

# INNOVATIVE FINANCIAL INSTRUMENTS IN THE CONTEXT OF THE EUROPEAN GREEN AGREEMENT (2020-2050)

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## **Abstract:**

*The European Investment Plan for European Green Transactions - The new EU growth strategy to promote the transition to a climate-neutral economy by 2050, is taking shape by launching the European Investment Plan for Green Transactions (Sustainable Europe Investment Plan). The plan addresses three issues: mobilizing funding of at least € 1 trillion from the EU budget and other public and private sources over the next decade; putting sustainability at the heart of investment decisions in all sectors and supporting public administrations and project promoters to create a strong focus on sustainable projects.*

*The main objective of this work starts from the fact that in the period 2021-2030, at least 1 trillion euros will be mobilized, sustainable investments by increasing the resources dedicated to climate actions within the EU budget and by using additional public and private funding. It is estimated that about half of the amount would come directly from the EU budget and incorporated into EU programs, while other public and private sources would provide the rest, mainly through leverage. Together with the amount expected by the European Investment Bank (EIB), the potential for financing climate targets would amount to about 1.75 trillion euros. Thus, in the most affected regions, the EU will provide financial support and technical assistance through the so-called Fair Transition Mechanism, i.e. contribute to the mobilization of at least EUR 100 billion over the period 2021-2027. Furthermore, during this programming period, the Commission will develop and/or extend the Sustainable Procurement Screening tool and a new and strengthened methodology for climate integration, with strong performance indicators and provisions to prevent any financial support for climate-damaging measures, and provide tailored support to public investors in implementing their projects.*

*The paper aims to identify and design innovative financial instruments that meet the requirements of the climate strategy and as support points in the strategy on fiscal restructuring in the European Union.*

**Keywords:** financial instruments, sustainable development, environmental equity

**JEL classification:** G23, Q01, Q56

## **Introduction**

*The European Union (EU), is a supporter and leader in the fight against climate change at the international level, is expected to further intensify its actions in this field during its institutional cycle 2019-2024. On 11 December 2019, in her first weeks in office, European Commission President Ursula Von der Leyen launched the European Green Deal as the new EU growth strategy to promote and facilitate the transition to a green, competitive and inclusive economy. Such a major economic transition requires huge financial investments, including to ensure that the process benefits all parts of society and to support the citizens and regions most exposed to the costs of decarbonization. Based on the current target of reducing greenhouse gas (GHG) emissions by 40% by 2030 compared to 1990 levels, the European Commission has estimated that additional investments of € 260 billion per year will be needed year to meet this target. Given that the environmental agreement intends to increase the intermediate target of reducing GHG emissions by at least 50% by 2030, the resulting financial needs will be even greater. For this reason, a*

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measure planned under the Environment Agreement is an investment plan to mobilize public and private funding towards the objectives of a fair transition to a green economy.

On 14 January 2020, the *European Commission* published a communication detailing the European Investment Plan for Green Transactions, also known as the Sustainable Europe Investment Plan. The investment plan, which complements other initiatives expected under the European Green Agreement, aims to make available and use the funding needed for the transition to 2030, seeking to put sustainability at the heart of both public and private sector investment and spending the private one. In the period 2021-2030, the European Commission will mobilize at least *€ 1 trillion in sustainable investment by increasing resources for climate action* under the EU budget and by using additional public and private funding. Part of the global resources will be specifically designed to support the regions most exposed to the challenges of the transition. Moreover, in the context of these challenges, financial innovations will have new valences, including in the field of financial technologies.

## Research methodology

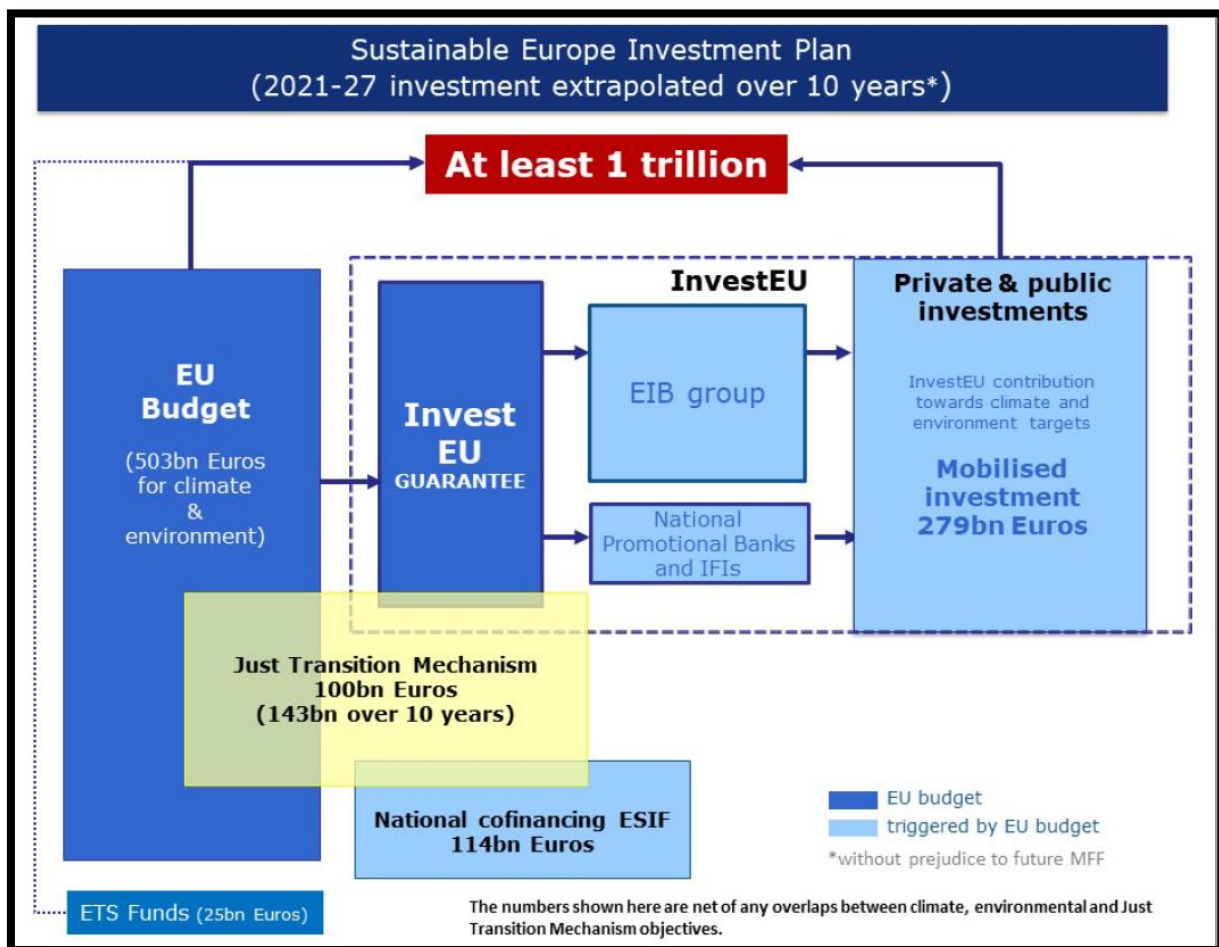
The methodology of the paper has as direct tools the collection of data and information from the specialized literature and from the existing global practice in public and private higher education institutions, but especially the scientific articles published on specialized research networks (Research Gate, Academia.edu, RePec ), articles published in various journals, relevant books in the field of reference, legislation, analysis and studies, official documents of the various institutions for quality assurance of higher education institutions, other relevant sources. Moreover, in the methodology, we will analyze the documents using the comparative, analytical, descriptive method, without participatory and participatory observation and the use of a set of information sources, data collection in established databases.

The paper will also be based on annual reports, publications, consolidated statistics provided by the World Bank, World Economic Forum, European Commission, OECD, data that need to be processed in order to provide an overview and analysis of the most important changes that have place globally - considered representative for understanding the phenomena studied. To substantiate the model of education through digitization and internationalization, we have used observation and examination tools, research methods based on the basic principles of scientific research, and we have also created procedures based on factual analysis, following significant practical experience, and intense documentation in national and international literature.

## Research results

The mobilization of financial resources worth 1 trillion euros over ten years is the component of the Investment Plan that has so far attracted the attention of the majority. According to official documents, about half of the amount would come directly from the EU budget, while other public and private sources would provide the rest, mainly through leverage. *The European Investment Bank (EIB)* should be a key partner in mobilizing additional funding, as it is expected to trigger investments of up to around € 250 billion (i.e. a quarter of the total) in line with the EU mandates under the plan. investment. Given that the EIB has announced its target of supporting € 1 trillion in climate action and investment in environmental sustainability over the next decade, it should be noted that the two targets only partially overlap. Therefore, it can be deduced that taken together, *the European Investment Plan for Green Transactions* and the EIB's target should have the potential to provide around € 1.75 trillion in climate-related finance. The overall level of investment for the European Green Plan Investment Plan requires further clarification on its time horizon, which covers the decade 2021-2030, in line with the fact that the current EU climate targets are for 2030. However, the next *Multiannual Financial Framework (MFF)* is intended to cover a period of seven years, from 2021 to 2027. Therefore, the European Commission has calculated the total amount on the assumption that the next MFF, scheduled to start in 2028, it will maintain at least

the same level of ambition as its predecessor for climate finance for the last three years of the decade.

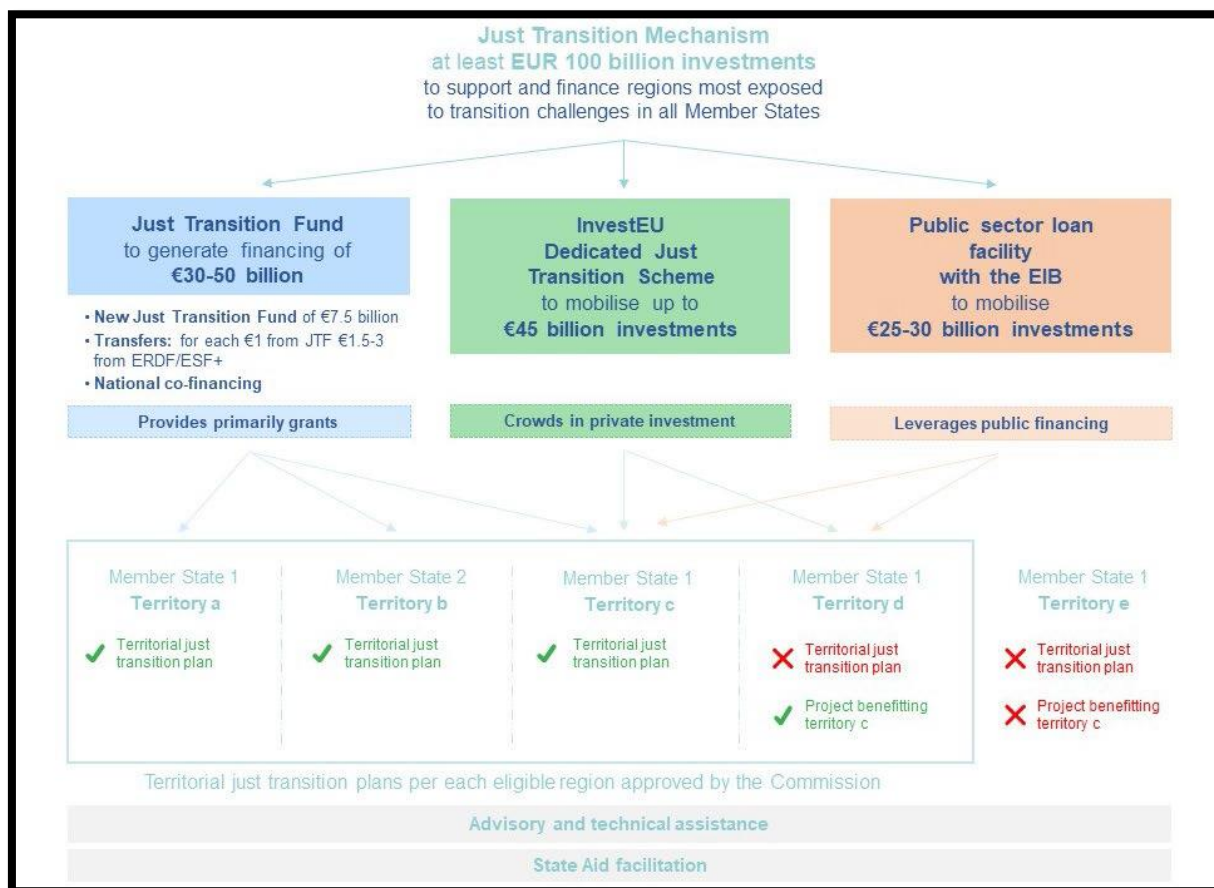


**Figure 1. Funding elements amounting to at least EUR 1 trillion in the period 2021-2030 under the European Investment Plan for Green Transactions**

Source: European Commission, 2020

The above figure shows the details of the total figure component of at least EUR 1 trillion. Furthermore, the European Commission presents this figure as clear of possible overlaps, taking into account the fact that different sources of funding and/or instruments may interact and contribute to a particular joint project or operation. In descending order of magnitude, five broad categories of climate finance sources would support a wide range of projects and contribute to the European Green Plan Investment Plan, as follows: EU budget (EUR 503 billion). The European Commission has proposed that at least 25% of post-2020 MFF resources be allocated to climate-related spending, by incorporating climate considerations into numerous EU budget funds and programs. Instruments that should make a significant contribution to this goal include Common Agricultural Policy (CAP) funds; European Regional Development Fund (ERDF); Cohesion Fund; the Horizon Europe Framework Program for Research and Innovation; LIFE program; and the Connecting Europe Facility (CEF). This approach is based on the experience with climate integration in the current MFF, below which the climate target amounts to 20% of total resources 2014-2020. EIB Group and other investment partners in the context of InvestEU (EUR 279 billion). The proposal for the MFF 2021-2027 includes the creation of the InvestEU program to streamline in a single investment scheme the operations currently carried out under the European Fund for Strategic Investments (EFSI) and various financial instruments supported by the EU budget. Furthermore, InvestEU would be the key tool to exploit the capacity of the EU budget to benefit from additional public and private funding for investments in the Union's internal policies, as well as its targeting of the dominant segment of business beneficiaries, namely SMEs.

The Commission has proposed a 30% climate target for InvestEU operations. The Commission intends to develop financial products aimed at ecological, climate, and social sustainability within InvestEU. CFM has a focus on the regions and communities most exposed to the challenges of transition, this mechanism would be structured on three pillars (see figure below): a fair transition fund, endowed with 7.5 billion euros new by 2027, and a specialized fair transition scheme within InvestEU; as well as a new public sector loan facility, with the EIB, to benefit from additional public funding. Particular attention is paid to territories with high employment in fossil fuel production or GHG-intensive industries. Under cohesion policy, EU Member States will identify eligible regions and the envisaged transition process by 2030, in the fair territorial transition, plans to be approved by the European Commission. Member States and regions will benefit from technical and advisory support from the Commission through a fair transition platform. As regards the overall financial system, the EU taxonomy will play a major role in the measures designed to put sustainable finance at its center. The Commission will also explore how the EU taxonomy, originally designed for the private sector, could be used by the public sector beyond the scope of *InvestEU* to promote synergies. In addition, a renewed strategy for sustainable financing is envisaged, including the creation of a *European Green Bond Standard* as a tool for increasing public and private finance for sustainable investment.



**Figure 2. Just transition mechanism in the period 2021-2027**

Source: European Commission, 2020

The European Commission supports sustainability, which is always duly taken into account when it comes to investment decisions, both in the public and private sectors. A mix of initiatives is envisaged to create the right conditions to achieve this goal, through legislative proposals and incentives.

As regards the overall financial system, the *EU taxonomy* will play a major role in the measures designed to put sustainable finance at its center. The Commission will adopt delegated acts for the implementation of this unified classification system, recently approved by the European Parliament

and the Council, which will help to determine activities that can be considered sustainable. The Commission will also explore how the EU taxonomy, originally designed for the private sector, could be used by the public sector beyond the scope of InvestEU (see above) to promote synergies. Also, a renewed strategy for sustainable financing is envisaged, including the creation of a *European Green Bond Standard* as a tool for increasing public and private finance for sustainable investment. In the field of state aid, the Commission intends to review the relevant rules by 2021 to reflect the objectives of the European Green Agreement and, in the meantime, to apply the current framework with more flexibility in areas that are crucial for decarbonisation efforts. Besides, the Commission will develop a "Sustainable Procurement Screening" tool to provide tailored support to public investors in implementing their projects.

In May 2018, the European Commission presented its proposal for the new MFF which should cover the period 2021-2027, calling for an agreement to be reached before the 2019 European elections to avoid delays in the implementation of related instruments. Among other things, the Commission has proposed raising the climate integration target from 20% of total resources to 25%. In the context of the *European Green Agreement*, climate integration in the EU budget should be further intensified, with proportionate resources to facilitate a fair transition to a carbon-neutral economy. The call for further change to the climate transition included a call for a new and strengthened methodology for climate integration, with strong performance indicators and provisions to prevent any financial support for climate-damaging measures.

*The emergence of Covid-19*, declared a pandemic by the *World Health Organization (WHO)* in March 2020, caused significant uncertainty, triggering the announcement of economic incentive packages to mitigate the social and economic impact of the public health crisis. An article published by the Peterson Institute for International Economics (PIIE) highlights the central role that public and private investment under the European Green Agreement must play in any recovery strategy.

Drawing attention to the falling price of oil, the author recommends that the EU and its Member States keep fossil fuel prices for consumers at pre-crisis levels, through higher taxes, as a crucial measure for their decarbonization efforts. The goal would be twofold: on the one hand, the public sector would have additional revenue to combat the pandemic and its consequences; on the other hand, the move would prevent the price of oil from falling. However, the Commission said it would continue its intensive work on climate issues. As previously planned, the Commission has launched a public consultation on the upward revision of the GHG reduction target for 2030, which aims to gradually increase the path to climate neutrality in 2050. Furthermore, the *European Environment Agency (EEA)* intends to assess the impact of the pandemic on production and consumption patterns once the crisis passes. The *Multiannual Financial Framework 2021-2027* is directly linked to the attitude of the Member States to be directly involved in the adoption of measures so that from 2021, small and medium-sized enterprises can use the financing instruments so necessary for their sustainability.

*New tools that should be developed in the financial markets, in line with sustainable development, the development of the collaborative economy.*

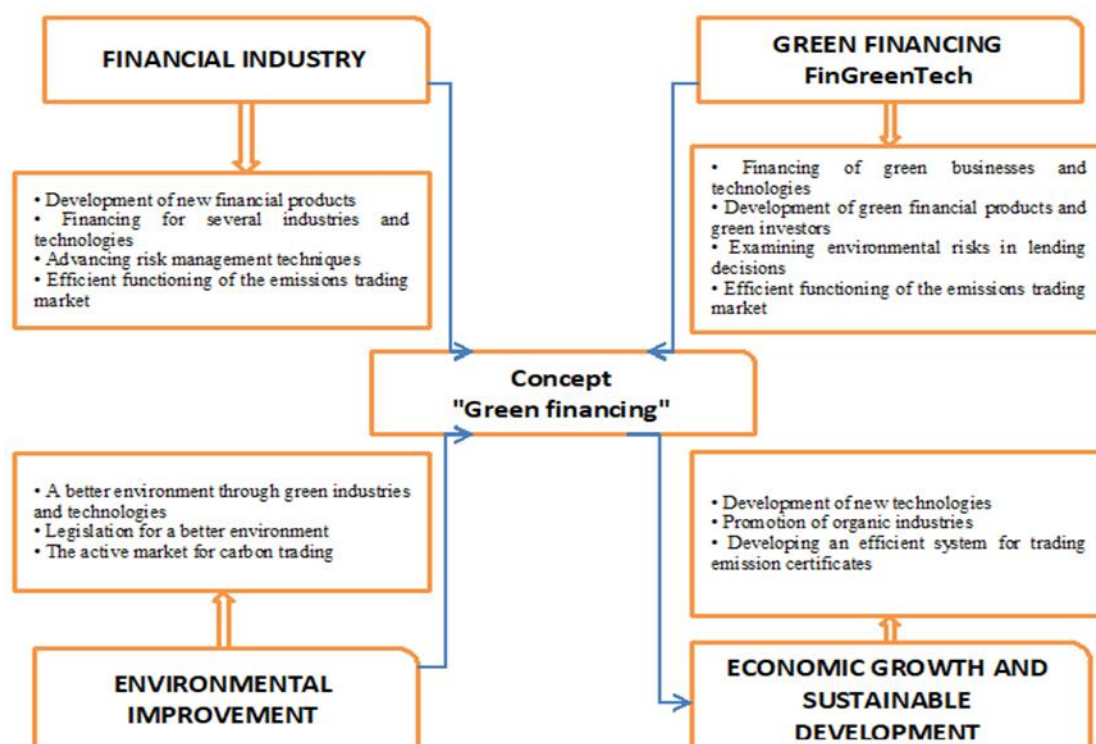
In our opinion, we believe that financial markets should develop techniques, methods, tools that are in line with the concrete conditions in which the global economy operates or will have to operate, especially in the current context of the *collaborative economy*.

Compared to the above and by the new green development policy, we propose the concept of green funding Fin GreeTech, a concept that we promoted in the research project in 2018.

### ***“Green financing” concept FinGreenTech***

Financial activities - which increase the financial industry, improve the environment and promote economic growth by carrying out activities with ecological impact.

**Figure 3. “Green Financing” Concept FinGreenTech**



Source: own concept, coordinated research project “Current trends of the national financial market in the context of the global financial market, CCFM, 2018

*Green economic growth means:*

- a paradigm of economic growth that simultaneously seeks to grow and improve the environment;
- stimulating growth and job creation through research and development in the field of clean energy and green technologies;
- conservation and efficient use of energy and resources;
- mitigating climate change and environmental degradation.

*Green technology*

Green technology is the technology that supports ecological growth by conserving energy and resources in various social and economic activities, with a direct impact on improving the environment. This is the technology to reduce greenhouse gas emissions that minimize pollutant emissions with greenhouse gas emissions, energy efficiency technology, clean energy production technology, resource recycling, and green technology (including relevant convergence technology).

*The need to develop the new concept of Green Financing - FinGreenTech*

Green industries based on green technology are promising growth sectors, and under the Paris Agreement, governments are required to fully implement green financial policies. Moreover, economists have launched the new concept of "ecological transition" as a continuation of the concept of sustainability.

Following this project to identify financial market trends, a challenge in the field of scientific research is to achieve an economic model using the concept of FinGreenTech, and as research topics for the case of Romania, we mention the following:

- development of technical infrastructure, creation of the vector of "green" indices, development of the "Index of green companies" to promote green investments;
- creation of the "Carbon Risk Index";
- the creation of a funding mechanism and a system for providing information on green technologies;
- creating green financial education "packages" for the human resources involved in the green financing process;
- the development of new financial products that integrate environmental factors into existing products and that take environmental technologies and risks into account in lending decisions;
- the development of new financial instruments that combine banking, insurance, and banking investment features.

## **Conclusions and recommendations**

*Reducing the impact of the COVID-19 crisis on Romania*, as well as in the Member States, required a rapid, focused and coordinated response from all Member States, including in the field of green financing. It is unanimously accepted in the literature that targeted state support is urgently needed to cope with the disruptive economic effects of the epidemic and the limitation of climate change. However, in our view, state support must be clearly defined and limited in terms of what is needed to address the acute economic crisis caused by the COVID-19 pandemic on the one hand, and the other. of climate change. Also, to turn state aid into an effective tool for supporting the real economy across the EU, it is mandatory to impose sufficient behavioral rules for beneficiaries to prevent the abuse of state support, such as, for example, the expansion of the company. or aggressive market strategies achieved with the help of a state guarantee.

In the current period, more and more companies, regardless of size, field of activity or market, feel the negative effects of the *global economic and financial crisis and make appreciable efforts to ensure the sustainability of their businesses*. The evolution of the economic environment has shown that the promotion of companies' strategies and objectives, as essential steps in ensuring sustainability, in increasingly obvious competitive conditions, is not possible without adequate information on the domestic and international economic and financial situation, without consideration and comparative analysis of different techniques and scenarios possible to follow. In the current economic and social context, excessively complex and dynamic, which decisively influences the good functioning of companies, the research carried out brings into discussion one of their most pressing problems, namely the exogenous financing of their businesses. Following the research undertaken, the main conclusions and proposals are summarized as follows:

a. the stage of development and the complexity of the financial structure at European level (*European Green Agreement, respectively the Multiannual Financial Framework*) decisively influence the action variables of financial management, the terms of their specific problems, as well as the nature of the solutions offered;

b. each type of financial environment delimits the space targeted by the financial management of the company, determining its objectives, issues and means of action. Moreover, as can be seen from the analysis at European level, each financing measure (including in *The New Green Deal*) is taken according to the political objectives set by that state;

c) capital, to be able to "orient" the financing policy towards the cheapest sources of capital (state intervention by issuing state guarantees, including promoting the launch of green bonds), which should contribute to maximizing the company's market value; and to satisfy as much as possible the interests of the parties involved in its activity; In adopting financing decisions for companies at government level through financing programs with state financial instruments (guarantees, loans, bonds, etc.), companies must have rigorous criteria that allow them to choose and combine these resources, and the cost of financing is the main criterion in choosing the financing resources; for Romanian companies, even in conditions of economic crisis, exogenous financing through bank loans is the main solution to cover the need for financing both the current activity and their development projects;

e. In order to improve the financing of companies through bank products specific to *FinGreenTech lending / microfinance / financing*, a number of measures are proposed, such as: eliminating the formal nature of preliminary discussions and advising company representatives on the specifics of lending, including for the correct and complete preparation of the necessary documentation; reducing the time of verification and analysis of the documents requested by the bank, and in case of non-acceptance of the credit application to be presented the reasons and indicators that led to this decision, respectively the digitization of these verification / evaluation services; companies to be provided with the necessary conditions to be able to effectively negotiate credit conditions with banks (credit volume, credit period, interest rate, grace period, etc.); the repayment schedule should be drawn up according to the cash flow made by the company, and the monthly repayment term should be not a fixed date, but a repayment period (for example between 25-30 of the month); the size of the guarantees should be determined according to the activity carried out and the nature of the loan (for example, in the case of investments in property, plant and equipment, guarantees may consist, on the one hand, of existing assets acquired); adapting the size and evolution of interest rates and commissions to the level and real trend of the market; An example of measures that directly contribute to improving the financing of companies has been taken by the Member State of Ireland;

f. following the analysis of the situation and dynamics of transactions at European level, we believe that in the period 2020-2030 companies will have improved funding through government intervention, but especially through innovative financial instruments (mediating the innovative financing concept *FinGreeTech*) which is in line with the principles of green financing and which are found in the *Multiannual Financial Framework 2021-2027*.

The conclusion that emerges from the analysis of interventions through financial instruments in the economies of European states, the decisions of the European Commission on the Temporary Framework and the Multiannual Financial Framework 2021-2027, as well as the concrete measures taken by Member States, we consider that in addition to decisions by the Romanian authorities so far and to be continued (possibly supplemented, especially the guarantees for SMEs as other states have done), the package of measures could be supplemented with the following proposal, respectively: for the business environment the establishment of a government and business units Green Financing ”(following the measures taken by the European Commission, the creation at national level of The New Green National Deal) in collaboration with relevant business organizations and labor market organizations to address sectoral economic hardship. Among the main objectives should be the MicroFinance Fund with a potential loan threshold of € 50,000 and intended to finance small family businesses, especially in areas with special conditions (such as mountain areas).

*FinGreenTech financial innovations are real tools to support the economic environment, especially in the current context of the new real economy model that is emerging, namely the collaborative economy model, and in the context of the European Green Agreement (2020-2050).*

## **Bibliographical references**

- Armendariz de Aghion, B., Morduch, J., (2005), *The economics of microfinance*, London, The MIT Press.
- Atrill, Peter, (2011), *Financial management for decision makers*, Sixth Edition, Pearson Education Limited.
- Robert Barbera, (2009), *The Cost of Capitalism*, McGraw-Hill Professional;
- Berk,J.,Morzo,P., (2013), *Corporate Finance*, Third Edition, London, Pearson.
- Bierman, Harold Jr., Smidt, Seymour, (1980), *The capital budgeting decisions. Economic analysis of investment projects*, MacMillan Publishing Co. Inc., New York.
- H. Bruyninckx, *Reflecting on climate-neutrality ambitions in Europe in times of Covid-19*, European Environment Agency, 20 March 2020.
- John Cassidy, (2008), *The Minsky Moment. Subprime mortgage crisis and possible recession*, The New Yorker,

Cooper, (2010), *The Origin of Financial Crises: Central Banks, Credit Bubbles, and the Efficient Market Fallacy*. Harriman House Ltd., London;

F. Colli, (2020) *The EU's Just Transition: three challenges and how to overcome them*, European Policy Brief 59, Egmont Institute

Crepon, B., Devoto, F., Duflo, E., Pariente, W., (2014), *Estimating the impact of microcredit on those who take it up: Evidence from a randomized experiment in Morocco*, Agence Francaise de Developpement (AFD)

D'Alfonso A.(2019), *Mainstreaming of climate action in the EU budget: Impact of a political objective*, EPRS, European Parliament

D'Alfonso A., (2019), *Multiannual financial framework for the years 2021 to 2027: The future of EU finances*, EPRS, European Parliament

European Commission, *Sustainable Europe Investment Plan: European Green Deal Investment Plan*, COM(2020) 21, 14 January 2020.

S. Fleming, *Brussels seeks EU budget overhaul to boost post-pandemic recovery*, Financial Times, 8 April 2020.

G. Claeys and S. Tagliapietra (2020), *A trillion reasons to scrutinise the Green Deal Investment Plan*, Bruegel

D. Gros and M. Elkerbout (2020), *Financing Europe's Green Deal: beware of the waterbed effect*, CEPS in brief, CEPS

Gitman, L.J. and Zutter, C.J. (2012), *Principles of managerial finance (13th Edition)*, Prentice Hall, United States of America

Hillier, D.(coord.), (2011), *Fundamentals of Corporate Finance*, McGraw-Hill Education.

Hillier, D.(coord.), (2013), *Corporate Finance*, McGraw-Hill Education.

Jensen, M. & Meckling, W., (1976), *Theory of the firm: managerial behavior, agency costs and capital structure*. Journal of Financial Economics, vol. 2

A. Hedberg , S. López Piqueres and S. Sipka (2019), *The European Green Deal: A promising start and a long road ahead*, EPC Commentaries, European Policy Centre (EPC)

Hyman P.Minsky, (2008), *Stabilizing and Unstable Economy*, McGraw-Hill Professional, New York

Hyman P.Minsky, (2013), *Ending Poverty:Jobs, Not Welfare*, Levy Economics Institute, New York

D. Keating, (2020), *Could Coronavirus Beat Green Deal In Slowing Climate Change?*, Forbes

M. Leonard, *The Green Deal will make or break Europe*, European Council on Foreign Relations (ECFR), 17 December 2019; and L. Bergamaschi, *There Is No Green Deal without a Just Transition*, IAI Commentaries, Istituto Affari Internazionali (IAI), 21 January 2020.

Manta, Otilia. (2017), *The New Challenges in Economic Science.*, Germany:, LAP Lambert Academic Publishing., Germany;

M. Leonard, (2020), *The Green Deal will make or break Europe*, European Council on Foreign Relations (ECFR), 17 December 2019; and L. Bergamaschi, *There Is No Green Deal without a Just Transition*, IAI Commentaries, Istituto Affari Internazionali (IAI)

Manta, Otilia. (2018.): *The Microfinance: Concepts and Applications in Rural Environments*, Lambert Academic Publishing, Germany

B. Mirchandani, (2020) *A €1 Trillion Opportunity: How To Read The EU Green Deal Investment Plan*, Forbes

Modigliani, F. & Miller, M., (1958), *The cost of capital, corporation finance and theory of investment*. American Economic Review, vol. 48

Modigliani, F. & Miller, M., (1963), *Taxes and the cost of capital: A correction*. American Economic Review, vol. 53

Molico,T.,Wunder,E., (2004), *Factoringul, alternativă modernă de finanțare*, București, Editura CECCAR.

Nivorozhkin, E., (2005), *Financing choices of firms in EU accession countries*. Emerging Markets Review, vol.6

Rogers, S., (2009), *Entrepreneurial Finance: Finance and Business Strategies for the Serious Entrepreneur*, Mc-Graw-Hill, SUA.

Sinkley, J., (1998), Commercial Bank Financial Management, New Jersey, Prentice Hall.

Stiglitz, J., (1969), A re-examination of the Modigliani-Miller theorem. The American Economic Review, vol. 59

S. López Piqueres, Does COVID-19 pose a threat to the EU's climate neutrality efforts?, EPC Commentary, 31 March 2020.

S. Tagliapietra and G. Zachmann, (2020), Europe's Green Deal must reach beyond its borders, Financial Times

R. Waldholz, (2020), EU should use Green Deal as road map for coronavirus stimulus – foundations, Clean Energy Wire (CLEW);

R. Waldholz, EU should use Green Deal as road map for coronavirus stimulus – foundations, Clean Energy Wire (CLEW), 19 March 2020.