## Inconsistent year-to-year fluctuations in THES and ARWU-Rankings 2010-2014

We used the public available data from the web pages of the THE and the ARWU ranking to analyze the dynamics of change in score and ranking position from year to year, and we investigated possible causes for inconsistent fluctuations in the rankings by the means of regression analyses. Regression analyses of results from the THE and ARWU from 2010–2014 show inconsistent fluctuations in the rank and score for universities with lower rank positions (below position 50) which lead to inconsistent "up and downs" in the total results, especially in the THE and to a lesser extent also in the ARWU. In both rankings, the mean year-to-year fluctuation of universities in groups of 50 universities aggregated by descending rank increases from less than 10% in the group of the 50 highest ranked universities to up to 60% in the group of the lowest ranked universities. Furthermore, year-to-year results do not correspond in THES- and ARWU-Rankings for universities below rank 50. We conclude that the observed fluctuations in the THE do not correspond to actual university performance and ranking results are thus of limited conclusiveness for the university management of universities below a rank of 50. While the ARWU rankings seems more robust against inconsistent fluctuations, its year to year changes in the scores are very small, so essential changes from year to year could not be expected. Furthermore, year-to-year results do not correspond in THES- and ARWU-Rankings for universities below rank 50. Neither the THES nor the ARWU offer great value as a tool for university management in their current forms for universities ranked below 50, thus we suggest that both rankings alter their ranking procedure insofar as universities below position 50 should be ranked summarized only in groups of 25 or 50. Additionally, the THE should omit the peer reputation survey, which most likely contributes heavily to the inconsistent year-to-year fluctuations in ranks, and ARWU should be published less often to increase its validity.