

The Double Disadvantage of rural place-based policies

STINE LIEN & ULLA HIGDEM



Lien, S. & Higdem, U. (2025) The double disadvantage of rural place-based policies. *Fennia* 203(2) 182–198. <https://doi.org/10.11143/fennia.147442>



From the 1990s onward, there has been a notable change in regional policy particularly in Europe and the United States, towards place-based approaches, which reduced the state's redistributive role and increased regional responsibility. Place-based policies, emphasizing tailored development strategies for specific contexts, have since gained attention. Despite extensive scholarly attention on place-based policies, the literature predominantly focuses on urban and metropolitan areas, leaving a gap in understanding their applicability to rural regions. This study conducts a scoping literature review of research on rural place-based policy for innovation and economic development from 2008 to 2022. It explores how rural place-based policy is understood and assesses its relevance for rural contexts. The review identifies a double disadvantage for rural regions, stemming from a lack of agglomeration and institutional capabilities, which highlights the need for new policies to address these challenges. To better suit rural regions, place-based policies must move beyond the urban-centric smart specialisation (S3) model to embrace strategies that strengthen rural institutional contexts, recognize the limitations of agglomeration, and focus on sustainable, inclusive development tailored to the specific needs and potentials of rural areas. Such transformative policies should address future challenges by recognizing peripheral regions as valuable assets, emphasizing that development does not necessarily require growth. The study concludes with an agenda for future rural policy development, emphasizing the necessity of genuinely tailored place-based approaches for rural areas.

Keywords: rural development, regional development, regional planning, place-based policy, smart specialisation

Stine Lien (<https://orcid.org/0009-0003-3668-4096>), Ulla Higdem (<https://orcid.org/0000-0003-3143-0153>), Department of Organisation, Leadership and Management, University of Inland Norway. E-Mail: stine.lien@inn.no, ulla.higdem@inn.no

Introduction

Throughout the 20th century, significant policy shifts were observed, from Keynesianism and a strong belief in the state's regulatory power to the deregulation of markets and innovation as a driving force for development and value creation. Reducing the state's role and deregulation led, among other things, to increased international competition and a focus on the private sector as a driving force in economic development, which in turn led to place being an important determinant of economic success (Beer *et al.* 2020). Following these changes, there can also be seen what has been called a paradigm shift in regional policy (Garcilazo 2011), from a spatially blind to a place-based regional policy, which reduced the state's redistributive role, giving the regions greater responsibility (Bukve & Amdam 2004). Place-based policies can be viewed as the next step in this development, from regional policies focused on a top-down resource redistribution to more bottom-up policies relying on regional resources.

Place-based policies focus on specific cities, localities, or regions, acknowledging that context matters and advocating for development approaches tailored to each place's needs (Beer *et al.* 2020). The so-called Barca report (Barca 2009) concluded that taking place into account is the best way to achieve European Union (EU) economic and social goals, and has since received significant attention in practical policy development and academia, both within and outside the EU. Several articles, taking different points of departure and within different disciplines, have focused on how place-based policy promotes economic development and innovation (McCann 2019). From a regional innovation systems perspective (Isaksen & Jakobsen 2016; Isaksen & Trippel 2016; Asheim *et al.* 2019), taking context into account and the focus on regional actors and utilisation of regional resources and advantages is a given. Building on regional assets led to the smart specialisation (S3) concept (Balland *et al.* 2019), possibly the most famous example of place-based policy.

Although these policies have received much scholarly attention (e.g. Garcilazo 2011; Grillitsch & Asheim 2018; Morisson & Doussineau 2019), the literature has been concentrated on urban and metropolitan areas. Despite the increased focus on challenges with depopulation and shrinking societies (Albrecht *et al.* 2023; Hagen *et al.* 2023), to our knowledge, no current articles are looking at whether place-based policies are suitable for rural regions. We have therefore conducted a scoping literature review of the research published on the development of place-based policy for rural innovation and economic development, including smart specialisation strategies, which have played a central role within this period. The article aims to better understand how place-based policy has evolved since the 1990s, and discuss this within rural contexts and how this policy fits rural regions. We then outline a starting point for current policies and an agenda for future rural policy development where the taken-for-granted growth paradigm focused on exploiting growth potential is contested (Pike *et al.* 2007; Pike *et al.* 2017; Leick & Lang 2018; Syssner & Erlingsson 2023).

The review was conducted during the last months of 2022 and is thus confined to articles published until 2022. Consequently, despite their considerable relevance, the review does not encompass more recent concepts and documents, for example, on the reforms of Cohesion Policy (European Commission 2024) or Partnerships for Regional Innovation (European Commission 2023). Newer publications like Morales and Dahlström (2023) indicate sustainable smart specialisation strategies (S4) as a way to green path renewal and there is a call for a paradigm shift away from traditional growth and competition models (Hagen *et al.* 2023; Syssner & Erlingsson 2023). These important perspectives contribute to the discussion of the way forward for rural policy development.

First, we review the existing literature to describe how it has contributed to understanding and developing place-based policies. Then, we discuss the rural-specific relevance to further understand how these policies fit rural regions, and finally how they can be further developed. This process was led by two research questions: 1) How is rural place-based policy understood in the academic literature? 2) According to the literature, how do these policies fit rural regions?

Section two presents the methodological approach, including a detailed description of the review process, search strategy, and selection criteria for identifying and selecting the included literature. Section three is an overview of the literature on how place-based policy is understood and how shifts in rural policy development have evolved. Section four is a discussion of whether these policy models fit rural regions, leading up to a conclusion in section five where the double disadvantage is elaborated.

Literature review as a methodological approach

To examine how place-based policy is understood in rural contexts, including why and how it has developed over recent decades, we have conducted a scoping literature review (Booth *et al.* 2022). The goal was to map the knowledge base of the rural place-based policy field, focusing on key concepts and definitions, and how research has been conducted in this field. This was done to provide an overview of the field and help synthesise topical evidence (O'Brien *et al.* 2016). Since our review is focused on how the place-based policy literature developed over time and how it fits a specific context, a scoping review is appropriate and likely to be of sufficient depth and breadth (Arksey & O'Malley 2005; O'Brien *et al.* 2016). Breadth is particularly central since diversity in geography and policy areas is desirable. Since we are looking at how rural place-based policy is understood within the academic literature and how it fits with rural regions, both theoretical and empirical contributions were included.

Following the proposed methodological framework of Arksey & O'Malley (2005), we started out by identifying relevant search terms and defined a search string based on our research questions. The search terms place-based policy/policies, place-sensitive policy/policies, economic development, innovation, regional, rural, peripher* (for example, all variations that include peripher), space, and spatial were organised into four elements to create a search string, as shown in Table 1. These four search elements include the aspects we are interested in studying as they capture both the spatial element and the developmental element of the policies we are interested in, and they also limit the search to only include the relevant context. We are aware that including other elements and search terms could have provided other information and insight. However, the search was limited to the mentioned elements as the aim of the review is to map the literature explicitly on place-based policy in rural areas and how this has developed and evolved. Element 2 could have included terms measuring more concrete aspects of development and innovation, capturing other values like well-being, green transition, and sustainability. Focusing on economic development and innovation with place-based policy in rural and/or peripheral regions, however, ensures the aforementioned breadth of the scoping review (Arksey & O'Malley 2005).

Table 1. Search elements.

Element 1	Element 2	Element 3	Element 4
Place based policy	Economic development Innovation	Regional	Space
Place-based policy		Rural	Spatial
Place based policies		Peripher*	
Place-based policies			
Place sensitive policy			
Place-sensitive policy			
Place sensitive policies			
Place-sensitive policies			

The search was conducted in Scopus and Web of Science databases, using the four elements included in the following search string: Element 1 AND Element 2 AND Element 3 AND Element 4. OR was used within every element, for example, Regional OR Rural OR Peripher*. In both databases, the search included abstracts, keywords, and titles, and the results only include peer-reviewed literature.

After the initial searches, the last element, space or spatial, was excluded due to very few relevant results. The final search string thus became: TITLE-ABS-KEY Place based policy OR Place-based policy OR Place based policies OR Place-based policies OR Place sensitive policy OR Place-sensitive policy OR Place sensitive policies OR Place-sensitive policies AND Economic development OR Innovation AND Regional OR Rural OR Peripher*.

The search resulted in 57 documents in Scopus and 61 in Web of Science. There was naturally an overlap between the database results, and several references appeared in both searches. After sorting and filtering using Excel spreadsheets, 75 unique documents were included and analysed.

The search string quality in each database was evaluated by sorting, filtering, and qualitatively assessing the search results. The document lists included articles published in academic journals from 2008 to 2022, with a significant increase in the number of publications since 2016. The search resulted in a geographical spread among the publications, but most of the studies have been conducted in Europe, followed by the United States of America (USA) and China. Articles and authors we expected to find before conducting the search also appeared on the list. The search string was thus considered satisfactory.

The next step was to systematically read the documents to answer the research questions presented in section 1. To systematize the reading and findings, we created a table into which these elements were entered: the article bibliography; how place-based policy was understood and used; whether the article made a theoretical and/or an empirical contribution; and which policy area(s) were addressed. The table was then used as a basis for the analysis of the development of place-based policy in the literature since 2008. Unlike a systematic review, the scoping review does not seek to synthesise evidence or aggregate findings from different studies (Arksey & O'Malley 2005). Our analysis is thus focused on charting information from the studies included to provide an overview of the literature, including the number of publications, geographical distribution, and year of publication, and subsequently conduct a thematic analysis of the content guided by the research questions. The analysis focused on how place-based policy has been developed and evolved through the understanding of the concept in the academic literature, and the theoretical and empirical contributions from the included literature with specific attention to advantages and disadvantages for rural or peripheral regions.

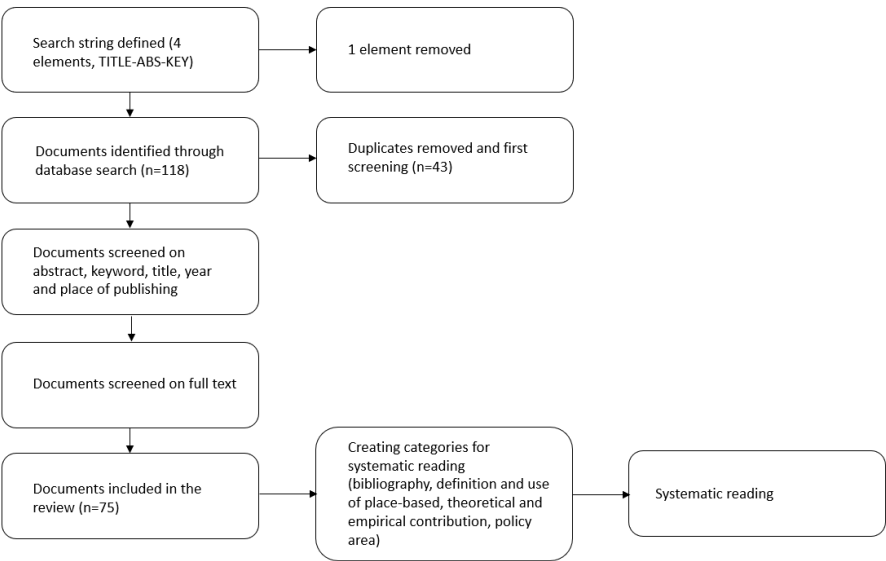


Fig. 1. Scoping literature search strategy.

Understanding and development of rural place-based policy in the academic literature

From spatially blind to place-based policies

One article — Barca, McCann and Rodríguez-Pose's (2012) *The Case for Regional Development Intervention: Place-based versus Place-neutral Approaches* — made an especially important impact on understanding rural place-based policy for regional development and is cited in most of the articles in our scoping review. That paper was based on five major reports published in 2009 and 2010, aiming at “rethinking development strategies from scratch” (Barca *et al.* 2012, 137), and was a response to the challenges of globalisation and increased regional disparities. According to Barca, McCann and Rodríguez-Pose, among the five reports, only one (Coulibaly *et al.* 2009) advocated a spatially blind strategy. The rest used a place-based approach (Barca 2009; OECD 2009a, 2009b; CAF 2010). Given the major impact of these scholars' understanding of place-based policies, Barca, McCann and Rodríguez-Pose (2012) also form the basis of our study.

Spatially blind strategies are presented as

policies that are designed without explicit consideration to space as the most effective way of generating efficiency, guaranteeing equal opportunities, and improving the lives of individuals wherever they live and work (Coulibaly *et al.* 2009, XXIV in Barca *et al.* 2012, 138).

In contrast, place-based approaches take a fundamentally different position:

Space matters and shapes the potential for development not only of territories but, through externalities, of the individuals who live in them. Consequently, development strategies should not be space-neutral, but, (...), place-based, and highly contingent on context. The place-based approach has two fundamental aspects. First, the place-based approach assumes that geographical context really matters, whereby context here is understood in terms of its social, cultural, and institutional characteristics (...) Second, the place-based approach also focuses on the issue of knowledge in policy intervention. Who knows what to do where and when? (Barca *et al.* 2012, 139)

These authors further argue that

the starting point of a place-based development policy is the idea that most of the knowledge needed to fully exploit the growth potential of a place and to design tailored institutions and investments is not readily available - whether held by the state, large corporations, or local agents - and must be produced anew through a participatory and deliberative process involving all local and external actors (Barca *et al.* 2012, 147).

This understanding of place-based development policy, focusing on geographical context, including social, cultural, and institutional characteristics and knowledge, has been widely adopted and applied by other scholars.

Although Barca, McCann and Rodríguez-Pose (2012) based their analysis on four reports published by different actors, the most cited report by far in understanding and defining place-based development or policy has been that of Barca (2009). Several authors refer to this report, commissioned by the EU to assess the EU cohesion policy, as the Barca Report. Šipikal and colleagues (2017, 16) lean on this report when describing,

a gradual shift from policies aiming at reducing disparities towards those aimed at strengthening regional and national competitiveness, with a focus on exploiting regional potential to contribute to national growth.

This has been identified by others, and by some referred to as a clear paradigm shift in place-based policies (Garcilazo 2011), and can be seen as a reaction to the previous decades' isomorphic approach to regional development, in which interventions mimicked one another and failed to consider place (Rodríguez-Pose 2013). Based on extensive national, metropolitan, and rural territorial reviews, as well as regional innovation reviews, Garcilazo (2011, 466) concluded that policy responses that can address negative externalities in agglomeration economies were a critical tool for national economies, “given their large contribution to aggregate growth” asserting that place-based policies are the best

way to accomplish this. It is argued that rural and often lagging regions must become independent of external measures to address their challenges and avoid,

potentially becom[ing] a drag on aggregated growth and represent a future cost. (...). Instead, policies should aim at realigning these regions into a sustainable growth path, one based on mobilising their endogenous sources of growth to avoid potential future remedial costs which can be costly to national budgets (*ibid.*, 466).

The older and newer regional policy paradigms are illustrated by Garcilazo (2011), showing the shift in objectives from compensating disparities to exploiting underutilised potential, with a new focus on functional regions rather than administrative units. With this new toolset, the policies included more positive notions. Traditional regional policies were about compensating for lagging regions, while the new paradigm emphasised building on the benefits and assets of each place. In this manner, the focus of the new paradigm was on transforming lagging regions into competitive regions.

Table 2. Older and newer regional policy paradigms (Garcilazo 2011, 461)

	Traditional regional policies	New paradigm
Objectives	Balancing economic performance by temporarily compensating for disparities	Tapping underutilized regional potential for competitiveness
Strategies	Sectoral approach	Integrated development projects
Tools	Subsidies and state aid	Soft and hard infrastructure
Actors	Central government	Different government levels
Unit of analysis	Administrative regions	Functional regions
	Redistributing from leading to lagging regions	Building competitive regions to bring together actors and targeting key local assets

Several articles on place-based development display a positive belief that all places have the resources and potential for growth and positive development and that challenges are thus related to the utilisation and exploitation of each place’s specific potential (Barca 2009; Varga 2017; Morisson & Doussineau 2019). To unlock this potential, collaboration among public, private, and civic sectors is needed “to create awareness for regional assets, to develop consensus on priorities, and to coordinate exchanges of resources and cooperation in pursuit of common goals” (Glückler 2020, 234).

The place-based approach posits that it is crucial for a region to have economic policies that leverage its strong characteristics and complement its weak ones. Place-based policies are built on the idea of identifying and utilising embedded local knowledge, as opposed to space-neutral policies with universal coverage in every territory (Šipikal *et al.* 2017). In addition to knowledge, a region’s economic development also depends on its social relations and subjective emotions (Zhu *et al.* 2023), underlining the importance of institutions (Rodríguez-Pose 2013). According to this view, the

fundamental tenet of the place-based approach is that place matters, which can be conceptualised as a blend of territorial and relational imaginaries (Pugalis & Bentley 2014).

After reading and analysing 75 articles on place-based policy in rural areas, of which many are based on empirical studies from different contexts, we have observed that what is meant by region is not always clear. Our study shows that the policies are implemented and studied at different levels; the EU Nomenclature of Territorial Units for Statistics (NUTS) level 3 is sometimes referred to as a region (small regions) (Bennat & Sternberg 2020), other times, region refers to what is called functional regions, where administrative boundaries are subordinate (Kline & Moretti 2014; Pugalis & Bentley 2014), or it may be different types of regions based on shared characteristics like industrial structure and population (Tödtling & Trippl 2005; Grillitsch & Hansen 2019). There seems to be a multitude of regions, and we have not been able to identify any clear definitions of region based on this literature review. The variation in the use of the term region entails a challenge for policymakers when designing place-based policies based on, for example, S3 principles.

Verheij and de Oliveira (2020) expanded on the work of Barca, McCann and Rodríguez-Pose (2012) by adding time to the development equation, asserting that the place-based school of thought is especially advantageous in times of rapid development and transition, as choices made today under certain circumstances may have long-term development impacts. This relates to the recurring focus on long-term strategies based on regional characteristics and working with “functional regions” or “functional economic geographies” (Pugalis & Bentley 2014, 563) instead of one-size-fits-all strategies.

Place-based development also requires multilevel governance and external interventions (Barca 2009), with a universal feature being some degree of subsidiarity, and potentially even a moral preference for the local (Hart & Connolly 2022). We identified several examples in which specific policy measures were labelled place-based in a rural or lagging context, such as targeted tax breaks or infrastructure development for underdeveloped regions (Shenoy 2018), including attracting manufacturing plants to a specific place (Kline & Moretti 2014).

Ghorbani and Brenner (2021) state that this location-based policy perspective, as established in the literature, considers preconditions and dynamics as well as institutional and industrial settings. It assumes that policy measures are path-dependent, rendering location-based policy necessary in rural areas. Referring to the innovation systems literature, and that innovation is unevenly distributed across territories, Hervás-Oliver and others (2021) also stressed the need to consider place when developing innovation policies. Innovation, being a set of systemic and spatially bounded processes (Cerulli *et al.* 2022), further strengthens that argument. The innovation systems approach is also associated with Smart Specialisation strategies (S3) (Foray *et al.* 2009). In the EU, research and innovation strategies for S3 (RIS3) continue to follow the place-based regional policy approach, including elements of key sectors’ thinking based on earlier regional innovation system approaches (Valdmaa *et al.* 2021).

These new place-based policy rationales are centred on the development of explicit regional development strategies, employing local knowledge — again, such as S3 strategies — to guide policy interventions (Morisson & Doussineau 2019). A key characteristic of these strategies is the necessary engagement of multiple actors in their design and implementation, which demands new forms of governance and enhanced regional governance capabilities (Arrona *et al.* 2020). The emergence of the S3 concept (Foray *et al.* 2009) can be seen as a place-based (innovation) policy (Uyarra *et al.* 2018). S3 strategies provide a policy framework or platform for promoting and implementing broad-based innovation policy, which the EU has implemented at scale (Asheim *et al.* 2011).

Acknowledging the large variations in regional preconditions and policy challenges in promoting innovation, competitiveness, and growth is a common point of departure for understanding place-based policy. Grillitsch and Asheim (2018) argue that this means that innovation policy should be place-based and region-specific. Referring to Barca, McCann and Rodríguez-Pose (2012), Camagni and Capello (2013), and Tödtling and Trippl (2005), it is stated that

Smart specialization strategies represent an explicit, place-based approach, emphasizing prioritization and selection through non-neutral, vertical policies, and thereby acknowledging the large variations in regional preconditions and policy challenges as regards promoting innovation, competitiveness and growth (Grillitsch & Asheim 2018, 1639).

This focus on place and the objective of tapping underutilized regional potential presupposes that rural regions have the resources and capabilities to do so. This assumption is problematic as we, for example know that rural regions often are characterized by thin regional innovation systems (Asheim *et al.* 2019) and disadvantages due to weak structural preconditions (Hassink *et al.* 2019). These may be obstacles that make it difficult to succeed with place-based policy in rural regions when left with their own resources to develop.

Rural place-based development processes

Place-based policies have a long history in some countries. They are widespread in the USA, tracing back, according to Kline and Moretti (2014), to the well-known 1933 Tennessee Valley program, which hastened industrialization and provided lasting benefits through manufacturing jobs. The agricultural sector shrank when subsidies stopped, while manufacturing did not. This is explained by the powerful agglomeration dynamics of the manufacturing industry, which are missing from the agricultural sector (Kline & Moretti 2014).

Furthermore, due to the current agglomeration effects of capital, goods, and people, Barca, McCann, and Rodriguez-Pose (2012, 136) concluded that “globalization has made space and place more rather than less important” and that, “the specific institutional arrangements and constructs of any space are increasingly the filter through which economic activity takes hold of different territories” (*ibid.*, 137). However, they also state that the development policy has not shifted, consistent with changes in scholarly understanding.

The implementation effects of place-based rural policy have been discussed across large global sectors. Despite gaining significant attention, little place-based strategy research was performed in non-metropolitan regions before 2014 (Pugalis & Bentley 2014). Šipikal and colleagues (2017) showed that spatially blind policy was also implemented in a way that differed territorially from their support distributions in the Czech Republic and Slovakia. Yet, how support was distributed was based not only on a fair assessment but on hidden factors such as corruption and lack of assessment competence. Variations in institutional arrangements and administrative capacity seem to have limited the potential of bottom-up policy development and the scope for sophisticated strategies (Bachtler & Begg 2018).

A year later, Bramwell, Hepburn and Wolfe (2019, 272) concluded their empirical study by stating that place-based policies are by nature experimental because, “they must be able to flexibly adapt according to policy learning and practitioner input from a wide variety of local contexts” and, more importantly, that place-based innovation policy is a complex, variable blend between top-down policy and bottom-up networks. That is, place-based policy cannot, of course, be entirely bottom-up driven or top-down implemented.

Shenoy (2018) showed that it is possible for a place-based program to successfully create economic growth, even in an institutional context as relatively weak as India and its regions. However, this has been critiqued. A study of regional core growth programs in eastern Germany cast doubt on the effectiveness of such place-based programs (Falck *et al.* 2019). Cerulli and others (2022) suggested what several others have also found, that different local contexts and policy designs can spur different effects. Consistent with this, Takano and Okamuro (2021) studied local innovation policies in Japan to find that they vary, reflecting different regional industrial structures and geographical positions. In western China, the place-based Western Development Strategy for Technological Innovation was implemented in 2001 (Li & Yu 2022). As a measure of innovation, they showed a significant decline in patents granted, and the program did not enhance development. Lu, Liu, and Song (2022) found that another Chinese government program, addressing resource innovation-exhausted cities, led to similar results; the program in fact had a significant negative impact on regional innovation. Of course, institutional and fiscal mechanisms in China may explain how strong national state intervention, lacking sufficient attention to local and regional governments, may distort markets and produce negative results (Lu *et al.* 2022).

A main challenge for this implementation type (for example, the dominant narrative from urban economics) is the institutional place-sensitive policies in lagging and/or declining areas (Rodríguez-Pose 2018).

Elite capture of rents has often derailed past intervention. Turning a blind eye to corruption, clientelism, nepotism, freeriding, and rent-seeking can only increase the widespread perception that any intervention is aimed at benefiting the ruling elites, putting further wind in the sails of populism (*ibid.*, 32).

Barbero and Rodríguez-Crespo (2022, 311), addressed the contributions of poverty in regions they call 'technological, institutional, and geographical peripheries'. Studying 229 European regions during 2007–2018, they found that

the diffusion and quality of information and communication technologies foster economic development and decrease the risk of social exclusion. A similar effect is found for institutional and geographical factors, and argues that these three determinants are critical to set up place-based policies.

Many scholars have addressed the fact that interventions aimed at 'building on local strengths' may well exacerbate geographic productivity and income inequalities (i.e. Mealy & Coyle 2022). Mealy and Coyle (2022) advocated for new, non-incremental policy approaches in The Organisation for Economic Co-operation and Development (OECD) countries. Yet, they did not suggest which interventions would set rural areas onto a different trajectory to more promising opportunities.

Studies of rural place-based development processes here reveal another obstacle to realizing potential in rural regions, namely the lack of agglomeration effects and a critical mass of capital, goods, and people. Innovation and economic development tend to be portrayed as an urban phenomena, and innovation in rural areas is argued to be overlooked in the literature (Shearmur 2016). This bias towards urban areas makes it challenging to transfer knowledge about innovation and development into place-based policies and unlock the potential for growth and development in rural areas.

Smart specialisation as a place-based policy

Arguments supporting EU-level place-based policy have been enshrined in the concept of smart specialisation strategies (S3) (Peck *et al.* 2013), which proposes a policy framework prioritising enhancing the scale and effectiveness of regions' entrepreneurial and innovation processes. In the UK, Peck and others (2013) concluded that policy strategies that consider regional or local consequences and responses to policy intervention are more likely to create the desired social, economic, and cultural outcomes in communities, also noting the regional-level's (for example, subnational) significance in knowledge production and dissemination and the application of new ideas and innovation. They state that "national and international development, therefore, is best achieved by mobilizing regional assets and synergies between regions through integrated regional policies" (*ibid.*, 383). In an S3 strategy, both intra- and inter-sectoral knowledge spillovers must be sought (for example, the socio-economic context). Thus, understanding the multilevel connections and engaging local entrepreneurial processes and key actors in enterprise partnerships is central (*ibid.*).

The framework of S3 has spread outside the EU and has been applied in non-member countries in Europe and even some regions outside Europe¹. S3 includes identifying, selecting, and promoting regional potential through the standardised entrepreneurial discovery process (EDP) (Foray *et al.* 2009; McCann & Ortega-Argilés 2019). Both S3 and EDP are based on the theory of related variation and economic upgrading through diversification (Boschma & Gianelle 2014; Balland *et al.* 2019), which can arguably be obtained by following three fundamental steps: identifying thematic priority areas; translating these into roadmaps to develop transformative activities; and implementing the activities with action plans (Foray *et al.* 2020).

The introduction and implementation of the S3 model have naturally received scholarly attention. In 2018, Uyarra, Marzocchi and Sorvik (2018) claimed, consistent with other scholars, that the S3 characteristics of the EDP and an 'outward looking' orientation (for example, collaborating regions) have thus far seen limited implementation. They suggested that

while the value of collaboration and the options offered by the forward-looking feature of S3 are widely recognized, lack of political commitment, relational inertia and complexities associated to joint programming and availability of research and innovation instruments are hampering the development of long-term collaborations between regions in EU (*ibid.*, 2346).

They asserted that, thus far, the S3 seems a somewhat 'incomplete' industrial policy. Bennat and Sternberg (2020) posed a critique of German research and innovation policy for being too narrow, arguing that enhancing combinatorial knowledge dynamics requires a wide set of actors with different knowledge bases and acknowledging different innovation modes. In China, an empirical analysis suggested that local economic characteristics depend on how spatially targeted programs affect the local economy (Barbieri *et al.* 2020).

Universities' knowledge bases' position in smart specialisation strategies has shown that promoting proximities on technological and organisational similarities between the firm and university partners is constructive (Johnston *et al.* 2021). Thus, it is also crucial to exploit global knowledge networks to avoid lock-in.

Valdmaa, Pugh and Mür (2021) critically examined strategic S3 implementation in Estonia and Wales, confirming difficulties with EDP, which depends on competencies and familiarities of existing policy-making communities. Implementation was top-down by the central government, an approach that, paradoxically, "failed to consider place-specific needs and weakened the research, development, and innovation policy-making capabilities of local governments" (Valdmaa *et al.* 2021, 692). A tech bias is another shortcoming outside countries' capital cores, which lack high-tech or research and development (R&D) intensive economies. Research and innovation strategy for smart specialisation (RIS3) efficacy toward reviving so-called lagging regions has been weak, concluded Barzotto and colleagues (2020). Other scholars have also found that S3 projects tend to be concentrated in urban areas, where the necessary critical mass of resources (for example, population, financial, organisational) facilitates innovation activities (Mieszkowski & Barbero 2021).

S3 is expected to be a highly inclusive process at both the strategy design level and during implementation. Several scholars have shown that this is a weak link in its territorial employment (Uyarra *et al.* 2018; Bennat & Sternberg 2020; Mieszkowski & Barbero 2021), where the preconditions of institutional capabilities of all territory types, but especially many rural areas, must be considered. Mieszkowski and Barbero (2021, 398) state that

There is still a need to expand this inclusion in the territorial sense, either by the revision of the S3 domains to expand their spatial dimension or by the improvement of the implementation mechanisms supporting the development of S3 domains in less attractive and active territories.

Poor governance and institutional failures, which may occur in many rural areas, will also hamper an S3 strategy (Barzotto *et al.* 2020), and, together with less than adequate conditions, may limit the potential for attracting and implementing them. Šipikal and others (2017) addressed cohesion policy and the need to attend to hidden implementation factors such as corruption and lack of competence. This would advance the institutional perspective on regional development (Rodríguez-Pose 2013), in which local capacity building is essential to success. Rodríguez-Pose (2013, 1043) concluded that

the main aim of building local capacity should be to promote local embeddedness and to make the planning and development process much more inclusive. This requires making local actors more capable and responsible for the planning and development process and ensuring that this process responds to the true needs of any given territory.

Uyarra, Marzocchi and Sorvik (2018) support the capacity-building perspective by suggesting that in S3 cases, national support could be given to cross-border R&D activities. Also important is a lack of initial support for technology and social or business networks. The Matthew effect, the tendency that those who possess resources like knowledge are more likely to enlarge these resources while those who have little are not, has been used to explain RIS3 strategy failures in rural and lagging regions (Barzotto *et al.* 2020), in which European cohesion is decreased rather than increased. The 'rich-get-richer' dynamics seem to function in all territorial policy settings, as they have in UK industrial policies (Mealy & Coyle 2022).

Do place-based policy models fit rural regions?

In the sample of 75 articles, we observe a shift from a purely positive to a more critical view of place-based policies. The criticism of implementing a dominant place-based narrative was originally put forward by Pugalis and Bentley (2014), and since 2018, several researchers have addressed S3 challenges and shortcomings related to rural place-based development. Several studies have demonstrated that S3 is not a universal solution to regional development and that it requires competence and resources that may be unavailable in rural regions. Studies also show negative cases and problems with developing and implementing S3 strategies (Uyarra *et al.* 2018; Falck *et al.* 2019; Barzotto *et al.* 2020; Glückler 2020; Mieszkowski & Barbero 2021; Flanagan *et al.* 2022; Kristensen & Pugh 2022). Implementing one type of model thinking, like S3, can be counterproductive to the idea of place-based practice modes because it may not actually encompass spatial particularities. As Kristensen and Pugh (2022) argue, the challenges faced by each region are far more contextually nuanced than they appear on the surface, addressing the important question of how to balance the uniqueness of problems from a bottom-up perspective with a universally applicable approach and support infrastructure (*ibid.*).

Valdmaa, Pugh and Müür (2021) critically examined S3 implementation strategies in Wales and Estonia, observing three main challenges; First, the challenge of difficulties with the entrepreneurial development process; second, the challenge that implementation depends on the competencies and familiarities of existing policy-making communities; third, the top-down chosen specialisations were broad and focused on high-tech sectors, which can be problematic outside urban areas with high-tech or R&D-intensive economies.

As late as 2020, Bennat and Sternberg (2020, 320) concluded in a German study that, “even though this is a widespread argument, it is less clear how such a customised and place-based policy approach should look like in practice”. In Chile, Oyarzo and others (2020) proposed creating differentiated instruments across extremely varying municipal contexts, complemented by transversal instruments to enhance the capabilities of each territory. Further, Flanagan, Uyarra and Wanzenböck (2022, 1006) have argued for a middle approach between “calls for space-blind mission-orientation towards broad and global ‘grand challenges’, and unrealistic expectations that regions can act like mini nation-states in terms of industrial policy”. Barbero and Rodríguez-Crespo (2022) have argued that new approaches suggest that EU regional disparities may be reduced by a twofold approach: reinforcing the strongest regions and simultaneously fostering lagging regions, to create a novel, “place-sensitive distributed development policy” (*ibid.*, 317).

As S3 has become a widespread policy, it has also developed into S4 with green industries and sustainable development entering the equation. One contribution to this new focus was made by Grillitsch and Hansen (2019), who identified place-based green industry development policies for different types of regions. We thus see different elements added to the place-based policy advice, like Randolph and Currid-Halkett (2022, 249), who introduced a broader understanding of place-based policy than had been previously implemented in the USA. They especially stressed that increasing interregional inequalities should be met with a holistic planning approach to promote development, rooted in “well-being and inclusion in addition to economic growth”. According to Conroy and Low (2022), closing gender gaps in business ownership and improving performance in rural areas need to be focused on in current US policy. Barzotto and colleagues (2020, 319) offered arguments in support of “more comprehensive regional development trajectories by embracing new models grounded on social innovation and the foundational economy”, as a new S3 variant better suited for lagging regions.

We have limited our search to only include rural and/or peripheral regions, but still, we see from the selected articles that there is a bias towards what can be called core areas with urban characteristics. Periphery is rarely considered only in a geographical sense but is also defined by economic and demographic factors, or not defined at all (Eder 2019), and Glückler, Shearmur and Martinus (2023) point to a challenge with the definition and understanding of the concept of peripheries as opposed to what is termed cores. They refer to, among others, Pugh and Dubois (2021) who have identified four problems with peripheries research: fuzzy language, bad talking peripheries, the idea that peripheries can be objectively delineated, and the inequality within peripheries. Glückler, Shearmur

and Martinus (2023) offer an alternative core-periphery model, trying to overcome the dichotomic approach by allowing for a continuum of all core and periphery possibilities, across both geographic and social network dimensions. The model then opens up the possibility of being both core and peripheral at the same time; network core in a peripheral place, network core in a core place, network periphery in a peripheral place, and network periphery in a core place. This implies that there are different peripheries, where there is not a homogenous group of places that have the same characteristics, the same challenges, and the same opportunities. It can also be argued that the term rural suffers the same, also being a continuum of rurality rather than a dichotomy (Schmidt *et al.* 2022).

Taking this approach illustrates the aforementioned challenge with the literature on place-based policy and how transferring models like S3 from one periphery or rural area to another might not be as effective as assumed, taking into account the imprecise use of the concepts. Acknowledging that places are more or less rural or peripheral, and more or less core or urban, makes it difficult to take models like S3 and implement them successfully in different rural or peripheral contexts as these contexts might be more different than alike, without many similarities in available or lacking resources, possibilities, and challenges. Reviewing the literature on place-based policy has revealed a focus on what can be called more urban parts of the periphery, and the policies seem to be more adapted for these types of regions rather than what can be called peripheral parts of rural regions.

Based on the 75 articles included in our study, we have, through thematic analysis, identified two main disadvantages associated with place-based policy in rural regions. Rural regions often have weak institutional contexts, and being left on their own to identify, exploit, and utilise their resources has proven to be difficult. The difficulties shown with EDP (Valdmaa *et al.* 2021) are one example. Another disadvantage is the lack of agglomeration effects and critical mass which is difficult for rural regions to obtain due to for example, characteristics of thin regional innovation systems (Asheim *et al.* 2019). Agglomeration effects and for example, Porter's cluster theory are influential contributions that provided the foundation and policy rationale for place-based policy (McCann 2019; Beer *et al.* 2020). These two disadvantages involve limited absorptive capacity (Cohen & Levinthal 1990) in rural regions, which is also connected to characteristics of rural regions such as few or no knowledge institutions and no clusters, poorly developed networks and lack of collaboration, and a scarcity of resources and restricted access to funding (Asheim *et al.* 2019). Unlocking and exploiting resources is thus difficult in rural regions, and potentials might not be identified and utilised. The regional innovation paradox that refers to the contradiction between the need to innovate and develop, and the relatively lower ability and willingness to acquire funding and invest in innovation compared to other regions (Oughton *et al.* 2002) remains.

Although the main perspective of rural development is within the traditional growth paradigm in the studied period, we notice the literature pointing at the coming discussion on alternatives, as mission-oriented and broad and global grand challenges (Flanagan *et al.* (2022), novel, bottom-up policies (Barbero & Rodríguez-Crespo 2022), new types of goals as well-being (but in addition to growth) (Randolph & Currid-Halkett 2022), and to encompass perspectives as social innovation (Barzotto *et al.* 2020). Reflecting upon the question of what is meant by "development" (Pike *et al.* 2017), what kind of development and for whom (Pike *et al.* 2007) might lead to thinking beyond growth where social and cultural values (Leick & Lang 2018) are considered as important in a sustainable and resilient policy perspective (Syssner & Erlingsson 2023).

How can place-based policy be developed to better suit rural regions?

The place-based policies concept for regional development constituted a fundamental change in the academic literature, policymaking, and practice from the 1990s (Barca 2009; Garcilazo 2011). Place-based policies were seen as reactions to spatially blind and isomorphic strategies, within which policies and interventions had failed to consider place and context differences. The new paradigm was based on a shift from reducing disparities towards exploiting potential, involving a belief that all places have the resources and potential for growth and positive development which can be unleashed by place-based and tailored policies (Garcilazo 2011). As we have observed herein, S3 strategies

became the main way of identifying and exploiting regional resources through the EDP and are especially dominant in EU policies and practice (Foray *et al.* 2009; McCann & Ortega-Argilés 2013; McCann & Ortega-Argilés 2019; Foray *et al.* 2020).

Reviewing the literature on rural place-based policy has revealed an interwoven tension. On the one hand, these policies seek to be context-sensitive so the local and regional situations can be analysed and subsequently create place-based policies and tailored measures, in which rural regions are given proper attention. On the other hand, the concept points to the state's withdrawal from lagging regions, which, in the former national redistributive and exogenous growth paradigm, were seen as places where such policies were too expensive and thus threatened national budgets. That is the policy of redistribution from growth areas (often urban areas and larger cities) to rural regions to compensate for their 'market failure', which needed to be replaced, based on the belief that all regions have endogenous resources that just need to be unlocked.

We suggest that rural regions suffer from a double disadvantage when it comes to place-based development generally and the S3 model specifically. We have seen herein that a shift from exogenous to endogenous regional development paradigms leaves such regions to develop their own resources. Simultaneously, the review illustrates that the S3 strategy for implementing place-based development has failed to succeed in rural regions. The S3 favours urban regions where the institutional context has the capability to implement such strategies and where agglomeration is possible. In rural regions, agglomeration is difficult (if at all possible), and weak institutional contexts make it problematic to implement S3.

This scoping review indicates that new policies are necessary to overcome this double disadvantage and create a regional development regime and new place-based policy types that would facilitate bottom-up regional development strategies favouring rural regions, of which many are also lagging, in terms of strengthening institutional and absorptive capacity. There have been developed and suggested new models that could make place-based policy better suited for rural regions, like S4 and green industry development for different types of regions (Grillitsch & Hansen 2019), holistic planning focusing on well-being and inclusion in addition to economic growth (Randolph & Currid-Halkett 2022), closing gender gaps (Conroy & Low 2022), and social innovation and foundational economy (Barzotto *et al.* 2020).

Based on the literature review, we argue that place-based policy has not really been place-based because it has developed into a model favouring urban areas, and due to weak institutional contexts and lack of agglomeration, this model cannot simply be implemented in rural areas. Policy development must address these two disadvantages and establish a regional development framework grounded in truly place-based policy types that leverage the strengths and address the weaknesses of the targeted areas. Strategies favouring rural regions in terms of strengthening institutional contexts despite the lack of agglomeration should be facilitated.

Taking into account the realities and variations of rural regions where agglomeration actually might not be possible and growth might not be realistic, could contribute to the development of a transformative regional policy in which rural regions can exploit their potential for positive development also within a new paradigm acknowledging that there are alternative social and cultural values to economic and demographic growth.

In this way, policymakers can facilitate a transformative regional policy (Schot & Steinmueller 2018) that can meet the challenges of tomorrow, grounded in place-specific needs and potentials based on regional preconditions, where periphery is treated as an asset rather than an obstacle (Glückler *et al.* 2023), where growth is not a necessity for development. There are some limitations to what conclusions can be drawn from a scoping review. The first limitation concerns the search on which the review is based, and the chosen databases only include peer-reviewed literature. The data upon which we have analysed rural place-based policy is thus dependent on the search string and the database, including all relevant literature. Based on the review of the literature on place-based policy, we cannot state what policy measures will work beyond documenting that place-based policy needs to be truly place-based. Further research should delve deeper into what works and does not in different contexts and investigate how different policy initiatives, such as targeted support for declining regions and local economic development policies in different contexts.

Notes

¹ Smart Specialisation Platform (<https://s3platform.jrc.ec.europa.eu/where-we-are>)

Disclosure statement

The authors report there are no competing interests to declare.

References

- Albrecht, M., Halonen, M. & Sysner, J. (2023) Depopulation and shrinkage in a Northern context: geographical perspectives, spatial processes and policies. *Fennia* 200(2) 91–97. <https://doi.org/10.11143/fennia.122933>
- Arksey, H. & O'Malley, L. (2005) Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 8(1) 19–32. <https://doi.org/10.1080/1364557032000119616>
- Arrona, A., Franco, S. & Wilson, J. R. (2020) Public innovation through governance in place-based competitiveness policymaking. *Competitiveness Review: An International Business Journal* 30(2) 119–136. <https://doi.org/10.1108/CR-03-2018-0023>
- Asheim, B. T., Boschma, R. & Cooke, P. (2011) Constructing regional advantage: platform policies based on related variety and differentiated knowledge bases. *Regional Studies* 45(7) 893–904. <https://doi.org/10.1080/00343404.2010.543126>
- Asheim, B. T., Isaksen, A. & Trippel, M. (2019) *Advanced Introduction to Regional Innovation Systems*. Edward Elgar Pub, Cheltenham.
- Bachtler, J. & Begg, I. (2018) Beyond Brexit: reshaping policies for regional development in Europe. *Papers in Regional Science* 97(1) 151–170. <https://doi.org/10.1111/pirs.12351>
- Balland, P.-A., Boschma, R., Crespo, J. & Rigby, D. L. (2019) Smart specialization policy in the European Union: relatedness, knowledge complexity and regional diversification. *Regional Studies* 53(9) 1252–1268. <https://doi.org/10.1080/00343404.2018.1437900>
- Barbero, J. & Rodríguez-Crespo, E. (2022) Technological, institutional, and geographical peripheries: regional development and risk of poverty in the European regions. *Annals of Regional Science* 69(2) 311–332. <https://doi.org/10.1007/s00168-022-01127-9>
- Barberi, E., Pollio, C. & Prota, F. (2020) The impacts of spatially targeted programmes: evidence from Guangdong. *Regional Studies* 54(3) 415–428. <https://doi.org/10.1080/00343404.2019.1635688>
- Barca, F. (2009) An agenda for a reformed cohesion policy. A place-based approach to meeting European Union challenges and expectations. [Report] Independent Report.
- Barca, F., McCann, P. & Rodríguez-Pose, A. (2012) The case for regional development intervention: place-based versus place-neutral approaches. *Journal of Regional Science* 52(1) 134–152. <https://doi.org/10.1111/j.1467-9787.2011.00756.x>
- Barzotto, M., Corradini, C., Fai, F., Labory, S. & Tomlinson, P. R. (2020) Smart specialisation, Industry 4.0 and lagging regions: some directions for policy. *Regional Studies, Regional Science* 7(1) 318–332. <https://doi.org/10.1080/21681376.2020.1803124>
- Beer, A., McKenzie, F., Blažek, J., Sotarauta, M. & Ayres, S. (2020) 1. What is Place-Based Policy? *Regional Studies Policy Impact Books* 2(1) 11–22. <https://doi.org/10.1080/2578711x.2020.1783897>
- Bennat, T. & Sternberg, R. (2020) Knowledge bases in German regions: what hinders combinatorial knowledge dynamics and how regional innovation policies may help. *European Planning Studies* 28(2) 319–339. <https://doi.org/10.1080/09654313.2019.1656168>
- Booth, A., Sutton, A., Clowes, M. & Martyn-St James, M. (2022) *Systematic Approaches to a Successful Literature Review*. 3rd ed. SAGE, Los Angeles.
- Boschma, R. & Gianelle, C. (2014) Regional branching and smart specialisation policy. [Report] JRC Technical Report 06/2014. Publication Office of the European Union, Luxembourg.
- Bramwell, A., Hepburn, N. & Wolfe, D. A. (2019) Growing entrepreneurial ecosystems: public intermediaries, policy learning, and regional innovation. *Journal of Entrepreneurship and Public Policy* 8(2) 272–292. <https://doi.org/10.1108/jep-04-2019-0034>
- Bukve, O. & Amdam, R. (2004) Regionalpolitisk regimeendring og regional utvikling. In Amdam, R. & Bukve, O. (eds.) *Det Regionalpolitiske Regimeskiftet — Tilfellet Norge*, 11–19. Tapir akademiske forlag, Trondheim.
- CAF (2010) Desarrollo local: hacia un nuevo protagonismo de las ciudades y regiones. [Report] Corporación Andina de Fomento, Caracas.

- Camagni, R. & Capello, R. (2013) Regional innovation patterns and the EU regional policy reform: toward smart innovation policies. *Growth and Change* 44(2) 355–389. <https://doi.org/10.1111/grow.12012>
- Cerulli, G., Corsino, M., Gabriele, R. & Giunta, A. (2022) A dose–response evaluation of a regional R&D subsidies policy. *Economics of Innovation and New Technology* 31(3) 173–190. <https://doi.org/10.1080/10438599.2020.1792604>
- Cohen, W. M. & Levinthal, D. A. (1990) Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly* 35(1) 128–152. <https://doi.org/10.2307/2393553>
- Conroy, T. & Low, S. A. (2022) Opportunity, necessity, and no one in the middle: a closer look at small, rural, and female-led entrepreneurship in the United States. *Applied Economic Perspectives and Policy* 44(1) 162–196. <https://doi.org/10.1002/aep.13193>
- Eder, J. (2019) Innovation in the periphery: a critical survey and research agenda. *International Regional Science Review* 42(2) 119–146. <https://doi.org/10.1177/0160017618764279>
- Falck, O., Koenen, J. & Lohse, T. (2019) Evaluating a place-based innovation policy: evidence from the Innovative Regional Growth Cores program in East Germany. *Regional Science and Urban Economics*, 79 103480. <https://doi.org/10.1016/j.regsciurbeco.2019.103480>
- Flanagan, K., Uyarrá, E. & Wanzenböck, I. (2022) Towards a problem-oriented regional industrial policy: possibilities for public intervention in framing, valuation and market formation. *Regional Studies* 57(6) 1–13. <https://doi.org/10.1080/00343404.2021.2016680>
- Foray, D., David, P. A. & Hall, B. (2009) Smart specialisation — the concept. *Knowledge for Growth: Prospects for Science, Technology and Innovation*, 20–24. [Selected conference papers] Knowledge for Growth. S&T policy in times of crisis: prospects for the knowledge-based economy 25 June 2009, Brussels.
- Foray, D., Eichler, M. & Keller, M. (2020) Smart specialization strategies—insights gained from a unique European policy experiment on innovation and industrial policy design. *Review of Evolutionary Political Economy*, 2(1) 83–103. <https://doi.org/10.1007/s43253-020-00026-z>
- Garcilazo, E. (2011) The evolution of place-based policies and the resurgence of geography in the process of economic development. *Local Economy* 26(6–7) 459–466. <https://doi.org/10.1177/0269094211417363>
- Ghorbani, M. & Brenner, T. (2021) Prerequisites and initial developments for economic specialization in lagging regions—a study of specialized villages in Iran. *Review of Regional Research* 41(2) 229–268. <https://doi.org/10.1007/s10037-021-00161-y>
- Glückler, J. (2020) Institutional context and place-based policy: the case of Coventry & Warwickshire. *Growth and Change* 51(1) 234–255. <https://doi.org/10.1111/grow.12362>
- Glückler, J., Shearmur, R. & Martinus, K. (2023) Liability or opportunity? Reconceptualizing the periphery and its role in innovation. *Journal of Economic Geography* 23(1) 231–249. <https://doi.org/10.1093/jeg/lbac028>
- Grillitsch, M. & Asheim, B. (2018) Place-based innovation policy for industrial diversification in regions. *European Planning Studies* 26(8) 1638–1662. <https://doi.org/10.1080/09654313.2018.1484892>
- Grillitsch, M. & Hansen, T. (2019) Green industry development in different types of regions. *European Planning Studies* 27(11) 2163–2183. <https://doi.org/10.1080/09654313.2019.1648385>
- Hagen, A., Higdén, U. & Övervåg, K. (2023) Planning to meet challenges in shrinking rural regions. Towards innovative approaches to local planning. *Fennia* 200(2) 175–190. <https://doi.org/10.11143/fennia.119752>
- Hart, A. & Connolly, J. (2022) Commonwealth place-based policies for addressing geographically concentrated disadvantage: A typology and critical analysis. *Australian Journal of Public Administration* 81(1) 145–162. <https://doi.org/10.1111/1467-8500.12498>
- Hassink, R., Isaksen, A. & Trippel, M. (2019) Towards a comprehensive understanding of new regional industrial path development. *Regional Studies* 53(11) 1636–1645. <https://doi.org/10.1080/00343404.2019.1566704>
- Hervás-Oliver, J.-L., Parrilli, M. D., Rodríguez-Pose, A. & Sempere-Ripoll, F. (2021) The drivers of SME innovation in the regions of the EU. *Research Policy* 50(9) 104316. <https://doi.org/10.1016/j.respol.2021.104316>
- Isaksen, A. & Jakobsen, S.-E. (2016) New path development between innovation systems and individual actors. *European Planning Studies* 25(3) 1–16. <https://doi.org/10.1080/09654313.2016.1268570>
- Isaksen, A. & Trippel, M. (2016) Path development in different regional innovation systems: a conceptual analysis. In Parrilli, M. D., Fitjar, R. D. & Rodríguez-Pose, A. (eds.) *Innovation Drivers and Regional Innovation Strategies*, 66–84. Routledge, London
- Johnston, A., Wells, P. & Woodhouse, D. (2021) Examining the roles of universities in place-based industrial strategy: which characteristics drive knowledge creation in priority technologies? *Regional Studies* 57(6) 1084–1095. <https://doi.org/10.1080/00343404.2021.1956683>

- Kline, P. & Moretti, E. (2014) Local economic development, agglomeration economies, and the big push: 100 years of evidence from the Tennessee Valley Authority. *Quarterly Journal of Economics* 129(1) 275–331. <https://doi.org/10.1093/qje/qjt034>
- Kristensen, I. F. & Pugh, R. (2022) Opportunities and challenges in implementing Smart Specialisation in Nordic 'strong innovator' regions. *Regional Studies* 57(1) 129–140. <https://doi.org/10.1080/00343404.2022.2054975>
- Leick, B. & Lang, T. (2018) Re-thinking non-core regions: planning strategies and practices beyond growth. *European Planning Studies* 26(2) 213–228. <https://doi.org/10.1080/09654313.2017.1363398>
- Li, Q. & Yu, J. (2022) Place-based policies and regional innovation: evidence from western development in China. *Applied Economics* 55(9) 999–1011. <https://doi.org/10.1080/00036846.2022.2095344>
- Lu, H., Liu, M. & Song, W. (2022) Place-based policies, government intervention, and regional innovation: evidence from China's Resource-Exhausted City program. *Resources Policy* 75 102438. <https://doi.org/10.1016/j.resourpol.2021.102438>
- McCann, P. (2019) UK research and innovation: a place-based shift? A paper for UK research and innovation. University of Sheffield Management School, Sheffield.
- McCann, P. & Ortega-Argilés, R. (2013) Some practical elements associated with the design of an integrated and territorial place-based approach to EU cohesion policy. In Crescenzi, R. & Percoco, M. (eds.) *Geography, Institutions and Regional Economic Performance*. Springer Berlin, Heidelberg.
- McCann, P. & Ortega-Argilés, R. (2019) 2. Perspectives on smart specialisation policies in lagging regions. *Regional Studies Policy Impact Books* 1(2) 17–27. <https://doi.org/10.1080/2578711X.2019.1621098>
- Mealy, P. & Coyle, D. (2022) To them that hath: economic complexity and local industrial strategy in the UK. *International Tax and Public Finance* 29 358–377. <https://doi.org/10.1007/s10797-021-09667-0>
- Mieszkowski, K. & Barbero, J. (2021) Territorial patterns of R&D+I grants supporting Smart Specialisation projects funded from the ESIF in Poland. *Regional Studies* 55(3) 390–401. <https://doi.org/10.1080/00343404.2020.1782877>
- Morales, D. & Dahlström, M. (2023) Smart specialization and participatory processes in green path renewal. Analysis of the forest-based bioeconomy in sparsely populated regions in the Nordics. *European Planning Studies* 31(8) 1734–1753. <https://doi.org/10.1080/09654313.2022.2106120>
- Morisson, A. & Doussineau, M. (2019) Regional innovation governance and place-based policies: design, implementation and implications. *Regional Studies, Regional Science* 6(1) 101–116. <https://doi.org/10.1080/21681376.2019.1578257>
- O'Brien, K. K., Colquhoun, H., Levac, D., Baxter, L., Tricco, A. C., Straus, S., Wickerson, L., Nayar, A., Moher, D. & O'Malley, L. (2016) Advancing scoping study methodology: a web-based survey and consultation of perceptions on terminology, definition and methodological steps. *BMC Health Services Research* 16 305. <https://doi.org/10.1186/s12913-016-1579-z>
- OECD (2009a) How regions grow: trends and analysis. [Report] OECD Publishing, Paris. <https://doi.org/10.1787/9789264039469-en>
- OECD (2009b) Regions matter: economic recovery, innovation and sustainable growth. [Report] OECD Publishing, Paris. <https://doi.org/10.1787/9789264076525-en>
- Oughton, C., Landabaso, M. & Morgan, K. (2002) The regional innovation paradox: innovation policy and industrial policy. *The Journal of Technology Transfer* 27 97–110. <https://doi.org/10.1023/A:1013104805703>
- Oyarzo, M., Romani, G., Aienza, M. & Lufin, M. (2020) Spatio-temporal dynamics in municipal rates of business start-ups in Chile. *Entrepreneurship and Regional Development* 32(9–10) 677–705. <https://doi.org/10.1080/08985626.2020.1743769>
- Peck, F., Connolly, S., Durnin, J. & Jackson, K. (2013) Prospects for 'place-based' industrial policy in England: the role of Local Enterprise Partnerships. *Local Economy* 28(7–8) 828–841. <https://doi.org/10.1177/0269094213498470>
- Pike, A., Rodríguez-Pose, A. & Tomaney, J. (2007) What kind of local and regional development and for whom? *Regional Studies* 41(9) 1253–1269. <https://doi.org/10.1080/00343400701543355>
- Pike, A., Rodríguez-Pose, A. & Tomaney, J. (2017) Shifting horizons in local and regional development. *Regional Studies* 51(1) 46–57. <https://doi.org/10.1080/00343404.2016.1158802>
- Pugalis, L. & Bentley, G. (2014) Place-based development strategies: possibilities, dilemmas and ongoing debates. *Local Economy* 29(4–5) 561–572. <https://doi.org/10.1177/026909421454161>
- Pugh, R. & Dubois, A. (2021) Peripheries within economic geography: Four "problems" and the road ahead of us. *Journal of Rural Studies* 87 267–275. <https://doi.org/10.1016/j.jrurstud.2021.09.007>
- Randolph, G. F. & Currid-Halkett, E. (2022) Planning in the era of regional divergence: place, scale, and development in confronting spatial inequalities. *Journal of the American Planning Association* 88(2) 245–252. <https://doi.org/10.1080/01944363.2021.1935302>

- Rodríguez-Pose, A. (2013) Do institutions matter for regional development? *Regional Studies* 47(7) 1034–1047. <https://doi.org/10.1080/00343404.2012.748978>
- Rodríguez-Pose, A. (2018) The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society* 11(1) 189–209. <https://doi.org/10.1093/cjres/rsx024>
- Schmidt, P. G., Díaz-Puente, J. M. & Bettoni, M. (2022) How rurality influences interactive innovation processes: lessons learnt from 15 case studies in 12 countries. *European Planning Studies* 30(12) 2595–2617. <https://doi.org/10.1080/09654313.2022.2043832>
- Schot, J. & Steinmueller, W. E. (2018) Three frames for innovation policy: R&D, systems of innovation and transformative change. *Research Policy* 47(9) 1554–1567. <https://doi.org/10.1016/j.respol.2018.08.011>
- Shearmur, R. (2016) Urban bias in innovation studies. In Bathelt, H., Cohendet, P., Henn, S. & Simon, L. (eds.) *The Elgar Companion to Innovation and Knowledge Creation*, 440–456. Edward Elgar Publishing, Cheltenham. <https://doi.org/10.4337/9781782548522.00037>
- Shenoy, A. (2018) Regional development through place-based policies: evidence from a spatial discontinuity. *Journal of Development Economics* 130 173–189. <https://doi.org/10.1016/j.jdeveco.2017.10.001>
- Šipikal, M., Sztásiová, V., Pisár, P. & Uramová, M. (2017) Spatially blind or place based policy? A comparison of innovation support in the Czech and Slovak Republic. *Ekonomie* 20 16–28. <https://doi.org/10.15240/tul/001/2017-1-002>
- Syssner, J. & Erlingsson, G. Ó. (2023) Place-based policies for the periphery? Policies for local development in sparsely populated areas in northern Sweden. *Local Economy* 38(8) 794–803. <https://doi.org/10.1177/02690942241275950>
- Takano, K. & Okamuro, H. (2021) Local R&D support as a driver of network diversification: a cross-regional comparison in Japan. *Science and Public Policy* 48(6) 776–787. <https://doi.org/10.1093/scipol/scab011>
- Tödtling, F. & Trippl, M. (2005) One size fits all?: Towards a differentiated regional innovation policy approach. *Research Policy* 34(8) 1203–1219. <https://doi.org/10.1016/j.respol.2005.01.018>
- Uyarra, E., Marzocchi, C. & Sorvik, J. (2018) How outward looking is smart specialisation? Rationales, drivers and barriers. *European Planning Studies* 26(12) 2344–2363. <https://doi.org/10.1080/09654313.2018.1529146>
- Valdmaa, K., Pugh, R. & Müür, J. (2021) Challenges with strategic place-based innovation policy: implementation of smart specialization in Estonia and Wales. *European Planning Studies* 29(4) 681–698. <https://doi.org/10.1080/09654313.2020.1767541>
- Varga, A. (2017) Place-based, spatially blind, or both? Challenges in estimating the impacts of modern development policies: the case of the GMR policy impact modeling approach. *International Regional Science Review* 40(1) 12–37. <https://doi.org/10.1177/0160017615571587>
- Verheij, T. & de Oliveira, H. (2020) Is economic complexity spatially dependent? A spatial analysis of interactions of economic complexity between municipalities in Brazil. *Revista Brasileira de Gestao e Desenvolvimento Regional* 16(1) 318–338.
- Coulibaly, S., Deichmann, U. K., Freire, M. E. S., Gill, I. S., Goh, C., Kopp, A. D., Lall, S. V., Montenegro, C. E., Packard, T. G., Larson, B. C. R., Ross-Larson, B. & Uchida, H. (2009) World development report 2009 : reshaping economic geography. [Report] World Bank Publications, Washington.
- Zhu, Y., Tang, R. W. & Xing, K. (2023) Effective coordination and innovation-facilitating role of science parks: The place-based approach with paradoxical outcomes. *Australian Journal of Management* 48(1) 171–195. <https://doi.org/10.1177/031289622210981>