# Chapter One

## The Worldwide Race for Talent

When Claire Booyjzsen finished her master's degree at the University of Witwatersrand in Johannesburg, South Africa, the world was her oyster. Intent on pursuing a PhD in chemistry, she consulted global rankings of universities to identify some of the strongest. Then she conducted more research, corresponding with professors and students to narrow down her list. She ultimately applied to eleven institutions. After the acceptance letters came in, she traveled to Coventry, England, where she is now a third-year doctoral student at the University of Warwick, an institution where one in five students comes from overseas. "It's really multicultural here," says Booyjzsen, who works as a tutor in a student dormitory. "I've met people from all over the world."

A relatively young university—it was founded in 1964—Warwick has become one of Great Britain's most sought-after institutions. It is also regarded as one of the nation's most entrepreneurial universities—and one of the most international as well. Warwick has systematically recruited students around the globe. In some instances, such as Booyjzsen's, its purpose is to search for talent; her studies are supported by a graduate fellowship funded by the university. In others, the search for international intellectual ability comes with a significant financial incentive (though the two are not mutually exclusive, of course). Almost all undergraduate and professional-school students from nations outside the European Union (EU) have "full pay" status. That means they don't enjoy the huge tuition subsidies received by British and other EU students—and thus represent a significant source of tuition revenues for Warwick and other universities that face declining state funding.

Warwick has attracted its international study body, at least in part, by establishing a network of recruiting offices around the world. Headed in almost every case by Warwick alumni, these outposts can be found in Beijing, Shanghai, Hong Kong, New Delhi, Singapore, and many other cities. Warwick's vice chancellor, Nigel Thrift, notes that the university now attracts students not just from major "sender" countries such as India and China but from a total of 120 nations. He downplays the budget-balancing aspect of his university's recruiting efforts, highlighting instead how the large number of overseas students exposes British students not only to intellectual firepower but also to global diversity. "It's just an enormous asset to the way the university is," Thrift says. "It makes it into kind of a little world city. I love that."

As Warwick goes, so goes the world: students like Booyjzsen have plenty of company. In recent years, international student mobility has been enormous—and consequential. Nearly 3 million students now study outside their home countries, a number that has risen steeply in a short period. From 1999 to 2009 alone, the number of students studying outside their home nations increased by 57 percent, according to UNESCO (United Nations Educational, Scientific and Cultural Organization) and OECD data reported by the Institute for International Education (IIE).<sup>4</sup> Methods of counting foreign students are imperfect and vary from country to country, but the magnitude of the trend is indisputable. Indeed, the UNESCO/OECD figures understate the amount of foreign study because they include only students who go abroad for more than one year.

Where are all these students going? Above all, to the United States—by far the world's biggest magnet for international students. The United States began to assume that role after World War II, and consolidated it with the flood of foreign students who came in the 1970s and 1980s to study at research universities that had become the best in the world. Today, the U.S. market share of those 2.9 million mobile students worldwide stands at 22 percent, according to a report by the London-based Observatory on Borderless Higher Education. That puts the United States far ahead of its closest competitors, the United Kingdom and Australia, which played host, respectively, to 12 percent and 11 percent of those students.

The U.S. edge among graduate students is even higher: about two-thirds of all foreign graduate students worldwide study in the United States.<sup>8</sup> In certain fields, more than half the PhD students at American universities

come from overseas: the percentages are 65 percent in computer science, 65 percent in economics, 64 percent in engineering, 56 percent in physics, and 55 percent in mathematics, of to cite the best-known examples. Indeed, a recent survey found that China's Tsinghua and Peking universities surpassed Berkeley as the top sources of students who go on to earn American PhDs. One professor of astronomy at a top-ranked U.S. university describes having to resort to "affirmative action for Americans" in order to ensure that his program enrolls more than a token number of native-born doctoral students.

Where do all these international students come from? Of the 572,509 foreign nationals who studied in the United States in 2004, more than half came from Asia; the top five countries of origin were India, China, South Korea, Japan, and Taiwan. China and India are the top source countries among Great Britain's overseas students, making up a combined 69,000 of the 318,390 foreign students who studied in the U.K. in 2005. Minilarly, India and China are the largest "sender" countries to Australia, which has become a major force in global higher education. It recruits students through an organization known as IDP Education, which has a network of over seventy-five offices in twenty-nine countries that hold education fairs and the like.

France and Germany, while relatively popular, are both considered secondary higher education destinations, and tend to attract students based on their own historical and cultural ties. A large majority of the 265,000 international students enrolled in French universities in 2006 came from Algeria, Morocco, and Tunisia. Germany, which enrolled nearly 190,000 foreign students in 2008, up 82 percent over the previous decade, attracts Chinese students more than any other nationality. After that, Germany is primarily a destination for Europeans from nations such as Bulgaria, Poland, and Russia. It has also attracted substantial numbers of Turkish students.

## A Grand Tradition

Students of global higher education are unanimous in their view that more students move to more universities around the world today than ever before in world history. "The notion that students can move great distances today, going from nation to nation with great ease, is certainly unprecedented," says higher education scholar Daniel Fallon, an emeritus professor at the University of Maryland at College Park. "Going back only two hundred years, you had to have passports and visas to go, within a country, from one town to another. What we do today is ridiculously simple compared to that." Nevertheless, while academe has never before seen such widespread movement of students and professors around the world, the history of Western universities has long been marked by student migration. "In the beginning was the Road," writes French historian Joseph Bédier, describing how the flow of ideas and knowledge in the Middle Ages was made possible by the roads linking ancient cities, which had become the sites of cathedrals and thus centers of learning. 16

The first Western universities were located in Paris and Bologna, which began to flourish during what has been called the Renaissance of the twelfth century. Early universities began as scholastic guilds, typically attached to cathedrals, and were called *studia generale*. Eventually, they came to be referred to as *universitas*.<sup>17</sup> And it did not take long for a version of internationalization to follow. Just as contemporary students' journeys around the world have been vastly eased by the Internet and cheap airline travel, so too did their predecessors benefit from their own periods' versions of better transportation and communication networks.

The best early evidence for quite extensive student mobility can be seen in the formation of "student nations" in the early 1220s, in which university students from different parts of Europe joined together for "mutual protection and help according to their home countries or provinces." Birthplace and mother tongue determined a student's membership in a nation. At the University of Paris were four such nations—the French, the Normans, the Picards, and the English. Still more diverse was the University of Bologna, which was home to nineteen nations, with students hailing from such disparate areas as Hungary, Poland, Spain, and Germany.

What accounted for such early significant patterns of mobility at a time when this was far from the norm? Most prosaically, of course, students in areas without universities—Scandinavia, Ireland, and Eastern Europe, for instance<sup>22</sup>—had no choice but to travel if they wanted to pursue higher studies. "If you were interested in anything scholarly, you took off," says Fallon. Another incentive to travel in search of learning lies in a set of

privileges awarded to traveling scholars in 1158 by Frederick Barbarossa, the Holy Roman Emperor. Known as the *authentica Habita*, these rules protected individuals traveling to foreign lands to study.<sup>23</sup> More broadly, churches and kings across Europe provided foreign students with financial assistance—call it the earliest version of today's scholarships—in the form of outright aid or inexpensive food and lodging. There was a catch, to be sure—in return for this assistance, students were expected to work for either the state or the Church.<sup>24</sup>

Then, too, world events had a role to play. Just as wars and revolutions in the past century have led to mass migrations of people and scholars, so the patterns of student movement in the Middle Ages were influenced by the happenings of the day. In 1229, for instance, students in Paris, enmeshed in disputes with local citizens, rioted violently (*plus ça change*, one is tempted to observe). The result? The king of France dissolved the university for six years, resulting in what one academic termed "The Great Dispersion" of French scholars.<sup>25</sup> The king of England, Henry III, like university leaders today who are constantly on the lookout for fresh talent, apparently saw the French contretemps as a recruiting opportunity—he welcomed the exiles from Paris into British universities.

In a similar parallel, just as various modern nations have fretted about brain drain, tried to keep more students at home, and, in some cases, erected barriers to their free movement across borders, so too did their counterparts in the Middle Ages. By the late fourteenth century, student mobility had declined, in part because countries devoted considerable resources to promoting local or regional educational opportunities. In addition, some countries passed laws that excluded from public office any students who had attended foreign universities.<sup>26</sup>

Still, as the sixteenth century dawned, academic mobility was once again on the rise. This new era of movement across national boundaries and exchange of ideas is personified by the travels of Desiderius Erasmus, the Dutch Renaissance scholar and Catholic theologian. Something of an itinerant student and academic, Erasmus studied at the University of Paris and the University of Cambridge. He also spent time at universities in Italy, Germany, Belgium, and Switzerland.<sup>27</sup> So renowned was his contribution to international academic exchange that some 450 years after his death, the EU initiated the Erasmus program, which is intended to facilitate such exchange between students and teaching staff in European universities.

For all the circulation of students and ideas that characterized the first six centuries of Western research universities, it wasn't until the nineteenth century that foreign students began to flock in large numbers to the country that would become the birthplace of the modern research university: Germany. The nation hadn't previously been a big draw for foreign students. On the outbound side, it sent several thousand students to Bologna and Paris from the thirteenth to fifteenth centuries. But Charles IV significantly stemmed the flow of German students abroad by founding the University of Prague in 1347. (The new university was also an early instrument of meritocracy: "From this time on," writes historian Helene Wieruszowski, "education became a social leveler with the slogan 'career open to merit.'") By the beginning of the fifteenth century, the University of Prague was a distinctly cosmopolitan institution, attracting some 2,000 foreign students to its community of about 4,000 scholars.<sup>29</sup>

German universities became particularly attractive to foreigners—not only as a study destination but also as a model for replication—with the founding of the University of Berlin (later Humboldt University) in 1820. The father of the German university is widely considered to be Prussian education reformer Wilhelm von Humboldt, who was committed to the proposition that a university should be a place that encouraged scholars to conduct research without government interference.<sup>30</sup> As a result of their emphasis on advancing research while also promoting technical and vocational education, the universities in Berlin and other German cities emerged as major destinations for international students by the end of the nineteenth century.<sup>31</sup>

The numbers are not large by today's standards, but they made up a not-insignificant share of enrollment. In 1900, for instance, 1,750 foreign students were enrolled at German universities, accounting for 7.6 percent of all tertiary enrollment in the country. A few years later, those numbers had grown considerably, with particularly heavy enrollment from Europe. In 1910, 4,646 Europeans were studying in Germany. Half were natives of Russia, while others came from Austria-Hungary, Switzerland, Bulgaria, and Romania. German universities even drew students from parts of Africa and Asia.<sup>32</sup>

While many of the students initially drawn to Germany were European, Americans, too, soon became a significant source of foreign enrollment. In 1911, American students made up 4.6 percent of overseas enrollment at German universities. At the most popular institution for U.S. students, the

University of Göttingen, 22 percent of the student body was American. By 1936, overall U.S. enrollment at German institutions had grown to 11.5 percent before dropping precipitously in the run-up to World War II.<sup>33</sup>

Other nations certainly continued to attract overseas students, particularly England and France. In 1928 French universities enrolled a record 14,368 foreign students.<sup>34</sup> In the United States, institutions such as the University of Virginia and Williams College were in various respects modeled on French universities.<sup>35</sup> And throughout the twentieth century, exchanges abounded between U.S. and French institutions—the University of Paris, for instance, prepared a special course for American students.<sup>36</sup>

Nevertheless, the German model was uniquely influential. When American students returned home from their studies, they attempted to replicate these German institutions, which had pioneered the combination of research excellence and teaching, not to mention such bedrock concepts as academic freedom.<sup>37</sup> Perhaps the best known of the institutions created as a result was the Johns Hopkins University, founded in 1876. Hopkins aimed to be the first German-style university in America; this aspiration was exemplified by the fact that many of its founding faculty members were former students at German institutions. Other influential universities, including the Massachusetts Institute of Technology (MIT) (1860), Cornell University (1868), and the University of Chicago (1890), were similarly founded on German academic ideals.

Yet if the roots of today's American research universities can be found in nineteenth and early twentieth-century German institutions, the vast influence that U.S. universities have come to occupy in the global academic enterprise traces more immediately to the period following World War II. As at the universities of Paris, Bologna, Oxford, and Cambridge over the previous eight hundred years, overseas students started flocking to U.S. universities as they began to achieve worldwide renown. Once a critical mass of foreign talent was in place in America's halls of academe, those students in turn contributed their brainpower to further advancing the United States' intellectual reputation—a virtuous cycle marked by, and powered by, mobility.

The number of foreign students attracted to the United States was relatively modest before the Second World War, but it grew quickly, rising from around 10,000 in the prewar years to some 36,000 students in 1955, of which one-third were enrolled at the graduate level. A 1957 *New York* 

Times article headlined "Foreign Students Choose the U.S." cited a survey released by the National Science Foundation that said the dramatic increase could be attributed to a combination of factors: "a reflection of the prosperity and influence of the United States; of financial support extended to foreign students by educational institutions, private agencies and both the United States and foreign governments; and of the achievement by educational institutions of an internationally recognized status that had been attained earlier by European universities." 38

As Europe was rebuilding a devastated and demoralized continent, American universities moved from strength to strength. Graduate education improved significantly as the PhD degree was introduced and the position of assistant professor was created, permitting young faculty members to conduct independent research.<sup>39</sup> At the same time, support from the federal government permitted universities to spend previously unimaginable sums on scientific research. By 1961, U.S. colleges and universities devoted nearly \$1 billion to research, a thirtyfold increase in just two decades.<sup>40</sup> Subsidies from the federal government accounted for 60 percent of this amount. Private foundations and industry contributed another 5 percent, while universities themselves made up the rest.<sup>41</sup>

These efforts came on top of a post–World War II effort to conceive of higher education as a tool for diplomacy and international cooperation. Accordingly, the nation created several programs and scholarships to facilitate and encourage international student migration between the United States and other countries. Probably the best known of these efforts is the Fulbright Program, created in 1946. Senator William Fulbright of Arkansas, the architect of the program, said it was intended to serve as a "much-needed vehicle for promoting mutual understanding between the people of the United States and the people of other countries of the world." Administered by the Institute for International Education, the Fulbright Program has seen tremendous growth. In 1953, a few years after its inception, 974 Americans traveled abroad for study. Five decades later, approximately 279,500 students and scholars have participated in the program.

At the same time this "soft" diplomacy got under way, the advent of the cold war provided a major impetus to the growth of university science and engineering. Amid much anxiety about America's competitive status vis-àvis the Soviet Union, the National Science Foundation (NSF) was created

in 1950, entrusted with advancing basic research. When the Soviet Union launched the *Sputnik* satellite seven years later, the NSF refocused its efforts on turning more academic institutions into centers of research and development. It broadened its criteria for scientific grants, for instance, awarding them to colleges and universities that badly needed to replaced outdated labs.<sup>45</sup>

These concerted national efforts, combined with huge funding increases, only increased the momentum of international student enrollment. In 1963, a record 74,814 foreign students studied in U.S. colleges and universities, a 16 percent increase over the previous academic year. Engineering was the leading field of study, followed by the humanities, and natural and physical sciences. In addition, 8,377 foreign scholars—faculty and researchers—along with 8,804 physicians were present in the United States, participating in internships and residencies, respectively. 46

U.S. dominance in scientific research grew throughout the 1970s and 1980s, serving to accelerate America's status as an international scholarly destination. The percentage of doctoral degrees earned by noncitizens swelled from 15 percent in 1972 to 26 percent in 1990, with far higher proportions in scientific fields. In 1986, foreign grad-school applications outnumbered domestic ones at Ohio State University, home to one of the largest student populations in the country.<sup>47</sup> While home to more foreign students than any other nation, the United States arguably has plenty of room for further growth: international students make up 3.5 percent of all students on American campuses, a considerably smaller proportion than in other popular "receiving" countries.<sup>48</sup>

### Competing for Students and Faculty

While American dominance of the international marketplace seems likely to continue in the near term, its long-term prospects are less certain as the global quest for talent becomes ever more competitive. Already, the U.S. share of all foreign students worldwide has dropped significantly since the 1980s.<sup>49</sup> And according to a recent report from the OECD, the U.S. market share of international students fell still further, by 4 percent, from 2000 to 2005. This decrease hasn't translated into fewer students in absolute terms, because the pie is getting bigger—the same report found a 5 percent increase in the total number of students studying outside their home coun-

tries during the same period.<sup>50</sup> What's happening is that the rate of growth of overseas student enrollment at U.S. universities is not keeping pace with some of the nation's competitors. During the 1999–2005 period, for example, overseas enrollments in the United States grew by 17 percent. Foreign enrollment in British universities grew by 29 percent during the same interval, in Australia by 42 percent, in Germany by 46 percent, and in France by 81 percent.<sup>51</sup>

Even countries that have seen growing foreign enrollment worry that this trend may not last. In an October 2008 report, for example, the British Council warned that the rapid expansion of higher education in countries such as India and China means that universities in the United Kingdom will have a harder time attracting students from abroad. (The Council suggested that British universities need to concentrate not only on student recruitment but on partnerships and research collaboration as well.)<sup>52</sup> In the past decade, for example, the number of Malaysian students at British universities has declined by more than 36 percent, as other nations such as Australia successfully woo these students.<sup>53</sup> Worried about this decline in enrollment from some nations, then prime minister Tony Blair initiated a program in 1999 that called for attracting an additional 271,000 foreign students to the United Kingdom—a quarter of all foreign students studying in primarily English-speaking countries.<sup>54</sup> The primary motivation for the initiative, which Blair later extended, was not bringing in tuition revenues but maintaining academic and economic competitiveness.

With universities around the globe vying for market share, recruiting students and fostering overseas partnerships have become de rigueur. In the United States, this involves not only individual universities—some of which hire recruiters to market their institutions to prospective students, and then to enroll them—but also higher education associations and the federal government. The U.S. Department of Education, for example, led a delegation of college presidents to China, Korean, Japan, and India in 2006, then took another group of university leaders to Chile and Brazil in the summer of 2007. Similarly, in June 2008 the Institute for International Education led a delegation of college presidents to three relatively undiscovered but fast-growing markets for new students: Thailand, Vietnam, and Indonesia.

Beyond the United States, other Western nations are also energetic recruiters of foreign talent. Australia, for instance, which is particularly

reliant on fees from international students, recruits heavily from China, Singapore, Malaysia, and the Middle East. As a result of those efforts, Australia—a country with a population only a bit larger than that of metropolitan New York—has attracted nearly one-third as many overseas students as the United States in the past couple of decades. Overall, 20 percent of students in Australian universities are from overseas—making higher education the nation's third largest export after coal and iron ore. In Scotland, too, universities are eager to enroll students from beyond their national borders. Nearly half of graduate students—and 20 percent of all students. —now come from overseas.

Recruiting foreign students is increasingly a priority for non-English-speaking countries, too. Many that have long been mostly "sending" countries now want to attract foreigners themselves. Singapore is hoping to attract 150,000 foreign students by 2015; Malaysia is seeking 100,000 students (up from 45,000 in 2005); and Jordan wants to attract 100,000 international students by 2020. China, which already has 196,000 foreign students, mostly from Asian nations such as Korea and Japan, 60 is now seeking to enroll 300,000 overseas students by 2020. Japan is especially ambitious; it aims to boost its current overseas enrollment of 120,000 to 1 million by 2025.

At times recruiting has become controversial, often due to the wide-spread practice—particularly among British and Australian universities—of offering per-student commissions to "agents" hired by universities to attract students. In some instances, recruiters have been given fees both by overseas students eager for Western credentials and by the universities seeking such students, creating concerns about financial conflicts of interest.<sup>62</sup>

Student recruiting can be so relentless that some entrepreneurial nations have adopted unconventional tactics. Not to be outdone by Australia's recruiting success, New Zealand recently launched (and then withdrew) steamy viral Internet ads aimed at young Asians. One video showed a young couple locking lips in a hot tub. The camera then pulled back to reveal their disapproving parents looking on. The words "Get further away from your parents" appeared at the bottom of the screen. 63

While a plurality of students who cross national boundaries to earn degrees in other countries are undergraduates,<sup>64</sup> student recruiting is particularly fierce when it comes to top graduate students. This is usually not because of the tuition revenues they will bring—many are supported by

fellowships—but because of their contribution to the research enterprise. "The battle for the knowledge of the future lies in recruiting postgraduate students," says Ellen Hazelkorn, the American-born director of research and enterprise, dean of the Graduate Research School, and head of the Higher Education Policy Research Unit at the Dublin Institute of Technology. "If you assume that we're in the middle of a knowledge economy, then you need to ask the question 'What will produce this knowledge? Where does it come from?' One of the biggest contributors to knowledge is universities. So then you ask, 'Who in higher education produces the knowledge and where does it come from?' Increasingly most of the work is done by researchers and their teams—and their teams are PhD students." 65

Hazelkorn notes that EU governments have set out to double the number of PhD students throughout the EU by 2010 in an effort to create what she terms "the biggest knowledge center in the world." This ambitious goal, combined with the limited number of domestic undergraduates likely to continue their studies, has led to intense efforts to enroll more overseas students, including scholarships designed to lure top doctoral candidates faced with many options. "There's an effort to counter the brain drain to the United States," she says.

The advantage to Great Britain and Ireland of offering overseas students an English-speaking environment is diminishing, Hazelkorn notes, as a growing number of universities on the European continent offer graduate-level programs in English. Now, she adds, universities eager to compete with American universities for top graduate students are retooling their PhD programs into something closer to the American model. That means moving away from the model in which "you sit at the foot of the philosopher king and you learn, which was the old traditional European model of PhDs," she says. Instead, European universities are creating a system in which cohorts of doctoral students take coursework and gain research skills of the kind that they will need to contribute to the knowledge economies in which they will participate once they have earned their doctorates.

Inevitably, the new global academic marketplace includes not just students but professors and university administrators as well. Perhaps the emblematic example of this emerging worldwide university culture is a professor of mechanical engineering named Choon Fong Shih. The son of a Chinese father and a Malaysian mother who emigrated to Singapore, he grew up in that nation, earning his undergraduate degree there before

following a fairly conventional East-to-West pattern of academic migration. After traveling to Canada to earn his master's degree at McGill University, he moved to the United States, obtaining his PhD from Harvard in 1973. He led a research group at the General Electric Corporate Research Lab, then went on to a highly successful career at Brown University, becoming one of the world's most frequently cited engineering researchers.

But in 1996, after several decades in the United States, Shih reversed course geographically and moved back to Singapore to found a materials science institute at the National University of Singapore. His star rose yet again in 2000 when he became president of the well-regarded university. Eight years later, like a professorial free agent in the rapidly changing global education economy, he was recruited away to become the founding president of Saudi Arabia's KAUST. 66

While journeys as numerous and distant as Shih's may not be taken by very many professors and administrators, his experience nevertheless illustrates the new patterns of faculty and research mobility that are beginning to emerge. Several administrators at American universities have taken senior positions at venerable British institutions, for instance, including two native Britons. Yale provost (and chemistry professor) Andrew Hamilton was nominated to become vice chancellor—the equivalent of president—of Oxford University in 2008. He took over from John Hood, an Australian who had previously headed the University of Auckland.<sup>67</sup> Another Yale provost, anthropologist Alison Richard, was recruited to become vice chancellor of the University of Cambridge in 2003.<sup>68</sup>

This kind of globe-trotting is seen as increasingly desirable outside the English-speaking world as well. Institutions that have traditionally had fairly homogenous faculties now actively seek international diversity. South Korea, for instance, has only twenty-two full-time foreign professors in its twenty-three public universities. In an effort to raise those numbers, the government is supporting universities in their efforts to recruit more foreigners. The nation's leading research university, the Korea Advanced Institute of Science and Technology, which is pushing hard to become a more cosmopolitan and competitive institution, recently recruited Mary Kathryn Thompson, an MIT mechanical engineering professor, to its faculty.<sup>69</sup>

The same patterns can be seen in other nations as well. In China, for example, despite the considerable flow of students and faculty to the West,

as the nation's own universities try to become more competitive, there are more instances of scholars relocating to those institutions from other countries. Canadian-born philosophy professor Daniel Bell has made just such a reverse commute after a worldwide academic journey. Born in Montreal with French as his mother tongue, he earned a BA at McGill, went to Oxford for his M.Phil and D.Phil in politics, and took his first teaching position as a lecturer at the National University of Singapore. Several visiting fellowships and jobs later (at New York University, the University of Hong Kong, and the Center for Advanced Study in the Behavioral Sciences at Stanford, among others), the fluent Chinese speaker is now a philosophy professor at Beijing's elite Tsinghua University.

In Italy, which has experienced a much-lamented brain drain, Bocconi University in Milan is doing its part to reverse the trend by recruiting some of the best foreign brains to its campus: it aims to hire at least half its new professors from abroad by 2010. This private university generally uses English as the language of instruction and tries to offer salaries competitive with those offered by American state universities. Still, many bureaucratic obstacles—such as visa difficulties—remain.<sup>70</sup>

Despite such impediments, these faculty and student examples suggest that the globalized academic community is creating swirling patterns of mobility that don't always abide by the traditional developing-to-developed world trajectory. In a recent paper, researchers Rajika Bhandari and Peggy Blumenthal of the IIE describe the phenomenon as follows:

Although there are no hard data to support this assertion, anecdotal evidence suggests that international mobility or skilled migration no longer follows a strictly linear pattern where people move between just two countries, typically from South to North. In an increasingly connected and flattening world, a student from Asia, for example, might choose to obtain an undergraduate degree in her home country, a Master's degree in the U.S., and a doctoral degree in the U.K., returning home subsequently to work for a European multi-national firm.<sup>71</sup>

Blumenthal, the IIE's executive vice president and chief operating officer, and Bhandari, the organization's director of research and evaluation, believe the terms "brain circulation" or "brain exchange" provide a more nuanced description of today's patterns of academic mobility and migration of skilled workers than the oft-used phrases "brain drain" and "brain gain." In the same vein, the University of Toronto's Jane Knight offers another new shorthand for multination study and work patterns: "brain train." Because of this phenomenon, she argues, the higher education sector is becoming a more important actor in public policy, and is increasingly likely to work hand in hand with science and industry, notably the technology sector, as well as immigration authorities, "to build an integrated strategy for attracting and retaining knowledge workers." <sup>73</sup>

As student and faculty mobility takes new directions, the shape of the academy is gradually being transformed by international mobility, particularly among elite scholars. A team of University of Warwick researchers recently completed a study finding that half the top physicists in the world no longer work in their native countries and that three-quarters of young economists in top U.S. universities earned their undergraduate degrees in another nation. The study also found that the United States and Switzerland are the largest importers of elite scientists on a per capita basis. "Talented researchers," the study's authors note, "are being systematically funneled into a small number of countries." <sup>74</sup>

Further evidence of the extent and impact of faculty globe-trotting is collected in a 2008 OECD report, "The Global Competition for Talent: Mobility of the Highly Skilled." The report observes, for example, that Australia has experienced fast growth in the movement of researchers into and out of the country. "The number of academics and scientists entering Australia on a long-term basis rose from 1283 in 1995-96 to 4823 a decade later," it notes. Departures of scientists and academics also rose during the same period, but at a slower rate.<sup>75</sup> In the United Kingdom, a report by Universities UK highlights the significant role in the academic workforce now played by professors recruited from abroad. During the periods 1995-96 to 2003-4, 806 academic staff came to the United Kingdom from Eastern and Central Europe; 3,018 from Western Europe and Scandinavia; 1,926 from Australia, the United States, Canada, and New Zealand; 526 from China, Japan, and East Asia; and 678 from the Middle East and Central Asia. And in Norway in 2001, some 16 percent of academic staff in the sciences were citizens of other nations.<sup>76</sup> A long time may pass before there is any authoritative answer to the question of whether and how the nature of academic work and knowledge production changes when increasing numbers of students, faculty, and even presidents are crossing borders to study, teach, and collaborate, when campuses themselves are becoming increasingly internationalized, and when online learning is spreading rapidly. But in the near term, evidence is emerging that, at the very least, globalization is having some practical intellectual consequences.

For one thing, the research community is on the road more than ever before. Research is "a globalized activity," says University of Warwick vice chancellor Thrift. "Many of my colleagues here spend as much time going overseas as they do at home." Little wonder, then, that cross-border collaboration is going up. A July 2007 study by Britain's Office of Science and Innovation, for instance, found that in 2001-5, the percentage of papers by American scientists written with coauthors from other nations rose to 25 percent, up from 19 percent during the 1996–2000 period. The degree of international collaboration rose even more in Britain, growing from 29 to 40 percent between the two periods.<sup>77</sup> Another study, which examined 2.4 million scientific papers written at 110 leading American research universities from 1981 to 1999, found increased collaboration in general—as scientific teams grew larger—as well as a greater degree of international collaboration. The authors write that "placement of former graduate students is a key determinant of institutional collaborations, especially collaborations with firms and foreign institutions."78

Does all this interaction across national boundaries actually affect the quality of academic work? It is hard to think of a research methodology that could provide a definitive answer to that question, particularly given that growing global collaboration is a relatively new phenomenon. Still, evidence suggests that international research experience is at least associated with higher quality. Well over half the highly cited researchers based in Switzerland, Australia, Canada, and Italy have spent time outside their home countries at some point during their academic careers, according to a 2005 study.<sup>79</sup>

Beyond physical mobility, another far-reaching change is taking place as well. Increasingly, academic mobility can be understood not just literally—as comprising the travels of students, professors, and administrators—but also metaphorically, as a state of mind. Universities now think of themselves as institutions that not only compete globally with other

universities but are also increasingly internationalized in their own operations and ambitions.

Take Stanford University, which, like many of its peers, is making a concerted effort to take stock of where it is globally—and where it ought to go. The 124-year-old university already has a substantial international presence on its own campus simply by virtue of its faculty and student body. About one-third of faculty members are foreign-born (some have become U.S. citizens), while around 7 percent of undergraduates and 30 percent of graduate students are from overseas. Most foreign faculty members tend to be of European origin, while most foreign graduate students come from countries such as China, Korea, Japan, and India. As at other prominent American universities, foreign grad students are especially heavily represented at the School of Engineering, the Graduate School of Business, and the School of Earth Sciences.

Notwithstanding this facts-on-the-ground international representation in Palo Alto, Stanford's board of trustees decided several years ago that the rise of globalization warranted considerably closer examination, both of what was happening at universities internationally and of Stanford's place in this fast-changing landscape. It brought in the consulting firm McKinsey and Company to prepare background research that formed the basis for a two-day board retreat, the upshot of which was a realization that the trustees lacked concrete information about Stanford's own global activities. Roberta Katz, then the university's associate vice president for strategic planning, was asked to prepare an inventory of what Stanford was up to. "It was hard to say we should be doing XYZ in the future if we didn't even know what we were [already] doing in terms of ABC," she says. 81 Her conclusion? Without any particular planning effort, Stanford's faculty and students were engaged in numerous activities, large and small, that placed the relatively young university squarely in the midst of the global academic revolution "The simplest way to put it is that we have a thousand flowers blooming," Katz says.

In addition to the many international faculty and students on campus, Katz found that Stanford professors of all nationalities are heavily involved in cross-border scholarly activities. Some 80 percent, she estimates, have "some global aspect" to their research and are in regular contact with colleagues from other countries—by traveling abroad as visiting lecturers or

by supervising graduate students and postdocs from abroad. One example of a partnership with far-reaching implications: in several departments, including applied mathematics and computer science, faculty members have been intensely involved with establishing Saudi Arabia's KAUST. In addition to receiving personal compensation and a multimillion-dollar gift to Stanford in return for their participation, Stanford professors anticipate ongoing academic relationships and research collaborations with the new Middle Eastern institution.

As part of Katz's review, the university also examined ways in which undergraduates are engaged overseas. Perhaps its best-known program, more than four decades old, is the Bing Overseas Studies programs, which sends undergraduates to more than a dozen countries. Students work under the supervision of Stanford professors (sometimes in conjunction with professors from universities in the host countries) and receive Stanford credit for what is typically an academic quarter overseas. To be sure, the program is far from an immersion experience. "It's us taking Stanford students to another country and providing them with more or less a Stanford education," says Katz. Still, she believes it is valuable simply by virtue of exposing students to the varying perspectives and cultures of another country.

So what did the trustees recommend following Katz's review? Their conclusion was, in part, to do nothing. So much globalization is under way that for the time being, "the consensus view is 'Let's not put too much bureaucratic infrastructure in place over this because it's happening,'" she says. At the same time, the campus leadership is eager to expand undergraduate opportunities abroad. "Getting our students to have a global mind-set, from an educational perspective, is very important to us," Katz observes. In an effort to encourage all undergrads to have some kind of global experience, the university is hoping to create more foreign internships, as well as more alliances with peer institutions in other countries. It also hopes to use an existing campus international center, which has thus far facilitated visas and programming for overseas students, to create more opportunities for domestic students and foreign students to interact with one another.

On the faculty front, while existing activities are numerous, sometimes communication is lacking. "Someone from the law school who is going to

some province in China may not be aware that someone from the biology department is working in the same vicinity," says Katz. The university will attempt to open up better channels of communication between its seven distinct schools, and also to provide improved nuts-and-bolts support about everything from telecommunications to health insurance for professors who want to set up research projects in other countries. Philosophically, Katz says, Stanford is determined to use the term "global" rather than "international." That's because the word "international" might imply that Stanford sees itself, and implicitly the United States, as "the hub of the wheel," she explains. By contrast, she adds, "If you have a global perspective, you understand that there are many nodes on a global network."

Like other elite universities, Stanford must also consider the matter of expansion overseas. A key question: whether making aggressive efforts to extend its presence globally could undermine the very quality that has placed it in the top ranks of higher education worldwide. "There's a distinction between building a brand and being a quality institution," Katz says. "Creating strong presences in other countries or having borders lifted is not necessarily a wise move when you already have a very strong brand." The stakes are particularly high for an institution like Stanford, which has much to lose if its reputation is eroded. Katz maintains that it can hold onto the value of its accomplishments in Palo Alto while still becoming a global university—but not necessarily acquiring foreign real estate. "You don't have to have a campus" in another country to be part of a global network, she says.

As Stanford was formulating its approach to globalization, its task force members consulted with Yale University president Richard Levin, an economist who is regarded as a leader in campus internationalization. So it is no surprise that Stanford is in many respects following Yale's lead. Yale is moving aggressively to embrace globalism in many forms, from physical mobility of students and professors through study abroad and joint ventures with foreign universities to a related attitudinal change that encourages students at the New Haven, Connecticut, university to see themselves as global citizens. "We want to do a good job of educating students for twenty-first century leadership, and you can't be cross-culturally illiterate and be a twenty-first century leader," Levin says. 82

A key plank in Yale's platform is to send more of its students overseas. Already, the number of undergraduates doing study abroad has grown

from 400 to 1,200 in the past five years, a figure that continues to grow. Because many students are reluctant to abandon Yale's rich course offerings and campus life during the school year, the university is placing a particular emphasis on sending undergrads overseas for study or internships during the summer. At the same time, Yale has made a concerted effort to recruit more international students: In the past twenty years, the proportion has jumped from one in fifty undergraduates to one in eleven. This has the effect of expanding Yale's search for top students, previously focused almost entirely on the United States, around the world. Admissions officials regularly travel to India, China, and beyond. "We want the best possible students that we can attract," Levin says. "There's just a bigger pool out there than the national boundaries define."

Moreover, in addition to boosting Yale's academic caliber, Levin sees the increased presence of foreign students as a means of exposing their U.S. counterparts to diversity, not only in culture but also in worldview. "It's the only way that American kids are going to, without going abroad, get real opportunities to learn about how people from different countries think differently than we do," he says. The growth in overseas students "already is having a big impact," he adds. "Everybody who graduates from Yale has an international friend."

The university cares about fostering leadership, too, both nationally and internationally. "We want to have an impact," Levin says, and Yale's long-standing traditional of preparing Americans for public service must now be extended worldwide. "We're in an interconnected world today," Levin says. "We're proud to say that we've not only educated four of the last six presidents of the U.S. but [also] a former president of Germany, two prime ministers of Korea, and a president of Mexico. We'd like to see that grow."

Other parts of Yale's internationalization agenda, outlined in a detailed strategic plan for internationalization that was released after a year of study in 2005, involve forging a wide range of institutional partnerships around the world. On the research front, the strategic plan makes the case that lower communication costs and lower barriers to trade and investment have created "huge potential gains in research productivity." The plan notes that other universities with which Yale competes have major partnerships in China—Johns Hopkins University completed a \$21 million, 100,000-square-foot building at Nanjing University in 2006,83 for example, and the

University of Michigan is expanding its joint undergraduate and master's programs with fast-growing Shanghai Jiao Tong University.

Thus, competitive forces are driving Yale's own efforts. The university has long-standing ties to China, and those now include extensive collaboration with Chinese research universities. Two key examples: Yale's Joint Center for Biomedical Research at Fudan University in Shanghai, and the university's Joint Center for Plant Molecular Genetics and Agrobiotechnology at Peking University. Both operate, the strategic plan observes, "at a scale that would be difficult in the United States." That's because both represent the academic version of global free trade, Levin says. "Facilities and laboratory technicians are cheaper in China than in the United States," he says. "We have one scarce factor of production [in China], which is the sophisticated knowledge worker who is the leader of the enterprise, whose research design is driving the system. And we're talking about experiments that are large scale and require a lot of lab technician support and a lot of space."

While Yale is enthusiastically pursuing partnerships around the world, it has been far more reticent than some other universities about creating branch campuses overseas. It came close to establishing an art institute in Abu Dhabi, but pulled out in 2008 after its Emirati partners insisted that Yale grant degrees, which the university was unwilling to do. But Yale has been far more eager to spread its teaching across borders through a virtual initiative that provides course content free of charge on the Internet. Each course includes not only a syllabus, as with the Massachusetts Institute of Technology's Open Courseware program, but also high-quality video and transcripts of lectures, which Levin is eager to point out are not typically provided for MIT's courses.84 Twenty-five Yale courses are currently available, a number that is projected to grow. Levin is well aware that simply putting courses on the Internet is no guarantee that they will be used. Accordingly, Yale is working with seven universities around the world that will either offer the classes with support from teaching assistants or adapt some material from the Yale courses in their own classes. "I think we'll go heavier in that direction than we will in the establishment of these branch campuses," he says.

Mobility, evidently, takes many forms, both real and virtual. And the possibilities offered by technology, while yet to be fully realized, seem likely to play a decisive role in expanding higher education both within and

across borders. Already, as former World Bank and Whitney International University official Ron Perkinson notes, online higher education is growing more quickly than any other segment of post–high school education.

But inevitably, many uncertainties and quandaries lie ahead. For one, are university leaders like Levin wise to expand their offerings overseas through distance learning? Some analysts contend that an expanded online presence is an attractive way for elite universities to burnish their reputations (in contrast to the widespread view that creating branch campuses is risky for top colleges because of the risk that their prestigious brands will be diluted as a result of problems with assuring quality control in foreign settings). Simon Marginson of the University of Melbourne, for example, argues that MIT's Open Courseware initiative will enhance rather than diminish the value of an MIT degree. Similarly, he says that Harvard strengthened its reputation when it made all articles by its arts and sciences faculty available on the Internet. "All else being equal," he believes, "Internet (or any) circulation of materials attached to a high-status brand augments the status of that brand."85

That said, Don Olcott, chief executive of the London-based Observatory on Borderless Higher Education (OBHE) maintains that global distance learning would be expanding even faster were it not for persistent concern over its legitimacy. Foreign students and universities who are paying to receive the benefits associated with Western universities, including academic programs, research, and technology transfer, value real-time, inperson contact over virtual learning. They are saying, in his words, "We will pay, but we want the real deal, not virtual expertise." This distinction may gradually become more and more blurry, however. Olcott notes that even on-the-ground overseas branch campuses of Western institutions are integrating "blended approaches" that include online learning as part of their course-delivery menu. "Campus faculty do this every day now, and it has become normative practice," he says.<sup>86</sup>

As universities everywhere contemplate globalization and take steps not to get left behind, old mechanisms of mobility are taking on new forms. Chief among them is language, the sine qua non of cross-border communication. When Western universities were first created, as noted by Philip Altbach, director of Boston College's Center for International Higher Education, the lingua franca that allowed students and professors from diverse nations to study together was Latin, the language of the Church

and thus of scholarship. Today, of course, the universal language of scholarship is English. Notwithstanding the exhortations in English-speaking nations—particularly the United States—for young people to learn other languages, the reality is that English is the key to university access and scholarly collaboration everywhere. Researchers have already calculated that nonnative English speakers worldwide outnumber native ones by three to one. Researchers have already calculated that nonnative English speakers worldwide outnumber native ones by three to one. Researchers have already calculated that nonnative English speakers worldwide outnumber native ones by three to one. Researchers have already calculated that nonnative English speakers worldwide outnumber native ones by three to one. Researchers have already calculated that nonnative English to only must Chinese and Chilean students master English to study at Anglophone universities, but universities in non-English-speaking countries are offering degrees in English to cater to Anglophone and non-Anglophone students alike. "When the French start offering a master's taught in English, you know the world has changed," says Peggy Blumenthal of the Institute of International Education.

In this evolving world, foreign students who once would have been unable to study at a German university without knowing German can now, for instance, enroll in an engineering master's program at the Technical University of Munich taught entirely in English. Similarly, Englishlanguage degrees are available in Scandinavian nations where it is hard to attract international students willing to learn Norwegian and Swedish. French and Spanish universities have begun offering English-language degrees, and the phenomenon is small but growing in Italy, Blumenthal says. The European Commission's Erasmus Mundus program, which gives scholarships to non-Europeans to do graduate work in EU universities, recently produced a booklet highlighting eighty-nine master's and PhD programs—in seventy-five of which the language of instruction is English. While the program is off to a fairly slow start, and must overcome the pull of brand-name elite universities outside the EU, collaborative efforts between universities, combined with an accessible language of instruction, will eventually lure students, predicts Blumenthal's colleague, IIE president Allan Goodman. "That is going to create, both within Europe and between Europe and the rest of the world, a whole new level of mobility."89

#### LOOKING AHEAD

Will the steady growth in academic mobility that has taken place over the centuries, with its vast acceleration in recent decades, continue in the future? And will the United States continue to be the most sought-after destination for students and professors alike? Some observers predict that today's waves of border-crossing students will seem small before long: one study estimates that by the year 2025, 8 million students will travel to another country for educational purposes—nearly three times more than today. 90 One underlying factor is the rise in the number of countries that have made K-12 education mandatory, creating huge numbers of graduates seeking higher education. "The massification of secondary education means that there are a whole lot of students seeking postsecondary education," says Peggy Blumenthal of the IIE. Indeed, 153 million students are now enrolled at universities around the world, a 53 percent jump in just nine years. With many nations unable to keep up with this growing demand, students have strong incentives to seek higher education wherever they can find it. An extra motivating factor is the perception that global aptitudes—linguistic, cultural, academic, or all three—are more and more necessary. "It's pretty clear that people realize their careers are going to be global," says Blumenthal. "They're not going to work for one company their whole lives. And whatever company they work for will probably be owned by a variety of multinational actors."

In countries such as India and China, which already account for some one-third of the world's tertiary students, 91 mobility is especially likely to continue, particularly as student populations grow. Altbach of Boston College estimates that the two countries could make up more than half the worldwide growth in student enrollment. Postsecondary capacity is growing in China and India, but to the extent both nations can't keep up with student demand—both in quantity and in quality—they will continue to be the largest sending countries. "In both countries, the upper middle class that can afford to send kids to Western countries, particularly to the U.S., is beginning to send them in significant numbers for undergraduate study, because there aren't enough quality places in either country, especially in India, for smart and reasonably well-heeled undergraduate students who want a good education," Altbach says. 92

Student mobility won't just be one-way, however. Both nations are also increasingly looking to foreign universities to come in as providers (although given its unfortunate protectionist history, the effort is very much in its embryonic stages in India). And they are likely to attract more foreign students to their own institutions. They do so for the same reasons as many of their Western counterparts—foreign students impart an added international character to campuses while also serving as a source of

tuition revenues. India doesn't serve nearly as many foreign students as China—about 20,000, compared to China's more than 200,000—but Altbach believes both countries are increasingly likely to attract international students as their economic ascent continues and they begin to be viewed as centers of academic excellence. China is likely to draw mostly students from East and Southeast Asia, he suggests, while India will be an attractive destination for students from South Asia.

The prospect that China and India may draw students largely from their own neighborhoods dovetails with a theory floated by Don Olcott of the OBHE. "There may be a new 'regional globalism' emerging where we will see more and more student mobility stay regional rather than involving large global distances," he says. "True, many international students will continue to head to today's most popular destinations: the United States, the United Kingdom, Australia, Germany, and France. But the emergence of regional agreements such as the EU's Bologna Process, has introduced a new model as well.

The Bologna Process, also known as the Bologna Accord, began in 1998 with a small group of countries and now includes forty-six participating nations. It standardizes degree requirements across the EU, making it much easier for students to move between member nations for study and work. The Bologna Accord creates, in effect, an academic and employment free-trade zone. That, Olcott, suggests, will not only facilitate inter-Europe student mobility but will also make Europe itself "a prime destination" for foreign students. Indeed, one goal of the accord was to improve the attractiveness of European universities to students from outside the EU. Over the longer term, the Bologna approach could spread to regions such as East Asia and the Persian Gulf, which might well wish to reap the benefits of easy internal scholarly exchange (which could keep more top students close to home), a strong regional knowledge base, and a greater ability to attract students from outside the region.

While more mobility seems inevitable over the long term, obstacles will surely be encountered along the way. To cite a well-known example, the United States experienced a slump in foreign enrollment after the 9/11 attacks, largely because of heightened security measures and resulting visa difficulties for many students. Farrollment recovered within a few years, but world events continue to have a huge effect on student movement. A worldwide pandemic or political instability could quickly alter the extent

and direction of foreign study. And, of course, the global financial crisis that began in 2008 has already forced some students to change their plans. The *Chronicle of Higher Education* cites the case of Indian student K. Archana, who graduated first in her class from Osmania University in 2006 and was admitted to two American PhD programs in microbiology in 2008. The Hyderabad resident shelved her plans to study in the States, in part because the combination of a stronger dollar and a falling rupee would have raised her tuition costs. What's more, she would have needed to borrow some \$42,000 to cover tuition and living expenses at a time when the dismal job outlook made taking on such a high debt load seem highly risky.

Archana is far from alone. India is the second-largest source of America's overseas students, sending more than 94,000 students to the United States in 2007. Worldwide, some 90 percent of Indian students rely on loans, the *Chronicle* notes. But the battered economy has meant that many are not only anxious about taking on debt but also having greater difficulty securing loans for foreign study. That could mean fewer Indian students at American universities.<sup>96</sup>

Similarly, tens of thousands of students in South Korea dropped or changed their overseas study plans in the wake of the worldwide financial meltdown. In a nation where studying abroad is increasingly regarded as necessary for professional success, the rapid decline of the won—it dropped by one-third in the last few months of 2008 alone—led many students to abandon their overseas ambitions. This was particularly true for the large numbers of students who sought to go abroad not for advanced degrees but to enroll in short-term programs, often to study English. "The global economy has not been good to me," Kang Youn-mo, a twenty-four-year-old French major who canceled plans to go to Paris, told the *New York Times*.<sup>97</sup>

Still, the economic crisis has by no means ended the appeal of foreign degrees. When job prospects at home are dimmer than before, the attraction of study abroad may be greater despite the cost. Just as U.S. students head to business schools when workforce opportunities are limited, a similar phenomenon occurs internationally. Blumenthal of the IIE explains, "When there are no jobs in India or China, people will say, and are saying, 'I might as well take that time to invest in getting a credential overseas that will help my career.' "At the education fairs held by the IIE to attract for-

eign students to U.S. universities, recent attendance has increased rather than dropped. "The major sending countries are in Asia," Blumenthal says, "and in Asia, culturally, parents consider investment in education the highest priority. Whatever resources they have left they'll put into educating their kids."

Indeed, in China, so-called overseas-study fever has continued unabated despite financial woes. Unemployment among recent college grads is 12 percent, household savings are high, the yuan has risen dramatically against the dollar, and families are intensely focused on their children's education. Elsewhere, the economic crisis has simply led students to alter their foreign-study plans in favor of less expensive destinations. South Koreans, for instance, are shifting their sights away from Great Britain and the United States and toward such nations as Australia, South Africa, Malaysia, and the Philippines. 99

Whatever difficulties are encountered along the way, over time the trend toward a near-borderless academic world seems inexorable. Whether motivated by the quest for intellectual enlightenment, career success, or both, students are more and more likely to have academic horizons that spread well beyond their home countries. As students continue to hopscotch across nations, behaving, in the words of the Economist, like "educational shoppers" in the "global supermarket," 100 changes large and small are well under way. Ironically, for instance, German universities to which Americans once looked for guidance now send regular delegations of rectors to the United States to learn how to "brand" themselves and to recruit internationally with greater success. For their part, despite rising global competition for students, American universities may see their market share grow still bigger. U.S. institutions by and large have yet to follow the lead of their counterparts overseas and use "agents" to recruit international students. The practice has been controversial in the United States, but a new nonprofit recruiting group hopes to destigmatize the practice by creating a new code of ethics to which all its members must subscribe. If that happens, the Economist predicts, "the market in international students will be transformed."101

But the influence of Western universities will not ultimately rest on the number of students they attract, considerable though that number has become. The very concept of academic mobility is being redefined. On the

#### THE WORLDWIDE RACE FOR TALENT

one hand is the proliferation of efforts by universities to set up branch campuses where their potential students reside. But a still more far-reaching form of mobility is the way in which the idea of the university itself is being exported. More than ever before, the Western research university is being replicated around the world by societies that have realized that the road to economic success runs through college campuses.