1

Why Study Abroad? Sorting of Chinese Students across British Universities

Abstract

This research contributes to the booming literature on the mobility of international students in higher education. Specifically, it analyzes university-level factors that affect the sorting of Chinese international students across British universities. To do so, we produced a unique dataset merging university-level data from the the 2014 UK Higher Education Statistics Agency and the Higher Expectations Survey, supplemented by qualitative evidence from six focus groups which we use for illustrative purposes. Our results, using nationally representative evidence for the first time, confirmed that university prestige is the most important driver of the sorting of Chinese students across British universities provide. Interestingly, cost of study and marketing strategies deployed by universities do not seem to drive the Chinese students' university choices. Overall, our findings underline the importance of diffuse institutional factors such as university rankings and their taken for granted status by students themselves.

Keywords

International student mobility; Chinese international students; UK higher education; sorting; university rankings.

It is not by chance that sociologists of education and immigration are increasingly interested in the international mobility of students in higher education. The global number of international students tripled from 1.3 million to 4.3 million between 1990 and 2011, even if the proportion they represent out of the total population in tertiary education remains stable at around 2% (British Council 2012; Freeman 2010). Among the different streams of empirical and theoretical interest covered by the international research agenda, the study of determinants of international student mobility has a prominent position. We contribute to this literature by studying the sorting of students from a single flow (Chinese) across universities in a single destination country (the UK).

Constituting the single largest and fastest-growing body of international students in today's world, 712,157 Chinese students studied at a tertiary level abroad in 2012 (UNESCO 2014). The proportion that international Chinese students represent out of the total enrolments of students in higher education in China is around 5% as of 2015 (China Ministry of Education 2015). As the main destination for Chinese students in Europe, the UK hosted a total of 93,419 Chinese students in 2014, a sharp increase from the 2002 figure of 36,026 (UK Higher Education Statistics Agency 2015). As presented in Figure 1, the increase has been driven mainly by students who pursue undergraduate and master's degrees, on which our study focuses.

In identifying the determinants of international mobility, a first line of research focuses on the cross-country comparisons to explore why some countries excel in attracting inbound international students, whereas others feature a high volume of outbound students (Kritz 2016; Wei 2013). Following the classic push-and-pull model in the immigration literature, this research mainly analyzes indicators such as gross domestic product (GDP) *per capita* and tertiary education enrollment rates in terms of the supply and demand of educational resources. Although it sheds light on the role of country-level factors in

determining the global flow of tertiary-level students, this literature does not provide much insight on specific factors shaping students' choices of university. Given that the growth of international education entails intense competition among HEIs, a second line of research assesses the effectiveness of distinct strategies adopted by certain HEIs to compete for students in the marketplace (e.g. Branco Oliveira and Soares 2016; Briggs 2006). Prioritizing marketing-based concerns, this research often offers an unpresentative view on a small number of universities or students, and rarely adopts a sociological approach.

In contrast, a key aim of our research is to analyze nationally representative evidence on how university-level factors may determine the flow of Chinese international students within the UK, by taking into consideration the broader sociological explanations. Existing literature offers several contending conjectures on the role assumed by university characteristics in configuring student mobility. The most common theoretical argument originates from human capital perspective, which underlines the expected return from education and frames out-migration to desirable universities as an option for individuals to enhance their labor market and career positioning (see Beine et al. 2014 for a comprehensive review). Other perspectives are less inclined to emphasize the economic incentives of international education and instead accentuate nonpecuniary motivations, such as seeking distinction and accumulating cultural currency that may be translatable to advantages to get ahead in life (Collins 2013; Findlay and King 2010; Findlay et al. 2012; Waters and Brooks 2012). Beyond its material and cultural gains, however, international education is increasingly becoming a taken-for-granted goal in itself (Hansen and Thøgersen 2015; Kipnis 2011). Recent research points to institutional factors such as world university rankings, various market devices, and education agents in shaping students' higher education expectations and decisions (Collins 2012; Sauder and Lancaster 2006; van Zanten and

Legavre 2014). In our analysis, we examine these alternative explanations of factors that channel the flow of Chinese international students.

Drawing on the 2014 data from the UK Higher Education Statistics Agency (HESA) and the 2014 Higher Expectations Survey (HES), our research provides the first systematic quantitative assessment of how Chinese students sort on universities' prestige, social and cultural life offerings, economic cost, marketing strategies, and the size of existing Chinese student body across 120 British universities. We further supplement and elaborate on the quantitative findings with qualitative evidence from the focus groups we have conducted with Chinese international students. The qualitative evidence is provided for illustrative purposes in order to provide a sense of the potential individual logics underlying our quantitative patterns.

Theoretical considerations and hypotheses

The international mobility of Chinese students have to be considered against the backdrop of the dramatic expansion of tertiary education enrollments China has experienced in the last two decades (Samir et al. 2010). After a decade-long disruption during the Cultural Revolution, the *gaokao* (National College Entrance Exam) was restored in 1977, as a mechanism of restructuring higher education opportunities away from political affiliation, and the 1978 economic reform and opening-up furthered the idea 'meritocracy' in education (Liu 2013). The number of HEIs mushroomed from 1054 to 2554 between 1995 and 2014 and the number of university students nearly tripled from 2.91 million to 7.21 million (China National Bureau of Statistics 2014). With the massification of tertiary education, a university degree no longer confers the same sense of symbolic and cultural distinction as it did in the 1980s (Bai 2006; Mok 2016; Waters 2008). It does not necessarily promise a secure job in the Chinese labor market, either; more than 30% (2.3 million) of university graduates in 2014

were unable to find a job in 6 months' time after graduation (Sharma 2014). This has not however necessarily diminished the demand for higher education among the Chinese youth. On the contrary, it has exacerbated domestic competition for degrees from prestigious top universities that exercise highly selective admission criteria and generates anxiety and ambition among young Chinese people (Hansen and Thøgersen 2015; Yan 2013).

From a human capital perspective, studying abroad emerges as an instrumental means for increasing the likelihood of sending positive and distinctive signals to employers in an increasingly globalized setting (Fong 2011). Accordingly, Chinese students would regard international education as an opportunity to access global academic standards and to increase economic return from their investment in tertiary education. On the contrary, with the increased globalization of higher education and the taken-for-granted status of world rankings in the sector and beyond,¹ 'world-class' education becomes 'less as a means to an end and more as a [symbolic] object of desire in itself' (Hansen and Thøgersen 2015, 6, referring to Kipnis 2011). Young Chinese people and their families are highly aware of such globally constructed university prestige and are likely to pay attention to them in their decision making. We would therefore expect university prestige to be an important attraction for Chinese students in their university choice.

H1 (University prestige): University prestige is positively associated with the number of Chinese international students in British universities.

¹Global university rankings originated externally to the higher education sector. Nevertheless, today they are a highly entrenched part of universities' competitive strategies, and as much as they are contested, they are the main source of public information about higher education. Shanghai Rankings of World Universities, for example, has been issued since 2003 with the Chinese government backing and has been widely observed along with other Western originated rankings.

Largely understated in previous research but increasingly important is the role played by the student body itself in diffusing information about their host universities. Researchers such as Ma and Cartier (2003) identified the existence of a sizable coethnic network as an attraction for new Chinese migrants in choosing their migration destinations. We make a different argument. Because the legitimacy of symbolic capital is largely dependent on a collective of social actors who are responsible for the validation and amplification of the symbolic currency (Bourdieu 1991), there is good reason to believe that the Chinese student body within each university may serve to raise the profile and bolster the prestige of the British universities they attend. This may be particularly relevant in light of the rapid increase in the number of university-specific alumni associations for overseas returnees in China (a long tradition for U.S. colleges) and the establishment of Chinese student associations on campus in the UK (Zweig 2006). Therefore, we expect the size of the universities' Chinese student body to moderate the strength of university prestige as an appeal to Chinese international students.

H2 (Size of Chinese student body and diffusion of prestige): University prestige has a stronger positive impact on the enrollment of Chinese international students when the universities host more rather than less Chinese international students.

Cultural capital perspectives, like human capital, also emphasize the instrumental benefits of going abroad, but from this perspective the cultural distinctiveness and social networks one builds matter most (Collins 2013; Waters and Brooks 2012), not only for labour market but also for other life-course outcomes such as mating. With the 'opening up' of China starting from 1978 and the end of the Cold War in the early 1990s, the intensified trade, technology, and cultural exchanges have valorized the West as being more 'developed' on the gradient of societal evolvement and hence the desirable destination for bolstering cultural currency (Goodman 2004). Beyond the status and material benefits it accrues, however, international higher education is also associated with ideas about self growth and gaining new experiences and outlooks (Marginson 2014; Pyvis and Chapman 2007; Tran 2015). We argue further that the increasingly transnationalized imaginaries of individual tastes, values, and life course strategies—transmitted through consumption markets and media but more importantly by scientific theories and ideologies of education—create expectations of international mobility and social and cultural experiences beyond the local (Frank and Meyer 2002; Nakano 2015; Soysal 2015). Accordingly, we expect that the availability of cultural and social offerings on campus and in the surroundings is important in Chinese students' pursuit of international education and their university choice in particular.

H3 (Social and cultural life): Universities' social and cultural offerings are positively associated with the number of Chinese international students.

China's rapid economic growth since the opening up has helped to enable the affordability of international education, particularly for the emerging urban middle-class. Between 2000 and 2013, China's GDP per capita underwent a seven-fold increase from \$949 to \$6807 (World Bank 2014). Not only do Chinese families invest heavily in children's education in general (Cai et al. 2010), but also the coming of age of the singleton generation—product of the one-child policy—means that extended families such as grandparents and relatives pool their resources to invest in the only child in the family (Fong 2002). However, the costs associated with studying in British universities above £20,000 per annum are high even for middle-class family incomes (ca. £2,500 to £10,000 per annum) in China (Farrel et al. 2006), and even when supplemented by the extended family, which suggests that Chinese students and their families may be sensitive to tuition fees and the cost of living associated with international education.

H4 (Cost): The cost of degrees and living expenses are negatively associated with the number of Chinese international students in British universities.

A further factor we consider relates to the marketing strategies that the HEIs progressively deploy to maintain their appeal to students and their families in the face of a globally expanding higher education sector and intensifying competition. Marketing strategies take multiple forms, from open days to attending educational fairs, from glossy prospectuses and websites to personal contacts with prospective students (Branco Oliveira and Soares 2016). Universities profusely invest in such activities to brand an identity and convey their attractiveness to diverse student motivations while at the same time constructing such motivations (e.g. access to excellent learning environment, international career opportunities, multicultural exchange, unique experiences, and exciting social life and lifestyles). Therefore, as universities utilize marketing strategies as part of the broader higher education internationalization goals to attract international students, we would expect the following hypothesis to hold.

H5 (Marketing strategies): British universities with extensive marketing strategies attract more Chinese international students than universities with scarce such strategies.

Data and method

In this research, we draw on quantitative data from two sources. First, we use the 2014 HESA data to construct our dependent variable—the total numbers of Chinese international students (undergraduate and master's) in each university in Britain.² We also extract the total number of students in each university from the same data to control for the size of university. Our

² Because we use administrative data aggregated at the university level, our unit of analysis is university rather than individual. As a limitation of the nature of aggregate data, we are not able to take account of potential heterogeneity within the Chinese student body.

second source of data is the 2014 HES, which is an annual survey conducted by Youth Sight with a representative sample of about 11,000 students across British universities on why students selected their current university and how they evaluate the academic and social context of their institution using a series of binary 'agree' and 'disagree' measures. Students participated in the survey on a voluntary basis. While international students were under-representated in the HES (accounting for 5% of the sample), weighting was applied to correct for sampling biases when Youth Sight produced the university-level indexes from the survey data (for further information on the HES, see http://www.youthsight.com/expertise/higher-education-research/higher-expections/). Our final analytical sample is restricted to 120 British universities providing valid information from both sources of our data.³

We use the HES dataset to build composite indicators of the students' views on the universities in which they are enrolled. As presented in Table 1, we draw on a wide range of measures to derive our predictors, namely, the indexes for prestige, social and cultural life offerings, cost, and marketing strategies at the university level. Exploratory factor analysis with Varimax rotation and Cronbach's α test are conducted to ensure a reasonable level of internal consistency between the measures for each index (Eigen-value >1 for all four indexes), and Bartlett factor scores are calculated for each index. A higher factor score means that a given university is considered by students to be more prestigious, offers richer social and cultural life, incurs a higher cost, and is highly rated by students for its marketing strategies than universities with a lower factor score for each of the four indexes.

To test Hypotheses 1 and 3–5 regarding the main effects of university prestige, cultural and social life, cost, and marketing strategies, we fit ordinary least squares (OLS) regression models predicting the number of Chinese international students in each university.

³The 120 universities are from England, Wales and Scotland. Universities from Northern Ireland are not included as they were not covered by the HES.

Although it is not a major objective of this research to systematically assess the difference between undergraduate and master's students, we are aware that the motivations for and pathways leading into undergraduate and postgraduate studies may differ (Briggs 2006). To acknowledge and explore any potential differences, we then fit separate OLS regression models for undergraduates and master's to explore how, if at all, distinct university-level factors may affect the sorting of undergraduate and graduate students differently. Robust standard errors are estimated for the OLS regressions. To disentangle the relative importance of distinct factors in channeling the flow of Chinese international students in the UK, we further calculate the partial r^2 to reflect the net contribution of each factor to the OLS regression models. Tests are conducted to ensure that there is no multicollinearity present between the predictors, and the variance-inflation-factor scores are well below the threshold of 10.

To test Hypothesis 2, we fit an unconditional quantile regression (UQR) predicting the total number of Chinese students in a university to examine whether and how the association between the predictors and the dependent variable varies by the distribution of the dependent variable. UQR can be estimated in Stata using the 'rifreg' package developed by Firpo et al. (2009)—a simple OLS regression on a dependent variable that is transformed using the recentered influence function (RIF) as follows:

$$\operatorname{RIF}(Y;q,F_Y) = q + (\tau - 1\{Y \leq q\tau\})\tau Y\tau / fY(q\tau)$$

where τ is a given quantile, $q\tau$ is the value of the outcome variable at the τ th quantile, $fY(q\tau)$ is the density of *Y* at $q\tau$, F_Y is the cumulative distribution function of *Y*, and 1 is the indicator function. We calculated robust standard errors based on 200 bootstrap simulations to account for the uncertainty involved in estimating the RIF. For more technical information on UQR, see Firpo et al. (2009).

This modelling strategy imposes limitations for the identification of causality. Given the existing data constraints, our analysis at best identifies correlations between our dependent and independent variables. So as to illustrate the potential mechanism underlying our quantitative findings, we complemented the quantitative evidence with qualitative data from six focus groups with 30 Chinese international students conducted in 2015 to 2016 in a research-intensive comprehensive university in Britain. While our qualitative sample selected from only one university may introduce potential biases, we do not claim to have achieved a representative sample, but rather one that helps illustrate some possible ways in which individuals may make sense of our key quantitative factors. However, within the university, we tried to maximize the heterogeneity of our participants in terms of level of study, subject, gender and hometown in China in order to provide a fuller picture. The participants were selected using open recruitment and snowballing but also considering the need to represent variation in these dimensions. 30 students were finally invited from a diverse array of subjects, of whom 19 were female and 11 were male and 14 were undergraduates and 16 were studying for a master's degree. Conducted in Chinese, the focus groups were audiorecorded, transcribed, and translated into English. The students were specifically invited to discuss the most important factors in their university choice and why, with a focus on the type of factors whose effect we modelled in the regression analyses. Accordingly, the students' discussions were analyzed in conjunction with the major variables examined in this research to elaborate on our quantitative findings. In so doing, the focus group transcripts were coded based on the theoretical dimensions and preliminary findings arising from our quantitative analyses; and excerpts from each code were selected to illustrate the common and frequently cited ideas that emerged in relation to the arguments formulated in our hypotheses.

Results

Chinese international students spread unevenly across the 120 universities examined in this research. On average, each university hosted around 564 Chinese students in 2014, with a range between 0 and 2,505 and a standard deviation of 559. Table 2 presents the results for the OLS regression models predicting the total number of Chinese international students as well as the total number of undergraduates and master's.

Hypothesis 1 regarding the importance of university prestige in channeling the flow of Chinese international students is strongly supported by the results. The findings indicate a significant positive association between university prestige and the total number of Chinese international students in university (B=232.79, p<.001), and university prestige explains 16.81% of the variance in the sorting of Chinese students across British universities. Master's students seem to be more sensitive to university prestige than their undergraduate counterparts, as university prestige explains 23.5% of the variance in the sorting of the former as opposed to 3.3% for the latter. Specifically, the results show that university prestige is more closely associated with the sorting of master's students (B=166.56, p<.001) than undergraduates (B=51.27, p<.01). Furthermore, we calculated the predictive margin of the total number of Chinese students by 0.1 increments in the distribution of university prestige based on an OLS regression model that further includes the quadric (squared) term of university prestige to tease out any nonlinear influence of university prestige on the sorting of Chinese international students. As presented in Figure 2, the results show that the positive association between university prestige and the total number of Chinese international students does not seem to hold for the highly prestigious universities. This may in part reflect the fact that highly prestigious institutions are extremely selective and provide only limited opportunities for Chinese students despite the strong appeal of their reputation.

The crucial role played by university prestige in attracting Chinese international students is vividly illustrated and further nuanced by the findings from our focus groups. The students were well aware of the various rankings available and largely took them for granted. They made references to the *Times Higher Education*, *The Guardian*, QS, and Shanghai ranking in offering well-defined ideas of which university is 'better' than another and hence a desirable place to study. In the absence of a clearly defined ranking, students turned to other indicators of prestige, such as celebrity alumni and Nobel laureates. This is illustrated by the following discussion in one of our focus groups:

1A: Isn't there an academic ranking [of university] to refer to? (male, undergraduate in economics)

1B: [spoke as 1A did] There's a ranking of universities based on their research and academic reputation. (female, undergraduate in management)

1C: Yes, the rankings of specific subjects are important, too. (male, undergraduate in engineering)

Moderator: But how did you choose between universities that rank similarly on the league tables? For example, between University A and B [anonymized here]?

1D: Well, there is an obvious difference between University A and B, that is,University A have a Nobel Prize Laureate but University B doesn't ... (male, master's in finances)

[all laughed in agreement]

Beyond taking it for granted, the students also made assumptions about the instrumental value of university ranking and prestige, even when the assumptions were based on rather vague information or even when the very exercise of ranking itself was questioned. This is exemplified by the following exchange in another focus group:

2A: I look out [in world rankings] for which universities are ranked higher overall. Because universities with higher overall rankings must be more famous in China, I have to think ahead about my employment prospects when I go back to China. (male, master's in business)

2B: ... As I planned to study for a master's degree [in the UK], I consulted a previous student from my undergraduate university [in China] who had studied in the UK. He said University B is best for the subject I wanted to study, it's highly ranked in the UK, top 5 maybe or even number 1, I can't remember the exact number ... (female, master's in humanities)

2C: It is not that I believe in the rankings. They are produced by the media and commercial institutions anyway. But when you look for a job, your employers judge you against whichever ranking they can get hold of. Then you have but to consider ranking seriously when choosing universities. (male, master's in accounting)

As noted by participant 2B above, interactions with people who had previously studied and who are currently studying in Britain emerged in all six focus groups to be a key source of information from which the students learned about the importance of university prestige. Indeed, our second hypothesis, regarding the role assumed by the existing body of Chinese international students in 'diffusing' and 'amplifying' the efficacy of prestige of given universities, is confirmed by the results from the UQR model. As depicted in Figure 3, the association between university prestige and the number of Chinese students in the university is only statistically significant in universities from the top, but not bottom, quantiles of the number of Chinese students. Therefore, the results show that a large stock of Chinese students seems to interact with and thus bolster the attraction of university prestige to Chinese international students. Hypothesis 3 is partly supported by our findings. There is a positive association between social and cultural life offered by universities and the number of Chinese international students and master's students in particular. We found further qualitative evidence in support of this hypothesis. Whereas some students specifically expressed their aspiration to experience 'a different life,' others referred to a more diffuse desire linking to the wider world, as exemplified in the following conversation:

3A: I made my choice so I can broaden my horizon and experience a different life.
[Before coming to the UK,] I had friends who were in the States. They visited different places and made friends with people from different countries. [...] I was very curious to experience all that myself. (female, undergraduate in social sciences)
3B: The world is so big, and I just want to see it⁴ ... (female, undergraduate in social sciences)

3C: [Repeated] Yes, the world is so big and I just want to see it! (male, master's in computer science)

[Others in the focus group laughed in unison]

Our results do not support Hypotheses 4 and 5. We find no significant association between the cost related to specific universities and the number of Chinese students in those universities. The cost factor explains only 2% of the variance in the sorting of Chinese students across British universities and as little as 0.47% and 1.85% of the variance for undergraduates and master's, respectively. Surprisingly, universities' marketing strategies do not seem to influence Chinese students' university choices, either. Indeed, if anything, the results show a slight (nonsignificant) negative association between marketing strategies at

⁴*Shijie na me da, wo xiang qu kankan* is a saying that has recently become widely prevalent on the internet in China in expressing aspirations regarding going abroad.

university level and the number of Chinese students in a university. Not surprisingly, the size of universities as reflected by the total number of students positively predicts the universities' stock of Chinese international students.

Conclusions and discussion

We explored the university-level correlates of the stock of Chinese international students across 120 British universities. Examining factors that may affect the sorting of Chinese students at university level provides crucial insights into the preferences of Chinese international students when choosing universities abroad. In more general terms, our findings also contribute to ongoing debates on the broader motivations for international education mobility.

A bulk of existing literature suggests that the outbound mobility of international students from China is stimulated by the increasing levels of domestic competition to access prestigious institutions and the labour market (e.g. Findlay et al. 2012). According to the classic theory of human capital, we may expect Chinese students to be driven toward the more prestigious HEIs by instrumental considerations. Our finding that the more reputed institutions attract larger numbers of Chinese students seems to support this view of international education. However, our qualitative evidence nuances this finding as Chinese students appear to value attending a 'prestigious' institution as an end in itself rather than a mere means to an end. This invites us to consider the global transformations of higher education sector that increasingly normalize excellence evaluation practices and expectations of 'world-class' education (Ramirez 2013). It is vividly evident from the students' narratives that the various university rankings available are largely taken for granted and they define for students the meaning of 'good' university.

Whereas university prestige has been often examined as an independent factor in affecting students' university choice (e.g. Pyvis and Chapman 2007; Wei 2013), it can be argued that university prestige, as a form of symbolic framework and resource, does not operate on its own but facilitated by interactions between social actors in the perpetuation and validation of its legitimacy (cf. Bourdieu 1991). This has led us to examine the role played by the size of Chinese student body itself in diffusing the prestige of universities, yielding the finding that the impact of university prestige is 'amplified' by a large stock of existing Chinese students in amassing Chinese international students. This intersection between a university's stock of Chinese students and its prestige is particularly revealing against the backdrop of mushrooming university-based overseas returnee and alumni associations in China.

Our findings also suggest a purely instrumental perspective (e.g. labour market returns) is insufficient in providing a thorough understanding of international student mobility. As confirmed through the results for our third hypothesis, Chinese students are also motivated by non-career concerns in their university choice in Britain, which is evident from the role played by a university's social and cultural offerings (beyond immediate utilitarian return) in attracting Chinese students and graduates in particular. Therefore, the findings may indicate that international education is not only an investment strategy where further return is expected but also for many it is a way of self-realization and a 'lived' cultural experience in itself, in line with the increasingly dominant imaginaries of active and mobile individual. Therefore, we encourage future research to go beyond the conceptualization that Chinese students opt for international education to veer away from the fierce competition in *gaokao* or as a compensation strategy when they fail to access prestigious universities in China (Bodycott 2009; Brooks and Waters 2009).

Whereas the cost of study has been discussed extensively in previous research on the choice between international and domestic education in China (Xiang and Wei 2009), we did not find a significant association between costs and Chinese students' university choice in Britain. Our results however do not necessarily suggest that the cost of education is irrelevant in understanding decisions about international migration for education. Rather as we focus on Chinese students who are already studying in the UK, our findings relate particularly to the role played by cost in students' choice over specific universities in the UK rather than whether to study abroad or not, or in which country to study. In this context, it is worth noting that UK-based Chinese international students represent a highly selected niche from China's new middle class, which is relatively homogenous in socioeconomic terms.

Despite universities' heavy investment in marketing campaigns, our analysis revealed that such strategies might be counterproductive in attracting Chinese international students. In light of the role of diffuse institutional factors such as university rankings in attracting students, the lack of effect of marketing strategies may in part be explained by the fact that such strategies are mainly utilized by mid-range, but not high-prestige or low-status, universities to attract students. Whereas we focus on marketing strategies in more general terms, future works should focus on marketing activities specifically targeting international students, such as the role of educational agents in countries of origin working in collaboration with universities in destination countries, as well as international educational fairs (Collins 2012).

Finally, due to the nature of the data we utilized, our quantitative analysis was conducted at the university level. While we drew on qualitative evidence to illustrate potential individual-level logics underlying the observed quantitative patterns, the focus groups were conducted on a small scale with a convenience sample. The limitations of this research challenge researchers to collect representative data at the individual level to enable a systematic analysis of individual preferences and motivations for the choice of international HEIs. Building on this baseline, further works should also be conducted to explore the temporal dynamics underlying the changing outflow of Chinese international students. This is pertinent as the flow of international students at a global scale is already a structural reality and will very likely be so in the coming decades. It is thus essential to improve our sociological understanding of its dynamics and consequences.

References

- Bai, L. 2006. "Graduate Unemployment: Dilemmas and Challenges in China's Move to MassHigher Education." *The China Quarterly* 185: 128–144.
- Beine M., R. Noel and L. Ragot. 2014. "The Determinants of International Mobility of Students." *Economics of Education Review* 41: 40–54.
- Bodycott, P. 2009. "Choosing a Higher Education Study Abroad Destination: What Mainland Chinese Parents and Students Rate as Important." *Journal of Research in International Education* 8(3): 349–373.
- Briggs, S. 2006. "An Exploratory Study of the Factors Influencing Undergraduate Student Choice: The Case of Higher Education in Scotland." *Studies in Higher Education* 31(6): 705–722.
- British Council. 2012. "The Shape of Things to Come: Higher Education Global Trends and Emerging Opportunities to 2020." *Going Global Report Series* 2012. Available at <u>https://www.britishcouncil.org/education/ihe/knowledge-centre/global-</u> landscape/report-shape-of-things-to-come-1.
- Brooks, R. and J. Waters. 2009. "A Second Chance at Success." Sociology 43(6): 1085–1102.
- Bourdieu, P. 1991. *Language and Symbolic Power*. Cambridge, MA: Harvard University Press.
- Branco Oliveira, D. and A. M. Soares. 2016. "Studying Abroad: Developing a Model for the Decision Process of International Students." *Journal of Higher Education Policy and Management* 38(2): 126-139. DOI: 10.1080/1360080X.2016.1150234
- Cai, H., Y. Chen, and L. Zhou. 2010. "Income and Consumption Inequality in Urban China: 1992–2003." *Economic Development and Cultural Change* 58(3): 385–413. http://doi.org/10.1086/650423.

 China Ministry of Education. 2015. "An Overview of Education in China: State of Development of Educational Enterprises in 2015." Availabe at http://www.moe.edu.cn/jyb_sjzl/s5990/201612/t20161219_292432.html (original in Chinese).

- China National Bureau of Statistics. 2014. National Data—Education. Available at: http://data.stats.gov.cn/easyquery.htm?cn=C01.
- Collins, F. L. 2012. "Organizing Student Mobility: Education Agents and Student Migration to New Zealand." *Pacific Affairs* 85(1): 135–158.
- Collins, F. L. 2013. "Regional Pathways: Transnational Imaginaries, Infrastructures and Implications of Student Mobility within Asia." *Asian and Pacific Migration Journal* 22(4): 475–500.
- Farrell, D., U. A. Gersch, and E. Stephenson. 2006. "The Value of China's Emerging Middle Class." McKinsey Quarterly, 2(I), 60.
- Findlay, A. M. and R. King. 2010. *Motivations and Experiences of UK Students Studying Abroad*. London: BIS Research Paper No. 8.
- Findlay, A. M., R. King, F. M. Smith, A. Geddes, and R. Skeldon. 2012. "World Class? An Investigation of Globalization, Difference and International Student Mobility."
 Transactions of the Institute of British Geographers 3(1): 118–131.
- Firpo, S., N. M. Fortin, and T. Lemieux. 2009. "Unconditional Quantile Regressions." *Econometrica* 77(3): 953–973.
- Fong, V. L. 2002. "China's One-child Policy and the Empowerment of Urban Daughters." *American Anthropologist* 104(4): 1098–1109.
- Fong, V. L. 2011. Paradise Redefined: Transnational Chinese Students and the Quest for Flexible Citizenship in the Developed World. Stanford, CA: Stanford University Press.

- Frank, D. J. and J. W. Meyer. 2002. "The Profusion of Individual Roles and Identities in the Postwar Period." *Sociological Theory* 20(1): 86–105.
- Freeman, B. R. 2010. "What Does Global Expansion of Higher Education Mean for the United States?" In *Amercian Universities in a Global Market*, edited by C. T. Clotfelter, 373–404. IL: University of Chicago Press.
- Goodman, D. S. G. 2004. "The Campaign to 'Open up the West': National, Provincial-level, and Local Perspectives." *The China Quarterly* 178: 317–334.
- Hansen, A. S. and S. Thøgersen. 2015. "The Anthropology of Chinese Transnational Educational Migration." *Journal of Current Chinese Affairs* 44(3): 3–14.
- Kipnis, A. 2011. Governing Educational Desire: Culture, Politics, and Schooling in China.Chicago: University of Chicago Press.
- Kritz, M. M. 2016. "Why Do Countries Differ in their Rates of Outbound Student Mobility?" Journal of Studies in International Education 20(2): 99–117.
- Lagrée, J. C. 2013. "Coping with Internationalization of Higher Education in China." In *China's Internal and International Migration*, edited by L. Peilin and L. Roulleau-Berger, 174–186. Abingdon, Oxon: Routledge.
- Li, Z. and J. Lowe. 2016. "Mobile Student to Mobile Worker: The Role of Universities in the 'War for Talent."" *British Journal of Sociology of Education* 37(1): 11-29. DOI: 10.1080/01425692.2015.1095636
- Liu, Ye. 2013. "Meritocracy and the Gaokao: A Survey Study of Higher Education Selection and Socio-economic Participation in East China." *British Journal of Sociology of Education* 34 (5-6): 868-887, DOI: 10.1080/01425692.2013.816237
- Ma, L. J. C. and C. L. Cartier. 2003. *The Chinese Diaspora: Space, Place, Mobility, and Identity*. Oxford: Rowman & Littlefield.

- Marginson, S. 2014. "Student Self-formation in International Education." *Journal of Studies in International Education* 18 (1): 6–22.
- Mok, K. H. 2016. "Massification of Higher Education, Graduate Employment and Social Mobility in the Greater China Region." *British Journal of Sociology of Education* 37(1): 51-71.
- Nakano, L. Y. 2015. "Single Women and Cosmopolitan Re-imaginings of Gendered Citizenship in Shanghai, Hong Kong, and Tokyo." In *Transnational Trajectories in East Asia: Nation, Citizenship, and Region*, edited by Y. Nuhoğlu Soysal, 157–178. New York and London: Routledge.
- Pyvis, D. and A. Chapman. 2007. "Why University Students Choose an International Education: A Case Study in Malaysia." *International Journal of Educational Development* 27(2): 235–246.
- Ramirez, F.O. 2013. "World Society and University as a Formal Organization." *Sisyphus-Journal of Education* 1(1): 124-153.
- Samir K. C., B. Barakat, A. Goujon, V. Skirbekk, W. Sanderson, and W. Lutz. 2010.
 "Projection of Populations by Level of Educational Attainment, Age, and Sex for 120 countries for 2005-2050." *Demographic Research* 22(15): 383-472.
- Sauder, M. and R. Lancaster. 2006. "Do Rankings Matter? The Effect of U.S. News & World Report Rankings on the Admissions Process of Law Schools." *Law and Society Review* 40(1): 105–134.
- Sharma, Y. 2014. "What Do You Do with Millions of Extra Graduates." BBC, July 1. Available at: http://www.bbc.co.uk/news/business-28062071.
- Soysal Nuhoğlu Y. (Ed.). 2015. "Mapping the Terrain of Transnationalization." In *Transnational Trajectories in East Asia: Nation, Citizenship, and Region*, edited by Y. Nuhoğlu Soysal, 1–16. New York and London: Routledge.

- Tran, L.T. 2015. "Mobility as 'Becoming': A Bourdieuian Analysis of the Factors Shaping International Student Mobility." *British Journal of Sociology of Education*, 37(8): 1268-1289.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). 2014. *Global Flow of Tertiary Level Students*. Available at:

www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx.

- van Zanten, A. and A. Legavre. 2014. "Engineering Access to Higher Education through Higher Education Fairs." In *The Roles of Higher Education and Research in the Fabric of Societies*, 183-203 edited by G. Goastellec and F. Picard. Leuven: Sense Publishers.
- Waters, J. 2008. *Education, Migration, and Cultural Capital in the Chinese Diaspora*. New York: Cambria Press.
- Waters, J. and R. Brooks. 2012. "Transnational Spaces, International Students: Emergent Perspectives on Educational Mobilities. In *Changing Spaces of Education: New Perspectives on the Nature of Learning*, 21-38, edited by R. Brooks, A. Fuller, and J. Waters. Abingdon, Oxon: Routledge.
- Wei, H. 2013. "An Empirical Study on the Determinants of International Student Mobility: A Global Perspective." *Higher Education* 66(1): 105–122.
- World Bank (2014). *World Bank—World Development Indicators*. Available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?page=2.
- Xiang, B. and S. Wei. 2009. "International Student Migration and Social Stratification in China." *International Journal of Educational Development* 29(5): 513–522.
- Yan, Y. 2013. "The Drive for Success and the Ethics of the Striving Individual." In Ordinary Ethics in China, edited by C. Stafford. London: Bloomsbury.

Zweig, D. 2006. "Competing for Talent: China's Strategies to Reverse the Brain Drain." *International Labor Review* 145 (1–2): 65–90.

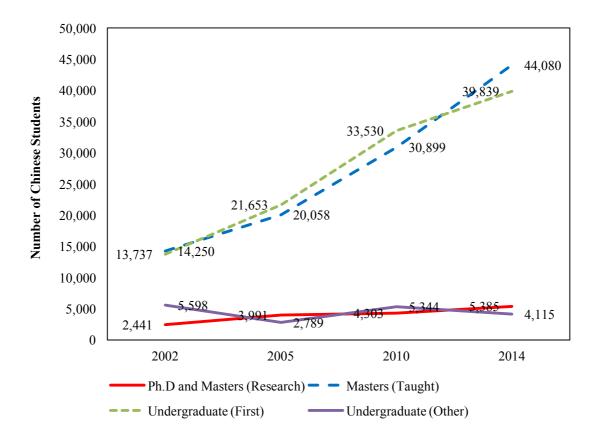
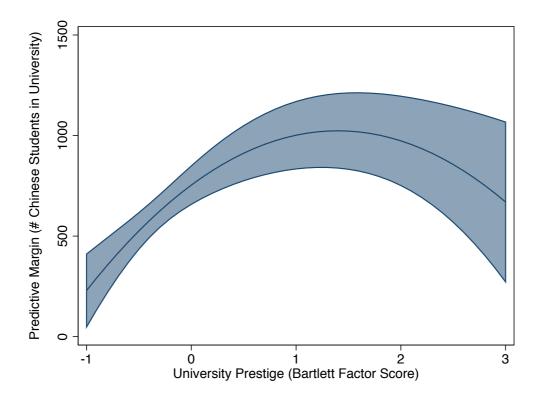


Figure 1. Increasing Number of Chinese International Students in Britain 2002–2014, by Level of Study.

Note: Ph.D. and Master's (research)=graduate degree by research; Master's (Taught)=graduate taught degree; Undergraduate (First)=undergraduate first degree; Undergraduate (other)=other undergraduate degrees. Authors' own calculations.

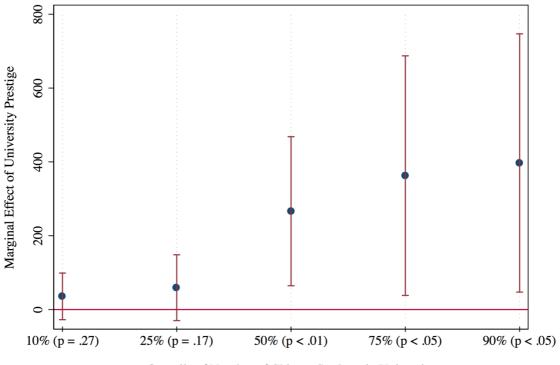
Source: UK HESA 2014.

Figure 2. Nonlinear relationship between university prestige and number of Chinese international students across British universities.



Note: Results based on OLS regression model including the quadric (squared) term of university prestige further to the OLS model reported in Table 2. Predictive margin calculated based on 0.1 increments in university prestige, with all other variables set at their sample mean levels. Band indicates 95% confidence interval.

Figure 3. Marginal effect of university prestige on the total number of Chinese international students by quantile of the number of Chinese international students in university.



Quantile of Number of Chinese Students in University

Note: Prediction based on UQR model for all students, controlling for all other variables including social and cultural life, costs, marketing, and total number of students in university. Error bars indicate 95% confidence interval.

Index	Measure	%	SD	Min	Max
		Agree			
University	Good reputation as a university overall.	.33	.16	.12	.91
prestige	Good reputation in terms of course, department, or lecturer.	.33	.19	.09	.96
(<i>α</i> =.81)	Good research reputation.	.29	.17	.08	.92
	The university is seen as a prestigious place to go.	.23	.21	.03	.96
	The university is strong in league tables.	.25	.21	.03	.96
Social and	The university would enable a good social life overall.	.28	.11	.03	.57
cultural life	The university has good transport links to other towns, cities, and places of interest.	.40	.15	.07	.69
(<i>α</i> =.72)	The university is situated in an exciting city/town.	.35	.16	.05	.70
	There is fun nightlife nearby the university.	.31	.12	.05	.70
Costs	The university incurs reasonable costs overall.	.17	.06	.04	.35
(α=.75)	The university incurs a reasonable cost of living.	.16	.08	.02	.39
	The university has good bursaries and scholarships.	.23	.06	.09	.51
	The university incurs lower tuition fees compared to alternatives.	.15	.10	.01	.53
Marketing	Attended an open day or visited the university.	.49	.09	.25	.73
(<i>α</i> =.83)	Contact prior to acceptance made the university attractive.	.34	.06	.25	.63
	The university provides a useful and appealing prospectus.	.33	.06	.18	.52
	The university provides a useful and appealing website.	.31	.06	.15	.52
	The university showed interest in the applicant during the application.	.34	.08	.09	.60

Table 1. List and descriptive statistics of university-level measures from the 2014 HES.

Note: SD = Standard Deviation. Data were provided at the university level aggregating individual responses in each university by the HES. Calculations based on 120 universities included in our analytical sample.

Source: 2014 HES.

	Model 1: Total		Model 2: UG		Model 3: PGT	
	Coefficien Partial r^2		Coefficien Partial r^2		Coefficien Partial r^2	
	t (RSE)	(%)	t (RSE)	(%)	t (RSE)	(%)
University prestige	232.79 (64.96)**	16.81 **	51.27 (26.43)†	3.31	166.56 23.50 (40.83)***	
Social and cultural life	63.17 (48.65)	.72	-1.81 (24.56)	.11	63.21 (28.86)*	2.98
Costs	76.16 (52.70)	2.03	19.76 (29.37)	.47	41.20 (27.05)	1.85
Marketing	-7.35 (45.25)	.02	5.08 (22.52)	.03	-10.61 (29.27)	.04
Total number of students	.04 (.01)***		.02 (.00)***		.02 (.00)***	
Constant 624.32 (38.77)***		271.91 (20.21)***		300.65 (22.25)***		
r^2	.52		.35		.52	

Table 2. OLS regression models predicting the total number of Chinese international students, undergraduates and masters across British universities (N = 120 universities).

Note: RSE = Robust standard error. All continuous variables centered at the grand mean of the sample; thus the constant reflects the predicted number of Chinese international students in a hypothetical university with all predictors taking their grand means of the whole sample. For a variable K, partial- $r^2 = (r^2 - r^2 - K)/(1 - r^2 - K)$, where r^2 is for the full model, and $r^2 - K$ is for the model that includes all variables except K. Partial- r^2 reflects the net contribution of a given variable to the model. † p < .10, * p < .05, ** p < .01, *** p < .001