інструментарій інноваційного розвитку фінансового ринку України

Актуальність. Актуальність питання перспективи розвитку фінансового ринку України шляхом впровадження фінансових інновацій сьогодні зростає через необхідність побудови стійкої фінансової системи в сучасних умовах, що є вирішальним чинником соціально-економічного розвитку будь-якої держави. Це пояснює особливу увагу до розвитку фінансового ринку, що є ключовим провідником фінансових ресурсів у реальний сектор економіки, забезпечує переміщення капіталу у сфери, найбільш відповідальні за економічну безпеку країни.

Глобалізація фінансового простору та конкурентна боротьба на фінансових ринках підвищує значущість інструментів формування конкурентних переваг національних фінансових ринків, створюючи умови для стійкого і ефективного розвитку національної економіки. Як наслідок, зростає роль фінансових інновацій, адже без них стає неможливим розвиток фінансового ринку в сучасних конкурентних умовах. Саме тому дослідження даної теми є надзвичайно актуальним та вкрай необхідним.

Мета та завдання. Метою статті є розробка теоретичних, методичних положень та прикладних пропозицій, які мають обґрунтувати: необхідність впровадження фінансових інновацій як головної складової подальшого розвитку фінансового ринку України через визначення проблем державного фінансового ринку, передумов їх вирішення та шляхи розвитку в сучасних ринкових умовах.

Результати. Фінансовий сектор України тривалий час виступає, як рушійною силою економічного зростання й фінансового розвитку, так і джерелом фінансово-економічних криз. В Україні розвиток фінансового ринку можливий за рахунок кардинально нових фінансових інструментів управління, які вирішали основні проблеми. Однак необхідно виконати деякі передумови для їх вирішення, а саме: зробити інституційну інфраструктурну стійкість через реформування правил та механізмів фінансового надання новими фінансовими відносинами, інструментами та продуктами, що будуть забезпечувати стійкість та ефективність розвитку фінансового ринку Україні через визначення проблем державного фінансового ринку, передумови їх вирішення та шляхи розвитку в сучасних ринкових умовах.

Висновки. Для України становлення та подальший розвиток фінансового ринку є передумовою появи потужного джерела інвестицій, що будуть спрямовуватися у сектори економіки держави шляхом аккумуляції вільних грошових коштів. Функціонування фінансового ринку неможливе без роботи фінансової системи та впровадження курсу на інноваційній розвиток фінансового сектору, що забезпечує нормальне існування і
TOOLS OF INNOVATIVE DEVELOPMENT OF THE FINANCIAL MARKET OF UKRAINE

Topicality. The urgency of the prospects for the development of the financial market of Ukraine through the introduction of financial innovations today is growing due to the need to build a stable financial system in modern conditions, which is a crucial factor in socio-economic development of any state. This explains the special attention to the development of the financial market, which is a key conductor of financial resources in the real sector of the economy, ensures the movement of capital in the areas most responsible for the economic security of the country.

Globalization of the financial space and competition in financial markets increase the importance of tools for the formation of competitive advantages of national financial markets, creating conditions for sustainable and efficient development of the national economy. As a result, the role of financial innovations is growing, because without them it becomes impossible to develop the financial market in today's competitive environment. That is why the study of this topic is extremely relevant and extremely necessary.

Aim and tasks. The aim of the article is to develop theoretical, methodological provisions and practical proposals that should justify the need for financial innovation as a major component of further development of the financial market of Ukraine by identifying problems of the state financial market, the necessary prerequisites and ways to develop in modern market conditions.

Research results. Ukraine's financial sector has long been a driving force for economic growth and financial development, as well as a source of financial and economic crises. In Ukraine, the development of the financial market is possible through the introduction of radically new financial management tools that would solve the main problems. However, it is necessary to meet some preconditions for their solution, namely to make institutional and infrastructural compliance in the processes and rules of mechanisms for development, implementation and control of financial innovations, to prepare the structure of economic sectors and households to use new financial services, tools and products and pay attention to the financial culture of the population. Fulfillment of these preconditions for the development of the financial market and the introduction of innovations is necessary, they form the foundation for global changes in the country's financial system and the disclosure of financial potential.

Conclusion. For Ukraine, the formation and further development of the financial market is a prerequisite for the emergence of a powerful source of investment that will be directed to sectors of the economy through the accumulation of free cash. The functioning of the financial market is impossible without the work of the financial system and the course of innovative development of the financial sector, which ensures the normal existence and development of the state. To do this, it is necessary to develop a comprehensive approach to solving existing problems, which is why...
Further research on the financial market of Ukraine and prospects for its development through the introduction of financial innovations should be devoted.

**Keywords:** financial market, financial innovations, financial instruments, innovative development, financial culture.

**Problem statement and its connection with important scientific and practical tasks.** Ukraine's financial sector has long been a driving force for economic growth and financial development, as well as a source of financial and economic crises. Over the last few years, the financial market of Ukraine has been developing dynamically. The total assets of financial intermediaries have increased 5 times over the past 5 years to about 50% of GDP, and trading volumes on the organized stock market - more than doubled and amounted to 4.2% of GDP. However, the overall level of financial market development remains quite low [1, p. 68]. Commercial banks remain the most developed component of the market, despite the fact that other institutions and markets lag far behind in their development. This situation is typical for countries with economies in transition and is the result of incomplete legal regulation of financial institutions and markets, as well as ill-considered economic policy on privatization, currency regulation, maintaining low inflation, etc. [2]. In Ukraine, the development of the financial market is possible through the introduction of radically new financial management tools that would solve the main problems, which is why modern financial literature is devoted.

**Analysis of the recent publications on the problem.** The urgency of the topic is emphasized by the interest of high-level specialists in it. S. Onyshko, L. Boldyreva, O. Yermoshkina, A. Oleshko, T. Kucher and others dedicate their works to the problems and prospects of development of the domestic financial market. Recent research by scientists is mainly devoted to innovative areas of financial market development in Ukraine. Thus, S. Onyshko devoted his research to the role of financial innovation in ensuring the stability and development of the financial market, as well as identified the necessary actions by the state. L. Boldyreva identified the main problems of the financial market of Ukraine and compared them with the problems of markets in other countries. T. Kucher considered the provisions of the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Improving the Functions of State Regulation of Financial Services Markets" and identified significant changes in the regulation of the financial services market. O. Yermoshkina emphasizes the need to develop financial culture in the use of traditional and innovative financial instruments, products and services and devotes his work to this topic. Thus, each author considers the problem comprehensively and immerses himself in a specific problem to determine the prospects for the development of the financial market of Ukraine.

**Allocation of previously unsolved parts of the general problem.** The analysis of existing theories and various works of the authors allowed to establish the lack of a single integrated approach and understanding of the problems and prerequisites for the development and implementation of financial innovations. The first proposes to consider the roots of the problem on the part of the state: government, legislation, reforms, institutional responsibility, and so on. Others see the problem in the development of financial culture as an opportunity to ensure a high standard of living (welfare) of the population. That is, in the absence of knowledge and skills necessary to ensure responsible financial behaviour and increase the financial inclusion of Ukrainians. It is emphasized that the level of financial culture indicates the ability of the people to accept and implement financial innovations in their lives and, as a consequence, to develop the financial market. Some see the main problem in the mobilization of resources and low quality of bank assets and further reduction of their liquidity, so they emphasize that it is necessary to start with the development of the banking sector. However, analysing the views of various authors on the problem of prospects for financial innovation and financial market development, we can conclude that we need a comprehensive approach that would cover all these problems and solve them in parallel. After all, no single solved problem will give the desired effect for the development of the financial market of the state.

**Formulation of research objectives (problem statement).** This study proposes to develop a comprehensive view of the prospects for the development of the financial market of Ukraine. An integrated approach should consider all existing market problems that hinder and inhibit the implementation of innovations, and combine them with the necessary preconditions and changes to address this issue.

**An outline of the main results and their justification.** In Ukraine, the development of the financial market is possible through the introduction of radically new financial management tools that would solve the main problems. The problems of the financial market are as follows:

- political and financial instability in the country;
- imperfect legal framework;
- high degree of vulnerability of the banking system to the exchange rate policy of the NBU;
distrust among the population;
• low quality of bank assets and further reduction of their liquidity;
• underdeveloped stock market;
• the problem of resource mobilization [3, p. 33].

The most important thing is to understand that all these problems of development and functioning of the financial market can be solved only by implementing appropriate financial innovations. However, first of all, the development and introduction of financial innovative products in domestic practice requires the following prerequisites:

1) Existence of institutional compliance in the processes and rules of mechanisms for development, implementation and control over the functioning of financial innovations (institutional and infrastructural compliance must be agreed).

In accordance with this premise, the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets" was adopted, which divided the authorized bodies by regulatory zones in the financial services market:

- National Bank of Ukraine - the market of banking services and money transfer activities;
- National Commission on Securities and Stock Market - securities market and derivative financial instruments;
- National Commission for State Regulation of Financial Services Markets - other financial services markets [4].

In addition, in connection with the adoption by the Verkhovna Rada of Ukraine of the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Improving the Functions of State Regulation of Financial Services Markets", significant changes took place regarding the regulation of the financial services market, namely:

• increase the efficiency of the system of state regulation of financial markets by eliminating duplication of functions of national regulators on licensing, control and supervision, simplification and transparency of management decisions in this area, improving business conditions while strengthening the responsibility of market participants;
• reduction of the number of regulatory and supervisory bodies in the markets of non-banking financial services;
• increasing the effectiveness of state regulatory policy, the functionality of regulations aimed at creating an effective mechanism for state regulation and supervision;
• reduction of operating costs of financial institutions caused by excessive and inefficient government regulation;
• ensuring competition in the financial market and preventing the activities of unscrupulous companies [5].

Among other things, this Law provides for the transfer of a number of functions of the National Commission for State Regulation of Financial Services Markets to the National Bank of Ukraine [6, p. 48].

2) Preparation of the structure of sectors of the economy and households for the use of new financial services, tools and products (there must be a demand for financial innovations);

3) Development of financial culture in the use of traditional and innovative financial instruments, products and services [7, p. 144].

The formation of the appropriate level of financial culture of Ukrainian society is a very important direction in strengthening and developing the domestic financial market. Financial culture - knowledge, skills and attitudes necessary to ensure responsible financial behavior and increase the financial inclusion of Ukrainians. It is the level of financial culture that indicates the ability of the people to accept and implement financial innovations in their lives and, as a consequence, to develop the financial market and the economy as a whole.

According to the USAID study "Financial Literacy, Financial Inclusion and Financial Welfare in Ukraine", the level of financial literacy of the population of Ukraine is 11.2 (out of 21). This is a low figure, which is why the NBU is actively implementing a strategy to increase the financial literacy of the population and create conditions for increasing the personal well-being of Ukrainians through the formation of a new financial culture [8].

Financial culture consists of financial literacy, financial responsibility, culture of financial planning, stimulation of financial innovation [7, p. 145]. The development of each of the components is the basis for the development of the financial market.

Financial innovations, products and services, which are today considered to be innovative trends in the
activities of non-bank financial institutions, are presented in Table 1.

### Table 1

**Innovative trends in the activities of non-bank financial institutions**

<table>
<thead>
<tr>
<th>Type of product / service</th>
<th>General characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Chain</td>
<td>Translated from English &quot;Block chain&quot; is a continuous sequential chain of blocks containing information built according to certain rules. However, it is better to give a definition given the purpose of block chain technology. Block chain was challenged in the context of a very specific task, namely how to build a decentralized (without a single control centre) financial system, the correctness of which could be verified by anyone. Based on this, we can define a block chain as a way to store and reconcile a database, a copy of which is available to each participant.</td>
</tr>
<tr>
<td>Digital marketing</td>
<td>This is the use of different ways to promote the product to the masses using digital channels. Digital Marketing is a set of promotion tools that use digital channels. It is not identical to Internet marketing, as it includes channels such as television, radio and even outdoor advertising. Internet marketing has evolved into digital marketing, which uses comprehensive methods of online strategy, website development and mobile applications, creativity and copywriting, contextual advertising and SMM, as well as other interactive products. The most popular forms of digital channels are search engine promotion; contextual and teaser advertising; media and banner; promotion on social media and blogs; creation of mobile applications for smartphones, tablets and other media; viral advertising</td>
</tr>
<tr>
<td>CRM</td>
<td>CRM - a system for sales, namely ready-made processes for managing all types of transactions. Online CRM combines the capabilities of a customer relationship management (CRM) system and a business process management system (CRM). This is the first application solution developed on the bpm'online platform.</td>
</tr>
<tr>
<td>Grid-technologies</td>
<td>Grid computing is a geographically distributed infrastructure that combines many different types that a user can access from anywhere, regardless of where they are located. Grid provides a collective distributed mode of access to resources and related services within globally distributed organizations (enterprises that share global resources, databases, specialized software).</td>
</tr>
<tr>
<td>Digital insurance</td>
<td>Digital strategy in insurance is not only online sales, but also the transformation of the entire business to work with e-policy. Digital insurance allows insurance companies to reduce costs, increase the speed of customer service. Consumers have the opportunity to receive timely updates on changes in the company's insurance policy.</td>
</tr>
<tr>
<td>ePrescription</td>
<td>ePrescription (electronic prescription) is carried out on the basis of three such procedures: eCapture - the formation of an electronic prescription by a doctor of a medical institution; eTransfer - confidential transfer of an electronic prescription to a pharmacy; eDispensation - data transfer from the pharmacy back to the medical institution, confirmation.</td>
</tr>
<tr>
<td>TeleHealth</td>
<td>&quot;Digital&quot; technologies to provide remote medical services and support the work of doctors.</td>
</tr>
</tbody>
</table>

Source: Based on [9]

Consider the level of development of these innovation trends in Ukraine:

1) Block chain.

In terms of industry, according to Gartner, the greatest interest in the block chain is shown by CIOs in the field of telecommunications, insurance and finance. Implementing block chain in business processes requires considerable knowledge in many areas, such as security, law, decentralized management, and organizations that choose to use block chain will be forced to completely change their historical structure, whose traditional business processes do not correspond to the idea of block chain. also, trying to integrate the block chain into outdated value streams and systems [10], face a loss of investment or find that the technology does not suit them. Given Ukraine's European integration intentions, it should be noted that on April 9, 2018, 22 EU countries signed a declaration on the establishment of the European Partnership in
Block chain Technology [11], exchange of knowledge and experience in technical and regulatory areas. It is planned to prepare for the launch of single applications for the European Union using the technology of distributed registers for the public and private sectors.

Currently, there are few projects that cannot be implemented without block chain technology. Its use allows in some cases to reduce the cost of transactions, in others - to increase transparency and trust in the system, as well as reduce the cost of processes or employees.

Unfortunately, in Ukraine this technology is used only by private institutions, at the state level and in public administration it is not used, although it would help solve many problems. For example, the introduction of technological infrastructure that allows to automate the distribution of funds received by the Pension Fund, one of the most budget options of which is block chain technology in some business processes of the pension fund, in particular during the appointment and payment of pensions, insurance premiums, personalized accounting of pension system participants, etc., will improve the activities of the Pension Fund, reduce staff, further costs of the fund and in combination with other methods of optimizing the pension system will not increase the retirement age in Ukraine [10].

2) Digital marketing.

Unfortunately, today the level of use of digital technologies in Ukraine is much lower than in developed countries. According to Miniwatts Marketing Group, which has been researching the development of the Internet industry in the world since 2000. Ukraine ranks last in Europe in terms of Internet penetration rate. Only 43.4% of Ukrainians use the World Wide Web, while the average in Europe is 73.5%, and in the most developed countries, such as Germany, Iceland, Norway and the Netherlands, the share of Internet users exceeds 95% [12].

However, despite the low prevalence of the Internet in Ukraine, the last few years the direction of digital marketing is growing and developing very rapidly. The most popular in Ukraine are the following digital marketing tools:
- contextual advertising Google Adwords, Yandex Direct;
- Big Data technology - data arrays of large volumes;
- retargeting - retargeting;
- mobile marketing;
- Email;
- viral marketing.
- RTB (real time bidding) - real time bidding;
- SMM (social media marketing) - social media marketing;
- SMO (social media optimization) - optimization for social networks;
- SEO (search engines optimization) - site optimization in search engines;
- SEM (search engine marketing) - search marketing.

3) CRM.

The advantages of using CRM-systems at first glance are obvious: in addition to reducing the amount of routine work and ease of control over the business, they allow you to increase the company's revenue by optimizing sales.

For many Ukrainian entrepreneurs, CRM is still an unfamiliar term. According to the study, 68% of Ukrainian companies do not work with such systems and do not plan to invest in their implementation (see Fig. 1) [13].

![Fig. 1. Prevalence of CRM in Ukraine](image-url)

Excel (in particular for maintaining the client base), 1C (for accounting), M. E. Doc, office programs and paper reporting are still used for routine work.
The main reason for the low prevalence of CRM in Ukraine is its high cost, which Ukrainian businesses cannot or do not want to pay due to lack of knowledge about the effectiveness and impact of CRM on the development and profits of companies.

The main players in the market of CRM-systems of Ukraine are Bitrix24 - it is used by 26% of companies, Terrasoft - 15% and AmoCRM - 9%. The next places in the ranking are shared by Salesforce, Zoho and OneBox.

4) Grid technology.

The main current tasks of the Ukrainian Grid sector are: expanding infrastructure, increasing the capacity of resource centres, finding tasks to solve using Grid technology, training users, attracting young professionals to develop and use both system and application level of this technology in the XXI century.

In particular, this technology is the most common in Ukraine. The official presentation of the first Grid segment in Ukraine took place on April 4, 2007 at the Institute of Theoretical Physics at a field meeting of the Bureau of the Presidium of the NAS of Ukraine.

Currently, NTUU "KPI" specialists are participating in the project on data processing of the Large Hadron Collider at CERN. Together with specialists from the Bogolyubov Institute of Theoretical Physics of the National Academy of Sciences of Ukraine, KPI scientists participate in the European Grid Initiative (EGI) program. To perform this task, 200 computing cores of the university cluster are allocated for the corresponding calculations. NTUU "KPI" participates in the development of the international educational Grid network together with scientists from the Russian Federation, Bulgaria and Kazakhstan.

Despite the lack of computing resources, the project of the Ministry of Education and Science and the National Academy of Sciences of Ukraine "Development and implementation of semantic Grid-services of intelligent data processing" has already been launched. A number of scientific and educational institutions of Ukraine have expressed interest in participating in the project as partners [14].

5) Digital insurance

Unfortunately, this type of financial innovation in the non-banking market is not developed in Ukraine at all. We do not have any insurance company that would introduce this technology. This situation is related not so much to the price of such technology, but to the financial literacy of the Ukrainian population, because most people do not even see the need to introduce digital insurance, so the insurance market in our country is quite underdeveloped.

6) ePrescription and 7) TeleHealth

Both types of innovations are currently absent in Ukraine, but there is now a course for full automation of the medical system. The Helsi system is currently operational, but so far it has only an electronic doctor's record system. Because of the pandemic, money for health care went to fight the coronavirus. However, according to the plan for the development of the health care system in the future, Ukraine will be fully automated and digitalized according to world standards.

In addition to the main innovation trends in the activities of non-bank financial institutions, consider what other financial innovations are actively implemented and developed in Ukraine (see Table 2) [9].

<table>
<thead>
<tr>
<th>FinTech directions</th>
<th>FinTech companies (strataps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blockchain and cryptocurrency</td>
<td>Attic Lab, Blockchain Lab, Distributed Lab, KUNA</td>
</tr>
<tr>
<td>Payments and money transfers</td>
<td>Agency21, Coinipay, Easypay, Electrum, Lcogaming, MAXI CARD, MOSST, Paylastic, iPay, Portmone, Tachcard, Tyme, UAPAY, Uplata, WideUp, AIRouting</td>
</tr>
<tr>
<td>Technologies and infrastructure</td>
<td>Corezoid, bNesis, Bintels, Igama, PaycoreIO, ProCard, SkyService, Smart Data, Team301, UnityBars, YouControl, PayForce</td>
</tr>
<tr>
<td>&quot;Mobile wallets&quot;</td>
<td>Wallet Factory</td>
</tr>
<tr>
<td>Marketplaces</td>
<td>CheckDom, Treeum</td>
</tr>
<tr>
<td>Inshurtech</td>
<td>Alfa Protection, INSART</td>
</tr>
<tr>
<td>Digital and neobanks</td>
<td>Altbank, Forward Bank, VOLT24</td>
</tr>
<tr>
<td>Finance Management</td>
<td>Finance-controlling FIN, Finkee, MTAX Ukraine</td>
</tr>
<tr>
<td>Other</td>
<td>BRDO, Fimmaiya, Startup.Network</td>
</tr>
</tbody>
</table>

Source: Based on [9]

Paying attention to these prerequisites for the development of the financial market and the introduction
of innovations is necessary, they form the foundation for global changes in the country’s financial system and the disclosure of financial potential.

The lack of financial potential in the country creates such negative trends as an increase in the state budget deficit, rising public debt with declining credit ratings, rising inflation expectations, and this affects the rising cost of financial resources in the country [15].

Thus, the introduction of innovative financial innovations in Ukraine will reduce the cost of equity for domestic enterprises in the corporate sector, which in turn will be a factor in attracting foreign direct investment into the economy [5, p. 41]. Attracting foreign investment in the domestic economy will help increase the share of investment in Ukraine’s gross domestic product, which will lead to economic growth in the future.

Thus, the introduction of financial innovations launches a chain that has a positive impact not only on the financial sector, but on all areas of activity and functioning of the economic apparatus of the country.

However, in addition to the positive impact of financial innovations on the development of the financial market, there are reservations about their active use and implementation. World practice shows the possibility of significant losses from the use of innovative instruments, which led not only to significant losses in certain sectors of the economy, but also became one of the main causes of the recent global financial crisis. In particular, this concerned the large-scale use of derivative financial instruments to hedge risks in mortgage lending [15].

Under such conditions, this requires particularly balanced approaches to the formation of policies for the use of financial innovations in national financial markets. The necessary approach and tools that would take into account the specifics of innovation, minimize risks and increase their positive impact on the financial market and its economy as a whole.

**Conclusions and perspectives of further research.** The current state of the financial services market in Ukraine convincingly shows that innovations are needed for further development. However, the domestic financial market and Ukrainian society are not ready to implement and use financial innovations.

For Ukraine, the formation and further development of the financial market is a prerequisite for the emergence of a powerful source of investment that will be directed to sectors of the economy through the accumulation of free cash. The functioning of the financial market is impossible without the work of the financial system and the course of innovative development of the financial sector, which ensures the normal existence and development of the state.

**ЛІТЕРАТУРА**


8. Важливість фінансової грамотності та міжнародний досвід. URL: https://old.bank.gov.ua/control/uk/publish/article?art_id=83163618#:~:text=%D0%A4%D1%96%D0%B0%D1%81%D0%BE%D0%B2%D0%B0%20%D0%BA%D1%83%D0%BB%D1%8C%D1%82%D1%83%D1%80%D0%B0%20%E2%80%93%20%D0%B7%D0%BD%D0%B0%D0%BD%D0%BD%D1%8F%2C%20%D0%BD%D0%B0%D0%B2%D0%B8%D1%87


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