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HIGHER EDUCATION INSTITUTIONS DURING THE COVID-19 PANDEMIC

The ongoing COVID-19 pandemic has affected all areas of human life and very likely will have a continuous effect on them even after tackling the novel coronavirus. With the beginning of the pandemic, higher education institutions all around the world have faced with challenges of the global lockdowns, urgent switch to distance learning, and global covid-caused economic decrease. COVID-19 Pandemic challenges have influenced teaching and learning practices, equal access to higher education of different social groups (including vulnerable and disadvantaged ones), and international student mobility [3]. According to key findings of the UNESCO "COVID-19: reopening and reimagining universities" global higher education institutions survey, COVID-19 challenges led to an increase in online and hybrid learning modes, reduce of international and increase in domestic enrollment, the major setback of international mobility programs, disruption of research activities, widening inequality in student funding opportunities, limited campus operation and a significant reduction in job opportunities for graduates [2]. At the same time, UNESCO reported the limited effect on academic staff in most of the surveyed countries, while some countries experienced a reduction in academic/administrative staff and remuneration reductions/salary freezes [2].

Despite the freeze of most research activities, some universities took part in conducting epidemiologic and COVID-19 vaccines research. The most prominent case is probably Oxford-led research and development of ChAdOx1 nCoV-19 Vaccine in cooperation with AstraZeneca inc [6]. However, in comparison to the overall number of higher education institutions and subject areas, the share of departments that were able to boost their activities and attract COVID-related funding to their research is rather limited.

Overall, the impact (and, especially the long-term impact) of COVID-19 pandemic on higher education institutions remains vague and it is complicated to determine precise indicators to track its direction.

World university rankings constitute a popular reputation tool among higher education institutions, their potential students, and potential investors. These rankings are widely criticized across academics mostly because of the adoption of ideological assumptions on what higher education should look like, over quantification of indicators, enhancing elite and well-funded institutions positions, overfocusing on STEM disciplines, and non-critical use of these ratings as policy-informing tools [4; 5]. Nevertheless, agencies, that carry out data collection about higher education institutions on an annual, two-year and five-year basis.

The question is whether in the COVID-19 period indicators, that are used in university rankings have changed significantly? To answer this question, we have chosen Times Higher Education World University Ranking (THE WUR), and tried to look at the indicators, that could reflect changes that might be connected to COVID-19 changes.

THE WUR comprises 5 “Pillars”, namely, Teaching, Research, Citations, International Outlook, and Industry income. The rankings for the academic year are published in the autumn of the previous academic year (e.g. rankings for 2022 are published in autumn 2021). Some of these indicators are measured by a Reputation survey (conducted every 2 years), some indicators include bibliometric information (measured within 5 years range), and the rest of the indicators are received from institutions on the annual basis [8]. Only aggregated indicators (with some additional indicators like the number of students, % of international students, student/staff ratio, gender ratio etc.). Teaching indicators consist of (reputation survey – 15%, Academic staff-to-student ratio 4.5%, Doctorates awarded-to-bachelor’s degrees awarded ratio – 2.25%, Doctorates awarded-to-academic staff ratio – 6%, Institutional income – 2.25%) indicators that measured annually and every 2 years (reputation survey) [8]. Indicators, that were used for exploration are the % of international students (part of the “International outlook”) and the “Teaching” aggregated indicator.

The percent of international students has not decreased from 2020 to 2022, nor in general, neither within ranking groups (the average difference in the

percentage of international students between 2022 and 2020 is 0,9%, which is the same % as it was between 2020 and 2018). It reflects rather the slowing of increase than the decrease in international students' number.

Ranking group (2022)	Average of Diff 2022-2020	Average of Diff_2020-2018	Average of Diff_2018_2016
1-200	1,2%	1,6%	1,6%
201–250	1,3%	1,9%	1,4%
251–300	0,9%	0,9%	1,2%
301–350	0,7%	0,7%	0,9%
351–400	0,1%	-0,3%	1,2%
401–500	1,2%	0,7%	1,3%
501–600	0,6%	0,0%	1,3%
601–800	1,0%	0,8%	1,6%
801–1000	0,2%	0,6%	1,4%
1001–1200	0,9%	1,2%	1,1%
1201+	0,7%	0,7%	0,9%
Grand Total	**0,9%**	**0,9%**	**1,4%**

Table 1. Differences in % of international students

The freeze in an average increase of international students' share in 2022-2020 started from 2018. From 2020 to 2022 the pace of increase in the share of international students has slightly slowed down in Top 1-250 and 800-1200 ranked universities, however in universities holding 251-800 positions in THE WUS ranking, this indicator remained stable or even slightly increased. There might be a part of COVID-19 influence in it.

Has the COVID-19 influenced the "learning environment" or "institutional teaching productivity" which THE measure as a "Teaching" pillar and positions of universities against each other for this indicator? To understand this, the rank correlation (Kendall Tau) coefficient between 2022 and 2020 teaching score was calculated and compared with 2020-2018 and 2018-2016 coefficients. The bigger

Tau value is, the more ranking pairs coincide (for instance, a university ranked 10 for this indicator in 2020, keeping this position in 2022).

Ranking group (2022)	tau 2022 to 2020***	tau 2020 to 2018***	tau 2018 to 2016***
1-200	0,89	0,88	0,81
201–250	0,83	0,78	0,76
251–300	0,75	0,77	0,72
301–350	0,73	0,76	0,76
351–400	0,73	0,65	0,57
401–500	0,77	0,66	0,70
501–600	0,84	0,77	0,80
601–800	0,74	0,70	0,69
801–1000	0,72	0,67	0,64
1001–1200	0,68	0,68	0,66
1201+	0,66	0,69	0,75
Total	**0,83**	**0,83**	**0,82**

Table 2. Tau coefficient for ranked teaching scores

Overall, the correlation between the rank in Teaching indicator for the current year vs two years before remains stable in 2020-2022. The most of "position-keepers" universities belong to top 1-200 universities (which was also true for 2020 to 2018 and 2018 to 2016 comparisons). For other groups fluctuations in ranks (for teaching indicator) are more visible. This means that high-rank institutions are more bound to keep their places regarding the "Teaching" indicator, compared to others.

In spite of the stability of relative positions between groups, regarding institutional teaching productivity, scholars and professional academic associations report on worsening conditions for university staff during the pandemic time. For instance, according to the annual Faculty Compensation Survey, conducted by American Association of University Professors (AAUP), in 2020-2021 average salary

increase in American academy by 1% was the smallest one since 1972, and after adjusting for inflation, was a 0,4% decrease [1]. Among “temporary COVID-19 response measures”, AAUP reported that nearly 60% of American HE institutions implemented salary freezes, about 30% eliminated or reduced some benefits for staff, 5% of tenure track and 20% of non-tenure track contracts were not renovated or terminated [1].

According to the survey of UK’s academics, Watermeyer et al. (2021) have found out that UK HE institutions tend to behave as “disaster capitaliists”, broadening and deepening neoliberal and undemocratic practices [7]. Around 60% of their respondents reported on weakening of the academic autonomy, 64% of surveyed UK universities' employees, noticed the pivotal change from research to teaching in 2020. Apart from that, according to the research, the pandemic and pandemic-response policy in universities have led to additional load and exploitation of academic staff, especially early-career researchers [8].

The effect of COVID-19 on HE institutions and their positions in relative reputational rankings is yet to be explored. As it was seen from THE WUR, the COVID-19 challenges are not reflected enough in rankings which, on the one hand, may indicate that indicators used in the aggregated “teaching” indicators are relatively sustainable to external circumstances, but on the other hand, it shows that there are no significant changes (increments/decrements) across ranking groups. Even though reputational ranks remain stable and “top institutions remain top institutions”, overall, the “learning environment” has worsened due to COVID-19 pandemic and institutional response to it.

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