

WHAT DOESN'T WORK IN THE EUROPEAN COHESION POLICY? DEVELOPMENT CHALLENGES OF THE INNER PERIPHERY AFTER THE SARS-COV-2 PANDEMIC

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ABSTRACT: The EU's cohesion policy is a fundamental component of intervention policies in united Europe. Its primary goal is to reduce the scale of spatial differences in development by striving to improve economic, social, and territorial cohesion. The outcomes of the actions implemented to date have been unsatisfactory. This underperformance is the basis for the ongoing discussion in Europe about the future paradigm of post-2027 cohesion policy. This article systematises the challenges and proposes recommendations concerning the actions of EU cohesion policy that should be considered in the new paradigm of this public intervention, enhancing its effectiveness and efficiency during a period of strong pressure from external development shocks, especially in less-developed areas such as inner peripheries. Its unique value is constructed on two fundamental factors. Firstly, the presented results are the outcome of qualitative field research, providing unique empirically factual material. Secondly, they concern the processes occurring in relation to the territories of the member state that is the largest beneficiary of EU cohesion policy, Poland, which is often regarded as a specific laboratory for cohesion policy.

KEYWORDS: cohesion policy, inner peripheries, functional urban areas, SARS-CoV-2, European Union, Poland.

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Introduction

Public policy programming, constituting a form of interventionism in developmental processes, aims on the one hand to reduce market inefficiencies and on the other to implement development goals set for achievement (Martin et al. 2021). In the case of cohesion policy, which is one of the main public policies of the European

Union (EU), these actions aim to reduce the scale of spatial disparities in development, thereby ensuring improvement in economic, social, and territorial cohesion. This should lead to an increase in living standards and conditions for residents across all areas to a level where spatial disparities in development, while not eliminable, gain societal acceptance (Rocco, Faludi 2022). While EU cohesion policy has contributed

to convergence among member states, similar success has not been consistently realised at regional and sub-regional levels. The increase in developmental divergence within regional structures has intensified under the influence of global crises (SARS-CoV-2; Russia's aggression against Ukraine), fully identifying the lack of resilience of less-developed areas and highlighting their internal strong disparities (European Commission 2023). The observed regularities justify the need for a territorially-oriented approach (place-based policy) in programming intervention actions, based on the need to tailor them to specific needs of diverse territories (McCann 2023).

A particular type of less-developed areas that should be covered by the scope of cohesion policy interventions is inner peripheries. These areas are distinguished by 'disconnect' rather than by their peripheral location in relation to more developed areas, which is typical of external peripheries. Thus, these are often areas (occurring in all European countries) with relatively good locations that, nevertheless, exhibit an above-average concentration of developmental deficits determined by limited relations with the environment as well as internal factors (Servillo et al. 2016). This results in lower productivity, lower levels of development, lower access to services, leading to a lower quality of life of these areas' residents compared to neighbouring territories (Copus et al. 2017).

The goal of the article is to explore and systematise the development challenges faced by inner peripheries in the context of external shocks, particularly the SARS-CoV-2 pandemic, and to formulate recommendations for refining EU cohesion policy. By synthesising findings from qualitative research conducted in Poland, the largest beneficiary of EU cohesion policy, and integrating these insights from the existing literature, this study aims to take a more effective and territorially integrated approach to future interventions. This analysis emphasises the role of inner peripheries as key spaces for addressing development disparities, offering actionable strategies for the next post-2027 programming period.

The goal has been implemented in the research procedure, which is presented in the following way. The article starts with the findings that draw attention to the lack of satisfactory

effectiveness and efficiency of previous EU cohesion policy interventions. This step involved a review and systematisation of the subject literature and analysis of the conclusions of the latest evaluative reports prepared on behalf of the World Bank, OECD, and the European Commission. It helped to identify the most significant contemporary challenges facing EU cohesion policy and systematise proposals for changes in its current paradigm. Next, the article presents in a synthetic manner the quantitative and qualitative methods used in the subject study, which were used to delimit and typologise inner peripheries in Poland, analyse their development trajectories, and identify development challenges and previous intervention practices. In the following stage, the results of direct research conducted in selected inner peripheries in Poland, carried out in the form of focus group interviews, individual in-depth interviews, and analysis of existing strategic-programmatic documents, are presented. This unique empirical material allowed the identification of the main development challenges of this category of less-developed areas in the period after the SARS-CoV-2 pandemic, along with the identification of the actions expected by residents, entrepreneurs, and local government authorities. Within the discussion, the obtained results are related to the findings of the subject literature, indicating both the confirmation of facts and opinions formulated by other authors, as well as drawing attention to new findings in the subject area. This made it possible to propose recommendations that can be operationally utilised in the ongoing discussion on the direction and scope of the reform of EU cohesion policy after 2027. They have the character of final conclusions that synthetically collect the most important findings, with particular attention to new proposals concerning the programming and implementation of intervention actions, constituting the added value of the conducted study.

The analysis fits into the ongoing discussion on the future of EU cohesion policy, introducing unique findings regarding the identified regularities related to the development processes occurring in the particular category of less developed areas represented by inner peripheries. Its unique value is built by two fundamental factors. Firstly, they arise from qualitative field research, offering empirically rich and singularly factual

evidence. Secondly, they focus on processes unfolding within the territories of a member state, Poland, which stands as the foremost beneficiary of EU cohesion policy. Poland is frequently regarded as a pivotal testing ground for cohesion policy initiatives, lending heightened relevance and applicability to the findings presented.

Ineffectiveness of the European cohesion policy

Socio-economic development is inherently uneven across different geographical spaces. This variability stems from two main factors: the heterogeneity of spaces in terms of resource quantity and quality, and the effects of agglomeration and economies of scale, which naturally drive spatial polarisation in development processes. Despite the shifts influenced by megatrends (Rodríguez-Pose et al. 2024), these factors do not lead to the outcomes predicted in discussions about the 'death of distance', 'end of geography,' or the supposed dominance of a 'weightless economy' as highlighted in Thomas Friedman's concept of a 'flat world' (Friedman 2005). This underscores the fundamental and enduring importance of diverse places and their populations in shaping development policy objectives, which aim to improve economic, social, and territorial cohesion effectively and efficiently (McCann 2008, Rodríguez-Pose, Crescenzi 2008). It also highlights the inevitability of spatial disparities in development, which, if maintained at socially acceptable levels (Rocco, Faludi 2022), underpin the operation of a capitalist economy (Harvey 2005).

While acknowledging that a certain degree of spatial development inequalities is inherent and inevitable, it is crucial to recognise that their persistence, coupled with a growing tendency, leads to entrenched issues, resulting in escalating scales and costs that become increasingly challenging to overlook (Rodríguez-Pose et al. 2024). The OECD report entitled "The Longstanding Geography of Inequalities," released in 2023, outlines three primary categories of these costs, distinguishing them as economic, social, and political (OECD 2023). Economic costs arise from underdeveloped areas and/or those ensnared in prolonged stagnation cycles, constituting a

substantial portion of economic activity across all nations and representing untapped potential for driving growth. Their subpar performance is also linked to fiscal costs, manifested in the form of heightened levels of social support. Although the EU achieved great success in integrating the socio-economic systems of new member states in Central and Eastern Europe, the economic crisis in 2008 ended a decade of progress in the convergence process. Consequently, alongside low-income regions, a new category of low-growth regions has emerged, losing their capacity for further positive changes despite relatively high levels of development, and 'left-behind places' have become a focal point of geographic inequalities (Farole et al. 2018, Pike et al. 2023). More than half of the 27 OECD countries with available data observed widening income inequalities among their regions (OECD 2023). Social costs relate to the inability to provide adequate access to essential public services and infrastructure, a characteristic of both rapidly-developing areas (with issues like high property prices and congestion) and marginalised areas (with limited access to social services). The impacts of these challenges became particularly pronounced during the social consequences of the SARS-CoV-2 pandemic and Russia's aggression against Ukraine (Zhai et al. 2021, Mbah and Wasum 2022, Ballantyne et al. 2023). Political costs result from increasing dissatisfaction and disengagement, which contribute to the rise of populism and could potentially undermine the foundations of European democracy in the long term (Rodríguez-Pose 2018, Dijkstra 2020, Rodríguez-Pose et al. 2023).

Regrettably, the extent of spatial development disparities is on the rise, particularly at intra-regional level, underscoring the inadequacy and inefficiency of existing cohesion policies. Undoubtedly, as asserted by the authors of the High-Level Group Report addressing the challenges of a future cohesion policy (Forging a sustainable... 2024), for over three decades since the restructuring of Structural Funds in 1989, cohesion policy has made significant strides in alleviating poverty for numerous Europeans. It has propelled social and economic advancement across the EU by investing in customised solutions tailored to tackle the distinctive local circumstances and structural hurdles of each region. Cohesion policy has emerged as the most

comprehensive and sophisticated approach to territorial development worldwide, inspiring analogous initiatives in other global regions as nations acknowledge the substantial economic, social, and political costs linked with the absence of economic, social, and territorial cohesion. It is essential for the proper functioning of the single market, forming one of its fundamental foundations, as highlighted by Jacques Delors and currently re-emphasised in political discussions (Ninth Report... 2024), culminating in the Enrico Letta Report (2024). Regrettably, its efficacy and efficiency are not fully realised. While national convergence has been noted, there is a burgeoning divergence at regional and, particularly, sub-regional levels. This leads to a masking of inner disparities and a dangerous increase in the number of areas falling into a development trap and experiencing economic stagnation. The nature of these disparities is broadening, intensifying discussions surrounding the origins of 'forgotten locales', 'lagging regions' (Pike et al. 2023), which frequently manifest as 'inner peripheries' (Servillo et al. 2016, Copus et al. 2017), areas characterised more by their lack of relational connections with growth centres than by their physical distance. Recognising these factors and formulating effective and efficient cohesion policy measures based on them becomes imperative in the light of contemporary challenges, such as geopolitical tensions, geo-economic competition, climate transition, demographic decline, and technological transformation, which often exert a more pronounced impact on weaker EU areas and catalyse processes of developmental divergence.

The persistent and, in certain EU member states, expanding collection of 'left-behind' locales starkly highlights the ineffectiveness of cohesion policy. The fact that areas particularly experiencing economic stagnation, population decline, low productivity, high unemployment, and a shortage of highly-skilled jobs and innovation centres are prevalent across the European Community demonstrates the profound impact of these issues (MacKinnon et al. 2022). This leads to the impoverishment of inhabitants, a decline in real wages, and fosters social tensions (MacLeod, Jones 2020). Neglected places are often characterised by limited connectivity. These are regions poorly connected to growth centres

at regional and national levels, leading to feelings of detachment and isolation from other parts of the country (Mattinson 2020, Tomaney et al. 2021). This isolation is manifested by the fact that essential services, including transport and communication infrastructure, are often inadequate or absent. There is also a lack of social infrastructure, such as schools, healthcare facilities, and public services. They are often closed or in poor condition, because of a population decline and financial challenges (Davenport, Zaranko 2020). The deficits encountered impede the potential of these areas to accommodate anticipated green and digital transformations. They pose significant obstacles to development, potentially exacerbating developmental inequalities and disproportionately impacting economically disadvantaged regions (Rodríguez-Pose et al. 2024). This is aptly illustrated by the repercussions of recent global crises, which starkly underscore the low resilience of lagging regions (Floerkemeier et al. 2021). Residents of these locales, ensnared in the stagnation of their social status and confronting barriers to social mobility, increasingly voice discontent, rendering them highly susceptible to populist political overtures, thereby threatening the foundation of democracy (OECD 2023).

In the pursuit of overcoming the limitations in the effectiveness and efficiency of cohesion policy, there is a greater emphasis on the strategic use of Barca's propositions (2009) regarding place-based policy in novel circumstances (Barca et al. 2012). There is an increasing acknowledgment of the uneven impact of transformations and emerging challenges on distinct territories. Consequently, what is highlighted is the need for cohesion policy initiatives to be attuned to specific locales (Iammarino et al. 2019) and for the inhabitants who would shape their territorial assets, influencing the prospects for socio-economic advancement (Camagni 2008). While the consensus on the efficacy of place-based policies continues to evolve, the focus shifts towards refining operational aspects (McCann 2023). Drawing on a broad spectrum of American evidence, Bartik (2020) contends that place-based incentives, which involve bolstering business services and training assistance, reducing expenses, and augmenting the availability of local business investments, or alternatively, policies aimed at enhancing access to local infrastructure, typically

yield greater cost-effectiveness than subsidies directed towards companies contemplating new locations. Consequently, Bartik (2020) advocates for six essential priorities in crafting place-based policies. They should:

- explicitly target distressed areas,
- prioritise industries with high multiplier effects,
- avoid undue preference for large corporations,
- prioritise enhancing the influx of local business investments and improving local infrastructure and land development,
- encompass a cohesive set of measures tailored to the specific local context, fostering complementarity,
- undergo improved evaluation utilising quantitative selection criteria.

It is worth noting that development policy implementation seems to be making successful strides in applying these principles. The Biden administration has shifted towards place-based policies, enabling more effective resolution of local development challenges through tailored interventions that consider the specific needs of each area, incorporating the context of their territorial capital requirements and fostering expanded social participation (Muro 2023). Additionally, it is important to highlight that six principles outlined by Bartik (2020) are being integrated into the European cohesion policy. Their essence resonates with the proposals of Barca et al. (2009) and are subject to discussions on how to practically implement them in current reform proposals aimed at enhancing the efficacy and efficiency of undertaken actions. Recent reforms of EU cohesion policy over the last decade have shifted its focus towards a more evidence-based and forward-looking approach, emphasising local policy design and implementation, as well as increased engagement with stakeholders, collaboration, and project involvement (Hertrich, Brenner 2024). Unfortunately, the SARS-CoV-2 crisis, along with the energy crisis resulting from Russia's invasion of Ukraine, underscores deficiencies in the existing approach, particularly regarding the establishment of long-term resilience in regions (Martin, Sunley 2020). Moreover, it has led to a reinforcement of central authorities at the expense of limiting the empowerment of territorial self-government in a mission-oriented approach (Hadjimichalis 2021).

Methods

The research procedure leading to identifying the limitations to and formulating recommendations for the cohesion policy for inner peripheries in the post-COVID era included qualitative field research in four case study areas. Before choosing them, the identification of inner peripheries among Poland's functional urban areas (FUAs) was necessary. Therefore, the first stage of the study involved the delimitation of FUAs as the fundamental functional territorial units and posulated development policy intervention entities. Following that, we classified FUAs in multidimensional peripherality to identify inner peripheries. We then made an informed choice of case study areas. We analysed the development trajectories of the selected case study areas against the backdrop of the entire country and performed qualitative field research in these areas, including individual and group interviews and strategic document analysis around three core thematic topics: accessibility, economy, and residents and living conditions. The entire research procedure is schematically presented in Figure 1.

We used FUAs as spatial units of analysis in the first stages of the study as they better serve to identify areas with specific development features than administrative units (Churski et al. 2024). We combined 2477 Polish communes (the lowest-level administrative units) into 413 FUAs based on population flows (commuting to work and bidirectional migration; Churski et al. 2023). We then classified FUAs based on the set of characteristics of multidimensional peripherality. Nine substantial dimensions of peripherality (accessibility, economy, finances, demographics, housing, health and public safety, education, leisure and social activity, as well as ecosystem services) were represented by 47 indicators (Churski et al. 2024) sourced from public statistics, the Ministry of Finance, previous studies, and web-based sources. We then used the indicators in a two-step FUA classification procedure. After cluster analysis of variables to eliminate those highly correlated with the others, we applied the Gaussian mixtures method to classify the FUAs. We selected a five-group classification solution, distinguishing core FUAs with major cities, two types of transition FUAs, and two types of peripheral FUAs (Churski et al. 2024).

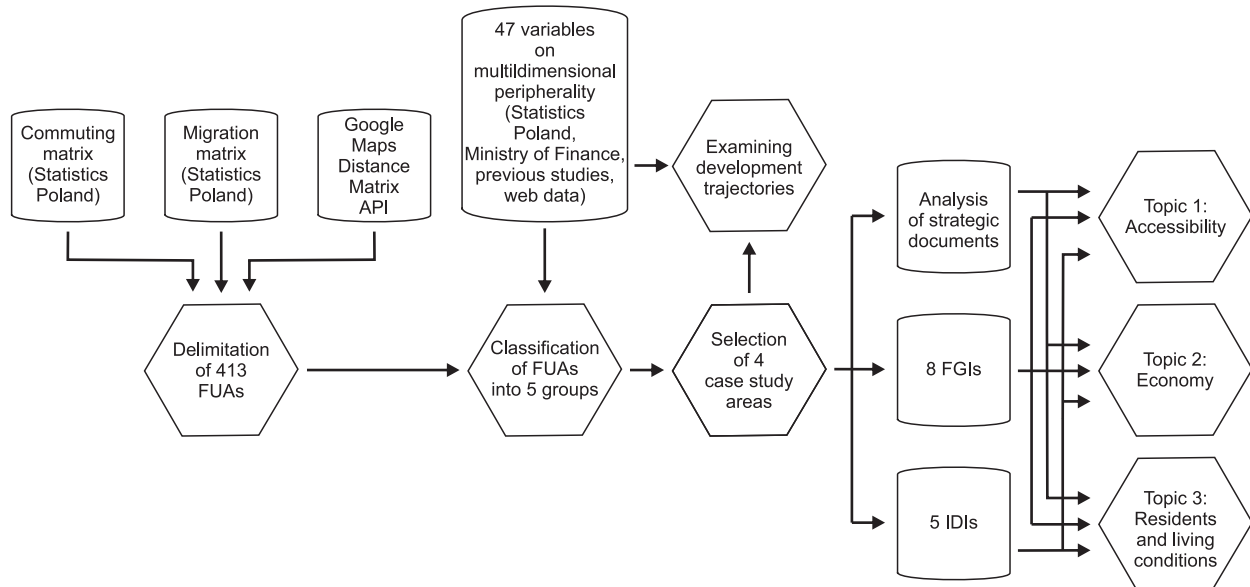


Fig. 1. Research procedure.

FUAs – functional urban areas; FGIs – focus group interviews; IDIs – individual in-depth interviews

We then selected case study areas for closer examination. We chose two cases of FUAs from each type of inner peripheries. We singled out areas with typical values of peripherality indicators, located in the country's different geographic and historical regions, and representing different sizes of FUAs and central cities.

At the next stage of the project, we looked into the development trajectories of groups of FUAs and individual case study FUAs. Our aim was to determine both the common characteristics of development dynamics within each of the FUA types, and the variations in development dynamics within these types, with particular attention given to the four FUAs selected for field studies. Owing to the lack of access to time series of data, in the dynamic analysis we only considered 30 variables out of the 47 taken into account in the FUA typology. We used correlation matrices, hierarchical clustering and the TCAM dimension reduction method (Kilmer et al. 2021) to aid in the understanding of the structure of temporal and spatial variability of indicators.

In the case study areas, we collected secondary and primary information and opinions from strategic documents and local informants. Document analysis focused on the development strategies of communes, poviats and voivodeships (larger administrative units), spatial management plans, sectorial and specific strategic documents including innovation strategies, strategies for combating

social problems, plans of revitalisation, plans for sustainable mobility, plans for the low-emission economy, and plans of environmental protection. We analysed the content of the strategies, looking for the diagnosis and responses to the problems we defined as those characterising inner peripheries: poor accessibility, economic and financial challenges, and social and well-being problems.

The second source of information and opinions was local interviewees: politicians and administration employees, entrepreneurs, and representatives of local non-governmental organisations. In each study area, in 2023, we performed two focus group interviews (FGI), and at least one individual in-depth interview (IDI), totalling eight FGIs and five IDIs. Individually, we talked mostly to leaders (usually mayors of central cities). One FGI in each area aimed to collect opinions of local administration, while the other one gathered entrepreneurs and representatives of non-governmental organisations. Interviews were recorded and transcribed verbatim. The informants were recruited, and interviews were performed in person by the researchers or a contracted research agency. We asked the interviewees about their perception of development challenges in the case study areas, with particular attention given to the dimensions of peripherality that we identified at the previous stages of our study and the changes that occurred as a result of the SARS-CoV-2 pandemic.

Regularities of the development processes in Poland's inner peripheries

Our analysis was based on the assumption that the inner peripheries are not internally homogeneous, which leads to the formation of central areas and the surrounding areas in their internal structure, following the general dichotomy of socio-economic space. Thus, we delimited the inner peripheries, taking previously delimited FUAs as reference units. These areas differ in size and spatial extent, corresponding to the size of the central city (Churski et al. 2024).

As a result of the FUA typology, five FUA groups were distinguished, different in the level of multidimensional peripherality, which is presented in Figure 2. The inner peripheries were categorised into first-order and second-order types. As many as 208 out of the 413 FUAs were classified as inner peripheries. Thus, slightly more than half of Poland's FUAs meet the criteria for inner peripheries with a concentration of negative social and economic phenomena. These areas face the greatest development challenges, with key issues arising directly from the diagnosed deficits.

The second-order inner peripheries are functional areas of medium-sized and small towns

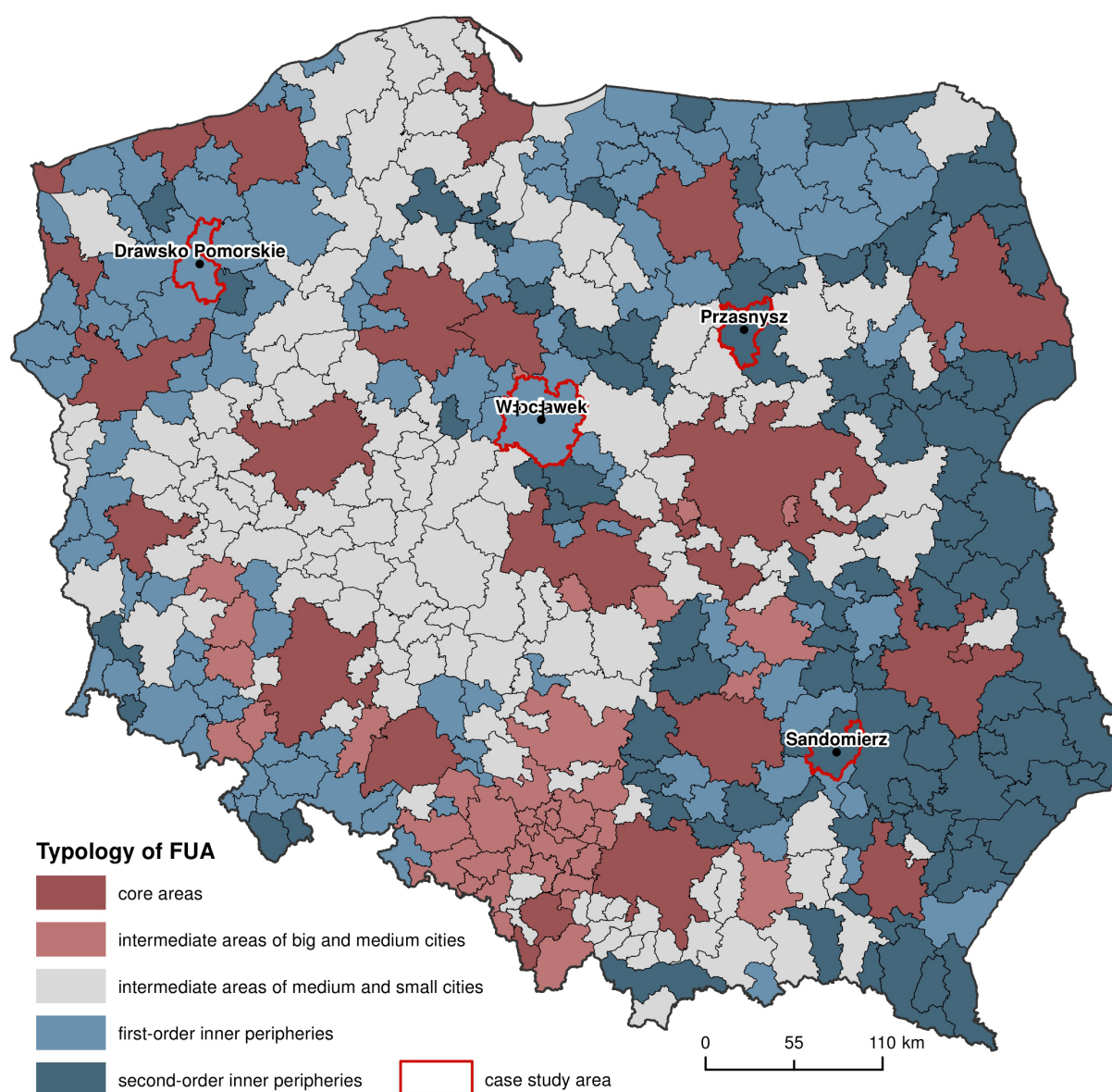


Fig. 2. Inner peripheries in the FUA typology in Poland.
FUA – functional urban areas

scattered across Poland, primarily located in the northeastern and northwestern regions of the country (Churski et al. 2023). They also concentrate in mountainous regions (the Sudetes) and in central Poland, and, notably, they directly adjoin the FUAs of large cities. In this context, it is crucial to underscore the primary feature of inner peripheries: their inadequate transport links to the core regions, where potential developmental stimuli originate. The characteristics of second-order inner peripheries include low efficiency or complete absence of public transport, which significantly reduces both internal and external transport accessibility. Second-order inner peripheries encompass regions in Poland with the lowest population density, which struggled significantly with the country's economic transformation in the 1990s. Demographically, stagnation is evident, though relatively moderate; the depopulation and ageing of society are not yet advanced. Additionally, the residents' incomes are notably low, due to weakening job markets and low levels of economic activity. Numerous tensions in public finances are observed, making these areas heavily reliant on financial support from the state budget and other external sources. The challenging financial situation described is reflected in low levels of infrastructural investment and poor availability and quality of public services.

Even more challenging conditions are present in the group of FUAs identified as first-order inner peripheries, characterised by the lowest level of development and the most pronounced functional and transport disconnect from areas driving development. These areas mainly comprise functional areas of small towns in Eastern Poland (Churski et al. 2023), covering regions primarily located in the eastern part of the country, which faced the most difficult and prolonged economic transformation. Peripheral areas there directly adjoined the core FUAs, which are characterised by the highest level of development in the country. There is also a strong convergence between functional and spatial peripheries, reflected in the lowest values of time accessibility indicators from FUA centres to regional centres. Very low digital accessibility, which determines digital exclusion in these areas should also be mentioned. First-order inner peripheries are also characterised by less favourable values of other variables. Demographic depression is observed, primarily

caused by the outflow of the young population. Stagnant job markets and a noticeable lack of economic activity are manifested in low individual and municipal purchasing power. This, in turn, does not guarantee budgetary stability, even with limited or often completely absent public investments. Consequently, these are areas with insufficient infrastructural development and significantly limited access to public services.

In further research, we traced the dynamics of development within the inner peripheries in relation to the rest of the FUAs. We looked at the dynamic characteristics of the four peripheral FUAs selected for field studies, representing both types of inner peripheries. Our research indicates a slight improvement in transport accessibility from year to year. The inner peripheries of both the first and second order exhibit the least convenient external accessibility, markedly weaker than in other regions, though diversified even across the four FUAs selected as case study areas. Internal accessibility is largely dependent on the spatial scale of FUAs: typically, peripheral FUAs are smaller than FUAs in core and transitional areas.

Inner peripheries are particularly negatively distinguished concerning matters related to economic activity. While indicator values are indeed increasing, this growth began later than in other FUAs, and significantly lower baseline values of indicators were noted. Similarly, the initial level of income in peripheral FUAs was markedly lower. Nonetheless, income levels increased at almost the same rate across the five types of FUAs; slightly slower growth rates were observed in relation to second-order inner peripheries. We observed negative demographic changes in all groups of FUAs, with both groups of peripheral regions being in the least favourable position. Depopulation intensifies primarily because of a decrease in the proportion of the young population. There is a divergence between central areas (with more gradual negative demographic changes) and peripheral ones (experiencing faster negative changes). The individual dimensions of indicators of peripherality exhibit specific characteristics of both temporal and spatial variability between FUA types and within individual types of FUAs.

During the quantitative research phase, we could not identify the vulnerability of inner peripheral areas and their core cities to

global socio-economic trends due to a lack of data. Therefore, direct research in four selected case study areas was necessary. Two case study areas were selected for direct research from the group of inner peripheries of the first and second order. The selection process was purposeful, based on an analysis of how the characteristics of each area were consistent with the typical features of its respective inner periphery type. Within the second-order inner peripheries, the FUA of Włocławek was chosen for direct investigation. The main city in this area is the largest urban centre of inner peripheries in Poland, with a population approaching 100,000, and is notably situated in a central location along key transport corridors. The second selected area representing second-order inner peripheries is the FUA of Drawsko Pomorskie, located in Central Pomerania. This area is characterised by its proximity to a large military training ground, its distance from major growth centres, and its relatively high unemployment rate. For first-order inner peripheries, the FUA of Przasnysz, located in Northern Mazovia, was selected as the first case study. This area is notable for having one of the lowest per capita income levels among taxpayers in the country. The second case study area for first-order inner peripheries is the FUA of Sandomierz, situated in the Sandomierz Basin in Eastern Poland, which serves as a popular destination for many day tourists.

From diagnosis to action: Post-SARS-CoV-2 development challenges and recommendations for Poland's inner periphery

The results of strategic document analysis and interviews in four study areas were organised into three thematic categories: accessibility, economy, and residents and living conditions, treating them as key for the functioning of inner peripheries in the context of identifying their development challenges (Fig. 3). Within each highlighted thematic area, attention was paid to trends in socio-economic processes that emerged as a result of the SARS-CoV-2 pandemic, including those that were a consequence of another asymmetric development shock, Russia's aggression against

Ukraine. The results obtained allowed us to formulate recommendations to be considered in the programming of EU cohesion policy targeting inner peripheries in its next programming perspective, i.e., after 2027.

It is our contention that accessibility is particularly important for the functioning of inner peripheries, characterised by a relatively high degree of disconnection. Given the development challenges related to the accessibility of inner peripheries delimited in the arrangement of functional areas, it is necessary in our opinion to pay attention to its inner and external dimensions. The inner dimension of accessibility shapes the inner cohesion within the inner peripheries, which is determined by the degree of heterogeneity of their space and the possibilities for developing relations between the central area of the functional area and its surroundings. The external dimension of accessibility shapes the possibilities for establishing and developing connections and full participation of a given area in the socio-economic system. Its deficit, especially in terms of communication accessibility, including the relatively large time distance to economic centres, results in a limited range of functional connections of these areas with the poles of socio-economic growth and development and the lack of ability or difficulties in their permanent establishment. The results obtained indicate a common deterioration of accessibility and an increase in communication exclusion, which persists in the post-COVID-19 period. This is the result of a deep crisis in public transport caused by the restrictions introduced during the pandemic. Our research indicates that there is a fundamental increase in car use as the primary means of transport, which raises costs, increases congestion, negatively affects environmental quality, and results in a decrease in road safety. The respondents have pointed out that there is an increase in the use of bicycles as a means of transport, but this is effective and efficient only at the level of ensuring internal cohesion of the studied areas and does not improve their accessibility in the external dimension. Initiatives related to the increased importance of e-services in improving residents' access to basic services, and especially higher-order services, are unfortunately rare in the studied units and are more incidental than common. Local leaders highlighted

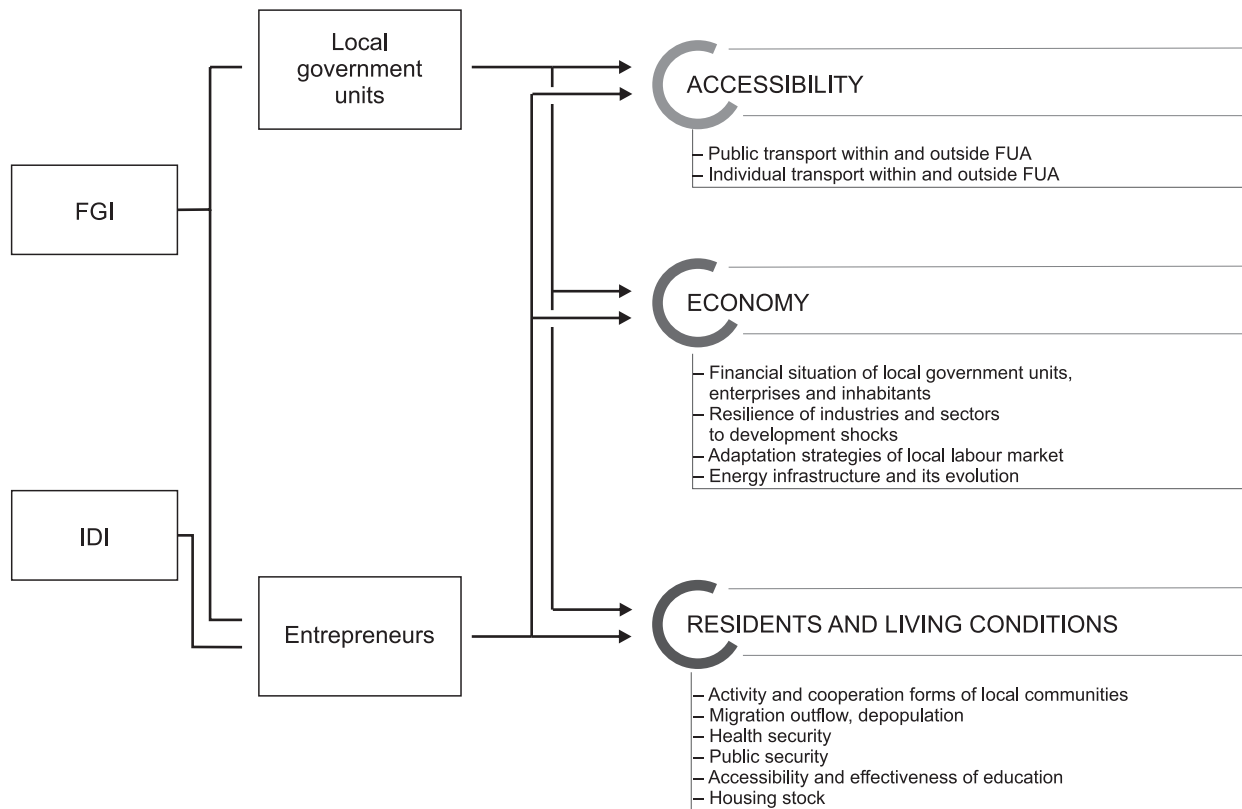


Fig. 3. Algorithm and scope of procedure in qualitative research.

FGI – focus group interview; IDI – individual in-depth interview; FUA – functional urban area

that attempts to restore the lost position of public transport and change its organisation encounter serious institutional obstacles related to barriers limiting the possibilities of cooperation of local government units within the functional area. In the face of the identified changes and trends concerning accessibility, based on the research findings, we compiled the catalogue of intervention actions programmed and implemented within the framework of future cohesion policy, composed of three key recommendations:

1. Implement a system for monitoring the directions and volumes of passenger flows, allowing for the identification of varying demands for transport services. This requires strengthening institutional collaboration within the functional area, which may generate a need for changes in legal regulations and enhancing administrative competencies. It is also necessary to integrate the operation of all public transport operators to fully utilise their transport capacity.
2. Restore the position of public transport in residents' mobility decisions, urgently. This requires reorganising its structure, using innovative forms and modes of transport services, including demand-driven transport and schedule and fare integration among different carriers. These actions should be accompanied by initiatives to increase the use of sustainable forms of transport, through the integration of bicycle path networks and the increased use of environmentally-friendly vehicles in public transport. Implementing these investments should reduce the degree of transport exclusion, decrease car use as the primary means of transport, and restore the key role of public transport in ensuring internal cohesion within the functional area.
3. Undertake measures to improve the external accessibility of inner peripheries. This involves both promoting the use of e-services while minimising the likelihood of digital exclusion due to a lack of infrastructure or limited user competencies and enhancing the quality of transport infrastructure connecting inner peripheries with growth centres and socio-economic development hubs, while organising public transport with full multimodal utilisation.

The economy of inner peripheries has a series of deficits and dysfunctions that result from these areas' difficult economic and social conditions. They are determined by the size and quality of a local territorial capital and the negative consequences of the impact of megatrends, as well as transformation processes in areas disconnected from centres of growth and socio-economic development. The results obtained confirm the indicated characteristics of the economy of inner peripheries, which under the influence of global asymmetric development shocks show very diverse economic reactions, unfortunately mostly negative. We have determined that economic entities located in these areas have varying degrees of resilience, both in terms of size structure and industry. The observed changes that occurred as a result of the SARS-CoV-2 pandemic, later reinforced by the socio-economic consequences of Russia's aggression against Ukraine, confirm the emergence of shifts in value chains. It should be emphasised that these changes do not always have negative consequences for inner peripheries and in some cases can be used as a new opportunity for development. Nevertheless, the results of our study shows that there has been a significant deterioration of the financial situation in the study units, due to both the negative economic effects of the development shocks observed and the lack of a thoughtful and well-executed national financial policy that could effectively limit the scope and impact of these negative effects. We have found out that attempts to improve the unfavourable economic situation of inner peripheries encounter many obstacles. In the studied areas, serious difficulties are observed in the preparation and promotion of investment areas that could form the basis for attracting new employers. The situation in this regard is not facilitated by the increasing competition between individual municipalities that are part of the functional area, with the noticeable negative influence of the core city, associated with the 'washing out' of the surrounding areas. This results in both a lack of a common offer aimed at potential investors and a difficult to understand, and accept, lack of cooperation between special investment zones operating within the studied areas. We determined that changes in the economic structure, progressing in conditions of asymmetric crises, lead to an increase

in the mismatch of qualifications and competencies of residents in relation to the changing needs of employers. A very serious economic challenge for inner peripheries, commonly noticed by study participants, is energy transformation. The need to make changes regarding the structure of energy production sources, its distribution, and the need to reduce the energy intensity of the economy and households results on the one hand from the assumptions of the European Union's Green Deal policy, which assumes that Europe will achieve climate neutrality by 2050, and on the other hand from the economic consequences of Russia's aggression against Ukraine, which led to a fundamental increase in energy prices. The regularities we have identified once again confirm the need to use a territorially-oriented approach in programming and implementing development interventions provided, among others, within the framework of cohesion policy. The results obtained make it possible to formulate key recommendations that, in our view, must be taken into account in the catalogue of intervention actions aimed at supporting economic processes that should be undertaken as part of a more effective and efficient future cohesion policy:

4. Strengthen institutional cooperation at supra-local level within functional areas, which should be the basic subject and object of intervention activities in future cohesion policies. This requires creating legal conditions for supra-local cooperation and supra-local programming and implementing intervention actions, which should be a precondition for accessing future cohesion policy funds. This should serve as a foundation for integrating economic policies aimed at diversifying economic activities, using local resources with viable specialisations. It should also facilitate the preparation and promotion of a common and competitive offering for future investors and residents. Finally, it should enable the planning of a labour market policy and an educational policy adapting the skills and competencies of residents to the changing needs of employers.
5. Restore significant decentralisation of competencies and public finances through the introduction of appropriate legal regulations. In our view, decentralisation is the best means to

combat further erosion of democracy, which could threaten the European integration idea, leading to unforeseeable economic and social consequences. Its need also stems from the necessity to ensure conditions for multi-level governance, which is the foundation of an effective and efficient cohesion policy.

6. To create conditions for an effective energy transformation in less-developed areas like inner peripheries, it is necessary to prepare and implement territorial programmes aimed at decarbonisation and improving energy efficiency. These would allow for integrating planned actions and, at the same time, for identifying barriers and limitations to this process, which can be more easily overcome through cooperation at supra-local level within the boundaries of functional areas.

Inner peripheries according to our research are characterised by unfavourable demographic trends, a relatively low quality of human and social capital, and low living standards. In the post-SARS-CoV-2 pandemic period, negative demographic trends strengthened in the studied areas. The greatest threat in this regard, in the opinions of study participants, is the increasing migratory outflow, especially of young residents, which leads to a rapid depopulation, disrupting the demographic structure and leading to an increase in social burdens. The pandemic also caused an increase in the need for health security, which is certainly not fully guaranteed in inner periphery areas. The results obtained also indicate that despite the forced development of the use of ICT solutions under pandemic conditions, no lasting and significant changes were observed in the organisation of work, including the development of shared workspaces and the increasing importance of remote work. Information and communication technologies, however, found its way into improving access to services, primarily health and education. The positive changes indicated by the study participants include an increase in social activity resulting from the self-organisation of residents in the face of challenges created by the pandemic and the migration crisis related to Russia's aggression against Ukraine. However, these trends do not necessarily lead to clear improvements in the quality of life for internal peripheries' residents. Opinions in this regard differ, highlighting the need for

territorialisation of intervention measures, tailoring them to the specific needs of each area. What is worth noting is the commonly indicated increase in residents' expectations regarding the provision of basic services within their immediate neighbourhood (isochrone travel time up to 30 minutes), while simultaneously accepting access to higher-order services at the expense of longer travel or through e-services. An important element in improving living conditions must be meeting housing needs. Deficits in this area are one of the main development barriers. Our respondents have indicated that housing policy should not be solely focused on building homes for sale. In these conditions, the development of rental housing and rental housing with temporary ownership is arguably the right direction. A very disturbing fact, identified in the conducted studies, is a very low level of residents' social activity. As was mentioned, it improved under the conditions of direct impact of asymmetric development shocks, but no permanent changes were observed in this regard. Low social activity limits the possibility of engaging all stakeholders in the process of programming and implementing development actions, which directly reduces their effectiveness and efficiency. This also translates into the functioning of formal institutions whose quality is relatively low. The obtained results make it possible to formulate key recommendations for future cohesion policy interventions focused on residents and their quality of life:

7. Introduce operational principles in socio-economic and spatial planning to ensure that all residents have access to a basket of basic needs within a socially acceptable time frame. This should be realised through the development of a concept of spatial social minimum, defining a minimal catalogue of services that must be provided to residents in each location.
8. Provide systemic support for projects related to implementing housing policies that significantly and permanently improve the level of housing satisfaction. It needs to be pointed out that linking these efforts with promoting the residential attractiveness of areas with better environmental conditions and lower population density can both improve their economic situation and reduce the congestion in core growth and socio-economic development centres.

9. Support the functioning of informal and formal institutions. This involves both increasing the competencies required to address ongoing development challenges and creating conditions for increased awareness, social activity, and residents' engagement.

Discussion: Integrating research findings with literature and policy implications

The SARS-CoV-2 pandemic and its consequences have had a tremendous impact on the implementation of cohesion policy, introducing challenges that it had not previously faced. Experiences from previous crises show that different countries and types of areas absorb their effects in different ways (Martin 2010, Brakman et al. 2015, Capello et al. 2015, Auzina-Emsina, Ozolina 2022, Kowalski 2024). Both our findings and initial analyses of the consequences of the SARS-CoV-2 pandemic indicate growing spatial disparities (OECD 2020, Brada et al. 2021, Artelaris, Mavrommatis 2022). This underscores the importance of territorially-targeted cohesion policy, which should consider the territorial context and territorial capital (Ministers 2020).

Pandemic-related restrictions on mobility and interpersonal contacts affected in particular highly-urbanised areas characterised by a greater scale of economic activity. They were more exposed to the effects of the crisis than peripheral areas (Auzina-Emsina, Ozolina 2022, Kang, Wang 2021, 2023). In the peripheral areas we analysed, there is a clear delay and milder form of initial reaction to crisis phenomena. The literature indicates various concepts for shaping the post-pandemic urban space, which must consider issues of the quality of life, environmental protection, and smart mobility, combining individual and public transport and an efficient monitoring of traffic flows (Pinto, Akhavan 2021, Moreno et al. 2021, Marchigiani, Bonfantini 2022, Cerasoli et al. 2022). On the one hand, there are actions aimed at reducing the need for mobility within the concept of the 'proximity city' (Cerasoli et al. 2022) and the '15-minute city' invented by Moreno (2020), and implemented in some European cities. Implementing such concepts requires the creation of basic public service infrastructure with short

transport accessibility (within 15 minutes), which is intended to enable the fulfilment of residents' basic needs in close proximity to their homes, simultaneously reducing congestion, movement, and counteracting adverse climate changes. On the other hand, as our research indicates, modern technologies and digital accessibility can enable remote work, halting the depopulation of previously peripheral areas and changing development conditions. This fits into the broader concept of the 'remote city' which assumes the use of digital technologies to meet basic human needs. As Artelaris and Mavrommatis (2022) demonstrate, the pandemic may positively influence the development of polycentric spatial systems, which are the foundation of spatial cohesion, while simultaneously implementing the idea of spatial justice. Cohesion policy should not completely reorient itself towards supporting peripheral areas, as cities are the engines of economic development. However, it should reinterpret the role of rural areas and urban-rural relations, analysing the causes of their marginalisation and developing new, alternative ways to overcome development problems (Cotella, Brovarone 2020). At local level, particularly in peripheral areas, the use of relational proximity in the implementation of development processes encounters problems, which may indicate the need to consider a broader, supra-local perspective. This supports the need articulated in this article to consider development programming in functional areas rather than within administrative units, taking into account urban-rural relations. This could positively impact the improvement of the resilience of entire economic systems, particularly long-term resilience, which is crucial for overcoming the consequences of shocks such as the SARS-CoV-2 pandemic.

The results of our research show that the economic structure, particularly diversification and labour market flexibility, has an impact on the resilience of the socio-economic system. The research conducted in the USA by Kang and Wang (2023) does not identify a significant impact of economic structure or regional specialisation on the consequences of SARS-CoV-2 for the economy and building regional resilience, although it is certainly important in the long term and during the recovery phase (Martin 2011). Other American studies (Bartik et al. 2020) indicate that the influence of the pandemic on business could

be observed even in the short term, in the form of significant reductions in operations and employment, with the scale of business closures increasing the longer the crisis lasted. Larger companies tended to have greater capacity to accommodate crisis phenomena and survive than small businesses whose financial capabilities allowed for the closure of operations for only a few weeks. Economic diversification undoubtedly positively influences the reduction of risk concentration. As analyses of responses to older crises indicate (Martin et al. 2016, Ray et al. 2017), the quality of human capital, specialisation, and knowledge accumulation should be important for long-term regional resilience to external shocks (Jagódka, Snarska 2022). This typically favours core areas, concentrating a more qualified workforce, simultaneously offering a higher level of education, particularly specialised education, and greater access to capital, which can finance innovations and increase the level of adaptation to crisis phenomena. This can lead to a change in the economic structure, which will be better adapted to post-crisis reality (Boschma 2015). The industrial sector exhibits a more pronounced response to crises, with a longer recovery process compared to the services sector (Ray et al. 2017). Conversely, the share of agriculture strengthens resilience in rural regions (Giannakis, Bruggeman 2020). Moreover, a higher degree of economic diversification increases the likelihood of milder crisis impacts (Giannakis, Bruggeman 2020, Lee et al. 2022, Angelopoulos et al. 2023), underscoring the necessity to support initiatives that promote economic diversification. Sectors such as accommodation, food services, arts, entertainment, recreation, educational services, tourism, and transport experienced greater adverse effects during the SARS-CoV-2 pandemic compared to other industries (Bartik et al. 2020, Auzina-Emsina, Ozolina 2022, Kang, Wang 2021). This corroborates our findings that industries based on raw materials, agricultural regions, and services reliant on natural resources exhibited weaker crisis impacts and higher regional resilience. In the context of the pandemic, and particularly in analysing the consequences of the war in Ukraine, a longer time series will be necessary to accurately capture the long-term effects.

Local governments play an important role in overcoming the effects of the pandemic. Owing

to their direct proximity to the local community, they are the first to respond to crisis situations, and pandemic experiences indicate that local governments have been extremely innovative in this regard (Dzigbede et al. 2020). In such a situation, the ability to generate adequate financing opportunities is crucial, which should primarily have their sources in own revenues, while many local governments rely on earmarked grants intended for specific sectoral activities (UNCDF 2020). Various researchers (Sabirin et al. 2022, Alibašić, Casula 2023) emphasise the importance of joint management, indicating that close cooperation between local governments and central (state) governments increases resilience to pandemic challenges. Other authors highlight the need to include actors from other sectors to create a multi-level and multi-sectoral crisis management system (Milly 2023).

Our recommendations, based on robust analyses and research, offer specific guidelines for shaping cohesion policy that is more resilient to future crises and better meets the specific needs of peripheral areas. Implementing such strategies can contribute to sustainable and equitable development that will benefit both core and peripheral areas, ensuring socio-economic balance and integrity in the long term. In the quest for better solutions for future cohesion policy, several key recommendations should be considered. Firstly, cohesion policy must acknowledge that trends in climate, demographics, geopolitics, and technology have shifted markedly because of the financial crisis, the SARS-CoV-2 pandemic, and Russia's invasion of Ukraine. These events have triggered a resurgence of inflation and raised concerns about supply security and the availability of food, energy, and raw materials (OECD 2023, Ninth Report... 2024). In this altered landscape, development interventions aimed at peripheral regions must cultivate their long-term resilience, leveraging their inherent resources to gain new competitive advantages (Lange et al. 2021) and recalibrating global and local connections (MacKinnon et al. 2022). This necessitates a departure from previous methods of programming and executing development initiatives, rendering them more intricate and demanding a heightened level of integration (Pike et al. 2023). Secondly, cohesion policy must foster development opportunities for all, combating exclusion

and economic poverty among residents (Forging a sustainable... 2024). Every individual should be provided with access to general services and basic infrastructure, a task particularly challenging in sparsely-populated or economically declining areas where costs escalate and efficiency diminishes, posing a mounting challenge to spatial social justice (Fritsch et al. 2023). This requires implementation of non-standard solutions that not only use product innovations, such as demand-responsive transport, but also fully leverage organisational innovations, such as organisational and tariff integration of public transport, and social innovations, such as increased participation in seeking socially acceptable solutions for disadvantaged areas, including peripheral ones (OECD 2023). Thirdly, strengthening local capabilities to respond to development challenges becomes essential, which is apparent not only in peripheral areas with deficiencies in territorial capital and a lack of 'critical mass' for local development, but also in economically stronger areas that fall into developmental traps (Diemer et al. 2022). To effectively counter this, a thorough understanding of the causes of development challenges and the possibilities for overcoming them is necessary, using both local resources and forming new functional relationships with the wide engagement of all stakeholders (Rodríguez-Pose et al. 2023). Fourthly, it is necessary to break down barriers to the influence of growth and development poles on their surroundings (Floerkemeier et al. 2021), while counteracting the adverse consequences of agglomeration effects that occur both in core areas (congestion) and surrounding areas (a vicious cycle of stagnation and decline) (OECD 2023). This should involve greater use of functional areas as entities programming and implementing intervention activities in the form of supra-local initiatives that create an environment for the development of functional relationships and improve the efficiency of the intervention provided. Fifthly, more intensive use of the local level as the architect and executor of intervention activities is necessary (Farole et al. 2018). This is not possible without providing the technical assistance necessary to build the institutional capacities of the local level (Forging a sustainable... 2024), whose deficiencies prevent full participation in activities, responsible multi-level actions, and ultimately the integration of the process,

documents, and consequently the outcomes of development planning in territories with diverse resources (Pinheiro et al. 2022).

Conclusions

Despite the commendable directions pursued by EU cohesion policy through a territorially-oriented approach, the efficacy and efficiency of this policy in reducing development disparities remain contentious in the face of macroeconomic shocks, such as the SARS-CoV-2 pandemic and the war in Ukraine. These dysfunctions disproportionately impact peripheral regions, which lack the necessary capacity to stabilise their economies and alleviate growing social tensions. Consequently, it is imperative to reassess the approach and enhance the instruments of EU cohesion policy to ensure that its interventions more effectively address the specific needs of diverse territories.

The results of our research on inner peripheries, operating under the unique conditions of the Polish laboratory of EU cohesion policy, underscore the need to enhance the capacity to respond to development challenges at supra-local level, corresponding to the reach of FUAs. In this regard, building local and supralocal institutional capacities is crucial to enable effective programming and implementation of developmental actions, particularly in terms of creating opportunities for complementary use of local resources on supra-local scales. This approach should eliminate competition for resources and foster coherent supra-local socio-economic systems based on the potentials of various functionally connected areas. Strengthening the ties between urban and rural areas should create conditions for more effective spillover of development impulses to non-urban areas, enhancing the role and significance of smaller towns and rural areas. We see potential in this approach for more efficient use of public funds allocated for development intervention, as well as a greater impact of the implemented actions on creating development opportunities for all residents.

Our findings lead to the conclusion that for the effective functioning of such supra-local systems, especially in the case of internal peripheries, key factors include the availability of an

efficiently operating transport system and high-speed Internet infrastructure. These should ensure access to basic public services, connectivity to more developed regional centres offering diverse employment opportunities and higher-level services, and a better work-life balance, which in turn improve the life quality of local communities. The economy of the analysed supra-local socio-economic systems must strengthen its resilience to the consequences of successive asymmetric shocks and accelerate adaptation to changing market and technological conditions. This will be facilitated by the diversification of the economic structure, effective territorial marketing, and the cultivation of a strong local identity. A significant challenge for the economies of such systems exhibiting characteristics of internal peripheries is the need to adapt to climate change. In this regard, actions must be strengthened at supra-local level to prepare and implement decarbonisation programmes, improve energy efficiency, invest in renewable energy sources, and create purchasing groups to mitigate the effects of the energy crisis. The greatest social challenge faced by these areas is depopulation. Improving the situation in this regard requires attention to the quality of education, access to childcare services (nurseries, kindergartens), flexible working hours, and the creation of conditions that would enable the combination of professional duties with child-rearing. Additionally, the implementation of an integrated supra-local housing policy, along with ensuring access to social, educational and health services and improving public safety, can significantly increase the attractiveness of these areas, especially for young families.

Our research covered the period immediately following the end of the SARS-CoV-2 pandemic and the onset of military actions in Ukraine, allowing us to capture only short-term effects. Continuous monitoring of the consequences of absorbing asymmetric shocks and evaluating the effectiveness of implemented interventions in various types of peripheral areas is necessary. It is also important to establish a systematic assessment of the potential and processes for strengthening supra-local institutional and social competencies. EU cohesion policy must be more diverse and tailored to the specific needs of local territories, with greater emphasis on building supra-local capacities to integrate actions and

resources within functional areas. Only such an approach can effectively reduce spatial development disparities, halt depopulation trends, and foster sustainability.

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Authors' contribution

PC: conceptualisation, methodology, investigation, writing – original draft, funding acquisition, project administration, supervision; CA: methodology, investigation, writing – original draft; AD: methodology, investigation, data curation, writing – original draft; MP: conceptualisation, methodology, investigation, writing – original draft, writing – review & editing; BS: methodology, investigation, data curation, writing – original draft, writing – review & editing.

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