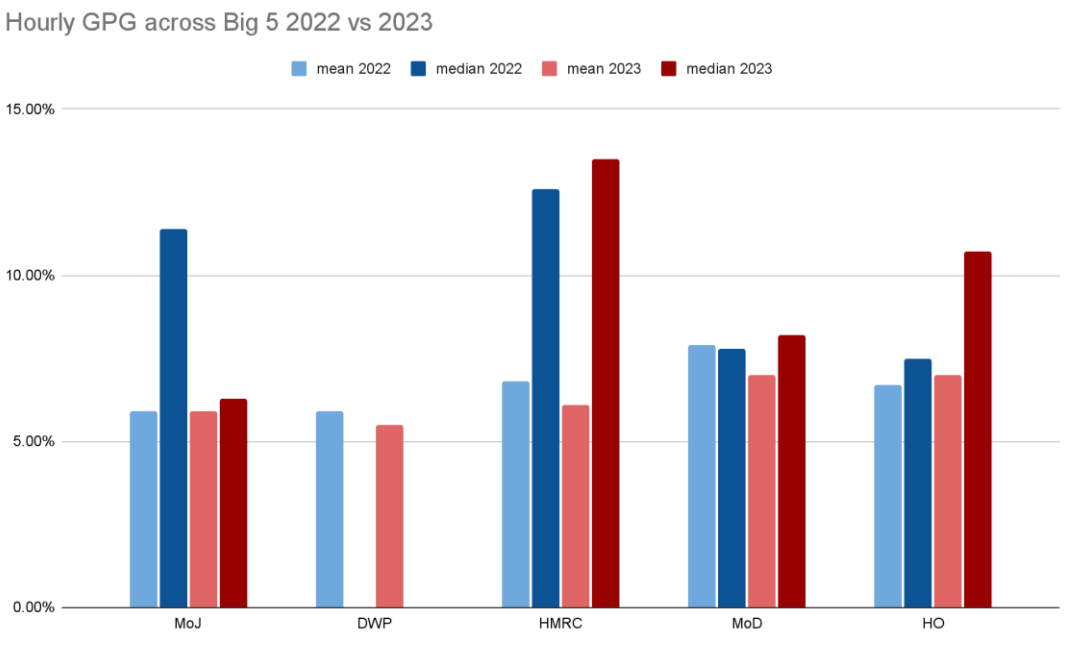

Figure 1: The first graph I made over the course of the fellowship from the data published on 03.11. Here, the hourly GPG in HO has increased from last year, and none of Big 5 have maintained the target of +/-3%

Overview of the Data Fellowship (23pts)

I worked within the Central Analysis and Insights Team at the Home Office for 4 weeks and was lucky to go visit in person once a week at 2 Marsham Street in Westminster for the duration of this period. My research project involved working towards presenting to Civil Service colleagues regarding the state of the Gender Pay Gap domestically and internationally in both the public and private sectors, and with specific focus on the data at the Home Office.

Data Analysis

In order to improve the GPG I thought it was necessary to consider improving the methodology of analysing it, and how other countries and organisations do it. I was looking forward to performing regression analysis myself (particularly the Oaxaca-Blinder model), but unfortunately as I hadn't had clearance by this point, I wasn't able to have access to the raw data, but I was able to pass recommendations on packages and methodologies on. Due to the restrictions of not having access, my research was based on pre-existing literature and statistics that I was collecting in order to build a picture to illustrate the state of the gender pay gap in the organisation.

The vast majority of the analysis that I did that wasn't looking at what the literature was saying was based on the statistics that the civil service released August 3rd. In doing this I sifted through over 80 tables from 2023 as well as comparing these to the 2022 statistics, and created an assortment of bar graphs, pie-charts, and box-plots comparing the hourly/bonus and mean/median gender pay gaps within the 'Big 5' Civil service departments, dependent on variables such as responsibility levels, age, part/full-time, and salary quartiles. I also compared these to graphs released by similarly sized/similarly scaled organisations such as NHS, and banks such as HSBC.

In doing this I had to formulate several "mini" research questions in order to compartmentalise different facets of what is a very complex political and economic problem. How do variables such as age, experience, and place within an organisation affect the GPG? Moreover, how do these affect each other?

Findings

I am not able to explicitly disclose my findings due to the confidential nature of the data I handled, however, major and broader implications to my findings include the necessity to improve data analysis to be more data-forward – modelling solutions as opposed to remarking on the symptoms of the GPG. In the case of the NHS for example - would increasing the pay of nurses (rather than 'increasing the proportion of me in lowest pay quartile') improve the GPG?

Key Skills Learnt

I am very grateful for the experience of being a data fellow, and the opportunity to work with inspiring colleagues and really be motivated to delve into an interesting and complex series of questions.

- Improvement of Excel Skills
- Improvement of presentation skills/public speaking confidence
- Development of time management skills and prioritising tasks
- Learning how to enjoy being confused about a research question – this is proof you are actually thinking deeply and facing the question head on, rather than on a superficial and simplistic level

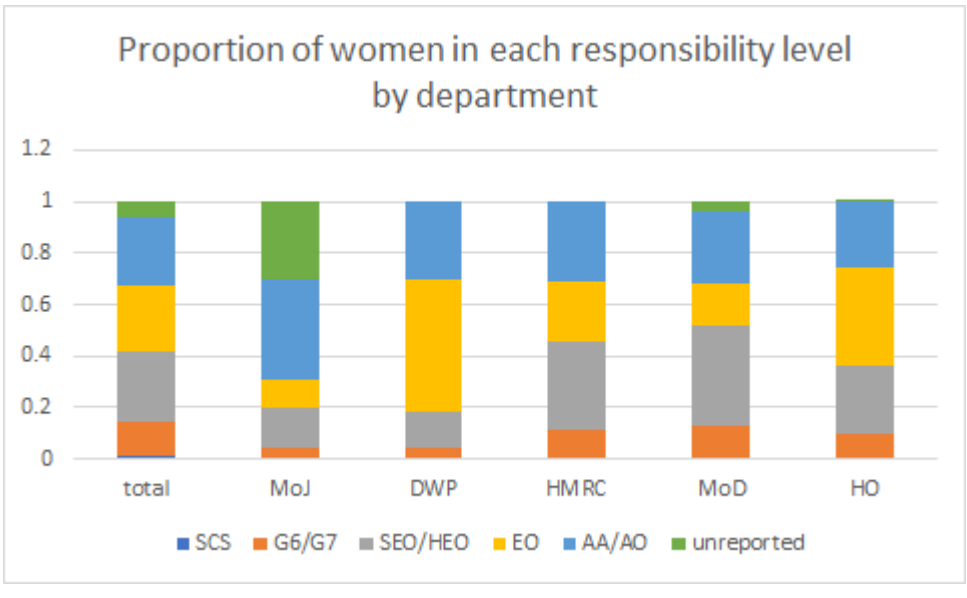

Figure 2: Another graph I found particularly interesting illustrating the proportion of women by department and by responsibility level (which is correlated to experience and pay level)