

2016 Top Markets Report **Education**

Overview and Key Findings

Introduction

The number of international students studying in the United States continues to grow (rising 10 percent last year to 974,926¹), but over the past 14 years, the percentage of internationally mobile students choosing to study in the United States has declined from 28 percent to 22² percent. Although U.S. institutions still host the largest percentage of internationally mobile students, the U.S. share is eroding due to the fact that global competition for international students is rising quickly, especially among English-speaking countries and foreign institutions that are increasing their English-language course offerings.

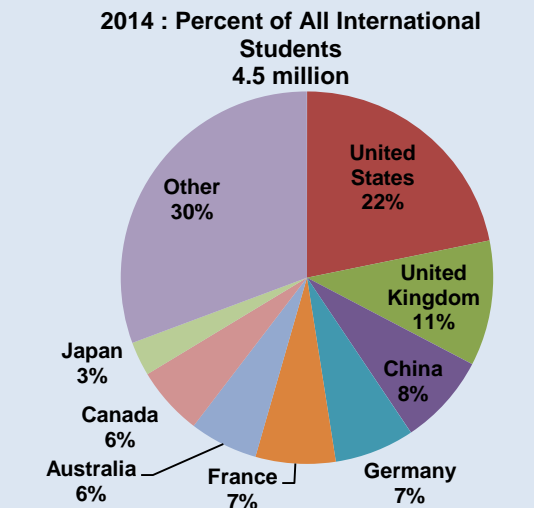
This report assesses global market opportunities for U.S. colleges and universities, providing guidance for U.S. institutions interested in the recruitment of international students.

Key Findings: Top Markets and Methodology

The list of countries sending the most students to the United States has been relatively stable during the past 10 years, and ITA does not anticipate significant changes to the list in the near future. Specifically, China, India, and Korea have ranked as the top three “sending” countries for the past 10 years while Canada, Taiwan, Mexico, and Japan have consistently ranked among the top 10 “sending” countries.

Although the number of students from the top “sending” countries has been relatively stable or growing, there are important fluctuations or sharp growth from counties such as Saudi Arabia, Iran, Brazil and Turkey. Such fluctuations are likely due to changes in government funding programs in each country.

Figure 1: U.S. Share of Internationally Mobile Students (2000 vs 2014)



Source: Institute of International Education (IIE)/Project Atlas

Figure 2: Projected Top Markets for Education Exports

- | | | | | |
|----------|-----------------|-----------|-----------|------------|
| 1. China | 3. South Korea | 5. Canada | 7. Taiwan | 9. Vietnam |
| 2. India | 4. Saudi Arabia | 6. Brazil | 8. Japan | 10. Mexico |

Figure 3: Internationally Mobile Students

Place of Origin	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
WORLD TOTAL	564,766	582,984	623,805	671,616	690,923	723,277	764,495	819,644	886,052	974,926
China	62,582	67,723	81,127	98,235	127,628	157,558	194,029	235,597	274,439	304,040
India	76,503	83,833	94,563	103,260	104,897	103,895	100,270	96,754	102,673	132,888
South Korea	59,022	62,392	69,124	75,065	72,153	73,351	72,295	70,627	68,047	63,710
Saudi Arabia	3,448	7,886	9,873	12,661	15,810	22,704	34,139	44,566	53,919	59,945
Canada	28,202	28,280	29,051	29,697	28,145	27,546	26,821	27,357	28,304	27,240
Brazil	7,009	7,126	7,578	8,767	8,786	8,777	9,029	10,868	13,286	23,675
Taiwan	27,876	29,094	29,001	28,065	26,685	24,818	23,250	21,867	21,266	20,993
Japan	38,712	35,282	33,974	29,264	24,842	21,290	19,966	19,568	19,334	19,064
Vietnam	4,597	6,036	8,769	12,823	13,112	14,888	15,572	16,098	16,579	18,722
Mexico	13,931	13,826	14,837	14,850	13,450	13,713	13,893	14,199	14,779	17,052
Iran	2,420	2,795	3,060	3,533	4,731	5,626	6,982	8,744	10,194	11,338
United Kingdom	8,274	8,438	8,367	8,701	8,861	8,947	9,186	9,467	10,191	10,743
Turkey	11,622	11,506	12,030	12,148	12,397	12,184	11,973	11,278	10,821	10,724
Germany	8,829	8,656	8,907	9,679	9,548	9,458	9,347	9,819	10,160	10,193
Nigeria	6,192	5,943	6,222	6,256	6,568	7,148	7,028	7,316	7,921	9,494
Kuwait	1,703	1,633	1,823	2,031	2,442	2,998	3,722	5,115	7,288	9,034
France	6,640	6,704	7,050	7,421	7,716	8,098	8,232	8,297	8,302	8,743
Indonesia	7,575	7,338	7,692	7,509	6,943	6,942	7,131	7,670	7,920	8,188
Nepal	6,061	7,754	8,936	11,581	11,233	10,301	9,621	8,920	8,155	8,158
Hong Kong	7,849	7,722	8,286	8,329	8,034	8,136	8,032	8,026	8,104	8,012
Venezuela	4,792	4,523	4,446	4,678	4,958	5,491	6,281	6,158	7,022	7,890
Malaysia	5,515	5,281	5,428	5,942	6,190	6,735	6,743	6,791	6,822	7,231
Thailand	8,765	8,886	9,004	8,736	8,531	8,236	7,626	7,314	7,341	7,217
Colombia	6,835	6,750	6,662	7,013	6,920	6,456	6,295	6,543	7,083	7,169
Spain	3,455	3,575	3,660	3,849	3,971	4,330	4,924	5,033	5,350	6,143

Source: - IIE/Open Doors 2015

Students from Saudi Arabia have grown considerably since 2005/06, and the country has ranked fourth among the top “sending” countries for each of the past four years. There was a significant increase in students from Brazil, starting in 2012, at the beginning of the Scientific Mobility Program. In fact, students from Brazil grew from 9,029 in 2011/12 to 23,675 in 2014/15. But due to economic and government budgetary problems in Brazil, the Scientific Mobility Program is now suspended.³

There has also been a significant increase in students from Iran since 2009 while Turkey has dropped out of the top 10 “sending” countries during the past two years.

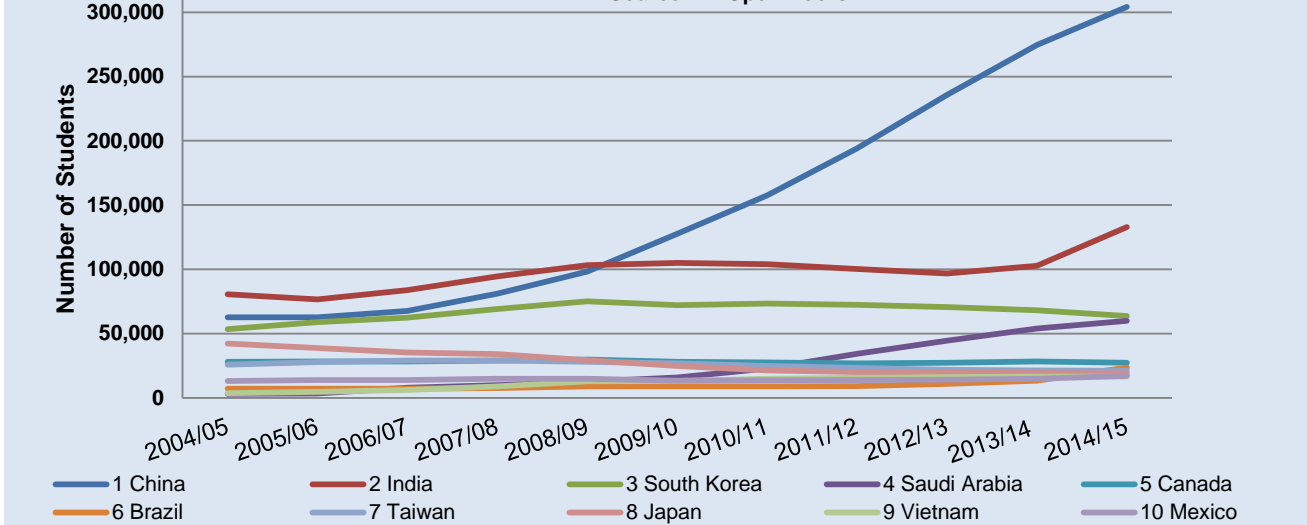
Countries with notable increases in the number of students studying in the United States compared to last year include Brazil (78 percent growth), India (29 percent growth) and Kuwait (24 percent growth).⁴ In the case of Brazil and Kuwait, during 2014/15, there were significant government programs to support study abroad.

This relative stability is illustrated in figure 4. It is important to note a few potential challenges to our forecast:

- 1) The Brazil Scientific Mobility program has recently been frozen. The program was designed to fund 101,000 students over the past four years (75,000 from the government and 26,000 from private sector sources). Future Brazilian government funding for overseas study is highly uncertain at this point.

Figure 4: International Students in the United States Top Ten Sending Countries (ranking of 2014/15)

Source: IIE Open Doors



2) Low oil prices could depress the number of students coming from Saudi Arabia and other countries in the Middle East, as many of these students are funded by the government.

Figure 6). These students will come largely from a concentrated number of countries, with roughly 38 percent coming from China, but will study at many locations throughout the United States. This forecast was derived using the methodology outlined in Appendix 1. As the table below reveals, China and India are projected to be the top “sending” countries for at least the next four years.

Developments in 2015 – Relative Stability

This report assesses global market opportunities for U.S. colleges and universities, providing guidance for U.S. institutions interested in the recruitment of international students. Worthy of note is that many U.S. colleges and universities have chosen to focus their recruitment efforts outside of the Top Markets so as to further diversify their campuses.

Developments Regarding Community Colleges

International students studying in two-year institutions (community colleges) rose 4.2 percent to a level of 91,648 in the 2014/15 academic year.⁵ This slower growth rate has been a six year trend. Students studying at two-year colleges as a percentage of total international enrollments has declined from 14.3 percent in 2008/2009 to 9.4 percent in 2014/2015.⁶

Competitiveness of U.S. Colleges and Universities Overall Forecast

From a global perspective, the number of internationally mobile students studying in the United States is projected to reach 1,185,000 in 2019/20 (see

Figure 5: Internationally Mobile Students Attending U.S. Community Colleges

Year	Total Int'l Students	Annual % Change	Int'l Students at Community Colleges as a Proportion of Total Int'l Enrollment
2004/05	81,859	-	14.5
2005/06	80,851	-1.2	14.3
2006/07	84,061	4	14.4
2007/08	86,683	3.1	13.9
2008/09	95,785	10.5	14.3
2009/10	94,175	-1.7	13.6
2010/11	89,853	-4.5	12.4
2011/12	87,997	-2.1	11.5
2012/13	86,778	-1.4	10.6
2013/14	87,963	1.4	9.9
2014/15	91,648	4.2	9.4

*Calculated based on data from the National Center for Education Statistics
Source: Institute for International Education, Open Doors Report

Competitiveness in the U.S. market

Within the United States, no school dominates the market for international students. Even the school that hosts the largest number of international students is home to only 1.4⁷ percent of the total number of international students studying in the United States. On the other hand, 60.2 percent of students studying in the United States in 2014/15 originate in the top five “sending” countries. China alone currently accounts for 31.2 percent of international students in the United States. After the top five countries (China, India, South Korea, Saudi Arabia, and Canada), no country accounts for more than 2.4 percent of international students in the United States.⁸

Industry Overview and Competitiveness

U.S. colleges and universities enjoy a strong competitive advantage over similar institutions in many other countries, presenting a unique opportunity to support export growth while also providing talented students to the country’s many outstanding academic institutions. U.S. schools benefit from a reputation of high-quality education, English-language instruction, strong curricula in attractive areas (science, technology, engineering and mathematics (STEM), and business), globally mobile credentials, teaching and training opportunities, and world-class research facilities. These advantages are somewhat offset by perceived visa challenges and concerns about high tuition.

Some students think the student visa process is highly bureaucratic. Some officials believe the perception is inconsistent with reality. The criteria for admission include:

- Student must be enrolled in an "academic" educational program, a language-training program, or a vocational program;

- Student’s school must be approved by the Student and Exchange Visitors Program, Immigration & Customs Enforcement;
- Student must be enrolled as a full-time student at the institution;
- Student must be proficient in English or be enrolled in courses leading to English proficiency;
- Student must have sufficient funds available for self-support during the entire proposed course of study;
- Student must maintain a residence abroad, which they have no intention of giving up.

The Nature of Education Exports

Attracting the best students from around the world has become a large and growing global export opportunity and source of competition. Policy-makers increasingly recognize the benefit of facilitating a globally-minded society, and of empowering their populations with the best ideas and skills that are provided by leading colleges and universities. By 2025, the OECD forecasts that eight million students will be globally mobile. This figure is up from just 2.1 million students in 2000.⁹ Last year, the number of students coming to the United States totaled almost 975,000, a 10 percent increase from the previous year and an 89 percent increase over the past 15 years. These students contributed \$30.8 billion¹⁰ to the U.S. economy – a number that ITA expects to increase going forward as tuition costs increase and more students come to the United States. As colleges and universities seek to diversify their student bodies and increase the international nature of their programs, recruit the best minds, and increase their revenues, many are actively recruiting foreign students, which will continue to expand this market in the years ahead.

Figure 6: Foreign Students Studying in the United States (2015-2020 are Forecasts)

Place of Origin	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
WORLD TOTAL	564,766	582,984	623,805	671,616	690,923	723,277	764,495	819,644	886,052	974,926	1,033,400	1,064,400	1,096,400	1,140,200	1,185,800
China	62,582	67,723	81,127	98,235	127,822	157,558	194,029	235,597	274,439	304,040	317,300	345,800	374,400	402,900	431,500
India	76,503	83,833	94,563	103,260	104,897	103,895	100,270	96,754	102,673	132,888	121,300	125,200	129,100	132,900	136,800
South Korea	59,022	62,392	69,124	75,065	72,153	73,351	72,295	70,627	68,047	63,710	65,000	66,300	67,600	68,300	69,000
Saudi Arabia	3,448	7,886	9,873	12,661	15,810	22,704	34,139	44,566	53,919	59,945	56,900	54,100	51,400	49,900	48,400
Canada	28,202	28,280	29,051	29,697	28,145	27,546	26,821	27,357	28,304	27,240	27,200	27,000	26,900	26,700	26,600
Brazil	7,009	7,126	7,578	8,767	8,786	8,777	9,029	10,868	13,286	23,675	17,500	15,800	12,600	11,300	10,200
Taiwan	27,876	29,094	29,001	28,065	26,685	24,818	23,250	21,867	21,266	20,993	19,700	18,600	17,600	16,600	15,600
Japan	38,712	35,282	33,974	29,264	24,842	21,290	19,966	19,568	19,334	19,064	18,500	18,100	17,800	17,400	17,200
Vietnam	4,597	6,036	8,769	12,823	13,112	14,888	15,572	16,098	16,579	18,722	21,000	22,500	24,000	25,500	27,000
Mexico	13,931	13,826	14,837	14,850	13,256	13,713	13,893	14,199	14,779	17,052	15,400	15,600	15,800	15,900	16,100

The benefits of foreign students coming to the United States for their higher education, however, go far beyond the cultural diffusion of new ideas and new ways of thinking. This brings in capital from foreign markets, resulting in the export of an education service. Tuition, fees, and living expenses all benefit the local communities in which foreign students live, often over a period of several years of study.

As you can see from the table below, the United States hosts almost twice as many international students as any other country. We also have the largest number tertiary institutions – even more than China, whose population is three times larger. In 2014/15, U.S. tertiary schools accommodated 20.3 million students.¹¹ This large domestic cohort of college students means that international students only account for 4.8 percent of all enrollments at U.S. colleges and universities – a figure far below that of many other countries.

Figure 7: Global Supply and Demand for Internationally Mobile Students

Host country	No. of schools	No. of int'l students	Int'l students as percent of total enrollments	Global share of int'l students
United States	4,921	974,926	4.7 %	22 percent
United Kingdom	160	493,750	21.5 %	11 percent
Australia	137	269,752	21 %	8 percent
Canada	137 (2014)	268,659 [^]	13.3 %	6 percent
France	330	298,902	12.1 %	7 percent
Germany	423	301,350 [*]	11.5 %	7 percent
China	2,824	377,054 [^]	0.8 %	8 percent

UK, France: 2013-14 school year
[^] = 2013 data , ^{*}2014 projection, from July 2014 = 300,909; 2013 actual: 282,201¹²

The leading competitors in foreign countries have far fewer universities seeking to recruit students, but international students represent a much larger share of their total enrollments. In 2014, key competitors markets for international students included the United Kingdom (11 percent of all international students), China and Australia (8 percent), France and Germany (7 percent), and Canada (6 percent each). Although these countries have a fairly robust percentage of internationally mobile students, each country is home to fewer than 500 colleges and universities, concentrating foreign students far more than in the United States.

Against this structural backdrop, the U.S. share of a growing market for international students has declined. As mentioned previously, over the past 14 years, the percentage of internationally mobile students choosing to study in the United States has declined from 28 percent to 22 percent. The decline is due to multiple factors, such as the increase in recruiting by schools from other English-speaking countries, the growth of English-language instruction offered in non-English-speaking countries, improved quality at foreign colleges and universities, increased investments by non-U.S. universities, increased information available through the internet about other destinations and colleges, and rising tuition costs in the United States (see Figure 4).

In 2015, IIE's Project Atlas reported that the number of foreign students studying at higher education institutions in each country (as a percentage of total students enrolled) is also significantly higher than the 4.8 percent posted by the United States. In Australia and the United Kingdom, for example, foreign students comprise 20 percent of the overall student population in colleges and universities. Canada, France, and Germany all report that their foreign student population exceeds 10 percent of total university-level enrollments.¹³

According to the report "International Student Recruitment: Policies and Developments in Selected Countries" by the Netherlands Organization for International Cooperation in Higher Education (2012), over the last decade the number of countries that actively recruit international students has grown considerably. In addition, countries that once only sent students abroad have started to improve the quality of their own education systems and developed strategies and policies to attract foreign students. These countries include China, South Korea, Mexico, and to a lesser extent, Russia, Taiwan, Thailand, Brazil, Argentina, and Chile.

More countries are competing for the same group of internationally mobile students. Target countries for schools new to recruiting tend to be from their own region (Asia, Latin America, or North Africa). The Dutch report goes on to say that several countries are attempting to become top destinations for higher education and research in their respective regions (e.g., Switzerland, China, Singapore, and others).

The reasons that countries undertake international student recruitment are varied. Two prominent reasons are (1) the belief that the presence of international students improves the quality of education, and (2) the belief that international students contribute to a knowledge society and economy. For some countries, a low birth rate encourages recruiting international students.

One example of this competition for the “best and brightest” is the fact that the Indian government in early 2016 approved a proposal to admit an additional 10,000 foreign students at the India’s premiere engineering institutes. The Indian government plans to add new seats in these institutes, so that Indian admissions will not decrease. One of the Indian government’s goals is to improve the international standing of its leading institutions. In addition, foreign students will pay tuition that is significantly higher than tuition for Indian students.¹⁴

Although China has a very large domestic market for higher education, it hosts only eight percent of internationally mobile students. This is likely to increase substantially as more Chinese universities offer courses in English and more foreign universities establish branch campuses or specialized programs in China. The long-term effect of this growth within China on U.S. export performance is uncertain.

U.S. universities will face increasing competition for Chinese students from other Asian, Canadian, and European universities. The total number of students now coming to the United States from the broader Asian region (apart from China and a few other top markets, such as Taiwan or South Korea) is relatively low as a share of the total and may have little effect on U.S. export performance.

The larger competitive risk is that Chinese universities

might divert a larger share of U.S.-bound Chinese students – on the basis of cost, convenience, or even government policy and incentives – but this will likely be offset to some extent by the advantages U.S. schools enjoy in terms of English language, the cultural immersion experience, and the different types of schools and programs available in the United States. The competition may well be limited at first to specific technical or management areas.

Recruiting efforts in China and other Asian countries might benefit from a clear focus on differentiating the U.S. experience from that in host countries that are building out new universities and programs. The new universities, even those with top technical programs, will have a long way to go to build entire university systems capable of competing with the leading U.S. schools across broad ranges of disciplines.

Global Industry Landscape

Structure of the global education market – Universities (For-Profit and Non-Profit)

Roughly 70 percent of U.S. degree-granting colleges and universities are public entities or non-profit organizations.¹⁵ This rate is higher in other countries.

There is virtually no concentration of market power across the global market. In the United States, for example, almost 5,000 degree-granting post-secondary schools provide university-level education, and the four schools with the largest international enrollments together represent about five percent of total foreign enrollments in the United States (see Export Profile of the U.S. Education Industry section below).

Today, roughly 20 percent of the revenues of public degree-granting universities in the United States derive from student tuition and fees (the remainder comes

Figure 8: How to Identify Potential Education Export Markets

Two actions that indicate a country’s growing interest in international recruitment are the establishment of a government or quasi-government agency to promote higher education to international students, and attendance at annual conferences hosted by organizations such as NAFSA: Association of International Educators, the European Association of International Education (EAIE), the Asia-Pacific Association for International Education Conference and Exhibition, and the Australian International Education Conference. Typical agencies are the German DAAD (The German Academic Exchange Service), Campus France, and The British Council. Conferences such as the ones listed above provide an important opportunity for representatives of countries attending to discuss international education with other countries and negotiate student exchange agreements relating to international education.

Figure 9: Visa Issues

U.S. policy on foreign student visas must reconcile the need to protect U.S. security interests with the need to facilitate the entry of international students into the United States. Considerable progress has been made to streamline the process for obtaining an F-1 (student) visas since the 9/11 attacks. Students in F-1 status, however, are only allowed to work off campus with special permission. The leading competitor markets -- Canada, Australia and the United Kingdom -- have in the past applied more liberal policies allowing for employment during and after completion of study. But the UK has adopted more restrictive student visa policies which reportedly led in 2015 to an 8.6 percent decline in non-EU enrollments. Canada has recently revised its student visa policy. These recent experiences appear to confirm that international enrollment is indeed sensitive to student visa policies, both during studies and after studies are completed.

from other sources, such as state, federal, and local funding or contracts; sales and services of hospitals or other enterprises; and private gifts or returns from university endowments). Student tuition and fees account for 32 percent of revenues in private non-profit colleges and universities but slightly over 90 percent of revenue in for-profit private colleges and universities.¹⁶

Structure of the global education market – Student Countries of Origin

In contrast to the competition among universities in the United States and abroad for international students (the supply side), the sources of the students themselves for particular destination countries (demand) tend to be somewhat more concentrated among a small group of leading source countries. This group is led by China and India, followed by a larger group of countries contributing smaller but mostly stable numbers of students each year.

In 2015, 60 percent of foreign students studying in the United States came from just five countries: China, India, South Korea, Saudi Arabia, and Canada. The top three countries alone account for 50 percent of foreign students in the United States. After the top 15 “sending” countries, enrollments per country fall below 1 percent of the total -- below 9,100 students per year.

Countries with notable increases in the number of students studying in the United States compared to 2013/14 include Brazil (78 percent growth), India (29 percent growth) and Kuwait (24 percent growth).¹⁷ In the case of Brazil and Kuwait, during the 2014/15 academic year, there were significant government programs to support study abroad.

Structure of the global education market – secondary schools

In recent years, foreign interest in U.S. secondary schools, and in particular boarding schools, has grown considerably. Currently, about 70,000 international secondary school students are studying in the United States. According to The Association of Boarding Schools, international students make up about 15 percent of boarding school enrollments. China is the largest sending country of secondary-level students. Much of the appeal of boarding schools is the belief that a U.S. high school diploma will make international applicants more attractive to U.S. institutions of higher education.¹⁸

Challenges and Barriers to U.S. Exports

Although the United States enjoys a strong competitive position within the international education market, challenges limit the potential for significant further growth in exports in the near term. These include the fact that tuition costs in many other countries are significantly lower than the cost of study in the United States, and that other countries have more liberal immigration policies that provide a pathway to remaining in the country after finishing a course of study. For example, Canada has recently eased the conditions for students to apply for Canadian citizenship by reducing the residency requirement and counting part of study time. Prior to 2012, the United Kingdom allowed international students on Tier 4 visas to remain in the UK to work following their graduation. This pathway was discontinued in 2012 and the UK government recently reaffirmed that it would not be re-introduced. One result of the change in policy appears to be a drop in non-EU enrollment.¹⁹

Figure 10: Competition from Massive Open Online Courses (MOOCs)

Although the United States has led the industry in the development of MOOCs (edX, Coursera, and Udacity are the current leaders in the United States), competition is building from Europe and is aided by the development of the European Credit Transfer System (ECTS), a system to provide academic credit transfers for MOOC providers in Europe. New MOOC providers include Future Learn (United Kingdom), Iversity (EU), Schoo (Japan), Korea Open Courseware (South Korea), Xuetangzaixian (China), and others.

At present, MOOC courses are free, but MOOC creators are exploring ways to earn revenue from the courses. For example, Coursera recently introduced its “Signature Track,” which provides a verified certificate for \$49. The certification of the learner’s identity relies on webcam confirmation. The edX program offers similar certification tracks and packages of courses presented as a series.

The effect on the U.S. balance of payments once MOOCs become profitable is uncertain. Coursera, the largest supplier of MOOCs, is an American company. Thus foreign students paying the fee for Coursera’s “Signature Track” certificate would produce a U.S. export.

If a MOOC had 50,000 enrolled in a class, half of whom were foreign, and 10 percent chose Signature Track, then the revenue would be $2,500 \times \$49 = \$122,500$. If similar numbers were applied to 100 MOOCs, then revenue would be \$12,250,000. Thus, it seems unlikely that MOOCs will soon be able to affect the U.S. balance of payments. MOOCs’ more significant impact is likely to the nature of college-level teaching models and the role of technology in education. The main criticism of MOOCs is low completion rates from students with little to lose from dropping out.

U.S. colleges and universities are also likely to suffer reduced demand from a significant increase in the number of European and Asian universities teaching courses in English.

Tuition Considerations

U.S. tuition costs are higher than those in competitor markets. The average costs for tuition, fees, room, and board in the United States rose from an average of \$9,620 per year in 1983-84 to \$21,003 in 2013/14, or 118 percent over 30 years. (Australia, where the average annual tuition rate for a bachelor’s degree runs between \$15,000 and \$33,000, is an exception.²⁰) That compares with many European universities that typically charge less than \$1,000 per year in tuition and fees.²¹

The effect of the higher U.S. tuition is unclear. The number of international students coming to the United States has continued to increase year after year even though the cost of university education in the United States has continued to rise. In any case, European students, who have access to publicly funded universities, have the strongest financial incentive to study in Europe, rather than in the United States.

Fields of Study

A full listing of the fields of study by selected countries of origin is available from the Institute of International Education. Countries which have 50 percent or more of

their students studying in STEM fields include India, Iran, Kuwait, Nepal, and Nigeria, all of which are developing countries whose governments support foreign studies as a means of promoting development goals. Countries that have 25 percent or more of their students studying business/management include China, France, Germany, Indonesia, Venezuela, and Vietnam. The data below show the fields of study in the United States sorted by students from different countries and could assist U.S. schools that specialize in a narrower set of program offerings. For example, over 56,000 foreign students studying in the United States last year studied Fine Arts, but very few of them came from India, Kuwait, Nepal, or Saudi Arabia. In contrast, U.S. business/management programs are almost universally popular.

Student Motivation and Demand for Higher Education

The demand for higher education is influenced by several factors, such as demographics, economics, secondary school completion rates, tuition costs, household income, and employer needs. The OECD Education at a Glance 2014 survey reported that, “In Chile, Brazil and Hungary, tertiary-educated people earn more than double the income of a person without upper secondary education.” This perceived value of future earnings potential is a clear motivating factor.

Figure 11: Fields of Study for Selected Places of Origin, 2014/2015

Place of Origin	TOTAL	Bus./ Management	Education	Engineering*	Fine/ Appl Arts	Health Prof.	Humanities	Intens. English	Math/ Comp Scien	Phys./ Life Science	Social Sciences	Other	Undeclared
Brazil	23,675	12.1	1.2	16.5	6.4	2.2	2	12.5	2.9	8.6	5	20	10.4
Canada	27,240	15	4.9	8.3	7.8	15.7	3.8	0.1	3.2	10.2	12.1	15.5	3.3
China	304,040	26.5	1.7	19.7	5.6	1.4	0.9	2.8	12.4	8.9	7.8	9.3	2.9
France	8,743	26.1	0.8	13.8	5.8	1.5	5.3	1.8	3.8	5.9	8.4	20.8	5.9
Germany	10,193	26.3	2	8	3.6	1.9	6.2	0.5	3.5	7.5	14.2	19.3	7
Hong Kong	8,012	22.4	1.2	8.3	10.2	2.4	2	1.6	6.2	7.2	16.1	16.5	5.8
India	132,888	10.7	0.4	37.5	1.4	3.6	0.4	0.2	31.4	7.9	2.4	3.1	0.9
Indonesia	8,188	28.8	2	16.7	9	3.1	1.4	0.6	5.2	7.2	9	12.4	4.6
Iran	11,338	4.6	1.1	54.8	5	1.8	1.1	0.4	10.5	12.1	4	3.7	0.7
Japan	19,064	19.1	2.4	4.1	6	2.3	5.3	15	2.7	4.9	10.9	19.4	7.8
Kuwait	9,034	12.8	0.6	44.9	1.8	1.8	0.6	23.4	1.1	3	2.9	6.2	0.8
Mexico	17,052	17	2.4	14.5	6.1	2.9	3	12.6	3.3	6.5	7.7	19.1	4.8
Nepal	8,158	14.3	0.6	20.1	1.3	6.8	0.8	0.4	18.3	23.3	5.6	6.1	2.4
Nigeria	9,494	14.1	1.7	22.5	2.1	12.9	2	0.5	8.7	12.2	7.7	10.9	4.6
Saudi Arabia	59,945	16.5	3.2	23.9	1.9	6.1	1.3	22.5	8.1	4.4	2.9	7	2
South Korea	63,710	16.7	3	13	11.9	4.7	4.3	3	5.6	7.7	11.9	14.5	3.8
Taiwan	20,993	21.2	3.1	16	12.6	4.1	1.9	3.8	6.7	11.6	6.5	10.1	2.4
Turkey	10,724	13.6	4.2	25.3	6.1	1	2.4	4.3	10.3	8.9	13.8	8.1	2.1
United Kingdom	10,743	17.8	3.6	5	6.4	4	6.9	0.1	3	7.5	16.6	23.6	5.6
Vietnam	18,722	32.6	1	8.9	3	4	1.4	8.6	8.3	7.2	5.1	10.4	9.5

Source: Institute of International Education. (2015). "Fields of Study of Students from Selected Places of Origin, 2014/15." Open Doors Report on International Educational Exchange. Retrieved from <http://www.iie.org/opendoors>

When foreign students were asked what motivated them to study abroad, most students cited a lack of university slots available in their home-country's highly prestigious colleges and universities. Other leading factors, listed in Figure 12, include the desire to specialize in a specific area that was not offered in the home country and the ability to have access to specific research tools.²²

In the global competition for students, the STEM fields (science, technology, engineering, and mathematics) and business dominate. In fact, 20 percent of international students study business and management in the United States, while 20 percent choose engineering.²³ Other top fields include math and computer science, physical and life sciences, and social science. Interestingly, although 80.4 percent of students from India studying in the United States pursue STEM subjects, only 42.4 percent of Chinese students in the U.S. study STEM subjects (26.5 percent of Chinese study business/management).²⁴ U.S. colleges and universities attempting to recruit prospective Indian students might want to highlight their STEM curricula and faculty, while

Scale from 1 = "very important" to 5 = not important at all"	
Reasons	World Aggregate Ranking
Limited places available to study at (highly prestigious) universities in the home country	3.5
Specialize in an area which is not offered in the home country	3
Have access to specific laboratories/libraries not available/accessible in the home country	3
Learn or improve knowledge of a foreign language	2.7
Interest in foreign culture, history and landscape	2.6
Get more practice-oriented education than offered in home country	2.6
Possibility to build up networks/friendships in an intercultural context	2.3
Improve career prospects/chances of getting a job in the home country	2.2
Opportunity to develop the personality/become more independent	2.1
Get a broader/more flexible education than offered in home country	2.1
Experience new ways of thinking and acting in the field of study	1.8
Improve chances for an international career	1.8

Source: IIE International Students in United States Report Survey of International Students in the United States Question 13: *How important were the following reasons for your decision to study abroad?*

schools meeting with prospective students from China may find it beneficial to emphasize their business and management programs in addition to their STEM curricula.

Financial Considerations

Demand for higher education is also influenced by financial considerations. According to the Institute for International Education (IIE), however, over 60 percent of students fund their education with personal and family resources (see Figure 13). The second most important source of financing is the academic institution at which the student is accepted. To assist both domestic and foreign students, most U.S. colleges and universities are sometimes able to offer financial aid in the form of scholarships, low-cost loans, stipends, research grants, and on-campus employment (students in F-1 status are only allowed to work off campus with special permission, during the first year of their studies). Offering these types of aid can raise difficult policy questions, since such aid may diminish the availability of scholarships or loans for U.S. citizens.

Opportunities

Given the growing global population, increasing

secondary school graduation rates, the rising middle class, and the increase in financial assistance available for students, ITA expects that the global demand for U.S. higher education is likely to increase. Rising penetration rates for the internet will also help fuel this trend as students are able to gather more information about colleges and apply to colleges more easily. The move to the “Common

Application” among over 500 schools in the United States, France, Switzerland, Austria, Germany, Italy and the United Kingdom also provides a competitive advantage to these schools, as it reduces the paperwork burden on students applying to multiple schools.

In terms of competing with other countries for international students, the United States and United Kingdom have a strong advantage due to their historically superior academic reputations. Many students believe that an education from the United States or United Kingdom will boost their job prospects at home. That advantage is tempered somewhat by the fact that students view study in Australia to yield a more enjoyable experience and perceive that Australia has more relaxed visa and immigration laws.

Characteristics of the university-level education market in each country give insights into promising export

Figure 13: International Student's Primary Source of Funding by Academic Level, 2014/15

Source of Funding	Total		Academic Level (%)			
	2014/15	% of Total	Undergraduate	Graduate	Non-Degree	OPT
Personal and Family	619,999	63.6	79.9	55.3	54.4	43.6
U.S. College or University*	203,337	20.9	7.9	36.3	28	8.8
Foreign Government or University	75,042	7.7	9.2	5	13.9	0.7
Current Employment	48,632	5	0.1	0.6	0.2	44.4
Foreign Private Sponsor	9,735	1	1	1.1	0.8	0.9
U.S. Government	4,915	0.5	0.2	0.7	1.1	0
U.S. Private Sponsor	4,124	0.4	0.6	0.3	0.6	0.1
International Organization	2,489	0.3	0.2	0.2	0.7	0
Other Source	6,653	0.7	0.9	0.4	0.3	1.5
Total Students	974,926	100	398,824	362,228	93,587	120,287

*Funding from U.S. colleges or universities includes teaching and research assistantships, which are often federal government research grants disbursed to the student through the institution.
 Source: Institute of International Education. (2015). "International Students by Primary Source of Funding, 2014/15." Open Doors Report on International Educational Exchange. Retrieved from <http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Primary-Source-of-Funding/2014-15>

strategies. Schools looking to immediately boost their foreign student enrollment might want to consider focusing on China, India, Saudi Arabia, and South Korea – countries sending the most students to the United States and which have fast-growing populations and middle classes (and in the case of Saudi Arabia, a strong government and private sector commitment to funding overseas education) and which highly prize U.S. higher education.

Utilizing U.S. Government Resources

Government-run education fairs are offered where student fairs run by the private sector are not available. Many of these government-run fairs do not target the biggest markets, as private sector organizers are already prevalent in those markets. Government education fairs often serve a market niche that is not covered by private industry – the need for campuses to diversify their student populations. In these cases, the U.S. government identifies promising target countries, recruits schools that might be interested in expanding their international enrollments, and publicizes the event to local students, faculty, and education officials in the target market. The U.S. Government also provides assistance with certain types of scholarship programs.

Current Government Actions Supporting U.S. Exports of Education

The relationship between college recruiters and U.S. Government agencies involved in international recruitment has been a close collaborative partnership for many years. The U.S. Government has facilitated the recruitment of international students by organizing live student fairs, virtual student fairs, and trade missions for education professionals, as well as providing online and in-person market research and counseling to students and recruiters. More information regarding these programs can be found at www.export.gov and www.educationusa.state.gov.

U.S. Government support for scholarship programs, including the Fulbright Program, has increased the visibility of U.S. institutions. Continuing efforts to improve the student visa process and to partner with the private sector will also enhance the United States as a destination for international study.

Although it is likely that the Top Markets for Education (foreign students studying in the United States) is likely

to follow historically stable patterns, many U.S. colleges and universities have chosen to focus their recruitment efforts outside of these Top Markets in order to diversify their campuses. While this report focuses on the countries sending the most students to the United States, the Education and Training Services Resource Guide 2016 reports on the education market in 50 countries. This Guide is available on <http://export.gov/industry/education/educationandtrainingservicesresourceguide2016/index.asp>

The U.S. Government supports exports of higher education as a matter of policy. Educational institutions are a substantial economic driver for many college and university towns and metropolitan areas. Furthermore, this sector contributed \$30.8 billion to the U.S. economy in 2015. It is important to note that U.S. Government student recruitment programs should coordinate closely to avoid duplication with private sector efforts.

In addition to the 2015 Education and Training Services Resource Guide mentioned above, the U.S. Department of Commerce Education Team (<http://export.gov/industry/education/index.asp>) continues to offer virtual education trade fairs, education trade missions, webinars, and other events to promote educational exports. More about these efforts can be found on www.export.gov.

In addition to these resources, the U.S. Department of State supports EducationUSA, a network of hundreds of advising centers in 170 countries that work with U.S. higher education professionals to promote international student enrollment in the United States. In addition to providing print and online materials at EducationUSA Advising Centers, advisers reach prospective student audiences through fairs and outreach events at local schools, universities, and other public venues. The State Department also funds the annual Institute for International Education Open Doors report which provides statistics about rates of college- and university-level international student mobility to and from the United States. More information about this program can be found on www.EducationUSA.info.

The International Affairs Office at the U.S. Department of Education seeks to simultaneously advance two strategic goals: strengthening U.S. education and advancing our nation's international priorities. Through these efforts, this office helps promote education

exports and hosts the annual International Education Week. More information on these efforts is available on <http://www.ed.gov/edblogs/international/>.

The U.S. Department of Commerce and the State Department's EducationUSA program have been working closely to offer events and activities to promote U.S. colleges and universities around the globe. A recent example was the highly successful Education Trade Mission to South Africa, Ghana, and Cote d'Ivoire in March 2016, in which representatives of 25 colleges and universities toured three countries to form partnerships and recruit African students. The enthusiastic support of the mission from ambassadors, local students, the press, and local governments clearly demonstrates the need to reach across borders and unite people of various nations and backgrounds. Participants had the opportunity to speak with thousands of students about their educational goals and interest in studying in the United States. The mission participants all indicated that the mission had been a success.

Potential Future Government Actions Promoting Education Exports

These U.S. government entities will continue to organize events and analyze trends in student mobility and will treat each market according to the interests of U.S. colleges and universities and the special circumstances of the market. They will also seek to avoid duplicating private sector efforts by groups organizing education trade missions.

These activities will be guided by the fact that some schools recruiting international students are focused on increasing the number of international students on campus in the near-term, although it may take up to three visits in a market to begin seeing student applications unless the school contracts with an effective partner. Other institutions which are more focused on diversification are likely to want to focus on markets beyond these top markets.

Further information is available on <http://export.gov/industry/education/index.asp>.

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- ² Institute for International Education (IIE), Project Atlas 2015
- ³ Institute for International Education (IIE), Open Doors Report. Fast Facts 2015; Email from the U.S. Commercial Service, Brazil of April 27, 2016.
- ⁴ Institute for International Education (IIE), Open Doors Report. Fast Facts 2015.
- ⁵ Institute for International Education (IIE), Open Doors Report. Special Reports: Community College Data Resource.
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- ⁷ Institute for International Education (IIE), Open Doors Report. International Students: Leading Institutions
- ⁸ Institute for International Education (IIE), Open Doors Report. Fast Facts 2014 and 2015.
- ⁹ OECD, Assessment of Higher Education Learning Outcomes (2012), p.24; Institute for International Education (IIE), Project Atlas 2015.
- ¹⁰ U.S. Department of Commerce, Bureau of Economic Analysis. www.bea.gov, International Services, Table 2.1
- ¹¹ National Center for Education Statistics (<http://nces.ed.gov/fastfacts/display.asp?id=98>)
- ¹² No of schools: For U.S., CHEA Fact Sheet, August 2012; No of schools, all countries except the U.S. and France: IIE Project Atlas; No of Int'l students: For U.S. IIE Open Doors. For all other countries, IIE Project Atlas Project; Int'l students as percent of total enrollments, all countries, IIE Project Atlas, for 2014; Global share of int'l students, all countries, IIE Atlas Project.
- ¹³ IIE, Project Atlas, 2015
- ¹⁴ "Indian technology institutes open admissions to foreign students," 30 Mar 2016, <http://monitor.icef.com/2016/03/indian-technology-institutes-open-admissions-to-foreign-students/>
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- ¹⁸ Institute of International Education, Charting New Pathways to Higher Education: International Secondary Students in the United States, at <http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2014/2014-07-08-New-Report-From-IIE-Looks-At-International-Students-At-US-High-Schools#.VyoY2mfVyUk>, and The Association of Boarding Schools web site: <http://www.boardingschools.com/how-to-apply/international-applicants.aspx>
- ¹⁹ "Canada: path to citizenship eased for international students" in <http://thepienews.com/news/canada-path-to-citizenship-eased-for-international-students/> and "UK business schools lose 133 million pounds in non-EU enrolment drop" in <http://thepienews.com/news/uk-business-schools-lose-133m-in-non-eu-enrolment-drop/>
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