

# Circular Economy and Resource Extraction

A Replication, Robustness Analysis and Re-estimation

*Do circular economy policies reduce European domestic extraction?*

## Context

- Environmental damage
- Sustainable economic growth
- Circular economy: reuse & recycling
- Study: Bianchi & Cordella (2023)
  - Empirical evidence of impact circular economy policies
  - Prominent study
  - Useful for policymakers

## Problem

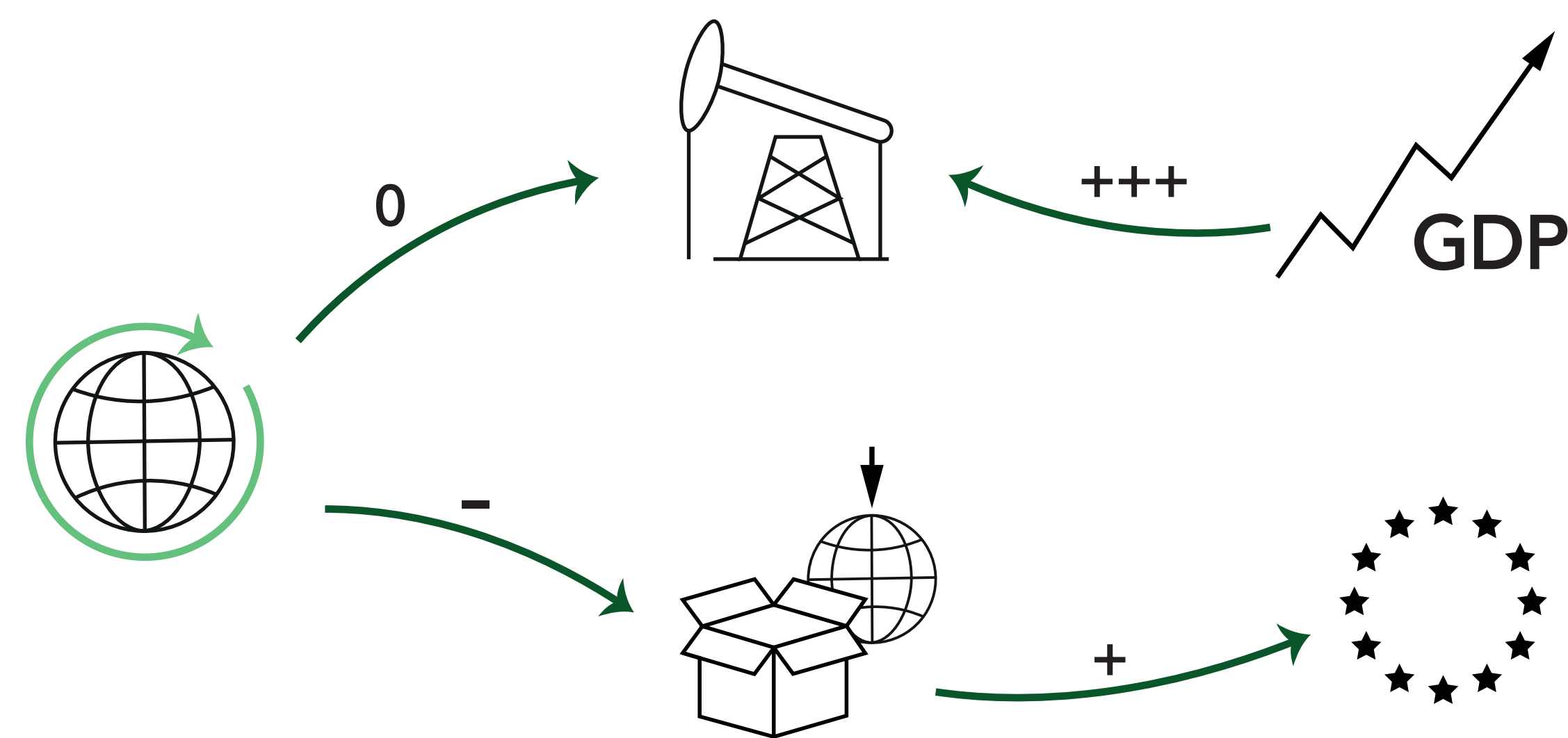
- Credibility & robustness concern:
  - Hansen-Sargan test p-value of 1.00
  - Instrument proliferation?

## Methodology

	Panel data model	Original data (28 countries, 2010-2019)	Extended data (27 countries, 2010-2022)	Specification adjustments?	Resource trade inclusion?
Verification	System GMM, etc.	✓	✗	✗	✗
Reanalysis	System GMM	✓	✓	✓	✗
Re-estimation (1)	2SLS	✗	✓	✓	✗
Re-estimation (2)	2SLS	✗	✓	✓	✓

## Results

- Successful verification exposed methodological flaws



## Contribution

- Extends empirical evidence of impact circular economy policies
- Strengthens research credibility through replication and robustness tests
- Offers practical approach to handle endogeneity in challenging panel data settings (applied Lewbel, 2012)