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Book review

Tijssen, R, Edwards, J and Jonkers, K (2021) *Regional Innovation Impact of Universities*, Edward Elgar, pp. 238.

Tijssen, Edwards and Jonkers have added to the growing collection of books about universities and regions. Certainly, it is a subject that remains highly topical with current policy developments in many European countries and growing interest in developing countries. In this case the focus is on regional innovation, and the book keeps a central focus on this rather than some of the wider regional impacts of universities such as on culture, health, governance and social development. It is quite a short book, just 125 pages for the main text, but with five substantial appendices of university case studies.

The authors seek to develop a framework to assess the Regional Innovation Impact (RII) potential and performance of universities. The first part of the book develops this RII framework as an analytical model and as an approach. Part II then draws on a rich body of new case studies, only some of which are in the appendices, to explore the components of the model. Part III then looks at issues of implementation, before the final section with the case study appendices.

The book starts with a statement that universities make a significant impact to their home towns or cities, but then asks a series of questions of how important, whether they work with local businesses and whether they can be incentivised to do more. The authors argue that we lack evidence on these issues, and there is therefore the need to shine a light into the black box. This book, I would argue, only partly addresses these questions. It has a particular focus on regional innovation, which is only a part of a university's regional mission. It surveys a set of research-intensive universities, and by so doing neglects a majority of institutions. It also focuses heavily on university leadership and policymaker concerns, which I would argue gives an official story of university regional engagement, with inevitable limitations. These restrictions are fair enough, as the topic is huge, and despite the claims is also well studied. The challenge for the authors is to make a significant addition to that literature, or to add a perspective that is genuinely useful to policy development.

The central focus is on the concept of Regional Innovation Impact, a concept developed by the authors in recent years within an EU policy study. RII is defined here as "an immediate or longer-term impact of an innovative outcome, within a local geographical area, which is directly linked to resources, processes or outputs that involve active participation of individuals and/or sub-units within a higher education institution located in that same area." (p. 15). As the authors note this is a slippery concept. It is not the same as the third mission, being narrower in scope (just innovation) and territorially focused. It includes the employment of graduates locally, knowledge spillovers and deliberate innovation activities. Innovation is defined fairly broadly, but there is an implicit emphasis on technology. This definition is used to create a conceptual model of an RII development trajectory linking goals, resources, pathways and impacts. A theory of change is also proposed as a means by which universities can identify the steps leading from initial goals through to impacts.

The "elephant in the room", as the authors identify it, is how to identify and describe these RII activities, and this is much of the focus of the book. Much of the literature on university innovation activity draws upon a limited number of indicators, often those things easy to measure such as patents or spin-off firms. This book looks to the U-Multirank tool for a set of regional engagement performance indicators around income, internships, graduates, research partnerships and joint publications. This is quite a limited perspective on innovation engagement, and again seems to be a

case of measuring what's available rather than trying to understand the complexity of the interactions. Admittedly there are caveats on the numbers, and what is proposed is a 'narrative with numbers' as a solution to the data problem, but the narrative is that of the university leadership and hence also subject to caveats.

The empirical part of the study draws on 20 university case studies, of which five are written up in the appendices. These cover 13 countries, mainly one per country, although there are four from Italy and three from Spain. There are leading research universities such as Leiden and Bologna, technological universities such as Delft and Kaunas, and some newer universities such as Stavanger and Rovira i Virgili. The universities compiled a self-appraisal document and were asked to complete a questionnaire. There are advantages to this in terms of gaining an official perspective on the university's strategy towards engagement and an overview of key activities. This is an approach used extensively by OECD over the last couple of decades, although OECD combine this with a team of peer reviewers to interview both the university staff and regional partners in developing regional case study reports (OECD, 2007). The weakness of the data, though, is precisely that it is a central view from the university, and as such may be something of a post hoc rationalisation. University central management are often not fully aware of all of the regional activities at the level of departments and individuals, and their view of what is good practice may be shaped by their own implicit biases as to what meets their central objectives rather than perhaps what meets regional needs. It is hard though to do cross-national comparative work on university regional engagement, yet also be aware of the contingencies of place and the diversity of actions at an individual level. There is a bit of a tendency to black box the university, which arises from the methodology and the focus on university strategy.

The analytical chapters 5 to 8 are quite brief and broadly cover regional strategy, education, research and knowledge exchange, and entrepreneurship support. Chapter 5 examines how universities participate in the governance of their regional innovation contexts, providing examples of how universities have taken leadership within their regions in smart specialisation strategies for example. Few seem to have identified the role of social sciences in this strategy development, although it's not clear if this is a bias on the part of the respondents or result of selecting technological universities. An important issue here is the potential for universities to help internationalise their regions through their research networks, and this could have been explored further. Chapter 6 looks at education and graduates. Pedagogical approaches such as problem-based learning represent important opportunities to connect students with real world problems in their regions, whilst several universities have provided descriptions of placements and graduate retention schemes. The graduate labour market issue is worthy of much greater detailed study though. One of the indicators used is the level of master's graduates retained in the region and it is acknowledged that this is a complex issue depending on the regional absorptive capacity as well as university attempts to connect students with local employers. Of course, for universities attracting large numbers of international master's students, retention may be very low, but other impacts may be more important. This illustrates the challenge the authors face in covering a broad set of topics yet needing to dig deeply into processes and impacts.

The research and knowledge exchange topic is covered in chapter 7 and includes specialised research partnerships, technology transfer offices and commercialisation. The emphasis here is on major infrastructures to support business engagement rather than the bottom-up activities of individual academics. The focus reflects the central university perspective, but by focusing on initiatives rather than the culture and incentive structures misses out on some important questions on how to encourage academic staff to become more engaged, and the nature of incentives and

barriers at the level of higher education systems. The final empirical chapter focuses on entrepreneurial education and enterprise support.

Part III of the book looks to policy implementation on the basis of the RII model and the narrative with numbers approach. Chapter 9 moves from a review of the self-appraisal approach to self-assessment and external assessment. There is a discussion of possible additional indicators, but also the limitations of a standard approach given the heterogeneity of universities and regions. Some regions have low absorptive capacity, and the regional or institutional environment may inhibit university engagement in RII. So not all universities will be able to excel in this, and it is recognised that many of those reported in this book are “high-profile success stories”. Perhaps we need to hear more on low-profile cases that have succeeded in inauspicious circumstances, particularly through everyday activities (Iakovleva et al., 2022). There is recognition though that assessment needs some input from regional partners and from external experts – perhaps of the kind undertaken by OECD, although there interestingly the focus was on the regional system rather than the individual university and this is perhaps a more appropriate way to capture the interactions and complementarities between universities.

Chapter 10 looks at policy issues for the EU. If greater innovation impact needs greater investment in universities then how should this be managed? Could the RII framework be used to assess performance in order to provide financial incentives? The UK Research Excellence Framework is discussed as one approach through its impact case studies, though a more pertinent approach is the UK’s Knowledge Exchange Framework. The latter is not yet used for funding and presents a challenge as whilst it uses a combination of narrative and numerical data, it fails to capture many aspects of regional engagement and the reliability of some of the data is suspect. There is also a longstanding issue of whether governments should be rewarding success in terms of universities attracting income from the region, or effort by the university to have an impact even if the region is unable to pay for the services. The problem with innovation impact is that it is a consequence of mutual efforts and the region is as much part of the outcome as the university. The chapter concludes with discussions of options for ERDF (European Regional Development Fund), Horizon Europe and Erasmus. A short final chapter reflects on value of the RII approach and calls for more work on indicators and more research on RII.

Overall, the book presents some useful insights for a regional policymaker of some of the dimensions of university regional engagement, along with some examples of good practice drawn from a diverse set of European institutions. For the specialist in the field there is little that is new or innovative, given the scale of the literature on this topic in recent years. For me, the focus on institutional self-assessment is a weakness, as we need to know more about the way university actions are placed in context – is the university shaping its region or being shaped? We also need to know more about the micro-scale and the everyday nature of university regional engagement. The discussion on indicators could also usefully draw on wider experience of assessing regional engagement including some outside of Europe, both in terms of what can be measured, but also the difficulties of assessing whether a university is making an above-average effort to support innovation in a weak region, or simply benefitting from a very supportive regional environment. This comes back to the original question of whether universities should and could do more, and that question still needs an answer.

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