MANAGEMENT AND PRODUCTION ENGINEERING

DIGEP - Environmental regulation and trade

Funded By	Dipartimento DIGEP Ministero dell'Università e della Ricerca - MUR [P.iva/CF:96446770586]
Supervisor	D'AMBROSIO ANNA - anna.dambrosio@polito.it
Contact	

Context of the research activity	Environmental regulations may bring relevant environmental benefits and stimulate virtuous production restructuring, but they also impose relevant compliance costs on firms. This project studies the impact of a major environmental policy in the EU, the REACH regulation, on Italian firms' performance and internationalization choices. It mainly employs an empirical approach. CUP PRIN 2022 E53D23006120006; CUP PRIN PNRR 2022 E53D23016490001

Objectives	The increasing attention to climate change brings sustainability high on the agenda of governments and international institutions. In the context of a long-term stimulation process towards the green transition, public policies are increasingly regulating the use of polluting substances, the production of hazardous waste, emissions, deforestation, and the protection of animal stocks. The EU Green New Deal and the recent Piano Nazionale di Ripresa e Resilienza (PNRR) are examples of how the EU and national governments introduce incentives and regulatory constraints to increase sustainability in the production process. One of the hindrances toward a green transformation is the alleged trade-off between "growing versus greening" the economy. Environmental provisions impose compliance costs on domestic firms, causing a restructuring of firms' sourcing strategies and technologies. If the costs of reorganizing production become too high, they may offset part of the benefits. Moreover, asymmetries in the stringency of environmental policies across countries may drive firms to offshore their production toward countries or regions with less stringent regulation, defined as "pollution havens". At the same time, the famous "Porter hypothesis" argues that stricter environmental policies can stimulate efficiency improvements and innovations in greener technologies that eventually increase domestic firms' competitiveness or induce a greening of the production outcomes.

	This project intends to contribute to the lively debate on whether environmental policies drive more costs or more benefits to firms, focusing on the impact of a major environmental regulation on Italian firms' costs, production technology, offshoring decisions, and the sustainability of their international trade flows. It draws on detailed data on Italian firms' trade and focuses on the impact of the REACH regulation, one of the most relevant and impacting regulations for production in the EU. Part of the project will also deal with the complex relationship between increased environmental stringency from the REACH and decreased budgetary capacity resulting from the COVID-19 emergency. The analysis will draw on relevant theoretical contributions in the environmental and international economics fields. It will mainly employ an empirical approach, leveraging recent developments in the econometric literature on impact evaluation. These methods will be applied to an original database, which the candidate will contribute to develop. As an immediate outcome, the project is expected to yield an impact evaluation of a major environmental policy, the REACH regulation. More broadly, we expect to shed light on the potential threats and opportunities of environmental policies for Italian firms, as well as internal and external factors influencing their reaction to the regulatory context.
Skills and competencies for the development of the activity	The selected candidate will join a team of economists working at the Polytechnic of Turin, the University of Turin, and the National Council of Research (CNR). Ideal candidates should hold a Master's degree in Economics, Management Engineering, or a related field. They should have the following competencies: - Knowledge of Microeconomics - Basic knowledge of Statistics and/or Econometrics - Ability and willingness to manage and elaborate large databases - Advanced knowledge of spreadsheets - Basic knowledge of statistical software, e.g., Stata, R, Python. - Strong quantitative skills - Fluency in English and Italian