

THE MECHANISM OF THE ECONOMY STABILIZATION AND THE BEHAVIORAL RESPONSES OF ITS AGENTS IN A PANDEMIC COVID-19

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PROBLEM.

The lack of modern experience in the fight against pandemics and unprecedented speed of the coronavirus SARS-CoV-2 spread in the world, led to the formation of a global entropy condition accompanied by increasing chaos and disorganization.

METHODS.

Theoretical and empirical methods, which formed on the basis of correlation, structural and functional analysis within the theory of complex systems self-organization.



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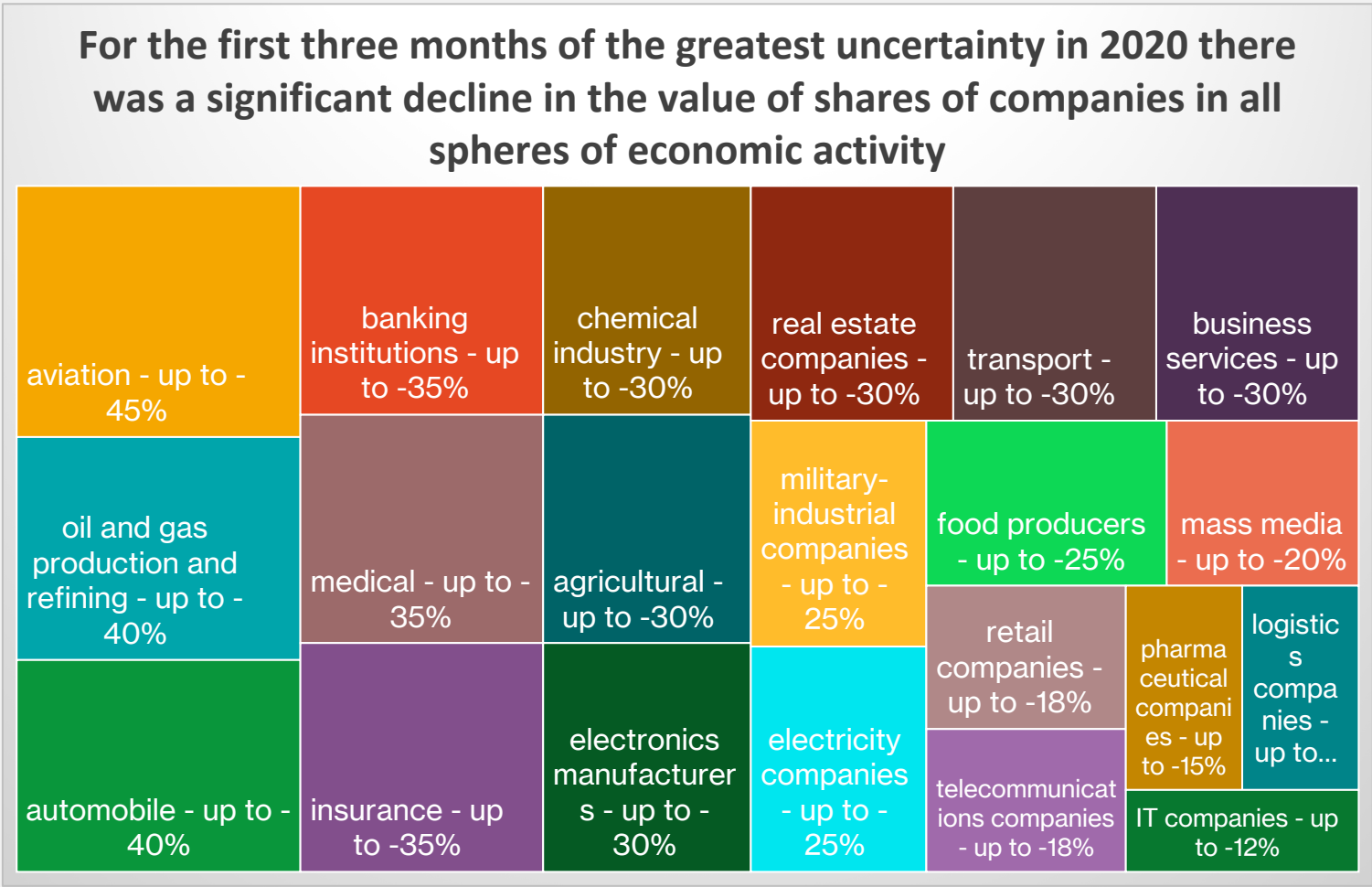
PURPOSE

is to determine the patterns of the pandemic crisis development, the content of the economy stabilization internal mechanism and the sequence of its agents behavioral responses.

THE IMPACT OF THE PANDEMIC ON THE ECONOMY - THE DEEPEST CRISIS OF THE PRESENT, REDUCING WORLD GDP BY 4.23%, STOCK EXCHANGE CRISIS, INCREASE OF NETWORK ECONOMY, CONSOLIDATION OF ECONOMIC AGENTS

Restoration and growth of the value of shares of companies during the second and third quarters of 2020

IT companies	up to 55%
automotive	up to 50%
electronics manufacturers	up to 45%
retail companies	up to 45%
media	up to 45%
business services	up to 35%
chemical companies	up to 35%
agricultural	up to 35%
food producers	up to 30%
pharmaceutical	up to 28%

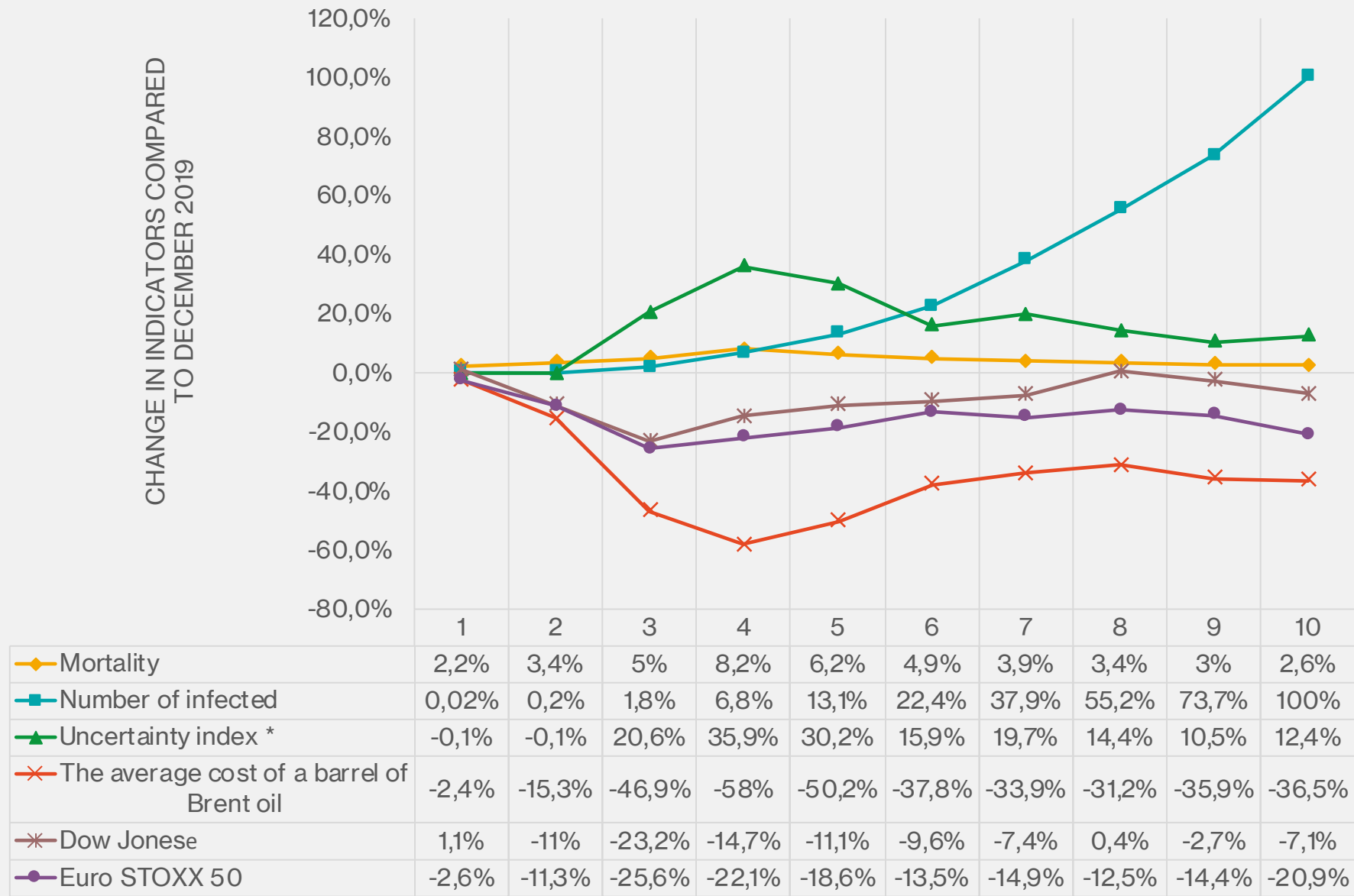


Industries with less growth (than decline) of company shares in the second and third quarters of 2020

aviation	up to 23%
transport	up to 23%
military-industrial companies	up to 22%
electricity	up to 22%
insurance	up to 20%
oil and gas extraction and refining	up to 17%
banking institutions	up to 12%
telecommunications companies	up to 8%

Efforts by economic agents to reduce entropy have been accompanied by investment in coronavirus research and pandemic control. The relative stabilization of the coronavirus spread in late summer and early autumn, the encouraging dynamics of vaccine production, the refusal of leading governments to restrict socio-economic activity, gave grounds for optimistic forecasts of a pandemic and economic recovery in the fourth quarter of 2020.

THE DYNAMIC CHARACTERISTICS CORRELATIONF OF THE COVID-19 PANDEMIC AND THE UNCERTAINTY INDEX WITH MARKERS OF ECONOMIC ACTIVITY IN 2020



* In order to achieve comparability of graphs, the value of the change in the uncertainty index is reduced by 10 times

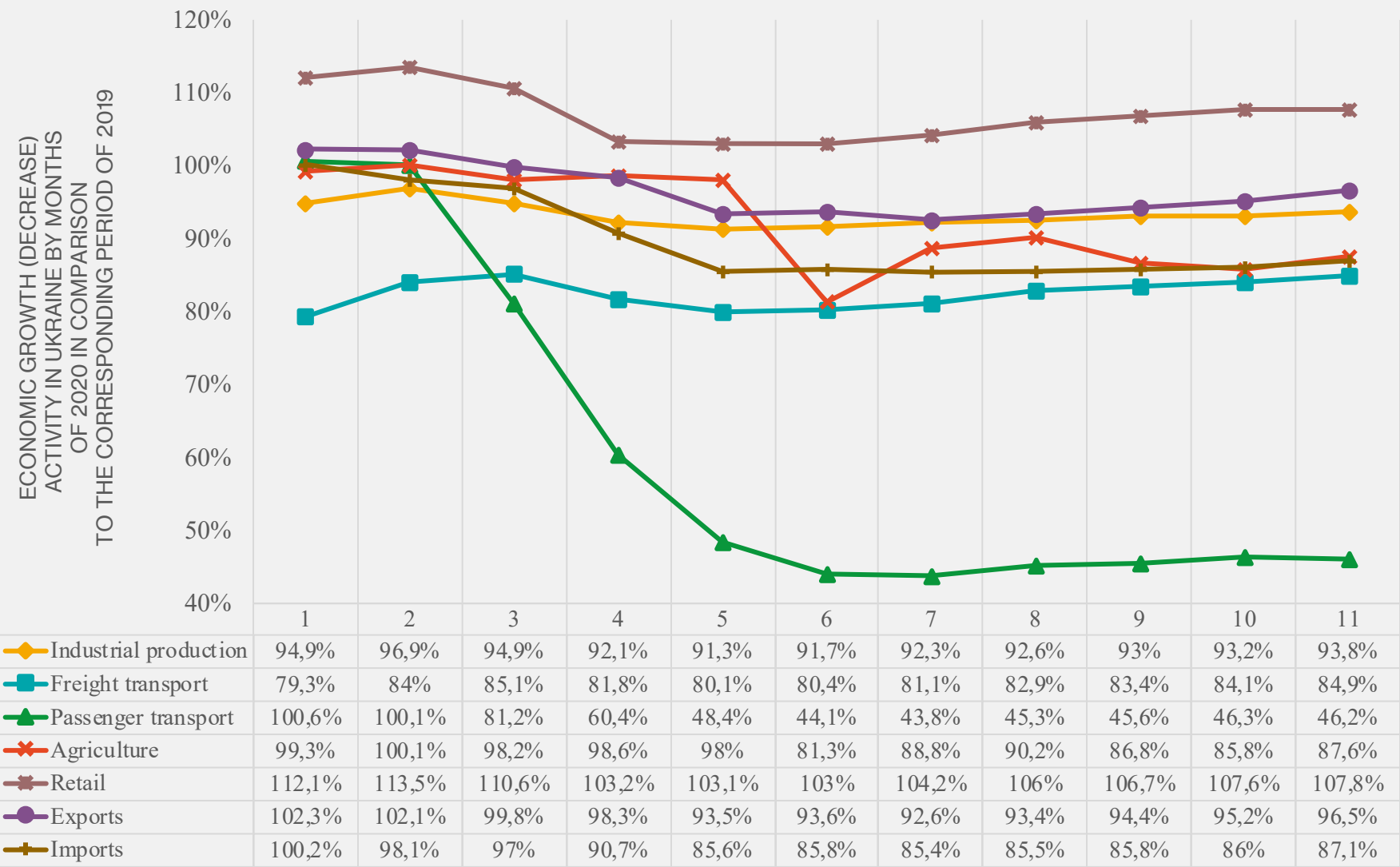
Analysis of the development of economic activity in the first months of the COVID-19 pandemic suggests that after the initial information shock and collapse there is an information and organizational adaptation, which is manifested in the inclusion of pandemic factors in the structure of economic agents at the level of forecasts and scenarios.

THE FIRST RESULT: From the factor of external influence the pandemic turns into a structural condition of economic activity. Under appropriate conditions, there is a significant weakening of the relationship between the number of infected and dead on the one hand and the dynamics of the economy on the other. There is a negative correlation between the recovery of economic agents and the index of economic policy uncertainty, which is gradually declining.

The obvious result of the COVID-19 pandemic is the destabilization of the economy, accompanied by a decline in economic activity, devaluation of stocks and energy resources, and chaos in management.

GLOBALIZATION CREATED CONDITIONS FOR SYNCHRONIZATION OF CRISIS DYNAMICS OF UKRAINE WITH WORLD TRENDS

In the context of the COVID-19 pandemic, the sharp rise in unpredictability in the economy was matched by a sharp decline in economic activity



During the shock period from March to June there was a decrease in industrial production by 8.3%, agricultural production by 18.7%, freight traffic by 19.9%, passenger traffic by 55.9%. Stabilization of economic dynamics and its slight recovery began in July 2020. The high degree of inertia of export-import operations led to a shift of critical moments in July 2020, when exports decreased by 7.4% and imports decreased by 14.6%.

THE SECOND RESULT: Based on the observation of economic behavior of business structures, it was found that there are two main behavioral strategies:

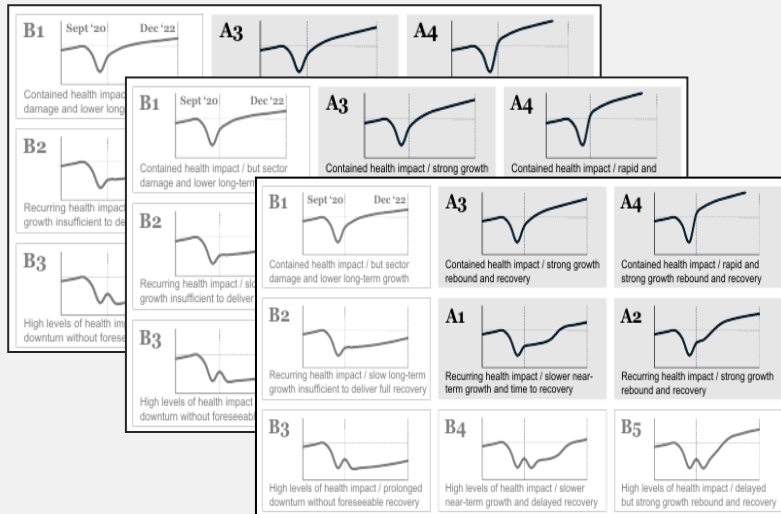
- 1) defense, which provides a reactive position and reduction;
- 2) offensive, aimed at the development of economic activity.

RESTORATION OF ECONOMIC CONFIDENCE ON THE BASIS OF CREATION OF FORECAST SPACE

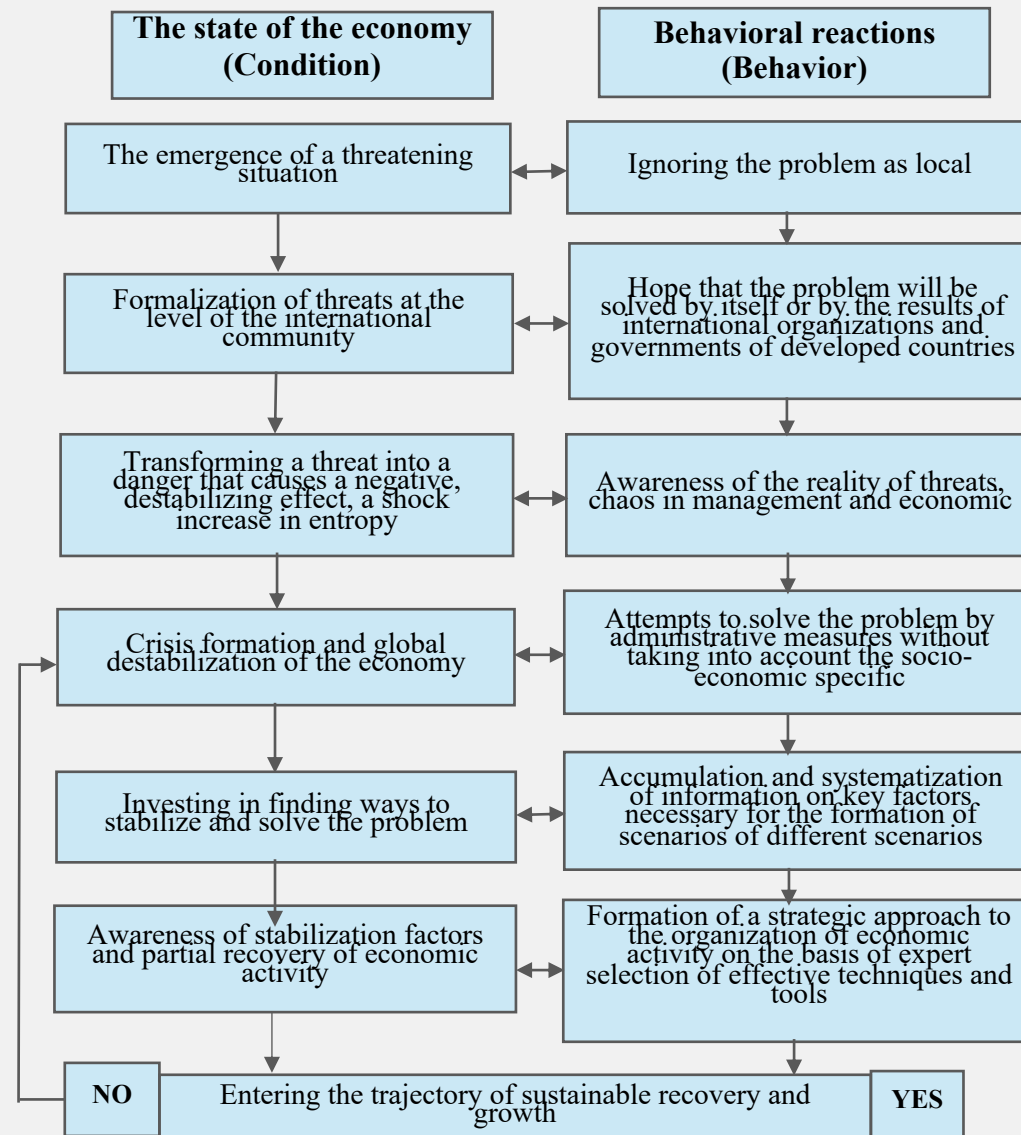
The main factor influencing the economy is the uncertainty of the factors spreading the COVID-19 pandemic, namely: the possibility of the formation of long-term immunity and the degree of mutagenicity of the coronavirus

THE THIRD RESULT:

The lack of reliable information is offset by the rapid formation of the information space of forecasts and scenarios, which create the illusion of controlled processes..



The corresponding situation can be characterized as a new economic reality that is developing in an updated coordinate system, one of which is the COVID-19 pandemic.



During the pandemic, the economy goes through successive stages of crisis development and adaptation of its agents

THE FOURTH RESULT:

The study revealed a direct link between the level of information uncertainty and agents economic activity. Proposed a mechanism for stabilizing the economy in response to the behavioral responses of its economic agents, such as ignoring the danger of a pandemic; trying to protect their economic system from change; using traditional stabilization methods; integration of resources and efforts to overcome the crisis.