THE CONCEPTUAL AND INSTITUTIONAL FRAMEWORK OF ECONOMIC RESILIENCE

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Abstract. *Recent disruptions and shocks caused by financial crises, pandemics, and catastrophic events, emphasize the importance of economic resilience as the ability of an economy to adapt and recover quickly. The concept is crucial for maintaining stability and economic growth in the face of global or internal challenges and fluctuations. This study aims to analyze the European institutional framework related to economic resilience and to explore the concept at the international level. The importance of studying resilience derives from the risk of it becoming a substance-less cliché due to excessive use and associated ambiguity. Numerous academic works address this subject, creating uncertainty. Despite the efforts of some international organizations to define the term, the inconsistencies encountered in some guidelines and the incompatibilities between them create difficulties in the development and implementation of appropriate policies. The methods used in this study are: bibliographic documentation, observation, synthesis and interpretation of information. As a result of the rigorous research carried out, the conceptual limits of economic resilience were established, which allowed the identification of key elements and resilient economic strategies, to ensure risk management and the promotion of sustainable development.*

Keywords: *economic resilience, sustainable development, conceptual framework.*
JEL Classification: *D60, Q51, R11.*

1. Introduction

Economic resilience is an essential concept in the context of managing risks and ensuring the long-term prosperity of an economy. It refers to the ability of an economy to cope with and recover quickly from disruptions or shocks, including recessions, financial crises or catastrophic events. Moreover, economic resilience is a measure of that economy's ability to maintain its stability and growth in the face of challenges and fluctuations in the global or domestic economic environment.

There are several key elements that contribute to a country's economic resilience. Sectoral diversification, for example, is crucial because economies that are overly dependent on a single sector are more vulnerable to shocks that may affect that sector. Institutional robustness is also essential, as strong and transparent institutions can help stabilize an economy in times of crisis. Adequate fiscal and monetary policies, investment in infrastructure, education and innovation play an important role in increasing a country's economic resilience.

Also, the adaptability and flexibility of labor markets and the business system are essential aspects of economic resilience. Economies with flexible and adaptable labor markets can more easily adjust to changes in the economic environment as well as crises that may occur.

In the contemporary world, economies face a number of risks and threats, such as climate change, financial crises, pandemics and natural disasters. To manage these risks and minimize their negative impact on the economy it is essential to know and understand the concept of resilience.

A resilient economy is better able to maintain stability in the face of shocks and return to a growth trajectory after periods of turbulence. Therefore, the study of economic resilience can contribute to the development and implementation of policies that enhance an economy's ability to cope with challenges and sustain long-term economic growth.

A resilient economy is one that can support sustainable development, taking into account both the needs of the present and those of future generations. By studying economic resilience, we can identify ways to build more robust and adaptable economies that can withstand and thrive in the face of economic and environmental challenges.

2. Development of the concept of economic resilience

2.1. The scientific evolution of the concept of resilience

The origin of the concept of resilience comes from the science of material resistance and expresses the behavior of materials to shock stresses. From the Latin *resilio*, means to jump back, to retreat, to recover. The term was originally used to describe the ability of a system to return to equilibrium after a disturbance. In the meantime, it has been enriched with new nuances and meanings, coming to include not only the return to a certain state, but also the adaptation to change and the transformation of the system (Mihai, et al., 2022).

In the opinion of the Romanian authors (Mihai, et al., 2022), but also of the author Adam Rose from the University of California (Rose, 2007), the first to introduce the scientific notion of resilience in the modern sense was C.S. Holling, a theoretical ecologist. Holling argued that "resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes in state, process, and parameter variables while managing to persist" (Holling, 1973).

Generous studies on resilience can be found in Linkov and Trump (2019). The central idea of the research presented by the authors concerns the need to understand resilience as a function dependent on *time and space*. The authors argue that resilience is both a philosophy and a methodological practice that emphasizes the role of *recovery* from a disruption as much as the *absorption* of a threat and its consequences.

The specialized literature contains several definitions of resilience depending on the field of application: ecological, psychological, physical, economic, social resilience, etc. There are also several dimensions, characteristics and principles that define this concept. In our study, we will focus on and describe the concept of economic resilience.

According to the Euro-Atlantic Institute for Building Resilience, economic resilience represents a country's ability to face and adapt to economic shocks and challenges, while maintaining sustainable growth and macroeconomic stability (IEACR, 2023).

2.2. The use of the concept of resilience at the level of European Union policies

The concept of resilience has been developed in various policy documents at European level. We will mention some of them below to outline the institutional and conceptual framework of resilience from the perspective of the European Commission.

One of the first approaches to the concept of resilience at EU level can be found in the 2012 Communication from the Commission to the European Parliament and the Council on resilience in the field of food security (COM, 2012). In this communication, resilience is defined as the ability of an individual, household, community, country or region to withstand, adapt and recover quickly from stress and shocks without compromises long-term development prospects. This involves two aspects: the ability to withstand and the ability to quickly recover from an impact.

According to this communication, increasing resilience can be achieved through two methods: increasing the entity's ability to deal with crisis situations or reducing the impact of these crises. It is also recommended to apply both strategies simultaneously. This requires a complex approach and a comprehensive perspective aimed at both reducing the multiple risks of crises and improving adaptive capacity at local, national and regional levels. Therefore, in building resilience, a long-term approach that focuses on mitigating the root causes of crises and improving capacities to manage future uncertainty and change is essential.

A series of acts and programs at the level of the European Union that address resilience followed. The European program for the protection of critical infrastructures (SWD, 2013) adopted the term "resilience" to develop a common approach in the EU for the protection and resilience of critical infrastructures, taking into account the interdependence between these infrastructures, industry and the state.

A number of approaches to resilience in the field of energy, security and foreign policy have also been reported (COM, 2014; COM, 2015; European Parliament, 2015; European Commission, 2016).

A significant contribution to the development of the concept of resilience was made by the Joint Communication to the European Parliament and the Council on resilience in EU external action (SWD, 2017) which examines different aspects of state and society resilience, helping to define a strategic approach to resilience in EU external action. This Strategy talks about resilience as " "a broad concept encompassing all individuals and the whole of society" that features " democracy, trust in institutions and sustainable development, and the capacity to reform". The EU's strategic approach to resilience aims to achieve the following objectives:

- the adaptability of states, societies, communities and individuals to political, economic, environmental, demographic or societal pressures, to support progress towards national development objectives;
- the ability of a state, amidst substantial pressures, to establish, uphold, or reinstate its fundamental functions, along with essential social and political unity, in a manner that upholds democratic principles, the rule of law, human and fundamental rights, and promotes comprehensive long-term security and advancement;
- the capacity of societies, communities and individuals to manage opportunities and risks in a peaceful and stable way and to build, maintain or restore livelihoods in the face of major pressures.

The Strategic Foresight Report - Charting the course towards a more resilient Europe (European Commission, 2020) addresses the use of foresight in EU policy-making and introduces the extended concept of EU resilience. The report assesses EU resilience from four interconnected perspectives: social and economic, geopolitical, environmental and digital. For each perspective, the report identifies the capacities, vulnerabilities and opportunities exposed by the crisis that need to be addressed in the medium and long term.

Social and economic resilience refers to the ability to cope with economic shocks and implement equitable and inclusive structural changes. Ecological resilience involves achieving climate neutrality by 2050, with measures to mitigate and adapt to climate change and protect the environment. Digital resilience ensures that living, working and interacting in the digital age respects and reinforces human dignity, freedom, equality and other fundamental European values. Geopolitical resilience refers to strengthening Europe's "open strategic autonomy" and its role as global leader in an interdependent world affected by the COVID-19 pandemic.

These documents and initiatives demonstrate the EU's commitment to building resilience in various areas and contexts as part of its efforts to promote stability, security and prosperity across the region.

2.3. Approaching the concept of economic resilience at the international level

The United Nations, through studies provided by the IPCC (Intergovernmental Panel on Climate Change), sees resilience as the ability of a system and its component parts to anticipate, absorb, adapt or recover in a timely and efficient manner from the effects of a hazardous event, including by ensuring conservation, restoration or improvement of its basic structures and functions (IPCC 2012).

The World Bank (World Bank, 2014) in the study conducted by Stephane Hallegatte, approaches economic resilience from two aspects: micro and macroeconomic:

- *Microeconomic resilience* is defined as the ability of an economy and society to minimize household welfare losses for a given level of aggregate consumption losses. This means that microeconomic resilience refers to the ability of an economy and society to manage and reduce the negative impact on individual household well-being in situations of crisis or economic disruption, without having a significant impact on the total consumption of the economy.
- *Macroeconomic resilience* is the ability to keep aggregate consumption losses as low as possible, for a given amount of capital losses, i.e. minimization of the amplification factor. This means that macroeconomic resilience refers to the ability of an economy to manage and reduce total losses to aggregate consumption in a crisis or economic disruption, while minimizing the impact of these losses on capital and other macroeconomic aspects. It is about the ability of the economic system to mitigate and limit the negative consequences of a crisis or economic shocks on the general level of consumption, thus reducing the factor that amplifies its negative effects.

Regarding the Republic of Moldova - the country towards which we are focusing our research interest, The World Bank's Board of Executive Directors approved in May 2023 the Second Emergency Response, Resilience, and Competitiveness Development Policy Operation (World Bank, 2023). This financial support, totaling 134.3 million dollars, will help the Government of the Republic of Moldova in mitigating the socio-economic impact on refugees and households caused by the war in Ukraine. In addition, the support package aims to strengthen resilience and increase competitiveness to reduce vulnerabilities to future shocks for the Republic of Moldova.

The Organization for Economic Cooperation and Development (OECD) has been concerned with the development of the concept of resilience since 2014 (OECD, 2014), publishing various studies on this topic in recent years. Synthesizing the definitions promoted by the OECD, we can deduce that economic resilience refers to the ability of an economy to adapt and withstand external and internal disturbances, as well as to return to sustainable growth and development (OECD, 2018).

The International Monetary Fund (IMF) is deeply oriented towards the financial support of the resilience of less developed states. Thus, in April 2022, the IMF launched a financial instrument called the IMF Resilience and Sustainability Trust (RST) through which it provides long-term financing with the aim of contributing to the stability of the balance of payments of low- and middle-income countries in the context of the climate change approach. RST offers loans with favorable terms, such as long repayment periods and extended grace periods, to support these countries in their efforts to adapt to the impacts of climate change and promote sustainable development.

The Republic of Moldova will receive a loan worth 129.375 million Special Drawing Rights (SDR), equivalent to more than 170 million dollars, from the International Monetary Fund (IMF), through the Resilience and Sustainability Trust (RST) financing mechanism. This loan aims to support the efforts of the Republic of Moldova in strengthening its capacity to face the impact of climate shocks, in implementing reforms in the energy sector and in ensuring the mobilization of sustainable financing. In order to benefit from this loan, the Republic of Moldova, including the Government, the ministries and the National Bank, must meet 12 reform conditions related to the country's economic resilience.

In the light of research conducted by international organizations, the concept of economic resilience is essential for anticipating, absorbing and recovering from hazardous events, both at the microeconomic and macroeconomic levels. The concern of these organizations on this topic is given by the programs and financial support instruments to strengthen economic resilience and to implement the necessary reforms to adapt to climate change and ensure sustainable development.

3. Conceptual framework on resilience

In the present study we analyzed the concept of resilience from a scientific point of view, we investigated what are the approaches to resilience, especially economic resilience at the level of the European Union and international organizations. From the research carried out we derive the following conceptual framework regarding economic resilience (Tab. 1).

Table no. 1. International conceptual framework on the concept of resilience

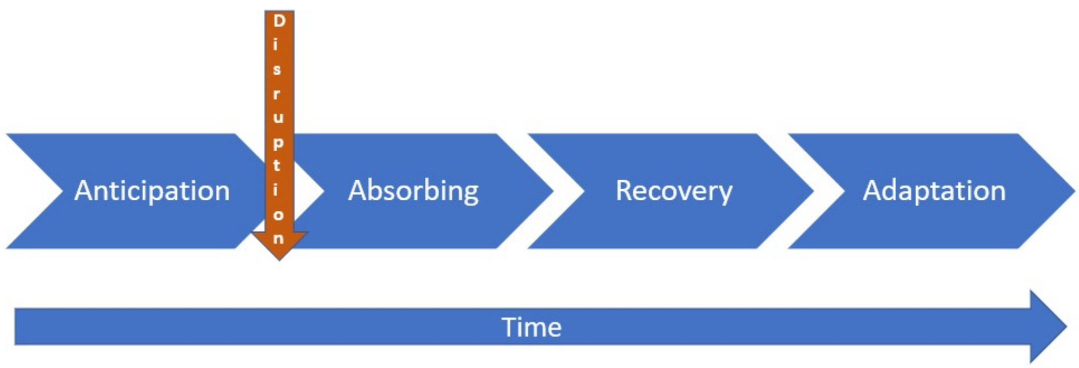
Author	Definition
C.S. Holling (1973)	Resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes in state variables, process variables, and parameters, while managing to persist.
Linkov and Trump (2019)	Resilience is a function dependent on time and space, serving as both a philosophy and a methodological practice that emphasizes the role of recovery after disruption as much as the absorption of a threat and its consequences.
Euro-Atlantic Institute for Building Resilience	Economic resilience is a country's ability to cope with and adapt to economic shocks and challenges while maintaining sustainable growth and macroeconomic stability.
European Commission (2012)	Resilience is the ability of an individual, household, community, country or region to withstand, adapt and recover quickly from stress and shocks without compromising long-term development prospects.

The United Nations, IPCC (Intergovernmental Panel on Climate Change) 2021	Resilience is the ability of a system and its component parts to anticipate, absorb, adapt or recover in a timely and effective manner from the effects of a hazardous event, including by ensuring the preservation, restoration or improvement of its basic structures and functions.
The World Bank (World Bank, 2014), Stephane Hallegatte	Economic resilience is the ability of the economic system to mitigate and limit the negative consequences of a crisis or economic shocks on the general level of consumption, thus reducing the factor that amplifies its negative effects.
The Organization for Economic Cooperation and Development (OECD) - 2014	Economic resilience refers to the ability of an economy to adapt and withstand external and internal shocks, and to return to sustainable growth and development.

Source: developed by the author based on the analyzed scientific literature

The analyzed conceptual framework allows us to establish the key elements of economic resilience that we present in Figure no. 1.

Figure no. 1. Key elements of economic resilience

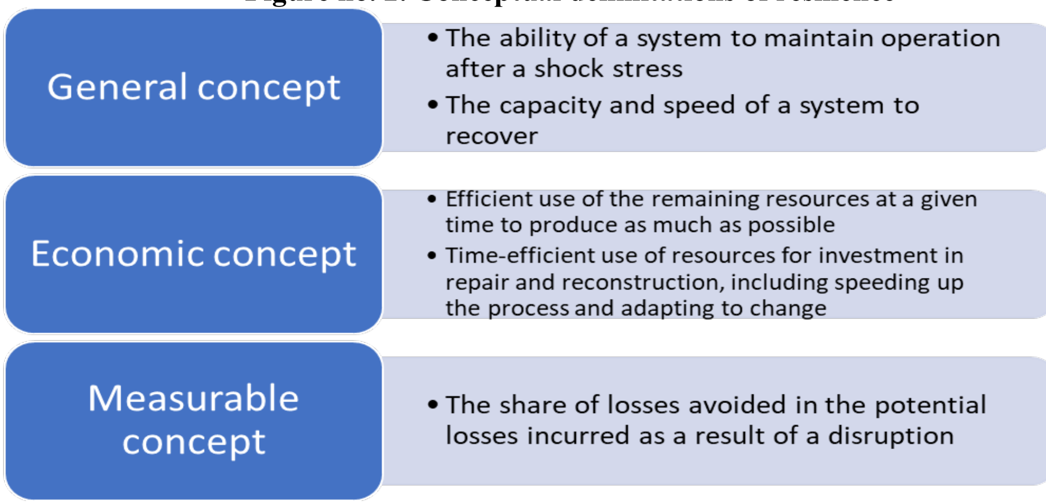


Source: developed by the author

Adam Rose (Rose, 2007) in his work focuses on the economic aspects of resilience, with emphasis on two distinct dimensions: time and context. In Rose's view, the concept of static economic resilience involves maximizing the efficiency of the use of available resources at a given point in time, in contrast to the dynamic processes involved in repair and reconstruction, which influence the evolution of the economy over time. This definition is consistent with a fundamental problem of economics, namely the efficient allocation of resources. In essence, it speaks to the fact that when we identify and delineate economic problems, we focus on ways to use resources efficiently, both now and for the future. Thus, it is important to understand how to use resources responsibly and productively to meet the current and future needs of society. Disasters amplify this problem, and *static resilience* has the potential to reduce associated losses in a simple and economical way. *Dynamic resilience*, however, focuses on speed of recovery and is more in the realm of engineering.

From the analysis carried out we can deduce some important aspects of the concept of resilience which we present in Figure no.2.

Figure no. 2. Conceptual delimitations of resilience



Source: developed by the author

4. Conclusions

The conducted study demonstrated that economic resilience represents an important concept in the current context of the countries' development, being a fundamental pillar in building and maintaining the prosperity of a long-term economy. Essentially, economic resilience measures the ability of an economy to maintain its stability and growth in the face of challenges and fluctuations in the global or domestic economic environment.

In the contemporary world, economies face a number of risks and threats, such as climate change, financial crises, pandemics and wars. To manage these risks and minimize their negative impact on the economy, it is essential to understand and promote economic resilience.

The concern of researchers, but also of international organizations experts towards the concept of resilience derives from the need to maintain the stability of economies and to find ways to return to an economic growth trajectory after periods of turbulence. The study and promotion of economic resilience can contribute to the development and implementation of policies that enhance an economy's ability to cope with challenges and sustain long-term economic growth.

In conclusion, economic resilience is an essential aspect in ensuring the long-term stability and prosperity of an economy, being a determining factor in managing risks and challenges in the global economic environment. By understanding and promoting this concept, we can help build more robust and adaptable economies that can withstand and thrive in the face of economic and environmental challenges.

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