



# Entrepreneurial University in the European Union—EU in the EU

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Received: 26 October 2018 / Accepted: 9 December 2018 / Published online: 4 January 2019  
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“Higher education is no longer a luxury; it is an essential tool for survival but, at the same time, higher education is essential to national, social, and economic development”.

(Task Force on Higher Education and Society 2000).

Knowledge management becomes ever more vital as the current global crisis gets worse and worse. After industrialism’s exploitation of resources lost its ability to procure satisfaction, knowledge economy was introduced as an solution (Heng et al. 2012; Ženko et al. 2017; Di Nauta et al. 2018; Carayannis et al. 2014). This is a system wherein the sharing of knowledge plays a crucial role in the production of prosperity, as the advancement of knowledge and the promotion of its efficient use is vital in today’s society (Mortazavi and Bahrami 2012; Mason 2018). Nowadays, we see a shift in which productivity and growth depend more on human resources, in terms or intellect, than natural resources, further incentivizing effective interaction between the government, universities, society, and the private sector (Heng et al. 2012). In spite of the differences between European and American universities, similar developments have been found in both higher education systems (Dabić et al. 2016).

Universities, now more than ever, are increasingly expected to facilitate economic development and societal welfare (Etzkowitz et al. 2000), straying from their traditional role, which focused exclusively on research and the transfer of knowledge (Wright et al. 2008). Each new expectation added to the university agenda affects all of its existing functions (Philpott et al. 2011). Previous changes pertain to curriculum reformation, quality improvement, implementation of control mechanisms, guarantee

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of European Credit Transfer System, promotion of mobility, education and research relationship, accessibility of education, internationalization, long life learning, cooperation with enterprises, openness of universities, and the design of strategies to obtain these aspirations (Etzkowit and Leydesdorff 2000; EC 2005, 2008; Gibb 2013; Link et al. 2014).

University independence and autonomy must also be upheld (the Bologna Declaration on the European space for higher education: an explanation, 2012i); however, the limitation of resources and the increasing demand for efficacy, render universities' battlefields of confronting agendas. On one side, there is the reduction of budgets, quality demands, and scope of service, and on the other side, there is the need to strengthen synergistic potential in entrepreneurial university development (Shattock 2009; Gibb 2012). Discussion of the quadruple innovation helix (QH) framework, which extends the triple helix (TH) concept, re-visits key operational tenets of the TH system, namely relationships, functions, and their contributions to regional systems of innovation (RIS). This special issue solicits theoretical and empirical (qualitative, quantitative, and case-based) articles that contribute to the understanding of the transformation of knowledge and the entrepreneurial university's role in a European content.

The emergence of knowledge economy, as discussed, has meant that universities have had to alter their roles in education. "In essence, universities are now required to become more entrepreneurial in their organisational outlook and in their offerings" (Miller et al. 2018). Discussions on entrepreneurial universities have raised questions concerning the influence of academic researchers on industry, creating a shift towards a third mission (Altmann 2013; Carayannis and Campbell 2009; Carayannis and Rakhmatullin 2014; Carayannis et al. 2018; Dabić et al. 2018). Mosey et al. (2017) present three studies empirically grounded within the specific and distinct policy contexts of Spain, Italy, and the UK, revealing new insights on the determinants of technological entrepreneurship. Catholic University in Leuven, Belgium has, in Reuters' latest innovation ranking, been crowned the most innovative university in Europe for the third year running.

In the opening article of this special issue, "Squeezing the Middle: the Consequences of Quality Oversight in Management Education," Hommel and Woods take a broad look at quality management's impact on institutional dynamics in higher education, using the business school as an exemplary focal point for analysis. Using the Theory of Fields framework by Fligstein and McAdam (2012), they argue that the triad of quality management (consisting of traditional quality assurance, reputation management, and risk management) establishes stability and order. What works in everyday conditions may, however, lead to detrimental outcomes in the face of disruptive change.

The authors theorize that the triad of quality management divides the sector into elite incumbents (accredited and ranked schools), other incumbents (accredited but non-ranked), and challengers sitting at the fringe of the sector. In their view, elite incumbents adjust their behaviour in response to disruption and can thereby affect field architecture. They are supported by challenger schools, who are not vested in current governance arrangements but hope to achieve incumbency status by aligning themselves with the elite by searching for new institutional arrangements. In actuality, groupings of elite incumbents and challengers may be pushing in different directions until a stable equilibrium can again be reached.

In contrast, field-destabilizing disruption may leave non-ranked incumbents in a difficult spot. Their status is derived from the bureaucratized celebration of behavioral rules and they lack the degrees of freedom to test out alternative

arrangements. This is likely to result in a procrastinated, delayed response to disruptive challenges, with harmful consequences in terms of market positioning and quality of educational provision.

A lot has been written on the negative effects of the accreditation/rankings game. Hommel and Woods are able to broaden the perspective by taking a more general approach to quality management. They suggest that the fixation on codifying rules of behavior as a means of quality control can lead to harmful procrastination and organizational decay. Moving forward, Hommel and Woods propose a looser approach to quality management, which will allow business schools to pay more attention to resilience-enhancing development.

In the paper “How University’s Activities Support the Development of Students’ Entrepreneurial Abilities: Case of Slovenia and Croatia,” authors Vojko Potočan, Zlatko Nedelko Matjež Mulej, and Marina Dabić use data collected from 306 Slovenian and 609 Croatian students and report that university activities do support the development of students’ entrepreneurship abilities. This bridges the gap between theoretical research concerning academic entrepreneurship and individual empirical studies examining students’ perspectives on the academic activities available to them that could development their entrepreneurial abilities.

Differences within two countries were observed in Slovenian and Croatian students’ opinions with regard to (a) required academic activities and (b) the significance of the activities offered to them to develop their entrepreneurial abilities. Results show that students’ gender and level of study do not affect their perception of the importance of academic activities. This research can be practically implicated to improve universities’ entrepreneurship education programs by identifying activities that can fill the gaps between the students’ needs and the academic activities offered to them.

In the paper “Impacts of universities in different stages of economic development,” Radzivon Marozau, Maribel Guerrero<sup>1</sup>, and David Urbano analyzed universities’ impact on the economic development of different countries. These countries were classified into three developmental stages: factor-driven, efficiency-driven, and innovation driven. Regression analysis demonstrated that human capital (created by universities) and knowledge capital (created/translated to the industrial sector) both have a positive effect on overall economic development. The final sample comprised consisted of 77 countries, all categorized into their stages of economic development: factor-driven (15), efficiency-driven (30), and innovation-driven (32).

The paper entitled “Academic Entrepreneurship in Post-transition Country—Case Study of Croatia” by Ivana Bilić, Vlatka Škokić, and Marina Lovrinčević presents interesting findings related to the future possibilities of academic entrepreneurship development and the barriers which hinder university/industry collaboration in Croatia. In this research, the authors adopted a qualitative case study approach, with a semi-structured interview as the main method of data collection. As the last joint member of the European Union, with a long history of communism and socialism, the findings of this paper shed light on a number of identified contextualized factors, which hinder the further development of academic entrepreneurship.

In the last paper titled “Open innovation capacity of the Polish universities,” readers gain insight into specific aspects of entrepreneurial universities in terms of their capacity for open innovation. HEIs, particularly universities of technology, are expected to act as knowledge hubs, entering into various transactions concerning intellectual

property rights and know-how. Are they able to do so? Marcin Baron uses to state-of-the-art literature to establish the position of universities in the field of open innovation. Afterwards, he focuses on the ways in which universities deliver solutions as partners/suppliers in outside-in company innovation processes as well as in universities, as facilitators of open innovation ecosystems or key players in these ecosystems. By accessing data from Polish universities of technology, the author seeks to answer the research question of whether or not actions undertaken by universities to boost their presence in ecosystems affect the sales of their intellectual property.

His main finding is not optimistic, as Baron claims that the scrutinized capacity is potentially high only because numerous activities are rarely followed up on by real open innovation transactions.

We hope that this special issue will foster debate and action in directions, which significantly increase entrepreneurial spirit, and action within universities—not just in the EU but also around the globe.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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