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# CRISIS AS A GENERATOR OF ECONOMIC SYSTEMS TRANSFORMATION

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#### Abstract

The article is devoted to the crises impact analysis on the economic system. Although the crisis has a devastating effect on the economic system as a whole, on the other hand, it creates conditions for its transformation and development, forming new elements of the system, instead of obsolete ones. The speed of changes in the economic system during the crisis, as well as the definition of its further development, depends on the chosen option of transformation: premature, timely, late, synergistic. Undoubtedly, the option of synergetic transformation of the system is more acceptable, and allows to reduce risks of the coming crisis many times. However, analysis of exit measures from the previous recession showed that states use other transformation models. Looking at the prospects, nature and source of the possible crisis of 2020, it can be concluded that the world 's anti-crisis policy may face some difficulties due to its multi-factoriness and significant features that distinguish it from other periods of recession. In this regard, consideration should be given to the possibility of applying a synergetic version of transformation, which is based on monitoring the state of the economic system, predicting the changes consequences and making the necessary adjustments in a timely manner.

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# 1. Introduction

Today, experts discuss the prospects of the new economic crisis of 2019-2020, its characteristics, the role of Russia and foreign economic policy of the United States, China as sources of destabilization, the pandemic impact, the anti-crisis measures peculiarities. The study of the economic cycles evolution shows that the causes of the crisis, their duration at different times, differ. The last two of them in 1997 and 2008 differed in depth, geography and influence on the world economy. For example, the 1997 crisis (or Asian crisis) was reflected in a large-scale fall in the Asian stock market, which was linked to the departure of foreign investors due to the devaluation of the region 's national currencies and the high balance-of-payments deficit of the SEA countries. The scale of its destruction was \$2 trillion in global GDP losses.

In 2008, the global financial and economic crisis began, with a decline in major economic indicators in most developed countries and a transition to a global recession. Its causes were the imbalance of international trade and capital movements, overheating of the credit market and the mortgage crisis (Mau, 2015, 2016).

The emergence of the modern economic crisis will not be affected by trade wars or geopolitical differences, which have recently intensified. The reason for its occurrence may be related to the spread of coronavirus (COVID-19), which will lead to the suspension of global demand growth and will affect the state of commodity markets (Mau, 2020). The pre-crisis state creates a debate about possible anti-crisis policies. To assess its effectiveness, let's consider changing the economic system under the influence of crises.

#### 2. Problem Statement

The effective anti-crisis transformations development of the economic system poses a number of challenges, both scientific and practical. Namely:

- Myth of negative impact of crises on an economic system
- Choice of options of an economic system transforming process

#### 2.1. Myth of negative impact of crises on an economic system

According to the majority, the crisis has a devastating impact on the economy, manifested in the decline of business activity, the overproduction of commodity capital, which manifests itself in the growth of stocks of unsold products, the re-accumulation of productive capital, which is reflected in the underutilization of production capacity, the re-accumulation of monetary capital, which is characterized by an increase in the amount of money not invested in production. The overall result is a fall in prices and profits, a decline in production volumes, a ruin of businesses, an increase in unemployment, a decrease in incomes of the population. And that, in fact the devastating role of the crisis, could lead to a long recession of the economy.

While the crisis is painful, it also plays a positive role. On the one hand it weakens and eliminates obsolete elements of the economy, on the other it forms conditions for the emergence of new elements of

the renewed economy. In the context of the crisis, there are incentives to increase profits by reducing production costs, renewing capital on a new technical basis.

This universal form of movement in nature and society, associated with the periodicity of development, is a fundamental position of crisis and catastrophe theory (Yakovets, 1999). Qualitative change of the system in conditions of extreme instability was considered in the works of Bogdanov (1989), Chizhevsky (1924), Condratiev (2002) and Sorokin (2009).

#### 2.2. Choice of options of an economic system transformation process

In the analysis of crises and transitions, it is important to identify the possible directions of transformation of the economic system and their scope in the management mode. Through targeted transformation processes in a crisis economy, the necessary changes, systemic adjustments, can be made to avoid the accumulation of contradictions and natural destruction. The nature of anti-crisis policies (goals, methods, forms, time of transformation) will depend on the ability of the State to understand the depth of crisis events and may constitute pre-emptive changes, actions that subject the system to destabilization deliberately in order to activate the processes of self-organization or maintain the course of movement towards the intended goals (Mau, 2016).

# 3. Research Questions

Economic systems and the crises that transform them are the subject of the problem study.

# 3.1. Economic systems

In modern science, the nature and essence of the economic systems development is revealed through various theories, each forming a certain kind of the system transformation. Thus, the theory of transition economy considers the presence of intersystem and revolutionary transformations, the theory of self-preservation – intra-system and evolutionary, the theory of economic transformations - consciously carried out and reflexive, the theory of cycles - repeated and qualitatively defined, the theory of crises and disasters - adaptive and catastrophic ones. In the framework of this study we will elaborate on the theory of crises and disasters, which reveals the mechanism of qualitative change of the system in extreme instability conditions.

#### 3.2. Economic crises

The lowest point of cyclic development of an economic system, or crisis (fall, recession) is characterized by decrease in macroeconomic parameters (GDP, the high rate of inflation, critical change of an interest rate of the Central Bank, devaluation of national currency, decrease in the stock market, etc.), contradictions aggravation of system elements. The subject of this study is the identification of the mechanisms of the crisis impact on the speed and quality of the economic system transformation.

# 4. Purpose of the Study

The main purpose of the study is to study the theoretical basis and develop practical recommendations on the transformation direction of the economic system in times of crisis.

# 5. Research Methods

#### 5.1. Economic systems development issues

As noted above, economic systems are subject to a cyclical movement, which means a periodic repetition of the sequence and objective inevitable development of systems through the stages from becoming to dying. At the same time in the progressive phase of its development the system has an optimal combination of elements, processes of organization and disorganization balance each other, there is an increase in business activity, all this against the background of its growth, expansion and transformation into an organized whole. When the reserve of progressive modification is exhausted, linear development stops, the system passes through a critical point (limit of progressive development) and enters a state of crisis. The limitation of growth is based on the fact that in economic systems the speed and direction of development of individual elements, their acquisition of new qualities can differ significantly (Scherbakov, 2016). This leads to the violation of the main proportions and correspondence between the parties to the activity, the emergence of internal contradictions in the system. Ultimately, the effectiveness of both the system as a whole and its elements is reduced. Resolving accumulated contradictions leads to a new quality of primary elements, their relationships and structure, to a new level of organization (Mischenko, 2004). In other words, one trajectory of development is replaced by another. The crisis is thus a generator of economic system transformations.

Given that the crisis affects the economic system development, its future state can be represented by a variety of options. This multiplicity of probable states is commonly referred to as a bifurcation mechanism. Translated from Latin bifurcation means "splitting," branching, "in this sense - variants of the system development trajectory. This concept defines the ambiguity of the post-crisis state of the system, the formation of different development options, which implementation depends on the combination of influencing factors determining the position of the system at the critical point (Shibanova-Roenko, 2016).

At the moment of bifurcation, the choice of further development path is to some extent random, but not arbitrary, but in the field of possible solutions. The subsequent state of the system will depend on its potential, degree of sustainability, external and internal factors of influence, communication channels between past, present and future states, etc.

Crises encompassing the economic system are unique and diverse. As noted above, the difference lies in the sources of occurrence, the time of flow, the possibility of maintaining systemic integrity, the disorganization degree, and the ways of entering the path of sustainable development (Yakovets, 1999). On the basis of these characteristics, three states of the economic system can be distinguished, describing its unstable state: critical situation, crisis and disaster (Armand et al., 2002).

A space-time critical situation can occur during any period of the system evolution and is caused by small deviations from sustainable development, which can be restored by adapting the system to new operating conditions based on adaptive mechanisms. The crisis itself arises when fluctuations are beginning to play an increasingly significant role in the development of the system. They are no longer local. On the contrary, any even the smallest undesirable deviations in a part of the system are equally detrimental to all other parts of the system. There is a slow accumulation of quantitative and qualitative changes in the parameters of the system and its components, according to which at the point of bifurcation the system will choose one of the possible attractors. As a result, a qualitative leap will occur, and the system will form a

new dissipative structure corresponding to the selected attraction. Transformation processes will be evolutionary. As the crisis is resolved, strong fluctuations will be suppressed, and the system itself will return to the stable state characteristic of it at this stage (Filimonova, 2008).

Crisis is a critical situation. Its difference is in the degree of crisis quality, and the common feature is the transformation caused by it, which is overcome on the basis and provided that the system exists, its characteristic properties and integrity are preserved. Situations involving the disruption of the integrity of the system, the disintegration of the original system into separate elements or the re-emergence of the system into a new one have the character of disasters. Disasters are caused not only by internal deviations, the strength and direction of which can be predicted by analyzing the history of development and the current state of the system, but also by external ones, which makes the forecast almost impossible. Gradually in the system the division increases, the previous structural elements and connections are denied. Further development is a completely new qualitative transformation, which can lead to the formation of a different order, for which its own structure, its threshold values of adaptation, its risks of loss of stability, its own cycle of development are formed.

Generalizing the above, we will present interrelation between a condition of an economic system and transforming processes: critical situation  $\rightarrow$  regulation; crisis  $\rightarrow$  reforming; catastrophe  $\rightarrow$  restructuring.

# 5.2. Choice of options of an economic system transformation process

The targeted transformation of the economic system can be represented by four possible options (Table 1).

**Table 01.** Economic system transformation options

Options	Characteristics
Premature	Transformation processes of the economic system begin before the onset of
transformation	the crisis a
Timely transformation	Transformation processes of the economic system begin at the moment of
	peak phase of crisis
Belated	Transformation processes of the economic system are aimed either at
transformations	conscious destabilization of the system or are post-crisis
Synergetic transformation	The transformation processes of the economic system are focused,
	conscious and reflect the objective and subjective state of the system in the
	present period

Premature initiation of transformations may be associated with maintaining the relative stability of the system. However, the timing of the transition is likely to be incorrect, so the system is beginning to rebuild without having exhausted its development potential. As a result, the pace of processes is slowing down, and the loss of profits from underutilization of development potential is the greater the earlier the process of change begins.

Belated transformations are just a prime example that a system can be deliberately destabilized to transform it to a qualitatively different state. It is this option that emphasizes the crisis as a factor in economic development. The essence of transformation technology is based on the fact that new development attractors are created, which push the system to evolve in a given direction on the basis of

self-organization mechanisms. The reforms in Russia in the early 1990s related to the transition of the economic system from one model of development, where the mechanisms of state regulation were central, to another, different in its internal nature, based on the mechanisms of market self-organization, can be a clear example of belated changes. In general, it should be noted that late transformations always involve direct losses, partial or total destruction of potential, which is very painful for economic systems.

The best option is to start a transformation at the time of the highest development of the system, when its potential has already been exhausted and the stage of degradation has not yet begun. But this is at the same time the most difficult option, because the system approaches the point of highest development in the most unstable state, which requires the utmost caution in carrying out transformations.

Another embodiment of targeted change is based on synergies resulting from the combined, powerful, interdependent action of objective and subjective development processes. That is, in economic development, any deliberate actions to transform the system will overlap with internal patterns and mechanisms for its functioning and development. The effectiveness of management processes is largely determined by the extent to which the parameters of objective processes have been taken into account and the effectiveness of measures aimed at synchronizing their pace and preventing or minimizing the adverse effects of development. It is this type of transformation that is called synergetic. At the same time, the correlation of objective and subjective processes is expressed in the fact that the more the progress of subjective processes is based on the parameters of objective processes of development, the higher the stability and efficiency of the system. At the moment when the system is in the stage of growth, preparation for the future transformation of the system begins, which allows at the point of maximum stability to start the transformation, which gives an opportunity to bring the system to a new higher level of development, maintaining its reproductive integrity (Filimonova, 2008).

# 6. Findings

Analyzing the crises of recent years, we can conclude that the anti-crisis policies of most developed States are based on the option of a timely transformation of the economic system. And that with some reservations. Thus, the crisis of 2008-2009, when states applied all measures to prevent it, did not lead to structural renewal of the leading economies. Above all, this was due to measures to prevent the death of inefficient firms based on expansionist fiscal and monetary policies. But those problems could get on the agenda of the looming crisis (Mau, 2020).

By contrast, the emerging crisis may differ from the previous stagflationary effect of demand change ("demand shock"), which may mean that the previous tools for crisis policy of States may not be applicable (Mau, 2020; Shakhalilov, 2020).

# 7. Conclusion

In summing up the study, it should be noted that monitoring the state of the economic system, tracking the accumulated inconsistencies, predicting the consequences of the changes and making the necessary adjustments in a timely manner become an essential part of crisis management. In other words, crisis management and change-building must be strategic, allowing for proactive decisions on crises.

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