PROCEEDINGS OF THE INTERNATIONAL CONFERENCE

PRIVATIZATION IN HIGHER EDUCATION

The Samuel Neaman Institute
Technion - Israel Institute of Technology
Haifa, Israel

January 7-8, 2008

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Academic Community
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for Economic Policy

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The conference was sponsored by
The Samuel Neaman Institute,
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Foreword

In accord with the policy of the Samuel Neaman Institute to tackle national problems of major significance for the State of Israel, the Samuel Neaman Institute has been working for several years now in the area of Higher Education.

In the world it has been clear now for some time that the basis for an affluent society is KNOWLEDGE, knowledge that is taught and researched at Institutes of Higher Education. Thus, in December 2004, the Neaman Institute held an important international conference where the agenda was the changes that are happening in higher educational national systems around the world, especially due to the dramatic expansion in the demand for higher education and in the availability of higher education. We brought the best researchers in the world to debate the issues and the proceedings of the book were published under the title "Transition to Mass Higher Education Systems: International Comparisons and Perspectives", and received a lot of attention from the policy makers of Higher Education in Israel. One of the outcomes of this conference was the establishment of a Higher Education Forum to openly debate the problems of higher education in Israel, especially between Universities and Colleges. Both in the 2004 conference and at the Forum, problems related to privatization were brought up, but not in a systematic way. Because of the lack of funds due to the meteoric growth of the student body in Israel AND the decreasing support from the government, both in relative and absolute terms, the higher education institutes dramatically increased the search for alternative funding and new so called "private institutes" emerged. We thus decided it was high time to have a global look, and perspective on the entire issue of privatization , and in January 2008 we organized another international conference, again bringing in the best people on the subject in the world, to look at the problem of "Privatizations in Higher Education". The aim was to see how countries around the world cope with these problems and consequently debate and suggest how Israel should expand its Higher Education system so that the system will stay open, amenable, honest, independent, meeting the needs of Society and the

Country and maintaining independent research, both pure and applied, at the highest international level.

As in the previous cases this was a joint effort of the Samuel Neaman Institute, BASHAAR – Academic Community for Israeli Society, and the United States-Israel Educational Foundation (Fulbright). We were also supported this time by the Azrieli Center for Economic Policy at Bar-Ilan University.

The publishing of the talks and discussions now has an even more profound importance in view of the international economic crisis we are currently in the midst of, and which underscores the necessity of the Institutes of Higher Education to diversify and find additional sources of support, so that the system in Israel will keep playing the same vital role in the development of Israel it has played so far, for the benefit of Israel and its inhabitants. My hope is that these proceedings will serve the policy makers of Higher Education in Israel in the best possible way.

Nadav Liron
Former Director
Samuel Neaman Institute
November 2008

WHAT DOES IT MEAN TO BE "PRIVATE"? NOTES FROM HISTORY

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Our subject for this conference is privatization. In subsequent remarks I will link it to private education. The former is a process, while the latter is an outcome, and I will not say that efforts to "privatize" result in such an outcome. I will, however, suggest that "private" is a state of mind, as well as a reality, that has important consequences for public higher education. It is true that neither the public nor the private dimension of higher education can be grasped apart from national and historical contexts, but this only means that privatization initiatives must be cognizant of those contexts. During my presentation, I will provide a list of the current pressures for privatization, familiar enough and common to all of our societies, and mention some of the ensuing difficulties as well as the benefits. An account of the stumbling evolution of private, non-profit colleges and universities in the United States follows, with a comparison to Britain, which has a more central political inheritance. But the point is to show that overall, the distinctions between public and private are not simple. I will close with some useful examples of European institutions that have pursued privatization strategies.

"Privatization" is an awkward word in the English language. I suppose that we have the British philosopher Jeremy Bentham to thank for such a clumsy term. This leftover Enlightenment figure, whose clothed skeleton and wax head adorn a cage in the foyer at University College London, an institution of which he was a spiritual founder, was a devoted coiner of words and gave us such neologisms as "maximize" and "minimize". As a philosopher of the doctrine of utility and principle of mass gratification, he may well be an interesting target for present discontents.

In the lexicon of higher education, "private" denotes not-for-profit institutions that are expected to meet their operating expenses

without government assistance. (On-line profit-oriented purveyors of educational courses lie outside my presentation. That is a different subject altogether.) Privatization is the pursuit of non-governmental sources of revenue either to replace lost or inadequate funding from central (or local) authorities or to acquire support for new research initiatives, programs, equipment, buildings, staff, and student assistance. Both goals can and do occur simultaneously. Some such activity is occurring throughout the developed democracies, and Israeli academics are certainly familiar with it. In fact, since 1988 Israel has had a conspicuous sector of private colleges and law schools, and by a decision of 2003 such institutions cannot be profit-oriented. Fears are expressed that the resulting high tuition charges are not adequately defrayed by scholarship assistance for the needy.[i] One fear everywhere is that governments will reduce public higher education budgets according to income privately raised. While I do not, at present, have cross-national statistics that justify the fear, I would not dismiss the suspicion that this is always a temptation.[ii]

Runaway Costs of Higher Education

I daresay there has never been a time when the leaders of universities or colleges were relaxed about their fiscal prospects. In the United States, hundreds of weakly-provided institutions collapsed in the nineteenth century. Even colleges and universities with record-high endowments endlessly pursue donors as if catastrophe lurks around the corner. It cannot be denied that the costs of financing national systems of higher education have reached staggering proportions. The causes are nowhere mysterious. First is the shift from elite to mass higher education. Until the twentieth century, only about 1%, sometimes 2% but no more than 4% of a relevant age cohort went into higher education. Historically, higher education everywhere in the Western world (or China) was elitist – in the restricted meaning that few attended, or in the expanded meaning that they were drawn from the more affluent sectors of society. But selection was not fully meritocratic. Students were chosen because of family, birth and connections or because their parents could afford tuition fees. Much historical attention has been devoted to the social basis of entrance. The task is a vexed one because past admissions registers employ class or status information incommensurate with ours. Nevertheless,

in general historians are not confident that access policies guaranteed admission to the many possible candidates from the lowest segments of European or American society – not even in Scotland with its famous national commitment to the poor farm boy, the "lad of parts." But there does seem to have been some reaching down into the rural communities in Sweden in the first half of the nineteenth century.

Today, depending upon country and how we define higher education, probably half or more of the age cohort is in some form of higher education. I am not even counting the numbers of lifelong learners or those in extra-mural programs or classes designed for the upgrading of skills. More students are available for higher education because the provision for secondary education expanded first, and access to higher education is historically driven by the numbers of those who leave school and go on into tertiary education. The expansion of secondary education is a combination of demand and supply, with governments intent on spreading the advantages of education more widely and – it is the hope – more equitably.

Furthermore, where once most undergraduates were drop-outs, the numbers staying on to degrees, and then to advanced degrees, contributes heavily to cost increases.

Second, before the middle of the nineteenth century, or the twentieth century in most instances, colleges and universities focused their attention on teaching, and often on teaching to a relatively limited syllabus. The curriculum has since exploded with choices, requiring larger teaching staffs. The numbers of books, journals, reports and other documents produced by relentless publishing strains the budgets of university libraries, although electronic publishing provides some shelf relief. Cooperative library sharing schemes are essential. We also have research-led universities and technical institutions that are under continual pressures to upgrade facilities, expand inquiry and provide multiple services to society. We all understand that in the age of big science and high technology, universities not only must acquire the expensive talent needed to perform expanded missions: they must provide the laboratory equipment and sophisticated machines required by today's research necessities. Universities have also become purveyors of culture and entertainment, and in many cases are expected to construct museums and galleries and offer theatrical performances. When universities

acquired research functions, they opened up a process of knowledge expansion and dissemination that theoretically has no limits. Disciplinary specialization and sub-specialization are the pathways to modern conceptions of a good life. While in some countries critics complain that teaching is over-specialized and students are not provided with the kind of breadth required of citizens in a democracy, the fact remains that discovery involves intense specialization, especially in the sciences and technology. My own view is that both breadth and specialization are vital, although I may have particular understandings of what breadth means. However, this is not a debate that I wish to engage in today.[iii]

A third cause of escalating costs is international competition, with nations demanding that research provide the necessary competitive edge and products, as well as other aspects of the same worldwide condition, namely acquiring the necessary and contingent academic talent, professors, students and graduate students. Talent at the expected levels is rare and consequently governed by the laws of supply and demand.

A fourth reason is that on all sides higher education is expected to advance the health and prosperity of society and its citizens. In the nation-states represented in this conference, governments are or have been the principal providers of resources for higher education. With very few exceptions (if any), this will remain the case in the future. Although half of some 3,000 colleges and universities (two-year colleges comprise another 1,000) in the United States are legally private, they educate only about 20% of the relevant age-cohort of undergraduates, so the rest are in institutions that receive their basic operating expenses from municipal, state or federal sources. Japan, I understand, has three-quarters of its students in private institutions.[iv] However, privatization has long occurred in the state research-led institutions, although without the intensity that we notice at present. The University of California, for example, receives much less than 30% of its total revenue from the government of the state, although half a century ago it received as much as two-thirds. (The percentages, however, vary by campus in what is today a ten-campus system.)

Declining Fiscal Assistance of Governments

Government assistance has fallen or has not kept pace with operating expenses. Academics have also long complained that funding for primary research is inadequate. Sometimes it is the case that particular governments, ministers and civil service officials responsible for higher education have been short-sighted, focused on the kind of immediate results that are antithetical to discovery. It is almost an axiom of research that discovery, so valued by our profession and our societies, is often the result of cumulative investigations whose ultimate outcome is unpredictable. The Noble laureate, Charles Townes, principal discoverer of the laser, wrote in his autobiography that he had no idea initially how the laser might be used but was certain that applications would be found.[v] This story could be repeated tenfold.

We also have instances of populism: ministers who accuse universities of elitism, a term once neutral but now apparently invidious. I refer you to President Zehev Tadmor's paper, *The Moment of Truth*, for a fuller explication of this theme as it applies to Israel. But let me remark upon an irony. The pressures for wealth generation and social amelioration produce competition for talent, which, because it is always limited, is ipso facto elitist, and we hope meritocratic. This in turn implies that some colleges must be selective in whom they hire and the students whom they admit. But highly select institutions are then denounced as discriminatory and biased toward economically disadvantaged minorities or the children of working-class parents. Our societies are schizophrenic on the issue, which is politically charged and admits of no simple solution. But one result is a suspicion of high stakes testing because it handicaps many who seek entry to elite colleges and universities, and we find that both school-leaving standards and university entry requirements undergo continual revision, which critics call "dumbing down."[vi] But this, in turn, produces another irony, as those demanding preferential treatment for the children of families with inadequate resources suddenly shift course and insist on output measurements and value-added assessments, as if higher education did not have a long history of raising standards. But how does one ever assess the intangibles of education, the slow but definite growth in maturity, deportment and

judgment that result from coming of age in an environment of learning?[vii]

However, it must be said that higher education has not always been assiduous in reporting its true expenditures. An absence of financial transparency in today's environment of media scrutiny is fatal. It immediately provides a moral justification for demands for enhanced accountability. What especially raises the ire of legislators and the public in the United States is the failure of public institutions to fully explain expenditures while crying poverty, especially regarding administrative salaries and related in-house expenditures. To the press, these appear to rise at an exponential rate. Unlike the compensation of research and teaching staff, administrative salaries cannot always be defended on the grounds of competition. Press reports in the United States liken such costs to the huge salaries somehow received by unsuccessful corporation executives. Carelessness in the use and reporting of public and private funds led to a major scandal in the central office of the ten-campus University of California in 2007, and the president was asked to submit his resignation.

The more dominant reason for the decline in higher education support has been the multiple pressures on government itself, consisting of a much broader demand for social services, law enforcement, infrastructure improvements, public amenities and the exigencies of national emergencies, which Israel understands all too well. Some governments are reluctant to raise taxes to pay for the increasing demands. The result is a certain circularity: universities, through their own knowledge imperative and the continual pressures from outside, are required to assume heavy costs. But governments are either unable or unwilling, politically or ideologically, to meet those increased costs. As expenses mount, new forms of external accountability, budgetary review and research and teaching rankings are devised to provide a basis for rewarding some institutions and punishing others. This process appears to be most advanced in the United Kingdom. It is time-consuming, detracts from teaching and research, and actually contributes to the real costs of running the higher education system. No one is certain that any of the new measures are superior to older and cheaper ones. As the formulas of

accountability and assessment are constantly revised, higher education cannot rely on any steady calculus of assistance.

Sources of Revenue

For these interconnected reasons, universities with expensive educational missions have been driven to consider a variety of alternative sources of funding. None of this is absolutely new in the history of universities. Requiring students to pay for their tuition, for example, was present at the founding of universities in the twelfth century. Not until the twentieth century, when they were still in an elite mode, were British universities more or less tuition free. Sweden remains reluctant to overturn what is a cornerstone of its social democracy, but I doubt that it can hold out much longer. German university students of the nineteenth century paid their professors, as did Scottish students, and American education, apart from community colleges, was never actually free, although in the state sector the incidental fees were very low until they started to climb in the last few decades. In almost all cases, tuition increases advance more rapidly than inflation.

For some families, the escalating costs of attending university have reached crisis dimensions, entailing sacrifices of which they may not be capable. But one cannot forget the residential factor. Residence at a university has long been considered desirable in Anglophone countries for reasons embedded in conceptions of coming of age and elite leadership, as well as from religious concerns, whereas in other countries, children attending university live with their parents. These potentially interesting cultural comparisons aside, the undeniable fact is that away-from-home residence easily doubles the amounts required to study. Most American undergraduates do not, in fact, reside, but are commuters, as in the celebrated "subway" colleges of New York City. Before the Second World War, the New York City colleges received the children of Jewish immigrants who either could not afford to go elsewhere or were subject to a *numerus clausus*, Harvard was particularly, but not solely, notorious for the latter.

Philanthropic gifts also have a long past, and they have been essential to the survival of private colleges and universities in America. These continue to be assiduously sought, and by public institutions as well. Some donations are restricted to particular

purposes. Besides single donors, philanthropic foundations are important contributors to universities, and American foundations such as Rockefeller and Ford have been active in countries other than the United States. Critical assistance was provided to the London School of Economics before the Second World War. The Ford Foundation helped public institutions in Latin America.[viii] Obviously, universities prefer contributions that are unencumbered and permit maximum discretion in their use. In view of our theme of privatization, the history of private giving is an essential aspect of the story. It would include the cultural motives for giving, the kinds of loyalties and attachments that universities and colleges inspire or fail to inspire. The large numbers of brochures and solicitations that I receive from institutions that I have attended in the United States and Britain, and those that I have visited elsewhere, indicate that American practice is being widely emulated. Taxation policies are critical, since they can strengthen voluntary or civil society or weaken donor incentives. In my estimation, historians of higher education have paid relatively little attention to the taxation policies and values that propel philanthropy, although we understand that in the centuries when the Christian churches influenced mainstream universities, salvation and redemption were prime motivations for giving.

An important source of outside support of course derives from industry. While, once again, we can point to precedents that go back into the late nineteenth century, alliances between universities and industry then were not nearly so important as at present. The academic barons did not altogether trust or value business, and the idea behind a university as we approached the twentieth century was to view the profit motive as antithetical to the claim that the pursuit of knowledge was of a higher order of activity. Knowledge was "sacred" in one reading, spiritual and not material. It is also the case that the industrial giants reshaping capitalist culture were not particularly interested in universities, deeming them, as the academics in fact wished, as impractical and unworldly. All that has changed. High technology itself is a product of university thought, and the organization of activity to be found in the great computer age companies of Silicon Valley and the numerous other "silicon glens" and "silicon wadis" around the world are often patterned on

universities. They value independent thought and creativity, are more horizontal than vertical – in management structure – and are located in the sort of kindergartens that go by the university name of "campuses." So here is an alliance that is more congenial to research universities than the old rust belt industries that largely met their technical needs from in-house employees.

It is sobering to remember that a principal driver and sponsor of university-based science has been the military, whose investment in university infrastructure and support for fundamental inquiry has been monumental. Would Stanford University have flourished quite so early as a builder of the Silicon Valley phenomenon had it not been for the Office of Naval Research and its sponsorship of electronics during the Second World War? It is sometimes difficult to distinguish Research from Development in R&D budgets. And universities have managed federal laboratories in the United States. The University of California manages or has managed three of them: one in Berkeley itself, one in nearby Livermore and one at Los Alamos, New Mexico.

Mention of the relationship between defense and universities leads our discussion of the search for money toward some of the conflicts that have been arising between universities and industrial or government sponsors. The University of California's management of two out of three federal laboratories has been controversial for two reasons. Poor management has bedeviled the relationship, leading to doubts whether the University of California was competent to manage labs, and Los Alamos is now a shared responsibility with other organizations. Livermore is now in the hands of a private corporation. But by far the most contentious issue is whether in the definition of a university there is room for secret research, which is what weapons research often entails. After all, a university is supposed to stand for public and accessible knowledge.

This issue continues to raise its head every time a lucrative contract with global industrial giants is proposed. A contract between one of the schools of applied science at Berkeley and the Swiss pharmaceutical corporation Novartis troubled the campus for months until the university was assured that academic norms of free inquiry and reporting were being observed. I understand from colleagues initially opposed to the contract that the outcome was satisfactory. At present, Berkeley and several other institutions have entered into a

large-scale enterprise with British Petroleum to develop alternative fuels. This too brought doubters to the fore. The fear is always that insofar as industry uses universities for product development, academics will ignore the inherited requirement of disinterested inquiry. Grant Harman, present today, has written about university and business relations in Australia, and these include jobs for graduate students and the use of industrial facilities and exposure to management styles that differ from those customarily found in academia. Those participating in these arrangements have not particularly complained of a violation of the principles of unhampered inquiry, but I do not have a comprehensive grasp of the multiple experiments currently underway.

Certainly, the special ideal qualities of a university as the home of independent thought, and the place where the outcomes of such thought are openly circulated, require a certain vigilance. The late President of the University of California, the eminent Clark Kerr, once wrote that money is not the root of all evil, but it is the root of some. The heavy emphasis on the university as a generator of wealth or a manufacturer of skills and manpower training tends to obscure those other important elements of a university: as a location where human curiosity can be satisfied, as a source of superior thinking, as a place that offers the ingredients of a rich personal life, as the purveyor of values essential to the health of a democratic society. The university today is a multilayered organization whose strength lies, as sociologists of the subject have explained, at the bottom in the sub-structures responsible for teaching, research and public service. The explosion of knowledge, the multiple methods and styles of sophisticated inquiry, and the range of talents contained in institutions of higher learning are a challenge to central policymakers who want rapid results and clear foci.

All of us understand that the modern world of competition for markets and reputation leads to exaggerated claims and to preoccupation with what are called "outputs," "learning outcomes" and "productivity gains" that are shallowly measured by what is now termed "metrics." I am sorry to say that even professional associations that should be in alliance with universities, as well as non-governmental accrediting bodies and the Organization for Economic Cooperation and Development, are caught up in the maelstrom of

accounting. The result will be a mountain of comparative data that will prove impossible to digest or interpret. Many of us weary of the daily barrage of a sound-bites culture, league rankings and popular magazine ratings. The loud clamor for attention is at odds with a more traditional and modest view of scholarship and science. But it must also be said that treating knowledge as a commodity has a long pedigree, even if our advertising age is special and particularly shrill in its persistent efforts at persuasion.

Serving Many Masters

I suggest that we pause now and examine privatization as a necessary strategy for higher education, especially for the research-led university. It is a means for responding to pressures generated from the outside but also from the inside; and if pursued carefully, with a clear understanding of the process, it can also be a means for crafting structures and procedures more consistent with professional academic inheritances. President Tadmor is concerned that a "big, messy, market-dominated and mediocre system" will result in Israel from a failure to align access possibilities with excellence.[ix] That is a legitimate fear, but it is also possible to consider markets in the plural as the classical economists did. Markets are arenas for trials (and errors), spaces for negotiation broadly conceived. Markets do not dictate results, unless there is a monopoly buyer. Therefore, let us remember that governments have long been monopoly buyers of educational products and services. And let us also remember that the greater the degree of centralized power in a society, the more likely it is that state leaders and bureaucracies will seek policies that avoid complexity and flexibility, both of which are prime necessities of creative academic investigation.[x]

So allow me to provide this shorthand definition of privatization: it is the process by which universities acquire many masters and serve many masters. In so doing, they have a better chance of preserving parts of their inheritance than if only one master pays the piper. I would argue – the thought is hardly original to me – that the greater the number of possible sources of revenue and support, the greater are the chances that in today's dynamic and risk-prone economic environments universities will be better able to maintain valuable elements of their traditions and insulate themselves from certain

vagaries than under conditions where governments are the absolute source of funding.

Surely the European experiences of the past three decades, or those of Israel as President Tadmor has related, is proof that government agenda are not necessarily commensurate with university agenda. Writing in 1991, Guy Neave and Frans van Vught asked whether "the higher education systems of the West [were] chained, like the miserable Prometheus, to a rock with the eagle of budgetdom and intervention tearing daily at their entrails?"[xi] And the question could certainly be asked of the European past. Monarchies pressed universities into support of state churches and imperial adventures, suppressed academic freedom as we understand it, rewarded academic friends and called in royal charters in order to enforce religious obedience. In the last century, totalitarian governments destroyed universities as places of independent inquiry and spread the poison of anti-semitism through them, with some academics unseemly rushing to comply. Efforts to suppress the independence of universities and to constrain intellectual inquiry are going on elsewhere even as we meet.[xii]

The Oddities of Being Private (Britain): a Confusing History

To better explain privatization as the process by which universities and colleges acquire many masters so that they are not overly reliant upon one, or fail to do so, I need to offer a few notes on the history of institutions that are deemed private. The first point to stress is that the divide between private and public is historically late and almost unimaginable as a way of cataloguing institutions. Until the nineteenth century, colleges and universities were neither public nor private in any strict legal or financial meaning of the word. The distinction and categories did not truly exist. Universities and colleges existed by sufferance. They had to be licensed or chartered, given corporate status by princely, royal or ecclesiastical authorities. While we do not always know the exact date when medieval European universities were founded, we do know when they were chartered, receiving statutes and ordinances allowing them to legally own property and govern themselves as corporations on the medieval guild model. Colonial American colleges were chartered by the British crown and by the states of the Union following the Revolution. Boards

of trustees were the common mode of legal control for schools and charitable institutions. The charter provided a basis for intervention by recognized outside authority in cases of dispute or malfeasance.

The colleges of Oxford and Cambridge are today legally charitable institutions, but it is unclear whether the designation "private" is suitable. The word is not generally used, but it was used for a time in the first half of the nineteenth century when the colleges were fearful of government intervention. Historically they were heavily dependent upon tuition charges, assessing students according to defined status categories, some therefore paying much more than others and some paying little or nothing. From the early modern period onward the tendency for college authorities was to tolerate the often unbecoming behavior of wealthy undergraduates as the price of accommodating their prominent families. The colleges, university professorships and the two university libraries had long attracted gifts and benefactions that were bestowed upon them by wealthy merchants, bishops, aristocrats and royal courts. These supported poorer undergraduates and the college fellowship. The colleges were by no means equally endowed (nor are they today), and in the middle of the nineteenth century, schemes were put in place to spread some of the wealth more equitably. These still exist. Compared to the colleges, Oxford and Cambridge Universities were weakly endowed. Because of this, as well as some other social factors, teaching gravitated to the colleges, a consequence that needed correcting in the second half of the nineteenth century if the new ideal of specialized teaching based on research was to be established. But a research mission could not be supplied from existing resources, and soon enough the two senior universities began to campaign for money derived from the proceeds of taxation. One prominent scientist, circa 1900, even advanced the position that universities were like battleships: the more and stronger the better. The context was imperial competition with France and Germany.

Parliament was reluctant to support this position, being under the influence of laissez-faire economic doctrines, although smaller grants had been given to other higher education institutions for specific purposes. The Scottish universities, much poorer than Oxbridge and long accustomed to assistance from the Crown, had always sought and welcomed state assistance even when the price might require

compromises. The Scottish universities of the time were more "national" in their identity than the English ones, which were in the process of outgrowing their historical connections to landed society. But in the third decade of the twentieth century, the universities received central government funding and became de facto state universities. The colleges by then had become dependent upon central and local government assistance to the students they admitted.

In the first part of the nineteenth century, the argument started to circulate in England that the difference between a college and a university was that the first was private and able to dispose of its income as the society of fellows decided (in accordance with the wishes of donors), while the second was public.[xiii] The distinction was unneeded earlier because Oxford and Cambridge enjoyed monopoly status in England without competition. So the distinctions first arose when the possibility of a rival appeared in the 1820s in the form of the first London University. The specific issue was the right to award degrees. The Oxbridge establishment opposed extending the right and argued that the University of London was only a college and not, as it wanted to be, a university, and that colleges had no degree-granting privileges by law because they were private. In retrospect this is a peculiar argument. It did not, for example, apply to the Anglican Trinity College, Dublin, but it held nevertheless for reasons that are as yet ill understood. Once the masters and fellows decided that colleges were private, they used their status to oppose parliamentary efforts to revise their statutes some decades later. Opposition failed. Royal government had long established its right to call in charters and revise statutes. Yet government had found a new weapon to dominate higher education: the degree. Whatever authority controlled the degree also controlled the curriculum and through the curriculum teaching itself. There was one loophole: institutions that did not award degrees were not as subject to regulation. But British society was moving toward certification and qualifications as conditions of professional employment, and degrees were assuming an importance that they had never before held. Until the founding of the University of Birmingham in 1901, every new institution was legally a college without the right to award degrees except through a central university created precisely for the purpose – a university that was odd, since it

did no teaching and had only a small administrative staff. This was the celebrated London University model of 1836.

So Britain had private colleges but they were yoked to degree-granting centers. To telescope a long historical process, the colleges of Oxford and Cambridge may possess a certain theoretical degree of autonomy by virtue of being independent charities. But just what this means in actual practice is impossible to state as they are yoked into a federation and receive government support for their students. They retain a certain independence with respect to revenue-sharing with other colleges, but recent changes have greatly increased the power of Charity Commissioners to inquire after college finances.[xiv]

Does Britain have "public" institutions? Degree-granting universities, which could not exist without government support, are not referred to as "public," but polytechnics created under legislation enacted in the 1960s were so designated. Like colleges, they too were not entitled to award their own degrees, although once again undergraduates could read for awards through examinations offered by a central body. A further confusing use of the word "public" occurs with regard to a segment of elite boarding schools. They are "public schools" because in the eighteenth century, unlike town grammar schools that had restrictions on who could attend, they were open to a nationwide paying public. There is another segment of schools termed "private" because they lack the endowment base of the more famous schools; but in American usage, all fall into the category of private education.

While polytechnics were labeled "public," the degree-granting unitary universities – the type that we best know – were certainly not labeled "private." But since the government of Mrs. Thatcher, who came to power in 1979 and started to hammer the universities for their alleged snobbery and disregard for business, the very idea of being private became more appealing for brand-name institutions. Ideas began to circulate, especially with regard to the better-endowed institutions such as Oxford, but the fear of further antagonizing unfriendly governments halted such dreams, along with the realization that being private was no guarantee that ministers would cease to intervene.[xv] Some commentators have troublingly spoken about the "decline of donnish dominion."[xvi]. But at the same time there exists a determination to reassert institutional initiative and to

seek creative solutions to funding exigencies. Universities have been pursuing privatization strategies and diversifying their revenue base. Initially opposed to tuition charges (it is the case that parents had been means-tested, however), the universities reversed themselves in due course. But privatization is not only a shift in behavior. It is *au fond* a shift in attitude or mentality, with some institutions plowing ahead faster than others and gaining recognition for doing so.

More Oddities: The Evolution of Private Institutions in America

The American university situation is quite different, and was also virtually unforeseen. There was no intention at the outset on the part of any higher education institution to become private. The earliest university colleges, most of which have grown into famous private institutions (Rutgers in New Jersey and William and Mary in Virginia are public), were institutions subsidized by colonial legislatures in a variety of ways. Historians have carefully worked over the circumstances that converted these state-dependent university colleges into private institutions. The story that they tell is not straightforward. It usually begins with what is called the "Dartmouth College v. Woodward Case" of 1819, ultimately a decision by the Supreme Court in Washington that allowed Dartmouth to declare its independence from interference by the legislature of the state of New Hampshire. But that interference had nothing to do with institutional autonomy or academic freedom. It involved political party disagreements, vested interests, the heirs of founding families and fights over who should sit on the board of trustees. The legislature only entered the story when asked by a member of the founding family to intervene in his favor. A state election in 1816, however, led to an effort by the legislature, now consisting of new members, to alter the board, an effort upheld by the high court of the state of New Hampshire. But the federal Supreme Court ruled that the legislature had no right to intervene in the first place.

Yet governments had always intervened in universities in one way or another. Efforts by the Oxbridge colleges to restrict intervention had and have failed. What caused the shift in legal thinking in America? The efficient cause was the American Revolution, and the ultimate cause was eighteenth-century thought regarding the importance at law of charters as contracts. The powers of government

were limited by the idea of social and legal contracts as explained by the philosophy of John Locke regarding political sovereignty. The American constitution was itself a contract that validated other contracts. The decision, it has been said, had more implications for business than for education. But what is fascinating is that no sooner had this decision been rendered than the former board, now restored, continued to ask the New Hampshire legislature for money, and the governor of New Hampshire sat as a trustee until the end of the century.

If Dartmouth College was now to be regarded as "private," neither the College leadership nor the leadership of many other, often faith-related, colleges understood that status in anything like the conditions presumably in use today. In other words, the ramifications of the Supreme Court ruling were not fully grasped. Private colleges and universities understood their educational role to be one that was committed to the public good and to the education of citizens for the new Republic much as they had done before. In undertaking that responsibility, they argued that history entitled them to government fiscal support – support, incidentally, that governments were reluctant to provide. In the United States, for at least half a century or more after the Revolution, some of the great names in American university history – Yale, Harvard and Columbia – received land and cash grants. The General Court of the State of Massachusetts gave a large sum to Harvard's Museum of Comparative Zoology in 1868. Members of the state governments sat on their boards. To this day, Cornell University, founded in the later nineteenth century, is both private and a public land-grant university. The Massachusetts Institute of Technology was founded with state as well as private money. The cycles of support waxed and waned, while the leaders of colleges complained of neglect. The founding of a new type of publicly-assisted institution, the so-called "A & M" (agriculture and the mechanical arts) or land-grant university of the Morrill Act of 1862 (of which Berkeley is a representative),[xvii] even occasioned some opposition from established private institutions fearing a loss of public money. The point is that we had not reached that historical moment when distinctions between public and private bore any clear and instrumental meanings. Universities and colleges, however founded, expected to be supported from taxes or land grants, and this

continued in the case of Dartmouth, the sometime-imagined prototypical private institution, until 1921.

A shift in mentality became apparent around the time of the American Civil War. The first reason was the war itself and the perceived incompetence of public response agencies and government bureaux. State and federal administrations, whose record of educational support was in any case spotty, were now regarded as unreliable. The second reason was large-scale philanthropy, the consequence of fortunes made as America industrialized. And the third, possibly connected to the second, was the appearance of active alumni associations. Whereas alumni giving in some form dated back to the final decade of the eighteenth century, it was not until the next century that the alumni voice was pronounced, and graduates assumed a more direct interest in the work of trustees. Yet another reason was an enhanced role for colleges and universities as suppliers of services to urbanizing America and, while limited, to the business communities. While America did not yet have a reliable system of secondary education that could feed colleges and universities with suitable undergraduates, there were stirrings in that direction as new elite preparatory schools were founded on English models. Around 1900 we find that universities such as Harvard are becoming more self-conscious about their heritage and place in American society and are starting to create the sagas and narratives that will go into the making of the Ivy League image of elite selection.[xviii] Charles Eliot, president of Harvard, once a defender of public support for all institutions (as was his father before him), declared in 1873 that in Europe it was an "axiom that the government is to do everything." He continued: "This abject dependence on the government is an accursed inheritance from the days of the divine right of kings."[xix]

How Different from Public are Private Institutions in the U.S.?

For colleges and universities now absorbed in the task of developing a corporate mentality as private in an era when large-scale businesses were transforming American economic and cultural life, one future objective would be to redefine the meaning of their responsibility to society as a whole. Would institutions legally private be expected to "live of one's own" in the seventeenth-century English expression? Was the role of a private college or university fundamentally different

from that of institutions more fully dependent upon tax revenues and political decisions? Or was that role a special aspect of American democracy, something unique that separated a private from a public university? What about access? Who would be admitted? Would private institutions be expected to participate in student credit-transfer schemes, so important to American conceptions of upward educational mobility, thus tying them to the public sector institutions?

The growth of state universities in America, and the new version of land-grant institutions, provided an opportunity for the private institutions to become more selective. Some private institutions would concentrate on top-slicing the candidate pool. While the movement for select admissions did not start to occur until the 1920s, when secondary education improved, already at the beginning of the twentieth century we find the standards movements and Intelligence Quotient testing that have played an important and increasingly controversial role in American higher education.[xx] State universities were supposed to absorb the increasing demand for university admission. But I would be remiss in leaving you with the conclusion that the cardinal distinction between a public and a private university was that publics provided democratic access while the whole of the privates concentrated on identifying and promoting excellence. Adhering to their religious origins or beliefs, or concerned about the urban poor, many were less meritocratic or competitive.[xxi] In fact, the number of select private colleges remains fairly limited given the size of American higher education, and some of the state universities are more selective, especially those that are research-led and contain increasingly expensive graduate and professional schools. These are often termed "flagship" campuses and are usually the first ones to be founded in their states, although given present status sensitivities, the word "flagship" is only mentioned *sotto voce*.[xxii]

I now come to another important point regarding the public-private divide. The divide is simply not as sharp as we might imagine. We would be more correct in noticing that much of American higher education is in some sense a hybrid – a conclusion that others have certainly noticed.[xxiii] Public universities behave like private ones. They are also in the business of raising endowments and soliciting gifts, to include buildings (which certainly has occurred in Israel), and they

assiduously cultivate their alumni associations. Free higher education, at least above the level of the two-year colleges, is a thing of the past.

Distinction in mission does not simply divide according to public or private. Institutions are also defined as to research and degree-giving capacities. For a long time, we have relied on a classification created by the Carnegie Foundation, and this is undergoing revision. Relative independence from state political influence or intervention does mark an important distinction between public and private, and this is possibly the most envied aspect of the brand-name institutions. However, the New York State Board of Regents exercises control over all chartered institutions in the state, as do the Regents of the State of Massachusetts. In 1997, the New York Regents intervened in the governance of Adelphi University, charged the trustees with misconduct and removed all but one member from the board. Going the other way, a few public universities have certain guarantees of self-government under their state constitutions – the University of California is one of them. This does not by any means eliminate the pressures that can be brought against the university by the governor and legislature, who still control the purse: the governor, incidentally, is one of several ex-officio public members of the board and appoints all the regular-term members. Nor does it remove the force of public opinion as expressed through the media, but it affords a cushion and provides a legal basis for challenging intrusion. Faith-related colleges in receipt of assistance from the religious Conventions of their states can certainly expect occasional efforts to intervene in the curriculum, especially in Baptist states such as Alabama or South Carolina, where the Conventions moved rightward. This pressure led solid southern campuses like Samford and Furman to sever financial relations with their Conventions in order to preserve institutional autonomy.[xxiv]

Research-led private universities are as dependent upon federal sources of income as are the publics. They are subject to the same controlling legislation regarding the use of those sums, such as health provisions and human subjects research. All colleges and universities are recipients of various student-aid programs from the federal government, or loan programs, which, unfortunately, have a scandalous recent history. Financial aid officials at some institutions have directed students to particular loan companies with which they had developed personal ties. New institutions are intent on being

officially accredited in order to receive federal student support. However, no institution controls that support, which goes directly to students if they qualify. The idea there was to strengthen the student market and to keep colleges and universities from dispensing those funds according to their own criteria and goals, which at one time would certainly have included favoritism. As for admissions policy, private institutions may well have a freer hand, although the "legacy" institutions have long had a special relationship with the families of their graduates. A certain mystery hangs over the admissions criteria used by many private institutions, no one on the outside being absolutely certain how officials arrive at selection. The officials themselves struggle hard to balance selection with equity, being as sensitive to external pressures to admit more minority students as public institutions.

To a list of how blurrings between private and public identities have occurred once the distinction appeared historically, I would add another component. The growth of academic specialism and careerism provides a fairly common national and even international standard of achievement and evaluation. The development of doctoral-granting graduate schools in the twentieth century – a movement that began to spread overseas several decades ago – has produced an academic class with widely-shared intellectual and occupational attributes. The institutional difference may express itself more in classroom size and staffing ratios than in mission or performance, but even that generalization does not consistently hold across the public-private boundary. Both sectors offer large lectures or small seminars and tutorial teaching depending upon how they wish to allocate resources. Course offerings and intellectual trends are more or less identical irrespective of a public/private separation, or even a college/university distinction. Four-year private colleges are eager to send their best graduates to the major research institutions and professional schools and prepare them accordingly. The word "diversity" to describe unique intellectual qualities has virtually lost all meaning and instead has become a shopworn word to indicate any institution's desirable ethnic mix.

I have deliberately pursued the notion of the contemporary university as a composite and have perhaps underplayed public and private distinctions. You may therefore find it necessary to disagree

with me, but I hope that I (and other sources that I cite) have at least persuaded you that the distinction between public and private has to be made carefully. I would also soften the claims of private-sector institutions to be special. Their fiscal position requires them to make the claim in order to survive and flourish. Institutional identity-seeking is a consequence of market discipline, the need to attract donor support but also reputation. Europeans are perplexed by the strong emphasis on team sports in American colleges and universities, but these are part of the same phenomenon of profile recognition. The "Ivy League" was first of all an athletic league. Burton Clark has brilliantly studied reputation-hunting in liberal arts colleges in the United States. Their narratives are clear: in order to be noticed (nationally, regionally, internationally), an institution must develop a history of itself that is special. It uses its network of graduates to disseminate an image. This requires an investment of time, thought and effort, and it needs to be continuous and consistently guided.[xxv] But public institutions do this too.

The "Entrepreneurial University"

Clark has also turned his attention to European universities that have systematically adopted the hybrid form. I highly recommend his studies as casebook accounts of how universities not only survive but flourish under conditions of extreme competition.[xxvi] The five universities he studies in England, Scotland, Sweden, the Netherlands and Finland are dependent upon government for operating expenses or on government-funded research councils for targeted and blue-skies research. One, however, Chalmers Technological University in Gothenburg, has become private, albeit with substantial government assistance in the interim.

Knowing that government sources are subject to ministerial decision-making and are contended for by numerous interests, these universities have become "entrepreneurial," a word that Clark knows will raise hackles because it appears to equate universities with business firms. But his point is not that they are business corporations and have foregone their university inheritances. He means that they have aggressively pursued strategies and innovations calculated to improve their independence and initiative. They have diversified their

income streams, offering to serve many masters in order to avoid serving only one.

Those who expect a single model for success will find none. That is critically important. The basic requirement is a spirit of boldness, a willingness to take risks and rethink inherited structures and modes of decision-making, the avoidance of a begging mentality and an unembarrassed strategy for entering the numerous markets that characterize modern society. In the case of Chalmers, change began below, among the professors, and percolated upwards. Warwick, in England, took an opposite strategy and managed change from above, employing a more centralized approach. Sometimes, the traditional faculty structures were maintained, at other times discarded. Cross-disciplinary organizations were created, as were science parks and institutes, and alliances with local industries. Specialties with high market value were developed and an emphasis was placed on attracting and keeping talent. Management teams were established in some instances, but the rule in all cases appears to have been steady vigilance, taking nothing for granted and searching for economic alternatives on almost a daily basis. This required dedicated and persistent academic leadership. It also entailed a willingness to subordinate academic fiefdoms to the welfare of the entire institution.

While it is customary in academia to hear complaints that a managerial attitude has overtaken an institution to the disregard of guild and collegial traditions of cooperation, the entrepreneurial universities regard management as a full collaboration with senates, courts and colleagues. Collegial and guild cultures have not been discarded. The techniques and structures that these universities employed and created are indeed astonishing in their variety and dynamism. However, what is most astonishing of all, at least to me, is how the five universities are permeated throughout with a positive spirit: how energy is diffused everywhere, to include undergraduates, postgraduates and alumni (yes, this American habit has been borrowed). Furthermore, it is understood – as it has been understood in American universities and colleges – that while many disciplines are not designed to exploit financial markets, they can contribute to the animating spirit of the institutions, which in turn rewards them by distributing the opportunity costs and by building theater facilities to promote the arts and humanities. Furthermore, the fact that the

universities have taken their fate in their own hands and are not content to wait for government to provide recurrent grants has won the approval of civil servants and politicians, who are relieved to find that their crude efforts to drive universities to markets has produced a far more sophisticated approach to living in the world than any set of government artificers could ever design.

This is the brief story of privatization and "private" that I put before you this morning, awaiting the more detailed country analyses that our colleagues will provide over the course of the next few days. I have tried to show that even in the example of the United States, the preeminent upholder of the idea of private education, the story has never been simple. Colleges and universities evolved as composites and hybrids, learning how to negotiate among buyers and praying that the negotiations were a means of preserving core values of teaching and research. Some institutions have clearly been more successful than others; and in all cases, as angry American observers were saying in the first half of the twentieth century, there were trade-offs and departures from the German university model, the cardinal example of what universities were supposed to be.

Partisanship More to be Feared than Markets

There were failures. I alluded to that. There are anxieties, even in the United States where, comparatively speaking, higher education does well. There is some talk about the "crisis of the publics," the title of a symposium held in Berkeley last year. Tuition charges are too high for millions of Americans, although the publics, like the privates, are in the business of tuition discounting. There are other issues that are equally or more troubling to me, most noticeably the use of the classroom to dispense political and ideological positions, especially in connection with issues regarding the Middle East and Israel. A proposed boycott of Israeli academics by British academic unions or the activities by a group of faculty at Columbia along similar lines are almost unimaginable in the context of university ideals. The real threats to academic integrity, to considerations of honesty and objectivity, to a belief in reasoned discourse are not market forces but the one-sided narratives being concocted by members of the humanities and social sciences. Academic freedom requires that the classroom be free of partisan rants and be home for the sober

exchange of well-grounded facts. Other forms of internal intimidation have arisen as a consequence of the diversity movement. Students and faculty adhering to older canons of merit hesitate to voice their views because of charges that in so doing they are discriminating against students from less privileged homes. For those who are troubled by privatization because it opens universities to multiple influences, let me insist that the university is already open to many political and ideological influences that affect the quality and nature of scholarship. Faculty and students bring the world, its conflicts and its aggressive tendencies into the university.

But ups and downs notwithstanding, and despite the restless nature of contemporary society and an occasional but egregious lack of political vision, universities are still recognized as vital to the health of our nations. It is always important for those of us in higher education to keep that argument foremost in our dealings with those outside and to explain why some government policies are not only detrimental to universities but to national well-being. In the nineteenth century, higher education had not yet become the lifeblood of the nation, the source of its scientific and intellectual development, the proving grounds for the education of the nation's talent. Women were a neglected source of talent. They are no longer. As we contemplate the numbers of women entering higher education – in so many places now greater than that of men – we have another indication of the importance of the university to our ideas of progress and improvement. We see what has happened – or is happening – to nations that discriminate against women or steer their higher education systems toward limited ends. They have failed to provide the dynamic economic, political and social conditions that in turn, if we recognize the historical process, can create colleges and universities that understand how to live under those conditions, contribute to them, and – I am bold enough to say – may even prosper.

The True Meanings of "Public" and "Private"

Universities today cannot be isolated from the many confusing strands of competing interests. Democracy and market economics require that they be mixtures, uneven crosses between private and public, each requiring a particular state of mind, as I said at the outset.

The true meaning of "private" is a mentality of independence, a bold, honest, fair and generous commitment to learning and discourse. The true meaning of "public" is responsibility. All universities, public or private, are fiduciary institutions. Whatever they do, they must pursue and retain the trust of their many masters. And each type of institution should also appreciate how much it requires the collaboration and support of others. A healthy university and college system can endure competition but not squabbling and jealousies, which only invite intervention from outside the academic communities. Finally, it must be insisted that service to society and government is not the same as servitude. The oft-quoted remark of Hillel is always apt. I will only give the first half of it: "If I am not for myself, who will be for me?"

Public and private: that is the combination that history offers to us. Dionysius of Halicarnassus is supposed to have said that history is philosophy teaching by example. Shall we leave the matter there?

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[i] Noga Dagan-Buzaglo, *The Right to Higher Eduction in Israel, a Legal and Fiscal Perspective* (Tel Aviv: Adva Center, January 2007), p. 36ff. The Adva Center describes itself as a "non-partisan, action-oriented Israeli policy analysis center," founded in 1991 by movements to advance the welfare of Mizrahi Jews, women and Arab citizens. See the online description, "About Adva Center." (Adva means "ripple" in Hebrew.)

[ii] The Thatcher Government in Britain reduced the grant for overseas students at Oxford according to an expected increase in charges. Anthony Kenny and Robert Kenny, *Can Oxford be Improved? A View from the Dreaming Spires and the Satanic Mills* (Exeter: Imprint Academic, 2007), p. 112.

[iii] As expressed in Sheldon Rothblatt, "The Living Arts, Comparative and Historical Reflections on Liberal Education," in *The Academy in Transition*, (Washington DC: American Association of Colleges and Universities, 2003).

[iv] Roger Geiger, "Finance and Function: Voluntary Support and Diversity in American Private Education," in *Private Education, Studies in Choice and Public Policy*, ed. Daniel C. Levy (New York and Oxford: Oxford University Press, 1986), p. 215.

[v] *How the Laser Happened* (New York: Oxford University Press, 1999).

[vi] I have addressed this subject in *Education's Abiding Moral Dilemma: Merit and Worth in the Cross-Atlantic Democracies, 1800–2006* (Oxford: Symposium Books, 2007). The three democracies are Scotland, England and America. "Merit" refers to measurable talent, and "worth" to a broader and deeper conception of human value.

[vii] The current Secretary of Education in the United States appears to be a member of this camp, although the American constitution makes education a responsibility of the individual states.

[viii] Daniel C. Levy, *To Export Progress, the Golden Age of University Assistance in the Americas* (Bloomington: Indiana University Press, 2005), p. 99.

[ix] Zehev Tadmor, "The Moment of Truth," p. 11. Paper circulated to the conference.

[x] James C. Scott, *Seeing Like a State. How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), pp. 11, 353.

[xi] Guy Neave and Frans van Vught, "Conclusion," in *Prometheus Bound, The Changing Relationship between Government and Higher Education in Western Europe,* ed. Guy Neave and Frans A. van Vught (Oxford and New York: Pergamon Press, 1991), p. 253.

[xii] Precisely because of the dangers that centralized power represents, Martin Trow has discussed the advantages of weak government for higher education. Market competition for resources is one way of diminishing the threat of central intervention by providing alternatives. See his paper, "In Praise of Weakness: Chartering, the University of the United States, and Dartmouth College" (Center for Studies in Higher Education, University of California, Berkeley, March 2003).

[xiii] There appears to have been a similar notion in America at about the same time, but none of the historians whom I have read offers any explanation for it, nor do they recognize an historical "problem."

[xiv] *Can Oxford be Improved?*, pp. 119, 141.

[xv] Ibid., p. 128.

[xvi] A. H. Halsey, *The Decline of Donnish Dominion* (Oxford: Clarendon Press, 1992).

[xvii] There is a long if interrupted history of land grants, later sea grants, going back to the early Republic.

[xviii] See John Thelin, *The Cultivation of Ivy: A Saga of the College in America* (Cambridge, MA: Schenckman Publishing Co., 1976).

[xix] John S. Whitehead, *The Separation of College and State, Columbia, Dartmouth, Harvard and Yale, 1776–1876* (New Haven and London: Yale University Press, 1973), p. 191. See also John R. Thelin, *A History of American Higher Education* (Baltimore and London: The Johns Hopkins University Press, 2004), pp. 70–73; Lawrence A. Cremin, *American Education, The National Experience, 1783–1876* (New York: Harper and Row, 1980), pp. 402–403; Daniel C. Levy, "'Private' and 'Public': Analysis and Ambiguity in Higher Education," in *Private Education, Studies in Choice and Public Policy*, pp. 170–192.

[xx] Universities like Harvard, hitherto dominated by privileged New England families, found to their dismay that the children of Jewish immigrants were hugely successful in meeting tougher admissions standards. The result was the introduction, de facto or outright, of a *numerus clausus*. These policies were not in every instance ended until after 1945.

[xxi] Daniel C. Levy is of the view that public institutions in Brazil are probably superior to those in the private sector. *Private Education*, p. 178.

[xxii] This makes the recent report of Indiana University's Mission Differentiation Project team particularly interesting. The report calls for officially labelling the Bloomington campus of the multi-campus system as "flagship," thus setting it apart from the other campuses as a research-led, elite campus. Indiana University News Room News Release (November 9, 2007). Robert M. Berdahl, former Chancellor of the University of California, Berkeley, delivered an interesting address on the subject of flagship designations on October 5, 1988, called "The Future of Flagship Universities," in which he advocated a return to the use of the word.

[xxiii] E.g., Levy and Geiger in *Private Education*.

[xxiv] For further remarks along these lines, see Robert O. Berdahl and John D. Millett, "Autonomy and Accountability in US Higher Education," in *Prometheus Bound*, pp. 215–238.

[xxv] Burton R. Clark, *The Distinctive college: Antioch, Reed and Swarthmore* (Chicago: Aldine Publishing Company, 1970), republished by Transaction Books, 1992, with a new introduction.

[xxvi] See *Creating Entrepreneurial Universities, Organizational Pathways of Transformation* (Kidlington, Oxford: Pergamon/Elsevier Science Press for the International Association of Universities Press, 1998 and 2001); and the follow-up study, *Sustaining Change in Universities; Continuities in Case Studies and Concepts* (Maidenhead, England, and New York: Society for Research into Higher Education and Open University Press, 2004).

SESSION I, PART I

Current Trends in the Privatization of Higher Education

PRIVATE HIGHER EDUCATION'S GLOBAL SURGE: EMULATING U.S. PATTERNS?

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Abstract
One of the most striking global changes in higher education is privatization. Privatization encompasses both partial privatization within public universities and the growth of separate private higher education institutions. Many countries, Israel included, experience both forms of privatization. It is the growth of private institutions that is the subject of this paper. Private institutions now account for roughly a third of total global enrolment.

Private higher education spread historically from its longtime U.S. home to ample representation in Asia and Latin America. But just in the last couple of decades not only has it grown in those two regions but also spread to the Middle East, Central and Eastern Europe, and Africa. We can identify the causes of the private growth and assess its main contours. Yet private higher education is far from uniform. Some provide for group identity, others for elite or semi-elite options, and the rising bulk are non-elite institutions accommodating exploding demand for higher education.

Throughout, this paper particularly highlights the U.S. case. It is the most potent, largest, and of greatest interest to Israelis. Different from much of the global private higher education in many respects, it typifies and leads in other respects. At the same time, U.S. private higher education is itself transforming. We can identify several of the major trends.

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Theme
This conference presentation focuses on private higher education (hitherto PHE), which, astonishingly, now accounts for roughly a

third of total global enrolment.[1] Despite this, PHE has not been much studied, at least until around the year 2000. Policy officials often have little knowledge of PHE, which, of course, does not always keep them from setting rules. One purpose of this presentation is to give an informed global view of PHE.[2]

A related purpose is to analyze the global tendencies against the backdrop of U.S. reality. Both similarities and differences are highlighted. U.S. reality can help us understand global reality and global reality should help provide us perspective on increasingly private dimensions of U.S. higher education. Widespread popular impressions would have it that the U.S. is the "king" of PHE. In some respects this remains true. In other respects, it does not. I like to ask audiences to guess at the share of private total enrolment globally and in the U.S. Almost invariably, responders are too low on the global side and too high on the U.S. side. In fact, the global share (omitting the U.S.) is roughly 50 percent higher than the U.S. share (of 23 percent).[3] (Israel's PHE share remains lower than both, around 13 percent.)

The dinner address that opened the conference raised the question, for Israel, of whether "reform" is to be associated with "privatization." Globally, there is heavy association between the two, at least in the minds and plans of policy-makers – domestic and international (e.g., World Bank) – and leading scholars. Reform report after reform report either explicitly or indirectly advocates increased privateness (World Bank 2000). On the other hand, much of the higher education establishment and the general public remain opposed or wary.

This presentation is divided into two parts: (1) the astounding growth of PHE; (2) the major *types* of institutions that constitute the sector. The second part is crucial, because PHE is not uniform. Rather, we see not only private-public distinctiveness (Levy 1992) but also great distinctiveness between types of PHE. For each section of the two parts, we will provide the U.S. backdrop and then turn to the world.

"Private" is not a clear-cut term, not used the same way by everyone. Professor Rothblatt will help enlighten us on historical meanings. My approach takes private and public by legal definition, but assumes little about how they function, which is a matter for

empirical investigation (Levy 1986b). Reality also differs greatly across regions and countries, and across time. In the U.S. alone, significant change continues within PHE and there are great differences depending upon region and state. PHE is a wide-ranging and multifaceted phenomenon. Most generalizations about it are simplifications, often conveying a distorted view. Nonetheless, we can now make a number of warranted and weighty generalizations about PHE.

A final introductory word is that global privatization in higher education comes on two fronts. One is PHE growth, our topic. The other is partial privatization within the public sector – not our topic but noted at some crucial points.[4] The conference deals with both forms of privatization and Israel witnesses both kinds.[5]

I. Emergence and Size

Several major points arise about the emergence and size of PHE in the U.S. compared to the world. Among them are those listed in Table 1, most then elaborated in the text.

Table 1: U.S. PHE Emergence and Size

- U.S. has the earliest PHE (that has been continuous).
- U.S. private precedes U.S. public.
- U.S. PHE share was higher historically than today, falling largely in the third quarter of the last century.
- But relative stability of PHE/total U.S. enrolment for decades now.
- Stable ratio reflects continued large growth in PHE *absolute* enrolment—which leaves the U.S. still atop the world in absolute private numbers.
- U.S. total higher education enrolment growth persists more than is the case in most of the developed world.
- U.S. PHE/total enrolment share remains very high compared to most developed countries.

The U.S. has the world's oldest continuous PHE sector. One caveat is that countries often had private roots in vocational schools, seminaries, and the like, but these should not be confused with

today's PHE. It is the U.S. that has a strong, undivided legacy of PHE from past to present. Another caveat is that British tradition, passed on to colonies and commonwealth (Australia, Canada, India, Israel, New Zealand), features juridically public universities that have had considerable privateness. Although until recently these countries were identified as basically without PHE, privateness has been manifest in finance and governance both, with at least finance getting more private in recent years. In comparison, the European "Continental" model is marked by large state authority and weak institutional autonomy, a very public model (Clark 1983). Neither the University of Cambridge nor the University of Rome is legally private, but the former looks considerably more private by comparison.

Similarly, the U.S. stands out for being truly private before public. In most of the world it is the public sector that took hold before the private sector. Whereas the early U.S. colleges could be depicted as private-public hybrids, the 1819 Supreme Court decision that Dartmouth had its own charter removed ambiguity (Whitehead 1973). Higher education was private, with public higher education emerging only thereafter. In contrast, globally and for most of the twentieth century, higher education was usually public. Where public-private ambiguity had existed, it evolved into public form. This appears to be the case for all regions beyond the U.S.[6] PHE emergence would have to break what was generally public monopoly.

Modern PHE growth is mostly about the developing and transitional post-communist world. The U.S. has been exceptional in the developed world not only for starting PHE earlier but also for maintaining a significant private sector throughout its history. Until the mid-twentieth century the U.S. stood virtually alone among developed countries and until then, PHE still accounted for half the country's higher education enrolment. The share then fell but has remained fairly steady at between a fifth and a fourth for decades now. And this leaves the U.S. with either the world's largest PHE in absolute numbers (over 3.5 million), or roughly tied with India, followed by Japan, Brazil, South Korea, and Indonesia, with no other country's PHE near 2 million.

Even today, the only clear-cut example of a developed country with a larger share of private to total enrolment is Japan (plus South Korea and Taiwan if we label them as developed). In contrast,

Western Europe continues to be the world's main region with only very limited PHE. Its higher education system has been mostly state-centered. Private sectors have often been only "peripheral" (Geiger 1986). The major European change today is partial privatization of the public sector, recognizable as a partial Americanization. However, there is PHE emergence as well, often in niche institutions. MBAs are the leading example. Although philanthropy remains rare, capitalist tycoons have pledged to invest huge sums in one existing and one new private university (Germany, Italy).

Consider the contrast to Central and Eastern Europe. Under Communism there was of course virtually no PHE.[7] Immediately upon the fall of Communism, however, the picture transformed quickly and powerfully (Slantcheva and Levy 2007). Most dramatic until the mid-1990s, the growth produced up to 30 percent private shares (e.g., Poland), albeit only a few percent in some places (e.g., Slovak Republic). PHE shares are jeopardized by countries' aging demographic context (as public universities, the first choice of most applicants, may have unfilled slots).

Until recently, Israel was surrounded by countries in which only a few private institutions dotted the horizon; perhaps most salient have been "American Universities," as in Egypt and Lebanon. Compared to many countries of the region, Israel was relatively early in introducing PHE (colleges), even while it is relatively late in global perspective. Now, however, there is a private breakthrough in much of the region. Unlike in most of the world, government is not a surprised observer of PHE emergence in the Arab world. On the contrary: it has generally played a notable role in creation, at times largely by undertaking agreements with foreign institutions and providing at least some start-up funding. PHE growth is facilitated by economic opening and growth, but those are not necessary conditions, just as, obviously, democracy is not a necessary condition either. Bahrain, Egypt, Jordan, Iraq, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, and Yemen are among the PHE breakthrough countries. Egypt is one of the most advanced Arab countries in PHE, having launched many PHE institutions since its promulgation of a 1992 law.[8] Another interesting feature, not limited to Egypt and its Al-Azhar University, is the existence in some Muslim countries of institutions that are both public and religious. Turkey

preceded Israel's closer neighbors into PHE (even apart from its first PHE, shut down in the 1970s); Turkey is now about 6 percent private. The region's PHE has international connections and the hue is decidedly more American than is the case with the region's public institutions.[9]

Prospects for much further private growth in the Middle East appear strong. Like most of the developing world, Arab countries will continue to see substantial growth in the demand for higher education. Public supply will continue to be inadequate to meet this demand. In today's global environment, what is to grow greatly in higher education is usually to grow privately. Moreover, much room exists for growth as cohort enrolments in higher education overall are still so low, and we would expect feminization to be a growing part of the picture.[10]

Young but not as young as Middle Eastern PHE is Sub-Saharan Africa's PHE (Mabizela, Levy, and Otieno, forthcoming). Its unplanned, unanticipated growth echoes the much longer Latin American experience. From only about 3 percent private around 1950, the Latin America's private share catapulted to near 40 percent by around 1980, notwithstanding unprecedented growth in the public sector (Levy 1986a). The share may now be 45 percent. Brazil, Chile, and Colombia are examples where PHE holds the majority of enrolment, Cuba being the sole example of no PHE. Cross-national variation is yet larger in Asia, with the peak going over 70 percent private (as in South Korea and Taiwan). India is easily the largest country in the 30 to 40 percent range. But the largest present growth, with huge potential, is in countries with private shares still under 15 percent and with still quite low cohort enrolment overall. Several Southeast Asian countries fit, but China is the main case.

This overview of PHE growth and size tells us much about access. Among developed countries, possibly only Japan "massified" through the private sector (again reasonably adding South Korea and Taiwan). Yet, looking ahead, it is possible to conceive of a major access role for PHE in relatively developed countries, moving from 30–40 to over 50–60 percent cohort enrolment. Even societies not ideologically keen on privateness in education have today faced the stark reality of lack of funds for increased mass access through the public sector. "You can't do it without us," could be the PHE rallying point.

The U.S. is exceptional in that access was mostly through private institutions until the middle of the nineteenth century (Kinser 2006). Enrolment was about 50 percent private from the 1930s to 1950s and then access exploded mostly in the public sector, especially through community colleges. A twist today is the fast-growing for-profit private subsector, with a socioeconomically modest clientele resembling that of the community colleges. Whereas community colleges have often epitomized the idea of access through public funding, the for-profits epitomize access through private means.

II. Types of PHE

To know something about *the* PHE sector can distort as much as illuminate. PHE varies tremendously. Therefore, most questions and answers about PHE should be attentive to types of private institutions. Different types can be widely encapsulated into three categories. Each has a fairly defining set of characteristics, mostly intertwined with factors driving their emergence.

Identity

Group identity was a hallmark of U.S. PHE from the outset. And in the beginning, group identity was essentially religious identity. The early colleges (Harvard and Yale to take just the first two established) were denominational entities (Whitehead 1973). From colonial well into independence days, religion remained a defining element. After all, U.S. society then was more about religious pluralism than religious blending, separation more than integration. To each his own. Only later did other types of PHE emerge, alongside public higher education.

But religious PHE has waned. For decades a transformation of U.S. PHE has involved not only the growth of non-religious institutions but also the declining religious identity of once religious higher education institutions, especially Catholic institutions. This stems partly from the integration of Catholics into wider society. It also relates to the marketization of U.S. higher education. Many Catholic institutions cannot survive in today's marketplace, with difficulty attracting enough fee-paying students, unless they become more like other private colleges: less religious, more entrepreneurial

(Collier, forthcoming). This U.S. transformation has parallels in much of the world.

Although U.S. PHE was unusual in emerging before public higher education, the fact that private initially meant religious has not been unusual; global PHE emergence has frequently, perhaps usually, been tied to religious affiliation. A catalyst was sometimes the secularization of preexisting universities, along with the fresh creation of markedly secular public institutions. Where else could religious higher education function if not in private institutions? Clearly, public higher education today is overwhelmingly secular. In contrast, much of the private sector remains discernibly religious, though not overwhelmingly so. Religious higher education has been a way to protect or promote the identity of a religion-based group.

Yet there is change within the religious subsector. Dramatic is the increasing mix of religions. Catholic predominance sometimes yields ground to an evangelical surge. Islamic higher education also grows. Where Muslims are a minority, PHE is an option; where they are a majority, religion may find expression in the public sector. Several African countries' PHE simultaneously have Catholic, evangelical, and Islamic subsectors. Only a few universities (outside Israel) have a special Jewish identity (e.g., Maimonides University in Argentina, Brandeis in the U.S.).

Taking all religious PHE together, its share of total PHE, including cultural identity PHE, is shrinking. On the other hand, the most important rising identity is ethnic. Naturally, the phenomenon may be particularly strong in countries with quite heterogeneous populations. As with the religious side, so with the ethnic side: PHE is often both protective and promotional for its group in intent and practice. Ethnic institutions have played these roles even in relatively tolerant societies, such as the U.S. But in more fractured or intolerant societies, the minority cultural niche is often especially defining. Post-communist Europe provides notable examples.[11]

Elite PHE

The U.S. fits much less with the world when it comes to elite PHE. It is not exaggerating much to say that elite PHE *is* U.S. PHE. The U.S. elite leadership is mighty and has had remarkable persistence, holding its place even through centuries.

True, both foreign observers and U.S. citizens err when they equate elite PHE with the bulk of U.S. PHE; the bulk of U.S. PHE enrolments are in colleges or universities that do not tower over the system. However, the importance of elite PHE obviously and hugely outdistances its enrolment share. Measured by academic leadership, top graduate and undergraduate students, research, money, representation of alumni in positions of political and economic leadership elite, and prestige, PHE towers not just over the rest of the private sector but over the public sector as well. In national institutional rankings, it is difficult for the most academically elite of public universities to finish in the nation's top ten. If Berkeley makes the list, it does so trailing Stanford, Harvard, Princeton, and others. Even in today's dynamic higher education environment, this remains a weighty continuity. And if we turn from research universities to colleges, private dominance at the top is arguably even more striking. Whereas UCLA, Michigan, and Virginia are state universities in a tier just below the most elite PHE, it is difficult to name public colleges only moderately behind private places like Williams, Amherst, and Reed.

Notwithstanding their status at the top, the leading U.S. private universities are only partly different from public ones. Finance is an example. At the undergraduate level (and in global perspective), PHE relies much more than public higher education on tuition, but tuitions at both private and public are high and soaring. Elite PHE attracts more alumni and other donor money, but many public universities raise sums unheard of in the rest of even the developed world—and bulking up the efforts is, today, all the rage at the public places – again a partial privatization of the public sector.[12] Conversely, the private elite universities get much less by way of annual government subsidy than their public counterparts do, but the amount of public research money for both sectors is staggering. So is the private funding for both sectors. In extraordinary response to the vital similarities between the private and public top, and taking to another level the logic of transforming the public sector, governors in states such as Virginia, Colorado, and Michigan have offered their flagship state universities a deal: accept a one-time severance subsidy from state government; but surrender the right to future annual subsidization, get your funding elsewhere, get away from our regulation, and

become legally private universities. So we go beyond *partial* privatization.[13]

If the U.S. plainly leads in elite PHE, there have not been many followers. Elite PHE is very rare around the world, including the developed world. The public universities and their traditions and norms are deeply institutionalized. They have clear dominance, sometimes a near monopoly, on status, top faculty and students, the public dollar, pure research and advanced graduate education, and political standing (partly through the presence of their alumni in high policy positions). An attention-getting (2004) ranking of the world's top 200 universities included only 6 private ones outside the U.S. (and, in truth, several of these, in Europe, are only dubiously considered private).[14]

Exceptions catch our attention. Though Asian elite PHE institutions almost never match the public top, Japan has private representation in its top 10 (e.g., Keio University and Waseda University). In South Korea, 8 of the top 10 ranked universities are private (Kim 2006). Aspirations also catch our attention. Several Latin American private institutions that are more socioeconomically than academically elite are turning the corner as they broaden. Often, a key is persistent problems in public higher education. This reality helps to explain the lack of elite PHE in Western Europe, China, New Zealand, and Israel, while shedding light on the rise of Turkey's prestigious private Bilkent University, about which Rector Doğramacı will address us. When all is said and done, outside the U.S., private elite remains very rare on the global scene. Israel has an impressive ranking in the global indexes but of course all seven of its included universities are public.[15]

Yet more common is what we might call semi-elite PHE. In Africa, Asia, and post-communist Europe, a set of public universities continues to dominate the top, so that semi-elite private universities may compete principally against public universities in the second tier. In Latin America, PHE is often the first choice (e.g., Mexico, Peru), but sometimes not (e.g., Brazil and Argentina). Again, however, PHE is generally more socioeconomically than academically elite and rarely competes in the exact sciences and medicine. Moreover, full-time teaching, graduate education, and research remain the exception even in PHE's leading institutions. In Latin America and beyond, the semi-

elite concentrates largely in niches and there sometimes even approaches the elite level. Business-related fields, including management, are the leading example, often at the Masters level.

Criticism and praise for the semi-elite subsector partly echoes that associated with the elite subsector. A major example is the lament that students tend to come from privileged families; another is that they are too non-national, too tied to U.S. models, English, or fitting into the global economy. At the same time, semi-elite institutions lack the quality and breadth of elite counterparts. On the other hand, they are serious institutions providing good opportunity below the pinnacle but ahead of the bulk of the sector or system. Here again, we see the proliferation of business schools, in the 1990s rising perhaps to some 300,000 enrolments in Poland alone (Kraft and Vodopoviec 2003). Many semi-elite institutions are entrepreneurial and competitive, demonstrating capacity to improve and enlarge, sometimes pumping gains from fields with heavy demand (yielding substantial income) into more costly fields, facilities, and faculties. The semi-elite rise can be associated with global higher education's move toward business orientations, competitions, and U.S. tendencies.

Non-Elite Demand Absorbers

The U.S. also remains unusual for not have a clear demand-absorbing subsector. At least, few U.S. institutions would see themselves as demand-absorbing. Nonetheless, the majority of U.S. PHE institutions are non-elite. This, of course, cuts against the myth that U.S. PHE is elite. What could classify as demand-absorbers lie at the bottom, sometimes for-profit institutions but often not. Many have been shown to be fraudulent, many more accused of being. It is unsurprising that the U.S. would have such institutions, given that many states (e.g., California) have had only lax regulatory structures.

Outside the U.S., were importance defined only by numbers, the non-elite subsector would warrant the bulk of our attention. In every region in which PHE becomes the majority sector (and in many where it becomes a large minority sector), it is this demand-absorbing subsector that has been numerically dominant, increasingly so. Here most students are not choosing their institutions over other institutions as much as choosing some place over no place. The crux of the non-elite subsector is demand absorption, as the soaring

demand for higher education—fuelled by economic growth and an enlarging middle class, and by copying the examples of others—exceeds the public supply of slots as governments conclude they are no longer able to finance most new enrolment.[16]

The vaulting into mass higher education thus has much to do with the demand side. Government "helps" by limiting its financing in the public sector to accommodate the new students and by limiting its regulation over the opening or large expansion of the demand-absorbing sector. This has been the case in Africa, Latin America, post-communist Europe, and even in a dictatorship like China's. However, all four of these cases also show concerns that lead to much "delayed regulation" (Levy 2006). Russia appears to be the latest major case (Nemtsova 2007). Globally, it becomes more difficult for those who would establish new institutions and for many of the existing institutions to continue functioning. Enrolment is a casualty.

Israel's PHE began in the 1990s on a demand-absorbing pattern. At first, "excess" demand gave rise to foreign campuses in the country, but some of those were later converted into Israeli institutions. As is pretty much the case anywhere, fast development of demand-absorbing PHE leads to concern over quality assurance.[17]

The private non-elite subsector often includes institutions labelled universities but the label is questionable. Moreover, this is the subsector most concentrated in institutions not even labelled universities.[18] Indeed, many private institutions are technical, vocational, company, or training institutions, ambiguously perched on the definitional borderline marking higher education as well as for-profit and non-profit (Atchoarena and Esquieu 2002). Israel is among countries where PHE is only in colleges, not universities; so is New Zealand (Abbott 2005). Moreover, for 16 of 19 countries on which we have data on both universities and non-universities, PHE's share of the latter is greater than its share of the former, often greatly so.[19]

Fast emerging is an array of private-public partnerships. Private-public partnership involving business or government is more widespread than is partnership between private and public higher education institutions. It usually represents a further kind of privatization related to higher education. Where we do see partnership of private and public higher education institutions, one

form is partnership between a private college and a public university, as in South Africa.

Evaluation of the non-elite sector is often extreme, especially on the negative side, reflecting a mix of real observation, traditional prejudice, and stereotype. Unfortunately, the negative critique is often apt. It is here that the heaviest complaints are launched against PHE quality. Fly-by-night institutions operate in search of financial reward, shamelessly profiting from the large demand-supply gap. They are often quite small, sometimes family-owned, with much of what they do quite non-transparent. Here is where we most find institutions that are legally non-profit yet functionally for-profit.[20]

However, many non-elite institutions aim beyond financial gain alone. The best of these institutions tend to focus on useful training and learning for jobs (Cao 2007). Moreover, where the non-elite subsector is composed of less privileged clientele than found in much or most of higher education, it can contribute to access, in often egregiously unequal societies.[21] Some institutions take this role to heart but, in any event, many strive for improvement, even hoping eventually to border the semi-elite subsector. In contrast, the fly-by-night organizations are vulnerable to national tightening of licensing standards or introduction of accreditation systems. A vital task for scholars and policy-makers is to dissect the demand-absorbing sub-sector into its serious and exploitive components (Silas Casillas, forthcoming).

In the U.S. and elsewhere, some of the legally for-profit institutions lie on the serious side, earning high marks from students and employers (Education Commission and Kelly 2001). There are now major international chains and networks, such as those of the Apollo Group, which runs the 300,000 U.S. University of Phoenix. Laureate (formally Sylvan) is the leading business investing for profit largely by buying up non-profit universities in Latin America and Europe. Whitney International also is important, expanding in Latin America. An increasing number of countries also permit the establishment of domestic for-profit higher education (Kinser and Levy 2006). In several cases, for-profit institutions are proscribed in "higher education" or as "universities" (Chile) but are permitted as enterprises governed through business law.

In the U.S., for-profits account for about a fifth of total private enrolment (a bit lower if we focus on degree-granting, a bit higher if we include non-degree enrolment). Though this is still a relatively small share, it is the fastest-growing area of U.S. higher education. The creation of for-profits is a clear example of privatization via PHE institutions. Yet alongside this, we see also the other side of privatization: both non-profit and even public institutions—including leading universities—commercialize and pursue "internal profits" that can then be used for competitiveness as well as for subsidization of unprofitable parts of the university. One could say that public institutions get more private while private institutions get even more 'private.'[22]

Conclusion

In the U.S., private-public boundaries have long been blurry, and today they blur even more. This has resulted partly from an expanded government role in PHE and now mostly from partial privatization of public institutions. In global perspective, it seems common that private-public distinctiveness can diminish over time.

PHE growth has substantially reshaped the higher education landscape. Once the norm, public monopolies and near monopolies have become uncommon. When we refer to higher education, we must be sensitive to the reality of two sectors and the differences between them. Spectacular in recent decades, global PHE growth occurs mainly in the developing and transitional world, where there appears still to be much potential for further expansion. Across regions and within them, the strength and extent of PHE growth has varied, but no region has been unaffected.

Variation is manifest also in the several different principal types of PHE. Numerically and increasingly, the dominant form is non-elite, absorbing demand unaccommodated by the public sector. Within this sub-sector in particular it is crucial to try to distinguish between fly-by-night institutions and serious ones usually oriented to the job market. On the other end of the PHE spectrum are elite universities, but unless the term is used liberally, few such institutions exist outside the U.S. More common are semi-elite institutions, sharing some characteristics with high end non-elite counterparts, and often doing well in status and results in the entrepreneurial realm. Finally

(and sometimes overlapping the semi-elite), religiously and culturally oriented institutions maintain a strong presence. Growing in important respects, receding in others, they contribute considerable diversification to the private sector and thereby to higher education overall.

Whatever patterned differences characterize PHE types, evidence of powerful private-public differences is abundant. The fact that private is usually different from public underscores the importance of mapping and understanding PHE. Of course, the differences are not uniform and we can identify tendencies of increased public roles in PHE and increased privatization within public higher education. But for the most part, the public sector remains quite public whereas private institutions are privately financed and have governance and accountability profiles consistent with their funding and purpose.

We can conclude with a few words about national PHE reality in the context of global PHE patterns, coming back to the Israeli and U.S. cases. Whereas observers in a given country often assert the uniqueness of their national case, the assertion is usually more wrong than right. Many features of PHE can be found in much of the world. Where there are strong differences between PHE in two countries, the likelihood is that each of those countries is part of a wide pattern, albeit not a universal one. This perspective fits Israeli reality. Among national features that are found typically or often beyond Israel are a tradition of public universities with features of privateness, rather recent PHE emergence, rather small PHE/total enrolment shares, concentration in non-universities, demand-absorption and issues of quality assurance, lack of any elite PHE, and present partial privatization of public universities. In contrast, U.S. PHE can be cited for the high degree of "exceptionalism" often noted for U.S. politics and culture. U.S. PHE is truly exceptional in so much of its evolution, absolute size, relative size within the developed world, legitimacy, popular judgment of private as superior to public, and incredible presence and uniqueness of elite PHE (or am I falling into the trap of seeing *my* country's system as unique?). Other U.S. PHE characteristics are uncommon yet hardly unique in the contemporary world. But even U.S. PHE is in sync with much of global PHE: continued growth in absolute numbers, intra-sectoral variation,

diminished religious presence, an important semi-elite presence, for-profit growth, and concern over quality assurance at the low end.

Notes

1. UNESCO has estimated the private share of global enrolment at 31.5 percent, as Kemal Guruz reports. The figure seems reasonable, perhaps a bit high (Guruz 2004–2005).
2. The Program for Research on Private Higher Education (PROPHE), http://www.albany.edu/dept/eaps/prophe/publication/publication.html, provides research, data, references, and news on PHE. It has data on some 84 countries (http://www.albany.edu/dept/eaps/prophe/data/data.html). Major global research on PHE has roots in Levy 1986a. The most recent edited books are Altbach and Levy (2005) and Slantcheva and Levy (2007), with forthcoming volumes on Africa (Mabizela, Levy, and Otieno, forthcoming) and India (Gupta, Levy, and Powar, 2008), as well as in a special issue of the *Journal of Comparative Policy Analysis* (Levy and Zumeta, forthcoming).
3. Figures calculated from UNESCO data on system enrolment (http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx) and PROPHE data on private shares (http://www.albany.edu/dept/eaps/prophe/data/international.html). Global total enrolment for 2005 is 127.8 million; U.S. enrolment is 17, 272,144 for the same year, from the same source. Thus, the U.S. accounts for roughly 13.5 percent of global enrolment and so PHE/global-minus-U.S. share could be around 2 percent over an inclusive PHE/global enrolment figure.
4. As in most of the developed world, U.S. privatization is more about changes within the public sector than growth of the private sector; among the leading recent accounts of U.S. public privatization are Geiger (2004), Bok (2003), and Kirp (2003). In contrast, privatization via private institutions is the more powerful force in the developing world. However, both privatization forms are found in both developed and developing countries.
5. An intriguing question is how much private schools (primary and secondary) have characteristics that we identify in PHE. A pioneering case on one country suggests important parallels (Scheker 2007).
6. Moreover, for a good part of the twentieth century there was commonly a "publicization," in sharp contrast to today's dominance of privatization.
7. Some of these countries had PHE experience pre-Communism, but higher education was basically public.
8. Roughly a fifth of Egyptian enrolments are private.

9. See recent news on Middle Eastern PHE creation at http://www .albany.edu/dept/eaps/prophe/publication/NewsArticle.html. Among a few particularly striking developments are efforts to establish an American university in Iraq's Kurdistan, Jordanian forays into expensive fields, and the idea that Amman University (Jordan's first) wants to open an extension in Israel. Several Muslim or partly non-Arab countries have large private sectors (Indonesia, Philippines, Pakistan, Malaysia).
10. If the experience of other regions is a guide, PHE institutions may be more pro-Western, internationalist, market-oriented, and politically less radical than public counterparts.
11. Sometimes overlapping a group or religious orientation is a set of values at odds with perceptions of what dominates in the public mainstream. Where these values stress authority, safety, and the like, parents have special PHE interest for their daughters. This may link up with concentration of study in traditionally female fields such as nursing. Additionally, some U.S. and other PHE have distinct political identities, whether conservative or liberal, strict or permissive.
12. A fascinating development that can be thought of as somewhere between privatization via PHE growth and privatization of public institutions is public institutions' admission of "private" paying students alongside their subsidized ones. The paying students are often in semi-elite beachheads in market-oriented fields. This phenomenon is clear in some African and Central and East European countries (Otieno and Levy 2007). The fresh units or "modules" within the public universities aim to operate more like the private competition than like their public brethren.
13. Management and governance are harder than finance to define as public or private, but historically we can associate PHE with relative institutional autonomy from government, identity, internal hierarchy, and trustees watching out for the bottom line. Remarkable is how much U.S. public universities (compared to counterparts worldwide) share many of these "private" tendencies. Also remarkable is how strong contemporary tendencies make public governance and management increasingly like those in the private sector.
14. See PROPHE International Data (online) available at http://www.albany.edu/dept/eaps/prophe/data/International_Data/WorldUniversityRanking2004_ModifiedFromTHES.pdf. Such data give the lie to common beliefs. The 2007 version of the *Times Higher Education Supplement* on the world's top 200 universities (in 28 countries) is accompanied by commentary about how private universities are the world's best based on both the opinions of academics and on numerical data (Ince 2007). However true this is for the U.S. case, it is even more false for the rest of the world.
15. For the *London Times* 2007 ranking of the top 200 universities, Hebrew University is 128 and Tel Aviv University is 151, whereas in the Chinese

ratings, Hebrew University is 64, with Technion, Tel Aviv, and Weizmann in the top 200, and Ben-Gurion, Bar-Ilan, and Haifa also scoring high up as the survey shifts to the Asia Pacific Region.

16. Further contributing to private non-elite proliferation has been a lax regulatory environment, at least for some initial period of proliferation (Levy 2006), though proliferation has been weaker in East Asia and the Middle East than in Africa and Latin America.
17. I thank Gury Zilkha for these observations on Israel.
18. See PROPHE National Data on Private Higher Education (online) available at http://www.albany.edu/dept/eaps/prophe/data/national.html. U.S. practice varies by state as to whether there are fixed criteria for institutions to be called universities.
19. The 16 are Argentina, Brazil, Chile, Cyprus, Germany, Israel, Japan, Malaysia, Mongolia, New Zealand, Poland, Russia, South Korea, Taiwan, Uruguay, and Venezuela. The 3 exceptions are Bulgaria, Mexico, and Portugal, available online at http://www.albany.edu/dept/eaps/prophe/data/international.html. (As many of the private non-universities are quite small, the private/public enrolment ratio is usually lower for non-universities than for universities.)
20. We cannot determine the rough percentage of for-profit institutions (not just legally but functionally) among non-elite private institutions overall, but we know that the overwhelming number of for-profits are in the non-elite private subsector.
21. The access role of non-elite PHE engages a classic debate in stratified higher education systems, notably in the U.S.: Do the "lower" institutions help by providing entry for groups not well represented in higher education ("something is better than nothing") or are these institutions part of a sorting process as the less privileged dwell here while privileged groups concentrate in better institutions ("something is really close to nothing")?
22. The commercialization of non-profit private institutions, which thus become more like for-profits, is a widespread concern well beyond higher education alone.

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NOW YOU SEE IT, NOW YOU DON'T: PRIVATIZATION AS THE WILL-O'-THE-WISP IN THE HIGHER EDUCATION POLICIES OF WESTERN EUROPE

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Introduction

Travellers in far lands face many perils and those who wander into the fastness of Exmoor in England's southwest peninsula, no less so. Exmoor is a bog, a species of sinister upland swamp – windy, cold, naturally damp. As the readers of R. D. Blackmoor's Lorna Doone, that splendid novel of 17th-century brigandage, vengeance and romance, will recall, it is also very, very dangerous even for the most wary of bog-dwellers. As bogs do, it naturally emits marsh gas, which gives out an eerie and intermittent glow that comes and goes. This, the locals dread and know as "Will-o'-the-Wisp". In times past, when ancestral memory held a greater place in the lives of farmers and upland peasants, Will-o'-the-Wisp was held to be an Evil Spirit, lighting the traveller's path the better to lure him to his doom.

The Use of Conceits and Metaphors

In using this conceit I am not suggesting that the process of privatization is daemonic, though I do not exclude the possibility that some may indeed see it thus. And as for luring us to our doom, that is a matter on which, as scholars, we do well to suspend our hopes! No. The quality that impels me to conjure up this bizarre metaphor to describe the situation in which privatization finds itself in Western Europe lies in its virtually unseizable nature. As one casts a leery eye over the higher education landscape in Western Europe – which I hasten to add is somewhat less desolate than Exmoor on a good day – privatization, like Will-o'-the-Wisp, comes and goes, takes on

different shapes, emerges in one form here and another one there. And, like Will-o'-the-Wisp, it is indeed a redoubtable peril even to the toughest and most seasoned student of higher education and comparative higher education policy.

Before I lure you into the complexities of privatization in Western Europe, let me rehearse a few details that may serve to place private higher education into the particular context – economic, historic, social and political – that higher education in general occupies in the lands to the west of the Oder- Neisse line.

The Backdrop

If nothing else, the study of higher education is a multi-disciplinary domain. It is said to involve at very least some 20-odd disciplinary perspectives from Anthropology through to Women's Studies. (Becher, 1998) It is, then, scarcely surprising that the way privatization is interpreted is very often a function of the disciplinary allegiance of the individual scholar. Indeed, obscurity is compounded when in this case the term "privatization" has very different meanings according to the discipline involved. Today, "privatization" is inseparable from the economist's understanding of the term and with it the rise of Economics as the major vehicle in shaping higher education policy. To the sociologist, however, the very same word deals with a very different phenomenon – namely, the individual's withdrawal from involvement in civic society and in the collectivity, voting with his (or her) feet, or limiting personal engagement to primary groups. To the sociological imagination, privatization is the process of dissolving that social cohesion that both identifies a community and holds it together.

Disciplinary allegiance largely determines not just the operational features chosen to analyze this issue. It also tends to determine the time-scale and the perception involved. There are those who dwell on the contemporary scene; those who concentrate on what one may call the factors of evolution – the rise of the private sector (Williams, 1996); or, more rare, but by no means absent, those who pore over its fall. (Amaral, 2003) For some, the dynamic flows from present to possible outcomes in the future. For others, the dynamic lies in the contrary direction – from the past to the present in an effort to explain how we have reached our present state. This latter is sometimes known in the

trade as "Historical Contingency". We are what we are because of the ineptitude of our ancestors or the consequences of actions by our younger selves.

Whether static or dynamic, whether looking forwards or backwards, these temporal approaches form dimensions additional to and found within the individual scholar's disciplinary framework in which he or she sets an explanation. This makes for considerable richness of interpretation and great variety in the criteria employed. If the truth were out, this is our equivalent of Will-o'-the-Wisp. Before giving you some evidence of this claim, I will make a brief excursion into three systems of classification, drawn respectively from Economics, Public Administration and History. Forewarned is forearmed, they say. So let me make you privy to my particular perspective, if only to avoid your seeing my expose as yet another diabolic form of Will-o'-the-Wisp.

Penchants Personal

As one trained in the delights of French Political History, for me it is natural to give preference to the Clio, the Muse of History. It is almost instinctive to find explanation for the present by using the technique of the oarsman. That is, moving with one's back to the future and one's gaze fixed on what went before. (Neave, 2007a) I tend to the view that such an approach is often fruitful in allowing us to take a rather longer-term perspective than, let us say, evaluation or quality studies, the vitality of which resides in the immediate and the short term. There are advantages in placing contemporary developments in a long-term perspective. Amongst the most important is that we can see our concentrated "technicité" within a broader context rather than becoming locked into it. It helps see the wood from the trees or from believing that the forest is of the same species as the specimen we are drawn to.

Three Discipline-Based Typologies

1. The Economic Perspective

Privatization in Western Europe has many facets. (Williams, 1996, pp. 39–-56) Indeed, some of our good colleagues have spent much time and effort – some a lifetime –- devising systems of classification and typologies to identify and thus to plot the place and weight that the

private sector occupies in the provision of higher education in any one nation. Over a decade ago, Gareth Williams, one of Britain's leading economists of higher education, identified six dimensions, within what might be termed the institutional procedures and practices in the funding area. How much of a happy coincidence it is that Williams' typology built on from Levy's classification of a decade earlier (Levy, 1986) must remain open. Amongst the features Williams proposed as determining the degree of "privateness" present in a system were whether a university was run:

- as a commercial organization
- as a non profit making trust.

What proportion of public university income derived from:

- tuition fees?
- other private sources?
- whether public universities contracted services to private agencies?
- whether public universities based their allocation of resources on market criteria?

Interestingly, though how far it is a happy coincidence must remain open, Williams' typology built on from Levy's classification of a decade earlier still. (Levy, 1986) And this allows me to introduce another classification, grounded in Politics and Public Administration.

2. The Public Administration/Politics Perspective

As I read it, and I will check later with the Source Himself, Levy was also concerned with the identifying what might be termed the driving factors that ease a public higher education system over to assimilating pragmatic procedures rooted in private business and thus, arguably, as levers in changing the de facto operational basis of the public university towards privatization qua "marketization". Though I might be mistaken, Levy's analytic framework sought to identify features that discriminated between the private and public sectors in the Nation's provision of higher education at a particular moment. His typology gives us a snap shot of a situation achieved, rather than Williams' quest to pinpoint the factors underlying the dynamics of system development. Furthermore, Williams focused on the individual institution, whereas Levy dwelt upon those features operating at the aggregate system level.

Thus, the algorithm that underpins the Levian definition of private higher education ran as follows:

Is the national system a single sector or dual public-private sectors?

If a single sector, what is the contribution of public funds to the public sector?

If wholly funded from public sources, then the system qualifies as "**Statist**".

If funding comes from both public and private sources, then the system qualifies as "**public-autonomous**".

If dual, what is the size of each sector and the distribution to each sector of public and private funds?

Are funding patterns similar across both sectors?

If **Yes**, then the system is qualified as "**Homogenized**".

If **No** and funding sources are different, then the system qualifies as "**Distinctive**".

If **Distinctive**, what is the private sector's share in national enrollment?

If private sector enrollments are *less* than half, then the system qualifies as "**Minority Private**".

If *more* than half, then the system qualifies as "**Majority Private**".

3. The Perspective of Historical Contingency

Naturally, other classifications are to hand. Geiger (1986) pursued identifying characteristics of private HE from a functional/structural perspective, but using a different dynamic. His three major categories were:

- mass private higher education, ;
- private higher education as different;
- private higher education as elite oriented.

Geiger's categories were largely informed with regard to Historical Contingency. This emerges clearly in a more discriminating classification, which he applied to systems where public and private higher education coexist. In examining the differences that set private higher education aside from its public fellow, Geiger laid out three other descriptives. These were systems where private higher education:

- catered for the mass with a limited public sector;
- ran in parallel to the public sector;
- was peripheral to a "comprehensive" public sector.

More importantly, he linked these categories to the underlying historical circumstances that shaped their standing, their student clientele and their funding patterns. The first configuration had private higher education as the main vehicle for mass higher education, provided at low cost and of inferior quality. Mass private higher education survived on tuition fees, and relied on "buying in" academic staff from the public sector. The public sector, by contrast, retained its elite status.

Parallel systems emerge when the legitimate claims of groups – denominational, ethnic or particular interests in society – are recognized by government as reflecting an essential and accepted place in national diversity. The historic tripartite division of politics, social institutions from schools, health care to Trades Unions, TV stations in the Netherlands along religious lines – Catholic, Protestant and Neutral –- is a clear example of political and social segmentation. (Daalder, 1980, pp. 162–-184) A similar arrangement was made with the additional dimension of language (Wallon French vs. Flemish is the outstanding feature in Belgium). Parallel systems also tended also to coincide with strong centrally-defined degrees and standards together with substantial public funding for the private sector.

Finally, there is that version of private higher education, which Geiger saw as occupying a "peripheral" status. Under this pattern, the public sector bore the weight of massification. Public financial support concentrated on a "comprehensive" public sector, leaving the "peripheral" sector to fend for itself, drawing variously from the benevolence of sponsoring groups or on the Student Estate in the form of fees. Sensitivity to the latter as a source of income, Geiger suggested, gave higher education institutions of this type a greater capacity to adapt than the public "comprehensive" sector. However, the low proportion they represented of all national enrollments in higher education did not permit the "peripheral" sector to compete with its "comprehensive" counterpart. Amongst systems which some scholars using Geiger´s system see the private sector located, are in Germany, France, Sweden and the UK. (Duczmal, 2006, p. 38)

Clearly, there is commonalty in the dimensions identified across these three typologies, even if their terminology varies. Funding patterns and funding sources are central to all three. So are student numbers as a percentage of the Nation's Student Estate. And there would appear to be a pleasing degree of concordance between Levy's distinctive and minority category and Geiger's peripheral configuration. Indispensable though they are as analytic frameworks for dissecting the precise nature of the private sector, these typologies tend to overestimate, on the one hand, the degree of legitimacy – as I have argued in one of Dan's latest offerings – that is attached to private higher education in what was once described by high authority as "The Old Europe". (Neave, 2007b) On the other hand, they tend to pass lightly over the fact that irrespective of whether legitimate or not, privatization – that is, the process of becoming private – is itself subject to change across time.

Why History is Important to Comparative Policy

Such change ought not to be dismissed on the grounds that earlier meanings are irrelevant or simply *passé*. To be sure, the older versions of this term may not correspond to present-day circumstances or to current profiles, and still less to fashionable currents in economic thought. Still, present present-day attitudes do not exist in utter isolation from what went before.

The First Modernization: Organizing Political Authority in Western Europe

Let me suggest first, that within the Western European context, privatization – though I am by no means convinced that this is a good descriptor – stands as the third "modernization" of higher education. Naturally, this assertion begs the questions: "When did the first two take place in Western Europe?" "What was their main thrust?" The standard answer to the first invokes, of course, the Humboldtian vision of the university as the incubator and generator of new knowledge through its dual engagement to learning and research. However, this is only one half – though certainly the more significant half – of Humboldt's vision. Nor was von Humboldt alone in his initiative. (Nybom, 2003; 2007)

The other seminal figure was Napoleon Buonaparte, the Corsican Ogre. In the same year as von Humboldt penned his Memorandum on the Foundation of the University of Berlin – 1806 – another, equally significant, legislation was passed in France. (Prost, 1968) It provided for the creation of an Imperial University. It was less an exercise in overhauling the basic engagement of the university for the sake of research and scholarship, as providing the training, knowledge and allegiance (today we would call this "political socialization") to a State grounded on in the principles of meritocracy in public service. To this state the University supplied the qualified manpower, to use a deliberate anachronism. Such a process gradually coalesced across over the 19th century into the Corps de l'Etat, the technocratic heartland of the modern French state. (Kessler, 1986)

The Corsican stands, then, as *one* of the most visible architects of university reform and national efficiency, expressed not in economic terms so much as in the political and institutional domains. Napoleon was not, however, the first to do so. Political reconstruction, efficiency and their insertion into the purpose of the University, was also not however a French exclusivity. Nor, for that matter, was the Corsican's initiative the first in this general process of modernizing the State through university reform. An earlier example is to be found in the administrative reforms of Joseph II of Austria, who, towards the end of the 18th century, conferred the monopoly of supplying high-level candidates to public service upon the universities of the Austrian Empire. (Gruber, 1982) This too formed the second half of von Humboldt's vision. His was a far more complex task. It involved nothing less than "postwar reconstruction" following the defeat at the Battle of Jena (1806) and the subsequent occupation of Prussia by the French. (Nybom, 2003) Here too, the university was to be the main instrument in political construction and, no less important, in re-defining national identity, shifting it from an absolutist monarchy to a Nation, whose identity was personified in the monarch.

The Hidden Face of the Freiherr von Humboldt

If we pay tribute to von Humboldt as the father of the modern Research University (*sic*) (Neave, Nybom and Bluchert, 2007) we tend to leave aside the role that both he and his reforming circle played in the area of political modernization. The symbiosis between university

and public service as agents of modernization set out a pattern that developed throughout Western Europe during the 19th century and which, only today is dissolving. It created national standards in the form of special qualifications for entry to public service, for which the university prepared its students. Depending on the particular system involved, national degrees ran in parallel to purely academic qualifications in Belgium, France and the Netherlands, in the shape of *grades légaux*, *diplômes nationaux* or those degrees endowed with the *effectis civilis*, respectively. In Italy and Spain, the ties between university qualifications and eligibility for civil service posts were closer still. Those holding a university degree were eo ipso qualified to serve the State. Such ties, as well as the status of professors as civil servants, made both university and academia directly accountable to the government via the central ministry.

Incorporating the University into State Service

The creation of state universities, however, did not incorporate all universities. Some were left out, largely on the pretext that their allegiance to "organizing powers" lay outside the Nation. The first phase in modernization in effect excluded, certain establishments – Catholic in the main – which were not regarded as serving the Nation so much as "particular interests" and, though nowhere explicitly mentioned, as the mainstay of traditional elites. (Neave, 2001; 2007b) This policy of exclusion on the one hand and incorporation into State service on the other, defined what today we have come to call the "private" sector. It was a "residual" definition and also a negative one. If the State sector enjoyed public funding, its terms of access were nationally defined and, its degrees having the monopoly over entry to public service, it also followed that the "non-state" sector (Neave, 1986) did not enjoy these benefits. Rather, it had to rely on the time-honoured source – gifts and student contributions. There are three points to be made: first, modernization, which proceeded throughout the 19th century in France, Germany, Italy, and Spain, turned around defining the definition of the ethical basis of higher education. This, in turn, involved defining the elite base of national identity and for this reason, political in the extreme. Second, in contemporary thought, the residual "non-state" sector was not regarded by its supporters as private so much as "free" in the sense

that it was "free from" state oversight. Finally, the process of incorporating the majority of universities into State service, by the same token was a process of "de-legitimizing" the "free" sector, condemning it to a condition of "inner exile" – *in* the Nation- State but not *of* it.

The Second Modernization: Access and Diversity

A good case may certainly be made for arguing that the pattern of higher education laid down during the first period of modernization held, by and large, until the late fifties to early sixties in Western Europe. Two developments mark the second period. And both of which had direct consequence for the standing of the "free" sector. The first saw the fires of religious strife quenched. The second was the so-called "explosion in the schools" (Cros, 1961; Capelle, 1966) and with it, the recognition, with varying degrees of anguish and trepidation, that social demand for education called for a corresponding expansion in higher education. In France and Belgium, countries where the marginalization of the "free" sector had assumed its more extreme forms, the pressure of demand put an end to the School Wars, the first with the Berthoin reforms of 1958 and the second in the same year, the Pacte scolaire in Belgium. Both legislative agreements extended the principle of public funding to the "free" sector, first at the secondary level and later in higher education. (Mallinson, 1980; Charle and Verger, 2007)

From "free" to Non-State Higher Education

With religion as a cause of strife largely eliminated from policy, the way was open for a different interpretation of higher education's role and purpose, that of function rather than identity. If the tasks higher education faced – drawing deeper on the "reserves of talent", raising the level of education attained and raising thereby the Nation's level of efficiency in industrial output – were truly to be met, what was important was not the issue of ownership and personal belief, but what part the free sector could contribute to meeting these new priorities? In short, the rise of educational planning, allied to both social and economic goals, redefined higher education in terms of national provision rather than squabbling over ethical identity. By extending public support to the free sector – support conditional on

accepting national standards in staff quality and national validation for the qualifications issued – the inner exile of the free sector was brought to an end. It changed its status as well. By accepting the Prince's pence, the free sector, in effect, took on the trappings of a "Non-State" sector. The long quest for legitimacy was over and with it the end of inner exile. By the same token, and reverting for a moment to Geiger's classification, partial funding from public monies moved the sector, once "free" and marginal, over to a status of parallelism with its state counterpart. It was, in short, partially assimilated into the national provision of higher education.

The Drive to Mass Higher Education: the Non-State Sector as "Complementary Provision"

The drive to mass higher education in Western Europe was borne virtually without exception by state sector higher education. The exception to this general trend was the Netherlands, where the notion of education qua national provision had long been an outstanding feature in Dutch political culture extended to education. (Idenburg, 1966) In France and Belgium, the notion of "national provision" merged only with the ending ancient rivalries, which brought officially the "free" segment as part of national purpose. By the same token, it altered the function of the "free" sector, now redefined as a "non-state sector", in its relationship vis-à-vis the state sector counterpart. Henceforth, the role of the "non-state" higher education was one of complementarity.

The Rise of Short-Cycle Higher Education

Yet, the second period of modernization did not revolve uniquely around the university. In the minds of governments in France, Germany, Britain and Norway, no less than in Belgium and the Netherlands, that expansion should focus on the Nation's universities was by no means taken for granted. No less a priority was the need to expand types of higher education alternative to the university. Thus, structural stratification between university and the non-university sector is one of the salient features of the second modernization. In the case of Britain, France, Germany and Norway, it gave rise to a new form of higher education. Some, like the French *Instituts Universitaires de Technologie*, were new in status, construction and curriculum.

Others, amongst them the British Polytechnics, the *Fachhochschule*n in West Germany and the District Colleges in Norway, were upgraded, some from secondary education, others from vocational training establishments. (Furth, 1974; Gruson and Markiewicz-Lagneau, 1983: Teichler, 2007; Kyvik, 1981)

Generically described as "short-cycle" higher education, this sector fulfilled a multiple mission – as the provider of "second chance" education for those who had missed out when young, and as institutes for training technical cadres and middle management. Some saw it as meeting a social, rather than an economic, need. This was to provide an education better suited to first-generation students from working class homes who, it was felt, were inclined towards studies of an applied rather than a theoretical and abstract nature.

The latter is an interesting view. Implicitly, it entailed a further – though largely unspoken – task. That task was to act as an outer bulwark to protect the university by deflecting a significant portion of the rising Student Estate away from the university – a sort of complementarity *à rebours*.

Competition or Complementarity?

The interesting feature that underlay the rise of short-cycle higher education lies less in the different patterns of ownership that sector displayed which were municipal, communal or denominational. Still, it must be admitted that the "non-university" segment attracts little attention from the scholars of "privatization". For whilst systems, which included non-state, short-cycle institutions are not wanting, the issue is further confused by changes in official terminology. Dutch Higher Vocational Education (Hoger Beroeps Onderwijs), for instance, displays a cunning duality: as professional universities when advertising outside the Netherlands and Polytechnics as when advertising on the home market. Yet, having been created as "complementary", theirs sector was not officially seen as a role of inter-sectoral competition. Agreed, some supporters did indeed see competition with the university as a feature to be developed. (Brosan and Robinson, 1972) Theirs, however, was "a still, small voice crying in the wilderness".

In a structurally, rather than denominationally, dual system, the purpose of the non-university sector was from the first one of

complementarity. This is clear from the nature of the student body it was assumed they would attract, its curricular emphasis, and the duration of studies, which was shorter than the university degree.

Drift, Deflection and Failure.

The strategy of "deflection" failed. It failed for a number of reasons: Firstly, in France it failed to turn aside student demand, which continued to drive into the university sector. Secondly, because even though often dispensing diplomas was designed to lead directly to the labour market, large numbers of students nevertheless opted for the principle of caution. Having obtained a non-university diploma, they preferred to re-enroll in the university sector and obtain an additional university degree the better to improve their personal market value.

The policy of deflection also failed in Britain, but not because students voted with their feet. On the contrary: university entry is highly selective there. It failed because the Polytechnics dropped their sub-degree programmes, which, paradoxically, were precisely the difference characteristic that set them apart from the university. British Polytechnics preferred, rather, to expand their offerings at degree level – a form of "academic drift", which met the wish to be on a footing of equality with the university sector.

The academic drift in British polytechnics was powerful, progressive and a devastating departure from what was conceived as their original purpose – to concentrate on applied studies with a particular weighting towards Science and Engineering. Agreed, concentration on full degree-level studies and, later, a similar push to develop graduate degrees up to the PhD level was a perverse tribute to the power of cross-sector integration that the universities exercised by dint of their standing. The "Drift" away from the mission originally assigned by planners to the "non-university" sector was not confined to Britain. Different forms of "institutional drift" were equally evident in the polytechnic equivalents in Germany and Norway. (Neave, 1979)

In short, the notion of complementarity was reinterpreted by the non-university sector as only a temporary expedient. Complementarity as difference, as vertical stratification, was not acceptable. From the standpoint of the non-university sector, complementarity was not static. It was a dynamic condition – a first step towards convergence and a redefinition along the lines of horizontal parallelism between the university and non-university sectors.

Complementarity as a Lever in System Change

If one bears in mind that the main dimensions of drift entailed either curricular isomorphism or isomorphism expressed through the demand by the non-university sector to accede to graduate programmes, one is immediately struck by its implications. In effect, complementarity is both an unstable and, for that reason, an unwittingly dynamic construct. If we place it in the context of Geiger's categories and apply them not to the "non-state" sector but rather to the higher education system as a whole, clearly academic drift acts as the basic mechanism, which moves the de facto configuration of the higher education system from a parallel to a "comprehensive" arrangement. The failure of the "non-university" sector in higher education to maintain its 'vocational commitment', to act as a deflector of mass demand away from the university and, last but not least, to stand by the mission assigned it by planners, was to have major consequences in the third stage of modernization.

The Third Modernization

If the second stage of modernizing higher education in Western Europe took place over the two decades from the late fifties to the late seventies, the onset of the third Modernization began in the early eighties. Its epicentre lay in Britain and the Netherlands. It is also the stage when the notion of privatization comes into its own as both a leitmotif and as justifying both measures of reform and, more to the point, as redefining the social purpose and vision of what higher education should do. But it did not do so immediately; indeed, privatization – like ET – was not alone. The policies introduced during the Third Modernization could certainly sustain the notion of privatization. But, it was largely an approach indirect, progressive

and multidimensional across many different dimensions, rather than the direct transfer of ownership or, as in Central and Eastern Europe, the creation of large numbers of higher education institutions by private individuals or groups. (Levy and Slancheva, 2007) Last, but not least, the measures taken to "modernize" higher education in Western Europe during this period lend themselves to other interpretations than beyond simply seeing reform only in terms of the drive to privatization. On the contrary, privatization may equally well be seen as a doctrine grafted onto policies already under way. Seen from this angle, privatization assumes a very different purpose. It becomes a form of over-arching construct, largely conceived to provide a retrospective coherence to initiatives already in train.

Interpreting the Rise of Privatization in Western Europe

Precisely why this overall conceptual shorthand made its way into the rhetoric of policy opens up further perspectives when placed in the setting of Western Europe. The first of these is that privatization could be presented as an idea that had been successfully tried and tested elsewhere and that successfully. Not surprisingly, the example constantly cited in this connection was the United States, and very particularly the part played by non-public sources of student funding, the beneficial relationship enjoyed with the corporate sector and very especially in the area of research. Last but not least, was the underlying social ethic of individual responsibility and competition.

In a curious manner, privatization *à l'américaine* served in the Western European setting as a device for legitimizing retrospectively a series of measures – in the areas of financing higher education, its governance and, management, and very far from last, a fundamental overhaul to the historic pattern of authority between government and higher education that had been laid down in the first modernization. (Neave and van Vught, 1994)

Privatization, Policy Steering and Control

A second interpretation is a derivative of the first, but applies to a very different area, namely, control and steering. Here, the grafting on to policy of the rhetoric of privatization was less easy, if not downright contradictory. It involved using competition as a policy lever for the strategic steering of higher education in Western Europe.

And though competition was presented as the central driving force in US higher education, its use as a 'steering instrument' in Western Europe, served, if anything, to strengthen the interventionary powers of government, whether central or regional.

The Ways of Building Up Market Forces

A third interpretation is to view privatization as a justification for the build-up of "market forces", as the prime driving and shaping force in higher education in place of the "social demand" model that had dominated during the second modernization. The paradox involved here lay in the fact that governments in Western Europe controlled and regulated the main agents of marketization: the level of student fees, the conditions (where they existed) of student access to higher education, the procedures and conditions for recruitment and terms of eligibility for recruitment to the Academic Estate, and the conditions under which it worked. Most, if not all, were in varying degrees laid down in nation-wide legislation (De Weert and Enders, 2004; 2008) and rarely changed.

If higher education was to obey a market rationale, the initiative had, perforce, to come from government, if only for the fact that government commanded precisely the procedures central to this task. Hence, governments found themselves obliged to act as a "market substitutes" – 'pseudo-markets' to prime the pump, as it were, during a transitional phase in which practices, procedures and new patterns of administrative responsibility central to 'marketization' were developed and embedded at institutional level. The outcome saw the rise of new agencies of oversight and new procedures for control and verification that were more powerful, more sensitive and – if the truth were out – more invasive than had ever existed in the two previous stages of Modernization.

What One Might Retain

What should we retain from this paradoxical situation? The first lesson one might draw with respect to privatization is that in Western Europe at least, it is as well to distinguish between privatization as an accompanying rhetoric or ideology from the operational consequences of the policies it was called upon to justify. The second is that in the context of Western Europe, the long-term development of higher

education had never before taken on board privatization as a policy model. Finally, when privatization was presented as a policy construct, it was inevitably re-interpreted and adjusted to Western Europe's particular circumstances. Put another way, privatization in Western Europe is historically contingent.

Three More Questions

Making this assertion raises in turn three other questions. First what circumstances set aside the Third Modernization from its predecessor? Second, what were the driving forces behind higher education policy? How were they presented in Western Europe? Third, what were the 'alternative modes of justification'?

Marker Issues in the Third Modernization

Just as the second Modernization in Western Europe saw the settlement of denominational conflict and its replacement by the notion of "national provision" as a policy response to the twin concerns of economic advance and social justice, so the Third Modernizations saw a no less marked shift in ethical values and the injection of radical reform into higher learning. Its operational form was visible above all in the overhaul of governance, management structures and an emphasis on institutional leadership. Also no less marked was the re-definition of the particular qualities held necessary for the survival of individuals and institutions, above all those institutions concerned with injecting such qualities as adaptability, competitiveness and flexibility into the life of the Nation. Whereas the Second Modernization had hewed to the view that economic efficiency and performance were dependent on social justice as a preliminary condition for their advance, so the Third Modernization stood this relationship on its head. Competition, efficiency and performance were held to be the prior conditions for ensuring subsequently social and political stability. (Neave, 2006)

Continuities

Continuities, however, persisted across both the Second and Third Modernizations of higher education in Western Europe. The more obvious was a renewed drive of the Student Estate into higher learning on an unprecedented scale. Over the ensuing 20 years, the

second tidal wave in enrollments carried whole systems well beyond massification – that is, when national enrollments account for 15% or more of the relevant age group. (Trow, 1974) Today, many systems of Western Europe's systems stand at that threshold Martin Trow identified as the "universal" stage in their development – effectively a participation rate of more than 40%. Already in France, participation has already gone beyond the 50% mark. Others, notably Britain (White Paper, 2003) and the Netherlands (Kwikkers et al., 2005), have officially set themselves the ambition goal to reach a similar level by the year 2010.

The Oarsman's View

Seen from the oarsman's perspective on higher education policy, (Neave, 2007) financing such growth in student numbers was not sustainable at the level of relative generosity that had prevailed earlier. Neither in Britain nor the Netherlands was policy drawn up to meet the situation initially conceived in terms of 'privatization'. In the case of the former, the measures taken remained fully within the canons of pragmatic 'good husbandry' – differential cuts in funding individual institutions (Kogan and Kogan, 1983), reductions in unit costs and the press to increase efficiency, which amongst others took the form of letting the staff-student ratio slip.

Delegation Does Not Necessarily Mean Privatization

Nor for the Dutch did the 'solution' lie in privatization either. Rather, it lay first, in reviewing the geographical distribution of course and programmes irrespective of whether the establishments putting using them on were State or Non-State, and second, in the quest for a new mode of control and thus a shift in the relationship between central administration and individual university. (Ministerie van Onderwijs en Wetenschappen, 1983; van Vught and Maassen, 1988) More particularly, the solution the Dutch worked towards involved a "cybernetic" model of relationship, based on the concept of strategic or "remote steering" from the centre, with institutions, undertaking their own interpretations and adjustments in the light of their particular circumstances. (van Vught, 1989) In neither case was privatization invoked.

This is not to say that the measures taken to extend the range of institutional responsibilities cannot be interpreted in terms of privatization, when viewed within the paradigm of economics. The abandonment of "Regalian Rights", such as staff appointment at senior level, the nomination by central government of such figures as Secretary General, the right of individual establishments to negotiate contracts for services with the corporate sector, may certainly be interpreted as steps towards "privatization", as can the strengthening of the self-managerial capacity of individual universities.

Measures such as these are as evident as they are widespread across the different systems of higher education in Western Europe, from Belgium to Spain and the UK to Finland. But their justification and rationale were rarely presented in terms of "privatization". Nor was the task set out as "rolling back the frontiers of the State" – a goal, that came to inform Britain's higher education in the late 1980s (Williams, 2004) and which, in a remarkable example of policy as perversity, emerged in the very opposite of what was claimed to be the central objective, namely, the rapid rolling *forwards* of the frontiers of the State to attain almost Napoloeonic dimensions!

Alternative Interpretations

A close reading of the initial rationale that, in Western Europe, accompanied the process of downwards delegation of powers of oversight hitherto vested in central national administration, shows that it obeyed an imperative more akin with to the notion of 'participant democracy', than with privatization. It was, however, participant democracy with a significant difference. Rather than being applied to the inner affairs of the Groves of Academe, at the behest of the assistant class and the Student Estate (Neave and Rhoades, 1987) as it had been during the Second Modernization, it was now applied, with all the weight that officialdom could muster, to external relations between university and society.

Participation has been presented in many and various terms. The "Stakeholder Society" is one. Administrative devolution is another. The restitution of subnational "cultural rights" is a third. To these interpretations is added another: In certain systems, especially in Scandinavia, close interaction with the local community is now designated as the "Third Task" of higher education alongside its basic

functions of transmitting and generating knowledge. (Ahola, 2006; Brulin, 2006; Brulin, Ellstrom and Svensson, nd) This is an interesting development. It reflects a fundamental change and very certainly a fragmentation of the historic notion of the national community the university was once called upon exclusively to serve. (Neave, 2001) Taken together, and different though they are, these four justificatory rationales represent a radical re-engineering of the relationship that was laid down during the first modernization, namely, that the community the universities of Western Europe served was national, not local. (Neave, 2003)

Furthermore, the initial steps of delegating responsibility away from central national administration in no way changed the official status of the institutions involved, in the sense that their ownership changed. Thus, in the case of Belgium, Spain, France and, arguably, even the assignment of funding responsibility in the United Kingdom to regional authorities in England, Scotland, Northern Ireland and Wales, the shift was rather a relocation of the point at which public expenditure was disbursed. In Belgium and Spain, the transfer of public authority together with policymaking and steering capacity over higher education to the linguistic communities in the case of the former and to the Autonomous Communities in the case of the latter, provides specific examples of strengthening ties with the regional cultural community.

Privatization Anatomized

It is at this point that one must go one step back to take two steps forwards. I have developed the idea of privatization as a retrospective device to improve the acceptability of change. Here, my purpose is to draw a further distinction between two categories of "privatization": direct and indirect. Direct privatization involves transferring an institute's ownership – that is, to use a Belgian legal term, the "organizing powers" to which it is answerable. Arguably, devolving responsibility to the sub-national or regional level could be regarded as a form of privatization, were it not for the fact that by and large, this step was not accompanied by change in institutional legal status – say, from, public and/or administrative law to corporate or private law. In the second instance delegation to the regional level in no way overthrew the principle of higher education being borne on public

expenditure. There are certainly examples of 'direct privatization' in Western Europe, just as there are examples of institutions transferring their legal status.

This situation casts a rather different light on Williams' typology. Williams' typology, as I suggested at the outset of this exploration, is set within the canons of Economics. It focuses on the different dimensions that indicate the degree of 'privateness' present in an individual institution. Privateness is defined as the degree of reliance on sources other than public revenues raised from taxes – present in any one institution. In effect, Williams' typology sees 'privatization' as an incremental and accumulative process within institutions, irrespective of their formal *legal* status. It is an essential rather than a nominal distinction.

To my way of thinking, which may be heretical in the extreme, the elements Williams pinpoints may be fully integrated, in my scheme of things, as illustrating privatization in its indirect form. The extent to which each of the elements he identifies, is present, how many and in what weighting, determine how far an institution has gone down the road to becoming private in its resources, and/or corporate in the way those resources are allocated internally. But this is not a "system neutral" approach. On the contrary: its sensitivities, just as its operational items, are deeply linked with one system in particular, namely, the United Kingdom. I will deal with this a little later.

An Objection from Times Past

There is, however, a further objection, that goes beyond the methodology to involve the overall framework in which that methodology is sited. By bringing up both methodology and framework, we are forced back to questioning whether it is accurate, from perspectives grounded in history, law or even politics, to see the dynamic of higher education in Western Europe simply in terms of a binary outcome – either public or private – which is the basic assumption on which all three of the typologies mentioned earlier, are grounded.

From a long-term perspective – and this is why I have inflicted on you a screed so unmerciful – the development of higher education in Western Europe has never previously been directly and specifically concerned with privatization *en tant que telle*. It has, most assuredly,

been concerned with defining the state sector during the First Modernization and with integrating, at least partially, the "free" sector to form what has been described as a "non-state" sector during the Second Modernization. What identified – and for that matter, created – the "non-state" from the previous "free" sector was precisely its access to public funding.

An Unholy Trinity

What has now to be tackled is how we deal with privatization, other than as a metaphysical construct: What if the transformational categories are not State vs. Private but rather State, Non-State and Private? Such a tripartite classification, whilst raising questions of quite horrendous complexity, is a closer reflection of reality in the western half of the European landmass than its binary counterpart, however convenient the latter may first appear.

Agreed, it raises with particular acuity a problem that has bedeviled the best minds amongst the students of privatization, namely, the question of thresholds. (Levy, 1986) How much of an institution's overall revenue must come from non-public sources before it may reasonably be said to be private? This brainteaser has been a plague for many a long year. And whilst it may, perhaps, be avoided by saying that the mere presence of private monies shows an institution is "privatizing", a three-way split makes the issue of thresholds unavoidable.

Thresholds become vital in enabling us to decide in which category an institution fits. Finally, such an unholy trinity does have a certain advantage. It could conceivably allow us to tackle the issue of how we are to deal with 'non-profit' and 'for-profit' institutions. In a tripartite scheme, this could well be accommodated by placing the 'for profits' in the redesignated 'private' sector and the 'non-profit'– making establishments in the non-state sector. I am not suggesting we do violence to our American or British colleagues by having them apply this to their systems. But I am suggesting that we do not greatly serve ourselves by accepting uncritically the application of their model to ours.

That said, how far has "privatization" advanced in Western Europe?

Paths of Transformation: the direct route

Rare indeed were the countries in Western Europe that met the 'second wave' of student enrollment by building new establishments and, a fortiori, by expanding the private sector. To this general rule, there were two exceptions: Iceland and Portugal. The latter is especially interesting. Not only did it create a polytechnic sector, echoing at two decades remove a policy that in Britain had failed to fulfill the original mission educational planners had assigned to it. Unlike their British, French or German equivalents, which were public institutions, the Portuguese model also included legally defined private establishments. This variation is interesting in itself, since it would seem to follow, in part at least, both the purpose and the structural segmentation found in another Lusophone country, namely, Brazil. The outstanding feature of Brazilian private sector higher education is, precisely, the absorption of social demand that overflowed from public sector higher education. (Schwartzman, 1998) Created as at a time when the age cohorts were growing, private sector Polytechnics in Portugal have since seen their fortunes decline in line with the subsequent demographic dip, which today has greatly compromised their viability. (Amaral and Teixeira, 2000, pp. 245–266; Amaral and Teixeira, 2001, pp. 357–395)

Iceland provides the other second example of expanding higher education provision in 1998, by setting up what is officially termed "private sector higher education" (OECD, 2006), though it is probably more correct to see it, at least in part, as closer to what I have called "non-state" establishments in sofar as they are in receipt of public monies. Two features distinguish them from the University of Iceland, the country's single University, founded in 1911: They are fee-paying: some receive the direct backing of Stakeholders in commerce and industry. The rationale that underlies Iceland's private sector is a close replication of the classic doctrine put out by the World Bank. This sees the private sector as an agent of mobilization for the whole system of higher education by posing as a competitive alternative to the university, though it has to be said that such a role seems, at the moment, confined to the undergraduate rather than at the postgraduate or research-training levels. The University of Iceland still carries out 80% of Iceland's research. (OECD, 2006)

Elsewhere, private universities established *de novo* are rare and

because rare, therefore remarkable. Let us simply note the foundation in Germany of Witten-Herdecke University in 1983 (Schilly, 2003) and University Viadrina in 1991 at Frankfurt am (Oder) in 1991, and the establishment the University Viadrina in Germany and in France, the creation of the 'Pôle Universitaire' Leonardo da Vinci in France in 1995 by the Conseil Général of the *département* of the Hauts-de-Seine in the Paris basin. These are clear examples of fee-paying, self-supporting universities.

In Western Europe the direct route to privatization is very much the exception.

Paths of Transformation: the indirect route

More attractive by far is the "indirect route". As the term implies, the move to disengage the individual university from financial dependence on government largesse is often the first stage in this process. The second stage involves changing the legal status of the institution, based either on corporate or private law as opposed to public or administrative law. Depending on the particular strategy, these two stages can be successive and protracted or, combined in one fell swoop and therefore more expeditious. The two stages have another importance. In a tripartite classification, they also serve to distinguish progress along the path towards full private status, which, arguably, is attained only when the legal basis has been changed. In other words, financial diversification whilst necessary is not sufficient to place an establishment in the 'private' category. Financial diversification on its own moves the institution to the 'non-state' category. Only when both conditions are united, I would argue, does an establishment become private.

Transformation by the indirect route is beginning to make its mark and, indeed, is the current strategy supported by the German government, though earlier examples are to hand. If one takes a closer look at those establishments that have already completed this process, they tend to have acquired their standing whilst in the public sector. There, they have built up a solid financial relationship with industry and corporations. Even before opting for full private status, their reliance on public expenditure is relatively marginal. Amongst such fortunates are Chalmers University and the University College at Jonkoping, both in Sweden. They have opted for a legal formula that

defines them as foundations and are governed by private rather than public law. Likewise, the London School of Economic and Political Science and the University of Warwick in England may be seen in a similar light.

However, it is only fair to point out that in the latter two instances, the situation is significantly different. As is the case with most British universities founded before the Act of 1992, which raised the Polytechnics to the status of universities and replaced a binary system with a unitary one, the charters of the "old" (*sic*) universities were tailor-made, rather than being part of system-wide framework legislation as is the case on mainland Europe. Precisely because charters are individual to the institution, it may be argued that change in legal status does not occupy so important a place as it does in mainland Europe. A revision of legal status is apparently sufficiently adaptable not to be a major obstacle. The absence of the need to revise formal legal status confers an adaptive capacity upon British institutions to move rapidly into a different relationship with public authority. This characteristic explains why Williams' typology omits legal status in defining the degree of privateness. At the same time, this trait confirms the 'Britishness' of Williams' operational criteria.

Nevertheless, it has to be admitted that this facility makes it no easy matter to apply the tripartite typology to the British case. Unless, that is, one cares to regard all higher education in the United Kingdom as falling into the 'non-state' category, in which case, moving over to de facto private status would appear, in theory, to be less arduous.

Though the situation is changing elsewhere, 'going private' in the classical mode of changing ownership and changing the institution's legal status is not a possibility open to all. Those that have moved firmly along the indirect path of transformation in Western Europe tend already to be elite establishments with strategically central specialties, high research capacity and close ties to key sectors in the Knowledge Economy – Engineering, Information Technology, Banking and Business Administration.

From Sporadic Initiative to National Policy

Though pioneering, such initiatives are sporadic rather than being systematic, though clearly governments may – and do – create

conditions (contractualization and conditional funding being amongst the most powerful) which urge the individual university to embark on this route. However, the signs are very clear and suggest that what began as individual initiatives are on the way to becoming a broader and more general strategy.

It is here that recent developments in Germany are well worth the noting, and very especially since they reveal a drive towards dissolving that relationship between higher education and State, which had grown up over the past 200 years. Official statistics for the year 2005 show clearly the rise of the 'Non- State' sector. In that year, some 99 'non-state' higher education institutions were in place. (BMBF, 2005, p. 149) Amongst them were 17 universities, 16 Theological Seminaries, 7 Arts Academies and 59 Fachhochschulen, the German short-cycle equivalent to the one-time British polytechnics.

That the number of short-cycle establishments to embark on the indirect route to 'privatization' is more than three times the number of their full university counterparts raises an important issue. Is the process of *'dé-étatisation'* simply creating a further dimension in differentiation between 'teaching-based' and 'research-based establishments' by encouraging the former to opt for designation as 'non-state' establishments? Or is it a type of converse policy, to protect those establishments clearly regarded as 'research universities' by 'offloading' those less committed to close ties with public service?

That 99 institutions, taken individually, have migrated from the established relationship with external society can be – and indeed often is – taken by those for whom privatisation is a viable solution, as evidence of success. What is less certain is the degree of progress this represents once one takes into account the numbers of students involved. For the most part, these establishments draw upon limited student numbers. Thus, as in other systems – for instance, Poland and Romania – the picture one retains from institutional provision is far more favourable to the 'privatizing' school of thought. The size of the Student Estate in the 'non-state sector' as a proportion of the Nation's students, however, provides a picture less rosy. (Dima, 2005, Table 2, p. 16)

Yet the path to being reclassified in the non-state sector is becoming easier, and very particularly since the University Reform

Act of June 2004. Universities in the Provinces of Saxony, of North Rhine-Westphalia and Baden-Wurttemberg now have the option to reformulate their formal legal status from being State Universities subject to public law to become Foundation Universities, that is, self-administering public bodies. This involves transferring State – in effect *Land* (provincial) – authority from the Ministry to a Supervisory Board, roughly the equivalent (Palandt, 2005) to the US Board of Trustees. The Foundation, as a corporate body exercises legal responsibility over the university. This change in legal status brings other changes in its wake. First, Foundation Universities are not managed as part of the State budget. Second, the task of determining the budget rests with the Foundation. The Foundation's relationship with provincial authorities – or such, at least, is the situation in Saxony – is contractual and flows from negotiations between the two parties.

The German Foundation Model

Interestingly, the Foundation formula was chosen on the grounds that it would be more appealing to private donors and to corporate interests than would fully public establishments. The Foundation, once constituted, may recruit staff without requiring the assent of the Provincial Ministry of Education (Kultusministerium). However, public salary scales will still apply.

Whilst one may observe obvious features that are specifically constructed around the principle of privatization, - e.g., the changed legal status, assumption of full budgetary responsibility, and the "corporate style" of the Foundation's Supervisory Board, – the State nevertheless retains certain residual powers of oversight. These are principally to be found in its obligation to protect academic staff by stipulating their rights and duties, irrespective of whether they are in post when the change in status took place or whether they are subsequently taken on by the Foundation. (Palandt, 2005)

Back to the Unholy Trinity and Matters Methodological

The foundation model casts an interesting light on the vexed issue of how to classify universities that opt for this a form of 'indirect privatization'. Clearly, a Foundation University can no longer figure in the ranks of State universities. Nor can it be assigned into the

'private' category, if only because the State retains residual rights of guarantee over the conditions of academic work. And whilst it is very certain that the percentage of the institution's annual budget from public expenditure will decline from the present level, it is reasonable to suggest that public authorities will, from the standpoint of funding, continue to be the prime interlocutor. Even so, and for the sake of argument, if the part of public funding were to fall below 20% of annual income, the fact remains that the State still wields an element of "Guardian" rights, (Neave, 2008) which effectively debar Foundation Universities from being assigned to the category of private institutions. The indirect route, however, leads them into the 'non-state' category.

The German model of Foundation University shows, at very least, three of Williams' six dimensions of privatization: financial diversification, a management structure obeying corporate lines, and allocation of resources on market lines. On a more general level, it also alerts us to the need for careful scrutiny of the conditions laid out in the founding legislation, just as it is to attending to the question of internal resource allocation. Though founding charters or their counterparts may not, as we have argued, pose very serious problems in systems that – like either the American or the British – are not grounded in the principle of legal homogeneity. (Neave and van Vught, 1994) Nevertheless, this is a very major issue in Mainland Europe and, for that therefore, cannot be dismissed when seeking to determine an institution's place as a State, Non-State or Private establishment.

Envoi

In this presentation I have sought to follow two main lines of development in tracing the place and evolution of the process of Privatization. I have done so by adopting a long-term perspective, grounded mainly in History: I have traced the broad trends in the evolution of higher education in Western Europe with reference to what I have called the "Three Modernizations" of the University. Some may, naturally, contest the periodization. They may also contest the emphasis laid upon some of the trends thus identified. I would hope, however, that they would share the basic assumption – namely, that the explanation for the apparently cautious and rather hesitant

embrace of privatization in Western Europe, in contrast to the enthusiasm its fellow systems in Central and Eastern Europe have shown towards privatization is not just a matter of circumstances in the short-term.

The implicit thesis I have sought to elaborate serves, above all, to demonstrate that whilst privatization may be seen by our cousins and relatives in the US and the United UK as the natural state of things[1], it is very far from being viewed in the same light in the western parts of Mainland Europe. In a way, this is not surprising. It is in Western Europe that ties, which developed between Nation-State and its Universities, have been the longest embedded. For just over two centuries, these ties took a very particular form, which, in varying degrees, first marginalized the private sector, and then partially integrated it into national provision.

Yet, only by setting the various reforms over the past two decades against what went before them can we fully appreciate their radical nature. That the private sector now seems to command a degree of legitimacy, acts – at least theoretically – as an agent of mobilization, that it should, ideally, be seen by governments as a desirable model to be encouraged, takes on its full significance only when placed against the long-term backdrop. Even so, neither the type of privatization towards which the various higher education systems in Western Europe appear to be moving, nor its dynamic, fit easily into hitherto well-established schemes of classification.

It may be misplaced on my part to make such a suggestion. But in Western Europe, the paths to private status are not straight, still less narrow, even if some hold that these are the paths to economic righteousness and Salvation! The road we will have to travel, assuming we wish to, is likely to be more tortuous and more complicated than most. Reforms that start with one set of objectives very often end up enacting another, even those that governments saw deemed as necessary and which commanded a considerable degree of public support. (Cerych and Sabatier, 1984) And this alone should

[1] As indeed it is for systems whose point of departure is usually associated with the Dartmouth Judgement of 1819. The judgement conformed to the principle of institutional ownership residing first and foremost in the founders of universities and their trustees rather than in the state. (Trow, 2004)

remind us that in the bottomless swamp of reform, we can never be entirely sure we are not following a Will-o'-the-Wisp.

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TRENDS IN ISRAEL

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General Overview

Institutions that receive no governmental budgetary participation, hereinafter referred to as "non-budgeted institutions/colleges" or "private institutions/colleges," are those that requested, when they were established, to be excluded from considerations of government priorities as derived from the needs of society and the state. The basis for the establishment and consequent activities of the aforementioned institutions lies in a Council for Higher Education (CHE) decision dated June 11, 1991. These institutions accepted the condition that the government would not participate in their funding when they opted to act outside of the state framework of planning and budgeting. However, when initially requesting accreditation or permission to open a new academic program, an examination of the financial stability of the requesting institution is conducted. The aim of this examination is solely to ensure that the institution can fulfill its commitments to its students, so that in the grim situation of bankruptcy, the financial burden will not fall upon the government. The institution must also comply with all other conditions set out in the CHE Law, including preserving the complete autonomy of the institution, according to Section 15 of the Law.

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In 1998, Amendment no. 11 to the CHE Law regularized the activities of branches of foreign institutions operating in Israel, by requiring those institutions to be licensed in order to be eligible to operate legally in Israel. Institutions licensed to act as branches of foreign parent institutions are not accredited by the CHE. The Council for Higher Education does not regulate the academic aspects of the branches' activities, but permits them to operate subject to meeting certain administrative criteria, in order to ensure that at the outset the academic similarity between the parent institution abroad and the branch in Israel exists. The criteria include verification of sufficient infrastructure and the availability of relevant competent staff.

Unlike the regular rules for publicly funded institutions of higher education, non-budgeted institutions are free to charge tuition fees as they see fit and there is no supervision over the wages and terms of employment of their academic and administrative staff. There are no limitations on the number of students enrolling in these non-budgeted institutions and they are not subject to state planning and government budgeting considerations. Furthermore, these non-budgeted institutions are free to operate as they see fit in the financial markets, in contrast to the budgeted institutions that are banned from doing so without prior permission from the Planning and Budgeting Committee (PBC). This limitation is articulated in the Israeli Budget Foundations Law (1985) relating to all publicly funded entities. Noteworthy is the fact that according to the CHE Law, all higher education institutions, including the non-budgeted institutions, must be non-profit organizations, and are thereby exempted from income taxes and eligible to receive donations which in return serve as a tax benefit to the donors.

Currently, in the 2007/08 academic year, there are 10 non-budgeted institutions of higher education.[2] In addition, there are 6 applications

[2] The College of Management – Academic Studies, Netanya Academic College, Interdisciplinary Center Herzliya, Sha'arei Mishpat – College of Legal Studies, Academic Center for Law and Business, Ono Academic College (formerly a branch of Manchester University), Ruppin Academic Center, Schechter Institute of Jewish Studies (formerly a branch of JTS – Jewish Theological Seminary of America), Lander Institute (formerly a branch of Touro College, New York), and Peres Academic Center (formerly a branch of Polytechnic University of New York).

in various stages of examination[3] requesting permission to commence operations as non-budgeted institutions for higher education. Furthermore, there are several requests to "convert" from institutions with a license to act as branches of foreign institutions seeking to become Israeli institutions offering programs leading to the master's degree.[4] These "conversions" are a consequence of Amendment no. 12 to the CHE Law, passed in April 2005, concerning the recognition of degrees offered by institutions with a license to act as branches of foreign institutions for the purposes of employment and wages. As mentioned above, Amendment no. 11 established the academic similarity between the degree from a branch of a foreign university and the degree from the parent institution. However, following Amendment no. 12, these degrees would no longer serve for the purposes of meeting work eligibility criteria, or determination of an employee's rank for salary and terms of employment in Israel.

It is important to note that the Council for Higher Education Regulations from 1964, paragraph 3, state that "An institution for higher education won't be authorized, in most cases, to award an accredited master's degree, until after graduating four classes of accredited bachelor's degrees." This was also reiterated in paragraph 1.1 of the CHE decision dated July 15, 2003, which deals with programs of study leading to the master's degree in institutions of higher education.

In view of the above, the Council for Higher Education discussed all aspects of the issue and decided, on December 26, 2006, to accede to the minister of education's request to freeze the process of examination and accreditation for new applications for permission to

[3] The Academic Center Carmel – A. C. C., Erets Israel College, G. B. – the College for Management and Computer Science, Ort Hamelin, Ramot Minhal, and Hed College of Music.

[4] The Center for Academic Studies in Management, Social Sciences and Humanities (formerly a branch of Derby University), the Academic College of Israel (formerly a branch of the College for Israel and Heriot Watt University), the College for Economics and Management (formerly a branch of City College), the Academic Campus Mar Elias (formerly a branch of Indianapolis University) and the College for Society and Art (formerly a branch of Lesley University).

open non-budgeted institutions. Later, on May 29, 2007, the CHE decided:

1. To examine, with the Planning and Budgeting Committee, the needs of the higher education system, from a long term point of view, to ensure its quality and to set a general policy for all the academic institutions of higher education.
2. That this general policy must be based on solid facts and data about the current situation and the long-term forecast. The policy will address, among other things, the long-term implications for the systems of higher education and of the approval of applications that are now before the CHE, or that will be brought before it in the future.
3. That this examination should take no more than 6 months. In the meantime, the CHE will continue to examine the specific programs that were submitted before this decision, in parallel to the process of setting the general policy as mentioned above.

The response of the representatives of the private (non-budgeted) institutions and the institutions that had requested "conversion" was acute, as they had already fulfilled most of the CHE's requirements for accreditation as Israeli academic Institutions. They claimed that preventing their establishment would harm their rights according to the "Basic Law - Freedom of Occupation." Furthermore, they claimed that since the CHE and the PBC do not participate in the budgets of the private institutions, they therefore do not have the authority to plan and limit their establishment or the type of academic programs they offer.

Budgetary Aspects

As noted above, non-budgeted institutions in Israel receive no governmental budgetary participation. Nevertheless, when the government decided to reimburse the higher education institutions in lieu of the reduction in the tuition fees that was decided upon by the Winograd Committee for the Reduction of Tuition Fees (2001), the non-budgeted institutions received, for several years, the tuition fee refund as if they were public-budgeted institutions.

The non-budgeted institutions have been requesting indirect allocation of public funds via the distribution of vouchers to students. This has also been reemphasized in their appearance before the

Committee for the Examination of the Higher Education System in Israel (The "Bayga Shochat Committee," 2007). Recently, there was a decision by the High Court of Justice on this subject in the Petition by David Gerby et al. against the Minister of Education, the Minister of Finance and the Planning and Budgeting Committee.

The petitioners were students in private, non-budgeted institutions, and the students' associations of these institutions. They claimed that the current policy of budgetary allocations discriminates against students that are not studying in publicly funded institutions and therefore asked the court to order the respondents to pay a balancing payment to students in private institutions. The court rejected the petitioners' claims and determined that the Planning and Budgeting Committee (PBC) does have the authority to decide on allocations of budgets. Furthermore, in response to the petitioners' claims that there is no representation of private institutions in the PBC and that PBC members have a conflict of interest due to the fact that they are employed in publicly funded institutions, the court decided that PBC members were selected according to the criteria of "senior standing in higher education" and that their individual achievements were the reason for their selection as PBC members, and not their institutional affiliation. Participation in the tuition fees of students in non-budgeted institutions would necessarily decrease the budgets available to the publicly funded institutions, thereby compromising their ability to respond to the state's need for higher education. The essential equality is expressed in the ability of each person to attempt to be admitted to a university: his admission or rejection is based solely on excellence, which is a legitimate criterion and is not discriminatory, and there is, therefore, no basis for judicial intervention.

A theoretical opposite view on this subject was described by Epple and Romano (1998), who examined the competition between private and public schools, the use of vouchers, and peer-group effects. They developed a theoretical and computational model with tax-financed, tuition-free public schools and competitive, tuition-financed private schools. In their model, students differ by ability and income. Achievement depends on their own ability and on peers' abilities. Equilibrium has a strict hierarchy of school qualities and two-dimensional student sorting with stratification by ability and income.

In private schools, high-ability, low-income students receive tuition discounts, while low-ability, high-income students pay a tuition premium. They found that tuition vouchers increase the relative size of the private sector and the extent of student sorting, and benefit high-ability students relative to low-ability students.

Therefore, distribution of vouchers to students enrolling in non-budgeted institutions would affect allocation of public funds to non-budgeted institutions and, consequently, would cause these institutions to act as if they were budgeted institutions.

Statistical Survey

The number of students in the non-budgeted institutions in 2006/07 was 29,049 (about 42% of the total number of students in academic colleges) 25,698 of whom studied for the bachelor's degree.

In Tables 1 and 2, the numbers of students in budgeted and non-budgeted are detailed:

Table 1: Students in Academic Colleges, by Degree and Type of Budgeting, 2006/2007

	Bachelor's degree	Master's degree	Total
Budgeted colleges	40,228	769	**40,997**
Private colleges	25,698	3,351	**29,049**
Total	**65,926**	**4,120**	**70,046**

Source: CBS and CHE/PBC data, 2007

Table 2: Students in Private Colleges, by Degree and Institution, 2006/2007

	Bachelor's degree	Master's degree	Total
College of Management – Academic Studies	7,845	1,436	**9,281**
Netanya Academic College	2,881	294	**3,175**
Interdisciplinary Center Herzliya	3,456	341	**3,797**
Sha'arei Mishpat - College of Legal Studies	1,713		**1,713**
Academic Center for Law and Business	1,338		**1,338**
Ono Academic College	7,051	468	**7,519**
Ruppin Academic Center (not publicly funded programs)	950		**950**
Schechter Institute of Jewish Studies		492	**492**
Lander Institute	375	241	**616**
Peres Academic Center	89	79	**168**
Total	**25,698**	**3,351**	**28,881**

Source: CBS and CHE/PBC data, 2007

The main disciplines studied were law (49%) and business administration (30%). The remainder of the students (21%) studied mainly in the fields of computer science, communication and Judaic studies (CBS and CHE/PBC data, 2007). It is important to note that it is possible to study law only in the private colleges and in the universities, because programs in law are not yet offered in budgeted colleges. In contrast, it is possible to study engineering and architecture only in public budgeted institutions but not in private institutions.

The percentage of students from Asian-African origin is 29% in the private colleges, the same as in the public colleges. About 72% of the students lived in Tel Aviv and in the center of the country. Over 65%

of the students are from the high socioeconomic clusters (clusters 7 to 10 according to the classification of the Central Bureau of Statistics). The number of students per senior academic faculty member in 2005/6 was 63 in the non-budgeted colleges, versus 38 in the budgeted colleges (CBS and CHE/PBC data, 2007).

According to Romanov et al. (2006), there were distinct personal characteristics of graduates of private institutions in comparison with those of graduates of public institutions. For example:

- Only 10% of the private institutions' graduates came from the peripheral areas, compared with 27% in the public colleges and 21% in the universities.
- The average monthly salary of the students' parents was as follows: in the private colleges 15,000 NIS, compared with 12,000 NIS in the public colleges and 14,000 NIS in the universities.
- The academic higher education of the graduates' mothers was as follows: 20% of mothers of private college graduates had academic degrees, 23% of mothers of public college graduates had academic degrees, and 32% of mothers of university graduates had academic degrees.

How Much Public and Private Investment is There in Higher Education? The OECD International Comparison

Cost-sharing between participants in the education system and society as a whole is an issue under discussion in Israel, as in many of the OECD countries. In many OECD countries, the growth in tertiary participation represents a response to heavy demand, both individual and social. Just as many tertiary structures and programs were designed for a different era, so too were their funding mechanisms.

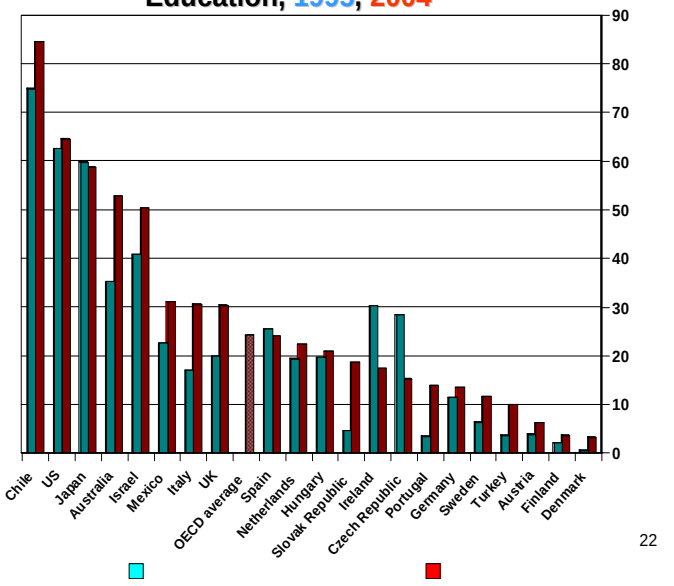
According to the report of the OECD (OECD, Education at a Glance, 2007), the share of tertiary spending from private sources rose substantially in some countries between 1995 and 2004. The share of public funding at the tertiary level in OECD countries was, on average, 76% in 2004 (see chart 1 below). The average share of public funding in tertiary institutions among the 18 OECD countries for which trend data is available, decreased slightly between 1995 and 2000, as well as every year between 2001 and 2004. However, unlike in Israel, in general, the increase of private investment has not displaced public financing, but rather complemented it.

Private expenditure from entities other than households is still significant, representing 10% or more in Israel, as well as in Australia, Hungary, Italy, Korea, the Netherlands, Sweden, the UK and the US. In all OECD countries, private funding represents 13% of all funds on average. This proportion varies widely among countries and 12 countries report a share of private funding above the OECD average. Nevertheless, in Australia, Japan and the US, as well as in Israel, private funds constitute around one-quarter of all educational expenditure and exceed 39% in Korea and Chile.

At the tertiary level, the high private returns in the form of better employment and income opportunities, suggest that a greater contribution by the individual to the costs of tertiary education may be justified, provided, of course, that governments can ensure that funding is accessible to students irrespective of their economic background. The proportion of expenditure on tertiary institution covered by individuals, businesses, and other private sources, including subsidized private payments, ranges from less than 5% in Denmark, Finland, and Greece, to more than 50% in Australia, Japan, the US, and Israel, and over 75% in Korea and Chile. In Korea, about 80% of tertiary students are enrolled in private universities, where more than 70% of budgets are derived from tuition fees. The contribution of private entities other than households to the financing of educational institutions is on average higher for tertiary education than for other levels of education. In one-quarter of OECD countries – Australia, Hungary, Italy, Korea, the Netherlands, Sweden, the UK, and the US – as well as in Israel, the proportion of expenditure on tertiary institutions covered by private entities other than households represents 10% or more. In more than a half of the OECD countries, the private share increased by 3 percentage points or more. This increase exceeds 9 percentage points in Australia, Italy, Portugal, the Slovak Republic, and the UK, as well as Chile and Israel. In Australia, the main reason for the increase in the private share of spending on tertiary institutions between 1995 and 2004 was changes to the Higher Education Contribution Scheme (HECS) that took place in 1997. The changes in HECS were part of a reform process aimed at providing more funds for higher education, partly through increased student/former student contribution (OECD, Education at a Glance, 2007).

The Committee for the Examination of the Higher Education System in Israel (The "Bayga Shochat Committee") attempted to do the same, as a result of the dramatic budget crises in the higher education system in the years 2000–2007. The committee recommended that tuition fees be raised significantly, along with an increase in funds for student aid and a subsidized loan system. Meanwhile, the Israeli government has not yet approved the committee's recommendations, primarily due to resistance to them by the students and part of the academic staff.

Chart 1: Share of Private Expenditure for Tertiary Education, 1995, 2004



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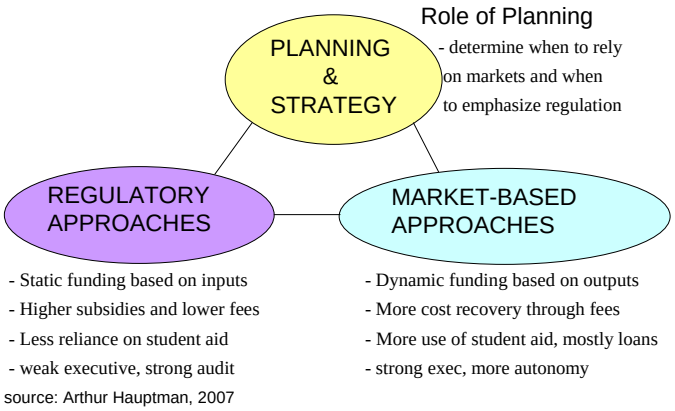
Source: OECD, Education at a Glance, 2007

Academic Planning Considerations

The activities of the institutions that receive no government participation in their budgets (non-budgeted or private colleges) and of the institutions that have a license to act as branches of institutions from abroad, raise several important issues for the CHE and the PBC. The discussion should deal with: the complex relationship between non-budgeted institutions and publicly funded institutions; competition for academic staff and students; the distribution of academic disciplines and degrees; access to higher education; quality assurance; and the level of freedom for market forces versus government regulation (see Chart 2 below).

Chart 2
PLANNING, REGULATION AND MARKETS: DEFINING THE RELATIONSHIP



source: Arthur Hauptman, 2007

The statistical data indicate that there is stability in the numbers of new candidates for higher education, except among two specific population groups - Arabs and the ultra-Orthodox, who have not yet utilized their potential (CBS and CHE/PBC data, 2007). The forecast of demand for the next few years is that this situation will remain the same (see: Shlomo Herskovic, 2007). It may therefore be concluded that the increase in the number of private institutions reflects a change in the mix of fields of study and the geographic distribution.

While the publicly-funded academic colleges arose from a desire to provide a solution to the public need for increased access to higher education for students in peripheral areas, the private colleges developed in order to satisfy a much more specific need - the desire to study law in a non-university framework. At the start of this process, in the beginning of the 1990's, the number of students applying for admission to university faculties of law was so high that many of the rejected candidates chose to study abroad. Thus was born a prosperous new "academic industry," which later proceeded to include additional fields of study, such as business, communication, and other professional areas in high demand.

The dominant resistance to accreditation of private colleges came from the public colleges who claimed that increasing the number of private colleges might destabilize the structure of the higher education system in Israel. The main objections were based on the central geographic areas and the popular fields of study of the non-budgeted colleges, and the concern that they would be more attractive for students and academic staff, thereby reducing the total income of the budgeted institutions.

The position of the Association of the Heads of Colleges ("VARAM") is that establishing such a large mass of private colleges will not give the publicly funded colleges the opportunity for fair competition. The Planning and Budgeting Committee (PBC) limits the fields of study that the publicly-funded colleges can teach, because of planning aspects, while the non-budgeted colleges can quickly develop new and attractive programs. The absurd is that the budgeted colleges need the popular and relatively inexpensive programs, such as law, business and communication, to subsidize their more expensive programs, such as engineering.

There is also a debate about the appropriate size of the higher education system for a country the size of Israel. Currently, there are 64 accredited academic institutions in Israel. In terms of the average number of square kilometers per academic institution, Israel's 363 sq km, is one of the lowest in the world, as shown in table 3 below:

Table 3: Tertiary Institutions per Square Kilometer

	Ireland	Switzerland	Germany 2004	Austria	United Kingdom	Israel	Sweden
Tertiary institutions	60	20	365	40	168	61	54
Universities	7	12	100	30	89	8	13
Total area (sq km)	84,412	41,285	357,050	84,000	244,820	22,145	449,964
sq km per tertiary institution	1,407	2,064	978	2,100	1,457	363	8,333
sq km per university	12,059	3,440	3,570	2,800	2,751	2,768	34,613

Source: Brezis, 2006. The data was collected by Ariel Soueri (Bar-Ilan University).

Based on the stable and even declining numbers of new applicants entering higher education, it seems that there are a sufficient number of academic institutions, some of which are relatively very small. In contrast, the representatives of the private colleges claim that freezing the accreditation process regarding the private colleges is a violation of the democratic rule of occupational freedom. Moreover, avoiding accreditation of private colleges will prevent the development of proper competition among the existing budgeted and non-budgeted institutions. Another claim is that the CHE lacks authority to plan the academic disciplines sought by the private institutions and that the CHE's role is limited only to quality assessment of the academic studies, since these institutions are not budgeted by the public. In addition, they also claim that they underwent a long and very expensive process, in accordance with the CHE directives, which included comprehensive examinations of the institutions carried out by professional committees. They further claim that it is inequitable to stop the process now, and that the CHE's decision to discontinue accreditation of new private colleges is a way of blocking the entry of new participants into the system, similar to the treatment the budgeted colleges themselves experienced when they were established.

Discussion

It seems that the process of opening private institutions and their expansion meets needs that public institutions are not able to supply. Within a relatively short period, it is quite probable that the private institutions will become of high quality and, consequently, in high demand. The CHE should analyze the development process of the non-budgeted institutions, the incentives to open these institutions, and the student demand for enrollment in these institutions. Change in CHE and PBC policy may bring about a gradual decrease in the economic incentive to open non-budgeted institutions (as occurred with the branches of foreign institutions operating in Israel, due to the cessation of recognition of their degrees in the labor market).

From where does student demand to enroll in non-budgeted institutions stem?

There are several possible assumptions:

The most probable assumption is that the non-budgeted institutions provide students with a different "product" than that of the publicly funded institutions. The private institutions manage to aim at many of the students' needs, which include the option of obtaining and gaining professional work experience while completing their academic studies. According to Romanov et al. (2007), students in the private institutions worked more months a year in comparison with students enrolled in the public institutions and in the universities. This phenomenon was apparent all through the years included in the research, and despite this, 80% of the students in the private institutions received their first degree within the standard length of studies, in comparison with 63% of the students in the universities and 71% in the public institutions.

We assume that students in the private institutions pay high tuition fees and, in return, receive personal treatment and concentrated study programs, leaving them free time for other activities. Another assumption is that the social and professional status of studying in the private institutions has become, over the years, higher than the status of the publicly funded institutions, especially if the institutions are located in peripheral areas. The non-budgeted colleges in Israel obtained increasing returns to scale, despite the difficulties that they encountered, which included low public image and underdeveloped infrastructure.

This situation might be contrasted to what is described by Akabayashi and Naoi (2004), who asked the question: why is there no *Harvard* among Japanese private universities? They claim that the social and academic reputation of private universities in Japan is generally far behind the national universities. They argue that heavy subsidy *and* the low tuition of national universities determined by the central government are both responsible for making the production of high academic quality difficult for private universities in equilibrium. Using several simulations based on a theoretical model of assignment of heterogeneous students and universities with respect to tuition and educational quality, they show that the distribution of tuition and academic quality of private universities are affected by the low tuition and heavy subsidy policy of national universities. Using the cross-section data of all universities in Japan, the authors present empirical evidence on the determinants of tuition of private universities that support this theoretical prediction.

Unfortunately, in Israel, the budget cuts that were inflicted on the budgeted institutions were so severe during recent years (PBC data, 2007, The "Bayga Shochat Committee," 2007), that they caused academic quality, infrastructure, and teaching facilities to deteriorate, while the non-budgeted institutions continued to develop.

A possible solution to this complex situation described above should be led by VATAT (PBC), based on four components:

1. A change in the budgeting system is required so that the PBC's participation in teaching costs would better reflect the PBC's policies, targets, and goals. This policy is intended to encourage technological and engineering studies, where the teaching costs are higher and which necessitate infrastructure that can not be provided by the free market. In accordance with this policy, the PBC's participation in costs in the professional fields (such as business administration and law) should be significantly lower, while in other preferential fields (such as engineering, exact sciences, and humanities) it should be substantially higher. Consequently, the budgeted institutions will not be required to balance their budgets by applying a cross-subsidy mechanism, by which – and due to the PBC's current tariff structure – the professional fields subsidize the more costly fields of study.

2. The PBC and the CHE should not limit the opening of academic professional programs in the budgeted colleges, especially in the peripheral areas, in order to enable students in these geographical areas to study these disciplines.
3. It is necessary to adapt the PBC budgeting model for the benefit of the colleges, while taking into consideration such unique factors as the distance from the center of Israel, the size of the institution, and the numeric relationship between students and senior academic staff.
4. Currently, the budgeted academic colleges receive altogether approximately 13% of the total direct budget allocated by the PBC, while increasing portion of the students are enrolled in the budgeted colleges. It is necessary to increase the budgeted colleges' portion, but based on an upgrading of teaching capabilities and academic quality of the study programs, rather than on an increase in student numbers.

By means of proper long-term planning according to the aforementioned guidelines, it is possible to enable different types of institutions and diverse higher education providers to operate together in a complex environment, while achieving high-quality teaching and studies output for the benefit of the individual students and of society.

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DISCUSSION

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Mr. Chairman, dear colleagues,
Good afternoon.

We had a chance this morning to hear a lot of things, beginning with Sheldon's keynote address and then the enlightening presentations in the first session on how private higher education has evolved in different places throughout history, and how much academic cultures have influenced the nature, shape, and size of private higher education in various jurisdictions.

Here in Israel, we have adopted a mix of cultures. We were greatly influenced by the academic cultures of Western Europe – mainly Germany. Everyone knows that we adopted the Humboldtian idea of a research university from Germany. But as Guy Neave described it, we also decided from the very start to depart from the original Humboldtian idea in some respects. In Germany, a symbiosis was established between the university and the public service. National degrees run in parallel to purely academic qualifications, and professors are civil servants expected to act as agents of modernization for the state's benefit. Unlike Germany, the Israeli higher education has separated universities from state.

In terms of administrative protocol, we adopted more the Anglo-Saxon public university approach, which is characterized by considerable privateness in managing academic and financial matters, as Daniel Levy indicated in his presentation this morning. As regards the development of private higher education in Israel, I would say that we mostly follow patterns of Central European, Eastern European, and Latin American countries, in the sense that our private higher education institutions:

- mainly focus on high-demand niche areas, such as MBA, law, and computer science;

- usually have many part-time teachers coming mainly from public universities;
- do little, if any, research;
- are sometimes more socioeconomically than academically elite, as is the case in many Latin American countries. I was last October in Mexico and in Columbia,, where there is a huge proportion of private universities, some of which are more elite in their socioeconomic dimensions than according to academic standards.

In relating to private higher education in Israel, I will follow Daniel Levy's classification of the three types of private higher education: elite, semi-elite, and non-elite.

Do we have elite private higher education in Israel?
No, we do not.

Are we likely to have elite private higher education in the future?
Quite unlikely, at least in the near future. But we should not feel bad about it because, as we heard, elite private higher education is quite exceptional outside the US, so we are sharing the same fate as other countries.

Do we have semi-elite private higher education?
I know that many of my colleagues here in Israel will strongly disagree with me, but I dare to say that some of our private higher education institutions are on the way to becoming semi-elite private institutions, in the sense that they are not in the pinnacle of higher education, but still they excel in whatever they decided to focus on, and they are entrepreneurial in nature with the capacity to improve.

However, most of the Israeli private higher education institutions fall into the category of the non-elite sector, accommodating an exploding demand for higher education.
Clearly, there are negative aspects in such institutions. Some of them are degree mills, and, as Professor Levy called them, "fly-by-night institutions".

I did not consult Sheldon Rothblatt beforehand, but I also decided to speak about the positive aspects of private higher education, because I assume that many will relate to the negative aspects of the phenomenon.

Private higher education indeed has advantages, also in the Israeli context. I will mention five such advantages:

- First of all, private higher education institutions widen access to higher education.
- They are challenging traditional education systems by introducing more competition, innovative programs, and delivering methods. I will add that the master's degree in this country has evolved into a monster that does not exist in any other place. I dare say that mainly in the area of graduate studies, it is not by chance that most of the foreign universities are offering master's degrees in Israel. If something can be learned from programs offered by external branches, it is that we have to totally redefine and reshape our graduate studies, mainly in social studies.
- Private higher education institutions help make higher education more competitive.
- They assist in diversifying the budgeting resources of higher education.
- They enable institutions to benefit from links with prestigious overseas universities.

How can we, here in Israel, maximize the advantages of private higher education?

I would very briefly, in the very limited time that I have, refer to five points:

First: Encourage the serious private higher education.

I quote from Daniel Levy's paper: "Policy officials often have little knowledge of private higher education, which, of course, does not always keep them from setting rules." (Since we have not yet set all the rules in relation to private higher education, our policy makers should be very, very careful in considering the rules that they are going to set in the near future.) "Evaluation of the non-elite sector is often extreme, especially on the negative side, reflecting a mix of real observation, traditional prejudice, and stereotype. Unfortunately, the

negative critique is often apt." (In Israel we have still the trauma of Latvia University, which actually overshadows the whole experience of private higher education in Israel. But this is just one example and it does not characterize all private higher education.) Daniel Levy's recommendation is that "A vital task for scholars and policy makers is to dissect the demand-absorbing sub-sector into its serious and exploitative components. . . . [The] serious ones [are] usually oriented to the job market". This is the major task facing our policy makers.

Second: Expand and wisely plan privatization within public universities.

Most Israeli universities lack the privatization orientation, which significantly characterizes American universities, as Sheldon Rothblatt has portrayed in his keynote address. I would like to give an example of how a public university can engage effectively in privatization and reap benefits from it. When I was in Bogotá last October, I was greatly impressed by a presentation by Professor Kai-ming Cheng from the University of Hong Kong. I found many similarities between the Israeli public research universities and The University of Hong Kong. Both were established under the British Mandate. The University of Hong Kong was established in 1910 and opened in 1912. It currently has around 22,000 students – approximately the size of our large universities – and it draws the best students in Hong Kong. It is a leading research university that also has nanotechnology and nanoscience research centers. In 1999, it established a collaborative research center with the Pasteur Research Center in Paris, and another with the Aaron Diamond AIDS Research Center in NY in 2003. But on top of these research activities, five years ago, the leaders of the University of Hong Kong decided to change the institutional investment policy, realizing that relying only on public funding is no longer adequate for an expanded system. They decided to go more "aggressively" into the private market. Within five years, they managed to increase alumni donations by 465%, and 85% of the donors were new donors – a most impressive achievement. The World Trade Organization recognized the University of Hong Kong as a leader in tertiary education, and in 2004 it was selected as the official WTO training center for the Asia-Pacific region. The university currently runs regional trade policy courses for government officials

from over thirty countries in the region. It has links with more than 4,000 overseas universities and hosts over 3,200 international students. Around 1 million students are enrolled in its continuing education courses. The underlying concept behind the institutional advancement policy of the University of Hong Kong has been that when you are based on public funding only, it turns out to be that "when there is no money, there is no plan". When you diversify your funding sources and engage also the private sector, the principle changes to "when there is no vision, there is no money". In the institutional advancement plan, "great vision brings big money", and you ask for money not when you feel poor, but rather when you feel strong. I will not go into more details.

Through the University of Hong Kong example, I would like to demonstrate that our public universities can do a great deal in privatizing part of their activities. Some of our public universities have made some endeavors in privatization, and quite often they get a lot of criticism in doing so. But many potential venues for privatization have not yet been tried and explored.

Third: Encourage partnership with overseas universities.

I do not know how it happened, but as far as I remember, at the beginning of the 1990s, somehow the Council for Higher Education policy has restricted and cut collaborative ventures with overseas universities. Such a policy might have been valid for an industrial era, but it does not suit an operation in the current globalized world. Again, we have the trauma of Latvia University, but in many places there are numerous examples of leading universities operating external branches. In Qatar, for example, through the funding of the Qatar Foundation for Education, Science and Community Development, a non-profit organization founded in 1995 by the Emir of Qatar, top leading research universities from the US were mobilized to operate in Qatar. Cornell University opened there a branch of its Medical College, Texas A&M University operates an engineering program there, and Carnegie Mellon University opened computer science and business programs there. There are many more good examples of fruitful collaborations between local and overseas universities. Except for the Kellogg-Recanati Program at Tel Aviv

University, there are very few collaborative ventures between Israeli and overseas universities in academic programs.

Fourth: Redefine strategies to mobilize the corporate and business world in Israel.

I would say that we have not been too successful up to now in mobilizing the Israeli corporate world to invest in the academic world. Our rich citizens are more proud when they build an extravagant hotel in Las Vegas or purchase a football team than when they donate money to universities. Two years ago, I was invited to the Technion Chairman's Leadership Forum, and I heard leaders of the Technion Societies of various countries complaining that they find it difficult to mobilize funds, since many sources that they approach point to the fact that we have already our Israeli multi-millionaires and ask why *they* do not donate to Israeli universities.

I would like to quote a sentence from a book by Charles Vest that was published in 2007, *The American Research University from World War II to World Wide Web*. Vest was the former president of MIT for thirteen years, and in this book are his three Clark Kerr speeches that he delivered at the Center for Studies in Higher Education in Berkeley. He gives an example of Milton Eisenhower, president of Johns Hopkins University from 1956 to 1967 and 1971 to 1972, who used to say when he worked on fundraising: "Higher education and business are basically inter-dependent. One needs money to produce educated people, and the other needs educated people to produce money". In our complicated world, it is not that easy, but still a lot remains to be done and they are not being done right now in this domain. Maybe some of the fundraising efforts that we do lack the mission, the strong passion that are crucially important for convincing and engaging.

Fifth: Reconsider the language of instruction in Israeli universities.

We are sitting here right now in the Technion, in the city of Haifa, where a war of languages began less than 100 years ago. The Ezra schools in 1914 and after that the Technion in 1924 struggled between teaching in Hebrew or in German. Hebrew is a wonderful language, and I admit that then it was vital to decide that Hebrew was to be the language of instruction, in the context of the revival of the Zionist

movement and the renewal of the Jewish nation-state. But right now, in the global world we live in, we have to understand that English has become the lingua franca of the academic world. The Weitzmann Institute, which is a graduate research institute, constitutes an exception in the Israeli higher education setting. The language of instruction there is English and therefore it attracts an international student body. I talked with Steven Stav about Israel's willingness to join the Bologna Process which has been taking place in Europe since 1999. Teaching in English is a prerequisite for most collaborative teaching programs within the Bologna Process. Accordingly, we too should really consider very carefully the language of instruction in our universities, at least at the level of graduate studies.

Thank you very much for your attention!

SESSION I, PART II

Current Trends in the Privatization of Higher Education

CURRENT TRENDS IN PRIVATE HIGHER EDUCATION IN ASIA

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Abstract

There has been rapid growth in private higher education in most countries including in Asia during the last two to three decades. The growth of private higher education in Asian countries is more in response to the 'excess demand' phenomenon than to the phenomenon of 'differentiated demand'. Increasing scarcity of public resources on the one hand, and the neo-liberal environment that is gaining strength over the years, on the other hand, are the two most important factors that have enabled the rapid growth of private higher education. Public policies are formulated in favour of private higher education either out of compulsion, or, rarely, out of conviction. While some countries have adopted policies that are strongly supportive of public sector and are anti-private, some intend to regulate the growth of private sector, and policies in many countries can be described as *laissez-faire* policies, which in effect work as pro-private.

Some of the striking aspects of the growth of private education are: (a) decline in philanthropy in higher education, (b) acceptance of the phenomenon of profit in private higher education, (c) rapid – even unbridled growth of private higher education, (d) corresponding rapid diminution of the public sector in higher education, (e) exclusive reliance of private institutions on students' tuition, etc.

The rapid growth of private higher education has its effects on education and development in general. The growth of the kind being experienced in many Asian developing countries, results in loss of equity – social and economic, increase in regional disparities, erosion in quality, loss of important academic disciplines (in favour of marketable disciplines) of study, change in attitudes, erosion in

national, social and educational values, public pauperisation and private enrichment, crowding-out of the public sector, loss of public good nature of higher education, and loss of balanced development of higher education in terms of various disciplines of study and research.

Without losing sight of the fact that there are wide differences between several countries in the Asian region, not only with respect to the levels of development, socioeconomic development policies and their effects, but also specifically with respect to the growth of private higher education, the paper examines some of these recent trends in the growth of private higher education in the Asian region, the socioeconomic and educational effects, and the public policies in this regard, and outlines some implications for the future.

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The issue of modern private sector in higher education has been the most dominant feature of the growth of higher education in several Asian countries during the last quarter century. Private education is not a new phenomenon in the Asian region,[1] though modern private education is of a recent origin. There has been rapid growth in private higher education in many countries of the Asian region during the last two to three decades. In fact, in some countries of the region, it is a new phenomenon and rather sudden too. Even in those countries where private higher education existed earlier, governments hardly expected that it would grow so dramatically in such a short time. The wave of privatisation of higher education has been sweeping all over, covering market economies, communist societies, mixed economies and the welfare state as well. By the beginning of the 21st century, no country in the Asian region seems to have been spared by the private surge in higher education.

Growth of private higher education can be explained generally in terms of the phenomenon of 'excess demand' or the phenomenon of 'differentiated demand' (James, 1993). When the public higher education system is not able to meet the growing demand for higher education, the private sector enters to meet the excess demand. That the governments do not have resources to provide enough places of

[1] The paper largely focuses on South Asia and East Asia, including China and Japan.

higher education has been a common argument in recent days, though some argue that it is not the lack of resources, but lack of political will and lack of faith in higher education as an instrument of development that matter in this regard. On the other hand, if people demand education of a different type and quality (say, e.g., religious education), which is not provided by the public higher education system, people opt for private education that meets their specific demand. This is known as the phenomenon of differentiated demand. Both phenomena are related to some extent. In general, the growth of private education in developing countries can be largely attributed to the phenomenon of excess demand, while it is more the excess demand phenomenon than the other that is believed to be explaining the growth of private education in advanced societies. But as the distinctive role of private institutions disappear (such as private institutions providing secular education instead of religious education), it is the excess demand that becomes the only phenomenon that explains demand for private education. In addition, in recent years, the neo-liberal argument that private education is inherently more efficient and equitable than public provision of education and hence government should disinvest in sectors such as higher education, has provided further momentum to the growth of private education. It is further argued that the private sector or markets in education, contributes to overall improvement in efficiency, reduction in costs and improvement in access, by introducing and enhancing competition. These arguments, applicable to normal goods, are being applied to higher education, which is a public good and a social merit good. It produces a huge set of externalities, which have not only economic, but also social, political and cultural implications and an "experience good" (McPherson and Winston, 1993), whose product characteristics, such as quality and price, are difficult to observe in advance and can be ascertained only upon consumption. The international environment, characterised by the emergence of the World Treaty Organization (WTO) and the General Agreement on Trade in Services (GATS) as a strong force in education and the structural adjustment loans provided by multi-lateral organisations such as the World Bank and International Monetary Fund, is also contributing to the rapid growth of private education. Because of these national and international forces, public

policies are formulated in favour of private higher education either out of compulsion, or, rarely, out of conviction. While some countries in Asia have adopted policies that are strongly supportive of the public sector and are anti-private, some adopted policies in favour of the private sector, some intend to regulate (and also deregulate) the growth of the private sector, and policies in many countries can be described as *laissez-faire* policies, which, in effect, work as pro-private (Tilak, 2005a). Yet, one may note that very few governments in Asian countries have been active initiators of private emergence in education. The private sector entered the education arena and grew; and governments very often responded to it as a *fait accompli*. In most countries, the wave of privatisation is so strong and sweeping that governments appear to be losing the ideological and also fiscal wherewithal to be the primary custodian of higher education and/or withstand the private wave.

In all, we find that the Asian region is highly diverse in terms of the extent of private higher education. Geiger (1987) has classified higher education systems, based on the size of the private sector, in three categories: having a massive private sector, a parallel private sector and a peripheral private sector.[2] In a system characterised by a massive private sector, public institutions of higher education are very limited in number, like in Japan and South Korea. Japan and Korea have highly developed, strong private higher education systems, and public institutions seem to be only complementing the private ones. Systems that can be described as having a parallel private sector are those where the size of the private sector is considerable compared to the size of the public sector. Governments have even supported private sector essentially to meet needs of varied ethnic and cultural groups of population. The private sector is complementary to the public sector in this case. The private sector of the third category is

[2] As the USA does not fit into this classification, it was categorised as a separate sector: the "American private sector" (Geiger, 1987). Levy (2008) classifies the private higher education models into two categories, viz., the US model and the global (non-US) model. In fact, based on the nature of private higher education, the existing models can be classified into four types, viz., the US model, the Western European model, the Japan-Korea model (or the J-model, as Umakoshi, 2004, calls it) and the developing countries model.

much smaller in size. However, these categories can be regarded as transitional phases: a peripheral private sector may become a parallel private system, which may eventually dominate the public sector and become a predominant private sector, subject to public policies and the overall environment.

Besides Japan and South Korea, quite a few countries in Southeast Asia, including Indonesia and Malaysia, have widely spread private higher education systems, which are also highly regulated by the state; in China,[3] India and Pakistan there has been an unbridled growth of private higher education. In contrast, private higher education is extremely marginal in Singapore and Hong Kong, and almost nil in Sri Lanka. While Singapore, Hong Kong and Sri Lanka can be regarded as economies with peripheral private sector, Indonesia, Malaysia and the Philippines, along with Japan and Korea, can be regarded as having massive private sector. Even in countries like Vietnam and Cambodia, private institutions grew in number and today exceed the number of public institutions.

Private institutions in the Asian region, like in many other parts of the world, are of various types: private education supported financially by the state, private education recognised but not funded by the state, and private education institutions that are neither recognised nor funded by the state. Based on management-cum-finances, Tilak (1991) classified the phenomenon of privatisation of education into four types: (a) extreme degree of privatisation, where education is seen as a business, and profits – exorbitant profits – are made by private institutions, (b) strong form of privatization, where a large part of the costs is recovered, but no profits are made; (c) moderate form of privatisation, characterised by low to moderate levels of fees, which are set much below the cost levels, and (d) pseudo privatisation, which includes private institutions managed completely privately, but financed nearly fully by the governments. Currently, almost all countries in the Asian region have private education institutions of all four types in varied proportions.[4] The

[3] The growth of private institutions recognised to award degrees seems to be regulated in China, while the growth of others is less or not at all ulated.

[4] Public institutions are also becoming privatised – financially with reduced levels of public subsidies and increased levels of students' fees and other

private higher education systems in Japan and Korea belong to category (b), South Korea figuring ahead of Japan in the rates of cost recovery through student tuition fees. While India, the Philippines and other countries have had pseudo private institutions (that is, private institutions heavily supported by the state) for a long time, the current trend in countries like India, Pakistan and the Southeast Asian countries leans towards categories (a) and (b) and more in favour of category (a). Thus, a major part of the current discourse on policies relating to private higher education focuses on type (a).

Stylised Facts

There are wide differences between several countries in the Asian region in terms of development of education and with respect to the nature and growth of private higher education, as briefly noted above. However, one can make a few generalised statements, somewhat as 'stylised facts', on the current trends in growth of private higher education in the region. Some of these stylised facts are based on robust empirical evidence and some on theoretical support as well. A few are well known, but empirical research evidence on them is nil or negligible, as it is hard to obtain any reliable empirical data. Certainly, there may be a few exceptions to these facts, but they are more or less generally valid statements. After all, a stylised fact is "a simplified presentation of an empirical finding. While results in statistics can only be shown to be highly probable, in a stylized fact, they are presented as true. They are a means to represent complicated statistical findings in an easy way. A stylized fact is often a broad generalization, which although essentially true may have inaccuracies in the detail".[5] A few such stylised facts are described here in this paper.

It may be noted that the available database on private higher education is extremely limited. For example, the Programme on Research on Private Higher Education (PROPHE), based at the State University of New York at Albany, that attempts to build a strong database on private higher education across the globe, could get data

non-governmental revenues, and managerially by corporatising the universities, as in Japan. This aspect is deliberately kept outside the purview of this paper.

[5] http://en.wikipedia.org/wiki/Stylized_facts

from various sources only on a couple of indicators of private education.[6] More importantly, data available from different international sources, including UNESCO Institute of Statistics and OECD, are highly suspect; they differ from each other and further differ from national sources.[7] Many also do not properly define terms and their scope, such as "private" and "higher".[8] Correspondingly empirical research on private higher education is also limited to case studies and micro-level investigations; otherwise research has been confined to broad discussion on policy issues.

Despite some of these serious limitations, presented below are a few stylised facts on the current trends in private higher education in Asia.[9]

Stylised Fact # 1: There has been rapid growth in private higher education in the last quarter century, resulting in a significant and rapid diminution in the relative size of the public sector in higher education.

The growth in private education includes growth in various types of private institutions, ranging, as described earlier (Tilak, 1991), from state-recognised institutions that charge full cost as tuition, profit-making private institutions and state-funded private institutions, to

[6] Two tables based on PROPHE are given in this paper.

[7] For example, according to the UNESCO Institute of Statistics (2007), 99.4 per cent of the enrollments in tertiary education in India are in public institutions in 2002–03, in contrast to 30.7 per cent as given by PROPHE. The latter seems to be closer to reality. UIS in a personal communication admitted that a correction on India is pending. But this is not an isolated example. See Table A.1 in the Appendix.

[8] Terms such as "tertiary", "higher" and "post-secondary" are used to refer to higher education. Private universities are also knownun avoidable confusion: independent universities, non-government institutions, foundation universities, non-state universities, non-budget or non-subsidise institutions etc. Te "non-subsidised institutions may ncorrect, as these institutions receive many indirect subsidies, as tax exemptions, and direct subsides, as subsidied public land and other raw material and resources.

[9] Some of the issues discussed here are partly drawn from Tilak (2007).

private institutions not recognised by the higher education bodies in the given country or by any international bodies.[10]

More than 86 per cent of the higher education institutions in Japan are private institutions; corresponding figures are 81 and 87 per cent respectively in the Philippines and South Korea. In Malaysia these institutions account for as much as 92 per cent and in Indonesia the figures are as high as 96 per cent. These figures refer, in all probability, only to the government-recognised institutions and may be inclusive of state-funded private institutions.

In many countries, institutions that do not receive any state support are growing very fast and they outnumber public institutions. That the neo-liberal economic policies are primarily responsible for the growth of private higher education is clear from the trends in the recent past. For example, in Malaysia, the number of private institutions has increased by more than four times, from 156 in 1992 to 706 in 2001. In India, private universities emerged only during the last two decades. Compared to no private universities about a decade ago, there are now more than 20 private universities and about 80 university-level institutions, known as "institutions deemed to be universities". In one of the southern states in India, the number of private colleges that exclusively rely on fees has increase from negligible numbers in 1989-90, i.e., on the eve of introduction of economic reform policies in India, to more than 1,100 in 2000-01. Today, such colleges outnumber public institutions by several times. Correspondingly, the relative size of the public sector has been diminishing to negligible levels, posing problems of access to weaker sections of the society. Hardly 10 per cent of the colleges of engineering and medicine are in the public sector. Correspondingly, the relative size of the public sector diminishes to negligible levels, posing problems of access to weaker sections of the society. Hardly 10 per cent of the colleges of engineering and medicine are in the pubic sector.

[10] As there is not much information on the last category, i.e., on institutions not recognised by the government, we often confine our examinations to only, and among the others to private institutions that do not receive any state support.

Table 1: Number of Private Higher Education Institutions in Asian Countries

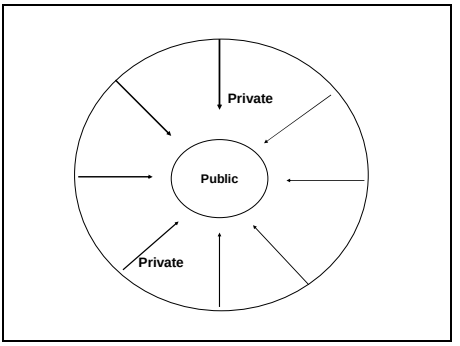
	Year	Private	All	% Private
Bangladesh	2005-6	54	111	48.6
China	2002	..	..	39.1
India	2005-6	42.9	17,973	42.9
Indonesia	2001	1,931	2,012	96.0
Japan	2000	4,173	4,834	86.3
Malaysia	2000	642	696	92.2
Pakistan	2005-6	54	111	48.6
Philippines	1999	..	..	81.0
South Korea	2002	..	..	87.0
Taiwan	2004	..	..	65.8
Thailand	2003	54	120	45.0

Source: PROPHE (2007a)

All this is in addition to the more rapidly growing menace of unrecognised institutions of higher education. These institutions do not qualify to be recognised by the government as educational institutions. Moreover, the institutions themselves do not seek recognition, as recognition by the government restricts the freedom of the institutions to adopt undesirable and questionable methods of management, relating to admission, student fees, teacher recruitment, etc. These 'fake' institutions can be regarded as 'black' or 'illegal' education markets. They vary in nature widely and include teaching shops or shop-like institutions, coaching centres, cram schools, etc.

The numbers of private institutions and the consequent overall numbers of institutions of higher education are so large in quite a few countries that governments do not feel the need to open any new public institutions and increase the total number of higher education institutions in their countries. In fact, the size of the private sector is so vast that no space is left for public institutions. As Umakoshi (2004, p. 39) shows in a diagram, the tiny public sector is being encircled and squeezed by the rapidly expanding private sector, as shown here in Figure 1.

Figure 1: Private Sector Squeezes Public Space



Source: Adapted from Umakoshi (2004, p. 39)

With a high growth rate, private institutions outnumber public institutions in several countries of the region. The private sector hardly remains peripheral. More interestingly, some of these developing countries surpassed advanced countries in the relative extent of private higher education. Today, higher education in developing countries is more privatised than in many advanced countries. This is true with respect to the growth of all types of private education, but also holds true even if one confines observation to the growth of fee-relying recognised private institutions. For example, only one-fourth of the enrollments in higher education in the US are found to have been in private institutions, and the ratio is much lower in Canada and many European countries. In contrast, the proportion is higher than two-thirds in some of the developing countries: 67 per cent in Indonesia, 68 per cent in the Philippines, etc. (OECD, 2004). Except in Korea and Japan, 75 to 100 per cent of the total enrollments in the OECD countries are in public and government-funded private institutions (Table 2).

As many of the developing countries were to adopt pro-private approaches as a part of the package of structural adjustment policies and the like, the critics of neo-liberalism rightly view this as a conspiracy of advanced countries and international organisations against developing countries to weaken the state in general and the higher education systems in particular, so that these depend upon developed countries forever.

Table 2: Distribution of Enrollments in Tertiary Education (Type A and Research), 2002

	Public	*Government -Supported Private*	*Independent Private*		*Public*	*Government -Supported Private*	*Independent Private*
OECD Countries				***Asian Countries***			
USA	76	..	24	Philippines	31.9	..	68.1
France	87.8	0.8	11.4	Indonesia	33.5	..	66.5
Spain	87.9	..	12.1	Malaysia	77.0	..	23.0
Switzerland	90.4	6.8	2.8	Thailand	86.9	..	13.1
Austria	92.7	7.3	0				
Italy	93.5	0	6.5	***OECD Countries in Asia***			
Sweden	94.1	5.9	0	Korea	22.7	..	77.3
New Zealand	97.3	1.4	0.6	Japan	27.5	..	72.5
Australia	100	0	0				
Canada	100	0	0				
Germany	100	0	0				
UK	100	0	0				
OECD mean	*79*	*10.3*	*11.4*				

Note: Though it is not clear, enrollments in government-supported private institutions in Asian countries seem to have been included in the "Independent Private".
Source: OECD (2004)

The evidence also raises questions like whether the prescription of private education is good for developing countries, but not for advanced countries. Note that private education is advocated in developing countries not just because those countries cannot afford public education, but also for reasons of efficiency. That said, does the issue of efficiency in education assume relevance only in case of the developing countries and not for others? Perhaps what is good for advanced countries is not good for developing countries; and what is good for developing countries is not relevant for developed countries.

Stylised Fact # 2: There has been a very significant shift from philanthropy to profits in private higher education over the years in most countries – developing and developed – but it has been more pronounced in the developing countries of Asia.

In the middle of the last century, i.e., during the period immediately after attaining independence, many countries of the Asian region witnessed a sudden growth in philanthropy in education. Individuals, the corporate sector and others voluntarily made huge contributions in cash and kind to public education. Some pooled their own resources and founded private education institutions with a view to participate in national development, to supplement government efforts and to provide education to the people. Charity, philanthropy and genuine concerns to help the poor were the guiding principles in founding those institutions. Some of the best private institutions in India and many other countries belong to this category. Governments also recognised their contributions and extended financial assistance to those institutions.

But over the years, there has been a drastic decline in voluntary private contributions in the form of donations and endowments to public institutions. For example, the decline in donations and voluntary contributions is quite marked during the post-independence period in India. In 1950–51, such donations, voluntary contributions and other sources formed 11.6 per cent of the total income of the education institutions (of all levels) in the country; and they declined in relative size to 4 per cent by 1986–87, the latest year for which such data are available.[11] Further, there is a virtual halt in the growth of private institutions based on the principle of charity and philanthropy. Over the years, even those institutions that were set up with philanthropy and charity as the main considerations became nearly totally dependent on government funds. Moreover, the charitable private institutions have also tended to become profit-oriented commercial institutions.

In contrast, the individuals, the corporate sector and others began to find that investment in education yields attractive returns quickly. The very concept of profit, which was not respectable in discourses on

[11] In 1996–97 such contributions to school education accounted for 3.6 per cent (GOI, various years).

education for a long time, has become acceptable and even fashionable. Though there are ethical and, more importantly, legal barriers in many countries to formally recognising profit as acceptable, classification of private higher education institutions as for-profit and not-for-profit institutions has become common. The presence of private investors seeking profits in education has become normal. As a result, all kinds of businessmen – petty to large, with the least knowledge of the nature of higher education – entered the education markets and began setting up institutions. For many of them there is no difference between setting up an institution of higher education and establishing a manufacturing firm, a poultry farm or a shopping mall. They are ready to offer any programme or conduct any activity, academic or not, in their institutions that yields quick profits. They also receive social and bureaucratic acceptance as educational entrepreneurs. These developments reflect an overall change in the attitudes of society towards education on the one hand and private monetary and other pecuniary gains, replacing social concerns on the other, and have contributed to a rapid growth of full-cost–recovering private institutions, also known as self-financing private institutions, or simply profit-making institutions.[12] The growth of such institutions has been so rapid in the recent years that such institutions are predominant among the private institutions, and even among the total (including public) number of institutions. Commercialisation of higher education is taking place at a fast pace.[13]

Although public policy in many countries favours the private sector in higher education, it does not favour commercialisation of higher education. Privatisation of education is acceptable for many governments, but not commercialisation. But it is actually difficult to differentiate between privatisation and commercialisation in education, either theoretically or in practice. Both are characterised by profit. The *Concise Oxford Dictionary* defines "commercialisation" as a method to "manage or exploit in a way designed to make a profit",

[12] Costs in neo-classical economics include profits as remuneration for entrepreneurship; so full-cost-recovering institutions can be rightly considered as profit-making institutions.

[13] See Tilak (2006) for a discussion on the shift from philanthropy to profits in higher education.

and "profit" as "a financial gain, especially the difference between an initial outlay and the subsequent amount earned". These are also exactly the same features of privatisation, which also involves management of resources so as to make a profit. Thus, one may note no difference between privatisation and commercialisation; they are two sides of the same coin. Both are based on the same principles and considerations, the most important of which being profit maximisation. If commercialisation of education is not good for education, as is widely agreed, then nor is privatisation of education.

Stylised Fact # 3: Contrary to the most generally held belief that private institutions provide high quality education, in many private education institutions in the region, the quality and standards of education are poor.

Except for a very few, the quality of most private institutions is of low level. This fact, which is being widely noted, may be due to a lack of serious concern for providing quality education by the management of these institutions, as their motives revolve more around making quick money than providing good quality education. More importantly, it may be due to a lack of any strong quality ensuring mechanisms instituted by the governments and other higher education regulatory bodies. These institutions also focus on less expensive programmes. For example, most of the more than 1,000 private universities in China offer only two- and three-year study programmes. In fact, many of these universities are small in size and somewhat equivalent to community colleges (Min, 2004). Private institutions in many countries are too small to provide rich and vibrating intellectual environment and adequate academic infrastructure. In contrast, many public institutions are big in size, offering undergraduate, postgraduate and research degree programmes in many disciplines, besides being involved in postdoctoral research. For example, in India, institutions such as the Indian Institutes of Technology, Indian Institutes of Management, All India Institute of Medical Sciences, and the Indian Institute of Sciences, as well as Peking University and a few other public universities in China, Singapore and Hong Kong – and many in Europe – are regarded as high quality institutions of international

standards. All the while, they are open to economically and socially disadvantaged sections of society.

No detailed data are available on quality differences between public and private universities in many countries, except for anecdotal references and case studies relating to internal and external efficiency of private higher education. In the absence of such data, one may look at the World University Rankings, which are based on a variety of qualitative and quantitative indicators of university systems. In the world university ranking of the *Times Higher Education Supplement* (2004), it may be interesting to note that very few non-US private universities figure. Out of the 138 non-US universities that the THES ranked, only 6 private universities can be found on the list, as shown in Table 3. They include 1 university in North America (Canada), 4 in Europe and 1 in Asia (South Korea); none of them, however, figures in the top 50 universities. They also seem to be least-known universities.

Table 3: Non-US Private Universities in the World University Rankings (2004)

	Name of the University	**Country**	**Rank**
1	Université Catholique de Louvain	Belgium	52
2	Free University of Brussels	Belgium	54
3	Chalmers University of Technology	Sweden	92
4	McMaster University	Canada	147
5	Pohang University of Science & Technology	South Korea	163
6	Nijmegen University	Netherlands	191

Source: "World University Rankings", *Times Higher Education Supplement* (reproduced in PROPHE [2007b])

Not a single university in Japan, despite having a large number of private universities, or China, which has more than 1,200 private universities, figured in the world rankings. Research is an important factor considered in these university rankings. It is well known that few private universities focus on research. They are largely teaching institutions, that too at undergraduate level. Many of them may not have conventional graduate schools. Further, several private

institutions concentrate more on marketable disciplines of study and training, paying little attention to basic sciences, social sciences, humanities and arts. All this has a bearing on the final quality of institutions and of their graduates.

In contrast, some, although not many, public universities figure in these world rankings: 6 in Japan, 5 in China, 1 in India, 2 in Malaysia, 2 in Singapore, 2 in South Korea and 1 in Taiwan. Table 4 presents an exhaustive list of ranked universities in Asia. In all, 23 public universities and 1 private university in Asia figure in this list.

Despite some of the familiar weaknesses associated with such world rankings, they do reflect some broad dimensions of quality, and hence they are useful for general comparisons. In the present context, they are really telling.

Stylised Fact # 4: Private institutions in Asia tend to rely exclusively on student fees, as *the* source of funds.

Student fees are either the only source or, in a few cases, the major source of funds for private institutions. The private sector's own contribution in terms of financing education is negligible, and whatever investments are made by the private sector, are quickly recovered with interest within a short period through student fees. Fees in private institutions are generally higher than in public institutions in most countries. This is understandable and well known. While in public institutions fees cover a small proportion of the total costs, mostly ranging between 0–40 per cent, they cover 100 per cent, if not more, of the costs of education in private institutions in India, China, Pakistan and many other developing countries. In contrast, in the USA the corresponding proportion was only one-quarter; in Japan 59 per cent (Futao and Hata, 2004). Tuition fees yield as little as 8–15 per cent of the total revenues in the state universities and about 20–25 per cent in the private universities in the US. Moreover, fees in private institutions in countries like the USA and Japan are only 3–8 times higher than the fees in public institutions in those countries, while it is 50–80 times higher in countries like India.

Table 4: Public and Private Universities in Asia in the World University Rankings, 2004

Country	Rank	University
Public		
China (5)	17	Peking University
	61	Tsing Hua University
	154	China University of Science & Technology
	192	Nanjing University
	195	Fudan University
Hong Kong (4)	39	University of Hong Kong
	42	Hong Kong University of Science & Technology
	82	Chinese University of Hong Kong
	198	City University of Hong Kong
India (1)	41	Indian Institute of Technology
Japan (6)	12	University of Tokyo
	29	Kyoto University
	51	Tokyo Institute of Technology
	69	Osaka University
	153	Tohoku University
	167	Nagoya University
Malaysia (2)	89	University of Malaya
	111	Sains Malaysia University
Singapore (2)	18	National University of Singapore
	50	Nanyang Technological University
South Korea (2)	118	Seoul National University
	160	Korea Advanced Institute of Science & Technology
Taiwan (1)	102	National Taiwan University
Private		
South Korea (1)	163	Pohang University of Science & Technology

Note: Figures in parentheses denote the number of universities.
Source: PROPHE (2007b)

The non-tuition and non-state sources of funding of private institutions in the US are very important; they include voluntary donations and philanthropic contributions from the community and the corporate sector, and profits from investments made out of university corpus funds. This third source of funds – non-tuition and non-state – is virtually absent in many developing countries of Asia.

Most public higher education systems, almost everywhere, provide for elaborate mechanisms of student support – scholarships, stipends, fee waivers, etc., as equity in education for socioeconomic, gender and even regional population groups, is an important concern of public education. Furthermore, diversity in the socioeconomic, cultural and racial composition of students in the university campuses is regarded as an important virtue of higher education that needs to be safeguarded and nurtured. For the same reason, many private universities in the West spend considerable amounts of their budgets on scholarships and granting free tuition. For example, it is reported that universities like Harvard spend about 10 per cent of their recurring budgets on scholarships and fee waivers. This is, again, a major feature missing from private higher education in most developing countries. Very few private institutions in Asian developing countries have instituted any noteworthy student-aid mechanism. The importance of scholarships as an instrument for ensuring greater equality of access for disadvantaged but academically deserving students is hardly noted by these institutions. Students are left to themselves and to markets.

In fact, private education in Asian countries is not the same as in Western countries. In the West, private education grew out of considerations of philanthropy, charity and education, and to promote quality and diversity. In contrast, in developing countries, private education is growing as public investment is declining and is motivated by profit. As Lawrence Summers (2006) observed, the Asian model of private higher education that relies on profit is not the best model of development of higher education. He argues that the US model based on philanthropy is more appropriate for the developing countries that would like to set up private universities.

Stylised Fact # 5: Economies with predominant private higher education systems have not necessarily developed much – educationally or economically, or even socially and politically.

The view that large private higher education systems will necessarily result in higher levels of development is not supported by the available evidence. Large higher education systems reflected in high gross enrollment ratios are important for development, though their effect on development also depends upon several other factors. But countries that have expanded their higher education systems, mainly relying on the private sector, do not seem have registered significant progress. The opposite is also true: countries that have higher education systems that can be described as predominantly public have progressed well – educationally, economically, socially and politically. Exceptions to this are very few. Only Japan and South Korea seem to be the two major exceptions. In most other countries, the evidence of the *fact* is robust. Countries in North America and Western Europe have strong public higher education systems and some of them have no private higher education at all; and they are educationally advanced, economically prosperous, politically stable and socially cohesive. On the other hand, many countries in the Latin American region have long histories of private higher education, but they continue to remain as economically developing countries and are not socially, politically or even educationally advanced. This is also the case in the Philippines, which has a long history of private higher education, and in Indonesia, where more than 66 per cent of the students are enrolled in private higher education institutions; both remain poor developing countries. This may be partly because of the poor quality of higher education offered by the private institutions. In contrast, Singapore and Hong Kong have strong public higher education systems and they are relatively more advanced.

At the same time, it may be possible to argue that as governments in poor countries are not able to meet the demand for higher education, the private sector becomes dominant in those countries, while the governments in advanced countries can meet the demand on their own without relying on the private sector. It is, indeed, difficult to reveal the cause-and-effect relationship between the size of the private sector and development. Nevertheless, the fact remains

that countries with predominant private higher education systems have remained underdeveloped – economically, educationally and even socially and politically.

Interestingly, high enrollment in private education does not reflect significantly improved access to higher education either. Despite high enrollment in private higher education, above 66 per cent, the gross enrollment ratio in higher education in Indonesia is only 17 per cent and in the Philippines it is 28 per cent. With lower enrollment in private education (23 per cent), Malaysia could increase its gross enrollment ratio to 32 per cent, and Thailand, with 13 per cent enrollment in private education, has attained a higher enrollment ratio of 43 per cent. The gross enrollment ratio in India is only 12 per cent, though it also has a sizeable proportion of students in private institutions.

Table 5: Enrollments in Private Higher Education and Overall Gross Enrollment Ratio in Higher Education

	% Private	GER (2005)
Philippines	68	28
Indonesia	67	17
India	31	12*
Malaysia	23	32
Thailand	13	43

Source: PROPHE (2007a); UNESCO (2008) * GOI (2008)

While the relationships are not so simple, they do, nevertheless, suggest that there is no automatic positive relationship between private enrollments and overall gross enrollment ratios, and clearly, increase in enrollment in private education does not necessarily increase the overall rate of participation in higher education. After all, the private sector has rarely undertaken the role of providing massive access to higher education, or, of course, a role in any social reform (Kirp, 2003). In fact, as the private sector knows very well, the few advantages that the private sector can gain in higher education can be realised only if the size of the sector is kept small.

Stylised Fact # 6: While many attempts are being made to forge public-private partnerships in education, they often tend to end in favour of privatisation of education and diminution of the role of the government.

Realising the strong adverse effects of privatisation of higher education, it was often stated that private participation in education should be encouraged, but not necessarily privatisation. Some find private participation in education undesirable, but favour public-private partnership. In fact, "public-private partnership" has become a popular slogan nowadays. In the area of education, mobilising private sector for public education and public support for private education have not been altogether new forms, though they assume new dimensions nowadays (Patrinos and Sosale 2007). The government-supported private system of institutions of higher education – the private sector setting up institutions of higher education with its own initial capital investments and the state financing most of the current budget needs – is indeed an important example of public-private partnership. These institutions did serve an important purpose in the early decades after independence in India and until around the 1960s in Korea, the Philippines, Indonesia and many other countries, as the private sector came in with some considerations of philanthropy. But they also tended, as argued earlier, to become profit-seeking institutions. With the changing dynamics of political economy factors, involving the corrupt political class, the shady bureaucracy and the conniving business community in a strong nexus, the involvement of the private sector caused a severe degree of distortion in allocation of public resources, pocketing for themselves disproportionate levels of public budgets, leaving very small amounts for government-run schools and colleges. This is a phenomenon that Tilak (1994) has described as "private enrichment and public pauperization".

Current modes of public-private partnership that are being suggested also belong to this category of private enrichment at public expense. In the current thinking, direct subsidisation by the government in the form of grants-in-aid does not figure explicitly; concepts of indirect subsidies in the form of a host of tax concessions, subsidised land, and other resources, etc., are more common, as the explicitly stated goal is to promote private investment and private

participation. Provision of a liberal, huge grant by the government to private investors to set up educational institutions, and then leaving the institutions completely to the private investors is yet another emerging form of public-private partnership in education in developing countries like India. In addition, forging of university-industry links is also advocated essentially with a view to involve private sector in education issues. Encouragement of the private sector also involves issues relating to autonomy, specifically financial autonomy for these institutions to determine levels of fees and salaries, to control utilisation (or misuse) of funds, and, in short, to make profits – normal or exorbitant. In fact, public-private partnership is also interpreted to mean restricting the public sector so that space is created for the private sector! Eventually, one may end up with a situation where there is no space for the public sector at all, as in the famous fable of the Arab and the Camel.

As Katrina Tomasevski (2003) rightly observed, the public-private partnerships often turn out, essentially, to be *business deals* and not any meaningful and desirable types of partnerships. After all, the considerations of the state and those of the private sector are widely different and they conflict with each other (see Bok, 2003); and the interests of the private institutions may even conflict with not only public good aspects of education, but also national interests, as Table 6 shows.

Table 6: Conflicting Interests of the State and Private Sector in Higher Education and Research

	State	**Private**
Motivation	Service	Profit
Main Concern	Knowledge	Skills
Area of interests	Generic	Specific
Duration of interest	Long term	Short term
Team effort	Rarely	Always
Research	Publish/ public good	Strict confidential/ private good
Time Schedule	Flexible	Rigid
Nature of Universities	Diversity	Uniformity

Moreover, the partnership is between unequals and the forces of the markets are so strong that public institutions become vulnerable and they give in to the private interests at the cost of academic and other public interests. In the same way, the competition, if any, is also between unequals, and public institutions are at a disadvantage. Gradually, the public institutions will feel compelled to become "entrepreneurial universities" and "viable commercial" institutions (Guinn, 2002; Raines and Leathers, 2003; Gittleman, 2004) and eventually cease to be academic organisations with intellectual interests of creation and dissemination of knowledge.

Stylised Fact # 7: The ability of the government in regulating markets and in ensuring that private institutions provide quality education is extremely limited in developing countries.

Those who favour private education also argue for strong regulatory mechanisms, admitting that without regulation, private sector can create chaos in the higher education markets. In fact, many argue for a drastic change in the role of the government – from governance to regulatory governance (e.g., Bortolotti and Perotti, 2007). In most developing countries the governments' ability to regulate, monitor and control the private sector, to ensure quality, to ensure strict adherence to norms and procedures, to check mal practices etc., is extremely limited. India, for example, has a good number of regulatory bodies, including the University Grants Commission (UGC) for general higher education, the All-India Council for Technical Education (AICTE) for technical (essentially management and engineering) education, the Medical Council of India (MCI) for medical education, the Bar Council of India for legal education, etc., and also an accreditation council, the National Assessment and Accreditation Council (NAAC) for assessment and accreditation of various courses of study and the institutions of higher education. These are in addition to several government bodies, such as State Councils of Higher Education and ministries of higher education in the state and central governments. But it is widely held that few of these statutory and other bodies have been effective in regulating the quality and standards in higher education institutions in general and in private institutions in particular. They are not even able to check the emergence of 'fake' institutions and their cheating

the gullible public by offering unrecognised degrees and diplomas. These bodies are also not able to ensure proper adherence of the private institutions to officially prescribed norms regarding fees, admissions, teacher recruitment, syllabi, etc. In a sense, the private education promoters are stronger than the state, and the governments' ability to monitor private higher education is severely constrained. It is constrained by (a) sociopolitical factors, (b) the strong forces of the monopolistic and oligopolistic private education sector and (c) inherent inabilities of the regulatory organisations. This is also evident in the numerous court cases involving issues relating to private education. After all, that a large number of private universities in an Indian state were found to be illegal and hence were to be closed down recently, does not owe to any government action, but to civil (in fact, individual) initiative and judicial intervention. Hence, the argument that the private sector needs to be encouraged in the education sector, but with a strong regulatory mechanism, does not seem to be tenable, particularly in big countries with soft governments and democracies. Countries with strong governments, like Singapore, Thailand, South Korea and Japan, may be able to manage to some extent. Some of these countries may have the advantage of size and have different political systems. Even China is found to be unable to regulate the growth and quality of private universities effectively.

Concluding Observations

An attempt has been made in this paper to describe some of the important trends in private higher education in Asia as a set of stylised facts. They may look like sweeping generalisations. It is well known that stylised facts are defined as "observations that have been made in so many contexts that they are widely understood to be empirical truths, to which theories must fit".[14] So, they are, of course, sweeping statements, with some important exceptions. In fact, numerous caveats may have to be attached to the above facts. Nevertheless, I believe, they are generally true.

Public policies towards private education are in a confusing state in many countries. Policies are formulated either out of compulsion, or, rarely, out of conviction. Some policies are strongly supportive of

[14] *Online Glossary of Research Economics.*

the public sector and are anti-private; some are pro-private; and some intend to regulate the growth of the private sector. Many policies can be described as *laissez-faire* policies, which, in effect, are pro-private. In fact, the governments in quite a few countries seem to be terribly confused regarding the role of private sector in education, the dangers involved therein and choosing between state and markets[15] (Wolf, 1993; Tilak, 2005b). As Levy (2006) argues, it is more "the lack of vision" on the part of the government than "a concrete vision" that makes the public policy on private higher education in many countries. This very lack of vision has created a big policy vacuum relating to private higher education in some of the Asian countries. But even when there is no clear policy on private education, cuts in public investment in education and an overall policy neglect of higher education by the government also contribute to the growth of private education; and growth of private education in turn justifies increase in public apathy. Thus, public apathy and growth of private education are mutually related in a cyclic way. Absence of clear and coherent policy statements have contributed to an erratic and unbridled growth of various types of private higher education in many countries. Thus, the growth in the private sector is due to changing domestic conditions, lack of government resources, strong market forces, weak government mechanisms and the absence of clear public policies. The international environment – the introduction of neo-liberal and adjustment policies and the emergence of WTO/GATS in the area of higher education – also contributes to the rapid growth.

Privatisation of higher education has been the most rapidly growing phenomenon in many countries in Asia, much to the detriment of society. The growth of the kind being experienced in many of the developing countries of Asia results in loss of social and economic equity, increase in regional disparities, erosion in quality, loss of important academic disciplines (in favour of marketable disciplines) of study, change in attitudes, erosion in national, social and educational values, public pauperisation and private enrichment, crowding-out of the public sector, loss of the public-good nature of higher education, and balanced development of higher education in terms of various disciplines of study and research (Tilak, 1999). In

[15] Wolf (1993) considers both the state and markets as imperfect alternatives.

short, one notices the Gresham's law of money operating in the education sector as well.

Belfield and Levin (2002) suggested evaluation of private systems in terms of (a) freedom of choice to the students, (b) efficiency in resource use and (c) equity or fairness in access to educational opportunities, resources and outcomes. Evidence shows that in terms of not only these three criteria, but with respect to others as well, private systems in countries are not faring satisfactorily.

Why does not the private sector perform well in higher education, while it does with respect to many manufacturing goods and services? The reasons lie in the very special characteristic features of higher education, which limit the relevance of principles of neo-classical economics and markets to education.[16]

Education is not just a non-profit enterprise. It is a public good, producing a wide variety and a magnitude of externalities. The social benefits of having a large higher educated population go beyond the increase in GNP. The externalities include improvement in health, reduction in population growth, reduction in poverty, improvement in income distribution, reduction in crime, rapid adoption of new technologies, strengthening of democracy, ensuring of civil liberties, and even *dynamic* externalities, which are necessary for technical progress and economic growth, and to arrest diminishing marginal returns. Realisation of these positive externalities necessitates strong public higher education systems. Furthermore, when viewing democracy, reduction of crime, economic growth, redistribution of resources, etc., as other public goods, it is important to note that higher education helps in the fulfillment of these other public goods. Secondly, education is a merit good, social benefits from which are so desirable that governments have to essentially limit consumer choice to the public sector to ensure that such goods are appropriately provided. Thirdly, public provision of higher education is advocated on the grounds of providing equality of opportunity, which is an important function of higher education. Fourthly, higher education institutions have multiple objectives and they are not just economic.

[16] See Neave (2004) for a discussion on how economics, pragmatism and ideology meshed and influenced higher education policy in many parts of the world, historically and contemporarily.

They also produce multiple outputs, some tangible and many not. Further, a strong argument accepted by many in support of public provision of education is the existence of imperfections in capital markets and asymmetric information, including imperfect quality information (Dill and Soo, 2004; Stiglitz, 2000). These basic characteristic features of higher education stress the importance of the public sector in providing education, and at the same time explain why markets do not work in the case of higher education. Public systems are also associated with some failures; but market failures can be much costlier than government failures in higher education.

To conclude, the private sector has a very limited role in providing good higher education that is socially relevant, that contributes to national development, and that produces public goods. Hence, it has to be realised that despite economic constraints, the state has no choice but to assume complete or near complete responsibility of higher education, and that private sector can, at best, perform only a peripheral supporting role. After all, it has been widely noted for decades that "public education is the foundation of the prosperity of the nations" (Cubas, 1893).

Appendix

Table A.1: Different Data Sources and Different Estimates on Enrolments in Private Higher Education Institutions in Asia

	UIS (Total Tertiary)		PROPHE (Higher)	
	Year	**%**	**Year**	**%**
India	2002-03	0.6	2005-06	30.7
Indonesia	2002-03	61.0	2001	71.4
Malaysia	2002	31.8	2000	39.1
Philippines	2002-03	66.4	1999	75.0
Thailand	2003-04	18.5	2003	13.7

Source: UIS (2007) and PROPHE (2007a)

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PRIVATE UNIVERSITY INITIATIVES IN TURKEY: THE BILKENT EXPERIENCE

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1. Introduction

How private are private universities in Turkey? The objective here is to address this question by focusing on specific issues using narrow but concrete examples. This will be followed by a case study on Bilkent University to examine what one such university attempted to achieve. First point: the current legal system in Turkey does not allow private universities like the ones in the USA. It does permit, however, something somewhat similar, called foundation universities.

By the end of 2007, Turkey had a population of over 70 million, more than half being no older than the age of 28. To provide higher education for this population, the country had 85 state universities and 30 foundation universities. Foundation universities of Turkey are not as private as those of the USA. Legally, they are not corporations. Rather, the Turkish legal system states that foundation universities are "public legal entities". Each one of them is established by an act of Parliament. Articles 130 and 131 of the Turkish Constitution require that only foundations establish such universities and permit these institutions to have certain administrative and financial freedoms subject to specific conditions: These universities are to be non-profit institutions. They are not to fall below the minimum academic and security standards of the state. They are annually inspected and audited by YÖK, Yükseköğrenim Kurulu (in English, the Council of Higher Education of Turkey). In addition, the Ministry of Finance, and the Ministry of Education perform their evaluations on these institutions. Foundation universities as well as state universities in Turkey vary in terms of how they are perceived by the public in regard to their educational and research performances.

[1] I benefited from the comments of Özalp Özer on an earlier version of this paper. Any remaining errors are mine.

Privatization is a term that can be used in different contexts for different meanings. Consider a country in which the laws only allowed for state universities. Suppose that the prohibition is later lifted allowing freedom for private institutions, foundations or people to establish non-profit private universities. Allowing for such private universities is the topic of this presentation and is different than modifying existing state universities as described by Priest et al. (2006)[2].

Relationships between governments and higher education have been studied in diverse contexts for a long time (e.g., Neave and Van Vught, 1994, and Huisman, Maassen and Neave, 2001). The following section is not a comprehensive study in that sense, but rather an illustration of some of the forces in action, and their ensuing process of balance.

2. Admission to Undergraduate Programs

By being private, a university may be expected to have some latitude in determining the way it admits its students. For example, in the USA, Dartmouth may use an admission system that is considerably different than that of Bennington College. Not so in Turkey.

2.1 The ÖSYM System

Entrance to the undergraduate programs in the country, for state as well as foundation universities, is administered by a state organization called ÖSYM. The letters stand for the Turkish equivalent of "Student Selection and Placement Center". The entry of a high school graduate is not simply to a specific university, but also to one of its specific departments. The students in most universities thus have to choose their departments, i.e., majors (areas of study), at the time of entry to their universities.

Each year, the state and foundation universities inform ÖSYM of how many students they can admit to each of their undergraduate departments (majors). Later, in early summer, ÖSYM conducts its

[2] Priest et al. (2006) define privatization in public higher education as "the process of transforming low tuition institutions that are largely dependent on state funding to provide mass enrollment opportunities at low prices into institutions dependent on tuition revenues and other types of earned income as central sources of operating revenue".

university entrance test. More than 1.5 million high school graduates take this state-administered test. ÖSYM then matches each student's score with his/her personal ranking of preferred universities and departments. Students with the highest scores enter the universities and departments they wish. The ones with lower scores enter their second, third or lower choices. Students with even lower scores do not enter anywhere at all. Thus, it is not the universities that choose their students, but rather the opposite. The students decide where to go by their ÖSYM scores. They enter their most preferred university department among those that have not yet been filled by other students with higher scores.

Compared to foundation universities, state universities are almost free. Annual tuition and fees of state universities amount to several hundred dollars, while students admitted to foundation universities without scholarship have to pay amounts that can be more than 20-fold. Foundation universities wishing to provide 4- or 5-year scholarships to entering students declare, prior to the entrance test, their quotas for each of their departments, and get such scholarship distributions settled at the ÖSYM level.

For example, if a student interested in studying industrial engineering-related topics in the city of Istanbul submits her ranking as:

1st choice: Boğaziçi University, Industrial Engineering;
2nd choice: Koç University, Industrial Engineering, with scholarship;
3rd choice: Istanbul Technical University, Industrial Engineering;
4th choice: Koç University Industrial Engineering, without scholarship;
5th choice: Boğaziçi University, Department of Mathematics,

then her fourth and fifth rankings would imply that she is willing to pay about $19,000 a year to Koç's Industrial Engineering Department rather than attend Boğaziçi's almost-free mathematics. Furthermore, in this hypothetical example, her top three choices in the list imply that when industrial engineering departments of all three universities are not discriminated by tuition fees, she prefers first Boğaziçi, then Koç, and after them, Istanbul Technical University.

As mentioned above, more than 1.5 million students take the university entrance and placement test each year. Consider the top 100 students with the highest quantitative score. These students can enroll in the university and department of their first choice. The

universities that these top 100 students have chosen over the last five years (2003–2007) are listed in Table 1.

Table 1: The universities chosen by the top 100 students in the "Quantitative Segment of the Test" for 2003–2007[3]

University	State versus Foundation	Number of Students
Boğaziçi	State	147
Bilkent	Foundation	140
METU	State	87
Hacettepe	State	84
Sabancı	Foundation	19
Fatih	Foundation	8
Istanbul	State	8
Koç	Foundation	3
Çukurova	State	1
Ege	State	1
Gülhane Tıp	State	1
Istanbul Tech	State	1
TOTAL		500

Table 1 shows that from 2003 to 2007, 170 of the 500, i.e., 34% of the top students chose foundation universities. This percentage is not far off from the percentage of foundation universities to total number of universities in the country. From this perspective, one may venture to say that foundation universities do not seem to be any less popular than state universities in Turkey. Comparisons can also be made with respect to other measures, such as size. Most foundation universities are smaller in size compared to state universities. For example, in 2005, the total number of students enrolled in all foundation universities in Turkey was 95,782. In the same year, the corresponding number for state universities was 2,055,973 students.

[3] Other test categories, such as the "Verbal Segment of the Test", which is used in placing students into departments such as archeology and Turkish literature would produce different university rankings.

Since most foundation universities provide scholarships to the top 100 students, preferences in Table 1 are made under comparable affordability conditions. However, had these students not been offered scholarships from foundation universities, then many more would have had to choose the almost-free state universities.

2.2 *Choice of Majors at the Time of Entry to the Universities*

The number of students taking the university entrance test far exceeds the number of places available in the Turkish universities. Due to the tight competition, a large number of applicants try to better prepare for this test by spending considerable time and money at private test preparation centers. Many of these centers advertise their performance by announcing how many of their customers have been placed in the most difficult university slots. Such advertising creates an incentive for preparation centers to advise their best students to rank the most difficult-to-enter majors as their first choice, even if a student might have had a different area of study in mind. Thus, low-demand areas of study have a difficult time increasing their intake of high-scoring students.

One indicator of the most popular majors is the choices made by the top-scoring students. Taking again the 100 students with the highest quantitative score for the years 2003–2007, the areas of study they chose are displayed in Table 2.

2.3 *Perceptions of Institutional Freedom versus Public Fairness*

If a university is private, should it have to conform to the state system for university admission and placement? Compare the requirement of choosing one's major at the time of entrance to university, to the American practice of often doing it at the end of the sophomore year. At Bilkent University, we have allowed inter-departmental transfers to achieve flexibility in this area. Sabancı University in Istanbul went one step further and declared that students admitted to their Faculties of Engineering and Natural Sciences shall only have to choose their majors in their second year. This is the reason why Table 2 below has 19 students classified in the category of "Engr & Natrl Sci (i.e. Engineering and Natural Sciences) with major to be declared later", which corresponds to the 19 students of Sabancı University in Table 1. This is an example of a foundation university challenging the

standard practice of the powerful YÖK (Council of Higher Education of Turkey) and its affiliated ÖSYM, and getting away with it.

Table 2: Majors chosen by the 100 students with highest quantitative scores, 2003–2007

Major	Number of Students
Electrical Engineering	269
Medicine	94
Computer Sci/Engr	52
Industrial Engineering	52
Engr & Natrl Sci with major to be declared later	19
Physics	3
Molecular Bio & Genetics	2
Economics	2
Mathematics	2
Mechanical Engineering	2
Industrial Design	1
Pharmaceutical Sciences	1
Architecture	1
TOTAL	500

Does this mean that foundation universities have complete freedom to depart from the ÖSYM system? The answer at the present time is not a complete yes, but exceptions exist. A foundation university in Istanbul wished to give preference to the students graduating from a specific private high school. They tried to achieve this by charging lower tuition fees from students admitted from this high school. YÖK, which annually inspects the finances of every university, observed the practice and intervened. The inspectors declared that the university had no right to use its funds to subsidize students just because they came from a specific private school. In response, the founders of that university decided to provide scholarships to the same students via one of their foundations, which, being an institution separate from the university, was not under the

jurisdiction of YÖK. Hence, the high school continues to receive preferential treatment.

The intervention of YÖK in this case may be explained in terms of an attempt to provide equal opportunity to graduates of other high schools. Should YÖK bring the case to court, it could find some support in the Turkish judiciary, which is known to lean towards fairness and equality based on headcount rather than qualifications. Nevertheless, YÖK has chosen not to do so at present.

The two examples stated above show that perhaps a certain degree of flexibility in the ÖSYM system ought to be considered[4]. They also indirectly show (by absence of any larger deviations from YÖK-ÖSYM standards) that, to a large extent, the terrain is dominated by the centralized system.

The concept of equal opportunity and the desire to assist people with lower income prevail in the country, especially within the judicial system. This may be one of the reasons why the ÖSYM system has remained in operation for decades. Challengers of the system are busy preparing new alternatives that can be justified in terms of benefits to the overall student body (rather than any new freedoms it may provide to some universities). The chances of adoption of such proposals are likely to depend on their degree of fairness and perceived overall educational benefit to the large body of Turkish high school students.

Belfield and Levin (2003, 2005) define governance of education as "overall authorization for operation of schools and responsibility for schooling decisions as vested in the domains of private or public control". They point out that even in private institutions, governance is jointly carried out by both public and private authorities. The benefits of privatization – such as freedom of choice, allowing alternative modes of organization and new opportunities for innovation, and efficient use of resources – need to be balanced against dangers such as segregating the educational system by income, religion, race or ethnicity. Turkey's experience in private education is older than post-communist Europe, which is in search of legitimacy (Slantcheva and Levy, 2007). While the state's control

[4] An existing exception to the rule enables Galatasaray University to provide some flexibility to a small number of graduates of certain French language high schools.

establishes limits to the freedom of foundation universities, it also provides them legitimacy. In the course of time, the balances between state control, institutional freedom, fairness and equity and performance may be readjusted as we learn from experience.

3. Bilkent: The Oldest Foundation University in Turkey

The oldest foundation university in Turkey is Bilkent[5]. It admitted its first students in 1986. It was followed by Koç in 1992, and the others followed shortly thereafter.

Bilkent University was legally founded on October 20, 1984, by my father, İhsan Doğramacı, through a joint resolution of his foundations. The establishment of this university was later approved by an act of Parliament. The aim was to create a center of excellence in higher education and research. The name "Bilkent" exemplifies the founder's aim, since it is a compound of "bilim kenti", Turkish for "city of science and knowledge."

It had long been an objective of the founder to establish a private university distinguished by its high quality of education and research. The founder, himself an academic by profession, had earlier contributed to the establishment of numerous public institutions of higher learning and served as rector of Ankara University, chairman of the Board of Trustees of the Middle East Technical University, founder and first rector of Hacettepe University, as well as the founding president of YÖK.

The establishment of Hacettepe University in the 1960s involved a radical departure from conventional medical education in Turkey. In those years, the Turkish constitution, modeled along the lines of those in central Europe, prohibited private universities. As a state university, Hacettepe flourished due to its novel structure, permitted by a special law, which the founder convinced the members of Parliament to adopt, and also due to the support of the endowments created by the founder. Hacettepe remains, to date, a state university with a very prominent medical school. For example, of the 94 top

[5] There was a much older and very successful private university, Robert College, established in the 19th century by Americans. It was nationalized in the 1970s and converted into a state university, now called Boğaziçi University.

students in Table 2 who chose to study medicine in Turkey, 84 of them enrolled in Hacettepe.

Preparations for Bilkent University began as early as 1967, with the purchase of a large tract of land to the west of Ankara. In the late 1970s and early 1980s, construction began on the site. In the early 1980s, İhsan Doğramacı convinced the lawmakers that articles 130 and 131 of the Constitution that addressed higher education should also include provisions permitting the establishment of foundation universities. Shortly thereafter he founded Bilkent.

The endowment of the university was donated by its founder and consisted of large tracts of land and full ownership of more than forty companies. In the USA, university endowments include corporate stocks, but rarely of a whole company. Compared to the USA, Turkey's stock market was thin and more volatile. A young university needed a steady flow of income, especially in view of the heavy capital expenditures involved in building up the campus and its facilities. Owning whole companies allowed the university to demand and obtain support even during the low ebbs of business cycles. Some of the endowment companies later formed partnerships with other (i.e., outsider) regular companies and grew considerably. Thus, for example, the university today is the largest shareholder of TAV, a company that builds and operates major airports in Turkey (in Istanbul, Ankara and Izmir) and elsewhere. Other companies owned by Bilkent's endowment operate in diverse sectors, including furniture manufacturing, manufacturing of various construction materials, construction companies, paper companies, retail chains and shopping malls.

From the time of its founding, the university structure provided for student union representatives to be voting members of the administrative committees of various schools and of the University Senate. Beginning in the second year of instruction, the practice of student evaluation of courses and instructors, at the time not a common practice in Turkey, was instituted.

Over the last 20 years in Bilkent, income from tuition fees have accounted to approximately half of the total university expenditures. For example, measured in US dollars, in the calendar year of 2007, annual cash inflow (and also total expenditures) amounted to $202 million. Income from tuition fees for the same period was $96 million,

which amounted to 47.5% of the total. Research projects and state grants and supports added up to about 18% of the annual income. Approximately 30% of the annual income came from the university endowments. The remaining 4.5% was income from dormitories, other campus operations and small external donations.

Over the last decade, Bilkent's annual library expenditures for new books and journals exceeded $3 million/year. While this value is modest in North American standards, it is the largest in Turkey. Turkish state university libraries are not open to the general public. Bilkent Library is open to the public 7 days a week, 362 days a year.

The medium of instruction in Bilkent is English. Compared to other research-oriented foundation universities in Turkey, Bilkent has a large student body: about 12,000 students, of which slightly more than 3,000 are on full university scholarship (i.e., pay no tuition fees, and also receive some stipend). For example, during the 2005-2006 academic year, the total enrollment in two other research-oriented foundation universities, namely, Koç and Sabancı Universities, was 3,270 and 2,847 respectively. Koç and Sabancı families own massive business empires and are well known for their large-scale and diverse philanthropic activities through their family foundations. Universities such as these, by their mere existence, provide support for one another, because they have self-interest in defending a concept that is novel to the country – namely, the raison d'etre for private non-profit research universities.

At Bilkent, about 30% of the teaching staff are from countries other than Turkey. Those from Canada, the UK and the USA add up to 206. The rest come from 40 other countries. Of all the assistant professors, associate professors and full professors in Bilkent, about 75% are reverse brain drain. They were mostly in North America or Western Europe when they received a Bilkent job offer. Some of the remaining 25%, recruited within Turkey, have stated that they might have left for positions abroad, had the Bilkent option not been available.

4. Diversity of Activities in Bilkent

Why would so many people in North America and Europe choose to come to Ankara and work in Bilkent? The answer may lie in the kind of things they hope to achieve on the Bilkent platform.

In 1986, the year Bilkent admitted its first students, I became a member of the board of trustees of this university. I traveled to Turkey for each meeting, while living and working in the USA. In the following three years, it became clear to me that making recommendations at board meetings was not enough to get things done on the ground. The Bilkent platform, as established by its founder, was a unique means of introducing new facets to education in that part of the world. But this could only be achieved by being there, i.e., not via remote control. Hence, I moved to Ankara. The attraction was strong not only to the administrative cadres, but even more so to a large number of educators, researchers and artists coming to Bilkent to achieve their scholarly or artistic aspirations. In this part of the world, where breakthroughs in education are urgently needed, the Bilkent platform provided a new and unusual environment for self-actualization and service.

The university provided its faculty members furnished apartments on campus for free, as well as reasonable salaries to support their families. The research and educational facilities and support for the faculty members in carrying out their scholarly (or artistic) ambitions were coupled with the presence of good students and competent colleagues.

Bilkent recognized that the reverse brain drain from North America and Western Europe could be facilitated if the children of the newcomers could attend a pre-K–12 school that met internationally recognized high standards. The local regulations, however, prevented imposition of international standards to national schools. Bilkent, on the other hand, was founded to initiate new approaches in the country. The legal platform on which the university rested, and the financial resources available, allowed the university to initiate a new kind of pre-kindergarten to 12th grade school, beyond the existing framework (limits) of the National Ministry of Education. This was achieved by declaring the school as an integral part of the university, and by subtly burying it under the blanket of the institution's academic freedom. This Bilkent University Preparatory School (BUPS) became accredited not only by the local authorities but also by the New England Association of Schools and Colleges, and by the European Council of International Schools. With its International Baccalaureate (IB) and IGCSE programs, it has served as a magnet for

attracting families of scholars from abroad. Providing the incoming professors with an environment that strives to meet their family needs allows the professors themselves to fully devote their energies to their educational and creative endeavors.

There are two leading research groups in nanotechnology in Turkey. They compete with each other, yet both grew and reside in Bilkent. The Department of Physics has 17 faculty members. Appendix A at the end of this paper provides an incomplete list of their publications in 2007, illustrating their research interests and intensity. Being a small university, instead of addressing a large number of fields, Bilkent's strategy has been to address narrower areas, but with the intention of hitting deep. This can be seen in Appendix A: The research of our physicists does not focus on nuclear power or high-energy physics. But it is world class in certain areas of nanotechnology and materials.

Concrete measures of international recognition have been integrated into the performance evaluation system of the university. Departments of Bilkent's School of Engineering routinely get evaluated by ABET, the agency involved in accreditation of engineering schools in the USA. Bilkent graduates wishing to pursue academic careers often receive offers to join various universities (see Appendix B). Bilkent's Business School is the only AACSB-accredited school in Turkey. Some of the recent CDs of Bilkent Symphony Orchestra that were released through international labels are listed in Table 3 below.

At least 20 of the students taking the national university entrance test each year choose Bilkent's Electrical Engineering Department. After they graduate, many of this crème de la crème group are likely to become leaders in society, whether in academia, industry or government. They are likely to be involved in matters far beyond just engineering. In the1990s, their curriculum at Bilkent was revised to include compulsory humanity courses conducted in small classes.

Table 3: Recent CDs of Bilkent Symphony Orchestra on international labels

Bilkent Symphony Orchestra, Emil Tabakov, conductor Jean Philippe Collard, piano P. I. Tchaikovsky / Piano Concerto No.1 in B flat minor, Op.23 P. Sancan / Piano Concerto Label: **EMI**
Bilkent Symphony Orchestra, Alain Paris, conductor İdil Biret, piano J. Massenet / Concerto for Piano C. Franck / Symphonic Variations C. Franck / "Les Djinns" Symphonic Poem Label: **Alpha**
Bilkent Symphony Orchestra, Emil Tabakov, conductor Patrick Gallois, flute Philippe Bernold, flute Jean-Philippe Collard, piano E. Tabakov / Concerto for Two Flutes E. Tabakov / Piano Concerto Label: **Naxos**

Table 4 below lists the curriculum for the sophomore year of the Electrical Engineering Department.

Table 4: Electrical and Electronics Engr Dept, 2nd Year Curriculum

Autumn Semester	
MATH 225	Linear Algebra and Differential Equations
EEE 211	Analog Electronics
HUM 111	**Cultures, Civilizations and Ideas I**
TURK 101	Turkish I
Technical Electives (2)	
Spring Semester	
MATH 206	Complex Calculus and Transform Techniques
EEE 202	Circuit Theory
EEE 212	Microprocessors

HUM 112	**Cultures, Civilizations and Ideas II**
TURK 102	Turkish II
Technical Elective (1)	
Class sizes in HUM 111 &HUM 112: 15 to 22 students.	

The required readings in these small classes include English translations of the primary texts, as listed in Table 5 below.

Table 5: Main textbooks for the courses HUM 111 & HUM 112

Gilgamesh: A New English Version, trans. Stephen Mitchell (New York: Free Press, 2006).
Strachey, James. *Sigmund Freud— Civilization and Its Discontents* (New York: Norton, 1961).
Homer. *The Iliad*, trans. Robert Fagles (New York: Penguin, 1990).
Sophocles. *Theban Plays*, trans. E. F. Watling (New York: Penguin, 1974).
Plato. *Republic*, trans. G. M. A. Grube (Indianapolis, IN: Hackett, 1992).
Machiavelli, Niccolo. *The Prince* (New York: Penguin, 2003).
Shakespeare, William. *The Tempest* (New York: Pelican) or *Macbeth* (Oxford) or *Hamlet* (Oxford).
Descartes, René. *Discourse on Method: Meditations on the First Philosophy* (New York: Everyman).
Woolf, Virginia. *A Room of One's Own* (New York: Harcourt).
Nietzsche, *On the Genealogy of Morals* (New York: Vintage, 1989).

These two courses are required for all departments of the engineering school. The importance that the university places on an encompassing education is reflected in the diversity and qualifications of the teaching staff that is devoted primarily for HUM 111 and 112, as shown in Table 6.

Table 6: Faculty Members Teaching HUM 111 and HUM 112

* **David de Kanter Arndt**. BA Yale Univ.; PhD in Comparative Literature, UC Irvine.
* **Louise Barry**. BA (hons) Trinity College Dublin; DEA, Univ. of Lille III, France; PhD in French Literature, Emory Univ.
* **Gabriel Noah Brahm Jr**. BA in English, UCLA; Teaching Certificate in Rhetoric, San Francisco State Univ.; MA in American Literature; PhD in Literature and Cultural Studies, UC Santa Cruz.
* **Duncan Chesney**. BA Columbia Univ.; M.Phil. Cambridge Univ.; PhD, Yale.
* **Julie Chung In Park**. BA; PhD in Comparative Literature, UC Irvine.
* **Costantino Costantini**. PhD Emory Univ. Undergraduate degree Univ. Bari.
* **Daren Ivan Hodson**. PhD in Comparative Literature, Univ. of Utah.
* **Thomas Kelso**. BA in Italian and Anthropology, Univ. Virgina; MA Univ. Texas; PhD in Comparative Literature, Univ. of Pennsylvania.
* **Martina Kolb**. PhD & MPhil. in Comparative Literature, Yale Univ.; MA Univ. of Oregon; Graduate degree in Philology and undergraduate degree, Tübingen Univ.
* **Mustafa S. Nakeeb**. BA Northwestern Univ., PhD in Philosophy, SUNY Buffalo.
* **Andrea Rehberg**. BA (hons) in Humanities, Univ. of North London; MA in Continental Philosophy, Univ. of Essex; PhD in Philosophy, Univ. of Warwick.

As mentioned above, Bilkent's strategy has been to concentrate on a limited number of fields, so that greater depths may be achieved in each. Nevertheless, the university also tries to maintain diversity to attain a wider perspective. This is reflected in the teaching staff of Bilkent's small History Department, as shown in Tables 7 and 8 below.

Table 7: Nationalities of faculty members of Bilkent's History Dept.

Turkey	Bulgaria	Greece	Britain	USA	Iran
M. Kalpakli	E. Radushev	E. Kermeli	C. Leighton	T. Roberts	A. Miandji
O. Ozel			A. Thornton	E. P. Cohn	
O. Ergenc			D. Thornton		
G. Buken			P. Latimer		
K. Emoroglu					
H. Inalcik *(Prof Inalcik is recipient of honorary doctorates from Univ. of Bucharest, Univ. of Sofia, Athens Univ., Hebrew Univ. of Jerusalem, Ankara Univ., and more)*					

Table 8: Sample publications of members of the History Dept.

Inalcik, Halil and D. Quatert, *An Economic and Social History of the Ottoman Empire*, Cambridge University Press, 1994.
M. Kalpakli and W. G. Andrews, *The Age of Beloveds: Love and the Beloved in Early Modern Ottoman Turkish and European Literature, Culture, and Society*, Duke University Press, 2005.
E. Kermeli, "The Confiscation and Repossession of Monastic Properties in Mount Athos and Patmos Monasteries, 1568–1570", *Bulgarian Historical Review* vol. 3, p. 39-53 (2000).
P. Latimer, "Estate Management and Inflation: The Honour of Gloucester, 1183—1263", *Albion*, 34:2 (2002), 187–212.
E. P. Kohn, *This Kindred People: Canadian-American Relations and the Anglo-Saxon Idea, 1895–1903*, McGill-Queen's University Press, 2004.

5. Extension Beyond the Conventional Borders of the University

What are the basic root causes that drive people to devote considerable amounts of their wealth, time, or efforts for the sake of improvements in higher education? Whatever they are, would they not also cause some of the same people to consider devoting their resources to the improvement of secondary or primary education? The answer is likely to be affirmative, especially in environments where significant numbers of students admitted to universities turn out to be not well prepared.

Our motivation in Bilkent to address pre-university education in the eastern regions of the country began to take shape in the late 1990s. If one could build and operate exemplary schools that would strive to meet international standards, then others might also follow, and even the state schools might be positively stimulated from the wake-up call.

The eastern regions of Turkey are mostly low in income. Private schools that serve the middle class and the wealthy families of central and western Turkey have no market in the east. Still, throwing out money alone does not solve the problem. First, one needs to train good teachers who might consider serving in eastern Turkey. Bringing in good international teachers to the Bilkent school (BUPS) in Ankara was possible. But extending this flow to eastern Turkey did not seem feasible. Thus, in 2000, we started a two-year master's program at Bilkent for teacher training. All the students admitted to the program received full tuition scholarship from Bilkent. Finding the faculty to teach in this program was a challenge in itself. Unfortunately, many of the professors serving in faculties of education in the country lacked teaching experience in outstanding secondary or primary schools. To prepare the leading teachers of the future involved recruiting faculty members who had served as schoolteachers. About half of the names in Table 9 below have backgrounds with considerable international teaching and administrative experience in leading schools.

Table 9: Faculty members for the Teacher Training Program

- H. NECMİ AKŞİT, PhD, Educational Sciences, Middle East Technical University, 1998.
- C. ALACACI, EdD, Mathematics Education, 1998, University of Pittsburgh. Teacher education.
- ARMAĞAN ATEŞKAN, MA, Biology Teacher Education, Bilkent University, 2002.
- GARY CRIPPIN, BA, Dartmouth; PhD, History, UCLA, 1975.
- LIVINGSTON T. MERCHANT, PhD, International Relations, Harvard University, 1969; PhD,, Asian History, Brown University, 1983.

- RASİM ÖZYÜREK, PhD, Turkish Language Teaching, Baku State University, 1998; Turkish language teaching methods.
- MARGARET SANDS, PhD, Science Education, University of Nottingham, 1983.
- ENGİN SEZER, PhD, Linguistics, Harvard University, 1991.
- ERIC WILLIAMS, PhD, University of Illinois, 1996
- DARYL YORK, MA, English Language Teaching, Aston University, 1997. School management, curriculum development, discourse analysis.

The first year of this master's program for teacher training contains five regular courses each semester. In addition, during the autumn semester, students spend one day a week at Bilkent's high school gaining experience in internationally accredited practices in education. The spring semester of the first year is similar, except that they attend other leading Turkish schools to get a wider view. With the generous support of the Fulbright Program of the US Department of State, in their second year they spend two months in Midwest USA taking courses and teaching practice classes in the schools of Iowa.

Bilkent's first high school in eastern Anatolia was started in 2007 in the city of Erzurum (Boland, 2007). The curriculum, teaching methods and external exams are structured according to the model of Bilkent's school (BUPS) in Ankara. However, in Erzurum, more than 80% of the students receive full Bilkent scholarships. When completed, the school will have 1,000 students from kindergarten to 12th grade.

In order to recruit good teachers to Erzurum, incentives include the following: Salary is reasonably high. Teachers are provided furnished apartments on campus, free of charge. The students are exceptionally good because they are selected from a large number of applicants, thanks to Bilkent scholarships. The curriculum, with IB and IGCSE, is world class and provides professional satisfaction. In addition, a Bilkent Graduate School of Education exists on the campus, where most teachers attend evening classes towards a doctoral degree (again on Bilkent scholarship). Using the summer semesters as well, teachers may be able to get their doctorates in six years. This can open up new horizons in their careers towards becoming university professors, and also inject a new breed of professors into the country's faculties of education: professors with solid teaching experience in top schools. Close to half of the teachers

recruited were graduates of Bilkent's teacher training program. The others were teachers from well-known schools of the country.

This initiative is designed to introduce new colors to eastern Anatolia. For example, the school, with its music hall and concert grand Steinway piano, has brought classical music to this remote city.

After making some headway in Erzurum, the project is to be replicated in three other provinces of the region: Malatya, Şanlıufra, and Van.

Figure 1. Erzurum School Campus Plan

Figure 2. **Back view of the first classroom building in Erzurum**
Construction started April 2007, completed September 2007
(Until April ground is frozen in Erzurum, delaying start of the construction.
Owning a construction company helps complete the building in time)
This building also has a fully equipped videoconference classroom that conducts joint classes with Bilkent-Ankara, and Bilkent-New York

Figure 3. Faculty Housing for Teachers of the School in Erzurum:
Construction started & completed: summer 2007
All teachers are provided with furnished apartments on campus, free of charge

Figure 4. Bilkent Symphony Orchestra Serving Erzurum with an all Mozart Concert at Bilkent High School Music Hall

6. Final Remarks

State universities are not all alike in Turkey. They vary considerably from one another. The same applies to foundation universities. Indeed, the differences between the leading universities of the two groups may be smaller than the difference between the top and the bottom ones within each group.

A thorough understanding of the terrain requires investigation of different ways of organization for higher education. Studying different types of university organizations in terms of what makes them move, and what makes them different, involves more than drawings of the organizational structures or collections of data on numbers of students and professors in diverse divisions of the universities. Analysis of such data should be supported by a deeper understanding of the purposes and processes of each organization. Furthermore, education cannot be summarized by course descriptions alone. The actual course contents and concrete measures on the educational richness and preparedness of the faculty members teaching those courses make a big difference, but do not necessarily show in national statistics.

Micro-studies, such as the one in this presentation, may provide supportive information to conventional statistics. In this sense, the presentation made here is one of the small pieces intended to contribute towards such an overall objective. Small pieces such as this one, when collected for a variety of institutions, may contribute towards a richer comparative perspective.

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Appendix B

Graduates of Bilkent's Industrial Engineering Department who currently teach in North America (incomplete list)

Bilkent is a young university. Academic instruction started in 1986, and bachelor's degrees were awarded beginning in 1990. From 1990 to 2007, 1,163 students graduated from Bilkent's Industrial Engineering Department. Most of them work or teach in Turkey and perform extremely well. Those who choose to go international also succeed spectacularly. The incomplete list below presents some of those who as of autumn 2007, were faculty members of universities in North America.

- **Oğuzhan Alagöz:** University of Wisconsin-Madison
- **Aydın Alptekinoğlu:** University of Florida
- **Barış Ata:** Northwestern University
- **Alper Atamtürk:** University of California, Berkeley
- **Murat Bayız:** University of Southern California
- **Bahar Biller:** Carnegie Mellon University
- **Metin Çakanyıldırım:** University of Texas, Dallas
- **Cenk Çalışkan:** University of Delaware
- **Sıla Çetinkaya:** Texas A&M University
- **Abdullah Daşçı:** York University
- **Savaş Dayanık:** Princeton University
- **Serdar Dinç:** MIT
- **Feryal Erhun:** Stanford University
- **Mustafa Karakul:** York University
- **Pınar Keskinocak:** Georgia Tech
- **Gürhan Kök:** Duke University
- **Erhan Kutanoğlu:** University of Texas, Austin
- **Özalp Özer:** Stanford University
- **Özge Şahin:** University of Michigan
- **Eylem Tekin:** Texas A&M University
- **Tolga Tezcan:** University of Illinois, Urbana-Champaign
- **Ayten Türkcan:** Purdue University
- **Vedat Verter:** McGill University

A more complete list may be obtained from the web pages of the Industrial Engineering Department of Bilkent.

Note: A number of such faculty members each year receive job offers from Turkish universities. The list is not static.

AUSTRALIAN EXPERIENCE WITH PRIVATE HIGHER EDUCATION

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Introduction

This paper describes recent major expansion in private higher education in Australia. It concentrates particularly on higher education institutions as defined today in Australia as institutions offering recognised university-style degrees and diplomas, excluding vocational education and training that in other countries might be found in community colleges. It also concentrates on private higher education institutions and students, and not on other forms of privatisation that include strategies to attract private resources to support higher education institutions and students. However, reference will be made to the Higher Education Contribution Scheme (HECS) that has operated in Australia since 1990 and to its extension through FEE-HELP to tuition fee-paying domestic students in public and private institutions. Reference will also be made to entrepreneurial activities of public universities in raising substantially increased revenue, especially by charging full-cost fees from both domestic and international students, and by means of commercial activity.

What is probably of most interest to an international audience are details about the recent expansion of private higher education enrolments and institutions and why this expansion has taken place; problems in defining private higher education and the lack of a robust data base; and the important role played by governments in providing a legislative base for private universities, an appropriate regulatory and quality assurance framework, including restrictions on use of the name "university" in institutional titles; and, more recently, government financial support to selective private providers for

particular national priority courses and, more generally, to students in private institutions.

From the establishment of the first Australian universities in the 1850s until recently, Australian higher education has been predominantly public and secular in character. This was based on a strong national preference to depend on government and public institutions as the main vehicles for offering higher education and post-school education. Thus, from the foundation of the University of Sydney in 1850 and the University of Melbourne in 1852 until the late 1980s, no private universities were established, despite an unsuccessful attempt in the 1950s to establish a Catholic university in Sydney. Private higher education remained small, under-funded and often little noticed.

Admittedly, private non-university institutions have had a long history in Australia and, in fact, the earliest church-related private institutions predated by at least a decade the foundation of the first universities. From then on, various theological and teacher training colleges were founded by both Catholic and Protestant churches to meet the needs of training clergy and teachers for church-related schools. But these remained small and, with the exception of the Melbourne College of Divinity (Melbourne College of Divinity Act 1910, Section 4), none of them gained the right to grant degrees. Similarly, except for in-house training performed by industry and government departments, vocational education and training was essentially in the hands of government-operated technical colleges that became known in the 1970s as "technical and further education" (TAFE) institutions.

In the 1970s, with a national reorganisation of teacher education outside universities, most government and private teachers colleges were absorbed into new national colleges of advanced education that had been developed in the second half of the 1960s as a 'polytechnic' alternative to universities. In particular, a large number of Catholic teachers colleges were combined to form a relatively small number of larger Catholic colleges of advanced education, funded on the same basis as other colleges of advanced education. At the end of the 1980s, these Catholic teachers colleges were further combined in order establish, in 1991, the multi-state Australian Catholic University, which is funded on the same basis as public universities, but enjoys

the privilege of offering university education from a Catholic perspective.

In the past two decades, however, the scene has changed dramatically for both private higher education and private vocational education and training. As a result, today there are 2 well-established private universities, a small number of overseas universities that have gained approval to operate in Australia and more than 100 other private higher education providers. In total, these private higher education institutions enrol between 30,000 and 50,000 students, with the private sector accounting for an estimated 3 or 4 per cent of full-time undergraduate student load equivalent and about 8 per cent of postgraduate load. In the vocational education and training area, growth of enrolments has been more spectacular, and it is estimated that some 400,000 students are enrolled in apprenticeship and skills training with private providers. Unfortunately, for both private higher education and private vocational education and training, reliable student enrolment data are not available, although serious efforts are currently being made to remedy this serious deficiency.

Australia's Current System of Post-Compulsory Education

Post-compulsory education in Australia consists of a higher education sector, and a vocational education and training sector that includes community and adult education providers. The higher education sector enrols about 1 million students in total, about 25 per cent of whom are international fee-paying students.

There are various ways of classifying this diverse set of higher education institutions, but here we will use the classification system of the Commonwealth Government employed for funding and regulatory purposes into Table A providers, Table B providers and private providers. As will be pointed out, the utility of this classification is becoming increasingly problematic.

Table A providers consist of 37 public universities (including the Australian Catholic University) plus 2 small specialist public institutions, the Australian Maritime College and Batchelor Institute of Indigenous Tertiary Education. Most of these institutions were established under legislation enacted by state or territory legislatures, although the Australian National University and the Australian Maritime College were established by legislation enacted by the

Commonwealth Parliament. Most domestic students who study in Table A institutions are in Commonwealth Government-supported places, which means that the Commonwealth Government subsidises the costs of their courses, while students pay a financial contribution through HECS that is an income-contingent student loan system to meet a proportion of course costs. A smaller number of Australian undergraduate and postgraduate students choose to enrol on a full-cost tuition fees basis. All institutions in Table A are regarded as self-accrediting institutions, meaning that they have the right to design and accredit their own courses, leading to different kinds of awards.

While the Australian Catholic University is regarded, as far as the Commonwealth Government is concerned, as a public university, it might possibly be better regarded as a hybrid or even as a private institution that receives substantial public subsidies. It was established in January 1991, following the amalgamation of four Catholic tertiary education institutions in eastern Australia that had the status of colleges of advanced education. These institutions had their origins in the mid-1880s, when religious orders became involved in preparing teachers for Catholic schools and, later, nurses for Catholic hospitals. The university operates as a private company limited by guarantee, under the company code of the state of Victoria, although the Parliaments of New South Wales and Victoria provided enabling legislation. It has a constitution that clearly identifies its objects in education, scholarship and research as part of the mission of the Catholic Church. It has six campuses located in four capital cities and in the Victorian regional city of Ballarat. In 2006, it had a total enrolment of 12,967 students, enrolled mainly in education, nursing, business and management courses.

Table B institutions consist of three private institutions that enjoy the same status as Table A institutions in that they are regarded as self-accrediting institutions. They are Bond University, the University of Notre Dame and the Melbourne College of Divinity, all non-government institutions with their own enabling legislations.

Bond University was established on the Gold Coast of Queensland as a company limited by guarantee under the Bond University Act 1987 of the Parliament of Queensland, with the aim to be a leading non-religious private university. The 1987 legislation specifies that the functions of the university are "to pursue, within the limits of

financial resources available to it, the objects provided by its memorandum of association, and in particular, the university company may award and confer degrees, diplomas and other awards as awards of a tertiary educational institution" (Bond University Act 1987, section 3.1). In 2006, it had a total enrolment of 4,635 students located mainly in humanities, social sciences, law, business and medicine.

The University of Notre Dame is a Catholic university founded by an act of the Parliament of Western Australia in 1989. It is a rapidly growing university that in 2006 had a total of 5,636 students, with campuses in Perth, Broome and Sydney. It also has strong international links, especially with the University of Notre Dame in Indiana, USA. It offers education in areas including law, business, medicine, nursing, health sciences, physiotherapy, teaching, counselling and behavioural science. Its legislation provides for the university to offer "university education, within the context of the Catholic faith and values", and "to award and confer degrees, diplomas, and such other awards as it sees fit" (University of Notre Dame Act 1987, section 6). All students are required to take core units in theology and ethics.

The Melbourne College of Divinity is a consortium of Protestant and Catholic churches, which was constituted by an act passed by the Parliament of the State of Victoria in December 1910 (Melbourne College of Divinity 1910, section 4). Since its inception, the college has been committed to providing ecumenical Christian education through the awarding of a variety of degrees and diplomas, from undergraduate to doctoral level. In 2006, it enrolled a total of 833 students.

Private higher education providers are the group about which the least is known. They are made up of between 100 and 150 institutions that offer a variety of courses, mainly in business, management, ICT, liberal arts, education, health studies, and art and design. Unlike institutions in Tables A and B, institutions in this group must meet prescribed conditions in order to be listed on the Register of Approved Higher Education Providers maintained by the Australian Qualifications Framework (AQF) secretariat and lawfully offer higher education. Their courses must also be individually accredited by one of the recognised state or territory higher education accreditation

bodies (Australian Qualifications Framework 2007). Such accreditation is rigorous and, under quality assurance arrangements agreed to in 2000, state and territory accreditation bodies in turn must submit to regular audits by the Australian Universities Quality Agency that also audits universities on a regular basis.

Many private providers are set up under corporations law or as nonprofit charities, or they are entities owned by companies or public universities. The AQF list of private providers includes a small number of overseas universities that have been granted approval to operate in Australia. One of the best known is Carnegie Mellon University, which established campuses in Adelaide in 2006 in order to offer Australian and American courses in areas such as IT, government management, new media and entertainment. Other foreign universities include Cranfield University from England that delivers in Adelaide master's-level and professional courses supported by research in defence management, leadership and technology. According to 2006 enrolment statistics, the largest institutions in this group of private providers (which does not include Bond University, the University of Notre Dame or the Melbourne College of Divinity, which are all in Table B) are the Australian College of Theology (2,463 students), Sydney College of Divinity (1,788 students), Australian College of Applied Psychology (1,576 students), Australian College of Natural Medicine (1,398) and Avondale College (1,246 students).

The vocational education and system comprises the second major component of post-compulsory education. In 2004, there were about 1.6 million students enrolled in formal vocational programs providing mainly technical skills and knowledge required to enter the workforce for the first time, retrain for a new job or upgrade skills. About 400,000 of the 1.6 million students studied with private providers, although in terms of total hours of training they accounted for only 13 per cent of total hours (National Centre for Vocational Education Research 2004). Since the 1990s, a dominant feature of vocational education and training is that private providers have been able to compete for government contracts so as to offer nationally approved training packages, even though such packages have been designed by government TAFE colleges. Historically, government funding only went to public providers, but in the 1990s the Commonwealth

Government adopted a policy of competitive tendering for the delivery of vocational educational and training programmes, leading to an increased proportion of government funds going to private providers. In the 1990s, funds for competitive tendering increased from $108 million in 1996 to $198 million in 1998, leading to a rapid increase in the private providers' share of the market (Borthwick 1999; Roussel & Murphy 2000; Harris, Simons & McCarthy 2006).

Problems of Definition and Data on Student Numbers

The private higher education sector suffers from the inter-related problems of definition and certainty about the numbers of institutions and students. Both are serious impediments to more rational policy development.

In modern societies, the distinction between public and private higher education institutions can be made on various criteria, but is most commonly made on the basis of ownership of institutions or the main funding sources. Other criteria that could be used include student entry and selection requirements, limitations on academic freedom in terms of curricula and teaching content, degree of autonomy in decision about what courses to offer, and the areas of professional training offered or disciplines taught.

In Australia, the current classificatory system owes more to history and tradition than to any well-thought-out basis. Originally, the distinction was based on ownership of institutions but has more recently shifted to source of funding. Currently, all Table A providers are public institutions established by Commonwealth, state or territory legislation, but they operate as quasi-private entities, not as branches of government departments. The situation changed in the late 1960s with the development of advanced sector colleges that came to include a number of long-established institutes of technology that were companies limited by guarantee rather than strictly government-owned institutions. This led to an ill-explained shift to a distinction based primarily on whether or not institutions received Commonwealth government funded places. It has been noted already that the current Table A institutions are all Commonwealth-funded (or subsidised) institutions and that students in these institutions are eligible to defer tuition fees through the HECS system. But this distinction is becoming blurred with particular Commonwealth-

funded student places now being offered by the University of Notre Dame (Table B) and by a number of other church-related private providers, including Avondale College, Christian Heritage College and Tabor College. More recently, the new FEE-HELP program allows tuition fee-paying domestic students in both public and private institutions to take government loans similar to HECS in order to pay their fees. By October 2007, 64 private providers had been approved for FEE-HELP. So the distinction based on source of funds is under further pressure.

To complicate the situation further, public universities receive substantial amounts of private money in terms of full-cost tuition fees while the Australian Catholic University receives three-quarters of its funding from the Commonwealth Government. Public universities not only enrol students supported by government subsidies but also full-fee-paying students.

Use of other criteria would also raise problems in distinguishing between public and private institutions. Most private providers typically have a narrower range of disciplines than public institutions, but both Bond and Notre Dame universities are becoming increasingly comprehensive. While the largest enrolment in private providers are in such fields as banking and finance, religion and theology, management and business, and health science (Watson 2000), religion and theology are also taught in some public universities, while banking is offered by some 15 universities and finance by most. Even fields that are less than fully respectable, such as naturopathy and Chinese medicine, are now offered by both public and private providers.

With regard to the number of private higher education institutions and student enrolments, some difficulties have already been mentioned. Different official listings show different numbers of institutions. While the national Register of Approved Higher Education Institutions maintained by the AQF secretariat includes some 150 higher education institutions, Commonwealth Government statistics list only 45 institutions, but already some 64 institutions have been approved for FEE-HELP. Earlier, a survey commissioned by the Commonwealth Department of Employment, Education and Training reported that in 1999 there were 86 higher education providers (Watson 2000).

Similar problems exist with student numbers. In recent years, the Commonwealth Government has collected student enrolment statistics from a limited number of private providers. Table 1 summarises enrolment trends for both public universities and private providers, but the total of 25,517 students enrolled in 2006 (in 45 private institutions) does not sit well with other evidence.

Table 1: Total Higher Education Enrolments in Public and Private Providers, 2001–2006

	Public Providers			Private Providers		
	2001	2005	2006	2001	2005	2006
New South Wales	270,620	291,881	294,468	1,030	5,310	8,412
Victoria	217,657	241,630	249,179	441	1,321	2,515
Queensland	159,427	181,429	185,401	37	5,334	4,946
Western Australia	81,625	92,393	95,248	437	4,806	5,758
South Australia	56,715	65,715	68,118	0	895	1,283
Tasmania	14,821	18,020	18,719	0	0	40
Northern Territory	6,117	5,917	6,068	0	0	0
Aust Capital Territory	8,758	9,995	10,495	0	17	0
Multi-state	10,985	13,263	13,967	0	2,336	2,563
Total	826,725	920,243	941,663	1,945	20,019	25,517

Source: Department of Education, Science and Training (2007a) *2006 Full Year Higher Education Student Data*, Canberra.

Note: In this table, public providers include Table B institutions and all other private providers.

For example, Watson (2000) reported that in 1999 there were 86 private providers that offered higher education courses and that, of these, 79 institutions that responded to the survey reported a total of 31,212 students enrolled in over 200 courses of study. This translates into a student load of 18,877 EFTSU or 3.4 per cent of total higher education student load nationally. On the other hand, the two

industry associations provide somewhat different estimates. The Council for Private Higher Education, which represents 16 institutions, including Bond University and the main church-based providers, estimates that currently total enrolments for private providers is between 30,000 and 40,000 students, while the Australian Council for Private Education and Training (which represents some 1,200 higher education and vocational education and training providers) estimates that private providers represent about 8 per cent of total higher education enrolments, or about 50,000 students (Smith 2004).

Mechanisms of Government Assistance

One reason for the recent substantial expansion in private higher education has been the facilitation and financial support provided by both Commonwealth and state governments. This has taken a number of forms, but of particular importance has been the provision of a legislative basis for private universities, a strong regulatory and quality assurance framework, and recent provision of financial assistance to particular institutions and students.

Legislative Basis for Private Universities

As already noted, the Australian Catholic University, Bond University, the University of Notre Dame and Melbourne College of Divinity were all provided with their own acts of parliament giving them the right to operate as universities and to award degrees and diplomas. With these advantages it is not surprising that they are regarded as self-accrediting institutions. The National Protocols for Higher Education specify that new universities may be established only by a legislative instrument, but this does not necessarily mean that each university must have separate legislation (Ministerial Council for Education, Employment, Training and Youth Affairs 2006, p. 15).

Regulatory and Quality Assurance Framework

The regulatory and quality assurance framework aims to ensure that only quality higher education is offered by both public and private providers, and that all courses fit within an agreed hierarchy of awards and are provided by financially secure institutions. This

framework consists of the AQF, a multi-element quality assurance system and agreed protocols for the accreditation of higher education institution and courses. Development of this overall framework has been a major challenge for a system of higher education located within a federal system of government where constitutional power for education rests with the states and territories, but funding responsibility rests mainly with the Commonwealth Government.

The AQF is a unified system of national qualifications offered by schools, vocational education and training institutions (TAFE colleges and private providers) and higher education that was established in 1995. For higher education, the AQF provides for qualifications at five different levels: doctoral degrees, master's degrees, graduate diplomas, graduate certificates, bachelor's degrees and associate degrees. Guidelines with detailed specifications for each award are provided in the *AQF Implementation Handbook* (2002).

Since 2001, Australia has had in place a new, multi-layered and comprehensive system of quality assurance for higher education. This system appears to be working smoothly, providing the kind of quality assurance mechanisms that have the potential to safeguard quality and standards in the Australian higher education system, and assure key stakeholders that the value of awards and the quality of graduates are being maintained. While the quality assurance mechanisms intrude somewhat into the traditional autonomy of Australian universities, they have generally been welcomed by universities as being essential for a comprehensive "mass" higher education system, especially one that has made recent impressive developments in the export of higher education services to other countries.

The quality assurance system is dependent on internal institutional quality management and the role of external elements including:

- accreditation of new providers by state and territory government agencies, using agreed national protocols;
- regular audits of universities and state and territory government agencies responsible for the accreditation of new providers and accreditation of courses offered by private providers; and
- supplementary mechanisms provided by the Commonwealth Government, including published outcomes data.

Traditionally, Australian universities depended on internal processes for monitoring admissions, teaching and assessment, and took some external assistance for processes such as reviewing faculties and departments and examining higher degree research theses. Unlike Britain, few Australian universities used external examiners at the departmental level. In the non-university sector, until the end of the binary system in the late 1980s, colleges of advanced education were under much stronger forms of external assessment and control.

In the 1980s and 1990s, however, with major expansion in student enrolments, the reliance on individual universities to satisfactorily handle quality assurance was questioned and efforts were made to introduce new system-wide mechanisms of quality reviewing. A national, voluntary system of discipline reviews was created to assess academic standards and to improve quality and efficiency, while the Australian Vice-Chancellors' Committee established a voluntary system of reviews for fourth-year honours degree programs. While these efforts highlighted the importance of quality assurance, they still did not provide a robust national system of quality assurance.

In the early 1990s, an experiment was made with a system of institutional audits of universities, but it was not until April 1999 that Commonwealth, state and territory ministers of education, meeting as the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), referred the issue of a common approach for higher education quality assurance, accreditation criteria and procedures to a committee of higher education officials. On the advice of two commissioned reports (Anderson, Johnson & Milligan 2000; Harman & Meek 2000), in March 2000, ministers endorsed National Protocols for Higher Education Approval Processes and the establishment of an Australian Universities Quality Agency. As a result, the framework now encompasses the roles of the AQF, universities and private providers, Commonwealth and state/territory governments and the Australian Universities Quality Agency (Jones, Pearce & Karmel 2001).

The Australian Universities Quality Agency was established in 2000 by MCEETYA as a not-for-profit company with responsibilities for the promotion, auditing and reporting of quality assurance in Australian higher education. It began operations in 2001 and has now

entered its second five-year program of reviews. The agency is formally responsible for:

- conducting quality audits of self-accrediting institutions and of state and territory accreditation authorities on a five-yearly basis;
- providing public reports revealing the outcomes of these audits;
- reporting on the criteria for the accreditation of new universities and non-university higher education awards, as a result of information obtained during the audits of institutions and state and territory accreditation processes; and
- reporting on the relative standards and international standing of the Australian higher education system and its quality assurance processes, as a result of information obtained during the audit process (Australian Universities Quality Agency 2003).

The agency operates independently of governments, under the direction of a board of directors consisting of five persons elected by the higher education sector, six persons nominated by governments and an executive director appointed by the board. To date, it has been successful in its audits, using sufficient rigour to identify weaknesses but at the same time showing appropriate sensitivity towards university institutional autonomy and recognising that highly damaging reports could adversely affect the future viability of institutions.

The development of National Protocols to be followed by all Australian governments overcame difficulties springing from considerable variations in the processes and criteria employed by the various state and territory accreditation bodies. Some of these bodies employed more rigorous criteria and processes than others, tempting private providers to seek accreditation with the jurisdiction that had the least demanding requirements. The National Protocols were endorsed by MCEETYA in March 2000 (Ministerial Council for Education, Employment, Training and Youth Affairs 2000).

An important element of the protocols was the protection they provided on use of the name ”university” in institutional titles. Prior to agreement on the National Protocols, a lively debate took place on whether special restrictions should be placed on use of the name “university” by private higher education providers. This had been

prompted by a small number of cases where private providers under corporations law were registered as universities and by a public controversy over Greenwich University, which had been established in June 1998 on the Commonwealth territory of Norfolk Island under legislation approved by the Norfolk Island Government, using its powers of self-government. Major concerns were expressed in the press about the quality of courses offered by Greenwich University, leading to a Commonwealth Government review of the academic and financial standing of the university by an expert review panel of five persons. The panel concluded that the standard of its courses, quality assurance mechanisms and academic leadership failed to meet the standards expected from Australian universities. As a result, on 2 December 2002, the Commonwealth Government enacted legislation to regulate the use of the title "university" and the delivery of higher education in Australia's external territories. This legislation overrode the operation of the Greenwich University Act 1998 of Norfolk Island. The controversy earlier prompted a decision by MCEETYA to recommend protection of use of the title "university" in the National Protocols, followed by legislation passed by each state and territory parliament (Guthrie, Johnston & King 2004, pp. 56–65).

The 2000 National Protocols thus protected use of the title "university" by forbidding its use in a business name and by establishing a legislative framework with consistent criteria and procedures by which institutions may use the title. In each jurisdiction, it was agreed that "establishment or recognition as a new university in Australia should only occur by the mechanism of a legislative instrument, either by separate act, or by a regulation or order made under an act" and subject to parliamentary scrutiny. (Ministerial Council on Education, Employment, Training and Youth Affairs 2000, p. 4). The criteria set for university recognition were as follows:

- authorisation by law to award higher education qualifications across a range of fields and to set standards for those qualifications which are equivalent to Australian and international standards;
- teaching and learning that engage with advanced knowledge and inquiry;

- a culture of sustained scholarship extending from that which informs inquiry and basic teaching and learning, to the creation of new knowledge through research, and original creative endeavour;
- commitment of teachers, researchers, course designers and assessors to free inquiry and the systematic advancement of knowledge;
- governance, procedural rules, organisation, admission policies, financial arrangements and quality assurance processes, which are underpinned by the values and goals outlined above, and which are sufficient to ensure the integrity of the institution's academic programs; and
- sufficient financial and other resources to enable the institution's program to be delivered and sustained into the future (Ministerial Council on Education, Employment, Training and Youth Affairs 2000, p. 5).

The National Protocols were revised in 2006 following an extensive consultation and review in 2004 and 2005 (Guthrie, Johnston & King 2004; Wilson 2005). Significantly, while some criteria were made more explicit, the criteria for the establishment of new universities were modified somewhat in order not to require new universities to offer education qualifications "across a range of fields", thus making possible the creation of more specialised universities. However, the new version of the protocols drew attention to the need of all institutions enrolling international students to comply with the requirements of the Education Services for Overseas Students Act 2003.

Financial Assistance to Institutions and Students

Varying financial assistance has been given to private higher education providers. The Rann Labor Government of South Australia provided AUD$20 million to assist the establishment of the Carnegie Mellon Campus in Adelaide while for many years private providers have been able to compete for research funds from the Australian Research Council and the National Health & Medical Research Council. However, by far the most important financial assistance has been the allocation of government-subsidised student places and financial assistance to students. Financial assistance was first provided

to teacher education courses at the University of Notre Dame and Avondale College and more recently to Christian Heritage College in Brisbane and to Tabor College in Adelaide and Melbourne. However, more recently financial assistance has been extended to the University of Notre Dame to enable medicine and nursing courses at its new campuses in Sydney. While it is not clear on what basis the first allocations were made, the most recent allocations have theoretically been on a competitive basis and within areas of specified national priorities.

Also of considerable importance was agreement in March 2004 that a new suite of student loans called FEE-HELP would be made available to fee-paying students in both public and private institutions. Modelled on the HECS system, FEE-HELP provides eligible students with income-contingent loans to pay undergraduate or postgraduate fees. Students are able to access a loan of up to the amount of the full tuition fees to a limit of AUD$50,000 (Department of Education, Science and Training 2004). Students studying at a private institution have access to FEE-HELP only if their institution is recognised as a higher education provider by the Australian Government.

New criteria for registration were set, and by October 2007, 64 private institutions had been approved. To qualify for financial help for students from FEE-HELP, a private higher education provider must be a body corporate that carries on business in Australia and has its central management and control in Australia; have as its principal purpose either education or research, or both; have accreditation as a higher education provider and be listed on the AQF Register of Recognised Education Institutions and Authorised Accreditation authorities; meet financial viability requirements; satisfy quality requirements, including periodic audits by the Australian University Quality Agency; meet fairness requirements, including tuition assurance guarantees; and be able to meet other compliance, accountability and information requirements. (Department of Education, Science and Training 2007b).

Factors Driving Private Higher Education Expansion

It is important to try to identify those factors that have facilitated and prompted the recent expansion of private higher education. Reference

has already been made to the important role played by Commonwealth and state governments, but behind this lie a number of factors, but particularly a strong non-partisan consensus across major parties about encouragement of the development of private higher education.

Four factors appear to be of major importance in explaining the expansion of private higher education. First, for the past two decades, Australia has seen major expansion in higher education enrolments, which has sprung from major structural changes in the Australian economy. There is much more emphasis on the development of specialised manufacturing and service industries, stronger demand for skilled and professional labour, rapid expansion of international fee-paying students, and rising retention rates in secondary education. All this has been accompanied by a general recognition that both substantial public and private investment in higher education is necessary and desirable. As a result, new opportunities have emerged for private providers to attract students. Moreover, the move in the late 1980s from free public education to the HECS system and then to fee-paying places in public universities for domestic undergraduate and postgraduate students prompted changes in attitudes to the idea of charging tuition fees for higher education.

Second, the application of the New Public Administration from the 1980s in both Commonwealth and state governments has put much greater emphasis on the ideas of competition, choice and diversity in the delivery of public services. These ideas have been applied to a range of service areas, including health, social security, job placement and post-school education. Associated with these developments since the early 1990s, the Commonwealth Government, first under Labour and then a coalition government, has put much more emphasis on entrepreneurial activities by public higher education institutions and on encouraging institutions to generate a greater proportion of their own revenues. Now, across the public universities, government-operating grants cover less than 40 per cent of total budgets. Dramatic increases also have occurred in the enrolment of fee-paying domestic and international students. International student numbers grew from 18,207 in 1988, to 95,607 in 2000 and to 239,495 in 2006. By 2002, international and domestic student fees totalled AUD$2.5 billion or

over half the sum provided by the Commonwealth Government in direct subsidies to support teaching in universities.

Full-fee undergraduate places for domestic students has been highly controversial. Universities that offer such courses admit to concern about equity but justify their action because of the relatively low levels of Commonwealth Government subsidies for HECS-based places. They also point out that it would be inconsistent if domestic students were unable to access those fee-paying courses that are offered to international students. Opponents argue that since university education largely determines the life chances of young people, such courses should be offered only on the basis of academic achievement and the likelihood to succeed, and should not be dependent on wealth.

Third, after a century of dispute over the possibility of providing "state aid" to non-government primary and secondary schools, in the 1970s, the idea of substantial government support for non-government primary and secondary schools became accepted policy by the major political parties and, to a large extent, by the community in general. This has prompted an end to many traditional views that ideally, higher education should be offered only by public providers.

Fourth, in order to achieve the application of FEE-HELP to international students, private providers marshalled strong equity arguments. The Australian Council for Private Higher Education and Training campaigned for FEE-HELP for two years, arguing the need for "equality of treatment for students enrolled in private providers" and for "effective rights of choice of provider for Australian higher education students" (Smith 2004).

Conclusions

While Australia cannot claim a long history of substantial private higher education, its experience over the last two decades may be of international interest, particularly as many OECD countries, as well as transitional and developing economies, have been experimenting with private higher education institutions and private investment in higher education. Internationally, the last two decades have seen major expansion in student enrolments, pressures on public budgets and demands for more highly skilled and professional workforces.

In the case of Australia, some initiatives have worked extremely well. HECS has been a highly successful experiment that is now widely accepted. Its attraction is that lower income students are not discouraged from participation, since they are not required to pay fees at the time of enrolment and must commence repayment of their HECS debt only when their income reaches approximately the community average income level. At that stage, students from poorer backgrounds find it hard to argue that they are financially disadvantaged. Another striking advantage is that HECS is a government-operated student loan system, without any involvement of banks or other commercial lenders. Overall, the effects of HECS on participation have been limited, especially in the period up to 1996, although recent studies suggest that changes made by the Howard Government in 1996 with regard to the amount of HECS debt and income level for commencement of repayments may well have affected demand to some extent, particularly of mature students and members of recognised disadvantaged groups.

To a surprising extent, government encouragement of universities raising revenue has been highly successful. Many universities have displayed impressive entrepreneurial talent, particularly in attracting full fee international and domestic students. The presence of large numbers of international students on university campuses has also had many positive benefits, especially in further internationalising Australian higher education.

The Australian experience with private higher education points to possible difficulties as it has lacked clear and well-thought-out definitions of what private higher education is and a robust data system. On the other hand, the Australian experience points to the value of government-established regulatory and quality assurance frameworks in order to ensure quality provision in both public and private sectors. It also points to the desirability of clear decisions on whether or not to provide legislative protection to the name "university". Finally, the Australian experience also illustrates how government funding can blur the lines between public and private provision, raising the issue of whether Australian higher education in time might move increasingly to an arrangement where there is lack of clarity in demarcating between public and private providers.

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ON STEERING POLICY, STRATEGIC POSITIONING, THE RISE OF MARKETS AND THE GIVING OF GIFTS

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Introduction

We have been treated to three very different perspectives in these three presentations, each as challenging as it is stimulating and enlightening – a joy to listen to. Dogramaçı gives us the inside view. He concentrates on the detailed saga of the drive to create an exceptional establishment within the setting of one state. Harman looks at system level and ventures outside it. Tilak has given us a panoramic overview of the varied development of privatisation in India, South East Asia, Japan and South Korea. These narratives unfold on very different scales. From a geographic point of view, we are confronted with one transcontinental region, one continent and one country. From a demographic perspective, we cover lands where more than one half of humanity has its being, a second with 72 million and a continent the inhabitants of which are as numerous as those in the Netherlands - around 17 million. I am tempted to say that to find a richer tableau for the launching of our discussion would be difficult indeed.

Parallel Perspectives: Australia, Asia and Europe

Harman is particularly revealing by showing how the degree of government influence over policy is not just a direct consequence of the squeeze that comes with redefining the funding and student funding systems as levers in the drive towards privatisation. He also shows the importance of making this shift acceptable by providing an alternative opening to national income sources, an alternative clearly set out early on by broadening and repositioning Australia's strategic

place in the Asian region. In many respects, this region, as Tilak has argued, is a mirror image of Western Europe. The private sector bears the brunt of growth and expansion and in its extreme form, given over making exorbitant profits, is growing by leaps and bounds. It is the public sector that is peripheral. With certain notable exceptions, such as Japan, South Korea and Malaysia, where governments exercise a degree of oversight and control over the conditions in the private sector, the impression one retains is of quasi-anarchy not greatly dissimilar to that which pertained to Russia, Poland and Romania up to the mid- to late 1990s with the collapse of the ancien régime. Whilst such incoherence in Central and Eastern Europe was transitional, it appears to be more firmly rooted in some of the developing Asian systems of higher education.

But the question of cohesion, of overall vision and national purpose, forms a central theme across all presentations this morning. Whether in Australia or in Asia, the drive towards privatization raises other issues. Not least amongst them is the struggle to maintain coherence across systems that are assuming a greater degree of diversity in structure, procedures, institutional values and identity. And here it is perhaps legitimate to draw a line between those systems that seek to redefine an effective – and effectual – locus of cohesion, control, regulation and oversight from those that are apparently unable to do so.

The quest for a new form of coherence for systems under pressure from the ongoing process of diversification is evident in Australia just as it is in Western Europe. But the diversity involved in these two cases is very different. It is dynamic in Australia. It stems from conjoining different historic national models and practices in Europe within the construct of the European Higher Education Area. There are, of course, differences, particularly in Eastern and Central Europe. But even if we confine our attention to Western Europe for a moment, a good case can be made for arguing that the *rapprochement* of individual higher education systems, even if none has individually advanced its *institutional* diversity greatly over the past decade, presents another form of that same process of diversification. It is, however, diversity across and beyond the nation-state. It emerges by bringing Europe's universities into one transnational construct, to wit, the European Higher Education Area.

By contrast, the inability of certain Asian systems to cope with excess demand, the absence of government control over national standards and over the quality of the services provided, and even the ability to identify "fake" establishments, suggest that we are in the presence of a rather different dynamic. In the absence of effectual overseeing bodies, the drive to privatization urges national provision of higher education towards increasing incoherence.

Differences

In both Europe and Australia, the quest for coherence is evident, though it does not follow the same paths. Prior to privatization, the individual states of the Australian Commonwealth wielded considerable powers in shaping and founding their individual "systems", though I would emphasise that this is not the usual way they are perceived. From this particular angle, it is, I think, evident that alongside the drive towards privatization, we are in the presence of another development, equally important.

Emergence of a Common Trend…

This development, seen from the Western European standpoint (and here I deliberately change the terminology to suit the task we have before us), involves the quite extraordinary strengthening of what some observers of the Western European scene call the "supranational" or "intergovernment level" in policy making. The degree of purchase the Commonwealth level has secured for itself – that is, the level above the individual states – would be the envy of our masters in Bruxelles and doubtless the despair of its citizens. From this perspective, privatization in Australia is also accompanied by increasing activity at the Commonwealth level: more comprehensive legislation, built around key criteria that define institutional status. This definition is further underpinned by protecting the title "university". As an aside, it is interesting that the latter should come so late in the day. In Western Europe, it was usually the defining step, creating a "university *system*" to replace a previous constellation of individual universities within the national territory.

In Australia, the intergovernmental level is no less concerned with defining in considerable detail the terms and conditions under which

different HEIs can avail themselves of public bounty. This is an interesting variation on a similar theme of setting in place procedures and controls. In Western Europe, this has sometimes been analysed in terms of "New Public Management" – though more often than not by English-speaking and Anglocentric scholars.

…and its Features in Western Europe

In the narrower confines of higher education, the parallel process in Western Europe is not always wholly and uniquely identified with New Public Management. Rather, it is associated with the rise of what is sometimes termed "The Evaluative State". The difference between the Western European version of this and its Australian counterpart, as too with New Public Management, is that the latter two do not embrace the principle of legal homogeneity (the legal rights and duties of universities defined by national framework legislation, which applies equally to all establishments in the same segment of the higher education system). As Harman points out, Australian universities – even the more recent additions – still cleave to the British modus operandi. Each university is individually subject to a founding act of parliament, issued sometimes by the individual state, and now additionally ratified by the Commonwealth Parliament.

As strategies for upholding system cohesion, both New Public Management and the Evaluative State involve the shift over to funding, quality assessment and a very sensitive instrumentality for determining institutional performance on the basis of output. Closer control over public bounty, its assignment to particular purposes and the frenetic competition within and between individual universities are powerful "steering instruments" across the system in its entirety. And here I must recognize that Australian funding practices have not been without influence on the British student loan-based fee system, though this influence has rarely extended to Continental Europe.

Though there are exceptions, the situation in Asia could not be farther from this strategy. As Tilak reminds us, "That private higher education should be encouraged with a strong regulatory sector is not tenable by countries with soft government and democracy". Thus, the second strand to privatization, clearly visible in Western Europe and Australia, namely, reinforcing institutional accountability, assessment

of performance, glows by its absence.

The Concentration of "Steering Instruments"

Seen within the canons of New Public Management on the one hand and the very particular interpretation I have placed upon the Commonwealth as an intergovernmental layer of administration on the other, clearly the process common to both involves the concentration of powerful steering instruments in the intergovernmental layer in Australia. In Europe, the Evaluative State, paradoxically enough, is more ambiguous about the level at which concentration should take place. Not because concentration is absent, but because in contemporary Western Europe there are still great misgivings about letting these instruments of control escape upwards to the European equivalent of the "Commonwealth" level. That is to the tender mercies of Bruxelles. Both New Public Management and the Evaluative State share, however, in the underlying principle of "Evaluative homogeneity", that is, a homogeneous series of criteria for measuring institutional performance and efficiency applied to all establishments within the geographical area covered by agency remit. It is the identifying and central trait in system coherence. Arguably, the inability of some Asian countries to push forward to this second stage is, by the same token, the hallmark of incoherent systems. Either way, the type of public oversight and its instruments is crucial. It is as much our moment of truth as it ought to be for some regions where extreme privatization bids fair to turn private gain into public squalor.

Philanthropic Drift

The second theme I consider worth developing further is the question of what may be termed "philanthropic drift". Is it the culture in which universities or higher education are set, one which regards with favour the private endowment, funding and what the British sociologist Peter Townsend called the "gift relationship"? Is this relationship present or absent, encouraged or subject to benign neglect amongst governments and alumni? What is its underlying dynamic? Dogramaçı's paper is an extraordinary paean to that culture. And none can deny the part that the donative principle has played in creating and sustaining some of the United States' most exceptional

establishments by transforming private gain into public good.

The Ambiguity of Giving

But neither the presence nor the strength of this gift relationship are by any means acquired, even if they are written in stone by our various religions. This, I think, is one of the most important points to be retained from Tilak's analysis of the situation in India. Is it unfair to see his devastating account as the Death of Philanthropy? I do not think so. Certainly, it is not inevitable that in other circumstances, the gadarene rush from giving to taking, from higher education as the object of philanthropy to being the way to ensure, literally, a "quick buck", may be less speedy and slightly more decorous. It may well be that for those systems that have put in place an instrumentality of cohesion, philanthropic drift may be contained. But the forces behind the commodification of higher learning are not feeble, and without national resolution, the path to venality, which is but an historian's expression for what the mealy-mouthed call commodification, is not easily avoided.

Certainly, there are outstanding examples of philanthropy and vision walking hand in hand. And it is in this light that Dogramaçı's saga of Bilkent University serves to inspire us all. But such vision and determination are all too rarely the rule. Nor, to be frank, is it necessarily incompatible with a more general and pervasive rend in the drift from philanthropy.

Indeed, the gift relationship in many Western European societies is not always perceived as that Lockean sign of Divine blessing through wealth accumulated by private initiative and acumen, applied to the benefit of the common weal. Rather, the remnants of the donative culture drag behind it deep political echoes of old regimes, their adepts and their "particular interests" served by charitable work. In this European version of republicanism, the institutions that were the object of such charity could acquire legitimacy only when taken over by the collectivity, by the nation or the state. This too is the basis of Europe's social security systems, or that construct which many have been seeking to de-legitimise these past 20 years, namely, the welfare state. Why they should wish to do so is not part of this debate.

The Scope of What is Needed

Reviving the gift relationship – that is, voluntary giving to the common good through payments that others yield by taxation – was seen by the British White Paper of 2003 as one of the most desirable elements in a society re-engineered to support a degree of privatisation in its HE system. (Neave, 2005, pp. 17–22) This was as good a recognition of the erosion of the gift relationship in Britain as ever one might wish. And as Tilak has suggested, what may replace it in an incoherent system is most definitely a pis aller.

The Hidden Face of Privatization

Against this backdrop, the issue is very clear. Is the university a legitimate priority for private largesse even supposing the gift relationship remains intact? There are many other calls upon that precarious source of revenue – precarious because largely unpredictable. Thus, from a different angle of attack, I come back to one of the points Zehev Tadmor raised in the presentation we all received and which, for my part, got the cerebral juices overflowing. In the question of private resources and public need, I suspect there is much that the UK shares with Israel in the question of priorities, even assuming – and it is a major assumption – that social priorities necessarily attract the attention of private donors. For their part, donors are often just as reluctant to back projects they reckon to have already supported by their tax bill. This is the hidden side of privatisation. It is also a question of priorities. That is to say, it involves the financial equivalent of that medical procedure known as "triage".

Generating Additional Revenue

Just as Israel shares the pressure of public need upon the institutions that have their imperative task to meet it, there are also major and strategic differences in the way additional resources can be generated. And in this respect, Israel's position, so it seems to me, bears greater similarity to Western Europe than it does to the UK. If we change our perspective for a moment to the question of generating external resources, we bring in, once again, the remarkable similarities between the UK and Australia. A couple of years ago, in celebration of the life work of our good friend Maurice Kogan, I argued that UK

higher education policy (Neave, 2006, pp. 115–128) reflected a basic dilemma. For the UK, this dilemma is not new. But it has special relevance when placed against the broader economic process known as globalization and no less when put alongside the issue of privatization.

Two Dimensions in the Raising of Revenue

British higher education policy has two faces: in respect to the immediate region – Europe – and the Blue Water strategy – that is, the world. Revenue generation through world outreach has been a deliberate part of British strategy from the early 1980s, though historians will point out that its roots go much further back. Not all of it has been desirable. And not all of it has been of irreproachable integrity, as many here know. But it does mean that like Australia, Britain has the potential to draw upon a world market to ease the difficulties higher education faces at home. Let me also point out that Australia has been a major example in this domain. Repositioning itself as higher education's version of a service provider on the Pacific Rim has, in turn, stoked up the Britons' determination to 'go forth into the highways and byways and compel them to come in that our coffers – rather than our house – may be full'. And Grant Harman's paper is clear as the day is long about the importance of revenues to be generated from abroad. They amount to "over half the sum provided by the Commonwealth Government in direct subsidies to support teaching in universities." (Harman, p. 16)

Israel and Western Europe

The Blue Water strategy has its impact abroad. It also has, as Harman made very clear, its consequences at home. The possibility of outreach activities as an ersatz for public expenditure lies, as Harman explained, at the heart of privatization's acceptance as a principle amongst the older establishments of higher education. Where the similarity between Israel and the higher education systems of mainland Western Europe lies, I believe, is that revenue generation within either region is not greatly promising. For whilst the principle of student fees has finally been recognized in Western Europe, it is recent indeed. For the most part, fees are pegged by national governments and rarely, if ever, cover full costs. From the standpoint

of the entrepreneurialism, there are no great pickings to be had, even when partial study abroad is becoming integrated with the usual undergraduate experience of higher education in Western Europe.

A Hesitant Look Forward in Guise of a Conclusion

To be sure, Israel has its own counterpart of the Blue Water strategy. It lies beyond the region – with the United States. But the development of a regional higher education policy of outreach, which would seek to place Israel in a position analogous to Australia on the Pacific Rim, will be exceedingly difficult to develop, despite the concentration of talent this nation very obviously possesses in abundance and despite the obvious demand potential this region represents.

In short, making up the shortfall in public expenditure does not, I reckon, lie in privatization alone: and very certainly not if the only resources available to sustain a privatized system are to come from resources within the nation. Unless, that is, one is prepared to let slide the quality of service provided. Or, by that response already standing in the wings in certain Scandinavian systems, namely further institutional concentration in an effort to protect the research base.

The lesson one might retain from Western Europe, Britain, Australia and Asia is that the phenomenon we agree to call privatization *faute de mieux* is certainly rendered less fraught if there is a money stream from extra-national sources. For this reason, and I put it forward with no little hesitation, it remains to be seen whether the very particular philanthropic culture already present in Israel – a donative culture rooted in the *pietas* of the sons and daughters of the Diaspora – can alone be sufficient to take up this burden.

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SESSION II

The Role of Public and Private Higher-Education Institutions in the Economy

GROWTH AND THE FINANCING AND GOVERNANCE OF EDUCATION

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1. Introduction

A comparison of higher education attainment in the US versus that in the EU in 1999–2000 shows that 37.3% of the US population aged 25–64 completed a higher education degree, against only 23.8% of the EU population of the same age group. This comparison is mirrored by that on tertiary education expenditure, with the US devoting 3% of its GDP to tertiary education versus only 1.4% in the EU. Is this European deficit in tertiary education investment a big deal for growth?

There are also marked differences between the ownership structure and governance of American universities versus European universities and between European universities. Are these differences related to research performance and the contribution of these universities to the growth process?

In this lecture, we develop a framework that attempts to shed light on these questions. A first class of models emphasizes capital (physical or human) accumulation as the main source of growth. The main references on this neo-classical view are Mankiw et al. (1992) and the celebrated article by Lucas (1988).

In Mankiw et al. (1992), which is an augmented version of the Solow model with human capital as an additional accumulating factor of production, human capital accumulation slows down convergence into the steady state by counteracting the effects of decreasing returns to physical capital accumulation. In Lucas, on the other hand, the assumption that human capital accumulates at a pace proportional to the existing stock of human capital, indicates a positive long-run growth rate. Whether on the transition path to the steady state (in Mankiw et al. (1992)) or in steady state (in Lucas), the rate of growth

depends upon the rate of accumulation of human capital, not upon the stock of human capital. Moreover, these capital accumulation-based models do not distinguish between primary/secondary and tertiary education: the two are perfect substitutes in these models.

However, Benhabib and Spiegel (1994) have shown, based on cross-country regressions over the 1965–1985 period, that human capital accumulation (where human capital is measured by school enrollment) is not significantly correlated with growth, whereas human capital stocks are. Another source of skepticism towards the Lucas/Mankiw et al. (1992) approach is the finding by Ha and Howitt (2005) that the trend growth rate of the number of R&D workers in the US has gone down over past 50 years, whereas the trend rate of productivity growth has not.

In this lecture, we consider an alternative approach to education and growth. Pioneered by Nelson and Phelps (1966), this approach emphasizes the complementarity between human capital stocks on the one hand, and the process of innovation and technological catch-up on the other hand.

The lecture is organized as follows. In Section 2 we present the Nelson-Phelps model. In Section 3, we develop a model of an appropriate education system to analyze the relationship between growth, the composition of education spending, and a country's level of technological development. In Section 4, we discuss evidence that supports our model. In Section 5, we analyze the relationship between the performance and governance of universities. Section 6 concludes.

2. The Nelson-Phelps Model

More than just questioning the capital accumulation approach to education and growth, Benhabib and Spiegel (1994) resurrected the simple model by Nelson and Phelps (1966). Nelson and Phelps did not have a model of endogenous growth with endogenous R&D and innovation, but they were already thinking of growth as being generated by productivity-improving adaptations, whose arrival rate would depend upon the stock of human capital. More formally, Nelson and Phelps would picture a world economy in which, in any given country, productivity grows according to an equation of the form:

$$\dot{A} = f(h)(\overline{A} - A),$$

where again $\overline{A}$ denotes the frontier technology (itself growing over time at some exogenous rate), and h is the current stock of human capital in the country. A higher stock of human capital would thus foster growth by making it easier for a country to catch up with the frontier technology. Benhabib and Spiegel tested a slightly augmented version of the Nelson-Phelps model, in which human capital does not only facilitate the adaptation to more advanced technologies, by also makes it easier to innovate at the frontier, according to a dynamic equation of the form:

$$\dot{A} = f(h)(\overline{A} - A) + g(h)\gamma A,$$

where the second term captures the innovation component of growth.

Using cross-country regressions of the increase in the log of per capita GDP over the period 1965–1985 as a linear function of the sum of logs of human capital stocks over all the years between 1965 and 1985, Benhabib and Spiegel found a significantly positive correlation between the two, which, in turn, was evidence that the rate of productivity growth is also positively correlated with the stock of human capital. Moreover, BS found a larger correlation for countries further below the world technology frontier, which would hint at the catch-up component of growth being the dominant one. Thus, more than the rate of human capital accumulation, it is its stock that matters for growth. Does this help us understand the comparison between Europe and the US?

Unfortunately, more recent work by Krueger and Lindahl (2001) would temper our optimism. Using panel data over 110 countries between 1960 and 1990, choosing the number of years in education instead of the logarithm of that number to measure human capital,[1] and correcting for measurement errors, Krueger and Lindahl would still find a positive correlation between growth and human capital,

[1] This change was, in turn, motivated by the so-called Mincerian approach to human capital, whereby the value of one more year in schooling is measured by the wage increase that is foregone by the individual who chooses to study during that year instead of working. This amounts to measuring the value of a human capital stock by the log of the current wage rate earned by an individual. That log was shown by Mincer to be individual, after estimating an equation of the form:

$$\ln w = a_0 + a_1 n.$$

positively correlated to the number of years spent at school by the stocks (although they also found a positive correlation between growth and the rate of accumulation of human capital). However, the significance of the correlation between growth and human capital stocks would disappear when restricting the regression to OECD countries.

3. Appropriate Education Systems

Should we conclude from Krueger and Lindahl that education only matters for catching-up but not for innovating at the frontier, and that, consequently, education is not an area that Europe needs to reform in order to resume growth at a rate at least equal to that of the US? The new hint at that point came from an idea by Acemoglu et al. (2002) on appropriate institutions and economic growth. That hint provided the backbone for the Sapir Report, and the application of that report to education led to a report on "Education and Growth" for the French Conseil d'Analyse Economique.

3.1. Acemoglu-Aghion-Zilibotti

By linking growth to innovation and entrepreneurship, and innovation incentives to characteristics of the economic environment, new growth theories made it possible to analyze the interplay between growth and the design of policies and institutions. For example, the basic model developed in Section 2 of the paper by Acemoglu et al. (2002) suggests that long-run growth would be best enhanced by a combination of good protection of property rights (to protect the rents of innovators against imitation), a good education system (to increase the efficiency of R&D activities and/or the supply of skilled manufacturing labor), and a stable macroeconomy to reduce interest rates (and thereby increase the net present value of innovative rents). Our discussion of convergence clubs in Section 3 of the paper then suggests that the same policies or institutions would also increase a country's ability to join the convergence club.

Now, new growth theories may be criticized by development economists and policy makers, precisely because of the universal nature of the policy recommendations that appear to follow from them: no matter how developed a country or sector currently is, it seems that one should prescribe the same medicines (legal reform to

enforce property rights, investment climate favorable to entrepreneurship, education, macro-stability, etc.) to maximize the growth prospects of that country or sector.

However, in his essay "Economic Backwardness in Historical Perspective", Gerschenkron (1962) argues that relatively backward economies could more rapidly catch up with more advanced countries by introducing "appropriate institutions" that are growth-enhancing at an early stage of development but may cease to be so at a later stage. Thus, countries like Japan and Korea managed to achieve very high growth rates from 1945 up until the 1990s with institutional arrangements involving long-term relationships between firms and banks, the predominance of large conglomerates, and strong government intervention through export promotion and subsidized loans to the enterprise sector – all of which depart from the more market-based and laissez-faire institutional model pioneered and promoted by the US.

That growth-enhancing institutions or policies might change with a country's or sector's distance from the technological frontier, should not come as a total surprise to our readers at this point: in the previous section, we saw that competition could have opposite effects on innovation incentives depending on whether firms were initially closer to or farther below the fringe in the corresponding industry. (Competition would enhance innovation in neck and neck industries, and discourage it in industries where innovating firms are far below the frontier.) The same type of conclusion turns out to hold true when one looks at the interplay between countries' distance from the world technology frontier and "openness". Using a cross-country panel of more than 100 countries over the 1960–2000 period, Acemoglu et al. (2002) regress the average growth rate over a five-year period on a country's distance from the US frontier (measured by the ratio of GDP per capita in that country to per capita GDP in the US) at the beginning of the period. Then, splitting the sample of countries into two groups, corresponding respectively to a high and a low openness group according to Frankel-Romer's openness indicator, Acemoglu et al. (2002) show that average growth decreases more rapidly as a country approaches the world frontier when openness is low. Thus, while a low degree of openness does not appear to be detrimental to growth in countries far below the world frontier, it becomes

increasingly detrimental to growth as the country approaches the frontier. Acemoglu et al. (2002) repeat the same exercise using entry costs to new firms (measured as in Djankov et al. (2001)) instead of openness, and they obtain a similar conclusion, namely, that high entry costs are most damaging to growth when a country is close to the world frontier, unlike in countries far below the frontier.

More formally, consider the following multi-country growth model. In each country, a unique final good, which also serves as numéraire, is produced competitively using a continuum of intermediate inputs according to:

$$y_t = \int_0^1 \left(A_t(i)\right)^{1-\alpha} x_t(i)^{\alpha}\, di, \tag{1}$$

where $A_t(i)$ is the productivity in sector i at time t, $x_t(i)$ is the flow of intermediate good i used in final good production again at time t and $\alpha \in [0, 1]$.

As before, ex post each intermediate good producer faces a competitive fringe of imitators that forces it to charge a limit price $p_t(i) = \chi > 1$. Consequently, equilibrium monopoly profits (gross of the fixed cost) are simply given by:

$$\pi_t(i) = \delta\, A_t(i),$$

where $\delta \equiv (\chi - 1)\, \chi^{-\frac{1}{1-\alpha}}$.

We still let

$$A_t \equiv \int_0^1 A_t(i)\, di$$

denote the average productivity in the country at date t, $\overline{A}_t$, the productivity at the world frontier that we assume to grow at the constant rate g from one period to the next, and $a_t = A_t / \overline{A}_t$ the (inverse) measure of the country's distance from the technological frontier at date t.

Productivity growth occurs as follows. Suppose that intermediate firms have two ways to generate productivity growth: (a) they can imitate existing world frontier technologies; (b) they can innovate upon the previous local technology. More specifically, we assume:

$$A_t(i) = \eta \overline{A}_{t-1} + \gamma A_{t-1}, \tag{2}$$

where $\eta\overline{A}_{t-1}$ and γA_{t-1} refer respectively to the imitation and innovation components of productivity growth. Imitations use the existing frontier technology at the end of period $(t-1)$, thus they multiply $\overline{A}_{t-1}$, whereas innovations build on the knowledge stock of the country, and therefore they multiply A_{t-1}.

Now, dividing both sides of equation (2) by $\overline{A}_t$, using the fact that

$$\overline{A}_t = (1+g)\overline{A}_{t-1},$$

and integrating overall intermediate sectors i, we immediately obtain the following linear relationship between the country's distance from frontier a_t at date t and the distance from frontier a_{t-1} at date $t-1$:

$$a_t = \frac{1}{1+g}\left(\eta + \gamma\, a_{t-1}\right). \qquad (3)$$

This equation clearly shows that the relative importance of innovation for productivity growth increases as: (i) the country moves closer to the world technological frontier, i.e., as a_{t-1} moves closer to 1; whereas imitation is more important when the country is far below the frontier, i.e., when a_{t-1} is close to zero; (ii) a new technological revolution (e.g., the ITC revolution) occurs that increases the importance of innovation, i.e., increases γ.

This immediately generates a theory of "appropriate institutions" and growth. Suppose that imitation and innovation activities do not require the same institutions. Typically, imitation activities (i.e., in the equation (3) above) will be enhanced by long-term investments within large existing firms, which, in turn, may benefit from long-term bank financing and/or subsidized credit, as in Japan or Korea since 1945. On the other hand, innovation activities (i.e., γ) require initiative, risk-taking, and also the selection of good projects and talents and the weeding out of projects that turn out to be unprofitable. This calls for more market-based and flexible institutions, and particularly higher reliance on market finance and speculative monitoring; higher competition and trade liberalization to weed out the bad projects; more flexible labor markets for firms to select the most talented or best matched employees; non-integrated firms to increase initiative and entrepreneurship downstream; etc. It

then follows from equation (3) that the growth-maximizing institutions will evolve as a country moves towards the world technological frontier. Far below the frontier, a country will grow faster if it adopts what Acemoglu et al. (2002) refer to as "investment-based" institutions or policies, whereas closer to the frontier, growth will be maximized if the country switches to innovation-based institutions or policies. In the remaining part of the current paper, we simply apply this distinction to education systems.

3.2. Distance from frontier and the composition of education spending

Using the Acemoglu et al. (2002) insight whereby productivity growth can be generated either by implementing (or imitating) the frontier technology or by innovating on past technologies, each type of activity requiring different institutions or policies, we will depart from Benhabib and Spiegel by decomposing total human capital stock into primary/secondary and tertiary education, and by arguing that different types of education spending lie behind imitation and innovation activities.

Higher education investment in particular should have more effect on a country's ability to make leading-edge innovations, whereas primary and secondary education are more likely to make a difference in terms of the country's ability to implement existing frontier technologies. Thus, it is not so much the total *amount* of education, but more importantly the *organization* of education, that impacts on growth differently across countries at different stages of development.

Now, what are the potential implications of this approach for education policy, and is there something to learn from the comparison between Europe and the US, given the disappointing news from Krueger and Lindahl on cross-OECD country regressions? The remaining part of this section is based on work by Vandenbussche et al. (2004) and by Aghion et al. (2005). The starting point of these two papers is that, in contrast to the Nelson-Phelps or Benhabib-Spiegel models, human capital does not affect innovation and imitation uniformly. More specifically, primary/secondary education tends to produce imitators, whereas tertiary (especially graduate) education is more likely to produce innovators. This realistic assumption, in turn, leads to the prediction that as a country moves closer to technological

frontier, tertiary education should become increasingly important for growth compared to primary/secondary education (all measured in stocks).

3.2.1. Solving the Krueger-Lindahl puzzle

First, note that this simple combination of Acemoglu et al. (2002) with the Nelson-Phelps model of education and growth provides a solution to the Krueger-Lindahl puzzle. Namely, that total human capital stock

$$U + S$$

is not a sufficient statistic to predict growth in OECD countries. For example, take two countries, A and B, at the same distance from world frontier, with same total human capital, but

$$S_A > S_B .$$

Country A will grow faster if the two countries are sufficiently close to frontier whereas country B will grow faster if both countries are far from frontier; and yet the two countries have the same total amount of human capital.

3.2.2. A simple model of appropriate education systems

Going into formalization in greater detail, Vandenbussche et al. (2004) and Aghion et al. (2005) focus on the following class of productivity growth functions:

$$A_{it} - A_{it-1} = u_{m,i,t}^{\sigma}\ s_{m,i,t}^{1-\sigma}\ \overline{A}_{t-1} + \gamma\ u_{n,i,t}^{\phi}\ s_{n,i,t}^{1-\phi}\ A_{t-1} = g(u,s), \qquad (4)$$

where $\overline{A}_{t=1}$ is the frontier productivity in the last period, A_{t-1} is the average productivity in the country in the last period, u_m (resp. u_n) is the number of workers with primary/secondary education (unskilled workers) used in imitation (resp. innovation), s_m (resp. s_n) is the number of workers with higher education (skilled workers) in imitation, and

$$u = \left(u_{m,}\ u_n\right);\ s = \left(s_{m,}\ s_n\right),$$

and

$$\sigma \geq \phi$$

so that the elasticity of productivity growth with respect to skilled (resp. unskilled) workers is larger in innovation (resp. imitation).

Letting $a_t = A_t / \overline{A}_t$ denote the country's proximity to the technological frontier at date t, and letting the frontier grow at constant rate $\overline{g}$, the intermediate producer will choose u and s to maximize profits. Dividing by $\overline{A}_{t-1}$ and dropping time subscripts, the producer's problem simply becomes:

$$\max_{U_m, U_n, S_m, S_n} \left\{ \delta \left[u_m^{\sigma} s_m^{1-\sigma} + \gamma u_n^{\phi} s_n^{1-\phi} a \right] \right\} - w_u (u_m + u_n) - w_s (s_m + s_n),$$

where we eliminate the firm's subscript i, since all intermediate firms face the same maximization problem. Moreover, in equilibrium we necessarily have:

$$u_m + u_n = U \; ; \; s_m + s_n = S \; ,$$

where U and S are the total supplies of workers with primary/secondary education and tertiary education respectively.

What we have here is formally equivalent to a small open economy model with two factors and two products, where the two products are imitation and innovation, whose prices, δ and $\delta\gamma a$ are exogenously given. As in standard trade theory, these given output prices uniquely determine the equilibrium factor prices w_u and w_s. The "revenue" in firms' objective function is proportional to the growth rate (plus unity). Solving for the equilibrium allocations of skilled and unskilled labor between imitation and innovation as a function of U, S and the proximity a to the technological frontier, one can look at how the equilibrium growth rate

$$g^* (U, S, a) = g \left(u^* (U, S, a), s^* (U, S, a) \right)$$

varies with either of those three variables.

In particular, looking at the cross derivative of g^* with respect to S and a, we find:

$$\frac{\partial^2 g^*}{\partial a \partial S} > 0 \; ;$$

in other words, the closer the country is to the world technology frontier, the more a marginal increase in the fraction of workers with higher education enhances productivity growth.

The intuition for this result relies on the Rybczynski theorem in international trade, which implies that a marginal increase in the supply S of highly educated workers leads to an even greater number of skilled workers being employed in innovation. Since the change does not affect equilibrium factor prices, it leaves the factor proportions unchanged in each activity, meaning that innovation also attracts an increased number of unskilled workers. More precisely, since $\sigma > \phi$, so that innovation is the skill-intensive activity, innovation will increase but imitation will decrease. The effect on firms' "revenue", and hence the effect on the economy's growth rate, is positive. For countries closer to the frontier, where the "price" of innovation $\delta\gamma a$ is larger, the effect is larger than for countries further from the frontier.

4. Cross-country and Cross-US States Evidence

4.1. Cross-country evidence

Vandenbussche et al. (2004) confront this prediction with cross-country panel evidence on higher education, distance from frontier, and productivity growth. Aghion et al. (2005) test the theory on cross-US state data. Each approach has its pros and cons. Cross-US state analysis uses a much richer data set as well as very good instruments for higher and lower education spending. However, a serious analysis of the growth impact of education spending across US states must take into account an additional element not considered in previous models, namely, the effects on the migration of skilled labor across states at different levels of technological development. On the other hand, cross-country analysis can safely ignore the migration, but the data are sparse and the instruments for educational spending are weak (they mainly consists of lagged spending). In the remaining part of this section, we shall consider both models of empirical analysis.

Vandenbussche et al. (2004) consider a panel data set of 22 OECD countries over the period of 1960–2000, which they subdivide into five-year subperiods. Output and investment data are drawn from Penn World Tables 6.1 (2002) and human capital data from Barro-Lee (2000). The Barro-Lee data indicate the fraction of a country's population that has reached a certain level of schooling at intervals of five years, so they use the fraction that has received some higher

education together with their measure of TFP (constructed assuming a constant labor share of .65 across country) to perform the following regression:

$$g_{j,t} = \alpha_0 + \alpha_1\, dist_{j,t-1} + \alpha_2 \Lambda_{j,t} + \left(\alpha_3\, dist_{j,t-1} * \Lambda_{j,t}\right) + \upsilon_j + u_{j,t},$$

where $g_{j,t}$ is country j's growth rate over a five-year period, $dist_{j,t-1}$ is country j's closeness to the technological frontier at $t-1$ (i.e., five years before), $\Lambda_{j,t}$ is the fraction of the working age population with some higher education, and υ_j is a country's fixed effect. The closeness and human capital variables are instrumented with their values at $t-2$ and the equation is estimated in differences to eliminate the fixed effect. Before controlling for country-fixed effects, Vandenbussche et al. (2004) obtain a statistically significant coefficient of -1.87 for the human capital variable, and a statistically significant coefficient of 2.37 for the interaction variable, indicating that indeed higher education matters more as a country gets closer to the frontier. Controlling for country-fixed effects removes the significance of the coefficients; however, this significance is restored once a country is regrouped into subregions and country-fixed effects are replaced by group-fixed effects. This suggests that cross-country data on only 22 countries, are too sparse for significant regression results to survive when we control for country-fixed effects.

To see how this result translates in terms of the effect of an additional year of higher education schooling, Vandenbussche et al. (2004) perform the following regression in logs:

$$g_{j,t} = \alpha_0^{'} + \alpha_1^{'} dist_{j,t-1}^{'} + \alpha_2^{'} N_{j,t} + a_3^{'}\left(dist_{j,t-1} * N_{j,t}\right) + \upsilon_j^{'} + u_{j,t}^{'},$$

where this time $dist_{j,t-1}^{'}$ is the log of the closeness to the technological frontier and $N_{j,t}$ is the population's average number of years of higher education. The econometric technique employed is the same as before. Before controlling for country-fixed effects, Vandenbussche et al. (2004) find the coefficient of the number of years to be 0.105 and of little significance, but the coefficient of the interaction variable to be equal to 0.368 and significant. This result again demonstrates that it

is more important to expand years of higher education close to the technological frontier.

4.2. Cross-US states evidence

Aghion et al. (2005) test the same theory on cross-US state data instead of cross-country data. As mentioned above, one potential problem when moving from cross-country to cross-region data, is that educational policy should affect migration flows across regions more than it affects migration flows across countries. Thus, a suitable model of education and growth across regions within a same country ought to include an additional equation describing how migration flows vary, for example, with the wage differential between a certain state and the state currently at the technological frontier. Introducing the possibility of migration reinforces the positive interaction between closeness to the frontier and higher education. Namely, in addition to the Rybczynski effect described above, investing in higher education in a state that is far from the technological frontier, would contribute less to growth in that state, as the newly skilled workers would subsequently migrate to a more frontier state where productivity and therefore wages are higher.

Any regression with growth on the left and education on the right, raises an obvious endogeneity problem, best emphasized by Bils and Klenow (2000). Here, as in the above cross-country panel regressions, the endogeneity problem can be stated as follows: If states or countries choose their composition of education spending according to the model, then we should see the composition of educational investments being highly correlated with technology and productivity, and therefore the regressions would say nothing about causality.

However, the great advantage of moving from cross-country to cross-state analysis, is that we have access to a natural source of exogenous mistakes in education investment, namely, political economy considerations that may lead the congress or other federal instances to misallocate the funding to higher education across states. For example, because it has a representative on a congressional commission for higher education, a far-from-frontier state may end up mistakenly receiving excessive funding for research-related education. Conversely, because of local political economy considerations, a close-

to-frontier state may misguidedly focus its investment in primary education, neglecting higher education.

In other words, political economy considerations and the politicians' ability and incentive to deliver "porks" to their constituencies, provide a natural source of instruments that predict states' tendencies to make exogenous mistakes when investing in education.

The actual instruments used in Aghion et al. (2005) are:

1. for research-university education: whether a state has a congressperson on the appropriations committee that allocates funds for research universities but not other types of schools;
2. for "low-brow" postsecondary education (community colleges, training schools): whether the chairperson of the state's education committee represents voters whose children attend one- or two-year postsecondary institutions;
3. for primary and secondary education: whether the overall political balance in the state's supreme court interacts with the state-school finance system.

Then, using annual panel data over the period of 1970–2000, Aghion et al. (2005) perform a two-stage procedure whereby: (i) in first-stage regressions, the various kinds of educational spending are regressed over their respective instruments; (ii) the growth rate in each state and year is regressed over the instruments for the various kinds of educational spending, the state's proximity to the frontier, and the interaction between the two, controlling for state- and year-fixed effects.

We refer our readers to Aghion et al. (2005) for the detailed regression results, which yield the following conclusions. First, in contrast to our previous cross-country analysis, here the correlations remain significant even after controlling for state-fixed effects without having to regroup the country dummies. Second, the above instruments are very strong, with an F-statistic of more than 10 for the joint significance of the two dummies for senator and house representative on the corresponding appropriation committees as determinants of research education spending. For example, every additional representative on the House Appropriation committee increases the expenditure on research-type education by $597 per cohort member, which is considerable. Now, turning to the second-

stage regressions, Aghion et al. (2005) find that an additional $1000 per person in research education spending raises the state's per-employee growth rate by .27% if the state is at the frontier (with a close to 1), whereas it raises it by only .09% if the state is far from the frontier (with a close to .3). More generally, the closer a state gets to the technological frontier, the more growth-enhancing it becomes to invest in higher education and the less growth-enhancing it becomes to emphasize lower education.

5. Performance and Governance of Universities

Following disappointing growth performances in comparison to the US, and to low Shanghai ranking indicators, several European countries have embarked on national initiatives aimed at improving the foundations and the competitiveness of their national systems of higher education. In some cases, this does not go beyond shaking up bureaucratic inertia and approaching the more advanced European models. But there are also cases that demonstrate elements of general interest, well worth consideration in a Europe-wide setting.

Specifically, there is the English reform (it is English because it does not apply to Scotland or Wales), with its two main features: an increase in yearly tuition fees (up to a cap of 3000 pounds) and the Graduate Contribution Scheme. There is also the German Excellence Initiative (approved by the Schroeder government), which devotes €1.9 billion, over a period of five years, to a competitive program aimed at generating world-class institutions from the matrix of the German universities. Currently, France is also initiating a reform of its university system. After several unsuccessful attempts at implementing radical reforms, France is now taking a more progressive approach, which emphasizes universities' autonomy in faculty hiring, leaving aside the delicate issues of student tuition and student selection.

Is this too little and/or too late? What needs to be done for European universities to catch up with their American counterparts and to contribute more to the growth process in Europe?

University performance is measured by the well-known Shanghai indicator, discussed in detail in Aghion et al. (2007). Governance is captured by universities' answers to a questionnaire that we designed for this purpose and sent to all 200 European universities among the

top 500 universities in the Shanghai ranking. More than one-third of these 200 European universities filled out the questionnaire.

Our main findings, in Aghion et al. (2007), can be summarized as follows: First, there is no one single model of success in the university sector. The best performers in Europe – which includes the UK, Scandinavia, and Switzerland – display quite some diversity in terms of both funding and governance. While the UK, as expected, is much more 'market-oriented' than the European average, this is much less true of the other high performers. Our second main finding is that good performers are generally those universities that enjoy a higher per student budget as well as higher budget autonomy. Finance and autonomy are, therefore, complementary inputs for success.

Even though it displays a few cross-sectional regressions, the analysis in Part I of Aghion et al. (2007) remains essentially descriptive by lack of good panel data involving enough governance variation within each individual country. Thus, in Section 4 of that paper, we use panel data on higher education spending and on the governance of universities across US states, to perform a more systematic econometric analysis of the relationship between performance and the spending and autonomy of universities. Performance is measured here by the average patenting rate in a state over a ten-year period. The governance variables are: (i) the share of private universities in the state; (ii) the average degree of autonomy among public universities in the state, itself constructed from a whole set of component measures (hiring autonomy, budget autonomy, etc.). The main finding in this section is that autonomy and spending are complementary in generating higher growth or higher patenting in the state.

Constructed by a group of Chinese scholars, the Shanghai indicator puts weights on six sub-rankings.[2] Table 1 presents a detailed account of cross-country performance comparisons, looking successively at the top 50, the top 100, the top 200, and the top 500 universities in the Shanghai ranking.

[2] For more details on the sub-rankings of the SJTU, see the Web site: http://www.arwu.org/rank/2007/ARWU2007Methodology.htm

Table 1: Country Performance Index (US=100)

Country	Population (millions)	Shanghai ranking			
		Top 50	Top 100	Top 200	Top 500
Austria	8	0	0	0	53
Belgium	10	0	0	61	122
Czech Republic	10	0	0	0	13
Denmark	5	0	75	114	161
Finland	5	0	46	75	81
France	60	3	15	29	45
Germany	83	0	17	37	67
Greece	11	0	0	0	12
Hungary	10	0	0	0	13
Ireland	4	0	0	0	50
Italy	58	0	0	11	34
Netherlands	16	20	51	76	131
Poland	38	0	0	0	4
Spain	43	0	0	0	14
Sweden	9	7	117	179	217
UK	60	72	86	98	124
EU15	383	13	26	41	67
EU25	487	10	21	32	54
Australia	20	0	31	66	101
Canada	32	39	54	63	104
Japan	128	14	17	24	27
Norway	5	0	66	91	107
Switzerland	7	97	166	228	230
US	294	100	100	100	100
California	36	234	199	163	103
Massachusetts	6	449	308	302	263
New York	19	196	167	139	148
Pennsylvania	12	111	177	161	115
Texas	23	33	61	83	103

Source: Based on the Shanghai Jiao Tong University Academic Ranking of World Universities (2006).
Note: All figures are rounded.

To better see how to read this table, consider column "Top Y", where Y equals, respectively, 50, 100, 200, and 500. For each column, the best university in the Top-Y group is given grade Y, the next best university is given grade Y-1, and this goes down to grade 1 for the lowest performing university within that Top-Y group. The column

"Top Y" shows, for each country (region), the sum of Top-Y Shanghai rankings restricted to the Top-Y universities that belong to this country (region), divided by the country's (region's) population. Moreover, all these totals are divided by the number for the US, so that each number can be interpreted as a fraction of the US per capita performance.

Several interesting facts emerge from this table. First, the US completely dominates among the Top 50, and this is even more true for "university hubs" like Massachusetts (which, moreover, `benefits' from its small population). Not surprisingly, there are more zeroes in the Top-Y column the lower the Y, as it is harder for universities in a country to make it to that group. However, countries and states become more equalized once we enlarge the ranking. In particular, the gap between the EU15 or EU25 and the US narrows as Y increases. Of course, the relative weights allocated to the various universities also equalize as Y increases. For example, the top Shanghai university gets 50 in the Top 50 and 500 in the Top 500; but the 51st university gets zero points in the Top 50 but 450 in the Top 500. Yet we see that in all columns with Y equal to 100 or higher, among European countries Switzerland, the UK, and Sweden do particularly well; the rest of Scandinavia, Belgium, and the Netherlands do pretty well too, but southern and eastern Europe always lag behind. Finally, Table 1 shows that the relative performance of EU universities improves as the sample size grows, which suggests that the variance in university performance is lower in Europe than in the US, and that what EU countries lack most dramatically are top-class universities.

With regard to input, Aghion et al. (2007) present aggregate data showing that countries with better university performance (e.g., the US and Scandinavia) spend more on higher education, with higher per student budgets.

How about governance?

A survey questionnaire was sent to the European universities that figured in the Top 500 of the Shanghai ranking in the fall of 2006. We obtained a response rate of 36%, and focused on the 10 countries for which we obtained response rates of at least 25%. One can observe that the respondents of each of these countries had an average Shanghai ranking close to that of the whole population of universities

from that country. (In fact, for all countries, respondents had a somewhat higher ranking, except for Spain.)

What do we learn from this questionnaire on how various governance variables link to performance? First, private universities tend to perform better than public universities. Second, universities that determine their faculty wages do better than universities that are subject to a centralized wage-setting mechanism. Third, the same is true for universities with hiring and budgeting autonomy.

The country performance figures in Table 1 suggest that a university's performance is positively affected by all our measures of "autonomy" and also by funding. However, they do not tell us: (i) which of these autonomy indicators dominates and how collinear they are; (ii) whether funding and autonomy improve performance in a "separately additive" fashion, or whether we see positive interactions between the two. To answer these questions, Aghion et al. (2007) first perform a cross-sectional regression of performance over budget and governance variables from the survey. They find a highly significant link between a higher number of students and better performance (that is, a lower rank), which suggests a size effect that may be indicative of increasing returns to scale but also of a "Shanghai bias" in favor of large institutions. The link between higher student age and better research performance suggests a cumulative reputation effect, which adds almost 0.20 to the R-square. The link between higher per student budget and better research performance is also significant, and adds 0.21 to the R-square. Turning to governance variables, they find that only budget autonomy is linked significantly to research performance. The other autonomy variables appear with the anticipated sign (that is, autonomy helps performance), but not significantly. They then rerun the regression concentrating on budget autonomy as sole governance variable, and we see that the various coefficients all remain significant. Then they introduce an interaction between budget autonomy and budget per student. The result indicates that having budget autonomy (i.e., going from a value of 0 of the 'budget autonomy' variable to a value of 1) doubles the effect of the "budget per student" variable on the ranking performance of the university.

The main lesson is therefore: A per student budget benefits research performance, and autonomy doubles this beneficial effect.

Moving from European to US data has one main advantage, namely, that we can "instrument" for education spending. In other words, we can truly interpret correlations as causalities from education spending to university performance. Another advantage is that for the US we have access to rich cross-state time-varying data sets on education spending and patenting across US states over time.

Interestingly, there is also considerable variation in university governance even across neighboring states, even though governance indicators do not vary much over time. For example, universities in Illinois show low autonomy on average, unlike their neighbors in Ohio. These governance differences are persistent over time and they go back to the idiosyncratic origins of American universities, reflecting differences in the preferences of university founders. Thus, it is no accident that Benjamin Franklin founded the private University of Pennsylvania whereas Thomas Jefferson founded the public University of Virginia.

Aghion et al. (2007) take US states' differences in autonomy as given and then ask whether exogenous investment in higher education produces more patenting in a certain state if universities in that state are more autonomous.

For research education Aghion et al. (2007) use the detailed time-varying data on how much each state spent on each type of education in all years from 1947 to 2007. In terms of governance, we consider two alternative measures of university autonomy: (i) the percentage of research universities in the state that are private (private universities are, indeed, more autonomous than any public university, since they would score higher on every measure of financial and academic autonomy); (ii) an aggregate index for public research university autonomy; this index is constructed from a set of component factors listed below.

The aggregate autonomy index takes the maximum value when the public university: (a) sets its own faculty salaries; (b) sets its own tuition; (c) has lump-sum budgeting (as opposed to line-item budgeting); (d) can shift funds among major categories of expenditure; (e) retains and controls tuition revenue and/or grants; (f) has no ceilings on external faculty positions (it need not hire faculty internally); (g) has no ceilings on external nonfaculty positions (administrators or technicians); (h) has freedom from pre-audits of its

expenditures; (i) has year-end balances that are carried over (that is, not returned to the state).

The data covers the 1947 to 1972 birth cohorts, and they tell how much each US state spent on each birth cohort in each year. Thus, we know how much was spent on average on each individual at every stage of the student's studies (from primary school to postgraduate college).

Aghion et al. then examine the effect on patenting in a US state, and of increasing research education funding by $1000 per year and per person in the relevant age cohorts over a six-year period in states with highly autonomous universities and in states with less autonomous universities, respectively.

At first, when the increase in research education funding is just being introduced, only those cohorts that are about to enter the labor market benefit from the increase in research spending, and therefore the impact on patenting remains small. However, this impact increases as more and more cohorts affected by the spending increase enter the labor market, and it peaks when all the cohorts affected by the increase are in the labor market.

Figure 2 in Aghion et al. (2007) stresses that the accumulated effect of spending on patenting is always significantly higher in states with more autonomous universities than in states with less autonomous universities. The same contrast is shown between states close to and far from the frontier. That the curves peak lower in the latter case than in the former, reflects the fact that research spending enhances patenting more in states closer to the frontier, whether universities are more autonomous or not.

6. Conclusion

What have we learned from our discussion in this lecture? First, we can conclude that capital accumulation-based models have little to say about education policy, especially with regard to the increasing growth gap between Europe and the US. Second, we can state that Schumpeterian models that emphasize the interplay between human capital stocks and the innovation process, have more potential for delivering policy recommendations, yet when looking at educational spending as a whole there is not much that can be said from looking at cross-OECD comparisons.

However, once we distinguish between imitation and frontier innovation and map these two sources of productivity growth to different segments of the education system, then we can come up with relevant policy recommendations for regions like Europe that have moved closer to the frontier and yet are maintaining very low levels of higher education spending compared to the US. The above regressions suggest, indeed, that putting the emphasis on primary/secondary education was fine as long as Europe was technologically far from the US and therefore relying more on imitation as a main source of growth. But they also suggest that now, as the growth potential of imitation is wearing out, it becomes more urgent to invest more in higher education, so as to foster innovation.

What should be done to improve the performance of European universities? First, European countries should invest more in their university systems: on average, the EU25 countries spend 1.3% of their GDP on higher education against 3.3% in the US. Thus, European countries should increase funding of higher education by at least 1% over the next 10 years. An open question remains as to which fraction of the necessary increase in European education funding should be borne by public budgets (tax money) versus tuitions and other sources of private funding. Second, European universities should become more autonomous, particularly in their budget decisions, but also in hiring, in setting wages, in program selection, and in student (particularly MA-level) selection. A third conclusion, of importance for policy makers, is that while it looks desirable for countries or states to improve on all possible dimensions of autonomy, in countries like France or Italy one can already achieve significant improvements by increasing the per student budget, the budgetary autonomy of universities, and their autonomy in hiring and wage decisions, while postponing the more delicate issues of tuition and student selection. This suggests a diversity of paths to university reform that are both efficiency enhancing and politically feasible.

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RESPONSIBLE TECHNOLOGY TRANSFER BY STARVING UNIVERSITIES

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Introduction

The knowledge-based industry is a keystone in modern economy. The progress of this industry relies heavily on innovations in different fields, such as ICT (information and communication technology), biotechnology, nanotechnology, and cleantech. It calls for transfer of technology from the source of new knowledge (and know-how) – i.e. the research institutes – to the industrial sector, where it can be transformed and developed into products. As such, governments around the world that are committed to democracy and a free-market economy view university-industry technology transfer as an important tool for economic growth, and encourage it through various channels.

Most universities in the developed countries respond positively to and practice technology transfer. The most common procedure is by patenting university service inventions and out-licensing them. The licensing philosophy, policy, and tactics vary considerably from case to case – even between comparable technologies. The differences are based on circumstances particular to each specific invention, business opportunity, licensee, and licensor.

In the summer of 2006, Stanford University's Dean of Research convened a small meeting of research officers, licensing directors, and a representative from each of the 12 leading American universities to brainstorm on important societal, policy, legislative, and other issues in university technology transfer. The result of that conference is an important document entitled "In the Public Interest: Nine Points to Consider in Licensing University Technology," published in March 2007. As the title suggests, the authors emphasize that a major aim of university-industry technology transfer is to serve the public interest,

and not just bring income to the research institute. Quoting the document, it reads: ". . . it is our aim in releasing this paper to encourage our colleagues in the academic technology transfer profession to analyze each licensing opportunity individually in a manner that reflects the business needs and values of their institution, but at the same time, to the extent appropriate, also to bear in mind the concepts articulated herein when crafting agreements with industry. "

In Israel, technology transfer is carried out by technology transfer companies (TTC) associated with each of the seven research universities. The first and the most successful TTC is Yeda, established by the Weizmann Institute of Science in 1959. Yeda is not only the first Israeli TTC, but also one of the world's original technology transfer organizations. With no governmental guidelines, Yeda and the following Israeli TTCs, together with their associated universities, constructed their own guidelines, which significantly overlap the 2007 "nine points" guideline. The essence of the TTCs' policy is to maintain responsible technology transfer. Following this policy, Yeda and Yissum (the TTC of the Hebrew University of Jerusalem) succeeded in becoming world-leading TTCs, each with an annual commercialization income of tens of million of dollars. However, in recent years the Israeli universities have suffered dramatic cuts in governmental support, and technology transfer has come under pressure to serve as a short-term, limited-view source of income.

The challenge of upholding responsible technology transfer policy, aiming to serve the public interest and not just maximize short-term income, while being in a financial crisis, is the main topic of this paper.

Commercialization of Academic Research Results – Not "All Win"

Universities are no longer ivory towers. Commercialization of academic research results is here. It exists all over the world, taking different forms and different mechanisms, depending mainly on the discipline and on the regulatory system. And it is generally considered a desired goal. Advancement of the commercialization of research results is the policy of governments all over the world. Articles in top journals with attractive headlines, such as "Turning

technology into gold",[1] and "Making money in the UK",[2] indicate the positive view of commercialization of academic results.

Technology transfer in the US was regulated in the early 1980s by the Bayh-Dole Act. According to an opinion piece in The Economist, published on December 12, 2002, it was "Possibly the most inspired piece of legislation to be enacted in America over the past half-century". In the same article, "Innovation's Golden Goose", the writer states that "Together with amendments in 1984 and augmentation in 1986, this unlocked all the inventions and discoveries that had been made in laboratories throughout the United States with the help of taxpayers' money. More than anything, this single policy measure helped to reverse America's precipitous slide into industrial irrelevance".

Apparently, technology transfer serves the interests of all partners involved: the industry, gaining access to advanced knowledge and innovation; the individual researchers, getting professional satisfaction as well as additional income; and the universities, providing the public with useful inventions and achieving income with no strings attached.

So isn't it "all win"? In recent years, more and more warning signs have portended the unwanted effects of commercialization of academic results,[3] including:

1. Institutional changes: commercialization may alter the direction of faculty research.[4]
2. Restricted dissemination of research results.[5]
3. Increased dependency of science on governance, for regulation and support.
4. Institutional, as well as individual, freedom of research at risk.

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[1] Nature, **426**, December 11, 2003.

[2] The Scientist, November 13, 2003.

[3] T. Agres: "The Costs of Commercializing Academic Research", The Scientist, August 25, 2003.

[4] J. G. Thursby and M.C. Thursby: "University Licensing and the Bayh-Dole Act", Science, **301**, p. 1052, August 22, 2003.

[5] M. A. Heller, R. S. Eizenberg: "Can Patents Deter Innovation? The Anticommons in Biomedical Research", Science, **280**, May 1, 1998.

5. Potential conflict of interests and conflict of commitments (institutional and individual).

Hence, it is now accepted that commercialization of research results is not "all win" (e.g. [6]). The main pros and cons can be summarized as follows:

Pros – Positive implications of academia-industry technology transfer	**Cons – Negative implications of academia-industry technology transfer**
Direct contribution to short-term growth	May hazard innovation and therefore growth in the long run
"Fair" and efficient use of public support	Jeopardizes the foundations of academic culture: openness, freedom of research, diversity of topics, etc.
Improves exploitation of knowledge to the benefit of the public (e.g., new drugs)	Potential institutional as well as individual conflict of interests at universities

In order to find the balance between the pros and the cons, and to make the best out of commercialization of academic research results, technology transfer should be carried out in a responsible way, placing public interests at the fore.

Can this be done? The Weizmann Institute, similarly to the leading American universities mentioned in the introduction, has maintained a responsible technology transfer policy for over 50 years. The declared mission of Yeda, the Weizmann Institute's TTC, is "to allow society to benefit from discoveries made at the Institute"; and "To create additional source of income to the institute so that more independent research can be conducted" (in that order). For this undertaking, a set of concrete regulations has been produced and the institute and its researchers follow them carefully. Not surprisingly, after half a decade of consistent policy and practice of responsible technology transfer, the Weizmann Institute is perhaps the world

[6] D. Kennedy: "Bayh-Dole: Almost 25", Science, **307**, p. 1375, March 4, 2005.

leader in revenues from technology transfer and, at the same time, one of the best academic research institutes. The main question is whether other universities in Israel can follow its example while being very much dependent on decreasing public support.

Responsible Technology Transfer by Starving Universities – Is It Sustainable?

The seven Israeli research universities, though they are private non-profit organizations and are not held directly by the government, are considered public institutions by the nature of their budget sources, and are, in actual fact, subject to audit and budgetary control by certain governmental entities. The universities are publicly supported through the annual budget law, and by public-supported research funds, such as the Israel Science Foundation, the Binational Science Foundation, the German-Israeli Foundation, and others. Another important source of income is tuition fees, which are regulated by the government. Then come donations, generally sourced by university personnel. The last source of income could be best named as "other".

The problem the universities are facing today is decreasing public support, through a decline in direct budgetary allocation and reduced funding for basic research. Tuition fees are regulated and tend to shrink under the public pressure. Donation support is limited, and hence the only way to maintain the current level of research and operational activity is by increasing the "other" sources of income.

These "other sources" include fruits from endowments, overhead from performance of specific projects, sales of services, and income from technology transfer.

For the Weizmann Institute in 2004, these "other sources" amounted to 42.6% of its annual income, and it has been reported that Yeda's income from licensing royalties in 2003 were $93 million. Yissum of the Hebrew University, the second TTC in Israel and among the world's top dozen, reported a licensing income of about $41 million in 2007. Ramot at Tel Aviv University, Israel's third TTC, reported a licensing income of $6.6 million for that year.

Unlike other universities' economic-financial adventures, technology transfer is generally considered a desired goal, aligning the interests of the academic institution with the interests of the private sector, the government, and the individual inventor-

researcher. As such, increasing the income of Israeli universities from technology transfer is regarded as the universities' main tool for reducing dependence on public support.

Issues of Confrontation

Relations between the public university licensor and the private sector licensee usually arrive at certain cross-roads where the integrity and public-interest mission of the university is thoroughly tested. First and foremost are, of course, the economic terms of the license; however, there are other "soft" issues that ought to be considered:

- **Ownership of Intellectual Property.** It is in the public interest that IP generated by a university team should be owned by the university, irrespective of the source of sponsorship or where the IP was conceived. The university's inventions are based on many years of knowledge buildup through public funding, and the mere fact that the end test or final study happened to be funded by a private entity should not require transferring ownership of the results. The funding entity will get its return by either having an option to license, or having a license to the results, usually with no added license fee. Nevertheless, starving universities face the risk that financial constraints will force them to sell the intellectual property if the other party insists.
- **Open vs. closed license.** It is in the public interest that the license scope be limited to certain clearly defined applications and products, under a limited number of patents and specified know-how. The license should not include "improvements", the development of which is not paid for or sponsored by the licensee; nor should it include IP generated in the past, present, or future by other non-specified university researchers. Note that starving universities are at risk of being pressed to "license the researcher" or even "license the university".
- **No shelving of the licensed technology.** It is the university's goal to instigate the development of new products and applications that will benefit the public. Therefore, the essence of the license is the introduction of licensed products into the market. The university will, therefore, require certain diligence from its licensee, towards such development, and shall make sure that the license is terminated if the licensee shelves the licensed technology for

whatever reason. Starving universities risk being pressured to belay the diligence terms or to sell the IP, thereby foregoing the ability to relicense should the technology be shelved.

- **The right to perform further research and the right to publish.** The curiosity-driven pursuit of the unknown and the dissemination of knowledge are the essence of academia. A university-granted license should not impede its researchers' performing further academic research into the subject matter or publishing their research results, whether sponsored by the licensee or not. Starving universities are at risk of letting the licensee veto their rights of academic freedom.
- **Liability.** The licensing university is sometimes requested to provide representations and warranty as to the applicability of the licensed technology, the enforceability of the IP, the freedom of operation, no breach of a third party's IP, or obtaining certain results while performing its research. However, the university has no control over the development process by the licensee; it is not involved at all in the making of the final product; and research activities are not engineering, and therefore cannot guarantee the outcome. Starving universities could be forced by the licensee to provide such representations and bear the liability of the licensee's possible failure in the long run.

Are there remedies to such risks faced by starving universities? Should technology transfer be regulated by the government? Ought the government provide a "standard license agreement"; approve university-industry license agreements; audit and veto university-industry license agreements? We believe the answer to these questions is no. The government should be distanced from the universities.

Should technology transfer be regulated by market forces? No. Market forces are generally short term by nature, and they do not guarantee satisfying the public interest in the long run. License agreements, once matured into products, may last for 15–20 years, and all sides ought to benefit financially from its success. Hence, a long-term view is required.

Should technology transfer be self-regulated by the universities? No. We have already detailed the pressures exerted by the private sector on starving universities, and the risks such universities face.

Most probably, the solution is somewhere in the middle: the government-regulator should dictate certain licensing guidelines to be followed by the universities, tackling the "soft" issues of IP ownership, free research, and publication. The universities will generate their own set of guidelines under this government umbrella. The daily operation of technology transfer will then be subject to such long-term far-reaching guidelines, and hence could withstand the daily pressures of the "market forces".

Summary

Technology transfer issues go beyond the campus limits, where academic freedom rules, into the economic world of sharks. In this world, starving universities stand helpless. We propose that the basic rules of the game, as seen from the public interest point of view, be regulated by the government, while the universities formulate their guidelines in light of such rules and with a long-term outlook.

COMMERCIALIZATION OF PROGRAMS WITHIN PUBLIC INSTITUTIONS – THE VIEW OF VATAT

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Abstract
The tendency of establishing commercial academic programs within public institutions is mainly motivated by economical and budgetary considerations. This tendency has increased recently due to reduced government support and reduced tuition fees in public institutions. The potential benefits of this process are not clear but, at the same time, there are various negative long-term effects. The view of most public institutions is that selected programs can be established, while keeping academic standards. Some institutions, particularly the private institutions, are against these programs.

In this presentation, previous discussions and decisions of the Planning and Budgeting Committee will be reviewed. It is believed that, in general, the state should sufficiently support the public institutions, while providing opportunities for the private institutions to develop.

General Background

The tendency of establishing commercial academic programs within public institutions is mainly motivated by economical and budgetary considerations. This tendency has increased recently due to reduced government support and reduced tuition fees in public institutions.

The existing commercialized programs are mainly focused on popular disciplines of high demand (such as business and management). A relatively large number of these programs are towards MA and MSc degrees without theses. Some of the programs are intended for specific groups of students, such as students from certain companies or industries. Most of the programs are intended for Israeli students, but some are specially oriented for foreign

students. In 2006, about 2,000 "private" students formally studied in these programs in public institutions, mostly in Tel Aviv University, the Hebrew University, and Ruppin College. As a matter of fact, more private students study in such programs in these and in other institutions than reported.

According to the policy of the Council for Higher Education (MALAG), the institutions of higher education are required to apply to MALAG and to its Planning and Budgeting Committee (VATAT) in order to initiate commercial programs. Moreover, the programs can be started only after the formal approval of MALAG. However, in the past, some of these existing programs were not reported, and therefore, were not approved by MALAG. The explanation of the institutions was that these programs are identical (or similar) to the common programs that were approved previously. In addition, no financial support has been requested by the institutions from VATAT for these programs. MALAG and VATAT could use administrative and budgetary sanctions to impose their requirements, but this has not been done so far.

VATAT decided that before establishing a general policy on this subject, it is important to take into consideration all relevant points of view. These include economical and budgetary considerations; academic and social considerations; judicial considerations; the possibility of unfair competition with private institutions; etc.

Relevant Considerations

Since the existing academic programs are focused on popular disciplines, such as business and management, there is high demand for these programs. The cost of teaching these disciplines in public institutions is usually low because of high student to faculty ratio and simple infrastructure (laboratories are not usually required). In addition, the high tuition fees help to increase the financial resources and to overcome financial problems. On the other hand, establishment of high-level academic programs involve larger expenses, particularly due to high faculty salaries and large investments in improved facilities. Thus, it is not always clear whether the net profit of high-level academic programs is significant.

While the potential benefits of establishing commercial academic programs are not completely clear, there are various negative long-

term effects. These effects can be observed from several different points of view: of the individual student, the academic institution, and the whole nation. Some of the shortcomings and drawbacks involved in the operation of these programs are briefly described below.

One major question relates to the use of public infrastructure for commercial programs (or profit-generating activities), with all relevant consequences, including legal issues. (Similar questions arise in cases of private health services within public hospitals.)

It might be difficult to properly distinguish between the public and the commercial programs within the same institution of higher education. It is not easy to separate control or to follow up on and distinguish between profits and losses of the two different systems. Specifically, there is a danger of transferring potential losses from the public programs to the commercial programs. In addition, various academic and social problems may arise due to the mix of the two different types of programs, faculty salaries, and tuition fees at the same institution.

From an academic point of view, high-level commercial programs could be developed by means of significant investments in excellent faculty and suitable infrastructures for teaching. On the other hand, poor commercial programs might be the result of economical and budgetary considerations or constraints.

Commercial academic programs may contribute to deterioration of public programs in several ways. In particular, a transfer of resources from the public programs to the commercial programs may cause academic damage to the former due to insufficient investments in infrastructure. As a result, it might be difficult to attract excellent faculty for the public programs.

Another potential problem is the flow of resources in research universities from research to commercial teaching. In particular, there is a danger of neglecting important and high-level academic disciplines due to concentration on high-profit (or high-income) teaching programs.

Other problems include potential damage to accessibility to high-level institutions of higher education for students from the periphery, and unfair competition with private institutions. Planning problems may arise due to investments in profitable teaching, instead of teaching and research in high-priority disciplines.

Evidently, various groups and sectors that encourage privatization may support the establishment of commercial programs within public institutions. The development of such programs may affect a government policy of increasing privatization and reducing government support for public higher education and research. Under certain circumstances, this process may encourage the government to lessen its commitment to the development of excellent public institutions of higher education.

The View of VATAT

Despite the numerous problems, shortcomings and drawbacks involved in establishing commercial programs within public institutions of higher education, it seems that, from a judicial point of view, the development of such programs might be possible after taking into consideration some necessary steps. On the other hand, VATAT could decide against such programs, in case it finds that such programs are not appropriate, or if the potential damage is more significant than the expected benefits. In any case, before a final decision on this subject is reached, the following points should be taken into consideration by VATAT:

- all existing rules and laws;
- establishment of new rules and criteria related to budgetary topics;
- the rights of stakeholders;
- the potential damage and the expected benefits of such programs.

Over the years, VATAT has carried out extensive discussions on the subject of commercial programs within public institutions of higher education. To consolidate its position, VATAT asked the institutions of higher education to give their views on this topic. It turns out that most public institutions are in favor of establishing commercial programs, whereas some institutions, particularly the private institutions, are against this step. Typical views of the public universities are as follows:

- **University A** – In favor of selected programs, while maintaining academic standards. Such programs may help to overcome budgetary difficulties and to attract high-level faculty.

- **University B** – In favor of particular programs intended for certain populations in remote places. Before taking a final decision, various questions relating to this topic should be discussed by experts.
- **University C** – In favor of these programs, in order to overcome budgetary difficulties.
- **University D** – In favor of these programs because of budgetary difficulties. In particular, programs intended for foreign students should be encouraged.
- **University E** – In favor of these programs in particular disciplines, under certain limitations.

The following decisions, taken by VATAT in recent years, summarize the main developments in this area:

May 2004
Due to the severe budgetary cuts imposed on the institutions of higher education, VATAT decides to positively consider, under specific limitations, the possibility of establishing commercial academic programs within public institutions. An ad-hoc committee will investigate the relevant aspects of this subject. The committee will recommend the necessary procedures and rules before VATAT makes a final decision.

May 2006
After consideration of academic, budgetary, socioeconomic, and judicial aspects, VATAT decides not to open new commercial programs within public institutions. The budgetary effects of existing programs will be evaluated.

July 2006
VATAT decides to freeze its previous decision until a fair hearing is given to representatives of the institutions of higher education.

April 2007
VATAT approves its previous decision not to open new commercial programs within public institutions, and not to expand the number of students in existing programs.

Concluding Remarks

The tendency of establishing commercial academic programs within public institutions is mainly motivated by economical and budgetary considerations. This tendency has increased recently due to reduced government support and reduced tuition fees in public institutions. While the potential benefits of this process are not completely clear, there are various negative long-term effects. The view of most public institutions on this topic is that selected programs can be established, while keeping up academic standards. Some institutions, particularly the private institutions, are against this step.

Various problems may arise due to the mix of two different types of programs within the same public institution. One major problem is related to the use of public infrastructure for commercial programs. In addition, the potential unfair competition with private institutions should be considered. Other problems are related to various topics, such as legal, academic, social, and planning issues.

The development of commercial academic programs may significantly affect a government policy of increasing privatization and reducing government support for public higher education and research. Moreover, this process may encourage the government to lessen its commitment to the development of excellent public institutions of higher education.

In summary, it is believed that the state should sufficiently support the public institutions, while providing opportunities for the private institutions to develop.

DISCUSSION

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I have to say I am terribly relieved not to have to comment on Professor Philippe Aghion's talk. It came across to me as a series of rapid-fire power points, and I am both amused and confused. I suppose what I thought about at the beginning was the difference between the ways in which an economist might approach some of these issues and the way an historian might approach them. I mean no offence to economists – some of my best friends are economists! But there is an awful lot of sophisticated firepower rushing through.

I am so glad that the rest of you asked the questions. I was really struggling to know where to go with my remarks. One of the things I might have asked Professor Aghion (but it would have been better if we had been sitting over coffee or something), is about all the regressions to the mean and the coefficients. Did that surprise you, the listeners? Because the message I took away from much of what he was saying is that the rich can get richer, that if you give money to those institutions that are already in elite status and acquiring a lot of money, you will get more economic growth and development than if you put money into catch-up institutions. I might have said that without any mathematics whatsoever. But never mind. Aghion is charming and interesting, and we can ponder his analysis.

The other two papers are less technical. What I would like to say about those is not too much, because I agree wholeheartedly with the presenters that there are some real problems when you introduce a profit-generating motive in a university as a matter of survival. We have been talking about this all day. It is a very important historical question.

I am interested in the circumstances that may lead an institution to forget or downplay some of the inheritances or traditional values that account for its strengths. I also recognize that nothing in life ever sits still. Nothing can ever sit still. There always has to be change. Over

the 800 years of university history, there has always been change, always been modifications according to different sources of income and authority.

So the real question, I think – and VATAT is wrestling with this, and certainly you are wrestling with this – is to what extent commercialization invites critical compromises with university history that may even involve ethical matters, questions of trust, and professional cooperation. The academic profession has a guild history, a history as a community. The word "university" in Latin means a "community", a "society or body of persons"; that was its original meaning. And so, to what extent can this guild tradition, which we in modern times have reinterpreted as a profession based on an ethical conception of service, be maintained? To what extent can we trust the academic community to respect its own integrity and not follow a wholly business model into the market where profit or anything for profit – just about anything for profit – is legitimate?

My other worry, which is related to that, is that institutions like universities, whether they are public, privatized, or private, are fiduciary institutions; that is to say, they have a responsibility to the public (as was said). What is interesting about Israel, as compared to some other countries, particularly the United States, is the weakness of the public opinion sector with regard to educational issues. One of the real controls on universities in the United States is not government but public opinion and the arousal of public opinion through the media and through the press, or even through legislative complaints.

But the arousal of public opinion is part of a conception of civil society, where individuals in a democracy take an interest in the institutions that are serving them. It is a very powerful regulator of morality. We have been discussing universities and their commercialization solely in a context of markets and states without reference to civil society. This, then, leads to a conclusion that the state is needed to regulate the morality of universities whenever market forces become too dominant. That is not a conclusion that is borne out by the history of university-state relations. While states have been an ally of universities, they have also been an enemy. All the necessary qualifications have been made in the session's presentations: I am only trying to reach into the dilemmas, and, in a way, to emphasize them.

I want to wrap up, because it is really late and everyone is tired. When portions of a publicly supported university privatize, as we have been discussing, either by charging higher fees for certain kinds of programs, or entering into technology markets, collecting money for that sort of activity, what happens to the parts of the university that are not engaged in money-making activity? Can they never be engaged in that activity and never be commercially viable?

In the best examples that I have read and looked at, that sort of activity takes place within an understanding that the entire university is going to benefit in some way and must benefit. What I did not mention today in referring to Burton Clark's empirical analysis of privatizing universities in Europe is that much of the money that is collected for profit activity is used by the "entrepreneurial universities" (in his phrase) to support the humanities and soft social sciences and other subjects that do not generate income. In the case of Warwick University, a large Arts Centre was built with money generated from outside activity, or income that was redistributed. The lesson is that revenue gained from commercial activity can and, I would argue, should be used to benefit the entire institution. The stronger the entire institution, the better it will be. Relatedly, we must apply the same reasoning to a nation's network of higher education institutions and ask the question as to how one type of institution may cooperate with and assist other types of institutions for the good of the nation. There can be cooperation between different kinds of universities.

Finally, to repeat my earlier point, it has always been my hope that public opinion in Israel could somehow be educated to take a healthy and supportive interest in the nation's higher education institutions and be made to realize how essential it is for the survival and progress of society. We cannot just have a world divided into markets and the state. We need to recall Guy Neave's tripartite divisions: we need a world that is market, government, and public opinion.

SESSION III

Effects of Privatization in Higher Education on Social Needs

THE SOCIAL RESPONSIBILITY OF THE INSTITUTIONS OF HIGHER EDUCATION IN ISRAEL

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By way of examining the social responsibility of academic institutions, a brief introduction to Ono Academic College will be made. Following this, two programs have been chosen to show how social excellence is achieved. In conclusion, academic excellence as social responsibility, Ono's social entrepreneurship, and the questions pertaining to roles of academic institutions will be discussed.

Introduction

Ono Academic College is a dynamic, private academic institution, fully accredited by the Israeli Council for Higher Education, that has set for itself two principal goals:

- Development and study of excellent applied academic programs that enable graduates to successfully enter the labor market immediately upon graduation, while preserving high academic standards and quality of teaching;
- Giving priority to the social problems of the State of Israel by finding solutions for various sectors of the population that are underrepresented in academic institutions, providing the opportunity for higher academic education in these sectors, and creating opportunities for active participation in the Israeli workforce.

Since Ono Academic College received accreditation, it has experienced tremendous growth and development unparalleled in the Israeli academic world. Within a short time, the Ono Law School became the largest undergraduate law school in Israel, and the Ono Business School became the second largest undergraduate business school, in terms of the number and quality of its students and the number of excellent, full-time faculty members. The latter include many leading researchers, teachers, and academic leaders from Israel and the world, in addition to young doctoral students from

prestigious universities with promising potential. The student body has reached 8,500.

Quality of Teaching

The academic foundation of Ono Academic College rests on ensuring the best quality of teaching. Ono does not receive government support but, rather, supports itself from tuition paid by students. As a private institution that charges tuition almost three times higher than public institutions and that must compete with other private institutions, if Ono wants to continue to exist, it must continuously ensure excellent teaching. Without it, the school has no right to exist, in the most literal sense of the word.

Applied Academics

Our working assumption is that the rapidly changing business environment requires us to follow its progress and adapt the program as it changes. The field of business administration exists in two worlds: both the academic-research world and the practical world of actual business.

Ono Academic College has developed an "Applied Academics" approach, which is implemented in the curriculum and in the makeup of each course and program. This differs from universities that emphasize pure research-based ideologies, and ensures that studies are relevant to today's job market.

Social Excellence: Accessibility of Academic Education to Excluded Sectors of Israeli Society

As part of its integration of academic excellence and social responsibility, Ono strives to influence varied sectors in Israeli society. Ono considers itself a home in which the elite of Israeli society meets with future leaders of the Ethiopian community, the ultra-Orthodox community, the periphery and development towns, as well as Beduin, Druze, and Arab students.

Ono considers providing an equal opportunity for education to weaker sectors of the population that have generally been excluded from academic education to be a matter of utmost national importance, in order to help these sectors integrate into the job market and Israeli society and to ensure that as an academic institution, we

create change, not just graduates. Ono believes that significant change for these population groups can only be created by giving an equal chance to *large* groups of students rather than to a limited number of individuals.

Two specific sectors have been chosen for this discussion: the Ethiopian Israeli community and the Jewish ultra-Orthodox (Haredi) community.

Integrating Students of Ethiopian Descent into Higher Education and the Job Market

All of Israel was overwhelmed with excitement when, in the 1980s and 1990s, Ethiopian Jews arrived in Israel in large numbers. For Israel, this represented a coming home of a lost tribe, a kind of national closure. However, since the dramatic immigration from what is essentially a third world country to Westernized Israel, the Ethiopian immigrant community has struggled with family crisis, poverty, social ailments, and hopelessness.

Higher education, in the manner of providing the fishing rod instead of the fish, is the key to enabling this community to become self-sufficient and regain its lost leadership within Israeli society. Yet it was only when we first spoke to the Jewish Agency in Israel about the Ethiopian community, when the former requested that we admit one or two Ethiopian students to each of our faculties, that we realized these eager young people were not being accepted to faculties that had the potential to achieve this goal.

Ono has opened the door to the Ethiopian community to study law, business, accounting, finance, banking, systems analysis, and more. Israel has over 40,000 lawyers, but only 33 from the Ethiopian community at last count. Out of some 120 students studying law in all of Israel's private and public institutions, 67 study here. There are no accountants in Israel's Ethiopian community – soon we will be proud to have our graduates be the first to break into this elite profession. One of our graduates, employed at one of Israel's three major banks, has told us that she is one of only three employees of Ethiopian descent there.

Right now, 150 students from the Ethiopian community, including 10 MBA students, study in Ono's academic programs. Ono took upon itself to meet the national challenge of creating a genuine revolution

within the community. This revolution will not come about if only one or two students are accepted annually to high-demand faculties such as medicine, law, business, and engineering, as is the practice of other academic institutions.

The program's goal is the achievement of prestigious academic degrees in high-demand professions, along with personal and leadership skills: professions that will enable our graduates to fully integrate in the job market and become productive members of Israeli society, leading to the strengthening of the family and social fabric of the Ethiopian Jewish community in Israel. This generation of Ethiopians has the opportunity to break the glass ceiling and sever the chain of poverty of this community in Israel. All of Israel remembers the drama of these exciting arrivals in the country, but since then, we have not given these immigrants the chance to succeed. We need to be active now, in order to enable them to become fully participating members of the Israeli society and economy.

Ono Academic College and the Jewish Agency have taken the responsibility to fully subsidize the education of Ethiopian immigrants and provide them with academic, social, and personal support during and after their entire course of studies, until they are integrated into the Israeli job market. After years of investment and success, Jewish Federations in the US (especially Detroit and Los Angeles) and Canada, as well as Keren Hayesod, have joined us in full partnership to help support the program.

Since fees equivalent to public sector tuition are paid for Ethiopian students by the Ministry of Absorption, one can ask why they are not flooding public campuses and becoming lawyers, doctors, bankers, accountants…. The answer: Public universities have not yet opened their doors to significant numbers from the Ethiopian community to enable them to study towards these prominent and high-wage professions.

As the first class of Ethiopian Israelis at Ono neared graduation, we realized that without a natural professional network, without what we call "*protekzia*" in Israel, graduates may falter in the job market. We realized that we must be responsible not only for the academic education of these young people, but for their entrance into the professional community as well, and we accepted and acted upon this responsibility.

We are very proud of the partners we found in both the public and private sectors who opened their doors and hearts in accepting Ono's graduates from the Ethiopian community in excellent internships and professional positions, including leading law offices, accounting firms, and government ministries. We are proud of our graduates: Mr. Elias Inbram, who became Israel's spokesperson in the Israel embassy in South Africa after completing the prestigious Foreign Ministry cadet course; Adv. Pnina Tamano, who was accepted to Bank Discount's legal department in the bank's head office; business school graduate Tziona Yeshayahu, who became the first Ethiopian Israeli director of private banking at Bank Hapoalim's airport branch. These are just a few examples of the success of Ono's Ethiopian Israeli graduates.

Integrating the Ultra-Orthodox Population into Higher Education and the Job Market

The Haredi campus is another way that Ono distinguishes and differentiates itself from other academic institutions in Israel in its commitment to social excellence.

Israel's fastest growing Jewish community, but also its most isolated, is the ultra-Orthodox (Haredi) community. In Israel, a large percentage of ultra-Orthodox men dedicate their lives to religious study and are supported by substantial government funding. This has lowered the community's capacity for self-sufficiency, and the community suffers from economic and social difficulties, often poverty. The Israeli government recently reported that 49% of the ultra-Orthodox subsist under the poverty line. Just as important, this system of government support has caused a large rift between the ultra-Orthodox and secular communities, fanning anti-religious sentiment and resentment. The ultra-Orthodox have become Israel's most detached community.

Ono established the largest academic framework for the ultra-Orthodox community in Israel and the only one that is part of a secular institution.

In general, the ultra-Orthodox cannot presently study in public academic institutions in Israel because the essence of their religious beliefs precludes men and women from studying together. It may be that this seems inconsequential, but unfortunately, the establishment universities have not provided answers to these special needs.

Ono's Haredi campus pays attention to all details that enable students to feel comfortable in their surroundings without compromising their religious practices and holidays. The scope and content of the program, faculty, and schedule are identical to the regular program. The only difference is that on the ultra-Orthodox campus, men and women study on different days and the administrative conditions at the campus are appropriate for the ultra-Orthodox population.

Presently, over 1,400 men and women study at the Ono Haredi campus.

It is our contention that the ultra-Orthodox community can be engaged in society in Israel by participation in the business economy, by means of acquiring academic education.

One might argue that the ultra-Orthodox do not have the appropriate educational background needed to be accepted to higher education and cope with its challenges. This is easily solved with an intensive pre-academic preparatory program in subjects not taught in yeshivas (religious schools) that is recognized by the Council for Higher Education .Ono also subsidizes a substantial portion of the students' tuition in order to ensure that this population has access to higher education. Graduates of the first class have already found a place in the Israeli job market or in academic programs leading to advanced degrees. They succeed when given the opportunity and they can change their society and all of Israel by becoming productive, wage-earning members of society. It is our responsibility to provide the conditions for them to do so.

Networking and Changing Perspectives

In accordance with this perspective, a variety of other sectors of the population also make their academic home at Ono: students with previous academic (at least BA) degrees; people already involved in the public and private sectors, including doctors, accountants, and officers in the security services, officers from the prestigious IDF Ofek program; residents of Israel's periphery and development towns; and just ordinary young people who want to study.

A particular significance of the meeting of all sectors of Israeli society in an academic institution is the fascinating and important interaction between them. There is no doubt that each will influence

the other, positively adjust perceptions, and pave the way for job market acceptance for all. The worldwide networks established at Ono will also be lifelong.

The Social Responsibility of Academic Institutions in Israel

The examples that I have presented depict an absurd situation. One would expect that the academic elite be the most active in the social dialogue, rather than be apathetic to our social ills. One would expect that the responsibility for bringing the less fortunate sectors of Israeli society into the fold of higher education belongs to the publicly funded universities in Israel and not to a private, tuition-funded institution. Why hasn't the establishment academia shown that they, the academic elite, are the instruments for change in Israel? Why hasn't this happened?

As these words are written, Israel's senior academic staff has been on strike since the beginning of the academic year, with no end in sight. Astoundingly, the Israeli public is apathetic to the strike, justified as it may be, and has not raised its voice. This, sadly, is a painful demonstration of the public perception of its public universities and, moreover, accentuates the gap between the majority of the population and Israel's academic elite. This is the result of a profound and continuous lack of involvement of the academic community in the public spheres of influence.

Closed doors to higher education are a ticking time bomb. If the Ethiopian community, for example, is not part of the social, economic, and professional dialogue in Israel, that community will not be able to join mainstream Israel. We were all distressed to see, just this week, that four Ethiopian schoolgirls were separated to study in a class of their own. Not admitting Ethiopian Israelis to medical school, for example, is no different than isolating them in elementary school classes. Without role models and success stories, the community will flounder and continue in poverty and social isolation at all levels.

The Commitment to Academic Excellence

Public academic institutions, though they receive the bulk of their funding from the public budget, may claim that they need not be committed to the economic welfare of all sectors of the population. They may profess that their commitment must be to recruiting the top

students in Israel and providing them with an excellent education. They may maintain that their major function is to produce high quality, world-class research. Universities and colleges may decide not to be major players in the social responsibility game.

However, if this is the case, then we should fund them accordingly. We should fund only master's and doctoral degrees from the public budget, for those students whose excellence has led them to seek advanced degrees.

If publicly funded academic institutions, universities, and colleges declare or act in a manner that is not committed to producing professionals – with bachelor degree graduates – for the local job market, in all of Israel's major, high-demand faculties, in engineering and medicine, in law and business, in accounting and banking, and in systems analysis, then we should not provide them with public funding for undergraduate degrees.

Public funding must be used to fund the public, and academic institutions must be committed to this very same public. All of us, from Israel's elite to its development towns, pay into the public treasury. Public funding should guarantee that all sectors of our society can become part of it.

Actually, if all of Israel's academic institutions accepted all sectors of the population to all their faculties, no one institution would need to bear the financial brunt of extensive scholarships, or create a special program. Universities may even be surprised at how the huge will to succeed becomes a self-fulfilling prophecy when the doors to academia open.

If we don't open the doors to higher education, the doors to the job market will also remain closed. We will perpetuate low level employment for weak communities – menial jobs and social unraveling – rather than leadership and economic prosperity.

If we do not specialize in social excellence, we will not move forward. Social excellence does not need to go hand in hand with academic excellence – social excellence *is* academic excellence. Lack of social responsibility will ultimately bring the universities to close. The public will not continue to support their elitist agenda.

Our government and education councils must also share in the responsibility for accepting all sectors of Israeli society to higher education. The universities, because they receive most of their income

from limited government budgets, are limited in the number of students they can accept to any given faculty. Of course, the demand for prestigious faculties, such as law, business, medicine, engineering, etc., far exceeds the number of places allocated by the government agencies. As a result, universities raise their admissions standards to a level that is impossibly high for those who come from lower socioeconomic backgrounds.

Though there are, undoubtedly, many qualified Ethiopian Israelis who would like to enter these high-demand faculties, they are not being accepted because there will always be candidates whose financial and cultural advantages outweigh their means. If, instead, Ethiopian Israelis apply at private colleges, they will not be able to afford the high tuition. Ono managed to solve this problem by supporting a full-tuition program with its own funds, solely from the sense of responsibility that this must be done. Is it enough? We believe that the traditional universities must first of all decide, and then find the way to open the doors to *all* their faculties to all sectors of the population, in meaningful numbers.

Social Entrepreneurship

It is the freedom of choice that comes with being a private institution that has led Ono to social entrepreneurship. As a private institution, Ono Academic College encourages entrepreneurship, inventiveness, and innovation in all of its operations, among all of its faculty and employees. We have been able to come up with innovative solutions to Israel's most pressing problems by implementing a new approach. We are passionate about our approach and committed to the vision.

Leaders of academic institutions must be zealously active in leading the way to major change in the society around them. Presidents and faculty members have the opportunity to implement proven models for success, such as that at Ono. Academic excellence stemming from social responsibility to create positive change in Israeli society will lead to measurable, maybe even immeasurable, rewards for us all. Both public and private academic institutions must play a major role in becoming part of the solution to what is certainly the biggest social crisis and greatest threat to our security that we have had in all of our history.

EFFECTS OF PRIVATIZATION ON THE QUALITY OF HIGHER EDUCATION

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Abstract
The purpose of this study is to analyze the relationship between privatization in higher education and the quality of universities. An interesting fact is that of the top 10 universities in the US, 9 are private. Previous studies have claimed that there is a relationship between the privatization of universities and their quality, since countries with a high proportion of private resources have superior universities.

This paper analyzes whether this supposed relationship is due to empirical regularities between quality and ownership, or whether the two are unrelated. The analysis presented herein is based on data collected on 508 universities in 40 countries. I show that flexibility is the important element affecting quality, and not ownership per se.

Introduction

Higher education institutions have undergone many changes over the past few centuries. Universities were once part of the religious establishment, and their main role was to teach the liberal arts, philosophy, and theology, though some of them became famous for specific subjects, such as law in Bologna and medicine in Montpellier. Most university students, whose numbers were in any case few, were preparing for a career in the Church, even after the Reformation.

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From the medieval period and on, universities were mainly funded by the church or the city. During these centuries, the impact of higher education on the economy was inexistent. Even during the first Industrial Revolution, the effect of university education on innovations was still negligible (see Bairoch, 1999).

Then, in the late nineteenth and early twentieth centuries, the impact and role of university changed, mainly due to two economic events. The first was the second Industrial Revolution, i.e., the rise of new science-based industries, such as chemical and electricity (see Landes, 1969; and Mokyr, 1993). The second was the rise of the corporate economy and of the Chandlerian managerial enterprise that led to the process by which salaried senior managers largely took over from capital owners and heirs of the founding families. Both engineers and managers needed specialized formal training, while the pioneers of industrialization and their heirs only had on-the-job training (see Brezis and Crouzet, 2004).

In consequence, the medieval universities were reformed and expanded in the nineteenth century. They generally became secular, and they started to teach new subjects, particularly sciences and technology, as well as economics. Furthermore, many new, state-funded universities were established in Europe, especially in England and Germany. However, the universities' role in the economy was still a minor one.

The second main revolution in the role of universities took place following World War II. Indeed, during the last half of the twentieth century, dramatic changes took place in higher education: First, the role of universities has changed: They became critical to economic growth. As a consequence of the importance of higher education for economic development, there was a rise in the scale and scope of universities; the number of universities and colleges in the West rose, and the number of students increased even more.

Concurrently with their democratization, universities became heterogeneous not only in their specialization, but also in their quality. From this point on, a distinction could be made between the elite universities on the one hand, and the rest on the other. Today, not only does a degree affect the remuneration and career path of graduates, but the prestige of the university or college from which

they graduated has an effect too (largely, yet not exclusively).[1] Concomitantly with the emergence of this heterogeneity in the quality of universities, a clear distinction became apparent in the funding and ownership of universities: some are private while others are public.

Not all countries have the same distribution of private and public institutions, and the dissimilarity among countries in the emergence of types of universities is large. In some countries, such as Japan, a strong sector of private universities emerged; in other countries, mostly in Europe, the majority of universities are owned and funded by the state. Moreover, in some countries, there is strong government intervention in universities' decision-making processes; while in others, the state has little or no role in universities' decisions.

The purpose of this paper is to examine whether these two typologies, i.e., quality and ownership, are related. Psacharopoulos (2005) claims that there is indeed a relationship between the distinction of private vs. public and the quality of universities. He shows (see Table 1) that countries with a high proportion of private financing have overall higher quality universities.

Another empirical regularity regarding the relationship between ownership and quality is presented in Table 2, which shows that of the 10 top universities in the US, 9 are private. Is this correlation, presented in both tables, due to some causality? In other words, does it mean that, ceteris paribus, in order to be of high quality, universities have to be private? In this paper, I check whether private ownership is a necessary condition for a university's achieving quality.

I show that the empirical regularities presented in these two tables actually blur the picture – i.e., the relationship between state ownership and quality is not monotonic. There is another element that is essential to quality: flexibility. Private ownership is not a necessary condition for attaining flexibility, yet in some cases, in an environment of strong government intervention, it becomes essential.

This paper is divided into four parts. Following the introduction, I define quality of institutions. In the third part, I develop the typology of ownership and define the role of government in higher education. I then analyze the relationship between privatization and quality of universities. I empirically test the elements that affect

[1] See Brezis and Crouzet, 2005; and Brewer et al., 1999.

quality and relate them to the broader intervention of governments. Part four concludes.

2. The Quality of Universities

From their founding in Middle Ages until the nineteenth century, universities had no economic or social goals. The university was intended neither to train the workforce, nor to carry out R&D; it was mainly the seat of theological discourse.[2] Later on, especially after the nineteenth century, universities started producing research and affecting the economy.

Today, universities produce multiple goods and have three main goals. The first goal is R&D. The university is the place where ideas are developed, innovation processes are invented, and basic research takes place. The literature emphasizes that pure and basic research cannot be supported by the private sector; therefore it must be conducted in universities.[3]

The universities' second goal is to educate the next generation of the labor force. Higher education leads to an increase in human capital, which is one of the main factors of production today.

Their third role is to increase social capital. People like to have cultivated people in their milieu; it increases well-being and decreases crime. (Some even believe that attaining a cultural patina should be the main goal of higher education [see Readings, 1996].) This third element, however, is not related to the quality of universities, since all institutions provide culture.

Therefore, the quality of a given university should be related to the excellence of R&D and education. In recent years, there have been many attempts to find indices to these elements that could enable ranking universities.

[2] It must be stressed that the eighteenth-century Industrial Revolution was not based on theoretical knowledge developed at universities, but rather on training "on the [shop] floor".

[3] Aghion et al., 2005a, for instance, state that basic research should be conducted in universities, while advanced research should be conducted at private institutions. The intuition underlying this statement is that scholars want "creative control", and in exchange accept lower wages than those paid in the private sector.

It is clear that the ideal index for quality of education is related to the increase in human capital, which can be represented by wage increase. Indeed, from a theoretical point of view, higher quality in education means that *ceteris paribus*, the graduates' salaries will be higher. So, assuming the same in practice, better education will be represented by higher wages. For R&D, the best proxy is its impact on other research.

For the past few years, two institutions have published quality indices of universities, attempting to find good proxies for education and R&D. In 2004, the Times Higher Education Supplement (THES) started producing a ranking of the top 500 universities, which is popular with firms hiring new graduates, while the Academic Ranking of World Universities published by Shanghai Jiao Tong University (SJTU) has become well known and is mostly used for comparison of universities by the academia and policy makers.[4] Since the correlation between both indices is 0.78, and the correlation between SJTU and the proxy of citation is 0.8, we focus only on the SJTU index. (Table 3 presents the correlations between the various indices.)

The data on the SJTU and the citation indices for the top 100 institutions as well as the Israeli ones are presented in Appendix C, where I also present the classification of the universities, i.e., public or private. All 7 public Israeli universities are included in the list of top 508 institutions; only one is in the top 100. It should be noted that of the sample of the 508 universities from among 40 countries (Table 5), only 12% are private. In Table 4, I present a summary of the data per country. In column (7), I present the percentage of enrollment of students in private institutions.

3. Private vs. public institutions and quality of universities

In this section, I analyze the effects of the typology of ownership on the quality of universities. Is private ownership an important element for the quality of a university?

[4] See Liu, 2004. There are also indices that specialize in the ranking of specific departments. The differences between them are small, and all indices are highly correlated. For instance, see Coupe (2004) for rankings of economic departments.

The terminology on private and public institutions has led to some confusion in the literature. In fact, there are three different levels of analysis of the typology of ownership, each of which has to be considered separately: ownership per se, budget, and flexibility. This paper focuses on ownership and flexibility.[5]

A. Ownership

(i) Overview

Regarding ownership, this typology is valid only from the end of the nineteenth century, or since government has had a say in matters of higher education. Before that, no distinction between public and private universities could be made, since from the Middle Ages, universities were not directly funded by the state, but rather mainly by the church or the city. Note, for example, that when Harvard was founded in 1636, it was a small state-church college chartered by the Massachusetts Colonial Assembly. The structure of ownership changed at the end of the nineteenth century, a period wherein changes in the structure and aims of higher education occurred, along with the creation of many new universities in Europe as well as in the US.

When defining the structure of ownership of universities, it should be emphasized that there are not two, but three different types of institutions: public, private non-profit (PNP), and private for-profit (PFP). The first group includes all institutions for whose budgets the state is responsible. In most countries, the majority of institutions fall into this category.

The second group consists of the universities owned by non-profit institutions. In Europe, until the last two decades, the private non-profit institutions were overwhelmingly affiliated with religious groups, especially the Catholic Church, and were mainly established in the nineteenth century.

[5] In Brezis, 2008, I analyze the effects of budgets on flexibility and on quality.

Lately, in many countries in the world, and especially in developing countries, secular PNP institutions are burgeoning in great numbers. Indeed, due to massification, as well as the pressure of higher enrollment in existing universities, new PNPs have developed. In other words, the emergence of PNP institutions occurred in countries where massification became very important, yet the state budget could no longer cover the expenses (see Tilak, 2003). A good example of this development is Latin America, where the increase in the number of students has been astounding. Between 1960 and 1970 Latin America's student body growth rate was 260%, and it has mainly been compensated for by an increase in enrollment in private universities. In 1950, only 7% of the student enrollment was in private universities; in 1990 it had reached 40%.

The third type of institution is the private for-profit university. All of the PFPs are quite new. While they are not numerous, it could well be that they will take off in the future.

With a thick brush, we could relate the existence of public universities and PNPs in the past to the tendency of a given country toward government intervention. In countries with strong interventionism, à la Colbert, as in France, the government is expected to develop universities just as it is responsible for primary and secondary education. Therefore, institutions in Europe were almost all public.

Another reason given for the intense development of public institutions in Europe is that the establishment of research universities has also been related to the development of the nation-state. The creation of universities arose from the needs of modern states to adopt and develop new technologies; states increasingly needed trained specialists and engineers, for waging war in particular, and for economic development in general. Since universities became the necessary link in the chain of the success of industrialization in Europe, public universities in that region flourished.

The development of universities in the US and Japan has taken a quite different path. In these two countries, PNP institutions were already quite evolved by the late nineteenth century (see Table 5). Moreover, in both countries, the development of PNP and public institutions occurred in parallel.

In the developing world, budgets are diverted mainly to primary education, so that higher education is left mainly to financing by the private sector.

In the US, at the end of the nineteenth century (circa 1890), public institutions constituted only 22% of total enrollment. From then on, the number of public universities increased, and they have enabled the massification of the twentieth century. As such, enrollment in the public sector increased during the twentieth century to reach 50% of total enrollment in 1935, 60% in 1940, and 70% today. As shown in Table 5, the reputable PNPs were all established before 1920. Despite the importance and high quality of PNP institutions, the rapid development of public institutions occurred mostly in states where the number of private institutions was small.[6] Thus, the development of public institutions had the aim of developing education in the respective states and enabling students from those states a financial advantage. In the US, there are also some PFP institutions (see Table 6), of which three of them are mentioned in Table 5.

In Japan, private institution enrollment still accounts for nearly 75% of total university enrollment. However, with a few exceptions, the public universities are those ranked high; the best students and scholars are recruited to these universities. Admission to these top universities is similar to recruitment to the *grandes écoles* in France (see Brezis and Crouzet, 2005).

In Europe, in contrast to the US and Japan, the PNP sector is not developed at all, and only recently have some been established. The case of Germany is typical: since 1980, more than 60 PNPs have been created. In the UK, two universities are privately financed: the University of Buckingham, which is a PNP, and BPP College, which is a PFP.

(ii) Empirical Results

Does ownership affect the quality of institutions? As illustrated in Tables 1 and 2, it appears that indeed it does. Let us recall that Psacharopoulos (2005) found a correlation of 0.63 between the top 100 institutions and the share of private resources financing higher education. Checking simple correlations, similar to his work, I find

[6] See Goldin and Katz, 1998.

that in 2006, there is a correlation of *only* 0.11 between the number of institutions in the top 100 in a given country and the percentage of enrollment in private institutions (see Table 7).

Moreover, there is a correlation of 0.34 between the number of institutions in top 100 and the GDP per capita, and there is a strong correlation of 0.66 between the number of institutions in the top 100 and the number of students in the country (see Table 7).

These correlations imply that the data presented by Psacharopoulos, 2005, are not sufficient to conclude an ownership-related effect on quality (see also Psacharopoulos, 2003). The correct way to analyze this relationship is to examine, at the micro level, the effect of ownership on the ranking of the top 508 universities in the world.

Table 8 shows the empirical results on the effects of ownership on quality. In column 1, on the entire set of 508 universities, the dummy for private ownership is significant. We obtain the same relationship on the sample of the top 100 universities (column 2), and on the 166 US universities (column 3).[7] So over the entire sample, private ownership affects a university's ranking.

In Table 5, it appears that the top universities are also the oldest. I therefore performed a regression checking whether seniority has an impact on quality. In Table 8, columns 6 and 7, I show that seniority is significant, and in column 8 all variables are significant: While seniority affects quality, private ownership still has an effect on the ranking of universities in their respective countries.[8]

In conclusion, it appears that the results at the country level, as presented by Psacharopoulos, are also robust at the individual university level. In the next section, I attempt to isolate which element implied by ownership leads to the relationship between ownership and quality. I focus on flexibility.

[7] However, when we remove the top 20 universities from the total sample, and also from the US sample, the ownership index is no longer significant (see columns 4 and 5).

[8] In column 8, the sample comprises US and UK universities only, with a dummy for the UK. In columns 9 and 10 are presented the regressions for the US only, with and without the top 20 universities.

B. Interventionism and flexibility

(i) Overview

One of the main differences between private and public institutions is the level of state intervention. States and governments are not responsible solely for the budgets of public universities; they do sometimes intervene in their administration. There are at least four levels on which governments intervene, and accordingly, the level of flexibility of private institutions differs from that of public institutions in the same country. The four levels of flexibility are: (1) flexibility in deciding which scholars are recruited to the institution, and freedom in deciding on their promotions; (2) freedom in student admissions; (3) freedom in deciding on salaries; and (4) freedom regarding tuition fees.

The variance is wide between countries: on the one hand are some of the US states, where private and public universities have total freedom in choice of students and scholars. On the other hand, as in France, no flexibility is given to the heads of universities, neither in their admission of students and tuition fees, nor in their selection of scholars and their pay. In Table 9, I present an index of flexibility of public institutions in the various countries of the sample. This index was formulated mostly based on a questionnaire sent to scholars in the various countries. The questions that were sent to the scholars are presented in Appendix A. At each level, the ranking is scaled from 1 (no flexibility) to 4 (total flexibility).[9]

In Table 9, we present the sum of these four levels and their product. Each of these series presents a different index of public institution flexibility. The range for the sum is from 4 to 16, and for the product from 1 to 256. The intuition underlying these two possible indices is that the first presents the level of flexibility if there is no inter-relationship and effect between the various levels. The second index, the product, represents an index based not only on flexibility per se, but also on cross-effect between flexibilities.

[9] Note that in this paper, I use a unique index for all the different states of America. This assumption should probably be relaxed in further research.

(ii) Empirical Results

Does flexibility affect an institution's quality? Table 11 shows the results of the regressions, including the Flexibility Index.[10] The sample has been reduced to 464 universities, and, as in Table 8, private ownership per se is significant when introduced alone. However, when we add in the Flexibility Index, we obtain that the "private ownership" variable is no longer significant, while the index for flexibility in its two forms, product and sum, is significant.

So, it is not ownership per se that has an influence on the quality of universities, but rather *flexibility of administration*. Governments that leave their universities alone to make their own decisions actually give them the possibility of attaining high quality.

This result implies that public universities are not necessarily suffering from some bias in quality. They suffer from the intervention of governments in their decision making.

4. Conclusion

Privatization is one of those subjects that leads to fierce debate on the grounds of political and philosophical arguments. On one side are the neo-liberals, who believe that privatization is the panacea to bad management; on the other side are the neo-conservatives, who would like to keep sensitive sectors in the public sphere. Privatization of higher education is even more delicate. Public universities were established in the late nineteenth century on the grounds that they would be the locomotives of development. Universities are perceived as the last bastion of intellectual life and national culture.

However, the university's role has changed considerably. Today, its main role is the development of new technologies in a competitive environment. In consequence, the meaning of excellence and quality has evolved: It is no longer sufficient that universities are the meeting grounds where students develop and fulminate their ideas on changing society, and discuss them with scholars. Today, results and efficiency have "invaded" the realm of research and higher education. A techno-bureaucratic notion of excellence is no longer perceived as contradictory to the values of the university. At present, quality is reflected in measurable elements; we have rankings, with all their

[10] Aghion, 2008, uses an index for autonomy, based on a questionnaire somewhat different than ours, which was sent to European universities.

flaws.

This paper has analyzed whether privatization is an important element in the quality of universities. I have shown herein that the main factor in a university's success is flexibility, which permits good administration.

When the public universities were created in the West, they were adapted to the economic and social environment of the times. However, today they have not adapted to globalization. The problem in public universities is too much state control and too little freedom to administer their own affairs. It is clear that if the public universities want to maintain their rankings, and not lose pace with the others, first and foremost they need flexibility. In the age of globalization, this element becomes crucial as the competition between universities for good scholars and students increases.

This paper has shown that the typology of ownership explains nothing, while the typology of flexibility is what tells the story of quality in higher education. Governments should give universities flexibility, the sine qua non of quality and success. The Flexibility Index developed herein emphasizes this importance.

Budgets are also an important element of a university's success. However, a university does not need to be public in order to obtain state funds. While research should be financed even more by public funds, all other intervention of the state is unwelcome.

This decade has seen higher education reforms in nearly all countries in the West. The sense is that the system is not prepared for the huge increase in the number of students and the fierce international competition. Therefore, France and Israel, among others, stand on the eve of far-reaching reforms in their educational systems.

If flexibility fails to be integrated into education reforms, there are only two possible dynamic paths that countries can take: Either their public universities will take a clear downhill slide and become irrelevant to quality research, or they will become privatized. In countries where union strength will prevent such changes, privatization will nevertheless pop up and save the system. So unless such unions come to understand that the best policy is to permit at least some flexibility, privatization will become the panacea. While it is not a necessary phenomenon, a lack of serious reforms in countries lacking flexibility will prompt private universities to take the lead.

Appendix A – Questionnaire for the Formulation of a Flexibility Index

We asked 130 scholars from 26 countries in Europe, North America, Asia and Oceania to answer this questionnaire:

1. Are decisions concerning recruitment of scholars taken by the university/department, or is there some intervention of the government in the recruitment of scholars?

2. Are decisions concerning acceptance of new students taken uniquely by the university, or is there some intervention of the government/state?

3. Are salaries of scholars flexible: are they open to negotiation between the university and the faculty member/candidate or is it determined by the government/state. Are there differences of wages among professors in different universities or departments?

4. Concerning tuition fees: do the universities have the freedom to set tuition fees or it is the state/government that takes this decision?

We compared the answers that we received to the data presented by the European Union (see Eurydice European Unit, 2007). Approximately 19% of the scholars, from 15 countries, answered these questions. The results are presented in Table 9 (Appendix B). We used a scale of 1–4 points to describe the degree of freedom in each category, whereby 4 denotes complete freedom to the public universities while 1 denotes no flexibility. (Private universities, having complete freedom, get 4 points in each category.)

Appendix B – Tables

Table 1: Private Financing and Quality of Universities

Country	Private resources for higher education (%)	# Universities in top 100
Austria	0	1
Denmark	0	1
France	9	4
Germany	10	7
Sweden	12	4
UK	30	11
Japan	55	5
Australia	44	2
US	67	51
Canada	39	4

Source: Psacharopoulos, 2005, Table 2

Table 2: Top 10 Universities in the US

Institution	Regional ranking	Private/Public
Harvard	1	Private
Stanford	2	Private
Berkeley	3	Public
MIT	4	Private
Cal Tech	5	Private
Columbia	6	Private
Princeton	7	Private
Chicago	8	Private
Yale	9	Private
Cornell U.	10	Private

Source: SJTU 2007

Table 3: Correlation between the Different Proxies of Quality

	THES Overall (2006)	THES Citation (2006)	SJTU Overall (2006)	SJTU Citation (2006)
THES Overall (2006)	1.00			
THES Citation (2006)	.59	1.00		
SJTU Overall (2006)	.78		1.00	
SJTU Citation (2006)		.47	.80	1.00

Table 4: Selected Data on Higher Education

Country	No. of institutions in top 500 (1)	No. of institutions in top 200 (2)	No. of institutions in top 100 (3)	GDP per capita (in US $) (4)	Population (in millions) (5)	No. of students (in thousands) (6)	Students in private HE institutions (in %) (7)	Students per population (in %) (8)
Europe								
Austria	7	1	0	34,700	8.2	229		2.8
Belgium	7	4	0	33,000	10.4	316		3.0
Czech Rep.	1	0	0	22,000	10.2	317	6.4	3.1
Denmark	4	3	1	37,100	5.5	201		3.7
Finland	5	1	1	33,500	5.2	174		3.3
France	23	7	4	31,120	63.7	2,287	12	3.6
Germany	41	14	6	31,190	82.4	1,974	3	2.4
Greece	2	0	0	24,000	10.7	353		3.3
Hungary	2	0	0	17,500	10.0	422		4.2
Ireland	3	0	0	44,500	4.1	192	7.5	4.7
Italy	20	4	0	30,200	58.1	1,820	6.3	3.1

Netherlands	12	9	2	32,100	16.6	194		1.2
Norway	4	1	1	46,300	4.6	211		4.6
Poland	2	0	0	14,400	38.5	1,917	29.5	5.0
Portugal	2	0	0	19,800	10.6	381	25.7	3.6
Russia	2	1	1	12,200	141.4	6,884	14.9	4.9
Slovenia	1	0	0	23,400	2.0	112	2	5.6
Spain	9	1	0	27,400	40.4	1,444	12	3.6
Sweden	11	4	4	32,200	9.0	357		3.9
Switzerland	8	6	3	34,000	7.5	160	1.6	2.1
UK	42	22	11	31,800	60.8	2,336		3.8
Asia								
China	14	1	0	7,800	1321.9	9,236		0.7
China-HK	5	0	0	37,300	7.0	79		1.1
China-TW	6	1	0	29,600	22.9	1,270		5.6
India	2	0	0	3,800	1129.9	11,779		1.0
Israel	7	4	1	26,800	6.4	246	10.5	3.8
Japan	33	9	6	33,100	127.4	2,809	75.6	2.2
Singapore	2	1	0	31,400	4.6	110		2.4
South Korea	8	1	0	24,500	49.0	3,549		7.2
Turkey	1	0	0	9,100	69.7	2,454	5.2	3.5
America								
Argentina	1	1	0	15,200	40.3	1,273		3.2
Brazil	5	1	0	8,800	190.1	1,550	70.3	0.8
Canada	22	7	4	35,700	33.4	1,014		3.0
Chile	2	0	0	12,600	16.3	800	44.1	4.9
Mexico	1	1	0	10,700	108.7	2,538	33.7	2.3
United States	166	88	54	43,555	300.0	16,031	27.4	5.3
Oceania								
Australia	17	7	2	33,300	20.4	863	1.4	4.2
New Zealand	5	0	0	26,200	4.1	491	0.1	11.9
Africa								
Egypt	1	0	0	4,200	80.3	1,670		2.1
South Africa	4	0	0	13,300	44.0	758		1.7

Table 5

United States			
World Ranking	Institution	Classification	Year of establishment
1	Harvard Univ	PNP	1636
2	Stanford Univ	PNP	1891
3	Univ California - Berkeley	Pub	1868
5	Massachusetts Inst Tech (MIT)	PNP	1861
6	California Inst Tech	PNP	1891
7	Columbia Univ	PNP	1754
8	Princeton Univ	PNP	1746
9	Univ Chicago	PNP	1890
11	Yale Univ	PNP	1701
12	Cornell Univ	PNP	1865
13	Univ California - Los Angeles	Pub	1919
14	Univ California - San Diego	Pub	1960
15	Univ Pennsylvania	PNP	1740
16	Univ Washington - Seattle	Pub	1861
17	Univ Wisconsin - Madison	Pub	1848
18	Univ California - San Francisco	Pub	1873
19	Johns Hopkins Univ	PNP	1876
21	Univ Michigan - Ann Arbor	Pub	1817
26	Univ Illinois - Urbana Champaign	Pub	1867
28	Washington Univ - St. Louis	PNP	1853
29	Northwestern Univ	PNP	1851
30	New York Univ	PNP	1831
31	Rockefeller Univ	PNP	1901
32	Duke Univ	PNP	1838
33	Univ Minnesota - Twin Cities	Pub	1851
34	Univ Colorado - Boulder	Pub	1876
35	Univ California - Santa Barbara	Pub	1905
37	Univ Maryland - Coll Park	Pub	1856
38	Univ Texas - Austin	Pub	1883
39	Univ Texas Southwestern Med Center	Pub	1943
41	Vanderbilt Univ	PNP	1873
43	Pennsylvania State Univ - Univ Park	Pub	1855
44	Univ California - Davis	Pub	1905
45	Univ California - Irvine	Pub	1965
47	Rutgers State Univ - New Brunswick	Pub	1766

49	Univ Pittsburgh - Pittsburgh	Pub	1787
50	Univ Southern California	PNP	1880
51	Univ Florida	Pub	1853
58	Univ North Carolina - Chapel Hill	Pub	1879
60	Carnegie Mellon Univ	PNP	1900
61	Ohio State Univ - Columbus	Pub	1870
68	Purdue Univ - West Lafayette	Pub	1869
70	Brown Univ	PNP	1764
74	Univ Arizona	Pub	1885
75	Univ Rochester	PNP	1850
78	Case Western Reserve Univ	PNP	1967
80	Michigan State Univ	Pub	1855
83	Boston Univ	PNP	1839
87	Rice Univ	PNP	1891
90	Indiana Univ - Bloomington	Pub	1820
91	Texas A&M Univ - Coll Station	Pub	1871
93	Univ Utah	Pub	1850
96	Arizona State Univ - Tempe	Pub	1885
97	Univ Iowa	Pub	1847
102	Univ Massachusetts - Amherst	Pub	1863
103	Georgia Inst Tech	Pub	1885
105	Oregon State Univ	Pub	1868
107	Univ California - Riverside	Pub	1954
108	Tufts Univ	PNP	1852
110	Univ Virginia	Pub	1819
116	Emory Univ	PNP	1836
125	Baylor Coll Med	PNP	1900
126	Mayo Clinic Coll Med	PNP	1972
131	Univ Hawaii - Manoa	Pub	1907
135	Dartmouth Coll	PNP	1769
138	Univ California - Santa Cruz	Pub	1965
139	Univ Georgia	Pub	1785
140	Univ Illinois - Chicago	Pub	1890
141	North Carolina State Univ - Raleigh	Pub	1887
147	Univ Massachusetts Med Sch	Pub	1962
152	Univ Tennessee - Knoxville	Pub	1794
153	Colorado State Univ	Pub	1870
155	Univ Miami	PNP	1925
156	State Univ New York - Stony Brook	Pub	1957
158	Virginia Tech	Pub	1872
159	Florida State Univ	Pub	1851

166	Univ Texas Health Sci Center - Houston	Pub	1972
169	Univ Cincinnati - Cincinnati	Pub	1819
171	Iowa State Univ	Pub	1856
173	Virginia Commonwealth Univ	Pub	1838
177	Univ Alabama - Birmingham	Pub	1900
178	Univ Texas M.D. Anderson Cancer Center	Pub	1941
182	Univ Connecticut - Storrs	Pub	1881
185	Univ Nebraska - Lincoln	Pub	1869
187	Oregon Health & Sci Univ	Pub	1974
191	Univ Delaware	Pub	1743
193	Univ Maryland - Baltimore	Pub	1807
200	Mt Sinai Sch Med	Pub	1963
203	Univ Med & Dentistry New Jersey	Pub	1970
204	George Mason Univ	Pub	1957
205	Univ Colorado Health Sci Center	Pub	1912
208	Rensselaer Polytechnic Inst	PNP	1824
210	Yeshiva Univ	PNP	1886
215	Univ Kentucky	Pub	1865
221	Univ Kansas - Lawrence	Pub	1865
222	Univ Missouri - Columbia	Pub	1839
231	Univ Notre Dame	PNP	1842
232	Washington State Univ - Pullman	Pub	1890
233	Univ New Mexico - Albuquerque	Pub	1889
234	Brandeis Univ	PNP	1948
235	Louisiana State Univ - Baton Rouge	Pub	1859
238	Univ South Carolina - Columbia	Pub	1801
239	Univ Houston	Pub	1927
240	Univ Vermont	Pub	1791
243	Univ Oregon	Pub	1876
248	George Washington Univ	PNP	1821
249	State Univ New York - Buffalo	Pub	1846
260	Univ Texas Health Sci Center - San Antonio	Pub	1959
266	Univ South Florida	Pub	1956
273	Wake Forest Univ	PNP	1834
278	Wayne State Univ	Pub	1868
279	State Univ New York - Albany	Pub	1844
283	Syracuse Univ	PNP	1870
284	Univ Texas Med Branch - Galveston	Pub	1891
296	City Univ New York - City Coll	Pub	1847

298	Univ Alaska - Fairbanks	Pub	1917
302	Georgetown Univ	PNP	1789
306	Kansas State Univ	Pub	1863
309	Thomas Jefferson Univ	PNP	1824
320	Univ New Hampshire - Durham	Pub	1866
323	Univ Rhode Island	Pub	1892
326	Med Univ South Carolina	Pub	1824
333	Univ Central Florida	Pub	1963
336	Tulane Univ	PNP	1834
347	Texas Tech Univ	Pub	1923
348	Clemson Univ	Pub	1889
351	Univ Montana - Missoula	Pub	1893
352	St.Louis Univ	PNP	1818
353	State Univ New York Health Sci Center - Brooklyn	Pub	1860
356	Univ Nevada - Reno	Pub	1874
359	Univ Oklahoma - Norman	Pub	1890
362	San Diego State Univ	Pub	1897
363	Univ Texas - Dallas	Pub	1956
372	Temple Univ	Pub	1884
373	Indiana Univ - Purdue Univ - Indianapolis	Pub	1969
380	Univ Arkansas - Fayetteville	Pub	1871
386	Brigham Young Univ - Provo	PNP	1875
388	Utah State Univ	Pub	1888
399	Auburn Univ	Pub	1856
400	Med Coll Wisconsin	PNP	1893
402	Univ Nebraska - Med Center	Pub	1880
414	Univ Wyoming	Pub	1886
417	Univ Maryland - Baltimore County	Pub	1966
420	Michigan Tech Univ	Pub	1885
436	Drexel Univ	PNP	1891
438	Univ Connecticut Health Center	Pub	1961
443	Florida International Univ	Pub	1965
450	Northeastern Univ	PNP	1898
451	Mississippi State Univ	Pub	1878
452	Southern Methodist Univ	PNP	1911
458	Univ Akron	Pub	1870
463	Boston Coll	PNP	1827
464	Univ Maine - Orono	Pub	1862
472	Univ Idaho	Pub	1889

474	Univ Kansas Med Center	Pub	1905
476	Med Coll Georgia	Pub	1828
478	Lehigh Univ	PNP	1865
480	West Virginia Univ	Pub	1867
481	Univ Louisville	Pub	1798
485	Univ Wisconsin - Milwaukee	Pub	1956
487	Coll William & Mary	Pub	1693
491	New Mexico State Univ - Las Cruces	Pub	1888
497	Howard Univ	PNP	1867
504	Old Dominion Univ	Pub	1930
507	Montana State Univ - Bozeman	Pub	1893
508	Univ Memphis	Pub	1912
	University of Phoenix	PFP	1976
	Walden University	PFP	1971
	Capella University	PFP	1993
United Kingdom			
4	Univ Cambridge	Pub	1209
10	Univ Oxford	Pub	1096
23	Imperial Coll London	Pub	1907
25	Univ Coll London	Pub	1826
48	Univ Manchester	Pub	1824
53	Univ Edinburgh	Pub	1582
62	Univ Bristol	Pub	1876
72	Univ Sheffield	Pub	1897
81	Univ Nottingham	Pub	1798
84	King's Coll London	Pub	1829
92	Univ Birmingham	Pub	1900
111	Univ Liverpool	Pub	1881
130	Univ Sussex	Pub	1961
136	Univ Leeds	Pub	1831
142	Univ Glasgow	Pub	1451
170	Univ Southampton	Pub	1862
176	Univ East Anglia	Pub	1963
180	Univ Durham	Pub	1832
186	Univ Leicester	Pub	1921
188	Cardiff Univ	Pub	1883
189	Univ St Andrews	Pub	1413
199	Queen Mary, Univ London	Pub	1785

216	Univ Reading	Pub	1892
226	Univ Aberdeen	Pub	1495
229	Univ York	Pub	1963
230	Univ Newcastle-upon-Tyne	Pub	1963
246	Univ Warwick	Pub	1965
250	Univ Bath	Pub	1966
255	Univ Dundee	Pub	1881
262	Univ Lancaster	Pub	1964
281	Queen's Univ Belfast	Pub	1845
282	London Sch Economics	Pub	1895
292	London Sch Hygiene & Tropical Med	Pub	1899
308	Open Univ	Pub	1969
357	Univ Essex	Pub	1964
361	Univ Exeter	Pub	1855
392	Royal Holloway, Univ London	Pub	1849
421	Univ Wales - Swansea	Pub	1920
425	Univ Surrey	Pub	1891
439	Brunel Univ	Pub	1966
489	Birkbeck, Univ London	Pub	1823
505	Univ Strathclyde	Pub	1796
	University of buckingham	PNP	1974
	BPP college	PFP	2007
Japan			
20	Tokyo Univ	Pub	1877
22	Kyoto Univ	Pub	1897
67	Osaka Univ	Pub	1869
77	Tohoku Univ	Pub	1907
94	Nagoya Univ	Pub	1871
99	Tokyo Inst Tech	Pub	1881
149	Hokkaido Univ	Pub	1876
150	Tsukuba Univ	Pub	1872
154	Kyushu Univ	Pub	1903
267	Kobe Univ	Pub	1902
285	Keio Univ	PNP	1858
293	Hiroshima Univ	Pub	1929
312	Okayama Univ	Pub	1870
334	Niigata Univ	Pub	1921

339	Waseda Univ	PNP	1882
369	Kanazawa Univ	Pub	1949
370	Tokyo Med & Dental Univ	Pub	1946
382	Yamaguchi Univ	Pub	1949
405	Nagasaki Univ	Pub	1949
407	Univ Tokushima	Pub	1874
412	Gunma Univ	Pub	1949
413	Chiba Univ	Pub	1901
415	Nihon Univ	Private	1889
422	Tokyo Univ Agr & Tech	Pub	1877
427	Kagoshima Univ	Pub	1949
428	Osaka Prefecture Univ	Pub	1888
431	Gifu Univ	Pub	1949
433	Osaka City Univ	Pub	1880
442	Ehime Univ	Pub	1949
444	Tokyo Metropolitan Univ	Pub	1949
483	Kumamoto Univ	Pub	1874
498	Juntendo Univ	Private	1838

Table 6: US Postsecondary Institutions and Enrollments: Fall 2001

	Public	Private not-for-profit	Private for-profit	Total
Institutions	2,099	1,941	2,418	6,458
Four-year	629	1,567	324	2,520
Two-year	1,165	269	779	2,213
Less than two-year	305	105	1,315	1,725
Enrollment	12,370,079	3,198,354	765,701	16,334,134
Four-year	6,236,486	3,120,472	321,468	9,678,426
Two-year	6,047,445	63,207	241,617	6,352,269
Less than two-year	86,148	14,675	202,616	303,439

Source: American Council on Education, 2002. Page 2

Table 7

	Institution in top 508	Institution in top 200	Institution in top 100	Per capita GDP	Population	No. of students	Students in private HE	Students per population
Institution in top 508	1.00							
Institution in top 200	0.99	1.00						
Institution in top 100	0.98	0.99	1.00					
Per capita GDP	0.37	0.36	0.34	1.00				
Population	0.12	0.08	0.09	-0.42	1.00			
No. of students	0.65	0.64	0.66	-0.21	0.72	1.00		
Students in private HE	0.11	0.08	0.11	-0.29	0.50	0.17	1.00	
Students per population	0.08	0.09	0.11	0.19	-0.33	-0.06	-0.37	1.00

Table 8

Regression Results: The Effect of Private Ownership on Quality of Institutions
Dependent Variable: Quality of the Institution

Variable	(1)	(2)	(3)	(4)	(5)
Constant	247.6225 (35.83)	452.9342 (144.17)	282.3761 (19.92)	242.4908 (35.90)	266.9174 (19.02)
Private Ownership	55.45689 (2.83)	23.19079 (3.62)	61.27699 (2.35)	18.85533 (0.91)	26.43392 (0.95)
Seniority	----------	----------	----------	----------	----------
Country[3]	----------	----------	----------	----------	----------
R^2	0.0155	0.1177	0.0325	0.0017	0.0062
Obs	508	100	166	488	146

Notes:
** t value are in parenthesis.*
(1) – top 508 universities.
(2) – top 100 universities.
(3),(6),(9) - US universities in the top 508 universities.
(4),(10) – excluding world top 20 universities.
(5) – Top 20 US universities are excluded.
(7) – UK universities in the top 508 universities.

Table 8 (cont'd):

Regression Results: The Effect of Private Ownership on Quality of Institutions
Dependent Variable: Quality of the Institution

Variable	(6)	(7)	(8)	(9)	(10)
Constant	237.6648 (7.82)	251.0822 (9.29)	247.3975 (13.35)	236.1385 (7.83)	241.8687 (7.41)
Private Ownership	----------	----------	52.60046 (2.08)	49.80764 (1.86)	22.8271 (0.81)
Seniority	0.4657602 (2.25)	0.2505058 (2.55)	0.2784201 (2.78)	0.3680387 (1.73)	0.1999353 (0.85)
Country[3]	----------	----------	-1.636305 (-0.06)	----------	----------
R^2	0.0299	0.1398	0.0630	0.0501	0.0112
Obs	166	42	208	166	146

Notes:
** t value are in parenthesis.*
(1) – top 508 universities.
(2) – top 100 universities.
(3),(6),(9) - US universities in the top 508 universities.
(4),(10) – excluding world top 20 universities.
(5) – Top 20 US universities are excluded.
(7) – UK universities in the top 508 universitie

Table 9: The Flexibility Index

Country	Flexibility Index (Public Institutions)					
	Scholars	Students	Salaries	Tuition fees	Sum	Product
Austria	4	4	4	1	13	64
Belgium	4	4	1	1	10	16
Czech Republic	4	4	1	3	12	48
Denmark	4	4	1	1	10	16
Finland	4	3	1	1	9	12
France	1	1	1	1	4	1
Germany	3	3	2	1	9	18
Greece	1	1	1	1	4	1
Hungary	1	4		3	8	
Ireland	4	3	2	1	10	24
Italy	4	3	1	4	12	48
Netherlands	4	2	2	1	9	16
Norway	4	2	2	1	9	16
Poland	2	4	1	2	9	16
Portugal	3	1	1	1	6	3
Russia						
Slovenia						
Spain	3		1	1	5	
Sweden	4	3	3	1	11	36
Switzerland	3	4	1	4	12	48
UK	4	4	3	3	14	144
China						
China-HK						
China-TW						
India	4	4	2	1	11	36
Israel	4	4	1	1	10	16
Japan	4	4	4	2	14	128
Singapore						
South Korea	4	4	1	3	12	48
Turkey	3	1	1	1	6	3
Argentina						
Brazil						
Canada	4	4	1	3	12	48
Chile						
Mexico						
United States	4	4	4	4	16	256
Australia	4	4	1		9	
New Zealand	4	2	1	4	11	32
Egypt						
South Africa						

Table 10: Correlation between Ownership and Flexibility

	Private ownership	Sum	Product	Seniority
Private Ownership	1.00			
Sum	0.37	1.00		
Product	0.45	0.90	1.00	
Seniority	0.08	-0.09	-0.07	1.00

Table 11: Regression Results: The Effect of Classification on Quality of Institutions
Dependent Variable: Quality of the Institution

Variable	(1)	(2)	(3)	(4)	(5)	(6)
Constant	174.5596 (7.08)	237.518 (20.71)	239.0614 (20.69)	183.3286 (7.18)	259.6898 (34.46)	255.6841 (35.18)
Private Ownership	----------	----------	23.66568 (1.06)	27.91562 (1.31)	47.29403 (2.37)	51.29979 (2.58)
Flexibility[1]	6.974606 (3.71)	----------	----------	5.983729 (2.96)	----------	----------
Flexibility[2]	----------	0.2082537 (3.17)	0.172878 (2.35)	----------	----------	----------
R^2	0.0289	0.0226	0.0251	0.0325	0.0127	0.0142
Obs	464	436	436	464	436	464

Notes:

t values are in parentheses.

(1)—Flexibility by index of sum.

(2)—Flexibility by index of product.

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Appendix C – SJTU ranking

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
1	Harvard Univ	Prv	Massachusetts	USA	100	100	100	100	100	73	100
2	Stanford Univ	Prv	California	USA	42	78.7	86.1	69.6	70.3	65.7	73.7
3	Univ California - Berkeley	Pub	California	USA	72.5	77.1	67.9	72.9	69.2	52.6	71.9
4	Univ Cambridge	Pub		UK	93.6	91.5	54	58.2	65.4	65.1	71.6
5	Massachusetts Inst Tech (MIT)	Prv	Massachusetts	USA	74.6	80.6	65.9	68.4	61.7	53.4	70.0
6	California Inst Tech	Prv	California	USA	55.5	69.1	58.4	67.6	50.3	100	66.4
7	Columbia Univ	Prv	New York	USA	76	65.7	56.5	54.3	69.6	46.4	63.2
8	Princeton Univ	Prv	New Jersey	USA	62.3	80.4	59.3	42.9	46.5	58.9	59.5
9	Univ Chicago	Prv	Illinois	USA	70.8	80.2	50.8	42.8	54.1	41.3	58.4
10	Univ Oxford	Pub		UK	60.3	57.9	46.3	52.3	65.4	44.7	56.4
11	Yale Univ	Prv	Connecticut	USA	50.9	43.6	57.9	57.2	63.2	48.9	55.9
12	Cornell Univ	Prv	New York	USA	43.6	51.3	54.5	51.4	65.1	39.9	54.3
13	Univ California - Los Angeles	Pub	California	USA	25.6	42.8	57.4	49.1	75.9	35.5	52.6

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
14	Univ California - San Diego	Pub	California	USA	16.6	34	59.3	55.5	64.6	46.6	50.4
15	Univ Pennsylvania	Prv	Pennsylvania	USA	33.3	34.4	56.9	40.3	70.8	38.7	49.0
16	Univ Washington - Seattle	Pub	Washington	USA	27	31.8	52.4	49	74.1	27.4	48.2
17	Univ Wisconsin - Madison	Pub	Wisconsin	USA	40.3	35.5	52.9	43.1	67.2	28.6	48.0
18	Univ California - San Francisco	Pub	California	USA	0	36.8	54	53.7	59.8	46.7	46.8
19	Johns Hopkins Univ	Prv	Maryland	USA	48.1	27.8	41.3	50.9	67.9	24.7	46.1
20	Tokyo Univ	Pub		Japan	33.8	14.1	41.9	52.7	80.9	34	45.9
21	Univ Michigan - Ann Arbor	Pub	Michigan	USA	40.3	0	60.7	40.8	77.1	30.7	44.0
22	Kyoto Univ	Pub		Japan	37.2	33.4	38.5	35.1	68.6	30.6	43.1
23	Imperial Coll London	Pub		UK	19.5	37.4	40.6	39.7	62.2	39.4	43.0
24	Univ Toronto	Pub		Canada	26.3	19.3	39.2	37.7	77.6	44.4	43.0
25	Univ Coll London	Pub		UK	28.8	32.2	38.5	42.9	63.2	33.8	42.8
26	Univ Illinois - Urbana Champaign	Pub	Illinois	USA	39	36.6	44.5	36.4	57.6	26.2	42.7

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
27	Swiss Fed Inst Tech - Zurich	Pub		Switzerland	37.7	36.3	35.5	39.9	38.4	50.5	39.9
28	Washington Univ - St. Louis	Prv	Missouri	USA	23.5	26	39.2	43.2	53.4	39.3	39.7
29	Northwestern Univ	Prv	Illinois	USA	20.4	18.9	46.9	34.2	57	36.9	38.2
30	New York Univ	Prv	New York	USA	35.8	24.5	41.3	34.4	53.9	25.9	38.0
31	Rockefeller Univ	Prv	New York	USA	21.2	58.6	27.7	45.6	23.2	37.8	38.0
32	Duke Univ	Prv	North Carolina	USA	19.5	0	46.9	43.6	62	39.2	37.4
33	Univ Minnesota - Twin Cities	Pub	Minnesota	USA	33.8	0	48.6	35.9	67	23.5	37.0
34	Univ Colorado - Boulder	Pub	Colorado	USA	15.6	30.8	39.9	38.8	45.7	30	36.6
35	Univ California - Santa Barbara	Pub	California	USA	0	35.3	42.6	36.2	42.7	35.1	35.8
36	Univ British Columbia	Pub		Canada	19.5	18.9	31.4	31	63.1	36.3	35.4
37	Univ Maryland - Coll Park	Pub	Maryland	USA	24.3	20	40.6	31.2	53.3	25.9	35.0
38	Univ Texas - Austin	Pub	Texas	USA	20.4	16.7	46.9	28	54.8	21.3	34.4

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
39	Univ Texas Southwestern Med Center	Pub	Texas	USA	22.8	33.2	30.6	35.5	38	31.9	33.8
40	Univ Paris 06	Pub		France	38.4	23.6	23.4	27.2	54.2	33.5	33.8
41	Vanderbilt Univ	Prv	Tennessee	USA	19.5	29.6	31.4	23.8	51	36	33.6
42	Univ Utrecht	Pub		Netherlands	28.8	20.9	27.7	29.9	56.6	26.6	33.5
43	Pennsylvania State Univ - Univ Park	Pub	Pennsylvania	USA	13.2	0	45.1	37.7	58	23.7	32.7
44	Univ California - Davis	Pub	California	USA	0	0	46.9	33.1	64.2	30	32.7
45	Univ California - Irvine	Pub	California	USA	0	29.4	35.5	28	48.9	32.1	32.5
46	Univ Copenhagen	Pub		Denmark	28.8	24.2	25.7	25.2	51.4	31.7	32.2
47	Rutgers State Univ - New Brunswick	Pub	New Jersey	USA	14.4	20	39.9	32.1	44.8	24.2	32.1
48	Univ Manchester	Pub		UK	25.6	18.9	24.6	28.3	56.9	28.4	32.0
49	Univ Pittsburgh - Pittsburgh	Pub	Pennsylvania	USA	23.5	0	39.9	23.6	65.6	28.5	31.9
50	Univ Southern California	Prv	California	USA	0	26.8	37.1	23.4	52.7	25.9	31.4
51	Univ Florida	Pub	Florida	USA	21.2	0	37.1	24.8	65.5	26.5	31.1

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
52	Univ Paris 11	Pub		France	31.3	39.1	14.8	20.4	44.8	30.8	30.9
53	Univ Edinburgh	Pub		UK	21.2	16.7	26.7	34.2	47	29.3	30.8
54	Karolinska Inst Stockholm	Pub		Sweden	28.8	27.3	32.3	16.6	47	24.5	30.8
55	Univ Munich	Pub		Germany	34.8	22.9	14.8	27.1	51.8	31.1	30.8
56	Tech Univ Munich	Pub		Germany	40.3	23.6	25.7	20.2	44.4	29.9	30.6
57	Australian Natl Univ	Pub		Australia	16.6	12.6	36.3	30	44.7	32.2	30.4
58	Univ North Carolina - Chapel Hill	Pub	North Carolina	USA	11.8	0	37.8	29.3	60.1	27.7	30.2
59	Univ Zurich	Pub		Switzerland	11.8	26.8	22.2	28.3	48.4	31.1	30.2
60	Carnegie Mellon Univ	Prv	Pennsylvania	USA	32.8	32.8	32.3	12	36.7	31	30.0
61	Ohio State Univ - Columbus	Pub	Ohio	USA	16.6	0	41.9	22	61.2	19.8	29.5
62	Univ Bristol	Pub		UK	10.2	17.9	29.6	26.7	47.3	32.8	29.4
63	McGill Univ	Pub		Canada	27	0	29.6	24.2	58.7	32.7	29.3
64	Hebrew Univ Jerusalem	Pub		Israel	31.1	20	24.6	23.3	43.6	28.2	29.0
65	Univ Heidelberg	Pub		Germany	18.6	27.2	18.2	22.8	48.7	29	28.9
66	Uppsala Univ	Pub		Sweden	24.3	32.2	12.8	23.6	49.1	21	28.8

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
67	Osaka Univ	Pub		Japan	11.8	0	24.6	30.4	64	28.5	28.6
68	Purdue Univ - West Lafayette	Pub	Indiana	USA	17.6	16.7	29.6	20.9	51.3	20.2	28.3
69	Univ Oslo	Pub		Norway	24.3	33.4	18.2	16.8	42.5	27.9	28.2
70	Brown Univ	Prv	Rhode Island	USA	17.6	13.6	31.4	28.2	39.9	29.6	28.1
71	Univ Leiden	Pub		Netherlands	23.5	15.5	28.7	20.9	45.2	28.2	28.0
72	Univ Sheffield	Pub		UK	22	14.1	22.2	27.8	46	29.5	27.9
73	Univ Helsinki	Pub		Finland	17.6	17.9	19.6	21.7	52.7	28.9	27.8
74	Univ Arizona	Pub	Arizona	USA	0	0	29.6	37.1	54.6	25.7	27.6
75	Univ Rochester	Prv	New York	USA	31.1	8.9	26.7	21.5	43.1	35.2	27.4
76	Moscow State Univ	Pub		Russia	51.6	34.2	0	7.5	48.5	31.6	27.1
77	Tohoku Univ	Pub		Japan	17.6	0	22.2	23.7	63	28.3	27.1
78	Case Western Reserve Univ	Prv	Ohio	USA	38.1	11.5	21	19.6	43	32.2	26.8
79	Univ Melbourne	Pub		Australia	14.4	14.1	22.2	18.4	55.1	25	26.6
80	Michigan State Univ	Pub	Michigan	USA	11.8	0	36.3	24.6	51	18.4	26.1
81	Univ Nottingham	Pub		UK	14.4	20	24.6	16.2	44.8	27.3	26.0
82	Univ Basel	Pub		Switzerland	24.3	17.1	21	22.9	35.6	35.1	25.9

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
83	Boston Univ	Prv	Massachusetts	USA	14.4	0	30.6	27.1	50.4	17.3	25.5
84	King's Coll London	Pub		UK	15.6	23.1	19.6	15.4	45.1	26.6	25.5
85	Ecole Normale Super Paris	Pub		France	48.5	31.6	12.8	16.8	25.8	25.8	25.5
86	Stockholm Univ	Pub		Sweden	27.6	29.6	16.6	17.2	36.4	19.4	25.3
87	Rice Univ	Prv	Texas	USA	20.4	21.9	22.2	22.3	30	29.8	25.0
88	Univ Goettingen	Pub		Germany	36.3	20	14.8	16.3	39.7	25.2	25.0
89	McMaster Univ	Pub		Canada	15.6	18.9	22.2	14.3	45.4	25.7	25.0
90	Indiana Univ - Bloomington	Pub	Indiana	USA	13.2	17.9	27.7	20	39.9	18	24.9
91	Texas A&M Univ - Coll Station	Pub	Texas	USA	0	0	33.1	23.6	53.7	20.3	24.8
92	Univ Birmingham	Pub		UK	23.5	10.9	22.2	15.4	45.3	26.9	24.5
93	Univ Utah	Pub	Utah	USA	0	0	30.6	27.6	47.5	25	24.3
94	Nagoya Univ	Pub		Japan	0	14.1	18.2	22.3	50	25	24.1
95	Univ Freiburg	Pub		Germany	23.5	20.9	16.6	18.9	37.4	23.6	24.1
96	Arizona State Univ - Tempe	Pub	Arizona	USA	0	14.1	24.6	26.1	42.7	18.2	24.0
97	Univ Iowa	Pub	Iowa	USA	0	0	34	22.2	49.6	21.1	23.9

World Rank	Institution	Classification	State	Country	Score on Alumni	Score on Award	Score on HiCi	Score on N&S	Score on SCI	Score on Size	Total Score
98	Lund Univ	Pub		Sweden	27.6	0	23.4	19.1	50.7	18	23.9
99	Tokyo Inst Tech	Pub		Japan	15.6	0	22.2	23.9	46.9	30.4	23.8
100	Univ Bonn	Pub		Germany	18.6	20	14.8	16.9	42.6	24.2	23.8
106	Technion Israel Inst Tech	Pub		Israel	17.6	23.1	14.8	15.1	39.2	23.3	23.2
117	Tel Aviv Univ	Pub		Israel	0	0	24.6	19.1	51.3	27.1	22.3
145	Weizmann Inst Sci	Pub		Israel	0	0	24.6	30.7	31.1	22.6	20.1
295	Ben Gurion Univ	Pub		Israel	0	0	7.4	11.5	36.5	17.6	13.2
328	Bar Ilan Univ	Pub		Israel	0	0	12.8	9.5	28.4	14.7	11.9
492	Univ Haifa	Pub		Israel	0	0	7.4	3.8	24.8	11.8	8.6

Notes:

Definitions of Indicators:

Alumni (weight of 10%). The total number of the alumni of an institution winning Nobel Prizes and Fields Medals.

Award (weight of 20%). The total number of the staff of an institution winning Nobel Prizes in physics, chemistry, medicine, and economics and Fields Medals in mathematics.

HiCi (weight of 20%). The number of highly cited researchers in broad subject categories in life sciences, medicine, physical sciences, engineering, and social sciences.

N&S (weight of 20%). The number of articles published in *Nature and Science* between 2002 and 2006.

SCI (weight of 20%). Total number of articles indexed in Science Citation Index-expanded and Social Science Citation Index in 2006.

Size (weight of 10%). The weighted scores of the above five indicators divided by the number of full-time equivalent academic staff.

UNIVERSITY AUTONOMY AND ACADEMIC FREEDOM – POLITICAL RHETORIC OR INSTITUTIONAL REALITY?

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Modern universities have a diversity of missions and tasks (too many?). They deliver teaching and learning in a range of areas and subjects, carry out research and collaborate in research and development with outside organisations. Their ability to adapt to changing conditions in a time of changing missions, of resource scarcity, competition and demands from a globalised knowledge society have been questioned – from without and within.

The obligation to outreach may be more or less well formulated. In some cases, a university has kept its original mission and original tasks, as set in traditional statutes and charters. In other cases, they have – at least partially or rhetorically – gradually changed and reformulated their core obligations and institutional strategies, usually in accordance with what they perceive as changing external conditions and demands. This had led to a state of insecurity – particularly in academia, but also in society at large – regarding the future role, organisation and obligations of the university.

In recent years, and particularly in the last two decades, there has been marked interest all over Europe to increase the institutional autonomy of the institutions of higher learning. Strange as it may seem, these "calls for freedom" have been equally frequent in political, bureaucratic and certain academic circles. The discussions have ranged from rather nebulous proposals to initiate some kind of "privatisation" process to the more humble needs of renegotiating the 200-year-old Berlin contract between the nation-state and its higher education institutions. It is, nevertheless, a fact that European universities are gradually being decoupled from state. The question remains whether this process should be called deregulation, or whether we are, rather, witnessing a process of reregulation.

In 2005, The European University Association (EUA) highlighted the need for institutional autonomy in the so-called Glasgow Declaration, where European rectors called upon their respective ministers of research and education to take immediate and decisive measures in order to radically increase the legal, administrative and financial autonomy of the European universities. According to the institutional leaders, the need for shift and bold action was not only a matter of principles. It was also pushed and motivated by the challenges of sharpening international competition –from the old US archenemy and from Asia – and, not least, by the demands of the ongoing and accelerating integration on the European level, i.e., the Bologna Process. A year later, a similar manifesto, reiterating roughly the same arguments, was presented by the Swedish Rectors' Conference.

The driving forces and motives behind this heated discussion and supposed urgency for immediate reform are long as they are well-known and must be understood in a wider context of, at least to some extent, global socioeconomic and political transformations:

- The shift from mass to almost universal higher education, and subsequently a growing heterogeneity of the higher education sector
- The steadily growing competition for students, teachers, researchers and resources on an almost global scale
- Rapidly increasing costs in teaching and research, and particularly in infrastructure.
- A curious combination of academic and vocational drift in all parts of higher education
- The university's loss of virtual monopoly in the creation and dissemination of qualified knowledge and training of elites
- The retreat of the state as sole, or at least central, founder of the university/research system
- The more immediate and pressing requirements of the labour market, and other new, more or less precise, *additional* expectations society has regarding their higher education institutions, besides traditional knowledge diffusion
- The alleged shift from knowledge creation and diffusion to "knowledge production"

- The growing demands of "entrepreneurship" and "innovation capacity"
- Accountability towards new and old "stakeholders", who actively intervene – and believe they have every right to do so – at a much earlier stage in the knowledge producing/educational process
- The shift (in Europe) from almost exclusive "input" (*Abitur*, peer review) to "output" control (assessment/evaluation)
- A period of contradictions and insecurity for the universities: While their central importance as national key-institutions has probably never been more persistently emphasised by politicians and private/public bureaucrats, their will and abilities to fulfil this strategic role has never been more explicitly called into question.

If one wishes to continue the list, it could be endless. Instead, I will sum it up by using a quote from one of my most learned friends from Northern California:

> "… Today universities are not so isolated from society. They are no longer so difficult to find … and no longer of one or a limited type. They no longer have control over students, or over budgets, admission and hiring policies. And their integration with government, society and industry is so extensive that they often appear to be just another of society's institutions providing a realm of services and offerings that change according to outside funding. They are creatures of government 'policy'." (Rothblatt 2006, p. 47)

The changes and shifts we are witnessing and experiencing presently are indeed rapid, far reaching and, to many of us, even frightening. But in our capacity as reflecting academic intellectuals, we should, nevertheless, not forget that the university is but one institution among many, which has to reposition itself in a world where almost every other sector in life and society is reshuffled – on the national, regional (EU) and global levels.

Thus, one could, perhaps, make a tentative statement maintaining that our almost impossible present task is the remodelling of the university as a core cultural institution in what has been labelled the

"knowledge society", without losing what most of us consider to be a set of indispensable universal values that this noble institution has more or less successfully guarded. But in the face of such an almost super-human mission and in these days of academic gloom and despair, let me give you a word of consolation by recalling that in its millennium of existence, the university, to my knowledge, has successfully undertaken profound adjustments at least five times before. So why should it not be able to perform a similar stunt one more time?

As I stated earlier, the concept of autonomy has been a key issue in the internal and external European debates on university reform for a long time – and particularly so during the last 25 years. But when discussing university autonomy, one must be aware that the difference between the idealised form of the university and the "real" institution is blurred. Even if there has always been at least a formal consensus that institutional autonomy is a fundamental necessity to promote changes from the inside and, at the same time, safeguard the freedom of research and teaching, it is, nevertheless, debatable whether this cherished concept has been uncontroversial even within the internal academic discourse.

The German sociologist Rudolf Stichweh (1994) has suggested that the concept of institutional autonomy should include the following properties and dimensions:

- The right and competence to make independent decisions on the limits of institutional commitment
- The right to endorse specific value systems and define forms of "capital", career systems and incentives
- The right to independently decide on institutional principles and forms of internal governance
- The ability to control the criteria of institutional access, at the level of both students and academic staff
- The right to define strategic tasks and to set institutional aims
- The possibility to identify and determine the formal and informal relations and links to other sectors of society
- The duty to assume full responsibility for decisions taken and the possible external effects of these decisions – in short, to be accountable.

It is, perhaps, unnecessary to emphasise that the last point indicates that far from the somewhat idealised and free-floating vision of institutional autonomy cherished by some academics, the university has always been linked to various systems of societal – ecclesiastical, regal, civic – accountability, and this unavoidable connection between "town and gown" will also be the crucial determinant for future formation and scope of institutional autonomy. This shows that autonomy is always historically situated and must be understood as a relative dimension with crucial impact on the way higher education and research actually function in a particular historical and societal set of circumstances.

In the present policy-dominated discussions – at least in Europe – the concept of autonomy is defined and used almost exclusively in an instrumental and technical sense. It is presented as an operational tool accepted by the state as the best practical means for running "university business" efficiently. Consequently, the societal responsibility and, hence, also the accountability towards society are understood and implemented as an operational "objective" technical formula consisting of a rigid set of quantitative indicators. They are not understood and implemented by procedure of negotiation between universities and representatives of society about the balance or trade-off between certain academic values and the duty to provide society with certain public goods.

Against this background, it is no surprise that the most frequent argument in the public rhetoric of almost every European government representative to promote swift reforms in order to enhance university autonomy has nothing to do with academic freedom. The increased autonomy is supposed to strengthen the universities' capacity to respond immediately and efficiently to explicit demands coming from "society". Thus, autonomy has, basically, a management dimension and nothing to do with the value-base of academic institutions. Accordingly, the buzzwords in this "reform agenda" are "competition", "flexibility", "responsiveness", "innovation" and – last but not least – "leadership". Universities are no longer primarily perceived as self-reproducing, cultural institutions, but rather as "clearinghouses" between academia and the national/regional economy.

At the same time, collegiate structures of decision-making are automatically and routinely supposed to be cumbersome and almost archaic, and power is gradually transferred to smaller, selected administrative groups and even individual officers. With the introduction of "New Public Management", it has also become quite obvious that higher managerial positions in the universities are no longer automatically linked to academic excellence. And I do maintain that recruitment strategies and decision-making procedures and structures in many ways correspond with what is conceived as the basic values and mission of an institution.

Thus, the collegial and managerial models could be described as two contrary institutional ideal-types, in the Weberian sense of the term. The collegial university usually combines an explicit professional autonomy with a high level of participation in management. The managerial model reduces the professional influence, while introducing executive management systems and structures found in the corporate sector; the illusive dream is obviously to force the allegedly cumbersome, expensive and reflecting members of the "temples of learning" into instantly reacting, "on-demand producing" and lean "temples of earning".

Whether this development is possible or even desirable is a matter of opinion and intense discussion. There are those of us who are, perhaps, less euphoric, or even sceptical, about these prospects; but those offering such warnings and caveats are often dismissed – not least by the most enthusiastic proponents, as romantic Humboldtian e*wig Gestrigen*, who do not understand where the world is presently heading. And, interestingly enough, it should be noted that not few of the most fervent representatives of the new "entrepreneurial" creed are to be found in academia – notably among the rectors!

Furthermore, the price paid for increased institutional autonomy is an abundance of ex post accountability and evaluation schemes, short-term and task-oriented contracts, and performance-indicator-based resource distribution. If the criteria and indicators of these regularly executed evaluations are primarily defined by government bureaucrats, and resources are distributed accordingly, this is an extremely powerful means to exert influence on the decision-making process without having to carry the burden of responsibility. And a situation where political power and action are separated from

immediate responsibility would create an even more delicate, and even dangerous, position for the European universities.

All things considered, one could – and should – question whether the externally driven "autonomy movement" is a new and perhaps different form of increased dependency. In most European cases, there seems to be a tendency to introduce a division between detailed decision making and responsibility (university) on the one hand, and the control functions (state) on the other. In most reform cases – implemented or proposed – the institutions are presumed to be free to decide autonomously on certain issues, but, at the same time, the state – directly or indirectly – has gradually introduced new control systems and steering mechanisms. Simultaneously, in most European higher education systems, the individual university lacks the necessary internally controlled resources for efficient long-range strategic planning and action. Thus, they are running an actual risk of being even more preoccupied with daily chores than ever before.

Furthermore, a more officially pronounced right to directly interfere in the internal affairs of the university has also been transferred to different stakeholders and to a vaguely defined "society" at large. Thus, while universities are given broader power of autonomous decision making, society is increasingly trying, through different mechanisms and devices, to impose its particular demands, visions, interests and *values* upon the universities' institutional long-term policies and short-term priorities. Sometimes, either intermediary strategic bodies have been created and appointed by the government, or the central state has kept the right of direct intervention on matters considered to be of central importance. Autonomy in this respect is certainly no synonym for independence; it is, rather, a case of widened scope of decision making under certain important constraints, with more local responsibility than ever before.

"Autonomy" is a heavily value-loaded concept. "Freedom" – and especially academic freedom – has an even stronger value connotation. And while institutional autonomy has been central in the intense discussions on the acute need for institutional reform, academic freedom for the individual academic teachers seems to be a non-existent problem. It seems to be taken for granted that if institutional autonomy, in some form or other, is granted to the universities, then academic freedom will, somehow, automatically

follow. In reality, the tensions between individual and institutional autonomy are obvious. Academic freedom refers to the actual working conditions of the individual faculty member. Institutional autonomy, on the other hand, refers to the self-governance of the institution.

It is quite possible to have institutional autonomy without academic freedom. And, as shown in many historical European cases, it is equally possible to have almost total academic freedom without institutional or financial autonomy. In the ongoing debate and reform initiatives, there is a clear shift from the notion of the university as "the house of Salomon" – a specially designated place where scholars and researchers carry out their work in "Einsamkeit und Freiheit" – to the notion of the university as an organisation that provides certain agreed-upon "knowledge services" to society.

A particularly interesting and illustrative case in this context could be the gradually changing visions regarding academic staff and employment principles, and, not least, the shifting balance between permanent and temporary staff. For a long period of time, tenured positions were regarded as *the* main vehicles to secure academic freedom. This general consensus has gradually evaporated, at least in Europe. Paradoxically enough, the first step was to transfer the right to hire and fire academic staff to the universities themselves. To begin with, this change was generally welcomed by the universities, but it gradually became clear that it also meant that new and rather heavy financial burdens were put directly on the individual institutions.

To handle this, a steadily growing number of short-term staff are employed, a situation that is threatening to push the universities into an insoluble dilemma of responsiveness/flexibility versus institutional stability. Furthermore, it has also led to steadily growing functional and symbolic differentiations within the academic profession. It has also virtually dissolved the old and, at least rhetorically, cherished Humboldtian ideal of the integration of "Forschung und Lehre".

The new heterogeneous staff structure is also changing the power relations in the university, because it means the faculty no longer has "natural" common interests. It has also led to a situation where academic staff is considered to be, and be treated as, a collective/"manpower" rather than highly qualified individual

researchers and scholars. And it is a well-known and established fact that "manpower" is much easier to shift and replace than individual and specialised researchers – especially if the "manpower" is hired on short-term contracts and task-oriented bases.

Thus, the ideological foundations of the university as a key societal institution have undergone fundamental changes in the last three decades. This is certainly nothing new or exceptional in the long and winding history of this always contested, sometimes detested and sometimes cherished curious institution. Today, one could perhaps say that there is something like a general consensus, inside and outside academia, that European universities, by and large, are under-funded and, in many cases, over-regulated. But it remains, nevertheless, another matter altogether whether you endorse the present-day "reform orthodoxy" put forward by its ardent proponents in the OECD, the World Bank, the EU Commission, European ministries of education, the "entrepreneurial/Mode 2" academic zealots in the EUA, etc. In any case, it is certainly not always quite clear on what grounds the particular changes – proposed or undertaken – are being justified or commonly characterised as "self-evident".

Against the background of the contemporary prevailing and growing "entrepreneurial" ambition – or illusion – to transform the European universities into smoothly run corporative operations producing "innovations" and perhaps even profit, it would be wise to remember, or at least to contemplate, some of the fundamental differences between the two important institutional or organisational forms.

First, universities have characteristics that make them quite different than corporations. They have other origins and histories. Their goal is reputation rather than profit. Ownership, if this concept can even be applied to universities, is very different. Finally, the organisation of universities does not allow the same degree of control of employee behavior and financial flows.

Thus, even if universities today are increasingly adopting management methods and rhetoric, they cannot be considered corporations. Instead, they are professional organisations, many with long experience, with often unclear ownership structures aiming for reputation. These characteristics are significant in making universities

special, and have probably also been instrumental in the very long survival of the organisational form called a "university." If the characteristics were changed, universities would no longer be universities. This, in turn, would imply that they could no longer perform their basic tasks of education and research.

Recognising this has certain implications for university governance, since it reflects the *necessity* of acknowledging the special character of universities. As a matter of fact, this is in the interest of both universities and their principals and trustees, be they private, public or state. In order to stimulate innovative research and promote high quality education, the best trustees can do is to rely on the disciplinary experts. The role of the trustees is to provide stable and transparent rules for universities and not to make direct interventions or to use universities for political purposes. The latter case risks hampering innovation and quality of education.

The rules set up by the trustees are not only important for the relationship between them and the universities. They are also crucial for the university-business relationships. It is important that these rules provide stable platforms for negotiations that would enable the combination of long-term university perspectives and the more short-term goals of business. For both parties, a mutual understanding of the partner's working conditions can be expected to be very fruitful.

This could be interpreted as a plea for leaving the universities alone, but that would be misleading. As a matter of fact, even if there are good reasons to continue a system for university governance that has survived over centuries, it is also in the interest of universities that politics and business pay them close attention. This is crucial and important for the future of universities. But in order to be productive, this attention has to be based on realistic expectations and proper knowledge about the fundamental characteristics of universities.

It should also be noted that universities today are not only governed by trustees. To a certain extent, they also have business relationships. They are also increasingly governed by media and related activities. This, in turn, has implied a tendency to focus less on what scholars actually have to say (content) than on where they say it (publication outlet) and who has read it (citations). There are a number of risks associated with this development that may be a threat to both innovative research and quality of education. However,

having such an excellent survival record over the centuries, there should be good chances that universities will also be able to handle this challenge in the transnational society of learning.

Finally, and whether you like it or not, I would like to offer you a piece of advice from an ageing historian: The fundamental problem and risk of grounding and motivating your higher education reform agenda and political actions by referring to the "needs of society", is – and has always been – the simple but eternally relevant fact that "society" almost never knows what it actually needs in 10 or 15 years time – not to mention in a generation!

Ergo:
Politicians are here for four years, or – at worst – for life!
Bologna, Cambridge, Harvard, Berkeley, Berlin, Uppsala and Technion are here forever!
Please, have this basic scenario in mind when you are planning to reform your higher education systems.

DISCUSSION

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Mr. Chairman, I will try not to exceed the 10 minutes allotted to me.

Having gone through the 3 papers, before the conference of course, I am sure that you would understand why I found the task of an integrative summary of this panel extremely difficult, if not impossible. Hanoch, you too, as Chair of this session, alluded to this at the beginning. The reason for the difficulty is that these 3 presentations were offered by people of different scholarly cultures and spheres.

I will start with the first presenter on the agenda, Mr. Ranan Hartman, the college founder (Ono Academic College), as we all know, an academic entrepreneur, a lawyer by training. No wonder he presented a j'accuse of the university system and, of course, a defending presentation of his "client", his college. I do not want to go into detailed argument with his claim; I am sure that during the discussion, the audience will raise some questions as to the social contribution of private versus public institutions. But, Mr. Hartman, if you look into what the university that is "next door" to Ono College, Bar-Ilan University, is doing socially, you will find that as a public university it is doing for society no less than Ono the private college, if not much more – and that is an understatement. As a comparative educationist, I frequently quote as a simple dictum of the British author Rudyard Kipling: "Those who know only London, don't know even London."

The next paper was given by an economist-historian (Brezis), and the final one by an historian (Nybom), who presented us with a critique of the present sorrow state of the European universities' so-called reform movement. No wonder, then, that these 3 perspectives are entirely different from one another. I'll therefore try to refer mainly to the issue of this panel: "social need or social responsibility",

as was referred mainly by Mr. Hartman, but I will relate to it in general terms, starting with 4 wh- questions.

First question: **Whose** needs? What segments of the population ought to benefit from privatization? The answer to that is the socioeconomically underprivileged in the periphery and, in parenthesis, as all of us know, that there are of course also urban peripheries in Tel Aviv, Haifa, and Jerusalem. Moreover, the periphery is not just geographic, but also socioeconomic, in relation to ethnicity, religion, etc.

Now, when we talk about periphery, we should remember that privatization – namely, the private higher education institutions that were established in Israel – did not occur in the center of Israel (as we used to say, "between Gadera and Hadera"), but rather it took place along the narrow coastal stretch of Israel, between Rishon-le-Zion and Netanya. I would like very much to see some entrepreneurship of opening colleges where they are needed most: in the northern and southern peripheries.

Note the disturbing picture that was presented this morning in Stav's presentation: the typical profile of a student in a private college, is of privileged socioeconomic background.

I will leave, therefore, this first question open; I am sure that it will be referred to in the discussion.

The next wh- question is: **What** are these needs? Economic or, rather, sociocultural? If one assumes that the need for privatization is not just economic but also sociocultural, then in the latter case, private colleges should not only be involved in professional training, but also aim at educating by imparting culture, i.e., humanities, education etc. As an educationist, I think that universities and private colleges have a social responsibility not just to criticize the educational system for its failures in achieving expected and desired goals, but to contribute to the improvement of the educational system by preparing teachers and retraining them, from the elementary school levels and all the way up to teachers colleges. I do not know how many of the private colleges are actually involved in training teachers and educators. At least in one of them I do know that it is preparing education administrators, special education teachers, and the like; but, of course, these are the most in-demand fields in education. Not one of the private colleges that I know of is dealing with education or teacher training per se.

The third wh- question is: **Who** should respond to or supply these social needs? Should it be the private colleges, from their own funds? Or, and more likely of course, should the state through VATAT maybe compensate the private colleges for its nonprofit activities? Subsequently, a distinction would be drawn between profitable and nonprofitable subjects/disciplines/research for funding or support.

Finally, the last question is: **How** should those social needs be provided? We witnessed today, in one of the early morning sessions, two models (or sort of models). One is an Indian model (by Professor Tilak) of private universities, which are profit-driven commercialized institutions, without much care for academic standards. The other model – I don't know whether I should call it a Turkish model (by Professor Dogramacı) – is the Bilkent model of a private university in Turkey. I must say that I envy this second model. As the Rector of Bilkent University indicated in his presentation, all history students (mind you, not nano-technology students) are tuition-free students. I wish some of our public universities would follow this lead, including active involvement in teacher education, social work, and the like.

I would like to conclude with a few words of caution, or, rather, realism, quoting an American author and critique, H. L. Mencken (1880–1956). His words might add a cautious perspective to the current situation and challenges that we presently face in regard to privatization of higher education, and its effects on social needs. Mencken said: "For every complicated problem there is an answer that is short, simple and wrong." There is indeed no short and simple answer to the question of the effects of privatization of higher education in responding to social needs.

We must all construct new roads or new answers to transform the manner in which we conceive the response to social needs in higher education – private or public. This is especially so in a heterogeneous society such as Israel, which faces not just economic but also security problems, and where all these problems affect the cohesion of Israeli society. Some of the solutions, some of the answers, were approached by this panel and in other sessions at this conference.

Indeed, and this is my final statement, there is a wealth of information, experience, and practice, here and abroad, that we could

and should resort to. This is the social responsibility of this conference. I hope that we will stand by this social responsibility.

Thank you.

SESSION IV

The Gradual Privatization of Higher Education in Israel

THE PRIVATIZATION OF HIGHER EDUCATION AND CONSTITUTIONAL PRINCIPLES

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Several Comments on the Privatization of Institutions of Higher Education

- No clear definition exists for the term "privatization."
- The concept of privatization was coined in 1948 and entered spoken discourse through various channels, one of which was against the backdrop of high profile acts of privatization during Margaret Thatcher's regime, from 1979 to 1990.
  (See the article "privatization" on the Internet Wikipedia Free Encyclopedia.)
- There is no disagreement concerning the hard-core or classic definition of the term "privatization." In this regard, "privatization" is defined as the process by which property under public ownership is sold or transferred to private ownership.
  (See: Ibid.)
- According to a broad definition of the concept "privatization," it is a policy designed to reduce governmental involvement in social and economic life. This goal can be achieved through a range of means, including opening the door to private activity in new fields.
  (See: Professor Dafna Barak-Erez, "The Public Law of Privatization: Models, Norms and Challenges," publication forthcoming in the journal *Iyunei Mishpat*; appears on the home page of the Israeli Knesset website under "On the Public Agenda–Public Debate on the Subject of Privatization"; hereinafter: "Barak-Erez").
- Three phenomena in Israel reflect privatization in higher education:
  1. The entry of private (non-budgeted) institutions into the field.

2. The opening of non-budgeted programs in budgeted public institutions.
3. The import of higher education through the opening of branches of foreign institutions for higher education in Israel.

- There is no doubt that the three phenomena described above do not fall within the classic definition or the hard core of the concept of privatization.
- Is it possible to view these phenomena within the broad definition of privatization, reflecting the reduction of governmental involvement in economic and social life?
- Government involvement in higher education in Israel finds expression in one central way: government budget allocation for higher education.
- In Israel, the government has no part in the ownership of institutions of higher education.
- The Council on Higher Education Law establishes a clear legal framework for the status of institutions of higher education.
- Clause 14 of the Law provides:

  > A recognized institution is a corporation, and is fit to prosecute or be prosecuted, to acquire and possess property and to remove it from its possession, to enter into contracts and to be a party to legal or any other negotiations.

- Clause 15 of the Law provides:

  > A recognized institution is free to provide for its academic and administrative matters in the framework of its budget as it sees fit.

  In this clause, "academic and administrative matters" includes determining a program of research and teaching, appointing institution authorities, appointing teachers and raising them in rank, establishing systems of teaching and learning, and any other scientific, educational, or economic act.
- According to the Law, an institution of higher education is prohibited from being under governmental ownership, and it is forbidden for the government to have any control or influence over administrative bodies of institutions of higher education.
- Also, in regard to the one area in which government is involved in higher education, namely, budget allocation, the government has

been distanced from direct budgeting of institutions of higher education.

The government only establishes the extent of the annual budget that is to be transferred to higher education, and it is the Planning and Budget Committee of the Council on Higher Education (hereinafter: "CHE") that is charged with its distribution. The Planning and Budget Committee is a body independent of the government to which professors from institutions of higher education are primarily appointed.

- Thus, the degree of government involvement in higher education in Israel is limited to determining the extent of government financial support for higher education.
- Therefore, it is doubtful whether the three phenomena that reflect privatization in higher education reflect, in their basic essence, a process of privatization.

Privatization and Free Competition

- The term "privatization" has a negative connotation. It is loaded with implications of harming weaker population groups, and is associated with the relationship between government and capital. The expression "free competition" has a positive connotation. It is laden with positive implications regarding benefit to the consumer and the dismantling of monopolies.
- Is the process that took place in Israel (the three phenomena) an expression of free competition or privatization?
- Some contend that there are many people who confuse the concept "privatization" with "free competition." (For example, privatization can occur without opening the market to competition, leaving the monopoly in a given field in the hands of the privatized company.) For those confusing the terminology, removing a concession from one or several bodies and granting licenses to competing bodies (such as, for example, opening colleges that will compete with universities that are non-governmental corporations) is erroneously called privatization, when it is actually a process of reinforcing free competition. (See: Wikipedia, "privatization".)
- While the court generally takes a neutral stand in regard to the decision of privatization itself, when the issue involved is free

competition, the court takes a supportive stance in strengthening competition, which is seen as an element of the constitutional principle of freedom of occupation.

(In regard to the neutral approach of the Supreme Court toward selecting a path of privatization, see: Barak-Erez, p. 16)

Free Competition and the Constitutional Principle of Freedom of Occupation

Free competition is recognized in Israel as an element of the constitutional principle of freedom of occupation.

- Basic Law: Freedom of Occupation (hereinafter: "Basic Law") provides as follows:
- The purpose of this Basic Law is to protect the freedom of occupation in order to enshrine in a basic law the values of the State of Israel as a Jewish and democratic state.
- Every citizen or resident of the state is entitled to pursue any occupation, profession, or trade.
- The Basic Law grants a constitutional status to freedom of occupation.
- In regard to the constitutional status of the right to freedom of occupation, the Supreme Court stated:

  > With the enactment of the Basic Law, freedom of occupation has been elevated and earned constitutional status. The significance of this is that from this time forward, neither the chief legislator, nor all the more so any subordinate legislator, are permitted to infringe or limit the freedom of occupation of a person, even insofar as they might deem such to be reasonable. Hereinafter, Basic Law: Freedom of Occupation… granted this right formal constitutional recognition, and a super-statutory status. It has become a protected basic right, resting on a higher normative level than regular legislation or Israeli case law.

- (HCJ 4264/02 *Abalin Towers Partnership v. Abalin Local Council* (not yet published), par. 13 (hereinafter: the "Abalin matter")
- (See also: CA 239/92 "Egged" Cooperative Association of Travel in Israel, Inc. v. Mashiach, PD 45(2) 66, 71; HCJ 1715/97 *Bureau of Investment Managers in Israel v. Minister of Finance*, PD 51(4) 367,

384; CA 6821/93 *Bank Mizrahi United, Inc. v. Village Tower Partnership*, PD 49(4) 221, 345.)

The right to freedom of occupation is granted to the one pursuing an occupation not only as an individual but also as a corporation. (See: HCJ 726/94 *Clal Insurance Company, Inc. v. Minister of Finance*, PD 58(5) 441, 471–472 (hereinafter: the "Clal matter").)

- Freedom of occupation is a type of liberty right that grants to its holder the freedom to choose his occupation without interference from the government or any other person. At this level, "freedom of occupation is a special expression of the general principle of human dignity and liberty."
- (See: HCJ 5936/97 *Lamm v. Director of the Ministry of Education, Culture and Sport*, PD 53(4) 673, 682 (hereinafter: "the Lamm matter") and the references cited there from A. Barak, "Interpretation in Law – Constitutional Interpretation" (Vol. 3, 1993) (hereinafter: "Barak").)
- On a broader level, the Supreme Court established that freedom of occupation is interwoven with freedom of competition, "as societal values that serve both the welfare of the individual seeking to fulfill in his choice of occupation his personality and his desires, and societal welfare in the development of a free economy that is essential to achieve efficiency in the market through optimal allocation of resources in society."
- (See the Abalin matter above, par. 15; see also, inter alia, regarding protecting freedom of competition: the Clal matter above, p. 460; HCJ 2313/95 *Contact Linsen (Israel), Inc. v. Minister of Health*, PD 50(4) 397, p. 409; HCJ 1869/95 *Fuel Transportation Company, Inc. v. Minister of Transportation*, PD 49(5) 559, 571; HCJ 1030/99 *MK Oron v. Chairman of the Knesset*, PD 56(3) 640,661.)
- The Supreme Court also determined that "free competition is likely to lead to lower prices, to improved product quality and to the provision of improved service in the sale of products. Free competition is also likely to encourage development of the market through many kinds of legitimate initiatives. We seek to support these accomplishments, which free competition is likely to achieve. "
- (See: CA 371/89 *Leibowitz v. A. and Y. Eliyahu, Inc.*, PD 44(2) 309, 327; See also: the Abalin matter above, par. 15.)

- The Supreme Court even took a clear position supporting strengthening free competition in higher education.
- Free competition in the higher education market enables many individuals in the public at large to realize their right to freedom of occupation. The existence of a free market in the field of higher education enables many more people to pursue teaching and research, and to thus realize their right to freedom of occupation and the rights deriving from the nature of this specific pursuit, with freedom of expression as an example. The existence of competition expands accessibility to higher education to a broader segment of the public and creates a greater number of potential students. Competition also leads to improvement in the service provided to students, and to increased efficiency in the operation of institutions, which will enable the lowering of tuition or of the scope of public support of higher education.
- (See: Justice Zamir on the importance of expanding the possibility of acquiring higher education in Israel and on support of free competition in this field in HCJ 9486/96 *Eilon v. Registration Committee of the Psychologists Law*, PD 52(1) 166, 175.)

Limitations Imposed on Free Competition in Higher Education in Israel

- Three main limitations were imposed on free competition in higher education in Israel.
  1. The CHE established that it would not enable the opening of for-profit institutions of higher education. In other words, an institution of higher education must be a non-profit public institution.

     This issue was first examined by the CHE in 1994. A public committee established by the CHE, with the Supreme Court Justice Shoshana Netanyahu (then serving as deputy chairperson of CHE) as its head, determined that the establishment of for-profit institutions should not be prevented. (See: The Report of the Sub-Committee on For-Profit Institutions of Higher Education in Israel). On the basis of this finding, a permit was granted to open a private for-profit institution for MBA studies. In 2002, the CHE cancelled the

recommendations of the Netanyahu Committee with no additional public hearing.

2. Since time immemorial, the CHE has held a policy that does not allow institutions of higher education to operate out of several campuses. The rule is that an institution of higher education must operate from one campus. There are a few isolated exceptions to this rule (such as the Hebrew University, which operates two campuses in Jerusalem and the Agricultural School in Rehovot, and the College of the Negev, which operates on two campuses – Beersheva and Ashdod). In addition, the CHE made a decision to approve the request of several colleges to join together as a multi-campus institution of higher education, but this option is not available to solitary institutions.
   (See the decision of the CHE dated 12.6.01 regarding "Guidelines for the Establishment of Multi-Campus Institutions of Higher Education (on the basis of their foundations as colleges)".)
3. Finally, in the Economic Policy Law (commonly known as the Budgetary Arrangements Law) of 2005, an amendment was appended to the CHE Law with the goal of reducing imported higher education operating in branches of foreign institutions in Israel. According to this amendment, a degree that is granted from one of these branches will not have the same standing as a degree from its head institution, and will not, in general, be recognized for the determination of salary and work in the public sector in Israel. As a result of this statutory amendment, most of the foreign branches that operated in Israel initiated the process of becoming recognized Israeli institutions.
   (See clauses 58 and 59 of the Economic Policy Law, 2005.)

Is it Possible to Prevent the Opening of Additional Private Institutions or to Reduce the Activities of Existing Private Institutions?

- The minister of Education declared that she intends to prevent or reduce the establishment of additional institutions of higher education. The minister announced that she intends to plan higher education as opposed to allowing free competition in this field.

(See: The Marker Online, 1.1.07.)

- On the basis of this position, the minister of education brought before the CHE (on 26.12.06) the question of imposing a freeze on processing all requests to establish new private institutions. A significant number of these requests were applications of foreign branch institutions to become Israeli institutions.
- This issue was brought to the attorney general for a legal analysis. In summation of the principle hearing and the expert opinion of the attorney general, it was established as follows:

> The policy of the CHE, customary for more than a decade, according to which the Council does not as a rule consider planning factors when addressing the granting of permits and recognition as a non-budgeted institution of higher education – in contrast to the practice that does exist in relation to budgeted institutions – is a correct and appropriate policy from a legal perspective….
>
> Refusal to grant a permit and recognition to an institution that fulfills all of the relevant professional requirements requesting to operate as a non-budgeted institution of higher education, due to the existence of other institutions capable of providing for Israel's needs, would be, in general, an infringement of freedom of occupation beyond a necessary degree. Only in very special and exceptional circumstances, which would occur in the opening of an institution that has implications for the use of limited public sources and resources, or for harm to higher education in Israel, are planning considerations likely to be relevant factors also for non-budgeted institutions.

(See the summation of the hearing that took place on 23.1.07 with Joshua Shoffman, Adv., the deputy attorney general, p. 2.)

- It is noted that despite the attorney general's instructions, the CHE did not change its freeze decision until two organizations that had submitted applications to set up new private institutions petitioned the High Court of Justice.

(See: HCJ 3647/07 *D. Hermelin ORT College of Engineering, Netanya, v. Professor Yuli Tamir*; HCJ 3648/07 *G. B. College of Computer Management and Science v. Professor Yuli Tamir*.)

- It is important to emphasize that the intention to prevent the establishment of additional private institutions is not based on academic, professional, or substantive considerations relating to the requests of these bodies. The assumption is that any new institution must fulfill the professional requirements and conditions for establishing an institution of higher education. The reason for preventing the establishment of new institutions is embedded in the desire to reduce the number of institutions of higher education, to reduce the competition in the field, and to protect existing institutions.
- Thus, it appears difficult from the legal perspective and on the basis of the constitutional principle of freedom of occupation to prevent the establishment of new institutions.

Difficulties That Are Created as a Result of Privatization or Opening up Competition

- Until the beginning of the 1990s, the higher education market in Israel was monolithic and included only public institutions – mainly the universities and a small number of state-budgeted public colleges.
- The opening of the market to competition and the entry of private institutions create phenomena that did not previously exist. I will cite two of them.

Free Competition under Differing Conditions

- In proper free competition, all participants must be subject to equal conditions.
- In the existing situation, there is a compound lack of equality.
- Budgeted institutions enjoy, on the one hand, the advantage of receiving a state budget. As a result, tuition is lower than at private colleges and, as such, state-budgeted institutions enjoy a true advantage over private colleges in the competition for prospective students.

  On the other hand, and because of the state budget, limitations are imposed on the public institutions, relating primarily to limitations on salary for academic personnel. Consequently, these institutions are likely to be at a competitive disadvantage in hiring good personnel for the more popular and sought after disciplines.

- Private institutions benefit from the freedom to pay higher teaching salaries, and are therefore able to bring in good personnel for the sought-after disciplines. On the other hand, they are at a disadvantage regarding the rate of tuition and in attracting prospective students. In addition, their ability to expand into core areas such as engineering, life sciences, and medicine is almost non-existent without public financial support. In this way, their development is limited.

The Student Perspective

- From the perspective of students in private institutions, it is difficult to understand why they have to pay three times the amount of tuition than their peers in public institutions, where tuition is subsidized.
- The students raise the claim of infringement of the principle of equality.
- The Supreme Court rejected this claim. (See: HCJ 11075/04 *David Girby et al. v. Minister of Education*, given on 5/12/07).
- Several proposals have been raised for dealing with this issue:

  One proposal (from the house of study of the private colleges, primarily; the main initiator is Professor Uriel Reichmann) is to change the system of public support to a voucher system. According to this system, every potential student will be given a financial voucher from the state and he will decide in which institution to use it. Under this system, no direct public support will be given to the institutions, but to the students instead, and the institutions will compete over the students holding vouchers. Supporters of this approach argue that it will force institutions to become more efficient and to raise their standards.

  Another suggestion (from the house of study of universities and budgeted institutions) is to allow the establishment, alongside budgeted educational tracks, of non-budgeted tracks (for which students will pay a high and realistic tuition) in the popular disciplines, to enable the institutions to reward their academic personnel and to compete for good staff.

  To date, both of these proposals have been rejected. Several attempts to enact legislation establishing the voucher system have failed. The proposal to establish non-budgeted tracks within a

budgeted institution was rejected by the Shohat Commission and by the CHE (despite the fact that in practice several such programs exist in public institutions).

In Summary

- Free competition (or privatization) in higher education in Israel is the product of a reality in which the demand for higher education is growing steadily, while government financial support remains at the same level (or has even decreased). Even if there were a real desire on the part of the government to increase public financial support, this increase, apparently, could not keep pace with the growth in demand for higher education.
- The attempt to limit free competition is problematic against the backdrop of the constitutional principle of freedom of occupation, a principle that embodies within it the value of free competition.
- Free competition in higher education created new situations. The budgeting arrangement for higher education did not change, and remained as it had been in the past, when the higher education market was only a public one.
- It is essential to rethink a new budgeting model as part of the system of support for higher education in Israel.
- A model must be developed that will enable free competition with equal conditions for all.
- It is possible that it will be necessary to adopt a model in which instead of allocating budget funds to institutions, funds will instead be budgeted for academic disciplines that the state and the public have an interest in strengthening, while cancelling subsidies for the more popular fields that the free market is capable of handling alone. According to this model, in every institution of higher education there will be budgeted tracks and non-budgeted tracks, according to the field of study. This is not a simple model. It raises many questions, but appears to be an improvement on the existing model. In the legal sphere, this model does not raise any problems – it is completely equal – from the vantage point of both the institutions and the students, and it enables free competition with equal conditions at the outset.

THE REVOLUTION OF PRIVATIZATION OF HIGHER EDUCATION IN ISRAEL

Prof. Zvi Arad
Netanya Academic College, Israel

Professor Zvi (Herman) Shapira, a mathematician at the University of Heidelberg, was the first to raise the idea of founding a Jewish university in Israel. At the first Zionist Congress in Basel in 1897, he claimed that the language of science is German. In fact, in 1925 the World Zionist Organization founded the first institution of Higher Education in Haifa and named it "Technion". The language of instruction at the Technion was German.

That same year, in April 1925, the World Zionist Organization opened the Hebrew University on Mount Scopus. As the university's name implies, the official language of instruction was to be Hebrew. Albert Einstein and Haim Weizmann served on the Founding Committee. In 1949, the Weizmann Institute of Science opened its gates.

The Zionist movement's idea of developing a system of higher education in Israel was intended to achieve two goals:

1. The Jewish people must be a light unto the nations;
2. To provide Jewish students and scholars access to universities without discrimination.

After the Hebrew University and the Technion were founded, the process of founding new universities in Israel was an almost impossible mission. The leaders of both the Hebrew University and the Technion fought firmly against the idea.

The founding of Bar-Ilan University in 1955 in Ramat Gan by Professor Pinchas Churgin was based on a government decision supported by Prime Minister David Ben-Gurion and Haim Shapira, the leader of the Religious Zionist Party. The government decided that financial support would never be given to Bar-Ilan University, but coalition agreement reversed this decision.

The founding of Tel Aviv University and Haifa University also faced serious difficulties because the leaders of the Hebrew University failed to see the importance of spreading higher education in Israel.

The only exception was the founding of Ben-Gurion University of the Negev, which got the support of the Hebrew University.

The process of degree recognition in the new universities failed in many cases. The first doctorate given by Bar-Ilan University, to Zvi Luz, under the supervision of Professor Baruch Kurzweil was against the policy of MALAG (the Council for Higher Education).

The relatively recent development of the college system in Israel was also led and supported by politicians like Amnon Rubinstein, Miki Bar Zohar and Uriel Lynn, and not by the Council for Higher Education.

One can say that the Council for Higher Education failed in its historic mission to establish new universities in Israel and to spread higher education throughout the country. Only politicians and political decisions paved the way to doing so and forced the Council for Higher Education to take part in this very important mission.

After finally embracing this idea, the Council for Higher Education made great efforts to expand the system of higher education, but conflicts of interest between the universities and the colleges still prevented the maximization of potential and quality.

In my lecture I plan to portray the revolution in higher education that led to the spread of higher education throughout Israel. This was achieved by the establishment of state-funded and, especially, non-funded colleges. The focus of my lecture will be on the non-funded colleges, their contribution and their great potential for the future of the State of Israel.

Some Figures on Higher Education

In 1948, the number of students in elementary schools in the State of Israel was 100,000. The number of high school students was 3,000. The number of students at the Hebrew University was 957, among them 88 graduate students. The number of students at the Technion was 678, among them 2 MSc graduate students. Hence, the total number of students in higher education was well under 2,000.

Let me mention that the current number of students at Netanya Academic College is 3,800, among them 506 graduate students in 12 different degree tracks.

The Hebrew University and the Technion were fortunate that the Council for Higher Education was not established at that time, since under its current regulations it is most likely the official names of these institutions would have been "The Hebrew Academic College" and "The Technion Academic College".

In 2000, the total number of students in elementary schools was 750,000. Approximately 580,000 students studied in high schools and 170,000 in academic institutions.

In 2007, the total number of students in academic institutions was approximately 250,000, out of which 30,000 studied at non-funded institutions.

These figures illustrate the revolution of higher education in Israel.

This revolution had a major impact on Israeli Arab society as well. In 1948, there were almost no Arab high school and university students. In 2007, there are over 100,000 Arab high school students and some 17,800 Arab students studying for bachelor's degrees.

It is a pity that this revolution started only in 1990, as there is a clear correlation between poverty and higher education. Only higher education can unify society's different sectors. If only this revolution started 20 years ago, in 1970, it could have prevented the current poverty situation in Israeli society as well as the animosity between the different sectors of our society.

The last university founded in Israel was Haifa University in 1963. Israel's population was 3 million at the time. From that point on, the universities turned into a well-organized monopoly that rules the Council for Higher Education and prevents the opening of new institutions of higher education in Israel. The Planning and Budgeting Committee divides its budget, provided by the government, without any written criteria. It was only in 1991 that the late Professor Amnon Pazy formulated some criteria and guidelines.

The monopoly's concepts prevented the revolution in education and 20,000 young and talented students travelled to Europe and North America to obtain academic degrees, as the gates of universities were closed to them in their homeland.

Bar-Ilan University as a Pioneer

I must commend Bar-Ilan University for being a pioneer in spreading higher education to the periphery, in order to promote Israel's society and economy in remote regions. Bar-Ilan's branches – Ashkelon College, Zefat College and Emek Hayarden College – were founded in 1970 as non-funded colleges. Their status was later changed, as I convinced the late Minister Zvulun Hammer to budget them via the ministry of education and later directly through the Planning and Budgeting Committee.

In 1985, I was appointed by Bar-Ilan's senate to chair the three branches and within a few years I changed their status. The number of students in these three branches increased from 200 FTEs (full time equivalent students) to a few thousand FTEs. In 1989, after I was appointed rector and president of Bar-Ilan University, I added Ariel College to the branches of Bar-Ilan University. Within a few years, the number of students at Bar-Ilan University doubled and provided a solution to the surging numbers of new immigrant students.

Today, there are over 10,000 students in all four colleges and their contribution to Israel's periphery is marvelous.

Unfortunately, other universities failed to contribute to this revolution. The void was soon filled with new institutions linked to foreign universities that provided academic degrees in return for minimum time and effort, without any public control and supervision. Many students simply bought their degrees. It was only a few years ago that the law was changed to block this channel.

During 1990, a few Knesset members, such as Amnon Rubinstein, Uriel Lynn and Michael Bar Zohar, initiated a new law that enabled the opening of new non-funded law schools. Such institutions were founded at Bar-Ilan University by Professor Sinai Deutch and myself and at Tel Aviv University by Professor Uriel Reichman.

The above-mentioned Knesset members forced the Council for Higher Education to enable the establishment of new, funded and non-funded institutions of higher education.

In 1993, Amnon Rubinstein was appointed minister of education and served in this role until 1996. During this period, many new institutions of higher education were founded, among them the Interdisciplinary Center in Herzliya and the Netanya Academic College.

This year, there are 30,000 students in non-funded colleges, which accounts for approximately 40% of Israeli bachelor's degree students at the universities. Although the figures are impressive, I believe the process is far from over. In my opinion, we must have a larger number of students and allow more students, especially from poor sectors, minorities and ultra-Orthodox Jews, to enter the gates of higher education.

The Importance of Non- Funded Colleges

The independence of the non-funded colleges has advantages as well as disadvantages. On the one hand, we can increase the number of students without the intervention of the Planning and Budgeting Committee, pay professors without the committee's control and consequently hire the best professors. We can invest in infrastructure, laboratories and facilities and compete with universities. Since our investments are financed by tuitions and donations, the State of Israel saves approximately 600 million NIS annually and, at the same time, these institutions offer room for students, in addition to those at the funded universities and colleges.

Unfortunately, the full burden is upon the shoulders of the students. Their tuition is triple that required at universities. This burden forces them to work too many hours each week in order to finance their tuition. The Israeli government subsidizes the tuition of over 200,000 students in the higher education system, as well as 70,000 yeshiva students; but 30,000 students who served in the army, pay heavy taxes and fulfill their duties to the state, find themselves as underprivileged citizens with unequal rights when they turn to the state for financial support towards their education. These facts are against human rights, immoral and must be corrected.

The social contribution of our institutions to the State of Israel is a miracle. Netanya Academic College dramatically changed the status of the city of Netanya. From one of the poorest cities in Israel, Netanya became a rich city that attracts young and wealthy couples. The city's industrial parks are rapidly developing. Society is stronger – a new city was built in east Netanya (Kiryat Hasharon) and it became the most developed neighborhood in Israel. Prices of land and apartments in the college's region have rapidly soared.

We believe that the solution to high tuition lies in partial support by the government not to the institutions themselves, but directly to the students. I believe each student at the non-funded institutions should receive 50% of the support that a funded institution's student receives. This formula can reduce the state's investment per student and be fair to all students.

Since the state cannot afford to establish new funded institutions, the real solution is to encourage and support the non-funded institutions. I can state, however, that Netanya Academic College, a non-funded institution founded in 1995, received neither financial nor moral support from the Planning and Budgeting Committee.

Furthermore, the evaluation and authorization process of new departments is too long and usually takes several years. In most cases, the positive approval is given towards the end of the academic year, leaving little time to publicize, attract and enroll enough students to form a class that is economically viable. Therefore, the first three years in each department are a heavy financial burden on the college's budget.

In addition, the various committees of the Council for Higher Education that are involved in the evaluation, authorization and accreditation process for any given program frequently have different views on certain issues, and their contradictory decisions lead to confusion and to financial loss to the college. There is no unified policy for all institutions and, indeed, many decisions and requirements vary from one institution to another.

I can provide other examples to support my view that the non-funded colleges are considered as stepchildren by the Council for Higher Education and the Planning and Budgeting Committee. They withhold assistance even when it would not be at their expense. This policy must be changed. The Supreme Court should not be the platform to solve our problems.

Last year, the government appointed the Shochat Committee to evaluate the system of higher education in Israel. The committee's mandate was to consider all aspects and the full scope of higher education. Most of the committee members were university professors, as well as professors from the Council for Higher Education and the Planning and Budgeting Committee. In the final report of the Shochat Committee there is a single sentence regarding

the non-funded colleges: "We decide not to discuss the non-funded colleges". This means that 30,000 students are considered irrelevant and of lower standard.

In my opinion, we need a new leadership for the higher education system, as the last 10 years were lost years. The recent strike was only a symptom of the sickness.

I wish a better future for our higher education system, which is the key to advancing our society, to bringing peace upon Israel and making us a light unto the nations.

Tables from
The Shochat Commission for Reforms in Higher Education Report
July 2007

Table 1: Students of Higher Education Institutions by Degree and Institution Type

	Bachelor's Degree Students					Master Degree and Doctoral Students	Total
	Universities	Academic Colleges	Teacher Training Colleges	Academic Track in Regional Colleges	Total		
1981	40,910	1,321	712		42,943	14,930	57,873
1982	41,960	1,295	732		43,987	15,255	59,242
1983	43,380	1,518	702		45,600	15,265	60,865
1984	44,815	1,621	861		47,297	15,795	63,092
1985	44,355	1,848	1,033		47,236	16,800	64,036
1986	44,945	1,909	3,967		50,821	17,415	68,236
1987	45,480	1,879	4,058		51,417	18,020	69,437
1988	45,730	2,648	5,143		53,521	18,460	71,981
1989	45,880	3,329	4,767		53,976	19,200	73,176
1990	46,960	3,540	4,746		55,246	20,810	76,056
1991	48,750	4,269	5,289		58,308	22,440	80,748
1992	53,950	5,129	7,182		66,261	24,690	90,951
1993	57,197	6,550	8,201	2,245	74,193	26,360	100,553
1994	59,951	8,647	10,127	3,229	81,954	28,300	110,254
1995	62,860	9,440	10,538	3,890	86,728	30,500	117,228
1996	63,563	13,041	12,966	5,387	94,957	32,750	127,707
1997	64,190	18,020	18,073	6,110	101,286	34,600	135,886
1998	65,570	23,350	18,151	6,970	114,041	36,590	150,631
1999	66,551	28,366	19,317	7,279	121,513	37,913	159,426
2000	66,836	33,369	19,646	7,374	127,225	39,259	166,484
2001	66,203	37,325	19,998	7,887	131,413	40,245	171,658
2002	67,231	42,371	20,701	8,199	138,502	42,942	181,444
2003	68,184	47,046	21,714	8,511	145,455	45,455	190,910
2004	70,175	51,057	21,714	8,540	151,486	48,915	200,401
2005	69,910	54,987	22,458	8,540	155,895	49,670	205,565
2006	68,672	60,825	21,361	8,143	159,001	50,490	209,491

Note: Figures do not include Open University students.

Table 2: Percentage of First-Year Students in Higher Education Institutions From among 20–24-Year-Old Average Age Group, by Area of Residence (2002, 2004)

	2002		2004	
	Total 1st Year Students	% of Average Age Group	Total Freshmen	% of Average Annual
National Total*	**43,645**	**40.4**	**48,048**	**43.6**
Jerusalem	3,570	26.2	3,674	26.1
North	6,914	35.7	7,588	39.0
Haifa	5,711	41.6	6,260	46.0
Center	10,895	45.7	12,427	50.4
Tel Aviv	7,971	44.1	8,399	48.9
South	6,796	42.9	7,626	45.8

Source: Adaptation from the Central Bureau of Statistics Data

* Total figures also include students from the Judea and Samaria area.

Table 3: High School Graduates by Sector (1991 – 2006)

	Jewish Sector		Total	Arab Sector	Total
	Non-Orthodox	Ultra-Orthodox			
1991	51,889	3,548	55,437	8,730	64,167
1992	55,037	4,016	59,053	8,822	67,875
1993	59,384	4,676	64,060	9,560	73,620
1994	63,778	5,246	69,024	10,341	79,365
1995	61,571	5,646	67,217	10,455	77,672
1996	64,021	6,409	70,430	11,949	82,379
1997	62,722	7,047	69,769	12,433	82,202
1998	63,741	7,558	71,299	12,479	83,778
1999	66,938	8,528	75,466	13,290	88,756
2000	67,087	8,975	76,062	13,810	89,872
2001	68,874	9,749	78,623	14,429	93,052
2002	71,903	10,935	82,838	15,711	98,549
2003	71,964	10,093	82,057	15,747	97,804
2004	74,030	10,479	84,509	17,399	101,908
2005	70,626	10,740	81,366	17,605	98,971
2006	70,203	11,428	81,631	18,924	100,555

Table 4: High School Graduates in the Arab Sector during the Years 1991–2002 Who Began Their Academic Education within Two Years of Graduation, by Institution Type (Percent)

Graduation Year	Total	University*	Academic College	Teacher Training College	Open University
1991	10.7	6.2	0.0	3.5	1.0
1993	13.2	7.9	0.1	4.6	0.6
1995	15.1	9.0	0.8	4.9	0.4
1997	14.6	7.7	1.1	5.0	0.8
1999	17.9	9.0	1.3	6.7	0.9
2001	19.2	9.3	1.9	7.3	0.7
2002	18.8	9.6	2.5	6.1	0.6

Source: The Central Bureau of Statistics Data

* Figures include students on academic tracks in regional colleges acting under universities' academic supervision.

Table 5: Bachelor's Degree Arab Students by Institution Type (1996–2005)

	Total	Total Universities	Out of which:		Academic Colleges	Teacher Training Colleges
			Universities	Academic Tracks under universities'		
1996–7*		68,950	63,563	5,387	17,263	14,257
% Arabs		7.0	6.7	10.5	3.5	15.6
2000	127,448	74,194	66,935	7,259	33,250	20,000
% Arabs	10.1	9.0	8.1	16.6	6.0	20.9
2004**	151,500	78,715	70,204	8,511	51,085	21,700
% Arabs	10.7	9.8	9.1	15.1	5.0	27.7
2005	155,900	78,450	69,910	8,540	55,000	22,458
% Arabs	11.4	10.1	9.3	16.8	5.6	30.4

Source: The Central Bureau of Statistics Data

* Figures of universities and academic tracks acting under universities' academic supervision relate to 1996; figures of academic colleges and teacher training colleges relate to 1997.

** As of 2003, the Central Bureau of Statistics changed its classification of population groups. This should be taken into account when comparing perennial data.

Table 6: Forecast of the Number of 1st-Year Students in 2007

	2007 (Forecast)	2006	% Change
Total	200,230	197,624	1.3%
Universities – Total Regional Colleges	75,850 7,850	76,815 8,329	1.3%- -5.8%
Academic Colleges	64,000	60,761	5.3%
Teacher Training Colleges	20,900	21,378	-2.3%
Open University	39,500	38,670	2.1%

Table 7: Students' Predicted Division into Degrees in 2007 Compared with 2006 Figures

	2007 (Forecast)	2006	% Change
Total	254,108	250,566	1.4%
Bachelor's Degree	200,230	197,624	1.3%
Master's Degree	42,330	41,767	1.3%
Doctorate	10,200	9,835	3.7%
Certificate	1,350	1,340	0.7%

SESSION V

Commercialization of Programs within Public Higher Education

NON-COMMERCIAL VALUE IN HIGHER EDUCATION AND THE CHALLENGE OF COMMERICALIZATION

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We need to define two things: What do we mean by the challenge of commercialization, and what is meant by the expression "non-commercial value in higher education"? Basically, my thesis is that unless we find some way to quantify non-commercial value in higher education, we will succumb to the challenge of commercialization.

What is the challenge of commercialization? Commercialization can be deemed to have begun with the development of private colleges in the United States in the nineteenth century. A further stage was marked by the development of programs in questionably academic fields, such as business. However, in the age of the Internet, commercialization means the presence of educational vendors who are not universities and who are willing to sell their educational product, e.g., via the Internet. Thus, in the first stage, commercialization meant the development of private institutions of higher learning, such as the IDC in Herzliya. The second stage is marked by the "academization" of previously non-academic fields of endeavor. The third stage is one in which the primacy of colleges and universities in awarding qualifications is subverted. We have not yet reached that stage, but it is entirely imaginable.

A parallel process has also evolved in the second function of higher education: research. In the first stage, research was outsourced to research institutions that do not engage in teaching. This phenomenon began in Germany in the late nineteenth century, and in France with the French Revolution. The novelty was the nineteenth-century integration of teaching and research, which may turn out to have been temporary. In the second stage, academization expanded to all imaginable areas of life. For example, research institutes engage in activities that were not considered academic previously, such as policy studies. Nobody even questions the academization of policy studies in contemporary culture, but no institution before World

War II was of this type. Some policy institutes are within universities, and some are not. Perhaps archetypical for this process is the Rand Corporation, which started as a private contractor for the United States government, but at one point began to award doctoral degrees without becoming an institution of higher learning. In a conceivable third stage, most research will no longer be carried out within the university, since it will have become too expensive, and will be carried out by private corporations. However, the example of the Rand Corporation may indicate that corporations such as GE or Siemens may then evolve to award quasi-academic or academic degrees.

The contemporary blurring of the boundary between university and business has been masked by the creation of large integrated university-cum-business communities, such as Route 128 and Silicon Valley. The idea was that location next to a university could provide economies of knowledge transfer for venture enterprises. This intuition is only true so long as either venture capital or knowledge capital is relatively cheap. If such communities turn out to be more expensive than separate corporate research departments, then they will fade. Thus, the question is whether the advantages of knowledge concentration will outweigh the disadvantages occasioned by the sharply increasing costs of contemporary research. The commercialization of research means either that research will cease to be carried out in universities or that universities will become commercial institutions.

Thus, the future holds two options: either universities will disappear or they will not look anything like universities do today. In the context of commercialization, maintaining non-commercial universities is just too expensive. Lest any one have any illusions, this development is as potentially threatening for the sciences as it is for the humanities. Right now, undergraduate education is combined with research. In the humanities, the problem is that graduate research cannot readily be commercialized, and so the humanities are devalued into a form of undergraduate education. However, the sciences depend on the labor of graduate students in order to run their labs economically. Despite their comparatively large incomes in relation to other students, in terms of what they do, graduate students in the sciences are grossly underpaid: they subsidize the university in

its guise as a private corporation. This anomaly is unlikely to subsist. At some point, it will be comparatively advantageous for science graduate students to obtain real wages in the private sector – once the link between graduate study and accreditation is dissolved, or once businesses award certifications or degrees (something they don't do today because of the restriction on certifying institutions that is characteristic of today's states, but that may well fade). It could be that in the future a country will be able to choose to accredit scientists on the basis of five published papers, just like now, the difference being that the scientists will have written them while being well paid by private corporations.

What, then, will the future be like? It may consist of a two- or three-year general education program followed by a return to a kind of on-the-job training. However, this corporatization of study and training may be damaging for the quality of the research, since research will be devalued into being a trade. Being a researcher will be much like getting a law degree while working for a lawyer, the way that most American lawyers qualified in the nineteenth century.

The situation in the recent past, when governments subsidized non-profit research at universities, cannot continue on anything like the same scale, because the rate of increase of the expense of educational institutions in the tertiary, i.e., higher, education sector has far outstripped the rate of inflation. Indeed, the relative amount spent on research in universities as a proportion of GDP is already declining. Moreover, non-profit research is also being contaminated by the drive to democratization, i.e., spreading the limited money between too many institutions. This can readily be seen in the allocation of funds in the EU, which, in terms of money spent, has failed to produce the expected quality of research. This outcome must be due, in part, to the EU selection process. In a confrontation between non-profit research and research for profit, the latter holds an excellent hand and, barring major international convulsions, may likely obtain the upper hand in the next period.

The point I wish to take up now is the question of what is meant by the idea that privatization may damage the quality of research. On the one hand, such an idea is counter-intuitive, since in an open situation, one could assume that the best research will triumph. The

problem is that the best science from one point of view is not always the best science from some other point of view.

What those points of view may be is a matter for clarification. One parameter would be the best science per se. For example, the accusation has been made that cancer research has stagnated because of less drug company funding; it is alleged that drug companies are not interested in innovations that would threaten existing products. Another parameter might be research that is socially beneficial but economically damaging. This possibility is masked by the notion that anything can be rendered profitable. However, there may be a large time gap between the social need to carry out research and the point in time at which it would become profitable.

One could imagine other criteria for what might constitute the best science. Scientific rationality is not the same as economic rationality. What we mean by non-economic rationality, however, may have other or different components than scientific rationality. If we agree that economic rationality is only one kind of rationality, it follows that economic optimization is only one parameter for designing an optimal research and education system. It also implies that if we apply economic measures to non-economic activities, we may obtain absurd results. Anyone who has studied costs in higher education knows that cost measures in higher education are notional, and that profit or outcome measures are even more far fetched.

That raises the questions of what non-economic parameters can be applied in a precise fashion, and what such non-economic parameters might be. As noted, it is easy to invent criteria that appear to be analogous to economic criteria. Such criteria don't work because they are only apparently economic. What I am arguing is that not only what is measured may not be amenable to economic measurement, but also that these criteria, e.g., those of the allocation model used by the Planning and Budgeting Committee of the Council of Higher Education, are not even truly economic criteria. This argument is analogous to arguing that if we apply economic criteria to, e.g., measuring God's presence in the world, the criteria will not really be economic ones. This is not only because God's presence in the world is not amenable to economic measurement, but also because the model we would construct for this purpose would be fantastic; cost,

output, and profit would themselves not look like cost, output, and profit when these measures are applied to business activity.

One problem with such measures is the question of defining the market for higher education activity. In a free market situation, universities would be able to raise funds in relation to their fabrication of a better product, but in certain ways the market for higher education is not really a free market. One well-known facet of the higher education market is that it is really an oligopolistic guild. Still, that of itself would not fully prevent market behavior, as demonstrated by the case of the guild of lawyers.

In the Israeli situation, there is a graver distortion in that most of the money comes from one source. Israeli universities are confronted by a monopoly of supply. As such, the supplier can jack up the price to any level he wants. If only one place in the world produces oil, the owners of that place can set any price they want. But what is the good that is owned by the monopolistic supplier here? It is money itself. Therefore the cost of money for universities dependent on the Planning and Budgeting Committee of the Council for Higher Education is very high. If one could quantify this cost of money, its rate might even turn out to be usurious. The assumption here is that when you receive money from the government, it is an illusion to think that its cost is nothing, that the money is free. Rather, it is very high. Certainly such costs as the *cost* of money for a publicly-funded institution should be amenable to quantification.

The irrationality of the cost of money in a non-market situation imposes monopolistic distortions on the economics of education. These distortions are cumulative rather than constant: it is not as if a constant percentage of distortion will create a constant deviation from the optimum (which we have not yet defined). In this way, a cost-based financing system will create ever-greater inefficiencies both in research and in teaching, as the experience of health in medicine readily proves both here and in the United States. Moreover, while expensive health care may be better care, the marginal benefit of ever-greater money lavished on the health-care system must lead to an ever-smaller result, because the slope of the effect of monetary investment is ever steeper. What that means is if one is buying luxury goods, one pays a lot of money for a negligible result in terms of quality. Moreover, at some point this curve can reverse direction.

Thus very expensive clothes are often much less durable than slightly less expensive clothes, because they are intended to have a one-time effect. In the same way, cost-based financing provides incentives to the recipient to jack up notional costs in order to get more money, and he can only do so after a given point by becoming less efficient. No matter how that criterion is defined, cost-based financing will eventually result in reduced efficiency.

Here, then, the real question has to be: What are the qualities one wants to have in a product? Should, for example, durability be a measure for quality in clothing? Here it should be pointed out that even if one selects a given quality for preference, such as creativity, the path from investment to output is not a straight one. Implementation often has to be conceived in terms of arranging for byproducts and spillover effects, where the desired goal is precisely the spillover effect and not the stated goal. That means, for this example, that intellectual creativity is often a result of the kind of work in which one is engaged, i.e., that simply rewarding the "best" scholars is not a guarantee of creativity. This last statement needs to be tested over time in various disciplines, in order to figure out whether the overall quality of work in a given discipline has been increasing or declining over time.

Stated another way, what this means is that because something is expensive does not mean that it is valuable. It may not even be economically valuable. We treat health as if the goods supplied in the health market were like paintings at an art auction: the price of the painting is the same as its cost, which is notional. The original cost of producing the painting has no effect on the price of the painting at all. I believe that the cost of much of what goes on in the health profession is also notional, but it is notional in a slightly different way. The people in the health profession claim that there exists a relationship between the cost of health and its price. In that case, why does the price for health services vary so much across the world, even when we factor in purchasing power parities.

When an educational-grants organization applies the parameter of cost for spending comparatively scarce educational monies, it is treating groups as if they consist of collections of potentially valuable artists. The only ceiling that the works of art have is the purchasing power of the richest agent interested in purchasing the picture. In

other words, there is no ceiling on notional costs other than the disposable wealth of the members of the society in question. When this criterion is applied to collective costs, the same principle holds: As the example of health expenditure in the United States shows, American society can still spend much more than it does on health. Moreover, it is not clear that American society has reached the point at which it has to cut other expenditures to meet its health costs. At most, it has to cut the growth in other expenditures to meet the growth in health costs. From this discussion, it can be inferred that such costs can only continue to grow as long as there is no external limit set by the spender, in this case a society or its government. Moreover, at some point they will work like bad money driving out good money, i.e., they will cause noise at the margin in the competition between the costs in different sectors for a society's absolutely disposable funds.

Thus, there is no relation between the cost of such goods and their value. One could, of course, argue that the cost of a good is its value. My point here is that the price is, indeed, set in terms of the cost, but that the cost is an arbitrary figure. As such, there is no way to tell the value of the good, since the price has been distorted and since the cost is arbitrary. Therefore, neither the cost nor the price is a reliable indicator for the value of the good. It is a good question whether this situation would also hold true in an absolutely free market, one in which it could be presupposed that the price would reflect a minimum margin beyond the cost, and the cost itself would be subject to competition, i.e., that the cost itself would be held at a minimum.

However, this model does not work for two reasons. Firstly, perfectly free markets are inherently distortive – a general argument that cannot be developed extensively here. Suffice it to say that such "free" markets would only work if the price of the goods in question were constant. But they are not. Not only does innovation distort equilibrium, but also perfectly free markets inherently advantage certain cost factors in relation to others, thus making some goods more preferable over others in a way that could not be directly deduced from the freedom of the market itself. The second reason is that the impetus in such a market is to cut costs to the bone. However, that cost-cutting means that the good that is being offered for sale is no longer the same good: a three-wheeled vehicle is not the same as a

four-wheeled vehicle, and a cheap medical education is perceived to be in some way different from an expensive medical education. In these cases, the operation of the free market has changed the good through reassessing its value.

But what alternative model can be advanced? In the absence of cost and of price, how could one obtain a coherent way of measuring value? We have shown that one cannot compute the value of a good that is subject to such a criterion as notional cost, since the value is induced from the cost, and not from the price, since, in the case of medical education, the price is lower than the cost. The question to be addressed, however, is: What would be the situation if one could design a model in which the cost would be dependent on the value? Perhaps the great advantage of non-economic goods is that in their case value can be set as dictating cost. However, simply declaring value as the independent variable does not mean that one is any closer to having a criterion for defining or for measuring value, let alone comparative value, i.e., determining a measure that, like money, allows one to use the same measure of value for different non-economic goods.

Even if one had such a non-economic criterion of value, perhaps the same problem that we discerned in the case of a work of art or the way in which we value medical education would hold for that criterion. Namely, the criterion would work best for goods clustered around the median, and would be totally ineffective for the outliers. In certain cases, however, we are interested in the outliers, and by definition those are not really amenable to measurement, in the same way as the measurement of IQ is less precise the further one is on the scale from the median. Yet in some forms of education, what we are seeking to reward is genius. By definition, we could only do so if we could devise a measure that would let us distinguish between different levels of genius. At some point, refining these distinctions would become imprecise because the n would be too small, even if case 1 of genius were "twice" as good as case 2 of genius in a two-person field. The underlying argument here is that some types of academic education are treated as if they were rare goods, like diamonds. We have seen the market distortions that diamonds inherently create. However, having diamonds on one end of the scale for rare gems creates still another distortion, namely, treating non-

preferred goods – zircons – as if they were junk. Medicine is not a diamond, and Sumerian is not a zircon.

Thus, we have reached the following provisional conclusion: In some significant ways, the analysis of non-economic value behaves like the analysis of economic value. Is this a consequence of our rationality or a consequence of the process of valuation? However, in some significant ways non-economic value does not behave like economic value. The one way that we have found for this to be true is where the criteria for non-economic value must precede valuation – because we still don't know what these criteria are. We either apply economic criteria to non-economic values, and we then obtain irrational results, or we invent measures that are both values and valuations, i.e., constructive outputs that are apparently quantitative, such as the number of publications requisite for promotion.

This example illustrates what the problem is: lip service is paid to the idea that someone can be promoted on the basis of a few significant publications. This does happen, but very rarely. What is then our standard for evaluating those few publications? The letters of evaluation obtained from experts. In other words, what we really do is substitute peer review for the market, and then assume that peer review and the market are rational in the same way. Of course, this result cannot be true, since peer review is by definition an oligopoly, while a fully rational market cannot be an oligopoly. This shows how imposing a certain measure on a market of itself distorts the market in question. Moreover, in this particular market, demand is valued more than supply, i.e., peer estimation as a measure of demand for the product of an individual scholar is viewed as more important than the sheer number of publications.

In certain situations, however, a rational market would say that sometimes supply is more of a factor than demand, and in other situations, the reverse applies. Moreover, once again, this measure shows that we are all conceiving of the academic market as one in which the goal is to produce an intellectual Rolls Royce. However, such a market is really one in which we believe there is a Rolls Royce that is hidden somewhere in a pile of Volkswagens. It is obvious that such a procedure is very expensive and is much like a treasure hunt for the one stone that will produce a big payoff. However, just as almost all prospectors never find a Hope diamond, in our second

analogy the cost of trying to discover a Rolls Royce far exceeds any conceivable profit. (Remember that we pay out the same for producing a genius mathematician as we do for a very good but not outstanding mathematician.) In other words, our method of valuation has transformed what we conceive to be a market into a treasure hunt.

Yet when, in contrast to the system for hiring, we turn to the educational system through which we produce researchers, we impose opposite measures. We bewail the desires of students to study so-called practical subjects, i.e., we belittle demand, unlike in our intellectual evaluation. We want to force-feed them with whatever education we imagine may be good for them, i.e., we extol supply.

In other words, there is no measure for equilibrium in the non-profit system. The pursuit of excellence and the production of excellence operate according to opposite principles. Moreover, the consequence of our strategy for assessing demand as a basis for hiring and promotion assigns wildly varying marginal values to phenomena where the underlying difference in real marginal value is relatively small. At the same time, the consequence of our strategy for assessing supply as a basic criterion for what we teach people is actually is a reduction in the diversity of offerings.

I repeat here how the consequence of our educational system has been a reduction in our intellectual offering to students and an overemphasis on presumed differences between the academics and intellectuals who were created by the homogeneous system we have created. An educational system that is both homogeneous and highly selective may produce a cohesive elite, but it is questionable whether it can produce the very originality it claims to further. If such systems, such as the French educational system, can be shown to nonetheless stimulate outstanding work, the reason must lie elsewhere and not in the system.

Where else? Alas, my answer to this question will not be particularly revolutionary, but I think that the consequence of the application of social science methods to the educational system has been the neglect of attention to what is taught. The real difference in value between subjects must be related to their content. Moreover, it is not clear that a comparative commodity indifference curve can be meaningfully constructed, as if x mathematics is worth y Bible. Yet what we actually do is to assign x hours of teaching to a and y to b.

Moreover, we assume, for reasons of convenience, that fields are worth *x* credit points, as if French and philosophy are comparable in the quantity of knowledge that is to be taught. Even where we acknowledge a difference, i.e., in assigning more credit hours to the sciences than to the humanities, we do not do so for any well-considered judgment of the matter taught. This point may sound banal, but it consists of a hot potato, for what it implies is that there are inherent differences in the matter of what is studied – that literature may be more important than physics, or biology may be more important than philosophy – and that some of these differences may of themselves foster or impede excellence. Moreover, we rarely consider the spillover effects from teaching one discipline on another. These spillover effects may be such that a field may itself not be so excellent, but may nonetheless be requisite for producing excellence in a quite different field (e.g., philosophy as a requisite for producing innovative physics). This question of cross-disciplinary effects has not obtained sufficient empirical study.

But this kind of value is non-commercial. Moreover, it is value that can be quantified in relation to outputs. My thesis: while by definition non-commercial value cannot be studied as if it were a free market, that does not mean that it cannot be measured or quantified. However, that does not mean that the appropriate model is some kind of input-output analysis that analyzes all components in terms of a small set of factors. Rather, non-commercial value can inherently be evaluated in the interrelation between fields.

The suggestion here is not to encourage interdisciplinary studies. It is, rather, to measure the effects of one discipline on another discipline. If we wish to measure the general cultural or social effects of a phenomenon, it makes sense to measure the palpable effects on the immediate surroundings first (although it is not always the immediate surroundings that are immediately affected).

My reason for this suggestion is that there is an inherent barrier in any field to import conclusions from another field. Often, these extra-field conclusions are only symbolic, for it is often the case that people reinterpret extra-disciplinary data in terms of their academic discourse. Nonetheless, the consequences of such a move could be great, for it would place a premium on appealing to an academic audience outside of one's own discipline. Moreover, it would be

interesting to be able to determine what apparently unrelated knowledge is synergistic for specific fields.

A PRIVATE PROGRAM WITHIN A PUBLIC MEDICAL FACULTY

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The Problem of Declining Governmental Funding

During the last two decades, governmental financial support for higher edu in many Western countries, including Israel, has been in progressive decline.

As the governmental part of the university budgets has declined, the public universities have become more reliant on tuition and other funding resources. Universities have jumbled to sustain access and quality by diversifying revenues, streamlining costs, and adopting technology.

More emphasis is being put on research grants and business alliances. Universities are discussing joint research ventures with partners from the private sector and research contracts are being made with industrial, high-technology, and pharmaceutical companies.

The limitations in resources have led universities to substitute full-time tenure-track faculty with part-time and/or non-tenure-track faculty. This has been implemented despite the fact that increased employment of part-time and/or non-tenure-track faculty is associated with reduced percentage rates of student graduation.

The universities may still be publicly owned, but they are gradually becoming more privately financed. The contribution of student tuition has become a relevant source of funding and creeping privatization has accelerated a broader movement to raise tuition. Thus, in order to maintain and even improve academic quality, some universities have opted for a variable pricing model similar to the one that is used at private institutions. This extreme act has violently compromised social values and duties of higher education, impairing accessibility to large deprived communities.

Higher education is becoming more and more stratified with fewer and fewer students from low-income families, many of them belonging to minorities. The increased stratification is not just a socially undesirable side effect of increased private financing; it is also silently ticking bomb .

Yet the need to preserve the diversity of students has particular importance in medical schools. Racial and ethnic diversity that adequately represents society will result in higher quality medical education and will increase the productive diversity of physician and research workforces. It will increase access to health care for deprived populations and will nourish and perpetuate research in medicine, particularly in public health. A diversity of medical students will eventually result in diversity among health-care managers.

In an immigrant-absorbing and culturally diversified country such as Israel, increasing tuition to compensate for the reduction of governmental funding is a truly problematic option.

The Increase in Cost of Medical Education

Medical education has been hurt twice: not only has the governmental financial support to universities been reduced, but the health-care budget has been restricted as well. Over the past 20 years, the cost of obtaining a medical education has been gradually increasing.

Costs can be categorized as instructional costs and total educational resource costs. Instructional costs, which can be distinguished further as marginal costs or proportionate-share costs, are those costs that can be related directly to the teaching program and its support. Total educational resource costs are those costs supporting all faculties deemed necessary to conduct undergraduate medical education in all its teaching, research, scholarship activities, and patient care.

In the USA, instructional cost estimates of a medical student's education are between $40,000 and $50,000 per student per year. The estimates of total educational resource costs show greater variation and fall between approximately $75,000 and $95,000 per student per year. The average tuition and fees at USA public medical schools during the 2003–2004 academic year amounted to approximately $16,000, and the corresponding figure for private schools was double ($32,500).[1]

Several suggestions have been made for restructuring medical education for the sake of efficiency and cost effectiveness. But these were just means of transferring responsibility for expenses to others.

Medical schools all over the Western world are facing the same problems, and have been working on alternative ways to expand their budgets. Staff positions have been cut by consolidating overlapping positions and by unifying several technical units. Merging and sometimes even eliminating programs has been an additional cost-cutting technique. The problem is, however, that in order to cut expenses, only a net reduction of the medical school curriculum can truly reduce costs. But medical knowledge must continue to develop, as must the range of information and skills required of medical students, deeming this last solution absurd.

Another way of balancing the budget is by increasing revenues. In order to do so, fund-raising and marketing has become a priority in universities. Major attention is being given to research grants and alliances with the private market.

Medical schools have demonstrated creativity and some have broadened their revenue bases by launching new academic programs. Programs for foreign medical students, for example, have been considered an appealing track to increase revenues.

The Private Program within a Public Medical Faculty

At the Technion, we offer this latter alternative. By engaging a private program for foreign students within our public institution, we are able to obtain financial resources. This hybrid system is functioning in our faculty of medicine, whereby a private medical program for American students runs parallel to the public Israeli medical program. In this manner, part of the public medical program expenses is covered by revenues from the private one.

The faculty's expenses for one year are three times its budget, so additional funds – just for day-to-day operation – are essential. A good and solid private program can easily help close this gap and allow expanding the number of preclinical scientists and academic

[1] Gail Morrison, M.D.: Mortgaging Our Future – the Cost of Medical Education. N Engl J Med. 2005 Jan 13; 352(2):117–9.

physicians on staff. Revenues from the private program are used to avoid minimizing manpower and technical units and to better teaching conditions for both the public and the private programs.

This system, however, is not free from potential obstacles.

Possible Conflicts

- Students may get a false impression that title and/or achievements can be bought and are therefore negotiable.
- Students who pay more expect to be rewarded accordingly.
- The background level of academic achievements between the two programs is different.
- The socioeconomic status differs between the two groups of students.
- The private program may lack diversity.
- Hostility may develop between the students of the two programs.
- Faculty members may prefer to teach in the private program.

The Principles of the Private Program

- Paying is not the only criterion for acceptance.
  Only high-level students are recruited to the program. In order to have the most motivated students, we first examine the academic potential by looking at the grade point average (GPA) and the medical college admission test (MCAT) scores. A student who meets the threshold criteria is then called for an interview. The interview is performed by senior faculty members and a psychiatrist. The rate of acceptance is one out of three applicants.
- The students know from the start what their obligations and privileges are. They also learn that both, privileges and obligations, are the same in the two programs.
- The academic program is run by faculty members from the public program, but it is designed to meet the standards of top USA medical programs.
- In areas where teachers are lacking, we hire external teachers, usually retired faculty members or physicians with no academic appointments, all of whom also teach in the public program.
- We maintain the same high standard of teaching in both programs.
- We use the same criteria for failure, success and excellence in both programs.

We found that most, if not all, of these problems are solved by using appropriate selection criteria, by targeting high standards in the private program, by recruiting highly motivated, well-prepared students and by maintaining the same standards for both programs. We believe that the final "product", i.e., the new physician, has the same academic and professional qualities, whether a graduate of the public or the private medical program at the Technion.

PRIVATIZATION OF HIGHER EDUCATION IN ISRAEL IMPLICATIONS FOR THE PUBLIC COLLEGES

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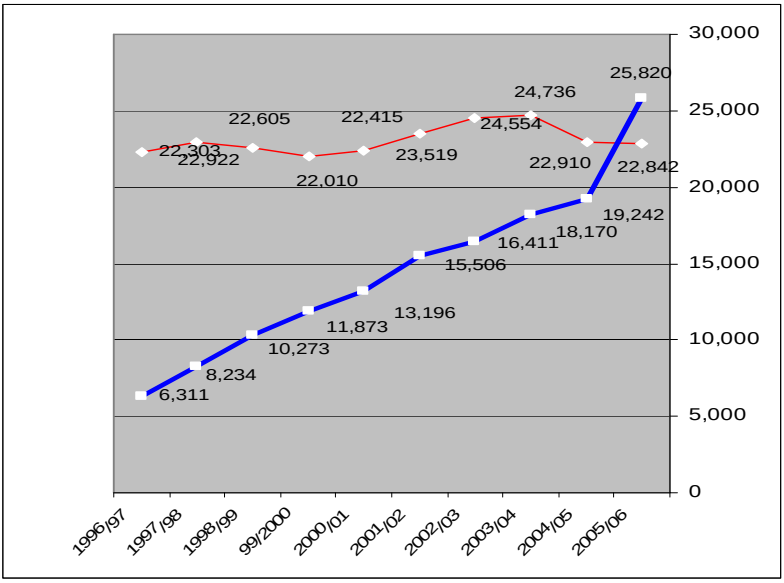
The Public Colleges

In the 1990s, the perception that acquiring higher education was no longer a privilege of the elite but a basic right of all young people led to a turning point in the structure of higher education in Israel. The understanding that the quality of contemporary society is directly dependent on broadening access to an undergraduate degree, contributed strongly to the establishment of new institutions that grant academic education. It also led to Amendment no. 10 to the Council for Higher Education Law, enabling the opening of academic colleges. From 21 institutions of higher education in 1990, the number grew to 61 in 2006. The number of students attending colleges almost doubled from 2000 to 2006: from 33,828 students to 64,355. In 2007 ca 60% of all students in Israel attended colleges, and in following years, according to the policy of the Planning and Budgeting Committee (PBC), two out of every three first-degree students will study at a college.

Table 1: The increase in the number of students beginning bachelor degree studies, 1996–2006

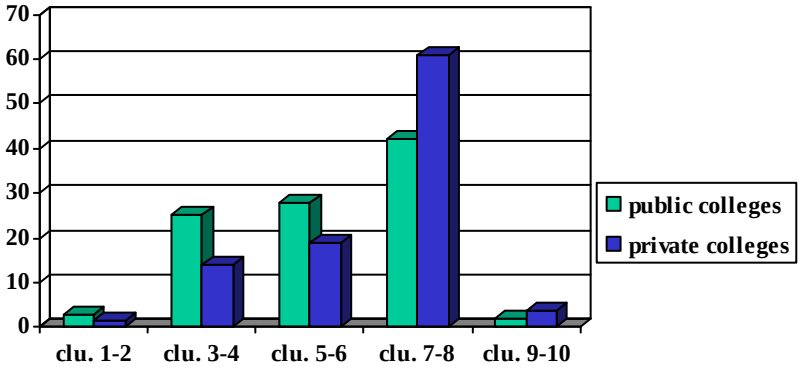


Data: The Central Bureau of Statistics

The academic colleges constitute a new phenomenon, in the Israeli academic arena. No one disputes that they have successfully complied with the goals set them by the heads of the higher education establishment over the past fifteen years. Yet despite their achievements so far, the colleges still have a long way to go until they obtain the capacities needed to meet all the challenges and difficulties confronting them.

Many Public-budgeted colleges are situated in distant regions, making them a highly important regional factor as well as a focus of culture and of community pride. These colleges are attentive to the needs of the communities where they function – far from Israel's center, in its geographic or societal periphery – and there is ongoing interaction with the communities in several social, cultural, economic, and educational spheres. This sets the colleges an overall more complex and challenging mission. The private colleges, in contrast, are mostly located in the Greater Tel Aviv area, and thus operate within a more affluent population.

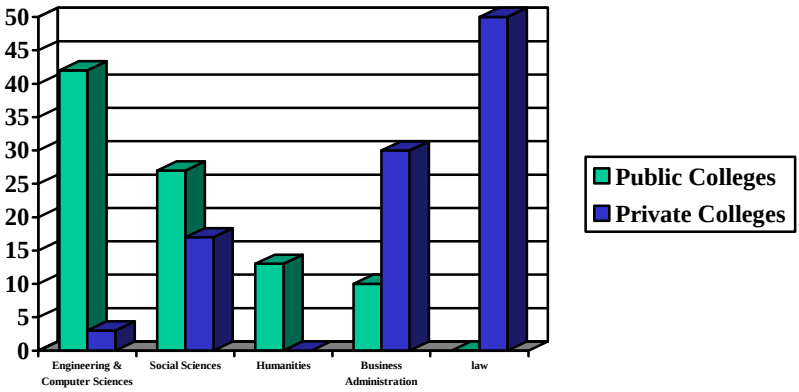
Table 2: Students in public and private colleges, by socioeconomic clusters



Source: Council for Higher Education

Any study-track that is opened at a private college is the result of a market survey . Justification is purely economic, and does not stem from national planning for the needs of the country's economy. It is the budgeted colleges that supply the national economy with professionals in vital fields such as engineering sciences and computer sciences (see Table 3).

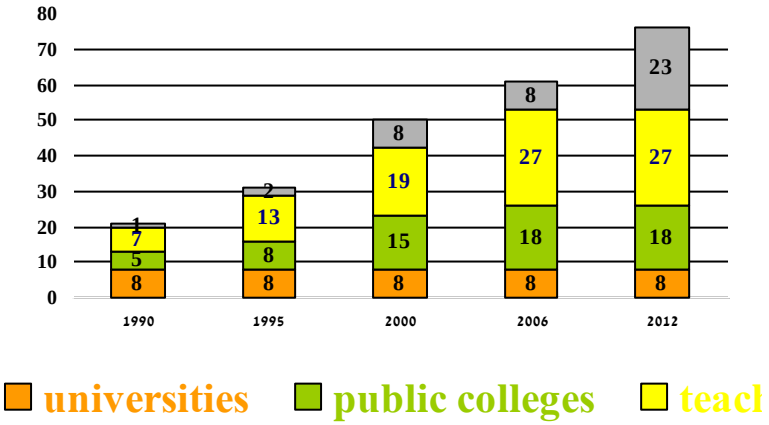
Table 3: Study disciplines offered by public and private colleges (as a percentage of the total number of students in the colleges)



Source: Council for Higher Education, 2006

If the applications submitted to the Council for Higher Education to open another eleven private colleges are indeed approved, the higher education map will change radically. From being minor players that help the system by supplying immediate response to fashionable trends, the private colleges will become dominant players with wide-ranging influence. Expanding the private system will cast doubt on perceptions of higher education as being a public product, and on the state's responsibility for it. In turn, it will have far-reaching implications for Israel's entire higher education system in the coming years.

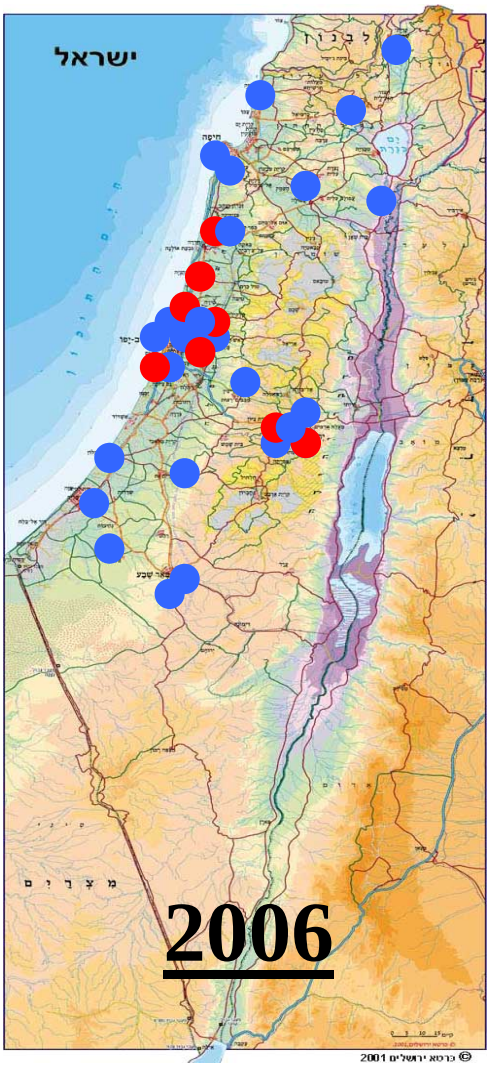
Table 4: Number of higher education institutions in 1990–2006, and the forecast for 2012

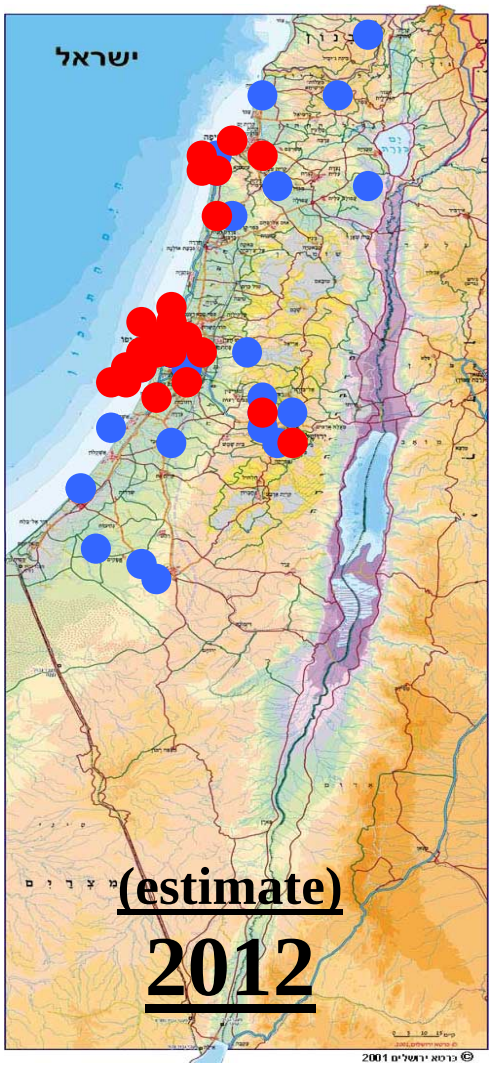


Source: Council for Higher Education, self-estimation for 2012; Teachers training colleges.

It is not only the scope of the private system that will grow and affect the whole system, but its spread will too. For financial considerations, the private system will remain concentrated in the country's center. As a result, the system will lose that sensitive equilibrium that gives residents of the peripheries equal opportunities for high-quality further studies taught by top faculty.

Figures 1 and 2: Geographical distribution of public and private higher education institutions – 2006 and 2012 (estimate)




ישראל
(estimate)
2012
© כרטא ירושלים 2001

The Impact of Privatized Higher Education on Public Colleges

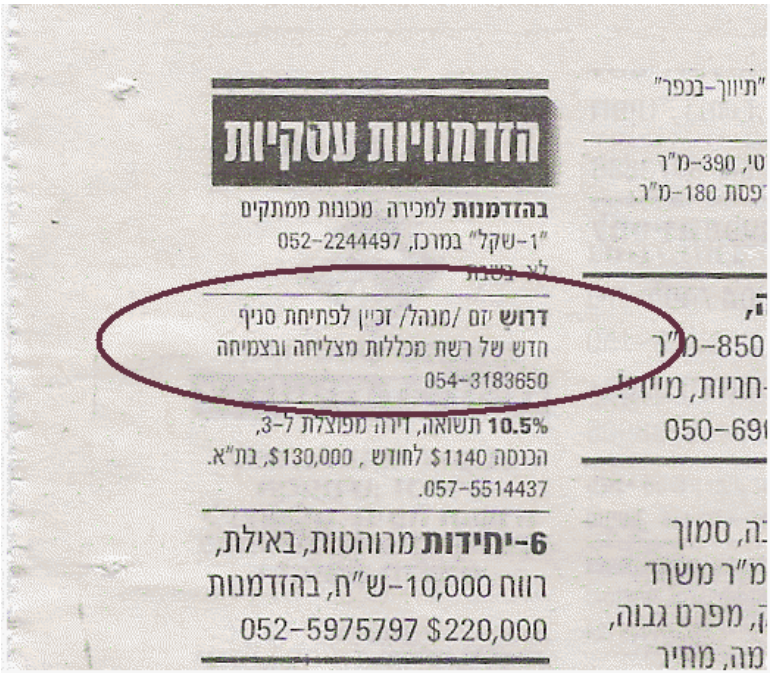
The growth of the private colleges leaves the public colleges at a disadvantage in several areas:

- **Employment conditions of teaching staff**. While the budgeted colleges are restricted by the PBC regulations regarding salary and employment conditions for their teaching faculty, the non-budgeted colleges are free of such restrictions. The result: unbudgeted colleges attract high-quality faculty and lecturers who have retired from the universities, by means of superior salary conditions. This inturn cause severe reduction of high quality staff in the universities.
- **Study areas**. Budgeted colleges, unlike the unbudgeted ones, are restricted by the PBC to specific study areas. If the "popular " disciplines are taught at the unbudgeted colleges, and those requiring major research infrastructures are taught at the universities, the spheres of academic development at the budgeted colleges will dry up. This can bring upon shortage in various disciplines (e.g. engineers) in the future
- **Numbers of students**. The number of students at the budgeted colleges is the outcome of national planning policy, which restricts the number of students accounted for in the state budget. The budget restrictions that are applied to the system has led to a situation where approved programs have not obtained the budgetary response necessary for the quota of students required for the program's stability. When the budget has not permitted intake in that scope, deficits have been created. Restricting the number of students has also led to inefficiency, since under such circumstances the colleges are unable to make optimal use of the resources at their disposal.
- **Size of the institution**. The institution's size, i.e., the number of its students and faculty, is an important factor in its development and the strengthening of its infrastructures. Already now, the average student body at an unbudgeted institution is 50% larger than at any of the budgeted ones. This is the result of the CHI's policy, which on the one hand attempted to disperse the budgeted institutions and prevented them from joining forces, but on the other hand allowed new, unbudgeted institutions to be opened without planning considerations.

Implications of the Continuing Privatization of the Higher Education System in Israel

- Concern over the possible creation of a dual system: high-quality education for the wealthy, centrally-located population; and inferior education for the poor and peripherally-located population.
- A detrimental effect on the actual academic and economic existence of the public colleges.
- A detrimental effect on the quality of academic degrees, due to business considerations.
- A detrimental effect on the quality of research.
- Shortage of professionals e.g. engineers.

Higher Education as a Business Opportunity



הזדמנויות עסקיות

בהזדמנות למכירה מכונות ממתקים "1-שקל" במרכז, 052-2244497

דרוש יזם /מנהל/ זכיין לפתיחת סניף חדש של רשת מכללות מצליחה ובצמיחה 054-3183650

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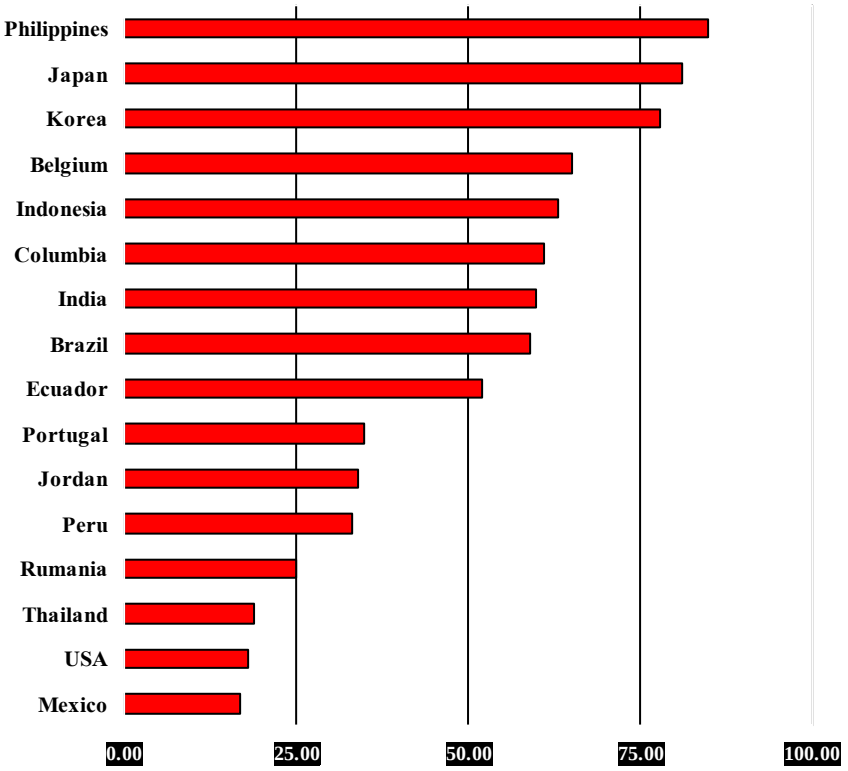
BUSINESS OPPORTUNITIES

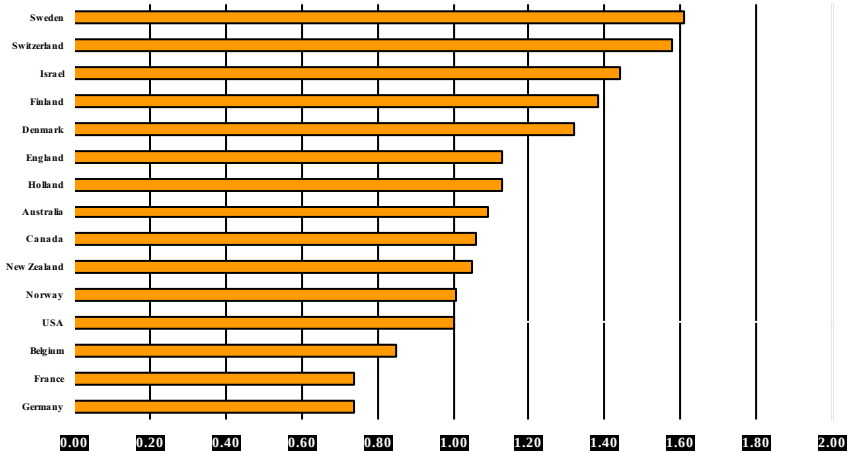
Seeking: an entrepreneur/manager/franchisee to open a new branch of a successful, thriving network of colleges. 054-3183650.

Table 5: Countries with high percentages of students studying in private institutions



Source: Higher Education in the Global Knowledge Economy, Guruz, 2003

Table 6: Scientific publications, 2000–2003, per 1000 inhabitants (index: USA = 1.00)



The Shochat Committee

- **The report does not restrict the establishment of private colleges.** The report ignores the existing situation, in which there is unfair and unrestrained competition on the part of private institutions.
- **The report offers no significant reinforcement of the private colleges' faculties.** The quality of the faculty members greatly determines the quality of the institution. A limited, weakened faculty has an adverse effect on the level of the academic institution, and creates second-rate students.
- **The report offers no suggestions or appropriate plans for reinforcing the network of academic institutions in peripheral areas.** The academic institutions in the periphery are not a burden on the system, but rather a national opportunity that must not be missed.
- **The report does not significantly restrict the quotas for students in the public system, and directs the increase in the number of engineering students back to the universities.** Quotas must be adjusted to meet increasing demands, with the objective of preserving the system as a public system and maintaining a proper division of roles between the universities and the colleges.

- **The report does not reinforce the teaching infrastructures in the colleges.** It offers no real solution for improving teaching infrastructures, such as laboratories, libraries, and classrooms.

Conclusion

- **Policy:** Planning and budgeting for all components of the higher education system must be performed by the Council for Higher Education and by the Planning and Budgeting Committee, rather than the Ministry of Finance.
- **Planning:** There is no justification for establishing and opening any additional institutions of higher education. The majority of the demand must be directed to the public colleges.
- **Quality:** Academic, economic, and physical standards must be determined to ensure the operation of high-quality institutions of higher education.
- **Budgeting:** Peripheral institutions must be reinforced – due to their unique needs and because their future is at risk as a result of the continuing privatization processes.

DISCUSSION

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What the scientific community has been trying to do for the last 30 years or so – and I have been in this business since 1972 – is to survive: the higher education system is constantly trying to find resources from various foundations and public sources, and, of course, the main source so far has been the government. I think the common feature between universities and colleges has been coming up with various imaginative and creative ways to raise funds for higher education, and a recent technique, of course, has been adopted by the Faculty of Medicine at the Technion. There was also an early approach, I think 30 years ago, taken at Tel Aviv University. There were and are still all sorts of efforts to find creative solutions across the board.

I moved from the Ministry of Absorption in 1972, when Yigal Allon was Minister of Absorption and became Minister of Education. I became involved in the early stages of building the Planning and Grants Committee, later joined the Israel Science Foundation, and after that the Council for R&D, and so on. So, practically, I have been in the effort of trying to create some changes within the existing system for some time, and, of course, we have difficulties.

I think the common denominator in all the processes that we see can be divided to 3 categories:
(1) mission
(2) structure
(3) funding sources

There is no doubt that the **mission** of the founders of the State of Israel in dealing with higher education was research-oriented. Our guests, who have kept coming for the last 12 years, know about the Humboldtian model – and some of them probably say that the last place where the Humboldtian model is still active is in Israel. But

there is no doubt that the mission has changed. Apropos the Faculty of Medicine, I will never forget a discussion at the Council of Higher Education, I think in 1972, when Yigal Allon, by then Minister of Education, presented his idea of having a new faculty of Medicine at Ben-Gurion University. Without his voice, it would not have passed at the Council. So there is no doubt politicians have been a driving factor toward change.

What happened over the last 30 years or so was that the scientific establishment of higher education first accepted the colleges – reluctantly, I admit – as they were, and then later saw changes in what are now called the private colleges. Around the time when Amnon Pazi was appointed as Chairman of the University Grants Committee the changes in the mission of higher education really sprouted as the door was opened to new colleges. And we have heard all the examples that were brought up in this discussion.

So what we see is diversification of missions. This first category has certainly been determined by people with drive, sometimes politicians. This diversification has definitely been a hard process to go through in our situation.

I heard Harman speaking yesterday, and today Professor Reichman and Zvi Arad. People's drive is unbelievable; they certainly deserve all the credit, knowing that they at least have something to accomplish within the existing system.

There is also the change in **structure**. As the change in mission has occurred in the Israeli higher education system – maybe not at the pace that we wanted it, but it certainly occurred – so a change in structure occured too. This began with the introduction of a new organ, the Planning and Grants Committee, in 1974.

I remember days when negotiations were held directly with the Treasury – and we do not want to go back to that. As Tamar Ariav mentioned here, I think people have no idea what it means that just at the Ministry of Science 16 ministers of science were appointed over the last 10 years or so. Who wants to go through this again? Who wants to go through changes in the political system to the extent that we, within the scientific community, and I will use a phrase that was used at the Planning and Grants Committee, receive "the key to the cashier and are now running it alone." This was the case at early stages. Anyone who followed what happened later will certainly

realize that the block grant principle, which was based in the a belief in a contract between the Treasury and the Planning and Grants Committee, was completely eroded and turned into a gradual intervention of the state in determining student numbers, student costs, direction, and so on.

But on the whole, there was a change in the structure, change in the membership of the Council of Higher Education, and change within universities. Maybe, again, it was not at the pace that was expected, but change within universities occurred. Changes also took place in other entities that started to come up, among them the Israel Science Foundation. This too was a change that took place by the initiation of the academia and with the help of the government.

Next is the change in **funding sources**. In the table that Hagit showed last night, 60% of funding comes from public sources and the rest must be raised from tuition fees and other sources.

I recall the figures from the early 1970s, when government provided 70%–80% of the necessary funds, depending on the year. Now it is around 60%, and that is in absolute terms; when you talk about $1.5 billion in absolute terms, it is a lot of money.

I would like to relate to the issue of costs. I think Gabriel Motzkin wrote a wonderful appendix relating to the budgeting model of the Planning and Grants Committee. Howard Bowen, a leading economist during the 1970s and 1980s wrote a book called *The Costs of Higher Education*, published by the Carnegie Commission in 1981. Bowen lists what he calls "the laws of higher education." One "law" states: "The institutions tend therefore to spend up to the very limit of their means." This is an observation of many institutions that they have to work on the Carnegie Commission. Another law states: "Each institution raises all the money it can." This indeed seems "very trivial." Each institution spends all the money it raises, as anyone who has dealt with the issue of cost would certainly find out.

The model of budgeting that VATAT has been using for years, was based on something very simple. It is a contract between three institutions: the Planning and Grants Committee, the government, and the universities. The contract is based on belief and trust. Once you break the contract, if you do not accept the costs at a certain point, the whole basis of the interaction is lost. So, in recent years, the model

has been revised with more detail and the relation of cost to reality has completely eroded.

I would like to say one thing about the modern budget that we are using. And I think we should try to see – especially in these days – positive points in the things that have been done in recent years. The higher education sector is the only public sector in Israel that is using output budgeting, and anyone who knows what that means understands the complexity of trying to find all sorts of indicators, not input indicators, but also output indicators that are connected to student efficiency, research quality, and the quality of students. There is no other public sector in the whole country that has been using such an output model in the last 30 years. I think it should be kept. I think it is something that we should treasure.

Personally, it took me at least 10 years to work on it, between periods, and it is connected to 2 other people who are sitting here. During the period of Yigal Allon, Oded Messer (Hagit's father) was charged with the job of finding out what exactly the cost of a student is. I think when we worked in the 1970s, there were no figures, and there were no credited numbers of expenditure. Later, as we were trying to shape the model, I was looking for a student to help me collect the data. Fortunately, I met Steven Stav, who helped to collect the data in 1974–5. Since then, this community has been trying to work with expert knowledge, trying not to involve politicians in our own business. I think we should keep it this way and try to be accountable.

Lastly, I would like to thank the group of people who have kept coming to Israel over the last 12 years for this conference, which was begun by Nehemia Lev-Zion, when he was director of Van Leer Institute. I hope the Van Leer Institute will also join forces with the Samuel Neaman Institute and others in order to hold these kinds of joint seminars, workshops, and investigations on higher education, because we, in the public sector, are not doing it enough.,

The first time this group gathered in Israel was when we were facing the emerging colleges. I will never forget what we were told then by this group: to try to ease regulations for the college system and let the market forces work. I do not know whether we listened to them, but I think it was worthwhile. Last time we assembled here,

3 years ago, we discussed mass education (or maybe the mess in higher education), and for that we should thank all of the participants.

We should like to maintain this kind of dialogue constantly. We need external people who know and have the knowledge of what is going on here to examine the system. Unfortunately, the same group of people from the Israeli side that I see here has not expanded. We do not manage to add more who are interested in this subject as a profession and we rarely have presidents of universities who attend the meetings. But still, I think our dialogue should continue; it is essential and we should be visible. We should try to open our discussions to others, not hold them just as a small group.

Thank you.

SESSION VI – PANEL

Reflections on the Future Developments in Private Higher Education

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This session is devoted to reflection on *future developments in private higher education*. Insofar as Israeli higher education is concerned, I have trouble understanding the present. Thus, reflecting on the future is a challenge that I cannot handle with any degree of confidence.

My dissertation advisor used to say that reflections are *spontaneous* and, therefore, one should spend a lot of time preparing them. I have had ample opportunity to prepare. In recent months, I participated in quite a few discussions on private higher education, but I could not glean from them any intelligent observations about the future. They mostly dealt with the question, "Is private higher education good or bad?"

I will not weigh here the merits and drawbacks of private higher education. I will just offer a few comments on the actual process of privatization of higher education in Israel and on what it may lead to.

There is the matter of terminology – and some disagreement on the terms that should be used, which underscores the complexity of the issue. Some, particularly champions of privatization, argue that the actual distinction in Israel is not between private and public academic institutes, but rather between institutes that are subsidized by the government and those that are not.

The private-public distinction is indeed problematic, as it brings up the muddy question of ownership. The subsidized-not subsidized distinction is operationally clearer. I believe, however, that neither the first distinction nor the second captures the essence of the problem that we must currently address in Israel. To do so properly, we should prefer the distinction between regulated and deregulated higher education.

Regulation has two facets. The Council of Higher Education reviews and accredits academic programs and, in principle, it can withdraw accreditation. This form of regulation is believed to apply equally to

all academic institutes in the country: universities and colleges, those commonly referred to as public and those referred to as private.

The Committee for Planning and Budgeting, as its name implies, is entrusted with the planning and budgeting of the "public" system mostly. It allocates funds and it plans which academic programs should be allowed to be established where, as well as the creation of new schools, colleges, and universities. It sets the salaries of faculty members in the "public" institutes, and, in some cases, it even monitors the extent to which the faculty lives up to its obligations. At least once I year I am required to explain why, for instance, one of my faculty members taught 22 weekly semester hours rather than the 24 that she is expected to teach. This type of regulation applies only to the so-called "public" institutes.

The distinction between the two types of regulation is not as clearly delineated as many would believe it to be. Anyone who has ever been involved in academic planning and administration knows full well that academic standards and budgetary considerations are not truly separable. So the distinction we are dealing with is between institutes that are regulated with regard to planning, administration, and budgeting and those that are not. There are grounds to believe that this distinction also reflects, to some extent, on academic regulation.

What is preferable: a regulated or a deregulated academic system? There are staunch defenders of regulated, so-called "public" systems, and advocates of deregulated systems. Yet, which is preferable is the kind of question that an intelligent person should not bother to answer. There are obviously advantages and disadvantages to each system. *The important question is how one intelligently manages a system that is partly regulated and partly deregulated*.

Some countries do have a partly regulated and partly deregulated higher education system – so a mixed system can obviously work. But what we currently have in Israel is not just a system that is partly regulated and partly deregulated. *What we are currently witnessing is a deregulated process of deregulation, and the results threaten to be chaotic*. The signs of a chaotic development are abundant. One, for example, is the proliferation of deregulated programs in regulated institutes. The "executive" MBA programs heralded the trend, but we now have

"executive" programs in almost any field where imbalanced "supply and demand" makes them profitable. We now have a major university offering an "executive" M.Sc. program in computer science. The lavishly printed brochure describes the program as requiring no thesis, no seminars, and no elective courses; designed to be studied in 10 months. Another most striking example concerns the decision of the Council of Higher Education and the Committee for Budgeting and Planning that, for the time being, no new universities are to be established in the country. This decision notwithstanding, a college unilaterally transformed itself into a university, or, at the very least, announced that as of a certain date it is to be considered a university. I expect additional colleges to soon follow suit.

Observing from the sidelines, I do not get the impression that the Council of Higher Education has a clear idea how to regulate the deregulation. There was some hope that the Shochat commission would address this issue. Yet the Shochat report remained silent.

I believe that this silence sends a message: deregulation should be allowed to run its course, or, in other words, deregulated deregulation should not be tampered with. Nothing was written about deregulation in the report, but the issue did come up in the deliberations of the Commission, and the guiding principle was formulated tacitly. You can probably guess what it was. If not, I was there and I can tell you: *Any program of study or discipline that is in great demand (i.e., "demand exceeds supply") should be deregulated. If demand is sufficiently large there would be enough candidates who would be willing to pay.*

Here is an example of how deregulation can directly affect academic standards: There are evidently enough people who are willing to pay for an M.Sc. degree in computer science. Yet these people are very busy (making money takes time). Hence, a custom-made program that is not too demanding (no thesis, no seminars) that can be completed very quickly is ideal.

By not saying anything, the Shochat Commission essentially sent the message, "Let the market logic set the tone." The Council of Higher Education was represented in the Commission, but it did not claim otherwise. So here is what deregulated deregulation might end up looking like:

Fields of study in which "demand exceeds supply" will end up being deregulated. Some of the deregulation will occur in deregulated, i.e., "private", colleges and some, as already happens, within "regulated" universities. In certain areas, regulated universities and deregulated colleges will find themselves in direct competition. In some cases they already are. Incidentally, given the determination and resolve that the regulator has shown to date, I predict that some of these deregulated colleges will before long become universities. One should take some time to analyze the social consequences of the deregulation of desired careers.

Areas of vital national and economic importance (science, technology, etc.) that require large investments in research infrastructure will remain the province of the research universities.

There is a third group: the regulated ("public") academic colleges and colleges of engineering. In parentheses let me say that these are the institutes that feel the brunt of regulation to its fullest. Well, the regulator has quite effectively excluded these colleges from any serious research activity. They will not be able to contribute significantly in the so-called areas of national and economic importance. The more lucrative areas will be deregulated and they will not be allowed to start programs in these areas. It took me two years to receive the regulator's permission to submit an MBA program for approval. As the saying goes, "The future is now." Moreover, because the salaries and employment conditions in the "public" colleges are tightly regulated and are significantly inferior to salaries paid at the universities, and even more inferior to salaries paid at the deregulated institutes, the "public" colleges will be unable to maintain "lucrative" programs that they already have. *Given the current rules of the game, the policies and practices of the regulator, along with foreseeable developments, the collapse of the public college system is probably inevitable; it is perhaps imminent*.

What will the market logic do to courses of study that do not contribute much to employment prospects and have no obvious relevance to national security or to the economy; humanities, for instance? *Here we do not have to guess or project. They are being wiped out already*. Again, "the future is now."

So the question whether deregulation of higher education is good or bad is immaterial: we have it already, it is here to stay and grow.

The challenge of the regulator, so long as we have one, is to plan and manage the process in ways that will minimize the damage.

There is a clear truism that our regulator, I am afraid, appears to ignore: deregulation and competition are tightly correlated. This has two implications: First, some fields and disciplines (I mentioned humanities) cannot compete. They should be taken out of the competition and noncompetitive ways have to be found to assure their survival. Second, so long as we have a mixed system, partly regulated and partly deregulated, regulation should be applied in ways that do not kill some of the regulated players' competitive chance. Regrettably, the regulator is still oblivious to these two implications.

Nehemia Friedland
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Thank you.
Good afternoon.

I will project some slides, part of which are presented in my work that was circulated for this conference, and to try to analyze some of the process that occurred in higher education by reflecting on past developments and how they can probably – with some speculation – effect the future of higher education in general and private higher education in particular.

First of all, we will try to understand the reasons behind the phenomenon of expansion in private higher education over the last two decades that transpired in this country and all over the globe (with some exceptions in Europe).

One of the causes behind it is the fact that higher education is an attractive investment for individuals. Many researches indicate that the more education one gains, the more one improves earnings and social mobility. This has been shown extensively in many statistical analyses that have been carried out in this and other countries; OECD indicators show it very clearly. So, people tend to go to higher education not only for the sake of their individuality, but also to gain economic benefits. Of course, those benefits are good for the individual as well as for the country as a whole, and that is why the public sector should flourish too.

Secondly, we can see that in many countries, strengthening the knowledge-oriented economy policy is a main government objective. They tend to consider higher education as a means to economic progress and leverage it with all their power so as to boost the general standard of living. So this too has motivated the expansion of higher education systems.

But we can also see that in recent years, government commitment to public investment in higher education has declined tremendously in many countries, relative to growth and to GDP per capita. The expansion of higher education, from only a few percent of the cohort

entering higher education maybe 50 years ago, is up to 60%–70% today, if we include community colleges and other sorts of tertiary education. Despite the substantial growth, government investment is still declining, and the government portion within public institution budgets is becoming scarcer and scarcer.

Basic research, mainly in the sciences, requires long-term funding and investments. Most of these investments are not made by the private sector, but through the public sector. If governments want to concentrate on basic research, they should invest more and more, relative to the rise in the standard of living – and that is a very heavy burden. So, scarcity of funding with increased higher education systems imposes a heavier burden on governments and on the individual students.

Diversity in public higher education is also important. As we are not talking about a uniform or a binary system, but a multi-layer system that can reflect all the needs of society, private higher education plays a role in that system.

We can see this through the many types of higher education, which include the private sector. We were talking a lot yesterday about elite private research universities, which exist mainly in the US; but we have to understand that those institutions, with all their uniqueness, are actually not private. They get a lot of government money through research funding and through the Pell Grant programs. So these are really semi-private initiatives.

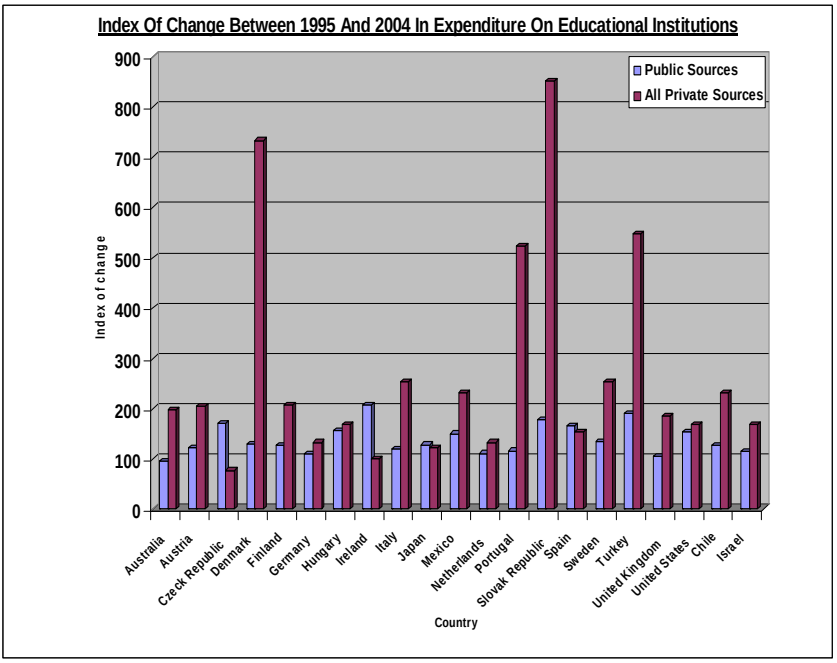
Most of the private higher education institutions are established as non-profit organizations. For-profit private institutions have been developing primarily in the US in recent years. In Israel, for-profit institutions are banned by the Council for Higher Education. In other countries, again mainly in the US, but also in Europe and in Southeast Asia, we also see now comprehensive institutions, which include research, that are involved in private higher education.

In China and elsewhere, professional private colleges have been established. Church-affiliated private colleges are scattered all over the world. Community colleges do not exist in Israel but are very common in North America; they function as a kind of shock-absorber for demands from the public and are a good tool for social mobility. Some of those community colleges are private as well.

Continuing education was mentioned by our Australian colleague. This too is growing tremendously: if I remember the figures, more than 50% of the students currently in continuing education are studying in private initiatives.

Let us look at some figures and try to examine the changes that have taken place. If you can see the index of change in the course of the last decade, between 1995 and 2004 (see Figure 1), in overall expenditure of higher education institutions we can see declining public sources and, thus, the growing need for private sources. The shrinking funding sources for higher education from governments is particularly evident in Korea and Japan, but also in the US and Australia. Western Europe holds the highest percentage of government funding, although the overall funding per student there is declining.

Figure 1:



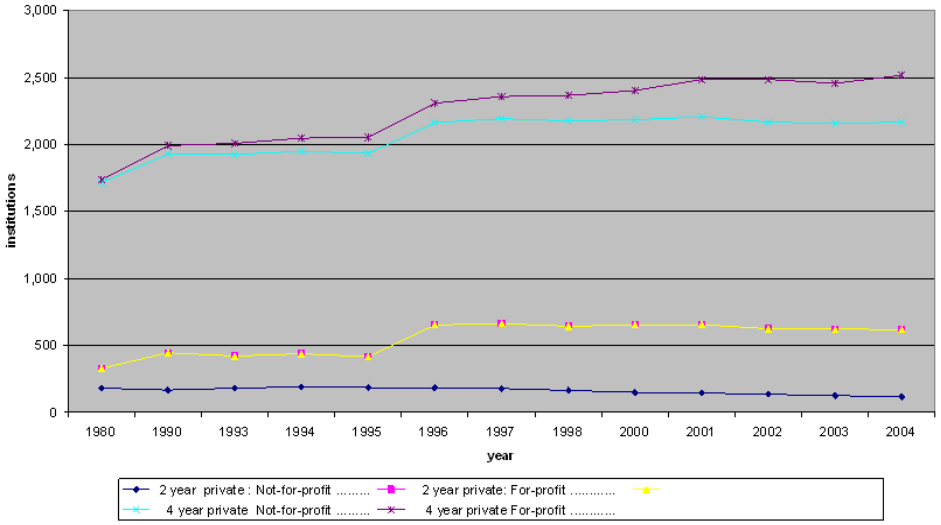
The consequential growth in the private sector is vivid in Southeast Asia, as well as in eastern Europe (ex-communist countries) where the governments could not cope with the growing demand for higher education and with the expansion of the system. It is also very evident in North America, but less so in Continental western Europe and the UK. There are some private institutions that are publicly funded, like in the UK. In some Latin American countries, including Mexico, Brazil, Argentina, and Chile, the private sector controls more than 50% of the system.

The number of institutions is enormous in Japan, Russia, and the US. The most expanding private system today is in Russia, where this enormous country with a population of almost 200 million is experiencing growth towards the social sciences and technical subjects – a growth that is being carried out by the private sector.

In the US, although the system is considered very much privatized, only 17% of the students are studying at private institutions. In western Europe, Canada, and Australia, private higher education is still a small sector. So, we see that most of the affluent societies have found equilibrium within the boundaries of a large public sector and a relatively small private sector that is rapidly growing mainly in professional subjects. Japan is an exception, where even though the number of institutions overall is enormous, the majority of students study at private institutions.

Since 1990, the US colleges have grown tremendously (see Figure 2), but we can see the pattern of those that are 4-year private for profit or 2-year private for profit: both of them, community colleges as well as 4-year private colleges, grew. The biggest growth percentage-wise is of the for-profit institutions.

Figure 2: US Private Colleges



Let us talk about that tier of higher education relating to for-profit private higher education, which exists mainly in the US. Taking figures from 20 years ago, we see that there were fewer than 20 such institutions then. Today there are more than 400 such institutions, such as the University of Phoenix, DeVry University, and others. But the "for-profit" notion is sometimes misleading: Are the private non-funded institutions really private, when they get a lot of funding from the government through many Federal programs and some of them can give very high salaries instead of distributing dividends to shareholders? So, there is a slight distinction to be made between for-profit and not-for-profit institutions. One of the decisions made here in Israel recently by the Council for Higher Education whereby the establishment of for-profit institutions is prohibited is quite questionable.

In the UK there is permission to run for-profit degree institutions, but the government supplies most of the funding. But, again, there we mostly find public institutions and very little private sector. For-profit institutions are very evident in Latin America, and in China the system is run indirectly, by means of investment of the private sector in BOT (build, operate, transfer)-like operations

Today's varying sources of income for private higher education also reflect future developments. Tuition fees is one of these sources. In addition, we find research grants in some institutions; donation and endowment funds (although these are not found much in Israel); public land allocations, which are equivalent to public funding; BOT initiatives, as I mentioned before; and professional – non-academic – tertiary courses and diplomas.

So, we can see a lot of changes occurring now in this area of private higher education, and the reasons behind them are apparent. It is becoming more and more evident that the private sector is likely to continue growing in the near future. We should accept this, regardless of whether we think it is good for academia, for universities. It is good for the public. It is what the public is waiting for. So, as long as the scarcity of resources exists, private higher education will absorb the extra demand from the public and will dominate part of the scene of growing higher education.

Thank you.

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I should begin by saying that I am a physicist serving as the dean of the Business School at the Hebrew University. I came to the Business School from my research in theoretical physics three years ago. As a physicist, I have worked and am still working on astrophysics, and my specialty is black holes. Some say that I came from the theoretical world to do experimental work; the academic system in Israel looks now as if it is just about to collapse into a black hole. Others say that I come from “outer space”. Since I come from "outer space", I can make some remarks without prejudice.

I will focus here on the current crisis in professional schools, specifically the business schools (even though most of what I say is also relevant to the law schools), at the public-supported universities in Israel. There is a clear reflection of these ideas on the rest of the academia.

The bottom line of my talk is that the solution is reform and deregulation! I do not like the word "privatization" (in Hebrew *hafratah*), which has a very bad connotation in Israel now. Israel is an over-regulated state. We have seen many other cases where excessive regulations were removed and things improved. The Israeli higher education system is in a crisis now and such a reform is badly needed. I am very pleased to see that even though I come from “outer space”, my ideas on the need for reform are in accordance with many other ideas that I have heard here today.

The public higher education system is a classical example of an over-regulated system. On one hand, the system is publicly subsidized; on the other hand, it is controlled by issues of tuition, salaries, and working conditions. There are two direct controlling agencies: VATAT and MALAG, and more recently the budgeting office, within the Ministry of Finance, is trying to act as a third regulating agent.

Some of the regulations are bizarre. For example, it is not widely known and not mentioned here so far, that actually the private

colleges are subsidized indirectly by the public system in a strange way. According to the present system, faculty at the public universities can retire at the age of sixty (even though they can still work for seven additional years), in some cases with a full pension and always with other benefits, like travel funds and so on. During these seven years they receive dual salaries: a pension plus benefits from the public system and a salary from the private one. The pension they receive from the public universities goes into the budgeting of their work. Without it I am not sure that they would have been attracted so easily to the private system, or the private sector would have had to pay much higher salaries. This is just one crazy aspect of the current system.

Now let me make some observations on the present situation.

It is clear that at least in business and law there is a huge demand for higher education. The public tuition is about 10,000 shekels per year. The tuition at the private colleges is twice or three times this amount. In spite of this, registration to the private colleges thrives. The tuition in American business schools is about 40,000 dollars, yet in spite of this and the high cost of living, more and more Israeli students study there. The large number of business students outside the public system, despite the relatively high tuition, indeed shows that there is a huge demand for this education.

There is a need within the industry. I have seen several research papers stating that one of the weakest points of the Israeli high-tech industry is the lack of highly trained professional managers, especially mid-level ones. It is well known that some of the industries do not acknowledge this. But within others it is beginning to be recognized.

Finally, there is a recruitment crisis. The huge salary gap and the drastic differences in working conditions between Israeli universities and the US institutions, makes it impossible, or practically impossible, to recruit young faculty into the current regulated system. It is impossible to change the salary structure because of the governmental control and because of the numerous regulations. For example, even the Shochat committee that considered drastic reforms in the higher education system suggested only minor changes in salary, and these are only according to excellence and not according to discipline. On

the other hand, there are huge salary differences in the US between different disciplines and a beginning assistant professor in a US institution can easily make three to four times the salary of his colleague in the humanities, and five to six times the salary of his friend who teaches business in Israel. With such a situation, it becomes more and more difficult to recruit faculty, and with no faculty there is no school.

Within business education we are now in what one may call a vicious cycle between the four players in this game, namely, the industry, the students, the faculty and the schools:

i. There is no appreciation in the industry of the business degrees that the institutions grant. As such, there is no large salary benefit for an MBA graduate.

In response to this:

ii. Students tend to be unwilling to work hard or pay high tuition. Most of the students are part-time students.

In view of the very low tuition:

iii. Institutions are unable to pay higher salaries, which are essential to attract business faculty.

Leading to:

iv. Inability of the business schools to provide higher quality education.

This leads back to (**i**), *and so on*.

In fact, the criticism that was heard from the Greenbaum Committee (which was appointed by the CHE to evaluate the quality of business education in Israel) focused on the last point. Unfortunately, they ignored the first three, the third being a critical part of this cycle and one that the CHE could have helped resolve.

There is a clear conflict between the public need for high-quality business education and the ability of the public business schools to attract high-quality faculty, even though there are excellent Israelis holding top positions in leading business schools in the USA and Europe. What can be done?

The only solution that I see is deregulation, with:

- No restrictions on tuitions.
- No restrictions on salaries.
- No restrictions on working conditions.

In addition, I suggest that:

- Public support for the teaching of business administration will stop.

This deregulation has to be carried out carefully and moderately. Specifically:

- The universities should have full academic control of the business schools.
- A system of grants for excellent students and loans for all other students should be established.
- A system that will support academic research via research grants should be established.

I believe that such a solution (or a variant of it) can resolve most of the current problem in the business education in the public system. First and most importantly, flexibility on the issue of salary and working conditions will enable the schools to recruit top Israeli faculty from abroad.

An essential point of this deregulation, as I see it, is the change in tuition fees for business education. While opinions differ on this matter, I personally do not see any moral reason why the public should support higher education in fields that lead essentially to highly paid jobs. An argument against higher tuition is the social and moral need to allow students from low income backgrounds to have access to such education. This can be and should be resolved via a system of grants and loans! In the long run, one can expect that the private sector that would benefit from an improved business education would help in establishing the grants and loans. In fact, I believe that only well-orchestrated and well-planned deregulation can achieve this goal. An uncontrolled process, in which the market forces play on their own, may lead to terrible results.

A lesson can be learned from the partial de facto deregulation of some of the public medical services in Israel. This deregulation was uncontrolled. We have never heard of a low-income sick person who received medical care from "SHARAP" (private medical service in public hospitals) or an equivalent semi-private semi-public service.

We also have to take steps to ensure that high-quality research will not be hurt. This should be partially achieved by keeping the business schools as part of the universities and letting the universities control the academic selection and promotion of the faculty. Additionally,

clearly dedicated research funds should be established. Again, one can hope that in the long run business research will be funded by the industry. But before this happens, one has to ensure the continuation of research.

One can expect that deregulation will lead to a new cycle, such as the one that exists in the leading US and European institutions now:

i. Appreciation in the industry of the quality of the education and correspondingly high salary for MBA graduates.
ii. Student willingness to invest in their studies (in terms of both tuition and hard work).
iii. Ability to pay a competitive salary and attract top faculty.
iv. Higher quality education and services for the students.

Unfortunately, it is far from clear that the deregulation that I suggest here can take place. It requires bold steps from the university managements and from the government. It is not clear that the university managements or the government are willing to take such steps. Furthermore, as the revisions would involve a tuition increase and significant changes in the salary structure, one can anticipate objections from both the students and the teachers union. One has to find creative ways to overcome these obstacles.

One also has to realize that there is no real alternative. One cannot fight market forces indefinitely. We are competing in a global market, and in order to bring back to Israel high-quality faculty that are essential for any educational program, we must allow for competitive compensation for the faculty. Of course, we cannot compete dollar per dollar with the financial terms of the US institutions, but we have to offer much higher compensations than what we are offering now. The same market forces work toward higher tuition fees. One cannot maintain higher faculty compensations and better services without higher income from the students.

An important, indirect implication of a higher tuition is a change in the students' attitude toward their studies. A psychiatrist friend told me once that the high fee per visit that he charges is part of the treatment; without it the patients do not take the visit seriously enough. The same holds with tuition fees. Human nature is such that we value less what is given for free and we value dearly things that are costly. Students paying higher tuition would be willing to invest

more in their studies. They would also demand more, and the schools that will have the available resources will be able to supply these demands.

I have already mentioned that a de facto deregulation has appeared in some parts of the public health system. One can expect that if nothing else happens, some de facto deregulation will take place at the business schools as well. One may consider the executive MBA programs in the leading public schools as the beginning of such de facto deregulation. I would like to warn here that such a natural process, which is the most likely outcome of the present situation, is very dangerous. If we allow such a random process to take over, we may find ourselves in places that we do not want to be.

Finally, I must stress that although I have discussed the business schools, I believe that in the long run such deregulation is essential in the whole academic system in Israel, with different emphasis as appropriate, of course. The academic system in Israel that was and still is one of the prides of the State of Israel is in danger of collapsing into a black hole and disappearing. As an expert on black holes, I can tell you that once a collapse like this begins, it is very hard to stop. We should all be very worried.

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I want to thank Professor Mordechai Shechter for his warm introduction. I plead guilty on both counts: I am an economist and I have been a member of the Shochat Committee, but I will try to convince you that some economists are reasonable people, at least to some extent . . .

We are discussing in this panel the role of institutions of higher education, which essentially consists of producing two "goods": basic knowledge and human capital. We know very well that basic knowledge – basic research – is a public good by nature. The production of human capital contains also elements of public goods, of externalities, and therefore there is very good reason for the institutions engaged in producing basic knowledge and human capital to be funded, to a large extent, by the public sector. That is almost axiomatic.

However, not all of the financing should come from the public sector. Why? Because some of the human capital renders private returns to the individuals acquiring it, thus there is private demand for it, and therefore students should pay for some of it as well. Some of the ***basic*** research carries private returns as well. Lately, we see it more and more, with the advent of technology transfer offices, so there is a balance to be struck between public funding and private funding, which varies a great deal across countries.

Then there is a third consideration, which is equity; that is, we want public funding to counteract the inequities in the acquisition of human capital that occur at earlier stages, and to offer equal opportunities to all.

It is important to note that the extent to which basic research and the production of human capital are public goods changes with time; certainly the characteristics of different fields of knowledge in that respect change a great deal. One of the problems that we face when trying to design institutions of higher education is that institutions are very slow moving, like dinosaurs, whereas technology and the

economy move much faster; thus, they are slowly adapting but not at the speed that at which we would like them to do so.

So the first question is: How much new knowledge and human capital should universities produce, and how should we fund that? The second question is *how* to do it: how to produce these goods. What should be the nature of the institutions that supply these goods? A key issue in that respect is whether these institutions should be private or public, in the sense of management, regulation, and so forth. We know very well that history matters in this respect, that there is "path dependency"; that is, the place you start at conditions, to a large extent, where you will find yourself later in time. The fact that in the US there are those renown elite private institutions is due to history, going back to the early 17th century; not that somebody got up one day and said, "Let's design it that way." In Israel we started, just to remind you, from a system that was completely public, both in the funding and in institutional design, and we gradually evolved into a more mixed system, but still the vast majority of it is public.

What are the main considerations in that regard? We definitely want *institutional diversity*, and even though each of us has a vested interest in his/her own type of institution, we need to advocate diversity; that should be a guiding motto for us. Why? Because nobody here can claim that he or she knows better what type of institution should prevail, and there is no such thing as "one size fits all" in this context. It is not a coincidence that we see so much variety in the world, in the US, whereas countries that display rigid uniformity are typically in trouble. That should be on the table, and our regulatory bodies should be explicit in fostering diversity and precluding uniformity.

Nature knows how to experiment with species, how to evolve. And institutions should be the same: they have to evolve. I repeat that there is no "one size fits all," certainly not over time, and if we do not allow for experimentation, for the natural process of selection to take place in the institutional arena, we are going to condemn the system to gradual deterioration.

For experimentation and evolution to take place, you need, of course, to be able to manage change; you need the tools to do so. However, if the regulatory environment does not allow for flexibility by fixing the key parameters for all institutions, then there is no way

that you can adapt. These are simple truisms. I am amazed that I have to say that with passion, and I have to do that simply because the system is stuck: there is not enough flexibility and hence institutions of higher education in Israel are in a bind.

When we talk about private versus public, that is one way of framing the dilemma. But it is not the only way of doing so. The mode of ownership and control of the institutions is just one parameter that impacts the extent to which these institutions have flexibility, capability to adapt, etc. I can conceive of private institutions that are rather rigid, and I can perfectly conceive of public institutions that are flexible – we need to introduce flexibility to ***all*** types of institutions, regardless of who they are. We have to make that happen, and when I say "we," I mean everybody involved. It is not just a matter of the government dictating the rules; the government has limited capability to implement change, and the more I am exposed to the modus operandi of the government, the more I am convinced of that. Change has to occur at all levels, including the regulatory institutions themselves.

There is one example that is very telling of the dynamism of Israeli society, and that is the Histadrut, the confederation of worker unions. The case of the Histadrut is remarkable: it is an institution that, after decades of exercising control over big chunks of the economy in Israel, went to elections and elected somebody to dissolve its excessive power, to change norms that were out of place, out of time. Why am I mentioning this? Because institutional change has to occur at various levels: one is at the institutions that exercise control, that is, "VATAT," "MALAG," the Ministry of Education, etc. But it also has to occur at the universities, the research institutions, and the colleges themselves. You have to generate change from below, agitate, serve as catalyst; not sit here and expect that things will happen by themselves - they won't, that I can assure you. But if there is enough movement, enough action, things will happen.

A thought about globalization. We are all well aware of the fact that we live in a global, close-knit economy. That is also true in academia, and part of what we are seeing in the academic world is the result of globalization. Of course, there are good aspects to globalization (e.g., the competitive drive), but there are also dangers attached to it. More

importantly, there are universities that are well positioned to cope with globalization and benefit from it, and there are those that are not as well poised to do that. Well, we do not have a choice, being a small open economy, but to engage in the globalization process, go with it, excel in what we can and let go elsewhere. In academia, we cannot fight globalization by invoking Zionism – tell our smart graduates in the US, "Come back because we're nice guys and this is your homeland." That is not going to work. We need to engage globalization, and that means having the flexibility to cope with the changes and the challenges that globalization pose to us.

Let me say a few words about what is happening in Israel now. I think we are going through very interesting times, and, contrary to Nehemia, I am (still) optimistic. (Nehemia said that "pessimists are statistically right most of the time.") Nehemia, what you said is probably true, pessimists may be right most of the time. But let me say that *optimists are the ones who make a difference*. We are at a critical junction in the evolution of the higher education system, of academia in Israel. We have to recognize that this system performed beautifully for quite a few decades, it brought amazing results for such a small country. Let's not forget that, lest we throw out the baby with the bath water. But it is clear that the universities in Israel, and the system as a whole, will have to transform and reinvent themselves. There are plenty of signs that we are heading in that direction.

Let me give you a few examples. The confrontation with the students in the course of drafting the Shochat Report was a prelude to transformation. Why? Because we were signaling, "Hey, you know, something has to change here." You may not like the direction of change. But I think it is the wise direction. Something has to change there. There is a confrontation, a clash, that has not been resolved, just postponed; it is lurking there and it will burst again, because there are certain things that are hard to do by consensus building.

I do not want to go into the strike of the faculty, but there, as well, there are elements of resistance to change from *all* sides, not just from one. Think of it not just as a wage dispute: it is a dispute also about whether we are going to continue along the same course of things, or going to change. This underlying, deeper conflict is more subtle, it is between the lines, but it is absolutely there. There are also fights, overtly or less overtly, about regulations, about setting up a new

school of medicine: who is going to do that, etc. That is also a proxy fight over issues that are deeper than just establishing a school of medicine. The issues have to do with the division of labor between colleges and universities, how much room we give to colleges to evolve, the tension about the role of private universities vis-à-vis others, etc. And, of course, there is also the conventional (big) argument about how much the public sector should be funding the academia.

Let me say one word about that, just to set things straight here. The ratio in Israel of public spending, the size of the government vis-à-vis GDP, is about 45%. We are more or less at the average of OECD countries, that exclusive club that we honestly earned the right to belong to (well, the right to initiate the process of admission). But in Israel ten percentage points of these 45% go into two "extras": very high defense spending, and excess interest payments due to the very high burden of the debt in Israel (now about 81% of GDP). Thus, our 45% of GDP that the government spends is not comparable to the OECD countries, but it really means just about 35% of GDP that is devoted to all social needs, including higher education. The reason I'm saying that is that hopefully the government will increase public funding of higher education, which according to the Shochat plan will happen over a period of five years. I will certainly do my best to make that happen. However, we are still going to be below the level of funding of the average OECD country. That is unavoidable, and if there is somebody here that thinks otherwise, well, he or she does not recognize the realities that we live in. Similarly, we are relatively underfunded compared to OECD countries in almost every other dimension, simply because of defense spending and interest payments. We cannot ignore that.

So we are going to increase government funding. But it will be still too little. Thus, the question is: How do we do it? How do we extract the highest quality of research and higher education possible in Israel, given the budget constraint?

I said that we are at a turning point, that there is a struggle, there is turmoil. My impression (and I may be wrong) is that we can take such turmoil into the right direction. For that purpose and very importantly, we have to seek alliances. We do not necessarily need consensus; we need to build alliances between different types of

institutions, between universities and some industries such as Biotech, between colleges and universities. We have to build alliances, to push for change, to push for flexibility, to push for diversity – because that is our ticket to a better system, and I cannot really conceive of us excelling or even preserving what we have if we do not implement change in all those dimensions.

Thank you

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The S. Neaman Institute has supported the international conferences on Massifications of Universities in 2004 and this conference on privatization, in order to learn from international experience and to help clarify how to handle the historic shifts on the higher education scene. The former conference helped us to understand at what stage of development in massification we stand vis-à-vis the rest of the world, or where we are on the timeline of transition from elite to mass and finally to universal excess in higher education. And this present conference has clarified, at least in my mind, what privatization is all about and what happens in the rest of the world.

I think that both conferences were very successful. I am very sorry that not enough members of university managements, the Council of Higher Education, and members of universities and colleges took advantage of this conference. But I am happy to see that the Planning and Budgeting Committee is well represented. Yet, everything is recorded, and everybody can get access to the audio-lectures, the Web, and, later, the published proceeding.

I would like to talk about change, flexibility, and diversity, which Manuel mentioned, and why they are so essential in the higher education system. But let me start with a few comments on the 'big picture'. The big picture in Israel is the dual nature of the Israeli economy. Manuel already pointed out that we have a high-tech segment that is very successful – it is international, global, moves ahead, and self-initiating, while the rest of the economy is made up of inefficient services and low-tech, traditional industry,. If we want to continue and succeed at the rate that we are going now, and reach leading status in the world, like some other small countries, we have to do two things: We have to bridge the gap between the advanced

and lagging parts of the economy by improving the latter, and we have to maintain lead position in the high-tech parts of the economy.

So what should be done in order to accomplish that?

First of all, we are all proud of the high-tech industry, because it is very successful, but we have to remember that a high-tech industry is the result of 50 yeas of heavy investment by the government in technology for defense. Without that, the high-tech industry would not have existed. We are also lucky because when the high-tech industry suddenly started to grow, it was in the late 1980s and 1990s, at the time of the influx of Russian immigrants, tremendous human resources; the peace process started, and a whole range of other things happened at the same time, which created the 'miracle' of Israel's success in high-tech. That would not repeat itself. It was a unique event. It was the "perfect storm" with everything falling together at the right time in the right place.

The next big high-tech wave will not be coming from the defense industries; it will be coming in the bio-, nano-, and clean technologies, materials, and chemistry, all of which will be developed at university laboratories. And that points toward the vital importance of research and research funding in Israel.

Universities, therefore, must play a key role in order to maintain our lead in research, to create the foundation for the new future technologies, and the higher education system must play a key role in raising the standards and qualities of the low-tech, traditional services and industry in the country to a much higher level. Then, together we can move ahead and have a much higher GTP per capita and thus have a more just society, with a smaller gap between the rich and the poor.

Unfortunately, the two kinds of economies that I am talking about also reflect the divide between the periphery and the center, amplified by an ethnic and religious rift, which creates tension in the Israeli society. So, we must also significantly increase participation in the work force: as Manuel said time and again, we have to put the Orthodox men and the Arab women into the workplace, otherwise, Israel will not be able to reach its economic and social goals. Again, the higher education system will play a key role in the process.

So, higher education in many respects is a key to accomplishing Israel's goals for the future. If I want to exaggerate this point, I'll say

Israel's long-term survival depends on the education system from K–12 up to higher education.

How can this be achieved? First of all, let me talk about research. Israel is too small; it cannot afford 7 research universities. We do not have the human resources and we do not have the funding. We have to create, by appropriate funding policies, a situation where out of the 7 universities, 2 or 3 will attain world-class excellence. For that we have to substantially increase competitive funding in the country. Significantly. Currently we have roughly $100 million that go to competitive funding. Compare this with leading universities abroad: MIT has close to $1 billion a year, Michigan has $600 million and Berkeley roughly $500 million. So with $100 million in competitive funds for 7 universities, one cannot create research universities that are in the top ten.

Now, if we alter the funding system, which means that we take away some of the funding that goes to the universities in block research grants, and we gradually move it into the competitive funding pool, together with a significant increase in research funding allocation, then chances are that the best groups in the country will be able to get very significant funding. That creates excellence and, naturally, what will happen, I assume, is that 2 or 3 universities will excel, and others will just be good research universities with some centers of excellence. Then we will have two kinds of universities: top research universities that can compete among the top in the world, and good – very good – research universities that will do less research and more teaching. It is a simple policy shift, but, of course, it is a painful process.

In order to provide the necessary human resources to the traditional industry and services, the education level of the entire workforce must be raised. For doing that we need a system that is similar to the California system; meaning that we have to take all the 2-year colleges (professional colleges) and include them in the higher education system. I support the private colleges, I think they are good. Those colleges should accept anybody and they should be allowed to give associate degrees, so that they can be part of the system. Then you will have all the privately funded colleges, which are doing a good job – the more diversity the better. With such an expansion, the system will

be able to meet the needs of the Israeli economy at large. With such a system, in 20 years we will be able to reach the goal of increasing the number of students from today's 250,000 to 750,000, so that a cohort of 75% should go to some kind of higher education.

In order to accomplish all this, we need to reform the governing bodies: the Planning and Budgeting Committee and the Council of Higher Education. It is not conceivable that these institutions, which were established in the 1950s and early 1960s to manage a few universities, can manage a system that includes 7 universities, 60 colleges of different kinds, and another 60 entities of post-secondary education. The only way to manage such a system is by decentralizing them and providing far more responsibility and authority to the various entities. It is inconceivable that every small decision that each university or a college wishes to make requires approval of these governing bodies. Funding policies and quality control should remain centralized; all other authority and responsibility should be shifted to the management of the individual universities and colleges.

So, I think that a flexible, diversified, proactive higher education system can provide Israel with its needs, alongside promoting excellence.

Philippe Aghion

Philippe Aghion is Robert C Waggoner Professor of Economics at Harvard University. His research focuses on economic growth. With Peter Howitt, he developed the so-called Schumpeterian growth paradigm, first in a paper entitled "A Model of Growth through Creative Destruction", (Econometrica 1992), second in a book entitled "Endogenous Growth Theory" (MIT Press 1998). He then used this framework to analyze the relationship between competition and growth ("Innovation and Growth", with Rachel Griffith, MIT Press **2005), and more recently the relationship between growth and (higher) education. Starting with a paper entitled "Distance to** Frontier, Selection, and Economic Growth" (with Acemoglu and Zilibotti, JEEA 2006), he developed a new approach to growth policy design indicating how growth-enhancing policies must be taylored to a country's level of technological and financial development.

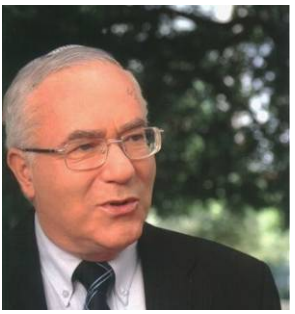
Shoshana (Malis) Arad

Prof. Shoshana Arad graduated with a BSc in biology from The Hebrew University of Jerusalem and holds an MSc (cum laude) from Ben-Gurion University of the Negev. She received her PhD from The City University of New York. Prof. Arad founded and headed the Institute of Applied Biosciences at Ben-Gurion University.

Prof. Arad is an expert in the field of algal biotechnology focusing on cell wall polysaccharides. About thirty graduate students have been educated in her laboratory. She has a wealth of experience moving an idea from the test tube to industrial application. Several algae-based products developed by Prof. Arad are already in use by leading cosmetic companies worldwide.

Prof. Arad was appointed president of the Ruppin Academic Center in 2004.

Zvi Arad



Professor Zvi Arad, President of Netanya Academic College.
Professor Arad is a distinguished, world-renowned mathematician. A leading authority in his field, he is a member of the Russian Academy of Natural Sciences, has served on the editorial board of various international publications, and participated in many academic projects. Before founding Netanya Academic College he held a variety of senior academic posts, including as the President and Rector of Bar-Ilan University. He served as a member of the Council for Higher Education of the State of Israel, and fulfilled a key role in the development of higher education in Israel

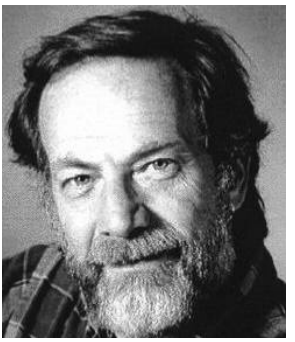
Gadi Ariav

Associate Professor of Technology and Information Systems Management, Faculty of Management, Tel Aviv University. Almost 40 years of experience in the practice, research and teaching of the use of information technologies and systems in organizations. 25 years of international academic career, including altogether 11 years as academic director of TAU's executive MBA programs. Founding director of the Kellogg-Recanati program as well as the Georges Leven High-Tech Management School (HTMS) at Tel Aviv University. Current academic focus on the global management of innovation and the consumption of video contents in future TV environments. Holds a Ph.D. in Decision Sciences from the Wharton School, University of Pennsylvania, an M.Sc. (Cum Laude) in Management Sciences – Information Systems, as well as B.A. degree in Statistics and Economics, both from Tel Aviv University.

Elise S. Brezis

Prof. Elise S. Brezis is currently the director of the Azrieli Center for Economic Policy at Bar-Ilan University. She previously was the head of the Statistics division at the Research Department in the Bank of Israel, and later on, she was the President of the Israeli Association for the Study of European Integration. She holds a Ph.D. in Economics from MIT (USA). Her research interests cover a wide range of topics related to economic growth, from R&D to human capital and higher education. She has published articles in the *American Economic Review, European Economic Review*, in the Oxford Encyclopedia as well as in the New Palgrave. She has edited a book (Elsevier) on Elites and Economic Growth. Her current interests are on evaluation of R&D projects, on recruitment of elites and higher education.

Morton M. Denn



Morton M. Denn is the Albert Einstein Professor of Science and Director of the Benjamin Levich Institute for Physico-Chemical Hydrodynamics at the City College of New York, CUNY, with faculty appointments in Chemical Engineering and Physics. He was previously Professor of Chemical Engineering at the University of California, Berkeley, where he served as Department Chair, and at the University of Delaware. He is a member of the National Academy of Engineering, a Fellow of the American Academy of Arts and Sciences, a Guggenheim Fellow, and the recipient of numerous awards. Professor Denn was a Visiting Professor at the Technion in 1979/80 and at the Hebrew University of Jerusalem in 1998/99. He is the author of six books on subjects ranging from process optimization to fluid mechanics.

Ali Doğramaci

Professor Ali Doğramacı has been serving as rector (chancellor) of Bilkent University since 1993. Prior to his current position he served as vice-rector and chair of department of industrial engineering at the same university from 1991 to 1993. Prior to Bilkent, Professor Doğramacı taught at Rutgers The State University of New Jersey (Graduate School of Management), Cornell University (School of Industrial Engineering and Operations Research), and Columbia University (Department of Industrial Engineering and Operations Research). He was elected to the senates of Columbia University (1976-78) and Rutgers (1986-89) and also served as chair of the budget advisory group to the president of Rutgers University. He holds M.S. and B.S. degrees from Stanford and Middle East Technical Universities respectively, in civil engineering, as well as Ph.D. and M.S. degrees from Columbia University in industrial and management engineering. He is founding editor-in-chief of *Journal of Productivity Analysis*. The books he edited/co-edited have been published by Academic Press, Martinus Nijhoff Publishing, and Kluwer Academic Publishers. His papers have appeared in journals such as *Administrative Science Quarterly, Management Science, AIIE Transactions, International Journal of Production Research, Naval Research Logistics, and Operations Research.*

Nehemia Friedland

Professor of Social Psychology, Tel Aviv University (Emeritus).
2000 – present, President, The Academic College of Tel Aviv-Yaffo.
Member of the Israel Council of Higher Education (1994-1997) and of the Committee for Budgeting and Planning (VATAT) of the Israel council of Higher Education (1997-2000).

Sarah Guri-Rosenblit

Prof. Sarah Guri-Rosenblit heads the graduate studies in education at the Open University of Israel. She received her PhD from Stanford University in 1984 in education and political science. In the last fifteen years most of her studies have been conducted in the field of comparative research of higher education. She was a member of the Scientific Committee of Europe and North America in the *UNESCO Forum of Higher Education, Research and Knowledge* from 2003 to 2007. In 2005/6 she was selected as one of the 30 New Century Scholars in the Fulbright Program on: "Higher Education in the 21st Century: Global Challenge and National Response".

Her full CV and a list of her publications can be found at:
http://www.openu.ac.il/Personal_sites/sara-guri-rosenblit.html

Rhanan Har-Zahav

Dr. Rhanan Har-Zahav, a 45 year old attorney with his own law firm (rated by Dun and Bradstreet as one of the leading law firms in Israel in the field of administrative law), is an expert in the field of administrative law in general, and in the law governing higher education in particular. He has authored several seminal books in the field of public law (among them "*Israeli Administrative Law*" and "*Rules of Procedure before the High Court of Justice*"), as well as the only legal text in Israel regarding higher education – "*The Law of Higher Education*", written together with Dr. Barak Medina. Among his other professional activities, he has lectured extensively on public law, and was the founding editor of the legal journal "Hamishpat".

Grant Harman

Professor Grant Harman is an Emeritus Professor in the School of Business, Economics and Public Policy at the University of New England, Armidale, New South Wales, Australia. With post-graduate degrees from the University of New England (MA in history) and the Australian National University (PhD in political science), he has held academic appointments at the Australian National University, the University and Melbourne and University of New England. His main research interests are in higher education policy and management and he is Editor in Chief of the major refereed journal, *Higher Education*, published by Springer in the Netherlands. He is a member of the UNE Centre for Higher Education Management and Policy.

Ranan Hartman

Ranan Hartman is Ono Academic College's founder and Chairman of the Board. His vision of excellence in academics and creating social change in Israeli society is the guiding force behind Ono Academic College's growth and success, making it unique among Israel's academic institutions.

A native Canadian, Ranan made Aliya to Jerusalem with his family as an infant. Ranan was an officer and tank commander in the IDF, and studied law at Bar-Ilan University.

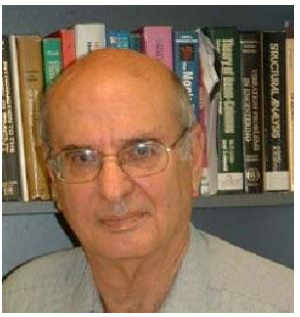
Ono has initiated outreach several programs, positioning the social issues of the Israel at the top of Ono's priorities. Most important of these are the Project for the Advancement of Ethiopian Born Immigrants to Israel for Higher Education and Community Leadership, and the Haredi (Ultra Orthodox) Campus.

Yaacov Iram

Prof. Yaacov Iram is Professor of History Comparative and International Education and former Dean of the Faculty of Social Sciences at Bar-Ilan University, Israel. He is the Chair-holder of the UNESCO/ Burg Chair in Education for Human Values, Tolerance and Peace. Prof. Iram has served as President of the World Association for Educational Research; The Israel Educational Research Association; The Israeli Comparative Education Society; and the Israeli History of Education Association. His research interests, teaching and publications are in comparative education, social history of education affecting educational policies and higher education. Prof. Iram was granted twice the Fulbright awards (1987/1988; 2000/2001; 2001/2002) and other bi-national awards.

He has published extensively in American and European scholarly journals, chapters in books and encyclopedia entries on issues of higher education.

Uri Kirsch



Vice Chairman of The Planning and Budgeting Committee (VATAT), The Council for Higher Education , Israel

Professor of Civil and Environmental Engineering, the Technion. International research awards: The State of the Art Award, American Society of Civil Engineers. Humboldt Research Award. Carnegie Research Fellowship. Fulbright scholarship.

At present, Vice Chairman of the Planning and Budgeting Committee (VATAT), the Council for Higher Education (MALAG). In the past, Senior Vice President of the Technion.

Daniel Levy

Daniel Levy (Ph.D. political science, University of North Carolina, Chapel Hill) is Distinguished Professor, SUNY. His home unit is the Department of Educational Administration & Policy Studies, with university affiliations in 3 additional departments. Levy directs PROPHE, the world's first and foremost research center on private higher education globally. His seven books have been published by the university presses at California, Chicago, Indiana, Oxford, Pittsburgh, as well as with Praeger and Westview. His articles appear in an array of professional journals. Levy's main research interest is how educational institutions fit into the wider interface between civil society and the state. Starting at Yale University pioneering research programs, he has now spent over 25 years on this broad subject matter, increasingly working on private higher education and its relationship to the public sector. Levy has lectured at almost all of the leading U.S. universities and he has also lectured and worked in six continents. He is a consultant for international foundations, development banks, and academic agencies. Dr. Levy teaches graduate students mostly in the social analysis of education, especially higher education.

Nadav Liron

Nadav Liron is Professor of Applied Mathematics at Technion – Israel Institute of Technology, the incumbent of the Mina Gotlieb Opper and Henry Opper Chair in Mathematics and Director of the Samuel Neaman Institute for Advanced Studies in Science and Technology since 2003. He is also Head of the Compensation Committee of the Head of the Universities Association, since 1998. Formerly, he was Vice President for Academic Affairs of Technion from 1995 – 1998. He was Chairman of the Department of

Mathematics from 1988 – 1990. He holds degrees from the Hebrew University and the Weizmann Institute of Science. He has been a Visiting Professor at the Courant Institute of Mathematical Sciences, NYU, RPI, Duke University, Universities of Madison, Wisconsin and Stanford. He has published over 50 articles in the professional literature. His main interest now lies in the area of Biofluiddynamics.

Hagit Messer

Hagit Messer, the Vice President for Research and Development at Tel Aviv University, is a professor of Electrical Engineering and a fellow of the IEEE. In 2000-3 she has been the Chief Scientist of the Ministry of Science, ISRAEL. In addition to her formal activities, Prof. Messer-Yaron has a special interest in various aspects of science ethics, including bioethics and the commercialization of academic research. She is also deeply committed to the advancement of women in science and technology.

Gabriel Motzkin

The Director of the Van Leer Jerusalem Institute, Professor Gabriel Motzkin, holds the Ahad Ha'am Chair in Philosophy at the Hebrew University. He was also a member of the Departments of History and German Literature.

Gabriel Motzkin has served as the Dean of the Faculty of Humanities (2001-2004) and Director of the Franz Rosenzweig Center for German-Jewish Literature and Cultural History (1996-1999 and 2006-2007)

Motzkin has been a Fellow at the Siemens Foundation, the Max-Planck-Institute for Human Cognitive and Brain Science, Clare Hall at the University of Cambridge, the Max-Planck-Institute for the History

of Science, the Einstein Forum, the Wiener Institute at Tel Aviv University, the Max-Planck-Institute for History, the Wissenschaftskolleg (Berlin), and the Zentrum für interdisziplinäre Forschung (Bielefeld).

He has been a Visiting Professor and/or Visiting Scholar at the Ecole des Hautes Études en Sciences Sociales (Paris), the University of Giessen, the University of Amsterdam, the University of Konstanz, and the Cardozo School of Law at Yeshiva University.

His fields of interest are: the philosophy of history, secularization theory, cognitive science, memory theory, and Heidegger.

He is married to Emily D. Bilski, an art historian and exhibition curator. They have two sons, Theo (14) and Alex (11).

Guy Neave

Guy Neave is Honorary Professor at the Centre for Higher Education Policy Studies, (CHEPS) Universiteit Twente, Netherlands and Senior Principle Researcher at the Centro de Investigacão de Politicas do Ensino Superior, Porto, Portugal. He was Editor of the scholarly quarterly, Higher Education Policy for more years than he will admit. His latest effort with Thorsten Nybom and Kjell Bluckert is *The European Research University: an historical parenthesis* (Palgrave 2006). His next excursion with Alberto Amaral, Peter Maassen & Amelia Veiga will be *Bologna, Universities and Bureaucrats* (Kluwer Academic), due out next year. Trained as an historian, he was the Professor of Comparative Education at London University from 1985 to 1990. He lives in the Far West part of the Paris basin, in the township of St Germain en Laye.

Thorsten Nybom

Deputy Vice-chancellor and Professor of History, Örebro University

- *PhD in History*, Stockholm University, 1978
- *Research Fellow*, Stockholm School of Economics, 1979
- *Associate Professor of History*, Uppsala University 1980-89
- *Director* Swedish Council for Studies of Higher Ed. and Research, 1989-98
- *Research Fellow*, Norwegian Institute of Higher Education Studies, Oslo 1990
- *Research Fellow*, Center for Studies in Higher Education, UC Berkeley, 1991
- *Professor*, Grad. School of Interdisciplinary Studies, University of Linköping, 1994-98
- *Visiting Professor*, Center for West-European and German Studies, UC Berkeley, 1996
- *Professor of History*, Uppsala University, 1998
- *Stiftungs-Professor*, Nordeuropa-Institut, Humboldt-Universität zu Berlin, 1998-2000
- *Professor of History*, Uppsala University, 2000-01
- *Director of Cultural Studies*, University College of Blekinge, 2001-02
- *Stiftungs-Professor*, Nordeuropa-Institut, Humboldt-Universität zu Berlin, 2002
- *Professor of History and Director of International Relations*, Örebro University 2002-2006
- *Professor of History and Deputy Vice-Chancellor*, Örebro University 2006-

He has published numerous articles and books on topics related to higher education and research policy planning – national and international - most recently:

- *The European Research University – A Historical Parenthesis?* Palgrave – Macmillan, New York 2006 (with Guy Neave and Kjell Blückert).

- "The Visible Hand versus The Invisible Hand. The Allocation Research Resources in Swedish Universities", In Richard Whitley (ed.), *The Changing Governance of the Sciences: The Advent of Research Evaluation Systems*. Springer, Dordrecht 2007
- "A Rule-governed Community of Scholars: The Humboldt-vision in the History of the European University", in Peter Maassen-Johan P. Olsen (eds.), *University Dynamics and European Integration*. Springer, Dordrecht 2007

Tsvi Piran

Prof. Tsvi Piran is one of the world leaders in High Energy Astrophysics. His research interests are varied and cover black holes on one hand and the theory of the Big Bang on the other. Prof. Piran studied as undergraduate at Tel Aviv University and received his PhD from the Hebrew University. He returned to the Hebrew University at the early 80ies and he is a full professor there since 1986. Tsvi Piran was a visiting professor at Harvard University and at Columbia University. He was a Senior Moore Scholar at the California Institute of Technology a visitor at NASA's research center in Chicago and a long term member of the Institute for Advanced Studies in Princeton NJ. Prof. Piran served as a member of the steering committee of the Israeli Space Agency. Several years ago Prof. Piran has led a reform that revolutionized the promotion procedure at the Hebrew University. In 2005 he was appointed to the Schwarzman University chair and as a dean of the HU business school.

Sheldon Rothblatt

Sheldon Rothblatt is Professor Emeritus of History and former Director of the Center for Studies in Higher Education at the University of California, Berkeley. Educated at Berkeley and King's College, Cambridge, he also holds an honorary doctorate from Gothenburg University in Sweden. He is a Fellow of the Royal Historical Society of Britain, a Foreign Member of the Royal Swedish Academy of Sciences, and a member of the National Academy of Education (US). His specialties are modern British and European history and the comparative history of universities. His newest book, *Education's Abiding Moral Dilemma: Merit and Worth in the Cross-Atlantic Democracies, 1800-2006*, appeared in January 2007.

Eliezer Shalev M.D.

- M.D. Technion, Israel Institute of Technology.
- Professor in Obstetrics and Gynecology, Associate Dean, Faculty of medicine, Technion.
- Chairman, Department of Obstetrics and Gynecology, HaEmek Medical Center, Afula.
- President , Israel society of Obstetrics and Gynecology.

Mordechai Shechter

Born - Tel-Aviv, married +3. Ph.D., Iowa State University, USA, 1968. 1968-1977: Faculty of Industrial Engineering and Management, Technion – Israel Institute of Technology; 1978-date: University of Haifa – Professor, Department of Economics; Chairperson, Graduate Department of Natural Resource & Environmental Management, School of Management. Director, Natural Resource & Environmental Research Center, focusing on the economics and management of environmental and natural resources. Served as University Rector (Provost), Dean of Research, Economics Department Chairperson, and Chairperson of the Senior Faculty Association. 2000-2005 - President of Tel-Hai Academic College, Upper Galilee. Research & teaching: environmental and natural resource economics and management and public sector economics. Public Service offices: Chairperson, the Board of the City of Haifa Museums; Chairperson, National Parks and Nature Reserves Authority; member, Executive Committee, Nature Protection Society; National Management Committee, Council for Beautiful Israel; Founding Committee, "Bashaar".

Steven Gary Stav

Economist, Business Administration specialist (MBA, LL.M) and Certified Public Accountant (CPA), with many years of experience in the service of both private and government enterprises in Israel and abroad. For over 20 years, have been working as an independent consultant providing consulting services in the areas of accounting, budgeting, financial management and control.

Currently is serving as the Director General of the Israel Council for Higher Education and the Planning & Budgeting Committee.

Past professional experience includes: Deputy Director General for Budgeting of the Council for Higher Education in Israel, Financial Management Specialist as part of the World Bank Ghana Water Sector Rehabilitation Project, Consultant and Certified Public Accountant, Vice-President and Director of Finance and Administration of Kidron Digital Systems Ltd. Work Experience also includes consultancy and management in various projects carried out in Africa and in Asia.

Zehev Tadmor

Professor Zehev Tadmor, former Technion president, currently serves as chairman of the board of the Samuel Neaman Institute for Advanced Studies in Science and Technology at the Technion – Israel Institute of Technology, Haifa. Prior to assuming the presidency of the Technion in 1990 — a post he held for eight years — Prof. Tadmor served as director of the SNI from 1986-90.

Prof. Tadmor published three books, many book chapters, over 75 papers and holds more than 20 U.S. patents in his discipline. He is a member of the Israel National Academy of Sciences and Humanities and a foreign associate member of the U.S. National Academy of Engineering.

Among the many professional awards he received are an Honorary Doctorate from the University of Bologna in 1995 and the Israel EMET- Prime Minister Prize in 2005 in sciences, Prof. Tadmor has been inducted in the Polymer Processing Hall of Fame in the U.S. in 1993.

Professor Tadmor has also published extensively on issues of science and technology national policy, higher education, engineering education and university mission and governance. Together with colleagues, he established the Israel Plastics Society and more recently

the voluntary organization of university professors: "Bashaar – Academic Community for the Israeli Society", which via a series of proactive educational programs encourages underprivileged children to aspire for higher education.

Jandhyala B G Tilak

Jandhyala B. G. Tilak, an economist of education, is a Professor at the National University of Educational Planning and Administration, New Delhi. Recipient of the Gold medal in M.A. Economics from Andhra University and Doctorate from the Delhi School of Economics, Professor Tilak had taught in the Indian Institute of Education (1981-82) and the University of Delhi (1976-81), taught as a Visiting Professor at the Hiroshima University (2002-03) and the University of Virginia (1989-90) and continues to teach as a Visiting Professor in the Sri Sathya Sai University (since 2002). Dr Tilak was also on the research staff of the World Bank (1987-89). His publications include eight books including Economics of Inequality in Education (1987), Education for Development in Asia (1994), Educational Planning at Grassroots (1992), Education, Society and Development (2003), Financing Education in India (2003), and Women's Education and Development (2007) and more than 250 research papers published in professional journals of high repute in the areas of economics, development studies and education. He is the recipient of the Swami Pranavananda Saraswati National Award of the UGC in Education (1999) and Malcolm Adiseshiah Award for distinguished research contributions to development studies (2003). Professor Tilak is also the Editor of the *Journal of Educational Planning and Administration* and is associated (as a member of the editorial board) with several national and international journals. Dr Tilak also served on several official committees on education and related issues constituted by the Government of India, Ministry of Human Resource Development, the Planning Commission, the University Grants Commission and other bodies.

Manuel Trajtenberg

Prof. Manuel Trajtenberg is the head of the National Economic Council in the Prime Minister's Office.

Manuel Trajtenberg is a Professor at the Eitan Berglas School of Economics, Tel Aviv University (he has been Chairman of the School until January 2004), Research Associate of the NBER in Cambridge, MA, USA and of CEPR in London, UK. He obtained his Ph.D. (with Distinction) at Harvard University, and has held visiting positions at Harvard and Stanford Universities. Prof. Trajtenberg is also the Head of the Science, Technology and the Economy (STE) Program at The Neaman Institute for Advanced Studies, the Technion. He has been a member of the Directorate of "Magnet" for the support of Generic, Pre-Competitive Technologies, Office of the Chief Scientist, Ministry of Industry and Trade, and has served as advisor to the Chief Scientist, ministers and policy makers in this area. Prof. Trajtenberg works also as expert consultant in antitrust litigation, and has been a member (until March 2004) of the Board of Directors of "Mei Eden".

Prof. Trajtenberg's main research interests are in the economics of innovation, patents, industrial organization, and R&D policy. He has also worked on technology-lead growth, pioneering the concept of "General Purpose Technologies." He has led a long-term research program on patents, and created together with several co-authors a comprehensive data set on US patents that has become a widely used research resource.

His most recent book is: Patents, Citations and Innovations: A Window on the Knowledge Economy (with Adam Jaffe). Cambridge, Mass.: MIT Press, 2002. ISBN 0-262-100959. (includes data CD).

Meir Zadok

1987 – present: Director, National Academy of Sciences and Humanities
1986 – Advisor to the Academy, Establishment of the National Science Foundation
1980 – 1983 Head of Department for Planning and Research, Council for Higher Education, Israel
1973 – 1977 Head of Department of Budgeting and Finance, Council for Higher Education, Israel

Consulting
1986 – 2002 Management and Financial Advisor to the Ministry of Education on issues of Colleges, further education and the school system
1996 – 1997 Member of various national committees, appointed by the cabinet on Structural Change of the Educational System

Teaching
1995 – 1996 Lecturer in economics of education, Hebrew University of Jerusalem
1985 – 1986 Lecturer in educational finance and management, Tel Aviv University

Gury Zilkha

Gury Zilkha (Israel) is an Economic, financial & management consultant to government Agencies and higher education institutions. In the past he was the director general for the council of higher education and the planning and budgeting committee of the state of Israel. During that time the higher education system more than doubled and private higher education institutions were approved. During that time he was responsible for budget allocation to research universities and colleges, which were given according to output indicators based on a new teaching and research formula. Zilkha is member in governing boards of higher education institutions and holds degrees from the Hebrew University and Penn State University.

About The S. Neaman Institute

The Samuel Neaman Institute for Advanced Studies in Science and Technology is an independent, interdisciplinary public-policy research institute, established in 1978 and located at Technion - Israel Institute of Technology. The mission of the Institute is to research, identify and evaluate solutions for national problems in the areas of science and technology, education, economics, industry, and social development. Through its sponsored research, workshops and publications, the Institute serves as a bridge between academia and decision makers in government, public institutions and industry.