

**PROSPECTS FOR THE DEVELOPMENT OF
FINANCE IN THE CONDITIONS OF
EUROPEAN INTEGRATION OF UKRAINE**

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**P.34: PROSPECTS FOR THE DEVELOPMENT OF FINANCE IN THE
CONDITIONS OF EUROPEAN INTEGRATION OF UKRAINE**

Editorial board: Namig Agaheydar Isazade, PhD in Busines; Ptashchenko Liana, D.Sc.
(Economics), Professor; Svystun Lyudmyla, PhD in Economics, Associate Professor

P.34 **Prospects for the development of finance in the conditions of European integration
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The monograph is dedicated to the consideration of the problems of the development of the financial market of Ukraine that are relevant in the context of European integration. Very important issues of today, which are highlighted in the monograph, are the restoration of budgetary stability and debt security of Ukraine in the post-war period, improvement of monetary and budgetary policy aimed at macroeconomic stabilization in the country. The authors emphasize the tools that can ensure anti-crisis regulation of the banking system, financial business management. The monograph examines the issues of ensuring the economic security of the construction industry, directions for improving the accounting policy in the field of business as a whole, and improving the quality of audits.

These and other aspects of the current problems and priority directions of the development of the financial market are devoted to the monograph of the team of authors who carry out up to date researches within the scientific school of the National University "Yuri Kondratyuk Poltava Polytechnic".

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ENHANCING FINANCIAL INCLUSION IN UKRAINE ON THE BASE OF EUROPEAN EXPERIENCE

Skryl Vitaliia

PhD in Economics, Associate Professor

ORCID 0000-0003-4064-8146

Ensuring the financial inclusion of the country (the availability of financial services for the population, primarily due to the spread of information technologies) creates new opportunities for the economy and the state as a whole, because it stimulates economic growth by expanding the opportunities to attract savings of individuals and invest these funds in the development of the economy, increases the level of well-being of the population by developing people's entrepreneurial abilities, the ability to judiciously plan personal financial decisions, including drawing up one's own budget, controlling financial accounts, savings, loans, one's own debt, etc. Currently, 44 countries of the world have approved the strategy of financial literacy, and in 27 countries this document is at the stage of development. Accelerated provision of financial inclusion is also defined as one of the strategic goals of the NBU.

In the conditions of the coronavirus, the state of war, which caused people to self-isolate in order to protect themselves from the coronavirus infection and the dangers to life as a result of the war, there is a clear demonstration of the relevance and necessity of solving the problems of accessibility of the population in all populated areas of Ukraine to basic financial services, the formation of their financial literacy and the formation of trust in financial intermediaries, which forms the financial inclusion of society in general. Today, financial inclusion is equal access and use of financial products and services that are: affordable; meet the needs of households and enterprises; accessible to all segments of society regardless of income and place of residence; are provided by representatives of the financial sector responsibly and ecologically for all participants in the process [13, p.10]. OECD/INFE defines financial inclusion as the process of promoting affordable, timely and comprehensive access to a wide range of financial products and services, spreading their use among all layers of society through the implementation of existing and innovative approaches, including financial awareness and education, with the aim of promoting both financial well-being and economic and social inclusion.

The last five years of development of both the global financial system and national ones are closely related to blockchain, cryptocurrencies and fintech. All banks and other financial structures, as well as investment instruments, are built inefficiently. And in the next 10-20 years, they will simply collapse under the onslaught of new technologies. Blockchain and fintech touch everyone and everything, they are fundamental. In addition, these are areas where countries such as Great Britain, the United States, and China are not competitors to the "partisan" countries: Latvia, Lithuania, Estonia, Singapore, Luxembourg, which have a real chance to become the new Switzerland. All because "small and fast" here achieves much more success than "big and heavyweight" [16]. So it becomes obvious that today, the problems related to the formation of financial inclusion, using modern information and communication technologies for the development of the financial system of the country as a whole, come to the fore.

Currently, the problem of financial inclusion around the world is quite relevant and is being studied by international financial organizations and scientists. Scientific works and practical researches and developments of such well-known scientists Anufrieva K., Geitsa V., Hrytsenko A., Kraus N., Leonenko P. are valuable researches in the scientific sense of the problems of the formation of financial inclusion, S. Mishchenko, O. Manzhury, S. Naumenkova, P. Nikiforova, V. Osetskogo, G. Pochenchuk, O. Shevchenko, Shklyara A., Shtepy O. Thus, the scientific publication of Ukrainian researchers Naumenkova S. and Mishchenko S. deserves attention [11], who, based on an analysis of the economic situation in Ukraine, managed to determine that its deterioration

increases the share of the "financially excluded" population, makes it difficult for citizens to access digital financial services in the most convenient form for them.

For the first time, the concept of financial inclusion was defined and discussed at the Global Partnership for Financial Inclusion (GPII) conference by such institutions as the Basel Committee on Banking Supervision (BCBS), the Committee on Payment and Settlement Systems (CPSS), International Anti-Money Laundering Group (FATF), International Association of Deposit Insurers (IADI) and International Association of Insurance Supervisors (IAIS) [11]. According to them, financial inclusion means a state where working-age adults have effective access to credit, savings, payments and insurance from formal service providers. At the same time, effective access involves convenient and affordable provision of services for the customer on the conditions of sustainability for the provider (sustainable services), as a result of which customers outside the formal financial system (one whose activities are regulated by legislation) begin to use formal financial services instead of existing ones unofficial options [17].

The National Bank of Ukraine understands financial inclusion to be the creation of conditions for attracting all segments of the population and businesses to use a variety of financial services, which are available in terms of infrastructure and price, are officially regulated and meet the needs of the population, with the aim of stimulating the economic growth of the country and reducing social inequality [12, p.107].

Revealing the meaning of the concept of financial inclusion, it is advisable to focus attention on such important points:

Firstly, it is about the accessibility of the adult population of the country (over the age of 15) to basic financial services, which, according to the approaches of the World Bank, include such things as: money transfers and payments, savings services, lending services, insurance services.

Secondly, financial inclusion is considered in terms of increasing the part of the population "included" in the system of official financial services. Possible methods of unofficial or unregulated financial services are not considered.

Third, "financial inclusion" and "access to finance" are not identical concepts. Limited access to financial services is not necessarily due to lack of access. Some citizens may have access to the services of banks and other financial institutions, but refuse to receive them for religious, cultural and other reasons - this is a manifestation of the voluntary "exclusion" of a person from the financial service system. In other cases, limited access to financial services may be caused by the presence of various barriers, namely: informational, technological, price, contractual. A separate group includes barriers that complicate access and are characterized by coercive restrictions on access to financial services - these are military operations, natural disasters, insufficient income, limited product range [5, p.129].

The insufficient level of financial inclusion is mainly a problem of developing economies, but developed countries also face similar challenges when it comes to the poorest or marginalized sections of the population, migrants (including illegal ones), refugees, etc. According to the World Bank's 2017 global survey, there are approximately 1.7 billion adults worldwide who do not have accounts with any financial institutions or mobile financial providers, up from 2014. 2 billion people. Almost 60% of this number are women. Persons not covered by basic financial services are concentrated in the poorest segment of the population: in the first quintile of households by income level, 27% of them are, while in the richest fifth quintile - two times less. Financial exclusion (that is, exclusion when subjects for some reason cannot get the financial services they need through official channels ("formal financial system") and are forced to turn to unregulated or even illegal providers) is disproportionately young. Young people between the ages of 15 and 24 make up a third of people who do not have any accounts. In general, financial inclusion rates range from 100% (Denmark, Finland, Netherlands, Norway, Sweden) to 10-15% (South Sudan, Central African Republic, Afghanistan, Niger) [2].

Expanding financial inclusion is one of the main directions of the Strategy for the Development of the Financial Sector of Ukraine until 2025 (hereinafter referred to as the Strategy) and its further reform in accordance with leading international practices, as well as the

implementation of measures provided for in the Association Agreement between Ukraine and the EU. For this purpose, standards of market behavior of financial institutions and disclosure of information about financial products will be implemented, targeted programs will be activated to increase the financial literacy of the population, as well as the protection of consumer rights will be strengthened, incentives will be created for the development of payment infrastructure for non-cash operations, the deposit guarantee system will be expanded and improved, etc. Innovations in the financial sector will include a wide range of actions, including: development of the BankID remote identification system, creation of a platform for crowdfunding and venture capital, as well as regulatory "sandboxes" like sandbox, introduction of new technologies for payments and transfers, expansion of access of financial market participants to public registries, development of big data, blockchain, cloud technologies, etc.

Thus, the Strategy provides for reforms in all segments of the financial sector: in the banking market, in the sector of non-banking financial institutions, in the capital markets. Its implementation will make it possible to create a transparent, competitive, stable and high-tech financial sector in five years. Under such conditions, it will become a driver of sustainable and inclusive development of the national economy and contribute to the improvement of citizens' well-being thanks to the effective accumulation and redistribution of financial resources in the economy [1].

Financial inclusion has three components:

- 1) availability of financial services – willingness and ability to use such services;
- 2) understanding - the consumer's ability to choose a financial service knowingly, with a full understanding of the benefits and risks, guided by the basics of financial literacy;
- 3) consumer confidence in financial market intermediaries that provide services, which must be guaranteed and ensured by a third party (by regulatory authorities).

So, the main prerequisites for financial inclusion are::

- the level of financial literacy of the population;
- public trust in the state and financial market institutions;
- access to financial technologies;
- regulatory environment (legislative protection of the rights of creditors and consumers, protection of property rights). Let's consider them in more detail.

It should also be noted that Ukraine took the first steps in the development of payment and credit services, financial literacy and financial inclusion back in 1996 by launching joint projects with international card payment systems to issue payment cards, implementation of salary and pension projects, development of the network for accepting non-cash payments and adoption of relevant legislative and regulatory acts in 1999-2013. Unfortunately, during this period, a system characterized by the presence of quasi-market conditions (monopolization, significant concentration, overpowering administration) was created, which, including led to the exclusion of a significant number of the adult population from the consumption of financial services. It is widely known about 5 million citizens who continue to receive pensions in cash and, accordingly, are excluded from financial digital services, do not use digital payment tools (accounts, internet banking, internet commerce, cashless payment of utilities, etc.).

In the period 2014-2018, the intensive introduction of innovative payment instruments (digital cards, mobile wallets, contactless payments, etc.) and services in Ukraine took place in isolated cases at the expense of significant own investments of market participants, as well as as a result of the implementation of projects by payment systems and international companies MasterPass, Visa Checkout, G-PAY, Apple Pay.

The factors that limited competition in the previous period were strengthened by the nationalization of the largest private bank in the country, the withdrawal from the market of 80 banks (more than 45% of the total number) and the corresponding super concentration of the banking market, inhibition of the implementation of principles open banking, the lack of an opportunity to enter the market of payment and financial services of solvent and ready to invest in digital technologies of non-bank financial and payment institutions.

"Salary and pension slavery" with an average term of contractual relations from 12 to 30 (max) months does not contribute to the inclination of clients to financial inclusion, financial planning, and the realization of long-term goals. Salary and pension clients (from 5 to 10 million people) are poorly treated, poorly understood and do not sufficiently use both basic and other financial services, such as non-cash payments, savings, credit and insurance, investing in education or health care, risk management [6].

The current state of affairs in the field of regulation of the payment services market does not provide an opportunity, in accordance with the G-20 principles for the implementation of financial inclusion, to ensure the possibility of piloting the necessary new innovative channels, products and services, as well as business models. The reason is the need to constantly and indisputably comply with all regulatory requirements, which are available in large numbers in non-special legal acts of banking regulation, which complicates innovation processes and the development of digital payments and the digital economy [8].

As part of the USAID project "Transformation of the Financial Sector" together with the National Bank of Ukraine, a national statistical survey of the population on financial literacy and financial inclusion in Ukraine was conducted. According to the OECD methodology, as indicated in table 1, in 2021 the index of financial literacy of Ukrainians amounted to 12,3 points (58% of the total possible value - 21 points). Comparing the data for 2018, in three years the growth of financial literacy of citizens amounted to 6% (from 11,6 to 12,3 points), which represents a positive increase. However, the average growth rate of financial literacy in other countries compared in the OECD report was only 2,4%. So, although the level of financial literacy of Ukrainians is quite low, according to this trend, Ukraine is catching up with other more developed countries in this area. If we examine this index in more detail in terms of the age of the surveyed citizens, citizens over 60 years of age received the lowest financial literacy index (11,6 points). Despite this, the financial literacy of the older group of Ukrainians is higher than in such countries as Georgia, Italy, Montenegro, Romania, and Malta. Young people aged 18-29 received 12 points in terms of financial literacy and, compared to other countries, it is close to the Czech Republic and leaves behind Italy, Bulgaria, Croatia, Montenegro, Malta and Romania. Grouping the population by place of residence, differences in the financial literacy of residents of villages and cities are observed - respondents from villages received 11,8 points, and residents of cities – 12,6 points, which is a significant gap [7].

Analysing the index of financial well-being of Ukrainians, according to the OECD methodology, Ukraine received 8,3 points (42% of the total possible value - 20 points). This shows that the surveyed population is quite insecure about their finances and believe that they are not able to control their own long-term financial plans. In other compared countries, the average score reaches 9,3 points, namely 47%. Georgia – 6,9 points, North Macedonia – 7,9 points and Moldova – 8,2 points received lower indicators than Ukraine [7].

There are differences in the values of the Index of Ukraine and its components in comparison with other countries (tab. 1).

- the score of Ukraine for financial knowledge is slightly lower than the scores of the comparison countries (4,3 points) and the average value of the OECD countries, but at the same time an extremely positive trend can be observed - a growth of 7,5% compared to a growth of 4,4% for the comparison countries and 0,0% for the adjusted sample of OECD countries;

- the score of Ukraine for financial behavior is 5,5 points and is higher than that of the comparison countries and almost at the same level as the average value according to the adjusted sample of OECD countries;

- the score of Ukraine on the attitude to financial issues is 2,5 points and is lower than the scores of the comparison countries and the average value according to the adjusted sample of OECD countries. However, it is worth noting that, unlike these countries, Ukraine showed a growth of 6% in less than 3 years, while in comparison countries there was a drop of 3,3%, and in OECD countries - by 6,5% [9, p.173].

Table 1

Financial Literacy Index: Comparison of Countries by Components

Component	Ukraine, 2021 (point)	Ukraine, 2018 (point)	Change, %	Average by country comparison, 2020 (point)	Average by country comparison, 2016 (point)	Change, %	Average for a sample of OECD countries, 2020* (point)	Average for a sample of OECD countries, 2016* (point)	Change, %
Cognition (iz 7)	4,3	4	7,5	4,7	4,5	4,4	4,7	4,7	0
Behavior (iz 9)	5,5	5,2	5,8	5,1	4,8	6,3	5,4	5,2	3,9
Attitude (iz 5)	2,5	2,4	4,2	2,9	3	-3,3	2,9	3,1	-6,5
Total financial literacy score (out of 21)	12,3	11,6	6,0	12,7	12,4	2,4	13	13	0
General index of financial literacy (in percentage)	58 %	55 %	5,5	60 %	59 %	1,7	62 %	62 %	0

* The average for a sample of OECD countries does not coincide with the indicators from the OECD reports for 2016 and 2020, since the data were recalculated

But it is worth noting that the general index of financial literacy in Ukraine did not show differences by gender, but differences were recorded by such characteristics as age, region, place of residence, income level and education, as well as by the use of technology and savings. In the section of the components of the Index, certain features can also be traced.

Grouping by age took place in different age ranges. Firstly, according to the OECD methodology, three age groups are distinguished: 18-29 years, 30-59 years and over 60 years. This grouping makes it possible to make comparisons across countries. According to this grouping, the lowest Financial Literacy Index was recorded in the age group over 60 years old (11,6 points). However, the financial awareness of people over 60 years old in Ukraine is higher than in such countries as Italy, Georgia, North Macedonia, Montenegro, Romania, Malta, Peru and Colombia. Youth aged 18-29 in Ukraine in 2021 received a financial literacy score of 12 points and is thus on the same level as the Czech Republic and ahead of Italy, Malta, Bulgaria, Croatia, North Macedonia, Montenegro and Romania, Colombia. The 30-59 age group reached 12,6 points in 2021 (tabl.2).

The difference between men and women according to the Financial Literacy Index is statistically insignificant (12,26 and 12,23) according to the results of the 2021 survey, as well as by its components. It is worth noting that in 2018 there was a statistically significant difference in the financial behavior of men and women, with the latter demonstrating better results (tabl. 2).

Firstly, according to the OECD methodology, three age groups are distinguished: 18-29 years, 30-59 years and over 60 years. This grouping makes it possible to make comparisons across countries. According to this grouping, the lowest Financial Literacy Index was recorded in the age group over 60 years old (11,6 points). However, the financial awareness of people over 60 years old in Ukraine is higher than in such countries as Italy, Georgia, North Macedonia, Montenegro, Romania, Malta, Peru and Colombia. Youth aged 18-29 in Ukraine in 2021 received a financial literacy score of 12 points and is thus on the same level as the Czech Republic and ahead of Italy, Malta, Bulgaria, Croatia, North Macedonia, Montenegro and Romania, Colombia. The 30-59 age group reached 12.6 points in 2021 (tabl. 3).

Table 2

The value of the Financial Literacy Index: demographic differences across Ukraine

		Ukraine, 2021 year	Ukraine, 2018 year	Change, %
Gender	Women	12,2	11,7	4%
	Men	12,3	11,5	7%
	18-24	11,4	10,7	7%
	25-34	12,7	12,1	5%
Truck	35-44	12,6	11,9	6%
	45-59	12,5	11,9	5%
	60 and more	11,6	11,2	4%
	Up to UAH 3,500.	11,2	-	-
	From UAH 3,501 to UAH 7,000.	12,0	-	-
	From 7,001 to 15,000 UAH.	12,9	-	-
Personal income	From 15,001 to 20,000 UAH.	13,2	-	-
	From 20,001 to 30,000 UAH.	14,5	-	-
	From 30,001 to 50,000 UAH.	13,9	-	-
	More than UAH 50,000.	15,5	-	-
Family income	We barely make ends meet	10,5	10,8	-1%
	There is not enough money even for food	11,0	10,3	7%
	There are enough funds for food and clothing, but the purchase of durable goods causes difficulties	13,0	11,5	13%
	There is enough money for food, clothes and durable goods	13,9	12,3	13%
Education	Higher Education	13,3	12,5	6%
	Secondary special education	11,9	11,4	4%
	Full or partial secondary	11,2	10,4	8%
Region	Center	11,8	12,4	-5%
	North	11,9	12,2	-2%
	South	12,6	10,8	17%
	West	12,4	11,1	12%
	East	12,5	11,8	6%
Type of settlement	Village	11,8	11,5	3%
	City	12,6	11,7	-1%
Use of technologies	Non-users of technology	9,9	-	-
	Technology users	12,4	-	-
	Savings will be enough for less than three months	11,8	-	-
	There are savings for more than three months	14,2	-	-

Grouping by age took place in different age ranges [4].

Secondly, in the 2018 study in Ukraine, a different grouping by age was used, which allows more precisely to provide recommendations for conducting educational activities in the field of financial literacy. Accordingly, both in 2018 and in 2021, the lowest value of the Financial Literacy Index was recorded in the 18-24 age group and is currently 11,4 points against 10,7 points in 2018. However, the fact that the growth of the Index was the greatest in this age group is indisputable – 7%. It is worth noting that it is young people aged 18-19 who remain the least financially literate with an Index value of 10,1 points, which means the need to continue directing efforts to increase financial literacy in this age group and younger. Financial awareness is also significantly lower in the age group over 60 (11,6), which also requires close attention [3].

Table 3

The value of the Financial Literacy Index: demographic differences in Ukraine and OECD countries

			Ukraine, 2021 year	Average by country comparison, 2020	Average for a sample of OECD countries, 2020*
Index of financial literacy	Gender	Women	12,2	12,7	13,0
		Men	12,3	12,6	13,1
	Truck	18-29	12,0	12,3	12,6
		30-59	12,6	13,0	13,4
		60+	11,6	12,3	12,6
	Use of technologies	Non-users technologies	9,9	10,2	-
		Technology users	12,4	12,8	-
	Availability of savings	Savings will be enough less than for three months	11,8	12,2	12,4
There are savings for more than three months		14,2	13,9	14,2	
Knowledge	Gender	Women	4,2	4,6	4,6
		Men	4,4	4,8	4,9
	Truck	18-29	4,2	4,6	4,7
		30-59	4,5	4,9	4,9
		60+	4,0	4,5	4,5
	Use of technologies	Non-users technologies	3,2	3,3	-
		Technology user	4,4	4,8	-
	Availability of savings	Savings will be enough for less than three months	4,2	4,6	4,5
There are savings on more than three months		4,9	5,1	5,1	
Behavior	Gender	Women	5,6	5,2	5,4
		Men	5,4	5,0	5,4
	Truck	18-29	5,4	4,9	5,2
		30-59	5,7	5,2	5,6
		60+	5,0	4,8	5,1
	Use of technologies	Non-users technologies	4,4	4,1	-
		Technology users	5,5	5,1	-
	Availability of savings	Savings will be enough less than for three months	5,2	4,8	5,0
There are savings for more than three months		6,6	5,8	6,0	
Attitude	Gender	Жінки	2,4	2,9	3,0
		Чоловіки	2,5	2,8	2,9
	Truck	18-29	2,3	2,8	2,8
		30-59	2,5	2,9	3,0
		60+	2,6	3,0	3,0
	Use of technologies	Non-users technologies	2,4	2,9	-
		Technology users	2,5	2,9	-
	Availability of savings	Savings will be enough less than for three months	2,4	2,8	2,8
There are savings for more than three months		2,7	3,0	3,1	

Statistically significant difference compared to the sample mean in 2021 at the 95% significance level: green = high value, red = low value.

The highest level of financial literacy was recorded in the age group of 25-34 years – 12,7 points, but it should be noted that this group lags behind the age groups of 35-44 years and 45-59 years in terms of dynamics (tabl. 3).

Given that the level of income of Ukrainian citizens has changed over the past three years, the comparison with 2018 causes certain difficulties due to the adjustment of intervals. If we analyze the data of 2021, the growth of the Financial Literacy Index can be traced depending on the amount of income of citizens. For groups of respondents with a higher level of income, for example, 7,000 UAH - 15,000 UAH, the value of the Financial Literacy Index is 12,9 points, and for 15,001 UAH - 20,000 UAH – 13,2 points (tabl. 3).

According to the methodology of the OECD report for 2020, respondents were divided into two groups based on the availability of savings to cover current expenses for at least three months in the event of the loss of the main source of income. In Ukraine, the group of respondents who have such savings showed a significantly higher score on the Financial Literacy Index, which was 14.2 points, and thus it secured its place in the TOP-10 among countries in the 2020 OECD study (tabl. 3).

As in 2018, so in 2021, there is a direct relationship between the level of financial literacy and the availability of education: the higher the level of education, the higher the financial literacy score. If the total score of persons with full or partial secondary education is 11,2 points in 2021, then persons with secondary special education (technical school) – 11,9 points, and persons with higher education – 13,3 points. Note that the growth of financial literacy occurred at all levels, except for incomplete secondary education (tabl. 2).

By type of settlement, we observe a growing gap in financial literacy between rural and urban areas. If in 2018 the Financial Literacy Index was approximately at the same level, then currently respondents from the city have 12,6 points, and respondents from the village have 11,8 points (statistically significant difference). If we compare the Financial Literacy Index by region, the following feature is noteworthy: the financial awareness of respondents in the North and Center has worsened, while the South, West and East have become the leaders (tabl. 2).

According to the OECD methodology, technology non-users are those who have not used a computer, e-mail, Internet or mobile phone in the last week. If we compare Ukraine in terms of financial literacy of non-technology users, then 9,9 points is a sufficiently high indicator, since there are countries in which this indicator starts with 8 points. However, if we analyze only the level of Ukraine, this score is definitely low, mainly due to knowledge and behavior. It is noteworthy that this category makes up only 5% of the sample and 68% consists of people aged 60 and older (tabl. 2). Correlation analysis shows (table 4) that, as in 2018, knowledge, attitude and behavior are weakly correlated in Ukraine.

Table 4

Correlation between components of the financial literacy score

	Cognition	Attitude	Behavior
Cognition	1		
Attitude	- 0,01	1	
Behavior	0,27**	0,17**	1

Attitude and cognition are not correlated at all. A weak correlation is observed between behavior and both knowledge and attitude. This means that these particular items of cognition and attitudes from the OECD survey are not determinants of behaviour [18, p.85].

So, Ukrainian society still has a lot to overcome in order to increase the level of financial literacy. Thus, based on the analysis of the global experience of financial inclusion and the peculiarities of the Ukrainian financial market, the maximum effect in this area can be achieved by implementing a set of measures from four components, in the following directions [14,15]:

Component №1 – Practical regulatory support for digital financial inclusion and the introduction of responsible digital financial practices.

Two categories of citizens are interested in the implementation of the first component:

- citizens who are currently not part of the official financial system and do not have access to an account in a financial institution (bank, non-bank, post office, payment institution, etc.) to receive and send payments, store money, manage their financial life.
- citizens who are currently part of the official financial system, but do not have free, free and conscious access to an account in a financial institution, or have problems with financial goal-setting, as well as awareness and protection of their own interests.

The implementation of this component requires availability:

- results of analysis of EU legislation, countries with a positive digital and cashless history, experience of responsible digital financial practice;
- results of the analysis of white books, drafts and current acts of legislation (NBU, KMU, Verkhovna Rada);
- results of market research analysis on financial inclusion in Ukraine;
- the results of the assessment of all areas of national legislation related to digital financial inclusion to identify (and resolve) areas of overlap or contradiction, as well as any gaps, barriers to access. These areas should include: financial services, payment systems, telecommunications, competition, discrimination, identity, barriers for excluded and underserved consumer groups.

The implementation process of this component may include the following elements:

1. Preparation of proposals for the introduction of framework regulation (hereinafter, the framework) for digital financial inclusion, which provides for entry requirements for new market participants, prudential requirements, where appropriate (e.g. for capital and liquidity), consumer protection, anti-money laundering and anti-terrorist financing safeguards and insolvency.

Such a framework should be technologically neutral and flexible enough to cover both new and existing service and product providers (due to the broad definition of the terms digital financial providers and digital financial services). It is also necessary to ensure the ability to pilot innovative new channels, products and services, as well as business models, without the need to immediately comply with all regulatory requirements. At the same time, such a framework should ensure fair and balanced oversight, supporting the obligation to meet anti-money laundering and anti-terrorist financing requirements.

The framework may include:

- principles of open banking, ensuring (restoration) of a competitive environment on the Ukrainian financial market;
- terminological apparatus, principles and provisions of the European Payment Service Directive;
- proportional to all types of service providers requirements for the protection of the rights of consumers of digital financial services;
- an improved legal framework that will protect the confidentiality and security of personal data when using digital financial services.

2. Promoting competition, fair and open conditions for digital technologies for financial inclusion by ensuring that providers of similar digital financial services have similar rights and obligations regardless of their institutional type and the technologies they use. Including the preparation and implementation of the following projects based on the decisions of the Government:

- digitization of large-scale, periodic payments from government institutions to consumers and small businesses (G2C, G2B);
- implementation of transaction services for financially excluded and non-included citizens, which can provide significant volumes of digital payments;
- provision of actual informal free choice by consumers of a financial institution for service;

– elimination of organizational and pseudo-fiscal (documents regarding the facts of receiving digital payments must be actually recognized by the executive power as documents for the movement of goods and provision of legal procedures for the protection of consumer rights) obstacles for SMEs to accept digital payments;

3. Working with national authorities to remove barriers and facilitate the provision of domestic and cross-border financial services to promote digital financial inclusion and ensure a clear delineation of responsibilities between regulators (NBU, KMU, DSFMU, National Financial Service Commission) regarding regulation and regulatory framework related to digital financial services and digital financial inclusion in general.

4. Facilitating the development and implementation of agreed and balanced regulation for the preservation of client funds belonging to non-prudentially regulated providers of digital financial services (financial companies, payment aggregators, providers of payment services that apparently do not provide them - mobile operators), including, for example, escrow accounts, "transfer" schemes of guarantee deposits to reliable banks and the distribution of claims of the Guarantee Fund with appropriate compensation to these funds, risk insurance, etc.

Component №2 – Promoting the development of digital financial services as a priority direction for the development of inclusive financial systems, ensuring the balance of innovation and risks to achieve digital financial inclusion, simplifying and implementing compatible digital identification of clients for digital financial services.

Citizens and financial institutions are not always and not fully aware of the benefits of digital finance, and that risks may develop or increase through the use of digital technologies and that they must be effectively assessed and managed.

The reason for this is that digital finance is constantly changing, improving, and not always all categories of citizens (except for digital geeks) are able to make the first operation of a new type, with a new tool, etc. without proper explanations and training. In addition, digital financial risks take many forms. They may arise due to convergence and various new patterns of interaction and combination of processes and products of existing and new suppliers; may depend on agency networks and a relatively low level of financial literacy among consumers. Digital technology risks can arise in all digital financial services and payment systems chains, including at the operational, settlement, liquid, credit levels, in the process of meeting (or not meeting) anti-money laundering requirements.

The situation is complicated by the fact that criminals use the lack of awareness of consumers and can compromise not only operational processes or system elements, but also innovative products and services as a whole. In addition, the time and procedural and organizational shortcomings of the current paper identification in the digital world inhibit the implementation of innovations and de-stimulate digital financial inclusion.

Therefore, the effect of the implementation of the second component will be reflected on the citizens and financial institutions of Ukraine.

The implementation of this component requires availability:

– analysis results GPMI White Paper, Global Standard-Setting Bodies and Financial Inclusion: The Evolving Landscape;

– the results of the analysis of research by GfK Ukraine in the field of financial services and non-cash payments for 2014-2018.

– the results of the analysis of current threats in the application of digital payments in Ukraine (Exchange-online), Europe (EAST, EC3 Europol, European Parliament, European banking authority, FATF), the world (WB, G20, IFC) and countermeasures;

– the results of the analysis of FATF recommendations, AML EU Directives on digital identification.

The implementation process of this component may include the following elements:

1. Support active dialogue and coordination between all key stakeholders in the digital financial ecosystem, including government, private sector and civil society, to ensure a common understanding of digital financial inclusion, goals and market expectations for digital financial

services in the formats of working groups, press briefings, round tables, press releases for the media.

Facilitating the involvement of mass media, including in the formats mentioned above, to improve skills and gain knowledge about the ratio of benefits and risks in the development of digital finance, the formation of a permanent habit of careful, adequate commenting on new financial technologies with an emphasis on convenience and formation of proper assessment and habits of digital financial hygiene.

2. Promoting the use of de facto market standards and the creation and promotion of new and innovative forms of identification, registration and verification, such as digital biometric identification products and online identity verification services. Establishing acceptable open standards to manage risk and ensure identity, transaction and account security. Encouraging the development of modern and secure digital signature systems that can simplify the authentication and verification process.

3. Development of best practices and industry codes for users on how to use digital financial services, as well as knowledge bases and practical actions on their safe use, protection against unauthorized use, disclosure, modification and destruction of personal data.

4. Development of best practices and industry codes for responsible and fair lending and debt collection.

5. Developing best practices to ensure that digital financial service providers ensure the accuracy and reliability of all data related to:

- accounts and transactions;
- marketing of digital financial services;
- credit scores and reports for financially excluded and underprivileged consumers.

Component №3 – Expanding the ecosystem and infrastructure of digital functional services.

The expansion of a reliable, secure, efficient and widely available retail payment system and ICT (information and communication technologies) infrastructure is especially important for creating an ecosystem of digital financial services), which provides all users with convenient, reliable service points for sending and receiving payments and performing other digital financial services. As far as possible, such infrastructure should reach the "last mile" of rural areas, as well as serve large cities and areas in key transit corridors.

The current number of payment terminals for payments by the most common payment instruments in the country - payment cards is clearly insufficient for Ukraine, and is from 20 to 40% of the number of terminals in EU countries commensurate in terms of territory and number of citizens. In addition, many representatives of SMEs, realizing the importance of income from card transactions, are looking for specific forms of accepting cards for payment – at the expense of buyers by receiving funds to personal accounts, without paying a commission for acquiring and without paying taxes - through P2P transfers, or send consumers to pay through PTKS. Accordingly, the problem also covers fiscal issues and tax evasion.

The effect of the implementation of the third component will be reflected on citizens, business entities and the financial result of the country due to the detinization of retail payments.

The implementation of this component requires availability:

- analysis results cashless & digital payments White Papers;
- the results of the analysis of research by GfK Ukraine in the field of financial services and non-cash payments for 2014-2018.;
- the results of the analysis of modern form factors and channels of digital payments in Ukraine, Europe, and the world;
- the results of the analysis of the introduction of open banking approaches in the EU, interchange regulation in the world.

The implementation process of this component may include the following elements:

1. Preparation of proposals for the modernization and expansion of the infrastructure of the retail payment system and the introduction of open payment platforms (open banking), primarily related to the clearing and settlement systems of the country (including SEP of the NBU), which will ensure safe and effective access to banks, non-bank financial institutions and new (PSD2) payment service providers.

2. Facilitating the use of large-scale public channels such as post offices for the distribution of digital financial services (acquiring, e-commerce, digital financial supermarket, credit brokerage, etc.).

3. Encouraging payment service providers to ensure compatibility and interaction of access points (services) and channels, further expansion of access to cities providing payment and financial services and general convenience for owners of accounts, electronic wallets, payment services, mobile and internet banking (including through working groups, press releases for mass media).

4. Encouragement and persuasion of retail and HoReCa representatives in the expediency of strict compliance with the requirements of the legislation regarding the acceptance of digital finance and partner price offers of the financial industry, including economically justified commissions for acquiring (including through press briefings, round tables, press releases for mass media).

Component №4 Strengthening digital and financial literacy and awareness.

Two categories of citizens are interested in the implementation of the fourth component:

Financially excluded and underserved consumer groups are exposed to various risks related to digital financial services.

They include:

- lack of guarantees regarding funds belonging to non-prudentially regulated suppliers (financial companies, payment aggregators, providers of payment services that apparently do not provide them - mobile operators);

- limited (insufficient) disclosure of commissions and tariffs, terms of use of financial services;

- possible insufficient liquidity of agents, fraud of their employees;

- confusing user interfaces that increase the risk of erroneous transactions;

- insufficient system security;

- irresponsible (predatory) lending through digital channels;

- malfunction of systems, which prevents access to funds;

- unclear or limited compensation systems; inability to store personal data confidentially and securely.

Digital financial products and the inherent benefits and risks are changing so rapidly that conventional methods of obtaining and understanding information through traditional learning methods and channels are ineffective.

Detailed information is needed by users throughout the lifecycle of digital financial products and tools.

The implementation of this component requires availability:

- the results of the analysis of GfK Ukraine research on consumer financial literacy and awareness of anti-fraudulent actions (2018 year);

- the results of research analysis based on the results of training campaigns and the «Humane Phishing» project (2018 year);

The implementation process of this component may include the following elements:

1. Using high-quality digital tools to develop financial literacy, digital literacy programs that build knowledge, understanding and confidence in using digital financial services.

Example:

- online games to help parents teach their children about financial management;

- digital toolkits for tracking income and expenses;

- online programs of small business financial management;

- interactive educational programs.

2. Use through own and partner digital (video, social networks, messengers, e-mail) and non-digital (posters, newspapers) channels (post office, buildings, bank branches and ATMs at enterprises salary projects) practical, accessible financial literacy and awareness materials, for included and excluded, disadvantaged and vulnerable groups, to help consumers understand the features, benefits, costs of using digital financial services and financial security tools.

3. Providing high-quality and uninterrupted support for customers and users, with simple and accessible instructions on the right actions in a particular situation, including complaint submission and tracking mechanism (24/7 call center, online chatbot, website or social media).

4. Provide training by providers of digital financial services to teachers and employees about: product features; regulatory obligations of a financial services provider; fair treatment of inexperienced and vulnerable consumer groups; and regression procedures. Training should also cover the interpretation of documents (contracts, agreements, regulations), especially if the wording is in a language that the consumer does not understand.

REFERENCES:

1. Report on the results of the research "financial literacy, financial inclusion and financial well-being in ukraine in 2021». Available at: https://bank.gov.ua/admin_uploads/article/Research_Financial_Literacy_Inclusion_Welfare_2021.pdf?v=4.

2. National Bank of Ukraine. Official site. Available at: <https://bank.gov.ua/ua/news/all/za-ostanni-tri-roki-riven-finansovoyi-gramotnist-ukrayintsiv--polipshivsya--rezultati-doslidjennya>.

3. Financial education. Available at: <http://www.fst-ua.info/ua/category/financial-education/>.

4. Financial literacy of Ukrainians needs improvement. Available at: <https://www.poglyad.info/2022/08/02/finansova-gramotnist-ukrayintsiv-potrebuye-pidvyshhennya/>.

5. Zhulin O.V.(2021). Improving the market of financial services in the context of ensuring financial inclusion. *Business Inform.* №8. pp. 127–134.

6. Vinnyk R. (2021). Development of financial inclusion in Ukraine. *Economy and society.* (31). Available at: <https://www.economyandsociety.in.ua/index.php/journal/article/download/714/686>.

7. Financial Inclusion As defined by RBI. Available at: <https://www.oecd.org/finance/financial-education/48303408.p>.

8. Finansova inklyuziya, innovatsiyi ta bezgotivkovi operatsiyi v Ukrayini – priorityty Strategiyi rozvytku FinTech 2025. Available at: <https://bank.gov.ua/news/all/finansova-inklyuziya-innovatsiyi-ta-bezgotivkovi-operatsiyi-v-ukray-ini--prioriteti-strategiyi-rozvitku-fintech-2025>.

9. Paxnenko O.M. (2017). Analysis of approaches to assessing the level of financial inclusion. Proceedings of the Problemy i perspektyvy rozvytku finansovo-kredytnoyi systemy Ukrayiny: zbirnyk materialiv II Vseukrayinskoyi naukovo-praktychnoyi konferentsiyi (Sumy, November 23, 2017), Sumy, pp. 170–174.

10. Vidyakin M. Financial inclusion: what is it and why is it important for all Ukrainians? Available at: <https://hromadske.radio/podcasts/rankova-hvylya/fininklyuziya-shcho-ce-take-i-chomu-ce-vazhlyvo-dlya-vsikh-ukrayinok-ta-ukrayinciv>.

11. Financial inclusion. The importance of financial inclusion. Available at: https://old.bank.gov.ua/control/uk/pub-lish/article?art_id=3961976&cat_id=31159082.

12. Zaxarchenko N.V. (2020). Financial inclusion to improve the welfare of the population and economic growth of the state. *Finance of Ukraine*, no. 6, pp. 105–116.

13. Dudynecz L.A., Vernej O.Ye. (2018). Financial inclusion and its departments. *Economics of national economy management*, vol. 2(130), pp. 8–13. Available at: [http://ird.gov.ua/sep/sep20182\(130\)/sep20182\(130\)_008_DudynetsL,VerneiO.pdf4](http://ird.gov.ua/sep/sep20182(130)/sep20182(130)_008_DudynetsL,VerneiO.pdf4).

14. Gladkyx D.M. (2019). Directions for ensuring financial inclusion in Ukraine. *Analytical note. Economics series.* National Institute for Strategic Studies, no. 8. Available at: <https://niss.gov.ua/sites/default/files/2020-01/analit-hladkyh-economy-8-2019-1.pdf5>.

15. For accessible financial services: creation of a national strategy for the inclusion of Ukraine. National Bank of Ukraine. 04.11.2020. Available at: <https://bank.gov.ua/en/news/all/finposlugi-stanut-dostupnishi-mi-dlya-gromadyan-v-u-krayini-zyavitsya-natsionalna-strategiya-z-pidvischennya-finansovoyi-inklyuziyi>.

16. Report on financial stability. National Bank of Ukraine. 2022. Available at: https://bank.gov.ua/admin_uploads/article/FSR_2022-H1.pdf?v=4.

17. What you should know about personal financial literacy during wartime: advice from the Partnership. Available at: http://probudget.org.ua/news/scho-var-to-znati-pro-personalnu-finansovu-gramotnist-pid-chas-viyni-poradi-partnerstva_942/

18. Povod, T. (2021). Financial literacy of the population as a priority condition for successful development of the state. *Taurida Scientific Herald. Series: Economics*, (9), 84-90.