

Review Paper

# Crisis Management of Enterprises and Post-War Reconstruction in Ukraine

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## ABSTRACT

It has been proven that the anti-crisis management program can determine the presence of three enterprise development systems that determine the choice of directions for anti-crisis management: "conditionally stable system," in which passive anti-crisis management is sufficient, "system with the manifestation of crisis phenomena," and "general crisis system," which requires the application of active anti-crisis measures. The goals of enterprise anti-crisis management vary depending on the type of financial system of the enterprise. Thus, anti-crisis management under the conditionally stable system aims to diagnose the indicators of enterprise activity for timely detection of manifestations of crisis phenomena. In the system expressing crisis phenomena, anti-crisis management aims to localize detected crises, overcome their negative impact, and restore pre-crisis indicators. The goal of anti-crisis management under the general crisis system is to manage the enterprise in conditions of prolonged crisis (stagnation). Each model of anti-crisis management has corresponding stages, the implementation of which is aimed at minimizing the negative impact of crisis phenomena on the enterprise's activity. The methods of anti-crisis management during the war have been systematized. The methods of anti-crisis management can be attributed to the entire set of methodological tools that include a complex of measures from pre-crisis diagnosis to methods of its elimination and overcoming. Based on the essential characteristics and the need to decide on applying anti-crisis methods at each stage of the enterprise's life cycle, their consideration from the perspective of diagnostic and crisis management methods is envisaged. Based on the application of a methodological approach to the formation of the system of forecasting anti-crisis management measures at the enterprise, the use of an algorithm for anti-crisis management to choose the direction of anti-crisis management at enterprises (passive or active) has been proposed.

## HIGHLIGHTS

- ① It has been proven that the anti-crisis management program can determine the presence of three enterprise development systems that determine the choice of directions for anti-crisis management: "conditionally stable system," in which passive anti-crisis management is sufficient, "system with the manifestation of crisis phenomena," and "general crisis system," which requires the application of active anti-crisis measures.
- ② Based on the application of a methodological approach to the formation of the system of forecasting anti-crisis management measures at the enterprise, the use of an algorithm for anti-crisis management to choose the direction of anti-crisis management at enterprises (passive or active) has been proposed

**Keywords:** Crisis management, war, reconstruction, market economy, business management

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Crisis management of enterprises in modern conditions is one of the main levers for overcoming crisis phenomena. In a market economy, enterprises as business entities are the main link in the state's economy. Today, the economy of Ukraine is going through a difficult stage of the crisis caused by internal and external factors. In these circumstances, the problem of timely and comprehensive analysis of the financial and economic stability of the enterprise and the adoption of operational decisions to localize crisis phenomena and overcome the consequences of the crisis with the most negligible probability of bankruptcy for the enterprise is relevant. Therefore, one of the leading crisis management tools for an industrial enterprise and its financial and economic stability is the analysis of the state of the enterprise's capital, the study of sources of its formation, efficiency, and the possibility of using it during crises.

This article aims to clarify the essence and content of enterprise crisis management and generalize scientific and methodological recommendations for diagnosing crisis phenomena and adapting crisis management measures at enterprises.

## METHODS

While working on this research, the authors used the following general scientific methods: comparative, correlative, analytical, historical, etc.

## DATA ANALYSIS

Crisis management through the optimization of financial and economic results is discussed by leading domestic and foreign scholars (Akimova, L., Akimov, O., Maksymenko, T., Hbur, Z., & Orlova, V., 2020), (Collier P., Hoeffler A., 2002), (Coulomb, Fanny, 2004), (Coyne, Christopher, 2005), (Irtysheva I., Kramarenko I., Sirenko I., 2022), (Kryshtanovych, M., Akimova, L., Akimov, O., Kubiniy, N., & Marhitich, V., 2021). The problems related to assessing the financial stability of an enterprise and the bankruptcy risk were reflected in numerous studies. The analysis of studies devoted to these issues has shown that the problem of systematizing financial and economic indicators and using comprehensive measures to overcome crises in Ukrainian enterprises requires a deeper study. The development of crisis management

measures will help to identify weaknesses in enterprise management and develop a planning system for forecasting the financial condition based on considering multifactorial and individual characteristics of enterprises (Lally M.A., 2007), (Lewarne, S., Snelbecker, D., 2004), (Popov, O.O., Iatsyshyn, A.V., Iatsyshyn, A.V., Kovach, V.O., Artemchuk, V.O., Gurieiev, V.O., Kiv, A.E., 2021), (Tzifakis, 2003), (Williams, Andrew J, 2005), (Vyshlinsky H., Repko M, 2022), (Diachenko S., Bulana O., 2022), (Ostrolutska L., 2022), (Pysarenko T.V., Kuranda T.K., 2022), (Pidorycheva I., 2022) and so forth.

Based on the research of the essence and theoretical foundations of crisis management in enterprises, the presence of three enterprise development systems can be identified in the crisis management program that determine the choice of directions for crisis management:

- ♦ “conditionally stable system,” for which passive crisis management is sufficient;
- ♦ “system with the manifestation of crisis phenomena;”
- ♦ “general crisis system,” which requires active crisis management measures (Samokhodskyi I., 2022), (Sofii O., 2020).

Anti-crisis management of the enterprise should have a systemic basis, operate with reliable information in diagnosing crises, have a straightforward, step-by-step program for implementing anti-crisis measures, and have sufficient resources to overcome the crisis.

The main factors that complicate the process of anti-crisis management in unstable conditions for enterprises are the imperfection of the tax system, the lack of a system for preparing anti-crisis managers, cyclic needs for modernization and restructuring of enterprises, non-payment, loss of competitive advantages, bankruptcy, and so on.

The effectiveness of anti-crisis management depends not only on internal factors but also on the state of the external environment in which the enterprise operates. For example, reforming the tax system to create a competitive economic environment, supplementing the fields of knowledge and specialties for which higher education recipients are trained to comprehensively prepare specialists in anti-crisis management, and attracting investors

to modernize industrial enterprises - all this will contribute to the effectiveness of anti-crisis management.

## RESULTS

In the process of writing this article, an analysis of anti-crisis methods of enterprise management in modern conditions was carried out, which made it possible to systematize the classification of anti-crisis methods of enterprise management and propose two directions for their application - diagnostic methods and crisis management methods. The first direction includes monitoring, system analysis, auditing, risk identification, and current state assessment, necessary for passive anti-crisis management in a conditionally stable enterprise development system. The second direction of anti-crisis management methods is proposed to be divided into two blocks:

- ♦ organizational block - as an ordered system for attracting and training anti-crisis specialists;
- ♦ functional block – a set of methods, tools, and measures of anti-crisis management, which are applied in active anti-crisis management in a system that detects crisis phenomena.

Forming a system for forecasting anti-crisis management measures at an enterprise should consider the degree of deviations of financial and economic results of the enterprise's activities, its development directions, and features, which will allow choosing methods of active or passive anti-crisis management.

Based on a methodical approach applied to the formation of a system for forecasting anti-crisis management measures at enterprises, the authors propose to use an algorithm of anti-crisis management to select the direction of anti-crisis management at enterprises (passive or active). In the case of choosing the active method of crisis management, it is recommended to use a simulation forecasting model built based on selected indicators (profitability, liquidity, autonomy, maneuverability, equity, and financial dependence). It will allow for determining the individual factors that influence crisis phenomena for each enterprise.

Applying the algorithm of crisis management and data processing is the basis for assessing an enterprise's financial and economic activities

with the subsequent decision-making on the need to apply passive or active crisis management to develop measures for enterprise crisis management.

After World War II, Europe began to rebuild only three years after the war ended. Until then, the post-war Western European economy had been supported by imports, grants, and loans from the United States and Canada. This situation was not sustainable, which led to the development of the Marshall Plan - a program of technical and economic assistance to Europe, not only for support but also for the revival of the economy.

If a country's economy is not restored after a war, it will need to be constantly subsidized, and this ultimately becomes much more expensive. However, it seems that world leaders have learned this lesson well, as plans for the reconstruction of Ukraine are already being discussed, despite the ongoing military conflict.

On April 21, the President of Ukraine signed a Decree establishing the National Council for Ukraine's Recovery from the War. This advisory body is tasked with developing a recovery plan to avoid repeating past mistakes and build a technological, competitive economy. According to the head of the President's Office, this plan was already developed and presented to the Verkhovna Rada Committee on Economic Development on May 2. It has not yet been made public, but Andriy Yermak shared some principles on which it is based:

- ♦ obtaining candidate status and then full membership in the EU;
- ♦ building the economy based on deregulation and liberalization principles;
- ♦ establishing logistics routes in the western direction;
- ♦ transitioning from raw material exports to processing in sectors that generate the highest export revenue;
- ♦ developing the domestic military-industrial complex;
- ♦ achieving energy self-sufficiency through increased domestic gas production and nuclear energy development;
- ♦ climate modernization;
- ♦ localization of at least 60%.

The National Council for Ukraine's Recovery from the War consists exclusively of members from the President's Office and the Government. However, activists and international experts are also invited to join the Council's working subgroups. The authors of this research hope that the government will consider their recommendations.

The war in Ukraine is undeniably a disaster. On the other hand, however, it opens new opportunities, including the involvement of global experts in various fields in the modernization and restoration of the country.

For example, the Centre for Economic Policy Research (CEPR) chose this way. It engaged eight world-class economists to develop "A Blueprint for the Reconstruction of Ukraine."

In this document, the authors set out the basic principles on which the country's future recovery should be based after the destruction caused by Russia's attack. They also proposed four stages of action: one during hostilities to minimize damage and three for gradual recovery.

At the same time, experts suggest creating an International Agency for the Reconstruction of Ukraine. Similar functions were performed by the Economic Cooperation Administration (ECA), which ran the Marshall Plan for Europe. This agency should be affiliated with the EU while being autonomous in decision-making and having a clear timeframe for its existence. Also, this authority will advise Ukraine during the recovery process and ensure that the money is spent as intended. In other words, such an agency could exist alongside the National Council to help it.

First and foremost, before rebuilding, Ukraine is trying to minimize all kinds of damage caused by the war. It means relocating businesses from the hostilities zone to safer regions, providing housing for temporarily displaced people, and generally taking all measures to ensure that people and businesses continue to live and work, thus keeping the economy functioning.

The second important step is to record the damage. On the one hand, it is necessary to bring Russia to justice for war crimes in international courts. However, on the other hand, such recording helps to collect information about all the destruction and damage.

Further, this information can be categorized, allowing for the development of reconstruction plans. For example, based on the extent of the damage, a building may need to be repaired or reconstructed, or it may have to be rebuilt from scratch. Therefore, the first step is to collect information about the damage, analyze it, and decide what to do with the house based on this analysis. The joint project of the Kyiv School of Economics, the President's Office, and the Ministry of Economy, "Russia Will Pay," and the Ministry of Digital Transformation are collecting data on the damage caused by Russia's military aggression through the "Diia" app.

Anyone can submit information about the damage caused to Ukraine and its citizens by Russian troops: infrastructure, housing, schools, marauding, environmental damage, and many more. The important thing is that this collected information is then combined into a common database, which will be used to plan the recovery.

Immediately after the end of hostilities, critical infrastructure will need to be restored. In particular, power grids, roads, railways, gas supply, water supply, and the Internet.

It is necessary to rebuild schools and hospitals and provide at least temporary housing for those who have lost it. At this stage, much humanitarian aid will still be needed. However, some of this can be done even before the end of the war – to restore the most critical facilities in the territories already liberated from occupation. In the future, the government and partners will focus on restoring the entire economy and its stable growth. The primary efforts will be focused on creating workplaces and permanent sources of income generation. In addition, it includes programs to support and develop entrepreneurship, a well-balanced financial policy, and strengthening the energy sector.

As part of the post-war recovery, Ukraine will have to rebuild some cities from scratch. This reconstruction must not be a blind reproduction of what was destroyed. There is an opportunity to apply the latest urban planning and architecture to make Ukrainian cities more comfortable and inclusive for their residents.

At the same time, to move towards the EU, Ukraine will need to continue the reforms started before

the war and harmonize its legislation with the European one. For example, introducing a European certification system and continuing large-scale privatization, anti-corruption, and judicial reforms. Meanwhile, it is essential not to lose the previous achievements but rather to use them during the reconstruction. Ukraine has made significant progress in ensuring transparency in public procurement.

The Cabinet of Ministers has authorized procuring entities to buy everything they need under direct contracts. The only requirement is to report on these purchases immediately or after the war. Overall, this is the right decision.

Just as it was the right decision to allow purchasing of everything needed to address COVID-19 directly during spring 2020, however, military procurement, like coronavirus procurement in its time, will also need to return to a competitive environment gradually. The Ministry of Economy's working group, Prozorro, and public sector experts are developing a solution to this problem.

The reconstruction will be financed from all possible sources. The Ukrainian government has created several funds for this purpose:

- ♦ Small and Medium Business Support Fund;
- ♦ Armed Forces of Ukraine Support Fund;
- ♦ Economic Recovery and Transformation Fund;
- ♦ Humanitarian Fund;
- ♦ Debt Management and Redemption Fund;
- ♦ Destroyed Property and Infrastructure Restoration Fund.

Also, there is a plan to create a separate Ukraine Recovery Fund for reconstruction. In the future, it would be advisable to consolidate all these funds into one. After all, monitoring the money from 6-7 funds will be much more difficult, creating confusion and corruption risks. Therefore, a joint Recovery Fund for all financial resources would be a good solution. Europe has already started thinking about accumulating funds for Ukraine's recovery. For example, the Energy Community has established a Fund for the Restoration of Ukraine's energy infrastructure destroyed by the Russian war, whose donors will mostly be EU member states.

In addition, the European Union plans to create a special trust fund to reconstruct Ukraine, which will function like the European COVID fund. How will these funds be replenished? Firstly, Ukraine is counting on the help of partner countries and international institutions - the World Bank, the International Monetary Fund, the European Investment Bank, and the European Bank for Reconstruction and Development. Another aspect is the assistance of large international companies and charitable foundations. Finally, a portion of the expenses for reconstruction can be covered by frozen Russian assets, both in Ukraine and abroad. However, for this to happen, it is necessary to make it possible under the law. The EU must decide how to legally confiscate these assets without violating the principle of the rule of law. At the same time, it is not always possible to establish a connection between a specific asset and, for example, an official from Russia. It is also an issue that the European Union needs to address. It is necessary to create or open (if they exist) registers of beneficial ownership and, in general, to improve legislation on curbing money laundering. Ukraine is currently facing a similar problem.

Another possible source of funding is reparations from Russia. However, it can only be discussed after winning the war and Russia's capitulation, which must agree to compensate for the losses. Ukraine considers the experience of previous wars of the XXth and XXIst centuries and thinks about reconstruction in advance. It is not just about more than forming plans and funds for the future. For example, the reconstruction of critical infrastructure in the liberated Kyiv region has already begun. Significantly, the authorities respond quickly to challenges when there is an opportunity. Thus, the residents of the liberated territories will be able to return home faster, start working again faster, and the economy will recover faster. However, it is crucial now that this recovery is moderate and transparent. Therefore, competent experts should be involved in these processes, and money should be spent efficiently. Even though the non-governmental sector actively supports the army and provides humanitarian aid, Ukraine's reconstruction should become another parallel battlefield for NGOs.

## CONCLUSION

Thus, from everything said, it can be concluded that in the program of crisis management, the presence of three enterprise development systems can be identified, which determine the choice of directions for crisis management: the “conditionally stable system,” in which passive crisis management is sufficient; the “system with manifestations of crisis phenomena”; and the “general crisis system,” which requires the application of active crisis measures. The goals of crisis management by the enterprise vary depending on the type of financial system of the enterprise. For example, in the conditionally stable system, the goal of crisis management is to diagnose the performance indicators of the enterprise for the timely detection of manifestations of crisis phenomena. In a system with manifestations of crisis phenomena, crisis management aims to localize identified crises, overcome their negative impact, and restore pre-crisis indicators. Finally, the goal of crisis management in the general crisis system is to manage the enterprise in conditions of prolonged crisis (stagnation). Each crisis management model has corresponding stages, the implementation of which is aimed at minimizing the negative impact of crisis phenomena on the enterprise’s operations. The authors of this article systematize the methods of crisis management. The methods of crisis management can be defined as the entire set of methodological tools, which include a range of measures from preliminary diagnosis of a crisis to methods of its elimination and overcoming. Based on the essential characteristics and the need to make decisions regarding the application of crisis management methods at each stage of the enterprise life cycle, they are proposed to be considered from the perspective of diagnostic and crisis management methods.

By applying a methodical approach to forming a system for forecasting anti-crisis management measures at enterprises, an algorithm for crisis management is proposed to select the direction of anti-crisis management at enterprises (passive or active).

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