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GLOBAL CHALLENGES TO THE EUROPEAN UNIVERSITY

Universities around the world are taking on global dimensions and facing increasingly difficult global challenges. These challenges may even be more daunting in Europe, where long cultural traditions and the association of higher education institutions with national identity may be harder to break down. This paper examines how European universities have responded to six major challenges: (1) How has the Bologna process internationalized universities by lowering barriers to student mobility and standardizing degree structures? (2) While European universities have numbers of students from other European nations, how much have they internationalized in other ways? (3) How effective have European universities been at recruiting top students from around the world? (4) How has Europe responded to its relatively poor showing in the world rankings that have emerged in the last few years? (5) Are the low world rankings a result of inadequate investment? If more investment is needed, where will the money come from? (6) Do antiquated bureaucracies and the lack of autonomy of universities handicap European universities in meeting global competition? The paper concludes that on many dimensions, European universities have responded effectively to global challenges, but competitiveness is threatened by under-funding, a lack of institutional autonomy, and the lack of access for international candidates to the European professoriate.

INTRODUCTION

Universities around the world are taking on global dimensions and facing increasingly difficult global challenges. These challenges may even be more daunting in Europe, where long cultural traditions and the association of higher education institutions with national identity may be harder to break down [Economist 2005]. The first university emerged in Europe in the 11th Century and became one of the most enduring cultural innovations in world history. Since that founding, the European university has influenced the shape and developments of universities around the world. Until recently, it was possible for universities to exist largely in the universe of their own nation state.

The global forces pushing change are many. The democratization (or "massification") of higher education has produced burgeoning enrollments, challenging the capacity of university systems to respond. The rise of the knowledge economy has made university education more important for career success and higher education is more closely tied to economic development. Globalization over the past generation has thrust universities into a world arena and competition comes from for-profit universities as well as traditional public and private universities.

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Europe's first challenge was to break down barriers among its own member states. As Europe became more economically and politically integrated through the European Union (EU), student mobility between countries was restricted because of all the different rules, regulations, structure of degree programs found among European countries. Europe responded with ERASMUS and other programs, and the Bologna process attempted to lower barriers to student mobility by standardizing degree structures across the signatories. What has Bologna achieved? A second challenge concerns internationalizing campuses. While European universities have numbers of students from other European nations, how much have they internationalized in other ways? Would European universities want to internationalize in ways similar or different to the United States? A third challenge concerns the recruitment of international students. How effective have European universities been at recruiting top students from around the world?

A fourth major challenge concerns the new phenomenon of world ratings of university quality. Since the first world ratings appeared in 2004, they have been dominated by the United States and to a lesser extent by the United Kingdom, with few universities from continental Europe making the top 50 or 100. Are world ratings simply a fad or a serious indicator that something is amiss? As enrollment has skyrocketed across European universities, has the quality of research and instruction kept pace? A fifth challenge concerns funding models. Are the low world rankings a result of inadequate investment? If more investment is needed, where will the money come from, state subsidies, or from rising tuition and fees? The final challenge concerns institutional structure and the relation to governments. Do antiquated bureaucracies and the lack of autonomy handicap European universities in meeting global competition?

European universities are in the midst of historic change and that change is not always easily accepted. Traditionalists rail against universities losing their elite status and becoming obsessed with "relevance" rather than the purer pursuit of knowledge. Many do not want to see higher education as a global export that boosts domestic economies. As English becomes the lingua franca of the academy as well as business, many faculties at European universities fear that more programs in English will sacrifice national identity. How will European higher education meet these challenges?

THE EVOLUTION OF EUROPEAN UNIVERSITIES THROUGH THE BOLOGNA PROCESS

The University of Bologna lays claim to being the oldest higher education institution in Europe. Established in 1088, it was paid tribute in the naming of the Bologna Accord as a key factor in the development of universities in Europe and the world. The university received its charter in 1158, but its establishment dates back to 1088. Around the same time, University of Paris grew around the Notre Dame Cathedral in central Paris as a religious focal point and center of learning. Other early universities include the University of Al-Karaouine in Morocco or Al-Azhar University in Cairo, Egypt which may predate the oldest Western European universities. [Farid 2006]. The modern European university developed from the early universities of

Bologna, Paris and Oxford. It gave a greater formality and organization to teaching groups that had existed previously on a smaller scale. Less formal institutions revolving around a famed or noted individual and their teachings were commonplace among the classical civilizations through the middle ages.

With the success of European integration from the 1950s to the expansion to 25 members in the early 2000s, there was a desire to develop a more coherent and organized structure for higher education institutions across Europe. The Bologna process had several objectives: (1) to increase the competitiveness of the European Higher Educational Area, raising standards of education and producing greater uniformity for higher degree courses across national borders, (2) greater cultural maturity and improved language skills, and (3) producing more employable students who were prepared for a career in the increasing global job market.

The establishment of the Sorbonne Declaration in 1998 signaled a clear intent from the Ministers of England, Italy, Germany and France to move towards more coherent policy across Europe for higher education institutions. A three tier system for bachelors, masters, and doctoral degrees would become standard, the so-called 3-2-3 system. The Sorbonne Declaration acknowledged the need to change the format of higher education in Europe to bring a greater uniformity. The Bologna accord signaled recognition in Europe of the need for university education to be more relevant to employment and the increasingly global job market. This was not always a change that was acceptable to traditionalists. As enrollments grew, and much of Europe struggled with high employment, there was a growing belief the higher education sector needed to be more responsive to labor market needs. While it was still desirable for a university to retain a certain degree of individuality, removing barriers to international cooperation and student mobility was more important. [Guena 2001]

The Bologna Accord was designed to create greater parity across Europe through the establishment of standards, quality assurance, and cohesiveness to higher education in Europe. The desire to replicate some of the other successful features of the European Union, such as the single currency, was also part of the motivation for the European Higher Education Area. The Bologna Accord aimed to create a European Higher Education Area by 2010. Now, some forty-five counties have signed the accord.

All this has not been without controversy. The very nature of supranational authority and government in Europe has long been an issue for political discussion. The establishment of frameworks for a united education policy across Europe comes with many issues and potential conflicts. Disputes between political and academic sectors can be problematic with each having a vested interest in shaping the direction of national and supranational education policy. Just as with other moves towards Europeanization, reforms to create a European Higher Education Area raises a number of challenging political issues.

Rick von der Ploeg [2006] concludes that the Bologna reforms have produced a number benefits. He claims that the Bologna Accord:

- reduces the risk of choosing the wrong field and encourages students to take more demanding courses;
- encourages students to combine different fields of study;

- stimulates variety;
- encourages students to finish more quickly;
- engenders competition between programs;
- makes the Bologna countries more compatible with the rest of the world;

European universities have had a long tradition that has influenced universities around the world. The Bologna process has been an important reform, with many successes, and a consistency with Europeanization. Have European universities done as well in terms of global engagement?

FROM EUROPEANIZATION TO INTERNATIONALIZATION

What does it mean to internationalize a university? What are appropriate "global competencies" for students? In the U.S., the National Association of State Universities and Land Grant Colleges (NASULGC) established a set of internationalization goals for American public universities [NASULGC 2007]. As part of their criteria for judging global learning, students should:

- have significant exposure to international, comparative, and global content in their curriculum;
- have access to area studies and international studies and study abroad that is integrated into their curriculum;
- speak a second language;
- have an international learning experience;

University campuses should:

- become international communities;
- establish benchmarks to assess progress for achieving international goals;
- facilitate international scholarly collaboration;
- sponsor and appoint visiting scholars;
- be engaged with development issues in the world;

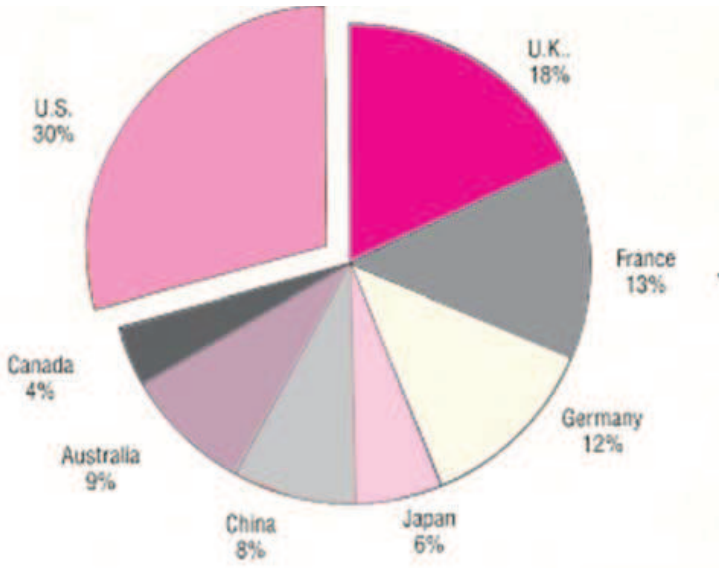
Would standards like this make any sense in a European context? Not completely, because of the mix of languages and culture in Europe and the nature of degrees. European students certainly surpass American students in terms of language proficiency, with many students multi-lingual. European curriculum is very different than curriculum in the United States, with more emphasis on advanced study in a single subject than general education. That would make it more difficult (and probably unwanted) to try to insert international dimensions into the curriculum such as, for example, having an international course requirement outside of the field of study. European universities may have an advantage over American universities in terms of study abroad as well. Increasingly, programs of study require a year abroad, such as at the Sciences Po institutes in France. Since 1987, over 1.5 million students have benefited from ERASMUS grants – nothing comparable exists for U.S. students [Forrest 2008]. Most of those students stay within the EU, however.

European universities do not score as well in terms of the mobility of the professoriate. Some argue the market for professors in much of Europe is still closed to outsiders, where good scholars are often skipped over for less qualified candidates with political connections. One critic writes, "In France, Italy and Germany, out-

siders and foreigners find it difficult to get a chair, and otherwise they get scared away by stifling bureaucracies." [von der Ploeg 2006] The U.K., Scandinavia, and the Netherlands, he observes, have more open recruitment. European universities have some advantages in terms of internationalization over the U.S. and the rest of the world, but some challenges remain.

GLOBAL COMPETITION FOR INTERNATIONAL STUDENTS

Another dimension of internationalization is attracting international students, which provides diversity in classrooms and exposes native students to world cultures. It can also be an important source of revenue for strapped universities. In terms of attracting international students Europe remains extremely attractive. Figure 1 shows how the "pie" of globally mobile students was divided in 2006. The United States ranked first, attracting 30 percent of the students. But the second, third, and fourth most attractive destinations for international students were the UK, France, and Germany. The United Kingdom, helped by the fact that programs are offered in English, is the country in Europe that has attracted the largest number of non-European students. They have been aggressive about marketing British universities in North and South America and particularly in Asia, the biggest source of international students. When we consider the proportion of international students, shown in Figure 2, the UK, France, and Germany pass the U.S. and trail only Australia, which has also aggressively recruited international students.



Source: Institute of International Education [2007: 30]

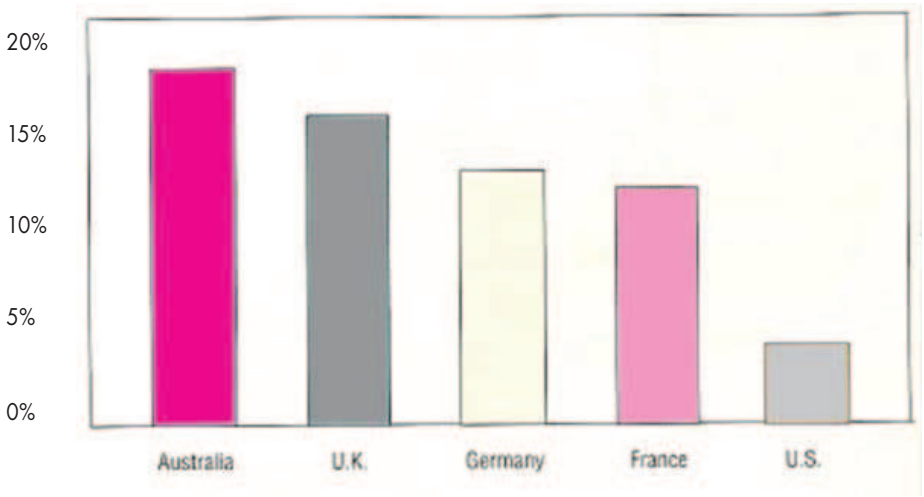
Figure 1. Share of International Students Among Leading Host Countries

Recruiting international students has become big business worldwide because many universities consider it a win-win situation, internationalizing campuses while adding badly needed revenue. In the UK, by 2007, one in seven students was from overseas. [BBC 2007] This has raised concerns about the loss of places for domestic

students and classroom overcrowding. In the United States, international students add $11 billion to the U.S. GDP. [Institute of International Education 2008] International education organizations in the U.S. are concerned with staying competitive with Europe. Some are concerned that the Bologna Accord makes U.S. universities less attractive, and that the U.S. needs to adapt to make itself compatible with Europe. As one commentator wrote:

> Europe (is) a most formidable competitor for the United States when it comes to the recruitment of international students and the expansion of international competencies for domestic students and faculties if the Bologna Process continues in its current very dynamic momentum. (...) A student who might once have gone on exchange to the United States (...) is now much likely to go to a European country.

Indeed, Europe has been extremely competitive in recruiting international students both through explicit government strategies and through educational reforms.



Source: Institute of International Education [2007: 30]

Figure 2. International Enrollment as a Percentage of Total Enrollment

THE CHALLENGE OF INTERNATIONAL RANKINGS

One of the biggest changes in global higher education is the emergence of world rankings of universities. For better or worse, it appears that rankings are here to stay and can have an impact on applications and admissions. The first and most important of the rankings is the Academic Ranking of World Universities developed by Shanghai Jiao Tong University (SHJT), which was originally designed to measure the gap between Chinese universities and the rest of the world. However unintentionally, the rankings quickly had a more profound impact on higher education worldwide. In Europe, in particular, there was surprise and dismay at the relatively poor showing of European universities. In the initial Shanghai rankings, only two European universities made the top 20 – Oxford and Cambridge Universities – both in the UK. One was in Asia – Tokyo University – and the rest

were in the U.S., led by Harvard, Stanford, California-Berkeley, and MIT. The rankings have changed little since 2004. In the 2007 rankings, again, no continental European university made the top 25. The highest rated continental European University was Swiss Federal Institute of Technology at number 27. [Shanghai Jiao Tong University 2008].

The SHJT rankings are based on objective measures of publication in prestigious refereed journals, citations in the Science Citation Index (SCI) or the Social Science Citation Index (SSCI), number of Nobel and Field prize winners, number of publications in the journals Nature and Science, and the size of the university. This has given rise to charges that the ranking system heavily favors natural and physical sciences at the expense of social science, humanities, and the arts.

The second prominent set of rankings are the Times Higher Education QS – World University Rankings. The THES-QS rankings are based largely on subjective factors – 50 percent of the total score comes from reputation. The rest is based on student/staff ratios, amount of international students and staff, and citations. Under this system, European universities were rated more highly, but the top spots still were dominated by the U.S. and U.K. universities. In the 2007 THES-QS rankings, Oxford and Cambridge tied for second, the University of Edinburgh was 23, Kings College London was 24, and Ecole Normal Superior in Paris was 26, the highest rated continental university in 2007. [THES-QS rankings 2007]

These two have opened the door to a host of new world university rankings including the U.S. magazine Newsweek, that pioneered controversial rankings of American universities. It offered its world ranking in 2006. A unit of the National Research Council of Spain has come up with the Webometrics Ranking of World Universities based on the volume of web content and the visibility and impact of web publications. L'Ecole Nationale Superieure de Mines in Paris proposed a Professional Ranking of World Universities based on the number of Chief Executive Officers in the Fortune Global 500. The University of Leiden was in the process of developing its own ranking system.

World ranking systems have been very unpopular, in Europe especially, but to some degree all over the world. Professor Benedetto Lepori of the University of Lugano points out that at best, rankings can only use proxy variables to measure quality. He writes, "It is not surprising that rankings are subject to a number of methodological problems and shortcomings as well as limited availability of data..." [Lepori 2008] However, some higher education experts around the world believe that the shortcomings of some of the rankings are greater than others. Professor Simon Marginson from the University of Melbourne, argues that the SHJT rankings are much more credible than the THES-QS rankings. He explained, "The SHJT ranking is largely valid...but I don't put any real value on the Times results – they go up and down very fast. Institutions that are in the top 100, then disappearing from the top 200 two years later." [GlobalHigherEd 2007]

The University of Leiden held its second international symposium on rankings in 2007, and reached several conclusions. First, ranking is here to stay and universities need to deal with the impacts of ranking because they are being discussed by the public and appear to be having an impact already on student recruitment. Second, most Europeans and educators around the world believe that the current ranking

systems are badly flawed instruments and need improvement. That suggests that there will be more ranking in the future rather than less. Third, the conference concluded that there are new metrics being developed that would be improvements over what is currently available. [Coelen 2007]

One of the challenges for European universities operating in this global environment of rankings will be to make them work to their advantage. First, the poor showing could provide evidence that Europe is not investing enough in higher education. Second, it provides European institutions an opportunity to devise their own measures of educational achievement, by discipline, or on a more differentiated basis than SHJT or THES-QS. In any case, ranking are likely to remain important and controversial.

THE CHALLENGE OF INVESTMENT AND UNIVERSITY STRUCTURE

European universities' performance will be increasingly compared to university systems around the world. Being the oldest is not sufficient for success in the 21st century. Some Europeans attribute the low world rankings of European universities to the fact that they invest far less in higher education than American universities. Total private and public spending on higher education in the 25 member EU a few years ago was 1.3 percent of GDP compared to 3.3 percent in the U.S. [Aghion et al. 2007] The difference in spending per capita is even greater, with the U.S. spending approximately four times more per student. Of course, much of that spending comes from private sources, from families that have lower tax burdens than Europeans who pay more for public services. Nonetheless, the difference in investment in higher education is enormous, and Europe faces a daunting challenge in deciding how or whether to catch up.

Philippe Aghion and his colleagues analyzed the research performance of European countries compared to U.S. universities using the SHJT data, and their relationship to funding levels and governance structure. [Aghion et al 2007] They found that among the top 50 universities in the U.S. and Europe, the gap is large in terms of research performance per faculty member. Looking at a bigger group, the top 500 in each region, the differences were not as great. This leads them to conclude that quality variance among universities is less in Europe than in the U.S. Within Europe, the U.K., Switzerland, and Sweden do the best when compared to the Americans. Among European universities, the authors found a correlation between funding levels and research performance.

Aghion and his colleagues also tested the relationship between structure and performance – specifically, the amount of autonomy (lack of state intervention) enjoyed by European universities. They found that excessive state control of universities, even private universities, hurts performance. They conclude, "Autonomy is good for research performance. Among our different indicators of autonomy, the variable that 'wins' in our regressions is budget autonomy, that is, whether or not the university requires Government approval." [Aghion 2007: 2] They suggest that Europe should invest more in higher education and to make that investment most effective, allow universities to become more autonomous and charge higher fees.

This is a period of change as the issues of funding and structure are being debated across Europe. Because of the need for additional funding, universities are turning to higher student tuition and fees. Putting the burden on students and their families is extremely unpopular across Europe where public education was free in many cases until recently. But with the exception of the Scandinavian countries who already invest heavily, most European governments are not in a position to provide the needed infusion of cash. Many are already concerned about high tax burdens stifling economic growth, and a number struggle to maintain EU deficit limits of 3 percent of GDP. As a result, increasing tuition and fees seems the only solution to stay competitive globally, but in many countries, political pressures keep public officials from allowing universities to charge the fees they need to excel.

As universities have opened their doors to more students, universities have changed from the elite enclaves they once were. Yet some universities still cling to centuries-old traditions, such as the requirement that every Italian student still take an oral exam by a full professor. Cultural conservatives believe that modern higher education's values of democracy and utility are, as one academic wrote, "degradations of the academic dogma." [Economist 2005]. Elitism and a disregard for practicalities such as employability will not lead to positive changes for European universities.

CONCLUSION

European universities have a distinguished and historic past that influenced the shape of the development of universities around the world. Today, European universities must confront a set of global challenges and make difficult decisions about the future. Increasingly it is recognized that investment in higher education is essential for future prosperity. Professor Raimo Vayrynenn, President of the Academy of Finland writes: "(...) the global system of science and technology is becoming increasingly layered; high value-added activities are still located in a few industrialized countries. This is important for the very simple reason that a high rate of investment (...) is the best assurance for the economic and productivity growth." [Vayrynen, 2006]

How will European universities respond to the global challenges to higher education? The Bologna process has already been successful and holds great future promise for mobility among European students and other regional neighbors. These successes have been noticed in the United States and around the world. A new report was issued in 2008 by the Institute for Higher Education Policy entitled, "The Bologna Club: What U.S. Higher Education Can Learn From a Decade of European Reconstruction." It notes that in addition to the harmonization of degree structure, Bologna has introduced accountability into higher education by clarifying the purpose of each degree and keeping students on track to graduate. The analyst sees Europe as having "a more intuitive and sensible approach to defining learning outcomes." [McMurtrie 2008]

Europe has also succeeded in internationalization and in attracting international students to their universities. European universities have been among the most

attractive destinations in the world, including students from Latin America, Asia, and Africa. International partnerships and collaborative degree programs are increasing in Europe, and many universities in the Americas and Asia are looking to partner with European universities. Where European universities may still be behind is in terms of national barriers to international faculty and researchers gaining permanent positions.

Perhaps the greatest challenge is maintaining quality as higher education grows. While rankings may have shortcomings, they also have some validity. To respond effectively, funding models and political/institutional structures must be carefully examined. Higher tuition need not close opportunities for low income students and a return to an elitist system if it is matched with a system of income-contingent grants and loans instead of student grants for everyone. Reforms to make universities more autonomous from national governments and bureaucracies will also be difficult, as public officials resist giving up power over universities.

The desire for prestige is strong in higher education, in Europe, as elsewhere. An exclusive focus on measures of productivity related to ranking will ill-serve most universities in the world. They will be left out of the elite group and perhaps will have sacrificed teaching and research quality, their identity, and mission. If a core of global "super-universities," emerges, it will be but a tiny portion of the worlds' universities, and will not solve the challenges of higher education in the 21st century. Universities not among the "super-universities" can still be excellent institutions, perhaps more specialized, more focused in mission. For most universities, improvements in quality and performance can come without chasing rankings. The new member states in the EU have made dramatic progress in the nearly 20 years since the fall of the Berlin wall. It makes sense for them to continue to invest in higher education for social and economic reasons, seeking excellence without obsessing about global rankings.

European universities must balance changes that will make them stronger and more competitive, but yet still maintain their national or regional identity and mission. There are examples throughout Europe, such as Tilburg University, where this has been done successfully. At Tilburg, English is the common language, but they aspire to be a European rather than American-like university, while still serving a regional mission in the Netherlands. [Tilburg University 2008]

Becoming a global university brings benefits but has risks. In a 2005 international survey of universities, 96 percent of respondents from 95 countries said that internationalization brings benefits to higher education. At the same time, 70 percent said that there were substantial risks. [Knight 2005] The greatest benefits, according to the survey, were a more internationally-oriented staff and students, and improved academic quality. In terms of risks, respondents named a brain drain, commodification, commercialization, elitism, and a loss of cultural identity as potential risks. As European universities confront these challenges, they increasingly recognize that full engagement in the world is essential and being competitive globally in terms of the quality of higher education will have profound impacts on the economy and the future of Europe.

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