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Ensuring information security in the conditions

of digitalization of the financial sector of the economy: normative and analytical aspects

# Introduction

Today, the state faces a large number of external and internal threats that nega- tively affect the stability of the financial system, the state of the national currency, and the economy.

The main threats to financial security:

* cyber-terrorism, including the financial sphere (remember the powerful blow of the Petya virus, which was felt, in particular, by banking structures); Countering cyber threats has become especially important for Ukraine with the beginning of the hybrid aggression of the Russian Federation, which uses our state as a testing ground for cyber weapons, complex cyber operations, as well as working out mechanisms for using cyberattacks as tools for special information operations aimed at undermining vital inter- ests. own political preferences;
* external aggression and separatism in the east of the country; During a cyberwar, cyberwar forces or the aggressor country’s intelligence services may also involve non-state actors: national corporations to carry out in- dustrial cyber-espionage actions to undermine the country’s economic se- curity (as is currently the case with China against American companies), criminal hacker groups for the development and implementation of viruses in the enemy’s ITS, (eg, the hacker group «FancyBear», involved in Russian intelligence to conduct complex cyberattacks), as well as terrorist organiza- tions sponsored by governments, which can not only be involved in cyber attacks but also ready to take responsibility for a high-profile cyberattack1.

1 O. Meleshko, N. Prokopenko, O. Gudz, The impact of the shadow economy on the coun- try’s financial security E3S Web Conf. 2021, 284 07005 DOI: https://doi.org/10.1051/e3s-

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The development of effective national financial security is complicated by the uncertainty of its certain categories and components.

Given the instability of the country’s financial system and the presence of cor- ruption factors, the development of a modern regulatory framework in the field of financial security may be slowed down.

Most experts point to several obscure things that are as surprising as possible, at most shocking. Like the activities in Ukraine of banks and enterprises whose capital originates from the aggressor country. The behavior of some business rep- resentatives who deliberately discredit the state, its economic opportunities, busi- ness and investment climate, etc. is surprising.

Unfortunately, this situation is in favor of the aggressor state. After all, Russia is constantly trying to criticize Ukraine and the current government, blaming in- ternal problems. The situation infuriates conscious citizens and society in general. Four years after the Maidan, the war in the east continues, and society cannot believe that the huge human and material losses in the fight against aggression are offset, in particular, by the renegade of the political and business elite, which puts its profits above national interests.

Development of an effective support mechanism financial security of the state is impossible without scientific comprehension of its economic essence, research, and development of methods for evaluation and revision of theoretical approaches to ensuring stability and sustainability financial system of the state.

Main part: The financial security of the state is affected by action numerous endogenous and exogenous conditions and factors, therefore ensuring its effec- tive system, first of all, requires systematization and classification of phenomena and events, the onset of which is directly or indirectly threat to the interests of the subjects of financial relations, making it impossible to implement them, or an element of the financial and credit sphere, the separation of positive and negative tendencies caused by them important for the development of recommendations and decision-making2.

Today there is no single point of view among economists on the classification of threats financial security of the state. However, most of them are common in domestic and foreign practice classification by source (external and internal) and the degree of danger (available, those that emerging, potential, and expected).

So among the internal factors that make up the greatest threat to the financial security of the state is worth it to allocate a permanent budget deficit, low effi- ciency of budget and tax policies are high inflation rates, excessive domestic levels

1. I. Britchenko, N. Bohomolova, O. Kravchenko, S. Pinchuk, *Aassessment of the determinats of financial security of railways in Ukraine*, „Financial and Credit Activity: Problems of Theory

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debt, exchange rate instability, low-level financial market development, investment and innovation activity, lack of gold and foreign exchange.

Methods of ensuring the financial security of the state objective and compre- hensive monitoring the economy and financial sphere in order detection and fore- casting threats to the interests of objects financial security Development of thresh- old values financial and socio-economic indicators, exceeding which can provoke financial instability and financial crisis.

Development is implementation-specific measures aimed at prevention, neutral- ization, and elimination of financial threats state security reserves, the weakness of the monetary system, instability of the banking system, shadowing of the economy, etc.

The main external challenge to financial security because the objective process of integrating countries in the world community can be accompanied by uncon- trolled external growth debt, limiting the presence of the state on foreign financial markets, export abroad foreign exchange reserves, inhibiting the development of its financial infrastructure, weakening financial independence in solving the most painful issues socio-economic development of the country, as well as positions of domestic enterprises, organizations, and institutions.

Currently, some elements of such cyber warfacyberwarfarey the Russian Federation during the ongoing military aggression against Ukraine, which is one of the hallmarks of modern hybrid wars, where information and cyberspace are be- coming a field of confrontation. Moreover, if during cyber operations in Georgia and Estonia hacker groups controlled by the Russian Federation used as tools mainly DDOS-attacks aimed at blocking the work of state information resources, in Ukraine all-military actions were accompanied by complex APT-attacks on the critical infra- structure of the state in the energy, transport, and financial sectors. In addition, in the measures of cyber aggression of the Russian Federation against Ukraine the in- formation component is traced - more and more often cyber attacks on3.

In Ukraine, out of one hundred percent of crimes committed online, the most fraud. A separate area of cybercrime both in Ukraine and around the world, which poses the greatest threat, is cyber attacks on the financial sector. According to the National Bank of Ukraine, the most common types of cybercrime are the most common in the banking system of Ukraine: ATM fraud, fraud in trade and ser- vice networks, fraud on the Internet to steal payment card details, fraud in remote banking systems:

– the presence in the economic system of Ukraine of structures with cap- ital originating from the aggressor country; As of March 2019, there are

1. N. Shmygol, O. Galtsova, D. Krylov, A. Semenov, K. Shaposhnykov, *Assessment of the pros- pects for restoring the financial security of the state*, „Financial and Credit Activity: Problems

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two banks with Russian state capital left in Ukraine: Prominvestbank and Sberbank. As of February 1, 2019, the net assets of these banks amounted to UAH 44.1 billion. This is 3.2% of the total assets of the banking sector of Ukraine. The other three banks had different shares.

VS Bank has joined TAScombank. BM Bank has become a financial company. VTB Bank was declared insolvent. All three had their licenses revoked at the end of 20184.

According to the NBU:

* On July 10, 2018, the National Bank granted permission to reorganize VS Bank by joining TAScombank. Following the reorganization of the bank, the National Bank revoked the banking license of VS Bank on October 30, 2018;
* On April 3, 2018, BM Bank received the consent of the NBU to return the banking license and transform it into a financial company. On November 6, 2018, the relevant banking license was revoked at BM Bank;
* On November 27, 2018, the National Bank declared VTB Bank insolvent. On December 18, 2018, the National Bank of Ukraine, at the proposal of the Deposit Guarantee Fund of Individuals, decided to revoke the banking license and liquidate VTB Bank.5

There are also banks with private Russian capital in Ukraine. Among them is Alfa-Bank Ukraine. In terms of assets, it is among the top ten banks operating in Ukraine.

The bank itself states its affiliation as follows: «The bank belongs to the pri- vate investment holding company ABH Holdings S.A. (ABHH) with its head of- fice in Luxembourg, which has investments in financial institutions in Ukraine, Belarus, Kazakhstan, the Netherlands roof and Russia, as well as offices in Cyprus and the UK».

Finally, there is UNEX Bank, which, despite the Ukrainian citizenship of its beneficiary, oligarch an,d member of the Verkhovna Rada of Ukraine Vadym Novynsky, can also be considered a Russian agent of influence due to its active pro-Russian position and recent Russian citizenship. Alfa-Bank Ukraine (exclud- ing Ukrsotsbank, which is in the process of joining Alfa-Bank) is the absolute lead- er among banks with Russian capital in Ukraine in terms of assets. The combined assets of Alfa-Bank and Ukrsotsbank put this group in fourth place in terms of

1. M. Ziolo, B.Z. Filipiak, Sundaysdys, Sustainability in Bank and Corporate Business Mod- els. The Link between ESG Risk Assessment and Corporate Sustainability (2021) DOI: 10.1007

/ 978-3-030-72098-8.

1. L. Andreeva, T. Epifanova, O. Andreeva, A. Orobinsky, Contemporary Issues in Business

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assets in the banking system of Ukraine, and in first place among banks with for- eign capital in the country.6

Alfa-Bank, although conducting an active information campaign aimed at dis- tancing itself from Russian geopolitics, is still deeply embedded in Russia’s world economic relations. In addition, this PR positioning of the bank raises serious suspicions of its «sincerity»: behind the «screen» of dual citizenship, the Russian capital is attributed in the bank’s reports only about 30% of the institution’s shares, instead of almost 90% of actual control by the aggressor state. The same manipula- tion is taking place against Ukrsotsbank, acquired by Alfa-Bank in 2016.

At the end of 2018, according to the State Statistics Committee, Russian invest- ments in the financial and insurance sector of Ukraine amounted to 690.2 million dollars, which was almost 20% of all foreign investment in this sector. And during the presidential campaign, according to the same State Statistical Service, at the end of the first quarter of 2019, Russian investment accounted for almost 10.3% of all foreign investment in these areas. Thus, during the presidential campaign in Ukraine, since the beginning of 2019, Russian players have withdrawn about 280 million US dollars from the banking and financial sector of Ukraine. Given the freezing of transfers of funds to Russia or the parent company, and during the election campaign in Ukraine, the possibility of converting these funds into polit- ical funding for lobbying Russian interests, if not obvious, is high. I assume that the withdrawn capital could well be converted into political investment. Indirect confirmation of this assumption was the short-term dynamics of Russia’s financial investments in Ukraine at the start of the election period.

Just before the presidential race in Ukraine, in the fourth quarter of 2018, the volume of Russian direct investment in the banking and insurance sector of Ukraine will increase by approximately $ 250 million. The volume of investments withdrawn from the financial sector in January 2019 almost coincides with this fi, and these funds could safely «dissolve» in the Ukrainian market during the elec- tion campaign. After a short burst in the fourth quarter of 2018, the volume of Russian direct investment in this area returns to previous levels by the end of the first quarter of 2019, until the end of the presidential marathon.

The volume of Russian investments in the share capital of Ukrainian enter- prises decreased by fourteen percent in four years and amounted to 694.1 million US dollars. The share of direct investment of Russian capital in the economy of Ukraine by foreign investment has halved (from 4.2% in 2015 to 2.1% at the begin- ning of 2019). The Russians withdrew about $ 1 billion from Ukrainian companies.

1. L. Andreeva, A. Alukhanyan, O. Andreeva, A. Selivanova, 2021, Technologies for ensuring the financial security of the banking system in conditions of informational alteration of busi-

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The legal framework needs to be updated.

The situation is complicated by the imperfection of legislation in the field of financial security. The concept of ensuring national security in the financial sphere was approved by the Cabinet of Ministers of Ukraine in 20Itt it does not take into account the current threats to Ukraine. The document was approved during the Yanukovych regime and therefore does not meet the requirements of our time.

Urgent issues – the development of a new Cconceptof financial security of Ukraine. The results of this painstaking and large-scale work will be presented to experts and specialists in due course. However, practice shows that the issue of national financial security should be the focus of the current government. This critical aspect of the life of the state should not be lost among other problems re- lated to socio-economic development and security7.

One of the effective tools for protecting the interests of the state could be the establishment of the Financial Investigation Service (SFS), which was discussed during the recent Council of Regions chaired by President Petro Poroshenko. The SFR should become an effective body that will concentrate efforts on countering threats in the financial and economic sphere. In addition, it will eliminate duplica- tion of law enforcement functions, promote financial transparency, create a level playing field and reduce pressure on the business.

After all, the protection of the financial interests of the state is a guarantee of its economic and political independence. Building effective national financial se- curity is complicated by the uncertainty of its specific categories and components. Taking into account the instability of the country’s financial system and the presence of corruption factors, the development of a modern regulatory frame- work in the field of financial security may slow down. Most experts point to several obscure things that are at least surprising, at most shocking. Like the activities in Ukraine of banks and enterprises whose capital originates from the aggressor

country.

The behavior of some business representatives, who deliberately discredit the state, its economic opportunities, business and investment climate, etc., is surprising. Conclusion: This situation, unfortunately, plays in favor of the aggressor state.

After all, Russia is constantly trying to criticize Ukraine and the current govern- ment, blaming internal problems. The situation causes indignation of conscious citizens and society in general. Four years after the Maidan, the war in the east continues, and society cannot believe that the huge human and material losses in

7 Directive 2008/48/EC of the European Parliament of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102 / EEC [Electronic resource] // National Com- mission for State Regulation of Financial Services Markets [website]. – Access mode: [http://www.](http://www/)

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the fight against aggression are offset, in particular, by the renegade of part of the political and business elite, which puts its own its above national interests.

Priority steps for financial security. At present, financial security is a goal rather than an effective, efficient tool. That is why the authorities, experts, and the expert community must take decisive steps to improve financial security. In particular, it is necessary to work together:

* develop and implement effective mechanisms to prevent these threats;
* modernize legislation;
* to introduce modern forms of interaction between various government agencies and institutions in matters of financial security and financial monitoring;
* to prevent the influence of Russian capital in any form on domestic pro- cesses in Ukraine.

The state must guarantee a state of protection of financial interests, which will allow to reform of all problematic areas of public life, and thus - to overcome the conflict in the east. Only under such conditions will Ukraine have a European fu- ture and become a civilized state governed by the rule of law.

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# Ensuring information security in the conditions of digitalization of the financial sector of the economy: normative and analytical aspects

(summary)

The main information risks of consumers of financial services are analyzed in the article. Based on the analysis of the legislation of the European Union, the main types of guarantees for the protection of the rights of clients of financial in- stitutions have been identified. Also, proposals were made to amend the legislation of Ukraine on the protection of information security of consumers of financial ser- vices. The purpose of this work is to identify the main types of state guarantees for the protection of information security of consumers of financial services and to es- tablish their common features based on analysis of financial legislation of Ukraine and the European Union. The author concludes: рriority steps for financial secu- rity. At present, financial security is a goal rather than an effective, efficient tool. That is why the authorities, experts, and the expert community must take decisive steps to improve financial security. In particular, it is necessary to work together: develop and implement effective mechanisms to prevent these threats; modernize legislation; to introduce modern forms of interaction between various government agencies and institutions in matters of financial security and financial monitoring;

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to prevent the influence of Russian capital in any form on domestic processes in Ukraine. The state must guarantee a state of protection of financial interests, which will allow to reform of all problematic areas of public life, and thus - to overcome the conflict in the east. Only under such conditions will Ukraine have a European future and become a civilized state governed by the rule of law.

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