



ABSTRACT OF THE HABILITATION THESIS

TITLE Sustainable economic development in the existing global context and with direct implications in international financial relations:

factors and current challenges of sustainable development Field of habilitation: *Economics*

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Summary

The habilitation thesis with the title "Sustainable economic development in the existing global context and with direct implications in international financial relations: current factors and challenges of sustainable development" presents the main scientific results obtained after the completion, in 2017, of the doctoral thesis with the title "Microfinancing. Concepts and applications in the rural environment" carried out within the School of Advanced Studies of the Romanian Academy - SCOSAAR. The problem of microfinancing as a support tool for the sustainable development of the Romanian rural space, analyzed in the framework of my doctoral thesis, later allowed me to approach some complementary scientific topics, namely the current factors and challenges of sustainable development, being topics addressed both within the research projects carried out at Romanian Academy within the Center for Financial and Monetary Research - Victor Slavescu and capitalized in the scientific articles published in ISI indexed journals. Moreover, participation in the program "Interdisciplinary excellence in doctoral scientific research from Romania-EXCELLENTIA" POSDRU/187/1.5/S/155425, SMIS Code: 59019, oriented in accordance with the general objective of POSDRU 2007-2013, the specific objectives related to the Priority Axis 1 - "Education and professional training in support of economic growth and the development of knowledge-based societies", DMI 1.5 -"Doctoral and post-doctoral programs in support of research" and the National Strategy for



Research, Development and Innovation 2007-2013, was based the research project supported within it, respectively "Social and financial inclusion of rural space". These themes were also the subject of other research, carried out within multidisciplinary teams, which resulted in the publication of articles in various BDI or ISI indexed journals, in the volumes of ISI indexed conferences or chapters in books published by international publishing houses (Lambert Academic Publishing, ACM and Springer).

The habilitation thesis focuses on the scientific and didactic results that attest to the ability to carry out and coordinate the scientific research activity in the field of *Economics*. Thus, the results of scientific research obtained during more than 20 years of professional and scientific activity (1998, the year in which I founded the first CNCSIS certified magazine, AgroTera magazine, coordinator and project manager in various projects financed by the EU programs in pre-accession and post-accession) and 5 years after receiving the doctorate title through collaborations within multidisciplinary teams made up of specialists from different university centers and research institutes in the country and abroad, and which are presented in close connection with the current state of research in the mentioned field. The scientific approach is based on three pillars that define my professional activity, namely the didactic field, that of scientific research and the involvement in the real economy as the last field that imprints an applied side especially to my pedagogical activity and that falls within the trend manifested at the international level of orientation of the university environment towards the entrepreneurial direction, and in the case of research activity, the approach to the application side.

In the first section of the habilitation thesis, I presented the main results of the scientific research activity aimed at the particularly vast issue of sustainable economic development in the context of existing global challenges and with direct implications in international financial relations. Sustainable economic development is a widely debated concept in specialized literature, however, in recent decades more and more researchers consider the impact of economic growth on the environment. Thus, the activity of the companies is no longer tracked and analyzed only from an economic point of view, but the assessment of the impact on the environment and the social responsibility of the companies towards different categories of stakeholders are also taken into account. For this reason, my research activity, carried out after completing my doctoral studies, was structured in three directions, namely: the economic, environmental and social pillars of sustainable development.

Starting from the importance of human resources, as a pillar of sustainable economic development in the context of climate, pandemic and societal challenges, together with professors from prestigious institutions in China we investigated the impact of employee quality on corporate social responsibility (CSR) and which otherwise represented and one of the research priorities. Another direction of research that I approached together with several colleagues was given by the establishment of the "green" balance between work and personal life, the balance between professional life and private life: myth and reality. Within our



research team, we also aimed to provide a comprehensive conceptualization of work-life balance, while examining in detail the measurement components of the researched environment and the impact on sustainable workplace development. Based on a cross-sectional *study in the banking industry and based on a sample of 170 managerial employees*, this paper analyzes the impact of work-life balance on employees' workplace, mediating performance and employee engagement on work activities.

In the context of current challenges, the relationship between air quality and stock market activity represents a new challenge given the current major factor on economic sustainability, namely climate change. In this work, together with a team of research professors, air quality (AQ) was analyzed, which is an urgent problem faced by underdeveloped countries due to their industrialization and urbanization process, as well as the impact of air quality due to the increase in the consumption of fossil fuels in recent decades. Moreover, high economic growth has a major impact on air pollution, and this factor threatens sustainable economic development. This study examines in depth the impact of air quality on stock returns in China. Key empirical findings indicated that stock returns are heterogeneous in response to air quality across industries. In detail, the values of the coefficient between AQ and SR turn from negative to positive with the deterioration of AO in the tourism, iron and steel, and automobile industries. In contrast, the coefficients in wind power, hydropower, thermal power, environmental protection industry, and medical equipment industries become positive from negative. To summarize, the asymmetric and heterogeneous relationships between air quality and stock yield are captured in our paper in detail. Consequently, our study provides valuable contributions to the scientific literature.

Considering the specific concerns of the didactic activity, we also researched the issue of *finances and sustainability tools in the context of current challenges*, drawing attention to the evolution of the population's financial indicators and their impact on the real national economy. In addition, due to the COVID-19 crisis, the problems related to the finances of the population have worsened and, as such, there was a need for structural changes and the adoption of new measures regarding the limitation of the impact of the crisis on the national economy. Finally, as an immediate and less expensive solution, in our research we came up with the suggestion to change the national economy towards frugality, therefore significantly supporting sustainable development. *A frugal economic system* has as its main objective to provide well-being by focusing on several economic, social and ecological values, with the aim of maximizing the efficiency of the use of resources and finances in the country from the perspective of all stakeholders in the economy.

The identification of the risk factors of the "sustainable guarantee" financing instrument represented another priority in our research, and this was based on the identification through the network based on the logistic regression algorithm. On the temporal scale, solvency and regional economic development exert an increasingly greater impact on the adherence of companies to financial instruments of the guarantee type, and through the



operationalization of these instruments the impact becomes less and less. At the spatial scale, the less close connection between company directors and developed companies is more suggestive of the possibility of entering the collateral financial instruments network. The guarantee is a financial tool and an important way to solve the problem of financing companies. A guarantee instrument contributes system-wide to improving the credit rating of companies and can increase their financing capacity. In any case, the behavior of companies regarding the non-standard guarantee instrument can also worsen the financial situation of the company and even harm the sustainability of the local economic environment.

Another tool that contributes to the achievement of sustainable development goals is public procurement, and in this context, together with a team of teachers, we "systematized" the current concerns regarding sustainable public procurement, we investigated the ways and solutions through which public procurement has an increased contribution to the achievement of sustainable development objectives. Moreover, we believe that it is very relevant for the authorities to consider the social sustainability of public procurement when awarding contracts by introducing sustainability clauses in public procurement legislation. The principles of sustainable development are promoted by international organizations, their transposition into national legislation being a necessity given the complexity of the transition process to the zeroemissions economy. Stakeholder involvement is increasingly complex, as companies integrate social responsibility into their business strategy. Together with portfolio investors and financial institutions, public authorities can shape the behavior of companies through green or socially responsible public procurement policies. The power of the example and the training effects are essential in this approach of the public authorities, remarkable results being recorded at the level of the European Union. Along with economic performance, environmental and social performance are essential elements that contribute to the evaluation of the role of companies in the economy. Sustainable finance plays a key role in meeting the policy objectives of the European Green Deal, launched by the European Commission in 2019, as well as the EU's international commitments on climate and sustainability, and aims to improve the financial sector to support both sustainable development in the context of climate change as well as sustainable recovery from the impact of the COVID-19 pandemic. Moreover, after a very long time the mountain economy becomes a supported pillar at the level of international forums, as an important part of the global economy. To this end, environmental, social and governance factors (ESG factors) will be taken into account in the investment decision-making process by financial sector entities, thus aiming to orient longer-term investments in sustainable economic activities and projects. Sustainability in public procurement denotes not only the purchase of green products, but also the adoption of sustainable purchasing decisions and the adoption of a sustainable supply chain management system. The promotion and monitoring of SMEfriendly policies in the field of access to public procurement contracts requires the development of a system of indicators, which allows their comparison under different aspects: temporally, territorially, at the level of the field of activity. Therefore, we support the need to adopt a new model of the public procurement system, including by developing the theoretical,



methodological and application mechanism to successfully achieve the objectives of sustainable development 2030. Through this mechanism, it will contribute to increasing the efficiency of meeting public needs simultaneously with the solution of some social problems, such as reducing unemployment, eradicating poverty and providing environmentally friendly procurement solutions.

The analysis, evaluation and modeling of investor behavior, respectively an analysis of trading for a sustainable growth of stock markets, are elements that I supported in one of the studies carried out together with fellow researchers, thus contributing to the development of a new approach regarding the estimation of investors' beliefs. In addition, we show that the uncertainty of market makers' beliefs is a key factor that determines the daily return of stocks traded in the capital market. This study contributes to the understanding of the subject by providing a new set of investor parameter beliefs. By focusing further investigations on the most important parameters or combinations, indecision, market volatility is reduced and sustainability is increased. In short, any increase in predictability with reduced volatility contributes to market sustainability, including in terms of increased efficiency or reduced corrective trading, and thus sustainable returns.

The digital transition, technologies and the internationalization of companies are supporting pillars of the sustainable growth of the economy and with direct implications in international financial relations. These current factors and the current challenges on the internationalization of companies were represented topics developed together with the research team in the published work. Moreover, their effects that appeared with the rapid globalization, respectively the internationalization of companies, were highlighted. At the same time, the firms became important strategic corporations, and their strategy was oriented starting from the necessity of survival and business growth. Sustainable economic growth is the most important element that limits these differences, and the internationalization of the company is a factor that greatly contributes to sustainable business development. Therefore, supporting and motivating business from this perspective is the right policy to be followed by government authorities. Sustainable economic development requires sustainable business growth for businesses large and small. Internationalization contributes to sustainable business growth and makes entrepreneurs more aware and responsible of the local and international environment. Firms in CEE countries face a more difficult local environment than those in advanced economies. Therefore, we believe that this could be a reason why their size and tenure is very significant, large and relatively old firms have more experience in dealing with this environment and different types of problems. Expansion into foreign markets is costly and requires resources, capabilities, and financial and managerial resources to support them in overcoming foreign liabilities and adapting to new markets. That is why large and relatively experienced firms perform better. These large and experienced firms, in addition to financial and managerial resources, have built relationships and networks that help them explore new opportunities or gain additional resources that cannot be accessed in domestic markets. Internationalization is a highly dimensional phenomenon, and measuring other aspects



provides a clearer picture and robust results.

Influences of artificial intelligence on the tourism sector, led us to investigate with a team of researchers the mediating role of the Internet of Things (IoT), sustainability, facilitating the adoption of technologies and adaptation to environmental, social and governance (ESG) conditions of investors, especially in the current context of intelligent automation in travel and tourism and likely to grow in the future due to advances in artificial intelligence (AI) and related technologies. Our study had as its topic the artificial automation of services in the tourism industry, and which could directly contribute to changing the roles of employees and customers based on intelligent automated services. The artificial intelligence framework positively influences work performance and contributes to the adoption of a sustainable artificial intelligent system at the level of the tourism industry. The result of the predictive model leads to the conclusion that AI-based design can improve the tourism sector if the intelligent automated framework is applied to it. This is driven by the fact that technologies based on artificial intelligence, the Internet of Things, facilitating adoption and sustainable ESG have had a predictive association identified through intelligent automation in tourism.

Moreover, our research continued with the presentation of the *analysis of the impact of* the use of technology in the tourism industry in the context of the COVID-19 crisis based on a bibliometric analysis. In recent years, many researchers have published articles with the aim of understanding the impact of the COVID-19 crisis on economic sectors, as well as the responsiveness of these sectors to recovery. Technological advances have played an important role in this process. Based on the previous premises, this article seeks to assess the key findings of previous research on tourism and the COVID-19 crisis to contribute to the discussion of how key stakeholders in the tourism sector are using technological tools to respond and redesign processes and operations to respond to the current crisis. Specifically, this study aims to understand what are the relevant technologies that enabled the tourism sector to restart after the onset of the crisis and to identify a future research agenda. The COVID-19 crisis has brought a very large volume of specialized studies, and which works as well as a new paradigm of how the human factor uses technology to optimize the tourism value chain, especially in the context where certain problems are caused by pandemic and are avoided through technology. In this paper, through a structured review of the literature, I have shown that digital technologies and applications are essential for the resilience, competitiveness of the tourism sector, and recovery of processes at the level of this industry. The digital transition and the use of tools such as social media, Big Data Analytics, artificial intelligence, robotics, and even virtual reality are helping travelers as well as travel companies to face the current crisis as well as future challenges. The use of technology will change the way tourism companies work. Robots and automated machines can help in many of the operational activities, from accommodation structures, to airports, airlines, etc. These technologies could also be used to perform human activities such as cleaning and sanitizing, but also to deliver food and other services, thus protecting employees and customers from infection. On the other hand, technologies based on artificial intelligence, big data solutions and chatbox will become



effective tools for redesigning and rethinking marketing, sales, reservations, communication, interaction mode, visitor flow management, mobility tracking, understanding customer behavior and preferences, as well as planning and decision-making processes at managerial level.

Starting from the consideration that transnational institutions are the main promoters of economic and financial inclusion programs, as well as social responsibility, in the period 2009-2015, I was involved as a project manager, respectively: the project "Microcredit, the fundamental component of entrepreneurship in the rural environment" ID 135486, project cofinanced by the European Social Fund (ESF) (transnational partner European Microfinance Network), project manager from September 2009-August 2012 within the Strategic Project "Human resource, valuable investment in Romanian rural tourism!" (ID 36694) (transnational project National Tourism Organization of Greece), partner coordinator from April 2014-September 2015 within the project "My village, my business!" ID 131046, project co-financed by the European Social Fund (ESF) (transnational partner EUExperts Aisbl Bruxelles). The doctoral scholarship, won through the competition, gave me the opportunity to carry out extensive scientific research on the issue of social and financial inclusion of rural areas, a determining factor of sustainable development in the Romanian economy. Through the analyzes carried out, we have identified the effects of the financing programs of the European institutions and of the international financial institutions, carried out on the rural area, innovative financial instruments, the environment, the collaborative economy, these being areas of interest on which these programs act, according to the principles developed within UN 2030 Agenda. In the research projects carried out during the postdoctoral period, I emphasized the importance of the actions of public authorities that, on the one hand, create the supporting regulatory framework or encourage economic agents to initiate various financial, economic and social inclusion programs; and on the other hand, it promotes social responsibility through its own activities such as green public procurement programs. Furthermore, government decisions are essential in the proper management of post-accession financing programs, currently in the Multiannual Financial Framework 2021-2027, with a determining effect on the sustainable development of the European economy and with a direct effect on the sustainability of the national economy.

In the secound section of the thesis, I presented the evolution of my professional activity considering the three interdependent activities: teaching activities, research activity (for over 20 years) and managerial activity in the academic, private and civil society fields through the involvement in organizations at an international level (June 2022- coordinator of the FINANCE AND FINANCIAL TECHNOLOGIES (FINTECH) Master's University Studies Program, within the Romanian-American University, Bucharest, Romania; December 2017-Vice-President within the European Union Experts (EUExperts), Brussels, Belgium; April 2020, Vice President, International Research Institute for Economics and Management (IRIEM), Hong Kong, China and Denver, USA; July 2021, Secretary General, National Academy of Technology (NAT), United States of America). The professional recognition and





the impact of my work are demonstrated by the number of citations in Google Scholar, and ISI Web of Science, by the value of the Hirsh indexes in these databases (9 and 5, respectively), respectively by the Research Interest Score (RIS) in the amount of 2.902 on ResearchGate, as well as involvement in the scientific/editorial committees of domestic and foreign journals indexed by BDI or ISI or of prestigious international conferences (indexed by BDI or ISI).

Also in the secound section of the thesis, I presented my plan regarding professional and academic development considering the current challenges, multiple crises and the paradigm shift regarding the role and involvement of universities in society and the economy. The activities and functions of universities are amplified and nuanced under the pressure exerted by internal and external factors such as the reduction of public funding that determines the need to use new financial resources, the demand for applied research from public institutions and private companies, the need for lifelong learning, globalization economy and increased competition for students, teachers and researchers; the information/knowledge society revolution; climate change and the need to promote sustainable development, the educational process. Considering the above, I believe that the development of my career must be based on the five fundamental pillars on 5 fundamental pillars academic-research-economic-governmental-societal, the results will be beneficial both for me and for the students, university and economic agents involved, government institutions direct beneficiaries of research projects and for society. In this way, the manifestation of social responsibility is ensured as well in the academic, economic, governmental and societal environment.

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