## ARTICLE



# Asymmetric patterns in territorial cooperation between core and periphery: The participation of Central and Eastern Europe in transnational and interregional cooperation programmes

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## **Abstract**

The study deals with the issue of core-periphery relations in the European Union, investigating its patterns in relation to the participation of Central and Eastern European (CEE) member states in European Territorial Cooperation (ETC) programmes between 2007 and 2020. Core-periphery patterns do exist in the European space, where besides the North-Western core ('Core'), there are two distinct peripheries, CEE and Southern Europe. The peripheral position is reflected in the weak performance of CEE in European-wide RDI networks subsidised by the EU. On the basis of the KEEP database, the study analyses the signs of core-periphery relations by identifying whether there is asymmetry in the participation of CEE and Core countries in cooperation projects under the transnational (INTERREG B) and interregional (INTERREG C) strands (together, TI) of ETC. The findings of the study show that there is a significant difference in the forms of involvement of actors from North-Western Europe and CEE in the TI programmes. Actors from CEE countries are very motivated to become involved in TI projects. However, they are significantly underrepresented in lead partner positions, especially in funding. The study's results suggest that participation activity patterns are significantly asymmetric in TI programmes, showing signs of a core-periphery dynamic even in such place-based, cohesion-oriented programmes. The consequence is that the articulation of geographic characteristics, special needs and issues associated with CEE is limited as they play a rather adaptive and imitating role in those territorial cooperation programmes that are influential in discourses and policies about territorial development in the European arena.

## KEYWORDS

Central and Eastern Europe, core–periphery, development, European Territorial Cooperation, international spatial planning, networking, partnership

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# 1 | INTRODUCTION

Networks among individuals and organisations are channels of sharing information and experience and spreading innovation. Common European Union (EU) policies initiate and support networks across Europe in several fields, including research and innovation, and also regional development (Bache et al., 2022). Through these networks, actors can articulate their own initiatives and adopt innovations from others. According to different theories related to the core–periphery paradigm, including path-dependence theory in economic geography, peripheries may have less chance to contribute actively to this networking (Martin & Sunley, 2006) due to the existence of hierarchical patterns. In principle, international cooperation between actors can either reduce the differences between them, conserve, or even deepen hierarchical or dependent relation (Ploszaj, 2013; Schott, 1998; Zelnio, 2012). The programmes of the European Territorial Cooperation (ETC) are good material for an analysis of these potential outcomes, as it supports European network activity in the field of public development and has a territorially balanced approach to implementation (as placed-based policy). It has a significant role in generating discourses about territorial development and spatial planning and influences the related policies of the EU (Faludi, 2011; Waterhout, 2008; Dühr et al., 2010; Zaucha & Szydarowski, 2005). However, the performance of the less developed Central and Eastern European (CEE) 'new' member states (MS) in ETC programmes has not been substantially investigated.

The paper aims to contribute to the core–periphery debate associated with the European Union by exploring the differences in participation in territorial cooperation programmes between the CEE periphery and North-Western European (NWE) core countries. The study examines the beneficiaries of all ETC transnational and interregional (TI together) projects between 2007 and 2020, looking at project participation, lead partner positions and funding data.

# 1.1 | Persistent core-periphery patterns in the EU

The core–periphery dichotomy approach in social sciences has been an influential line of reasoning concerning present and historical differences in development worldwide, used broadly by scholars and colloquially. The spread of this approach was strongly supported by dependency theory (Cardoso & Faletto, 1979) and the world systems theory (Wallerstein, 1974), but by now has been broadly applied in various fields of research, such as development economics, international relations and regional development, and economic (e.g., Krugman, 1991) and urban geography (e.g., Taylor et al., 2001) and explaining the failures of capitalism (Soja, 1980).

A key aspect of core-periphery theories is that countries' relationships with each other are characterised by *asymmetry* resulting in dependency (Weissenbacher, 2019; Rubinić & Tajnikar, 2020). According to early development theorists, resources—in the form of raw material in particular—flow from poor and underdeveloped states to wealthy states (Ahiakpor, 1985). Nowadays, the core is at the forefront of socioeconomic and technological development, while the periphery provides cheap labour and low-processed products. New ideas are generated predominately at the centre and then imitated in the periphery (Schott, 1998; Ploszaj et al., 2018). This division is supported by the transnational companies (TNC) influencing peripheral countries' politics and economies (Weissenbacher, 2019). Centre-periphery theories are now increasingly linked to notions of global value chains (GVCs), since high value-added activities are concentrated in core areas (e.g., Grodzicki & Geodecki, 2016; Bair, 2014; de Borja Reis & Cardoso, 2020), with which the core can maintain its high income and underdeveloped peripheries remain in a state of severe path dependency (See Gräbner et al., 2017; Martin & Sunley, 2006). Additionally, governments of core countries also have a stronger power in the international political arena that is realised in bargaining power in intergovernmental agreements, soft power, claims connected to their international aids, positions in international institutions. The asymmetric integration of countries of different development levels into the global economy and even political integration processes may reinforce centre-periphery relations by strengthening connectedness (Gräbner et al., 2017; Weissenbacher, 2019; Rubinić & Tajnikar, 2020).

Since the 1970s, the core–periphery approach has also become a broadly applied framework of understanding the internal inequalities and relations within the *European space* (Weissenbacher, 2018). At the time of its foundation, the European integration involved only high-income areas, but later, due to its Southern and Eastern enlargements in the 1980s and the early 2000s, territorial inequality radically increased. Probably the most essential question about European integration is whether the economic and political integration of unequal partner countries and regions can ensure significant convergence or whether the disparities will remain, and dependent positions will be dominant. Although many evaluations have found Cohesion Policy—as the main balancing policy—to be an appropriate means of catching up of CEE (Bachtler et al., 2014; Kopasz & Szigetvári, 2009; Varga & Veld, 2011) in the respective literature, we primarily found

arguments suggesting the long-lasting reality of core–periphery dependency. Convergence of South Europe (SE)—measured in GDP—stopped after 2000 (Grodzicki & Geodecki, 2016) and its positive trends in the early noughties in CEE (Barry, 2004) gradually slowed down (Salamin, 2015). The catching-up process of periphery countries, observed before the financial crisis in 2009, was in large part driven by expansions of private indebtedness and by the corresponding emergence of large-scale housing bubbles in some countries (Gräbner et al., 2017) and by cheap labour based foreign direct investment in CEE (Patel et al., 2021). Besides its catching-up progress in terms of GDP and the unemployment rate, CEE still performs poorly in innovation activity (Salamin, 2015; Moagar-Poladian et al., 2017; Dijkstra, 2022; Veugelers et al., 2015) and there is not any sign of a shift towards a more innovation and knowledge-based economy, which is demanded (ESPON, 2014; Smetkowski, 2018).

In the case of CEE, several relations maintaining dependence are revealed. The long-term persistence of the core–periphery division is suggested by analyses of the changes of GNI and industrial production rankings (Weissenbacher, 2019) and positions in GVCs (Grodzicki & Geodecki, 2016). Based on the latter, authors claim that NWE countries have even strengthened their core positions while CEE regions with their increasing openness have integrated more into GVC but remain dependent on foreign technology, foreign capital, and business strategies adopted by leading Western companies (Grodzicki & Geodecki, 2016, p. 399). In most CEE countries, the strong dependence of domestic supplier SMEs, cities, regions, and even smaller states on a handful of TNCs (which originated in core countries) is notable. At the same time, the dependence of national budgets on EU Cohesion Policy sources is also strong. (Salamin, 2015). Rubinić and Tajnikar (2020) emphasised the crucial role of unequal labour exchanges (with brain drain) and disparities in capital stock within the EU—seen as unrequited value transfer from the periphery to the core.

The issue is also recognised and addressed by policy documents. The Territorial Agenda of the EU highlighted the increasing interdependency between places that is 'visible in the concentration of economies and ... in the persistent core-periphery division in Europe and nationally' (TA2030, 2020, p. 10).

The current, dominantly neoliberal paradigm of the EU is blamed, which makes competition rather than cohesion the focus of common policies (e.g., Weissenbacher, 2019; Rubinić & Tajnikar, 2020). The shocks of the last two decades, such as the financial crisis of 2008, the COVID-19 pandemic, and the Russo-Ukrainian war—have translated into further divergence and further polarisation (Celi et al., 2022), while central EU crisis management by austerity brought the countries of the EU periphery to the brink of collapse (Weissenbacher, 2019, p. VII).

The hierarchical, core-periphery structure also prevails in the world of science in spite of the exponential growth in international scientific cooperation over the past two decades (Glänzel, 2001; Zelnio, 2012; Hwang, 2008). According to nexus analysis, the actors situated at the core usually maintain many relationships with other actors in the core and periphery. In contrast, those at the periphery mainly relate only to core actors (Stein & Jaspersen, 2019). While relations among the most scientifically developed countries are primarily horizontal, the relationships between stronger and weaker scientific actors are somewhat hierarchical. Researchers of less developed countries often serve merely as subcontractors or routine research service providers for core countries (Kreimer & Meyere, 2008; cited by Ploszaj et al., 2018, p. 1323), which are able to attract talented scholars from peripheral countries. Ploszaj et al. (2018) analysed core-periphery relations in the networks of international scientific collaboration by differentiating participants' leading and complementary roles. By measuring citation impact they found that core countries seem to benefit most from international cooperation when they lead the research (i.e., as corresponding authors), while peripheral countries benefit most from being led. This suggests that increasing international collaboration in science strengthens the persistence of the divided global distribution of research excellence (Ploszaj, 2013, p. 1326). According to Schott (1998, p. 138), scientific collaboration ties from the peripheries to the centres have stimulated research in the peripheries, but elevated the dominance of the centres. Collaboration is one of the means that the centre uses—even if unintentionally—to ensure its scientific domination over the periphery; for example, by having a central position in those networks, defining the rules of these collaborations, and imposing the research agenda (Ploszaj, 2013, p. 1323).

# 1.2 | The significance of European territorial cooperation

European Territorial Cooperation (ETC) became one of the main goals of EU Cohesion Policy in 2007, following the successful implementation of the INTERREG Community initiative (1990–2006). ETC is designed to support cohesion by promoting cooperation in border crossing between regions and countries to help their economic and social development and tackle the obstacles represented by borders. It creates collaborative networks. ETC has three<sup>2</sup> strands (EP, 2021):

INTERREG A (cross-border)—supports cooperation across the border between adjacent regions to promote regional development; INTERREG B—transnational cooperation programmes over larger transnational territories involving national, regional and local programme partners to achieve a higher degree of territorial integration; INTERREG C—interregional cooperation works at a pan-European level, covering all EU MS and partner states to reinforce the effectiveness of Cohesion Policy. It includes four centrally coordinated network programmes that support the innovative approaches, capacity building and the knowledge into regional development (Interreg Europe programme), into urban development (URBACT programme), and to support implementation mechanisms and the European groupings of territorial cooperation (EGTCs) (INTERACT programme) and the ESPON programme, which is designed to analyse spatial development trends in relation to the aims of territorial cohesion.

Although ETC has 2% in the budget of EU's Cohesion Policy, its share has continuously increased since the first launch of the INTERREG initiative. From the paper's point of view, the place-based nature and its significance in European level territorial development and spatial planning must be underlined (Dühr et al., 2010; Medeiros, 2018; Zaucha & Szydarowski, 2005).

ETC implements public development cooperation within designated programme regions of cross-border or transnational territories, each of which supports the development of the specific regions based on a joint strategy or develops regional or urban development knowledge transfer networks. The geographically balanced project participation is preferred. Thus, a crucial specificity of ETC is that—unlike other EU-funded cooperation networks—it follows a place-based approach, which may also provide peripheries with opportunities for both the more efficient adoption and the creation of their own initiations (Blouri & Ehrlich, 2020). ETC programmes have supported creating, exploring, and disseminating innovative policy solutions for socioeconomic development (Medeiros, 2018).

Due to its ability to connect territorial development actors and enhance integrated joint place-based strategies and projects as regards their implementation ETC—along with territorial cohesion—it is considered as a sort of European level spatial planning by the advocators of European spatial planning (Faludi, 2011; Dühr et al., 2007, 2010; Waterhout, 2008). This role in spatial planning is supported by the fact that several InterregB programmes focused explicitly on the spatial planning of the respective territory (Medeiros, 2018) and played a crucial role in the formation (e.g., Baltic Sea) and/or implementation (Daube Area) of European macroregional strategies (Sielker & Rauhut, 2018; Zaucha & Szydarowski, 2005).

URBACT and INTERREG Europe provide intellectual impulses and models to be followed by urban and regional authorities and planners. The ESPON programme is specifically dedicated to providing spatial evidence for policies. However, as Faludi (2012) puts it, by generating discourses, being involved in policy processes, providing scenarios, methods, pointing out the spatial issues and objectives that should be emphasised, involving stakeholders, ESPON actively formulates policies, therefore it is an actor of European spatial planning.

ETC also has a vital role in the process called 'Europeanisation' of spatial planning, as its professional and scientific cooperation has a significant international influence on domestic spatial planning systems of MS (Dühr et al., 2007; Salamin, 2023). In the process of the Europeanisation of spatial planning, the influential position of Western Europe can be recognised. In the policy-related discourses on European spatial development and territorial cohesion, North-West European countries have played a dominant role partly due to their more substantial influence on the formulation of European policy documents (Faludi, 2004) and stronger coherence of domestic systems with them (Nordregio, 2007), while the key concepts of European territorial policy also originated in Western European countries (Faludi, 2004).

# 1.3 | CEE in policy-supported EU networks

The following paragraphs analyse some EU-funded programmes' past and current networking patterns based on previous studies. In general, authors draw attention to the fact that peripheries of the EU often face administrative bottlenecks that reduce their absorption capacity (Incaltarau et al., 2020), and the respective cultures and experiences have a limiting influence on networking behaviour between Eastern and Western Europe (ESPON, 2012).

Although publication activity involving co-authorship indicates the strengthening of RDI networks inside CEE and between actors from CEE and Western European MS (Makkonen & Mitze, 2016) since 2007, as mentioned earlier, this is not reflected in any improvement in innovation performance. Timár (2004) and Lux (2012) empirically revealed the asymmetry in the performance of social sciences in NWE-CEE relations: only NWE actors influence science in CEE, not vice versa: scientific forums are typically led by NWE actors, and the latter frequently only exploit CEE scientific resources when cooperating.

CEE MS are also lagging with regard to competing for EU RDI financial resources (Veugelers et al., 2015; Moagar-Poladian et al., 2017; Young, 2015). CEE performance in the RDI-focused Horizon 2020 (H2020) programme of the EU (and the antecedent programmes) is notably weak: CEE actors are deeply underrepresented, and NWE actors are highly overrepresented in the networks of the subsidised projects in absolute as well as in relative terms concerning the respective countries' populations, size of the research community, and R&D spending (EC, 2017). The networks behind the projects are only exceptionally initiated and coordinated by CEE actors, generally in projects with smaller budgets. In this regard, no improvement can be detected during 2007–2013 and 2014–2017 (EC, 2017). Many criticisms have thus been raised about the geographically unbalanced implementation of H2020 regarding the lack of consideration of brain drain and the focus on NWE-dominated excellence (ibid., Sánchez-Carreira, 2020). The implementation regime of H2020 applies a purely competition-based spatially blind policy.

Based on the territorial orientation and place-based approach, CEE participation in ETC programmes is expected to show a different picture. Although several pieces of research have examined the networking performance of territorial cooperation programmes (e.g., Kochanska, 2009; Mirwaldt et al., 2009; Tatasciore, 2007; others cited later), no study that has explicitly focused on the differences between Eastern and Western European countries exists, except for some country analysis (Kochanska, 2009; Zaucha & Szydarowski, 2005). Studies highlight that the exchange of experiences, mutual learning processes, and networking activity are awarded higher priority in these projects than defining territory-specific transnational problems and finding joint solutions (Böhme, 2005; Dühr & Nadin, 2007; Wilke, 2009).

There is also criticism of transferring ideas from NWE to CEE, as the considerable socioeconomic differences hinder reasonable adaptation (Stead, 2012).

An assessment of an Interreg programme (III C in 2000–2006) showed disparities between CEE and old MS concerning the main cooperation themes, quality of partnerships, expectations about the role of lead partners (LP), and the involvement of partners (ESPON, 2012). NWE actors seemed to be dominant, and only some CEE countries (Hungary, the Baltic States, and Slovenia) performed well in relative terms (partners per population). CEE actors had high expectations about transferring know-how and expertise from the projects' LPs—typically NWE organisations (it must be noted that CEE MS joined the EU only in 2004).

Evaluations of ETC programmes in the 2007–2013 period explored the relationship between territorial cooperation and the economic development of regions (at the sub-MS level) (ESPON, 2012; Ploszaj, 2013; Smetkowski, 2013). A coreperiphery model proved valid, with a weak and negative correlation between the intensity of participation in project networks and the level of development of a region. More intense CEE participation in ETC was also detected in 2007–2013 than in the earlier programme period, explained by the strong intention of CEE to obtain knowledge from NWE core areas (Smetkowski, 2013).

Evaluations of interregional programmes in the 2014–2020 period showed that project partners from less developed regions were overrepresented concerning their populations (INTERREG, 2020), and CEE countries performed well in the Danube and Central European transnational programmes (Central, 2019; Danube, 2018).

## 2 MATERIALS AND METHODS

ETC programmes represent a suitable area for studying patterns of European networking. This form of territorial cooperation seeks to respond to social needs, solve problems caused by the differences between national territories (such as legal systems and cultural practices), and facilitate the development of joint arrangements that span national borders (Wassenberg & Reitel, 2015). The programmes are implemented within the framework of a decentralised and shared-management approach and even encourage territorially balanced partnerships in projects (for representing European macro-regions appropriately) (Wassenberg & Reitel, 2015). Projects financed by ETC address topics defined by the priorities of ETC programmes. Such projects implemented through partnerships consist of actors from more than one European country. Actors, as beneficiaries, can be public, non-profit or sometimes even business organisations that operate at different territorial levels in EU MS, EFTA countries, accession countries, or neighbouring countries.

In this research, all projects of four transnational cooperation programmes (Interreg B) covered (partly) by CEE countries, and interregional cooperation programmes (Interreg C) (excluding the minor INTERACT having a special coordinative mission) were analysed in the period between 2007 and 2020 (see Table 1). (The analysed programmes taken together are referred to as 'TI programmes'.)

The geographical scope of the study is similar to Grodzicki and Geodecki's (2016) approach. North-Western Europe is considered the core, and CEE is one of the two peripheries separate from Southern Europe (SE) based on



**TABLE 1** The main geographical and financial parameters of the analysed European Territorial Cooperation (ETC) programmes. *Source*: keep.eu

Bource. Reep.eu					
	ETC transnation	al programmes (IN	NTERREG B)		
	Central Europe		Southeast Europe	Danube region	Baltic Sea region
	2007-13	2014–20	2007–13	2014–20	2007–13
Seat of the programme managing authority (city)	Vienna, Austria	Vienna, Austria	Budapest, Hungary	Budapest, Hungary	Rostock, Germany
Number of projects funded	124	138	122	155	92
Total budget allocated to projects of the programme (million EUR)	299.1	293	265.7	280.8	281.6
Eligible countries	Germany, Italy, Hungary, Poland, Slovenia, Slovakia, Ukraine, Austria, Czechia	(part of) Germany, (part of) Italy, Hungary, Croatia Poland, Slovenia, Slovakia, Austria, Czechia	Bosnia and Herzegovina, Croatia, Italy, Hungary, Moldova, Romania, Albania, Slovenia, Slovakia, Serbia, Ukraine, Austria, Greece, Bulgaria, North Macedonia, Montenegro	Bosnia and Herzegovina, Germany, Croatia, Hungary, Moldova, Romania, Slovenia, Slovakia, Serbia, Austria, Czechia, Montenegro, Bulgaria	Estonia, Denmark, Finland, Germany, Latvia, Lithuania, Norway, Poland, Sweden, Russia, Belarus

the studies cited above and the following considerations. The core was identified based on recent indicators key to core functions, such as a concentration of innovation (in terms of innovation performance and patent applications, all the NWE MS are above the EU average in 2021 and all the SE and CEE MS under it), the European Quality of Governance Index, which is above average in all NWE MS, while in the current 2021-2027 period, with one exception, all the regions were classified—based on GDP—as underdeveloped in the Cohesion Policy are located in CEE or SE (Dijkstra, 2022). The CEE periphery is differentiated from SE due to differences in the historical development path, economic structure, urbanisation patterns, development challenges and potential highlighted in the territorial synthesis of the Territorial States and Perspectives (Damsgaard et al., 2011; Sütő et al., 2010). The different trajectories are reflected in recent economic growth dynamics (in terms of change in growth, all but one CEE region performed above the EU average and all but one SE region below the average between 2001 and 2019), while the level of health (measured in life expectancy) is dramatically lower in CEE regions (Dijkstra, 2022). Grodzicki and Geodecki (2016) identified a new type of European periphery trajectory in the case of CEE, which, since the EU accession, has experienced successful integration into GVCs as well as having considerably more significant dependence on global production networks, foreign capital and technologies compared with SE. Based on the above, in the empirical analysis, the core of the EU is considered North-Western Europe NWE, including Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Sweden and the United Kingdom (which was a MS in the investigated period), and CEE is the periphery of 10 post-socialist countries (EU10), including Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Due to the abovedescribed difference between the two peripheries, the current study investigates the relation between CEE and NWE countries in the partner constellations in TI programmes.

In the study, the focus is on the project level and identifying the relations between the participating actors in these cooperations; adapting Ploszaj et al.'s (2018) approach, the position of the actors is captured by specifying their respective roles in the projects. As part of EU Cohesion Policy, ETC programmes are financial cooperation tools (Medeiros, 2018). Therefore, roles in their projects are formalised and standardised. In ETC programmes, the so-called 'lead partner



	ETC interregion	onal programme	s (INTERREG C)			
	ESPON	ESPON	INTER-REG IVC	INTER-REG Eu.	URBACT	URBACT
2014-20	2007-13	2014-20	2007-13	2014–20	2007-13	2014-20
Rostock, Germany	Luxembourg	Luxembourg	Lille, France	Bruxelles, Belgium	Saint-Denis la Plaine, France	Saint-Denis la Plaine, France
199	68	65/69	204	258	61	88
333	35.4	19.7	409.7	390	31.8	52.8
Estonia, Denmark, Finland, Germany, Latvia, Lithuania, Norway, Poland, Sweden	All EU and EFTA member states	All EU and EFTA member states	All EU and some EFTA member states	All EU and some EFTA member states	All EU and some EFTA member states	All EU and some EFTA member states

principle' is applied. This generates an outstanding role for consortia leaders regarding responsibility, organising and developing project activities, and content. Accordingly, a robust and obligatory hierarchy between the lead and project partners is built into how projects operate. Participation differences are captured by the number of project partners, lead partners and budget allocation. The participating partners and lead partners are captured as beneficiaries of the programmes. However, the implementation of the ESPON programme was significantly transformed after 2013. Since there is only one beneficiary, the ESPON EGTC and the specific teams implementing collaborative research projects are selected through a public procurement procedure, resulting in a Europe-wide competitive situation. In that case the selected and contracted research organisations were considered as (lead) project partners.

This study developed its own database covering all the 1576 projects of TI programmes based on the dataset from KEEP.EU. The following types of data were analysed: project name, lead partner, partners, their host countries, budgets and some socioeconomic context indicators from Eurostat. (Due to the limitations of the 2007–2013 datasets, only the total budget associated with a project could be analysed.) In transnational programmes, the relative values were calculated based on (e.g., the population of) the countries' regions eligible for the respective programme. This analysis involved quantitative data comparison among single countries and groups of countries.

Besides the data analysis above, consultations with the programme management officials of related programmes (ESPON former MC member, national contact points, Danube programme, Central European programme) helped in the research design and the interpretation and understanding of the quantitative results.

Certain possible limitations of our results must be noted. NWE organisations—unlike CEE ones—can participate in other transnational programmes besides the ones we analysed (Table 1). If the overlapping transnational programmes are considered as competitors for the beneficiaries from their common area (however, they are not necessarily), NWE participation can be moderated while CEE participation can be increased in the analysed transnational programmes by the existence or the lack of other opportunities. The participation per population values in the interregional programmes with territorially balanced ambitions can be raised in CEE because CEE countries are less populous than WE countries.



# 3 | RESULTS

# 3.1 | Partner activity in ETC programmes

The number of partners in projects funded by ETC TI programmes was analysed in absolute and relative terms (see Table 2). Country performance was calculated through the partner activity of the organisations seated in that country.

While NWE countries dominated in absolute terms—except in some transnational programme areas that mainly cover CEE countries (Central, SEE, Danube)—CEE partners (from all programme partners) are relatively overrepresented concerning their populations, with some rare exceptions.<sup>4</sup>

The number of partners per 10 million inhabitants was higher in CEE countries (except for the Baltic programme) (see Table 3), especially in the case of Interreg and URBACT. This pattern aligns with the former observations concerning the strong commitment among CEE organisations to participating in the European-wide networks.

An exceptionally high level of representation of NWE partners can also be detected. This may be caused by the programme area that covers mostly NWE countries in the Baltic programme. In the research-focused ESPON programme, NWE universities, research institutes, and consultancy firms were better prepared to apply for funding (similarly to other research-focused EU programmes). Since ESPON's implementation was shifted to a tender-based process following Luxembourgish legislation in 2014, NWE values further increased. This may indicate the ability of NWE organisations to win European tenders.

CEE countries usually dominated in terms of partner activity in relative terms. Besides the general interests of the CEE organisations, Romanian, Bulgarian and Hungarian partners have also been supported by national subsidies that finance the necessary own resources (Danube, 2018).

The number of TI participations per project partner reflects how concentrated the participation was (what extent organisations specialised in TI participation). Most partners took part in one project per programme (participations per partner ≤1.5) (see Table 4). In interregional programmes, CEE actors are more specialised than NWE ones, so relatively fewer CEE organisations have Europe-wide networking ability. In programmes with a programme area dominated by CEE countries (Central Europe, Southeast Europe, Danube), NWE partners are more specialised, so relatively fewer NWE actors cooperate with CEE ones. Specialisation mainly increased in NWE and decreased in CEE between the two periods, so more CEE organisations started acting as partners. In NWE-dominated ESPON, the average number of project participations of a beneficiary organisation is outstandingly high.

# 3.2 | Lead partner activity

The role of LPs in TI programmes is vital compared with other partners regarding knowledge transfer and stimulating and disseminating public development innovation. A country's lead partner activity was measured by the number of organisations originating from the same country that acted as LP in a project.<sup>5</sup>

CEE LP values increased from 2007–2013 to 2014–2020 in almost all programmes, but—except for the Danube—NWE dominance persisted in absolute and relative terms (Tables 5 and 6, and Figure 1). In the ESPON programme, CEE LP activity weakened further by 2014–2020. The business-tendering-oriented programme implementation of the post-2014 ESPON (see earlier) resulted in fewer opportunities in the generally economically less competitive CEE.

Aside from the Danube programme, the countries that scored above average values for LP activity are predominantly non-CEE. Even in programmes with areas covering mainly CEE countries, NWE countries were responsible for the highest absolute numbers and were among the highest relative number of LPs (Central—Austria second; Danube—Austria second, Italy third).

NWE countries' higher level of LP activity may have been closely connected to their longer experience. Accordingly, CEE countries would theoretically have been able to catch up during the following period by gaining more experience, but this did not happen.

Being an LP more than once in a programme is very rare (see Table 4), but the case of ESPON is different again because of its highly specialised NWE LPs. For NWE organisations, specialising in generating TI projects and applying for grants was usually more common. CEE values for this factor slightly increased between the two periods (unlike those for NWE), which may indicate a decrease in diffusing LP capabilities among CEE organisations.

In the case of 2007–2013 interregional programmes, we also examined the interrelations between LP activity and economic performance that have characteristic centre (WE) and periphery (CEE) patterns (see Table 7). A solid or moderate

TABLE 2 Number and proportion of Western European (WE) and Central and Eastern European (CEE) country partners involved in European Territorial Cooperation (ETC) programmes. Source: keep.eu

	Transnati	Transnational programmes	ımmes				Interregio	Interregional programmes	nmes					
	Central Europe	поре	South east Europe	Danube	Baltic Sea region	region	ESPON	ESPON	INTER- REG IVC	INTER- REG Eu.	URBACT	URBACT	Interr. total	Interr. total
	2007–13	2014-20	2007-13	2014-20	2007–13	2014-20	2007-13	2014-20	2007–13	2014-20	2007–13	2014-20	07-13	14-20
Number of participating countries	6	6	16	14	11	10	31	32	29	31	29	30	31	32
Number of participating WE countries	3	8	7	7	4	4	12	12	12	12	12	12	12	12
Number of participating CEE countries	5	ιΩ	ν.	9	4	4	10	10	10	10	10	10	10	10
Proportion of partners from WE countries from all partners (%)	45.5	41.7	24.5	17.5	53.6	42.2	51.1	59.2	50.3	46.1	50.1	40.5	50.8	46
Proportion of partners from CEE from all partners (%)	53.7	48.3	42.1	57.7	38.5	34.8	22.3	17.6	28.9	28.4	26.9	31	27.7	28
Proportion of population of WE countries in the tot. pop. covered by the programme area $(\%)^a$	51.2	51.4	31.3	29.2	32.1	33.2	$65.1^{a}$	65.1 <sup>a</sup>	65.1 <sup>a</sup>	65.1 <sup>a</sup>	65.1 <sup>a</sup>	65.1 <sup>a</sup>	65.1 <sup>a</sup>	65.1 <sup>a</sup>
Proportion of population of CEE countries in the tot. pop. covered by the programme area $(\%)^a$	44.5	44.5	35.3	48.2	40.2	43.6	$19.2^{a}$	19.2 <sup>a</sup>	19.2ª	$19.2^{a}$	19.22 <sup>a</sup>	19.2ª	$19.2^{a}$	19.2 <sup>a</sup>

<sup>&</sup>lt;sup>a</sup> Population of non-EU member states is not included, values were calculated according to the population of the eligible territory of a country.

TABLE 3 Number of partners from Western European (WE) and Central and Eastern European (CEE) countries per 10 million inhabitants in European Territorial Cooperation (ETC) programmes. Source: keep.eu

	Interr. total	14-20	57	20	41	85
	Interr. total		62	57	48	68
	URBACT	2014-20	12	10	∞	20
	URBACT	2007-13	10	6	8	15
	INTER-REG Europe	2014–20	40	35	28	61
mes	INTER- REG IVC	2007-13	44	41	34	99
Interregional programmes	ESPON	2014-20	ις	4	4	ις
Interregion	ESPON	2007-13	∞	7	9	6
	Baltic Sea region	2014-20	95	92	57	114
	Baltic Sea region	2007-13	145	144	112	172
	Danube	2014-20	172	202	252	165
ımes <sup>a</sup>	Southeast Danube Europe region	2007-13	129	164	214	123
Transnational programmes <sup>a</sup>	Central Europe	2014-20	100	06	78	104
Transnatic	Central Europe	2007-13	06	93	80	108
			Programme average	Average of all examined countries	Average of WE countries	Average of CEE countries

 $<sup>^{\</sup>mathrm{a}}$  The values were calculated according to the population of the eligible territory of a country.

TABLE 4 Number of project participations per partner and per lead partner in European Territorial Cooperation (ETC) programmes. Source: keep.eu

	Interr. total	14-20		1.56	1.51	1.62		1.12	1.25	1.04
	Interr. total	07-13		1.41	1.36	1.51		1.16	1.17	1.04
	URBACT	2014-20		1.44	1.33	1.55		1.01	1.13	1.02
	URBACT	2007-13		1.37	1.30	1.49		1.08	1.09	1.00
	INTER- REG Eu.	2014-20		1.35	1.32	1.38		1.07	1.10	1.04
nes	INTER- REG IVC	2007-13		1.37	1.33	1.45		1.12	1.13	1.07
Interregional programmes	ESPON 1	2014-20		1.90	1.89	1.92		1.29	1.52	1.06
Interregion	ESPON	2007-13		1.84	1.84	1.85		1.38	1.41	1.00
	Baltic Sea region	2014-20		1.38	1.30	1.46		1.26	1.30	1.22
	Baltic Sea region	2007-13		1.32	1.26	1.42		1.31	1.34	1.14
	Danube region	2014-20		1.47	1.50	1.44		1.07	1.08	1.06
	South east I	2007–13		1.35	1.42	1.31		1.12	1.14	1.06
Transnational programmes	Central So Europe Eu	2014-20 20					ner			
nsnational	Central Cer Europe Eur		per partner	1.40	1.47	1.33	per lead part	1.15	1.10	1.20
Tra	Cer	200,	pations	1.38	1.43	1.34	pations	1.14	1.18	1.07
			Number of participations per partner	In all examined countries	Partners from WE countries	Partners from CEE countries	Number of participations per lead partner	In all examined countries	Lead partners from WE countries	Lead partners from CEE countries

Abbreviations: CEE, Central and Eastern European; WE, Western European.

TABLE 5 Proportion of lead partners of Western European (WE) and Central and Eastern European (CEE) countries in European Territorial Cooperation (ETC) programmes. Source: keep. en

	Transna	Transnational programmes	ammes.				Interregion	Interregional programmes	mes					
	Central ]	Central Europe	Southeast Europe	Danube region	Baltic Sea	region	ESPON	ESPON	INTER- REG IVC	INTER- REG Eu.	URBACT	URBACT	Interr. total	Interr. total
	2007-13	2007–13 2014–20	2007-13	2014-20	2007-13 2014-20	2014-20	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20	07-13	14-20
Proportion of lead partners from WE countries from all partners (%)	69.4	64.5	50.8	33.3	90.2	78.4	72.1	08	74	71	78.7	56	74.5	99
Proportion of lead partners from CEE countries from all partners (%)	30.6	33.3	34.4	64.1	8.7	21.6	4.	2.2	7.8	8.1	8.2	14.7	7.2	12.5

TABLE 6 Number of lead partners from Western European (WE) and Central and Eastern European (CEE) countries per 10 million inhabitants in European Territorial Cooperation (ETC) programmes. Source: keep.eu

Interregional programmes	INTER- INTER- Interr.	Baltic Sea region ESPON ESPON REG IVC REG Eu. URBACT URBACT total	2007-13 2014-20 2007-13 2014-20 2007-13	8 13 1 1 4 4 1 1 6 6	11 17 1 1 4 4 1 1 1 6 6	23 30 1 1 4 4 1 1 7 6	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
				4	4	4	7
rammes	INTER-	REG IVO	2007-13	4	4	4	7
gional prog		ESPON	2014-20	П	1	1	0
Interreg		ESPON	2007-13	П	1	1	0
		ea region	2014-20	13	17	30	1
		Baltic So	2007-13	∞	11	23	7
	Danube	region	2014-20	10	13	12	14
mmes <sup>a</sup>	Southeast Danube	Europe	2007-13	10	13	16	10
Transnational programmes <sup>a</sup>			2007-13 2014-20	10	10	12	7
Transnati		Central Europe	2007-13	∞	6	11	9
				Programme average	Average of all examined countries	Average of WE countries	Average of CEE

 $<sup>^{\</sup>rm a}$  The values were calculated according to the population of the eligible territory of a country.

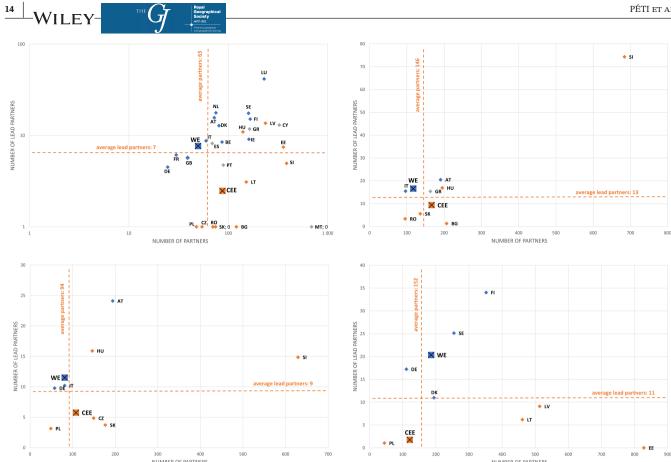


FIGURE 1 Lead partnerships and partnerships in European Territorial Cooperation (ETC) programmes 2007–2013. Source: keep.eu (values represent the number of partners/lead partners per million inhabitants of EU Member States; Legend: blue: Western European [WE] countries and total WE values; orange: Central and Eastern European [CEE] countries and total CEE values)

positive correlation was found between LP and GDP per capita values of all the MS, with no correlation in an ordinary partnership. GDP was significantly higher in NWE, so these variables cannot be considered fully independent. Displaying EU MS' partnership data in a grid (see Figure 1) demonstrates that above-average partner activity and less-than-average LP activity have been common in CEE countries (except for the Baltic programme, with an area mainly covering NWE countries).

#### 3.3 Geographical distribution of project budgets

The budgets allocated to a given country reflect the sum of the budgets for projects led by LPs originating from the respective country (only project-level budgets could be identified in 2007–2013 datasets). In both periods, NWE countries are overrepresented, and CEE countries are underrepresented according to budget allocation indicators—in terms of their value and population share (see Table 8). The organisations of NWE countries appeared to have a significantly greater ability to absorb resources as LPs. The only exception again is the CEE-country-dominated Danube programme.

Projects led by partners from NWE countries had significantly larger budgets than those led by CEE partners (see Table 8). The budgets allocated to CEE amounted to only 28-93% of those allocated to NWE countries (depending on the programme); balanced values are exceptional (Interreg IVC). No clear improvement in CEE budgetary conditions can be detected between the two periods. This budgetary disadvantage of CEE-led projects can be experienced even in programme areas covered mainly by CEE countries (i.e., Central, Southeast Europe, and the Danube).

The lower average wages in CEE countries cannot explain this difference: while a significant proportion of TI budgets go on personnel-related costs, even partnerships led by CEE LPs should be balanced territorially (between NWE and CEE organisations). Accordingly, unsurprisingly, the significant increase in post-2014 CEE wages did not reduce the gap. This poor resource-attracting ability of CEE actors may indicate deficiencies in generating projects of European significance.

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TABLE 7 Correlation between socioeconomic factors of a country and its lead partner activity in 2007–2013 ESPON, Interreg IVC, URBACT II programmes. *Source*: keep.eu; EUROSTAT

OKBACT II programmes. Boarce. Recp.eu, ECKOSTAT	
	<b>Economic performance</b>
	GDP per capita, EUR, 2007
Number of lead partners per 100 partners (ESPON, Interreg IVC, URBACT II)	
Pearson correlation	0.690**
Significance (two tailed)	<u>0.000</u>
N	27
Lead partners per 10 million capita (ESPON, Interreg IVC, URBACT II) <sup>a</sup>	
Pearson correlation	0.800**
Significance (two tailed)	0.000
N	27
Partners per 10 million capita (ESPON, Interreg IVC, URBACT II) <sup>a</sup>	
Pearson correlation	-0.111
Significance (two tailed)	0.582
N	27

Note: Grey: medium correlation (0.400–0.699); dark grey: strong correlation (0.700–0.899); bold underlined: strong inverse correlation (-0.700 to -0.899); framed: significant relations (<0.005).

# 4 DISCUSSION AND CONCLUSIONS

Despite the territorially conscious implementation of the place-based-oriented ETC programmes, our results show significant asymmetry in the participation patterns of NWE and CEE countries. On the one hand, organisations from CEE countries have engaged in more vibrant partner activity. This higher relative intensity of CEE project participation can be related to the relative shortage of financial sources available for innovation and cooperation activities in CEE (institutes are financially motivated to get funding from ETC) and their general learning attitude regarding NWE, as suggested by previous studies (ESPON, 2012; Smetkowski, 2013). However, according to the programme implementation actors we consulted, this latter motivation should theoretically have been reduced nearly two decades after EU accession. On the other hand, CEE organisations are far less effective at initiating, forming and coordinating European-wide or transnational networks than NWE organisations, as seen in CEE's poor lead-partner capacities. Projects led by CEE partners typically have much smaller budgets than NWE-led ones similarly to the experiences with Horizon programmes (cf. EC, 2017) and we cannot see any changes in this pattern over the investigated period.

The ESPON programme in particular became similar to other RDI funding programmes. In the case of ESPON, the most influential of the ETC programmes for policy shaping, its minimal CEE lead-partner activity before 2014 had declined further by 2014–2020. The new, more competition-based ESPON implementation process leaves much less room for the less competitive CEE actors to participate in this regard. ESPON also has strong research ambitions, and although theoretically territorially balanced, its asymmetric implementation patterns are similar to those of the main EU-level research programmes, which are territorially blind.

The results do not confirm that networking exercises in ETC projects could function as a learning process by which the new CEE MS learn how to cooperate with projects in the European arena successfully. LP activity could not evolve even in CEE countries where state budget supported the participation. Indeed, the CEE organisations have remained only bystanders for one and a half decades (or longer, considering the data on the 2004–2006 programming period [Ploszaj, 2013]). This asymmetric division of labour (and funding) results in a hierarchy of project governance. As reasons, we propose that crucial drawbacks might be identified in CEE organisations' financial abilities and innovation and management capacities. Their inherited submissive positions in network hierarchies organised from NWE may also be a factor.

In summary, although place-based policy ambitions in ETC have led to the inclusion of more actors from CEE and increased their cooperation with the European core, this has not been able to override the core–periphery structures

<sup>&</sup>lt;sup>a</sup> The values were calculated according to the population of the eligible territory of a country.

	Transnatio	Transnational programmes	ımes				Interregion	Interregional programmes	es					
	Central Europe	Central Europe	Southeast Europe	Danube region	Baltic Sea region	Baltic Sea region	ESPON	ESPON	INTER- REG IVC	INTER- REG Eu	URBACT	URBACT	Interr. total	Interr. total
	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20	2007-13	2014-20
Total budget allocated to projects of the programme (million EUR)	299.1	293	265.7	280.8	281.6	333	35.4	19.7	409.7	390	31.8	52.8	477	462.5
Budget allocated to WE-led projects (M EUR)	217.7	194.1	142.5	56.1	260	275.2	25.7	14.8	307.3	202.2	25	30.3	358	247.3
Budget allocated to CEE-led projects (M EUR)	81.5	91.2	91	146	20.4	57.8	1.6	0.3	29.6	43.4	2	6.3	33	50
Proportion of budget of WE-led projects (%)	72.8	66.2	53.6	19.9	92.3	82.6	72.7	75.2	75	51.8	78.5	57.4	75	53.5
Proportion of budget of CEE-led projects (%)	27.2	31.1	34.2	52	7.2	17.4	4.4	1.3	7.2	11.1	6.2	11.9	6.9	10.8
Average budget of WE-led projects (M EUR)	72.6	64.7	71.3	73	65.3	8.89	×	×	25.6	16.9	2.1	2.5	×	×
Average budget of CEE-led projects (M EUR)	16.3	18.2	18.2	29.2	5.1	14.4	×	×	ы	4.3	0.2	9.0	×	×

Abbreviations: CEE, Central and Eastern European; WE, Western European.

of the EU. Even programme areas dominated by CEE followed this model: the few eligible NWE countries here had high LP activity—Austria and Northeast Italy seem to take a historical role as a centrum for CEE. These results suggest that previous studies (Kreimer & Meyere, 2008; Ploszaj et al., 2018; Schott, 1993) claiming that international cooperation, despite its integrating function, can reproduce dependence relations despite increasing ties between countries may be confirmed. The one-way influence of NWE over the CEE periphery experienced in the performance of social sciences (Timár, 2004) can be identified even in ETC cooperation. This paper puts one more piece into the 'basket' of arguments of previous studies (e.g., Gräbner et al., 2017; Weissenbacher, 2019; Rubinić & Tajnikar, 2020), which claims that various manifestations of integration do not necessarily dissolve the hierarchical and depending relations between countries. Further qualitative research could serve as additional arguments for our results and its limitations.

Due to the significance of the EU in territorial development policies, this poor representation of CEE has further consequences for European integration. According to Ploszaj's (2013, p. 77) results, project leaders from 'old' EU countries may more or less consciously shape projects in a way that is better suited to the needs of their own regions; therefore, the benefits of cooperation may also be unevenly distributed to the disadvantage of the regions of the new MS. Besides the financial and organisational disadvantages of the related CEE institutions, this asymmetric and weak participation of CEE in ETC crucially affects territorial development policies. The analysed TI programmes are important in feeding European policy-making with discourses, territorial evidence and ideas (Dühr et al., 2007, 2010; Faludi, 2011; Waterhout, 2008). Due to this asymmetric participation, CEE is relegated to following the development narratives represented by NWE actors in TI projects. Without being able to take on the strategic roles with influence on project agendas, the intervention logics, development needs, and innovative ideas of CEE cannot be comprehensively reflected in the European arena. As a result, insufficient consideration of the specificities of CEE regions may occur. This risks decreasing the efficiency of EU policies, especially ones related to territorial cohesion. Further, it may decrease the commitment of CEE citizens and governments towards the EU project, which may be reflected in increasing tensions between the EU and certain CEE governments.

Reforming ETC programmes may be a reasonable ambition for creating the space for more vital and balanced European discourse and networking, and helping evolve a common but differentiated understanding of development needs and goals. Transnational initiatives that exclusively cover CEE countries may also be a leap forward regarding their ability to incubate common European values and identify needs and potentials more adequately.

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## CONFLICT OF INTEREST STATEMENT

On behalf of all the authors, the corresponding author states that there is no conflict of interest.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in Keep.eu database of the EU at https://keep.eu/ and the Eurostat at https://ec.europa.eu/eurostat.

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## **ENDNOTES**

- <sup>1</sup> Authors reveal that Cohesion Policy itself can reinforce increasing dependence of peripheries (Pámer, 2023; Salamin, 2015).
- <sup>2</sup> Interreg D: Outermost Regions programme was introduced for the period 2021–2027 as a new element, and is dedicated to the outermost regions of the EU.
- <sup>3</sup> Croatia, another EU MS in CEE, was not involved in this 2007–2020 analysis as it joined the EU in 2013.
- <sup>4</sup> The values were calculated according to the populations of the eligible territory of a country when the whole country was not eligible.

<sup>5</sup> The relative values were calculated according to the population of the eligible territory of a country when the whole country was not eligible.

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