

# DEVELOPMENT OF THE FINANCIAL MARKET: DESTABILIZING PROCESSES, THEIR ASSESSMENT, AND GLOBAL IMPACT

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**Abstract.** *The subject of the study* is the process of destabilization of the financial market of Ukraine in modern conditions. *Methodology.* The research used general scientific methods, in particular: theoretical generalization, methods of positive and normative analysis, and statistical analysis. *The goal is to assess* the processes of destabilization of the financial market of Ukraine in modern conditions. *Research conclusion.* For the formation of command information oriented to the production of effects in current conditions, it is necessary to provide in mathematical logic: 1) a comprehensive study of static (permanent) characteristics of the financial market as a hierarchically ordered combinatorial system; 2) research of existing trends in the development of the financial market of Ukraine according to the elements of its combinatorial structure; 3) specification of critical problems and obstacles to the development of the financial market (according to the elements of its combinatorial structure), which may negatively affect the performance of the financial market. The financial market of Ukraine is a complex structure characterized by constant structural changes. Currently, the financial market of Ukraine is characterized by somewhat contradictory trends of its development, taking place against the background of increasing stochasticity of its environment. Naturally, it is necessary to create opportunities to estimate and forecast the flows of financial resources and changes in the financial market associated with these flows by building a complex of models that provide 1) forecasting possible behavioral reactions of the integrated performance of the financial market on the basis of existing trends in changes in the value characteristics of assets under the influence of various influencing factors in stochastic models; 2) step-by-step descriptive-numerical representation of data in dynamic programming models to identify possible changes in the structure of the financial market. It is this content of the models that is important because it not only determines the possible directions of strengthening, vulnerability and destabilization of the financial market, such a model basis increases the scientific validity of the developed strategic priorities aimed at preventing destabilization processes on the efficiency of the financial market in the future.

**Key words:** financial market, destabilizing processes, global influence.

**JEL Classification:** C00, C53, G10

## 1. Introduction

During 2020–2021, the impact of the global COVID-19 pandemic required anti-crisis measures aimed at ensuring the stability and development of the financial market (Zolkover, Zolotykh, Mykhalchynets, Nemish, Delas, Sybirtsev, 2021). Within the framework of the strategy for the development of the financial sector of Ukraine until 2025 (within the framework of which there is an identification of the concepts "financial sector" and "financial market" (Strategy for the development

of the financial sector of Ukraine until 2025. National Bank of Ukraine, 2022) – this should contribute to:

1. Maximum preservation of such structural proportions and trends in the development of the financial market.
2. To reform and develop the financial market through leading international practices.
3. Implementation of measures provided for by the Association Agreement between Ukraine and the EU and other international obligations of Ukraine.

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At the same time, the strategy for the development of the financial sector of Ukraine lacks proposals for specific measures to ensure the results (or the percentage of increase in the monetary value and profitability of assets), which are most important for a stable (one that can preserve its properties for a long time) and developed financial market (according to seven strategic directions: financial stability, macro-economic development, financial inclusion, development of financial markets and innovative development. Each direction has its own strategic objectives and performance indicators). Therefore, authors believe that the financial market efficiency management system as a tool of this strategy for the development of the financial sector of Ukraine until 2025 should be interpreted as the transformation of information about the structure and trends of development of the financial market according to the elements of its combinatorial structure into command information focused on the production of effects. In connection with the large-scale invasion of the Russian Federation into Ukraine, the outlined need has become even more urgent. Therefore, it is inevitable to adapt the combinatorial structure of the financial market of Ukraine to new realities (in particular, in terms of structure, trends in changes in the value of financial assets, etc.), which may lead to a significant decrease in the effects produced by it and to a deterioration of expectations regarding them (at the expense of a decrease in the growth of monetary expression of the value of realized net income). Therefore, it is necessary to provide mathematical logic for the formation of command information aimed at the production of effects in current conditions:

1. A comprehensive study of the static (permanent) properties of the financial market as a hierarchically ordered combinatorial system.

2. Research of existing trends in the development of the financial market of Ukraine according to the elements of its combinatorial structure.

3. Specification of critical problems and obstacles to the development of the financial market (according to the elements of its combinatorial structure), which may negatively affect the performance of the financial market.

This presentation of information about the financial market of Ukraine provides formalization of the model of its development and evaluation of the processes of destabilization of the financial market of Ukraine.

The purpose of the article is to assess the processes of destabilization of the financial market of Ukraine.

### 3. Trends in the development of the currency market of Ukraine

Development trends of the foreign exchange market should be carried out according to its critical operations, which are also highlighted in the statistics of the financial sector. In particular:

- 1) transactions with foreign currency (including transactions of banks with non-cash foreign currency (from now on – FC), transactions of non-bank institutions with cash FC, transactions of clients of banks with non-cash FC, anonymous cash transactions of clients of non-bank institutions with FC, exchanges between private individuals, NBU interventions);

- 2) operations with bank metals (from now on referred to as BM) and investment coins (operations of banks and their customers with non-cash and cash BM and other assets classified as BM), which changed for the better in 2015–2022, although they did not improve radically.

The following features of the development of the currency market of Ukraine for 2015–2021 are highlighted:

1. Growth of the total volume of transactions with FC from 2017 to 2021 for all types of critical transactions (the most significant such growth was observed in 2018–2019, when the purchase of currency increased by 19.5%, and the sale by 21.2%). In 2021, the buying and selling of currency reached record levels. At the same time: The volume of operations of banks with non-cash FC on the foreign exchange market of Ukraine on the terms "tod", "volume", "spot" increased from 2018 to 2021; the volumes of interventions of the NBU were somewhat unstable, as they depended on the negative impact of excessive exchange rate volatility and extraordinary events on the foreign exchange market; the volume of cash foreign currency transactions of banks increased from 2015 to 2021 (mainly in 2017/2016 and 2018/2017); the volume of non-cash foreign currency transactions of bank customers increased from 2015 to 2021; the volume of completely anonymous cash transactions decreased from 2019 to 2021, which is directly related to currency liberalization.

2. The growth of the total volume of transactions with foreign currency coincided with the expectations regarding its net purchase of FC. Therefore, the balance for the entire period was negative, as the difference between the sale and purchase of foreign currency by the total volume of transactions with it. At the same time, from 2015 to 2019, the net purchase of currency decreased from 10,999.8 to 1,985.2 million dollars. US equivalent, then from 2020, the indicator again entered a digressive trend (in 2021, it reached 4121.1 million US equivalent).

3. Growth of the total volume of transactions with bank metals (silver, palladium, platinum, gold) and Ukrainian investment coins in 2015–2021. Although the volume of such transactions has increased, in comparison with the volume of transactions with foreign exchange it remains insignificant (in 2021 it will be 0.2% of the total volume of transactions on the foreign exchange market), which is due to the difficulties in predicting profits for short transactions, the existing commission for transactions with cash BMs of 3–5% (which is higher than the commission for foreign exchange), the fee for storing physical BMs, IM or account maintenance in non-cash banking metals, possible problems with receiving physical bullion when closing the account.

4. In 2021, the share of operations with non-cash IB was 67%, and with non-cash BM – 41.36% of the total volume of operations with them on the currency market of Ukraine. The volume of operations with cash FC is 33%, with cash BM – 58.64% (so the values remain relatively high).

#### **4. Assessment of destabilization processes on the financial market of Ukraine**

According to the presented features, the development of the currency market of Ukraine is characterized by several key problems that negatively affect its efficiency and can cause destabilization processes, among them:

1) The difficulty of keeping the volatility of the official rate of the NBU hryvnia within  $\pm 5\%$  per year, which is caused by the need to ensure compliance with the policy of inflation targeting (in particular, for 2021, the official exchange rate fluctuated between UAH 28.4–26.1 (Statistics of the financial sector. National Bank of Ukraine, 2021; Official exchange rate of hryvnia against foreign currencies. National Bank of Ukraine, 2022);

2) The complexity of the process of formation of the money supply within the framework of currency interventions (which is formed by significant volumes of completely anonymous cash transactions of clients of non-banking institutions with FC, exchanges between private individuals are formed for the NBU); 3) the process of displacement of the national currency by a foreign one (in Ukraine it is the U.S. dollar). Today Ukraine is classified as a country with a "highly dollarized" economy; according to the indicator of the share of foreign currency deposits in the monetary aggregate M2, the level of dollarization reaches more than 33% (Supervisory statistics. National Bank of Ukraine, 2022).

The process takes place due to a significant number of reasons, including the existing "black market" of the currency; significant amounts of inflows into the country of foreign currency transfers

from labor migrants; the high level of inflation in the country; 4) the situation of tension on the borders of Ukraine, which was supplemented by a full-scale invasion of the Russian Federation into Ukraine in 2022, the introduction of martial law in Ukraine on February 24, 2022, the introduction of temporary restrictions on the purchase of FC at the interbank or its issuance at the bank's cash desk during 2022, and other factors that constitute significant obstacles to the development of the financial market of Ukraine. Therefore, despite the positive trends in the development of the currency market, its dynamics may significantly deteriorate due to the costs of the invasion of the Russian Federation into Ukraine in 2022 and the consequences of the Russian-Ukrainian war. This, in turn, may lead to a sharp depreciation of the hryvnia against foreign currencies and a corresponding decrease in the profitability of foreign exchange transactions. The deposit market development trends for 2015–2022 were positive in terms of dynamics, but did not improve structurally. At the same time, in the conditions of the Russian-Ukrainian war, the deposit market became extremely vulnerable due to the increased need of individuals for cash. Currently, the static characteristics and development trends of the deposit market are determined by the following features:

1. An increase in the total volume of deposits attracted by depository corporations (the largest increase is possible in 2019–2021, estimated at 26.4%). By the end of 2022, the total volume of deposits may decrease. For example, by the end of January 2022, individuals – clients of Privatbank withdrew UAH 11.25 billion from their current accounts and UAH 288 million in term deposits (although in the same period in 2021, the bank attracted UAH 867 million from individuals. for demand accounts and UAH 485 million for term accounts) (Sleptsova, 2022). Oschadbank gave UAH 3.131 billion to citizens from demand accounts and UAH 226 million. from time deposits (for the same period in 2021, the bank attracted UAH 972 million and UAH 752 million, respectively) (Sleptsova, 2022).

2. Changes in the structure of attraction of deposits by depository corporations in sectors of the economy. In particular, according to the structure of attraction: the share of funds raised from other financial corporations decreased from 3.83% in 2015 to 3% in 2021; the share of funds raised from other deposit corporations decreased from 1.8% in 2015 to 1.1% in 2021; the share of funds raised from non-residents decreased from 5.3% in 2015 to 2% in 2021. From 2015 to 2022, the share of funds raised from households decreases from 54.2 percent in 2015 to 52.3 percent, while the share of funds raised from nonfinancial

corporations increases from 34.99 percent in 2015 to 41.7 percent in 2021.

3. Deterioration of the structure of attracting funds for deposits for key operations of depository corporations. The structural indicators were transformed according to the terms of repayment in the direction of increase of the number of funds on demand. With the beginning of the Russian-Ukrainian war, this became the cause of a significant outflow of funds, as depository corporations have the right not to repay term deposits early. However, they are obliged to return deposits on demand. In particular, the share of funds on demand increased from 43.7% in 2015 to 67% in 2021 (however, it was from them that the main outflow of deposits occurred in the first month of the beginning of the Ukrainian-Russian war), the share of funds involved in 1 year decreased from 36.3% in 2015 to 23.2% in 2021, the share of funds raised for 1-2 years decreased from 16.4% in 2015 to 8.5% in 2021, raising funds for two years decreased from 3.7 to 1.2%, respectively).

Trends in the development of the credit market in Ukraine for 2015–2022 had generally positive dynamics. However, the structural nature of relations between borrowers and creditors did not improve during this period. Combined with the economic consequences that exist in the economy, in 2022, as a result of the Russian-Ukrainian war, further deterioration of the structure and negative dynamics of credit market development is possible, which may negatively affect its performance. The following features of the credit market development were highlighted:

1. Current fluctuations in the total volume of loans granted by depository corporations (except for the NBU) for the period marked by a polynomial trend. In particular, the volume of loans granted by depository corporations grew from 2015 to 2018 (in 2015–2016 by 0.8%, in 2016–2017 by 3.7%, in 2018–2017 by 6.1%) and from 2020 to 2021 (by 10%), decreased from 2018 to 2020 (in 2018–2019 by -9.4%, in 2019–2020 by -4.5%). At the same time, the most significant growth in the volume of loans provided by depository corporations was observed in the general public administration sector (characterized by a constant increase in the indicator from 2016 to 2021). In addition, from 2020 to 2021, there was a 69.2% increase in the volume of loans provided by depository corporations to other financial corporations.

2. Changes in the structure of loans granted by depository institutions to sectors of the economy, the largest share of which is concentrated in the non-financial corporations sector. In particular, according to the structure of loans granted by depository corporations, from 2015 to 2021: the share of loans

granted to other financial corporations decreased from 1.5% to 0.9%, to other depository corporations – from 0.7 to 0.3%; the share of loans granted to non-financial corporations decreased from 71 to 69.7%; the share of loans granted to the general public administration sector increased from 0.3 to 2.5%; the share of loans granted to households (households), FPOs and NGOs serving households increased from 17.1 to 23.6%. In addition, the share of loans granted to non-residents will decline from 3.3% in 2015 to 3% in 2021;

3. Changes in the structure of loans provided by depository corporations in terms of repayment terms. Therefore, the structural indicators were transformed according to the repayment terms but in the direction of increasing the volume of loans up to the 1st year. The main reason was that from 2015 to 2021, deposit rates decreased. In particular, the share of loans with a maturity of up to 1 year increased from 44.66% in 2015 to 54.38% in 2021, and the share of loans with a maturity of 1 to 5 years decreased from 32.8% in 2015 to 31.3% in 2021, the share of loans with a maturity of 5 years decreased from 22.55% to 14.29%, respectively. These structural changes are related to the short-term nature of deposit institutions' deposit policy.

Therefore, the critical problems of the deposit and credit markets, which can negatively affect their effectiveness and lead to processes of destabilization of the financial market, are:

1) small amounts of long-term liabilities attracted by depository corporations (in connection with the difficulty of attracting legal entities and households to long-term deposits and increasing the total capital of banks). It should be noted that as of 2021, the funds raised in the total bank resources amounted to 73.06%. Therefore, they constituted their main base (most funds on demand). In 2021, the volume of deposits exceeded the volume of loans by 28.95%. However, there is a need for long-term and medium-term funds. This forces deposit companies to lend to the economy partly at the expense of their capital, which also limits the development of the credit market.

2) limitation of opportunities for attracting funds for deposit from current accounts on demand (in connection with the reaction of clients to the news about the escalation of the Russian-Ukrainian conflict, other negative information, and the increased need for cash). It should be noted that funds on demand prevailed in attracting funds for deposit for 2015–2021 and at the beginning of 2022. This became the main reason for the sharp decline in funding sources (Mykhalchynets, 2018). In particular, deposits of households in national currency for the first quarter. 2022 decreased by 13.1%, and the volume of foreign currency funds

of other financial and non-financial corporations decreased by 10.6% due to the outflow of funds from all groups of banks.

The most significant outflows of hryvnia business funds were observed in the first weeks of the war. In the conditions of the Russian-Ukrainian war, in parallel with the growth of economic uncertainty, the conditions for the development of deposit and credit markets have changed significantly, especially at the present time: the increased risk of loss of depository corporations and other market participants of liabilities (in particular, in 2022 the level of coverage of non-performing loans or NPL reserves has increased from 102 to 108%; there is a high probability of a decrease in the quality of assets (which is a source of funding); there is a high probability of a decrease in the volume of lending to the economy (for example, in the first two months of 2022, the volume of the loan portfolio increased by 5.8%, but the decrease in the volume of loans in March leveled the previous growth (Mykhalchynets, 2018).

During martial law, only short-term loans were granted. The outlined changes will affect the performance of the deposit and credit markets. The trends in the development of the markets for securities and derivative financial instruments and futures contracts (derivatives) for 2015–2021 were rather ambiguous. However, they showed a gradual development, which led to:

1. Growth of the total volume of securities (except shares) issued by residents (by economic sectors) and non-residents (in particular, the issue increased from UAH 110.760 billion in 2015 to UAH 631.151 billion in 2021). The total volume of issued shares registered by the National Securities and Stock Market Commission fluctuated significantly. From 2015 to 2017, the indicator increased from UAH 1,285, 54.79 million to UAH 324,844.24 million. At the same time, the volume of share issues decreased from UAH 128,554.79 million in 2015 to UAH 42,884.28 million in 2021, which is the result of work on cleaning up the securities market and increasing the transparency of the stock

exchange segment (Yemelyanova, 2020). At the same time, the total volume of exchange, purchase and sale of securities (excluding shares) began to grow from UAH 110,760 million in 2015 to UAH 631,151 million in 2021, when the volume of exchange, purchase and sale of shares, derivative financial instruments and term contracts (derivatives) will decrease.

2. Constant changes in the characteristics of exchange, purchase and sale of securities, derivative financial instruments and term contracts (derivatives), namely the share of transactions and operations by agreement of the parties on organized and unorganized markets for 2015–2021. In 2021, the volume of transactions on organized markets will amount to 67.05% of the issue of securities, in particular shares (Table 1).

The functioning of such a market requires the presence of trade organizers and trade organization. At the same time, the number of trade organizers has been decreasing since 2006. In 2015, auctions were held at ten venues (UFB, KMFB, INNEKS, PFB, UMVB, UMFB, SEFB, PFTS, PERSPEKTIVE, UB), and in 2021, auctions were held at only four venues (UB, PFTS, UMVB, PERSPECTIVE), while their fragmentation is noted, as the same instrument can be traded simultaneously on different platforms at different prices (Yemelyanova, 2020).

The unorganized market (interbank market, interdealer market, commodity exchanges, where the price is determined by agreement of the parties) accounts for 32.96%. Since on such markets are traded securities that have not gone through the listing procedure on the sites of trade organizers, the information secrecy of their issuers remains a problem. This shows positive trends in the increase of the volume of exchange contracts on trading organizations.

3. The basic structure of transactions of the organizational market from 2015 to 2021 was represented by a wide range of securities, financial instruments and term contracts (derivatives), including shares of domestic and foreign issuers, bonds of domestic state and municipal loans, bonds of

Table 1

**Volume of exchange, purchase, and sale of securities, financial instruments and futures contracts (derivatives) on organized, and unorganized markets of Ukraine, 2015–2021\***

	Value of indicators by years						
	2015	2016	2017	2018	2019	2020	2021
The volume of trading in securities, derivative financial instruments and futures contracts (derivatives)	200771	236953	205803	260871	304966	335410	451961
The volume of issuance of securities, particularly shares	239314,8	474693,94	685840,2	442514	450143,4	660158,8	674035,2
% of transactions in organized markets	83,89	49,92	30,01	58,95	67,75	50,81	67,05
% of business in unorganized markets	16,11	50,08	69,99	41,05	32,25	49,19	32,95

Note. \* The data exclude the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the temporarily occupied territories of the Donetsk and Luhansk regions.

business structures, investment certificates, foreign state loan bonds, bonds of a foreign issuer and a foreign state. At the same time, its component evaluation (which characterizes the internal and interspecies relations of elements) reveals the orientation of trades mainly on bonds of domestic state loans, which accounted for 98.2% of trades in 2021. After the end of the Russian-Ukrainian war, further growth of the share of bonds of domestic state loans in the structure of transactions of the organizational market is possible. In 2021, the lowest percentage of shares (0.123% of the total trading volume) and other securities (1.677% of the total trading volume) was available on the organized markets of securities, financial instruments and futures contracts (derivatives). This makes it impossible to organize long-term investment strategies, and the low percentage of financial instruments and futures contracts limits risk management and hedging strategies. Another characteristic feature of the structure of the organized market of Ukraine is the predominance of the volume of trading on the secondary market over the volume of trading on the primary market. Relevant data on the structure of agreements of the parties of the unorganized market are limited.

3. Changes in the structure of exchange, purchase, and sale of securities in sectors of the economy. In particular, in terms of exchange, purchase, and sale of securities other than shares, the largest share of transactions falls on the general public administration sector (the indicator increased from 80.62% in 2015 to 96.13% in 2021). According to other sectors (in particular, the production of tangible and intangible goods and services), the share of operations has become low. In terms of exchange, purchase and sale of shares, the largest share of operations falls on the sectors of financial and non-financial corporations (at the same time, the figures of 51% for financial corporations and 42.7% for non-financial corporations in 2015 changed to 44.7% and 50.6%, respectively, in 2021). Changes in the structure of exchange, purchase and sale of financial instruments and term contracts (derivatives) cannot be estimated due to lack of data. At the same time, in 2021, the largest share was forwards – 40.27%, futures contracts – 37.4%, and the share of options contracts – 22.3%.

1. Changes in the market by repayment structure/circulation of securities. Therefore, by securities (excluding shares), the share of securities with maturities of more than two years increased from 48.9% in 2015 to 59.8% in 2021. By shares, it became high (in 2021, 95, 77%) and remained a share in circulation for more than one year. Therefore, the main problems of the markets of securities, derivative financial instruments and futures contracts are their

underdevelopment. In addition, the performance of the outlined market is reduced by:

- 1) a low percentage of other than bonds, domestic government loans, securities, financial instruments and forward contracts (derivatives) on organized markets and their fragmentation;
- 2) a high percentage of transactions with securities on unorganized markets, where it is impossible to avoid the problems of information secrecy of issuers and temporary suspension of organized markets (during the war only trading in new issues of military discount bonds was allowed);
- 3) uneven distribution of transactions of purchase and sale of securities by sectors of the economy, which limits the development of the real sector of the economy. In the conditions of the large-scale invasion of the Russian Federation into Ukraine and various restrictions on the operation of the defined markets, the identified problems may aggravate and cause destabilization of the financial market.

The structural composition of the real estate market and the development trends for 2015–2021 are positive due to the following development characteristics:

1. Growth of the total volume of transactions with property rights on the real estate market. The volume of transactions with property rights to real estate objects: on the primary market will increase from UAH 28,907.5 million. in 2015 to UAH 102,894.3 million. in 2021 (or by 255%); on the secondary market will increase from UAH 102,844 million. in 2015 to UAH 170,823 million in 2021. Positive dynamics are associated with the growth of the housing price index. The primary real estate market is influenced by the improvement of the business environment and the issuance of construction permits.

2. Changes in the structure of transactions with ownership rights in the real estate market. Therefore, in 2021 the real estate market will be dominated by transactions with ownership rights to nonresidential real estate. In particular, the share of such transactions is 62% in the primary and 65.8% in the secondary market. From 2015 to 2021, the share of such transactions will gradually increase. By 2021, non-residential real estate will become increasingly liquid for investment and attractive for clients.

3. Changes in the real estate market according to the structure of transactions by period. Thus, as of 2021, the share of medium-term transactions in the primary market of transactions with ownership rights to residential and nonresidential buildings remains the largest (despite the decrease in the indicator, it is 45.86 and 39.26%, respectively).

At the same time, short-term transactions with property rights imply ownership for up to 1 year;

medium-term transactions with property rights imply ownership for 1 to 5 years; long-term transactions with property rights imply ownership for more than 5 years (EU: database, 2020).

Simultaneously, on the first day of full-scale war, the work of most state registries was suspended (which made many transactions in the real estate market virtually impossible). Later the blockade was lifted in most regions of Ukraine. Initially, the Ministry of Justice of Ukraine (according to the Order of May 3, 2022, No. 1760/5) approved a list of 2,832 notaries who were allowed to act on property rights under martial law from May 4. At present, this list is constantly being supplemented. Since April, the Resolution of the Cabinet of Ministers of Ukraine No. 480 dated April 19, 2022 "On Amendments to Certain Resolutions of the Cabinet of Ministers of Ukraine Concerning the Activities of Notaries and the Functioning of Unified and State Registers, the Holder of which is the Ministry of Justice, under Martial Law" has introduced a number of amendments to the regulatory acts regulating the rules of access to state registers and the performance of notarial and registration acts in connection with transactions involving property rights, which gradually remove the complete blocking of state registers. The real estate market has resumed, but the structure and dynamics of property transactions may change as a result of the hostilities.

The key issues facing the market at the moment are likely to be:

- 1) transformations of the structure of transactions with property rights in the real estate market;
  - 2) changes in the profitability of operations with property rights;
  - 3) changes in the structure of operations by period.
- At the same time, it is difficult to predict the nature of the outlined changes. Of course, it is difficult to predict the effect of such transformations on the real estate market, since everything depends on the time of the end of the war and on the damage caused to real estate objects as a result of military actions.

In the conditions of global challenges (pandemic, Russia's war against Ukraine) the difficult task of destabilization of the financial market, both external and internal, appears. Most of the authors studied

the post-war recovery (Serbo, Pavlenko, Irtyshcheva, 2022; Irtyshcheva, Kramarenko, Sirenko, 2022), the other part of the functioning under the influence of global factors (Pryshchepa, Kardash, Yakymchuk, et al. 2020; Popadynets, et al. 2021; Irtyshcheva, et al. 2022).

#### 4. Conclusions

The financial market of Ukraine is a complex structure characterized by constant structural changes. At present the financial market of Ukraine is characterized by rather contradictory trends of its development, taking place against the background of increasing stochasticity of its environment. Naturally, it is necessary to create opportunities for estimating and forecasting flows of financial resources and changes in the financial market associated with these flows by building a complex of models that provide 1) forecasting possible behavioral reactions of the integrated performance of the financial market on the basis of existing trends in changes in the value characteristics of assets under the influence of various influencing factors in stochastic models. This is because the trends in the development of the financial market according to its structure are the direct consequences of the stochasticity of the environment, the variability of the character formed by the action of not all but individual factors (which must be reasonably selected, taking into account the available field of influence of factors); 2) step-by-step descriptive-numerical presentation of data in dynamic programming models to identify possible changes in the structure of the financial market.

This is because the structure of the financial market forms the sectoral performance of the financial market, which can be regulated through the solution/achievement of appropriate strategic goals. It is this content of the models that is important because it not only determines the possible directions of strengthening, vulnerability and destabilization of the financial market, such a model basis increases the scientific validity of the developed strategic priorities aimed at preventing destabilization processes on the efficiency of the financial market in the future.

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