

The gender pay gap for professors in the UK

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The gap in pay between men and women in the UK remains high on the political agenda. In this article we document the gender pay gap among full professors in UK universities.

Previous research shows that gender pay gaps remain large in many developed countries, including the UK ([Goldin, 2014](#), [Blau and Kahn, 2017](#), [Costa-Dias et al. 2020](#)). Women are also under-represented at the top – in the highest-paid occupations and firms – and often earn less than men when they do reach senior levels within organisations ([Bertrand 2018](#), [Bertrand et al. 2019](#), [Azmat and Boring 2020](#)). Yet these high-achieving women have invested heavily in their human capital and careers, so we might expect some of the arguments that may apply lower down the earnings and education distribution to be less relevant. For example, taking the case of university professors by field of study: there are effectively no gender differences in the formal qualifications and professional accreditations of this group, and women who become professors have clearly worked hard over several decades, and likely with few interruptions (even if they had children), to get to the position they are in, so do not lack focus and motivation to succeed.

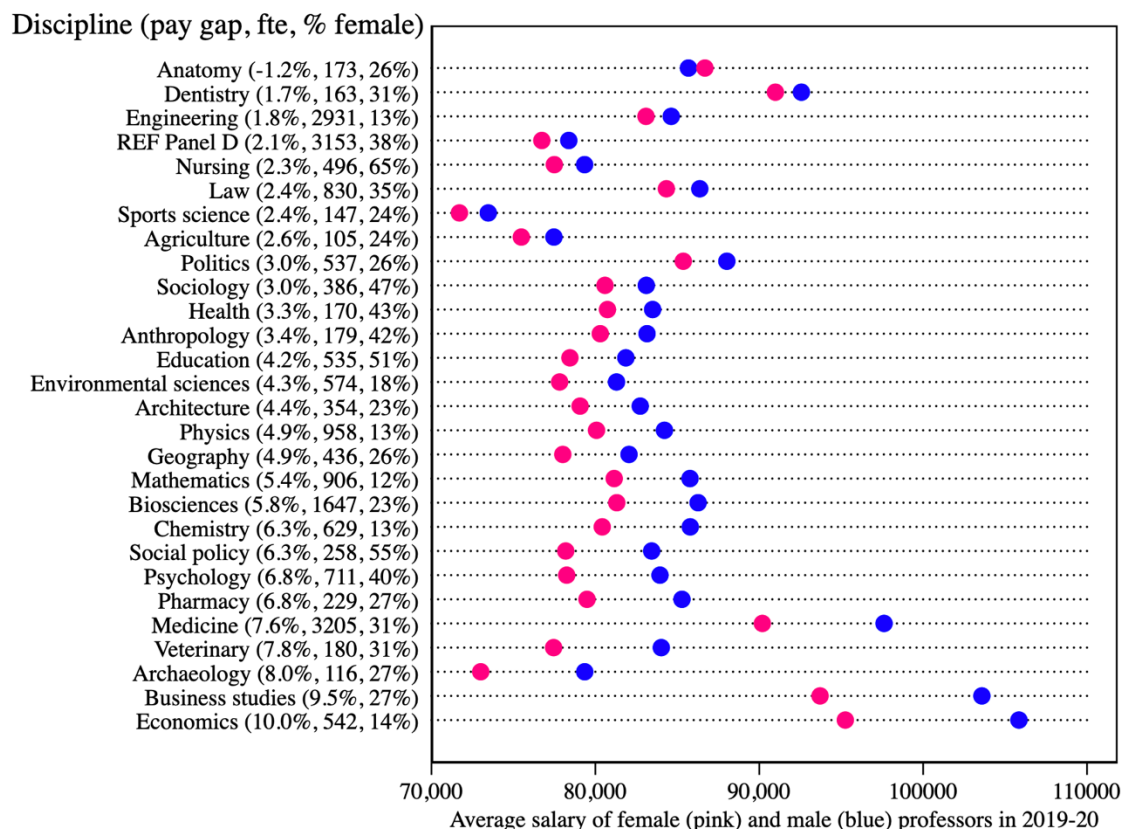
We use data on the pay of all professors in the UK provided by the Higher Education Statistics Authority (HESA), to document gender inequalities at the professorial level and their time trends. Universities are obliged to report pay data to HESA, and this provides us with a complete source of pay records. The recent RES report ([Bateman et al. 2021](#)) provided comprehensive figures on the under-representation of women in academia, including among professors in economics.

HESA data for the academic year 2019-20 record around 22,500 full-time equivalent professors in the UK across all disciplines, 28% of whom were female. (We use data from HESA covering academic years from 2012-13 to 2019-20. The data include salaries but not all kinds of remuneration. We drop some small and non-academic disciplines and some small institutions, and drop 52 observations where gender was not specified.) The share of female professors has increased steadily from 22% in 2012-13. Here we focus on the gender pay gap, which has not diminished over time.

In 2019-20, the average male professor's salary was 6% higher than the average female professor's salary (£87,850 compared to £82,570). This compares to a pay gap of around 10% for “professional occupations” ([ONS, 2020](#), Fig. 4). Male and female professors' salaries grew at similar rates over the period 2012-13 to 2019-20, so the pay gap remained unchanged over this period.

The data show gender differences in pay both across and within disciplines. The figure shows the average full-time equivalent salary of male and female professors by discipline in academic year 2019-20. The bars are ordered by the size of the pay gap, which is largest at the bottom. The subject labels include the average pay gap as a percentage of male earnings, and the share of female professors in each discipline.

On average, women are paid less than men in all disciplines except anatomy. Three of the disciplines with the largest gap (economics, business, medicine) also have high average salaries, meaning that women in these disciplines have higher average salaries than male professors in most other disciplines, despite earning substantially less than their male peers. In economics, where the pay gap is largest at 10%, the average pay of female professors is higher than the average male professor in all other disciplines except business and medicine.



Note: Numbers in brackets on the vertical axis are the pay gap, the full-time equivalent (fte) number of professors in that discipline in 2019-20, and the share of professors that are female. Disciplines are sorted by the size of the pay gap. REF Panel D disciplines include those listed at <https://www.ref.ac.uk/panels/units-of-assessment/>; engineering groups together all engineering disciplines.

The data also show gaps in the sorting of male and female professors across different universities, and gaps in pay within university, conditional on discipline. For example, the average salary in Russell Group universities is higher than non-Russell Group universities (£90,218 compared to £80,454 in 2019-20) and male professors are disproportionately represented in these universities (73.5% compared to 70.3%).

Overall, the pay gap is similar at non-Russell Group compared to Russell Group universities (5.9% compared to 5.4%), but it varies a lot across disciplines; in economics, for example, it is 11% at Russell Group compared to 5.6% at non-Russell Group universities.

This analysis raises many questions about why gender pay gaps persist even in environments where qualifications, experience, and output are fairly readily measured. These data offer the opportunity for further research into these issues.

References and further reading

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