COVID-19 and Its Impacts on Talent Mobility in China

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Abstract
COVID-19 has caused countries around the world to close their doors and put strict measures on the mobility of people across geographical boundaries. What will be the impact on highly skilled talent? We address this important question by exploring the experiences of European researchers in China during COVID-19. We do so by utilising the newest unique data gathered in a survey by EURAXESS, which reports that 47% of the European researchers in China left due to the outbreak. We complement this with archive data, interviews, and COVID-19 regulations to discuss and forecast future scenarios for talent mobility to and from China.

Keywords
COVID-19. Talent mobility. International researchers. Brain circulation. Travel barriers.

Summary
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1 Introduction

In a recent article, Liu, Lee, and Lee (2020) highlight how the COVID-19 pandemic is already having severe effects on both the global economy and global value chains. They emphasise that it is still too soon to draw definite conclusions concerning the consequences of the pandemic. However, they still point out an emerging trend, which shows that global supply chains are decoupling from China because of the pandemic. Moreover, they argue that this is happening in a time when there is a drastic reduction of air travel as well as severe travel restrictions (Liu, J.M. Lee, C. Lee 2020). In this chapter, we continue the discussion of migration and travel restrictions by exploring the effects of the pandemic on talent mobility amongst European researchers in China. Talent attraction policies have become increasingly important globally (OECD 2008). This has opened doors for academics around the world, only to come to a rapid halt because of COVID-19. The transformative issues arising in academia are highlighted in a recent series of articles published in Nature entitled “Science after the pandemic” (Witze 2020). The series explores some of the dramatic changes that have occurred in academia resulting from the COVID-19 outbreak. These issues include topics such as: what will happen to the nature of conferences, travel, and mobility? (Viglione 2020); what is occurring at now empty campuses? (Witze 2020); and how might publications change? (Callaway 2020). But they also deal with the effect on Chinese academia, which otherwise seems to have been on the rise since China became amongst the leading funders of researchers and the leading producer of academic articles (Cyranoski 2020). In this chapter, we will discuss what is happening to foreign researchers in China. We will mainly look in-depth at European researcher’s experiences and discuss the impact on European and Chinese scientific collaborations.

2 Talent Mobility: Why It Matters

Global flows of talent have become an increasingly important element of globalisation (Liu 2019). Whether in the public or private sector, the recruitment of individuals that can make a difference in organisations have become one of the key challenges of the decade (Lee, Rezaei 2019). In an article published before the COVID-19 crisis, Janger and Nowotny (2016) explore academic job choices and the international mobility of talented researchers. They find that in general job choices in academia are driven by factors such as collaboration partners, research funding, and academic freedom rather than personal factors. The literature on talent mobility suggests that the US is the first destination country for researchers and that it attracts
the most substantial flows of international talent, making it able to reap the innovative rewards that come with global talent (Kerr et al. 2016; European Commission 2017; Kerr 2018). However, other countries have caught up and developed talent attraction schemes of their own (Shachar 2006; Shachar, Hirschl 2013, 2015). These schemes are particularly prominent in academia and often considered beneficial as the mobility of researchers aids in the creation and the diffusion of knowledge, which is of significant importance to knowledge economies (OECD 2008).

3 Talent Mobility on the Rise in EU: China as a Partner or Competitor

In an EU context, the introductions of both the Marie Skłodowska-Curie actions programme and Euraxess have aimed to encourage mobility amongst researchers. Here it is argued that:

[t]he main reason to foster geographic mobility lies in the fact that it is related to more intense knowledge flows through international collaboration and, as a consequence, increases scientific productivity which may, in turn, affect economic competitiveness. (European Commission 2017, 10)

These reasons for fostering mobility in order to compete in global research goes beyond the interest of the EU. Concerns revolving around the opportunities as well as risks related to being at the front of the research stage or falling behind are shared by countries such as Brazil, South Korea, India, and China – all countries that have recently been boosting the mobility opportunities for researchers (European Commission 2017).

4 Talent Mobility in China: Traditionally a Brain Drain, But Becoming Competitive

As the world’s largest transition economy, talent in science and technology is critical to the development of a flourishing knowledge economy for China (Liu, Fang 2019). Since the opening of the Chinese economy and the increased mobility of students as well as researchers, China has suffered from a significant brain drain. The state, universities, and scientific organisations have therefore been part of implementing measures on both a country and local level which aim at attracting first Chinese returnees (Zweig, Kang, Wang 2020) and increasingly also foreign talents (Miao, Wang 2017). These efforts have coincided with the increased quality and the improved ratings of Chi-
nese universities as well as the development of Sino-Foreign universities (Wang, Chen 2020). Even though these efforts have been successful to a certain extent, the individual talents and researchers seem to remain mobile whether they are Chinese or foreigners (Mouritzen, Rezaei, forthcoming). This reveals an element of vulnerability in the talent flows towards China, so although the country fairs increasingly well in the global competition for human capital, according to the MORE3 survey (European Commission 2017) and OECD publications, China remains a relatively unattractive place for foreign talent (OECD 2013) as seen in the figure below.

![Figure 1](image)

**Figure 1** The impact of internationally mobile scientists, inflows versus outflows, 1996-2011 (OECD 2013)

## 5 Data and Methods

While the data revealed significant barriers to Europeans in China that remain relevant, new issues have arisen with the pandemic. In particular, we examined in-depth the 2020 survey conducted by Euraxess that has highlighted the new reality facing European talents in China after COVID-19. The material deriving from Euraxess is included as the organisation has a unique coverage within the community of European researchers in China. We complement the survey data with qualitative interviews collected by one of the authors of this paper during fieldwork in China before the pandemic and through online interviews.
with respondents after the pandemic, although the data collected after the pandemic is based on a smaller sample as many respondents were unavailable for various reasons connected to the pandemic. Finally, we draw upon recently published news and regulations.

6 COVID-19 Impact on Cross Border Mobility

As noted, the outbreak of COVID-19 considerably changed the academic reality globally. In China, the inflow of foreign talent has been limited, while the outflow seems to have increased during the pandemic. The challenges emerging because of COVID-19 are already influencing research activities conducted in China, particularly activities done by the group of foreign academics operating there, having forced many researchers to leave the country at least on a temporary basis. Thus, Euraxess China reports that as of March 6, 2020:

When asked if they left China amid the virus outbreak, 47% of researchers replied positively; among these, 63% are not planning on returning to China or are uncertain when they will. (Euraxess 2020)

The impact on foreign talents’ cross-border mobility was affected by travel restrictions imposed by the Chinese government since March 28, 2020 (The Foreign and Commonwealth Office 2020b, 2020a). As stated below:

In view of the rapid spread of COVID-19 across the world, China has decided to temporarily suspend the entry into China by foreign nationals holding visas or residence permits still valid to the time of this announcement, effective from 0 a.m., March 28 2020. (Ministry of Foreign Affairs the People’s Republic of China 2020)

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1 As the virus spread across the globe, first moving to Europe only to be overtaken by the Americas, China was no longer the world’s hotspot. Therefore, in a grander attempt to combat COVID-19, China implemented a string of restrictions on international travel. These included the suspension of the entry of most foreign nationals – even those who were holding valid visas that were issued before the announcement on March 26, 2020 (China Briefing 2020). Apart from all short-term visas such as transit visas and port visas lasting 72 to 144 hours, the visa restriction includes student visas, work permits, family visas, regular tourist visas, etc. Furthermore, they include such mobility options as the Asia Pacific Economic Cooperation (APEC) Business Travel Card (ABTC), which otherwise allowed individuals to move temporarily between fully participating economies for five years (China Briefing 2020). The few holders of the difficult to obtain green card (China Briefing 2019) are not subjected to restrictions (European Union Chamber of Commerce in China 2020b). It will only be visas issued after March 26, 2020 that will not be affected by the recently imposed restrictions (Ministry of Foreign Affairs the People’s Republic of China 2020).
The restrictions only became additionally significant, as many researchers had already left China to avoid the virus following the COVID-19 outbreak. As foreign holders of most visa types were no longer eligible to enter China, the restrictions have deeply affected international talents operating in China (European Union Chamber of Commerce in China 2020a). As a result, the European Chamber President contacted the Chinese Minister of Foreign Affairs to address the matter and request the easing of the restrictions. According to the European Chamber:

The Ministry of Foreign Affairs’ (MFAs’) official response recognised and thanked the Chamber for its support in China’s fight against COVID-19, and clarified that Chinese green card holders are not subject to the entry restrictions. It also stated that a fast-track system will be established for foreign nationals who need to return for urgent/necessary purposes, such as trade, science and research or humanitarian reasons. (European Union Chamber of Commerce in China 2020b)

Foreign nationals returning to China for necessary “economic, trade, scientific or technological activities or out of emergency humanitarian needs” will however still need to apply for a visa in order to enter China at the Chinese embassies or consulates abroad and undergo a quarantine period, affecting the travellers for at least 14 days.² Moreover, there have also been severe restrictions on international flights, initiated on March 12, 2020 (Business Traveller 2020; Reuters 2020), so that only 20 international flights could land each day.³ By the end of May, it was decided to maintain the restrictions with few exceptions (BBC 2020; Nikkei Asian Review 2020).

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2 Travellers will be required to undergo strict testing and individuals will be subject to a quarantine period of 14 days, although it is possible to enter into a fast-track option available to individuals from countries that have signed fast track agreements with China. However, this requires that the company ensures that the employer remains in a closed circuit or a sealed environment for 14 days, where a designated driver transports the individual from their home residence to their workplace without this employee having any physical contact with other members of the staff or other parts of society (European Union Chamber of Commerce in China 2020a).

3 The Civil Aviation Administration of China (CAAC) further implemented changes that reduced air travel to and from China, taking affect from March 12, 2020. These changes included a reduction of international flights such that Chinese Airlines could only maintain one route to any country with no more than one flight per week. A similar rule affected foreign airlines that were only allowed to maintain a single route to China and only fly once per week. Moreover, the rules state that each flight must “ensure passenger load factor no higher than 75%” (CAAC 2020).
7 European Talents in China

The restrictions have particularly affected the foreign community of mobile expats in China, both those who left China at the onset of the pandemic and the ones who stayed behind. Nevertheless, they are only a part of the pandemic’s transformational force that we will discuss later, relying on a survey developed and disseminated by Euraxess China where 46 European researchers based in China responded. The survey was an early response to the COVID-19 crisis, and some of the results were published on March 6, 2020 (EURAXESS 2020). Currently, we are working with Euraxess to develop and disseminate new material that will be available at a later stage. While the low numbers challenge the representativeness of the survey, the data is still a reliable indicator of changes affecting talent mobility. When asked “Is the novel coronavirus outbreak and the resulting prevention-and-control measures having any current impact on your work and research activities?”, close to 75% of the respondents replied that it had a medium or high impact on their activities, as illustrated below.

![Figure 2](image)

This finding resonates with qualitative interviews conducted amongst researchers based in China. Amongst these respondents, of which many are now living in Europe as they have been blocked from re-entering China, a variety of answers emerged. Researchers who for various reasons decided to stay in China reported that they faced empty campuses and closed laboratories where only they could come and go. While this situation seems to be the new normal which has spread to most of the universities of the world (Witze 2020), the group of researchers stuck outside of China have been affected in slightly differ-
ent ways with online meetings that at times have to include people based in both the EU and America as well as China. Moreover, most communication seems to have moved online – both the communication between individuals, such as a student and supervisors, but also institutional communication. When asked “Are you and/or your institution introducing or planning on introducing new online tools (such as online classes, webinars, online meetings, and group works) as an alternative to the normal activities?”, close to 80% of the respondents reported that they either had implemented new online tools or were working on implementing new measures.

Like most institutions, Chinese universities have adapted to reality after COVID-19, and while it is still unknown what the exact effects of the pandemic will be on learning as well as migration, it is clear that university institutions across the globe are updating their teaching tools to address a new reality. In particular, the Sino Foreign Universities have reported challenges faced by their cohorts being scattered across the globe and their staff being unable to return to China [tab. 1].

Figure 3 Are you and/or your institution introducing or planning on introducing new online tools (such as online classes, webinars, online meetings, and group works) as an alternative to the normal activities? With 59% responding that Yes, we have launched new online activities/tools, 20% responding Yes, we are working on that and 22% responding no
Table 1  Challenges and solutions from four Sino Foreign university institutions

| Challenges                                                                 | Initiatives that are dealing with COVID-19 in the short term | Initiatives that are dealing with COVID-19 and changes in the long term |
|----------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|
| Some international staff and students unable to return to China. These are advised against returning to China. | Fast transition to online teaching within the first month of COVID-19 | Planned online teaching ranges from supporting the teachers to filling in full semesters for international students and staff blocked by entry barriers. Most radically seen through the Sino-Danish Center, which plans a full-semester online |
| Reduction or cancellation of physical activities, such as: teaching activities, ceremonies, research activities, and PhD exchange activities | Online graduation ceremony and other online events, such as choir contests and introductions to campus life | |
| Reimbursed housing                                                        | Flexible semester starts, opening according to Chinese as well as global dynamics |

Table based on publicly available information at New York University Shanghai (2020b, 2020a), Nottingham University Ningbo (University of Nottingham Ningbo China 2020b, 2020a), Duke Kunshan University (2020b, 2020a) and Sino-Danish Center (SDC 2020). Moreover, this is a brief collection of the most fundamental and reoccurring challenges related to travel barriers and entry issues. Research that would dive deeper into the actual institutions would reveal other issues and solutions, such as wearing masks on campus and connections between health initiatives in the university and the province.

Just like the challenges faced by the transnational institutions, individual researchers collaborating between China and Europe report that their collaborations have suffered during the pandemic. When asked “In case you are involved in collaborations between China and Europe, have they been affected in some way by the current outbreak?”, a third of the respondents answered that it have had an impact, but that the impact is difficult to assess at the early stage, while another third replied that it already either had a medium or highly negative impact on their collaborations.
COVID-19 has abruptly put an end to talent mobility and talent flows. Early data suggests that research, teaching, and mutual collaboration shared by China and Europe will be significantly disadvantaged because of the pandemic. The barriers emerging include both travel restrictions and a significant reduction in the infrastructure that facilitates mobility across borders. This might have even stronger effects in the future by hampering students, researchers, and technicians from either entering a country in the first place or from returning to their country of origin. Moreover, teaching is changing significantly, and particularly transnational institutions are forced to apply online tools that may limit the exposure to other cultures and thereby hinder shared experiences in the time to come. Finally, it seems likely that collaborations across borders will be increasingly difficult to carry out. However, what this difficulty will mean for talent mobility and foreign talents spread out across the globe has yet to reveal itself fully. Therefore, questions relating to COVID-19’s impact on talent mobility should be raised and answered based on in-depth empirical research.

Figure 4 In case you are involved in collaborations between China and Europe, have they been affected in some way by the current outbreak? With 13% responding Yes, high negative impact, 28% responding Yes, medium impact, 33% responding Yes, but I cannot state what will be the impact, 4% responding No impact and 22% responding I’m not involved in any China-Europe collaboration

8 Conclusion

COVID-19 has abruptly put an end to talent mobility and talent flows. Early data suggests that research, teaching, and mutual collaboration shared by China and Europe will be significantly disadvantaged because of the pandemic. The barriers emerging include both travel restrictions and a significant reduction in the infrastructure that facilitates mobility across borders. This might have even stronger effects in the future by hampering students, researchers, and technicians from either entering a country in the first place or from returning to their country of origin. Moreover, teaching is changing significantly, and particularly transnational institutions are forced to apply online tools that may limit the exposure to other cultures and thereby hinder shared experiences in the time to come. Finally, it seems likely that collaborations across borders will be increasingly difficult to carry out. However, what this difficulty will mean for talent mobility and foreign talents spread out across the globe has yet to reveal itself fully. Therefore, questions relating to COVID-19’s impact on talent mobility should be raised and answered based on in-depth empirical research.
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