

INTRODUCTION

27
EU COUNTRIES10
YEARS~270
OBSERVATIONS

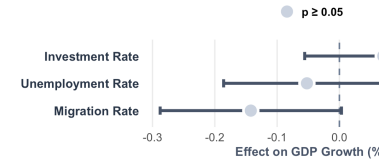
- Context: Migration crisis (2015), COVID-19 (2020), recovery (2021–22)
- Goal: Identify key drivers of economic growth across EU
- Approach: Panel econometrics with country fixed effects

DATA

Source: Eurostat (2014–2023)

VARIABLE	DESCRIPTION	UNIT
GDP Growth	Real GDP per capita growth	%
Migration	Net migration rate	‰
Unemployment	Rate (15–74 years)	%
Investment	Gross fixed capital formation	% GDP

RESULTS



VARIABLE	COEF
Migration Rate	-0.142
Unemployment Rate	-0.052
Investment Rate	0.070

 $p < .05$, $p < .01$, $p < .001$ | RE model, robust SE

RESEARCH QUESTION

How do migration, unemployment, and investment affect GDP per capita growth in the EU?

HYPOTHESES

- H1: Migration $\uparrow \rightarrow$ GDP Growth \uparrow (Labor supply)
- H2: Unemployment $\uparrow \rightarrow$ GDP Growth \downarrow (Demand loss)
- H3: Investment $\uparrow \rightarrow$ GDP Growth \uparrow (Capital accumulation)

METHODOLOGY

Panel Models Compared:

MODEL	PURPOSE
Pooled OLS	Baseline
Fixed Effects	Controls unobserved heterogeneity
Random Effects	Efficiency under exogeneity

Model Selection: - Hausman Test \rightarrow FE preferred - F-Test \rightarrow Individual effects significant - Robust SE (cluster) for inference

KEY FINDINGS

- Unemployment \rightarrow Negative effect on GDP growth (significant)
- Investment \rightarrow Positive effect on GDP growth (significant)
- Migration \rightarrow Mixed results depending on specification

CONCLUSION

- Policy Implications:
- Reduce unemployment \rightarrow strongest growth lever
 - Stimulate investment \rightarrow capital formation matters
 - Migration policy \rightarrow context-specific analysis needed

DIAGNOSTICS

TEST	RESULT	ACTION
Hausman	$p < 0.05$	\rightarrow Use FE
F-Test	$p < 0.001$	\rightarrow Effects present

REFERENCES

Eurostat (2024) · Boubtane et al. (2016) · Ortega & Peri (2013) · Wooldridge (2010)