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MODERN TRENDS AND DIGITAL VECTORS OF DEPOSIT CORPORATIONS' DEVELOPMENT

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СУЧАСНІ ТЕНДЕНЦІЇ ТА ЦИФРОВІ ВЕКТОРИ РОЗВИТКУ ДЕПОЗИТНИХ КОРПОРАЦІЙ

The current trends of deposit corporations' development are a component that is constantly at the center of state policy. This is because this component is the basic factor, which ensures the liquidity of the domestic economy. Given this and some other factors, the attention of state authorities to the development of deposit corporations is constantly growing. In particular, this attention has been signed recently due to the extremely powerful impact of the COVID-19 pandemic on the domestic economy and its massive shocks to the Russian military aggression. An additional threat is a wave of financial innovation from digitization. Although it has been a safety net for deposit corporations to accumulate free funds, it has also been a trigger for the development of FinTech and BigTech companies that operate through the platform and other technologies, benefit from network effects and, following expansion strategies, move from non-financial services to such, which allow them to compete in the market of financial services. The article is oriented on studying modern trends and characteristics of digital trends of deposit corporation development. Within the framework of the survey, attention was paid to the fact that the number of deposit corporations in Ukraine has decreased due to the fall in profitability of banking activity and the increase in the number of FinTech and BigTech companies in the financial services market. According to the results of the study, the growth rate of total assets of FinTech and BigTech companies outpace the growth of such assets in deposit corporations. The same is the dynamics of accumulated total liabilities. The rapid growth of the role of Fintech and Bigtech companies in the financial market requires immediate regulatory action by the state, as it creates several systemic and non-financial risks for the financial stability of Ukraine. It is proved that the priority task of the state is to create digital vectors of joint development of deposit corporations, FinTech, and BigTech companies within which each participant will get their competitive advantages.

Сучасні тенденції розвитку депозитних корпорацій є одними з базових чинників, який забезпечує ліквідність вітчизняної економіки. Враховуючи це, а також низку інших чинників, увага державних органів влади до розвитку депозитних корпорацій постійно зростає. Зокрема, останнім часом така увага значна, у зв'язку із надзвичайно потужним впливом пандемії COVID-19 на вітчизняну економіку та її масштабними потрясіннями сформованими російською військовою агресією. Додатковою загрозою є хвиля фінансових інновацій від цифровізації, яка, хоча і стала запобіжником, що зберіг можливості депозитних корпорацій акумулювати вільні кошти, одночасно вона є тригером розвитку Фінтех і Бігтех компаній, які працюючи через платформові та інші технології, отримують переваги від мережевих ефектів і, слідуючи стратегії розширення переходять від нефінансових послуг до таких, які дозволяють їм конкурувати на ринку фінансових послуг. Стаття орієнтована на вивчення сучасних тенденцій та характеристик цифрових трендів розвитку депозитних корпорацій. У межах дослідження звернено увагу на той факт, що кількість депозитних корпорацій в Україні знижується. Це пов'язане з падінням прибутковості банківської діяльності та збільшенням кількості Фінтех і Бігтех компаній на ринку фінансових послуг. За результатами дослідження визначено, що темпи приросту сумарних активів Фінтех і Бігтех компаній випереджають приріст таких активів у депозитних корпорацій. Аналогічною є динаміка акумульованих сумарних пасивів. Швидке зростання ролі Фінтех і Бігтех компаній на фінансовому ринку потребує негайних корегувальних дій держави, адже створює низку загальносистемних та нефінансових ризиків для фінансової стабільності України. Доведено, що першочерговим завданням держави є створення цифрових векторів спільного розвитку депозитних корпорацій, Фінтех і Бігтех компаній, у межах яких кожен учасник отримає свої конкурентні переваги. Перспективи подальших розвідок у даному напрямі полягають у розробці рекомендацій з оптимізації стратегії розвитку фінансового сектору України до 2025 року.

Key words: FinTech and BigTech companies; deposit corporations; total assets; total liabilities; financial services market.

Ключові слова: Фінтех і Бігтех компанії; депозитні корпорації; сумарні активи; сумарні пасиви; ринок фінансових послуг.

PROBLEM SETTING (DESCRIPTION OF THE PROBLEM BEING ANALYZED IN GENERAL AND ITS CONNECTION WITH IMPORTANT ACADEMIC OR PRACTICAL TASKS)

The modern tendencies of deposit corporations' development are a component that is constantly at the center of state policy. This is because this component is one of the main factors that ensures domestic economy liquidity. Given this, the attention of state authorities (in particular, the Government of Ukraine, Supreme Rada of Ukraine, and National Bank of Ukraine) to the deposit corporations development is constantly growing while broadening the financial state policy limits. The situation is due to some factors. In particular, this attention has been signed recently due to the extremely powerful impact of the COVID-19 pandemic on the domestic economy and its large-scale shocks to the Russian military aggression produce significant risks for credit intermediation, payments, and creation of credit means of circulation. An additional threat is a wave of financial innovation from digitization. Although it has been a safety net that has kept deposit corporations' capacity to accumulate free funds in the military economy, it has also become a trigger for the development of FinTech and BigTech companies, which operate through payment and other technologies, and benefit from network effects and, following expansion strategies, move from non-financial services to such ones, which allow them to compete in the market of financial services. According to the above, to ensure financial stability in Ukraine, both modern trends and digital vectors of deposit corporations' development should be studied.

THE ANALYSIS OF THE LAST RESEARCH AND PUBLICATIONS IN WHICH THE SOLUTION TO THIS PROBLEM IS BEGUN

Among the researches in which the solution to the problem of studying trends of deposit corporations' development is started in parallel with their digitalization vectors, we have allocated new knowledge and systematic investigation Bezztach R., Dovgan J., Zitar M., Zelinska V., Kasyan I., and others. The problem is that most of the available studies focus on analyzing the specifics of the deposit corporations sector functioning in the

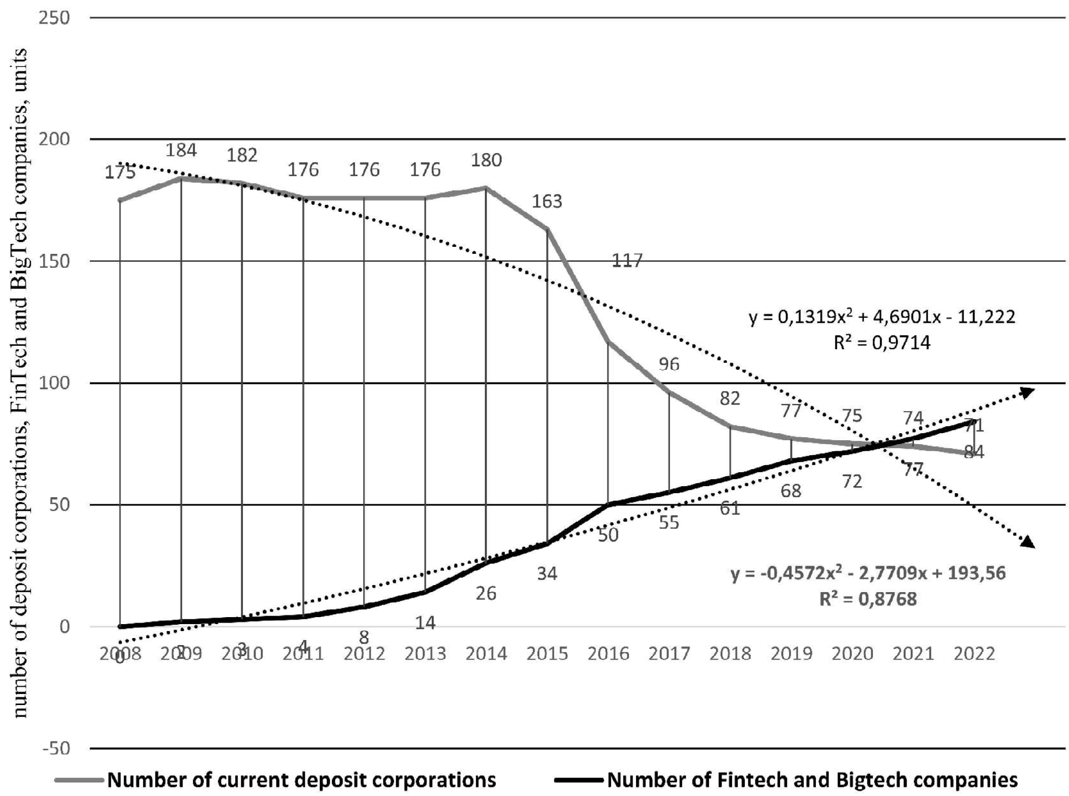

Fig. 1. Dynamics of changes in the number of deposit corporations, FinTech and BigTech companies on the financial services Ukraine market, from 2008 to 2022

Source: Data of the National Bank of Ukraine and Ernst & Young Global Limited.

digital economy or identifying the main problems that arise in the activity process (related to the emergence of FinTech and BigTech companies as new forms of banking activity). At the same time, the connection between the development trends of deposit corporations and the digital economy formed by a wave of financial innovations based on the possibilities offered by digitalization remains out of the attention of scientists. This wave came from outside the banking system, embodied in the form of new providers of financial services.

THE WORDING OF THE PURPOSES OF THE ARTICLE (PROBLEM)

The article studies modern tendencies and characteristics of digital trends in the development of deposit corporations.

THE PAPER'S MAIN BODY WITH FULL REASONING OF ACADEMIC RESULTS

The authors will understand the subjects of economic activity, realizing financial intermediation, and imitating debt obligations under deposit corporations. In the domestic economy, savings banks, mortgage banks, clearing and investment banks, and others can be used for such corporations. From 2015 to 2022, the number of such corporations in the State Register decreased from 180 to 71. This was due to a fall in the profitability of banking activity due to political and economic crises (which always synthesize a sharp decrease in funding, due to significant outflow of clients' funds, limited access to international capital markets, etc.) and increased financial technology (fintech) and business players in the financial services market (it is illustrated by Figure 1). In fact, according to the above data, it is obvious that in 2022, 71 deposit corporations accounted for 84 FinTech and BigTech companies, and as result innovation corporations are increasingly facing competition. Currently, there is no commonly accepted definition of FinTech and BigTech. Therefore, we will define them in the Ernst & Young Global Limited approach that identifies FinTech companies as players focused on new technologies provided, they seek to compete with traditional deposit corporations in providing financial services, and BigTech as platform companies (such as Google, Facebook, Apple, Amazon, Alibaba, or Tencent), if they act as new providers of services similar to those provided by deposit corporations.

In particular, the volume of total assets accumulated by deposit corporations remains significant and growing in dynamics (for example, from 2008 to 2022, the accumulated total assets

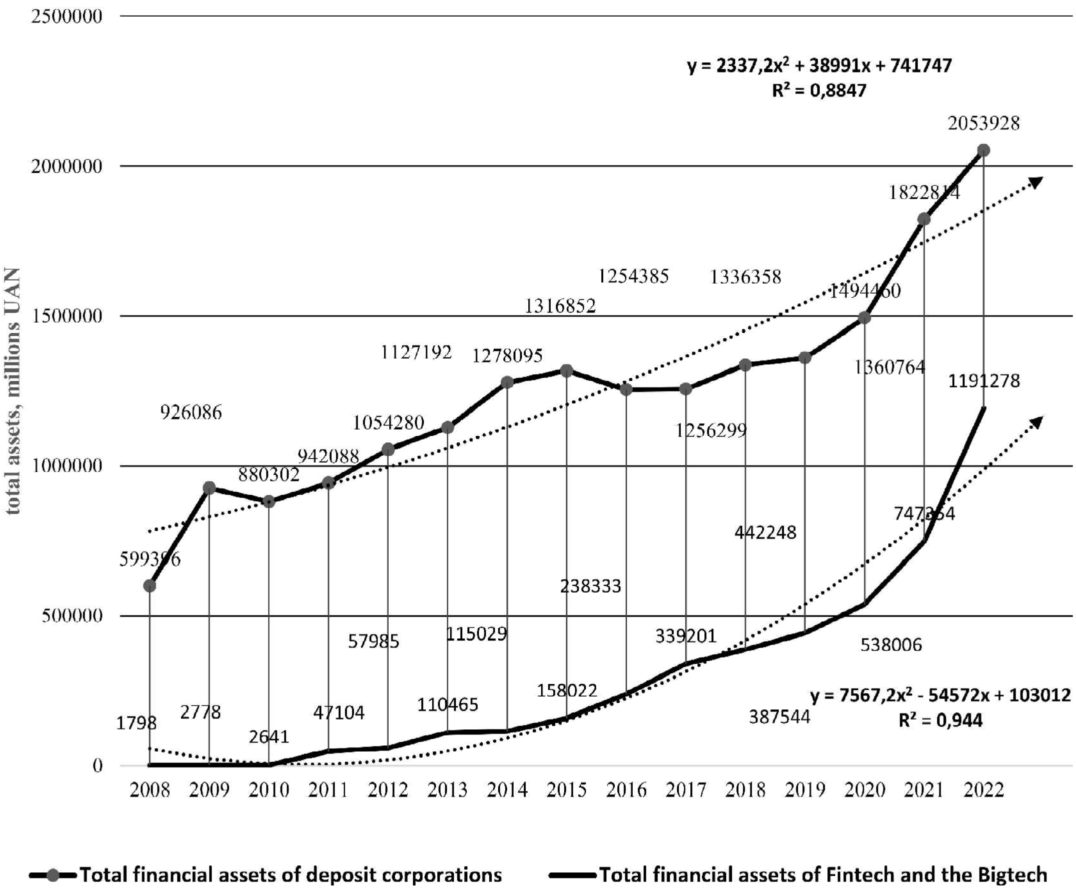

Fig. 2. Dynamics of total assets accumulation of deposit corporations, FinTech and BigTech from 2008 to 2022 (millions UAN)

Source: according to the Ukraine Ministry of Finance [4] and Ernst & Young Global Limited.

increased from 599398 to 2053928 million UAH. or 242%). However, this indicator in FinTech and BigTech companies is growing simultaneously (thus, from 2008 to 2022 the volume of accumulated total assets increased from 1798 up to 1191278 million UAH or 562%). The results of the analysis of dynamics of total assets of deposit corporations, FinTech, and BigTech companies from 2008 to 2022 are given in Fig. 2.

At the same time, it is obvious that the rate of growth of the total assets of FinTech and BigTech companies outpaces the growth of such assets in deposit corporations caused by a much larger volume of automated and it-oriented services in the field of credit. For example, according to Ernst & Young Global Limited for FinTech and BigTech companies on loans provided, this is 96% of services, while deposit corporations figure ranges from 5 to 11,2%. The same is the dynamics of accumulated total liabilities. In deposit corporations from 2008 to 2022, the volume of liabilities remains significant and in dynamics is growing, but, at the same time, this indicator in FinTech and BigTech companies (characterized by the outgrowth rates) is growing. This is the most noticeable change in accumulated funds (Fig. 3).

Thus, from 2008 to 2022, on deposit corporations, the sum of accumulated funds of economic entities increased from 111995 to 758434 million UAH (or 577%), and individuals' funds from 163482 to 727022 million UAH (or 344%) [5]. According to FinTech and BigTech companies, the sum of accumulated funds of economic entities increased from 336 to 447476 million UAH (or 1200%), and individuals' funds from 490 to 610698 million UAH (or 1100%). This is since the opening of different types of IBAN accounts in most deposit corporations is connected with complex procedures that require the personal presence of the client. At the same time, FinTech and BigTech companies create alternative services that allow opening corporate accounts and obtaining IBAN without physical presence requirements (e.g., Holvi, TransferWise, Payoneer, etc.). In any case, clients receive a full-fledged digital account with the following functions:

1) receiving of funds and payment of accounts;

2) tracking of payments and free maintenance of their account;

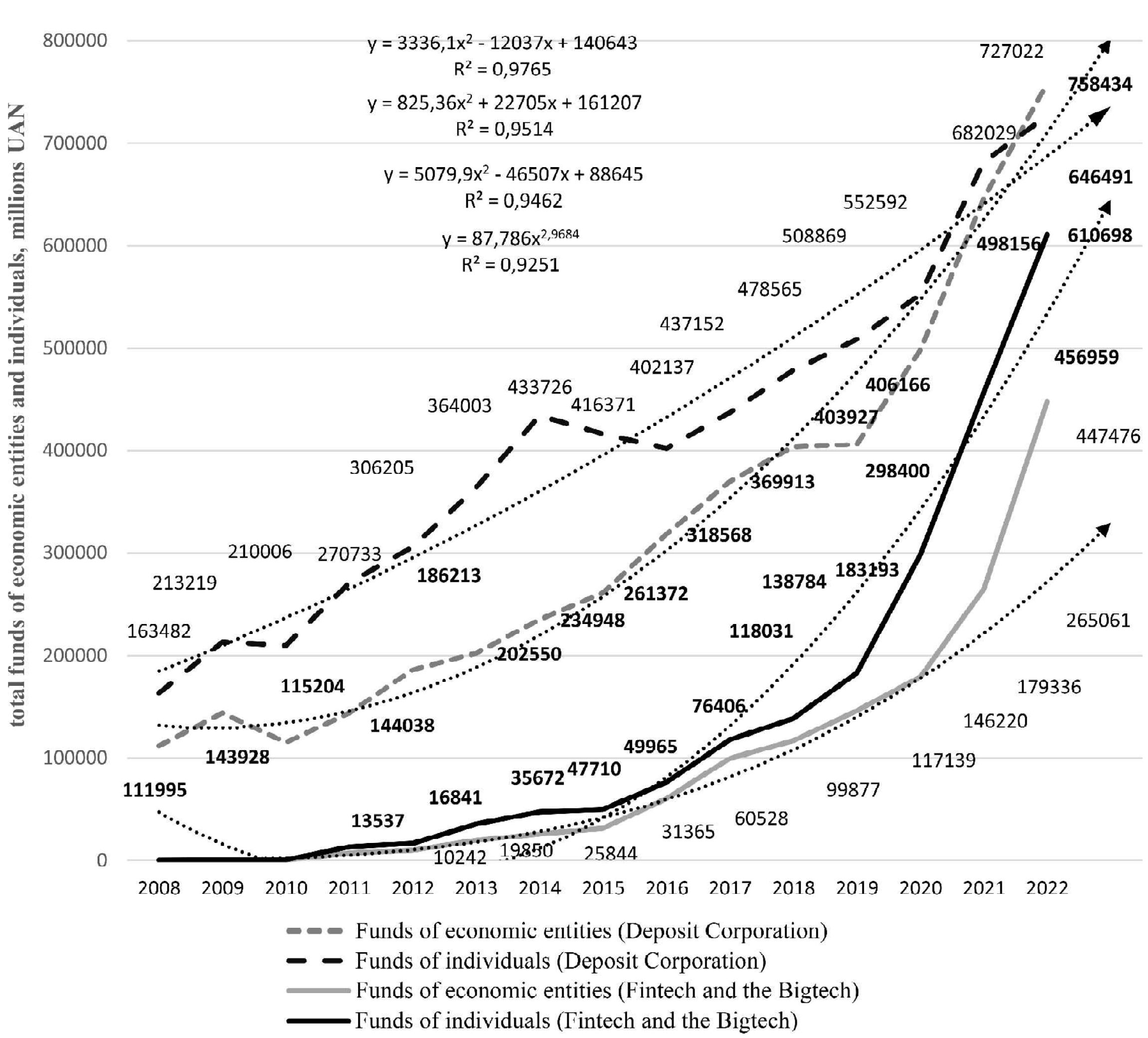

Fig. 3. Dynamics of accumulation of total funds of economic entities and individuals of deposit corporations, FinTech and BigTech from 2008 to 2022 (millions UAN)

Source: according to the Ukraine Ministry of Finance [5] and Ernst & Young Global Limited.

3) connection of PayPal and receipt of payments through it.

The rapid growth of the role of FinTech and BigTech companies in the financial market requires immediate action by the Government of Ukraine, Supreme Rada of Ukraine, and National Bank of Ukraine, as it creates risks for the financial stability of Ukraine. This is since such companies as deposit corporations:

1) are exposed to the underlying bank risks (in particular liquidity risks, credit, and market risks) associated with systemic risk;

2) are exposed to the inflow of non-financial risks (excessive use of artificial intelligence, over-automated or it-oriented services create a propensity to cyberattacks and systemic failures).

It is impossible to avoid systemic and non-financial risks for FinTech and BigTech companies. Thus, the priority task of the state is to create digital vectors for the joint development of deposit corporations, FinTech, and BigTech companies within which each participant will receive its competitive advantages. We state that the National Bank of Ukraine is currently encouraging cooperation between deposit corporations, BigTech, and FinTech companies. For example, on 11.06.2018, the National Bank approved a Regulation on the organization of the risk management system in banks of Ukraine and banking groups), in which the key positions established requirements for cooperation with outsourcers. In fact, under this provision, each banking institution is obliged to develop an internal order of outsourcers' cooperation (including BigTech and FinTech companies) [2]. Note that, we offer the same digital vectors that will ensure the coexistence of deposit corporations, FinTech, and BigTech companies because their collaboration will only foster intermediary chains and create risk-sharing problems.

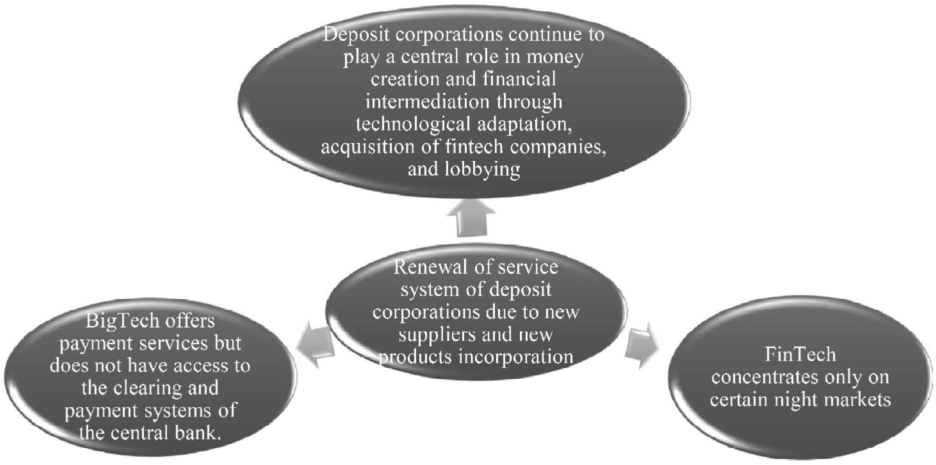

Fig. 4. Digital vector of deposit corporations' development by incorporation of new suppliers and new products

Source: developed by the author based on [1; 6; 7].

In our opinion, among such vectors can be distinguished the following:

— updating of service system of deposit corporations;

— transformation of the role of deposit corporations and the structure of the financial system;

— transformation of services-oriented relations of deposit corporations at the top and bottom levels of the financial market.

The digital vector for updating the service system of deposit corporations can be formed by incorporating of new suppliers and new products, including MobileWallet for Android and IOS with comprehensive functionality, remote office systems, PREPAID plastic cards, etc. (the main components of the vector are given in Fig. 4).

The specific thing is that the selection of this vector requires:

(1) changes in regulation and supervision of deposit corporations (which was available when digitalization has just started and non-financial risks have not been a priority);

2) increase the importance of non-financial risks to deposit corporations and their more accurate reflection in prudential regulation;

3) upgrading of the qualification of staff of regulatory and supervisory bodies.

The digital vector on the transformation of the role of deposit corporations and the structure of the financial system (the main components of the vector are given in Figure 5). Such a vector can be formed if the central bank starts introduction of retail digital currencies, and deposit corporations

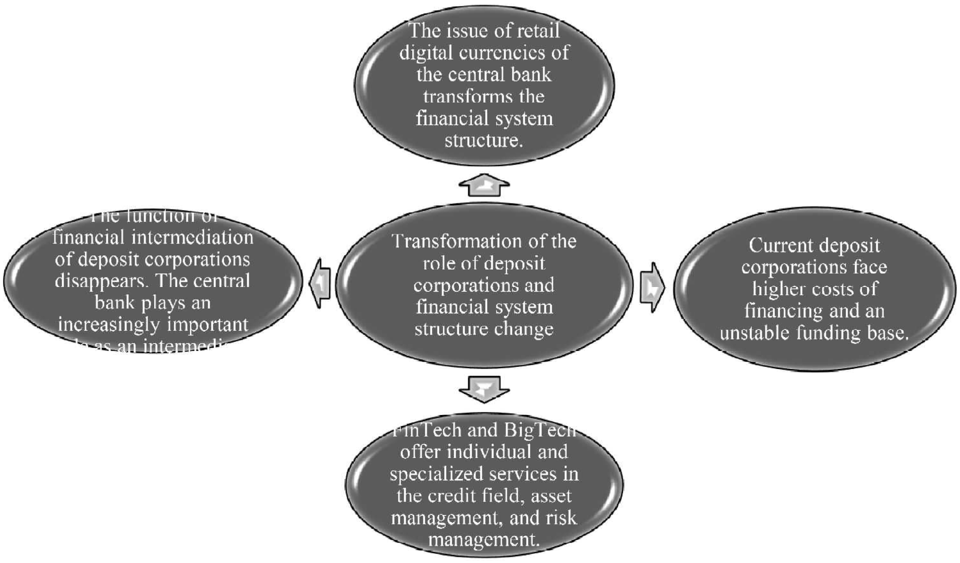

Fig. 5. Digital vector of transformation of the role of deposit corporations and financial system structure

Source: developed by the author based on [1; 3].

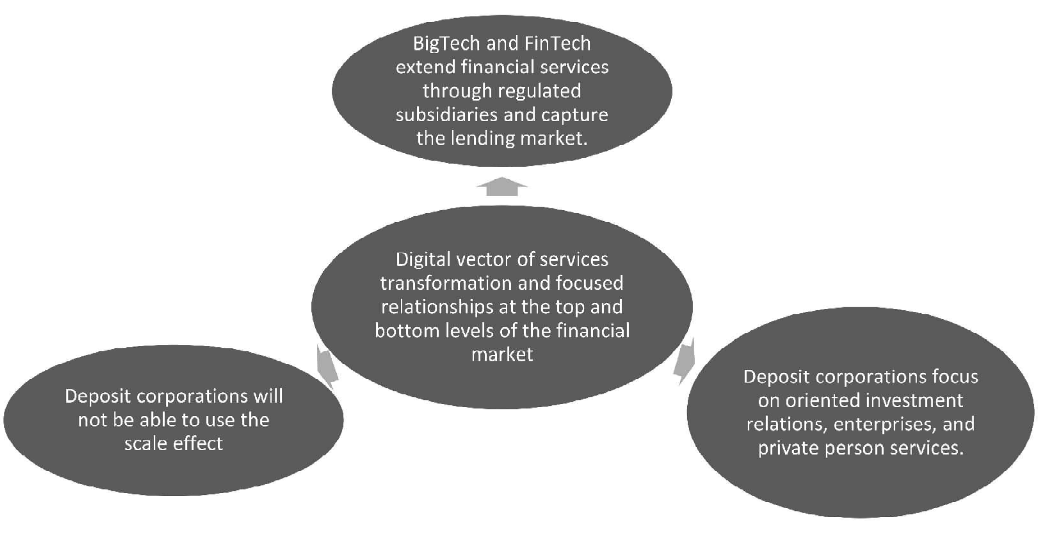

Fig. 6. Digital vector of services transformation and focused relationships at the top and bottom levels of the financial market

Source: developed by the author based on [2; 3; 7].

abandon their role as the basis of the financial system (since traditionally stable client deposits will switch, at least partially, to digital currency).

Selecting this vector requires:

1) development of methodology for estimation of efficiency of output of retail digital currencies of the central bank. This is due to the fact that the decision to issue them should balance the gain in efficiency with risks of stability of the financial system;

2) separation of financial intermediation activities from other activities of FinTech and BigTech (for example, by establishing subsidiaries or non-banks that fall within the regulatory perimeter);

3) expanding cooperation between regulators in different sectors and jurisdictions.

The digital vector on the transformation of services-oriented relations of deposit corporations at the top and bottom levels of the financial market (the main components of the vector are given in Figure 6). Such a vector can be formed if the activity of deposit corporations is focused on investment relations, enterprises and private person's service.

Selection of this vector requires:

1) separate activity of financial intermediation from other activities of Fintech and Bigtech;

2) creation of regulatory perimeter and conditions of access to financial security network for FinTech, BigTech, and deposit corporations.

We note that, regardless of the two-way digital vector of the development of deposit corporations, the structure of output support and reduction of their capacities should be strengthened. This is since any vector corporation will face increased competition in the financial market and will lose part of its profit. This will necessarily lead to the fact that existing deposit corporations will reduce their activities or leave the market. This process can cause financial turbulence. For this process to be smooth, the Government of Ukraine, Supreme Rada of Ukraine, and National Bank of Ukraine can also actively promote it, at the same time: 1) avoiding state support of inviable deposit corporations; 2) relaxing barriers to exit the financial market and liquidation; 3) promoting merger and formation of associations of deposit corporations.

CONCLUSIONS FROM THIS STUDY AND PROSPECTS FOR FURTHER EXPLORATION IN THIS AREA

Within the framework of the study, attention was paid to the fact that the number of deposit corporations in Ukraine has decreased. This is due to a fall in the profitability of banking activity due to the repeated political and economic crises and the increase of FinTech and BigTech companies in the financial services market. According to the results of the study the following conclusions were made:

1. At present, the volume of total assets accumulated by deposit corporations remains significant and growing in dynamics (thus, from 2008 to 2022, the accumulated total assets increased from 599398 to 2053928 million UAH). At the same time, this indicator is growing in FinTech and BigTech companies. At the same time, it is obvious that the rate of growth of total assets of FinTech and BigTech-companies outpace the growth of such assets in deposit corporations caused by a much larger volume of automated and

it-oriented services in the sphere of crediting. The same dynamics of accumulated total liabilities.

2. The rapid growth of the role of FinTech and BigTech companies in the financial market requires immediate action by the Government of Ukraine, Supreme Rada of Ukraine, and National Bank of Ukraine, as it creates some systemic and non-financial risks for Ukraine's financial stability, which cannot be avoided. Thus, the priority task of the state should be the creation of digital vectors for the joint development of deposit corporations, FinTech, and BigTech where each participant will get its competitive advantages. We state that we offer exactly the digital vectors that will ensure the coexistence of deposit corporations, FinTech, and BigTech as independent financial market entities, as their cooperation will be extended by intermediary chains and will create problems of mutual risk sharing.

3. Among the digital vectors of deposit corporations' development, we have allocated the following: renewal of the service system of deposit corporations; transformation of the role of deposit corporations and financial system structure; transformation of services, oriented relations of deposit corporations in the top and bottom levels of the financial market. Let us state that, regardless of the two-way digital vector of deposit corporations' development, the structure of support of the output and its reduction in capacity should be strengthened. This is because any vector corporation will face increased competition in the financial market and lose part of its profit.

The prospects of further developments in this direction are to develop recommendations on optimization of the strategy of development of the financial sector of Ukraine till 2025.

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