American Students Coming to China: An Analysis of Recent Trends [1]

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Abstract

At a time when China-U.S. relations are strained, international students from both countries play a crucial role as practitioners and facilitators of the "soft landing" of bilateral relations, and they hold strategic importance for public diplomacy and humanistic exchanges between the two nations. Much has been written about Chinese students in the United States, the current study focuses instead on American students studying in China. Drawing on several sources of data, we describe the characteristics and trends of American students in China, and examine a variety of issues including their fields of study, scholarship support, and future aspirations. We further explore possible factors behind these patterns. Based on the results from our time series model, we argue that the most important driving forces behind the trend of Americans studying in China are China's economic trajectory and interest in Chinese language learning. The last part of the paper addresses shifts in American users' Google search behavior related to studying in China and entertains some policy discussions.

Keywords American students studying in China; China-US relations; VAR model; Google Trends

Introduction

China has a long history of sending students abroad, especially during the post-1978 era. However, in recent years, China has gradually changed from an exporter to a receiver of international students (Wei, 2013). By 2018, China had risen to become the third-largest destination for studying abroad globally and the largest in Asia. "Study in China" has emerged as a prominent brand for overseas education (Wang and Miao, 2021). Before COVID, the United States was a significant contributor of international students to China, consistently ranking within the top five source countries. The influx of American students to China has witnessed a generally fluctuating growth trend over the past two decades (Wang and Miao, 2022). However, in recent years, with the continuous deterioration of China-U.S. relations, coupled with the impact of COVID-19, the process of American students coming to China has been constrained. The American ambassador to China, Niclos Burns stated openly that there were only about 350 American students in China during the period of COVID (U.S. Embassy & Consulates in China, 2023). In a recent interview, Burns mentioned that only about 800 American students in China (World Journal, 2024). This is in sharp contrast to the nearly 300,000 Chinese students in the United States in 2024.

We are motivated by several reasons for launching this study. First, American students in China can personally experience "cultural China" and serve as potential ambassadors for Chinese culture (Gao and Wang, 2017). Moreover, they greatly contribute to China's aspirations of modernizing its education system, enhancing national soft power, and engaging in global governance. Second, amidst the current nadir in China-U.S. relations, the development of international student education offers an effective avenue to alleviate tensions between the two countries amid geo-political rivalry. International students serve as mediators in the fraught Sino-U.S. relationship, fostering mutual understanding and reducing the risk of conflict between major powers. Notably, in 2019, Chinese President Xi Jinping underscored the importance of educational exchanges and cooperation in Sino-U.S. relations during

his dialogue with Harvard University President Bacow, emphasizing its role in bolstering public opinion support for Sino-U.S. friendship (Guangming Daily, 2019). Educational collaborations between China and the United States hold the potential to minimize misunderstandings, foster greater trust between the two nations, bolster international recognition. Notwithstanding friction across various domains in China-U.S. relations, the promotion of international students in each country is often one of the very few consensuses between the two countries. During his November 2023 visit to the United States, Chinese President Xi Jinping emphasized that the foundation of China-U.S. relations rests upon the people and the future hinges on the youth. He expressed China's readiness to welcome 50,000 U.S. international students to study in China over the next five years, delineating the trajectory for U.S. students' engagement with China.

Third, having a relatively large number of Amreican students in China serve the interests of the United States as well. Dennis Simon, former Executive Vice President of Duke Kunshan University, emphasized the importance of nurturing a cohort of young individuals who have undergone study experiences in China to serve as future China observers (The New York Times, 2023). Burns also remarked, "We need young Americans to learn Mandarin. We need American youth to experience China." American linguist David Moser warned that without these American students, "we will be unable to conduct astute and knowledgeable diplomacy in China over the next decade" (AP News, 2024).

Thus, this paper presents a relatively long view of American students in China and utilizes several sources of data, including time series data, questionnaire survey data, and Google Trends data, to integrate individual choices at the micro level with contextual factors at the macro level. The aim is to dynamically depict the historical, current, and prospective trends of American students coming to China. Additionally, we estimated regression models to delve deeper into the factors behind changes over time. The article aims to provide empirical evidence to enhance the understanding of international students in China, particularly those from developed countries.

Simultaneously, it endeavors to offer insights for improving support systems to facilitate their adaptation process in China.

Literature Review

For a long time, there has been a serious imbalance between domestic and international research on international students destined for China and the U.S. Many scholars have paid much more attention to international students going to the U.S. than to international students coming to China (Hayes, 1994; Leong, 2015; Hegarty, 2014). Current scholars mostly look at global competition (Choudaha, 2018), economic gains (Bevisand Lucas, 2007), international relations (Sarkodie-Mensah, 1998) and other perspectives to explore the reasons for the development of study abroad programs in the United States, focusing on students' motivations to study abroad (Yan and Berliner, 2011), career choices (Amuedo-Dorantes and Furtado, 2019), cross-cultural adaptation (Wang et al., 2018) and other aspects. In recent years, the introduction of the Belt and Road Initiative has sparked a surge in publications concerning international students arriving in China from countries along the route (Chen and Wen, 2018). However, predominantly, students studying in China originate from developing countries and neighboring Asian nations, with international students from developed countries being relatively underrepresented. Currently, there is limited scholarly attention on developing countries like China as study-abroad destinations. Studies focusing on students from developed countries choosing to study in China are even rarer.

Since 2007, China has been the most popular destination for American students outside Western Europe (Belyavina, 2013). Presently, extant research on American students in China published in English often relies on interviews and case studies to provide in-depth analyses of their interactions, particularly concerning language and identity. In Belyavina's study (2013), the majority of American students coming to China are undergraduates, with over 58% having earned credits at U.S.-based institutions. These students primarily encounter challenges in the current study abroad environment related to financial constraints, language barriers, and the absence of

credit transfer mechanisms. However, despite encountering certain language and cultural barriers, students generally reported a positive study-abroad experience in China (Yang, 2020). Tian and Lowe (2014) conducted interviews with American students regarding their study abroad experiences in China, revealing that all participants transitioned from perceiving China as a "foreign country" to adopting a more "open" cross-cultural identity. Additionally, Du (2015) conducted informal personal interviews with 29 American college students, concluding that studying in China did not significantly challenge this group's identity negotiation and self-presentation, thus affirming the cognitive enhancement effect of studying abroad.

Most domestic articles on American students in China rely on interview data and surveys, examining them from pedagogical (Tian and Yang, 2012), linguistic analyses (Yang, 2015; Wang, 2013; Zhang, 2011), Sinological perspectives (Ye, 2017), and other perspectives. Firstly, some scholars have delved into the cross-cultural adaptation of American students arriving in China, contending that the predominant challenges include language barriers, stereotypes, and cultural disparities in cross-cultural interpersonal interactions between American students and Chinese individuals (Pan, 2014). Secondly, regarding the significance of American students studying in China, Guo (2012) posits that their presence impacts China's national interests across political, cultural, social, economic, and educational realms. Others, drawing upon assessment and interview data, demonstrate that the study abroad experience in China effectively facilitates the personal and career development of American youth, leading to the alleviation of political biases, negative perceptions, and hostility toward China, thereby engendering a fundamental shift in their attitudes toward the Chinese populace (Su et al., 2017). This underscores the potential economic, cognitive, emotional, and other consequential effects resulting from the influx of American students in China. Hence, fostering a people-oriented, open, and inclusive approach to international education holds significant importance.

To encourage American students to study in China, we must pay attention to the possible driving forces behind their decisions. So far researchers have identified

economic and cultural aspects as the two most prominent considerations. China's economic development and the global surge in interest in the Chinese language have led to significant advancements in China's international education sector (Wu et al., 2012). Wei et al. (2018), based on an empirical analysis of bilateral data between China and 172 countries, concluded that economic and cultural factors are significant aspects of China's appeal to international students. Regarding economic factors, China's robust economic growth is cited as a major incentive for international students to pursue higher education opportunities in China (Jiani, 2017). Utilizing the gravity model, Song and Liu (2014) confirmed that China's increasing economic status and development potential are crucial in attracting international students. Liu et al. (2013) interviewed international students coming to China and reported that "China's economy is developing very rapidly, and studying in China is very favorable to my personal future development."

On the other hand, with the economic and political rise of China and the growing global interest in Chinese culture, language, and history, China has become a significant cultural magnet with increasing influence overseas. Studying in China offers opportunities to learn the Chinese language, improve understanding, and enhance intercultural competence (Ding & Saunders, 2006). Consequently, Chinese has become a second foreign language in many countries, and the enthusiasm for learning Chinese in some non-Chinese-speaking countries has increased, making Chinese language and culture popular worldwide (Ning, 2010). As a result, learning the Chinese language has become one of the main reasons for studying in China (Dixon, 2013), and interest in Chinese language and culture is a significant motive for international students to come to China (Huang, 2008).

Among international students in China, those studying the Chinese language constitute a significant portion of foreign student education. Besides being driven by the cultural enthusiasm for learning Chinese, international students' motivation to learn Chinese is also related to their career prospects (Borgonjon, 2008) and national political intentions (Diao and Trentman, 2016). Incoming students from developed

countries are mainly non-degree students studying Chinese language, literature, and other liberal arts subjects . Non-degree students account for more than 60% of the majors in the "Chinese language" category alone (Chen and Cheng, 2012). Similarly, American students come to China primarily to advance their Chinese language studies (Tian, 2003). Learning the Chinese language is very popular in the United States. According to the U.S.-China Strong Foundation, about 400,000 Americans are learning Chinese in the U.S., and more than 200,000 schools and kindergartens offer Chinese language courses in their curricula (Shanghai Daily, 2016). By the end of 2023, Mandarin immersion programs can be found in 32 U.S. states and the District of Columbia. Of the approximately 340 publicly funded immersion programs that currently exist, about one-third were established in the post-Obama era (Xinhuanet, 2023). In summary, economic and cultural, especially linguistic, factors play significant roles in attracting international students to China, and these two aspects also correspond to the instrumental and integrative benefits of studying abroad (Monsell, 1981).

The preceding literature provides the theoretical foundation for this paper to examine the overall landscape of international students coming to China from the United States. However, we have identified several shortcomings in extant research in this area: 1) the research scope is relatively broad, with most focusing on the general body of international students coming to China, lacking in-depth analyses of specific countries of origin. 2) There is a notable reliance on singular data source, with much of the relevant literature favoring qualitative research methods, such as interviews, with limited quantitative studies. 3) The research perspective tends to be static, lacking exploration from a dynamic standpoint. The trend of American students in China has been going through ups and downs, it is important to explain these trends over time. In light of these observations, this paper endeavors to explore and delineate the fundamental characteristics, influencing factors, and future trends of U.S. students coming to China, drawing upon multi-source data.

The current paper contributes to the literature in several ways. First, we provide

perhaps the first descriptive and systematic analysis of historical data on American students in China over two decades (1999-2018) along with other relevant characteristics such as information on degree-seeking students and fellowship recipients. In doing so, we also place American students in the larger context of international students in China, comparing American students with other countries. Second, we build regression models (time series data analysis) to understand the driving forces behind changes in American students coming to China. We especially focus on three major factors: the enthusiasm of Americans for learning Chinese[2], China's GDP growth rate[3], and the growth rate of American students in China. Third, using a survey of international students in China, we carried out an analysis of American students' perceptions of China and China-U.S. relations along with their future career plans. This will give us additional insights into the decision-making process of studying in China. To predict the future trend of American students, we explore Google trend data of Americans; Google search patterns.

Introduction to Data Sources

TABLE 1. Multi-source data

Data name	Data sources	Data usage
Time-series data on American students coming to China	Concise Statistics on International Students Coming to China, 1999-2018	Analyzing the Structural Characteristics and Dynamic Influence Mechanisms of American Students Coming to China
Questionnaire data on American students coming to China	Online questionnaire survey organized by the group in three Chinese universities in 2020-2021	Providing an in-depth depiction of the individual and group characteristics of American students studying in China.
Google Trends	"Google Trends" search data	Observing the Future Trends of

[2] The data is sourced from Google Trends, with search terms including "learn Chinese," "Chinese language," "Chinese lessons," "Chinese school," "Chinese resources," and "Chinese classes."
[3] This variable is sourced from the National Bureau of Statistics of China. See: https://www.stats.gov.cn/

Data	related to American students studying in China	American Students Studying in China

We use three sets of time series data for this study: survey data from American students in China, and large-scale Google Trends data. The three sets of time series data encompass the number of American students coming to China, China's GDP growth

rate, and the interest of Americans in learning Chinese. The online questionnaire survey data originate from surveys conducted by the research group during 2020-2021 among international students from northern universities A, central universities B, and eastern coastal universities C. Google Trends data was selected using the search term "study in China + university of China + Shanghai university + Beijing university," chosen based on the mean value comparison of keyword-related queries and search volume, focusing on the United States as the country and covering the search period from 2004 to 2023.

Historical Profile of American Students in China

Changes in numbers: Numbers are rising in fluctuations, but absolute numbers remain low.

As shown in Figure 1, the overall number of American students coming to China from 1999-2018 showed an upward trend, with an average annual growth rate of 10.27%. In 2018, the number of U.S. international students coming to China reached 20,996, which is 7.07 times more than the number in 1999 (2,970).

Figure 2 illustrates that, nonetheless, the absolute number of U.S. international students coming to China remains relatively low, and the annual growth rate exhibits a declining, zigzag pattern. In 2018, the number of U.S. international students coming to China accounted for approximately 4.27% of the total number of international students, representing a decline compared to the proportion observed over the previous 19 years. A similar trend is evident when comparing with U.S. international

students: according to the 2018 Open Doors Report released by the Institute of International Education (IIE), Chinese international students studying in the U.S. (363,341) constituted 33.2% of the total number of U.S. international students. This big gap suggests much more needs to be done to encourage more American students to come to China.

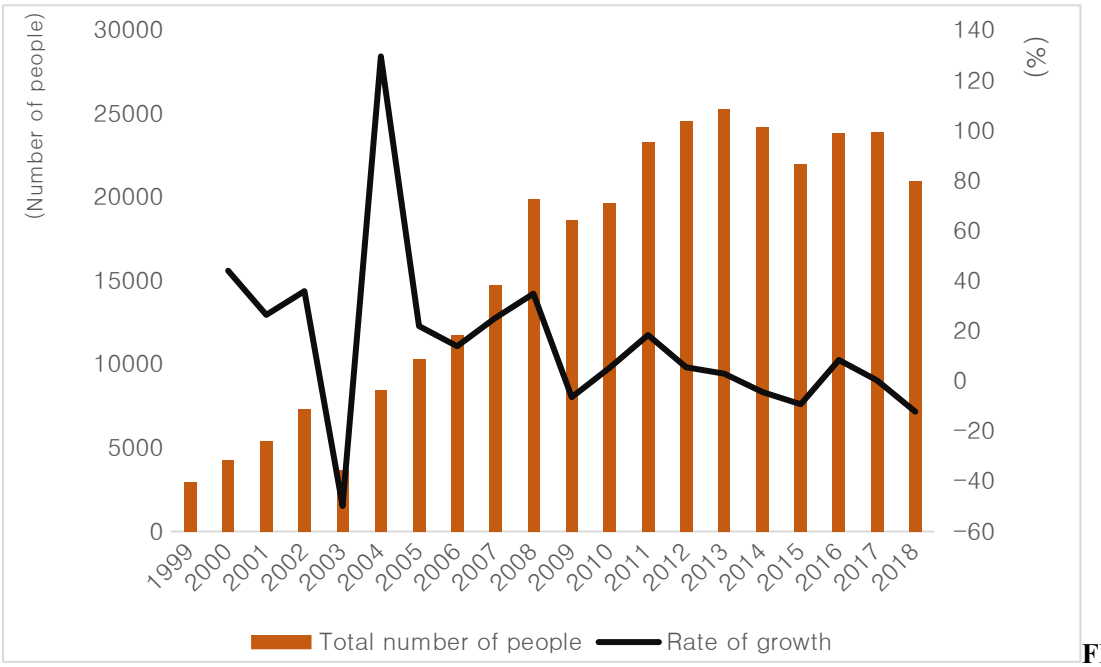

FIGURE 1. Changes in the number and growth rate of American students in China (1999-2018)

Source: Concise Statistics on International Students Coming to China, 1999-2018, same data source for Figures 3-7.

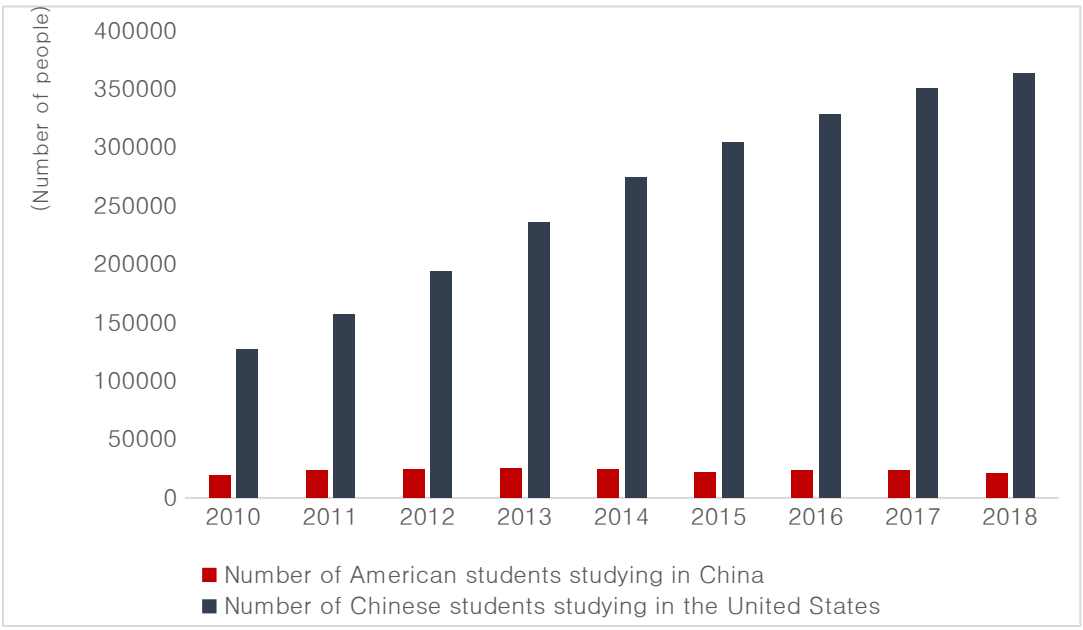

FIGURE 2. Number of American students studying in China vs. Number of Chinese students in the U.S.

Source: Data on Chinese students coming to the U.S. are from the Open Doors Report published by the Institute of International Education (IIE) (https://www.iie.org/research-initiatives/open-doors/).

Pursuing a Degree?: the comparison of American students with others

International students coming to China are categorized into two groups: degree students and non-degree students. Notably, there exists a significant disparity in the academic composition between students from developed and developing countries, with the number of non-degree students from developed countries substantially surpassing that of degree students (refer to Figures 4 and 5). Among them, the number of incoming non-degree students from the United States totaled 17,663, which is 5.3 times more than the number of its degree students, accounting for 15.95% of the total number of incoming non-degree students from developed countries. However, over time, as depicted in Figure 3, this disparity has gradually decreased. In 1999, the ratio of non-degree students to degree students stood at 30:1, decreasing to 5:1 by 2018. This suggests the quality of education in China has significantly improved, leading

many students from developed countries to pursue degrees in China.

Figure 6 illustrates the distribution of types of American students coming to China. The types of students are defined as follows: Advanced students are those with a master's degree or higher who come to China for specialized study. General students have at least a second-year university standing. Short-term students are individuals who come to China for a study period of less than one semester. Lastly, language students come specifically to learn and improve their Chinese language skills. Among non-degree American students in China, short-term students and language students constitute the largest groups, exhibiting an overall growth trend; conversely, the number of advanced students remains relatively low, fluctuating between 50 and 300 students annually, indicating significant potential for expansion. Studies have shown that non-degree students primarily aim for cultural experience and language exchange (Liu et al., 2021). Other studies have found that factors such as reasonable tuition fees, diverse teaching languages, and ample opportunities to interact with Chinese students are the most important concerns for non-degree students (Sun and Li, 2017). However, education for non-academic students in China is dominated by language teaching and faces issues such as outdated educational content, delays in the preparation of teaching materials for Chinese as a foreign language, obsolete teaching methods, and a lack of relevance, specialization, and applicability to the language proficiency required by international students once they enter the academic education stage (Lv and Duan, 2016). Therefore, future efforts should focus more on curriculum development, cultural experiences, skill enhancement, and socialization needs of non-degree students.

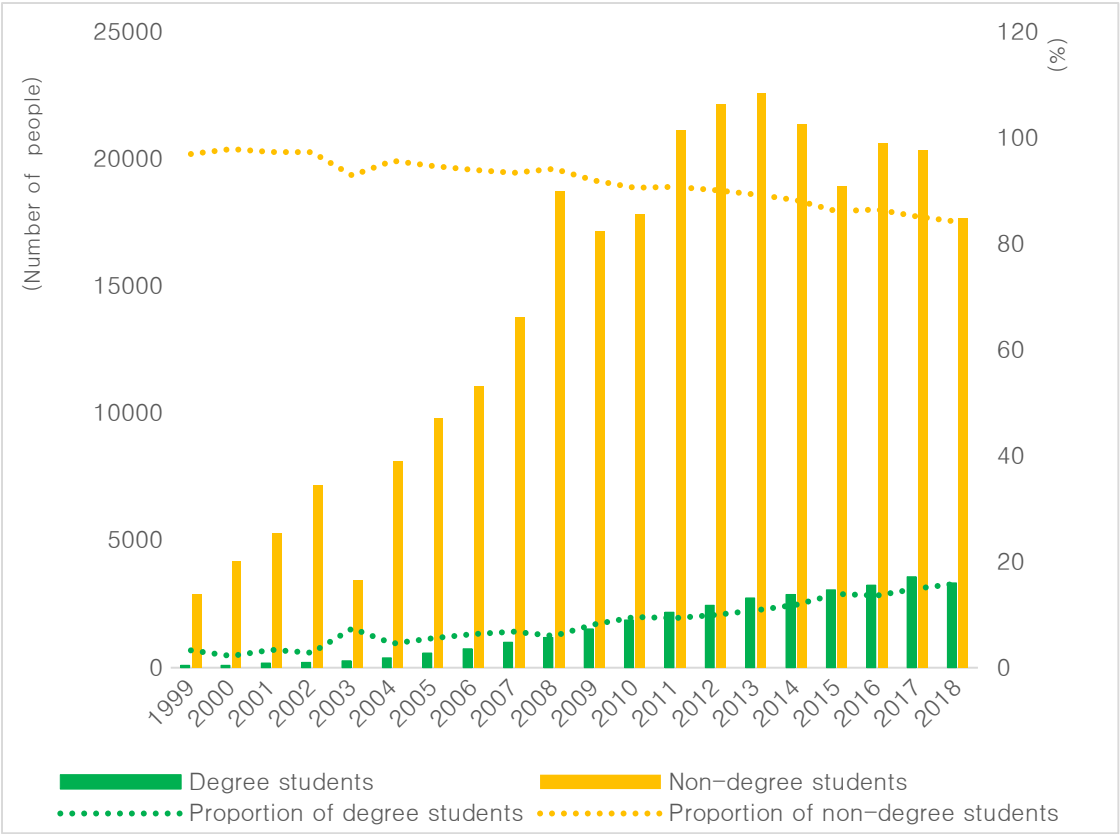

FIGURE 3. Comparison of the number of degree and non-degree students of American students in China

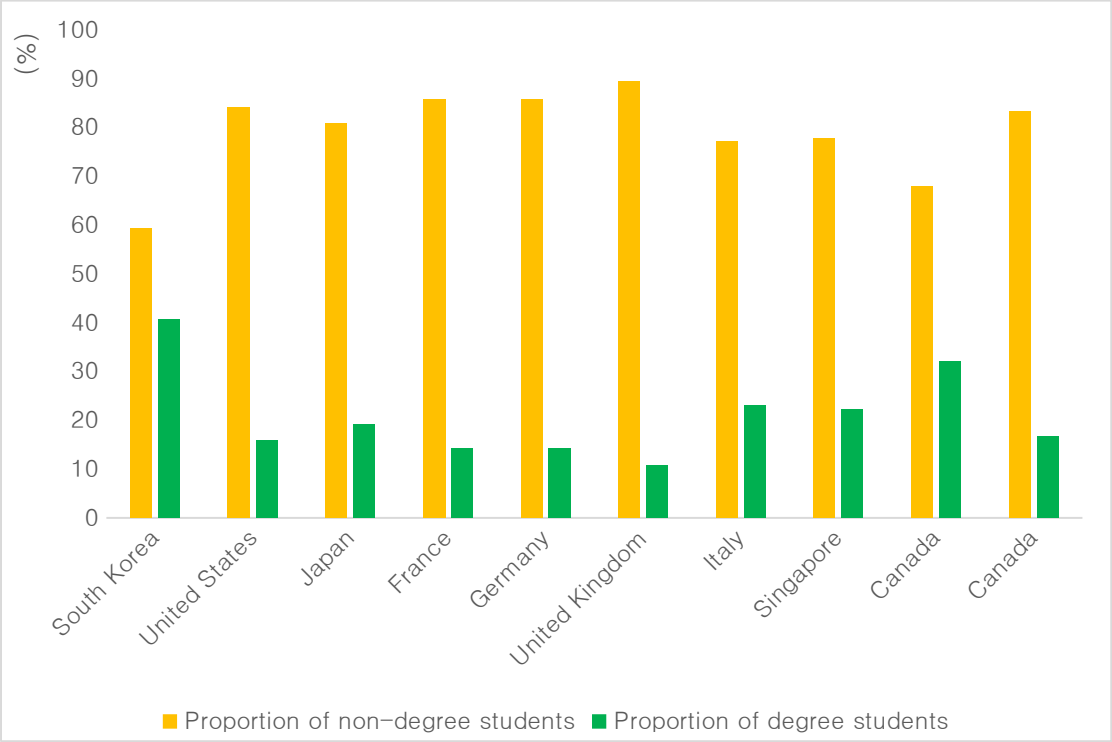

FIGURE 4. Distribution of degree students and non-degree in China from developed countries in 2018 (taking the top 10)

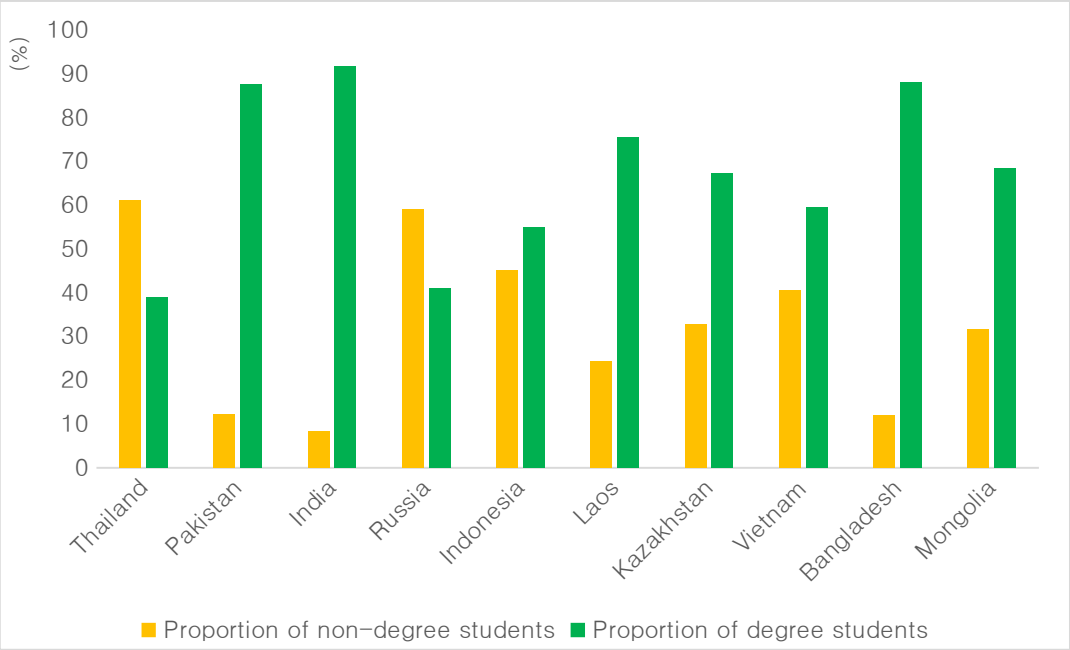

FIGURE 5. Distribution of degree students and non-degree in China from developing countries (taking the top 10)

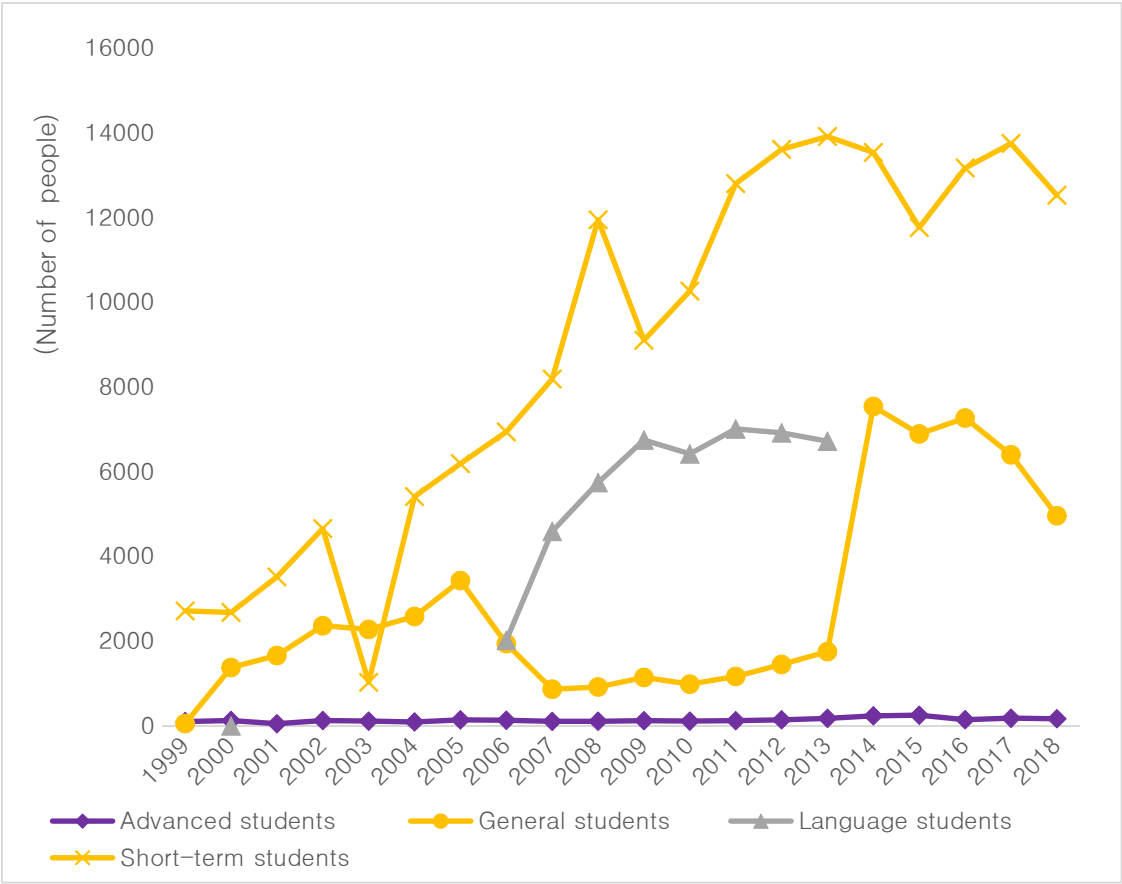

FIGURE 6. Changes in the number of four categories of non-degree students for American students, 1999-2018[4]

Who receives scholarship: The comparison of degree and non-degree students

To attract talented individuals from around the world to China, the government has established Chinese government scholarships. As shown in Figure 7, among American students coming to China, the number of non-degree students receiving Chinese government scholarships exceeds that of degree students due to the larger size of the non-degree group. However, upon comparing the proportion of degree students receiving Chinese government scholarships to the total number of degree students and the corresponding proportion of non-degree students, it becomes evident that, except for 2000-2003, the former consistently outweighs the latter in all other years. The vertical comparison of the proportion of degree students receiving Chinese

[4] The data of language advanced students are missing for many years, so the chart is presented with the above breaks.

scholarships to the total number of degree students among American students in China over the years reveals a generally fluctuating upward trend. There was a significant increase from 0.8% to 3.53% in 2008, surpassing 10% in 2010, presumably due to the government's efforts to implement the "Eleventh Five-Year Plan" for National Educational Development. In 2008, the government increased the size of the Chinese government scholarship student population to comply with the "Outline of the Eleventh Five-Year Plan for the Development of the National Education Program," resulting in an average annual increase of about 3,000 students in the following three years. Conversely, the proportion of non-degree students receiving Chinese government scholarships to the total number of non-degree students has been on a downward trend, falling below 0.01% after 2009.

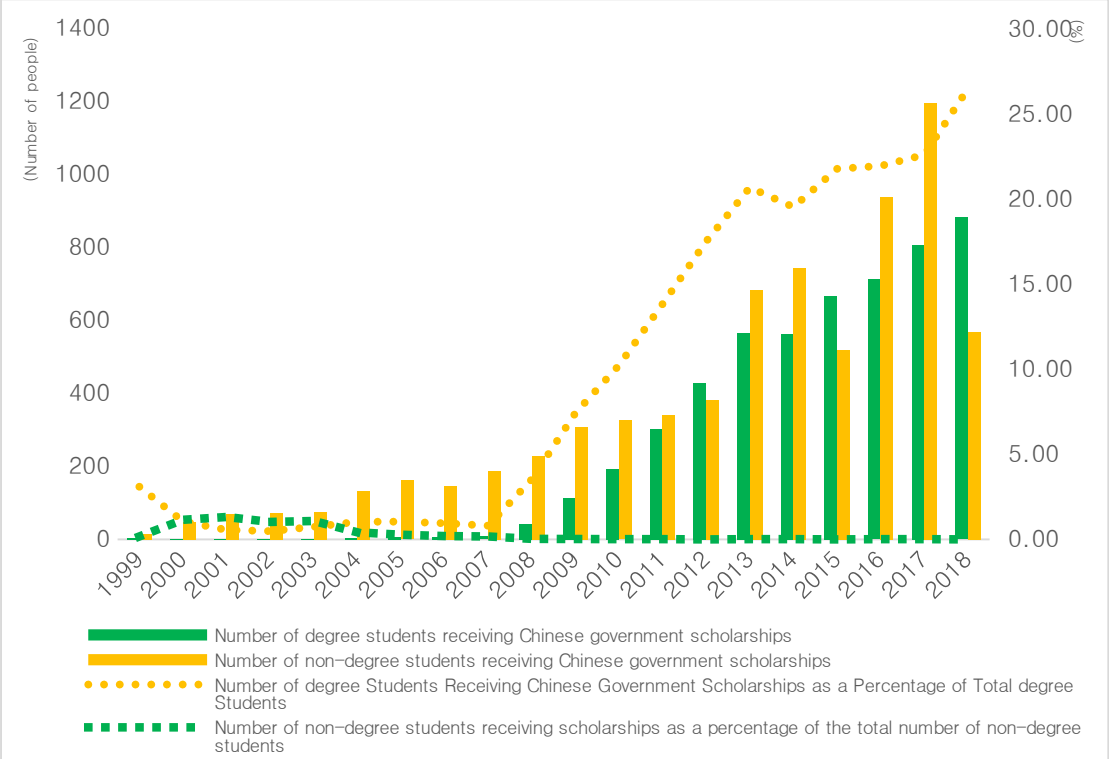

FIGURE 7. Changes in the number of degree and non-degree students receiving Chinese government scholarships in China

The Driving Forces for the Trend of American Students in China

Building on previous discussions regarding the factors influencing international students coming to China, next section of the paper will explore the factors influencing changes in the number of American students studying in China. Our

approach is to identify significant events and developments that potentially affect the trend of American students studying in China. These factors include the state of affairs in China and the U.S., China's economic development, significant events, scholarship policies, media discourse, public sentiment, and the popularity of Chinese language learning.

Time Clues to Changes in the Number of American Students Coming to China

Considering the driving forces behind the change in numbers, notable time points in the increase of American students coming to China are worth examining. Recall Figure 1 which shows the trend of American students going to China during 1999-2018. We highlight several major events that may be behind the trend. Firstly, the surge in student numbers around 2001 may be attributed to several factors: In 2001, the United States granted China "Most-Favored-Nation" (MFN) trade status, which laid the groundwork for China's entry into the World Trade Organization (WTO) at the end of the year. Since its accession to the WTO, China has continuously intensified its efforts to open up to the outside world, significantly enhancing the internationalization of its education sector; Additionally, the aftermath of the "9-11" terrorist attacks in the United States in 2001 shifted domestic sentiment towards China. Studies indicate that due to shared concerns over terrorist threats, security and military cooperation between the two countries increased. Furthermore, terrorist attacks and subsequent developments delayed the United States' perception of China as a strategic competitor, thereby creating stability in bilateral relations (AKDAĞ, 2023). Subsequently, the terrorist attacks led to a more favorable public perception of China, as evidenced by a Gallup poll showing Americans' favorability towards China increasing to 45% in 2001, up from 36% in 2000.[5] The appeal of studying in China has grown among American students. Secondly, the increase in student numbers around 2008 may be linked to the inception of the National Security Language Program (NSLP) in the United States in 2006, bolstered by congressional funding to provide scholarships for short-term training or extended study in China.

[5] Data from U.S. Gallup Poll, See:https://news.gallup.com/poll/1627/china.aspx.

Additionally, China's elevated international stature post-2008 Olympic Games has drawn American students interested in Chinese culture to pursue studies in China. This can be attributed to:1) the Olympic Games' opening ceremony showcasing China's rich history and civilization, garnering global attention; 2) the presence of over 80 dignitaries, including then U.S. President George W. Bush Jr., in Beijing, significantly amplifying the Olympics' impact. 3) Millions of volunteers participated in the Beijing Olympic Games, contributing to event services and weaving their personal narratives into the macro-narrative of the national image. This collective display of China's national image was widely acclaimed worldwide.

Third, the rise in numbers around 2010 can be explained by the following key events. (i) Policy perspective: In 2009, President Obama announced a goal of 100,000 students studying in China over the next four years, and since then federal government departments have increased their support for these programs. Correspondingly, in 2010, China's education department released the "Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020)" and the "Study in China Program," documents proposing to further expand the scale of foreign students, creating a favorable policy environment for U.S. students to come to China. (ii) Economic perspective: The increase in the number of international students coming to China after 2009 is closely tied to China's rapid economic development. In 2009, China's GDP growth rate was 9.1%, contributing to over 50% of global economic growth, whereas the U.S. growth rate during the same period was only 2.6%. Concurrently, China actively contributed to global economic recovery, solidifying its reputation as a responsible major power. Moreover, in 2010, the Cabinet Office of Japan reported that China's GDP surpassed Japan's, making it the world's second-largest economy, thereby bolstering its international influence and attractiveness to American students seeking to study abroad.

Despite the overall increase in the number of American students studying in China, there have been fluctuations over the years. For instance, the decline observed around 2003 can be attributed to the outbreak of the highly contagious and deadly SARS

virus in China, which deterred many American students from pursuing studies there. Moreover, as depicted in Figure 1, the peak in the number of American students coming to China occurred in 2013, followed by a decline. This downward trend can be linked to shifts in the US-China relationship: post-2013, escalating tensions and the "pivot to Asia-Pacific" strategy led the US government to heighten countermeasures against China, resulting in increased isolation across various domains and a more negative stance towards China. The relationship between China and the U.S. deteriorated further after Trump assumed office in 2017, with the Trump administration initiating trade and technology conflicts with China, significantly impeding cultural exchanges between the two nations.

The important implications of the U.S.-China relationship have been emphasized several times above, and what is clear is that today, the U.S.-China confrontation is dominant. According to Harvard University professor Graham Allison (2019), in the current international system, China's ascendant power will undoubtedly challenge the United States in its hegemonic position. He employs the "Thucydides Trap" as a metaphor for the future trajectory of Sino-U.S. relations, suggesting that China, as a rising power, will contend with the United States, the guardian of the status quo, across all domains. For example, when China proposed the "Belt and Road" initiative in 2013, the U.S. domestic parties had more worries than expectations about China's expanding influence, and some even claimed that the "Belt and Road" was China's version of the "Marshall Plan", sparking a series of negative arguments. These contentions have fueled a continuous escalation of conflicts between the two countries. To counteract China's influence in Africa and impede its support channels in international organizations like the United Nations, the United States has intensified its presence in Africa, turning the continent into a new battleground for Sino-American competition. Furthermore, China and the United States grapple with significant differences in traditions and cultural values (Samuel, 2017). In recent years, there have been voices in the United States accusing China of "neo-colonialism", arguing that China's foreign aid is aimed at achieving hegemony and

ideological assimilation. Additionally, frequent conflicts between China and the United States over issues such as the South China Sea, East China Sea, and Taiwan Strait have further strained their relationship, pushing it to the "knife edge". Nonetheless, Allison (2019) maintains that war between China and the United States can be averted. He suggests that cultural commonalities can help prevent conflict. Thus, he advocates for enhancing consensus through strengthened educational exchanges between the two sides to avoid falling into the "Thucydides Trap".

Media Coverage and Decisions to Study in China

It is well known that the coverage and construction of China's image by the American mainstream media serve as an important window for Americans to learn about China, and the mimetic environment created by the media may change the public's perceptions, which in turn may have an impact on their decision to study abroad. This is also verified by some scholars' studies, which suggest that the media's reporting tendency is significantly correlated with the public's perception of China (Huang et al., 2021). Therefore, once the transmission chain of deteriorating relations between the two countries, characterized by negative media coverage and decreasing public favorability, is formed, it inevitably affects the choice of study-abroad destinations for U.S. students. In the past, when American journalists reported on China, in pursuit of reader engagement, they tended to focus on sensational incidents and avoid depicting the "daily life" of Chinese people, resulting in a serious distortion of Americans' perception of China and further reinforcing a simplistic, black-and-white impression of the country.

In the 21st century, the narrative conventions of the American mainstream media on China have been challenged by American journalists with experience in China and a certain degree of influence in the United States, such as Ian Johnson, Peter Hessler, and Evan Osnos. In their writings, China is no longer portrayed as a monolithic entity, but as a "flesh-and-blood" and complex society navigating the currents of global development. Their reports have, to a certain extent, presented a more nuanced view

of China, moving beyond simplistic stereotypes. The works of these three journalists have garnered significant attention in American society, highlighting the commonalities between Chinese people and Americans, such as their shared ambitions for wealth, truth, and beliefs. This has, to some extent, mitigated ideological differences and reduced perceived threats at a psychological level. Through the reporting of these journalists and other influential local American journalists, an increasing number of Americans have altered their perceptions of China and are considering studying there.

Interestingly, both Ian Johnson and Evan Osnos had the experience of studying in China before they became correspondents there, which became the starting point of their understanding of China. This experience allowed them to perceive China outside of established frameworks and laid the foundation for their objective reporting on China in the future. In 1984, Ian Johnson came to China for the first time as an exchange student at Peking University. Upon stepping foot on Chinese soil, his impression of China transitioned from one of fantasy to one of disappointment, and eventually to one of renewed confidence. Similarly, Osnos also had a brief study abroad experience, spending half a year studying Chinese at Capital Normal University. These experiences can be said to have shattered their imagination and stereotypical image of China and made them "other" subjects to tell China's stories and spread China's image (Song, 2021), and change more people's stereotypical thinking through the output of viewpoints, which can be regarded as the inter-temporal benign influence of study abroad education.

"Chinese Language Fever" and American Students Studying in China

Moreover, the surge in Chinese language learning has significantly influenced American students' decisions to study in China. In 2005, Newsweek dedicated 21 pages to a comprehensive analysis of China's education, economy, and the Olympics under the title "Does the Future Belong to China?" In the realm of education, it highlighted the "Chinese learning boom" in the United States, as Chinese became the

third most popular language in the country. The increasing popularity of Chinese has generated numerous employment opportunities. A study published by the New American Economy website in 2017 revealed that the demand for Chinese proficiency in job postings in Colorado surged by 147.7% between 2010 and 2014. Furthermore, Chinese language acquisition fosters cultural exchanges between China and the U.S., prompting active encouragement from the U.S. government to promote Chinese language education. In 2015, President Barack Obama initiated the "One Million Strong" program, aiming to expand Chinese language learning in the U.S. to 1 million elementary and middle school students within five years, up from 200,000 students at the time. Two years later, the head of the China-U.S. Strong Foundation reported that the number of students had increased to 400,000 (Global Times, 2017).

However, despite the popularity of the Chinese language in the United States, the number of American college students studying Chinese has declined. Data from 2018 released by the Modern Language Association of America revealed a 13 percent decrease in the number of American college students learning Chinese from 2013 to 2016. Howie Berman, the executive director of the American Council on the Teaching of Foreign Languages, attributed the declining interest of students to existing language programs that prioritize literature reading over skill-based instruction. Moreover, the shortage of native Chinese language teachers in the United States exacerbates the issue, with most teachers being Chinese nationals who arrive through short-term education programs. Zhao Guocheng, deputy director-general of the Confucius Institute Headquarters, noted that the United States was among the first group of countries to express the need for support in Chinese language teaching resources, highlighting the urgent demand (Xinhua Net, 2018). Consequently, numerous American students travel across the ocean to China with the expectation of enhancing their practical language skills in an authentic cultural environment.

There are three major issues in Chinese language education in the United States: 1) Uneven distribution of Chinese language programs among states. 2) Shortage of Chinese language instructors. 3) Emphasis on reading rather than practical application

in Chinese language courses. Consequently, for American students seeking to learn Chinese, pursuing field learning experiences in China has become the favored option.

In sum, the aforementioned factors will undoubtedly influence Americans' decisions to study in China to some degree. Therefore, to foster sustained stability in educational cooperation between the two nations, leaders of relevant departments must exercise comprehensive oversight and engage in systematic planning.

Time Series Modeling of the Trend of Studying in China

To enhance the analysis of influencing factors mentioned earlier and incorporate the lagged effect of time into the study, this paper will construct a vector autoregressive model (VAR model) to explore the dynamic relationship among the number of American students studying in China and other time series variables. The VAR model is commonly used in multivariate time series analysis, primarily applied in the field of economics for analyzing interactive relationships and influencing factors. This model considers each endogenous variable in the system as a function of the lagged values of all endogenous variables. Its primary purpose is to forecast dynamic shocks to the system through relevant time series variables and random disturbance terms, thus elucidating the impact of these shocks on variable formation (Gao, 2012; Qin, 2011). In this paper, these "shocks" often refer to important factors (such as Americans' enthusiasm for learning Chinese and China’s GDP growth) that could impact American students studying in China.

During the variable selection process, we experimented with variables such as the enthusiasm of Americans for learning Chinese, China's GDP growth rate, the growth rate of international tourist arrivals in China, China's export growth rate to the U.S., the U.S. unemployment rate, the U.S. net household income growth rate, the U.S. dollar exchange rate to offshore RMB, China's approval rating in U.S. Gallup surveys, and historical growth rate of scholarship recipients, in combination with the growth

rate of American students studying in China, to establish a VAR model. Ultimately, we selected three variables—the enthusiasm of Americans for learning Chinese[6], China's GDP growth rate[7], and the growth rate of American students in China[8]—to enter the model for several reasons. First, relevant research provides evidence. For instance, Liu et al. (2013), based on an empirical study from Beijing colleges and universities, found that cultural interest in China and development opportunities in China are the top two factors attracting international students to study in China. Second, there is a significant positive correlation among enthusiasm for learning Chinese, China's GDP growth rate, and the growth rate of American students in China, indicating their high relevance and fit for the model. Lastly, due to the relatively short time series and small sample size, including too many variables could lead to inaccurate parameter estimation, overfitting, and poor predictive performance; therefore, we limited our selection to these three variables. Considering data availability, the selected time range is from 2004 to 2018. The expression of VAR(p) model is:

$$y_t = A_1 y_{t-1} + ... + A_p y_{t-p} + \varepsilon_1 + C$$

The vector y_t represents a set of k endogenous variables, while p denotes the lag order, t is the number of samples, and $\in_1$ is the perturbation variable, which is a k-dimensional vector of constants.

This paper utilizes EViews13 software for model estimation. The comprehensive analysis steps encompass the smoothness test, optimal lag order determination, exogeneity test, stability test, impulse analysis, and variance decomposition. However, due to space constraints, this paper only briefly presents the impulse analysis and variance decomposition. For detailed information on other tests, please refer to the appendix.

Impulse Response Analysis

[6] The data is sourced from Google Trends, with search terms including "learn Chinese," "Chinese language," "Chinese lessons," "Chinese school," "Chinese resources," and "Chinese classes."
[7] This variable is sourced from the National Bureau of Statistics of China. See: https://www.stats.gov.cn/
[8] Data derived from Concise Statistics on International Students Coming to China.

Impulse response analysis aims to explore the effects of shocks to one endogenous variable on others. Here, we focus on observing the dynamic effects of China's economic growth rate (CGR) and Americans' enthusiasm for Chinese language learning (CPL) on the number of American students coming to China (GUSR). Understanding these dynamics is essential for formulating effective educational and international student mobility policies, thereby enhancing the attractiveness of a destination for global learners.

The specific impulse response function is presented as follows: the horizontal axis represents the number of lags, and the vertical axis indicates the change in the growth rate of American students studying in China. The blue solid line denotes the response path of the variable to the shock, while the blue shaded area represents the 95% confidence interval.

The impulse response graph in Figure 8 shows the response of the growth rate of American students studying in China to a unit shock in China's economic growth rate at time t. In the first period, the response value is negative, indicating that following a shock to China's economic growth rate, the growth rate of American students studying in China will decline with a one-period lag (i.e., at t+1). A possible explanation is that an increase in China's economic growth rate might lead to short-term fluctuations in living costs and exchange rates, causing the cost of studying abroad to rise, which may make some potential American students hesitant or lead them to withdraw from the Chinese study market altogether. Additionally, rapid economic growth could increase pressure on existing educational resources, prompting the government to make a series of policy adjustments, such as changes in visa regulations. The positive effects of these policies might take some time to manifest. During the initial implementation phase, execution issues or adaptation challenges might arise, leading to a short-term decline in the growth rate of students coming to China.

However, in the second lag period, this negative impact is reversed, and the growth rate of American students studying in China responds positively. Specifically, the increased investment brought by economic growth might take some time to translate

into actual improvements in educational resources and infrastructure. These improvements may not be fully visible in the first lag period but could become apparent in the second lag period, thereby attracting more students. Over time, people's expectations adjust, and students and parents may recognize the career prospects and long-term opportunities brought by economic growth, thus increasing their interest in studying in China in the second lag period. In the third lag period, the response value turns negative again, possibly because, despite the temporary positive effects of economic growth in the second lag period, economic fluctuations and market adjustments might take longer to fully absorb. For instance, rapid economic growth might lead to certain instabilities in the economic cycle re-emerging in the third lag period, negatively affecting the attractiveness to international students. Additionally, the economic growth rate might lead to cumulative negative effects, such as persistent rises in living costs, urban congestion, and resource constraints. These issues, if not completely resolved in the short term, could resurface and exert negative impacts in the medium term.

The negative responses in the first and third lag periods are both negative but reflect different mechanisms and influencing factors at different stages. The negative value in the first lag period primarily reflects short-term market uncertainties, lagged effects of policy adjustments, and initial increases in living costs. The negative value in the third lag period is mainly due to cumulative pressures from living costs in the medium term, increased international competition, aftereffects of policy adjustments, and changes in the external environment. After the third lag period, the response values fluctuate around zero, indicating that the impact of economic growth on the growth rate of international students is noticeably volatile in the short and medium term but tends to stabilize over time. This reflects the gradual adaptation and self-adjustment processes of the market, policies, and external environment.

The response function in Figure 9 indicates that after the increased enthusiasm for learning Chinese among Americans, there is a crowding-out effect in the first and second lag periods, resulting in a decline in the growth rate of American students

studying in China. Possible explanations for this phenomenon include:

Firstly, the increased interest in learning Chinese might present certain challenges and pressures in the short term, causing American students to become more cautious in their study abroad decisions, thereby temporarily postponing or abandoning plans to study in China. Students also need time to learn a new language, which might affect their short-term study abroad preparation and application processes.

Secondly, as enthusiasm for learning Chinese increases within the United States, more students might choose to study Chinese domestically rather than immediately going to China. This choice could lead to a short-term decline in the growth rate of American students studying in China. Additionally, there might be increased investment in Chinese educational resources in the United States, such as the establishment of more Chinese courses and cultural programs, leading some students to opt for these domestic educational resources instead of considering studying in China temporarily.

In the third lag period, the response value rapidly rises to 6, indicating that the impact of enthusiasm for learning Chinese (CPL) on the growth rate of American students studying in China (GUSR) has a lagging effect. After the first two periods of study, students' Chinese language proficiency significantly improves, and they are better prepared linguistically, thus increasing their willingness to study in China. Additionally, as students learn Chinese, their interest in Chinese culture and academics gradually increases, fostering a sense of identification and motivation to gain a deeper understanding of China.

Furthermore, the long-term issues mentioned earlier regarding teaching and resource allocation in domestic Chinese education might drive students to pursue studies abroad in China. As their Chinese proficiency improves, students and their families might realize the tremendous potential for future career development that comes with mastering Chinese, making them more inclined to study in China to gain better educational and career opportunities.

Moreover, with the continued enthusiasm for learning Chinese, societal support for

Chinese studies and studying abroad in China increases, including scholarships and exchange programs, all of which promote the growth of international students.

Finally, the response value stabilizes and fluctuates around zero, indicating that enthusiasm for language learning, market fluctuations, and policy changes become normalized over the long term, leading to a more balanced growth rate of students studying in China.

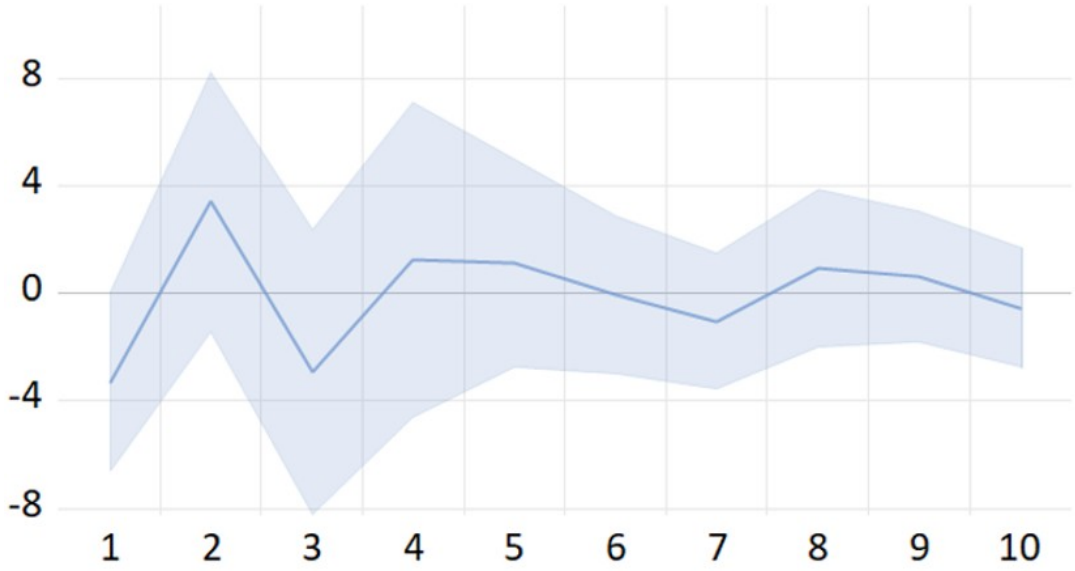

FIGURE 8. Response of GUSR to CGR

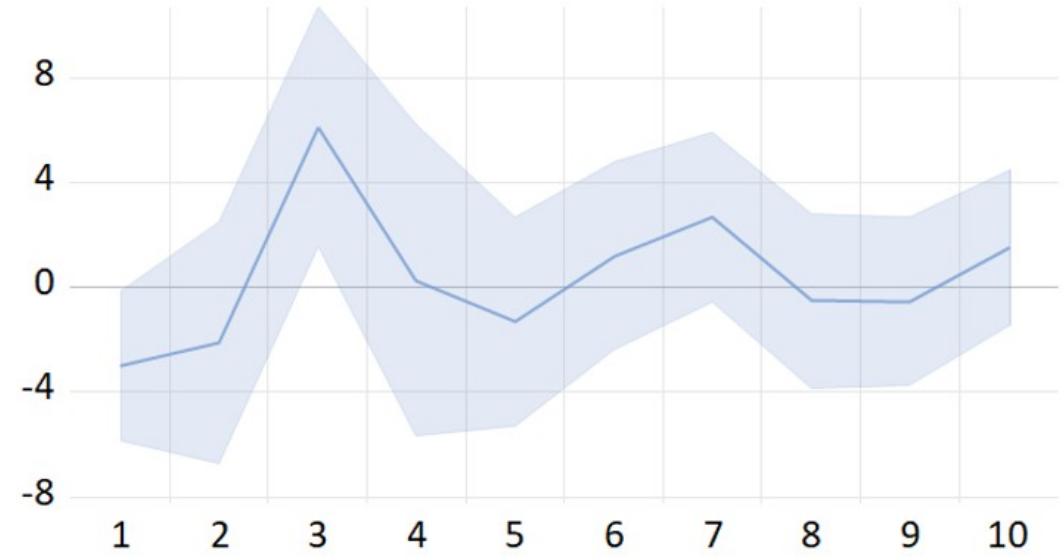

FIGURE 9 . Response of GUSR to CPL

Variance Decomposition

The variance decomposition is a statistical technique employed to investigate the impact of exogenous shocks on endogenous variables, thereby enabling the estimation of the relative importance of each variable.

As shown in Figure 10, during the first two lag periods, the proportion of variance explained by each factor, from highest to lowest, is the growth rate of international students, China's economic growth rate, and American interest in learning Chinese. However, starting from the third lag period, Americans' enthusiasm for learning Chinese surpasses China's economic growth rate and the growth rate of international students themselves in contribution. In the later periods, the explanatory power of these three variables regarding the growth rate of American students studying in China stabilizes. Enthusiasm for learning Chinese emerges as the primary contributor, followed by China's economic growth rate, and then the growth rate of international students.

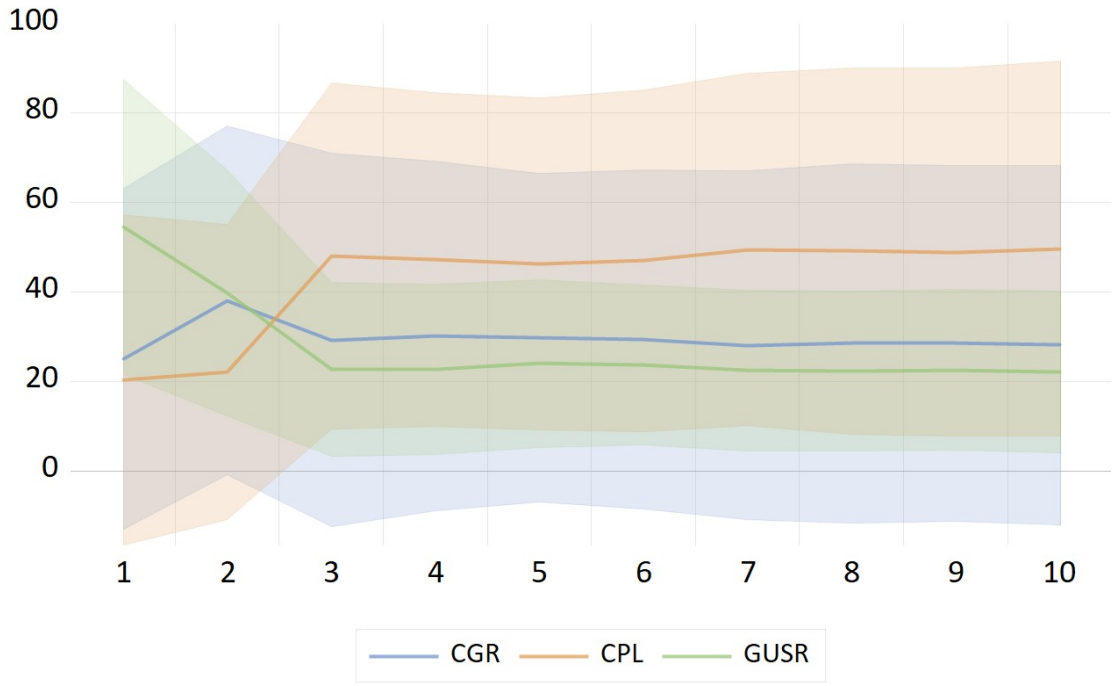

FIGURE 10. Variance decomposition of GUSR using Cholesky (d.f. adjusted) factors

American Students in China: Current Status and Future Plans

To gain further insight into the experiences of American international students in

China, our research team conducted an online questionnaire survey of international students at three Chinese universities. The survey focused on a range of topics, including academics, daily life, cultural adaptation, and mental and physical health.

The survey revealed that the majority of the 32 American students were of Chinese descent and their families in their home countries had higher economic statuses. Additionally, we observed that U.S. international students in China tend to assess their language proficiency more positively, consistent with findings from related studies (Du, 2015). For instance, over 40% of participants did not meet the required proficiency level in Chinese testing, yet approximately 72% rated their Chinese language proficiency as relatively good or very good. Furthermore, all participants in this survey were degree students, predominantly majoring in humanities and social sciences (65.63%). Nearly two-thirds of respondents had never received scholarships; among those who had, Chinese government scholarships were the most common.

TABLE 2. Basic Information of American Students in China

Student Profile		**Percentage**
Gender	Male	40.63%
	Female	59.38%
Types of Enrollment	Non-degree	0%
	Degree	100%
Ethnic Identity	Chinese Descent	81.25%
	Non-Chinese Descent	18.75%
Socio-Economic Status	Upper-Middle	40.63%
	Middle	50.00%
	Lower Middle	9.38%
HSK Level	Level 4 and below	15.63%
	Above Level 4	43.75%
	No level	40.63%
Major	Science and Engineering	12.50%
	Humanities and Social Sciences	65.63%
	Medical Science	3.13%
	Interdisciplinary fields	3.13%
	Other	15.63%
Religion	Protestantism	9.38%
	Catholicism	6.25%
	Buddhism	6.25%
	No religious affiliation	78.13%
Self-assessment of Chinese Language	Excellent	43.75%

Proficiency		
	Good	28.13%
	Fair	25.00%
	Poor	3.13%

TABLE 3. Perceptions and Future Plans of American Students from a University in Northern China

Time Spent in China		**Positive Assessment of China-US Relations[9]**		**Post-Graduation Plans**	
0-5 years	35.71%	Politics	3.57%	Employment	39.29%
6-10 years	14.29%	Economics	28.57%	Further Studies	57.14%
More than 10 years	50%	Humanities	32.14%	Other	3.57%
Number of Chinese People Frequently Contacted in the Past Month		**Understanding of the Belt and Road Initiative**		**Post-Graduation Destination Choices**	
0	3.57%	Very Familiar	17.86%	Long-term stay in China	3.57%
1-5	32.14%	Somewhat Familiar	25%	Stay in China for a While and Then Return to Home Country	25.00%
6-10	39.29%	Know a Little	42.86%	Stay in China for a While and Then Move to Another Country	17.86%
More than 10	25%	Heard of It but Not Familiar with the Details	14.29%	Return to Home Country Immediately	53.57%
Prior Acquaintance with Chinese People		**Frequency of Following Chinese News, Music, and TV Shows Before Coming**		**Post-Graduation Career Plans**	

[9] Consider those who answered relatively well or very well as having made a positive assessment of U.S.-China relations.

to China [10]

Did not know	7.14%	Frequently Followed	42.86%	Government Agencies	3.57%
				Business	25%
Knew	92.86%	Rarely Followed	57.14%	Specialized technical and related occupations	53.57%
				Other	17.86%

In addition, for American students at a university in northern China, we asked questions regarding their understanding of China and their future plans. The survey revealed that American international students studying in China generally possess a good understanding of various aspects of China, including the Belt and Road Initiative, China-U.S. relations, and related topics. T The reasons for this are attributed to the following factors: (i) Experience in China. A significant majority (89.29%) have visited China, with half of them residing in the country for over ten years, providing extensive exposure to Chinese customs. (ii) Social Circle Structure. Over 90% had acquaintances in China before their arrival, with a quarter having interacted with over 10 Chinese individuals in the past month, thus broadening their understanding of the country through social connections. (iii) Cognitive Resources. Over 40% had engaged in consuming Chinese news, music, or watching Chinese films and TV programs before arrival, establishing a basis for their comprehension of China. Regarding the assessment of Sino-U.S. relations, the majority express pessimism, with the political relationship receiving the lowest rating (3.57%), mirroring the strained bilateral ties. Nonetheless, prospects for collaboration between China and the U.S. in education are discernible from their positive appraisal of cultural exchanges (32.14%). Subsequently, when queried about future plans, American students displayed strong focus, with an overwhelming 96.43% expressing intentions to pursue careers related to China. Worth noting, however, is that nearly 50% of these American students intend to remain in China post-graduation. Only

[10] Those who answered "always" and "often" were considered to be regular followers, while those who answered "sometimes" and "occasionally" were considered to be less concerned, Those who answered "sometimes", "occasionally", "never" were considered to be less concerned.

3.57% plan on long-term residence, while 42.86% opt for short-term stays, with a significant proportion aiming to depart immediately. Among these, an additional 57.14% plan to pursue further studies post-graduation, while 39.29% intend to enter the workforce immediately. Delving deeper into their career preferences, over half of the American students (53.57%) aspire to careers in professional and technical fields (e.g., education, healthcare, research), with a quarter aiming for entrepreneurial pursuits. The future placement of this cohort of students in China necessitates coordinated guidance from various governmental bodies.

Future Trends of American Students Coming to China from Google Trends

Google Trends data is an unbiased sample of Google search datasets where searches are anonymized, categorized and aggregated. This platform enables users to explore search intensity, hotspots, and content popularity on relevant topics within their areas of interest (Simon, 2016). In this study, we utilize this dataset to analyze the search patterns of American users and predict future trends of American students studying in China. Firstly, the annual average keyword heat values from Google Trends are calculated and plotted to create the search heat line graph depicted below in Figure 11. It is evident that the overall search interest among American users regarding studying in China declined, dropping below the average value of 30.03 after 2012. Moreover, influenced by various factors such as the COVID-19 pandemic, the relevant search interest among U.S. users reached an all-time low in 2021. Nevertheless, in 2022, the preceding downward trend reversed, surpassing the 2018 heat average, which correlates with the gradual easing of China's international travel restrictions and study-abroad policies. This indicates a renewed focus among U.S. users on studying in China, presenting opportunities for China's study-abroad market. Furthermore, Pearson correlation is employed in this paper to roughly assess the co-variation of the two series over time. The results of the test reveal a positive and strong correlation between the two series. This demonstrates the viability of utilizing Google search big data to predict future trends in American students coming to China.

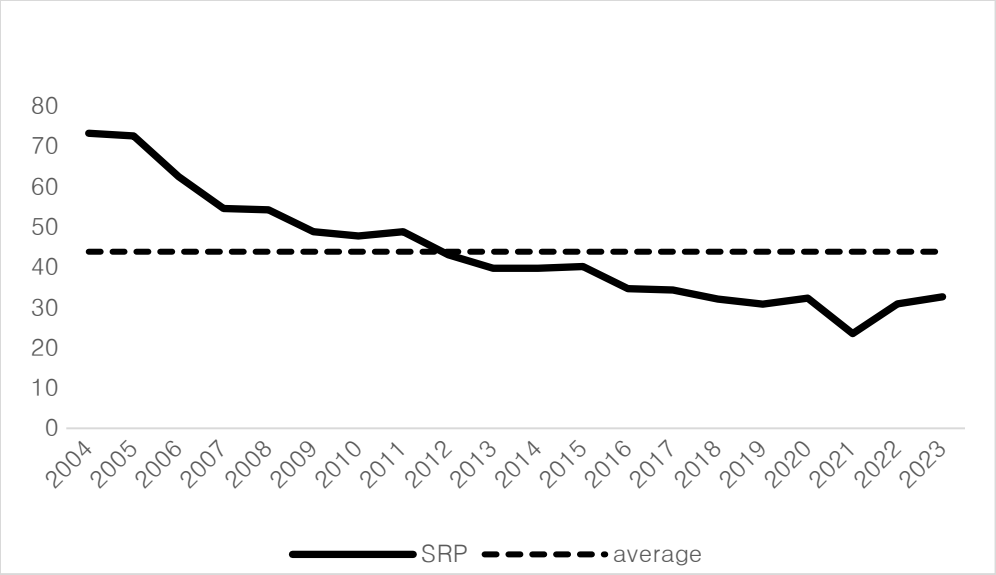

FIGURE 11. Trend in Search Interest for U.S. Study in China by Calendar Year, 2004-2022[11]

TABLE 4. Correlation analysis of the growth rate of the number of American students coming to China and the search interest of studying in China

	Growth Rate of American Students	Search Interest
Growth Rate of American Students	1	
	0.711***	1

Note: *** p<0.01, ** p<0.05, * p<0.1

Summary and Discussion

Although the broad trend of the rising number of American students coming to China is observed from 1999 to 2018, there are major fluctuations. We have highlighted some big events such as China's accession to the WTO and the 2008 Beijing Olympics that could potentially boost the trend of American students going to China. The trend data on American students also tell us that the number of non-degree students among American students studying in China is much higher than the number of degree students. Therefore, while improving China's education level and the internationalization ability of universities and colleges, trying to increase the proportion of American students with academic qualifications, and optimizing the

[11] This study selected several high-interest keywords—"study in China," "China university," "China college," "Beijing university," "Shanghai university," and "China tuition"—to describe the willingness of Americans to study in China, denoted by SRP. The dashed line (average) represents the mean keyword popularity from 2004 to 2022, which is 30.03.

overall academic structure, it is also necessary to pay attention to the experience and needs of non-degree students. Non-degree students enjoy various benefits, such as schedule flexibility and lower tuition pressure compared to degree-seeking students. It can also be more accessible for a larger portion of the prospective students. To better support non-degree students, China can certainly entertain the idea of sponsoring more short-term study programs catering to various needs of students and even offering fellowships for highly qualified students.

When we reflect on the most important factors that determine the future trend of American students studying in China, the two most important factors are China's economic prosperity (as measured by the growth rate of GDP) and eagerness to learn Chinese. It is probably true for any country that hosts international students, namely economic power matters. Thus, to encourage international students to come to China, China must continue its strong economic programs and to be competitive in many sectors of the world economy. China is already a leader in solar energy, electric vehicles, lithium batteries, big data, and AI technology. In the long run, a strong economy is the best advertisement for China's "Studying in China" program. This is particularly the case for the top 1 receiving country for international students, the United States. Many international students want to study in the United States because of the unparalleled quality of higher education resources along with potential job placement after graduation. The United States has clearly benefited from many talented international students who choose to work in the United States after graduation.

Not surprisingly, as the second-largest economy in the world, China is leveraging its economic strengths to attract international students. However, this is not enough because China has not built up an effective system to allow talented international students to stay and work in China. China's green card is perhaps the most difficult one to get. Without the process of allowing talented international students to receive permanent resident status, they are often facing major uncertainties in career planning. Our survey of international students reveals that in general, more than 70% of

international students want to stay and work in China. For American students, this percentage is close to 50%. Clearly, a more drastic policy change is in order. In addition, recent reports also reveal that some American students feel that they are losing the battle for job placement to other Chinese who have been educated abroad. Currently, there has been a significant increase in the number of Chinese returnees from overseas (China Daily, 2024). Young Americans increasingly view economic opportunities in China as diminishing (AP News, 2024). Studies indicate that foreign students face fewer internships and have lower job expectations in China (Jia, 2024). More needs to be done if China wants to be more inclusive and acts like other countries that host large numbers of international students such as the United States and Canada, among others.

Our results also suggest the importance of learning Chinese for American students before coming to study in China. In fact, China's own experience of sending students abroad is consistent with this story. Not long ago, the decades of the 1980s and 1990s were the time of "going abroad fever", when millions of young people were trying to find ways to study abroad in North America, Europe, Australia and Japan. Because foreign language ability is a necessary condition for going abroad, intensive foreign language training programs and workshops are unique. Of course, one can find English corners (where people practice English skills) in many cities at the time. To attract American students to study in China, China needs to build a similar language learning infrastructure, formal or informal. At a time when the U.S. and China are in a global rivalry and when political parties on both sides are united to confront China, it is not the best of times to offer Chinese lessons. Confucius Institutes used to offer many Chinese language programs, but not anymore as most Confucius Institutes in the U.S. are closed by now. Currently, Mandarin's popularity is sagging and has hit a plateau among American youth. Educators attribute this national trend of fading interest in Mandarin to a weaker Chinese economy and strained U.S.-China relations (SCMP, 2024).

But it is not the end of the world as far as Chinese language learning is concerned.

We suggest there are at least two possibilities that may be effective. The first is to offer more online language learning resources. Short-term Chinese language lessons can be offered fully online to allow easy access to everyone. This also has the advantage of catering to both people who are in school and full-time workers who can access the learning materials after work. A different approach could be using social media platform where teachers can offer live-streamed language lessons in Chinese, just like many similar live stream language lessons in English and other languages for Chinese citizens today. A site with large numbers of registered users can be compensated by platform companies. A second way is to adopt a more community-based approach. In many large or medium-sized cities in the United States, there are always Chinese immigrant-sponsored organizations. Typically, these immigrant organizations offer supplementary education programs for the second generation Chinese but also offer Chinese lessons. Many of today's adult second-generation Chinese had the experience of learning the Chinese language at these organizations. These immigrant organizations can certainly expand their service to members of the whole community and offer lessons to learners, young or old. This will go a long way to promote Chinese language learning in a friendly and non-intimidating environment.

Additionally, the nature of U.S. media coverage influences public attitudes toward China, subsequently impacting the public's enthusiasm to learn Chinese, their motivation to understand Chinese culture, and their likelihood of studying in China. One study noted that the New York Times' coverage of China in one year accounted for 54% of the variance in the U.S. public's perception of China in the following year (Huang et al., 2021). When media reports hold biased or misinterpreted views of China, this directly influences the American public's attitudes toward China, potentially impacting their eagerness to learn Chinese. Consequently, learning Chinese may be perceived as an unworthy investment of time. Conversely, if the public holds a positive and open attitude toward China or possesses a more objective and comprehensive understanding of Chinese culture, then learning Chinese may be considered a valuable investment, as it would be believed that mastering Chinese

facilitates a deeper understanding of China and promotes cross-border cooperation.

Therefore, to promote international educational exchanges and enhance bilateral mutual trust, we need more fair-minded reporters and writers like Ian Johnson and Peter Hassler who, based on their own experiences, tell real stories of China. Chinese media can also undertake various efforts to improve the unfavorable U.S. media environment toward China. Firstly, they can reduce misunderstandings about China by establishing more international channels and launching multilingual programs. Secondly, international cooperation can be strengthened by collaborating with U.S. media to report on issues related to U.S.-China relations, providing viewers with more comprehensive and objective information. Additionally, Chinese media can promptly respond to biased reports on China in U.S. media, correct misreporting, and minimize the negative impact on China.

In conclusion, we argue that people-to-people interactions between the two most powerful countries of the world are an important step to promote mutual understanding. It is also important to realize that the experience of studying abroad (either in the U.S. or China) will be likely to promote career prospects for individuals, but also has the potential to minimize any misunderstanding between the two powerful countries, thereby avoiding direct confrontations that could lead to unbearable costs for people on both sides of the Pacific.

REFERENCES

[1] AKDAĞ, Z. (2023). The Effect of 9/11 on US–China Relations. Current Perspectives in Social Sciences, 27(2), 172-179.

[2] Amuedo-Dorantes C, Furtado D. Settling for academia? H-1B visas and the career choices of international students in the United States[J]. Journal of Human Resources, 2019, 54(2): 401-429.

[3] AP News. (2024). Far fewer young Americans now want to study in China. Both countries are trying to fix that. https://apnews.com/article/china-american-students-universities-f5f6e53cd5d3bc686590f2f961165281

[4] Belyavina, R. (2013). U.S. students in China: meeting the goals of the 100,000 Strong

initiative. Institute of International Education. https://www.iie.org/Research-and Institute of International Education. -Insights/Publications/US-Students-in-China.

[5] Bevis, T. B., & Lucas, C. J. (2007). *International students in American colleges and universities: A history*. New York, NY: Palgrave Macmillan.

[6] Borgonjon J. Jan Borgonjon: President, InterChina Consulting[J]. China Business Review, 2008, 35(6): 28-28.

[7] Chen Qiang,Wen Wen. International student education in China under the "Belt and Road" initiative:mission, challenges and countermeasures[J]. College Education Management,2018,12(03):28-33.DOI:10.13316/j.cnki.jhem.20180423.009.

[8] Chen Songlin, Cheng Jiafu. The Structure and Trend of International Students in China at the Beginning of the 21st Century [J]. Modern Education Management, 2012(08): 39-44. DOI: 10.16697/j.cnki.xdjygl.2012.08.020.

[9] China Daily. (2024). China still leading source of foreign students.https://www.chinadaily.com.cn/a/202403/16/WS65f4e78ba31082fc043bcf71.html

[10] Choudaha R. A third wave of international student mobility: global competitiveness and American higher education[J]. Research & Occasional Paper Series, The Center for Studies in Higher Education, UC Berkeley, CSHE, 2018, 8.

[11] Ding X. Exploring the experiences of international students in China[J]. Journal of Studies in international Education, 2016, 20(4): 319-338.

[12] Ding, S., & Saunders, R. A. (2006). Talking up China: An analysis of China's rising cultural power and global promotion of the Chinese language. *East Asia*, *23*(2), 3-33.

[13] Dixon, B. (2013). Education abroad in China: Literature review of study abroad program types, outcomes and benefits. *Frontiers: The interdisciplinary journal of study abroad*, *23*(1), 105-122.

[14] Drabanemerosa hebecarpa. Why did John come to China to study? --A narrative study of an American international student[J]. Education Academic Monthly,2016(02):74-81.DOI:10.16477/j.cnki.issn1674-2311.2016.02.011.

[15] Du H. American College Students Studying Abroad in China: Language, Identity, and Self-Presentation[J]. Foreign Language Annals, 2015, 48(2): 250-266.

[16] Esther Yoon-Ji Kang, "Asian Americans Feel The Bite of Prejudice During The COVID- 19 Pandemic," NPR, March 31. 2020, available at: https: / / www. npr. org /local /2020 /03 /31 /824397216 /asian-Americans-feel-the -bite-of-prejudice-during-the-covid19 -pandemic.

[17] Gao Jinping,Wang Jipeng. International Students:An Important Force in the External Communication of Chinese Culture--A Survey Based on the Cognition of International Students in Beijing on Chinese Culture[J]. External Communication,2017(09):50-52.

[18] Global Times. (2017). 400,000 students learn Chinese! Number of Chinese language learners in U.S. grows by 200,000 in two years. https://world.huanqiu.com/article/9CaKrnK55sO,2017-09-07

[19] Gong Y, Lai C, Gao X. The teaching and learning of Chinese as a second or foreign language: The current situation and future directions[J]. Frontiers of Education in China, 2020, 15(1): 1-13.

[20] Graham Allison. Translated by Chen Dingding and Fu Qiang. Doomed to War - Can China and the U.S. Avoid the Thucydides Trap [M]. Shanghai: Shanghai People's Publishing House, 2019.

[21] Guangming Daily. (2019). Xi Jinping meets with Harvard University President Bako. https://epaper.gmw.cn/gmrb/html/2019-03/21/nw.D110000gmrb_20190321_2-01.htm
[22] Guo Yugui. The Impact of Attracting More U.S. Students to Study in China on China's National Interest (I)[J]. World Education Information,2012,25(11):15-21.
[23] Hayes R L, Lin H R. Coming to America: Developing social support systems for international students[J]. Journal of Multicultural counseling and Development, 1994, 22(1): 7-16.
[24] Hegarty N. Where we are now-The presence and importance of international students to universities in the United States[J]. Journal of International Students, 2014, 4: 223-235.
[25] Huang Nianfeng. Survey and Countermeasures of the Learning Motivation of International Students in China [J]. Chinese Adult Education, 2008(09): 113-114.
[26] Huang, J. M., Cook, G. G., & Xie, Y. (2021). Large-scale quantitative evidence of media impact on public opinion toward China. Humanities & Social Sciences Communications, 8(1), Article 181. https://doi.org/10.1057/s41599-021-00846-2
[27] Jiani M. Why and how international students choose Mainland China as a higher education study abroad destination[J]. Higher Education, 2017, 74(4): 563-579.
[28] Leong P. Coming to America: assessing the patterns of acculturation, friendship, formation, and the academic experiences of international students at a US college[J], 2015.
[29] Liu Yang, Wang Hui, Kong Fansheng. Why Do International Students Study in China? An Empirical Study Based on Surveys from Beijing Universities [J]. Research in Higher Education, 2013, 34(05): 32-38+52.
[30] Liu, Zhi-Min, Zhu-Li & Cheng, Li-Hao. (2021). Exploration on the promotion path of study abroad education in China under the new development pattern of "double cycle". College Education Management (05), 10-22. doi:10.13316/j.cnki.jhem.20210824.002.
[31] Lv Yaozhong, Duan Xingzhen. Current Status and Quality Assurance Strategies of Educational Services for International Students in China [J]. World Education Information, 2016, 29(21): 62-66.
mobility: a global perspective. Higher Education, 66(1), 105-122.
[32] Monsell, M. (1981). Transcultural experience and expressive response.
[33] Ning, W. (2010). Global English (es) and Global Chinese (s): toward rewriting a new literary history in Chinese. *Journal of Contemporary China*, *19*(63), 159-174.
[34] Pan Xiaoqing. A qualitative study of cross-cultural interpersonal adaptation of American students in China[J]. Comparative Education Research,2014,36(08):74-81.DOI:10.20013/j.cnki.ice.2014.08.013.
[35] Peking University. (2024). Jia Qingguo: Proposal on increasing efforts to attract foreign students to study in China. https://www.igcu.pku.edu.cn/info/2061/6477.htm
[36] Qin, D. (2011). Rise of VAR modelling approach. Journal of Economic Surveys, 25(1), 156-174.
[37] Samuel Huntington. The Clash of Civilizations [M]. Beijing: Xinhua Publishing House, 2017.
[38] Sarkodie-Mensah, K. (1998). International students in the US: Trends, cultural adjustments, and solutions for a better experience. Journal of Education for Library and Information Science, 39(3), 214-222.
[39] SCMP. (2024). Mandarin’s popularity sags, hits plateau in US as enthusiasm wanes for

American youth. https://www.scmp.com/economy/global-economy/article/3273862/mandarins-popularity-sags-hits-plateau-us-enthusiasm-wanes-american-youth?campaign=3273862&module=perpetual_scroll_0&pgtype=article.

[40] Shanghai Daily. (2023). Documentary records how Americans learn Chinese. https://www.shine.cn/feature/entertainment/2302025763/

[41] Simon Rogers. what is Google Trends data - and what does it mean [EB/OL]. (2016-07-2) [2022-12-25]. https://medium.com/google-news-lab/what-is-google-trends-data-and-what-does-it-mean-b48f07342ee8.

[42] Song Haiyan. Othering of China's national image: The mediating mechanism of international students[J]. Journalism Enthusiasts,2021(08):27-30.DOI:10.16017/j.cnki.xwahz.2021.08.007.

[43] Song Huasheng, Liu Li. Why Do Foreign Students Study in China? An Empirical Study Based on the Gravity Model [J]. Research in Higher Education, 2014, 35(11): 31-38.

[44] Su Zhixin,Mike Spagna. American students in China:Study abroad experiences reshape lives[J]. Education Academic Monthly,2017(03):79-87.DOI:10.16477/j.cnki.issn1674-2311.2017.03.011.

[45] SUN Huili,LI Xiaoxia. A comparative study on the influencing factors of school choice between incoming academic and non-degree students in Jiangsu Province[J]. China Adult Education,2017(01):63-67.

[46] The New York Times. (2023). Can U.S.-China Student Exchanges Survive Geopolitics? https://www.nytimes.com/2023/11/28/world/asia/us-china-student-exchange-geopolitics.html

[47] Tian Ling. A Study on the Phenomenon of International Exchange in Chinese Higher Education: A Case Analysis of Peking University and Tsinghua University [M]. Beijing: Ethnic Publishing House, 2003.

[48] Tian M, Lowe J A. Intercultural Identity and Intercultural Experiences of American Students in China[J]. Journal of Studies in International Education, 2014, 18(3): 281-297.

[49] Tian Mei, Yang Ruiying. Internationalization of Higher Education and "Internationalized" Individuals: A Study of the Experiences of American Students in China[J]. Fudan Education Forum,2012,10(04):10-15.DOI:10.13397/j.cnki.fef.2012.04.005.

[50] Times Higher Education. (2023). U.S. Students All but Absent From China. https://www.insidehighered.com/news/global/study-abroad/2023/12/21/study-abroad-Americans-all-absent-china

[51] Times Higher Education. (2023). Study abroad: US students all but absent from China .https://www.timeshighereducation.com/news/study-abroad-us-students-all-absent-china

[52] Wang Huiyao,Miao Lv. China Study Abroad Development Report (2020-2021)[C]. Beijing: Social Science Literature Publishing House, 2021: 34.

[53] Wang Huiyao,Miao Lv. China Study Abroad Development Report (2022)[C]. Beijing: Social Science Literature Press, 2022:287.

[54] Wang Y, Li T, Noltemeyer A, et al. Cross-cultural adaptation of international college students in the United States[J]. Journal of international students, 2018, 8(2): 821-842.

[55] Wang Yujun. Exploration of Reading Aloud Teaching in Second Language Acquisition--Taking American Students Reading Aloud "The North Wind Follows the Sun" as an Example[J]. Language Construction,2013(05):14-15.DOI:10.16412/j.cnki.1001-8476.2013.05.045.

[56] Wei Hao, Yuan Ran, Lai Desheng. A Study on the Influencing Factors of Attracting

International Students to China Based on Empirical Analysis of Bilateral Data between China and 172 Countries [J]. Educational Research, 2018, 39(11): 76-90.
[57] Wei, H. (2013). An empirical study on the determinants of international student
[58] World Journal. (2024). Ambassador Burns in China: The U.S. and China will engage in peaceful competition. https://ep.worldjournal.com/NY/2024-06-07/A05
[59] Wu Wenying, Zhou Hongling, Dong Xiaomei. An Empirical Study on the Cross-Cultural Adaptation of International Students Based on a Survey of a University in Beijing [J]. Journal of Beijing University of Technology (Social Science Edition), 2012, 12(03): 75-80.
[60] Xinhua Net. (2018). Chinese language fever in U.S. drives demand for Chinese teachers. http://www.xinhuanet.com/world/2018-05/20/c_1122859701.htm. 2018-05-20.
[61] Xinhuanet. (2023). Chinese language education persists in U.S.: report. https://english.news.cn/northamerica/20231229/ecc963f9528249dead49f2f6aa31d3ac/c.html
[62] Yan K, Berliner D C. Chinese international students in the United States: Demographic trends, motivations, acculturation features and adjustment Asian Pacific Education Review, 2011, 12(2): 173-184. Asia Pacific Education Review, 2011, 12(2): 173-184.
[63] Yang J. American Students' Cultural Adjustment in China: Experiences and Coping Strategies[J]. Journal of International Students, 2020, 10(1): 106-123.
[64] Yang Li. Acquisition of American international students' Chinese thank-you speech acts in the target language environment[J]. World Chinese Language Teaching,2015,29(04):562-575.DOI:10.13724/j.cnki.ctiw.2015.04.015.
[65] Ye Jun. American Sinologists' Background of Staying in China and Its Significance in Academic History--A Review of The First American Students in Beijing[J]. International Sinology,2017(03):174-180.DOI:10.19326/j.cnki.2095-9257.2017.03.023.
[66] Zhang Linjun. Phonemic and acoustic information processing of Chinese tones in American students[J]. Chinese Language Teaching in the World,2011,25(02):268-275.DOI:10.13724/j.cnki.ctiw.2011.02.010.
[67] Zheng Xiangrong. The Significance and Advantages of Developing International Student Education in China [J]. Exploration of Higher Education, 2010(05): 103-106.

APPENDIX

This appendix provides additional technical details related to our estimation of VAR model.

Unit root test

First, to prevent spurious regression in model construction, it is necessary to conduct stationarity tests on the selected variables before modeling to ensure the series have a constant mean, variance, and autocovariance. This paper uses the Augmented Dickey-Fuller test (ADF test) to perform unit root tests on the variable series to determine their stationarity. If the test indicates the presence of a unit root, the series is non-

stationary; otherwise, the series is stationary. According to the test results, the ADF values for the three series (GUSR, CPL, CGR) are lower than the critical values, thus rejecting the null hypothesis of the existence of a unit root process. Therefore, all three series are stationary and the VAR model can be directly constructed.

TABLE 5. Unit root test results

variant	hysteresis order (math.)	ADF value	Threshold 1%	Threshold 5%	Threshold 10%	Test Conclusion
GUSR	3	-3.710***	-2.792	-1.978	-1.702	smoothly
CPL	3	-3.803***	-2.772	-1.974	-1.603	smoothly
CGR	3	-4.320**	-4.200	-3.175	-2.729	smoothly

Note: ***, **, * indicate that the ADF values passed the significance test at the 1%, 5%, and 10% levels, respectively; the lag order was determined according to the AIC, SC, and HQ criteria.

Selection of the optimal lag order

The selection of lag order should balance the consistency and validity of parameter estimation, that is, the dynamic characteristics of the model and the degrees of freedom should be considered at the same time. According to the five information criteria of LR, FPE, AIC, SC and HQ, the lag order 2 with the most "*" is selected as the maximum lag order of the model. The VAR model can be built after performing the smoothness test on the series and determining the lag order.

TABLE 6. Maximum lag order test statistics

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-114.721	NA	14737.43	18.111	18.241	18.084
1	-79.716	48.468*	286.657	14.110	14.632	14.003
2	-65.361	13.251	173.091*	13.286*	14.199*	13.099*

Note: * indicates significant at the 5% level.

Exogeneity test

This paper employs the Granger causality test to examine the exogeneity of the model, aiming to verify whether the lagged terms of the variables have predictive power for the dependent variable. In time series analysis, the Granger causality test is used to assess the statistical precedence of variables, meaning that the test results do

not imply a true causal relationship in reality. To confirm a substantial causal relationship, further theoretical and empirical validation is necessary. The test results (table omitted) show that, at the 1% significance level, the growth rate of the Chinese economy is a Granger cause of the growth rate of the number of American students studying in China, indicating that CGR helps predict GUSR. Additionally, the growth rate of the number of American students studying in China and the popularity of learning Chinese in the United States are Granger causes of China's economic growth rate. To determine whether these influences truly exist and to assess their magnitude, it is necessary to perform impulse response analysis and variance decomposition on the three variables, as well as further practical testing.

Model stability test

As depicted in the chart below, all characteristic root inverses fall within the unit circle, and their magnitudes are less than 1, indicating the stability of the model.

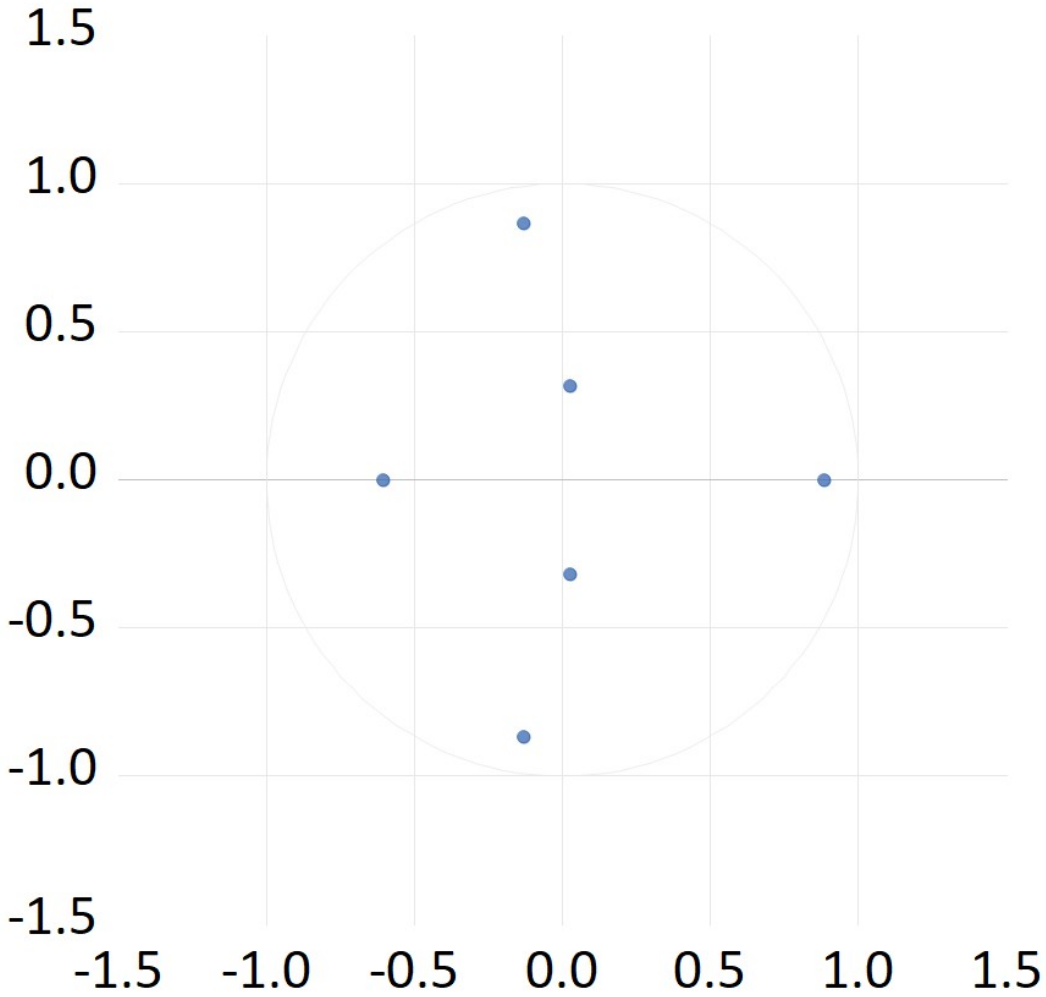

FIGURE 12. Plot of model stability test

TABLE 7. Model stability test table

Root	Modulus
0.884373	0.8843731234725814
-0.130924 - 0.866487i	0.8763220427233714
-0.130924 + 0.866487i	0.8763220427233714
-0.607710	0.6077103758121884
0.023992 - 0.318699i	0.3196009255002948
0.023992 + 0.318699i	0.3196009255002948