

WHERE CASE STUDY COUNTRIES STAND IN RESPECT TO THE PANDEMIC

*These are direct and personal comments from the our 'foreign correspondents' regarding where they **think** things are in their respective countries in terms of the impact of the pandemic on universities and researchers. We shall of course being investigating the situation more thoroughly over the next two years and monitoring change and will provides updates here.*

China

The COVID-19 pandemic has accelerated digitalization of higher education. From February to late April, all universities in China were closed. Teachers and students at the university participated in online teaching and learning via different internet platforms to overcome setbacks caused by the pandemic. MOOCs and live broadcast online teaching were widely used during the locked down. During the locked down, the university libraries provided online services and made sure researchers/students could get what they need in time.

Many postgraduates/early career researchers overseas study plans have been affected by the COVID-19 pandemic. Some Chinese students/ECRs intending to study abroad have been forced to change, delay or even call off their plans. A number of universities have reduced holidays for the coming National Day and the Mid-Autumn Festival as students are encouraged not to leave the campus for non-essential travel to prevent the spread of COVID-19.

In May, with the control of the pandemic, most universities in China opened again and welcomed students. Although they do need to test body temperature and scan QR code every now and again to get into the classroom or library. In the short term, the pandemic seems in control and the universities are all back to normal. **At the moment then, life for an ECR is very much the same as it was before the pandemic.** However, in the long-term implications of COVID-19 will reshape research work arrangements. For instance, more R&D investment will go to the 'key sectors' of research, such as vaccine and chip development, and there may be less top-university graduates/ECRs going overseas for further research.

France

awaiting

Malaysia

The Government of Malaysia enforced a Movement Control Order (MCO) on March 18, 2020 to break the chain of Covid-19. Within a few days, a switch to online classrooms and e-learning systems was widespread, and will continue to be so until Dec 31. Overall, uncertainty has risen and is a big worry, and a segment of universities have not found it easy to transition. The mental and physical health of the students and academics are also a major area of concern. The emergency closure of all research facilities has contributed to significant anxiety among researchers. ECRs, especially post-docs and doctoral students are struggling to navigate the disruption to their research caused by the MCO. These ECRs are the people who carried out the majority of scientific research. The narratives as exemplified in the media (<https://www.nst.com.my/education/2020/04/586607/covid-19-mco-put-phd-students-dilemma>) illustrate how ECRs are coping with Covid-19 challenges and pressures. Those at the stage of data collection through field work and lab work are tremendously affected. #staysafestayhome has made them focus on dry lab analysis and research writing, the latter facilitated by academic libraries maintaining a full digital reference service. They were allowed to go back to the lab on 26 June, flexibility given to only those requiring special equipment to conduct research. However, research work has not stopped although higher education funding sources are expected to be constrained by the pandemic. The Ministry of Higher Education invited a short-term research proposal submissions from researchers to draft Covid-19 related policies and provide solutions. This has created opportunities for Malaysian researchers, to play their part by developing different technologies to help fighting Covid-19, such as production of rapid test kits and instant hand sanitizer, creation of face shields using 3D printing, and the manufacture of sanitizing tunnels. Researchers had to also quickly learn new collaborative technologies for better researcher engagement/productivity through video-based conference calls on platforms, such as Zoom. The challenges brought about by the pandemic demands more Covid-19-related studies undertaken particularly in fields that can further help revive the country's economy, such as security, health, tourism. Research funding gives priority to those projects that can create impact, moving from producing "knowledge for knowledge" to "knowledge for society and nation. A significant rise in research studies and literature on Covid-19 is expected, which may be related to more budgets being diverted to COVID-19-related research.

Poland

In March and April, special funds were allocated by the National Centre for Research and Development for Polish entrepreneurs and scientists who work on the diagnosis, treatment and prevention of viral diseases. The express formula competition of the National Science Centre for research on the SARS-CoV-2 coronavirus and the COVID-19 pandemic was decided in May.

Since 24 October 2020, the whole of Poland is covered by the so-called red zone, i.e. significant social and economic restrictions related to the pandemic. As far as universities are concerned, the education process is carried out using remote working techniques only. The pandemic had a very negative impact on the international exchange of students and scientists. All forms of international cooperation were transferred to the network. Employees of the universities continue to carry out scientific activities, but among other things, periodic evaluations of academic teachers are not carried out. It proved necessary to extend the deadlines for obtaining titles and degrees. Meetings of doctoral, post-doctoral and professorial committees as well as conferences are held remotely. Matters are in a state of flux and things can change from week to week.

On November 4, another security policy was introduced, which was defined as the last stage before the national quarantine.

Russia

As of October, Russian universities have moved their educational and research activities online. University staff and researchers mostly work remotely due to local and federal restrictions. People are encouraged to work from home. All teaching is remote. There are no face-to-face lectures. If it is impossible to work remotely, then people attend the university at different times to avoid bunching. It is allowed to be on campus only if wearing masks and gloves and after undergoing temperature checks. Researchers who can work at home (i.e. data analysts, sociologists, psychologists) work from home and those who need to be in the lab (i.e. chemists, biologists) work there. A large number of events, conferences, internships were cancelled due to the pandemic, some of them were transferred online. International internships and business trips suffered most.

The pandemic has opened up new opportunities for raising the status of science in society and there are more research projects related to the impact of COVID-19 on various areas of society, medical developments, and technological innovations. No signs of staff cuts so far. The system is not paralysed, but, of course, it doesn't mean that everything goes well

but all the young researchers know are still working as before. It is the assumption of many academics that the medium and long-term implications for science and higher education are unknown.

Spain

The wholesale digital transformation that Spanish universities have undergone since March 2020 means the community can cope with distance learning, the university's classrooms have cameras to register students, the students can be evaluated online, the libraries can supply all their services, the departments and schools can have their meetings and so on. And the situation was not always like that. Everything was a mess in March and April but by May universities had more or less adapted to the pandemic. Google Meet is the communication platform of choice. In research terms, research has been put on the back-burner because lecturers are busy preparing digital materials for teaching and attending training courses to upgrade their digital skills. Calls for project and research grants have been postponed. Informal communication between members of the research team are less frequent and this hinders progress in projects. Access to research managers is more complicated as staff is working from home 2 days a week. No researchers have been sacked, but people hired temporarily may not be renewed, which will impact on ECRs down the line.

United Kingdom

There are four nations within the UK but England is by far the largest in terms of population, number of universities and of science/social science researchers. Decisions made by the UK government in London sometimes impact on all countries but always on England and this is the context of what follows. The recent return to universities, after an earlier lockdown, of the student body has highlighted one particular area of impact. The general success of bringing teaching online has produced student disaffection - we could just as well be at home - and students in many parts of the country are perceived as seats of infection. Dealing with problems like this ties up administration and has a knock on effect on research staff.

Most researchers are involved in teaching but it is the lower enrolment of foreign students for the year 2020-2021 which seriously reduces income. It looks as if the drop-off enrolments was not as great as expected, but such dependence is not healthy in research terms. A recent report (IFS) flags an additional problem. UK universities have not been maintaining

the pension pot which (unless rectified) will lead to future debts difficult to sustain. This and other declines in revenue will impact/is impacting on posts not being filled and redundancy among the researcher community.

The impression gained from UK Research and Innovation (UKRI) is that funding for pandemic related-research (including funds for the social sciences) is being preferentially treated. The implication of this was made clearer by a government survey (BEIS), which made clear that all researchers including this working in biomedicine, but not on Covid-19, were finding/anticipating serious decreases in funding accompanied by a loss of job security especially among ECRs accentuated by domestic problems, such as unexpected child care responsibilities. There is clear evidence of general loss of morale extending to mental ill health (Watermeyer). Obviously experimental scientists will suffer a great deal more than theoretical scientists but guidance from government and professional bodies indicates that work in the lab is not impossible though constrained. There has also been a surge in publication in non-Covid research areas though less marked in research concentrating on the pandemic. The argument (not well documented) is that if it is difficult for you to start new projects with a whole new range of experiments you can use your time to work up older research, put in on one side for the moment, into a submission.

United States

The global pandemic has disrupted university life throughout the United States. Many universities made the switch to online classes in March with little warning; some still remain all or mostly online. Some universities have seen a reduction in enrollment this fall and are facing hiring freezes or layoffs, others are pushing to return to normal. Uncertainty continues to put time management burdens and emotional stresses on faculty, staff, and students. There is some evidence that the burden has been disproportionate for early career researchers who have seen their research disrupted while they spend more time on adjusting teaching modes and, in particular, for women faculty members who bear a disproportionate amount of care for young children or other family obligations.