On the question of financial support for business during the war (Ukrainian case)

Abstract

The military invasion of Ukraine is accompanied by the infrastructure destruction, territories occupation, forced migration, a catastrophic drop in GDP, high inflation rates etc. Domestic business is one of the most important sources of tax revenues for the state budget, and therefore the question of its support during martial law is relevant and timely. The purpose of the article is to study the impact of the Russian invasion of Ukraine on the domestic economy, in particular, to determine the consequences for business entities and to assess the measures and volumes of financial support for businesses during the war, as well as to determine the priority directions for further financing of businesses. The scientific methods used: analysis, synthesis, graphic and statistical methods, the method of establishing cause-and-effect relationships. As a result of the research, the current state of the Ukrainian economy was determined and areas of support for businesses were considered. The novelty of the research is the proposal of priority directions for financing of businesses in wartime conditions, in particular financing of innovative

Resumen

La invasión militar de Ucrania va acompañada de la destrucción de infraestructuras, la ocupación de territorios, la migración forzada de la población y, como consecuencia, una caída catastrófica del PIB, altas tasas de inflación, aumento de los índices de precios al consumo, caída de las exportaciones e importaciones, interrupción de las cadenas de suministro, bloqueo de los puertos del Mar Negro - esta es una lista de largo alcance de las trágicas consecuencias para Ucrania, incluyendo a sus empresarios. Las empresas nacionales son una de las fuentes más importantes de ingresos fiscales para el presupuesto del Estado, lo que significa que la cuestión de apoyarlas durante la ley marcial es pertinente y oportuna. El objetivo del artículo es investigar el impacto de la invasión rusa de Ucrania en la economía nacional, en particular, determinar las consecuencias para las entidades empresariales y evaluar las medidas y los volúmenes de apoyo financiero a las empresas durante la guerra, así como identificar las áreas prioritarias para una mayor financiación empresarial. Para alcanzar los objetivos fijados se utilizaron los siguientes métodos científicos:

87 Candidate of economic sciences, associate professor department of business management, Odesa national university of technology, city of Odessa, Ukraine.
88 PhD in Economics, Associate Professor Department of Economic Analysis and Finance Faculty of Finance and Economics National Technical University “Dnipro Polytechnic”, Ukraine.
89 PhD in Economics Associate Professor Department of Economic Analysis and Finance Faculty of Finance and Economics National Technical University “Dnipro Polytechnic”, Dnipro, Ukraine.
90 Candidate of Economic Sciences (Ph. D.), Associate Professor at the Department of Banking Finance and Insurance West Ukrainian National University, Vinnytsia Educational and Research Institute of Economics, Ukraine.
91 PhD in Economics, Associate Professor of the Department of Economic Analysis and Finance, Faculty of Finance and Economics National Technical University “Dnipro Polytechnic”, Dnipro, Ukraine.

DOI: https://doi.org/10.34069/AI/2022.54.06.22
How to Cite:
and sustainable development. The practical results of the study can be used by businesses and the government to determine the main directions of adaptation to military conditions.

**Keywords:** Ukraine, financial support, business, military invasion, innovative and sustainable development.

### Introduction

The Russian invasion of Ukraine on February 24, 2022, accompanied by irreparable losses of population, occupation of territories, destruction of infrastructure, including educational and medical institutions, cultural heritage, houses, roads, as well as mass migration of the population, in particular outside the borders of Ukraine, provoked a number of negative consequences for the Ukrainian economy. The main ones include: an increase in the consumer price index, a drop in exports and imports, a disruption in supply chains, a drop in the country’s GDP, etc. In addition, the mentioned factors are related to significant expenditures of the country’s budget on social assistance, restoration of destroyed infrastructure facilities, and military expenditures. The support of EU countries and the world cannot fully compensate for such significant costs, and therefore Ukraine needs ways to supplement the budget from internal sources.

One of these sources is tax revenue from domestic businesses, however, in wartime, business cannot function normally. Many enterprises are located in territories that are temporarily occupied or in which active hostilities are taking place, some firms were destroyed by bombing, others had to move their facilities to neighboring regions. Also, not the last place is occupied by problems with logistics, disruption of supply chains, blocking of Black Sea ports, decrease in the purchasing power of the population, etc. Some researchers identify the rise in oil and natural gas prices as one of the main sources of business problems at the current stage of operation - Russia is one of the largest exporters of these resources, and the world’s rejection of Russian energy will lead to their shortage and significant increase in prices. Thus, Ozili (2022) notes that the rise in fuel prices will lead to the fact that businesses will have to spend more on importing raw materials, as well as on the production of goods and services.

Taking into account the above, it can be concluded that to a large extent the solution to the problems of businesses and the state in modern economic conditions lies in a mutually beneficial partnership. The state should introduce special programs and grants that will support business during the war, and businesses, in addition to the production of socially significant goods and services, will replenish the state budget through tax deductions.

The problem of determining, forecasting and minimizing the negative consequences of the military invasion for the Ukrainian economy, in particular domestic businesses, as well as the study of state measures to support businesses, has been in the focus of attention of scientists since the beginning of the war. Individual researchers made attempts to predict such consequences even before the invasion, assuming in advance the most unfavorable development of events.
Ciuriak (2022) notes in his research that the economic consequences of the current war are catastrophic for Ukraine. Ukraine is facing a massive economic downturn due to the destruction of Ukrainian economic infrastructure, a trade blockade, a reduced workforce due to conscription, war casualties (tens of thousands) and mass displacement of households (an estimated 10 million, or one in four Ukrainians, are now refugees, including about 3.5 million who fled abroad). In the first month of the war, half of Ukrainian businesses stopped working completely, and the other half are operating well below their capabilities; about 90% of the country’s population may be below the poverty line.

Astrov et al. (2022) provide statistical data on the fact that by mid-March 2022, the Russian invasion forced 30% of the economy to stop working. According to a survey conducted by the European Business Association in Ukraine on March 14, 2022, 42% of small and medium-sized enterprises have completely ceased operations, and 31% have suspended their activities, but intend to resume them as soon as possible. According to the Ministry of Economy, losses from the war can currently amount from one-third to one-half of the country’s GDP. These estimates are similar to the decline in economic activity recorded in Donbas, Iraq, and Syria after the start of the war.

Melnyk (2022) examines the impact of the military invasion on the country’s economy and business and emphasizes the importance of state support for the functioning of businesses in wartime conditions. The researcher notes that state support must be understood as state regulation of entrepreneurial activity, which involves, first of all, the conscious formation by state structures of appropriate direct and indirect business support tools, in particular, the creation of incentives, the use of material, financial and other resources that are involved for it subjects. The priority of state regulation and support of entrepreneurship in war conditions necessitates a transition from direct administrative assistance to the formation of a favorable economic and social environment for the improvement of mechanisms and tools for stimulating the development of business entities.

Sakun et al. (2022) determine the priority areas of financial support for domestic businesses. The authors note that with the support of international partners and on the basis of reforming tax legislation in Ukraine, significant steps have already been taken to provide financial support to domestic enterprises and entrepreneurs, but these initiatives need to be deepened and expanded in order to further restore the national economy, which should be achieved through the reconstruction and development of such areas as agrarian business, food industry, pharmaceuticals, light industry, trade and resource provision. The development and strengthening of own economic capabilities, the complete elimination of any economic ties with the aggressor countries, the development of European cooperation due to the rise of domestic manufacturers to a new level will help not only to accelerate victories and end the war, but also lay the foundation for economic growth and rapid recovery of our country.

Summarizing the above, it is possible to formulate the purpose of the article, which is to study the impact of the Russian invasion of Ukraine on the domestic economy, in particular, to determine the consequences for business entities and to assess the measures and volumes of financial support for businesses during the war, as well as to determine the priority directions for further financing of businesses.

The specified goal can be achieved by solving the following tasks: determining the current state of Ukraine’s economy and trends in its key indicators; research of government programs for business support, in particular business financing, as well as international measures to support Ukrainian business; determination of priority directions for further financing of businesses in Ukraine.

**Literature Review**

The chosen topic of the article correlates with research directions of scientists from different countries. Aspects of financial support of domestic businesses during the war are revealed by Sakun et al. (2022), Ihnatenko (2022) who study the legislative framework regarding the specific conditions that affect business during martial law, and also reveal the changes made by the government in the legislation regarding optimization business taxation conditions. Among other things, the authors examine changes in credit policy aimed at supporting Ukrainian businesses, and other government programs and initiatives on this topic. Researchers do not ignore the issue of international support for Ukraine in terms of the provision of funds, which should be directed, among other things, to the financial support of Ukrainian businesses.
Melyyk (2022) revealed the general principles of state support for businesses under martial law, which defines the following key areas of state support: changes in the payment of a single tax, a single social contribution, cancellation of inspections, programs for the temporary relocation of enterprises from affected areas during the war of regions, changes to the State program “Affordable loans 5-9%”.

Foreign authors mostly focus on the consequences of the war for Ukrainian and other businesses in the world, as well as providing recommendations. For example, Prohorovs (2022) deeply explores the problems and consequences of the military invasion for European and Ukrainian businesses. The author emphasizes the limited resources and opportunities for the state to support businesses in martial law conditions due to a decrease in budget revenues, but notes that in order to strengthen the competitiveness of businesses, entrepreneurs, companies and countries need to adjust their strategies, business models and management models in such a way as to be ready to an effective response to crises, including those due to non-economic causes.

The severity of the negative impact of war on businesses is highlighted in the work of Bobasu and De Santis (2022), who found that increased uncertainty will have a significant impact on business investment – greater than on GDP, consumption and household savings. Ožili (2022) highlights the significant losses for businesses due to rising energy prices.

The authors’ research proves the need for financial support for businesses under martial law from both the Ukrainian government and international organizations and other countries. The international support of Ukraine during the war is considered in detail in the work of Antezza et al. (2022) in terms of humanitarian, military and financial directions.

The proven relevance of the researched topic necessitates a deep study of government programs and legislation regarding financial support of Ukrainian businesses, international support measures, as well as determination of priority directions for further funding.

Methodology

During the research, the following general scientific methods were used: analysis, synthesis, graphic and statistical methods – to determine the general economic consequences for Ukraine; analysis of the legislative framework – to consider programs for financing businesses during the war; the method of establishing cause-and-effect relationships – for determining the priority areas of business financing in wartime conditions.

The complex nature of the research determines its division into stages. At the first stage, the key economic indicators of Ukraine in the conditions of the war were studied. An analysis of the dynamics of the consumer price index, GDP, exports and imports was carried out. It has been established that consumer prices have been characterized by significant growth since the beginning of the war, in particular due to increased risks and reduced opportunities in the activities of producers of goods and services. A drop in exports and imports was recorded due to the occupation of territories, active hostilities in certain regions, blockade of Black Sea ports, disruption of supply chains, etc. A significant decline in GDP has also been noted, which entails the destruction of infrastructure and costs associated with its restoration, military costs, social support costs, reduced tax revenues from businesses, etc.

At the second stage, an analysis of measures for financial support of businesses by the state was carried out. First of all, the tax changes are analyzed, which are mostly aimed at simplifying the activities of SSC payers. In the future, government programs for business support in general, as well as programs for business financing by the state, are considered. Attention is also paid to international programs within which financing of Ukrainian businesses takes place.

As a result of the research, the priority areas of business financing are proposed in separate areas, such as financing of innovative development, as well as financing of measures related to sustainable development.

Results

Study of key economic indicators of Ukraine in the conditions of war

The problems of doing business in the conditions of war are largely correlated with the economic problems of Ukraine as a whole, therefore, at the first stage of the research, it is advisable to identify the key problems of the domestic economy related to the Russian invasion. Figures 1-4 show the dynamics of the main economic indicators over the last period.

https://www.amazoniainvestiga.info   ISSN 2322 - 6307
Figure 1. Change in the consumer price index (CPI) in percentage compared to the previous period (compiled according to the data of the (State Statistics Service of Ukraine, n.d.).

Figure 1 shows the change in the consumer price index. It is this indicator that shows a significant increase in prices for goods and services for non-production consumption by the population. Its growth is caused by increased risks for businesses, costs associated with martial law, problems with logistics, disruption of supply chains, rising prices for raw materials and components (which, as defined above, in addition to other provoked increases in oil and natural gas prices).

Figure 2. Change in real GDP in percentage compared to the corresponding quarter of the previous year (compiled according to the data of the (State Statistics Service of Ukraine, n.d.).

Figure 2 shows a catastrophic drop in Ukraine’s GDP already in the first quarter of 2022, and it amounts to -15%. Moreover, the IMF predicts a decline in Ukraine’s GDP to 35% in 2022.

Figure 3. The rate of growth (decrease) in the export of goods as a percentage compared to the corresponding period of the previous year, cumulative total (compiled according to the data of the (State Statistics Service of Ukraine, n.d.).

Figure 3 shows a significant drop in Ukrainian exports in 2022. Since the Black Sea ports in the south of the country practically stopped due to the Russian attack, Ukraine lost the opportunity to sell more than half of its exports, primarily agricultural products and metals (Astrov et al., 2022). Ukraine is a major exporter of such goods as wheat, corn, sunflower seeds and oil, rapeseed (van Meijl et al., 2022), as well as some metals, in particular nickel, copper, iron (Ciuriak, 2022). The decrease in Ukrainian exports of wheat and oil is of particular concern to economists and scientists, as it threatens the entire global community with a food crisis.
Figure 4 shows a decline in imports, which is characterized by a similar trend as in the case of exports. Many Ukrainian enterprises have suspended or reduced the scale of their activities, and therefore stopped purchasing foreign materials. In addition, a significant part of the enterprises are located in the occupied territories and cannot maintain their normal activities.

Summing up the above regarding the deterioration of the economic situation in Ukraine as a whole, it is obvious that such significant fluctuations in key indicators must affect the activities of businesses, even those operating outside the regions that are temporarily occupied or on the territory of which active hostilities are taking place. Thus, it becomes necessary to investigate the programs adopted by the state regarding the financial support of Ukrainian businesses during the war and to evaluate their effectiveness.

**Financial support of businesses from the state**

On March 15, 2022, the state took one of the first and most significant steps regarding the financial support of businesses under martial law – the adoption of the draft law “On amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding the validity of norms during the period of martial law” (Law of Ukraine № 2120-IX (2022). The key provisions regarding the expansion of opportunities for business representatives during the war include:

for individual entrepreneurs, as well as legal entities whose turnover is less than UAH 10 billion, the single turnover tax will be 2 percent in accordance with the rules of the third group of taxpayers;
the possibility of voluntary payment of a single tax for individual entrepreneurs of the first and second groups;
changes in the calculation of individual taxes and fees operating under martial law;
VAT reduced to 7 percent, exemption from excise duty on fuel;
release from liability for late fulfillment of obligations to the creditor under the consumer credit agreement;
exemption from personal income tax taxation of assistance to persons affected by the military aggression of the Russian Federation;
termination of the provisions that granted rights to the mortgage holder regarding the eviction of residents, acquisition of ownership of the subject of the mortgage or its sale (Law of Ukraine № 2120-IX (2022). Evaluating the key provisions of the adopted law, it can be said that a number of its provisions relate to the simplification of the taxation system and the creation of favorable business conditions, in particular for representatives of small and medium-sized businesses, because a number of provisions are aimed at supporting SSP payers. This can be explained by the fact that small businesses have more chances to survive in crisis conditions due to their high ability to adapt to the surrounding conditions.

In addition to tax changes, the government introduced a number of programs and initiatives to support business in general, as well as programs to provide financial support to entrepreneurs from the state. The list of these programs is presented in the online service of public services – Diya. Key programs are presented in Figure 5.
The content of the programs indicated in Figure 5 is given below.

**Compensation for the employment of IDPs:** in the case of employment from among internally displaced persons (IDPs), the employer has the right to reimbursement of their labor costs;

**Temporary relocation of enterprises from war-affected regions:** the state provides assistance to enterprises located in the zone of active hostilities in relation to their relocation to the western territories of the country;

**A single digital interaction platform for business relocation assistance:** the platform is designed to receive business relocation assistance;

**A complete overview of initiatives regarding the relocation of enterprises:** provides an opportunity to get acquainted with all initiatives regarding the evacuation of businesses from regions affected by military operations;

**The government has launched the eRobota project:** the possibility of applying for a grant on the Diya portal for business development (new or already existing);

**Lending to enterprises under the "5-7-9%" program:** the possibility of obtaining a loan for domestic enterprises at 0 percent in the amount of up to UAH 60 million;

**Microfinancing of veteran businesses:** veterans, as well as their family members belonging to IDPs, have the opportunity to receive reimbursement for the purchase of goods that are necessary for starting a business.

Particular attention is paid to optimizing the conditions of exporters’ activities, in connection with which the Office for the Development of Entrepreneurship and Exports has launched an operational platform with up-to-date information for Ukrainian exporters who are ready to supply their products abroad in war conditions and give a worthy response to all Russian and Belarusians in the world. A credit program is also provided for companies that, due to the aggression of the Russian Federation, need additional financing for the implementation of export contracts (Diia (n.d.)).

Domestic businesses receive support not only from Ukraine, but also from other countries and international organizations. The main measures of such support are presented in Table 1.
Table 1.
International support programs containing measures to support Ukrainian business.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Document</th>
<th>Type of financing and terms</th>
<th>Amount of financing</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representatives of the government of the Federal Republic of Germany and the director of KfW in the region of Eastern Europe, the Caucasus and Central Asia</td>
<td>Loan agreement</td>
<td>Loan with a validity period of 15 years (the grace period for deferring repayment of the principal amount is 5 years) at a floating interest rate with the possibility of conversion to a fixed one after the loan is fully paid off</td>
<td>150 million euros</td>
<td>Reimbursement of expenses of the Government of Ukraine for the financing of small and medium-sized businesses</td>
</tr>
<tr>
<td>The European Commission</td>
<td>Agreement on the financing of the “Contract for the development of the state and strengthening of stability”</td>
<td>A grant, the amount of which is provided on a free and non-refundable basis</td>
<td>120 million euros</td>
<td>Financing of expenses, in particular, related to the provision of guaranteed social protection of citizens, the functioning of critical infrastructure and the security sector</td>
</tr>
<tr>
<td>The World Bank</td>
<td>An additional package of budget support for Ukraine, called “Financing of Recovery from Economic Emergency in Ukraine” or “FREE Ukraine”</td>
<td>Contains an additional loan in the amount of USD 350 million and guarantees in the amount of USD 139 million, as well as the mobilization of free financing in the amount of USD 134 million and parallel financing in the amount of USD 100 million</td>
<td>The total amount of financing is 723 million dollars</td>
<td>The government's provision of critical services to Ukrainian citizens, including wages for hospital workers, pensions for the elderly, and social programs for vulnerable populations</td>
</tr>
</tbody>
</table>

Source: (Sakun et al., 2022)

Summarizing the above, it can be stated that the activity of Ukrainian businesses in war conditions is significantly complicated due to negative factors of direct and indirect action. However, through mutually beneficial cooperation between businesses and the government, a certain improvement of the situation in the existing conditions is possible. From the side of the state and international organizations, it means creating favorable conditions for the functioning and development of businesses, from the side of businesses, it means filling the state budget.

Discussion

The study focused on simplifying the tax policy for entrepreneurs and developing government programs for financing domestic businesses. The obtained results of the study indicate that even in the conditions of war, the state tries to create favorable conditions for the functioning of businesses. The focus is mostly on small and...
medium-sized enterprises, which are more mobile and adaptable. However, in addition to considering programs of direct financial support for businesses, it is also important to consider regulatory acts related to the financing of certain aspects of business activities, for example, digitalization of activities (Spence, 2021), as well as sustainable development (Al-Qudah et al., 2022). These areas of financing can be considered as a priority in the state’s development of further business financing programs, because innovation and sustainable development are one of the key trends for businesses in developed countries, as well as the key to their success.

One of the positive aspects of doing business during the war is the trend of moving some businesses into the Internet sphere, which has developed over the past few years. The modern pace of life, as well as conducting business, have created optimal conditions for such a transition to online: most consumers, in particular young people who are active Internet users, prefer to conduct business, as well as shopping, through a smartphone, which significantly saves time and money. Full online functioning is far from possible for all businesses, however, most modern enterprises in one way or another use the so-called “digitalization” in their activities. This is facilitated by a number of legislative acts regarding the support of information development in the country, in particular the Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020 and the approval of the plan of measures for its implementation (Order of the Cabinet of Ministers of Ukraine № 67, January 17, 2018).

Thus, for many businesses operating on the Internet, the continuation of their business even in the case of the need to move to another region is possible without significant losses. However, it cannot completely solve such problems as a decrease in the purchasing power of consumers, the risk of damage to goods due to hostilities, difficulties with logistics, etc. In addition, the high innovation potential of Ukraine is accompanied by a small share of total costs for innovation in GDP, low costs for new developments in the presence of a large number of scientific personnel in the regions of Ukraine (Zolkover et al., 2020) - and these problems appear even more acutely in the conditions of war. In addition, some researchers identify such risks as the threat of cyber attacks and the threat to information and sustainable growth. Davies (2022) reports that modern war is fought not only with bombs (armed conflict), but also with bytes (cyber attacks). Russia is a world-class cyber operator that exposes key businesses (e.g., communications services, power grids, media agencies) in Ukraine to cyberattacks from the occupying country. V. Lim et al. (2022), concludes that the impact of technology-related sanctions on Russia and economic instability in Ukraine could lead to a huge risk to cyber security (e.g. digital payments), lack of access to cheaper highly qualified technical personnel and a slowdown in the economies of countries, in particular digital economy. When developing funding programs for information development, it is also necessary to take into account the risks discussed in the works (Bahn et al., 2021; Lioutas et al., 2021; Zscheischler, 2022), in particular cultural, ecological, socio-ethical and political.

In addition to financing innovative development, the state provides a number of measures to support the sustainable development of businesses, which is stated in the Law of Ukraine “On the Strategy for the Sustainable Development of Ukraine until 2030” (hereinafter – the Strategy). Among the main tasks of the Strategy is the formation of an organizational infrastructure to support entrepreneurship in the form of technology parks, business incubators, networks providing services to enterprises, in particular on the basis of public-private partnership; promote the development of cluster networks (Law of Ukraine (project) № 9015 2018). In addition, the Strategy defines that for the development of business and competition it is necessary to:

- facilitating the procedures for opening and running a business, in particular through e-government, by 2020;
- adaptation of the national system of technical regulation to the standards of the European Union, simplification of certification procedures in the countries of the European Union;
- creation of a network of mobile laboratories that will check the quality and labeling of goods;
- ensuring appropriate regulation of monopolies, in particular in matters of pricing;
- fight against anti-competitive actions;
- protection of the market from counterfeit and contraband products (Law of Ukraine (project) № 9015, 2018).

In general, from the point of view of sustainable development, the military invasion of the Russian Federation into Ukraine by some researchers (Patt & Steffen, 2022; Chepeliev et al., 2022) is considered as an impetus to accelerate the pace of environmental improvement, which is one of the pillars of
sustainable development, in particular through the use of more ecological energy resources. Thus, the financial support of businesses by the state should not only be of a temporary nature during the period of hostilities, but should contain such aspects, the positive consequences of which are prolonged in time and benefit not only Ukraine, but also the future of the world as a whole (support for sustainable development).

Summarizing the above, it can be stated that the conclusions obtained as a result of the research can be applied by domestic businesses and government representatives as the main directions of adaptation to military conditions and optimization of activities.

Conclusions

As a result of the conducted research, an analysis of the current economic state of Ukraine was carried out, in particular, the trends of such indicators as the consumer price index, GDP, export and import were outlined. A significant increase in the consumer price index was established, associated with the difficulties of producers of goods and services in war conditions, in particular, the complication of logistics, the location in temporarily occupied territories or territories where active hostilities are taking place, the general economic downturn, etc. The decrease occurred according to the indicators of import and export. The decrease in imports is caused, first of all, by the refusal of manufacturers (especially in regions where active hostilities are taking place) to make purchases in war conditions. The drop in exports is associated with the disruption of supply chains, logistics, blocking of Black Sea ports, etc. The catastrophic decline in GDP is attributed to significant losses in infrastructure, military spending, social support spending, and other factors.

Areas of state support for businesses operating in wartime conditions were also determined. In particular, financial support programs for businesses, as well as tax measures, have been determined. The latter are primarily related to simplifying the activities of SSP payers, and therefore optimize the work of small and medium-sized businesses, which are the most adaptable, flexible and mobile. International support programs that provide for the financing of Ukrainian businesses were considered.

The priority areas of state financing of businesses in the future have been established, primarily related to the financing of innovative development and support for the sustainable development of businesses. The main direction of further research should be the development of an approximate layout of the program for financing innovations and sustainable development in wartime conditions, in particular, the key directions and measures of such a program, taking into account the specifics of functioning in wartime conditions.

Bibliographic references


Davies, P. (2022). Cyber espionage is key to Russia’s invasion of Ukraine – The international community is fighting back. Euronews. Recovered


from https://www.euronews.com/next/2022/03/09/cyberespionage-is-key-to-russia-s-invasion-of-ukraine-the-international-community-is-fight


Lioutas, E.D., Charatsari, C., & De Rosa, M. (2021). Digitalization of agriculture: A way to solve the food problem or a trolley dilemma? Technology in Society, 67, 101744
