

The Changing Academic Profession: The Worldwide Impact of Expansion and Austerity

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The academic profession, like colleges and universities throughout the world, seems to be changing profoundly, and at an accelerating pace, through the last decade of the 20th and first decade of the 21st centuries. The nature of this change has been the subject of the Changing Academic Profession (CAP) project, which is a multi year, multi-country study of the academic profession, still (2011) in process, that is documenting this change in many countries through surveys and other scholarly tools. This paper, while informed by some of the early findings of these studies, is not part of the CAP project. Rather, it emanates from a professional career in universities, both as an institutional and a system head struggling with the consequences of financial austerity, from a scholarly career as professor and researcher into the economics and finance of higher education, and from a multi year study of higher educational finance and governmental policies from an international comparative perspective.¹ The remit of this paper is to examine two forces that have seriously impacted the academic profession worldwide: expansion, or massification, and austerity, or the diverging trajectories between surging costs and revenue needs in almost all countries and the increasingly limited revenues in most countries to meet these needs.

These two forces are closely related. Indeed, the principle driver of higher educational costs and revenue needs is enrolment expansion, and perhaps no trend has so dominated higher education in the last twenty years as expansion, or massification—quite apart from any economic or financial events or trends in the larger world economy. However, from the vantage of late 2011, much of the world—and virtually all of the highly industrialized world represented by the countries of the Organization for Economic Cooperation and Development, or OECD—is still emerging from the most severe recession since what is commonly referred to as the *Great Depression* of the 1930s. Governments in most countries as well as many families are having increasing difficulties keeping up with the rising revenue needs of higher education, whether this difficulty comes from reduced public treasuries and constraints on public borrowing, or from reduced family incomes stemming from unemployment or losses in personal assets. In turn, both of these forces—expansion and austerity, both independently and in concert—are affecting the institutions and the academic programs of the world's colleges

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and universities, the abilities and interests of the students, and the nature of, and expectations upon, the academic profession, worldwide.

Expansion

The numbers of students and of institutions have been surging worldwide for decades. Increasing enrollments—which of course exacerbates the natural increase in per-student costs, and thus exacerbates the financial austerity of institutions and especially of national systems of higher education—are a function of three primary forces that vary greatly among countries. The first of these is *demographics*: specifically the change (generally the growth) over time in the number of youth within the conventional college or university age cohort (ages 18 through about 24). Some countries such as Italy, Germany, other countries in southern Europe, Russia, and Japan are experiencing demographic declines. Most countries, however—and nearly all middle- and low-income countries—are experiencing increases in the traditional university age cohort (UNESCO-UIS/OECD 2005).

The second force affecting enrollments is the *participation rate* of this (generally increasing) university age cohort (UNESCO Institute for Statistics 2006). Increasing participation, in turn, is a function of: (a) increases in enrollments and completions at academic secondary levels; (b) changing employment opportunities, especially the loss of unskilled jobs in manufacturing and agriculture, and a belief that one's chances for the remaining good jobs require—or will at least be enhanced by—higher education; and (c) an increasing political and social regard for social and economic mobility and justice, leading to policies designed to increase higher educational participation, particularly among those traditionally less represented, such as ethnic and linguistic minorities, girls (in some cultures), or students from poor secondary schools or otherwise thought to be educationally disadvantaged.

A final factor affecting enrollments in some countries is the increasing amount, or final level, of higher education per entering student. This, too, is an *accelerating* factor as first degree graduates perceive a need for even higher levels of education to be competitive (e.g. the growth of MBAs and other professional master's degrees) and as professions (especially licensed professions such as teachers, and the non-physician health professions) endeavor to raise their stature and limit the numbers allowed to practice (thus limiting competition and enhancing status and remuneration).²

Teichler and Bürger (2009, p. 155) reported more than 51 million tertiary education students worldwide in 1980, which number nearly tripled to more than 139, 395,000 by 2006. The official background paper for the UNESCO World Conference on Higher Education (Altbach, Reisberg, and Rumbly 2009) reported an estimate of some 150 million students world wide. While the rate of enrolment increase will surely slow in the wealthy countries of the OECD, due both to a slowdown (and in a few countries to a reversal) of demographic increases, and also to what may be a near-saturation in participation, the rapid increase in the numbers of university-age youth and the still-low

² This may be countered in the European Bologna region with a shortened (bachelors) first degree on the Continent. But early indications are that most bachelors degree recipients in Continental Europe are preferring to go on, either for the masters in the same field or, as in the United States, to pursue a professional master's degree.

participation rates in most of the rest of the world portend a continuation of these surging enrolments for decades to come.

Expansion at the Margins

Clearly, the expansion of enrollments—assuming some increase in resources to meet at least some of the additional costs—means some concomitant increase in the numbers of institutions and academic programs as well as in the numbers of faculty and other members of the academic profession. However, as the numbers of students, institutions, programs, and faculty continue to increase, those additions—at the margin—are likely to be unlike the typical or even the average students, institutions, and faculty of the past, even of the very recent past. In other words, the marginal student—that is, the student who is entering higher education now, but would likely not have been entering a decade ago—is likely to be statistically different from the average and the marginal student of the past, when far fewer were completing academic secondary school both aspiring, and financially able, to go on to a university. Similarly, the new institutions at the margin of institutional expansion are likely to look less like the country's more venerable universities. And the new faculty that are hired to teach at these new institutions will, at least on average, be less likely to hold the highest degree in their field and to be less oriented to research than the faculty of the existing universities.

Thus, the concept of *marginal* as is being used here does not mean *inferior*, but merely statistically likely to be different from the typical past or current average. As applied to the nature of students at the margin of expanded enrolments, the likelihood of going on to higher education in all countries has always been to some degree *socio-economically constructed*: that is, drawing both on the quality of secondary schools (and in some cultures, tutors), the cultural capital of parents and peers, the typically more ambitious academic expectations of the middle and upper classes, and the financial ability of families to afford both the fees and the student living expenses associated with higher education. The marginal student, then, is statistically less likely to draw on any of these advantages.

The difference between the marginal and the average student of the recent past is likely to be lessened as participation rates increase and as more of the barriers to successful academic secondary school completion and entrance into higher education are removed or at least lessened. Thus, when students from all socio-economic circumstances and all ethnicities and home languages have essentially equivalent access to good secondary schools and to the other accoutrements of *cultural capital*, such as parental and peer encouragement to go on to education, and when the financial barriers to higher education are removed either by means-tested financial assistance or tax-supported higher education for all—in short, when access to and success in tertiary education ceases to so disproportionately favour the children of the already privileged—the students entering at the *enrolment margin* will no longer be as disproportionately from the socioeconomically marginalized. However, this disproportionately exists to some degree in all of the wealthy industrialized countries of the OECD. And it exists to an even greater extent in most of the low- and middle-income countries.

In summary, the expansion of enrolments worldwide will add students who are statistically likely to be:

- less well prepared, as they will increasingly come from more rural locations and from less well resourced and less academically intensive secondary schools;
- less financially secure, and thus more subject to the need to borrow and/or to have to work concurrently at a part-time (or even a full-time) job, and thus to be more likely to drop out;
- less academically motivated and more ambivalent about the sacrifices and personal discipline that higher educational success requires, and thus less inclined to persist on to degree completion;
- less inclined, as well as less financially able, to matriculate full time in a college or university far away from home, and thus commensurately more inclined to attend a local, less academically selective, and less prestigious institution;
- for all of the above reasons, more attracted to the shorter-cycle, more vocationally-oriented programs and to attend part-time.

Following upon the above conjectures, as enrollments expand and new institutions are created to accommodate this increased demand, the newer institutions—that is, at the margin of institutional expansion, whether new public institutions or the new institutions of an expanding private sector—are more likely to feature less costly programs (thus, favoring the social sciences and humanities over the sciences or engineering), shorter cycle programs (favoring bachelors and sub-bachelors over masters and doctoral programs), and institutions of less selectivity and academic prestige. The older, more venerable higher educational institutions in almost all countries tend to conform to the classic research university model, which features academically selective students, an academic staff that has gained their posts through a lengthy period of graduate study and apprenticeship and who are oriented primarily to research and to their (increasingly globalized) disciplines, an orientation to graduate (masters and doctoral) programs in the traditional arts and sciences and the advanced professional fields, and a university governance model that vests substantial authority and influence to the senior faculty (as opposed to authority and influence vested more in management).³ In contrast, the newer public institutions that have been added to national systems to accommodate increased demand for places (whether public, private non-profit, or private for-profit) are more likely to be less academically selective, to feature more applied programs at the bachelor and sub-bachelor levels, and to incorporate a largely teaching faculty that are more part-time and less apt to possess the highest degree in their fields. Furthermore, as the fastest growing enrollments—driven by rapidly increasing youth cohorts and rapidly increasing participation rates—are occurring mainly in the low- and middle-income countries, which also tend to have the most constrained state treasuries as well as the most socially and politically compelling competition for the available public revenue, these newer public institutions will tend to be less well resourced than the existing institutions.

³ Many observers note a shift in the direction of managerial authority in all institutions of higher education. However, this trend is most pronounced in the newer institutions on the margin of institutional expansion: that is, the public universities of applied science and technology on the European Continent, the so-called *deemed* universities of India, the new provincial universities in China, the university colleges of East Africa, and virtually all of the newer private colleges and universities throughout the world.

In combination with a student body that tends, as we noted above, to be somewhat less affluent and less academically prepared, and more inclined toward the shorter-cycle practical programs, the newer, or *marginal*, institutions are likely to focus on teaching rather than research, on bachelor and sub-bachelor programs, and on less expensive part-time rather than full time faculty. In fact, in many low- and middle-income countries, the surging revenue needs implied by the rapidly increasing student enrollment demands simply cannot be met by public institutions, even by short cycle bachelor and sub-bachelor colleges with lower per-student costs than the older universities. Throughout Latin America, much of Asia, Africa, and the former Communist, or transitional, countries, the inability of the public sector to meet the expansion of student numbers has led to very rapid increases in the numbers of institutions that are private (either non-profit or for-profit) or to private (or self funded) tracks within public universities—or in the case of China to essentially separate, self-funded colleges owned by public universities. For the most part (although with significant exceptions), the more prestigious, selective institutions continue to be the older public universities, with the newer private institutions—those on the institutional margin—sometimes termed *demand absorbing*.

Finally, the perspective of the marginal being statistically different from the typical or the average in the face of rapid and lasting expansion applies as well to the academic profession. In keeping with the likelihood that the marginal student is likely to be less academically prepared and committed, and the marginal institution less scholarly and less well resourced, the faculty on the margin of expansion are less likely to be full time, to hold the highest degree in their fields, and to be oriented to research. Again, this assertion should not be construed as suggesting a newer or younger academic profession that is necessarily less able or less committed to their profession. But the veritable explosion of enrollments in so many countries—nowhere more than in China—has required a yearly numerical increase in the academic profession that would have been impossible to accommodate by the annual numbers completing Ph.D. degrees. Altbach, Reisberg, and Rumbly in their report prepared for UNESCO’s 2009 World Conference on Higher Education, stated that the academic profession is “...under stress as never before [and that] [r]esponding to the demands of massification with the fast deployment of greater numbers of teachers has resulted in a decline of the average qualification for academics in many countries.” (p.5) In summary, the academic profession at the margin of higher education’s great expansion can be expected to be:

- less likely to be full time and more likely to hold several part time teaching jobs,
- if full time, less likely to be permanent or tenured;
- less likely to hold a Ph.D. (or other terminal degree); and
- less likely to be oriented to research and one’s scholarly reputation.

With respect to the wealthy industrialized countries, the Centre for Educational Research and Innovation of the OECD conducted a study, published in two volumes in 2009, on the likely effects of demography and globalization on tertiary education within the thirty member countries of the Organization for Economic Cooperation and

Development.⁴ The Executive Summary of the Demography volume concluded with three summary points on the impact of expansion and other forces upon the professoriate in these countries, concluding that (OECD 2009a, p. 14):

- the academic profession will be more internationally oriented and mobile, but still structured in accordance with national circumstances;
- the activities of the profession will be more diversified and specialized, and subject to varied payment contracts; and
- the profession will move away from the traditional conception of a self-regulated community of professionals and towards a model and consensus to be based on fresh principles.

Financial Austerity

Alongside the sheer expansion of higher education and its effect upon the academic profession is the effect of the increasing financial austerity in higher education, both of institutions and of systems. This financial austerity, of course, is partly a function of higher education's expansion. The massification of higher education imposes not only the costs of additional faculty, but also the capital costs of new classrooms, laboratories, lecture theatres, and offices in addition to entire new campuses as the expansion extends to new institutional types as well as new institutions in regions hitherto unserved.

However, even without increasing enrolments, higher education faces a natural upward trajectory of unit, or per-student, cost increases that tends to track the rate of increase of wages and salaries in the academic profession, which in turn tends to track wage and salary increases in the general economy—which, if there is any real growth in the economy, tend to rise at a rate of increase slightly in excess of the prevailing rate of inflation. This is the so-called *cost disease*, or the phenomenon of the *rising relative unit costs* in the labor intensive, productivity resistant, sectors of the economy, including symphony orchestras, schools, and universities that have few opportunities for the substitution of capital for labor, which is the main engine of growth in the goods-producing sectors of the economy.

Accelerating this natural rate of unit (or per-student) cost increase are other factors peculiar to many universities that further accelerate annual cost increases in varying degrees in different countries including:

- technology, which in higher education tends not to lower costs by substituting capital for labor and driving down unit costs as it does in most of the private, for-profit, goods-producing sectors, but to *increase* costs—supposedly altering the very nature and improving the value of the product, but still requiring more, not less, revenue;
- constant change as new programs are added (almost always faster than old ones—and their faculty and staff—can be shed); and

⁴ These thirty-four countries (as of 2011) include most of the highly industrialized countries of the world, including Europe (including the Central/East and European countries of Czech Republic, Slovak Republic, Poland, Hungary, and Slovenia as well as Turkey and Israel); the US, Canada, Mexico, and Chile in the Americas; Japan and Korea in East Asia; and Australia and New Zealand in Oceania.

- the already high and rapidly increasing costs of research, especially in the physical and biomedical sciences with their high technology expenses, and especially where faculty and administrative ambition are content not simply with a constant share of prestige or of the enrollment market, but where the elite and the *would be* elite universities seek greater scholarly recognition, better and more academically qualified students, and higher rankings on such international league tables as the Times Higher Education Supplement's *World's Top 200 Universities* or Shanghai Jiao Tong University's *Academic Ranking of World Universities*.

Higher education finance, then, is burdened with a natural unit cost trajectory that in normal years will exceed the average rate of increase of consumer prices generally: that is, will naturally exceed the rate of inflation. When the accelerating factor of enrolment expansion is added—which of course differs dramatically among countries, but is greatest in the low- and middle-income countries—the upward trajectory of higher education's costs and revenue needs is dramatic.

At the same time, the sources of revenue to meet these rapidly increasing needs are limited. Governments everywhere struggle increasingly under escalating burdens of pensions and the rising costs of elementary and secondary education, health care, public infrastructure, security, and other social welfare costs. Electorates in many highly industrialized countries have been getting more conservative, particularly in their distaste for taxation and what they perceive to be wasteful government spending. Many European countries, with their high social welfare costs, and typically spending from one-third to more than one-half of national gross domestic products in the public sector, are trying to shift productive resources to the private sector and to reduce public deficits to comply with the requirements of the European Community and the Euro Zone.⁵ Russia, the other countries emerging from the former Soviet Union as well as transitional countries of Central and Eastern Europe all labor under the enormous costs of building an internationally-competitive productive infrastructure and weaning a labor force away from its deeply rooted dependence on state enterprises and governmental employment. The United States struggles with an over-consuming, under-saving population that is unwilling to tax itself for the public benefits it demands.

Taxation in the developing countries, where production and incomes often tend to be low anyway, is technically difficult. The financial challenge to governments is how to get a share of purchasing power when relatively little wealth comes from large, stable enterprises that can be taxed and that can also be counted upon to withhold taxes from their employees. Former Communist countries, once dependent on easy and extensive turnover taxes on state-owned enterprises, now need to tax personal or corporate incomes, retail or commercial transactions, and/or property—all of which are difficult to calculate, expensive to collect, and relatively easy to evade. Businesses and individuals in many countries seem increasingly able to hide incomes and the value of their taxable assets. And even in the wealthy highly industrialized countries with efficient tax systems, the increasing globalization of the world economy encourages productive enterprises and wealthy individuals to flee to countries with lower taxes.

⁵ Exacerbated in 2011 by the European debt crisis especially in Greece, but also worrisome in Ireland, Italy, Spain, and Portugal.

Aside from the limitations on taxation, governments everywhere are contending with politically and socially compelling competing needs for these increasingly scarce tax revenues. In much of the developing world and in many transitional countries, the competitors for public revenue include the replacement of decrepit public infrastructure, unfunded pension obligations, the need in most countries for a workable social safety net, and the cost of reversing generations of environmental degradation. Finally, although the government (or taxpayer) in most developing countries as throughout the world will continue to be the principal revenue source for public higher education, most or even all of whatever limited additional revenue can be squeezed out of the public treasuries for higher education will be absorbed by the need to accommodate the inevitably expanding enrollments, leaving little or nothing to accommodate what ought to be the rising unit, or per-student, costs (much less allowing investment in new programs and pedagogies or in academic research).

If all of this were not enough, the economies of the United States and most of Europe have been devastated by the economic downturn that began in the United States with the collapse of the US financial market in 2008, but that quickly revealed profound problems in virtually all of the OECD countries in the form of excessive levels of public debt and future pension and health care obligations that are seemingly unsustainable. Unemployment in many OECD countries remains high, and economic growth is tepid. The response in most governments has been to curtail public spending wherever possible. And public colleges and universities in many countries—the United States and the United Kingdom especially—seem to be especially vulnerable to such budget cuts.

In the United States, for example, public (state) appropriations per student for public colleges and universities declined from 2008 to 2009 by \$751, while very large tuition fee increases—that is, shifting the burden from taxpayers to parents and students—went up by only \$361, effectively sharing the austerity and the financial pain among both institutions and families. The austerity faced by public colleges and universities varies by state, but in 2010, total state support for higher education went down in Vermont by 16.4 percent, in Virginia by 10.4 percent, in New Mexico by 10.2 percent, in Iowa by 9.5 percent, in Ohio by 7.9 percent, in Michigan by 7.1 percent, and in California by 6.8 percent (*The Grapevine*, 2011). In the United Kingdom, the government plans to cut the funding for universities in England by 40 percent by 2014/15, effectively defunding all instructional subsidies except in engineering and science and raising the current deferred annual tuition fee to as high as £9000. Callender 2011).

Public institutions in the United States, Canada, England, Australia, Chile, Japan, and even China have managed to supplement declining governmental tax revenues with steeply rising tuition fees, paid either by parents or students (through loans, or so-called deferred fees). However, even this source of revenue seems to have limits—reflected in the mounting debt loads and rising defaults, which simply place the burden back on governments and taxpayers.

Public colleges and universities in most US states, for example, while subsidized, pass 30 to 40 percent of undergraduate instruction costs on to parents and students in the form of tuition fees. At the State University of New York at Buffalo, in-state students pay about \$7000 in tuition and other fees, in addition to the expenses of completely unsubsidized food and accommodations, thus making the expense of a university year

around \$20,000. Helping to help meet these expenses are federal and state need-based, or means-tested, grants, partially subsidized students loans, and extensive part-time employment opportunities. With this student assistance, virtually all students (other than married students with families) can afford to attend the university even if their parents are financially able to contribute nothing.

However, the burdens of student debt and the distractions of part-time employment are mounting. For example, Sixty-three percent of New York State college seniors graduating in 2009 did so with debts averaging nearly \$27,000—and this before the full impact of the Great Recession, and before the much higher levels of graduate school debt. The mounting debt burdens in the United States are made all the more painful by levels of unemployment and underemployment even for college graduates, and by rising loan defaults that threaten access to graduate and advanced professional education (where aggregate student debt can easily surpass \$100,000) or the purchase of a first home (Project on student Debt 2009).

Expansion and Austerity: Combining to Impact the Academic Profession

The financial downturn of 2008-2011 and the related European debt crisis have affected mainly the wealthier countries of the OECD, although low- and middle-income countries such as China, whose prosperity depends on exports, have also been affected. However, the countries that have been least affected by the downturn include most of the countries that are low-income to begin with and that have felt the greatest financial pressure from the sheer expansion of enrolment demand. In short, worsening financial austerity, whether from too rapid expansion, from public fiscal distress, or from the great recession of 2008-09 and its aftermath, is a near universal condition throughout the world in the opening decades of the 21st century. And as expansion and state financial distress have much the same effect on the academic profession, these two forces complement and aggravate one another.

Thus, just as surging enrolments alone can outrun the supply of Ph.D. holders seeking full time college and university posts in a particular country, leading to the need to employ more part time and less credentialed faculty, fiscal distress and collapsing college and university budgets have the same effect. Just as the natural marginal growth of enrolments and institutions tends to shift in the direction of bachelors and sub-bachelors colleges and away from costlier research universities, so does governmental fiscal stress, whether stemming from recession, other public priorities, or the need to reduce a long-term public deficit. And both fiscal stress and expansion seem here in the world to stay, at least for several more decades.

The salient question, then, for the academic profession is whether the changes of the past decade or two will turn around—as they might with the return of good economic times to the countries of the OECD—or whether they are here to stay, and perhaps to portend changes in the profession that are even more profound? Might instructional technology, for example, bring great changes to institutions and to the academic profession—quite apart from the need to accommodate far more students or to adjust to a permanent financial downsizing? Might more and more students receive instruction from the Internet, changing the instructional role of professors from lecturers to guides and

assessors? Might the conduct of research return from the universities to private and public institutes and laboratories?

Richard Lewis, for OECD's forecast of higher education through the year 2030 (OECD 2009b, pp. 348-349), considers what he called "A possibly more fundamental change—the end of, or the redefinition of, higher education" with likely future changes including:

- Greatly increased participation rates in higher education, already around 80 % in some developed countries,
- The growing gap between the content of the bachelors (and in some cases) masters degree and the "frontiers of knowledge; and
- The perhaps inevitable consequence of the first two points that a very much smaller percentage of those engaged in teaching undergraduates will be engaged in research or even advanced scholarship of consultancy.

Clearly, such changes will lead to equally fundamental changes in the academic profession. But maybe these changes have already begun Perhaps the only issue is when we will perceive the changes in the academic profession not simply as financially-driven perturbations that will come to an end with better economic or political times, but as here to stay and to be further developed.

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