TESTING FOR CONVERGENCE IN EUROPEAN TRADE OPENNESS

MOTIVATION

Trade openness is a key driver of economic growth, competitiveness, and international integration. The EU Single Market is expected to promote convergence through deeper trade integration. However, European countries differ considerably in economic structure, innovation capacity, and institutional quality. These differences may lead to multiple convergence paths (convergence clubs) rather than a single common equilibrium. Identifying these patterns is important for designing effective European integration and cohesion policies.

AIMS OF THE PAPER

- Examine whether European countries converge in terms of trade openness over the period 2000–2024.
- Identify distinct convergence clubs using the Phillips and Sul (2007, 2009) club convergence methodology.
- Characterize the economic and structural features of the identified clubs.
- Discuss the implications of heterogeneous convergence patterns for European integration and cohesion policies.

DATA AND METHOD

Sample: 25 European countries (23 EU MS + Norway + the UK

Period: 2000–2024

Variable: trade openness (Source: World Bank, WDI)

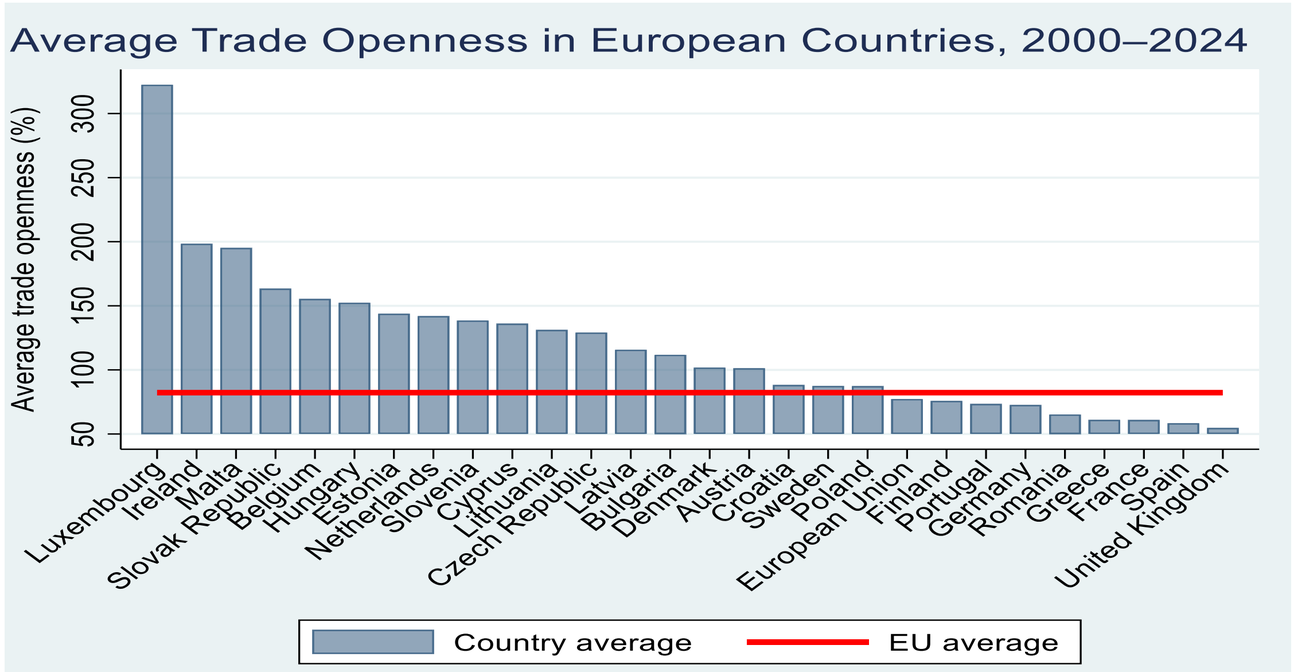
Method: the Phillips and Sul (2007, 2009) club convergence methodology

Rejecting convergence: $t \leq -1.65$

$\hat{\gamma} < 0$ and statistically significant = divergence

$0 \leq \hat{\gamma} < 2$ = conditional convergence

$\hat{\gamma} \geq 2$ = absolute convergence



MAIN RESULTS

- The **log-t test rejects convergence**, indicating that European countries do not converge toward a single level of trade openness.
- Instead, the analysis identifies **3 convergence clubs and 1 divergent group**.

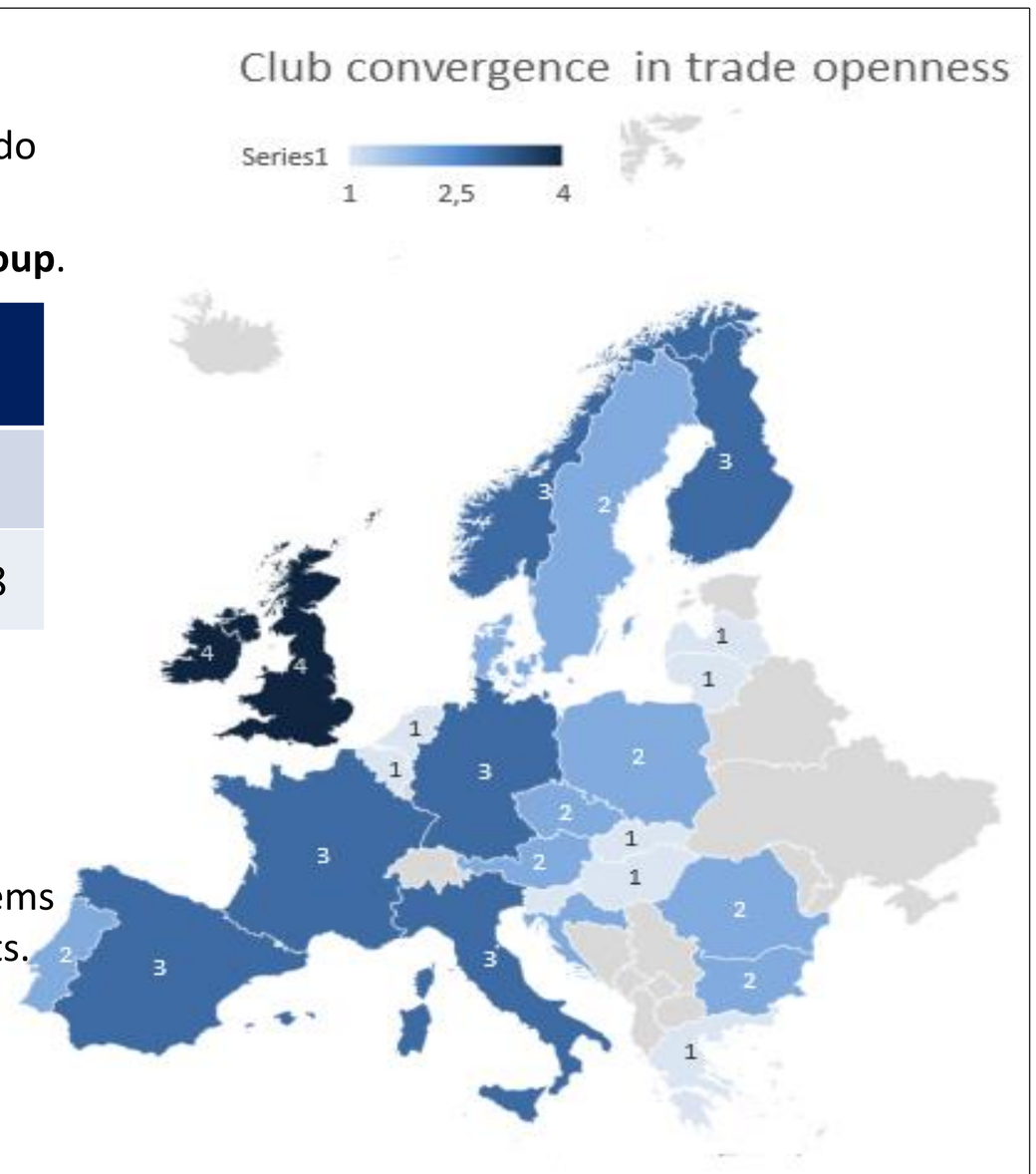
Statistics	Al countries	Club 1	Club 2	Club 3	Group
Coefficient ($\hat{\gamma}$)	-0.7771	0.002	0.069	0.14	-1.046
t-statistic	-28.0619	0.036	0.658	1.912	-157.538

✓ **Club 1:** Small, highly open economies with strong dependence on international trade but relatively limited innovation capacity.

✓ **Club 2:** Transitional and industrializing economies characterized by moderate trade openness and strengthening innovation.

✓ **Club 3:** Advanced, high-income economies with strong innovation systems but comparatively lower trade openness due to larger domestic markets.

✓ **Divergent group: Ireland and the UK**



Club 1 (8): BEL, GRC, HUN, LVA, LTU, NLD, SVK, SVN

Club 2 (9): AUT, BGR, HRV, CZE, DNK, POL, PRT, ROU, SWE

Club 3 (6): FIN, FRA, DEU, ITA, NOR, ESP

Divergent group (2): IRL, GBR

Convergence in trade openness is closely linked to broader structural transformation processes; it alone is insufficient to ensure convergence, as it interacts with innovation systems, governance quality, and macro-financial stability. Policymakers should tailor strategies to country-specific conditions, focusing on innovation capacity, institutional quality, and resilience in lower-income, highly open economies, while supporting competitiveness, innovation, and sustainable integration into global value chains in more advanced economies.

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