Chapter 21
Global Vertical Stratification of Institutions and the Academic Profession: The Role of Research in Future High Participation Environments

Marek Kwiek

Abstract In this chapter, I link two themes in the context of participation in higher education: vertical stratification of national systems and the changing academic profession. The perspective used is a longer-term scenario (20–30 years), the trends are examined as they emerge from the data (Elsevier; OECD; SciVal; Scopus), and from the theorizations of university governance, funding, and politics of higher education. The chapter shows that higher education may be expected to be sharply divided into two contrasting segments, both globally and intra-nationally, with only a limited number (say, 1000 or 3–5%) of universities truly combining teaching and research missions. Globally, in the overwhelming majority of institutions, academic work will mean relatively unexciting teaching of the masses of nontraditional students, higher workloads, and curricula much more closely related to the labor market needs than today. In other words, higher education, as a public good, will be provided to the masses of students at a relatively low cost by the masses of academics. However, the positional value of higher education credentials may be lower than currently expected, as in high participation systems, they will become widely available. Access to higher education will probably be fully open in general, but still highly restricted in the case of selected top institutions, with no changes from the current selectivity patterns. In this scenario, common social and economic returns from higher education will be high, but individual returns will diminish.

Keywords Academic profession · Research · Research excellence · Global vertical stratifiction

M. Kwiek (✉)
Institute for Advanced Studies in Social Sciences and Humanities (IAS), Center for Public Policy Studies, University of Poznan, Poznan, Poland
e-mail: kwiekm@amu.edu.pl

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21.1 Introduction

In this chapter, I link two themes in the context of participation in higher education: vertical stratification of national systems and the changing academic profession. In the postwar period, mostly in affluent European and North American societies, we became accustomed to the idea that the academic profession was relatively homogeneous, our higher education systems were more similar than dissimilar to each other, and the academic profession lived and worked maintaining middle-class lifestyles. However, in the past two decades, two processes have been increasingly visible: the academic profession has become more internally divided than ever before, perhaps most visibly in the United States (Cummings & Finkelstein, 2012; Johnson, 2017; Hermanowicz, 2012); and higher education systems have become vertically stratified (Cantwell et al., 2018b; Kwiek, 2019b). The various segments of the profession and components of higher education systems have been drifting apart, with a general contrast between the haves and have-nots in terms of working conditions and the attractiveness of the academic profession at the individual level, and the global visibility in league tables and access to national research funding at the institutional level. There have been many social, economic, political, and financial factors influencing these changes (Altbach et al., 2010), but perhaps the most divisive factor that causes higher education and its workforce to drift apart is research. The role of research in universities embedded in knowledge economies is powerfully divisive—and research performance and outputs are more easily measurable and internationally comparable than other university missions (Marginson, 2014; Stephan, 2012).

It is research that differentiates the academic profession into segments with various roles, and divides and ranks higher education systems into components with various functions. In ranking and measuring exercises, it is research that is most widely used across the globe to vertically stratify both academics and universities. This paper is an exercise in future scenario writing, in which the radical consequences of the divisive impact of academic research on individuals and institutions are discussed. The future of universities and the academic profession does not necessarily have to develop along the lines discussed here, but it certainly could. The perspective used is a longer-term scenario (20–30 years), the trends are examined as they emerge from the data (Elsevier, 2020; OECD, 2020, 2021; SciVal, 2021; Scopus, 2021), and from the theorizations of university governance, funding, and politics of higher education (Cantwell et al., 2018a, b; Kwiek, 2019a).

21.2 What Do High Participation Systems Mean?

What can be expected within the timeframe explored? In most countries, the higher education sector will probably be more sharply stratified than today, both globally and intra-nationally, with few highly prestigious institutions at the top and

numerous low-tier institutions. The binary divide will be between elite knowledge producers and the remaining institutions. There will be limited opportunities to move up the prestige ladder and join the elite sub-sectors, and much higher chances of staying in the demand-absorbing segments of national systems. Demand-absorbing institutions will be widely accessible, and the massification of higher education in high-participation societies at levels of 60–90% will be achieved in most developed and developing countries. Recent trends in the massification of higher education and their rationales are best shown in a series of studies presented by Simon Marginson and colleagues in the past few years, allowing the global higher education research community to move beyond both Martin Trow's theoretical tripartite division of higher education systems (Trow, 1973) into elite, mass, and universal (Cantwell et al., 2018b; Marginson, 2016a, b) and the other influential explanation of growth and massification of higher education: institutional theory, proposed by Evan Schofer and John W. Meyer (2005). The worldwide trends of expansion are examined through the themes of governance, horizontal diversity, equity, high participation society, and vertical stratification (Cantwell et al., 2018b, pp. 1–200; Kwiek, 2018b) and country cases include Australia, Canada, Finland, Japan, Norway, Poland, Russia, and the USA. Global expansion of higher education, leading to the emergence of "high participation systems of higher education (HPS)," is linked in their research to the growing social demand for position.

There are a number of factors leading to high participation systems of higher education, but Marginson and colleagues suggest that social aspirations are key. Once basic needs for subsistence are met, parents turn their minds to "lifting their children above themselves. If they are already affluent, they still want to improve the position" (Cantwell et al., 2018b, p. 27). Once the majority of families enter higher education, students and families outside of it face growing disadvantages. Non-participation in some types of higher education increasingly hurts, both socially and economically. As one of their propositions state, "In HPS there is no intrinsic limit to the spread of family aspirations for participation in higher education until universality is reached; and no intrinsic limit to the level of social position to which families/students may aspire" (Cantwell et al., 2018a, b, p. 27). In other words, the HPS theory suggests that in the long run, participation expands globally without limits. At the same time, social demand for higher education is not equivalent to economic and market demand. Social demand is the best available candidate for the role of common driver of the worldwide tendency toward HPS.

The HPS narrative of expansion goes beyond, but does not exclude, several other narratives: economic development narratives based on human capital, credentialism narratives based on degrees and certificates, and urbanization and middle class narratives. Higher education credentials are becoming a social and economic must (as a "defensive strategy") for millions of global citizens who increasingly want to have higher than average graduate earnings and live in cities where higher education institutions tend to be concentrated (Horta et al., 2019). What for decades was restricted to a small minority of citizens is today becoming more and more available to masses of young people. There are more than 250 million students at the moment, and the number is rising continually.

21.3 Higher Education Futures and Academic Profession Futures

It is difficult to think about the future of the academic profession in isolation from the trends impacting the future of higher education. Hundreds of millions of students worldwide mean dozens of millions of academics who are teaching them in all types of institutions. The first idea that comes to mind is that the vast change in student numbers expected in this scenario of increasing participation and unstoppable expansion of higher education will lead to a parallel change in the number of academics and in the type of work they will be performing in the sector; or rather, in its diversified sub-sectors. The relatively homogeneous nature of higher education systems known until fairly recently in most countries, sometimes with dual university and vocational sub-systems as in Germany or the Netherlands, is probably not sustainable in the future, with millions of new entrants to higher education globally.

What can be expected in this long-term scenario? The increasing global vertical stratification of higher education systems may include the emergence of a small global ultra-elite, a top league of research-intensive universities competing with each other, present in most countries but specifically in the affluent OECD economies (let us estimate provisionally their number to be around 1000). The global elite of universities will be distinguished by their supreme research performance and outputs, relatively easy to measure and rank in the various league tables, both nationally and internationally.

Research-intensive universities and their departments and individual academics act largely as "prestige maximizers" (Melguizo & Strober, 2007, p. 634), striving constantly to increase their status. Just as companies are "profit maximizers," universities predominantly seek prestige at the intersection of the monetary and prestige economies. Prestige can also be used to leverage resources, principally through research grants, and institutions, departments, and individual academics modify their behaviors—including publishing patterns (Kwiek, 2021)—to that end, competing for external resources in quasi-markets (Rosinger et al., 2016, Taylor et al., 2016). Individual prestige generation through publications, research grants, patents, and awards are critical resources for research-intensive universities. In this "competitive status economy" (Marginson, 2014, p. 107), research is a powerful source of differentiation and ranking, and prestige is a major driver of what Slaughter and Leslie (1997) called "academic capitalism." Prestige is a rival good, based on relative rather than absolute measures—a zero-sum game, in which "what winners win, losers lose" (Hirsch, 1976, p. 52)—as global research-intensive segments of academia become ever more competitive.

Most countries have research-intensive national flagship universities, often, although not always, located in capital cities. Most of them enter global rankings, sometimes alongside other national universities. These ultra-elite institutions are internationally visible knowledge producers that also train national political, social,

and economic elites. Their high selectivity in teaching and elite status in research are often accompanied by a long history.

21.4 The Concentration of Research: Institutions and Individuals

Among about 20,000 higher education institutions in the world (Scopus, 2021), there is no more than 1000 involved in competitive, global academic knowledge production. The SciVal platform of the Scopus database (SciVal, 2021) shows that in the decade 2010–2019, the total number of institutions (of all types) involved in global academic publishing was not higher than 9000 (8639), including institutions from academic, corporate, government, medical, and other sectors. If a threshold of 500 publications per year on average (or of 5000 publications within this decade) is used, then the number of all institutions above the threshold shrinks to 1590. There are 934 institutions with at least 10,000 publications, 153 with at least 50,000, and 24 with at least 100,000 publications of all types. Harvard University is by far the largest global knowledge producer, with more publications than any country except for 22; for instance, in Europe, Harvard has more publications than Denmark, Austria, Portugal, Czech Republic, Norway, and Finland, as well as Mexico, Singapore, Israel, and Malaysia globally. If we look at the research-focused rankings, the Leiden ranking 2020 lists 1176 universities with at least 100 publications in the 2015–2018 period and the ARWU World University Ranking 2020 lists 1000 universities. Specifically, in more regional terms, 41% of universities in the Top 100 of the ARWU ranking are located in the USA, two-thirds of universities are in one of five countries: the USA, the UK, France, Switzerland, and Australia (66%), and the upper 10 countries take 83% of places.

The concentration of research intensifies both at the level of institutions and individual scientists and scholars; and in the case of individuals, it intensifies with respect to both publications and citations. Four in ten of 6167 Clarivate's Highly Cited Researchers in 2020 come from US universities (41.5%), seven in ten come from the top five countries (71.8%), and 84.2% from the top ten countries. Should we expect radically more research-intensive universities in the future than the current 1000? The answer is probably not, and what is more, the number might be even smaller for a number of reasons. Perhaps the most important is the ongoing concentration of the most expensive research, elite journal publications (for instance, the upper 1% of highly cited papers and the upper 1% of publications in top journals), and their impact as shown through a proxy of citations.

Only about 1% of globally publishing scientists (of about 15 million in the period 1996–2011) constitute the "continuously publishing core" of the academic profession, with at least a single paper published every year within the 16 years studied. They are responsible for 41.7% of all papers in the same period (Ioannidis et al., 2014, p. 1). Also, about 1% of the most cited scientists in 118 scientific disciplines

in 2015 received 21% of all citations, a sharp increase from 14% in 2000 (Nielsen & Andersen, 2021, p. 5). The upper 10% of scientists and scholars in terms of research productivity are responsible for about half of all academic knowledge production in 11 European systems across seven major clusters of disciplines (and are often termed "research top performers" or "research stars") (Kwiek, 2016, 2018a). Highly productive and highly cited scientists tend to be increasingly concentrated in selected, elite institutions to different degrees in different countries (Abramo et al., 2019a, b; Yemini, 2021).

21.5 The Top 1000 Universities

Importantly, this ongoing research-induced global vertical stratification of higher education institutions seems to be accompanied by the ongoing vertical differentiation of the academic profession. Both processes can be expected to intensify in the coming decades. The processes of the concentration of top research in selected institutions may have a powerful impact on academic lives and careers. The attractiveness of the academic profession and the academic workplace is certainly at stake, especially in those institutions that are not research-intensive and instead, in this binary distinction, will be predominantly teaching-focused. The basic assumption of this scenario is that in hugely massified systems, the traditional Humboldtian (Kwiek, 2006, pp. 81–138; 2008) teaching-research nexus will be maintained in practice almost exclusively in the small elite sub-sector—despite normative narratives about the critical role of the nexus for higher education in national systems (Teichler, 2014). The opportunities at the disposal of institutions and individual scientists (or their teams) will vary immensely in the future, but most importantly, qualitative cross-institutional distinction will probably be between the top 1000 universities and the rest (comprising about 25,000–30,000 institutions, up from the current 20,000).

Depending on the country, steeper or flatter vertical stratification of academic institutions within national systems may become the rule rather than the exception, especially in less affluent economies. Limited affinities between the super-league of institutions, comprising just a few universities in most medium-sized countries, and the rest within national systems can be expected. Only in more affluent OECD nations will there be a larger number of universities that are globally visible and ranked (in terms of research intensity), with countries such as the USA, the UK, China, Japan, and Australia and such regional academic superpowers as the EU (with Germany, France, Italy, Spain, and the Netherlands) hosting the bulk of the global super-league universities responsible for 80–90% of all research published in globally recognized and indexed peer-reviewed academic journals. Vertical stratification of academic institutions may take different forms in different countries and its intensification may differ between national systems, but as Cantwell and Marginson (2018, p. 125) described, in the case of current HPS, it may take the form of bifurcation, or "a binary division into separate and opposing sub-groups that

together constitute an interdependent system." In their terms, the two opposing subgroups present today are "the artisanal" and the "demand-absorbing" sub-sectors, with different degrees of similarity to these two ideal types in different systems.

The 1000 top universities as global leaders in science, technology, and scholarship, nationally embedded and nationally funded but operating on a planetary scale and closely collaborating in research (Olechnicka et al., 2019; Wagner, 2018), will be providing the vast majority of internationally visible research and internationally recognized doctorates to the global higher education system as a whole. Additionally, due to their high selectivity, prestige, and long tradition, they will be training national and global elites. Students will become increasingly anxious about access to top universities, and status anxiety will be on the rise, leading to increased global mobility of status-seeking students (Oleksiyenko, 2018).

Always providing the best opportunities for its scientists and scholars, the super-league will likely have drastically different institutional features, management and governance modes, total funding, and total research funding than the rest of institutions, guaranteeing them unlimited access to a global pool of top research talents. The global vertical stratification of higher education will be based on institutional research capacities and global academic knowledge production, with the levels achieved by the super-league far beyond the reach of the remaining thousands of universities across the world. Advanced research is expected to be ever more costly, and impactful research results are expected to be ever more concentrated in a couple of thousand top, English language, peer-review academic journals, rather than in the tens of thousands of easy-to-publish, open access, non-indexed journals, in which research results will be widely disseminated, but possibly not widely read or cited. The global distribution of funding for research is highly skewed, with the USA spending 613 billion USD in 2019, China spending 515 billion USD, Japan 173 billion USD, Germany 132 billion USD, France 64 billion USD, and the United Kingdom 52 billion USD (OECD, 2021).

The concentration of funding for academic research in selected institutions is expected to be accompanied by the concentration of academic knowledge production, especially of globally indexed publications. Already, the sheer volume of publications—3.5 million articles published in the 40,000 journals of the Scopus database in 2020, up from 2.5 million in 2010—makes it almost impossible for scientists to follow the ongoing research (even in their specific fields), except for publications in globally indexed journals. In the past 5 years, some 18 million researchers have authored or coauthored at least one publication indexed in Scopus (SciVal, 2021); this number does not have to be different in the future, and may even drop as further expansion of national academic research systems may be difficult to finance.

Examining the global and national concentration in academic research production is in fact parallel to examining the concentration in research funding at the same levels. National research funding can be expected to be concentrated in the ever smaller minority of institutions, with the ensuing intra-national and cross-national mobility of top academic minds seeking smaller teaching workloads and better research opportunities. They will likely be trying to maintain the slowly

disappearing prestige of holding academic jobs, accompanying them with full-time employment with competitive remuneration, job benefits, and work stability. International academic mobility may intensify, but predominantly for junior academics. Intra- and international mobility will be driven by a scarcity of research opportunities and the sharp contrast in working patterns between the highly selective, research-intensive top institutions and the rest, in terms of teaching and research workloads, working hours, academic satisfaction, and job-related contractual arrangements. The contrast may be expected in the type of academic work performed, remuneration levels received, and job security enjoyed, all directly related to the attractiveness of the academic workplace.

Top institutions may be much more focused on socially and economically relevant research, with different disciplinary priorities than today's, and may be heavily involved in preparing national and global elites with entrance policies as selective as those used today. Internationally, major Anglo-Saxon countries (such as the USA, the UK, and Australia), with high fees and low and declining public financial support, may still be garnering huge private funds through fees from teaching the global elites. The "rest" (or the non-top universities)—as many as 95–97% of all universities globally—may be expected to become demand-absorbing, teaching-focused institutions, only loosely involved in any large-scale, international, collaborative research, especially in research with global impact and visibility. Exceptions can be expected, but the rule of the thumb may be much more the spatial concentration of research rather than its scattering across national institutions. The European Union, with its powerful integration policies, huge research funding, and a long history of the modern institution of the university, may be an exceptional region from a global perspective, with weaker stratification processes and less intensive transformations of the academic profession (Kwiek, 2006, 2013).

21.6 The Teaching-Focused Sub-sector of Higher Education

The teaching-focused sub-sector of higher education may become more similar to the current secondary education sector than to the current higher education sector, possibly with relatively low remuneration (compared with other professionals) for their staff and a high percentage of part-time and/or contracted staff. The casualization and perhaps feminization of academic faculty in the global teaching-focused sub-sector may thus be expected in this scenario. Working conditions in higher education beyond the top 1000 universities may be harder than today; the upward mobility for scientists and scholars in higher education systems will be possible both intra-nationally and globally, but the opportunities available may be limited due to the scarcity of best places and relatively friendly working conditions in the top universities (e.g. tenure advantages), hindering more accelerated exchange of academics. Tenured positions will be available, but competition for them will be higher than today. A smaller core of tenured scientists, surrounded by larger peripheries of their collaborating postdocs than today (Jaeger & Dinin, 2018; Yudkevich

et al., 2015), may characterize employment patterns in top universities in this scenario.

The negative impact of these increasing systemic inequalities in global science will build up over time. A strong "self-reinforcing dynamic" may develop (van den Besselaar & Sandström, 2017, p. 14). The dominant dynamics at the global level may be that as the rich (in citations, publications, international collaboration, global mobility, research funding, professional networks, research time, tenure opportunities, academic recognition, etc.) get richer, the poor get (relatively) poorer. These dynamics might operate at the level of countries, institutions, disciplines, and research groups as well as, to an extent, individuals (Kwiek, 2020).

The vast majority of universities may become similar to the private higher education institutions found around the world today (except for the elite private sub-sector currently present in the USA and Japan). Higher education will be fee-based rather than tax-based (Johnstone & Marcucci, 2010), (perhaps except for Continental Europe, which has a long tradition of tax-based higher education), with decent loan schemes available to all. The increasing role of fees in national systems may transform higher education beyond recognition.

21.7 The Vertical Stratification of National Higher Education Systems

Thus, internationally visible, cutting-edge academic research may be confined to elite national and global universities. This increasing institutional concentration of research funding will be driven intra-nationally by the growing costs and complexity of research. The concentration of research funds, perhaps accompanied by friendly national academic mobility schemes, may be viewed more favorably than the dispersion and deconcentration of research funds and academic immobility by policymakers, scientists, and the general public alike. The number of elite-producing universities for national systems may be lower than today, and the role of higher education credentials in general (rather than the credentials from top universities) may be diminished. "High participation systems," in which 60–90% of the age cohort may be trained in the higher education sector, will be globally dominant in most parts of the world.

For national higher education systems aiming to remain socially and economically relevant and publicly fundable, the need to be vertically stratified will be ever stronger. The role of the public in the strategic distribution of tax-based public resources will grow, with increasing competition among the healthcare sector, the pensions sector, basic national infrastructure, and higher education. Also, publicly-funded infrastructural needs may be much higher than today, resulting in sharp competition for public dollars. Universities will still be using huge public funds for research and innovation, but probably only in selected, top places. The vast majority of universities may be severely underfunded as part of the public sector in general,

with increasingly fee-paying students requesting stronger links between the teaching they receive and (mostly local) labor market needs.

The vertical stratification of national higher education systems is already occurring in many countries (e.g. national case studies in Cantwell et al., 2018a, b). The gap between top universities—usually located in national capitals and major academic cities—and other institutions has been growing. Our assumption in this scenario is that this gap will widen rather than close. Disinterested, and basic rather than applied research, really costs and it cannot be cross-subsidized by third parties, be they students through fees or the business sector through university-business contracts. What will truly differentiate the academic sector internally will be research, used as a criterion for further concentration of talents and resources.

21.8 Positional Goods and Social Congestion

In the majority of higher education systems, higher educational credentials lead to better jobs and better life opportunities. Nevertheless, from a theoretical perspective of "positional goods," developed in the 1970s by a British economist, Fred Hirsch, there is always "social congestion" in every society: the number of good jobs (for instance, prestigious jobs leading to high incomes or to stable middle-class lifestyles) in a labor market system is always limited, and top jobs in a given system will always be limited, no matter how well educated the workforce is. "Elite students" will always get the vast majority of "elite jobs," as studies on hiring processes in top-tier investment banks, management consulting firms, and law firms show in detail (Rivera, 2015), hiring being more "cultural matching" than based only on individual merit (Rivera, 2012).

Higher education is a powerfully positional good: it defines the social and economic position of its possessors only relative to others in societies and labor markets. Educational expansion leads to a higher number of highly qualified people who find it increasingly difficult to have stable, middle-class jobs compared with their parents across the whole developed world. The "positional goods" argument posits that the advantage of higher education credentials in the labor market is relative or positional: if collective efforts of ever-increasing numbers of young people are focused in the same direction, individual gains from individually rational life strategies do not lead to expected results (Brown et al., 2011; Hirsch, 1976). Higher education credentials in times of higher education expansion should be increasingly viewed as (Fred Hirsch's) "positional goods": they improve the chances of better labor market trajectories only to a certain point of saturation, beyond which they become a must, a starting point in competition between individuals holding it, rather than a clear competitive advantage.

As "social congestion" increases, that is, the number of higher education graduates increases in society, the role of credentials as signaling mechanisms (about abilities of graduates) is changing: as in Hirsch's memorable metaphor, standing on tiptoes in a stadium does not help to get a better view if everyone else is standing on

tiptoes. At the same time, not having higher education credentials, like not standing on tiptoes, is a serious drawback. So credentials are sought by an ever-increasing share of young people, even though their economic value for individuals in many systems may be questioned. Global expansion will involve millions of newcomers in the various higher education sub-sectors, but the stratifying force for institutions and the academic profession will not be teaching-related. The consequential stratification will be powered by research funding, performance, and output.

21.9 Final Words

To sum up, higher education may be expected to be sharply divided into two contrasting segments, both globally and intra-nationally, with only a limited number (say, 1000 or 3–5%) of universities truly combining teaching and research missions. The vast majority of institutions in this scenario will be teaching-focused, with marginal internationally visible research. Academic careers may maintain their current (diminishing) attractiveness (Roach & Sauermann, 2017), probably only in the top echelons of national higher education systems: the small sub-sector of highly selective and research-intensive universities. Globally, in the overwhelming majority of institutions, academic work will mean relatively unexciting teaching of the masses of nontraditional students, higher workloads, and curricula much more closely related to the labor market needs than today. References to the "teaching-research nexus" may be expected to be present almost exclusively in the elite sub-sectors of higher education. In other words, higher education, as a public good, will be provided to the masses of students at a relatively low cost by the masses of academics. However, the positional value of higher education credentials may be lower than currently expected, as in high participation systems, they will become widely available. Access to higher education will probably be fully open in general, but still highly restricted in the case of selected top institutions, with no changes from the current selectivity patterns. In this scenario, common social and economic returns from higher education will be high, but individual returns will diminish.

Finally, I offer my praise to Pavel Zgaga, the focus in this volume. Pavel's research into higher education is a perfect example of long-term, sometimes visionary, thinking about higher education futures and the role of research in higher education reforms. A number of themes highlighted in this paper appeared in his writings: the academic profession and inbreeding patterns (Klemenčič & Zgaga, 2015), higher education reforms policies (Zgaga, 2013; Zgaga et al., 2019) and centers and peripheries in global higher education (Zgaga, 2019; Zgaga et al., 2013). Pavel's research has been consistently focused on the issues highly relevant to Western Balkans and post-communist transition countries generally, or, recently, to "the non-core regions of Europe" (Warren et al., 2021), apart from Europe and the European Higher Education Area. Pavel studied the Bologna Process and the public-private dynamics in higher education, as well as education research centers emerging in the Western Balkans (Zgaga, 2014). Pavel was also State Secretary for Higher

Education (1992–1999) and Minister of Education and Sport (1999–2000), an exceptional experience for a higher education policy analyst, and the founder of the Centre for Education Policy Studies (CEPS) 20 years ago. He has collaborated widely, inviting the global and European higher education research community and hosting them generously many times. I am personally very grateful for the invitations I received and the fantastic time spent in Ljubljana, in various configurations of colleagues and friends from various international research projects. I am very grateful for his work on the Editorial Board of the HERP book series in Peter Lang Verlag (*Higher Education Research and Policy*) in the past decade. Thank you so much for everything, Pavel, my colleague and friend in higher education research and policy, and comrade on the long journey of reforming higher education systems in transition economies. I have learned a lot.

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Marek Kwiek, professor and Chairholder, UNESCO Chair in Institutional Research and Higher Education Policy, University of Poznan, Poland. His recent book is *Changing European Academics: A Comparative Study of Social Stratification, Work Patterns and Research Productivity* (Routledge 2019) Marek has been a Principal Investigator or country Team Leader in 25 international higher education research projects, attracting about 3.0 million euros in recent research grants. He is an editorial board member for *Higher Education Quarterly*, *European Educational Research Journal*, *and British Educational Research Journal*.