

SECTION I

REGIONAL DEVELOPMENT STRATEGIES AND POLICIES

NATIONAL RECOVERY AND RESILIENCE PLAN - OPPORTUNITIES AND CHALLENGES

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Abstract

The health crisis caused by COVID-19, together with previous crises, has shown that sustainable and resilient economies alongside strong financial and social protection systems have helped Member States to react more effectively and efficiently to shocks and recover faster. At the same time, resilience can lead to negative effects of shock propagation between Member States, affecting the process of convergence and cohesion in the European Union (EU). Falling expenditure on education, culture, healthcare can also affect the rapid recovery of economies. At the same time, investment and reforms can help build resilience and lead, in the medium and long term, to bringing back inequalities of all kinds.

In the context of the health crisis, an innovative instrument – the Recovery and Resilience Mechanism – has been proposed and promoted at EU level to support recovery and resilience in regions and Member States, with the stated aim of providing financial support in order to accelerate sustainable reforms and related public investment. Although new in nature, this mechanism builds on the experience gained by Member States from using other instruments and programs launched and funded by the EU but this plan also comes with several opportunities and challenges that will be discussed in this article.

Keywords: *National Recovery and Resilience Plan, opportunities, challenges*

Literature review

The concept of resilience can describe a linear or non-linear reality, in which the processes within complex systems register relatively wide variations under the effect of changes in context or other transformations. Resilience targets disturbances and how the entities studied are affected by certain external phenomena (whether they resisted or not).

The definitions of resilience can take on different meanings depending on the field to which it is referred and the general perspective on reality. Originally used to assess the ability of a system to return to equilibrium after a disturbance, over time it adapted to new challenges, taking on new meanings, ending up covering not only the return to a certain state, but also the processes of adaptation to changes and transformations of the field referred to, as follows:

1. environmental resilience can be expressed by the amount of disturbance that can be absorbed before the system changes its structure and functions, moving into another state or mode of operation; starting from ecology and renewable resource management, another framework was envisioned for analyzing the identified disturbances in a system where the ecological system is interconnected with the socio-economic system (environment and society);

2. socio-ecological resilience is regarded as “a property of the system, which targets the magnitude of change or disturbance that a system can endure without passing into an alternate state, characterized by different structural and functional properties.” (Resilience Alliance, 2010, p. 5); in the case of socio-ecological systems, the adaptation capacity of the human component and the management of resources become the most important aspects of resilience.

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Extending the use of the term to systems where the role of the human factor is decisive (urban regions) has aimed at an adequate response to disturbances of various types while preserving the opportunity for future development intact.

The Stockholm resilience Center defines resilience as “the ability of a system to cope with change and continue to develop – it involves the ability to withstand shocks and disturbances or use such events to catalyze renewal and innovation.” (Stockholm Resilience Centre, 2015, p. 18). This ability has also been called “evolutionary resilience”. (Davoudi, 2012) or “adaptive resilience” (Bristow and Healy, 2014). Thus, the concept is assimilated with long-term flexibility, through structural and functional adaptation and transformation. Also, if in ecology resilience was a descriptive concept, as it is applied in the social sciences it begins to take on normative nuances, expressing what should be or what is desirable (Brand and Jax, 2007).

There is also an obvious difference between two types of response to disturbances:

1. one that ensures immediate recovery after a shock one that involves a capacity that ensures long-term persistence and development.

Hamdouch et al. (2012) define territorial resilience through the two components of it: “static resilience” and “dynamic resilience”. If the former involves a certain defensive capacity of the territory to absorb shocks and adapt to preserve the foundations of development and its own specificity, the latter involves the capacity of some territories to create new resources, capacities and values that will lead to their transformation.

In the literature, other differences are made between specific resilience and general resilience (Resilience Alliance, 2010):

1. specific resilience involves an adaptation of systems (or some of the components) to a specific disturbance, identified and analyzed (such as forest resilience to fires, a coastal city’s resilience to tsunamis or the resilience of an economy to a financial crisis);
2. overall resilience is the ability to persist within a changing environment, but without taking into account a particular type of disturbance. In identifying it, a certain structure and functioning of the system is of major importance, which can ensure adaptability and transformability over time.

The conceptual approach to resilience by researchers in various fields of the social sciences has varied. Authors in the field of natural resource management emphasize the human-environment interdependence that this theory promotes in the study of regions (Folke et al., 2002), those in the field of economic geography support its usefulness for an evolutionary view on the regional economy (Simmie and Martin, 2010), While from the practice of territorial planning is noted the role of linking various sectoral areas of planning and between systems theory that this concept can play by providing a common scientific vocabulary (Wilkinson, 2012, Sellberg et al., 2015).

However, there is a dilution of the meaning of the concept of resilience and the increasing uncertainty that makes operationalization problematic (Brand and Jax, 2007, Davoudi, 2012). The estimation of resilience to economic crises based on the speed of return of some economic indicators to the pre-crisis situation was carried out within the Economic crisis: Resilience of Regions project, financed by the European Union ESPON Program. It investigates how EU regions reacted to the 2007-2009 economic crisis. The project analyzed the variation of gross domestic product and employment during the pre-crisis period, in the type of economic crisis and the following years, until 2011. Based on the difference between pre-crisis and current values, European regions have been classified as resilient, recovered, recovering and unrecovered, or on an upward path (ECR2, 2014).

Based on studies and analyzes of territorial resilience, a number of recommendations for long-term strategies that can be applied in crisis areas have emerged (OECD, 2013):

- Short-term decisions should not block long-term options. It is very important to think of a long-term strategy for the economic and social reconstruction of the region as soon as possible after the disaster, so that the reconstruction actions do not sabotage the future development.
- Identifying the economic base and the main social and economic factors specific to the region that can sustain its resilience is defining in order to support the stimulation of development from the local resources and the capital that can ensure a faster and more visible recovery of the region.
- Designing an integrated strategy for regional recovery based on dialog between key stakeholders to identify the necessary reforms and increase the quality of decision-making.
- The strategic decisions must be coordinated from a local level.
- The local crisis must be used to introduce reforms and national standards.
- Promoting public participation to support decision-making is very important because the recovery strategy should take into account the vision of the local Community.
- Public deliberation must be an essential component of the implementation of the regional development strategy as it helps to monitor progress.
- Building trust, increasing support for adopted policies and improving administrative capacity is based on broad access to information, dialog with civil society and the private sector to evaluate the strategy and improve it when implementing the envisaged measures.

In order to implement the above proposals, a maximum attention needs to be paid to the local context and have a thorough knowledge of the system on which to intervene. “There are no panacea for increasing resilience. All aspects presented require a nuanced understanding of how, where and when to apply them and how they interact and how they depend on each other” (Stockholm Resilience Centre, 2015, p. 3).

Resilience after the health crisis

At the level of the European Union, from the first signs of a global crisis, discussions / questions related to recovery and resilience began, summarized below:

Question 1: How robust the economic recovery will be after the crisis: Analyzed indicators: GDP growth (by sectors), total number of hours worked, household incomes, business dynamics, health risk;

Question 2: Will recovery create equal opportunities for all? - Indicators: Income inequalities, underemployment, young people not included in education or the labor market, financial insecurity, low satisfaction in living;

Question 3: Will recovery affect the environment/climate? - 1. Gas emissions, 2. Share of renewable energy, 3. Material consumption, 4. Natural cover of the land, 5. Exposure to outdoor air pollution.

Question 4: Why is it necessary to resist the crisis and prepare for future challenges? 1. Debt in the institutional sector, - By government, households, non-financial institutions, 2. Investments, 3. Broadband coverage – By regions, 4. Trust in government – by gender, 5. COVID-19 vaccination coverage.

As the EU economy moved from recovery to expansion, attention shifted from crisis management to transformational and inclusive recovery in the medium term. EU policy priorities remain structured around the dimensions of competitiveness and sustainability. The development goals are:

- The launch of the Recovery and resilience Facility, which will be the key tool for implementing the policy agenda in 2021-2022.

- The 2022 European Semester cycle integrated the recovery and resilience Facility, continuing the transition to a “new normality”, resuming the issuance of country-specific reports and recommendations.

Sustainable and resilient economies, together with strong financial and social protection systems, have helped Member States to react more effectively and efficiently to shocks and recover faster. At the same time, resilience can lead to negative effects of shock propagation between Member States, affecting the process of convergence and cohesion in the EU. Falling expenditure on education, culture, healthcare can also affect the rapid recovery of economies. At the same time, investment and reforms can help build resilience and lead, in the medium and long term, to reducing the inequalities of all kinds.

Past experience has shown that investments are often drastically reduced during crises and it is vital to support them in order to accelerate the recovery and valorisation of endogenous growth potential in the long term.

A functioning internal market and investment in green and digital technologies, innovation and research, including in a knowledge-based economy, in the clean energy transition and in increasing energy efficiency in the housing sector and other key sectors of the economy are important to achieve fair, inclusive and sustainable growth, in order to contribute to job creation and achieve EU climate neutrality by 2050.

Opportunities and constraints within the NRDP

Each major crisis, such as the coronavirus pandemic (COVID-19), offers opportunities to rethink national systems, resilience and recovery. In order to support these opportunities, a European Union-wide instrument called the *Recovery and Resilience Facility* has been devised, which aims to support the economies of the Member States affected by the health crisis and to provide support for the reforms and investments they propose. To this end, EUR 723,8 billion (current prices) are allocated in loans (€385,8 billion) and grants (€338 billion) to mitigate the economic and social impact of the coronavirus pandemic, in order to make them more sustainable and resilient to the challenges and to the opportunities arising from the green and digital transition. In the context of the health crisis, an innovative instrument – the Recovery and Resilience Mechanism – has been proposed and promoted at EU level to support recovery and resilience in regions and Member States, with the stated aim of providing financial support to accelerate sustainable reforms and related public investment. Although new in nature, this mechanism builds on the experience gained by Member States from using other instruments and programs launched and funded by the EU.

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In the EU, resilience is achieved on the basis of six pillars (table 1):

1. Green transition
2. Digital transformation
3. Smart, sustainable and inclusive growth including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
4. Social and territorial cohesion

5. Health, and economic, social and institutional resilience, including with a view of increasing crisis reaction capacity and crisis preparedness
6. Policies for the next generation, children and youth, including education and skill

Table 1: The estimate of expenditure on the six pillars of the resilience mechanism (%)

Pillars	First pillar	Second pillar	Total
Green transition	38,22%	11,67%	49,88%
Digital transformation	24,17%	4,67%	28,84%
Smart, sustainable and inclusive growth	13,53%	35,92%	49,45%
Social and territorial cohesion	9,90%	33,07%	42,97%
Health	6,74%	10,61%	17,36%
Policies for the next generations	7,44%	4,06%	11,50%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/thematic_analysis.html?lang=en

According to EU Regulation No 241 of 12 February 2021 (Article 3), the Recovery and Resilience Mechanism aims to promote a type of integrated and sustainable intervention, built on six pillars, thus:

Pillar 1. *Green transition* – supports reforms and investment in green technologies and capacities, including biodiversity, energy efficiency, buildings renovation and the circular economy, while contributing to the Union’s climate objectives, promoting sustainable growth, creating jobs and maintaining energy security.

This pillar covers 1.834 investments and 480 reforms and the breakdown of expenditure is presented in table 2.

Table 2: Breakdown of expenditure on climate objectives by policy areas – Pillar 1 (%)

Category of expenditure	Breakdown of expenditure for climate objectives by policy areas	Category	Pillar of the Green transition: Breakdown of expenditure supporting the green transition by policy area
Sustainable mobility	35%	Sustainable mobility	30%
Energy efficiency	27%	Energy efficiency	29%
Renewable energy	15%	Renewable energy	14%
RDI in green investments	6%	RDI in green investments	6%
Adaptation to climate change	6%	Adaptation to climate change	5%
Further mitigation of climate change	2%	Sustainable use and protection of water and marine resources	4%
Sustainable use and protection of water and marine resources	2%	Transition to a circular economy, waste prevention and recycling	3%
Transition to a circular economy	2%	Prevention and control of pollution (such as air, water, noise pollution)	3%
Protection and restoration of biodiversity and ecosystems	1%	Other measures to mitigate climate change (e.g. sustainable industry)	3%
Green skills and jobs	1%	Protection and restoration of biodiversity and ecosystems	3%
Pollution prevention	1%	Green skills and jobs	1%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/green.html

Pillar 2. *Digital transformation* – contributes to increasing the EU’s global competitiveness and increasing resilience and innovation by diversifying key supply chains. Reforms and investments support the digitalization of digital and data services and infrastructure, clusters and digital innovation centers, as well as open digital solutions. The digital transition stimulates the digitalization of SMEs. This pillar comprises 639 reforms and 1570 targets (table 3).

Table 3: Breakdown of expenditure for digital intervention targets – Pillar 2 (%)

Category of expenditure	Expenditure structure on digital objectives in Policy areas	Category	Structure on expenditure supporting digital transformation and on Policy areas
E-government, digital public services (including transport digitalisation) and local digital ecosystems	37%	E-government, digital public services (including transport digitalisation) and local digital ecosystems	36%
Digitalization of business	19%	Digitalization of business	22%
Digitalization in human capital	17%	Digitalization in human capital	17%
Connectivity	13%	Connectivity	11%
Digital capabilities and the development of advanced technologies	11%	Digital capabilities and the development of advanced technologies	11%
Digitalization measures in RDI	3%	Digitalization measures in RDI	4%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/green.html

Pillar 3. *Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, Research, development and innovation, as well as a functioning internal market with strong small and medium-sized enterprises (SMEs)*. Reforms and investment must promote entrepreneurship, the social economy, the development of sustainable transport and infrastructure, industrialization and reindustrialization, and mitigate the effect of the COVID-19 crisis on the economy. It includes 1053 measures, 950 reforms and 2647 targets across all Member States (table 4).

Table 4: Breakdown by category of expenditure — Pillar 3 (%)

Category of expenditure	%
Renovation and construction of buildings	22%
Support for SMEs	19%
Research, Development and Innovation	16%
Competitiveness	13%
Business environment/Entrepreneurship	8%
Industrialization and reindustrialization	6%
Business infrastructure	6%
Cultural sector	4%
Regulatory changes for smart, sustainable and inclusive growth	3%
Support for large businesses	2%
Transnational cooperation	1%
Total	100%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/smart.html

Pillar 4. *Social and territorial cohesion*. Reforms and investment in social and territorial cohesion will reduce territorial disparities, increase quality of life and economic opportunities, combat poverty and unemployment to help Member States' economies recover without leaving anyone behind. The reforms and investments will create stable and high-quality jobs, include and integrate disadvantaged groups, and enable the strengthening of social dialog, infrastructure and services, as well as social protection and welfare systems. This pillar covers 968 measures, 2283 targets and 767 reforms (table 5).

Table 5: Breakdown of Pillar 4 by categories of policy areas (%)

Category of expenditure	The policy area
Territorial infrastructure and services	66%
*Adult learning, including continuing vocational education and training; recognition and validation of skills	8%
*Social housing and other social infrastructure	7%
*Social protection, including social services and integration of vulnerable groups	6%
Development of rural and remote areas (e.g. island areas)	6%
*Modernization of labor market institutions, including employment services and skills forecasting and labor inspectorates; protection and organization of work; social dialog and wage-setting mechanisms; adaptation of jobs	3%
*Support for employment (non-youth) and job creation, including incentives for employment and transition and support for self-employment	3%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/smart.html

Pillar 5. *Health, as well as economic, social and institutional resilience, with the objective, among others, to increase the crisis preparedness and crisis response capacity* – The investments will improve public services, the accessibility and capacity of health and care systems, the effectiveness of public administration and national systems, including by reducing to a minimum the administrative burden, as well as the effectiveness of judicial systems, as well as the prevention of fraud and anti-money laundering supervision. It covers 870 measures, 2043 targets and 480 reforms (table 6).

Table 6: Breakdown of funds by Pillar 5 and policy areas (%)

Category of expenditure	The policy area
*Health: Resilience, sustainability, adequacy, availability, accessibility and quality, including digitalisation and infrastructure	47,80%
The effectiveness of public administration and national systems, including minimizing the administrative burden	27,78%
Long-term: Resilience, durability, adequacy, availability, accessibility and quality, including digitalisation and infrastructure	9,09%
Preparation for the crisis	5,19%
Effectiveness of the judicial system	3,76%
Strategic autonomy	3,11%
Ability to respond to crisis	0,91%
Tax measures, including measures pertaining to aggressive tax planning	0,83%
Business and public services – continuity (in crisis)	0,61%
Fiscal and government policies	0,44%
Fraud prevention	0,40%
Prevention of money laundering	0,04%
Reforms of the financial sector	0,03%
Rules on legal reform	0,02%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/smart.html

Pillar 6. *Policies for the next generation, children and youth, such as education and skills* – Reforms and investments in the next generation, children and young people, are essential to promote education and skills, including digital skills, upgrading competencies, retraining and reconversion of the active labor force, integration programs for the unemployed, investment policies in access and the opportunities offered to children and young people in education, health, nutrition, jobs and housing, as well as policies that bridge the generational gap, in line with the objectives of the children’s guarantee and the youth guarantee. Those actions should ensure that the next generation of Europeans will not be permanently affected by the impact of the COVID-19 crisis and that the generation gap does not deepen further (table 7).

Table 7: Breakdown of Pillar 6 by categories of policy areas (%)

Category of expenditure	The policy areas
General, vocational and higher education: accessibility, quality and inclusion, including digitalisation and infrastructure	75%
Early childhood education and care: accessibility, quality and inclusion, including digitalisation and infrastructure	14%
Support for youth employment and job creation for young people, including incentives for employment and job transition and support for self-employment	11%

Source: https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/smart.html

Seven other key sectors are added to this classification (flagship):

1. Energy (clean and renewable technologies)
2. Renovation (Energy efficiency of buildings)
3. Charging and replenishment (sustainable transport and electric charging stations)
4. Internet connectivity (Roll-out of the fast broadband services)
5. Modernization (digitalisation of public administration)
6. Scale-Up (sustainable data cloud capabilities and processors)
7. Retraining and improvement (education and training to support digital skills)

The most important constraints are due to poor asset quality, low energy efficiency, citing the need for replacement or improvement. The financial health of companies limits their access to credit. Romania has a large percentage of companies under-capitalized, with a level of capital below legal limits or even negative. So, only 20% of active companies are bankable (World Bank, 2018). As a result of the high indebtedness level, above the acceptable limits for banks, the investments of Romanian companies for example, are limited by the level of reinvested profits or that of the new capital (equity) they manage to attract. These constraints also manifest themselves in the case of profitable companies with good growth prospects, but with a higher risk profile and a low level of collateral. Rapid growth, high innovation and high share of intangible assets make bank financing difficult. Underfinancing of these innovative and growth-potential companies also limits the possibility of increasing private investments in the Romanian economy, contributing, along with the operational barriers, the lack of specialized personnel and instability to the deepening investment gap.

Diversification of funding sources, by using financial instruments to address these imbalances in addition to bank financing, could help to alleviate some of the constraints and significantly improve access to finance.

Conclusions

In conclusion, the policies that support resilience aim at rapid recovery after the crisis period (economic, social or natural disasters, pandemic crisis, etc.) and effective adaptation to the changing conditions of the external environment.

The main forms of resilience supported by the EU-27 Recovery and Resilience Mechanism are as follows:

- *Social and economic resilience* - the pandemic deepened inequalities, increased the demographic imbalances and poverty, accelerated automation and had a disproportionate impact on jobs in the service sector. The strategic perspective identifies the skills for the future in which to invest.
- *Geopolitical resilience* - The crisis has highlighted the EU's excessive dependence on third countries for raw materials essential for the key technologies needed to achieve a digital and carbon-neutral society. The strategic perspective can help identify possible scenarios and define policy options to boost the EU's strategic autonomy.
- *Green resilience* - a shift to a greener economy could create 24 million new jobs globally, and its impact on the recovery from the COVID-19 crisis could be significantly greater than previously thought. The strategic perspective contributes to exploring the drivers of change, understanding future structural changes in the labor market, retraining people who lost their jobs during the crisis or are likely to do so in the future due to technological developments and automatization.
- *Digital resilience* - The crisis has accelerated hyper-connectivity and the integration of new technologies that affect the human condition and the way of life of EU residents. The strategic perspective helps anticipate how emerging technologies could develop, their impact on all spheres of life and ways to seize the future opportunities.

Implementing a strategy to increase regional resilience involves a major collaborative effort between institutions and other stakeholders: research on adaptive governance of complex social systems shows that increasing resilience in such systems is a difficult and complex activity that cannot be easily planned and controlled by a single government-type institution. Local or regional authorities seeking to increase territorial resilience to economic shocks need to work with a number of other territorial actors and develop plans for response to disturbances within a collaborative and fluid governance network (Bristow and Healy, 2014, p.100).

Although the concept of resilience has become almost as widely used in scientific literature and international organizations' documents as that of sustainable development, the mechanisms by which a field or region becomes resilient still need the attention of researchers. However, we can break down some elements that play an important role in increasing resilience:

- assuming the change and uncertainty inherent in complex systems;
- awareness of the dependence of human communities on ecosystem goods and services;
- preserving diversity and relativizing competitiveness and optimization;
- reception of disturbances as opportunities to create new directions of development;
- creating opportunities for self-organization, experimentation and innovation;
- making learning processes more efficient by combining multiple sources of knowledge;
- adopting perspectives on the regional system over various time periods and at different spatial scales;
- taking a flexible way to manage an area/region.

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