

The Economic Impact of Study Abroad on Chinese Students and China's Gross Domestic Product

Rachel T. Barclay
The University of South Dakota

Mandie Weinandt
The University of South Dakota

Allen C. Barclay
Northern State University

China has become a global economic powerhouse creating one of the largest middle class populations in the world. A large number of Chinese citizens have acquired personal wealth and created a strong expansion in higher education. Since China opened economic doors, the country has been undergoing westernization in culture and education and is now experiencing growth in study abroad. This paper examines the relationship between Chinese students who study abroad and the impact those students have on China's Gross Domestic Product. The authors explore the benefits to both students and China due to studying abroad in the US

THE TRADING OF EDUCATION

Studying abroad is a rapidly growing trend enhanced as traveling becomes easier, faster, and more cost effective. Many students from all over the world come to study in the United States of America (US); however, since 2010, according to Project Atlas (2016), the most popular exporting country of foreign students to the US is China. A good way to look at foreign exchange students is to see them as a traded entity: a way of connecting countries to each other and a way of slowly breaking down any borders between countries. According to Dee (2010), "The number of students seeking education in foreign countries is still increasing, and is by far the most important method by which higher education services are traded" (p. 39). This exchange of higher education has an effect on both the student, and the student's home country, in this case, China. This paper intends to make a connection between the increase of students studying abroad and the increase in China's gross domestic product (GDP).

CHINA'S RAPID ECONOMIC GROWTH

The unbelievable speed at which China's economy grew and is still growing is something many consider the greatest economic growth story in modern times. In less than three decades, China became the country with the second highest GDP. "Since opening up to foreign trade and investment and implementing free market reforms in 1979, China has been among the world's fastest-growing

economies, with real annual gross domestic product (GDP) growth averaging nearly 10% through 2012” (Morrison, 2013, p. 1). With this rapid growth in GDP, a middle class has emerged who can now afford luxuries. These indulgences, including world travel and education were not easily afforded by the average Chinese person before.

Before 1979, China had a much more closed economy. According to Naughton (2007), “China’s total trade / GDP ratio never significantly exceeded 10%” (p. 377). It hit a low of 5% in the early 1970s. When China began trade liberalization, they began as one of the world’s most closed economies. Once trade liberalization began, China’s trade ratio rose rapidly to levels comparable to the rest of the world. According to The World Bank (n.d.), today, China’s trade ratio is 36.4%; this is a more than 25 percentage point increase from their trade ratio 30 years ago.

Although China’s GDP has been rapidly increasing since 1979, the country did not really start to establish its large middle class until 2004. Citizens joining the middle class can now afford what would have been considered luxuries before, changing spending patterns. Carol Wingard (2007) states the following on the subject:

It was not until 2004 . . . that foreign retailers started really to establish themselves. Since then, the biggest chains have been joined by a host of specialty retailers, including Mango, Zara and H&M. China is now seeing the creation of a new upper class and a subsequent boom in spending on luxury goods. But it is the emergence of China’s middle class consumers, and their adoption of aspirational purchasing attitudes, that is the most exciting story for retailers. (p. 8)

With the emergence of China’s middle class, studying abroad became much more prevalent. The growth, which will be discussed in a later section, is substantial. Even though China’s economy has grown quickly, China was not involved in international higher education until 2001. “In 2001, China became a member of the World Trade Organization, which created for it obligations in the area of ‘Educational Services’” (Paradise, 2012, p. 196). These obligations and the growth of China’s middle class starting in 2004 are what really skyrocketed international student studying. In 1978, only 860 Chinese students were studying abroad anywhere in the world (Paradise, 2012, p. 199). In 2015, that number was 304,040 in the USA alone.

THE ECONOMIC EFFECT STUDYING ABROAD HAS ON THE STUDENT

Wan (1999) conducted an interview with a Chinese couple studying abroad in the United States. “The study revealed that the interviewees came to study in the United States because they wanted to grow academically and professionally” (p. 10). The growth of China’s middle class that started in 2004 seems to be making it easier for young people to study abroad. This can be seen when looking at the rise since the 1970’s of both the middle class and international students. This was a possibility afforded to fewer students when China was a developing country; however, this has changed. The middle class in China has and continues to grow at an enormous rate (Barton, Chen, & Jin, 2013, p. 54), and this rapid growth gives those studying abroad certain economic benefits they can only receive by doing so.

Studying abroad has many benefits for the student. “Study-abroad programs, whether short or long term, can significantly enhance students’ formal education and improve their future employment opportunities” (Smith & Mitry, 2008, p. 237). While there are many personal and beneficial reasons one would want to study abroad, there are also economic gains for students as well. “The greater potential for acquisition of a foreign language, increased knowledge of the different cultures, developing cross-cultural skills and potential for transformational worldviews” (Smith & Mitry, 2008, p. 237). These positive effects of studying abroad can really impact a student.

One of the primary benefits for students who study abroad is a chance at having better career opportunities because of returning home with a new cultural view and better language skills. According to Smith & Mitry (2008): “participation in study-abroad programs provides students with an opportunity to view the world from completely new and different perspectives” (p. 237). This makes these students more

employable, as they stand out from the rest of the pool of applicants with a special skill set. Often being in a foreign country can be very overwhelming, especially at first, which allows students to learn useful coping methods. In addition, there is also personal development that comes to these students from studying internationally. Another benefit to students studying abroad is the opportunity for students to become more independent and learn how to behave in an overwhelming environment. These are positive characteristic changes that employers can tell those who have studied abroad have when looking for people to hire. “Employers value the skills and knowledge potentially gained from study abroad” (Franklin, 2010, p.169). Being more employable raises one’s personal economic worth.

Another component of studying abroad includes the different style of education between countries. Though this can be a challenge for those studying internationally, it also teaches skills that cannot be learned at home. Being abroad gives students the chance to see concepts from another point of view; they are able to see their major from a side they might not have been exposed to at home. Education is the most important part of studying internationally, and when student participate in activities that can eventually further their careers and education, their personal economic worth increases.

ECONOMIC EFFECT STUDYING ABROAD HAS ON THE HOST UNIVERSITIES

Students studying abroad have a positive effect on both the host university and on the home university. One of the many reason countries send students abroad is to build a connection with other countries. These connections bring countries together and can build a partnership between universities. As stated by Paradise (2012):

One way to think of these activities is in terms of education diplomacy. They are part of an effort by the Chinese government to use international education activities—such as sending Chinese students abroad, increasing foreign enrollment in Chinese universities, establishing foreign branch campuses in China, and fostering international research collaboration—to achieve policy objectives. (p. 195)

China started Confucius Institutes all around the world in 2004, according to their website. Confucius Institutes are University programs teaching Chinese language and culture (Paradise, 2012, p. 199). According to the South Dakota University Board of Regents (SDBOR), Northern State University (NSU), in Aberdeen, South Dakota, has a partnership with the University of Jinan, in Jinan, China (retrieved from www.sdbor.edu, 2016). A component of this partnership is the Confucius Institute at NSU. Having this program helps promote Chinese language and culture in the United States. Also according the SDBOR, the partnership benefits both universities by opening up exchange programs for both Chinese and American students to study at both universities.

This connection builds a cultural bridge between the universities. According to NSU’s website, this school year (2016-2017), NSU received 164 international students, 31 from China. For the University of Jinan, the benefits of this connection include more opportunities for students. With the population of China still growing, and with the middle class being able to afford to send more kids to college, space at their universities may become limited over time, it makes sense to partner with other schools, such as NSU, which have room for additional students.

Extra students mean extra tuition money for institutions. According to NSU’s website, the school’s tuition is approximately \$11,000 per student. This would roughly be a total of \$341,000 per year for the 31 Chinese students. These students will also purchase goods and services from the local and area stores, stimulating the local economy around the host university. They will most likely also spend money on tourism while in the US. This would include their travel within South Dakota, as well as to other destinations in the country.

In addition to the financial benefits of Chinese students studying in the US, there is cultural experience aspect as well. This aspect is the experience both Chinese and American students receive when associations emerge. Beyond friendships, the personal connections made by these students could possibly become business network connections in the future (Hendrickson, Rosen, & Aune, 2011).

ECONOMIC EFFECT STUDYING ABROAD HAS ON THE HOME COUNTRY

From an economic perspective, China also benefits from sending international students abroad, including connections to international students, faculty and universities in other countries that provide China's universities a multitude of ideas and perspectives. Paradise (2012) had this to say on the subject:

One of the most important objectives is to transform China into a knowledge-intensive and innovation-driven society. Improving the quality of the country's universities, the skill sets of its workers, and its ties to the international research community will enable China to move in this direction (Paradise, 2012, p. 195-196).

Chinese students studying in the US improves China's understanding of the talent in the US. Not only are Chinese students learning international skills, but the networking can also help increase China's available talent. The effect of Chinese students studying abroad "will be felt as China's economy becomes stronger economically, its talent pool increases, and the quality of its education improves" (Paradise, 2012, p. 196). Having internationally successful citizens improves keep China's competitive edge in the world of GDP.

When a student studies abroad, the possibility of remaining in that country after graduation always exists. Though many Chinese students remain in a foreign country after graduation, many of the students also return home to China. In 2010, 134,800 Chinese students studying in the US returned home to China, which would have been 85.56% of the amount studying in the US at the time (Paradise, 2012, p. 199). China's education system benefits from having students study abroad all over the world, according to China's Ministry of Education (2016):

By 2020, the structure of higher education shall become more balanced and distinctive, and it shall also go up a notch in talent or professional cultivation, scientific research and social service as a whole. Quite a few world-famous universities with original features shall come to the fore; some of them shall have reached or approached the level of world-class universities. China's higher education shall have vastly sharpened its global competitive edge. (as cited in Paradise, 2012, p. 197)

Educated individuals also return to China and play significant roles in Chinese society. In 1994, Xinshu Zhao conducted a study, which showed that a typical international student from China studying in the USA "cherishes the thought of returning to his homeland in the not-so-distant future as a visiting professor, a consultant, or even as a permanent resident" (Lin, 1994, p. 43). Based on Lin's (1994) research, highly educated and well-traveled people play important roles in Chinese society:

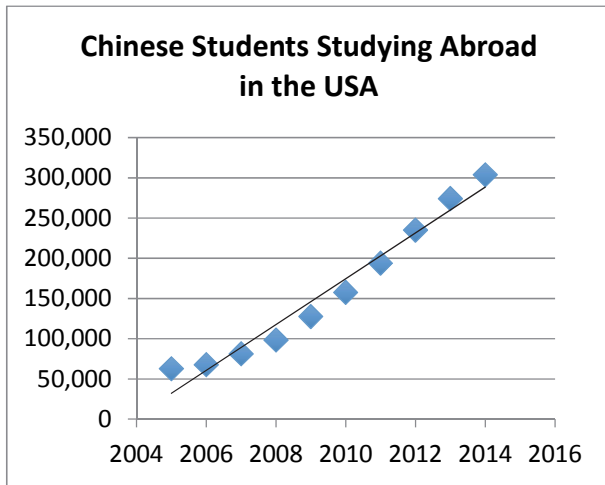
Today many of China's brightest students are being educated abroad. Thousands are being exposed to the economic, political, social, and cultural beliefs and practices of their host countries. In the past, many of these students have been reluctant to return home. But this may be changing, for Chinese leaders are actively wooing them. If these young people return to China in substantial numbers, their effect on China's future political and economic development could be profound. (p. 43)

In the past, returning to China has not always been the goal of students who study abroad. However, as Lin stated, this is changing. Returning to China is becoming more appealing to these students, which is a positive development for the country. Returning students can help develop China's educational system and increase GDP.

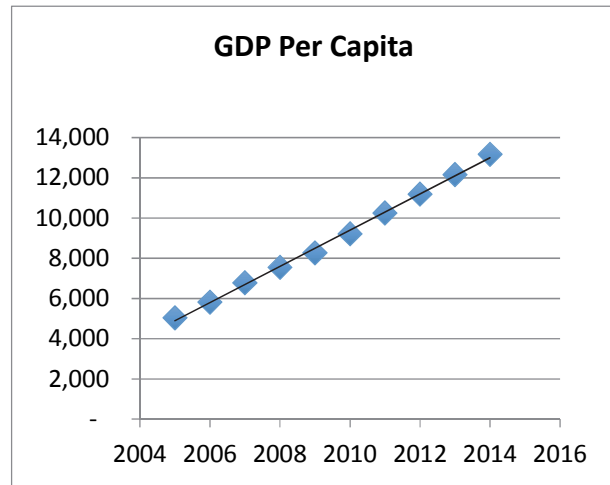
RELATIONSHIP BETWEEN INTERNATIONAL STUDENTS AND GDP

The numbers shown in figures (1) and (2) were retrieved from Project Atlas and the Organisation for Economic Co-Operation and Development, respectively. The graphs, when shown side by side, look very similar. While correlation does not necessarily equal causation, the trend in the rise in both international students and GDP per capita are interesting to observe.

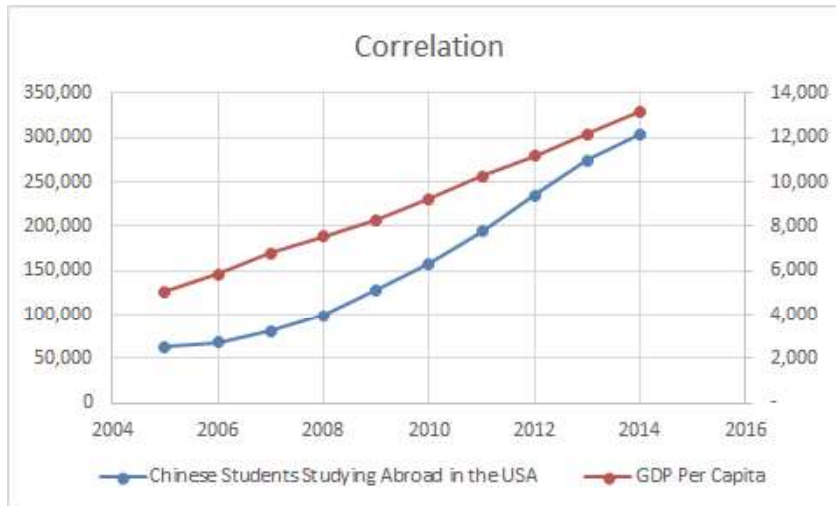
**FIGURE 1
CHINESE STUDENTS STUDYING
ABROAD IN THE USA**



**FIGURE 2
GDP PER CAPITA**



**FIGURE 3
CORRELATION**



These graphs are positively correlated, with a correlation coefficient equaling 0.981266621. The closer this number is to +1, the more the lines are positively correlated. Since both are sloping upward at a similar rate, they are considered positively correlated. The number of Chinese students studying abroad in the USA, Figure (1), shows a visible rise over the 10-year period. This same trend is shown in Figure (2). Looking at these graphs next to each other, they follow a similar pattern. In just over 10 years, both GDP per capita and number of students studying abroad have increased by more than 200%; the number of students studying abroad in the USA grew 485.82% and GDP per capita grew 261.38%. These numbers show the substantial growth in both international students and GDP.

CONCLUSION

The literature and data indicates that international study between the US and China is beneficial to both countries. The economic worth of Chinese students increases, while both the US and China as nations benefit, and there seems to be a correlation between Chinese students who study abroad in the US and China's GDP. In the future, China should promote study abroad for their students and determine measurable outcomes to assess the benefits more objectively. As the bridge between the China and the USA strengthens the benefit to both countries increases.

REFERENCES

- Barton, D., Chen, Y., & Jin, A. (2013). Mapping China's middle class. *Mckinsey Quarterly*, (3), 54-60.
- Dee, P. (2010). International student movements and the effects of barriers to trade in higher education services. *Globalisation and tertiary education in the Asia-Pacific: The changing nature of a dynamic market*, 39-71.
- International Students in the United States. (2016). Retrieved August 24, 2016, from <http://www.iie.org/Services/Project-Atlas/United-States/International-Students-In-US#.V7sTbtNdWKU>
- Farrell, D., & Grant, A. J. (2005). China's looming talent shortage. *McKinsey Quarterly*, 4(56), 70-79.
- Fouts, J. T., & Chan, J. C. (1995). Confucius, Mao and modernization: Social studies education in the People's Republic of China. *Journal of Curriculum Studies*, 27(5), 523-543.
- Franklin, K. (2010). Long-Term Career Impact and Professional Applicability of the Study Abroad Experience. *Frontiers: The Interdisciplinary Journal Of Study Abroad*, 19169-190.
- Griner, J., & Sobol, A. (2014). Chinese Students' Motivations for Studying Abroad. *Global Studies Journal*, 7(1).
- Hendrickson, B., Rosen, D., & Aune, R. K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations*, 35(3), 281-295.
- Li, C. (Ed.). (2010). *China's emerging middle class: beyond economic transformation*. Brookings Institution Press.
- Lin, C. (1994). China's students abroad: Rates of return. *American Enterprise*, 5(6), 12.
- Merchandise trade (% of GDP). (n.d.). Retrieved October 10, 2016, from <http://data.worldbank.org/indicator/TG.VAL.TOTL.GD.ZS>
- Morrison, W. M. (2013). China's Economic Rise: History, Trends, Challenges, and Implications for the United States*. *Current Politics and Economics of Northern and Western Asia*, 22(4), 461-506. Retrieved from <http://search.proquest.com/docview/1622677033?accountid=14750>
- Naughton, B. (2007). *The Chinese economy: Transitions and growth*. Cambridge, MA: MIT Press.
- News. (n.d.). Retrieved September 07, 2016, from <http://www.northern.edu/Pages/default.aspx>
- Ning, Y. A. N. G. (2011). More students choose to study abroad. *China Daily*, 25, 2011-04.
- NSU Confucius Institute to offer Mandarin course to community. (n.d.). Retrieved November 24, 2016, from <http://www.northern.edu/news/Pages/chinese012616.aspx>
- Pages - Home. (n.d.). Retrieved November 27, 2016, from <http://www.sdbor.edu/>
- Paradise, J. (2012). International Education: Diplomacy in China. *Brown Journal of World Affairs*, 19(1), 195-205.
- Smith, D. E., & Mitry, D. J. (2008). Benefits of Study Abroad and Creating Opportunities: The Case for Short-Term Programs. *Journal of Research in Innovative Teaching*, 1(1), 236-246.
- Wan, G. (1999). The Learning Experience of Chinese Students in American Universities: A Cross-Cultural Perspective.
- Wang, X., & Liu, J. (2011). China's higher education expansion and the task of economic revitalization. *Higher Education*, 62(2), 213-229.
- Wingard, C. (2007). The world's largest middle class. *European Business Forum*, (29), 8-9.

Yang, D. L. (2006). Economic transformation and its political discontents in China: authoritarianism, unequal growth, and the dilemmas of political development. *Annu. Rev. Polit. Sci.*, 9, 143-164. 413K. (n.d.). Retrieved September 08, 2016, from <http://www.chinesecio.com/>