

EUROPEAN THEORY – LOCAL PRACTICE: UNDER WHAT CONDITIONS DO TWO CENTRAL- EASTERN EUROPEAN REGIONAL UNIVERSITIES OPERATE THEIR SOCIAL RELATIONS?

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Abstract: *Two Central-Eastern European regional universities were examined in the form of a qualitative multimethod, comparative case study of 2020-2022 to identify the factors that either facilitate, or hinder the establishment and successful operation of their local-regional social relations. The results shed light on the extent to which these converge with the findings in the wider European context and to which they are to be considered unique. Confirming several and revealing some new conditions for university-external stakeholder collaborations, the study is a call for further research into the societal relations and regional engagement of Central European universities.*

Keywords: *social networks, Central-Eastern Europe, university, operating conditions, case study.*

1. Introduction

As economic, societal, higher education policy and maintainer expectations from universities'² functions and performance continue to expand, the range of university external stakeholders proliferates and their prioritisation changes (Jongbloed, Enders & Salerno, 2008; Goddard, 2018). Most recently, such macro-level societal challenges as the continuing ageing of European societies, the climate and migration crises, and the war in Ukraine are forcing higher education institutions to reconsider their institutional strategy, including their stakeholder relations and public service mission (Farnell, 2020; EURASHE 2023). Their reactive, proactive, or even pre-active response depends on a multitude of factors, many of which are deeply rooted in a university's embeddedness in its local-regional social context and the diverse roles it plays there: develop the local economy, serve its society, support sustainability (e.g. Goddard, 2018; Benneworth, Culum, Farnell, Kaiser, Seeber, Šćukanec, Vossensteyn & Westerheijden, 2018; Tijssen, Edwards & Jonkers, 2021). These roles can only be played via an effective collaboration with local-regional external stakeholders, whose management has long been a challenge for universities (Jongbloed et al., 2008; Tijssen et al., 2021).

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² Here 'university' refers to all types of European higher education institutions.

The conditions for the effective management of such relations are well established in Western European higher education literature (e.g. Kempton, 2019; Compagnucci & Spigarelli, 2020), and numerous studies have explored the external relations of European universities. However, the majority of case studies have been on research-intensive universities located in major European cities with only a few examples from Central-Eastern Europe (e.g. Goldstein, Radinger-Peer & Sedlacek, 2019; Tödtling, Trippel & Desch, 2021). Therefore, it seemed worthwhile to examine the cases of two non-metropolitan (Gál & Ptáček, 2019), entrepreneurial universities in this macro-region: the University of Dunaújváros (DUE), a Hungarian university of applied science, and Transilvania University of Braşov (UNITBV), a Romanian comprehensive university, to identify the facilitating and hindering conditions that define their local-regional³ social relations.

Another novelty is the scope of external stakeholders drawn into the research: not only the main local-regional public and business actors, but also a broad range of civic partners have been addressed, along the *quadruple helix model* (Carayannis, Grigoroudis, Campbell, Meissner & Stamati, 2018). This reflects a wider understanding of 'the third mission of universities' in European higher education research, which includes *community engagement* in the concept (Benneworth et al., 2018), in contrast to the still dominant position of the *third mission* referring only to technology and knowledge transfer between university and industry (Compagnucci & Spigarelli, 2020).

2. Objectives

The research explored the conditions of university-external stakeholder collaborations in the local-regional context to shed light on the operation of university contribution to the solution of local socio-economic-cultural challenges (e.g. Baranyai, 2016; Gotea, 2020; Bularca & Dan, 2024). Therefore, it inquired what factors facilitated the successful establishment and effective implementation of university-external stakeholder relations in the Dunaújváros (Hungary) and Braşov (Romania) urban areas, and what difficulties prevented their establishment, or hindered their effective implementation?

3. Theoretical Background

European higher education institutions have long been seen as the backbone of local clusters and regional innovation systems (e.g. Goddard, 2018; Tijssen et al., 2021). Supporting this role are their extended governance, business and academic networks, immense knowledge base, and long-term planning perspective (Goddard, 2018). They are deeply embedded in their relevant geographical area, national and global levels for a metropolitan research university, or the regional and urban levels for a small, specialized higher education institution in an underdeveloped region (Bajmóczy & Lukovics, 2009; Gál & Ptáček, 2019). In their own way, they all contribute to the economic and social sustainability of their respective regions via their three missions (Tijssen et al., 2021).

The most recent model for capturing this complex relationship is the Regional Innovation Impact (RII) (Tijssen et al., 2021; EURASHE, 2023) (Figure 1). Engaged in

³ 'Local-regional' is understood as the urban area of the two cities and their 50 km radius (Tijssen et al., 2021).

multiple complex interactions, the needs, problems and challenges from universities' local-regional environment motivate the institution to mobilize its aims, motivations, resources and incentives to unite with those of the external stakeholders to collaborate via 'Pathways' in the 'RII delivery space' to produce various outputs and outcomes ('Impacts'). These, in turn, impact on both the needs and resources of the external environment and those of the university, as well as lead to direct and indirect, short-, medium-, or long-term impacts on the regional economy and society (Tijssen et al., 2021). Owing to the depth of systematizing these relationships, this model was used as the theoretical background of this research to investigate the operating conditions of the mechanisms in the 'RII delivery space'.

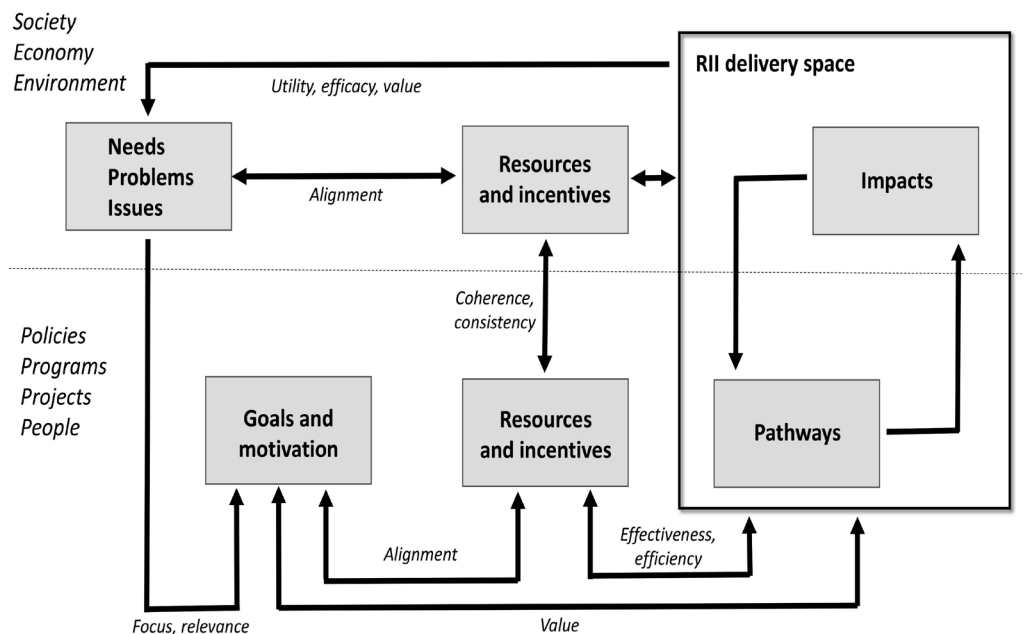


Fig. 1. *The Regional Innovation Impact model (Tijssen et al., 2021)*

As for the collaboration promoting and hindering factors present in the major European higher education literature, Table 1 summarizes the frequently recurring conditions. In the research, these were used as deductive codes in the data analysis process.

Table 1
Promoting & hindering factors of university-external stakeholder collaborations

Promoting factors	Literature	Hindering factors	Literature
Geographical proximity	Bajmócy & Lukovics, 2009; Lengyel, 2012; Benneworth et al., 2018.	Path-dependence: university profile, organisational culture, structure, strategic focus)	Pinheiro et al., 2012; Goddard, 2018; Erdős, 2018; Goldstein et al., 2019;

Promoting factors	Literature	Hindering factors	Literature
Long-standing personal relationships		Path dependence: region (spatial, socio-economic features)	Kempton, 2019; Gál & Ptáček, 2019.
Mutual interest	Pálné Kovács (2009)	Unsuitable & changing legal framework of university entrepreneurship	Pinheiro et al., 2012, 2017; Compagnucci & Spigarelli, 2020; Erdős, 2018
Shared local identity		Low academic acceptance of knowledge-transfer offices	Erdős, 2018
Common financial interests		Top-down motivations for university spin-off activity	Erdős, 2018; Tijssen et al., 2021
Shared responsibility for success		Lack of entrepreneurial perspectives & abilities of academics	Erdős, 2018
Constant communication		Expectations of state financing: Businesses	
Mutual dependence		Material motivation: Businesses	
Trust		Immature hybrid organisational forms	
Socio-political culture: locality		Insufficient university incubation capabilities	
Spatiality in RIS	Bajmóczy & Lukovics, 2009	Lack of autonomous intermediary organisations	Kempton, 2019; Gál & Ptáček, 2019
Local participants		Innovation demand & learning ability in the RIS	Bajmóczy & Lukovics, 2009, Kempton, 2019; Gál & Ptáček, 2019
University's local embeddedness		Negative perceptions of universities	Benneworth et al., 2018; Goldstein et al., 2019; Compagnucci & Spigarelli, 2020
Unique local resource-set	Ács et al., 2000	Capacity barriers: stakeholders	Benneworth et al., 2018
Range & distribution of spillover effects	Varga, 2009	Academic reward system	Kempton, 2019; Compagnucci & Spigarelli, 2020
Promoting national legislation	Goddard, 2018	Capacity barriers: University resources (all kinds)	Kempton, 2019; Tijssen et al., 2021; Compagnucci & Spigarelli, 2020

4. Methodology

For theoretical framework the interpretative constructivist approach was adopted to represent different contexts and perspectives in a research model of the exploratory-descriptive comparative case study design of two cases conducted as a cross-sectional study between 2020 and 2022. For data collection, semi-structured narrative interviews were used. For sampling, non-probability purposive sampling was used for the two universities: first by the logic of typical cases, then convenience sampling. Selection dimensions (Flick, 2018) were geographical location, regional importance and similar

educational profile as both universities are located in Central-Eastern European non-metropolitan areas (NUTS2: DUE: HU211, UNITBV: RO122) in ‘emerging innovator’ regions (EC, 2021); their cities followed a similar industrial development path after WWII (‘Stalin Cities’, EC, 2016); they were founded with similar aims; are the only higher education institutions in their urban areas; have a primarily regional scope; and although DUE is a medium-sized university of applied sciences and UNITBV is a large-scale comprehensive university, DUE’s educational profile is part of UNITBV’s portfolio.

Data sources were selected by the critical case strategy and expert or elite sampling (Flick, 2018). Thus, DUE’s rector and two of UNITBV’s vice-rectors with the head of the university’s office of corporate relations were interviewed. For the external stakeholders, a multi-stage sampling procedure was used: group selection by maximum variation based on the quadruple helix model, then relevant organisations within the stakeholder groups were identified by critical cases, whose representatives were selected by expert or elite selection (Flick, 2018): senior and middle managers from local government and companies, directors of institutions and other organisational leaders. In the DUE sample 4 business and 5 public administration organisations, 5 NGOs and 3 secondary schools were available (22 interviews), while in the UNITBV sample 2 businesses, 2 public administration organisations and 1 NGO without any secondary schools (8 interviews).

The verbatim interview transcripts were processed by qualitative content analysis following Schreier’s (2012) guidelines. Using the combined coding approach, two multi-level, highly complex coding grids were developed, then the main coding was performed with MAXQDA 2022. The results were presented through profile matrices generated by the Code Matrix Browser, case-oriented thematic summaries, and cross-case comparisons. The research results were evaluated in light of the major European literature (Table 1), and compared to each other.

4. Results

The first research question investigated the conditions that in some way facilitated university-external stakeholder collaborations, i.e. enabled their establishment, or supported their realisation. The DUE sample did not include a number of factors known from European literature: the knowledge absorption capacity of the actors in the regional innovation ecosystem, the inclusion of partnerships in university strategy documents, external stakeholder membership in university management, and academic career progression. Three factors characteristic of the UNITBV case were also missing: the university as a cost-effective supplier, moral obligation for cooperation, and the curricular flexibility in Masters and PhD programmes. However, unique to the DUE case were relevant training offer, the university’s openness to cooperation initiatives, the good personal relationship between partners’ senior management, the relevant professional knowledge of the university staff, external stakeholder resources and the university’s infrastructure, which support the European higher education literature.

All stakeholders agreed to the university’s training offer, research areas, knowledge base and infrastructure, its willingness to cooperate and its openness to new opportunities. On their own side, the importance of available resources (expertise, equipment, funding and network of contacts) was stressed, but trust among senior management, referrals from DUE alumni and local university contacts of their employees

were also considered as key supporting factors. Furthermore, attitudinal factors such as their organisation's human resource management principles and the corporate value of supporting the local community were also cited. In turn, university management also agreed to the essential role of professional knowledge, openness to new collaborations, supporting the local community and trust between leaders.

As for the UNITBV case, some conditions known from the international literature were missing: geographical proximity, external stakeholder membership in university boards, the legal obligation to cooperate, regional innovation ecosystem actors' knowledge absorption capacity, and the university's industrial capital. Some DUE factors did not apply here, e.g. the involvement of partners in university strategy development, the role of university foundations, flexibility in problem solving, the challenge of competitors, and stakeholders' own events as communication channels. Unique conditions to Brasov were available external stakeholder resources and their practical training offer, the relevance of the university's research and education portfolio, its openness to cooperate, its available resources and commitment to success, the good personal relationship and trust between operatives, tender opportunities, local patriotism and the ambition for a long-term partnership based on shared values.

All external stakeholders in Brasov agreed to three crucial conditions: matching supply and demand, the specific local resources, and the right attitude (business values and commitment). The majority added the stakeholder's expertise, equipment, funding and business relationships, and their commitment to developing the local community. Conversely, UNITBV vice-rectors emphasized university resources (infrastructure, human and financial resources, university events, communication channels), the relevance of their research areas, available external partner resources, openness to new initiatives, professional commitment, honest communication, and supporting the local community.

In sum, new collaboration facilitating factors were flexible problem solving, university prestige, political impartiality, moral obligation, the university as a cost-effective supplier, partners' willingness to innovate, diplomatic flair, professional and goal-oriented attitudes, informal personal relationships, common colleagues, honest communication, and the prioritisation of supporting local society at the strategic level.

The second research question explored the obstacles to, or barriers of university-external stakeholder co-operation. The data confirmed only some of the literary conditions: the mismatch between stakeholder demand and university supply, path dependency, autocratic university management, limited room for manoeuvre due to the external partner's capacity constraints, and the unstable and inadequate regulatory environment. However, twelve new factors were identified: some fundamental differences between the parties, the lack of formalised relationships, unorganised work placement, excessive university and state bureaucracy, negative stakeholder attitudes, restrictive legislation, diversity of actors (different expectations, mindset and organisational culture), various practical problems (e.g. timing, student preferences, corporate RDI at the parent company, the departure of a key actor, the termination of the training programme, Covid-19 pandemic closure), communication problems, lack of local patriotism, contradictions in dual training, and the time needed for change.

Relevant for both cases were the practical problems, actors' destructive behaviour, diverging strategic goals, interests, approaches and mindset, conflicting political loyalties,

supply-demand mismatches, stakeholders' human resource and financial constraints, inadequate information flow, low commitment to problem solving, university bureaucracy, and legal barriers of the different sectors.

As for the specific barriers of the two cases, there were similarities only in some areas with different emphases. For example, while in Dunaújváros the diverse organisational culture of large foreign companies obstructs co-operations, in Brasov the difference between industrial expectations and the university's capacities creates tensions for the university. While at DUE the range of practical problems is particularly rich, at UNITBV it is the various legal constraints that actors find the most difficult.

The common external stakeholder groups of the two cases agreed on distrust, burdensome university bureaucracy, lack of an adequate communication channel and effective communication between operatives, different political orientations, departure of a key person, missing institutionalisation of the collaboration, insufficient financial resources, lack of information and inter-sectoral conflicts of interest. However, no common barriers in university management experience were found, only three areas of agreement: some fundamental difference between the parties, the negative attitude of stakeholders, and practical problems. However, their manifestations were different: DUE highlighted different priorities, distrust, a lack of information and government bureaucracy, while UNITBV emphasised diverging supply-demand profiles, conflicting political sympathies, path dependency, different student specialisation preference, partners' organisational constraints, timing, and the departure of a key player.

5. Conclusions and Discussion

The conditions for the regional development role of Central-Eastern European regional universities (Gál & Ptáček, 2019) are met in both cases. Contrary to Western Europe, it is the direct, personal nature and long-term maintenance of university-external stakeholder relations that is decisive, rather than the coordination of an agent organisation delegated to the region (Kempton, 2019). This confirms that university regional engagement is mostly implemented through weak, bottom-up relations (Lengyel, 2012; Benneworth et al., 2018), while cultural characteristics and a lower degree of institutionalisation of the function in Eastern Europe could explain the difference.

Although both universities are open to any external stakeholders and are active in various joint activities, they mainly collaborate with the local government and large companies. They should increase engagement with societal partners of low advocacy and modest capacity to promote local-regional social sustainability (Benneworth et al., 2018).

The motivation, interest and rewarding of academics for participation in third mission collaborations is specific to the Romanian case. However, its details or extent were not investigated in this research, while a similar system had only been put in place at DUE at the time. An important facilitating condition was the continuous communication with external stakeholders, which DUE prioritised by a regular assessment of local-regional stakeholder needs for tailored service delivery (Compagnucci & Spigarelli, 2020).

To evaluate the findings on the collaboration hindering factors, the theory-driven conditions that were not confirmed by this research, as well as the twelve inductively identified constraints can be considered as new research results. In terms of the major barriers, the two cases repeated the lack of a clear and stable legal framework enabling

universities to cooperate with their various external stakeholders, and the insensitivity of existing legislation to the regulatory and spatial differences in the operational environment of higher education institutions. In Braşov, legal volatility and the provisions of the Public Procurement Law run counter to local rationalities. In turn, DUE suffers from a mismatch of local-regional knowledge demand and university supply due to the specific local industrial structure, and the capacity and capability gaps of micro-enterprises. This confirms the findings of Erdős (2018), Goldstein et al. (2019), and Gál and Ptáček (2019) about regional universities in Hungary and the Central-Eastern European region.

There were examples of SMEs and NGOs collaborating with DUE, but their indifference or negative attitude to university co-operation recalls the criticisms of Compagnucci & Spigarelli (2020). The order of major innovation partners of European universities (Kozirog et al., 2022), i.e. local and regional public institutions, international partners, large private sector companies, start-ups and SMEs, is characteristic of both cases.

As for university institutional barriers, a particularity of student involvement was confirmed: while mandatory internships for all students strengthened the university's social knowledge transfer function and increased the benefits for partners with the most potentials (Maassen, Andreadakis, Gulbrandsen & Stensaker, 2019), students' participation in local community engagement activities was mostly voluntary. As there are inherently fewer internships at NGOs, this supports the difference between collaboration areas and the weighting of external partners (Benneworth et al., 2018; Kempton, 2019).

Relating the findings to the RII model, they shed light on some of the local-regional and national framework conditions that determine the operation and effectiveness of the two universities' RII resources, capacities and potential (Tijssen et al., 2021) for realising their RII pathways in the RII delivery space. They may lead the two institutions to reinforce their external relations by strengthening their own resources (e.g. motivating student engagement, allocating own annual budget, targeted communication of collaboration results) and managing internal risks (e.g. simplifying administrative processes, efficient flow of operational information). Yet, exploring how the promoting and hindering factors interplay and shape the dynamics of the two universities' external relations, as well as impact studies investigating their effect on the RII pathways are possible future research directions.

As for limitations, these are only two cases with an uneven number of interviewees, which could have left further factors hidden in the UNITBV case. Therefore, a broader investigation in both Braşov and on the wider Central-Eastern European level is required to gain a fuller understanding of how specific and generalizable the two universities' experiences are.

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