PROJECT OPUS 19 -2020/37/B/HS4/01034 PROJECT OPUS 25 -2023/49/B/HS5/00256









Reinterpretation of Regional Resilience in the Context of Global Crises –Experiences of Internal Peripheries in Poland and Challenges for the EU's external border regions

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Outline of the presentation

Context:

Why resilience matters?

Lessons from TIPERICO

New project RECORU: Objectives, Assumptions, challenges

Paper Idea

Background of the project: Global Crises and Regional Resilience







Uneven impacts: Peripheral and less-developed regions are hit disproportionately hard

These shocks expose vulnerabilities in regional systems and test their adaptive capacities.

Resilience emerges as a critical concept – the ability of regions to withstand, adapt to, and recover from shocks

The Trajectories and Challenges of the development of inner peripheries in the new conditions of cohesion post SARS-CoV-2



Paweł Churski, Adam Mickiewicz University in Poznań Maciej Pietrzykowski, Poznań University of Economics and Business

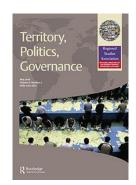








Selected forms of disseminating the results



Adamiak C., Rodríguez-Pose A., Churski P., Dubownik A., Pietrzykowski M., Szyda B., Rosik P., 2024.



Places that matter and places that don't: Territorial revenge and counter-revenge in Poland.

Territory, Politics, Governance. https://doi.org/10.1080/21622671.2024.2431702



Churski P., Adamiak C., Dubownik A., Komornicki T., Pietrzykowski M., Szyda B., Śleszyński P.

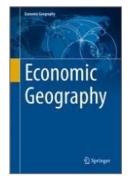
The changing role of functional urban areas in regional policy: New challenges for place-based policy in new conditions of development.



Regional Science Policy & Practice.

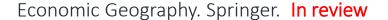
Special Issue: Left Behind Areas. Past, Present and Future





Churski P., Adamiak C., Dubownik A., Pietrzykowski M., Szyda B., 2025.

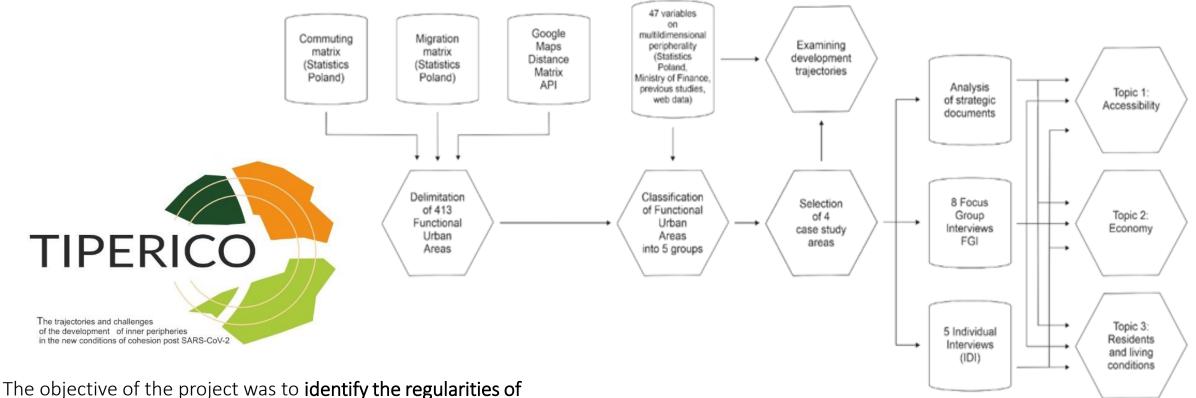
Inner Peripheries in the New Conditions of Cohesion post-SARS-CoV-2 - recommendations for European Cohesion Policy.





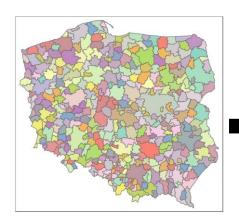


TIPERICO project



changes to the socio-economic development in selected inner peripheries in Poland with special attention given to their sensitivity and resilience to the consequences of the SARS-CoV-2 crisis, and the resulting recommendations for the changes in the development policy interventions.

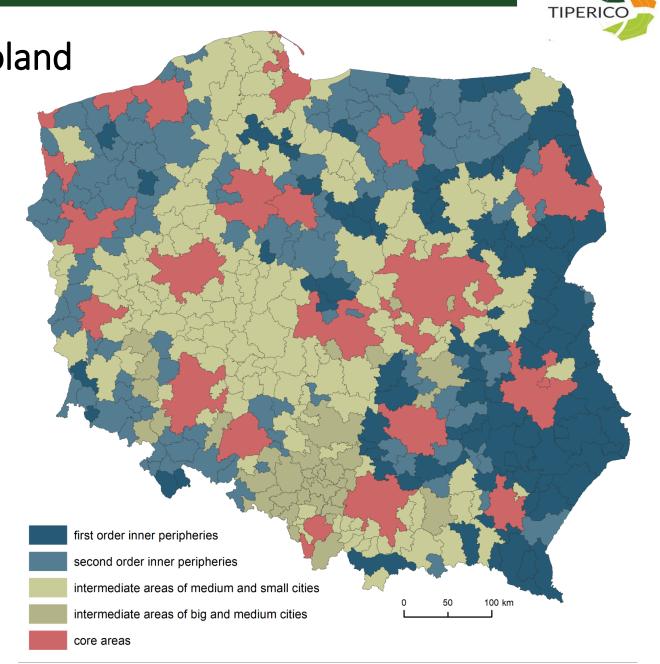
The application-related goal of the project refers to recommendations on the direction and ways of making developmental intervention (including the choice of instruments) in inner peripheries in Poland with special emphasis placed on the importance of the local cities to creating conditions for networking and diffusion of developmental processes. Identifying Inner Peripheries in Poland



Delimitation of 413 functional urban areas (FUAs)

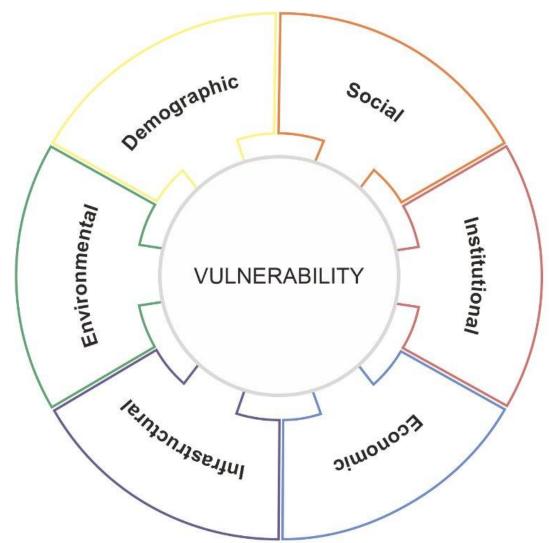
Classification based on 47 indicators of 6 factors of territorial capital

(accessibility, human capital, social and institutional capital, financial capital and material capital)





Dimmensions of vulnerability

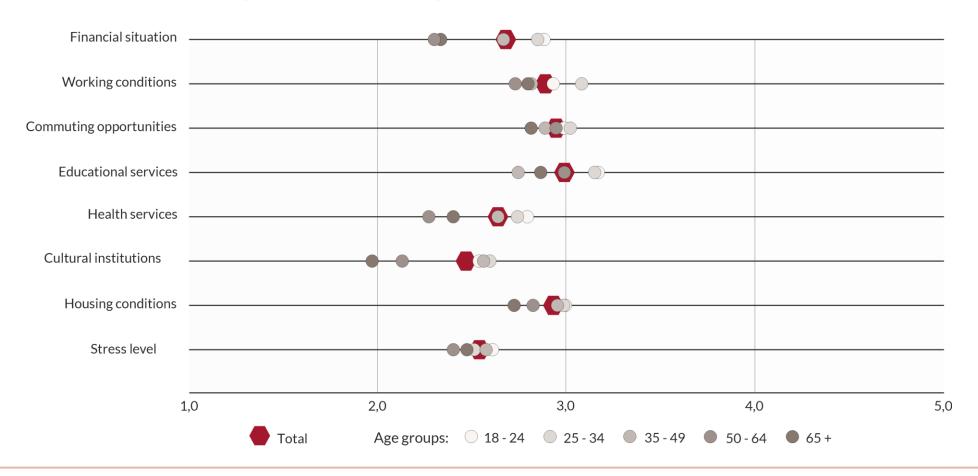




Social vulnerability

In relation to social resilience, it is also important to consider how access to cultural offerings has changed, as well as how stress levels among residents of internal peripheries have increased. People experiencing high levels of stress are usually less active and less engaged in community matters and often struggle to cope with personal problems.

Average assessment of change in life situation due to Covid pandemic (from 1 to 5)

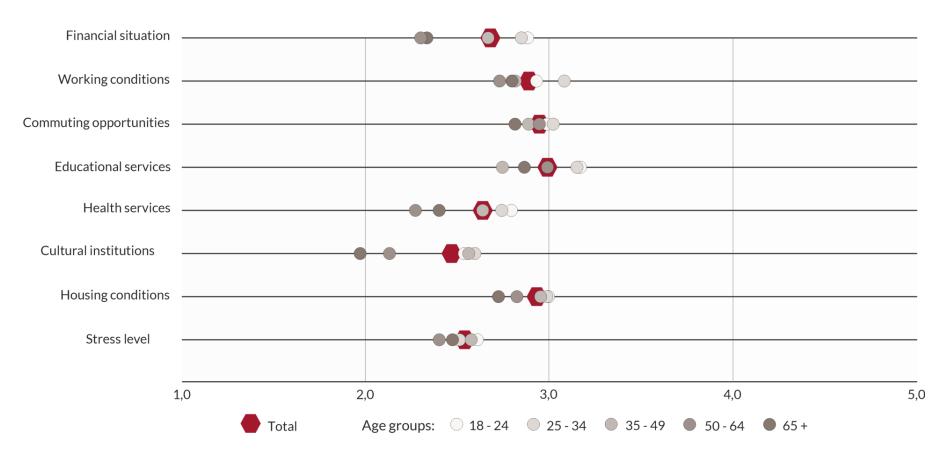




Economic vulnerability

In relation to economic resilience, it is important to address the financial situation of residents in internal peripheries. The survey results indicate that, as a result of recent crises, the financial situation has worsened—particularly for the elderly, who rely primarily on pensions that are not being adjusted at the same pace as wage growth.

Average assessment of change in life situation due to Covid pandemic (from 1 to 5)





Challenges and directions for molding resilience

- 1. Strengthening the transformational capacity of local economies
- 2. Enhancing the internal potential to seize opportunities arising from digital transformation
- 3. Creating conditions for glocalization



Recoverability → the evolution of regional policy in the countries and regions of the European Union (EU)



NEW RESEARCH PROJECT

Regional policy in Europe under conditions of development shocks — challenges of regional development resulting from the socio-economic consequences of Russia's aggression against Ukraine





PROJECT OPUS 26 2023/49/B/HS5/00256

Cooperation:

- University of Eastern Finland, Joensuu
- Leibniz Institute for Regional Development and Structural Planning (ISR), Erkner;
- Bucharest University of Economics Studies, Bucharest

Paweł Churski, Adam Mickiewicz University in Poznań – Pl

Maciej Pietrzykowski, Poznań University of Economics and Business















Our objectives



Main objective: Identification of spatial differences in selected social and economic consequences of Russia's aggression against Ukraine, and explanation of their impact on the transformation of regional development processes and the evolution of regional policy in EU countries and regions.

Research:

- Theoretical basis of regional development under shocks
- Socio-economic impacts of war on EU regions
- Stakeholder views on war impacts and responses

Methodological:

- Conceptual model of spatial war impacts
- Spatial modelling of war consequences in the EU
- Regional resilience and adaptation to war impacts

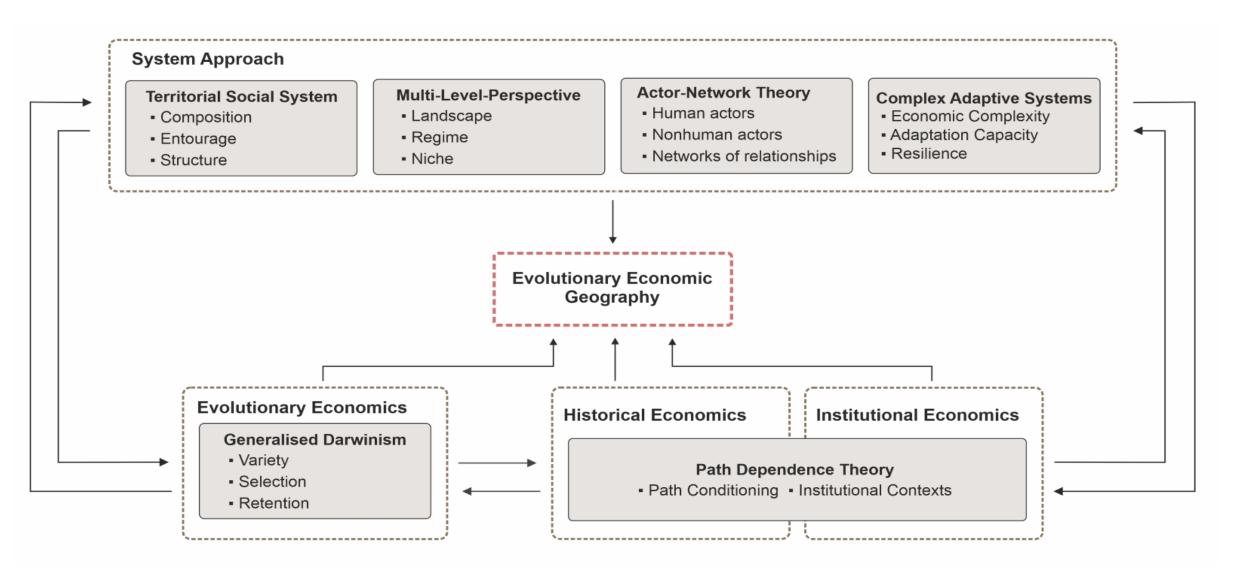
Applicative:

 Policy recommendations to enhance regional recoverability from war-induced shocks



RECUR Theoretical framework for our analysis







Conceptual Approaches to Regional Resilience



Engineering resilience:

Focuses on a rapid return to a pre-shock equilibrium.

Quantifiable via economic indicators (e.g. GDP,
employment). Suitable for short-term shocks. (Martin
2018; Holling 1996)

Ecological resilience:

Allows for path shifts between multiple equilibria. Emphasizes system stability and absorption capacity until collapse threshold. Applies to severe disruptions. (Capello et al. 2015)

Evolutionary Resilience

Views resilience as a path-dependent process of adaptive reconfiguration and creative destruction. Emphasizes learning, actors, and institutional change. (Boschma 2015; Bristow & Healy 2018)

Transformative Resilience

Involves fundamental systemic transition to a new development trajectory when existing structures become dysfunctional. Linked to MLP and just transition. (Sutton et al. 2023; Geels & Schot 2007)

Equilibrium approach

Evolutionary approach



RECUR 4 dimensions of Regional Economic Resilience



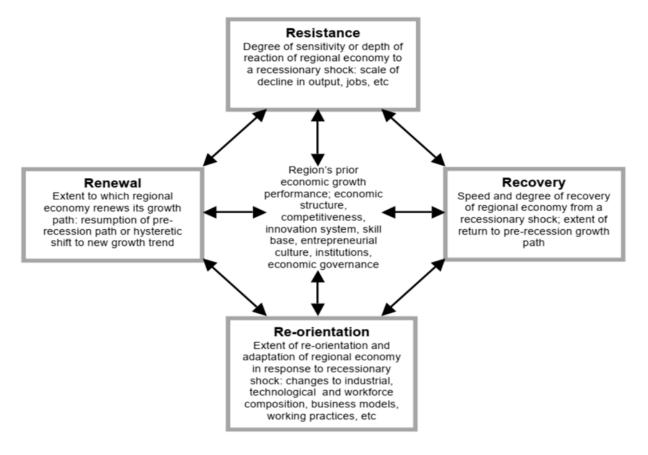


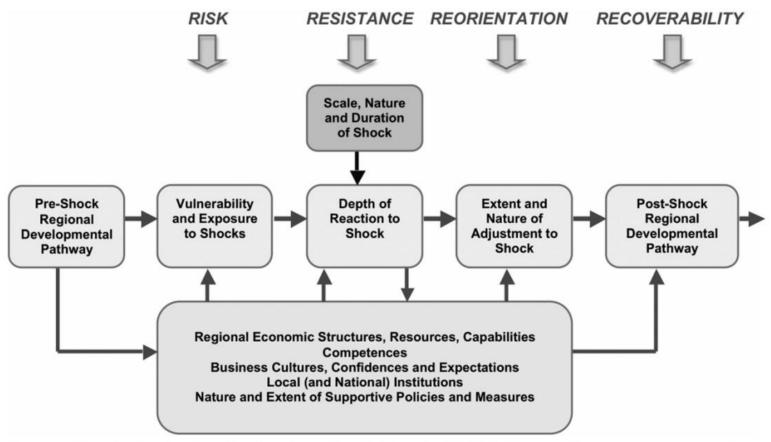
Figure 4: Four Dimensions of Regional Economic Resilience to **Recessionary Shock**

Źródło: Martin (2012, s.16)



Regional Resilience to Recessions





Source: Martin, R., Sunley, P., Gardiner, B., & Tyler, P. (2016). How regions react to recessions: Resilience and the role of economic structure. *Regional Studies*, *50*(4), 561-585. p. 565. Permission from the publisher of the Journal.



RECORD Our adaptation of the resilience concept for research



RISK

Vulnerability

- Robustenss
- Redundancy
- Resourcefulness
- Rapidity

SHOCK

Exposure

- Proximity of Russia and Ukraine
- Dependence on raw materials from Russia
- Russophilia
- Russophobia

RESISTANCE

Consequences

- Refugees
- Inflation
- Supply chain disruption
- Production decline

REORIENTATION

Reconstruction **Transformation** Adaptation

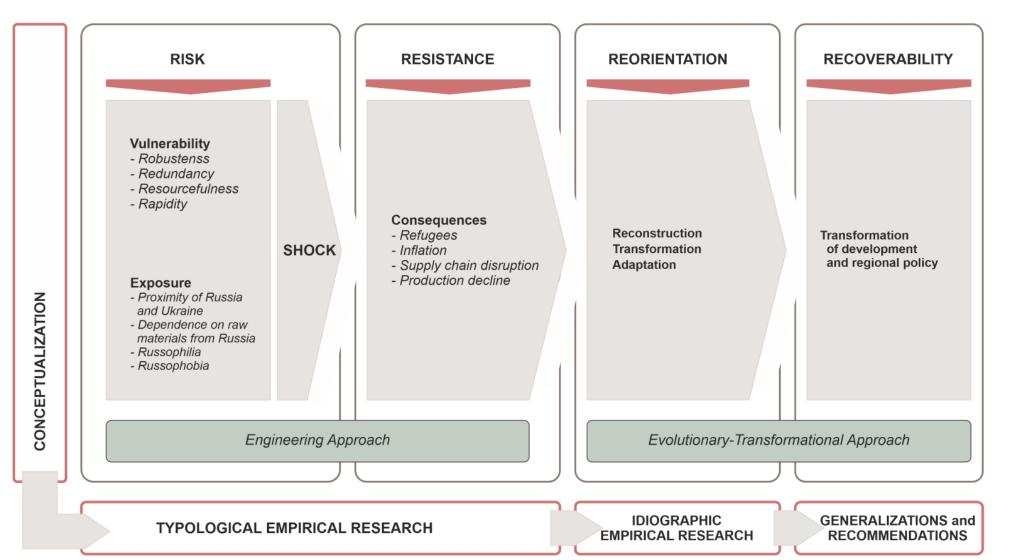
RECOVERABILITY

Transformation of development and regional policy



RECUR Linking Resilience concept with Research Plan









Dimension	Proposed indicators	Dimension	Proposed indicators
Social	 Share of population aged 65+ Dependency ratio Educational attainment At risk of poverty or exclusion (AROPE) Social trust / capital 	Environmental	 Climate risk index Carbon footprint per GDP Share of renewables in energy Water consumption per capita Share of protected areas
Economic	 GDP per capita (PPS) Unemployment rate Employment rate Sectoral structure of GDP/employment Economic diversification index R&D spending / innovation 	Institutional	 Quality of government index (EQI) Local institutional capacity Trust in local authorities Level of decentralisation Institutional crisis experience
Spatial	 Share of SMEs in employment Transport accessibility index Urbanisation level Road/motorway network density Broadband internet access 	Political	 Support for anti-establishment parties Voter turnout Stability of regional governments Protest index





Dimension	Proposed indicators
Social	 Population density Share of foreign-born population
Economic	 Export as % of regional GDP Export to Russia/Ukraine Gas consumption per capita Inflow of FDI
Spatial	Distance from shock sourceBorder region status

Dimension	Proposed indicators
Environmental	 Frequency of extreme events Energy import dependency Presence of environmentally sensitive sectors
Institutional	Crisis institutions load
Political	Geopolitical significanceCountry's political status





Dimension	Proposed indicators
Social	 Refugees per 1000 population Change in poverty rate Change in population size Excess mortality / life expectancy
Economic	 GDP change Peak-to-trough GDP drop Change in unemployment rate Number of business bankruptcies Change in household income Energy poverty rate
Spatial	 Internal migration balance Change in freight transport volume Change in urban vs rural population Change in regional disparity index

Dimension	Proposed indicators
Environmental	 CO₂ emission rise due to crisis Change in air quality Change in energy consumption New RES installations
Institutional	 New crisis policies Change in local government spending Efficiency in using crisis funds Change in EQI
Political	 Change in voter turnout Change in support for radical parties Number of pro-resilience political initiatives



- Evidence from the TIPERICO Project
- Theoretical Grounding: RECORU Framework on Regional Resilience to War: Assumptions of the RECORU approach towards Regional resilience impact of War in Ukraine
- Policy Implications: Reorienting Regional Strategies for Recoverability:
 Regional policy reorientation to enhance the recoverability (transformation of economies, exploitation of digital technologies, glocalization within Functional Urban Areas),
- Empirical Contribution: Preliminary results from empirical research

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