

WEST UNIVERSITY OF TIMIȘOARA

FINANCE DOMAIN

HABILITATION THESIS

CANDIDATE:

Lecturer, Țăran Alexandra-Mădălina, PhD

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SUMMARY

This habilitation thesis emphasises the main scientific, professional, and academic achievements, organised into two key sections based on disciplinary and interdisciplinary themes, as reflected in published scientific articles, including a strategic plan for the evolution and development of the academic career. The objectives outlined and pursued aim to strengthen the author's contributions to the specialised literature, both theoretically and empirically. They focus on integrated perspectives regarding implications for technological innovation, sustainable development, and sustainability within the context of public and corporate governance performance, while also highlighting recent professional and academic achievements.

The first section of this habilitation thesis highlights the author's numerous scientific contributions on the complex effects of digitalisation, technological innovation, and sustainable development on key economic and social outcomes within the context of public and corporate performance. Therefore, this habilitation thesis summarises the scientific research carried out after the confirmation of the PhD title in June 2024, in accordance with the Order of the Minister of Education No. 4715 of 17.06.2024. The doctoral thesis focused on enhancing the understanding of the interdependencies between *i)* public governance performance, digitalisation, and economic growth; and *ii)* corporate governance performance, technological innovation, sustainable development, and sustainability.

The performance of public governance is vital in shaping the economic path of EU regions, especially as digitalisation becomes more embedded in government functions. Effective governance frameworks facilitate the adoption and implementation of digital technologies that streamline administrative procedures, enhance transparency, and improve the delivery of public services. The digital transformation of the public sector not only enhances operational efficiency but also fosters a more favourable environment for economic activity by reducing bureaucratic burdens and encouraging innovation. However, the impact of digitalisation on economic growth is not consistent across the EU, with differences in governance quality and digital infrastructure between regions, resulting in unequal outcomes. Regions with strong governance frameworks and higher digital maturity often experience greater growth, emphasising the importance of coordinated policies to foster digital capacity development and governance reforms. Therefore, understanding and enhancing the performance of public governance is vital to maximise the economic benefits of digitalisation within the diverse landscape of the European Union. Moreover, crises triggered by geopolitical tensions emphasise the urgent need for strong and adaptable governance frameworks that can utilise digitalisation not only for efficiency but also as a means of economic recovery and growth, highlighting the uneven pace of progress across EU regions.

Corporate governance in EU companies greatly affects their capacity to innovate and adopt sustainable business practices, which are becoming increasingly essential for long-term competitiveness. The 2008 global financial crisis revealed weaknesses in corporate governance worldwide, resulting in stricter regulations across the EU aimed at enhancing transparency and accountability. More recently, the COVID-19 pandemic has compelled companies to innovate quickly, speeding up digital adoption and transforming supply chains with a greater emphasis on sustainability. Furthermore, the European Green Deal and climate-related regulatory pressures have increased the importance of sustainability-focused governance, encouraging firms to integrate environmental, social, and governance (ESG) criteria into their core strategies. However, the pace and effectiveness of these changes differ considerably across regions, shaped by local institutional frameworks and market maturity. These developments show how external shocks and shifting political landscapes can act as catalysts or barriers to

corporate governance reforms, innovation, and sustainability initiatives within the diverse economic contexts of the European Union.

The first part of the habilitation thesis is organised into four chapters, each targeting a specific research direction, connected through the publication of an original scientific article in recognised ISI journals, with a positive absolute influence score (AIS).

The first research direction (*Chapter I*) focuses on enhancing the understanding of the core aspects of public sector performance assessment, with a particular emphasis on the three pillars: governance, economic, and social. The research examines the dynamics of public sector performance in European Union (EU) countries and utilises composite indicators for each pillar (governance, economic, and social), evaluating the combined effects of various indicators. Additionally, the use of cluster analysis helps identify specific groups of countries based on their performance levels, enabling us to pinpoint areas that could significantly enhance public sector outcomes, thus revealing the performance dynamics within the EU. The composite index, based on the pillars, demonstrated the significant effects of governance factors, including controlling corruption, protecting and promoting human rights, and government effectiveness. These are crucial within the model and emphasise that transparent and accountable governance structures can further enhance overall public sector performance. Moreover, our results highlighted that the digital economy is gaining limited importance within the governance pillar, due to policymakers' lack of attention to implementing effective digital initiatives in public governance.

At the same time, *Chapter II* emphasises the development of a general framework for analysing and assessing the interdependencies between public governance, digital transformation, and economic growth. Thus, the study analyses the impact of digitalisation on economic growth in European Union member states between 2017 and 2021. Using the composite indicator of digitalisation (ITC), the research assesses how the intensification of digital processes influences GDP per capita. The study highlights the essential role of digital technology in stimulating economic development and innovation, especially in the context of existing disparities between EU countries in terms of governance. The applied methodology combines principal component analysis (PCA) and the OLS model. The obtained main results and the candidate's original contribution revealed that a high degree of digitalisation is associated with a higher level of economic development. The conclusions emphasise the need for a strategic reconfiguration of digital transformation processes, centred on technological integration and continuous innovation as drivers of economic growth.

Extensive research was also carried out to model the factorial and impact interactions between governance, sustainable development, and sustainability (*Chapter III*). In this context, the aim was to explore and identify the influences of global governance on environmental sustainability and its implications for economic and social development, considering the era of globalisation in the 27 EU member states during the period 2002-2021 and applying econometric methods and modern techniques, notably structural equation modelling. Furthermore, the study contributes to the existing literature by highlighting the essential and vital role of climate change processes and their influence on various issues such as sustainable development, renewable energy, globalisation, and global governance. However, the main conclusions enable us to identify important tools, policies, measures, and strategies related to the need for proper governance in maintaining sustainable development within the context of globalisation. The key results emphasise the significant effects of global governance on achieving sustainable development in European Union countries and its impact on human and economic well-being. Furthermore, *Chapter III* examines how climate change-related weather variability affects food price stability, emphasising the complex connection between local climate risks—such as droughts, floods, and extreme temperatures—and fluctuations in the global food market. Using time-varying causal inference methods, the analysis uncovers the

nonlinear and evolving nature of these relationships, emphasising the profound implications for the capacity of governance institutions to respond to increasingly demanding challenges.

The results obtained from the scientific research activity laid the foundation for evaluating the links between corporate governance and sustainable development from the perspective of sustainability and technological innovation (*Chapter IV*). The research continued with an approach centred on how green and sustainable investors in the European Union can harness digital transformation and technological innovation to enhance both sustainable business practices and financial performance. Using a complex methodology, the study is based on data from 2016–2023, covering the EU-27. The findings show that adopting technological innovation significantly boosts sustainability and competitiveness, offering investors clear strategic guidance. The study underscores the importance of integrating information technology into public policies and corporate strategies, with an emphasis on strengthening human capital and fostering scientific progress. Additionally, it highlights that technological innovation is emerging as a crucial factor in combating climate change, providing innovative solutions for companies to sustain development and manage risks, while challenging firms to align their technological innovation strategies with sustainability objectives.

The second part of this habilitation thesis discusses professional and academic achievements and contributions, as well as perspectives for enhancing the advances of own professional, scientific, and academic career.

In terms of teaching, the candidate has made significant efforts to achieve excellence in her academic career, supported by numerous national and international collaborations with academics from Romania and abroad. A notable example is the organisation of special teaching sessions and interactive debates between students from the Complutense University of Madrid, held during a research period (Start Grant), where the activities had a strong innovative component and contributed substantially to the effective transfer of knowledge.

Furthermore, the candidate combines research with teaching by incorporating practical knowledge of econometric software (e.g., EViews, STATA, JASP, RStudio) and conducting specialised literature reviews (e.g., VOSviewer, RSstudio), in accordance with European priorities on tailoring education to individual needs and labour market demands. The entire teaching strategy aims to develop the skills needed for professional integration and career progression. As a teacher, the candidate actively engages undergraduate and master's students in various research projects, participation in national and international lectures, workshops, and professional training programmes, within a dual educational model that combines theory with practice. This comprehensive approach promotes the development of technical and cross-cutting skills, such as communication, decision-making, leadership, and entrepreneurship.

The results of the scientific research activities, both theoretical and practical, mainly conducted after the award of the doctoral degree in June 2024, lead, on the one hand, to the publication of a significant number of original scientific articles in ISI-listed journals, journals indexed in international databases, and collective volumes of scientific events, and on the other hand, to the presentation of scientific papers at national and international conferences, including some as a special guest (keynote speaker). Therefore, the scientific contribution is highlighted overall by 5 ISI articles (published in ISI-rated journals with AIS not equal to zero), 10 articles presented at national and international conferences (most of them published in collective volumes), and 2 chapters in international books.

At the same time, the candidate's scientific research achievements are underscored by participation in numerous national and international projects and grants, where the candidate has held various roles – research assistant, member of the management team (project assistant), member, expert, or trainer. Overall, the candidate has been involved in four projects funded from different sources, including both research grants and a project financed by Romania's

National Recovery and Resilience Plan (PNRR) – Pillar III, Component C9, Investments I8 (PNRR/2022/C9/MCID/I8).

The professional prestige is supported by the high level of recognition, autonomy, and international visibility of the research activities outlined above, as well as by prestigious international positions and awards obtained, such as: national and international research projects, membership in research associations, research networks, and awards, national distinctions in the field, experience in managing the logistical aspects of projects, and collaborations with various researchers and professors from different universities and institutes. Additionally, it includes roles as organiser and coordinator of multiple scientific events, such as research workshops scheduled for September 2024, November 2024, and December 2024.

Since December 2024, the candidate has been a member of the East European Centre for Research in Economics and Business (ECEB), contributing to the centre's research activities. In this role, she actively participates in organising and coordinating scientific events organised by ECEB, such as international lectures, research seminars, interdisciplinary workshops, and round tables.

All the above-mentioned essential directions and coordinates, along with numerous other aspects presented in the habilitation thesis, provide strong arguments in support of the candidate's intention to apply for the habilitation certificate.