

Summary of doctoral thesis

Economic resilience has become the central imperative shaping contemporary policymaking, as European countries face an ever more intense range of environmental, social and economic crises and financial instabilities. In general terms society has been gradually understanding that economic resilience is also built sideways up on sustainable practices, other than completely relying on a continuous economic growth that does not consider environmental costs. This paradigm shift is due to a reaction to mounting evidence that an economy based on unsustainable use of resources is coupled with higher environmental degradation and higher social inequality, leading to the potential vulnerability of a country to systemic risks with the accompanying negative impacts on long-term prospects for economic stability and social well-being.

In this light, this thesis proposes the following research questions: (i) Which combination of policies best enhances social welfare, environmental sustainability, and economic resilience in European countries simultaneously? (ii) What is the relationship between estimated memory characteristics and best practices for policy efficacy and persistence across different sustainability domains? (iii) How are the feasible trade-offs between social, environmental, and economic goals affected by different constraint specifications, memory parameter settings, and policy weight allocations? Therefore, it can be formulated as "What is the most effective way for European policymakers to design a policy mix that creates prosperity, protects the planet, and improves social welfare and how should they time and balance these efforts for maximum effectiveness?".

This thesis argues that fragmented approaches in the sustainability governance of the European Union must be replaced by integrated, evidence-based frameworks. The recommendations formulated based on the results of the thesis focus on strategic integration, temporal optimisation, and regional differentiation and provide a roadmap for implementing the "European Green Deal", "Next Generation EU", and the "European Pillar of Social Rights". By prioritising renewable energy, implementing minimal social investments, and varying strategies based on regional EKC patterns, European policymakers can move from reactive crisis management to proactive, scientifically informed governance.

Key words: sustainability, economic resilience, optimisation, policy mix