

2016 Top Markets Report Education

A Market Assessment Tool for U.S. Exporters

May 2016



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Executive Summary

The United States hosted almost a million international students last year (974,926). That figure represents a 10 percent increase from the prior year. Although the United States continues to be the top destination for globally mobile students, the percentage of these students coming to the United States has declined over the past 14 years. In other words, the United States has a smaller share of a growing pie (see Key Findings).

The erosion is 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.

Despite this erosion, 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. 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.

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 "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 in students from counties such as Saudi Arabia, Iran, Brazil and Turkey. Such fluctuations are likely due to changes in government funding programs in each country. 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 challenges in Brazil, the Scientific Mobility Program is now suspended. 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.

ITA is optimistic about the long-term prospects of recruiting international students because policy-makers and parents 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.

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Overview and Key Findings

Introduction

The number of international students studying in the United States continues to grow (rising 10 percent last year to $974,926^{1}$), 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 22^{2} 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. 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

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Figure 2: Projected Top Markets for Education Exports1. China3. South Korea5. Canada7. Taiwan9. Vietnam2. India4. Saudi Arabia6. Brazil8. Japan10. 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	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

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:

 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. 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.

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

Figure 5: Internationally Mobile Students Attending U.S. Community Colleges										
Year	Total Int'l Students	Annual % Change	Int'I Students at Community Colleges as a Proportion of Total Int'I 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										

<u>Competitiveness of U.S. Colleges and Universities</u> <u>Overall Forecast</u>

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 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.

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

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

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. Policymakers 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.

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.

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: 282,201 ¹²										

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

<u>Structure of the global education market –</u> <u>Universities (For-Profit and Non-Profit)</u>

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 postsecondary 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 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

<u>Structure of the global education market – Student</u> <u>Countries of Origin</u>

In contrast to the competition among universities in the United States and abroad for international students (the supply side), the sources of the

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.

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.

<u>Structure of the global education market –</u> <u>secondary schools</u>

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 secondarylevel 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 reintroduced. One result of the change in policy appears to be a drop in non-EU enrollment.¹⁹

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

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.

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.

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

Figure 11: Fields o	f Study for	Selected Places	of Origin,	, 2014/2015
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Place of		Bus./		•	Fine/	Health		Intens.	Math/	Phys.I/	Social		
Origin	TOTAL	Management	Education	Engineering*	Appl Arts	Prof.	Humanities	English	Comp Scien	Life Science	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://w w w.iie.org/opendoors

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 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

Table 12: International Student Motivations	
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 important were the following reasons for your decision to study a	3: How broad?

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 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 fastgrowing 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

Figure 13: International Student's Primary Source of Funding by Academic Level, 2014/15											
	Tot	tal	A								
Source of Funding	2014/15	% of Total	Undergraduate	Graduate	Non- Degree	ΟΡΤ					
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

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 inperson market research and counseling to students and recruiters. More information regarding these programs can be found at <u>www.export.gov</u> and <u>www.educationusa.state.gov</u>.

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/educationand trainingservicesresourceguide2016/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.

Country Case Studies

The following pages include country case studies that summarize export opportunities in selected markets. The overviews outline ITA's analysis of the U.S. export potential in each market. The markets represent a range of countries to illustrate a variety of points and not the top four markets overall.

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China

China remains the largest single source of international students studying in the United States. In 2014/15, China sent 304,040 students to the United States, an increase of 10.8 percent from 2013/14. Chinese students make up a commanding 31 percent of all international students in the United States.¹

Overall Rank

1

Based on 2013 data from UNESCO, China sent over 710,000 students to study abroad.²⁵ Some observers believe that this figure is low. It is likely, however, that at least 30-40 percent of all Chinese students studying abroad are studying in the United States. The economic impact of these students on the U.S. economy is significant, and the Bureau of Economic Analysis reports that in 2014 (the most recent data available) U.S. exports of education services (tuition, fees, and living expenses) to China reached \$9.8 billion.²⁶

Level and Fields of Study for Chinese Students

Chinese students are fairly evenly split with 39.6 percent of Chinese students in the United States studying at the graduate level and 41 percent enrolled as undergraduates. The remaining Chinese students are enrolled either in "optional practical training" or "other."²⁷

As with many other countries, the STEM fields (science, technology, engineering, and mathematics) are the largest fields of study for Chinese students. STEM fields attracted 42.4 percent of Chinese students during the 2014/15 academic year. Meanwhile, business and management attracted 26.5 percent, and the social sciences, attracted 7.8 percent.²⁸

Chinese students are broadly distributed throughout the regions of the United States, including the East Coast, West Coast, South and Middle West. The 10 states welcoming the most international students account for about 62 percent all international students in the United States. These same 10 states also account for about 63 percent of all Chinese students in the United States. In nine of the top 10 states, Chinese students are the largest national student group and account for 30 percent to 40 percent of all international students. The 10 states are California, New York, Texas, Massachusetts, Illinois, Pennsylvania, Florida, Ohio, Michigan, and Indiana.²⁹

Future Growth/Opportunities

A growing middle-class allows more Chinese families to send their children abroad for their tertiary education. On the other hand, future growth in the number of Chinese students studying in the United States is tempered by: the slowdown of China's economy, a devalued currency³⁰, and the shrinking number of college-age Chinese students³¹.

Factors Which Might Dampen Future Growth

It is unlikely that the exponential growth in Chinese students studying in the United States of the last decade will continue indefinitely. U.S. institutions are increasingly focused on diversifying their campuses and are hesitant to depend on foreign students from any individual country. In addition, the Chinese Government has significantly increased its efforts to build universities in China, which could emerge as new competitors to U.S. institutions. Chinese institutions are also under pressure from the government to offer academic programs that facilitate an easier segue way to employment. Finally, other English-speaking countries also offer education in English and at a lower cost in tuition and fees than many U.S. institutions.

Both the Commerce Department's U.S. & Foreign Commercial Service and the State Department's EducationUSA offer information and guidance on recruitment of Chinese students for U.S. institutions. ITA has not organized a recent education trade mission to China, as several private sector organizations offer help in recruiting students in China. Furthermore, U.S. institutions are offering Chinese-speaking advisors and staff members to attract more Chinese students. The Internet and social media are also critical components to successful recruitment efforts. In China, and many other parts of Asia, it is important to supplement online recruitment efforts with face-to-face recruitment efforts, such as student fairs, because Chinese parents (many of whom do not possess strong English-language capability) play a large role in determining whether and where their son or daughter will attend university.

It is also important to note that Chinese families from smaller cities in China's interior provinces have the financial resources and interest to participate in studying abroad. Second and third-tier Chinese cities are an excellent market for U.S. schools and colleges interested in recruiting Chinese students.

India

For the past decade, India has ranked first or second among countries sending students to study in the United States. In 2014/15, India sent 132,888 students to the United States, a 29.4 percent increase from the prior year.¹ In the seven academic years preceding 2014/15, India consistently sent approximately 100,000 students to the U.S.

Overall Rank

2

The large, reliable number of students helps to make India an attractive market for U.S. institutions. In 2014/15, Indian students made up 13.6 percent of all international students in the United States, second only to China.³²

India is likely to remain a top market for U.S. colleges and universities over the next few years for several reasons. First, the Indian market has provided a large, perennial source of students for many years. According to the United Nations Education Scientific and Cultural Organization (UNESCO), over 180,000 Indian students studied abroad in 2013.³³ Of that number, over 48.2 percent chose to study in the United States, suggesting that U.S. colleges and universities have strong brand appeal among Indian students.³⁴ (NOTE: OECD data differs from IIE data, which is cited extensively in this report.) Second, although the number of Indian student enrollments in the United States has levelled off in recent years (with the exception of last year), the long-term growth rate of Indian students is positive.

United States is the Destination of Choice for Indian Students

According to the Organization for Economic Cooperation and Development (OECD), the second largest destination for Indian students studying abroad, after the United States, is the United Kingdom, with 11.5 percent in 2013. Australia was the third most popular country, recruiting 8.4 percent of Indian students.³⁵ The economic impact of all Indian students on the U.S. economy is significant. The U.S. Bureau of Economic Analysis reports that U.S. exports of education services (tuition, fees, and living expenses) to India were \$3.6 billion in 2014.³⁶

Overview of Global Export Market Opportunities in Education for India

Roughly 64 percent of Indian students in the United States are graduate students while 12.4 percent are undergraduates. Optional practical training (22.1 percent) and "other" disciplines (1.4 percent) make up the remainder.³⁷ Most students from India (80.4 percent) study STEM (science, technology, engineering, and mathematics) subjects. Business/management is in second place with 10.7 percent of Indian students.³⁸

Future Growth/Opportunities

The demand for higher education has grown significantly in India in the last two decades. Per the University Grants Commission (UGC) statistics of 2015, there are 39,671 colleges, 12,748 diplomagranting institutions and 736 universities in India offering a wide range of degree and diploma programs. Among universities, there are 339 state universities (established by the state governments), 126 deemed universities (a status of autonomy granted to institutes of excellence by the Department of Higher Education or DHE), 225 private universities, and 46 central universities (established by the DHE). There are also numerous world-class institutes such as the All Indian Institute of Medical Sciences (AIIMS), the Indian Institute of Management (IIM), the Indian Institute of Technology (IIT), and the National Institute of Technology.³⁹



The UGC is responsible for regulating, coordinating, setting standards, and dispersing grants to institutions of higher education in India. The higher education sector in India can broadly be divided into two segments—regulated and un-regulated. Regulated includes central, state and private universities; private/professional colleges; and technical and research institutions. Unregulated includes online education, vocational training, finishing schools, professional development and training and coaching classes.

India's higher education system is the world's third largest in terms of enrollment of students (22 million), next to only China and the United States. The huge demand and supply gap, participation of large number of private players, growth of information technology, demand for skilled workforce, increasing foreign direct investment, disruptive innovation and online education are a few factors which have led to this exponential growth in this sector.

Two developments are likely to affect the number of Indian students going abroad for study. First, according to industry experts, the higher education sector in India, which was \$8.38 billion in 2014, is expected to grow at a compound rate of 18 percent and reach \$42.17 billion by 2020. At the same time, the rapid growth in enrollment in higher education has led to increasing doubt that India will have enough purely domestic education institutions to meet such high demand. $^{\rm 40}$

While the number of Indian students studying in the U.S. will remain significant in the near-term, it is likely that growth will moderate due to increasing competition with foreign educational institutions. In 2001, the United States was host to 76 percent of all Indian students studying abroad. This number has fallen to 48 percent in 2013. The United States has lost ground to foreign universities, including those in the United Kingdom, Canada, and New Zealand.

Reasons that may help to explain Indian students' decision to study at home or in countries other than the United States include cost and distance. For instance, Australia and New Zealand are attractive options for Indian students because they are located closer to India than to the United States. The United Kingdom is also a competitive option as it offers education at costs that are lower than those in the United States.

In terms of university partnerships, education experts are still waiting for the Indian Parliament to pass a National Education Policy (NEP) that would replace the three-decade-old current policy by making it easier for foreign universities to set up campuses in India and collaborate with local partners. Under the new draft policy, foreign universities may be allowed to repatriate profits, award degrees, introduce their own curriculum, and employ teachers with no cap on salaries.

South Korea

Although the number of South Korean students studying in the United States has trended slightly downward in each of the last four years, South Korean students are still the third largest cohort of foreign students studying in the United States (over 63,000 students or 6.5 percent of total foreign enrollments). The U.S. Department of Commerce estimates South Korean students added \$2.3 billion¹ to the U.S. economy in 2014 as a result of tuition, fees, and living expenses.

Overall Rank

3

The South Korean market scores well against the criteria in the ITA Methodology primarily because of the size and stability of the numbers of South Korean students who already have chosen the United States. First, the number of South Korean students studying in the United States remains large, although it has eroded somewhat the last few years, oscillating between 60,000 and 73,000 for the past decade and amounting to 63,710 in 2014/15. Second, the United Nations Educational Scientific and Cultural Organization (UNESCO) reports that in 2013, almost 117,000⁴¹ South Korean students studied abroad. According to the OECD, 31.7 percent⁴² of internationally mobile South Korean students chose to study in the United States.

As seen in Figure 15, ITA analysis projects that the number of students South Korea sends to study in the United States will stabilize over the next four years. Despite this projected trend, ITA forecasts that South Korea will remain one of the largest "sending" countries in the world. On a per capita basis, South Korea sends more students to the U.S. than any other country.

As mentioned earlier, the United States continues to be the number one destination. Other significant destinations for South Korean students include China (29.3 percent), Japan (7.6 percent), Australia (6.7 percent), the United Kingdom (6.1 percent) and Canada (5.1 percent).

Level and Fields of Study for South Korean Students

Undergraduates account for 54.4 percent of South Korean students studying in the United States; 27.6 percent are graduate students; 7.6 percent are "other," and 10.4 percent enroll in optional practical training. Some experts have hypothesized that many South Korean graduate students return to South Korea for graduate work due to the sophisticated nature of many graduate programs – especially in the STEM fields (science, technology, engineering, and mathematics).

In terms of fields of study, 31 percent of South Korean students in the United States study STEM subjects while 16.7 percent study business/management, 11.9 percent study fine and applied arts, 11.9 percent study social sciences, and 14.5 percent study "other." At 11.9 percent, South Korea remains one of the countries with the largest percentage of students studying fine and applied arts, along with Taiwan at 12.6 percent and Hong Kong at 10.2 percent. Schools offering a specialty in this subject matter might want to target these markets for potential students.

Future Growth/Opportunities

Although South Korea is currently sending a large number of students to the United States, the future numbers might drop somewhat. One reason is that South Korea has one of the lowest birth rates in the world. Factors such as increasing competition from other countries and economic difficulties at home temper ITA's forecast for any significant increase in the number of South Korean students studying in the United States.

With these limitations in mind, the demand for U.S. education will continue to be fostered by alumni; English skills being expected by most companies in South Korea; South Korean parents being willing to spend a large portion of their income on education, expecting high future returns; and, in many circles in South Korea, overseas education becoming a standard.



The U.S. Government can help U.S. institutions make contact with potential students and help provide information about studying in the United States. Other proposals, such as streamlining the student visa process and promoting optional practical training (OPT), could promote U.S. trade interests in education.

Marketing U.S. Colleges and Universities to South Korean Students

South Korean parents are increasingly capable of directly acquiring information on educational opportunities for their children. Agents are utilized less. U.S. schools should consider employing a combination of on-line advertising, blogging, Facebook, and Twitter within their promotional campaigns. Building people-to-people networks through alumni advocacy and developing and broadening exchange programs that raise the profile of the U.S. institution can also help U.S. schools attract South Korean students to the United States.

Saudi Arabia

Saudi Arabia is a promising market for U.S. colleges and universities seeking to recruit international students. Over the last decade, Saudi Arabia has become the fourth largest source of international students studying at the post-secondary level in the United States. According to the Saudi government, in the 2014/15 academic year, there were 92,618 Saudi students studying at the university level in the United States.¹

Overall Rank

4

The significant increase in Saudi students in the United States over the last decade is largely attributable to scholarship funds offered by the Saudi government, especially the King Abdullah Scholarship Program (KASP). The scholarship typically covers full academic tuition, medical coverage, a monthly stipend, and round-trip airfare for both scholars and dependents.

The figures provided by the Saudi government are higher than those reported by the Institute of International Education (IIE), which is cited extensively in this study, but illustrate the same growth trends. Like the Saudi statistics, IIE figures place Saudi Arabia as the fourth largest source of international students studying in the United States with 59,945 students enrolled in U.S. colleges and universities last year.⁴³ The significant difference in these figures reflects a number of factors that shed light on Saudi enrollments in U.S. schools.

First, IIE data are collected through a survey of U.S. colleges and universities. Since 22.5 percent of Saudi students reported in IIE data⁴⁴ are studying intensive English language, a significant number of Saudi students might enroll in programs which are not necessarily affiliated with universities. In addition, some Saudi students studying on Saudi government programs might be dual U.S.-Saudi citizens and, therefore, might not be recorded in IIE data as international students.

A disproportionately young population coupled with growing university enrollment levels make Saudi Arabia an attractive market for U.S. colleges and universities looking to increase their ratio of international students. Saudi students overwhelmingly choose English-speaking countries when studying abroad, with the United States currently hosting over 54.8 percent⁴⁵ of all Saudi students studying internationally. The United Kingdom, Australia, and Canada are also top destinations.⁴⁶

Level and Fields of Study for Saudi Students

Approximately half of Saudi students studying in the United States are in undergraduate studies; 21 percent are graduate students; 25.6 percent are "other," such as intensive English language training; and just under 2 percent are here for optional practical training (OPT). Intensive English language programs will be interested to know that Saudi students accounted for over 25.8 percent of all students studying intensive English in the United States in 2014.⁴⁷

In terms of fields of study, slightly over 42.5 percent of Saudi students in the United States studied STEM subjects, while 22.5 percent studied intensive English and 16.5 percent studied business/management. Intensive English is often a precursor to studying other subjects and disciplines, and trends suggest that the best model for U.S. colleges to attract Saudi students is to offer strong intensive English classes that then lead to pursuits in STEM and business/management programs.⁴⁸

Future Growth/Opportunities

In 2005, the King Abdullah Scholarship Program (KASP) was established to provide full funding of college costs, sending 15,000 Saudi students to the United States for higher study in fields of medicine, allied health sciences, pharmacy, engineering, computer science, basic sciences, accounting and ecommerce. As of 2014, more than 200,000 Saudi students have received degrees in over 30 countries. Due to the recent decline in oil prices and revenues, the flow of students from Saudi Arabia studying in the United States could decline in the near future. Although the Saudi government views education as a



priority, there will be a 12 percent cut on education spending.⁴⁹ This scholarship program funds 90 percent of the total number of Saudi students studying abroad.

In addition, the Saudi Arabian Cultural Mission, the body that administers KASP in the United States, announced a six-month limit on funding for preacademic language training. There are also widespread rumors that KASP scholarships will soon be limited to funding students at the world's top 200 universities. Many sources are reporting the KASP program will be restructured to more directly secure the skills necessary to qualify for public sector employment in Saudi Arabia.

A young and relatively unskilled population clamoring for jobs and Saudi Arabia's move to diversify its economy away from petroleum into new fields like life sciences and advanced manufacturing mean that education will likely continue to account for a large share of the government's budget. In addition to promoting study abroad in the United States, leading Saudi academic institutions are looking to develop or expand partnerships and exchange programs with U.S. academic institutions. But budget problems seem likely to lead to some declines in the numbers of Saudi students coming to the United States. Thus ITA forecasts that the number of students from Saudi Arabia choosing to study in the United States is likely to decline from the IIE figure of 60,000 in 2014/15.

Scholarships

Other Saudi scholarship programs are offered through entities such as the Saudi Basic Industries Corporation (SABIC), Saudi Aramco, the General Organization for Social Insurance, the Saudi Arabian General Investment Authority (SAGIA), the Institution of Public Administration and the Olayan Financing Company.

Barriers to Future Growth

Scholarships like those offered through KASP are only available to students attending academic institutions that are vetted and approved by the Saudi government. American colleges and universities must be on the Saudi Ministry of Higher Education's approved institutions list in order to be eligible to accept scholarship students from Saudi Arabia. For more information about this KASP process, contact the Saudi Arabian Cultural Mission, 8500 Hilltop Road, Fairfax, VA 22031, Telephone 703-573-7226.

Additionally, Saudi Arabia is investing considerable resources into its domestic education infrastructure, particularly at the post-secondary level, which may encourage more Saudis to study domestically. In fact, the Government allocated approximately 25 percent of its 2015 budget (about \$58 billion) for its domestic education sector. Funded projects include improvements to several women's universities and the opening of eight new colleges.

Canada

Over the past decade, Canada has consistently sent between 27,000 and 30,000 students annually to the United States for study. We expect that Canada will continue to send similar numbers of students during the coming years.

Overall Rank

5

Universities in Canada are a \$26 billion enterprise. In 2013, Canada had a total of 2,023,191 individuals enrolled in universities and colleges. The most popular programs of study are business/management (18 percent), humanities (16 percent), and social/behavioral sciences and law (13 percent). In addition to this robust domestic market for students, during the 2014/15 academic year, Canada was the fifth leading source of students studying in the United States with 27,240, a decline of 3.8 percent compared to 2013/14.⁵⁰

United States is the Destination of Choice for Canadian Students

The Canadian market remains attractive as a result of sending between 26,800 to 30,000 students to the United States every year over the last decade. Furthermore, the United States is by far the leading country that Canadian students choose for study abroad. In 2013, the most recent data available, the United States attracted 54.9 percent of Canadian students who were studying abroad.⁵¹

Canada has a high quality and affordable higher education system. Many Canadian students are attracted to the United States by scholarships and specialized programs, such as art/design, religion, optometry and chiropractic studies, which can have considerable appeal for Canadian applicants. Also, athletic scholarships are more widely available in the United States than in Canada. Finances (the cost of studying abroad) are the top barrier to Canadians looking to study abroad. The recent depreciation of the Canadian dollar has aggravated this problem.⁵²

The economic impact of all Canadian students on the U.S. economy is significant, estimated by the U.S.

Bureau of Economic Analysis to be \$1.1 billion in 2014 (tuition, fees, and living expenses).⁵³

Overview of Canadian Students in the United States

In 2014/15, 48 percent of Canadian students in the United States were undergraduates. Graduate students numbered 39 percent. Students in optional practical training were 10 percent of all students.⁵⁴

Of all Canadian students, 37.4 percent study STEM subjects (engineering, health professions, math/computer science, physical/life sciences) and 15 percent study business/management. ⁵⁵

Future Growth/Opportunities

In the next few years, ITA forecasts small declines in Canadian enrollment with the number of students likely dropping to 26,600 by 2019/20.⁵⁶ The primary factor potentially reducing the demand for U.S. education among Canadian students is growing competition from other countries.

Several avenues, however, offer potential to increase Canadian enrollment in U.S. institutions:

(1) Increased exchange programs and partnering with Canadian institutions;

(2) Cross-border tuition agreements or in-state tuition for Canadians;

(3) Athletic scholarships;

(4) Marketing of U.S. institutions as a nearby foreign destination offering a variety of new experiences;
(5) Marketing of foreign language teaching opportunities to French speakers.⁵⁷



Brazil

Over the past 15 years, Brazil has sent between 7,009 and 23,675 students annually to the United States for study. Between 2013/14 and 2014/15, the number increased by 78 percent. This jump is largely due to the Scientific Mobility Program. Budget constraints in Brazil, however, assure that the number of Brazilian students coming to the United States will decline probably as early as 2015/16.

Overall Rank

6

Substantial increases in the number of Brazilians studying in the United States in each of the last four years are largely due to Brazil's Scientific Mobility Program. During the 2014/15 academic year, Brazil was the sixth leading source of students studying in the United States.⁵⁸

In 2011, the Brazilian government launched the Scientific Mobility Program (originally the Science without Borders Program) to support one-year, nondegree programs for Brazilian students to study abroad. The program has focused on the STEM fields (science, technology, engineering, and mathematics). The Scientific Mobility Program is part of a larger initiative to offer 101,000 Brazilian university students the opportunity to study abroad. The first cohort of Brazilian students arrived in the United States in January 2012 for the spring 2012 semester.⁵⁹

Since the program's inception, the United States has been the single largest destination for participants. As of 2016, the Brazilian Government awarded approximately 27,800 scholarships for study in the United States as undergraduates and graduates. They have studied in almost 400 U.S. institutions in all 50 states and the District of Columbia⁶⁰

At this time, the Brazil Scientific Mobility Program is suspended. According to the Ministry of Education, there will be no new awards under this program in 2016. Students already placed abroad, however, will continue to receive Brazilian Government support until they finish the program.⁶¹

U.S. institutions interested in learning about the status of the program may contact the Institute of International Education, Scientific Mobility Program, at

http://www.iie.org/Programs/Brazil-Scientific-Mobility.⁶²

The total number of Brazilian students coming to the United States in 2014/15 saw spectacular increase of 78 percent to 23,675 students – far greater than the 13,477 forecasted in 2015. The suspension of the Scientific Mobility Program appears certain to reduce growth in the number of Brazilian students coming to the United States as early as 2015/16.⁶³

The economic impact of all Brazilian students on the U.S. economy is significant, estimated by the U.S. Bureau of Economic Analysis to be \$408 million in 2014 (tuition, fees, and living expenses).⁶⁴

In comparison, projections are that in 2016, 10 million students will be enrolled in domestic universities, many of whom will be supported by Brazilian federal government loans (e.g. FIES loans, with which the students finance up to 100 percent of their education, and PROUNI loans, through which public school students finance up to 50 percent of their higher education expenses).

Overview of Global Export Market Opportunities in Education for Brazil

In 2014/15, 29 percent of Brazilian students in the United States were undergraduates. Graduate students numbered just over 17 percent of Brazilian students in the United States. Students in optional practical training accounted for 4.7 percent while "other" accounted for almost 50 percent. Much of this "other" category is intensive English language training.



Of all Brazilian students, 30.2 percent study STEM subjects, and 12.1 percent study business/management.

A significant number of Brazilian students need intensive English training before entering their oneyear academic program. Intensive English language programs attracted 9,063 Brazilian students in 2012/13 and 14,070 in 2013/14. The end of the Scientific Mobility Program, however, will lead to less funding for this English-language training.⁶⁵

Future Growth/Opportunities

In the near-term, the number of Brazilian students is likely to decline. The primary reason is the suspension of the Scientific Mobility Program (also called "Science without Borders"). Other important limiting factors include economic uncertainty in Brazil and the need for English language proficiency in U.S. colleges and universities.

Other factors potentially dampening the demand for U.S. education in Brazil include growing competition from other countries. Brazilian students show strong interest in exchange programs rather than going abroad for all undergraduate coursework, in large part because equivalency is sometimes not granted by Brazilian universities for coursework completed outside Brazil. Another promising avenue for U.S. colleges and universities would be to form a partnership with a Brazilian university to participate in the Brazilian Government's National Program for Technical Courses (PRONATEC), a \$35 billion program established in 2011 to funnel government investments into technical schools and courses for high schools students and adults.

Since its inception, PRONATEC has funded technical and vocational courses for over eight million students and expects to fund an additional 12 million students' courses for the second phase. PRONATEC only funds courses offered in Brazil. Foreign universities may take part in it by establishing partnerships with Brazilian higher education institutions. The Brazilian National Confederation of Industry, through its technical school, is also helping the government to offer these courses.

Taiwan

Taiwan has ranked among the top "sending" countries in terms of international students for the past 20 years. Since 2006/07, however, the number of students from Taiwan studying in the United States has been on a gradual decline – sliding from 29,094 to 20,993 (in 2014/15).

Overall Rank

7

During the 2014/15 academic year, Taiwan was the seventh leading source of students studying in the United States. The total number of Taiwanese students coming to the United States in 2014/15 was 20,993, a decline of 1.3 percent compared to 2013/14.⁶⁶

United States is the Destination of Choice for Taiwanese Students

The Taiwanese market is notable over the last 15 years for consistently sending 20,000 to 30,000 students per year to the United States. Furthermore, the United States is by far the leading country that Taiwanese students choose for study abroad. According to the Organization for Economic Cooperation and Development (which publishes data slightly different than the Institute for International Education, which is cited extensively in this report) in 2013/14, approximately 60,800 Taiwanese went abroad for study. The United States attracted 21,266 of these students, or 35.0 percent.⁶⁷

According to a recent unofficial survey, Taiwanese parents spend about 17 percent of household income on education for their children. This parental spending includes English lessons, test preparation, extracurricular activities, and service fees paid to student recruitment agents. Thus, Taiwanese parents have shown an inclination to provide highquality education for their children at all levels.⁶⁸ In addition, 32 percent of parents surveyed reported that they have plans to send their children abroad for study.

The economic impact of all Taiwanese students on the U.S. economy is significant, estimated by the U.S. Bureau of Economic Analysis to be \$712 million in 2014 (tuition, fees, and living expenses).⁶⁹

Overview of Taiwanese Students in the United States

In 2014/15, 29 percent of Taiwanese students in the United States were undergraduates. Graduate students numbered 46 percent of Taiwanese students in the United States. Students in optional practical training, high schools, and "non-degree programs" made up the remainder.⁷⁰

Of all students from Taiwan, 38.4 percent study STEM subjects (engineering, health professions, math/computer science, physical/life sciences) and 21 percent study business/management. Intensive English accounts for 3.8 percent of students from Taiwan. International students, including STEM students, tend to be concentrated in U.S. metropolitan areas. The top three metropolitan areas for STEM are New York-Newark-Edison, NY-NJ-PA; Los Angeles-Long Beach-Santa Ana, CA; and Boston-Cambridge-Quincy, MA-NH.⁷¹

Future Growth/Opportunities

Current trends and economic indicators seem to point to a small continuing decline in the number of students from Taiwan studying in the United States. ITA forecasts Taiwanese enrollments dropping to 15,600 students by 2019/20 which would be a continuation of the erosion in the numbers of students from Taiwan coming to the United States.⁷² This decline, however, is not certain. Several avenues offer potential to increase Taiwanese enrollment in U.S. institutions:

Deregulation in Taiwan of higher education and international partnerships among institutions will lead to more flexibility in attracting top international universities to establish campuses in Taiwan. U.S.



institutions may be able to benefit from current conditions to explore partnerships with Taiwan universities. To help compete with increasingly aggressive foreign institutions from markets other than the United States recruiting Taiwanese students, U.S. institutions can emphasize postgraduation job placement. Recruiting agents are one of the main resources used by Taiwanese students and parents. The Commercial Service can help with assessment of prospective agents.⁷³

U.S. colleges and universities have also been making inroads with universities in Taiwan through Taiwan's Education Innovation Curricula. Under this program, the Taiwan Ministry of Education (MOE) has approved nine in-country joint programs between Taiwan and foreign universities. Out of the nine joint programs, four of them are in cooperation with U.S. universities, namely the University of Southern California; University of Rhode Island; University of California, Los Angeles; and University of South Carolina, offering programs spanning from high-tech, business, sports management, and cultural studies to culinary programs. The Educational Innovation Curricula aims to foster collaboration between domestic and foreign universities and encourage the establishment of experimental branch campuses, independent colleges, or certificate programs/courses. These joint programs will be a great method to showcase the benefits of the U.S. educational system.

Finally, there is potential for growth in the high school and undergraduate segments. Some parents have chosen to send high school age students to U.S. summer camps and boarding schools to increase future options in higher education.⁷⁴

Japan

Japan was the leading sender of students to the United States from 1994 to 1998, but Japan has fallen in the ranks to eighth place due to a surge in students from other countries, particularly India, China, South Korea, and Saudi Arabia, and a fairly steady decline in students since 1997, which was the peak year during which over 47,000 students from Japan studied in the United States.¹ Since 2009/10, the rate of decline stabilized, but only slightly over 19,000 Japanese students studied in the United States in 2014/15.

Overall Rank

Despite a declining number of Japanese students, the United States remains the most popular destination for tertiary education, and Japanese students have a significant economic impact by contributing \$605 million to the United States economy.⁷⁵

The Organization for Economic Development and Cooperation data is slightly different than data from the Institute for International Education (above), but reflects that in 2013 (latest data available), 32,332 Japanese students studied abroad and 56.4 percent chose to study in the United States.⁷⁶ The second leading destination is the United Kingdom with 9.3 percent. Other countries that host a significant number of Japanese students are Australia with 5.2 percent, South Korea with 3.5 percent and Canada with 2.5 percent.⁷⁷

In the Japanese business industry, there is a shortage of local graduates who speak business level English, especially in comparison to Asian counterparts. Since English is the language of global business, companies are aware of the increasing demand for employees to be proficient in English in order to access global markets.

That being said, few companies have TOEIC score requirements for job applicants, and fewer companies have invested in programs to maintain or encourage higher English proficiency. There is a gap between the level of English desired and company actions to get to that level, which is expected to continue.

Level and Fields of Study for Japanese Students

The highest percentage of Japanese students in the United States, 46.6 percent, is undergraduates. The remaining students include 17.3 percent graduate students, 29.4 percent other, and 6.7 percent optional practical training (OPT). Business and management attract 19.1 percent of Japanese students in the United States, making them the most popular fields of study. The STEM fields attract 14 percent, and intensive English attracts 15 percent of students.⁷⁸

In addition to tertiary education, Japanese students participate in high school exchange programs to learn English and to become familiar with American culture. Many Japanese students have participated in exchange programs since the 2011 Great East Japan Earthquake through the TOMODACHI Initiative, which is a public-private partnership between the U.S.-Japan Council and the U.S. Embassy in Tokyo. These exchange programs allow for early exposure to an English environment and the United States, possibly setting the stage for future participation in a study abroad program.

Future Growth/Opportunities

There has been a stabilization of Japanese students after 2009, following a few years of significant declines in 2007 through 2009 in Japanese students studying in the United States. Some factors causing the earlier declines in numbers of Japanese students are a decrease in the number of Japanese youth due to a population decline, the stagnant Japanese economy that makes foreign tuition uncompetitive, and the recruitment cycle for employment. Japanese students apply for jobs in their third and fourth years



in college, through a time consuming process that requires them to physically be in Japan. Job offers are given before graduation, and those who do not secure jobs prior to graduation will opt to stay back a full year to preserve the coveted "new graduate category" in order to be competitive in securing a job. Therefore, Japanese students who choose to study abroad will not have the opportunity to go through the job application process during their last two years of college, leaving them with fewer options for pursuing a permanent job in Japan following graduation. The Japanese government is aware of this issue and is promoting policies to encourage study abroad participation in order for Japanese students to gain an international perspective, but this is expected to take time.

During the 2007-2009 financial crisis, Japanese firms cut outside training and education costs. As a result, Japanese employees were sent to the Philippines to study English due to its close proximity and low cost in comparison to the United States. A variety of online English lesson options have also entered the market, offering cheap and convenient alternatives to actual study abroad.

Currently, Japanese companies are realizing the benefits of hiring students with international

experience, and with the upcoming 2020 Olympics, there might be revival of Japanese students studying abroad.

Short-term programs, including intensive ESL courses paired with volunteer or internship opportunities are programs Japanese students would consider.

One of the most significant reasons Japanese students are choosing to study in Japan rather than go abroad is to better deal with the extremely competitive Japanese job market. If Japanese students study abroad, then they are physically unable to participate in the interview process held in Japan and may lack techniques and information for job hunting more easily available from career centers at Japanese universities. To counter these concerns, U.S. colleges and universities should highlight the connection between their programs and real-world career success.

U.S. colleges and universities should market shortterm as well as long-term study programs to potential Japanese students. It would be helpful to feature successful alumni in college brochures, especially those who have returned to Japan, to effectively show the benefits of studying in the United States. For new programs from universities not recognized in Japan, Japanese-language marketing materials are a must.

Vietnam

Vietnam has risen from the 26th position in 2004/05 with 3,670 students sent to the United States to ninth place in 2014/15 with 18,722 students. Over this 10 year period, the number of Vietnamese students increased by 410 percent. This large, steady growth over a decade helps make Vietnam an attractive market for U.S. institutions. These upward growth trends have given little sign of moderating, offering important export opportunities for U.S. colleges and universities.

Overall Rank

9

The Vietnamese market scores well under the criteria in the ITA methodology in Appendix 1. First, the number of Vietnamese students studying in the United States is relatively large and continues to increase each year, reaching 18,722 in 2014/15. Second, UNESCO reports that in 2013, approximately 53,500 Vietnamese students studied abroad and that the United States has done well in attracting about one-third of all Vietnamese students studying abroad. Third, the growth rate of Vietnamese enrollments has increased steadily. Fourth, the relatively low numbers of students going abroad suggests that there is room to improve U.S. export performance in this market. Fifth, 41.3 percent of the Vietnamese population is 24 years old or younger.⁷⁹

Based on recent trends, ITA projects the number of Vietnamese students studying in the United States will climb from 18,722 in 2014/15 to 27,000 in 2019/20, or 42 percent over the next five years.⁸⁰

Level and Fields of Study for Vietnamese Students

A large majority, 66 percent, of Vietnamese students in the United States are undergraduates. Business and management attract 32.6 percent of Vietnamese students in the United States, making them the most popular fields of study. The STEM fields are in second place with 28.4 percent of Vietnamese students. The social sciences attract 5.1 percent of students and intensive English attracts 8.6 percent. This strong preference for STEM and business is typical of students from all the leading countries sending students to the United States.⁸¹

In addition to university study, another potential destination for Vietnamese students is U.S. boarding schools for high school students. The reason is the increasingly popular view that a year or two studying in a U.S. boarding school will facilitate acceptance at a U.S. college or university.

Future Growth/Opportunities

While in the near-term, the number of Vietnamese students is likely to increase, there are several factors to reduce the number of students coming to the United States. The number of Vietnamese students increased over the past 10 years by 410 percent, and the increase from 2013/14 to 2014/15 was 12.9 percent.

Two developments might further slow increases in Vietnamese student enrollment in the United States. First, improving domestic higher education is a top priority for the Vietnamese Government, with the goal of a 10 percent increase in domestic university enrollment. To this end, over the last few years the Vietnamese government has increased budget allocations, liberalized private sector involvement, and encouraged foreign participation in developing education and training services in Vietnam.

Second, other destinations, such as Australia and Singapore, offer proximity, affordable costs, and possible post-graduate employment. The experience



of the winner of an award from ITA's MDCP (Market Development Cooperator Program) suggests that success in the Vietnamese market requires a steady, concerted effort over a long period to learn about the market and how to recruit Vietnamese students.⁸²

Addendum: Resources for U.S. Exporters

The U.S. Government has numerous resources available to help U.S. exporters: from additional market research, to guides to export financing, to overseas trade missions, to staff around the country and the world. A few key resources are highlighted below. For additional information about services from the International Trade Administration (ITA), please visit <u>www.export.gov</u>.

Country Commercial Guides

http://export.gov/ccg/

Written by U.S. Embassy trade experts worldwide, the *Country Commercial Guides* provide an excellent starting point for what you need to know about exporting and doing business in a foreign market. The reports include sections addressing: market overview, challenges, opportunities, and entry strategies; political environment; selling U.S. products and services; trade regulations, customs, and standards; and much more.

Education and Training Services Resource Guide

http://export.gov/industry/education/educationandtr ainingservicesresourceguide2016/index.asp The Education and Training Services Resource Guide

2016 reports on the education market in 50 countries.

Basic Guide to Exporting

http://export.gov/basicguide/

A Basic Guide to Exporting addresses virtually every issue an organizationlooking to export might face. Numerous sections, charts, lists and definitions throughout the book's 19 chapters provide in-depth information and solid advice about the key activities and issues relevant to any prospective exporter.

Trade Missions

http://www.export.gov/trademissions/

Department of Commerce trade missions are overseas programs for U.S. organizations that wish to explore and pursue export opportunities by meeting directly with potential clients in local markets. Trade missions include, among other activities, one-on-one meetings with foreign organizations and government officials that are pre-screened to match specific business objectives along with student fairs

Certified Trade Fairs

http://www.export.gov/eac/show_short_trade_event s.asp?CountryName=null&StateName=null&IndustryN ame=null&TypeName=International%20Trade%20Fair &StartDate=null&EndDate=null The Department of Commerce's trade fair certification program endorses overseas trade shows that are reliable venues and good markets for U.S. organizations to sell their services abroad.

U.S. Commercial Service

http://www.export.gov/usoffices/index.asp

With offices throughout the United States and in U.S. Embassies and consulates in nearly 80 countries, the U.S. Commercial Service utilizes its global network of trade professionals to connect U.S. companies with international buyers worldwide. Whether looking to make their first export sale or expand to additional international markets, organizations will find the expertise they need to tap into lucrative opportunities and increase their bottom line. This includes trade counseling, actionable market intelligence, business matchmaking, and commercial diplomacy.

Global Education Team

http://export.gov/industry/education/index.asp

The U.S. Department of Commerce Education Team continues to offer virtual education trade fairs, education trade missions, webinars, and other events to promote educational exports.

EducationUSA

www.EducationUSA.info.

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.

U.S. Department of Education – International Affairs Office

http://www.ed.gov/edblogs/international/

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, they help promote education exports and host the annual International Education Week.

Appendix 1: Methodology

After a U.S. college or university considers its program goals and its unique position in terms of international student diversity, the school might wish to consider further analytics of international student trends in specific markets.

The Case Studies outline historical trends in internationally mobile students from these countries and address additional factors that will influence the projected future numbers of students from these countries studying in the United States.

When analyzing which countries or regions the International Trade Administration (ITA) should focus on for case studies, we noted considerable stability in the top "sending" countries and considered four main factors in assessing which markets were most promising for U.S. colleges and universities attempting to recruit foreign students in the coming years. The factors are as follows:

- The number of students from a given country currently studying in the United States
- Historical growth rates and changes in those rates regarding internationally mobile students studying in the United States
- □ Information regarding government programs that fund study abroad programs
- Economic and demographic trends that might influence students studying in the United States.

On the basis of this analysis, we have focused the Case Studies on nine of the top 10 countries:

China India South Korea Saudi Arabia Canada Brazil Taiwan Japan Vietnam

NOTE: While these are the top nine countries, many U.S. colleges and universities are also considering other markets to better diversify their international student diversity.

Appendix 2: Citations

¹ Institute for International Education (IIE), Open Doors Report. Fast Facts 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.

⁵ Institute for International Education (IIE), Open Doors Report. Special Reports: Community College Data Resource.

⁶ Ibid.

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. <u>www.bea.gov</u>, 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, <u>http://monitor.icef.com/2016/03/indian-technology-</u> institutes-open-admissions-to-foreign-students/

¹⁵ Digest of Education Statistics, National Center for Education Statistics (NCES), Department of Education,

http://nces.ed.gov/programs/digest/d15/tables/dt15 317.20.asp?current=yes

¹⁶ Digest of Education Statistics, National Center for Education Statistics, Department of Education,

http://nces.ed.gov/programs/digest/current_tables.asp

Institute for International Education (IIE), Open Doors Report. Fast Facts 2015

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-forinternational-students/ and "UK business schools lose 133 million pounds in non-EU enrolment drop" in http://thepienews.com/news/ukbusiness-schools-lose-133m-in-non-eu-enrolment-drop/

Australian Government, http://www.studyinaustralia.gov.au/global/australian-education/education-costs;

National Center for Education Statistics, http://nces.ed.gov/programs/digest/d15/tables/dt15_330.10.asp?current=yes

²¹ Study in Europe at http://www.studyineurope.eu/tuition-fees

²² Institute of International Education, Survey of International Students in the United States (ca. 2010)

²³ Institute of International Education, International Students: Fields of Study.

²⁴ Institute of International Education. (2014). "Fields of Study of Students from Selected Places of Origin, 2013/14." Open Doors Report on International Educational Exchange. Retrieved from http://www.iie.org/opendoors

²⁵ United Nations Educational Scientific and Cultural Organization. Education: Outbound Internationally Mobile Students by Host Region. Washington, D.C.: Education, 2013. Accessed February 25, 2016. But compare IIE, Project Atlas, China, "1914, Number of students from China studying abroad: approximately 459,800"

http://data.uis.unesco.org/Index.aspx?gueryid=172

Bureau of Economic Analysis, U.S. International Services for 2015, Table 2.2 U.S. trade in Services, by Type of Service and by Country or Affiliation at http://www.bea.gov/international/ai1.htm#INTERNATSERV. Institute of International Education. Open Doors Fact Sheet: China. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015

Institute of International Education. Open Doors Academic Level and Place of Origin at http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/By-Academic-Level-and-Place-of-Origin#.VzDgzIUrKUk Fact Sheet: China. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015

²⁸ Institute of International Education. Open Doors Data International Students: Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15

Institute of International Education, Open Doors, Fact Sheets by U.S. State 2015

³⁰ Schultz, Abby. "Surge of Chinese Students Studying Abroad Could Ebb." *Barron's*, February 12, 2016. Accessed February 25, 2016. http://www.barrons.com/articles/surge-of-chinese-students-studying-abroad-could-ebb-1455254077

The Economist. "Georgia on their minds." The Economist, February 21, 2015. Accessed February 25, 2016.

http://www.economist.com/news/china/21644222-yearning-american-higher-education-has-driven-surge-overseas-study-georgia-their ³² Institute of International Education. *Open Doors Fact Sheet: India*. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016.

http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015

³³ United Nations Educational Scientific and Cultural Organization. Education: Outbound Internationally Mobile Students by Host Region. Washington, D.C.: Education, 2013, Accessed February 25, 2016.

http://data.uis.unesco.org/Index.aspx?gueryid=172

² Institute for International Education (IIE), Project Atlas 2015

⁴ Institute for International Education (IIE), Open Doors Report. Fast Facts 2015.

³⁴ OECD 2015, Education at a Glance 2015: OECD Indicators, OECD Publishing. Accessed February 25, 2016. http://dx.doi.org/10.1787/eag-2015-en ³⁵ OECD 2015, Education at a Glance 2015: OECD Indicators, OECD Publishing. Accessed February 25, 2016. <u>http://dx.doi.org/10.1787/eag-</u>

³ Bureau of Economic Analysis, International Services, Table 2.3 U.S. Trade in Services, by country of Affiliation and by Type of Service. ³⁷ Institute of International Education. Open Doors Fact Sheet: India. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015

Institute of International Education. Open Doors Data International Students: Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15

Education and Training Services Resource Guide, Global Education Team, U.S. Department of Commerce (2016), article on India.

⁴⁰ U.S. Commercial Service. "Education and Training Services Resource Guide." (2015), p. 32 (India)

⁴¹ United Nations Educational Scientific and Cultural Organization. Education: Outbound Internationally Mobile Students by Host Region. Washington, D.C.: Education, 2013. Accessed February 25, 2016.

http://data.uis.unesco.org/Index.aspx?queryid=172

⁴² OECD 2015, Education at a Glance 2015: OECD Indicators, OECD Publishing. Accessed February 25, 2016. http://dx.doi.org/10.1787/eag-

2015-en ⁴³ Institute of International Education. *Open Doors Fact Sheet: Saudi Arabia.* Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015

⁴⁴ Institute of International Education. Open Doors Data International Students: Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15

OECD, Education at a Glance 2015: OECD Indicators, OECD Publishing. Accessed February 25, 2016. http://dx.doi.org/10.1787/eag-2015-en ⁴⁶ United Nations Educational, Scientific and Cultural Organization. *Global Flow of Tertiary-Level Students*. Washington, D.C.: Education, 2013. Accessed February 25, 2016.

⁴⁷ Institute of International Education. Open Doors Data International Students: Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15

Institute of International Education, Open Doors, International Students, Fields of Study and Place of Origin, 2014/15

⁴⁹ "The King Abdullah Scholarship Program" on the web site of the Saudi Arabian Cultural Bureau,

http://www.saudibureau.org/en/inside.php?ID=16; Ivana Kottasova."Saudi Arabia Cuts Funding for Students Abroad"

http://money.cnn.com/2016/02/09/news/saudi-arabia-students-overseas/ (February 9, 2016)

Education and Training Services Resource Guide, Global Education Team, U.S. Department of Commerce (2016), article on Canada; IIE Open Doors Report 2015, Fast Facts

⁵¹ IIE, Project Atlas 2015

⁵² Education and Training Services Resource Guide, Education Team, U.S. Department of Commerce (2016), article on Canada.

⁵³ Bureau of Economic Analysis, U.S. Department of Commerce, International Services: Trade in Services in 2014 and Services Supplied Through Affiliates in 2013 (October 2015)

⁵⁴ IIE Open Doors Report 2015, International Students By Place Of Origin And Academic Level.

⁵⁵ Institute of International Education. Open Doors, Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February

25, 2016. http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15

⁵⁶ Estimated by ITA.

⁵⁷ Education and Training Services Resource Guide, Education Team, U.S. Department of Commerce (2016), article on Canada.

⁵⁸ IIE Open Doors 2015 Report, Fast Facts.

⁵⁹ Brazil Scientific Mobility Program, Fall 2014 Overview (Institute of International Education, Fall 2014)

⁶⁰ CAPES web site on the Science without Borders Program, on <u>http://www.cienciasemfronteiras.gov.br/web/csf/bolsistas-pelo-mundo</u> (accessed March 15, 2016); Brazil Scientific Mobility Program, Fall 2014 Overview (Institute of International Education, Fall 2014)

⁶¹ Email from the U.S. Embassy in Brazil to ITA, February 12, 2016.

⁶² Education and Training Services Resource Guide, Global Education Team, U.S. Department of Commerce (2016), article on Brazil.

⁶³ IIE, Open Doors 2015, Fast Facts.

⁶⁴ Bureau of Economic Analysis, International Services, October 2015, Table 2.3 Brazil and IIE, Open Doors Fact Sheet: Brazil (2015)

⁶⁵ Institute of International Education (IIE), Open Doors Report, International Students: Academic Level by Place of Origin and Fields of Study by Place of Origin; Brazil Scientific Mobility Program, Fall 2014 Overview (Institute of International Education, Fall 2014); Brazil Scientific Mobility Program, Intensive English Program, http://www.iie.org/Programs/Brazil-Scientific-Mobility/Current-Students/Intensive-English-Program#.VxkfZnErKUk

IIE Open Doors Fact Sheet: Taiwan 2015; IIE, Open Doors 2015 Fast Facts

⁶⁷ IIE Open Doors Report 2015; "More students going abroad: data", Taipei Times, March 4, 2014.

⁶⁸ Education and Training Services Resource Guide, Education Team, U.S. Department of Commerce (2016), article on Taiwan.

⁶⁹ Bureau of Economic Analysis, U.S. Department of Commerce, International Services: Trade in Services in 2014 and Services Supplied Through Affiliates in 2013 (October 2015)

⁷⁰ IIE Open Doors Report." International Students: Academic Level by Place of Origin.

⁷¹ IIE Open Doors Report, International Students, Fields of Study by Place of Origin; "The Geography of Foreign Students in U.S. Higher Education: Origins and Destinations" by Neil G. Ruiz, Brookings (2014), Table 7, Top 10 STEM Destinations as Total F-1 Students".

<u>2015-en</u>

⁷⁵ Institute of International Education. *Open Doors Fact Sheet: Japan*. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. <u>http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fact-Sheets-by-Country/2015;</u> Bureau of Economic Analysis, International Services, October 2015, Table 2.3 Brazil and IIE, Open Doors Fact Sheet: Japan (2015)

⁷⁶ United Nations Educational Scientific and Cultural Organization. *Education: Outbound Internationally Mobile Students by Host Region.* Washington, D.C.: Education, 2013. Accessed February 25, 2016.

http://data.uis.unesco.org/Index.aspx?queryid=172

⁷⁷ OECD 2015, *Education at a Glance* 2015: OECD Indicators, OECD Publishing. Accessed February 25, 2016. <u>http://dx.doi.org/10.1787/eag-</u>2015-en

⁷⁸ Institute of International Education. *Open Doors Data International Students*: Fields of Study by Place of Origin. Washington, D.C.: Open Doors, 2015. Accessed February 25, 2016. <u>http://www.iie.org/Research-and-Publications/Open-Doors/Data/International-Students/Fields-of-Study-Place-of-Origin/2014-15; and International Students by Place of Origin and Academic Level, 2013/14 & 2014/15</u>

⁷⁹ Institute of International Education (IIE), Open Doors Fact Sheet: Vietnam; UNESCO, Global Flow of Tertiary-Level Students, Vietnam at http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx

⁸⁰ IIE Open Doors program; Estimate by ITA;, <u>https://www.cia.gov/library/publications/the-world-factbook/geos/vm.html</u>, accessed March 21, 2016.

⁸¹ IIE Open Doors, International Students by Place of Origin and Academic Level, 2013/2014 & 2014/2015, and Fields of Study for Selected Places of Origin, 2014/2015

⁸² ITA Global Education Team, Education and Training Services Resource Guide (2016 edition), article on Vietnam, pp. 107 ff.

⁷² Estimated by ITA.

⁷³ Education and Training Services Resource Guide, Education Team, U.S. Department of Commerce (2016), article on Taiwan.

⁷⁴ Email of April 15, 2016 from the U.S. Foreign `Commercial Service in Taiwan to John Siegmund on higher education in Taiwan.

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