

JOHN K. HUDZIK

4. DRIVERS OF AND SPECULATION OVER THE FUTURE OF HIGHER EDUCATION INTERNATIONALIZATION

This chapter speculates on the future directions of higher education internationalization. It is driven by data related to the development of global higher education capacity in teaching/learning and research/scholarship as well as considering changes being imposed on higher education generally. Speculation centers on the futures of: mobility patterns and flows; cross border institutional competition and collaboration; patterns of multi-mission and comprehensive internationalization; rising expectations of accountability not only for higher education generally, but in outcomes and impacts from internationalization; and changing mixes of decision makers and priorities driving cross-border engagements.

Forecasting is inherently risky because it always has some probability of error associated with it. At best, forecasting is a mix of science and art. J. Scott Armstrong, (1978) a noted scholar and author on forecasting techniques advises that those in need of forecasters should not seek to hire the best, but rather the cheapest, with results thereby not being worse. Yet, while forecasts per se have error, one way to maximize error is not to consider plausible futures at all, thereby guaranteeing surprises at every turn. This article speculates about plausible futures for higher education internationalization as a means of stimulating further discussion.

A STARTING POINT FOR PLAUSIBLE FORECASTS ABOUT INTERNATIONALIZATION

Peter Drucker (1969) popularized concepts of the knowledge society and the knowledge economy. At the core of these concepts are the widespread generation and sharing of knowledge and its translation into innovation for societies. With globalization, the capacity of societies to generate and use such knowledge takes on a world-spanning scale. Knowledge becomes a key resource for the economies and cultures of contemporary societies—equal to, or perhaps surpassing the importance of the more traditional building blocks of “land, labor and capital.”

The central role of universities in creating, shaping and applying knowledge for social and economic development is widely recognized. See for example the World Bank publication, “How Universities Promote Economic Growth.” (Yusuf & Nabeshima, 2007; also, Hill, 2006). OECD analyses also find a strong correlation

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between GDP per capita and higher level literacy, numeracy, and analytical skills as measured by the Programme for the International Assessment of Adult Competencies (PIAAC) (van Damme, 2014); these higher level skills are the product of post-secondary and higher education capacity.

One consequence of growing global development and capacity is that the playing field for competition as well as collaboration is shifting from local/national to a global reference frame and increasingly in ideas and talent. Competition and collaboration in ideas require knowledge societies supported by high quality higher education systems. High-quality, cutting-edge higher education requires access to global pathways of learning, talent and ideas. Higher education institutions become a meeting ground of the local and the global.

CONTEMPORARY DRIVERS OF INTERNATIONALIZATION

The traditional drivers and motivations of internationalization were political and social and included the need for and benefits arising from building cross-cultural understanding, relations, peace, justice and mutual benefits of development. More recently the motivations and drivers have become more diverse to incorporate: (1) Recognition that the core missions and business of higher education (knowledge creation, transmission and application) are increasingly conducted across borders, and that higher education institutions function in a global market place; (2) a view that customers of higher education (e.g., students, communities and employers) live and work in a global environment, and that customers “at home” are global customers too; and (3) the over-arching needs of knowledge societies and economies are expanding to become part of a global market place. These combine to become powerful inducements for higher education to think strategically and comprehensively about engaging internationally, and intertwining local and global (Hudzik, 2015).

THE DEVELOPMENT OF GLOBAL HIGHER EDUCATION INSTRUCTIONAL AND RESEARCH CAPACITY

It is the global development of higher education capacity and trade routes that make more strategic and comprehensive internationalization among institutions both possible and necessary. Global capacity is “flattening” in Thomas Friedman’s (2007) terms. Student demand and capacity projections vary, partly based on definitions of higher education, but one commonly referenced projection is for available spaces to increase from 100 to 250 million (or more globally) from 2000 to 2025 with most expansion occurring outside the U.S., Europe and the Antipodes (Ruby, 2010). Mobility also is projected to increase in the coming decade – from 2.3 million a decade or so ago to 4.1 million in 2011 (OECD Education at a Glance, 2013, & 2014) and to 7.2 million or more by 2025 (Banks et al., 2007; van Damme, 2014).

Perhaps more important is the elaboration of mobility models to include short and long term study abroad, degree seeking, non-credit-bearing study, active

learning models and so forth (Waechter, 2013). If participation levels in all mobility models are counted in official statistics (which they are not uniformly), numbers will be even more robust than projected. The directions of mobility flows are also undergoing elaboration. Wildavsky (2010) points toward the emergence of “brain circulation” patterns that are global and multi-directional, involving both students and scholars, and with multiple instances of mobility by individuals. While brain drain remains an issue, it appears under modification owing to a wider variety of circulation paths.

Research capacity is spreading globally along with instructional capacity. Data reflect a similar “flattening” as well as shift in research capacity globally. This is plainly evident in global R&D expenditures comparing 1996 to 2014 projections. Data from the National Science Board (NSB) (2014) and the Battelle organization forecasts for 2014 (Grueber & Studt, 2013) show U.S. R&D expenditures dropping from 36% to 29% of the global total, the EU dropping from 27% to 22%, while Asia’s proportion has risen from 23% to 35–39%. In 2014, The U.S. was projected to lead the world in total R&D expenditures at \$465b (with China second at \$284b, then Japan at \$165b, Germany at \$92b, and South Korea at \$83b). Battelle (Grueber & Studt, 2013) predicts that China’s R&D expenditures will surpass Europe’s by 2019 and the US by 2023. Data also from the NSB (2014) reflect the rising quality of Chinese science and engineering articles as measured by citation rate.

A further trend of importance is that co-authorship of scholarly articles is on the rise having grown 67% between 1988 and 2010; but internationally co-authored articles (authors from more than one country) grew 300% during the same period (NSB, 2010; NSB, 2014). Envelope-pushing research is no longer centered in a few countries and one or two world regions. This has massive implications for where one looks for cutting edge ideas and for where institutions look to build research collaborations and partnerships.

It is not simply a matter of where the good ideas are, but also affordability. As Stephen Toope, former President of the University of British Columbia has pointed out, the rising cost of cutting edge research makes it increasingly difficult or impossible for a single institution to afford it; it must look for partners, and also increasingly the best partners are found across borders and regions (Loveland, 2011).

RISING COSTS AND PUBLIC AND PRIVATE INVESTMENT IN HIGHER EDUCATION

While public disinvestment in higher education is spreading, it does not manifest itself uniformly across all countries and regions. Yet, the trend as reflected in North America, portions of Europe and in the size of private sector higher education in all world regions reflects a significant per capita proportionate decline in public expenditures globally and a rise in private expenditures. Private expenditures for higher education have risen to 32% of total expenditures in 2010 – a 5–7 point increase compared to the not too distant past (van Damme, 2014).

Declining public revenues have consequences: (1) increased costs to consumers (students and parents) through rising tuition to compensate for declining public allocations; (2) growing private-like forces in public higher education in the form of pressures to diversify revenue through entrepreneurial activity, managerialism, commodification, and cost cutting (e.g., Sporn, 2003); and (3) rising pressures to demonstrate efficiency, outcomes and impacts. (Kehm & Teichler, 2007; Miller, 2006; APLU, 2011; & Henard et al., 2012). Further consequences include a far more cost-conscious consumer and an expansion of consumer cross-border comparison shopping based on cost effectiveness. The latter is aided by spread and growth in global higher education capacity and by global growth in the middle class.

THE GLOBAL MIDDLE CLASS

The middle class drives a wide range of consumer spending behaviors, including family funds for higher education. The upper middle class especially invests substantially in education, particularly when public sponsorship of higher education capacity falls short of demand. In numerous countries e.g., Brazil, S. Korea, Japan, Mexico, Poland (PROPHE, 2010) the private higher education sector is demand absorbing and private funding increasingly supports a large portion of mobility. Growing middle classes, particularly in developing economies, and inadequate higher education supply in many such countries, expand the numbers of mobile students, especially if there are intra-regional education opportunities.

The definition of middle class is open to debate, and differs substantially country to country because of purchasing power differences. The World Bank uses an income figure of \$10–\$100 per day to define middle class. While such amounts are inadequate in much of the developed west, these amounts in purchasing power parity (PPP) in several countries begin to elicit middle-class buying behaviors, including for education.

Massive growth in the world's middle class is underway, the vast majority in Asia and not in the developed West. Ernst and Young (2013), based on World Bank data, estimates the global middle class population will be about 3.2 billion by 2020 and 4.9 billion by 2030. The upper middle class will have its own substantial global growth, particularly in China where, in the views of some, self-funded mobility is in whole or in part becoming the norm (Choudaha et al., 2013).

TECHNOLOGY

The use of technology in education can expand access, improve cost effectiveness, and be demand absorbing. One aspect of global higher education competition will be those countries and systems which develop and market high-quality, technology-assisted education which in turn will require (a) development of flexible teaching models and pedagogies, (b) active learning components, and (c) availability of up-to-date technology as well as development of both faculty

and students capable of making productive use of technology. Systems which adopt and adapt to such changes will likely thrive in a competitive global higher education market place; those mired in traditional pedagogies and education models will less so.

Some, such as MIT (2013) in its strategic planning and its commitment to MOOCs (massive open online courses), are recognizing that technology can flexibly spread the time and space in which teaching/learning can occur, and that further effects may result in recognizing that there is no optimal academic calendar. Through use of technology and increased virtual and physical mobility, education itself could become more unbundled and degrees disaggregated 'into smaller credential units, with the possibility that the credentialing entity may be different from the institution that offers the course or degree.

The global market place of higher education may come to look like a system of credentialed parts suppliers rather than sources of a completed product only (e.g., institutions as places offering complete degrees). Although perhaps this is an unrealistic view, technology networks may develop to proffer a catalog of network products to be assembled from a multitude of suppliers by a globally mobile (virtually and physically) consumer.

MORE SPECULATION ABOUT FUTURE DIRECTIONS IN HIGHER EDUCATION INTERNATIONALIZATION

Decision Makers and Leadership

As the motivations driving internationalization diversify and the global scale of international activity increases, the number of diverse institutional actors with significant stakes in the defining of international priorities will widen to shape priorities. This is particularly true of faculty when internationalization offers opportunities to strengthen research and scholarly capacity and impact the content and pedagogy of teaching and learning.

In institutions becoming more comprehensively engaged internationally, leadership may paradoxically both centralize as well as devolve to lower levels. On the one hand, centralization may strengthen when it comes to overall institutional priority setting and coordination, thereby strategically focusing international efforts—particularly in forming partnerships abroad. At the same time leadership may devolve also, to imbed responsibility at the level of academic units to deliver relevant instructional, scholarly and engagement activity.

Mobility

Mobility patterns and models of both students and scholars as well as models of inter-institutional collaboration are likely to become much more diverse and competitive as a result of developing global higher education capacity. Trade patterns will shift

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to strengthen Asian in-bound and out-bound mobility. While traditional receiving countries are likely to maintain aggregate numbers, they will decline significantly in the proportion of globally mobile students and scholars.

Basic demographics (e.g., declining birth rates) will alter flows of senders and receivers not only because of population changes, but excess or inadequate higher education capacities. Senders may evolve toward becoming receivers (e.g., China?) and countries with relatively low rates of mobility may evolve into major senders and receivers as their higher education capacity and middle classes develop. Intra-regional mobility will grow as a cost effective option.

Knowledge society demands and the global expansion of high quality instructional and research capacity worldwide will increase competition for the best in students and scholars. English is likely to remain a dominant language of exchange for some time, except as moderated by sender-receiver countries sharing Spanish. Chinese will rise in importance parallel to China's economic and socio-cultural influence. Traditional provider and sender countries will remap themselves in light of developing global higher education capacity, also following changing patterns of economic development and strength.

Cross-Border Collaborations and Partnerships

Cross-border partnerships are likely to evolve from single-purpose to multi-purpose (multi-mission) collaborations, e.g., from a dominance of student exchange agreements toward incorporating faculty exchange, research collaborations, joint bidding on research and projects, and dual/joint degrees. Among research and graduate intensive institutions, a strong set of drivers and priority setting for partnerships, collaborations and other forms of international activity will be driven by research, scholarship, and institutional reputation building.

Inter-institutional agreements are likely under diverse models: bi-lateral, multi-lateral, and network arrangements. They are also likely to be controlled in number to focus on strategic institutional priorities. The formation of memoranda of understanding are already taking on a more institutional and corporate cast, replacing MOUs arising from the interests of an individual or a particular academic unit alone.

For institutions engaging internationally across all missions (teaching, research and service) and across diverse disciplinary fields, there is likely to be increased attention to developing strategic and deep partnerships. But as no given set of partnerships can hope to meet all needs, the formation of global institutional networks may well take on increased importance. Networks can service a more diverse and complex array of interactions. Networks can be fixed in membership and roles or flexible (e.g., working with some members for x-type projects and other network members for y-type projects).

Setting the Internationalization Agenda

The agenda of internationalization (e.g., motivations, program priorities, terms of collaborative agreements, outcome expectations, and so forth) will be less dictated and shaped by the traditional higher education powers (e.g., Europe, North America, and the Antipodes) but more broadly, particularly by Asian markets and consumers and later also by markets, institutions, and consumers in other world regions.

Quality and Standards

With global expansion of suppliers in both educational and research capacity, global competition among institutions is likely to intensify in terms of both price and quality, following patterns similar to those in other industries and markets (e.g., automobiles). A shifting and constantly improving global standard of price and quality is likely to develop in response to an increasingly mobile and informed consumer and suppliers (also similar to patterns in other industries and markets). Government regulation is also likely to play a strong quality control role, but so will market forces.

The further development of world higher education capacity, coupled with a more mobile consumer (moving virtually as well as physically) will increase pressure for reform in low-performing systems. The question is whether homogenizing forces such as world ranking schemes or the emergence of a dominant global higher education culture will reduce beneficial diversity among systems and institutions.

IN SUM

Nothing is as certain as change, and perhaps nothing as uncertain as the details of change. However, as outlined in this article, expansion of the motivations and rationales for internationalization and its components, the widespread development of global higher education instructional and research capacity, and global economic development will no doubt alter traditional patterns and models of international higher education competition and collaboration. The markets for international activity will change as a result, likely impacting cost, quality, the role of technology and forms of partnerships and collaborations.

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John K. Hudzik
Michigan State University, USA
NAFSA Senior Scholar for Internationalization