

EU Core-Periphery Division in the wake of Deglobalization



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European Union
(EU)

- Economic Complexity
- Political Unity
- Regional Diversity

- Complex mosaic of interconnected economies
- Well suited to be analyzed within framework of Core-Periphery Model

Introduction – Core Periphery Model

Endogenous differentiation into an industrialized core and an agricultural periphery

CORE

- Economic Prosperity
- High levels of industrialization
- Well-developed infrastructure
- Better access to essential resources

PERIPHERY

- Economic Disadvantages
- Limited industrialization
- Underdeveloped infrastructure
- Lower access to essential resources

- The duality and diversity of EU is a topic thoroughly covered by several authors:
 - Caraveli (2016) examines the core-periphery division in the European Union within the context of **global imbalances and geopolitical changes**. Addresses the challenges to the economic and political dominance of the West and changes to the European core-periphery pattern.
 - Gräbner & Hafele (2020) investigate the emergence of **polarization patterns** in the EU over the last 60 years from a structuralist and complexity economics perspective.
 - Rauhut & Humer (2018) identify the current economic thought influencing the **EU Cohesion Policy**.
 - Kersan-Škabić (2019) investigates the **heterogeneity of economic performances** in EU member states contributing to the core-periphery relationship.

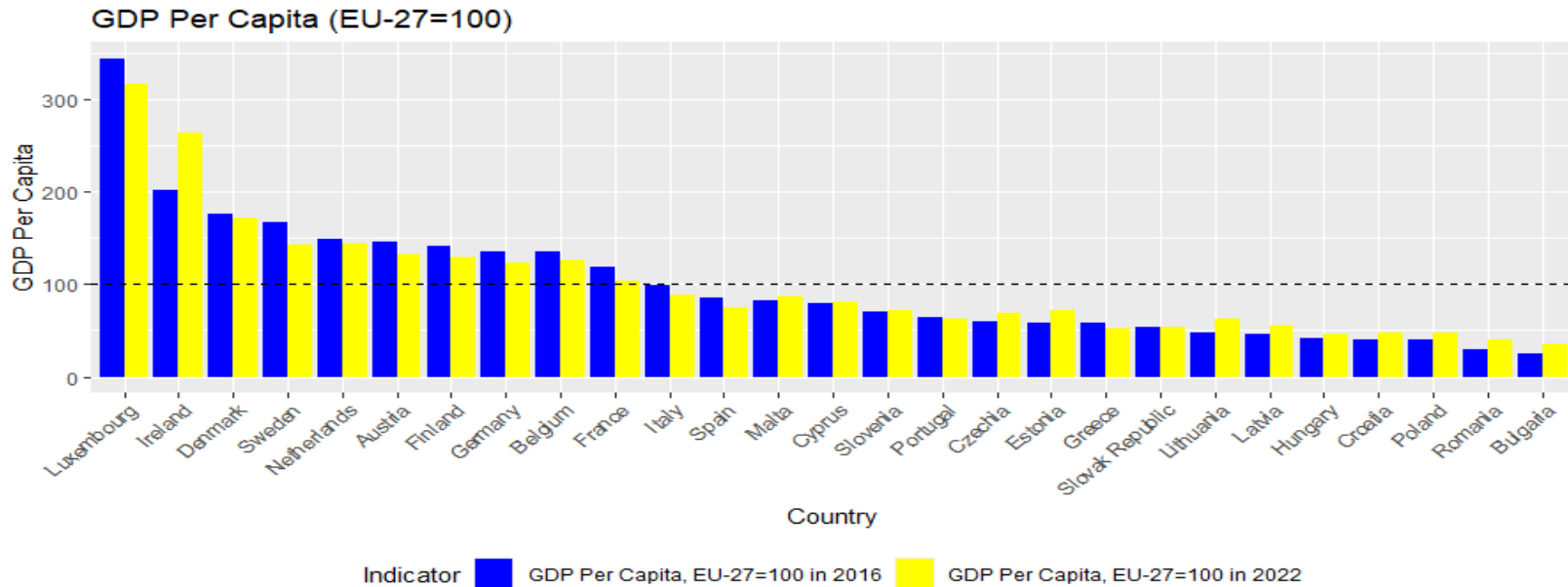
- Research Question: Investigate the Core-Periphery Model as it is applied to the European Union, updating the status of division.
- Assess key elements future EU Cohesion Policy should consider
- Contextualize results within larger Deglobalization trend

- World Bank
 - World Development Indicators
 - World Governance Indicators
- Eurostat

- Thematic groups:
 1. Economic Performance
 2. Governance and Institution
 3. Research and Development
 4. Labor and Employment
 5. Population and Demographics

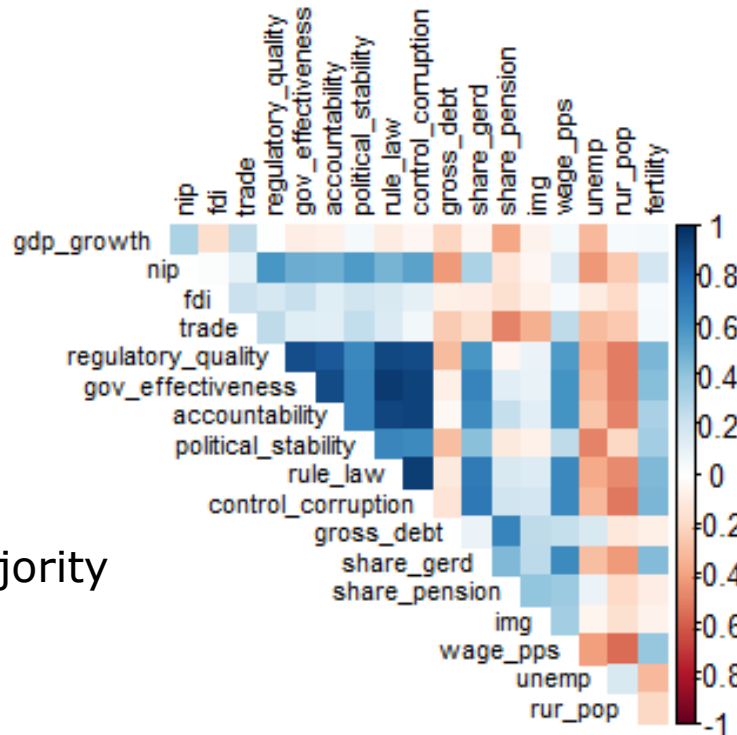
EU Winner and Losers

Clear divide North South-East Europe **BUT** dynamic centre of growth is shifting

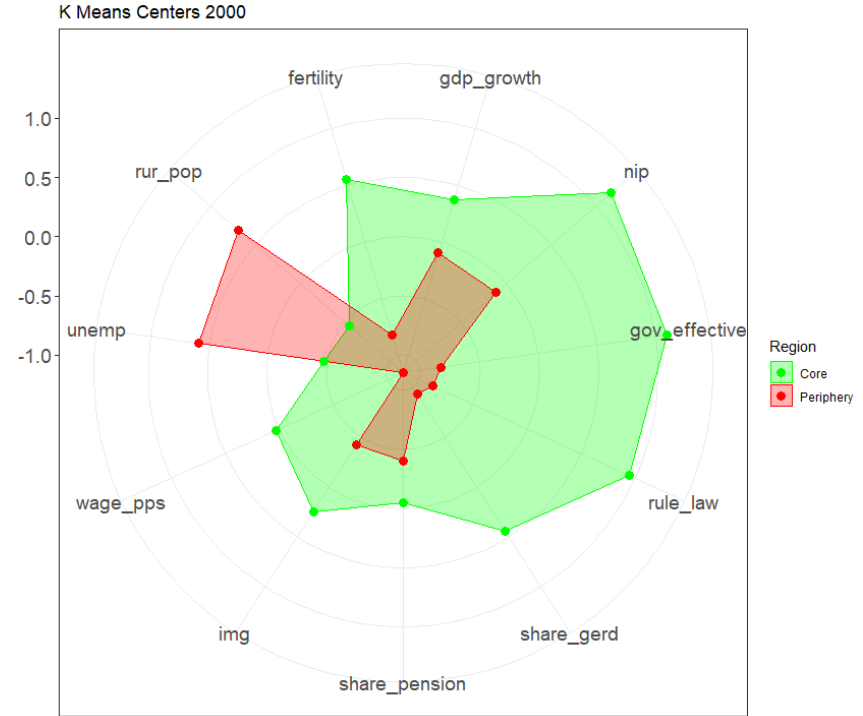
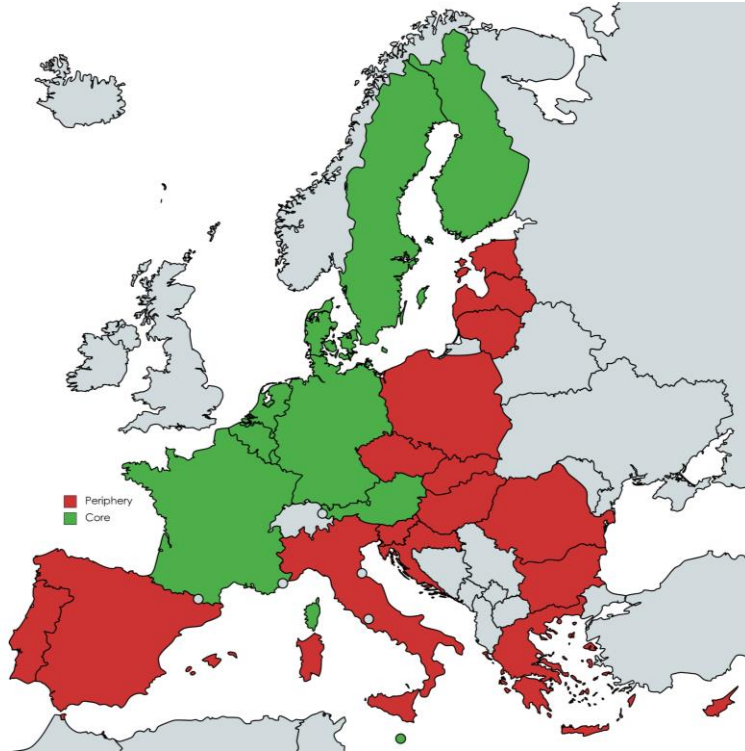


Cluster Analysis - Methodology

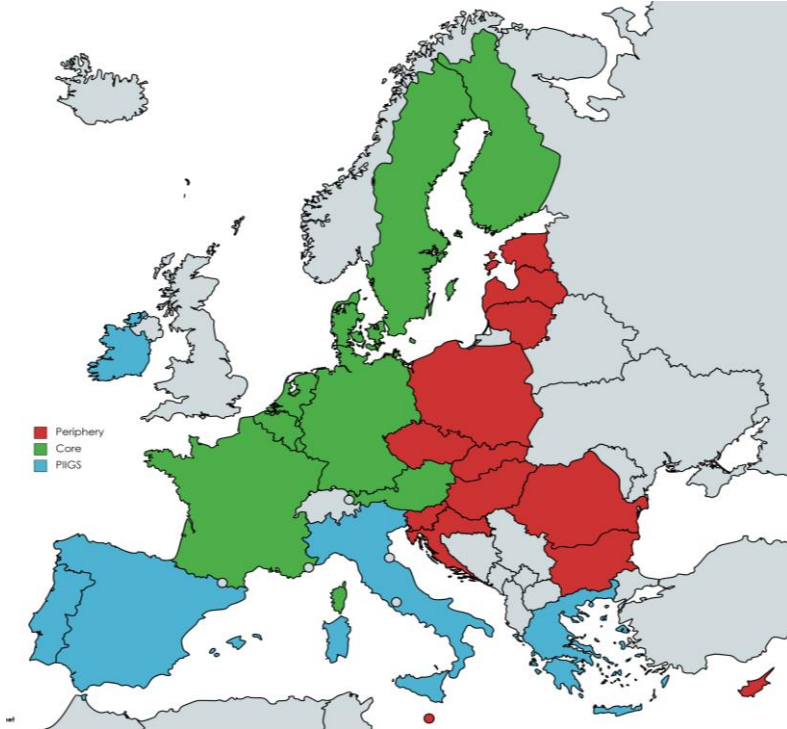
- Variable screening and cleaning
 - Correlation threshold
 - Imputation NAs
 - Scaling
- 3 subsets:
 - EU - 2000
 - EU - 2011
 - EU - 2021
- Number of cluster determined by majority rule



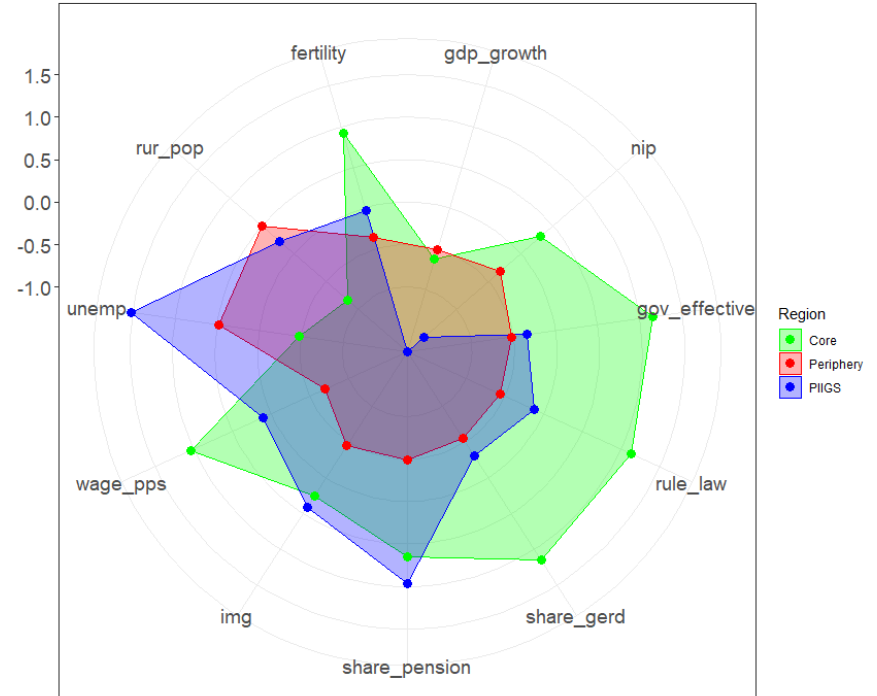
EU Core – Periphery in the 2000



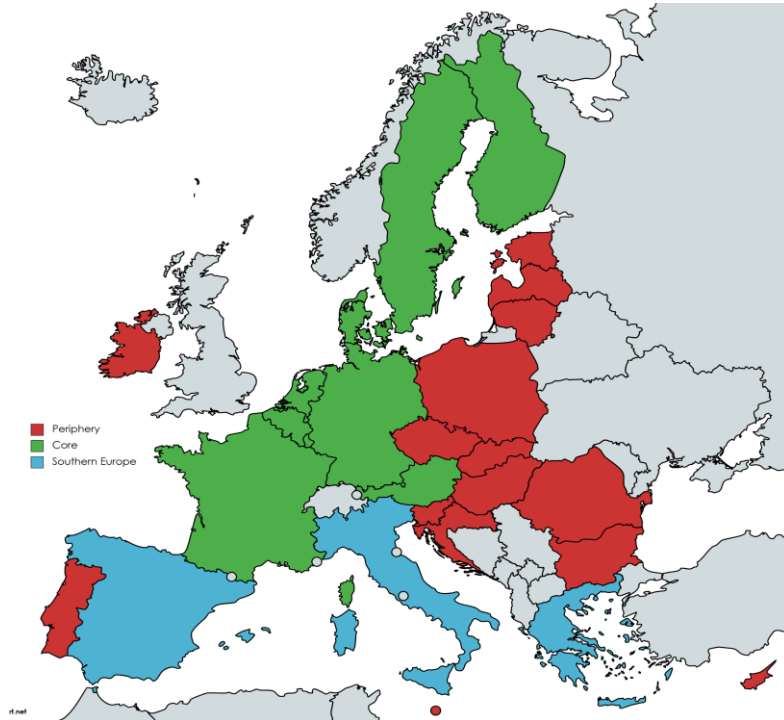
EU Core – Periphery in the 2011



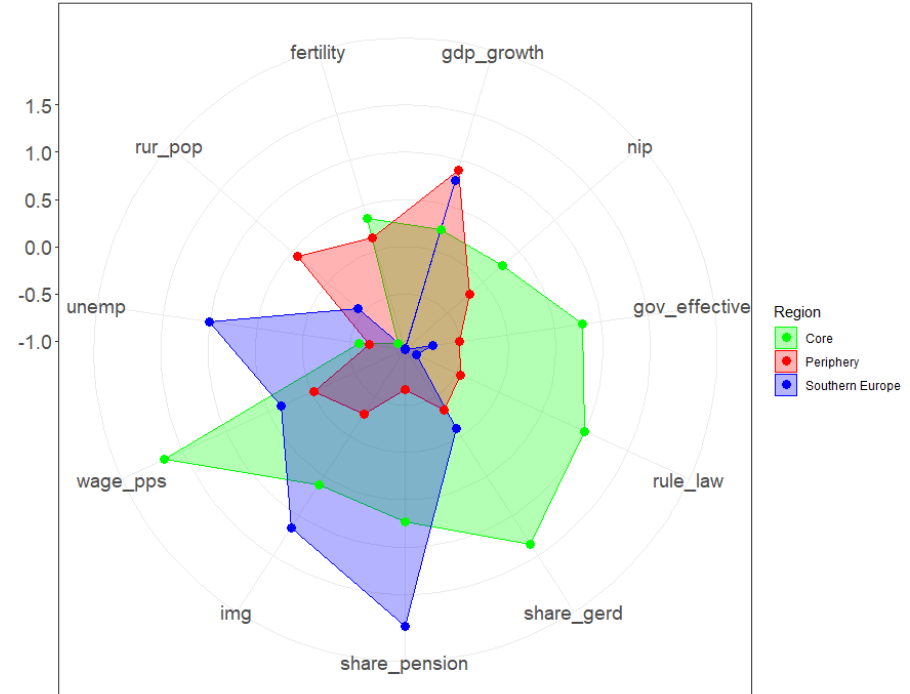
K Means Centers 2011



EU Core – Periphery in 2021

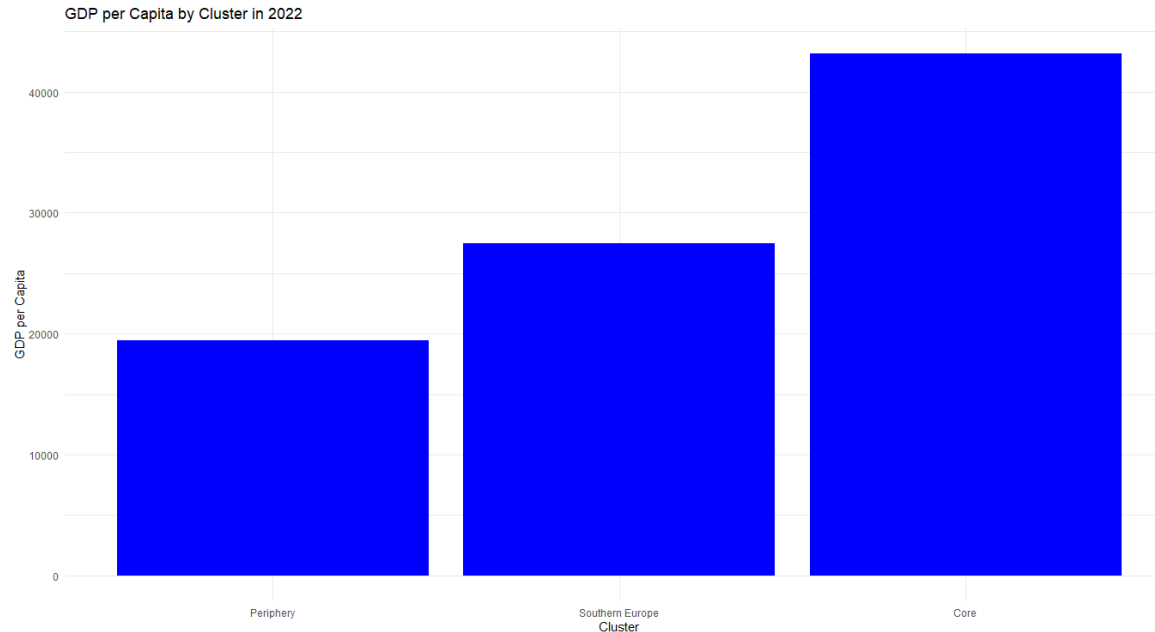


K Means Centers 2021



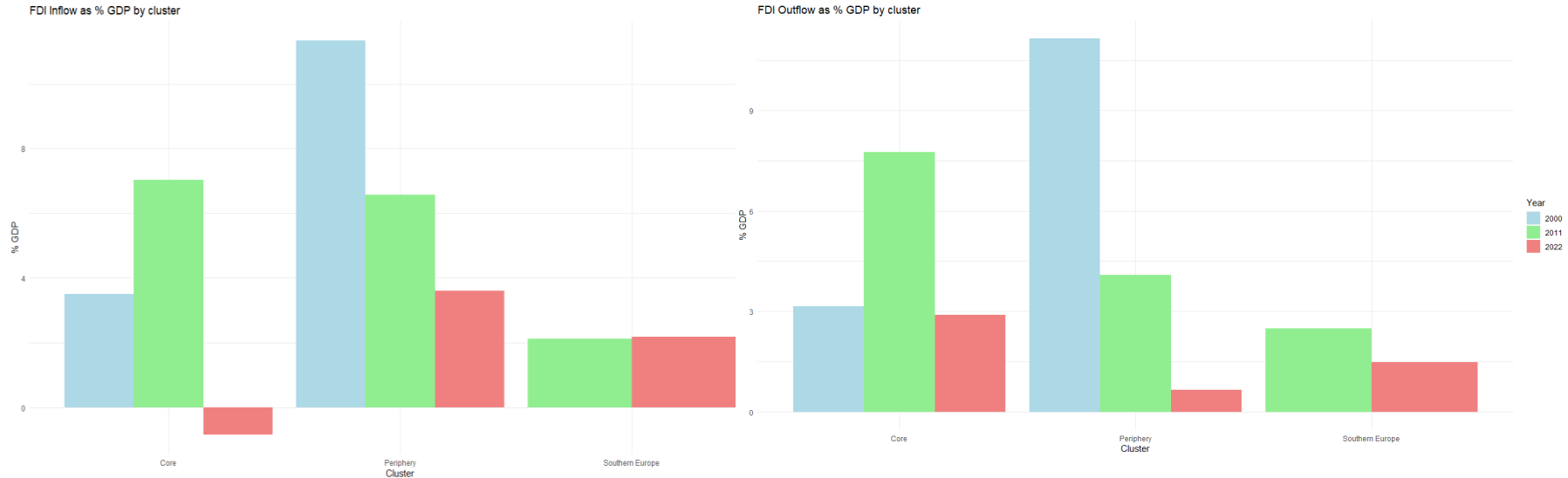
Implication for EU Cohesion

- Shifting reality of EU with challenges of ambiguous members



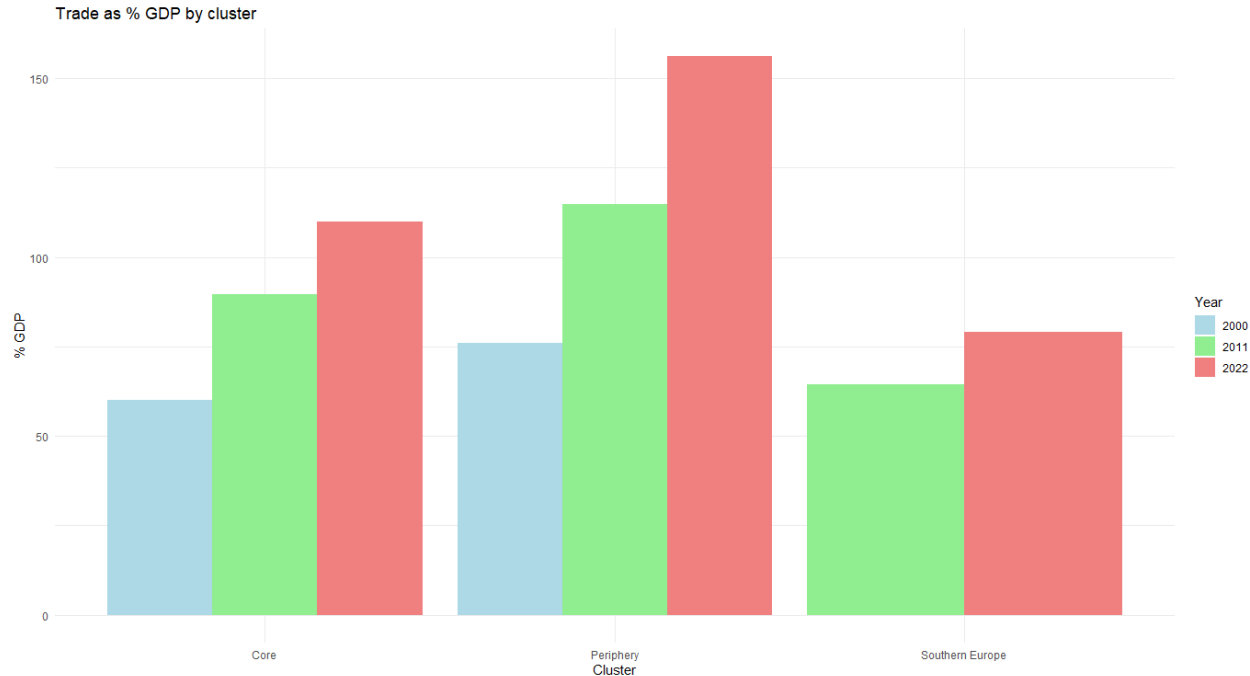
A further step: Deglobalization

- Shift in global investment patterns consistent with homeland economics trend



A further step: Deglobalization

- no absolute reduction of trade/openness but a more cautious management of it



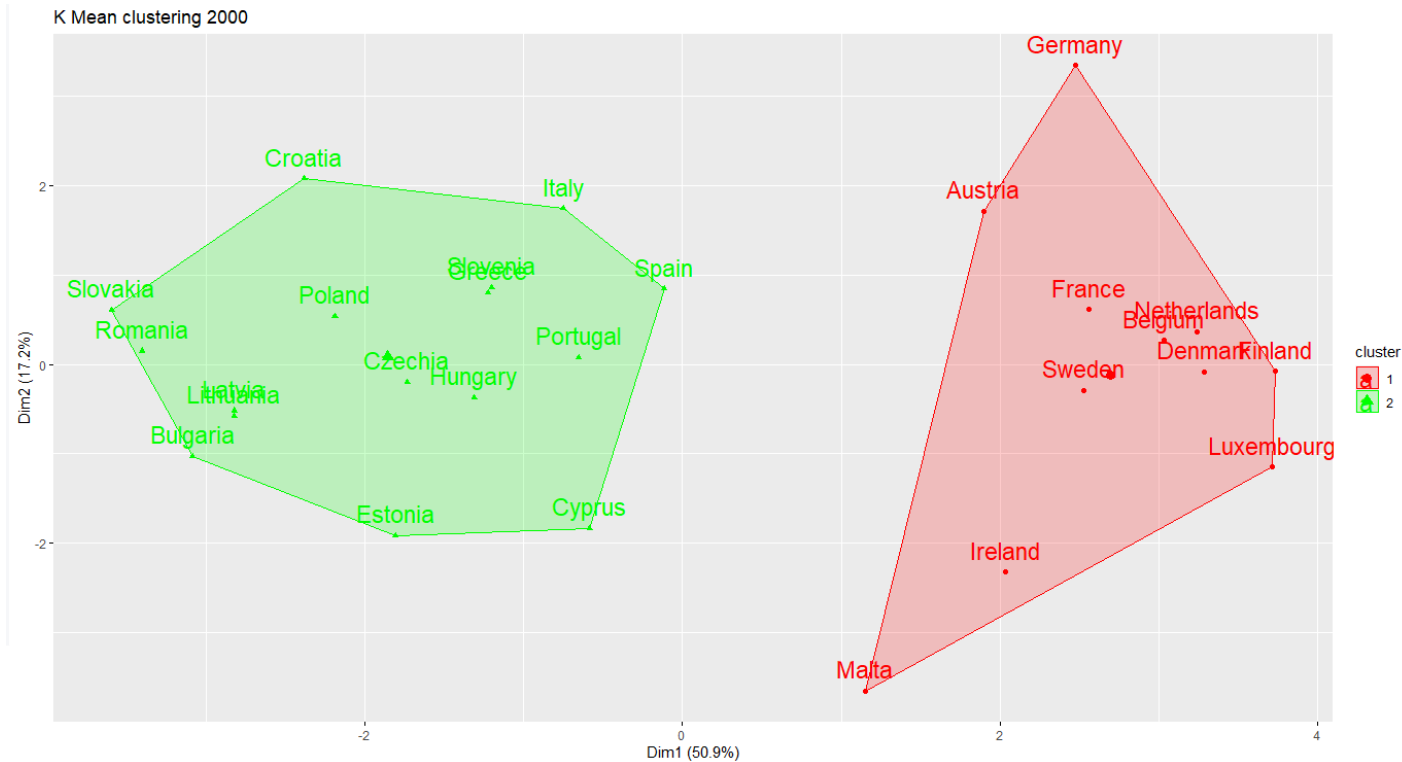
- Growing divergence in the core periphery pattern in EU
- Cohesion Policy of EU needs to consider presence of a
 - Core (North): rich, innovative and effective
 - 2 Peripheries:
 - Southern Europe with high unemployment, older population, high debt
 - CEE with rural identity but catching up
- Danger of further division
- Evidence of Deglobalization still mixed

- The R code and datasets is accessible on the following GitHub Repository: <https://github.com/EliaDG/EU-Core-Periphery-Division-in-the-wake-of-Deglobalization.git>
- European Commission, Directorate-General for Communication, (2022). The European Union : what it is and what it does, Publications Office of the European Union. <https://data.europa.eu/doi/10.2775/5377>
- Krugman, P. R. (1991) "Increasing Returns and Economic Geography", Journal of Political Economy, 99(3), pp. 483–499. <https://doi.org/10.1086/261763>
- Caraveli, H; Global Imbalances and EU Core-Periphery Division: Institutional Framework and Theoretical Interpretations. World Review of Political Economy , Vol. 7, No. 1 (Spring 2016), pp. 29-55. Available at <https://www.jstor.org/stable/10.13169/worldrevipoliecon.7.1.0029>
- Gräbner, Claudius; Hafele, Jakob (2020) : The emergence of coreperiphery structures in the European Union: A complexity perspective, ZOE Discussion Papers, No. 6, ZOE. Institut für zukunftsfähige Ökonomien, Bonn
- Daniel Rauhut & Alois Humer (2020) EU Cohesion Policy and spatial economic growth: trajectories in economic thought, European Planning Studies, 28:11, 2116-2133, DOI: 10.1080/09654313.2019.1709416
- Kersan-Škabić, I. (2020) ""Core-Periphery" in the European Union – An Economic Perspective", Periodica Polytechnica Social and Management Sciences, 28(2), pp. 146–154. <https://doi.org/10.3311/PPso.13979>

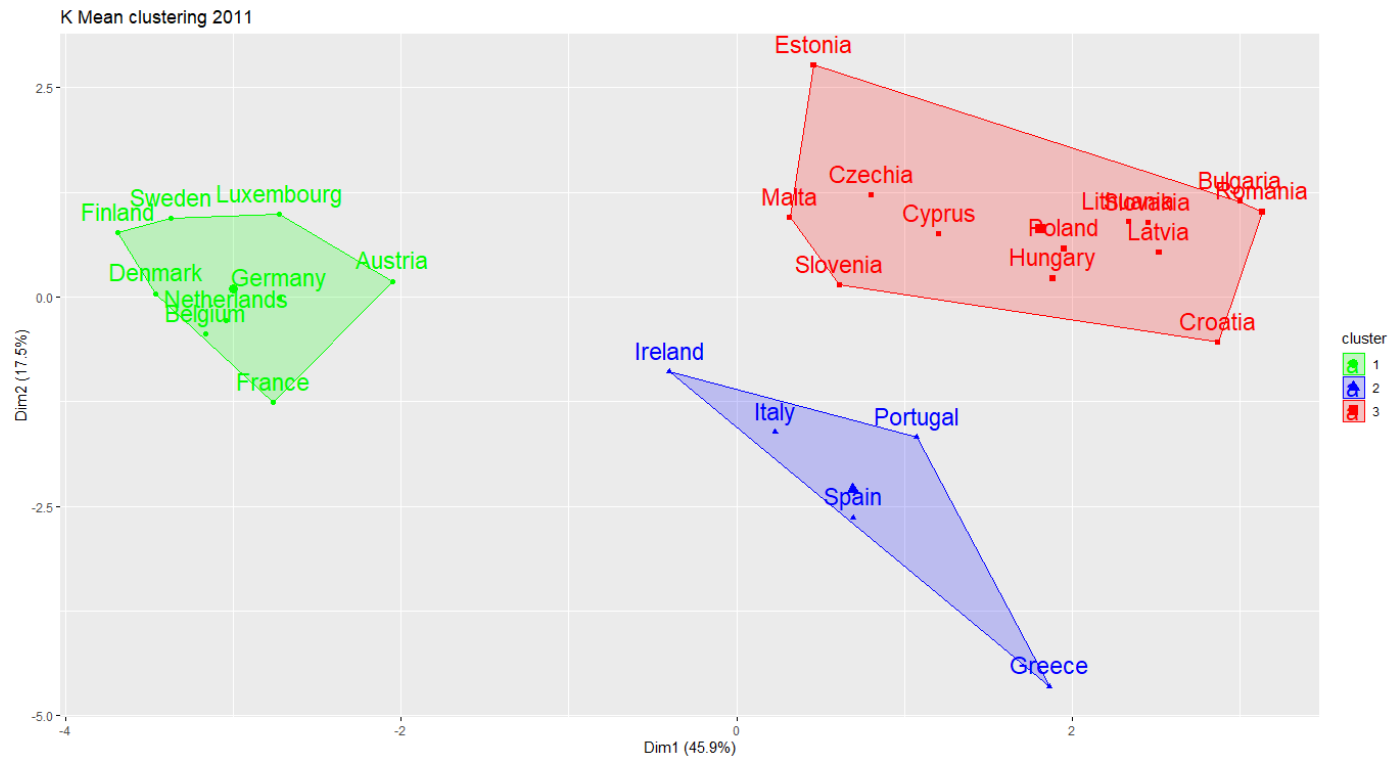
Thanks you for the attention!



Appendix



Appendix



Appendix

