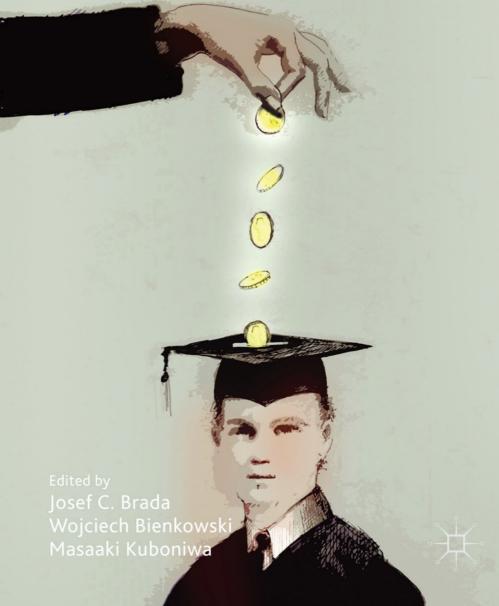
# PERSPECTIVES ON FINANCING HIGHER EDUCATION



# International Perspectives on Financing Higher Education

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Edited by

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Summary: "The funding of higher education is under stress. On the one hand, the benefits of universities for economic prosperity and growth are increasing as universities graduate more students; undertake a greater share of scientific research; and, through cooperation with business, stimulate the technological advance of the private sector. At the same time, government funding of higher education is stagnating or even falling in many countries. The book brings together the views of an international group of experts on the financing of higher education. They examine funding trends in Asia, Europe and the United States and present practical proposals for the reform of university funding and operations and examples of successful ways of building links between industry and universities that can be mutually beneficial and supplement government funding of higher education"— Provided by publisher.

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#### Introduction

Josef C. Brada

The funding of higher education faces a rather paradoxical challenge. On the one hand, universities are increasingly seen as the foundations of national prosperity and competitiveness, on the other hand, public funding of universities has declined in most developed market economies, as a number of the contributions to this book document. Thus, as government financial support for higher education has declined in Europe, Japan, and the United States, universities in these countries and elsewhere have been forced to turn to other sources of funding such as higher tuition fees, research cooperation with the business sector, and philanthropy to make up the difference. This book provides comparisons across a number of countries of how universities are adjusting to these new circumstances. What is clear from these comparisons is that who pays for the output of universities, whether it is education and degrees or research findings, how the amount of their payment is determined and how the funds actually reach the recipient universities is critical to how the higher education system functions.

In part, the issue of university funding is tied up in conflicting views of what the higher education system is expected to do and the distribution of the benefits of higher education. On the one hand, there is the belief that more citizens should have a university education. The European Union holds the ambitious goal that 40 percent of the European Union's 30–40-year olds have a university education by 2020. Obviously the European Union's leaders believe that an increased share of university graduates in the population has important positive consequences for European economic growth,

social development, and political cohesion. Some contributors to this volume, such as Marek Kwiek in Chapter 1, stress the private benefits from higher education, emphasizing the higher incomes, greater social prestige and political power, better health outcomes, and other benefits that accrue to university graduates. These private benefits are widely used to attract students to study at universities and to encourage parents, governments, and philanthropic foundations to support higher education. Undoubtedly, emphasis on the externalities of the higher education sector suggests greater public support while emphasis on the private benefits calls for shifting the costs of higher education from society to the students who are the beneficiaries of the higher incomes their degrees will provide.

Unfortunately, neither the social nor the private benefits of higher education can be measured in isolation from the economy and the society in which they function. A number of contributors to this volume mention the need for university graduates with the requisite skills of the new information-based economy. Others, however, point to the difficulty of graduates obtaining appropriate jobs after graduation. The problem seems worst in Europe where youth unemployment levels are at historic highs, where university graduates drift from one short-term contract to another in the, often vain, hope of eventually finding a permanent position and where studies show high rates of worker over qualification. Evidence suggests that this situation is also emerging on labor markets in Japan and the United States. The question, of course, is whether these unsatisfactory outcomes are the fault of the universities or whether they reflect problems with the labor market. Perhaps rather than advocating university reforms to make study programs more "relevant" or geared to employer needs, it is reforms of the labor market to make hiring workers more attractive, to promote greater flexibility for both employers and employees, and to stimulate aggregate demand that are needed to realize both the social and private benefits that higher education has to offer.

The higher education system has, in fact, undergone considerable change in the past half century from so-called elite education, where a very small fraction of the population was trained for the law, as clergy or for medicine. With the coming of the industrial revolution, there was a greatly expended need for engineers and managers, turning universities into institutions of mass education. Massification,

by its very nature, meant that the type of students participating in higher education would also have to change. This is shown graphically by Claire Callender in Chapter 5 where she compares the characteristics of full-time and part-time students in England. A key question for the financing of higher education is whether such a broadening of student characteristics, interests and abilities also calls for a wider range of higher education institutions, some research-oriented, others with a stronger pedagogical focus. If so, two further questions immediately arise. The first is whether the higher education establishment will accept such new institutions, which are likely to siphon off some of the government funding from existing institutions of higher education. The second question is whether a broader range of higher education institutions will require a wider range of tuition- and government-funding options. As a number of contributors propose, universities should seek research partnerships with business in order to supplement tuition revenues and government grants. However, such recommendations take a rather traditional view of the university as an institution that undertakes both high-quality teaching and cutting-edge research. This view ignores the fact that massification challenges this model of the university by throwing up a large number of students who do not need a researchintensive environment and who require an institution devoted only or mainly to pedagogy. Such institutions are unlikely to be able to form profitable contacts with businesses to undertake funded research, and the returns to education for students at these institutions are likely to differ from the social and private benefits accruing to their peers at elite institutions. This raises the question of whether and how government funding for, and tuition fees at, such massified institutions should differ from those at elite institutions.

The fact that higher education produces both private and public benefits has led to multiple sources of support for universities. Some funds are provided by students who pay tuition fees, some are provided by the government, some by the business community, and some by philanthropic foundations. The upshot of these multiple sources of funding is that all those who make use of university resources receive some sort of subsidy, and a question left unanswered by most of the various arguments about university funding is who should be the beneficiary of these subsidies and what the size of the subsidies should be. Should the design of these subsidies seek to overcome inequalities of opportunity in the population, or to overcome capital market failures that limit lower-income students' access to higher education or to account for the social externalities of university education? Alternatively, perhaps subsidies should attempt to maximize the economic benefits of the higher education sector, as determined by either government policy or by market forces.

For example, it is quite clear that student tuition fees, where they exist, do not cover the full cost of instruction at the university, so university students are subsidized. In the United States, somewhat paradoxically, the largest subsidies go to students at elite universities. Indeed, tuition fees at these universities are high, but they cover a much smaller percentage of the costs of education at these institutions than do tuition fees at less prestigious universities where the costs of instruction are lower. At the latter institutions, students pay a smaller amount in dollar terms, but this represents a higher percentage of the total costs of their education. Whether it is economically efficient or socially desirable to provide larger subsidies to students from well-off families at elite institutions is open to debate. Also rarely mentioned in the discussion of university-business relations is the question of the size and distribution of the subsidies that accrue to business from research cooperation with universities. A number of chapters, especially those by Marek Kwiek, Dieter Dohmen, Koryakina et al., and Jakub Brdulak, stress that university-business cooperation in research provides research results to cooperating firms for less than their full costs. Thus, like students who pay less than full tuition fees, cooperating firms also pay less than the full cost of research findings. While such a situation may be a "win-win" for both the university and the firm, there is again a question of whether the distribution of subsidies to the business sector is economically efficient and socially desirable. For example, in Chapter 8 Jakub Brdulak describes one example of such cooperation between a university and two large consulting firms. Reading his description of the cooperation arrangement, it becomes rather clear that such businessuniversity cooperation is almost exclusively possible for very large firms. Jan Andersen, in Chapter 9, confirms this when he mentions the pro forma need to include small firms in research-funding proposals, which suggests that they would be entirely absent from the process were there not some regulations requiring it.

Also left unanswered in the discussion of subsidies to higher education is the issue of tuition fees and students' ability to pay for a university education. In Chapter 4 Karina Ufert suggest that perhaps higher education should be seen as a "right" and students should be entitled to access to higher education at no cost. Certainly in an economic and technological environment where a university degree is increasingly seen as necessary for success in the informationeconomy labor market of today in much the same way that literacy and numeracy were seen as necessary for success in the labor market a hundred years ago, it seems rather archaic to draw a distinction between the public funding of elementary and secondary education based on the labor market needs of the eve of the industrial revolution and the refusal for full government funding of tertiary education in today's information-driven economy.

Indeed, as Ufert notes, the costs of university education have been pushed on to students, often in the form of student loans. The expansion of such student lending has a number of pernicious effects. The most obvious is that it induces young people, who have little financial literacy and no labor market experience, to take out sometimes very large loans that in many cases become a permanent burden over much of their working lives. That such loans are unattractive to mature students who have greater financial sense and more experience with the realities of the labor market is amply demonstrated by Claire Callender in Chapter 5 where she demonstrates the reluctance of these students to participate in student loan schemes introduced in England. Perhaps a better solution is offered by Dieter Dohmen in Chapter 6, where he proposes that the government finance higher education by capitalizing the higher tax revenues that will accrue from an increase in university graduates.

This book brings together studies that examine these and other issues related to the financing of higher education from different philosophical perspectives and that consider the experiences of a number of different countries, each with different social values, institutions for the support of higher education, and organization of higher education. The studies all point to similar problems in the funding of higher education, but the diversity of proposed solutions should help develop better solutions to ensure the future of the university as both a repository and a creator of knowledge.

## 1

### Competing for Public Resources: Higher Education and Academic Research in Europe – A Cross-Sectoral Perspective

Marek Kwiek

#### 1.1 Introduction

The chapter focuses on the increasing cross-sectoral competition for public resources between various types of public sector institutions in Europe and its implications for future public funding for both higher education and academic research. It views the major models of the institution of the modern (Continental) university and the major types of the modern institution of the state, and of the welfare state in particular, as traditionally closely linked (following Becher and Kogan, 1992; Kogan and Hanney, 2000; Kogan et al., 2000). Historically, in the postwar period in Europe, the unprecedented growth of welfare states and state-funded public services was paralleled by the unprecedented growth of public universities. The massification of higher education in Europe coincided with the growth of the welfare state in general. We are witnessing massification processes in higher education and far-reaching restructuring processes of welfare states. The major implication is the fierce competition for public resources, studied in this chapter from a cross-sectoral perspective, in which the future levels of public funding for higher education in tax-based European systems are highly dependent on social attitudes toward what higher education brings to society and the economy, relative to what other claimants to the public purse can bring to them.

# 1.1.1 Reconfigurations of knowledge production: a larger context

Knowledge production in European universities is undergoing a significant reconfiguration, both in its governance and authority relationships (Whitley et al., 2010) and in its funding modes (Martin and Etzkowitz, 2000). The combination of ever-increasing costs of academic research and the decreasing willingness and/or ability of European governments to finance academic research from the public purse (Aghion et al., 2008; Geuna and Muscio, 2009) leads to growing emphasis in both national and European-level policy thinking on seeking new revenue sources for research universities (Alexander and Ehrenberg, 2003; Mazza et al., 2008). New sources may include increased fees for the teaching mission and increasing reliance on various forms of third-stream activities leading to more noncore nonstate income for the research mission (Geuna, 1999; Shattock, 2009; Temple, 2012).

The inter-sectoral national competition for tax-based public funding has been on the rise in the last two decades, following the rising costs of all major public services, especially health care and pensions (Kwiek, 2006; Powell and Hendricks, 2009; Salter and Martin, 2001). At the same time, both the ability and the willingness of national governments to fund growing costs of both higher education and academic research may be reduced even more for reasons such as a shrinking tax base (Tanzi, 2011), financial austerity (Blyth, 2013; Schäfer and Streeck, 2013), escalating costs of maintaining the traditional European welfare state model and economic challenges resulting from global economic integration, and the transition to knowledge-based capitalism, as well as the overall social climate in which, in the opinion of both the population at large and policymakers, the promises of science are not being delivered by public universities.<sup>1</sup>

Institutions often do not undergo their transformations in isolation: they operate in parallel, and in parallel they often change, as Aldrich (2008), March and Olsen (1989), and Brunsson and Olsen (1993) argued. There is thus a complex interplay of influences between institutions and their environments, and European universities are perfect examples of the powerful connectedness between changes in institutions and changes in the outside world from which