Privatization, Mass Higher Education, and the Super Research University: Symbiotic or Zero-sum Trends?¹

David P. Baker State College Zusammenfassung: Privatisierung, Hochschulexpansion und die Entstehung von Super Research Universities verändern das Hochschulwesen grundlegend. Häufig wird angenommen, dass zwischen den genannten Tendenzen Konflikte bestünden. Der vorliegende Beitrag zeigt hingegen, dass in den USA die Beziehungen zwischen ihnen eher symbiotischen

Charakters sind und sich wechselseitig voraussetzen. Die Zunahme des Hochschulbesuchs zeigt an, dass das Hochschulwesen eine immer größere Wertschätzung erfährt, die ihrerseits die beispiellose Entwicklung der amerikanischen Forschungsuniversitäten begünstigt.

Vor diesem Hintergrund werden zwei Zukunftsszenarien zur Privatisierung des Hochschulbereiches und zur weltweiten Verbreitung von Super Research Universities diskutiert:

Zukunftsszenario 1: Research University als nationalstaatlich rationalisierte Strategie. Hier wird es zum Ziel der staatlichen Hochschulpolitik, die Super Research University hervorzubringen. Dabei werden Privathochschulen als potentielles Problem für den öffentlichen Sektor wahrgenommen, da die privaten auf Kosten der öffentlichen Hochschulen öffentliche Finanzmittel beziehen und sie so in einer Art Nullsummenspiel

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schwächen. Unter dieser Voraussetzung werden die Staaten daher an der Idee des nationalen, öffentlichen Hochschulbildungssystems festhalten.

Zukunftsszenario 2: Research University als transnationale Idee. Bei diesem Szenario genießt das Modell der Super Research University ein hohes Maß an Legitimität in der Gesellschaft insgesamt. Sie erscheint als am besten geeignet, Forschung und Lehre an Hochschulen mit der Idee des gesellschaftlichen Fortschritts zu verknüpfen. Deswegen werden auch private Mittel in großem Umfang zur Förderung dieser Universitäten mobilisiert. Unter diesen Voraussetzungen beziehen sie sich eher auf einen transnationalen Kontext. Nach diesem Szenario wird es viel mehr Hochschulen geben, die sich selbst als Super Research Universities zu organisieren versuchen.

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Over the past several decades, three major transforming trends in higher education are unfolding that are widely discussed, yet only rarely in relationship to one another. In fact, for many, these three trends represent opposites within formal education, that on the surface seem to create more conflict than harmony within the university. One trend, often divisively debated, is the rapid growth of the private sector of higher education across most nations. The second trend, often considered pedestrian, is the unprecedented expansion and massification of higher education in not only wealthy nations such as the United States and those in Western Europe, but in most all nations as well. The final trend, often celebrated, is the rise and flourishing of what can be called the "super research university," mostly in the U.S., but increasingly now as a model aspired to by many research universities throughout the world. What is not often appreciated about these three trends is that at their root they are related, even symbiotic, to the point that each likely would not be happening if not for the other.

An appreciation of the underlying relationship among these three seemingly separate major transforming forces in higher education develops a fuller picture of the institutional dynamism behind the growing legitimation of the university and its role in society. Frequently these three trends are assumed to be in some kind of zero-sum competition with each other, but this underestimates the institutional power of the educational revolution and the role of the university in its development. Also such an underestimate can lead to a policy environment in which universities and ministries of education around the world actually inhibit the development of mass higher education, private institutions, and reaching for the full capacity of research universities to generate new knowledge and train the next generation of scientists and scholars.

After a brief description of each trend, the argument is developed that the three trends are symbiotic and flow from a common historical intensification of education as a major global institution that now powerfully transforms society. Lastly given the argument developed here, several possible scenarios for the future course of private higher education are evaluated.

Privatizing the University

The growth in private universities and other private higher education institutions, as well as partial privatization of public universities, is occurring throughout all regions of the world and most nations (e.g. on Eastern Europe see Slantcheva/Levy 2007; on Romania see Reiz 2007; on Latin America see Levy 1986; on Argentina see Balan 1990; on Asia see Wongsothorn/ Tong-In/Wang 1995; on China see Yin/White 1994; on Africa see Sawyerr 2002). While this trend is well-described elsewhere and does not need to be repeated, it has three elements essential to the argument here.

First, the expansion is wide-spread, following along with the overall trend of higher education growth (Schofer/Meyer 2005). Across nations for which there is reliable information, the mean percent of higher education enrollment in private institutions is 26 with wide variation from nation to nation (s.d. 24%) (PROPHE 2008). So it is realistic to assume that the trend of growing private higher education is part of the larger trend of growing higher education, which is itself the latest wave in the mega-trend of the educational revolution that has spread mass education worldwide over the past century. Further, as developed below, it can be argued that the institutional forces that initiated and intensified the educational revolution in general can be applied to understanding the origin of growing private higher education.

Second, even though there is growing private higher education, most of it appears to be among non-university higher education (colleges etc.) or non-research private universities. It is this fact that often obscures the deeper institutional connections between private higher education worldwide and the rising success of the western style research university, which is the crux of the argument developed below and illustrated here with the American case. Third, a reasonable case can be made that like the emerging American model of the super research university now emulated in many nations, the current trend in privatization of higher education receives a fair degree of legitimation from the American experience with private higher education.

The University in the Education Revolution

The world is rapidly transforming itself into a schooled society (Baker forthcoming). The dimension of education in the world is immense in terms of its recent growth, its claim to people's time and effort, and its level of impact on their lives. What is most salient about the education revolution is both its relative newness to the human society and speed by which it grows. Of the some 200,000 years of organized human existence, schooling large proportions of cohorts of children and youth is an idea that has only been implemented over the past 150 years. Mass education, or the practice of formally schooling most of the population, is the single largest social intervention aimed at the development and socialization of children and youth ever undertaken by human society. And once started, the rate of growth for each level of mass schooling rapidly becomes significant and sustained.

To school everyone across the lifespan is a truly revolutionary idea in the evolution of human society with substantial implications for how we think, work, and live (Baker/LeTendre 2005). Although there is still a considerable way to go to reach universal basic education worldwide, nearly all nations agree on the desirability of mass education. Only large-scale national economic, political, or health crises seem to be able to retard the expansion of mass education, and the same is now true for mass higher education (Baker/Koehler/Stock, 2007).

The expansion of higher education is the next step in the unfolding of the education revolution. For example, Schofer and Meyer (2005) document the unprecedented rise in postsecondary schooling in worldwide – wealthier nations are leading the trend, but most middle-income and some low-income nations are also increasing higher education. For example, only about 500,000 students were enrolled in higher education institutions worldwide at the beginning of the 20th century, representing a tiny fraction of one percent of college-age people, but by 2000, the number of tertiary students had grown to approximately one hundred million people, a number that represents about 20 percent of the relevant age cohort worldwide, and most of this growth occurred after 1960 (UNESCO 2004). In

higher-income nations, it is now common for more than half of all youth to receive some post-secondary schooling, with numbers surpassing *eighty percent* in a few countries (UNESCO 2004).

Only a few decades ago, as wealthy nations were completing full expansion of secondary schooling, many pundits predicted either a death of educational expansion at the university's gate, or even a social crisis because of too much expansion (e.g. Berg 1970, Dore 1976). But neither of these happened. Instead, former static systems of higher education accelerated into rapid expansion – in the U.S., for example, every decade since mid-century has seen a substantially larger proportion of students going on to higher education. This unfolding third wave of the education revolution has expanded enrollments and the founding of new universities worldwide to historically record heights (Riddle 1993). And as this is occurring, so has a recent intensification of the university as the site of the generation of new knowledge in the form of the super research university.

The Rise of the Super Research University

The advent of the *super research university* (hereafter, super RU), primarily in the U.S., over the past several decades is an equally stunning educational development (Mohrman, Ma, and Baker 2007, 2008). An intensification of a number of unique qualities of the Western university has resulted in a small, but growing, number of institutions with the capacity to produce unprecedented levels of science, technology, and knowledge about human society. Sometimes identified as "world-class research universities," these institutions are, for better or worse, leading the establishment of an emerging model of the university that is rapidly becoming the accepted standard by which institutions will undertake graduate training and research. For better or worse, the ideas driving the super RU are rapidly forming into a pervasive normative model for the university throughout higher education worldwide.

The growing literature on these super RUs identifies a set of defining characteristics that most observers agree upon (e.g. Chait, 2002; Geiger 1993; Mohrman/Ma/Baker 2007):

Transcending global mission. These institutions see themselves as among a small set of universities whose mission is not just locally or even nationally based, but is explicitly global. In transcending national concerns, the super RU self-defining mission is the antithesis of the mission of the older national-flagship university that focused on the production of

successive generations of national elites. Further, instead of being a passive bystander or even just a critical reactor, the super RU prides itself as an active participant in the process of globalization.

Research Intensive. Super RUs are ever more research intensive, and not only in science and technology, as these institutions are leading the way towards an expanded scientification of disciplines outside the sciences (Drori et al 2003). The model underlying the super RU is characterized by an intensity of research that far exceeds past experience, and this research intensity drives worldwide competition for students, faculty, staff, and funding. And like the universities that house them, research projects are often global rather than just national in reach; similarly, more research explicitly uses strategies aimed at multi-disciplinarity to generate teams and larger external funding streams. The model driving the super RU is an expansion of the older functions of teaching, research, and service into what has been described as a "knowledge conglomerate" (Geiger 2004).

The new knowledge that is most prized in this model (and funded) is scientific and technological, as well as the social scientific study of human social problems (Frank/Gabler 2006). Many domains of the social world are increasingly brought under the authority and jurisdiction of scientists, experts, and external actors. What was once a dominant focus on individual scholarship has been transformed into large-scale scientific research done with teams of faculty and graduate students in large expensive laboratories. This "big science" model has spilled over into all parts of the faculty as social scientists and even traditional scholars in the arts and humanities are encouraged to adopt as much of the model as possible.

New Knowledge for the Good Society. Much of the implicit justification of the super RU is the assumption that investment in human capital is good for society and that new knowledge leads to a better world. The emerging model holds that nations can harness a rational process of knowledge production through public investment in the research university. And hence the super RU organizes itself to have high impact on disciplines–based research as well as on larger concerns in the production of the good global society. Thus in most accounts of future global development, super RUs becomes a key ingredient of the recipe for managed social and economic progress (Frank/Meyer 2006).

Decline of the Traditional Professoriate. Faculty members, seen more as producers of new knowledge than traditional scholars, are assuming new roles, shifting from traditional independent patterns of inquiry to becoming members of team-oriented, cross-disciplinary, and international partnerships, with research in the super RU directed more often than before toward perceived real-world problems than purely scholarly interests (Altbach 2007).

Recruitment of Academic Core is National and *International*. Universities are adopting worldwide recruitment strategies for students, faculty, and administrators.

For example, many institutions ranked highly by the *Times Higher Education Supplement* have very international faculty, with the London School of Economics, ETH Zurich, and the University of Hong Kong each having more than 80% of their faculty from outside national borders. A number of other universities, especially British and Commonwealth institutions, report more than half of their professors are citizens of other nations. Universities in western Europe and North America, long the magnet for students from other parts of the world, have a tradition of persuading their best PhD students to remain as scholars and teachers – and many of those bright graduate students want to do exactly that. At the same time, ambitious universities eager to move into the international higher education scene recruit professors from other countries to bring instant upgrading, and often prestige, to their campuses. Student recruitment by research universities is increasingly global, providing opportunities for greater migration and exchanges among academic personnel at all levels.

Greater Internal Complexity. The model behind the super RU has significantly upped the complexity of the internal organization of institutions. In recent years, research universities have expanded substantially, often desiring to become more comprehensive and more integrated by adding new programs to existing departments, establishing professional schools, launching new research centers, encouraging interdisciplinary units, creating offices focused on corporate research projects, and developing science parks to collaborate with businesses to take academic research to the marketplace. To support these activities, universities have added a number of administrative offices for human subjects review, patents, government liaison, and so forth.

Denser Networks of Universities and Steeper Competition. The model behind the super RU is driven by, and in turn deepens, the participation of universities in an interesting mix of competition and cooperation. The proliferation and importance of even crudely done rankings of universities in terms of knowledge production is one clear indicator of this trend. At the same time, universities enter into some degree of cooperation, particularly for obtaining very large funding projects. Their global aspirations and a far amount of growing similarities across universities worldwide because of the underlying model of the university in the 21st century propel both competition and cooperation (Meyer/Ramiez/Frank/Schofer 2007). And manifest of their transcending mission as global institutions is the growth of international university associations that offer a forum for these complex organizations to appraise their structure and performance vis-à-vis other like-minded universities.

Extreme Costs and Mixture of Funding. Research universities have always been expensive but the new model behind the super RU brings costs of research to levels unimaginable even a decade ago. On the research side, estimates of required annual funding to support a super RU with a medical center are US\$1.5 billion. And some universities, such as The Johns Hopkins University, have annual costs far beyond this. Not surprisingly, few institutions can compete at these levels of funding. Approximately 30 American universities have budgets of at least this size, while as of vet no European institutions can match such resources (Ward 2005). In the United States, such institutions receive about 20% of this amount from state tax revenues and another 30-40% from competitive research grants; and the share of private funds pouring into both public and private universities in the U.S. is unprecedented. As governments flatten higher education expenditures, universities increasingly raise money through different strategies including private donors, increased tuition and fees, grants for research and technical innovation, profits from spin-off businesses, contracting with corporate entities, recruiting international students for higher fees, and so on.

The Relationship among Privatization, Mass Higher Education, and the Super Research University

How then to think about these three phenomena together? To start, one must first understand that while obviously not every research university is at the scale of a super RU, the model driving the super RUs increasingly shapes what many universities do and strive for. No doubt the game of jud-ging whether or not particular universities make the grade as a super RU will still be played – but this misses the point. The model is pervasive and is shaping a large section of the higher education sector, even to the point of influencing institutions of higher education that prior to the growth of this trend were not very research-intensive and maybe can never really be so (Mohrman/Ma/Baker 2007). The super RU is more of a normative

model than it is a designation of a particular class of institutions, and as such it is very influential.

At the same time, both true of completely private universities, and sources of private funding in all public RUs and the super RU in the American case are saliently connected. This has always been the case historically, and it has intensified in recent decades. Often this intensification of private funds within American RUs is seen as a decline in the strength of universities as an institution, but in fact the very opposite case – that private funds reflect the growing overall strength of the university – can be made.

Geiger traces the dimensions of science and technology development in U.S. universities over the past half century and his cogent analysis of basic research production shows precisely the enhancing of the societal mission of the university (1994, 2004). Historically the rise of the "knowledge production conglomerate" in American research universities consists of a robust funding situation plus existing trends in the organization of university research and scholarship aimed at interdisciplinarity, the proliferation of research institutes, and 'raising the bar' in faculty hiring that are at the heart of the super RU model. This muscular approach to knowledge generation stems from a broad consensus in the U.S. (and most everywhere else too) around the idea that university-based, or universityinfluenced, research is crucial to economic global competitiveness (Geiger and Sa forthcoming). It is a short jump from this image of the role of the university to society-wide consensus that the university is a leading institution for the good of society. This image of the American university, now increasingly attempting to emulate the super RU model, is widely evident in the American culture.

This is often missed as many observers of RUs assume that privatization and public funds are in a zero-sum relationship. And indeed a superficial reading of trends can lead one to this conclusion. It is true that the American federal government's share in funding research (once the source of most university-based research) declined dramatically over the last twenty years from almost one half to just over a fourth of the nation's total expenditures on R&D. And what gained proportionally during the same time were privatized sources, which now fund 70% of all American R&D. Furthermore, the funding for basic research, which is predominately carried out in universities, grew only from about 14 to 18 percent.

What is missed though is that both public *and* private funds have flowed into American universities as a consequence of this broad societal consensus around mass higher education and university-based research has increased proportionally (Geiger 2004). Overall growth of all American R&D from 1980 to 2000 kept pace with the rapid growth of science and technology that the world has seen since the 17th century (de Solla Price 1963). Combined university-based and non-university-based R&D (basic research and expensive technology development) spending from 1980 to 2000 more than doubled in constant dollars from about 115 to 248 billion. And importantly, within this rapidly expanding R&D climate, the university has held its share at about one-half of all basic research. While federal (i.e. public) support to American universities has declined, it has been replaced from *private economic sources*, so that overall academic funding as a share of GDP grew by 50% in just twenty years, to an amazing 28.2 billion dollars in 2000.

Also, the rise of the model of the super RU (private and public) and expanding access to higher education are both large-scale trends that reflect underlying models of education and its role in society that in turn are transforming higher education. To see this argument, it is useful to consider the context that the super RU model arose from. As pointed out, the U.S. has the highest number of universities with the characteristics described above. These are universities that produce considerable amounts of new knowledge across many fields (e.g. out of the top 10 universities worldwide with the highest citation rates per faculty size rates, 8 are U.S. institutions, and of those 5 are private). And many other American universities are above the world average in citations. Similarly, out of those universities worldwide that can generate the enormous level of research funding, by far most are American, as shown in Table 1.

But the usual take on the American case – private money, low central control, and high tolerance for between-institution inequality (in part a function of inequalities produced by mixing private and public funding sources) – *is not* the root cause of why so much of the super RU model stems from the American experience. In other words, the super RU is not just the product of the historically unique private section of American higher education. It is not just that the super RU model is an expensive one to pursue, requiring a wealthy society. Nor that private money is now a substantial source of funding in the U.S. Nor even that many super RUs are privately controlled. While these factors certainly have enhanced the development of the super RU model, they are not at its root cause. *Instead, the cause is found in the way in which the American society has generated widespread societal support for higher education, institutionally led by the research university, which includes private universities and the private*

tization of significant parts of public universities. In other words, formal education in the U.S. has been an early leader in the movement towards mass higher education and all that such an idea includes. Instead of assuming that mass access to higher education and the model of the super RU, and the role of private funds and interests are mutually exclusive, zero-sum forces, what the American case illustrates is that in reality these three trends have significantly supported one another in the past and will continue to do into the foreseeable future.

1	Johns Hopkins	1.444,000
2	University of Michigan	809,000
3	University of Wisconsin	798,000
4	University of California, Los Angeles	786,000
5	University of California, San Francisco	754,000
6	University of California, San Diego	721,000
7	Stanford University	715,000
8	University of Washington	708,000
9	University of Pennsylvania	655,000
10	Duke University	631,000
11	Penn State University	626,000
12	Ohio State University	609,000
13	Cornell University	607,000
14	Massachusetts Institute of Technology	581,000
15	University of California, Berkeley	555,000

Table 1: NSF Total S&E Research Expenditures NSF Total S&EResearch Expenditures, Rankings for FY2005 (x \$ 1000)

It is true that this fundamental symbiotic relationship is not the product of some central plan, instead it grew out of a unique set of historical conditions. The effects of which have become more obvious as the model for the American super RU becomes attractive to many other nations leading higher education there to mimic certain aspects – including faculty working conditions, competitive-based governmental support for research, a large private sector basis – as well as the idea of substantial private funds within the system. But what is frequently overlooked in these efforts is the exceptional societal support the U.S. has been able to generate for education in general and higher education in specific – both public and private.

American society has achieved this for essentially two reasons: first, through a widely comprehensive system of public (and to a lesser degree private) secondary education graduating youth with the aspirations and

expectations for more education, and second through a relatively open and comprehensive higher education system made up of both public and private universities and many small private colleges. This has lead to the belief in American society that the university, and particularly the super research university, is not an elitist or esoteric enterprise; instead, it is perceived to a remarkable degree as a democratic and useful institution. The fact that so many Americans attend some institution of higher education and have deep connections to these institutions in all of their many types, translates into wide societal support (i.e. pubic and private monies) for the costs of super research universities, even if only a small proportion of Americans will attend, or has attended, one of these highly selective institutions. As with the expansion of mass and comprehensive (i.e. non-stratified) elementary and secondary education, the U.S. has over the last century led the way in mass higher education with the idea that more and more types of people can develop as individuals (and not just as workers) through extended formal education (about 60 to 70% of American youth with a secondary school degree enroll in some type of higher education). At the same time, what the research university is thought to do for American society further legitimates the expansion of education for all. Also, private universities and private aspects of public universities have played a direct role in mass education.

The tremendous level of private support for higher education in the U.S. is not only a reflection of rising tuition, it is also a reflection of the way that higher education in general, and universities in particular, are thought about in the U.S. The lack of a state controlled exclusive set of universities and other institutions of higher education in the U.S. has led to robust and broad private support of individual institutions, and also of the entire sector to a degree. Certainly rising tuitions and private shares of funding is a trend to be concerned about and in some ways is a product of failing public funds for higher education. But the idea of societal support is broader than just the shifting split between public and private funds. In the U.S. overall, the pie continues to grow for higher education.

The 19th century American land-grant model of the research university laid the groundwork for the future of American higher education, and in many ways perhaps also the future of higher education globally. Here are all of the forerunners to the new ideas that now drive the super research university in terms of the symbiotic relationship between university and society, and joining together several strands of ideas into one institution for the first time. Scientific knowledge, rational social progress, human

empowerment, and universalistic values become embedded within the authority of the university, and this authority, based on an intensification of these ideas in the postmodern world, drives the current support of the super RU model in the U.S. (see also Meyer et al. 2007). Also, every landgrant university, even though they are public, incorporates significant private funds, from tuition to research collaborations with private ventures, to in huge alumni giving of private gifts (money) to lucrative deals trading universities' logo for revenue from private sports apparel firms. This is not to pass moral judgment on the American super RU and its privatization, there are clearly positive and negative implications of the model, and thoughtful critics on both sides. Rather, the point of the American case is that one way to think about the growing private higher education sector worldwide is that it is partially driven by the rise of societal support for the super RU from mass education and now mass higher education. And that in turn, once private support for higher education begins to flow and becomes normative, it feeds into the overall growing institutional power of higher education.

Future Scenarios for Private Higher Education Worldwide

So far, the argument has been presented as if the worldwide trend of private higher education is driving towards (or at least, driven by) the American model. But is that true? As described above there have been very few private super RUs to emerge outside the U.S., so how reasonable is it to conclude that the American experience with higher education is related to the worldwide expansion of higher education? Certainly much of the trend is established around non-university expansion of private higher education. Therefore the question becomes what will the future of higher education be throughout the world? Will the super RU model, originally an American phenomenon that is shaping so much intensification in universities worldwide as a function of increasingly societal support (both public and private) of the role of the university, be strong enough to create privatization of universities worldwide?

There are two scenarios for long-term implementation of the model of the super RU and mass higher education that predict different futures for the university, its relationship to society, and the role of private higher education. The first can be called the *research university as a nationalrationalized strategy*. This is the more widely held prediction of where the trend towards the super RU will take higher education over the current century. It also continues to predict that private higher education is somehow a threat to public higher education. The second scenario, called the *research university as a transnational idea* is less understood, but of the two, it is probably the one most likely to dominate the future of higher education well into the new century.

Future Scenario 1: Research University as a National-Rationalized Strategy and Competition from Private Higher Education

Much of the emerging literature on the research university in general, and the super RU in specific, imagines that there are major distinctions between universities that cannot only be measured but can also be maintained and even planned for. Following the idea that nations have systematically created leading national universities (an account that historically was a myth in many cases, Riddle 1993), the obvious question becomes, can nations systematically make their universities into a super RU? The future that this scenario predicts is one in which national systems of education will intentionally, rationally, and to a degree centrally plan and create a super RU as a matter of national progress and pride. The public parts of the sytem will also either attempt to control or minimize private higher education and give preference to public institutions.

This version of the future sees private higher education as a potential problem for public parts of the system. Private higher education detracts from public funds in a zero-sum fashion leading to a weakening of public universities. Private higher education will also increase inequalities between institutions of higher education and reproduce social inequalities within the society at large, thus nations will hold on to idea of a national and very public system of higher education even in the face of growing mass higher education and the rise of the super RU as the dominate model for universities (Baker/Lenhardt 2008).

Those who predict this scenario hold the belief that while knowledge may be global, its production should be rooted in, and made to specifically address, the needs of particular nations and regions. This scenario also envisions public funds as the only ones that can be used for research. Therefore since super RU's make up a distinct class of mostly elite-oriented institutions, each nation must, if it can, mount one. But for a number of resource reasons, this will be a major challenge for many nations, thus the super RU model will only moderately permeate the rest of higher education. Quickly following this prediction, the question arises as to whether or not every nation can, or even should, have a super RU. And this leads to the corollary prediction that not all nations in the future will have a distinctly recognized super RU, and that worldwide this will be a very small class of institutions because there will be rationalized plans *not* to implement one, or not to implement very many. Related, there will be considerable variation in major aspects of implementation of the basic model across institutions, as higher education planners working with fixed public budgets will have to choose which parts of the model can be undertaken.

Future Scenario 2: Research University as a Transnational Idea

Unlike the first scenario, this one sees the future world of higher education dominated by an ever-globalizing model of the super RU supported by wide-societal legitimation in part accomplished through mass higher education. It will be driven by what in part has always driven the expansion of universities worldwide, even in times when there was some discontent - namely, the belief that regardless of national constrains, the university is the best application of higher education to social progress in all national societies. The super RU is an intensification of this idea. Whether or not the assumption holds true that the university in general and the super RU specifically are the best vehicle for social progress, most political and educational decision-makers have now adopted this assumption. Even though all recognize that knowledge production is global, the local (i.e. national) production of such knowledge is assumed to benefit the nation, and accompanying this assumption is that the university is assumed to offer the best cultural model to generate this knowledge, even if this is not always the case in practice (Meyer et al. 2007).

As the legitimation of the university deepens, it could pull private support into a larger system of higher education overall. This is essentially one interpretation of the trend in research and private funding unfolding in the U.S. Private higher education, and even the privatization of parts of public universities, could become a more symbiotic force than a zero-sum one.

Under this scenario all nations in all parts of the world will eventually be highly motivated to implement the model of the super RU, and with far less compromise. In this future, there will be more universities directly attempting to organize themselves as super RU's, and in fact the large popular literature on quality rankings of the research success among institutions already drives far more specific decisions in universities than many administrators like to admit. The flow of private funds into this effort is occurring in some nations, and it is a reasonable prediction that this will continue. It is interesting to note that all universities worldwide are included in these rankings without regard to any self-identification of their goals or intentions. This world and its immediate future assumes that the model of globally competitive universities is a given.

In this scenario the academic core, including faculty, students, curricular, administrators and even funding for scholarship will become even more transnational and open to private support. Of course, universities will continue to be tied to national contexts (this scenario does not see a world of UN universities) and public funding, but increasingly universities will legitimate and organize themselves transnationally and in terms of broad societal support including private funds. One obvious prediction to make is that the national systems of education which can maximize access to higher education will likely include *public and private* support, and ultimately more resources for universities to adopt the super RU model.

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