

# **HABILITATION THESIS**

## **SUSTAINABILITY – ENVIRONMENT AND ECONOMY**

Candidate:

Assoc. prof. Ph.D. **Mihaela Daciana ROVINARU**

Bucharest

2023

## *Summary*

The present habilitation thesis reveals the teaching and research capacities and performances, having as main objective the exposure of the author's professional trajectory, the professional achievements obtained after the awarding of the title of Doctor of Science, in the field of Economics and International Affairs in 2006. For coherence and continuity, it also presents prospects for professional development, anticipating future career development in all its aspects relating to academic, scientific and professional contributions.

The habilitation thesis entitled **Sustainability – environment and economy** it contains scientific, professional and academic achievements, documented by references to publications, in the context of the current state of scientific research in the field concerned, plans for career development and evolution and bibliographic references in correlation with content and specific needs. It is structured in three distinct parts.

The first part presents the evolution of the author's university career, pointing out the important elements of the professional training, which led to the shaping of the current professional profile. Both didactic and research activities were at the centre of the author's concerns, an aspect highlighted by various activities in which she participated, that have the role to improve her competencies. Thus, for the didactic activity, the author frequently participated in courses and programs designed to improve her qualities as a teacher, focusing on learning and applying the most appropriate teaching methods. Regarding the research activity during her doctoral studies, the author had the opportunity to have access at the Library of Congress in Washington DC, which contributed to the improvement of her researcher skills. The Erasmus mobilities, carried out after obtaining the PhD title, aimed, among other things, at the exchange of teaching experience, but also to have access at the libraries of the visited universities, respectively an efficient exchange of ideas with teachers and researchers who have scientific preoccupations in the same field as the author. The link between the main field of research and the didactic activity, including ensuring the transfer of knowledge, is highlighted in the subchapter containing the description of the didactic component of her activity.

The most consistent part of the habilitation thesis, both from the quantitative point of view, but especially from the point of view of scientific relevance and the added value generated, is intended to present the achievements obtained by the author in the field of research. As the title shows, the central element is sustainability, a concept that has become increasingly important in recent years, as environmental concerns, social issues and economic

development have multiplied. Starting from these considerations, a significant part of the documentation and research was dedicated to studying and analyzing the impact that sustainability, under its various facets, exerts on contemporary society in general, and, in particular, on international economic relations. Through the issues addressed, the entire content of the second chapter demonstrates that economic and sustainable development is not possible without changing the paradigm regarding the environment and energy. In addition, efforts in these endeavours, in order to have effects, cannot be individual, but must be designed at regional and even global level, and can only be achieved through international cooperation and collaboration.

As a result, scientific concerns have focused on two major directions, which connect sustainability with defining elements of the environment, and especially the current economic realities: sustainability and climate change, respectively sustainability and energy.

In addressing climate change and the impact it has on the environment and the economy, two specific indicators have been used: *Kaya Identity*, respectively *Climate Change Performance Index*, and attempts have been made to correlate them with macroeconomic indicators.

Another aspect in a very close relationship with sustainability is energy, and especially renewable energy. Consequently, the steps taken towards the transition to an economy based on renewable energy, both at the level of the European Union and Romania, were analysed, considering that renewable energy plays an important role in achieving the sustainability objectives, by reducing the dependence on non-renewable energy sources and by contributing to the protection of the environment.

One component of sustainable action is the recycling activity, which is also part of efforts to combat climate change. Recycling helps to reduce the amount of waste that ends up in landfills and, through this action, it helps to conserve natural resources. The need to extract, produce and transport new materials is also diminished, which has the effect of reducing greenhouse gas emissions and other negative environmental impacts. The recycling activities, in the automotive industry, have also made the objective of a scientific research approach, the results obtained being presented at the end of the second chapter.

The last part presents the future prospects for development. These intentions are convergent with the author's professional trajectory so far and are focused on both the didactic activity itself and the research one. Obviously, the two components will be interconnected, in order to continue to ensure coherence in the activity they carry out, but also an optimal transfer of knowledge from the research to the didactic activity, for the benefit of developing the

students' knowledge and competences. The bibliographic references bring together the selected works from the specialized literature together with the most significant own publications of the author.

The proposed work thus outlines the career path of the author in the professional plan, with emphasis on the research part in the field of sustainability, on the one hand, but also the possible future concerns, on the other hand, meant to contribute to her development in the scientific, professional and academic plan.

In conclusion, the applicant's entire activity corresponds to the area of interest concerned, and her scientific, professional and academic achievements allow her a vision of her own, based on critical and creative thinking. We can appreciate that the degree of achievement of the previous career objectives have been achieved and represent certain premises for supporting the evolution, in accordance with the new targets set.