

Advanced Econometrics – 1st stage of the project

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Econometric model¹:	PANEL DATA MODEL
Project's title: "CO2 EMISSION DETERMINANTS IN EUROPE & CENTRAL ASIA COUNTRIES (2015-2020)"	
Why is it worth to analyse the topic? Explain why the topic is an economic problem.	
CO2 emissions are an economic problem because they create negative externalities, which are not reflected in the market price of goods and services. This results in inefficient production and consumption as firms and individuals do not have the incentive to reduce their emissions to the socially optimal level. As countries aim to reduce emissions, there may be costs associated with transitioning to a low-carbon economy, which can affect economic growth and competitiveness. Businesses and consumers may bear these costs. Ultimately, failing to account for the costs of CO2 emissions creates a market failure.	

Data set Data from database: World Development Indicators	
Source	WORLDBANK
Link	https://data.worldbank.org/
Number of observations	330
Number of variables	12
Additional comments (if necessary) Number of observations and variables may change during the development of the project.	

Literature

Author(s)	Mihail Busu and Alexandra Catalina Nedelcu
Title	Analyzing the Renewable Energy and CO2 Emission Levels Nexus at an EU Level: A Panel Data Regression Approach
Journal	Processes 2021, 9(1)
Year	9 January 2021
Link	https://www.mdpi.com/2227-9717/9/1/130

Author(s)	Huiqing Zhao, Jian Hu, Feng Hao and Hongyuan Zhang
Title	Determinants of Carbon Dioxide Emissions and Their Peaking Prospect: Evidence From China
Journal	Front. Environ. Sci., 14 June 2022 Sec. Environmental Economics and Management Volume 10 - 202
Year	14 June 2022
Link	https://www.frontiersin.org/articles/10.3389/fenvs.2022.913835/full

¹ Select one of these: Panel data model; Binary dependent variable; Ordered choice model, Unordered choice model; Count data models; Limited Dependent Variables (tobit); Times series models (ARDL); Cointegration analysis