ABSTRACT
In the United States, developing human capital for both economic and social benefit is an idea as old as the nation itself and led to the emergence of world’s first mass higher education system. Now most other nations are racing to expand access to universities and colleges and to expand their role in society. Higher education is growing markedly in its importance for building a culture of aspiration and, in turn, the formation of human capital, the promotion of socioeconomic mobility, and the determination of national economic competitiveness. This paper outlines a convergence of approaches toward building what I call "Structured Opportunity Markets" (SOM) in higher education — including diversified providers and expanding enrollment and program capacity. Increasingly, higher education systems in developed and developing nations, and in some cases, supranational entities such as the European Union and emerging cooperation among nations in South East Asia, will move to most if not all of the components of SOM, in part influenced by a global process of policy transfer. Those nations and regions that do not pursue major components of SOM will be compelled to present rational arguments in both domestic and international forums as to why they are not adopting some aspects of the model. The paper concludes by arguing that while the US offers structural and operational models for many evolving national higher education systems, the EU offers important insights on how to pursue higher education reform in the modern and increasingly competitive global context.

A first priority for countries should be to develop a comprehensive and coherent vision for the future of tertiary education, to guide future policy development over the medium and long term in harmony with national social and economic objectives. – Tertiary Education for the Knowledge Society, IMHE OECD June 2008

Governments are having an epiphany. They are increasingly recognizing that their social and economic futures depend heavily on the educational attainment of their population, and as a corollary, on the size and quality of their higher education institutions and systems. Within this relatively new policy and economic environment, the command economy approaches to creating and regulating mass higher education that once dominated most parts of the world are withering. What is emerging is what I call “Structured Opportunity Markets” (SOM) in higher education — essentially, a convergence, in some form, in the effort of nation-states to create a more lightly regulated and more flexible network of public higher education

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* This research paper reflects a pending chapter in the book Access, Equity and Capacity in Asia Pacific Higher Education (forthcoming Palgrave Macmillan), edited by Deane E. Neubauer and Yoshiro Tanaka and a presentation made at an international conference held at Cheng Chung University – Taiwan co-sponsored by the East West Center; a summary of its themes was published earlier in the online Global University Network for Innovation newsletter (UNESCO). My thanks for the input of Richard Edelstein, Xu Dan, Ma Wanhua, Roger Brown, and Pat Pelfrey on earlier drafts.
institutions, including diversified and mission-differentiated providers, new finance structures, and expanding enrollment and program capacity.

We are in the midst of a monumental shift in the value placed on higher education by nations and citizens of the world, and in the quality and structure of national systems. So where is this all headed? The following outlines the major characteristics of the SOM model, a brief discussion of the reasons why governments are pursuing higher education reforms that reflect this model, an outline of important policy environment variables that influence these reforms (such as demographic and cultural factors), and finally, why Europe and other parts of the world are replacing the US as a model for restructuring and expanding higher education systems. My objective is to create a relatively simple way to interpret the rapidly and often complex changes occurring on a global scale. Hopefully this will aid scholars and practitioners often in the midst of a seemingly localized period of reform and restructuring of their higher education systems.

Increasingly, institutions and developed and developing nations, and in some cases, supranational entities such as the European Union and in Asia and South America, will move to most if not all of the components of SOM, in part influenced by a relatively new and vibrant global process of policy transfer. Those that don’t will be compelled to offer in both domestic and international forums clear reasons why they are not adopting some aspects of the model. One important result of this debate within and among nations is the emergence, in some form, of more comprehensive and perhaps eventually more coherent visions of the structure and respective roles of higher education within their societies.

A. SOM CHARACTERISTICS

The components of a SOM are not so much a reality in much of the world, but a powerful model that is slowly emerging, shaped by universal ideas on what works most effectively in the pursuit of both broad access and high-quality and productive universities and colleges. Reforms by governments and educational institutions adhere to local political and social cultures, but they are increasingly informed and shaped by powerful ideas on the successes, and failures, of other nations or by successful institutions such as MIT or Berkeley, or California’s pioneering idea of the community college.

There is also substantial political advantage in pointing to the policy advances of competitors, helping to break down what were often, in the past, primarily intra-national debates that, sometimes, openly rejected organizational approaches and ideas that were deemed “foreign” – a sentiment that often found favor in nations that had experienced colonial pasts.

Some have called this the “Americanization” of higher education, in part because of the iconic and, dare I say, somewhat romanticized advantages of the US model. But I would argue that that

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characterization is a misnomer, in large part because some of the most dramatic higher education reforms are occurring in other parts of the world, providing the new models in key areas such as access and financing. What is emerging is a much more dynamic and global policy-transfer environment.

The structured opportunity market is my way of attempting to capture some of the seemingly universal aspects of this quasi-process of convergence in national approaches to higher education – always mindful that similar broad approaches will not result in a single international model. Political culture and socio-economic factors, along with the legacy of past institution building, are too powerful and important for that. At the same time, politically and economically unstable parts of the world will lag considerably, seemingly left out of the globalization process.

With those caveats in mind, I will say that in ten or so years, most national systems will include the following elements of SOM, bolstered in no small part by pan-regional efforts at coordinating national higher education systems now emerging. My attempt here is to take a look into the future that, admittedly, is already partially fulfilled in many parts of the world, but certainly not all. The characteristics of the SOM model outlined in this essay offer a tool, or a map, for gauging the respective path and progress of current national higher education systems.

1. Shaping the Higher Education Market

In many parts of the world, national systems of higher education have experienced three phases of modern development. First, in the founding era, tertiary education was largely an elite function, ensconced in national culture and expectations, with few entering higher education, and catering largely to the training of a privileged social class for government service and professions.

The second phase was characterized by a substantial redefinition of higher education to engage and enroll a much larger part of the population, which included national initiatives to rapidly establish new institutions, reshaping old, once elite institutions, and thereby forming an often uniform and not very differentiated mass ecosystem of higher education. This higher education ecosystem remained nationalistic: degree programs specific to a national market, students with few if any opportunities outside of their own country for educational opportunities or jobs, and national universities operating without the reference of international competitors in teaching or research. This paradigm offered (and still offers) usually only one or two paths to higher education for a student, with selection determined by state sanctioned tests at a specific and often young age, and which often reinforce class and socioeconomic distinctions in society.

What is emerging, in the third phase, the SOM model, is a decidedly more differentiated, consumer and market-oriented approach to expanding access and managing enrollment, with various budget and structural limits, and with one goal of supporting greater socioeconomic mobility in society, and economic development. It also includes an awakening to the global nature of higher education, where the market for students, faculty, scientists, and academic and science and technology networks increasingly operate on an international level. This SOM model includes:

- The fostering of greater **Mission Differentiation** among existing and future higher education institutions and, in turn, **Alternative Paths for Access to Higher Education**.

Market and government-induced Mission Differentiation is the building block for creating a more dynamic set of paths for students to enter and succeed in postsecondary institutions. Where there once was a monolithic system of a network of elite, socially privileged universities and perhaps a set of vocational institutions, now a greater variety of institutions with different roles are redefining the higher education system of most nations. This development holds the potential of students gaining a better environment for their interests and preparatory skills with specific academic programs in tertiary institutions. It also promises greater institutional focus on their role in a larger system of higher education.
In short, most nation-states are beginning to realize that not all universities should be all things to all people, but more specialized within the broad range of needed academic institutions, including not just comprehensive research universities, but teaching institutions with a liberal arts bent, or those providing high quality applied training programs in professions such as engineering, or those that provide vocational programs and language and enculturation curriculums, or some combination of all of these. The next step in this sometimes extremely difficult process of reshaping national higher education systems is for public institutions (still the main provider in most nation-states) to further shape a distinct and practical mission within their respective markets, and to seek excellence in that sphere. Many institutions already do this, but there is much room for academic leaders to further refine and take pride in their role.

Mission differentiation also holds the promise of containing costs, for the individual and governments. The egalitarian desire has been to create public universities all with the same mission and range of programs, and claim on public resources. But few if any nation-states can afford such a model; nor can it produce high quality institutions across the board.

Finally, mission differentiation, along with the transfer/matriculation function (discussed in section 4), holds the promise of more points of entry into higher education, formal and more complimentary links between institutions, and, ultimately, more coherent higher education systems.

At the same time, there is no uniform national model for how this differentiated system should be constructed. The historical development of existing tertiary institutions, and the varied labor and socioeconomic needs of individuals, along cultural proclivities, has and will continue to create different approaches among nations.

• A corollary to the redefining of access to higher education is the establishment or expansion of Open Access Providers by an increasing number of nations. In the pre-SOM era, most nation-states approached mass higher education by opening and expanding an existing network of largely public universities. Now they are developing more broadly accessible forms of tertiary education via public institutions or through the private sector that range from vocational, adult learner, and pre-professional, to courses and programs that can qualify a student for university programs.

• Providing significant Institutional Autonomy for Public Higher Education to manage academic and financial affairs, and to determine which ways to best interact with society and the private sector, will likely prove a deciding factor in which nation-states build universities of the highest quality.

Even nation-states with a tradition of command economies and heavy government regulation of higher education are recognizing that nurturing the university sector, and the development of internationally productive and competitive higher education institutions, requires greater freedom for institutions to manage their own activities. This manifests itself in a number of ways in both financial and academic affairs, but a primary gauge of the quality of an institution is the degree of freedom afforded to faculty, and the collective ability of those faculty and academic leaders to, for example, say “yes” to private sector collaborations, and to say “no” if the arrangement infringes on academic freedom and management of the institution.

• Accountability in Academic Quality will increase as a value as institutions become more autonomous, essentially offering governments, and the public, evidence of proper stewardship by public and private universities and colleges. Much of the pressure for evidence of improved quality in academic programs and efficiencies (such as time to degree, or cost containment) is external – entailing measure and demands made by governments and in some instances the public or by
commercial rankings of institutions. But the key for quality assurance will relate to creating a **Culture of Institutional Self-Improvement** that is largely internal to universities.

The need to be more publicly accountable has led to an increasing array of regulations by nation-states, some of which are extremely interventionist — such as in England where the combined force of the original formulation of the Research Assessment Exercise (RAE) and the Teaching Quality Assurance (TQA) created accountability regimes of tremendous complexity and, perhaps, limited actual impact on institutional self-improvement. This initial foray in England has already lead to significant reflection on the unanticipated responses of institutions to game the assessment and the quality assurance regime imagined by government ministers and their staffs, perhaps leading to a major reformulation and even discussion of abandoning the RAE. Yet governments continue to experiment with top-down regulatory reform, sensing it is the only path toward reshaping the behavior of institutions and to gauge progress.

Looking at the latest crop of quality assurance regimes, Roger Brown has argued that we are now in a phase in which quality assurance is less about self-improvement, and more about improving scores and rankings outlined as priorities by governments and commercial ranking publications.¹

For all of these reasons, institutions themselves need to be more creative and collaborative with other like universities to expand the dialogue about accountability so that it is more a bottom-up process than, thus far, a largely top-down intervention by government. In the future, mature systems of higher education will be characterized increasingly by **internal quality measures**, in which institutions have their own mechanisms (like regular academic review of programs) and internal cultures of self-analysis and self-improvement.

One important question is whether government induced Quality Assurance measures and demands, along with government and commercial rankings, can ultimately promote both internal quality efforts and mission differentiation. Many external demands tend to create uniform notions of institutional quality and performance, and ignore the nuances of mission differences — including the mix and type of academic programs and the demographic characteristics of students.

- **Allowing for both a Well-Regulated Nonprofit and a For-Profit Private Sector.** Nations without quality nonprofit and for-profit institutions suggest they suffer from a lack of both flexibility and an understanding of the value of an array of higher education providers. On the other hand, nation-states that have a proliferation of for-profit higher education institutions generally indicate a lack of significant efforts to build their public mass higher education systems. Overdependence on generally high-cost and moderate- to low-quality for-profit institutions, which primarily seek profit by offering services as cheaply as possible, generally suggests a failure by nation-states to aggressively expand their public mass higher education systems.

- **Supporting Institutional and Regional Experimentation** is also a vital component for nation-states. They must be ready to support innovative approaches to expanding access, new institution building, fostering high-quality research, and greater levels of interaction with local, regional, national, and global businesses. This often requires a redefinition of the relationship of national governments and their ministries with regional governments, and with institutions. For example, allowing for greater regional experimentation — often a difficult political process — provides for a greater sense of competition among regions and, in turn, adoption of best practices as they emerge.

- Particularly at highly selective public universities, there is a growing effort at some form of **Expanding Access to Disadvantaged Groups** (what is termed **Affirmative Action** in the US, and **Positive Action** in

the UK) with the purpose of accounting for socioeconomic and racial factors in admissions, and expanding the number of disadvantaged students or those with specialized talents.

Simplistic approaches to expanding access to these groups include quotas; more sophisticated approaches look at the variety of factors that gauge not only the likelihood of a student succeeding and graduating from a university, but also: a) their ability to overcome hardship, their motivations, and their academic and civic engagement once at a university; and b) how a public university might best shape and influence the society it serves, including the goal of greater socioeconomic mobility.

Generally, such national and institutional efforts at Affirmative or Positive Action will evolve from a quota approach seen in its most stark example in India for designated classes of people, to the more nuanced approach which attempts to incorporate values related to an increasingly complex understanding of individual merit, and a student’s potential to succeed in the academy and as a contributor to society.

• Most nation-state efforts to build the vibrancy of their higher education systems will include a concerted effort to **Enroll International Students** and seek new national policies to **Retain the Best and Brightest Students in Their Own National Economies After Graduation**.

Many components of the structured opportunity market relate to a concerted effort to not only generate native talent, but also to retain high-quality students who, increasingly, have international options and recognize quality institutions as having high levels of autonomy and academic freedom, or greater financial resources and international aspirations. At the same time, international talent, both in terms of students and faculty, will increasingly evaluate not only the vibrancy of selective research universities, but also the quality of national systems of higher education, as important in their decision where to go.

The global nature of higher education markets is causing nation-states to embrace three values. One is to see higher education as a critical economic asset for “export” – principally international students enrolled domestically, but also in off-campus centers, as a means to attract talent and businesses. Two, nation-states must view higher education as part of their larger foreign policy regimes, and as part of growing reciprocal relationships necessary for building global networks of talented students, faculty, and professionals. And third, this requires the building of quality institutions, with the ability to grow in enrollment and program capacity.

• As nation-states rapidly expand their higher education systems, there must be concerted **New Efforts at Coordination Between Institutions**. This can be manifest in dual-enrollment programs, the sharing of facilities, and in larger policy realms such as the creation of shared admissions requirements or a single administrative unit for applying to multiple institutions, as in England.

• While higher education remains the prerogative of nation-states, increasingly the process of policy formation is including new **Pan-Regional Policy Regimes** – concerted international efforts by specific nations in a region to coordinate reforms, increase the interchange of students and academic staff, create new research funding mechanisms, and improve the quality, prestige, and competitiveness of that region’s universities.

The Bologna Declaration is the clearest example of pan-regional cooperation, with significant influence on the still emerging “European Higher Education Area,” along with the European Commission’s recent development of a “Seventh Framework” for central EU funding of research in universities on a competitive basis.

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The example of the EU, along with the influence of the establishment of formal regional economic cooperation agreements and associations, is leading other major regions, and specifically national ministries of education, to consider the benefits of more coordinated, pan-regional cooperation – in part, because the nations in each region often face similar challenges in reforming their higher education systems, and because national governments are increasingly seeking collaboration and ideas from abroad in a more systematic way.

A collection of South American nations seeks Bologna Declaration–like coordination. And there is an emerging Asian “Higher Education Zone” that is being promoted by the Association of Southeast Asian Nationals (ASEAN), and an increasingly active Southeast Asian Ministers of Education Organization (SAMEO). ASEAN and SAMEO have focused some of their initial efforts at creating an Asian Erasmus Plan (AEP) – the European program to facilitate international student mobility. But more is surely to follow.3

In a sign of shifting global power, the “Europeanization” of global higher education is, in fact, being promoted by organizations such as the European Commission, the German Academic Exchange Service (DAAD), the Netherlands Organization for International Cooperation in Higher Education (Nuffic), the British Council, CampusFrance (formerly EduFrance), and the EuropeanAid Cooperation Office by encouraging international forums and national and institutional cooperative agreements. There are no similar efforts by US government agencies that, in contrast to much of the developed and developing world, continue to view higher education as a domestic policy arena.

2. Higher Education Funding

Increasingly relying on diverse funding sources, including a Moderate Fee, High Financial Aid Model, will be a major determinant for pursuing both a high-access and high-quality higher education market. Creativity in the funding of higher education is extremely important and is, in fact, a determinant of the future vibrancy and efficiency of mass higher education systems, and all forms of postsecondary institutions.

• Seeking Diversified Institutional Funding Sources, and not simply relying on government to provide the vast majority of funds, as in the initial era of building most mass higher education systems, is already widely understood as a major new development vital for most higher education institutions — and in particular research universities.

Government needs to be a consistent provider of a substantial portion of the costs, and make steady investments in both operating and capital costs, preferably in relationship to student enrollment workload and other factors. But vibrant higher education institutions will seek other sources; those that do not, or are restricted by governments and/or political cultures fixed solely on government sources of funding, will be much less competitive than in other countries or regions.

• Competitive Funding for Research is replacing or supplementing previous funding systems for research that essentially provided block grants to institutions and often general allocations to academic departments and faculty. While national ministries and other granting agencies for basic academic research often provide funding to specific institutions for targeted research, such as nanotechnology or energy, increasingly nation-states are moving toward providing some form of open competition that is not targeted to any specific field, and are judging the merits of proposals through a process of peer review. The European Commission’s new Research Council, reflecting some aspects of the US’s

National Science Foundation, will provide peer-review funding of proposals, with potentially profound influence on the behaviors of Europe’s academics.

• Most nation-states will pursue or are pursuing a **Moderate Fee and High Financial Aid Model**, with the fundamental and vital concept that tuition and various fees form a means for income redistribution and for supporting lower-income students and others from disadvantaged backgrounds.

Charging tuition is influenced by the idea of assessing the cost of education for the average student at an institution and the proper distribution of that cost to society, to institutions, and to individuals who benefit from access to this public good. For most institutions, fees will come to represent between 10 to 30 percent (or higher) of an institution’s total revenues.

In many nations, there is vehement opposition to any form of fees for higher education, reflecting the values of a largely post–World War II culture in places such as Europe that views education as a public good that should be fully funded by governments. But that ethos is eroding; the path breakers include Australia, England, Germany, the Netherlands, and perhaps soon France—all nations where the support for university fees via legislation would have, at one time, been the effective end of a politician’s career.

The key to any fruitful discussion of the role of fees is to clearly understand that it is not just about generating new revenue; any or all discussion and analysis of the introduction of fees, or their expansion, must be accompanied by their potential use to substantially defray costs for underprivileged students and other targeted populations.

Indeed, clearly linking the goals of increasing funding, via tuition or other sources, with access is extremely important both for keeping the larger mission of institutions always in the forefront, and for political reasons: fees must equal, in some form, a redistribution of wealth and privilege, a concept that helps expand the political viability of new forms of or increases in fees and tuition.

• At the same time, nation-states must seek relatively simple and, most importantly, **Transparent Admission and Financial Aid Policies**. This returns us to the issue of institutional coordination and collaboration. If admissions policies, and most financial aid, are largely at the discretion of individual institutions, the result is a confusing tangle of requirements for students, and a path to higher education that has a larger negative effect on students from less privileged socioeconomic backgrounds.

• Finally, a key component for pursuing a greater diversity of funding sources, and an infusion of funds for enrollment and program growth, is more liberal **Tax Policies That Benefit Higher Education and Students**. Many nation-states are beginning to view their tax policies as not simply a tool for generating revenues for government-funded services, but as a major influence on markets and individual behavior. Tax credits for students and their families will grow as a method to support lower-income families, and to promote access to higher education.

Many nation-states will also provide, or are beginning to include, tax credits for individuals and corporations for funding university-based research activities and capital costs, or for establishing and funding endowments. Beneficial tax policies will increasingly become a part of an expanded portfolio of funding sources for institutions.

3. **Institutional Management and Governance**

Elements of the emerging SOM model require much greater institutional autonomy that essentially shifts increased management authority to the internal academic leadership and organization of individual higher education institutions. As noted, however, this shift in stewardship must be paired with accountability in
performance and, ultimately, mature internal management capabilities of universities and other tertiary institutions.

The building of mass higher education systems has in the past focused largely on macro issues of organization and funding; those issues remain, but increasingly funding and performance (in research produced, in patents filed, in graduates with global-level skills) will be tied to issues related to the quality and vibrancy of institutional management and culture.

Ministries of education have a predilection for setting top-down policies to encourage or enforce quality. But such interventions have had, and will have, in the long run, limited success – indeed, they often are detrimental, creating bureaucratic regimes that thwart the limited time and energy of academics and institutional staff.

The ultimate objective should be to help institutions more clearly define their missions, and to then allow for internal management and institutional cultures devoted to institutional self-improvement. The rationale for providing greater autonomy is precisely to allow for improved internal management. There are a number of widely understood characteristics for better institutional management that are outlined below. Those universities that have developed with very limited autonomy, and have long been subject to highly restrictive and prescribed government policies, will find it a more difficult path to create strong institutional management capabilities.

- Nation-states increasingly recognized the need for institutional leadership that includes a CEO. In many countries, the role of the president (or the equivalent title of rector, vice chancellor, warden, etc.) has been extremely weak, largely either a ceremonial position or a temporal, elected position in the university community with no distinct authority to manage an institution. Similarly, the extensive, often invasive, authority of ministries and rules and regulations generated by national governments on university activity has provided little room for institutional governing boards of any significance to arise.

This is changing in most parts of the world, with formal government policies creating broader authority for university presidents, including greater authority in budget management and administrative authority.

- Institutional Governing Boards for national universities will also grow in number and importance. Often first created to provide a link to businesses and other university constituents, and to raise funds, governing boards are increasingly becoming more important in setting institutional policies and performance goals, with direct powers for appointment and determining the longevity of the president and other academic leaders, and, in some nation-states, partially replacing the more distant, more bureaucratic, and often less nurturing ministries.

- Another evolving component in the management of universities in an era of greater autonomy and expectations of self-directed improvements in quality and efficiency is establishing new norms in Faculty and Administrative Shared Governance. Depending on the cultural traditions of various nation-states, the distinct role of faculty in the academic management of what are often rapidly growing institutions is a vital issue that will directly relate to the long-term quality and performance of universities.

With the increased authority of academic leaders, such as the president, there is a need for a clearly articulated role for the faculty, particularly in issues related to the academic activities of a university, including academic programs and curriculum, academic advancement, and admissions policies (where there is institutional discretion). Generally, higher education institutions must have a formal faculty representative organization (a “faculty senate” or equivalent) with authority over its own self-
organization, and stated areas of primary authority (decisions related to academic programs), shared authority (faculty appointments), and consultative rights (major budget decisions related to academic programs).

• **Institutional Research Capability** is a vital component to increased management responsibility, and for seeking institutional self-improvement. Most universities throughout the world have had very limited formal policies and strategies for gathering institutional data, and for employing trained staff to provide the information and analysis required for competent and innovative management and leadership of higher education institutions.

• **Academic Advancement Based on Performance** is increasingly the norm, replacing in some nations states a system of advancement for faculty largely tied to a civil service model that placed the highest value on time in a position and seniority. A key component for creating viable and legitimate performance reviews is clearly articulated criteria for appointments and advancement, and a process of review that formally integrates campus senior faculty, preferably through an academic senate committee, into decisions made by a campuses academic leadership.

• **Institutional and Program Accreditation** is a fundamental component for institutional self-improvement, generally consisting of some form of regularized internal assessment of strengths and weaknesses of academic programs, and a review by an outside agency or institutionally appointed panel of experts. In most countries, accountability regimes have emerged under the auspices of ministries and are integrated into broader agenda-setting by governments. But the ultimate purpose and focus of accreditation should be on creating information and a dialogue within institutions on how to improve their teaching, research, and public service activities and missions.

4. **Access and Curricular Reform**

In the movement toward mass higher education, policymakers are coming to terms with the reality that the academic and social abilities of students vary greatly, and that students mature over time at different rates. This requires different types of institutions and, to avoid socioeconomic tracking, some curricular link that can help students come in and out of a higher education system, depending on their maturation and their aspirations.

• Regional efforts at some form of **Degree Compatibility**, a la the Bologna Agreement, are requiring a reform in curriculum. Different national, and even institutional, approaches to the time to degree, and the meaning of a degree, are giving way to some form of international standardization. This is important for the student as it creates a larger understanding in a globalizing economy regarding the meaning of a degree; it is important for institutions as it usually includes a review of the curriculum and its purpose.

• The **Ability for Students to Bank Credits**, along with degree compatibility efforts and mission differentiation, provides the prospect for greater mobility of students between institutional types and programs.

• Emerging schemes for a **Transfer / Matriculation Function** among different types of institutions (typically a two-year program to a three- or four-year university, but not exclusively) are another benefit of the curricular reforms noted above. Although nascent throughout most of the world, these will likely grow as a component in national higher education systems.

• The revisiting of the curriculum and education program leading to a degree, including the need of some form of **General Education** even in three-year undergraduate programs focused on a specific field. Essentially, there is a growing need, and greater recognition by the academic community and private sector, for a more broadly educated engineer or scientist, for example, including training in business economics.
• **Greater Coherence in Graduate and Professional Degree Programs** is vital to institutional quality and effectiveness, and for attracting international talent — increasingly the focus of nation-states with stable or declining populations and mature higher education institutions, such as Japan. Throughout most of the world, graduate and professional degree programs are growing, acting as the second stage in movement toward mass higher education once dominated by a concern to increase access to first degree programs. Many institutions, particularly but not exclusively in developing economies, have not created well-organized graduate programs that include clear expectations for students and restricted time-to-degree mandates.

B. **BUILDING AN ASPIRATIONAL CULTURE**

Most governments in developed and, increasingly, in developing economies are moving toward most of the elements of this structured higher education opportunity market — or at least these elements are a topic of discussion, including supporting some grouping of postsecondary institutions open to all graduates of secondary schools. In much of the world, including Europe, the lack of a viable and culturally acceptable alternative to the university, and a one-size-fits-all mentality, means a negative drag on expanding access, and, in some cases, an overload of students in overextended and financially struggling universities.

Europe, for example, is arguably still too top-heavy in its higher education systems; meaning that the only major form of a higher education experience is to enter a university. In a growing number of nations, alternative postsecondary institutions are emerging, where a secondary diploma is not a requirement for an expanding array of postsecondary programs. There are, of course, constraints on the ability of students to enter specific universities or other institutions determined by admissions standards, financial aid, institutional financial resources, physical capacity, and other limits. But most nations are committed to broad access and are aggressively pushing demand. Why?

The reasons transcend immediate or even long-term job-market needs or the recognition that most workers will change jobs numerous times in the course of their working lives, often with the need for retraining under the rubric of lifelong learning. As important is the desire of most nation-states to promote a culture of aspiration, which in turn influences socioeconomic mobility and creates a more talented and entrepreneurial population, global competitiveness, and the hope for a more prosperous and equitable society.4

This ethos is front and center for many EU member states in their conscious efforts to boost participation rates and refashion their national higher education systems, often battling the legacy of overt class distinctions and biases. “All those who have the potential to benefit from higher education should have the opportunity to do so,” states an influential white paper issued by the Labour government in England in 2003. “This is a fundamental principle which lies at the heart of building a more socially just society, because education is the best and most reliable route out of poverty and disadvantage.”5

In effect, the goal of most postmodern governments, with only the tacit and sometimes reluctant support of the higher education community, is even larger in scope: to make broad access to higher education, or at least the opportunity at virtually any age, a part of citizenship. Just as compulsory education has moved from the elementary school level to the first two years of secondary school in most OECD countries, perhaps it will eventually include some form of postsecondary education. Alone, the economic arguments for such a policy shift are, in the contemporary era, not convincing because not all jobs require such an expansion.

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But the extension of compulsory laws to secondary schools in the early twentieth century was not explicitly formulated for economic reasons alone; rather, it related to broad ideas of citizenship, to fostering equality and socioeconomic mobility, and to assorted other national priorities, including the integration of immigrant populations in America.

C. POLICY ENVIRONMENTS

The SOM model attempts to identify major global trends and characteristics for higher education systems and institutions. But there are important environmental variables that provide a greater sense of the strengths and challenges facing nation-states on their own particular paths toward creating increasingly robust SOMs. The following outlines three major variables shaping policy options and political approaches.

History of System Building

Different nations often have significantly different histories of how they have approached building their higher education systems, which, in turn, influences their efforts at higher education reform and the SOM model. Many ministries of education and others concerned adopted all or most of the SOM elements, and have created a seeming consensus as to what they hope their HE systems might achieve and look like, but they must confront the realities of networks of existing, often mature, and often politically powerful universities.

In the United States, for example, the effort to create mass public higher education systems evolved over a long period, beginning in the 1800s, and at different paces reflecting the authority of each state government to organize its own system, with occasional infusions of funding and dictates from the federal government.

California’s contemporary higher education system, for example, was largely formed by the 1920s, creating a pioneering “tripartite” system of public colleges and universities that included local two-year colleges (what are today the California Community Colleges), a set of regional institutions with a focus on teaching and limited graduate education programs (what is today the California State University), and a multi-campus research university (the University of California). As California’s population grew, making it the largest state by 1963 and now twice the size of the next largest US state, it grew organically, expanding by adding new campuses, and was free from any major reorganization.

Other states tended to create a large network of public colleges and universities without the coordinated and coherent approach invented in California. However, facing increasing demand for higher education by the public and by the private sector in need of engineers and other professional and trained labor, and in the face of increasing costs and concerns with quality, in the 1950s states began a process of reorganizing all or a major portion of their public higher education institutions. Most created new multi-campus systems, incorporating existing colleges and universities under a single governing board.

Hence, the greatest period of reform in the organization of American higher education occurred largely in the post–World War II era and into the 1960s. As in California, this created a structured approach among the fifty US states that coped well with large increases in enrollment, and preserved a vibrant private sector that, combined with adequate public funding, adopted elements of SOM.

In contrast, we see various effects of extraordinary efforts throughout much of the world to rapidly create national mass higher education systems, reflecting national histories of institution-building that often meant converting a narrow network of elite institutions (created for a ruling class) into a vast network of universities, beginning in earnest in the 1960s. In the case of England, this meant rapid new institution-building that initially included a new polytechnic sector. But in a familiar story, the dual structure of
universities and polytechnics gave way to all institutions claiming the title of universities, all with equal claim on government resources and research aspirations.

The pressure to create a more equitable society, and to erode the pervasive class structure of most of Europe, led to similar singular approaches throughout what is now the EU. Germany and France both created a vast array of “research universities,” all with the duty to take on as many students who wished to attend, driving down the quality of both the old great institutions and new. In addition, the existence of separate and generously funded national research institutions, like the Max Planck Institutes in Germany, and the CNRS in France, has made it more difficult to create a sub-unit of highly productive universities.

In nations with developing economies, there are often the legacies of colonial influence on the structure of their higher education systems, reflecting the primacy at one time of serving elites and producing a select civil service class. In Taiwan, the influence first came from Japan, then the United States, and corresponding with its rapid and recent economic growth that led to the creation of a national network of universities, another group of regional universities, and the rise of a private sector.

In developed economies of Europe have a nearly nonexistent private higher education sector, in developing economies in the EU, South America, and in parts of Asia, the private and often for-profit sector has rapidly grown, filling a gap in demand that their nation-states have decided not to fill — largely a default, I suspect, because of the cost, a lack of organization in planning their higher education systems, and also a delayed recognition of demand.

Demographic Variables
Both the trajectory of population growth and its composition are hugely important variables in how nation-states are approaching SOM. In much of Europe, and in Australia, Japan, Taiwan, and Korea, population growth is largely flat, with projections of declines in the traditional tertiary-age cohort. In most of these and a collection of other nations that have vigorously pursued increasing access rates, the focus is increasingly on issues related to quality, accountability, and creating efficiencies. In Japan, for instance, the great array of largely small private institutions is widely understood as unsustainable. And with already-high access rates, Japan’s only logical chance at future growth for universities is in graduate education and expanding the number of international students.

As outlined in the SOM model, most nations are attracted to the growing market for international students, in some cases as a means to help financially sustain sectors in the higher education systems, and as a means to improve the quality of students in their institutions and expand a nation’s political sphere of influence. Those nations experiencing significant population growth, like the US, South America, and India, or those that have relatively low higher education access rates, are focused on how their systems can grow — even when there is, as in the case of China, no immediate labor market for university graduates.

Another global variable revolves around the changing racial and ethnic composition of nations, particularly in developed economies that increasingly rely on immigrant labor and talent. But even in developing economies with relatively low higher education access rates but with marked ambitions for higher access rates, the issues of integrating immigrant groups, and serving underserved native groups, will grow in significance.

Democratic Principles — Role of Relatively Open Societies
As discussed, the natural progression of nation-states developing their higher education systems is to first focus on building institutional capacity in order to expand access; second, to seek greater coordination and efficiencies related largely to costs; and third, to focus on issues of the quality of institutions, and more generally the net impact on creating a more prosperous and equitable society. Certainly, each of these goals is not mutually exclusive, or purely sequential.
But I think it is fair to say that, whether it is the development of mass higher education in the US, or the later rush to mass higher education in China, ministries and governments, along with higher education leaders, have focused on macro issues of system structure and institution-building, and less on the practices required in each institution to manage itself in a way that seeks constant institutional improvement and innovation. As noted in the SOM model, attention to managerial aspects of a modern, competitive, and high-quality institution requires an internal management organization and sufficient institutional autonomy to improve from within. It also requires a sufficient “institutional research” capability to create data and generate analysis for academic and budgetary decision-making.

But I would venture to say there is another important and global variable that will ultimately determine the quality, and influence, of the best universities: their existence in relatively open societies that embrace democratic principles, and, most importantly, include a very broad and clearly articulated definition of academic freedom. The truly great universities of today, and of tomorrow, have strong traditions of academic freedom that allow faculty to openly criticize and critique society and national leaders, and provide for wide latitude in the kinds of research academics may pursue. This is an essential requirement for creating “world-class” universities – the stated goal of so many nations.

An open question is whether universities are, in effect, simply reflections of their own society, subject to its cultural and political norms. Or are universities leaders of society, a place for cutting-edge thought and debate?

World-class universities, I would argue, are leaders, with scientists, engineers, social scientists, and faculty in the humanities who are engaged in not only debating the ethics and implications of their fields, but those of society at large. Extending this paradigm, world-class universities are institutions that are not dominated by or focused on only one field of knowledge, like engineering, or more generally the sciences; they are composed of a larger community of scholars and students who, in one form or another, are debating the great issues of today, and tomorrow.

The issue of the role of academic freedom in the rush of nation-states to create both mass higher education and a sector of high-quality, internationally recognized universities is a fundamental but largely neglected subject in the global discourse over higher education. As noted previously, the role of academic freedom, and more generally societal norms in which universities must operate, have real implications for nations without strong or nascent democratic traditions and institutions.

Societies with unstable political environments, or that practice blatant discrimination against women or certain ethnic groups, will have universities with significant limitations; they will be followers, and not leading world-class universities in productive research. And they will not create educational programs that produce broadly knowledgeable students and ultimately faculty, and “global citizens.”

D. REACHING SOM – THE POLICY PATH

The US, and states such as California, offer informative models of the organization and functions of higher education systems, with many of their strengths and weaknesses noted. Particularly in the post–World War II period, and increasingly in the post–Cold War era, US higher education has been widely viewed as paramount, and, indeed, many of the American structures of degree uniformity, the banking of credits, institutional management structures, mission differentiation, the community college, and peer review systems for research support, all form an influential inspiration for major higher education reforms – including the Bologna Declaration and the evolution of the European Commission’s Seventh Framework for research.
But it is also evident that the US may provide fewer models and ideas on the often politically difficult effort to reform higher education systems and institutional operations. This is because systems, such as the highly differentiated one found in California, are the result of a long history of institutional building. In California, this has largely been an organic process of building new institutions that essentially complement and preserve the designated hegemony of the University of California as the premier public research and graduate and professional school for the state of California. As noted, this building of new institutions, creating a mass higher education system that also supports an elite public university segment, goes back to the 1920s and earlier.

In other parts of the US, many states embarked on a process of reorganizing their higher education systems in the 1950s, usually involving the merger of a number of public and sometimes, as in New York, private institutions, under a single board and as a single designated multi-campus system. While this political policy process does offer clues and ideas that might be of interest to nations as varied as Korea, Brazil, Japan, and China, along with some EU nations, they were largely completed by the 1960s—some fifty years ago, and under different political and economic circumstances.

For better or worse, the US higher education system has since been relatively stable, subject to only marginal efforts at reform and reorganization. Stability is important for institution building and for focusing on the quality of what institutions are designated to do within their respective state systems of higher education. But the lack of innovation and serious consideration of the overall fit of the current system with the current and future economic and socioeconomic mobility needs of society may prove a significant problem for the US—one among many, in light of the current meltdown in financial markets.

For these reasons, reform efforts in Europe—including the sometimes slow but steady development of a European Higher Education Area, and a European Research Area—along with other nations already deep in the process of reform may increasingly prove the most valuable examples of the evolution toward SOM. The mix of central authority (governments) pushing reform and providing various forms of greater institutional autonomy, linked with strategies to create greater differentiation and increase the quality of teaching and research—which are sometimes overly invasive, sometimes effective—are essential elements of the new model for the world’s national higher education systems, united by the desire of academic and political leaders to make their systems more inclusive, more competitive, and more globally interactive.

Indeed, in South America and in areas of Asia, European initiatives are emerging as the new focus of attention and inspiration. The Structured Opportunity Market that I outline may heavily reflect the American experience and historical approach to creating vital mass higher education systems, but the path to each country’s version of SOM is found outside of the US.

In light of the severe global financial collapse, I offer a final observation. Within societies that have developed mass higher education, and where broad access is increasingly viewed as vital for socioeconomic mobility, demand for higher education tend to goes up in times of economic uncertainty. Individuals who lose their jobs, or fear low prospects for employment in declining economies, see a university or college degree as a means to better employment prospects. How nations approach the funding and support of their current reforms in higher education during this difficult economic period will, I suspect, provide a strong indicator of the value they place on universities and colleges as bridges to long-term economic prosperity.

Preliminary indicators are that much of the world, depending on their national economic position prior to the onset of the “Great Recession,” have protected higher education from large cuts, or have at least pushed cuts into next fiscal year. But there are examples, as in parts of the US, in which increasing demand for

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access to higher education are not being met; indeed, access is being limited and in some cases cut because of a lack of public funding, or inadequate ability to raise other revenue sources to expand access. We may well look back at the current global recession as having a largely marginal impact on the path toward SOM, and in fact as accelerating existing higher education reforms and the trajectory of many nation-states toward more mature and competitive networks of universities and colleges.