

Please note! This is a self-archived version of the original article.

Huom! Tämä on rinnakkaistalenne.

To cite this Article / Käytä viittauksessa alkuperäistä lähdettä:

Salomaa, M., Cinar, R. & Charles, D. (2021) Rankings and regional development: The cause or the symptom of universities' insufficient regional contributions? Higher Education Governance and Policy, 2021:1, s. 31-44.

URL: <https://dergipark.org.tr/en/pub/hegp/issue/63449/934602>

Rankings and Regional Development: The Cause or the Symptom of Universities' Insufficient Regional Contributions?

Maria Salomaa^{1,2*}, Ridvan Cinar^{3,4}, & David Charles⁵

¹RDI Services, Tampere University of Applied Sciences, Tampere, Finland

²Lincoln International Business School, University of Lincoln, Lincoln, UK

³Mohn Centre for Innovation and Regional Development, Western Norway University of Applied Sciences, Bergen, Norway

⁴Department of Social, Political and Territorial Sciences, University of Aveiro, Aveiro, Portugal

⁵Northumbria Centre for Innovation, Regional Transformation and Entrepreneurship / Newcastle Business School, Northumbria University, Newcastle upon Tyne, UK

Article Type: Research Article

Corresponding Author: Maria Salomaa, maria.e.salomaa@gmail.com

Funding: This study has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 722295.

Cite as: Salomaa, M., Cinar, R., & Charles, D. (2021). Rankings and regional development: The cause or the symptom of universities' insufficient regional contributions? *Higher Education Governance & Policy*, 2(1), 31-44.

Access: <https://dergipark.org.tr/en/download/article-file/1758151>

Rankings and Regional Development: The Cause or the Symptom of Universities' Insufficient Regional Contributions?

Maria Salomaa^{1,2*}, Ridvan Cinar^{3,4}, & David Charles⁵

¹RDI Services, Tampere University of Applied Sciences, Tampere, Finland

²Lincoln International Business School, University of Lincoln, Lincoln, UK

³Mohn Centre for Innovation and Regional Development, Western Norway University of Applied Sciences, Bergen, Norway

⁴Department of Social, Political and Territorial Sciences, University of Aveiro, Aveiro, Portugal

⁵Northumbria Centre for Innovation, Regional Transformation and Entrepreneurship / Newcastle Business School, Northumbria University, Newcastle upon Tyne, UK

Abstract

Universities are increasingly expected to contribute to regional development and the wellbeing of communities in the places in which they are located through a wide range of third mission activities. However, this is an arduous task as these regional activities are usually pitched against other missions, namely teaching and research, and global orientation strategy. While the literature has recently implied that rankings might be the cause of universities' insufficient regional contributions, the manner in which they inhibit regional engagement is yet to be uncovered. This paper therefore explores how rankings permeate universities and guide the behaviours of academics and top managers and thereby influence their regional engagement activities. Using a multiple case study design entailing semi-structured interviews carried out in Dutch, English and Finnish universities, we demonstrate that rankings inhibit universities' regional contributions in two ways: i) by exacerbating universities' difficulty of justifying regional engagement activities to the funders through an emphasis on quantitative third mission indicators, and ii) by encouraging universities to shift their focus from regional relevance to global excellence through stronger institutional profiling. We argue that rankings are not the cause of universities' insufficient regional contributions per se, but rather a symptom of it; the cause is increasingly global competition between higher education institutions.

Keywords: Rankings, universities, regional development, third mission

Introduction

University rankings have recently become highly influential in guiding behaviour of higher education institutions, academic staff and prospective students. Indeed, some governments have taken them as a benchmark, according to which extra funding has been mobilized for universities (Hazelkorn, 2015) and more countries now formulate policies and strategies aimed at placing as many higher education institutions as possible in the upper ranks of such global league tables (Rose & McKinley, 2018; Matveeva & Ferligoj, 2020; Yudkevich et al., 2015). Likewise, studies focusing on rankings and their impact on universities have increased considerably over the past two decades. The literature in this realm has so far explored a) how rankings create and reinforce competition among universities (e.g. Brankovic et al., 2018; Krucken, 2021), b) the way internationalization bolsters league tables and is driven by them (e.g. Delgado-Marguez et al., 2011; Horta, 2009), c) the nature of their methodology with particular focus on sets of indicators (e.g. Spence, 2019; Uslu, 2020), d) comparison between different league tables ranking universities (Cakir et al., 2015; Moed, 2017), and e) a geopolitical perspective towards

* **Corresponding Author:** Maria Salomaa, maria.e.salomaa@gmail.com

^{1,2}**ORCID:** [0000-0002-4415-0161](https://orcid.org/0000-0002-4415-0161); ^{3,4}**ORCID:** [0000-0002-5640-224X](https://orcid.org/0000-0002-5640-224X); ⁵**ORCID:** [0000-0002-0885-4209](https://orcid.org/0000-0002-0885-4209)

(Research Article) Cite as: Salomaa, M., Cinar, R., & Charles, D. (2021). Rankings and regional development: The cause or the symptom of universities' insufficient regional contributions? *Higher Education Governance & Policy*, 2(1), 31-44.

Received: May 8, 2021; **Revised:** June 25, 2021; **Accepted:** June 28, 2021; **Published:** June 30, 2021

university rankings (Jons & Hoyler, 2013; Koch, 2014). While these studies have enriched understanding of the way such league tables exert influence on individual academics, higher education institutions and policymakers, these insights have so far largely been confined to the first and second mission of universities, namely teaching and research. How rankings impact universities' contributions to regional development and the broader third mission activities have surprisingly attracted little attention given the growing external pressure for greater regional engagement.

Since the onset of the financial crisis in 2008, the role of universities in regional development has been accentuated, particularly in Europe and within innovation, regional development, and higher education policy spheres. Universities, especially those located in more peripheral regions, have been asked to increase the depth of their regional contributions to assist tackling complex societal challenges. Moreover, policymakers and external regional stakeholders now expect higher education institutions to move beyond purely commercially oriented engagement activities to also contribute into social, environmental, and cultural development (European Commission, 2018a; 2018b; 2018c) in order to have a broader impact within their cities and regions. Nevertheless, this is quite complicated and arduous for universities to justify to funders as on most occasions, the impact of non-economic contributions is hard to measure and cannot be necessarily quantified due to its tacit nature. One of the major rankers, Times Higher Education, has recently released an Impact Ranking, which is based on universities' engagement with United Nation's Sustainable Development Goals. However, such rankings may not fully capture the wide variety of impactful third mission activities universities engage in, particularly those involving the social sciences and humanities.

Recently emerging studies have indicated-either explicitly or implicitly- that rankings may have a negative impact on universities' regional contributions. Cinar (2020) demonstrated that they can pose systemic challenges to the institutionalization of bioeconomy activities. Furthermore, Lee et al. (2020) revealed that the higher a university is ranked, the less explicit it becomes about its commitment to regional engagement and third mission. What is less known, however, is the nature of such a negative impact on academics and universities. In this paper, we are therefore interested in exploring the manner in which rankings inhibit universities' engagement in a comprehensive set of third mission activities that are geared towards broader regional benefits.

First, we provide a brief overview of recent developments that have led to increasing expectations from universities to play a more proactive role in regional development. We then elaborate on the nature and technicalities of university rankings, in which we explore their relevance for regional contributions. Following this, we present case studies of three universities located in Finland, the Netherlands, and the United Kingdom to highlight the way rankings manifest a negative impact on regional engagement activity. Our findings demonstrate that rankings inhibit universities' regional contributions in two ways: a) by exacerbating universities' difficulty in justifying regional engagement activities to the funders through an emphasis on quantitative third mission indicators and b) by encouraging universities to shift their focus from regional relevance to global excellence through stronger institutional profiling. We conclude by arguing that rankings are not the cause of universities choosing to under-emphasise regional contributions per se, but rather a symptom of it; the cause is increasingly global competition between higher education institutions.

Changing Role of Universities in Regional Development and the Nature of Rankings

The notion that universities can contribute to regional innovation and local economic development has become widespread since the 1980s. The following three decades witnessed universities across the world being expected to collaborate with local firms, engage in technology transfer and invest in start-ups, activities that are generally associated with the entrepreneurial university (Audretsch, 2014; Clark, 2004). However, since the early 2010s, expectations of universities have evolved. Partly triggered by the financial economic crisis of 2008 and increasing territorial disparities, policymakers (regional and innovation) have been expecting universities to assume more roles in regional development. These new roles range from greater involvement in the formulation of regional innovation strategies to contribution to social innovation and tackling societal challenges: university activities that are often characterized by the concept of the engaged university (Uyara, 2010; Weerts, 2014).

On the other hand, national higher education policies are often focused on international research excellence (e.g., Goddard & Vallance, 2013). These different expectations can widen the mismatch between academic (research) profiles and regional assets (Goddard & Vallance, 2013), also within regionally-oriented higher education institutions (e.g. Salomaa & Charles, 2021). Although there is some evidence on the positive impact of university-industry engagement on research quality (e.g., Degl’Innocenti et al., 2019), finding a balance between “*borderless academic excellence as defined by international peer review and reflected in institutional league tables and generating and applying knowledge to meet specific regional specialisation opportunities*” (Goddard & Vallance, 2013, p. 96) requires extensive strategic capacity to find synergies between different missions.

Despite the growing body of literature discussing the ‘third mission’, university engagement is typically focused either on knowledge transfer outcomes (science-based activities) or more generic contributions to regional development. Bringing these two different types of engagement activities together ‘into a single coherent third mission’ is complicated (Sánchez-Barrionuengo & Benneworth, 2019), especially in the absence of the third mission from global ranking schemes. This can lead to de-prioritization of non-entrepreneurial, social and cultural activities (‘soft outputs’) related to the third mission (Lee et al., 2020), which can limit the university’s overall contribution to regional development.

Ranking tables for universities have been developed over a period of many years and there are multiple versions now available, some at national level, but the most significant being international, such as the Times Higher Education (THE), QS World University Rankings and Shanghai Jiao Tong (ARWU). U-multirank was developed as an alternative approach which allows the user to select the indicators and weighting (Van Vught & Ziegele, 2011). The purpose of the rankings is supposedly to provide a guide to the quality of universities for prospective partners and students, and hence the design of the ranking methodologies provides an implicit set of assumptions about what quality might mean (Taylor & Braddock, 2007), although there is no consistent view of what quality might be or how to measure it (Hazelkorn, 2015). Different rankings use different combinations and weightings though, producing different rank orders (Soh, 2017).

Generally, the core elements of most ranking systems are focused on research quality, to some extent teaching, and to a lesser extent internationalisation. Many of the weighted variables used are metrics taken from published data, such as on publications or staff/student ratios, but some ranking systems also place emphasis on the views of other academics and stakeholders through surveys. The underlying assumption though is that research excellence is the best indicator of quality (Taylor & Braddock, 2007) hence an emphasis on citations, awards, and suchlike. Teaching excellence is less amenable for international comparison, although may be an important factor at national level through student surveys (as in the UK) and hence resources (staff/student ratio) tend to be used as a proxy for this. THE also use doctorates as part of the teaching indicator although this is also a sign of research activity. Internationalisation is often seen as an important element in that the attractiveness for international staff and students is claimed to be a sign of quality, although this is moderated by the effect of national systems which are more or less open to international staff and students. The QS World University Rankings places particular emphasis on reputation with both a survey of academics and of employers’ accounting for half of the weighted score. THE also uses reputation, but to a smaller degree. This indicator is problematic given the subjective nature of the measures, the lag effects of reputation, and the bounded rationality of the survey respondents.

Regional engagement tends not to be an important element in ranking systems, with just one variable accounting for 2.5% of the THE ranking. Some attempt has been made to include a few variables in the U-multirank system and the Times Higher has introduced a separate ranking on impact which is based on variables related to the UN Sustainable Development Goals. Overall though the main rankings are primarily based on research, staff ratios and reputation. We therefore lay out our first proposition:

Proposition 1. There is no clear consensus among ranking tables that regional engagement is a sign of quality of institution, or how that could be measured, and this message is generally accepted by universities .

The significance of what is included in the rankings depends on the responses made by universities to their scores and relative positions. If universities assume that the rankings influence their attractiveness to international students or research partners, then they will invest effort in maximising those ranking scores. More significantly many governments have sought to use rankings as an indicator of the international competitiveness of their university sector with investment and targets to encourage universities to move up the league tables (Hazelkorn, 2015). This has become clear in terms of the ways in which many universities explicitly refer to rankings in their strategic plans. They may for example refer to moving into a higher category on the main listing or being in the top x universities for their particular country. Such objectives may be asserted almost ignoring the behaviour of other universities – so there may be 20 or more universities seeking to be in the top ten, when clearly the existing top ten have advantages of incumbency. The consequence is that universities decide their key performance indicators depending on what might help lift them up league tables, in some ways seeking to ‘game’ the various indicators contributing to overall rankings (Hazelkorn, 2015). High or rising ranking positions reinforces the advantages of high performing universities, attracting more resources to maintain those positions (Marginson, 2014). It is therefore possible to propose the following:

Proposition 2. Universities use rankings as important signifiers and seek to manage their performance through targeting improvement on key indicators.

In those limited cases where regional engagement data is used in rankings, or is collected and may be amenable to be used in future or modified rankings, what kinds of data are collected? Taking U-multirank as an example there are both knowledge transfer and regional engagement indicators. Knowledge transfer is measured through co-publications with industrial partners and patents awarded, whilst regional engagement is measured through graduates working in the region and regional joint publications. Whilst these are indicators of engagement, they are highly selective and represent a narrow slice of the broad range of forms of interaction. The THE uses income from industry as its only measure of knowledge transfer.

In 2021, the UK published its first iteration of the Knowledge Exchange Framework (KEF), which collects indicators against 8 themes and gives a modified ranking for each theme (in the top 20% of universities of that type for example). Here again many of the themes are assessed using simple quantitative indicators such as the level of income from a particular source as proportion of total university income. There is also a particular problem with assessing engagement as the measure used will be applied to the university and might be an indication of the value or benefit received by the university – number of projects, income, number of spin off firms. What is much more difficult is to represent the benefit to the region from such activities. Not only are there insuperable problems in assessing the level of aggregate benefits that might be attributable to university activities (although direct economic multipliers are often calculated based on employment and purchasing only), but values could be manipulated depending on the choice of ‘region’ and account would need to be taken of the level of opportunity realised by different locations. So, whilst some universities are based in regions with a positive absorptive capacity, which can utilise university knowledge and easily convert it into economic activity, others are based in much less propitious locations where it is harder to have an impact, yet that smaller impact might be more significant. Departing from such a background, we can arrive at our last proposition:

Proposition 3. Any inclusion of regional engagement in rankings is likely to focus on business links and on easily measurable university benefits rather than the benefits to the region.

These three propositions, taken together, suggest that university objectives to support engagement may come into conflict with the desire to manage league table positions, and that the focus on narrow business or income targets potentially skews the emphasis of engagement strategies towards the measurable rather than a wider concern for social benefit.

Methods and Materials

In this study, we are concerned with the way rankings may inhibit universities' regional engagement. We followed an exploratory multiple case study design to delve deeper into this particular phenomenon. Multiple case studies allow employing the 'replication strategy' in order to strengthen the analytical generalization (Yin, 2003) and the robustness of the key findings by replicating them across comparable case settings (Eisenhardt, 1989). We needed to select universities that are both regionally oriented-established with a mission to serve to the regional social and economic needs- and strive to be globally recognized at the same time, thereby paying more attention to the rankings. In order to cover a broad geographical and institutional diversity, we selected two universities and a university consortium involving different higher educations that formulate and implement a common strategy: University of Twente in the Netherlands, University of Lincoln in UK, and University Consortium of Pori in Finland. These higher education institutions claim to be both regionally relevant and globally oriented, which renders them appropriate cases to delve into. We then determined key people that can provide us with the insights into how rankings may inhibit further regional contribution: academic staff specializing on higher education research, executive board members, current and former rectors, employees working along the lines of strategy development, regional authorities, and administrative staff. Altogether, 87 semi-structured research interviews were conducted which involved questions on how these particular universities interpret third mission, how they justify their regional relevance and ranking-related strategies, and how rankings affect individual academics as well as the whole organization and overall, how rankings shape their regional engagement behaviour. The research interviews were conducted between 2017 and 2019 as part of two individual PhD studies within framework of the RUNIN project.¹ The distribution of interviews across cases can be seen in Table 1 below.

Table 1. Distribution of interviews across cases

Institution	Researchers	Top management	Admin staff	Others	Total
University of Twente	10	3	3	2	18
University of Lincoln	15	5	8	5	33
University Consortium of Pori				3	3 (36 overall for UC-Pori)
<i>Tampere University of Technology</i>	5	6	2	0	13
<i>University of Tampere</i>	3	4	0	0	7
<i>Aalto University</i>	2	1	0	0	3
<i>University of Turku</i>	4	2	4	0	10
Total	39	21	17	10	87

All of the interviews were transcribed and coded in NVivo and were re-examined for evidence relating to rankings and their impact on the universities and their engagement in regional issues through a content analysis approach. Findings from interviews were triangulated against secondary data sources such as the strategic plans of universities and website content. We now turn our attention to the characteristics of the selected universities and the regions in which they are located.

Case Study Overview

University of Twente

Twente region is located in the eastern Netherlands, bordering Germany. Twente has a population of approximately 626.500 with its major city being Enschede. Until the 1960s, the region was strong in the textile industry, but subsequently experienced a gradual decline. The region is generally defined as peripheral compared to the rest of the Netherlands (Benneworth & Pinheiro, 2017). The University of Twente (UT) was established in 1961, with a specific expectation of contributing to the revival of regional economic activity. In order to meet these expectations, UT has engaged with the region closely and invested in entrepreneurship, which generated more than 1000 start-ups/spin offs since 1980 (Cinar, 2019). Furthermore, it has played a key role in the emergence of the ICT sector and transforming the region into a high-tech hub both nationally and internationally. It is thus characterized as an

¹ 'RUNIN – The Role of Universities in Innovation and Regional Development' H2020-MSCA-ITN-2017.

entrepreneurial, technical, and research-intensive university. However, more recently, it is expected to diversify the scope of third mission activities by moving beyond (not abandoning though) economic oriented regional engagement activities. It has 11740 students, 1898 academic staff (including PhD students as employees) as of 2019 (UT, 2019). As of 2021, it ranks between 200-250 (Times Higher Education), and 197th (Quacquarelli Symonds). The expectation to perform better in such league tables has likewise increased, particularly since 2010.

University of Lincoln

Lincolnshire is a large, rural county in the East Midlands of England with ca. 751 000 habitants. The University of Lincoln (UoL) was first established in 1996. It was formerly a branch campus of the University of Humberside, which was developed after a long local lobbying process to attract a university to Lincolnshire. Subsequently, the whole university relocated to Lincoln (UoL, 2010). Currently, it has over 14 000 students and 1600 staff members on three campuses. Aside from the main campus in the centre of Lincoln there are two small campuses serving the local agriculture sector and food industry: Lincoln Institute for Agri-Food Technology (LIAT) in Riseholme near Lincoln and National Centre for Food Manufacturing (NCFM) in Holbeach in southern Lincolnshire.

UoL has always been a ‘regionally-oriented’ higher education institution and it has a strategic aim to serve the local job market. This has been delivered through for example a purpose-built Engineering School, which was a joint-initiative with Siemens Ltd to secure access to a highly-skilled workforce. UoL has also developed a range of interface structures to support local SMEs and to retain graduates within the area² (e.g., Sparkhouse incubator). One of its strategies is to attract large-scale businesses to the region by providing state-of-the-art facilities (e.g., Lincolnshire Innovation Park, NCFM). Most of these collaborative initiatives are based on strategic partnerships with regional actors (e.g., Lincolnshire County Council, Lincoln City Council) and businesses (e.g., Siemens Ltd).

University Consortium of Pori

The Satakunta region is one of the oldest historical provinces in Finland located on the southwest coast, combining 17 municipalities with a population of 220 398 habitants (OFS, 2017). The major regional centres are the cities of Pori and Rauma. The main industrial sectors of the Satakunta region are energy production, engineering, offshore process industry, ports and logistics and food industry.³

The University Consortium of Pori (UC-Pori) is one of the six university consortia located in peripheral areas of Finland offering local higher education activities. In the Satakunta region, both UC-Pori and Satakunta University of Applied Sciences are among the key institutions to increase the knowledge capital as well as the number of start-ups (Satakunta Regional Programme 2014-2017). The university consortia are network organisations of remote university unit’s belonging to Finnish universities located in more central areas. Since early 2000, the consortia’s purpose has been to enhance the societal role of higher education by responding to local needs (FINHEEC, 2013.) They became part of the Finnish University Act in 2009 (558/2009), and additional regulations on their state funding allocation were confirmed in 2012. The University Consortium of Pori’s roots are in the former Tampere University of Technology, which has offered engineering education in Satakunta since the 1980s. It was also the coordinator of the UC-Pori until its recent merger with the University of Tampere in 2019.⁴ At the time of the interviews, the other partner universities with remote units at the Pori campus were the former University of Tampere (UTA), University of Turku (UTU) and Aalto University (Aalto)⁵. Currently UC-Pori has 2500 degree students and 170 staff members. It provides education and/or research

² According to 2014/2015 graduate destination survey, 42.7% of graduates stayed in East Midlands and 13.4% in the East of England. The East Midlands breakdown shows that Lincoln is the most popular destination (40.5%), followed by North Kesteven (10.0%) and Nottingham (8.0%).

³ Regional Council of Satakunta website, <http://www.satakuntaliitto.fi/english>, accessed 12th November 2018.

⁴ Tampere University of Technology and University of Tampere merged on the 1st of January 2019 forming a new Tampere University (TUNI). TUNI is also the biggest shareholder of Tampere University of Applied Sciences. However, these two HEIs, TUT and UTA, were investigated separately in this study because the merger process was not completed at the time of the research interviews.

⁵ Since 2020, Aalto University has no longer presence at the Pori campus.

activities in technology and engineering (former TUT), social sciences (former UTA) and economics and maritime studies (UTU).⁶

The UC-Pori personnel are part of faculties located in the main campuses, but they work permanently at the Pori campus. The coordinating university of the consortium recruits a director, who is responsible for promoting collaboration between the UC-Pori units, parent universities and regional stakeholders. For this purpose, the coordinating university, currently the new Tampere University, receives an earmarked funding (ca. 600 000 EUR per year) from the Finnish Ministry of Education and Culture.

Empirical Evidence

TWENTE

The University of Twente (UT) has recently formulated its strategy titled *Shaping2030: Mission, vision and strategy*. This document mentions the word “region/regional” 10 times and contains a section devoted to how the university should reach out beyond the campus to the communities. While this exemplifies the regional relevance of UT and commitment to regional development, it also shows how UT is simultaneously situating itself between regional and global, including when it comes to societal contributions as the following statements sum up: “*Be it locally or globally, physically or virtually, we strive to connect with people and their needs and wishes*” (UT, 2020, p. 17) and “*We encourage researchers, teachers, support staff and students actively participate in off-campus connections with regional, national or international partners, either digitally or physically*” (UT, 2020, p. 22). Its research strategy puts a clear emphasis on strong visibility on rankings: “*To shape the way in which the UT with its research activities adds value, and creates a distinct UT profile within various networks, lobby interactions, rankings and media outings etc. we will...*” (UT, 2020, p. 29). The statement continues with a set of suggestions on how to achieve this. Furthermore, the university has a full section in its website, devoted to rankings and achievements in five different league tables⁷.

Most of the academic staff were very much aware of both external pressures: delivering regional impact and better performance at global rankings. However, they perceive that these two are generally pitched against each other due to their current nature:

“On the one hand, we are expected to engage more with the region. On the other hand, we are also expected to go up in the rankings. Currently, our position is not one of the best among Dutch universities. There are not really many third mission activities that you would engage and that these activities would still contribute to your position in the rankings. Perhaps industry collaboration to some extent, but other than this, not really.” (Academic staff, 6)

The underlying reason as pointed by the interviewed academic staff seems to be the way impact is accentuated within academic and policy discourse. More specifically, many interviewees pointed out to the way regional impact is measured and even further conceptualized by external stakeholders as the following statement indicate:

“When universities argue their impact on society, you see statements like ‘for every euro invested, the university returned it back with two or three euro contribution’. Or that we collaborated with X number of firms, generated X number of start-ups... These start-ups provide jobs to X number of people.... This is because national and regional stakeholders want the impact to be visible and quantifiable. I think this determines the type of regional engagement activities the university chooses” (Top Management, 8).

Furthermore, there was a discontent about the way global league tables impacted universities’ regional engagement and the broader third mission:

“In academia, we had a debate that the third mission is narrowly understood and there are many other activities universities can engage. Instead of solving it, I think rankings exacerbated this problem by putting so much emphasis on things that are quantitatively measured.” (Academic staff, 11).

⁶ UC-Pori website, <http://www.ucpori.fi>, accessed 12th November 2018.

⁷ <https://www.utwente.nl/en/organisation/facts-and-figures/rankings/#most-entrepreneurial-university>

The negative impact of rankings on regional contribution is felt quite strongly in universities that are not only regionally focused but also research-intensive and global-oriented simultaneously such as UT. This is manifested by gradual shift of organizational focus from regional relevance to global excellence. More specifically, the league tables put emphasis on highly cited research outputs, which is usually the result of delving into universal research topics that have global relevance and are conducted via international collaboration. This occasionally results in academic staff working on topics that are of international value instead of specifically regionally relevant research and prioritising such research activities over regional engagement. Nevertheless, interviewees, particularly those who have been in the university for a long time, have expressed that this particular shift existed before rankings, albeit much less severely: *“We had this dilemma [world-class vs regionally oriented] even before the league tables emerged. They intensified it and speeded it up the process [towards the world-class] I think what needs to be addressed first is the increasing competition between universities”*. (Administrative staff, 3).

LINCOLN

The University of Lincoln has identified its major priorities through its Strategic Plan 2016-21 (UoL, 2016) which identifies five main principles. These refer to regional engagement only obliquely as part of promoting enterprise and innovation, employer engagement, and the contribution of graduates to society. Whilst there is no explicit mention of league tables, there are a number of measures of success which identify indicators that do contribute to league tables: student satisfaction, increasing income, graduate employment, a ‘step-change improvement in any research assessment framework’, increasing high quality national and international research collaborations, improved citations, consultancy income and spin outs, and improving staff-student ratios. Meanwhile the university management watch closely the UK rankings and are quick to celebrate any improvement.

Most of the interviewed academics from the University of Lincoln were familiar with the expectations of the national research excellence framework (REF) and the UK HE landscapes, and how they may hinder successful implementation of regional engagement activities. Many of the researchers thought that regional engagement is valued within the university only *“as long as it fits within the university's research profile. --So, we, for example, have to constantly show how our research is going to fit into the REF in the UK”*. (UoL, Researcher 2). This may decrease academic personnel’s motivation to get involved with regional engagement activities, because of *“pressures from teaching and paper writing and REF”* (UoL, Researcher 12), unless the researchers have individual interest towards such activities beyond indicators of ‘academic excellence’. Even in the latter case, some academics did not feel that the university management supports such efforts, even though the UoL has a strategic aim to build research on regional needs:

“I am trying to do all these what I think is a very important work that actually will make, will generate social and economic impact. I feel that -- instead of supporting me they (line managers) try to prevent me of being successful (in engagement).-- if they do not give me the time (from teaching) bought out for this (engagement activity through external funds), it is an obstacle.” (UoL, Researcher 14).

“--The Golden Triangle and all that and, that has been difficult for regional universities. -- if you strip the research out of regional universities then you damage the local economies so they are (higher education policies) now much more balance back to the idea that they should be thinking about regional identity and so on. I think seeking to support research excellence which is aligned with regional needs clearly makes sense.” (UoL, Management 1).

One of the key drivers to engage with regional development was generating external funding from these sources, which is not, however, uncomplicated: *“I think the big challenges in terms of regional engagement are how university funding --works. So, it is inevitable that activity is driven in any organization by what is funded. -- the lion's share of university funding comes from --through teaching or research grants and therefore sort of by definition that is where most of your focus has to go. You need to deliver the things you're funded for.”* (UoL, Management 1). However, regionally funded initiatives do not automatically support international networking or profile-building, which were considered to be important for rankings:

“It is important for extending our international networks and visibility, which to a university like Lincoln, I think you when look at globally rankings, we're very poor because we are new and where we do not have that international exposure. So, I think those are the strategic reasons. I would love to say it is because universities really should be delivering high quality research and impact. But I think, you know, I think it is much more about playing the game and then you hope that through playing the game in the way you set up, the research and the impact and the real value will follow.” (UoL, Researcher 4).

“On the other side, the university assisting in regional development funding, is partially driven, or wholly driven, by what would happen in the research excellence framework, the REF. Will it produce a four-star paper? Well, if - first step back to what I have just said - if you do something for industry and (they) might not publicise it so, there is no four-star paper.” (UoL, Researcher 8).

Also, conducting research that is limited to a certain regional context might not be attractive for academics, as rooting university's activities too much in the local needs can have a negative impact on both academic career development and research excellence:

“I have done a lot of Lincolnshire based research and I feel myself becoming Mrs Lincolnshire sometimes. And a lot of academics are looking global although, you know, they want to be the world expert in this. And so, they do not see the appeal necessarily of working on a project with local SMEs because it feels too parochial perhaps.” (UoL, Researcher 12).

Furthermore, the regional funding authorities from Greater Lincolnshire Local Enterprise Partnership confirmed, that finding synergies between research and expected outputs is complicated in the regional development projects, e.g., funded through Structural Funds: *“And I think where the sticking points will be for that particular project, giving an example, is the research elements which do not have a direct coherent link to outcomes that are expected--.” (GLLEP, 1).*

UC-PORI

UC-Pori's strategy for 2021-2025 highlights three key areas to strengthen multidisciplinary and impactful collaboration, education, and research activities in the region and beyond. It focuses on profiling of the university consortium within the Satakunta region, increasing its visibility, impact and cooperation with regional stakeholders (UC-Pori, 2020). However, the strategy is a one-page document only stating the values, mission, and vision of the consortium, but not how these are achieved or measured. In practice, as also mentioned as part of the profiling activities, UC-Pori's activities are heavily guided by the strategies of the parent universities, whereas the role of the university consortium is not mentioned in any of the parent university's strategic plans. Although the societal role and interaction with different stakeholder groups were emphasised in parent universities' strategies, the quality and impact of university operations were perceived mainly through research and education. Furthermore, their aim towards global research excellence was explicitly stated.

Both the parent universities and the local management raised the issue of performance-based indicators defining the amount of state funding allocated to universities in Finland, which do not directly encourage regional engagement activities. These indicators are widely based on traditional education and research outputs, indeed steering the focus towards international research excellence, e.g., through research funding and highly-ranked journal articles. All parent universities had a strategic focus to increase the volume of research funding, also in remote campuses, and to push them towards the EU framework programme funds. Considering challenges related to regional engagement activities, which in the case of UC-Pori are mainly funded through Structural Funds of EU Cohesion Policy, one of the main issues is that locally funded R&D does not count as 'research funding', which can *“obviously be frustrating for academics”* (UTU, Admin 5). As an exception, UTU had an aim to develop institutional impact indicators for engagement activities to make these (regional) initiatives more visible, which was, overall, considered to be very challenging:

“How can we measure (the impact of) engagement activities? It is not easy, and if it would be up to me, then I would only look at STEM but there are so many different ways to interact and engage ---journal articles are not a great indicator because they can be published years after the activity ---and businesses do not necessarily share openly if they have adapted results from joint R&D activities. Maybe it would

be easier to track down social innovations as they are often developed together with public actors”.(TUT, Management 3).

On the other hand, the top management of the parent universities prioritised international prestige, and were cautious that “—*too much enthusiasms towards local activities (within university consortia) might damage the scientific quality.*” (UTA, Management 3). This view was widely shared by the top management of the parent universities:

“All research, despite the source funding-- will be measured globally through publications. –There is no ‘regional’ research-- but the results must be applicable elsewhere too.”(UC-Pori, Management 2).

“The ambition should be tied to internationally recognised research – I get that it is also important to develop regions – but I do not think it is in the core of academia.” (UTA, Management 4).

In general, UC-Pori’s regional development initiatives, typically SF projects, were not based on cutting-edge technology, but their aim was to transfer existing results. These kinds of ‘capacity building’ projects, again, may not strive for research excellence.

“The goals (of SF projects) are quite modest from the university’s point of view. If we just focus on serving the SMEs, it is just transferring existing knowledge and there is no time to develop anything new.” (TUT, Management 3).

Although the Finnish university consortia have a specific mission to serve their regions as written in the University Act, in practice, the interviewees confirmed these remote units in peripheral areas follow their parent universities’ strategies and are thus forced to balance between their regional engagement mission and delivering high-quality research outputs for gaining international reputation. The many organisational changes within parent universities of the UC-Pori had not reinforced the regional engagement within the UC-Pori units, but rather highlighted the policy push towards (global) research excellence.

Discussion and Conclusion

In this study, we explored how rankings may inhibit universities’ broader regional contributions and societal engagement. We found out that while rankings do not directly prevent universities from regional engagement, they have an impact on how regional engagement and the overall third mission is perceived, operationalized, and evaluated. Our findings demonstrate that there was a general implicit acceptance by university management and by academic staff that the rankings provided measures of quality, in that the universities sought to use and respond to those rankings.

The nature of the rankings used by universities differed so that whilst Twente were focused on the main global rankings and this drove research strategy, Lincoln was more focused on the UK Research Excellence Framework (REF), as this drove research income, but also on UK-based newspaper league tables which emphasised teaching performance, which were felt to influence undergraduate applications. Success measures such as Modern University of the Year in the Times/Sunday Times Guide, and Gold rating in the Teaching Excellence Framework are prominent on the website and social media. By emphasising these rankings with a primary focus on teaching and research, there was an implicit acceptance that regional engagement was less important, even though it was acknowledged as an important objective of the university. Regardless of the prioritisation of engagement, the funding for teaching and research was much more significant to the university and was directly affected by the performance on the main rankings. Consequently, universities included the aim to improve on their rankings in their strategies and sought to use indicators relating to rankings as targets. So, researchers reported a focus on international excellence in research over regional engagement.

Where regional engagement was evaluated, there was a tendency for this to be done in terms of simple measures focused on business links and income. Even though regional engagement was acknowledged to be a good thing, the benefits were often couched in terms of quantifiable economic benefits, and the advantages to the university in research and teaching. Funding was a key measure used by the universities, even if funding was a poor indicator of the benefit to the community. Those researchers that were keen to work with the local community often faced these tensions, and in some cases felt that

a regional focus was career-limiting, that they could see faster promotion and better opportunities by playing the game and doing what the university needed to raise its reputation via the rankings.

The suggestion that rankings of universities have an impact on their contribution to regional development and the third mission appears to have some merit, and in these three cases there was a view expressed by academic researchers that there is certainly conflict between the objectives of regional engagement and success in rankings. The relationship is complex though and may often be perceived more as a conflict by researchers than by senior managers, inasmuch as researchers receive what they see as conflicting signals. It is certainly the case though that universities tend to see the prime indicators behind rankings as signs of quality and hence seek to manage their performance in rankings as a way of attracting students and funding, especially when governments use rankings or similar indicators as drivers of funding.

The three universities examined here were all institutions with considerable regional commitments and were not institutions with very high positions in the global rankings. Thus, whilst they potentially had something to gain from enhancing their position in the rankings, they had made commitments to regional partners and to their own staff on their regional engagement. The staff interviewed in all three cases felt that there was a perceived tension in that university management was asking for increased international research performance and that regional projects were seen as less desirable in that respect. In all three cases it was national expectations that mattered more than the international rankings, but these were still expressed in terms of global research excellence.

It is clear that university strategies are not unnaturally being driven by funding priorities and as national governments seek to reward excellence, then research performance is an uncontroversial measure of excellence which rankings also tend to emphasise. Teaching income is usually driven by student numbers, especially fee-paying international students in the cases of the UK and Netherlands (significantly higher fees than their national/EU counterparts), and these students are also assumed to be following the rankings, and indeed success follows success as internationalisation is one of the metrics used by the rankings. Regional engagement is rarely built into rankings and even when done so is so narrowly drawn as to focus on the benefits to the university in terms of income from industry or spin off firms established to commercialise university knowledge, thereby reinforcing a research excellence-led view.

The rankings, however, are not the main cause of this problem, although they do contribute by making selected metrics visible. The real problem is the emergence of a culture of global competition in higher education, actively promoted by governments, which puts research excellence at the heart of their support for universities, even whilst simultaneously calling for greater regional contribution. The solution is not to add a few new metrics to the rankings to include regional engagement in the assessment of quality, as the metrics used would typically capture a particular form of research-led engagement whilst failing to capture much socially oriented and pro bono activity. Instead, a far more inclusive and sophisticated understanding of regional engagement is needed with institutions being rewarded for the impacts they have on local society, both through third stream funding and through mainstream research funds.

Lastly, we want to emphasize that this is a multiple case study of regional-oriented universities situated within European context. Further studies should thus uncover whether and how rankings influence regional engagement of higher education institutions located in other parts of the world as well as universities that characterize themselves as global and world-class.

Funding

This study has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 722295.

References

- Audretsch, D. B. (2014). From the entrepreneurial university to the university for the entrepreneurial society. *The Journal of Technology Transfer*, 39, 313-321.
- Brankovic, J., Ringel, L., & Werron, T. (2018). How rankings produce competition: The case of global university rankings. *Zeitschrift für Soziologie*, 47, 270-288.
- Cakir, M. P., Acarturk, C., Alasehir, O., & Cilingir, C. (2015). A comparative analysis of global and national university ranking systems. *Scientometrics*, 103, 813-848.
- Cinar, R. (2020). Structuration of natural resource-based innovations in universities: How do they get institutionalized? *Sustainability*, 12, 1834.
- Cinar, R. (2019). Delving into social entrepreneurship in universities: is it legitimate yet? *Regional Studies, Regional Science*, 6, 217-232.
- Clark, B. R. (2004). Delineating the character of the entrepreneurial university. *Higher Education Policy*, 17, 355-370.
- D'egl'Innocenti, M., Matousek, R., & Tzeremes, N. G. (2019). The interconnections of academic research and universities "third mission": Evidence from the UK. *Research Policy*, 48(9), 103793.
- Delgado-Marquez, B. L., Hurtado-Torres, N. E., & Bondar, Y. (2011). Internationalization of higher education: Theoretical and empirical investigation of its influence on university institution rankings. *International Journal of Educational Technology in Higher Education*, 8, 265-284.
- European Commission. (2018a). *A European ecosystem for social innovation*. Luxembourg: Publication Office of the European Union.
- European Commission. (2018b). *A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment*. Luxembourg: Publication Office of the European Union.
- European Commission. (2018c). *A new European agenda for culture* (COM, 2018, 267; Final). Brussels: European Commission.
- Fonseca, L., Nieth, L., Salomaa, M., & Benneworth, P. (2021). Universities and place leadership – A question of agency and alignment. In M. Sotarauta & A. Beer (Eds.), *Handbook on City and Regional Leadership* (pp. 226-247). Cheltenham: Edward Elgar Publishing.
- Goddard, J., & Vallance, P. (2013). *The university and the city*. London: Routledge.
- Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world-class excellence*. London: Palgrave Macmillan.
- Horta, H. (2009). Global and national prominent universities: internationalization, competitiveness, and the role of the State. *Higher Education*, 58, 387-405.
- Jons, H., & Hoyler, M. (2013). Global geographies of higher education: The perspective of world university rankings. *Geoforum*, 46, 45-59.
- Koch, N. (2014). The shifting geopolitics of higher education: Inter/nationalizing elite universities in Kazakstan, Saudi Arabia and beyond. *Geoforum*, 56, 46-54.
- Krucken, G. (2021). Multiple competitions in higher education: A conceptual approach. *Innovation: Organization & Management*, 23, 163-181.
- Lee, J. J., Vance, H., Stensaker, B., & Ghosh, S. (2020). Global rankings at a local cost? The strategic pursuit of status and the third mission. *Comparative Education*, 56, 236-256.
- Marginson, S. (2014). University rankings and social science. *European Journal of Education*, 49, 45-59.

- Matveeva, N., & Ferligoj, A. (2020). Scientific collaboration in Russian universities before and after the excellence initiative Project 5-100. *Scientometrics*, *124*, 2383-2407.
- Moed, F. H. (2017). A critical comparative analysis of five world university rankings. *Scientometrics*, *110*, 967-990.
- Regional Council of Satakunta. (2018). *Satakuntaliitto*. Accessed [November 12, 2018]: <http://www.satakuntaliitto.fi/english>
- Rose, H., & McKinley, J. (2018). Japan's English-medium instruction initiatives and the globalization of higher education. *Higher Education*, *75*, 111-129.
- Sánchez-Barrioluengo, M., & Benneworth, P. (2019). Is the entrepreneurial university also regionally engaged? Analysing the influence of university's structural configuration on third mission performance. *Technological Forecasting & Social Change*, *141*, 206-218.
- Salomaa, M., & Charles, D. (2021). The university third mission and the European Structural Funds in peripheral regions: Insights from Finland. *Science and Public Policy*. <https://doi.org/10.1093/scipol/scab003>
- Soh, K. (2017). The seven deadly sins of world university ranking: A summary from several papers. *Journal of Higher Education Policy and Management*, *39*, 104-115.
- Spence, C. (2019). 'Judgment' versus 'metrics' in higher education management. *Higher Education*, *77*, 761-775.
- Tampere Higher Education Community. (2020). *Tampere University's Strategy 2030*. Accessed [April 30, 2021]: <https://www.tuni.fi/fi/tutustu-meihin/korkeakouluyhteison-strategia>
- Taylor, P. and Braddock, R. (2007) International university ranking systems and the idea of university excellence, *Journal of Higher Education Policy and Management*, *29*, 245-260.
- The Finnish Higher Education Evaluation Council, FINHEEC. (2013). *Korkeakoulut yhteiskunnan kehittäjinä. Korkeakoulujen yhteiskunnallisen ja alueellisen vaikuttavuuden arviointiryhmän loppuraportti [Evaluation of higher education institutions' social and regional impact]* (5:2013). Access: https://karvi.fi/app/uploads/2014/09/KKA_0513.pdf
- Universities Act 558/2009 (Finland). (2009). *UNIVERSITIES ACT 558/2009 (Amendments up to 644/2016 included)*. Accessed [August 30, 2017]: <https://www.finlex.fi/en/laki/kaannokset/2009/en20090558.pdf>
- University of Lincoln. (2016). *Thinking Ahead 2016 -2021: University of Lincoln Strategic Plan*. Lincoln: UoL.
- University Consortium of Pori. (2020). *Strategy 2021-2026*. Accessed [August 30, 2021]: <https://ucpori.fi/fi-fi/meista/strategia/32/>
- University of Twente. (2020). *Shaping 2030. Mission, vision, strategy*. Accessed [May 2, 2021]: <https://www.utwente.nl/en/organisation/about/shaping2030/>
- University of Twente. (2020). *Research strategy 2020-2030 University of Twente. The University of Technology that puts people first*. Accessed [May 2, 2021]: https://issuu.com/utwente/docs/ut_researchstrategy2030_def
- University of Turku. (2021). *Strategy 2030*. Accessed [April 30, 2021]: <https://www.utu.fi/fi/yliopisto/turun-yliopiston-strategia-2030>
- Uslu, B. (2020). A path for ranking success: What does the expanded indicator-set of international university rankings suggest? *Higher Education*, *80*, 949-972.
- Uyarra, E. (2010). Conceptualizing the regional roles of universities, implications and contradictions. *European Planning Studies*, *18*, 1227-1246.

- Van Vught, F., & Ziegele, F. (Eds). (2011). *U-Multirank. The design and testing the feasibility of a multi-dimensional global university ranking* (Final Report). Access: http://ec.europa.eu/education/higher-education/doc/multirank_en.pdf
- Weerts, D. J. (2014). State funding and the engaged university: Understanding community engagement and state appropriations in higher education. *The Review of Higher Education*, 38, 133-169.
- Yudkevich, M., Altbach, P. G., & Rumbley, L. E. (2015). Global university rankings: The ‘Olympic Games’ of higher education? *Prospects*, 45, 411-419.