

# Trends in Selecting Undergraduate Business Majors & International Enrollment & Expected Salaries

Ceyhun Ozgur<sup>1</sup>, Yang Li<sup>1</sup> & Grace Rogers<sup>1</sup>

<sup>1</sup> College of Business, Valparaiso University, Indiana, USA 46383

Correspondence: Ceyhun Ozgur, Valparaiso University, 1909 Chapel Drive Valparaiso, IN 46383, USA. Tel: 219-4-64-5178. E-mail: Ceyhun.ozgur@valpo.edu

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## Abstract

The paper begins with a brief review of the literature and how business students choose their major in the U.S. and we list the most popular majors in the U.S. Universities. We also talk about the factors that influenced student's choice. In our next research project, we will not only use a larger sample size but also the sample will come from a few universities to reduce the sampling bias. In this paper, we also talk about changing trends in international students. We talk about the large group of Chinese, Indian, and Arabic students, and we show that with literature and graphical support. In the next section, we analyze one of the up and coming new business majors "Business Analytics" We finish the paper with a discussion of growth of international students both at graduate and undergraduate level, and how we will address the shortcomings of this paper with our next project.

**Keywords:** list of most popular business majors, trends in international student enrollment starting & mid-career business salaries for each major, list of functions for each major, business analytics major

## 1. Introduction

Two of the authors of this paper conducted a recent survey in which business school students indicated both their choice of academic major and the reasons for this choice. Given the overall focus on this paper on the differences made in popularity of specific majors brought to a school with the influx of large numbers of international students, the reasons students make these choices are very important.

Valparaiso University is a regionally accredited university located in central Indiana. Overall enrollment is approximately 4,000 students. Before examining the results of this survey it is important to note that the array of academic majors varies from one university to another. The most popular majors in the United States schools of business are the following majors:

- 1). Accounting
- 2). Finance
- 3). Business Analytics
- 4). Operations Management
- 5). Entrepreneurship
- 6). Management Information Systems
- 7). International Business
- 8). Management
- 9). Marketing

Appendix 1 at the end of this paper displays related job titles and business functions pertaining to the several majors. Appendix 2 at the end of this paper displays the administered survey that focuses both on the student's choice of major and the reasons for this choice.

**Business analytics (BA)** refers to the skills, technologies, applications and practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning (Wikipedia, 2013). Business analytics focuses on developing new insights and understanding of business

performance based on data and statistical methods. In contrast, business intelligence traditionally focuses on using a consistent set of metrics to both measure past performance and guide business planning, which is also based on data and statistical methods.

Silver, blogger, utilized a tremendous database of polling data, both historic and current, to accurately predict the winner of all 50 states on the night of the election. He also gave Obama a 91% chance of winning, going against the media tide calling for a very close race (or a Romney win). And it wasn't a fluke. In 2008, Silver correctly predicted the winner of 49 out of 50 states. For the general public, there was no way to know that the idea for the Parker contest had come from a data-mining discovery about some supporters: affection for contests, small dinners and celebrity. But from the beginning, campaign manager Jim Messina had promised a totally different, metric-driven kind of campaign in which politics was the goal but political instincts might not be the means. He hired an analytics department five times as large as that of the 2008 operation, with an official "chief scientist" for the Chicago headquarters named Rayid Ghani, crunched huge data sets to, among other things, maximize the efficiency of supermarket sales promotions(Wixom et al., 2011).

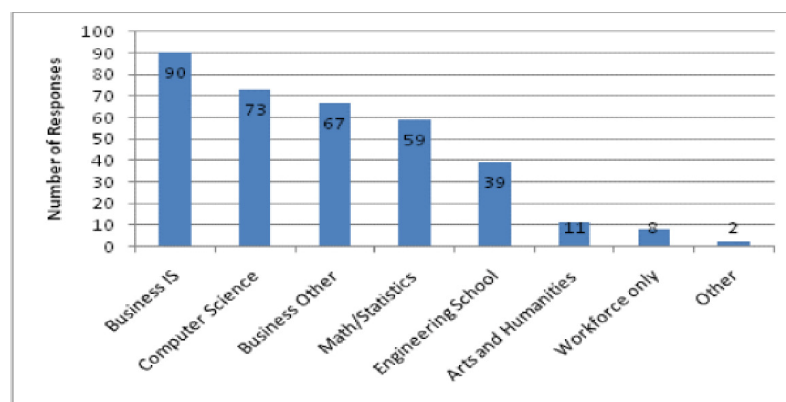


Figure 1. From where do you hire B|skills

Source: B|Congress|survey, based on 219 recruiter responses

This paper uses of different software involving different data. The most popular software is EXCEL, mainly because it's easy availability and low/no cost. However, it suffers from having inadequate menu and not being able to perform certain statistical tests. Instead of EXCEL, instructors prefer SAS, SPSS or MINITAB, mainly because we can do many more statistical tests using these software programs given above. SAS and SPSS can handle large data sets, but the disadvantage of SAS and SPSS is that there is a longer learning curve compared to MINITAB or EXCEL. Another advantage of SAS and SPSS, they can handle problems with large data sets. Utilizing problems with large data sets is very desirable by firms in different industries and what the recruiters are looking for in hiring college graduates in their Business Analytics departments.

In terms of expenditures, even though SAS and SPSS appear a lot more expensive on the surface, schools can save money by using either SPSS or SAS, if they utilize the resources offered to them by SPSS or SAS. Note that software is most desirable, because it is free, however it cannot handle problems with very large data sets. However, this should not be a problem in academic/university setting. However, when students get their first job in Business Analytics/Business Intelligence, they will be required to use a software program like SPSS or SAS. We think they will be better off to be introduced to SPSS or SAS earlier in their career, due to the fairly long learning curve for both software programs.

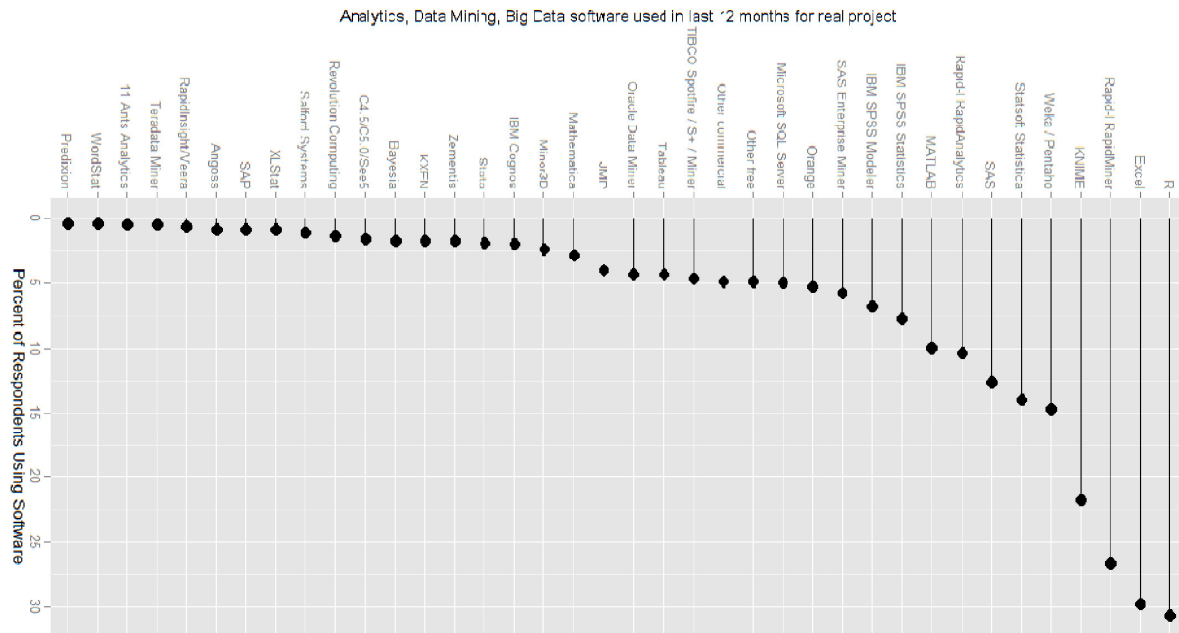


Figure 2. Analytics, Data Mining, Big Data software used in last two months of a project (KDNuggets, 2012)

The primary challenges that academicians/professors face when teaching Business Intelligence (BI) or Business Analytics (BA) stem from a shortage of teaching resources and support, indicating that professors who teach BI or BA lack the following: 1) Data sets; 2) Suitable cases; 3) Suitable textbooks; 4) BA/BI software; 5) Technical support/training. The pedagogy issues result from existing content not being shared adequately rather than resources not existing. That means instructors are forced to recreate content when teaching BI and BA.

The most popular software is EXCEL, mainly because it's easy to use and available to students at low/no cost. However, it suffers from having inadequate menu and not being able to perform certain statistical tests. Instead of EXCEL, instructors prefer SAS, SPSS or MINITAB, mainly because they can do many more statistical tests using these software programs given above. SAS and SPSS can handle large data sets, but the disadvantage of SAS and SPSS is that there is a longer learning curve compared to MINITAB or EXCEL. Another advantage of SAS and SPSS, they can handle problems with large data sets. Utilizing problems with large data sets is very desirable by firms in different industries and what the recruiters are looking for in hiring college graduates in their Business Analytics departments.

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Previous studies have indicated a couple reasons that students decide on their majors. For example, an article on the Princeton Review website (2013) claims that there are two distinct reasons for students to choose a major. Students either decide on a major because it will prepare them for a specific field, or they choose it because they enjoy the subject. While career-focused majors direct students to a specific profession—like engineering, business, education, or nursing—, subject-focused majors—such as history—develop students' critical thinking skills and writing skills, which are also highly valued by employers (Princeton Review, 2013).

In this study, we use a multi-criteria decision making approach called the Analytic Hierarchy Process (AHP) to identify student reasons for choice of major. According to Safian, Ezwan and Hadi (2011), "The AHP is a structured technique for organizing and analyzing complex decisions. Based on mathematics and psychology, it was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then." Saaty (1994) claims that AHP is, "natural to our intuition and general thinking" which combines logic and intuition

and that takes advantage of our ability to rank. (See Analytical Hierarchy Process by Strasser, Ozgur, & Schroeder, 2002). Wang, Xie and Goh (1998) explain the use of AHP in the context of Quality Function Deployment. Strasser, Ozgur and Schroeder (2002) apply AHP in the context of selecting an undergraduate business major and make some interesting conclusions regarding the selection process. Giullian, Odom and Totaro (2002) reveal which majors are important. Hansen and Neuman (1999) demonstrate the predictive power of a student's major in determining how successful he/she will be in the work force. Kaynama and Smith (1996) use consumer behavior and decision models to aid students in choosing a major. Malgwi, Howe and Burnaby (2005) study the factors that affect student's choice of undergraduate/graduate college major. It further examines which majors are difficult enough to deter students from pursuing that area of study. St. John (1994) outlines how personal debt impacts the student's choice of an undergraduate major and which major(s) are affected the most and the least. The finance major is affected the most by personal debt while the management major is influenced the least by personal debt.

The questionnaire distributed to the students includes the following factors: Interest in Subject, Influence of Others, Job Availability and Growth Potential, Usage of Computer Skills, Usage of Interpersonal Skills and Usage of Mathematical Skills.

Alongside the results of student reasons for choice of major, we include in our study U.S. government data on expected salaries of graduates with the several majors, both upon graduation and ten years afterward. This data is displayed in Tables 1 and 2.

Table 1. Average salary of graduates for several majors with graduate degrees

Average Salaries for each of the majors with graduate degrees		
Major	Avg. Entry level position salary	Avg. Salary for Experienced position
Marketing	60800	76000
Finance	64700	95013
Management	67380	101219
Entrepreneurship	70520	94628
Operations Management	70400	
Business Analytics	86490	
International Business	78220	125102
MIS	81190	114813
Accounting	62700	71666

Table 2. Percentage change in salaries between first time job and experienced worker for Graduates

Percentage change for salaries between first time job and experienced worker	
<i>Major</i>	<i>% Increase</i>
Marketing	25
Finance	46.9
Management	50.2
Entrepreneurship	34.2
Operations Management	
Business Analytics	
International Business	60
MIS	41.4
Accounting	14.3

Table 3. Average salary of undergraduates for several majors

Major	Average Salaries for each of the majors	
	Avg. Entry level position salary	Avg. Salary for Experienced position
Marketing	51900	76000
Finance	69000	90000
Management	46000	56000
Entrepreneurship	34500	54965
Operations Management	49000	60000
Business Analytics	85000	103000
International Business	78220	
MIS	58000	79000
Accounting	52000	63000

Table 4. Percentage change in salaries between first time job and experienced worker for Undergraduates

Percentage change for salaries between first time job and experienced worker	
<i>Major</i>	<i>% increase</i>
Marketing	46.4
Finance	30.4
Management	21.7
Entrepreneurship	59.3
Operations Management	22.4
Business Analytics	21.2
International Business	
MIS	36.2
Accounting	21.2

The data in Table 1 and Table 2 comes from Education Portal NACE Salary Survey Report (2013). We got results for graduates from Education Portal Salary Survey Report. However, we could not find operations management and business analytics majors average starting salaries. Then the authors calculated the percentage change in salaries between entry-level position and experienced position for each major. The results are produced by using the difference of salaries between entry level and experienced position divided by the salary for entry-level position.

Enrollment of international students in American universities has grown significantly in the past few years. Reliable sources place it at nearly eight percent of total enrollment. Most faculty members will be aware of the significant presence of international students in graduate programs for several years. What is more surprising is the very recent increase in international enrollment in some American undergraduate programs. At one mid-size American business school, international students increased from four percent to twenty-five percent of enrollees in just five years. Reasons for this growth in international enrollment include the facts that few Asian universities focus on career-oriented degrees and that brokers specializing in international enrollments act as recruiters overseas. Of particular interest is the fact that international students appear to have dramatically different preferences for majors as compared with “domestic” students. In one instance international students were three times as likely as their domestic counterparts to major in finance and comprised more than one half of total enrollment in that major. This suggests that valuable findings could occur if we can determine the reasons students chose their majors.

The growth of international students may be different for each institution and different programs of study and different countries; for example, finance majors draw more students than other business majors. In addition, Chinese, Arabic, and Indian students are more prevalent than other international students from other countries.

The overall trend in first-time enrollment of international graduate students for 2013 was predominately driven by students from India. The number of first-time enrollees from India increased 40% this year, substantially more than the 1% increase in 2012 and 2% increase in 2011.

First-time enrollment among students from China increased 5% in 2013, a substantially smaller increase than the 22% surge in 2012 and 21% increase in 2011. This new finding marks the end of seven consecutive years of double-digit growth in first-time graduate enrollment of students from China. However, China continues to be the largest source of international graduate students, representing 34% of all international graduate students in the United States, according to survey respondents (Kent, 2013). (<http://www.cgsnet.org/first-time-enrollment-international-graduate-students-10-percent>)

The following tables display statistics on majors within the field of business, marketing and management. The statistics included vary from number of students graduating from these majors, starting and mid-career salaries, number of jobs, and future job outlook for occupations stemming from the following majors. They highlight possible determinants for major selection by students in American higher education institutions. Analyzing this data can result in the further understanding of the breakdown of major selection.

Table 5. Number of students graduating and average salary information

Number of Students Graduating and Average Salary Information			
Major	Yearly # of students graduating	Average Starting Salary	Average Mid-career Salary
Marketing	34,605	\$39,588	\$75,319
Accounting	60,526	\$44,520	\$75,109
Finance	35,945	\$44,855	\$81,387
Entrepreneurship	3,038	\$39,096	\$85,275

(<http://www.collegefactual.com>)

Table 6. Average salaries in analytics-related jobs

Average Salaries in Analytics-related jobs	
Occupation	Average Salary
Predictive Analytics	\$112,000
Marketing Analytics consultant	\$80,000
VP Risk Management Analytic	\$179,000
Senior Data Scientist	\$112,000
Senior Healthcare Informatics Analyst	\$90,000
Big Data Developer	\$98,000

(<http://www.indeed.com/salary/Predictive-Analytics.html>)

Table 7. Salary, jobs and outlook of business, marketing and management related jobs

Salary, jobs and outlook of business, marketing and management related jobs				
Occupation	Median Pay	# of jobs	Job outlook	Employment change
Market Research Analysts	\$60,300	415,700	32%	131,500
Accountants and Auditors	\$63,550	1,275,400	13%	166,700
Financial Analysts	\$76,950	253,000	16%	39,300
Management Analysts	\$78,600	718,700	19%	133,800
Financial Managers	\$109,740	532,100	9%	47,100

(www.bls.gov) (Median pay and number of jobs is data drawn from the year 2012. Job outlook and employment change is over ten years into the future: 2012-22. Job outlook of 15% or more implies that the occupation is considered to be growing faster than average and all other outlooks in this table are considered as fast as average.)

The following graphs show the contributors of enrollment growth and highlight the importance of diversification in the internationalization strategies of American higher education institutions. It shows that the growth is concentrated in terms of source countries, types of institutions and level of education. The three charts from the

article look into year-on-year growth from three different angles-- academic level, type of institution and source countries (Choudaha, 2013). (<http://www.dreducation.com/2013/11/mobility-diversity-recruitment-trends.html>)

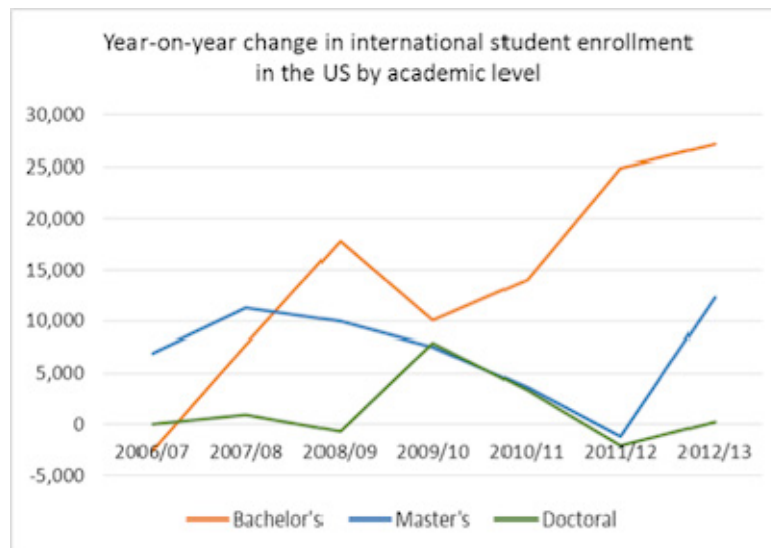


Figure 3. Higher revenue potential: Bachelor level enrollment becoming attractive

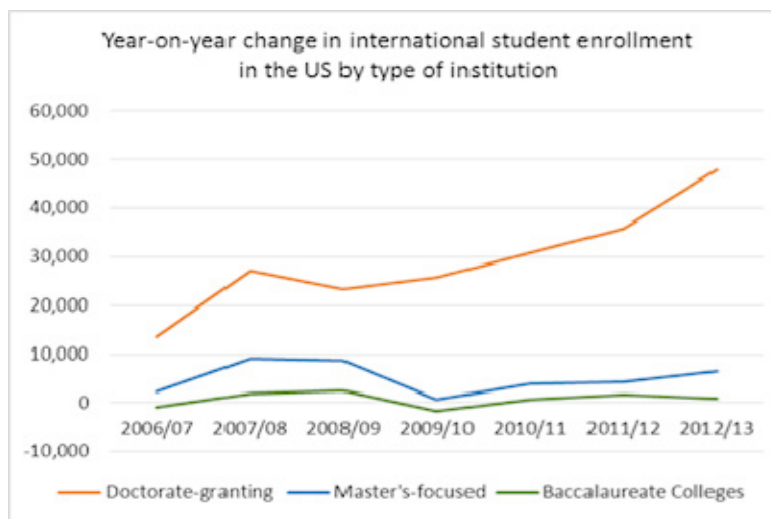


Figure 4. Big getting bigger: Doctorate-granting institutions driving growth





Figure 5. Demand from China and Saudi Arabia: Over-dependence on a few countries  
(Choudaha, 2013) <http://www.dreducation.com/2013/11/mobility-diversity-recruitment-trends.html>

Table 8. Enrollment of international students in the US universities 1948-2014

INTERNATIONAL STUDENT AND U.S. HIGHER EDUCATION ENROLLMENT, 1948/49 - 2013/14

Year	Enrolled Int'l Students	Optional Practical Training (OPT)	Total Int'l Students	Annual % Change	Total Enrollment <sup>1</sup>	% Int'l
1948/49	-	-	25,464	-	2,403,400	1.1
1949/50	-	-	26,433	3.8	2,445,000	1.1
1950/51	-	-	29,813	12.8	2,281,000	1.3
1951/52	-	-	30,462	2.2	2,102,000	1.4
1952/53	-	-	33,675	10.5	2,134,000	1.6
1953/54	-	-	33,833	0.5	2,231,000	1.5
1954/55	-	-	34,232	1.2	2,447,000	1.4
1955/56	-	-	36,494	6.6	2,653,000	1.4
1956/57	-	-	40,666	11.4	2,918,000	1.4

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1957/58	-	-	43,391	6.7	3,324,000	1.3
1958/59	-	-	47,245	8.9	no data	-
1959/60	-	-	48,486	2.6	3,640,000	1.3
1960/61	-	-	53,107	9.5	no data	-
1961/62	-	-	58,086	9.4	4,146,000	1.4
1962/63	-	-	64,705	11.4	no data	-
1963/64	-	-	74,814	15.6	4,780,000	1.6
1964/65	-	-	82,045	9.7	5,280,000	1.6
1965/66	-	-	82,709	0.8	5,921,000	1.4
1966/67	-	-	100,262	21.2	6,390,000	1.6
1967/68	-	-	110,315	10.0	6,912,000	1.6
1968/69	-	-	121,362	10.0	7,513,000	1.6
1969/70	-	-	134,959	11.2	8,005,000	1.7
1970/71	-	-	144,708	7.2	8,581,000	1.7
1971/72	-	-	140,126	-3.2	8,949,000	1.6
1972/73	-	-	146,097	4.3	9,215,000	1.6
1973/74	-	-	151,066	3.4	9,602,000	1.6
1974/75 <sup>(2)</sup>	-	-	154,580	2.3	10,224,000	1.5
1975/76	-	-	179,344	16.0	11,185,000	1.6
1976/77	-	-	203,068	13.2	11,012,000	1.8
1977/78	-	-	235,509	16.0	11,286,000	2.1
1978/79	-	-	263,938	12.1	11,260,000	2.3

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1979/80	283,503	2,840	286,343	8.5	11,570,000	2.5
1980/81	308,432	3,450	311,882	8.9	12,097,000	2.6
1981/82	323,419	2,880	326,299	4.6	12,372,000	2.6
1982/83	333,365	3,620	336,985	3.3	12,426,000	2.7
1983/84	335,494	3,400	338,894	0.6	12,465,000	2.7
1984/85	337,803	4,310	342,113	0.9	12,242,000	2.8
1985/86	339,627	4,150	343,777	0.5	12,247,000	2.8
1986/87	344,879	4,730	349,609	1.7	12,504,000	2.8
1987/88	351,387	4,800	356,187	1.9	12,767,000	2.8
1988/89	359,334	7,020	366,354	2.9	13,055,000	2.8
1989/90	379,139	7,712	386,851	5.6	13,539,000	2.9
1990/91	398,759	8,770	407,529	5.3	13,819,000	2.9
1991/92	411,355	8,230	419,585	3.0	14,359,000	2.9
1992/93	427,608	11,010	438,618	4.5	14,487,000	3.0
1993/94	438,319	11,430	449,749	2.5	14,305,000	3.1
1994/95	439,427	13,208	452,635	0.6	14,279,000	3.2
1995/96	438,337	15,450	453,787	0.3	14,262,000	3.2
1996/97	439,859	18,125	457,984	0.9	14,368,000	3.2
1997/98	464,698	16,582	481,280	5.1	14,502,000	3.3
1998/99	474,091	16,842	490,933	2.0	14,507,000	3.4
1999/00	489,866	24,857	514,723	4.8	14,791,000	3.5
2000/01	526,809	21,058	547,867	6.4	15,312,000	3.6

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2001/02	560,251	22,745	582,996	6.4	15,928,000	3.7
2002/03	558,530	27,793	586,323	0.6	16,612,000	3.5
2003/04	543,169	29,340	572,509	-2.4	16,911,000	3.4
2004/05	532,040	32,999	565,039	-1.3	17,272,000	3.3
2005/06	526,670	38,096	564,766	-0.05	17,487,000	3.2
2006/07	541,324	41,660	582,984	3.2	17,759,000	3.3
2007/08	567,039	56,766	623,805	7.0	18,248,000	3.4
2008/09	605,015	66,601	671,616	7.7	19,103,000	3.5
2009/10	623,119	67,804	690,923	2.9	20,428,000	3.4
2010/11	647,246	76,031	723,277	4.7	20,550,000	3.5
2011/12	679,338	85,157	764,495	5.7	20,625,000	3.7
2012/13	724,725	94,919	819,644	7.2	21,253,000	3.9
2013/14	780,055	105,997	886,052	8.1	21,216,000	4.2

Institute of International Education. (2014). "International Student Enrollment Trends, 1948/49-2013/14". *Open Doors Report on International Educational Exchange*. Retrieved from <http://www.iie.org/opendoors>

Looking at Table 8, we can see the growth in International students in the Total International Students column. In addition, we can also see the growth in international students in the International Students Percentage column. The percentage started as 1.1 in 1948, and changed to 4.2 in 2014.

Table 9. Leading countries of origin for international students at U.S. universities

Rank and Country of Origin	2012-13	2013-14	Percent	Percent
World Total	819,644	886,052	100	+8.1
1. China	235,597	274,439	31	+16.5
2. India	96,754	102,673	11.6	+6.1
3. South Korea	70,627	68,047	7.7	-3.7
4. Saudi Arabia	44,566	53,919	6.1	+21
5. Canada	27,357	28,304	3.2	+3.5
6. Taiwan	21,867	21,266	2.4	-2.7
7. Japan	19,568	19,334	2.2	-1.2
8. Vietnam	16,098	16,579	1.9	+3
9. Mexico	14,199	14,779	1.7	+4.1
10. Brazil	10,868	13,286	1.5	+22.2
11. Turkey	11,278	10,821	1.2	-4.1
12. Iran	8,744	10,194	1.2	+16.6
13. United Kingdom	9,467	10,191	1.2	+7.6
14. Germany	9,819	10,160	1.1	+3.5
15. France	8,297	8,302	0.9	+0.1
16. Nepal	8,920	8,155	0.9	-8.6
17. Hong Kong	8,026	8,104	0.9	+1
18. Nigeria	7,316	7,921	0.9	+8.3
19. Indonesia	7,670	7,920	0.9	+3.3
20. Thailand	7,314	7,341	0.8	+0.4
21. Kuwait	5,115	7,288	0.8	+42.5
22. Colombia	6,543	7,083	0.8	+8.3
23. Venezuela	6,158	7,022	0.8	+14
24. Malaysia	6,791	6,822	0.8	+0.5
25. Spain	5,033	5,350	0.6	+6.3

Redden, E. (2014). "Open Doors" report finds increases in international enrollment, study abroad|InsideHigherEd.com. Retrieved April 8, 2015, from

<https://www.insidehighered.com/news/2014/11/17/open-doors-report-finds-increases-international-enrollment-study-abroad>

As we can see, in Table 9, Chinese students in US universities have the highest percentage and highest enrollment, followed by Indian, South Korean, and Saudi Arabian students.

The Council of Graduate Schools (CGS) today reported a 10% increase in the first-time enrollment of international graduate students from 2012 to 2013, a growth that adds to 8% increases in this figure in each of the last two years. Total enrollment of international graduate students among responding institutions reached 220,000 in 2013. The findings were part of the 2013 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment (Choudaha, 2013). (<http://www.cgsnet.org/first-time-enrollment-international-graduate-students-10-percent>)

The recent release of the Institute of International Education's 2012 Open Doors data showed another rise in international student enrolments in the United States, reaching 764,495. This figure marks an increase of 5.7% from 2011 (723,277) and nearly a third since 2007 (582,984).

Despite this growth, international students still only account for a small share of students on US campuses—about 3.5% of a total of 20.5 million students enrolled in 2011. Certainly US colleges and universities have plenty of room to grow international enrolments to further internationalize their institutions.

For one, much of the recent enrolment growth has been driven by just three countries, China, India, and Saudi Arabia. Since 2007, enrolments from China have grown by 186.5% while enrolments from Saudi Arabia have grown by a staggering 332.9%. The first time enrollment of India students showed a growth rate of 40%. Indeed, international student enrolments in the US have declined since 2009 if China, India, and Saudi Arabia are excluded (Guhr, 2012; Kent, 2013).

<http://www.universityworldnews.com/article.php?story=20121123064223433>

<http://www.cgsnet.org/first-time-enrollment-international-graduate-students-10-percent>

## 2. Discussion and Future Research

The research reported in this paper seeks to provide business school faculty and administrators with some perspective on student choices of major, number of jobs, and starting and mid-career salary. The number of students graduating is most for accounting major at 60,526 and least for entrepreneurship major at 3038. The starting salaries is highest for finance majors at \$44855 and lowest for entrepreneurship major at \$39096. The mid-career salaries is the highest for entrepreneurship major at \$85,275 and the lowest for accounting major at \$75,105, and the next lowest mid-career salary is for marketing major at \$75,319. In addition, it shows the growth of international students in US universities both at graduate and undergraduate levels, especially the largest growth among Chinese, Arabic, and Indian students.

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## **Appendix 1. Schema of job titles and areas of interest for the respective majors.**

### **1. Marketing**

- a) Sales
- b) Marketing Research
- c) Advertising

### **2. Finance**

- a) Financial Sales
- b) Stock Market sales (stocks and or bonds)
- c) Trading futures or derivatives
- d) Serving as financial officer of a firm or a corporation
- e) Salesperson of financial services

### **3. Management**

- a) Manager of a service organization
- b) Manager of a manufacturing organization

- c)* Manager of an entry level position
- d)* Manager of an mid-level or higher management position
- e)* Strategic Management position
- f)* Tactical Management position

#### **4. Entrepreneurship**

- a)* Owning your own company
- b)* Preparing a business plan
- c)* Searching for sources of funds
- d)* Filing for reorganization or bankruptcy
- e)* How to plan for different businesses

#### **5. Operations Management**

- a)* Inventory Management & Scheduling and to work towards earning the CPIM (Certified in Production and Inventory Management) designation
- b)* Quality Management and work towards earning CQE (Certified Quality Engineer) designation
- c)* Supply Chain Management work toward earning the CSCP (Certified Supply Chain Professional) designation
- d)* Production controller
- e)* Master Production Scheduler
- f)* Planner/scheduler

#### **6. Business Analytics**

- a)* How to analyze large data
- b)* How to analyze small data
- c)* Foundations of Statistical analysis
- d)* How to use software to analyze data either using statistical software packages like Excel, SPSS or SAS and management science software packages like GAMS
- e)* How to use computer programming to analyze business data

#### **7. International Business**

- a)* How to use vertical integration in the context of International Business
- b)* How to use Strategic Management for an International Business
- c)* Utilizing foreign language skills
- d)* Consideration of Cultural barriers
- e)* Consideration of language barriers
- f)* How to use local business talent
- g)* How to utilize international business expertise

#### **8. Management Information System**

- a)* Knowledge of Systems like SAP or ORACLE and integration of such systems into business
- b)* Utilization of ERP in the context of business and breaking down unnecessary business silos
- c)* Development of artificial intelligence and manufacturing resource planning systems to help the company to develop a better business plan
- d)* Development of Decision Support Systems to help the company to organize for better planning
- e)* To help students earn certifications in SAP or ORACLE.

#### **9. Accounting**

- a)* Teaching/learning X's and O's of accounting and to prepare the students to obtain their CPA's (Certified Public Accounting)



- b)* Teaching/Learning the principles of Managerial Accounting and prepare the students to obtain their CM A'S (Certified Managerial Accounting)
- c)* Teaching/learning the principles of not-for-profit accounting
- d)* Teaching/learning the principles of taxation for both individual taxes and corporate taxes
- e)* Teaching/Learning GAAP (Generally Accepted Accounting Principles).
- f)* Prepare students for Internal Auditing exam

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