

Building an Academic Career

A Twenty-First-Century Challenge

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There is general agreement that the academic profession is in crisis worldwide. Without a successful professoriate, higher education is itself in crisis, for the academics are at the heart of the university—the teachers, researchers, and indeed creators of the intellectual and scientific life of higher education everywhere. If the “best and brightest” are not attracted to academe, not only are world-class universities impossible to achieve, but the academic system as a whole will be second-rate. Despite this situation, neither policy makers nor most academic leaders recognize either the centrality or the deep problems facing the academic profession. The concern here is to outline some of the structural problems that exist and to illustrate some of the particular challenges facing a specific but highly important sector of the academic profession—the younger generation now entering the profession.

Academics everywhere are part of a profession that has common elements worldwide. A small segment at the top of the profession is part of a globally mobile academic workforce. Most academics, however, are tied to their home countries and, in general, to a specific academic institution, since interinstitutional mobility for most is limited or impossible. There are additional distinctions created by institutional variations. For example, working conditions are quite different for professors in research universities than for teachers in a university devoted exclusively to teaching. There are variations by field and discipline as well. As Burton Clark has

pointed out, the academic profession is composed of “small worlds, different worlds” (Clark 1987; Becher and Trowler 2001). Thus, global generalization is difficult—yet, common realities are facing the professoriate.

Of special importance are the people in the younger generation of the academic profession. They are not only the future of the entire academic enterprise, but they have special significance because in most countries the academic profession in general is aging and large numbers will be leaving the profession in the immediate future. Further, postsecondary education has expanded dramatically in much of the world in the past thirty years, creating the need for larger numbers of new academics, while in many countries, there have been insufficient numbers of appropriately trained postsecondary teachers. The overall quality and levels of preparation of the academic profession in much of the world has declined in recent years, creating even more pressure on higher education. Indeed, while there are no accurate statistics, it is likely that the majority of teachers standing in front of a class at a postsecondary institution now has the equivalent of a bachelor’s degree! This is not the case in all countries and certainly not in the industrialized world, but it is reality in many places—especially in parts of the world that have seen recent rapid expansion.

One would expect that the market demand for young academics would improve salaries and working conditions in an effort to attract bright teachers and researchers. However, this has not happened. Indeed, in much of the world the terms and conditions of academic work have deteriorated. Even in the United States, fewer than half of new appointments to colleges and universities are on the traditional “tenure track” that leads to a career track (Cummings and Finkelstein 2011). Although statistics are scarce, it is clear that a growing proportion of the academic profession worldwide has part-time or otherwise unstable appointments. While the numbers of academics have expanded to meet growing student demand, the nature and conditions of appointments have become less satisfactory. The situation for those who are entering the profession tends to be least satisfactory—in terms of salaries, terms and conditions of service, contractual arrangements including security of tenure, building a career, and participation in the governance of the university.

Although without accurate statistics, most agree that the overall qualifications of twenty-first-century academics have declined in response to massification and the dramatic expansion of enrollments and access everywhere (Altbach, Reisberg, and Rumbley 2010). Fewer academics hold a doctoral degree. As a proportion of the total, fewer are engaged in research of any kind. More hold part-time appointments and fewer hold

career-track academic appointments. Most academics globally cannot live a middle-class lifestyle relevant to their country with their academic salaries alone—thus, moonlighting and other remuneration are necessary. These realities hit younger academics particularly hard.

The Global Policy Environment

Debates and policies—relating to higher education generally, to the academic profession, and to younger academics—are unfavorable to the professoriate and especially to younger academics. Indeed, with no discussion of the role of the academic profession, there seems to be an assumption that higher education does not need to be concerned with how the academic profession fits into the changes envisaged by policy makers. There is a general consensus that significant change is needed in higher education. The themes that can be discerned in international and national debates are among the following:

- The financing of higher education must be significantly altered, so that academic institutions and students pay for most of the costs of education. Impelled by enrollment expansion that most countries find difficult to support and a changing philosophy of higher education that stresses the “private good” benefit to students, the state seeks to reduce expenditure for higher education.
- Linked to financing reforms, universities are asked to become more “marketized,” earning income in various ways, charging more tuition, and in general becoming less dependent on public sources of income.
- Postsecondary studies and degree structures should be increasingly based on employability.
- Research should be “practical” and preferably funded by links with industry.
- Learning outcomes should be measured and quantified and used not only to measure student accomplishment but also the effectiveness of the academic profession.
- The use of information technology should be expanded, mainly as a cost-cutting strategy.

- Increased accountability is necessary to control costs and measure effectiveness of academic institutions and systems.

These are examples of trends in contemporary policy discussions, and many of the changes that have taken place in higher education in recent decades have reflected these and similar concerns. Regardless of the necessity or usefulness, these initiatives are largely negative for the academic profession. They place constraints on academic autonomy, ask for increased “productivity,” reduce emphasis on research autonomy and often funding, and deemphasize basic research. Increased emphasis on the use of information technology for delivering courses and degree programs place burdens on academics to develop and deliver new programs, many of which may end up eliminating jobs. Although these and other initiatives affect all parts of the academic profession equally, younger academics likely must shoulder more of the burdens—for example, of online learning—than their senior colleagues, because they typically have less autonomy in their careers. Further, young scholars may choose not to join the profession at all due to deteriorating working conditions.

Salaries and Remuneration

Salaries have not kept pace with competing remuneration in fields requiring similar skills. In a study of academic salaries and contracts in 28 countries, with significant variations among countries, in no nation did academic salaries compare favorably with competing fields (Altbach, Reisberg, Yudkevich, Androushchak, and Pacheco 2012). And in many cases, salaries for younger scholars were much lower than for those in senior ranks—low enough so that a middle-class lifestyle could not be maintained.

Increasingly, other career options are attractive for well-educated and bright young people—even more than is the case for senior academics—and thus academe is increasingly unappealing. Other emerging fields such as information technology, biotech, consulting of all kinds, and finance pay much more attractive salaries—and seem more exciting and welcoming.

Academic salaries are not only in general fairly unattractive, but starting salaries have probably deteriorated more than senior remuneration. Further, in an increasing number of countries, the gulf between starting salaries and top salaries has become greater—part of a trend toward

inequality in many societies and in academe as well. Younger academics may have to wait a long time to reach the top of the salary scale.

Further, in many countries academic salaries are not linked to “market conditions”—that is, university salaries in high-demand and well-compensated fields such as management or information technology cannot compare with what is offered by employers outside of academe. In these cases, academic salaries are the same for all fields and all universities, making it more difficult to recruit top candidates to highly compensated fields and disciplines. Further, there was little or no differentiation of salaries among universities with different missions or locations. Research universities often provided the same salary structure as teaching-oriented universities, even though academics in the research sector have greater earning capacity—both within the country and internationally, than their colleagues at less prestigious institutions. And there was little recognition of varying living costs, based on location or other variables. Again, the absence of market-based salaries affects younger scholars most, because they enter at the bottom of the scale and are also most likely to be recruited by nonuniversity employers.

Perhaps the most serious salary problem for younger academics is the inability to enjoy a middle-class lifestyle with an academic salary—particularly important for people establishing families. Academics after all do not generally enter the profession to earn high salaries but must be able to live appropriately according to the standards of their societies. In the 28-country salary survey, fewer than half of the countries offered middle-class salaries (Altbach, Reisberg, Yudkevich, Androushchak, and Pacheco 2012).

Mobility—Local and International

From a global perspective, job mobility for academics is unusual. With no accurate data, anecdotal evidence suggests that very few academics are mobile either within their home countries or internationally. Thus, for most beginning academics, the job that they obtain is likely to be the only position they hold during their careers. Although there is some mobility, it is likely to be within the same category of institution. Thus, extraordinarily few academics can move from an unselective teaching-focused institution to a research university. Obtaining a suitable and appropriate initial position is, therefore, of great importance. In an increasingly difficult academic job market, obtaining a position that matches an individual's

interests and qualifications is not easy—and mobility from that job can be quite challenging.

Even in countries with a reputation for interinstitutional mobility, such as those in North America and western Europe, mobility is often limited to the upper segments of the academic system and in any case often happens early in the academic career (Huang, Finkelstein, and Rostan 2013). Once settled, most academics stay put. Those who are highly mobile tend to be well-known scholars and scientists who publish a lot and have reputations beyond their home institutions.

International mobility is even more unusual. Although a good deal of global academic mobility exists, much of it is among senior professors. There are several rather distinct kinds of global mobility. The best known is among top scholars who are hired away from their home countries, often for large salaries. This occurs mainly among the top universities in the developed countries, although occasionally “stars” will be hired from other institutions. A few places, such as Hong Kong and Singapore, hire internationally to obtain a diverse and high-quality academic cadre. Much larger numbers of academics are hired by universities in countries that do not produce a sufficient number of academics for themselves. Examples include Saudi Arabia, where a majority of academics are non-Saudis, mostly from the Islamic world, and most of the Arabian Gulf nations, which hire more broadly. A number of African countries hire nonlocal faculty, as well.

Although there is no information concerning the age of globally mobile academics hired by countries such as Saudi Arabia, they seem to be of all ages. Many younger academics who cannot find good jobs at home go onto the international market. In many cases, foreign faculty are not offered permanent jobs and must settle for renewable contracts.

Closed Labor Markets and Inbreeding

In many countries, academic hiring markets are not open, creating special problems for younger faculty, who are unlikely to be known by the professional community in their fields during their early careers (Altbach 2003). Open positions may not be widely advertised. Hiring may be done through informal contacts among senior professors or through the use of various types of personal influence. In China, *guanxi* (personal influence) is widely practiced in academic hiring and promotion as well as more broadly in society. In some countries, it is well known that universities will hire graduates only in a small circle of similar institutions. In the

United States, for example, research universities typically hire graduates with PhDs from other research universities and seldom from elsewhere in the system (Caplow and McGee 2001).

In some cases, especially in Latin America, the situation is different but still creates problems. In some countries, such as Argentina, available academic positions must be widely announced and applicants subjected to a formal “contest” for each position. The process is generally quite lengthy and public, creating stress for candidates. In practice, on many occasions the positions are already reserved for identified candidates and the contest is symbolic.

A common practice among academic systems worldwide is inbreeding—appointing faculty members from among the graduates of the hiring university. This practice is surprisingly common globally and might well be a factor in close to half of the world’s academic appointments. Most agree inbreeding is detrimental for a vibrant and open academic profession by closing academic labor markets, ensuring that younger academics are dependent on their senior colleagues, and limiting new ideas from academic departments and faculties. Inbreeding creates a kind of client relationship between junior and senior academics that may last throughout the academic career.

Career Structures

Younger academics are especially concerned about building a successful career in academe. They want assurance that they can enter the academic profession and build a successful career. One of the attractions of the American academic system is the “tenure track” arrangement, which permits entry into the profession as an assistant professor and a clearly defined path for promotion up the ranks, with rigorous evaluations at several stages, and typically the award of tenure (permanent appointment) after promotion to associate professor on the sixth year. Although standards and requirements for promotion vary substantially by institution, patterns are similar throughout the system. In recent years, the proportion of tenure-track appointments in the United States has declined substantially—fewer than half of new appointments—with the rest being full-time contract appointments or part-time jobs, creating deteriorating conditions for young academics. Current estimates are that fewer than half of those teaching in American higher education today are on the traditional “tenure track” (Schuster and Finkelstein 2006).

In some countries, such as Germany, career structures are highly complex and offer many barriers for younger academics, who must frequently change jobs and wait for a small number of senior positions to open. In general, academic systems with a “chair system,” in which a very limited number of senior positions exist at the top of departments or faculties, provide fewer opportunities for young scholars and are less attractive.

A substantial but declining number of countries retain a civil service model of academic appointments. Typically, this means that when a person is appointed to a junior academic position, he or she receives an immediate permanent appointment with promotions and salary increases largely based on time in place rather than performance or productivity. New appointments thus have substantial job security, but little incentive for productivity, and universities have few ways of rewarding effective performance or punishing poor productivity.

Without question, a clearly articulated career structure encourages new entrants to the academic profession, by making it clear that productivity will be rewarded and promotion and increases in salary are integral to employment and the culture of the university. Many countries lack such career structures, thus making the professoriate less attractive to young academics. Senior scholars have somehow maneuvered the system to achieve a measure of success and thus are less concerned.

The deterioration of career structures for young academics is without question—one of the most serious problems facing new entrants to the profession—and a key deterrent to making a decision to enter the academic profession. In many countries, the path to a stable career in academe is simply unclear.

The Rise of the Private Sector

Private universities are the fastest-growing segment of higher education worldwide. Although the proportion of private enrollment has remained fairly stable in North America and Western Europe, numbers have expanded dramatically in much of the rest of the world. Latin America now has more than half of its students in private higher education. East Asia has traditionally been dominated by the private sector, and Southeast Asia has a rapidly growing private sector. In general, the new private sector serves a “mass” clientele and is relatively low quality. Much of the sector is for-profit, even in countries where there are restrictions against profit-making higher education. Typically, students prefer to study at public universities.

Unsurprisingly, the terms and conditions of academic work in the new private higher education institutions are inferior to what is found in the public sector, creating special problems for younger academics. Very few of these institutions offer secure full-time appointments or opportunities for promotion. They often hire young faculty and also some retired older professors, but do not keep them employed for a long time. Salaries tend to be low, and there are few benefits. The very large majority of people who are hired are part-time instructors who receive small stipends for their direct teaching.

There are some exceptions to this rather bleak picture: there are a small number of nonprofit private universities, including the traditional Catholic universities in Latin America, the older private institutions in Japan and South Korea, and a few new nonprofit private institutions in Turkey and several other countries. In general, however, the private sector has created an underclass of teachers who cannot make a career by working in these institutions. Private universities, where they existed, were traditionally nonprofit, high quality, and widely respected. While these institutions continue to exist, the nature of the private higher education sector has dramatically changed and, along with the change, has come vastly deteriorated prospects for a stable and productive academic career.

Trends in Graduate Education

Like much else in higher education, the gulf between high-quality and substandard preparation for the academic profession has grown, creating problems for younger academics. Expanding enrollments have created a need for more academics to teach, particularly in the new institutions catering to mass enrollments—with students who are much more diverse in backgrounds, social class, and abilities, than the small number of elite students traditionally attending universities. As was noted, graduate education (termed postgraduate in the United Kingdom and some other places) has lagged far behind the demand for teachers in postsecondary education worldwide. Thus, graduate education is rapidly expanding in many countries (Nerad and Heggelund 2003).

Traditionally, the large majority of academics had graduate training—either a master's degree or, in many countries, a doctorate. These academics were largely educated in respected research universities, which chose students fairly carefully and where quality was generally maintained. To meet mass demand, graduate education has expanded significantly. Almost

a century ago, American universities that were not experienced in offering advanced degrees and had no significant research profile began to offer graduate degrees—creating second- and third-tier PhD producers, and even a wider range of master's offerings. Graduates of these institutions typically could not aspire to jobs at top universities, but usually obtained positions at institutions mainly focusing on teaching. Thus, a pecking order developed among universities offering advanced degrees. In the twenty-first century, graduate education, particularly at the master's level, has expanded to the Internet, and degrees in many fields are offered through distance education. Some “professional doctorates” are now offered online, as well.

In many countries, all institutions with the title of university were expected to focus on research and offer advanced degrees. This is the case in much of Europe. Universities that traditionally offered only small graduate programs expanded them to meet the new demand. Thus, the quality of universities offering advanced degrees became more diverse, and the quality on average probably declined. This vastly more complex marketplace for graduate education has created challenges for young scholars and scientists in terms of choosing the appropriate university, and ensuring that the degrees offered will yield success in employment. In some countries and fields, there has recently been an oversupply of doctorates, while in many others there are severe shortages.

Graduate education, even more than higher education generally, has become internationalized. The proportion of international graduate students attending top global institutions is much higher than for undergraduate students. Many academic departments, particularly in science, technology, engineering, and mathematics fields, depend on international students to maintain enrollments. Doctoral graduates, particularly from top universities, find jobs globally. English is increasingly the medium of instruction at the graduate level in some parts of the world, further internationalizing institutions, and student populations. Young scholars look globally for the best departments and universities—and for the most attractive scholarship opportunities.

There are basically two models of graduate education at the doctoral level: the American pattern of what the British call the “taught doctorate” and the European “research doctorate” orientation. The American system requires a considerable amount of course work as well as a dissertation, while the European arrangement mainly consists of a dissertation written under the supervision of a faculty mentor. The European system assumes that the student will have a detailed background in his or her field, because of the specialized pattern of most European undergraduate programs. Some European universities are moving to require more course

work. Other parts of the world have adopted one of these models or a combination of both. An additional complication exists in a few countries such as Russia and Germany, which require a second doctoral thesis for appointment to senior positions.

These trends affect younger academics. Competition for entry to many of the top universities has become stiffer. A differentiated graduate education system means that those who obtain degrees from lower-tier graduate schools typically cannot find jobs in research universities. Changing patterns in doctoral curricula are sometimes difficult to understand. Budgetary problems in many universities have meant that the attention paid to students has decreased—and the quality of programs has to some extent declined. The job market was at one time fairly simple—senior professors were expected to find jobs for their students. This paternalistic arrangement, perhaps practical for small and elite systems, has for the most part disappeared. Further, the cost of graduate education has gone up in some countries, and scholarship and other financial support have decreased.

Governance and Autonomy

Traditionally, one of the attractions of the academic career is participation in academic decision making and enjoying a sense of autonomy. Several general trends may be observed globally in the organization of universities that affect governance and both institutional and personal autonomy. It must be noted first that in many countries and academic institutions there has never been a great deal of faculty involvement in governance or individual autonomy; and in these cases, the status quo has not changed.

Indian undergraduate colleges, of which there are more than 30,000, have never enjoyed much institutional or academic autonomy. They are highly bureaucratized, with most power and authority concentrated in the hands of the principal. Further, because most colleges are affiliated to a university, much academic authority over curriculum and other matters is in the hands of university authorities (Agarwal 2009). Many academic systems, while differing in the details, offer little institutional or academic autonomy—and the academic profession has little autonomy or creative freedom to develop the curriculum.

In general, research universities and other postsecondary institutions at the top of the academic ladder have more institutional autonomy and offer academic staff more freedom in their teaching and research. In most cases, research universities have governance arrangements that provide significant authority to the academic staff, and often “shared

governance” in which academics share authority with administrators, and in some countries, especially in Latin America, with students. Typically, academic senates or other representative bodies of the faculty exercised considerable authority over academic matters.

The traditional European pattern of governance gave most authority to the senior professors, enhanced by the election of the rector for a fixed term by the faculty. This pattern of academic authority was predominant in much of continental Europe until the 1960s, when university reform movements gave some power to students and younger academics. The American research universities shared governance between administration and faculty—with external boards of trustees holding legal authority, but typically devolving much of it to academic authorities.

Young academics had little authority in the European universities that were dominated by senior chair-holding professors. This arrangement, stemming from the origins of the research university in Germany in the early nineteenth century, gave immense power to the senior chair-holding professor who dominated each discipline. The disciplines were organized around the chair, who had authority to hire junior scholars, and typically dominated them. This organizational pattern came to dominate much of continental Europe and Japan. The American system was more democratic, with its department-based structure that provided participation to all faculty members on most issues, and thus some participation by junior academics. The British arrangement was somewhere between these two models and was influential in South Asia and Africa (Shils 1997).

The “golden age” of governance has, for almost a half century, been under pressure from massification, demands for accountability, and increased authority exercised by state authorities. In general, faculty authority has been weakened, and administrative power along with governmental influence has increased. All of this has decreased autonomy as well as the influence of faculty over academic decisions—with deterioration in the attractiveness of academic work, as a result.

The impact of these forces on younger faculty has been particularly acute. As noted, in many institutions and countries, young academics have limited authority in any case. What power that has remained with the professoriate is largely in the hands of senior faculty.

Attitudes and Young Academics

With the litany of woes that have been discussed here, it may seem surprising that anyone would choose to join academe now. Yet, the Chang-

ing Academic Profession international survey of academics in nineteen countries shows that the academic profession in general, and younger academics in particular, are, in many countries, not terribly dissatisfied with their chosen profession (Teichler, Arimoto, and Cummings 2013). The survey offers two kinds of evidence related to the satisfaction of academics with their jobs and careers: one item requiring respondents to rate their level of overall job satisfaction on a five-point Likert scale from low to high; another item asking respondents for their level of agreement with the statement: “If I had it to do over again, I would not choose an academic career again.” Career satisfaction is defined as disagreement or strong disagreement with the statement.

There are substantial differences in overall job satisfaction among the nineteen Changing Academic Profession countries, ranging from 87 percent satisfied in Mexico and more than 70 percent in the Netherlands, Japan, and Korea; to barely 40 percent in the United Kingdom; and barely half in Australia and Portugal. Overall, satisfaction levels seem to track fairly closely with financial pressures, especially government funding cuts, on the system—such as in the United Kingdom and Australia. In most cases, job and career satisfaction are related—with the United States serving as one of the clearest exceptions. In the American case, career satisfaction is considerably higher than overall job satisfaction, reflecting perhaps high satisfaction with the high predictability of the U.S. tenure system.

The differences in the levels of satisfaction expressed by senior and junior academics seem rather small, related to the other “objective” indicators of career opportunities for the two subgroups—with the possible exceptions of places like China, where the opportunity structure for new entrants is quite favorable. Thus, junior academics tend to express levels of satisfaction that are significantly higher than their objective prospects. Ultimately, it may be that new academics—those who have managed to earn some kind of foothold in the system—are relatively grateful or sanguine about their prospects. Thus, it is no doubt the case that many academic systems, especially in the advanced economies, are losing young doctorates who ultimately succumb to the discouragement at their prospects.

Conclusion

In the twenty-first century, the academic profession does not offer an alluring future for young scholars and scientists. Access to the job market, levels of remuneration, career prospects, and terms and conditions of

academic work are all problematical everywhere. Although the academic profession in general can be considered to be in crisis worldwide, the difficulties for young academics are especially serious. The challenge is especially grave in the emerging private higher education sector—where the chance for a normal career is largely absent.

All of this is problematic for several reasons:

- Massification has created a need for many more postsecondary teachers.
- In many countries, particularly in the industrialized nations, large numbers of academics are retiring, thus creating shortages.
- The emergence of the global knowledge economy has created a need for a cadre of creative research-oriented academics to staff the research universities located at the top of academic systems worldwide—a “special breed” of highly educated young scholars and scientists.

Although higher education is, in many countries, a topic of major debate in the media and in policy circles, such topics as accountability, cost reduction, university-industry collaboration, and others are themes of debate. There is much discussion about “disruptive innovation” and the need for postsecondary education to provide training for employment. And there is some criticism of the academic profession for its alleged conservatism and unwillingness to change. But there is no recognition of the needs of the academic profession or the necessity for an effective and committed academic workforce to serve the needs of higher education.

Despite all this, young people continue to enroll in graduate programs and aspire to work in universities. The lure of “the life of the mind” remains strong despite all of the evident difficulties. This is, perhaps, the hope for the future—the indomitable spirit, intellectual commitment, and curiosity of a sufficient number of young people to commit themselves to an academic environment that hardly deserves them.

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References

- Agarwal, Pawan. 2009. *Indian Higher Education: Envisioning the Future*. New Delhi: Sage.
- Altbach, Philip G., ed. 2003. *The Decline of the Guru: The Academic Profession in Developing and Middle-Income Countries*. New York: Palgrave Macmillan.
- Altbach, Philip G., Liz Reisberg, and Laura E. Rumbley. 2010. *Trends in Global Higher Education: Tracking an Academic Revolution*. Rotterdam, Netherlands: Sense.
- Altbach, Philip G., Liz Reisberg, Maria Yudkevich, Gregory Androushchak, and Iván F. Pacheco, eds. 2012. *Paying the Professoriate: A Global Comparison of Compensation and Contracts*. New York: Routledge.
- Becher, Tony, and Paul R. Trowler. 2001. *Academic Tribes and Territories*. Buckingham, UK: Open University Press.
- Caplow, Theodore, and Reece J. McGee. 2001. *The Academic Marketplace*. New Brunswick, NJ: Transaction.
- Clark, Burton. 1987. *The Academic Life: Small Worlds, Different Worlds*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Cummings, William K., and Martin J. Finkelstein. 2011. *Scholars in the Changing American Academy: New Context, New Rules and Roles*. Dordrecht, Netherlands: Springer.
- Horta, Hugo. 2013. "Deepening our understanding of academic inbreeding effects on research information exchange and scientific output: New insights for academic based research." *Higher Education* 65: 487–510.
- Huang, Futao, Martin J. Finkelstein, and Michele Rostan, eds. 2013. *The Internationalization of the Academy: Changes, Realities and Prospects*. Dordrecht, Netherlands: Springer.
- Nerad, Maresi, and Mimi Heggelund, eds. 2003. *Toward a Global PhD? Forces and Forms in Doctoral Education Worldwide*. Seattle: University of Washington Press.
- Schuster, Jack H., and Martin J. Finkelstein. 2006. *The American Faculty: The Restructuring of Work and Careers*. Baltimore: Johns Hopkins University Press.
- Shils, Edward. 1997. "The Academic Ethos under Strain." In *The Order of Learning: Essays on the Contemporary University*, edited by E. Shils, 137–162. New Brunswick, NJ: Transaction.
- Teichler, Ulrich, Akira Arimoto, and William K. Cummings. 2013. *The Changing Academic Profession: Major Findings of a Comparative Study*. Dordrecht, Netherlands: Springer.