

Shaping our Economy

Technical Annex

September 2023

Data shared

- Data fields were requested in three categories:
 - a. Demographic variables relating to protected characteristics, including gender and ethnicity.
 - b. Socio-economic background variables: this includes socio-economic background by parental occupation at age 14 (SEB), school type, eligibility for free school meals (FSM), and eligibility for income support.
 - c. Employment related variables: employees' starting date, seniority and occupational area, their current role and occupational area in the firm, and dates of any promotions secured.
- 25 member firms submitted data.
 - Thirteen organisations provided employee-level socio-economic and time-stamped promotion related data, necessary for the progression analysis.
 - Three firms provided employee-level data on socio-economic and diversity characteristics but did not have all the required employment data for progression analysis.
 - Nine firms shared aggregated (already summarised) data.
- 24 firms provided data on the socio-economic background (SEB) of employees (either in aggregated or disaggregated format).
 - All of these firms provided SEB as measured by the parental occupation at age 14 metric, with some also providing information on school type (16 firms), eligibility for free school meals (11), and parental education (6).

- Many firms also provided data on other diversity characteristics, including gender (17 firms) and ethnicity (15).
- There is variation in the number of employees in firms' submissions (from 25 to 42,000), including accounting for varying employee disclosure rates on SEB data (ranging from 2% to 78%).
- In the analysis we used the ANOVA technique with post-hoc tests to compare differences within groups. Bonferroni corrections were also applied as appropriate in instances of multiple comparisons. In local firm analysis, where sample sizes were small (parametric assumptions are not met), the Kruskal-Wallis test is applied.

Categorising data fields

- SEB categorisation follows best practice guidance from the Social Mobility Commission (<https://socialmobilityworks.org/toolkit/measurement/>), prioritising the parental occupation at age 14 metric.

Socio-economic background (SEB)	Parental occupation categories
Higher SEB	Modern and traditional professional occupations
	Senior, middle, or junior managers or administrators
Intermediate SEB	Clerical and intermediate occupations
	Small business owners who employed less than 25 people
Lower SEB	Technical and craft occupations
	Routine, semi-routine manual, and service occupations
	Long-term unemployed (claimed Jobseeker's Allowance or unemployment benefit for more than a year)

- To achieve parity across the data sets for comparative analysis and aggregation, we consulted extensively with each firm to apply a standard categorisation of seniority, using the best practice framework outlined below. This analysis will become increasingly insightful as more member firms submit data and sub-sector analysis is possible.

Level of seniority		Example job titles
Senior	Those in the most senior roles by grade / band, or reporting to this group and / or leading large teams. May also include high level specialist roles.	CEO, ExCo
		Director
		Head of Department / Branch
Middle	With developing professional experience, working under some supervision or autonomously on smaller projects.	Senior Manager
		Manager
		Team Leader
Junior	Undertaking closely supervised work, with little or no supervisory responsibility, including entry level roles.	Associates
		Assistant
		Officer
		Apprentice

- Similarly, firms were consulted on applying a uniform grouping to employees' occupational areas and in this initial year we have applied a binarised categorisation, grouping people in operational or client-facing roles. Again, this analysis will become increasingly insightful as more member firms submit data and sub-sector analysis is possible.

Occupational area	Example departments/service lines
Operational	IT
	Finance
	HR
	Data and analytics
	Operations
Client facing	Mortgages
	Savings
	Insurance
	Client services and portfolio
	Sales and marketing

Exploring progression rates in the data

- To analyse relative progression rates between employees of different backgrounds, we calculated the average time taken for people to progress to the next level of seniority. This data was available from nine member firms.
- Significant time was spent supporting most firms with data matching exercises, and to data management and cleaning – including identifying missing data, correcting inaccuracies within the data (e.g. spelling errors that prevented effective matching, dates in different formats, re-categorisations of grades / role labels over time).

- There are naturally employees who have not progressed between the seniority tiers during their time with an employer. The progression analysis is based on 8,389 promotions in the data. In future years the submission of data relating to attrition (including diversity characteristics) will also enable us to understand the extent to which people are leaving disproportionately by SEB, alongside this analysis of relative progression rates.

Experienced hiring

- We could also identify in the data whether those in senior roles were promoted to these roles within a firm or were hired externally as 'experienced hires'. We were correspondingly able to analyse the diversity of these two populations to compare them, and to identify whether experienced hiring contributes to diversity in different areas (including SEB), reinforces current levels of diversity – or if the effect of experienced hiring decreases overall diversity.