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Who Enters the Public Sector?

Clara von Bismarck-Osten*

March 2026

Abstract

Is the public sector losing the most educated to finance, tech, and consulting? Does it act as a Keynesian employment insurer to the less educated? The data constraints behind the limited evidence on this have recently been overcome for England. The probability of entering the public sector rises with education, and this paper documents that this educational gradient has strengthened. Relative to just before the financial crisis, the public sector became a less common workplace for individuals entering the labour market with low levels of education. At the same time, it became a more common destination for the most educated, whether defined by highest qualification, university rank, or final grade. Graduates from top universities do show increasing entry into finance, tech and consulting, but they also show—despite a substantial deterioration in pay differentials—an increasing preference for the public sector as an entry workplace. A decomposition of the trends by graduate discipline and destination industry points to UK-specific policy explanations.

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1 Introduction

There are reasons to believe that the attractiveness of the public sector has declined. The most obvious one lies in the evolution of pay differentials: a graduate in the United Kingdom who saw the public sector offering 18% more than the private sector on average in 2008 might no longer opt for it today, with a premium of 10%.[1] But non-pecuniary incentives may also have changed. The trend towards outsourcing is said to be "infantilising" the public sector (Mazzucato and Collington, 2024) and declining trust in public institutions may have diminished their prestige.

The lack of evidence reflects constraints in data infrastructure. Databases on pay and employment in the public and private sectors typically aggregate multiple cohorts of labour market entrants, with changes in their averages shaped not only by inflows but also by outflows and retention patterns. Describing changes in the attractiveness of the public sector requires data on both (i) pre-employment characteristics (e.g., education) of those it seeks to attract and (ii) employment records with sectoral identifiers. Although most developed countries have administrative education and firm-level employment records available for research, the databases are usually not linkable.

An effort to link databases of different UK government departments has made a granular description of inflow trends possible for the entire population of England-educated labour market entrants. Educational records—from primary and secondary education (held by the Department for Education, DfE) to tertiary education (collected by the Higher Education Statistics Agency, HESA)—were made linkable to annual earnings data from His Majesty's Revenue and Customs (HMRC) and a registry of employing organisations in the UK, maintained by the Office for National Statistics (ONS). While our empirical construction takes year of labour market entry as the unit of analysis, these *inflow* trends can also be seen as informative about broader public sector attractiveness, since the post-entry trends appear stable across entry cohorts.[2]

The paper documents diverging developments on the two sides of the education distribution. Between just before the financial crisis and the onset of the pandemic, the public sector became a less common initial employer for individuals with lower levels of education. At the same time, it became an increasingly common destination for those at the top of the education distribution—whether defined by highest qualification, university rank, or final degree grade.

This shift occurred over two distinct periods: a phase of decline in the public-sector share at entry between 2009 and 2014 and a recovery between 2015 and 2019. The decline was steepest for GCSE holders[3], A-level holders[4] and for university graduates from lower-ranked universities. The recovery was confined to university graduates and driven by those graduating from high-ranked universities, often with a first-class degree or a postgraduate qualification.

What accounts for those divergent trends by education?

Candidate explanations are unlikely to affect all graduates and industries equally, which makes it helpful to break down the trends. The decline in entry between 2009 and 2014 cannot be explained by reduced entry from graduates in education or medicine and stems largely from

[1] Own calculation using the Labour Force Survey; these represent unconditional averages. The most recent data comes from 2023.

[2] See Appendix Figure A2.

[3] Examination at age 16.

[4] Examination at age 18.

reduced entry into local authorities and government. This suggests that the cuts to public-sector expenditure in the beginning of the 2010s—which largely spared education and health budgets—had an educational gradient; that is, affected the lower end of the education distribution more than the higher end.

Graduates from the top five universities increasingly enter finance, tech and consulting but the evidence suggest that the increase is not so much coming at the cost of the public sector than other private sector industries. The share of graduate from the top universities entering central government rose by 14% between 2008 and 2019. This is despite the public-sector pay differential relative to the private sector falling from a 1% premium to a 13% penalty.

Examining the extent to which the documented trends are linked to the evolution of sectoral pay differentials reveals substantial heterogeneity across graduate disciplines. For graduates in subjects offering competitive private-sector options (e.g., science, technology, engineering, and mathematics (STEM)), the explanatory power of the entry-level public-sector pay premium is stronger than for those in subjects where the public sector is the dominant employer (e.g., medicine or education).

Section 2 describes the databases and how they were linked. Section 3 provides context as well as the main results: inflow and pay patterns for different definitions of education. Section 4 provides a breakdown of those trends by field of study and destination industry. Section 5 concludes.

2 Data

This study uses the second iteration of the Longitudinal Education Outcomes (LEO2)[5] which links administrative datasets from several government departments into an individual–year panel of educational trajectories and labour market outcomes.

- The National Pupil Database (NPD): Held by the Department for Education, this dataset provides attainment data at ages 16 and 18 for all pupils in state–funded schools in England, including detailed GCSE and A–Level results.[6][7] The NPD is itself linked to the School Census, which provides demographic information such as sex, age, ethnicity, and socioeconomic background.

- Tertiary education outcomes: Drawn from the Higher Education Statistics Agency (HESA), covering students enrolled at publicly funded UK higher education institutions. These records include the institution attended, subject area, degree level (undergraduate, postgraduate, PhD), and final degree grade (e.g., first-class, upper second).[8][9]

[5]Department for Education; HM Revenue and Customs; Department for Work and Pensions; Higher Education Statistics Agency, released 01 November 2023, ONS SRS Metadata Catalogue, dataset, Longitudinal Education Outcomes SRS Iteration 2 Standard Extract – England, https://doi.org/10.57906/pzfv-d195

[6]Over our timeframe, GCSEs were graded on a scale of A*–G, with C considered a passing grade. Students typically select between 6 and 11 subjects, including mandatory English, mathematics, and science.

[7]In 2015, the compulsory school–leaving age in England was raised from 16 to 18, requiring students to remain in some form of education or training. We observe no discontinuities in our trends around this policy change.

[8]Students who enrol in tertiary education but do not complete their qualification are assigned their next highest completed qualification (e.g., A–Level holders).

[9]To ensure comparability, we exclude individuals with non–standard educational trajectories: those taking less than three years or more than five years to complete an undergraduate degree after A–Levels, less than a year or more than three years for a postgraduate degree after an undergraduate, or more than seven years for a PhD after

- Annual income data: Derived from His Majesty's Revenue and Customs (HMRC) via the Pay As You Earn (PAYE) system, which captures nearly all employees earning above the National Insurance threshold.[10][11]

- Firm and sector data: Drawn from the Inter–Departmental Business Register (IDBR); a registry of UK employers registered for VAT or PAYE. Public sector status is inferred directly from the tax classification of the employer. The IDBR also provides seven–digit Standard Industrial Classification (SIC) codes and legal status identifiers, allowing us to distinguish public sector sub–industries (e.g., local authorities, central government).[12]

Two data–preparation issues warrant particular attention. First, there is a high concentration of low–income observations—a known but not yet fully understood feature of these administrative income records. We address this by censoring the bottom 5% of the income distribution within each tax year.[13]

Second, there is a risk of cohort compositional bias. Since this is a cohort study – where cohorts are defined are defined by the first year in which individuals are observed with positive annual income – care is warranted when constructing cohorts for valid comparisons over time. We mitigate this risk in two ways:

- Consistent cohort definitions: We begin with the cohort entering the labour market in 2008, when the first undergraduate degree holders with standard study durations appear in the data. To ensure comparability, we exclude individuals with unusually short or long educational trajectories—such as completing an undergraduate degree in two years or skipping school years.[14] Without this restriction, undergraduate cohorts observed before 2008 would consist almost entirely of highly selected individuals. Starting in 2008 and excluding these outliers ensures that cohorts are comparable and standard.

- Iterative analysis by highest qualification: We account for cohort differences in the representation of different highest qualification groups by examining public sector entry trends within, rather than across, highest–qualification categories.

3 Results

The sectoral structure of the UK economy witnessed significant shifts in the first two decades of the 2000s. Figure 1 panels (a) and (b) show that the public sector's share of total employment hovered around 25% until 2007, rose during the financial crisis as private sector layoffs spiked, and declined steadily thereafter, with the fiscal consolidation measures implemented between 2010

a postgraduate. These restrictions remove highly selected individuals with atypical labour market experiences prior to graduation.

[10] We exclude self–employment income, which is available only from 2013 onwards.

[11] As noted by Bell, Bloom, and Blundell (2022), PAYE data omit low–hours individuals earning below the threshold, equivalent to a minimum–wage employee working fewer than 15 hours per week.

[12] We exclude organisations that are neither strictly public nor private, such as charities or NGOs.

[13] This restriction primarily affects GCSE–level entrants rather than university graduates, who are the main focus of this study. A large share of these observations likely capture short–term or marginal work.

[14] For example, undergraduates are restricted to those who complete tertiary education between 3–5 years after finishing their A–Levels. Likewise, postgraduate graduates must graduate at most three years after their undergraduate degree, and PhDs must graduate between 3–7 years after their previously highest level of education.

and 2017.[15] The increase in the public sector share during the crisis (panel a) was driven by a contraction in private sector employment rather than a growth in public sector headcount. The subsequent decline in the public sector share after 2009 reflects stagnant public sector employment alongside continuing private sector expansion.

These employment trends relate to changes in pay differentials. Panels (c) and (d) show that real average pay rose in both sectors up to the financial crisis but then diverged: private sector wages fell sharply but recovered, while public sector wages stagnated in real terms from 2010 onward until pay caps associated with the "austerity" measures were lifted in 2018. As a result, the average public sector pay premium increased until 2012 (when private sector wage growth resumed) and then steadily declined. While those aggregate pay trends mask considerable occupation heterogeneity (see Appendix Figure A1), they appear robust to workforce composition controls.[16]

The subsequent graphs offer one interpretive angle on the trends described above: they show pay and employment at *labour market entry*, isolating cohort–specific inflow trends that are obscured in aggregate series such as Figure 1. They differ from Figure 1 and most cross–cohort analyses in the literature in three ways:

1. The X-axis indexes entry cohorts, defined by the first year in which individuals record labour market income after completing their highest qualification. Focusing on the entry year is well suited to studying inflows, and it can also be viewed as informative about broader trends in public sector attractiveness, since the post-entry rise in the public-sector employment share is broadly similar across cohorts (see Appendix Figure A2).

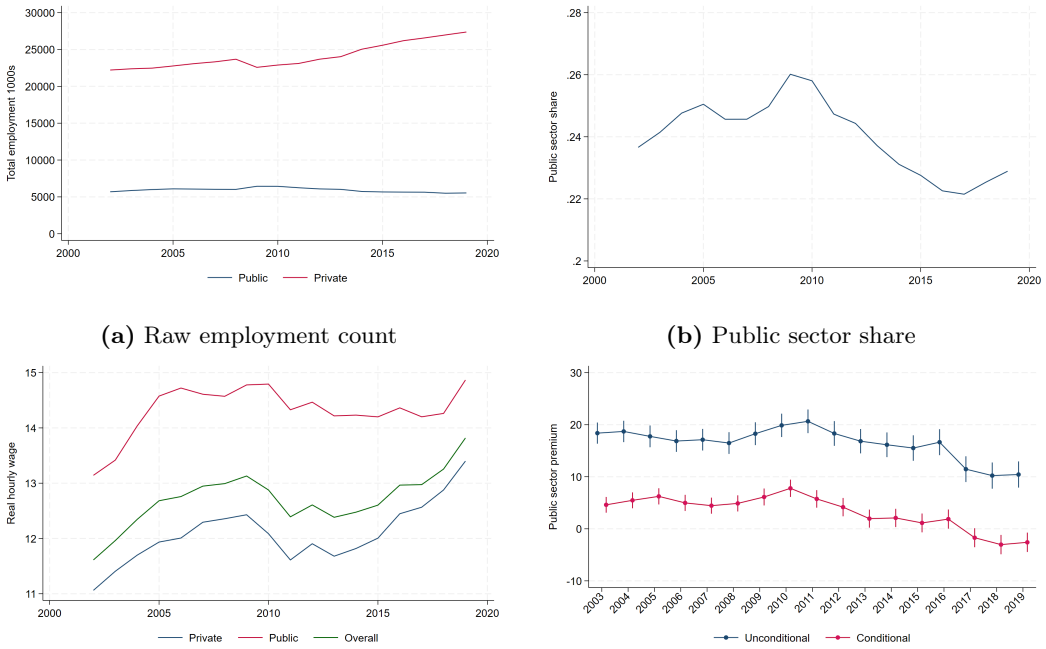
2. The Y–axis reports the public sector share and pay *in the first year of labour market income after completion of the highest qualification.* At entry, the public sector share is lower than later in the life cycle—and therefore lower than the cross–cohort aggregates in Figure 1—because the probability of public sector employment increases with labour market experience (see Appendix Figure A3).

3. Due to data limitations, the first year considered is 2008. This means that the analysis does not cover the relatively stable period preceding the financial crisis.[17]

[15] During this "austerity" period, total managed expenditure fell from 46.5% to 40.4% of GDP. The cuts were unevenly distributed across departments: local governments saw a 47.5% real–terms reduction, while health spending rose by rose by 5.4%; the civil service headcount fell by 20%. Wage growth was capped at 1% annually for individuals earning above £21,000, the public sector median. These policies significantly reduced income progression, particularly at the top of the distribution. The average public sector pay premium fell from 7% in 2010 to 0% by 2018, with degree-educated and female individuals outside southern England especially affected (Nibloe, 2024). The pay caps were lifted in 2018 and the public sector's share of total employment rose for the first time since 2009.

[16] When comparing trends across the public and private sectors, it should be noted there are marked compositional differences (see Table A1 in the Appendix). The public sector employs a higher proportion of women, older individuals, and degree-holders than the private sector (Nibloe, 2024), which reflects the occupational composition of the public sector, particularly in health and education, where tertiary qualifications are typically required. Life–cycle income and non–wage benefits—such as pension contributions—also substantially differ between the sectors (Postel-Vinay, 2015; Postel-Vinay and Turon, 2007; Boileau et al., 2023). Public sector pay is also more compressed, with a negative premium at the top of the wage distribution (Cribb and O'Brien, 2024). Yet, it can be argued that the *trends* in average pay differentials remain informative, as they appear robust to workforce composition controls (Cribb and O'Brien, 2024).

[17] We compare the share of university graduates entering the public sector with that of GCSE and A–Level holders, whose entry can be traced further back. Public sector entry probabilities for these groups remained stable between 2005 and 2008, suggesting that the first year of our analysis (2008) is representative of the pre–financial–crisis landscape.



(a) Raw employment count

(b) Public sector share

(c) Pay across sectors

(d) Public sector pay premium

Figure 1: Trends in public sector employment and pay, 2008–2019.

Notes: These panels show trends from 2008 to 2019: (a) total public and private sector employment (Y-axis), (b) the public sector share of total employment (Y-axis), (c) real public and private sector hourly pay in 2019 prices (Y-axis), and (d) the public sector pay premium (Y-axis), defined as the percentage difference in average pay between the public and private sector. In each panel, the X-axis shows years. Panel (a) is constructed from official government statistics, and (b)–(d) are constructed using the Labour Force Survey. Private sector employment includes self-employment. The unconditional public sector premium is calculated by regressing log hourly wages on a binary indicator for public sector employment. The conditional premium is calculated in the same way, except we also control for age (squared), sex, education, and 3-digit occupation fixed effects.

We evaluate three different proxies of education: highest qualification, university rank (incl. separate analysis of the trends for the top 5% university graduates), and degree grade. All three point to the same pattern, namely that, between 2008 and 2019, the public sector became a less common first work destination for those with lowest levels of education, but a more common one at the very top of the education distribution.

3.1 Trends by highest qualification

Figure 2 shows that the public sector share at entry declined more sharply for those with GCSEs and A–Levels than for those entering with undergraduate degrees.[18] By 2019, the share halved for GCSE holders, it declined by 24% for A–Level holders and by only 1% for entrants with an undergraduate degree.

[18]Further analysis within tertiary education levels follows below.

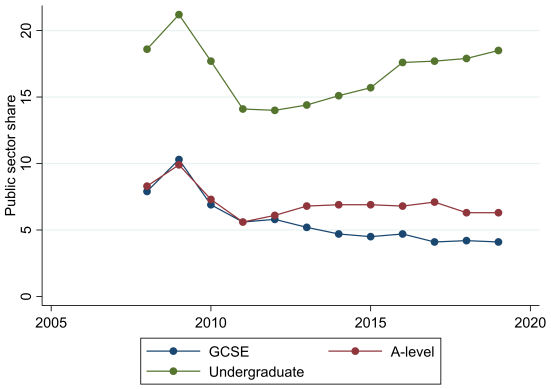


Figure 2: Public sector share at labour market entry by highest qualification, 2008–2019.

Notes: This line plot shows the public sector share at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for three groups: individuals entering the labour market directly after GCSEs, after A-levels, and after completing an undergraduate degree. Each point captures the percentage of entrants selecting public sector employment in that year for each group.

The divergence in trends by highest qualification group is mainly to be attributed to a stronger recovery in public sector entry among undergraduates between 2015 and 2019, which GCSE and A–Level holders do not observe. Trends were more similar across qualification groups between 2008 and 2014, with a financial–crisis–driven increase around 2009 followed by a sharp decline.

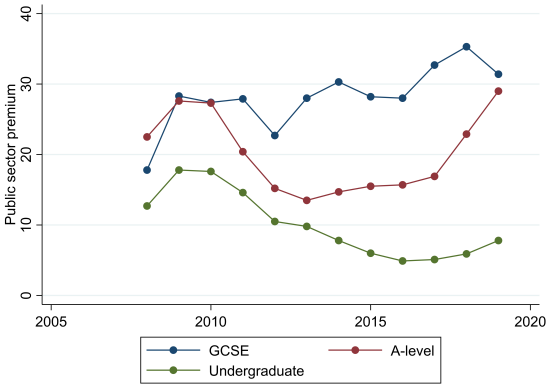


Figure 3: Public sector pay premium at labour market entry by highest qualification, 2008–2019.

Notes: This line plot shows the public-sector pay premium at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for three groups: individuals entering the labour market directly after GCSEs, after A-levels, and after completing an undergraduate degree. The premium is defined as the percentage difference in average pay between the public and private sectors. The trends are essentially unchanged when, instead of using the raw difference in mean pay, we estimate the premium net of compositional differences between sectors (i.e., using controls).

3.2 Trends by university rank

Are the trends *within* highest–qualification categories consistent? This subsection zooms in on undergraduate degree holders as the largest qualification group in the public sector.

Figure 4 reveals a university-rank gradient: entry into the public sector fell among graduates

of lower–ranked universities but slightly increased among those from top–ranked ones.[19] Figure 5 shows that this divergence was primarily driven by developments in the first half of the analysis period. Between 2008 and 2014, the public sector share at entry fell by ten percentage points for graduates of bottom–percentile universities, while entry rates from top–percentile universities remained stable. In contrast, the recovery between 2015 and 2019 was more evenly distributed.

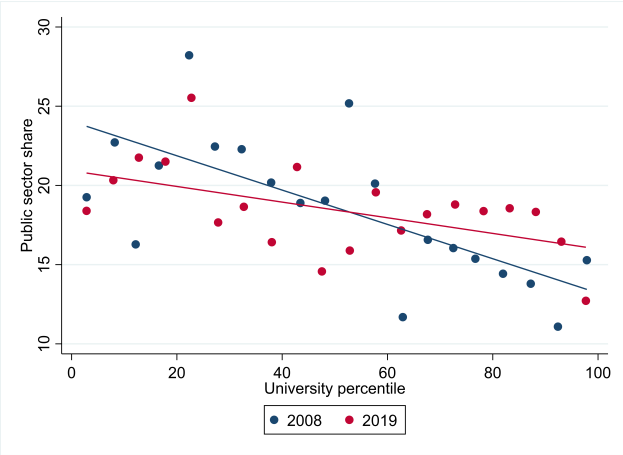
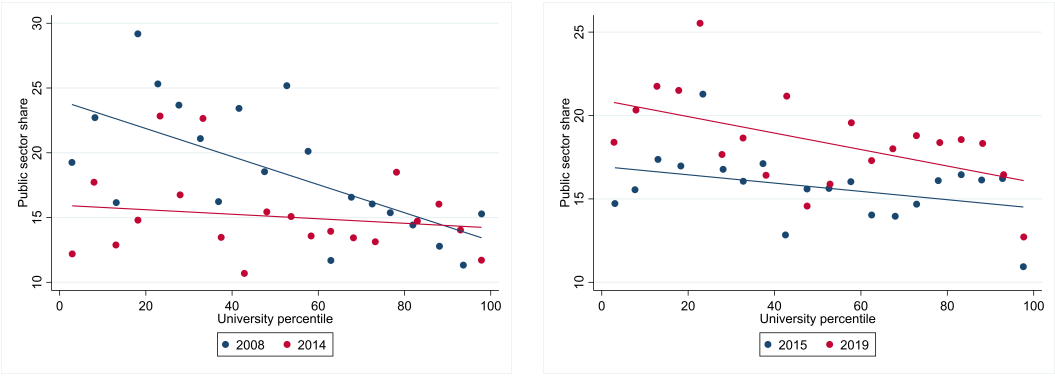


Figure 4: Public sector share at labour market entry by university rank, 2008–2019.

Notes: This binned scatterplot shows the mean public sector share at labour market entry (Y-axis) for 2008 and 2019 by university percentile (X-axis). Universities are ranked by the average GCSE scores (age 16) of prior graduates, with the 100th percentile representing the top 1% of universities. Each dot represents a mean over equal-sized bins of universities, weighted by student numbers.



(a) 2008–2014 **(b)** 2015–2019

Figure 5: Public sector share at labour market entry by university rank: 2008–2014 (left) and 2015–2019 (right).

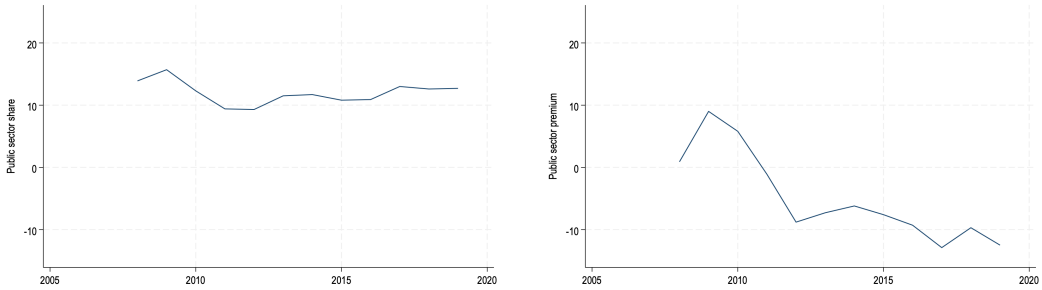
Notes: This binned scatterplot shows the mean public sector share at labour market entry (Y-axis) by university percentile (X-axis) for two years in each panel. Universities are ranked by average GCSE scores of prior graduates. Each dot represents a mean over equal-sized bins of universities, weighted by student numbers.

The evolution of entry-level pay differentials by university rank appears to have limited explanatory power. Appendix Figures A4 and A5 show that the public-sector pay premium

[19] Universities are ranked according to the average GCSE (age–16) scores of their prior entrants.

increased at the bottom of the university-rank distribution over the analysis period, and that the recovery in the public-sector share at entry in the second half of the decade observed for the top percentile universities occurred despite a decline in the pay differentials in favour of the private sector.

Figure 6 gives a closer look at the trends for graduates from the top five universities[20], whose trends stand out. While immediately after the financial crisis their average first-year income was higher in the public than in the private sector, the difference fell to around –10% by 2012 and has remained in that neighbourhood until the pandemic. Nevertheless, the share entering the public sector rose by 36% between 2014 and 2019. Appendix Figure A6 shows that this increase is primarily driven by higher entry rates into government.



(a) Public sector share **(b)** Public sector pay premium

Figure 6: Public sector share and pay premium at labour market entry for entrants with an undergraduate degree from the top five universities, 2008–2019.

Notes: These line plots show the public sector share (panel a) and the public-sector pay premium (panel b) at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for graduates from the top five universities (defined by the average GCSE attainment of prior students). The premium is defined as the percentage difference in average pay between the public and private sectors.

3.3 Trends by final degree grade

Are the trends robust to alternative measures of educational attainment, e.g., one only weakly related to university rank—the final degree grade?

Figure 7 suggests that yes. In 2008, graduates with upper and lower second–class degrees had higher public sector entry shares than those with first-class degrees but, by 2019, the ranking reversed. Entry shares increased among first-class graduates while declining for those with lower degree grades. By the end of the period, 19.8% of graduates with first-class degrees entered the public sector, compared to 18.2% of graduates with upper seconds (2:1) and 16.9% of graduates with lower seconds (2:2). (While grade inflation occurred over the period - see Appendix Figure A8 - it only biases interpretation of this graph if it affected different categories of final degree grades differently.)

Appendix Figure A9 shows that, over the same period, the entry-level public-sector pay premium increased for graduates with lower degree grades, while remaining relatively flat for those graduating with First-class and Upper Second (2:1) degrees.

[20]We select the top five universities based on the average GCSE scores of prior graduates.

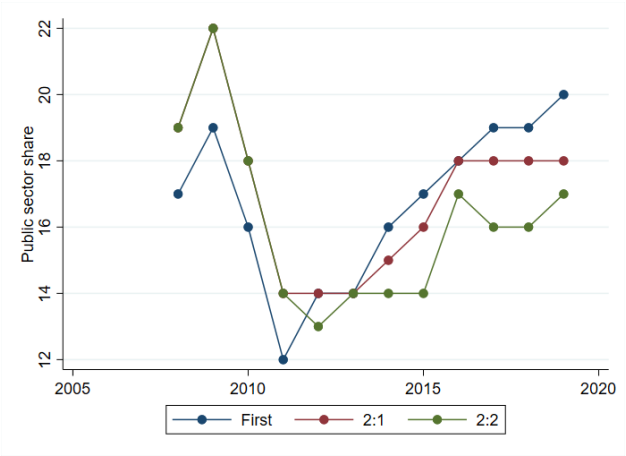


Figure 7: Public sector share at labour market entry by final degree grade, 2008–2019.

Notes: This line plot shows the public sector share at labour market entry (Y-axis) from 2008 to 2019 (X-axis) by final degree grade. Degrees are grouped into five categories: First, 2:1, 2:2, Third, and Fail. The latter two categories are omitted as they represent a very small share of students.

3.4 Trends by graduate education

The analysis thus far has focused on graduates with undergraduate degrees, who account for the largest share of graduate entrants.[21] For a more complete picture, we extend the analysis to two further graduate categories: postgraduate–degree holders (e.g. MSc, MA, MPhil) and PhD graduates. Figure 8 shows the public sector share at entry across cohorts of these three groups of labour market entrants. As discussed in Section 2, the more years of education, the later the year of labour market entry, implying that postgraduates and PhDs cannot be traced as far back as undergraduates.

Public sector entry shares are increasing in educational attainment: PhDs exhibit the highest probability of public sector entry (30% in 2018), followed by postgraduates (27%), and then undergraduates (18%)—a ranking that holds across cohorts of labour market entrants.

More revealing than the ranking is the dynamic: the growth rate in the recovery of public sector entry is found to be the highest for PhD graduates. Their public sector entry share increased by 32% between 2014 and 2018, compared with 9% for postgraduates and 22% for undergraduates.

[21] To avoid cohort compositional bias, as explained in Section 2.

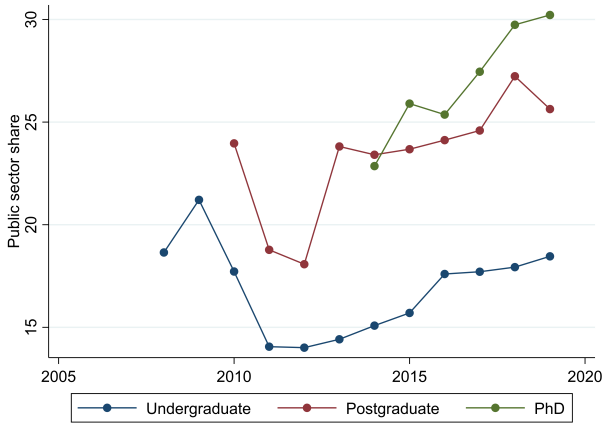


Figure 8: Public sector share at labour market entry by tertiary education category.

Notes: This line plot shows the public sector share at labour market entry (Y-axis) for selected years (2008, 2010, 2014, 2016, and 2018), disaggregated by tertiary education category: undergraduate, postgraduate (e.g., MSc, MPhil, MA), and PhD.

4 Trends by discipline and industry

What could be driving the divergence of trends across the two ends of the education distribution? Candidate explanations are likely to have unequal effects across graduate disciplines and their destination industries.

The following analyses aid interpretation with a decomposition of the trends by subject of study and industry. The analysis distinguishes industries within the public sector as well as private-sector industries often cited as pulling high-educated away from the public sector — finance, tech, and consulting.[22]

4.1 Heterogeneity by graduate discipline

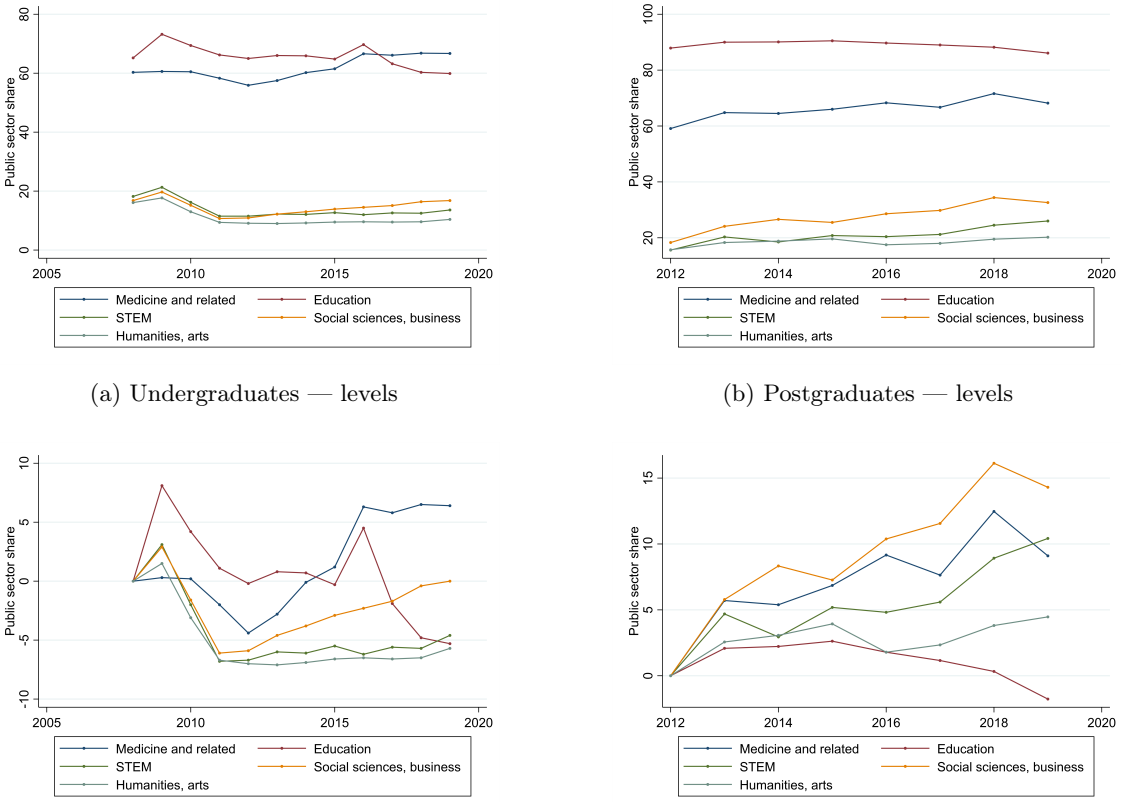
The breakdown of trends by university degree subject (Figure 9) reveals that the steep educational gradient in the decline of public sector entry between 2008 and 2014 was not driven by graduates in education or medicine, but by graduates from all other fields, with substantial variation across subjects. Table A2 in the Appendix shows that public sector spending reductions largely spared education and health budgets, providing suggestive evidence that austerity-related expenditure cuts explain the observed trends in the first half of the 2010s. This suggestion will be further supported by a breakdown of the trends by public sector destination departments in the next subsection.

As shown in panels (a) and (c), graduates in education and medicine (and related fields) consistently exhibited high public sector entry shares, which remained relatively stable throughout

[22]Industries are classified using the UK Standard Industrial Classification of Economic Activities (SIC), a hierarchical coding system that assigns each firm/establishment a code based on its primary economic activity. I define Finance as SIC 64–66 (financial service activities; insurance and pension funding; and auxiliary financial/insurance activities). Tech is defined as SIC 62–63 (computer programming related activities; information service activities). Consulting is defined as SIC 7022 (business and other management consultancy activities).

the entry cohorts until 2014 (and beyond for education graduates).[23] Over the sample period, the most pronounced reductions in public sector entry shares were observed among humanities, arts and STEM undergraduates. By contrast, social sciences and business undergraduates experienced a sharp decline between 2009 and 2011, followed by a marked increase in public sector entry after 2012. (Appendix Figure A7 illustrates how the subject distribution differs by quintile of the university distribution.)

Turning to postgraduates in panels (b) and (d), we observe an increase in the public sector share across all subjects between 2012 and 2019. Unlike among undergraduates, there was a substantial rise in the proportion of STEM postgraduates entering the public sector.



(a) Undergraduates — levels

(b) Postgraduates — levels

(c) Undergraduates — normalised

(d) Postgraduates — normalised

Figure 9: Public sector share at labour market entry by subject.

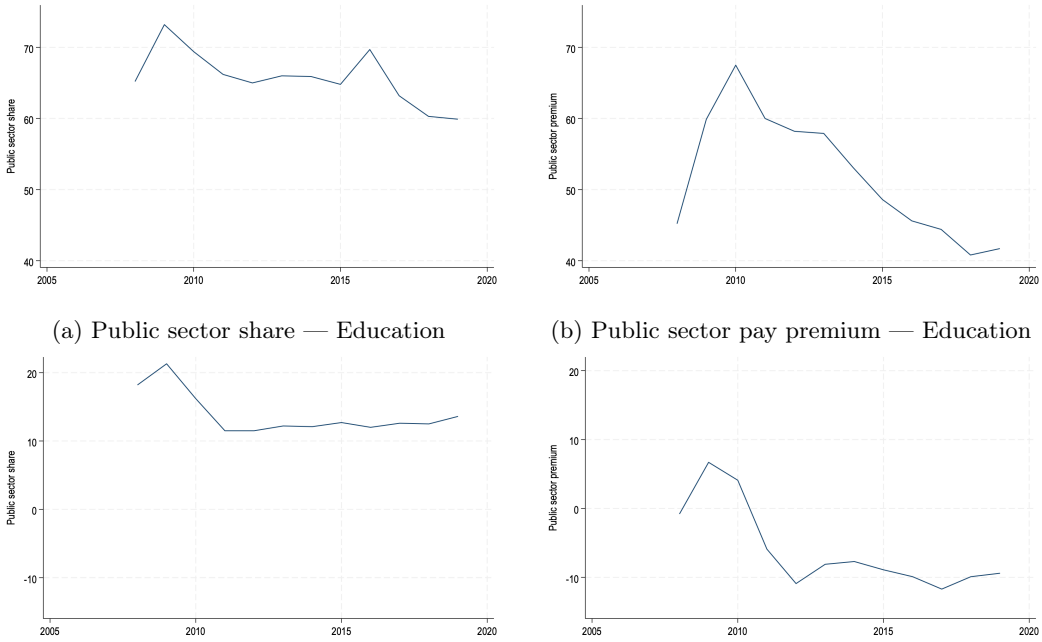
Notes: These line plots show the public sector share at labour market entry (Y-axis) by selected subjects of study (X-axis), separately for graduates entering the labour market with an undergraduate degree (left panels), from 2008 to 2019, and for entrants with a postgraduate degree (right panels), from 2012 to 2019. Panels (a) and (b) present shares in levels; panels (c) and (d) show shares normalised to 2008 for undergraduates and to 2012 for postgraduates. Subjects are grouped into five categories: Education; Humanities and Arts; Medicine and Related; STEM; and Social Science and Business. Postgraduate cohorts are observed later due to longer study durations (see Section 2).

To what extent are the observed trends linked to the evolution of pay differentials between the public and private sectors?

[23] 'Medicine and related undergraduates' includes, for example, core medicine graduates and those who studied pharmacy and nutrition. The latter two are more likely to enter the private sector than core medicine graduates.

Figure 10 reveals heterogeneity in this relationship. For graduates from fields with strong private–sector options, the trends exhibit a relatively strong correlation with the evolution of entry-level pay differences, whereas in fields where the public sector is the dominant employer—such as medicine and education—the correlation is weaker. On the whole, the explanatory power of the public sector pay premium does not appear to weaken or strengthen over time, as one might expect if non–pecuniary factors were becoming increasingly important for occupational choice (see Figure A10 in the Appendix).

It should be noted that this evidence is merely suggestive of the importance to attribute to financial incentives, and the measure considered – the entry-level public sector pay premium – is debatable. First, because, for most individuals, sectoral choice depends more on long–term career prospects than on first-year pay. Second, because the measure is imprecise: since entry occurs throughout the calendar year, the observed first-year annual income conflates differences in compensation rates with differences in employment duration and hours worked (see Section 2).



(a) Public sector share — Education

(b) Public sector pay premium — Education

(c) Public sector share — STEM

(d) Public sector pay premium — STEM

Figure 10: Public sector share and pay premium at labour market entry for Education and STEM graduates, 2008–2019.

Notes: These line plots show the public sector share (left column) and the public-sector pay premium (right column) at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for Education graduates (top row) and STEM graduates (bottom row). The premium is defined as the percentage difference in average pay between the public and private sectors.

4.2 Heterogeneity by destination industry

Breakdown by public sector area The breakdown by public sector destination area (Figure 11) shows that the decline in public sector entry between 2008 and 2014 was driven by reduced entry into local authority and government (including core civil service), rather than into

health. The recovery of the public sector share at entry since 2014 appears to have been driven mainly by health, and to a small extent by the government (see Figure 9), while local authority entry has continued to decline.

This pattern suggests that austerity cuts help explain the educational gradient in the declining importance of the public sector as an employer for the low-educated. Table A2 in the Appendix shows that public sector spending reductions disproportionately affected local authorities and government services, while largely sparing health and education budgets.

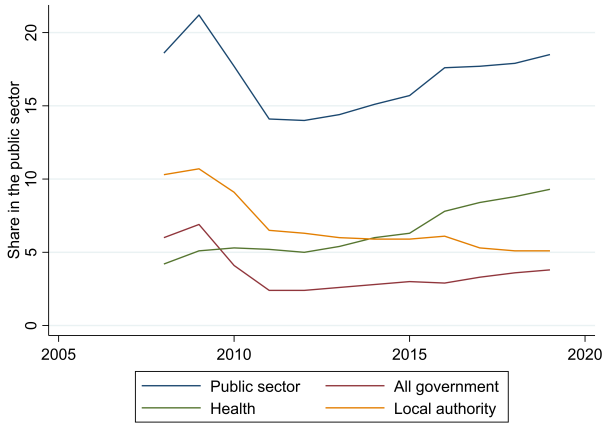


Figure 11: Public sector share at labour market entry by destination area, 2008–2019.

Notes: This line plot shows the share of labour market entrants (Y-axis) from 2008 to 2019 (X-axis) in four categories: the overall public sector, all government, the health sector, and local authorities, for graduates entering the labour market after an undergraduate degree.

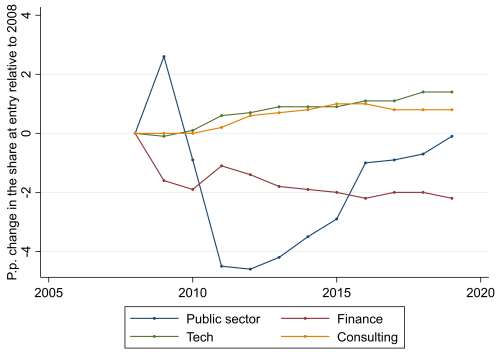
Breakdown of private sector outside option industries A popular explanation for the perceived decline in the appeal of public service is the rising pay and prestige in certain private sector industries. With the outsourcing of prestigious tasks from the public sector, technological advances driving the growth of influential industries, and pay in finance recovering, it is argued that a 'brain drain' is occurring: a drain from the public sector into finance, the tech sector, and the consulting industry (Mazzucato and Collington, 2024; Teutem, 2025).

Figure 12 provides partial support for this view. Entry into the tech sector and consulting industry has increased relative to pre–financial crisis levels. But the increase appears steady and does not seem to mirror fluctuations in public sector entry, which contracted in the first half of the 2010s and recovered only in the second half of the decade. Finance has maintained an entry-level employment share approximately two percentage points below its pre-crisis level, despite a substantial rebound in entry-level compensation. (Appendix Figure A11 gives the trends in levels).

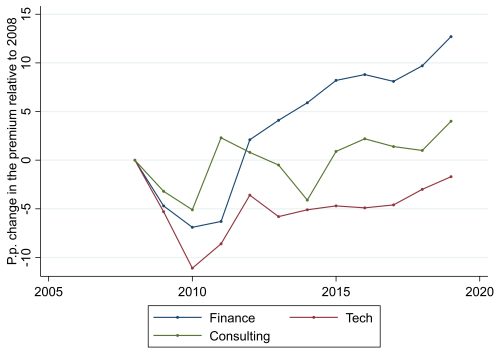
For graduates from the top five universities, shifts in relative pay differentials are more pronounced: finance, the tech sector and the consulting industry have increasingly outpaced the public sector in entry-level compensation. The post–financial crisis downturn in finance pay appears to have been less marked for entrants from the top universities, while the subsequent recovery was more substantial.

All three industries expanded their share of employment at labour market entry. At the same

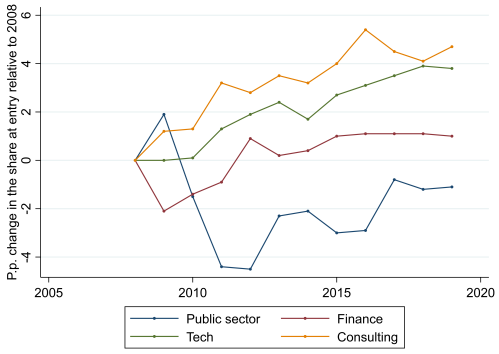
time, the patterns do not indicate a one-for-one reallocation from the public sector. Entry into the public sector has continued to rise since 2012, despite their entry-level pay difference with the private sector falling from -8.8% to -12.5%.



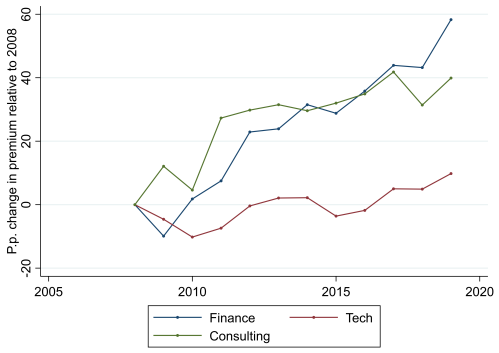
(a) Undergraduates — entry shares (normalised)



(b) Undergraduates — average pay difference with the public sector (normalised)



(c) Top five universities — entry shares (normalised)



(d) Top five universities — average pay difference with the public sector (normalised)

Figure 12: Selected industry shares and pay differences at labour market entry for undergraduates and for undergraduates from the top five universities, 2008–2019.

Notes: These line plots show entry shares into (i) the public sector, (ii) finance, (iii) the "tech sector", and (iv) consulting at labour market entry (Y-axis), normalised to 2008. The top row shows undergraduates; the bottom row shows graduates from the top five universities. Panels (b) and (d) show the percentage difference in average pay between the respective industry and the public sector. Industries are classified using the UK Standard Industrial Classification (SIC): Finance is SIC 64–66; Tech is SIC 62–63; Consulting is SIC 7022.

Taken together, the heterogeneity analyses by field of study and industry point toward UK-specific policy explanations rather than a universal decline in public sector prestige that would be expected to manifest similarly across countries. The fact that areas most exposed to these cuts, such as local authorities (see Table A2) experienced the largest changes in entry, while relatively protected sectors saw little adjustment, suggests that expenditure reductions played a central role in the decline in public sector entry among individuals with lower levels of education.

Importantly, this decline among the lower-educated has not reversed following the formal end of the austerity programme in 2017. The subsequent recovery in public sector entry has instead been

driven by individuals at the upper end of the education distribution, indicating a compositional shift of government toward more highly educated entrants—potentially linked to rising skill requirements associated with the implementation of "Brexit".

5 Conclusion

Before the financial crisis, young university graduates were already more likely than those with GCSEs or A–Levels to begin their careers in the public sector. By 2019, this educational gradient strengthened: entry into the public sector became more common among the most qualified, while it declined sharply among those with fewer qualifications.

General theories attributing the decline in public sector attractiveness to a reduction in relative pay compared to finance and emerging industries like tech and consulting seem to offer only a partial explanation. While inflows into these new industries have risen, there has, since 2012, been a concurrent recovery in public sector attractiveness at entry. The stability of public sector entry is particularly surprising for graduates from the top five universities, given that their average public–private pay gap shifted from a 0.9% premium to a 12.5% penalty.

Heterogeneity analyses by graduate discipline and destination industry point to UK-specific policy explanations. The decline in public sector entry in the early 2010s was largely driven by reduced inflows from the lower end of the educational distribution into local authorities and central government—sectors hit hardest by austerity-related spending cuts. By contrast, areas relatively insulated from cuts, such as health and education, continued to attract entrants. The subsequent rise in entry in the latter half of the decade appears to be driven by highly educated individuals moving into government, potentially reflecting increased skill and credential requirements linked to Brexit implementation.

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Additional Material

Sector	Mean Wage	Wage P10	Wage P90	Emp. Share (%)	Educ > A-level (%)	Age	Female Share (%)	White Collar (%)	North (%)
Private	2.46	1.81	3.26	68.56	47.08	38.39	43.17	43.84	37.29
Public	2.63	2.03	3.24	31.43	67.28	42.13	64.18	63.79	42.52
Overall	2.51	1.86	3.26	100.00	52.89	39.47	49.21	49.57	38.79

Table A1: Summary statistics by sector.

Notes: This table summarises key characteristics of public sector employees, showing that the workforce is more female, older, and more educated compared to the private sector. All wages are in 2020 £. "White collar" occupations are defined as occupations under 4000 according to the SOC 2000 classification. This table is reproduced from Nibloe (2025) using the Quarterly Labour Force Survey pooled from 1992–2020.

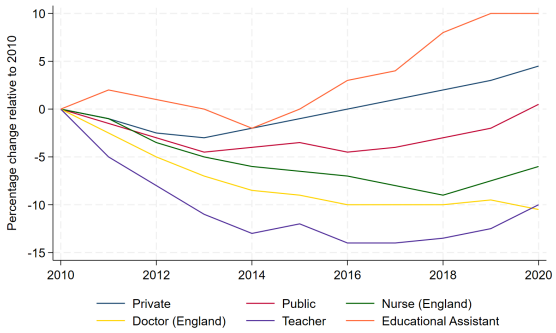


Figure A1: Wages in public and private sectors by occupation.

Notes: This figure shows the average pay evolution between 2010 and 2020 across a range of occupations. The public and private series refer to mean weekly earnings from the Average Weekly Earnings dataset (AWE). The series on doctors and nurses are mean annual earnings per person in NHS trusts and other core organisations in England. The data on teachers and educational assistants refer to average weekly earnings collected from the Annual Survey of Hours and Earnings (ASHE). The figure is replicated from Cribb and O'Brien, 2024.

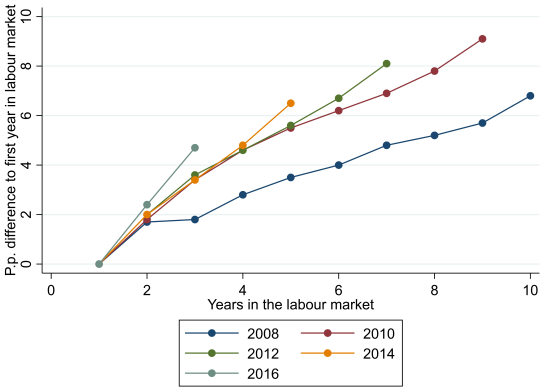


Figure A2: Public sector share over years of experience, by labour market entry cohort.

Notes: This line plot shows the public sector share over years of experience (Y-axis) across different labour market entry cohorts (separate series).

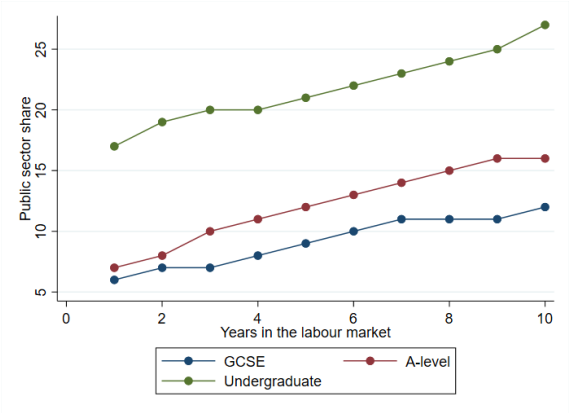


Figure A3: Public sector share over years of experience, by highest qualification.

Notes: This line plot shows the public sector share over years of experience (X-axis), separately by highest qualification group (separate series).

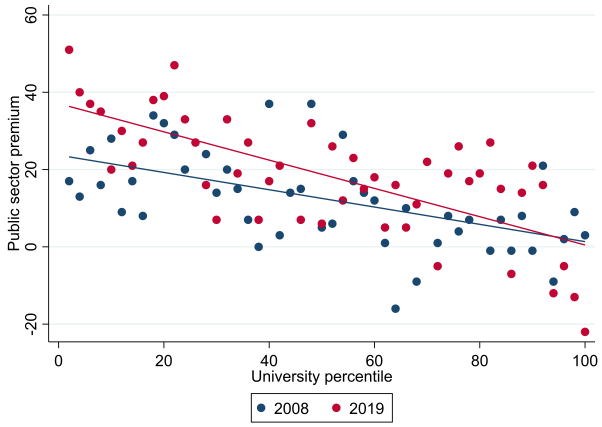
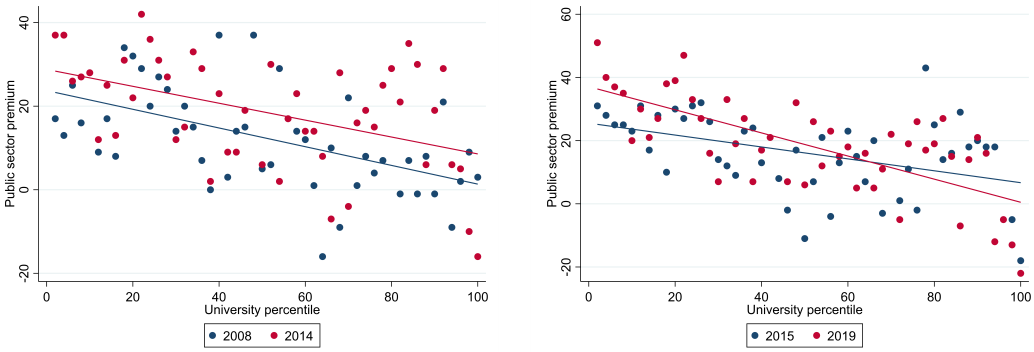


Figure A4: Public sector pay premium at labour market entry by university rank, 2008–2019.

Notes: This binned scatterplot shows the mean public-sector pay premium at labour market entry (Y-axis) for 2008 and 2019 by university percentile (X-axis). The premium is defined as the percentage difference in average pay between the public and private sectors. Universities are ranked by the average GCSE scores (age 16) of prior graduates, with the 100th percentile representing the top 1% of universities. Each dot represents a mean over equal-sized bins of universities, weighted by student numbers.



(a) 2008–2014 **(b)** 2015–2019

Figure A5: Public sector pay premium at labour market entry by university rank: 2008–2014 (left) and 2015–2019 (right).

Notes: This binned scatterplot shows the mean public-sector pay premium at labour market entry (Y-axis) by university percentile (X-axis) for two years in each panel. The premium is defined as the percentage difference in average pay between the public and private sectors. Universities are ranked by average GCSE scores of prior graduates. Each dot represents a mean over equal-sized bins of universities, weighted by student numbers.

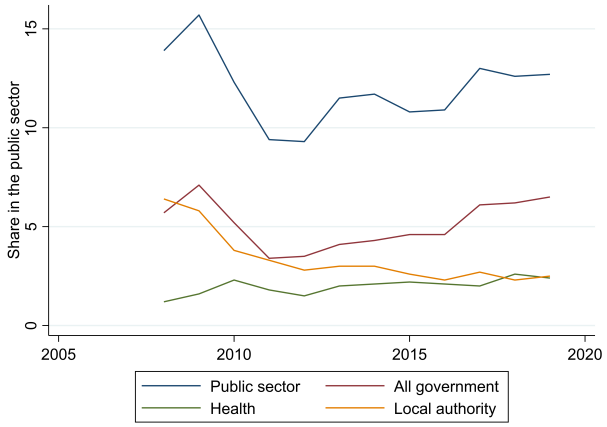


Figure A6: Public sector destination at labour market entry for entrants with an undergraduate degree from the top five universities, 2008–2019.

Notes: This line plot shows the public sector share at labour market entry (Y-axis) from 2008 to 2019 (X-axis) by destination area for graduates from the top five universities (defined by the average GCSE attainment of prior students). The four series correspond to the overall public sector, all government departments, the health sector, and local authorities.

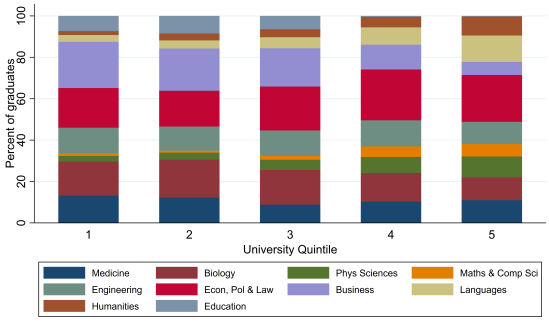


Figure A7: Graduate subject distribution by university quintile.

Notes: This stacked bar chart shows the distribution of new graduates entering the labour market in 2019 across fields of study, by university quintile (defined using Key Stage 4 scores).

	National Statistics					
Total DEL by departmental group	**2010–11**	**2011–12**	**2012–13**	**2013–14**	**2014–15**	**2015–16 (plans)**
Education	61,520	58,008	56,126	55,264	56,997	57,630
NHS (Health)	107,483	108,144	108,888	111,307	113,300	115,420
Personal Social Services (Health)[3]	1,574	–	–	–	–	–
Transport[4]	13,352	13,003	12,566	12,414	11,915	8,425
CLG Communities[5]	10,980	6,030	4,064	5,940	6,356	7,738
CLG Local Government[5]	26,047	26,688	23,997	16,711	13,657	10,534
Business, Innovation and Skills	20,458	18,255	17,265	17,461	15,767	16,713
Home Office	13,948	13,040	11,988	11,292	11,529	10,491
Justice	9,004	9,393	8,777	7,900	7,350	6,533
Law Officers' Departments	719	645	613	586	551	527
Defence	39,383	39,071	35,452	35,021	34,368	34,618
Foreign and Commonwealth Office	2,411	2,279	2,097	2,147	1,872	1,894
International Development	7,993	8,216	8,028	10,159	9,650	9,391
Energy and Climate Change	3,836	2,736	3,269	3,429	3,635	3,877
Environment, Food and Rural Affairs	2,390	2,490	2,353	2,628	2,336	2,057
Culture, Media and Sport	2,199	2,903	2,520	1,118	1,515	1,526
Work and Pensions	10,016	8,148	7,934	7,772	7,225	6,438
Scotland	30,499	28,965	28,879	28,740	28,803	28,322
Wales	16,197	15,371	15,118	15,243	15,528	14,271
Northern Ireland	11,557	10,982	10,796	10,803	10,772	10,555
Chancellor's Departments	4,234	4,085	3,567	3,411	3,582	2,971
Cabinet Office	2,630	2,574	2,597	2,544	2,835	2,762
Small and Independent Bodies	1,763	1,789	1,518	1,577	1,692	1,715
Reserve	–	–	–	–	–	–
Special Reserve	–	–	–	–	–	300
OBR allowance for shortfall	–	–	–	–	-3,000	-3,000
Adjustment for Budget Exchange[6]	–	–	–	–	–	2,000
Total DEL	**401,786**	**382,815**	**368,413**	**363,107**	**361,244**	**353,200**

Table A2: Evolution of departmental expenditure limits in the UK government.

Notes: The data are reproduced from the Treasury Economic Evidence NCA Remuneration Review Body (HM Treasury, January 2014), Table 1A. Real terms figures are the cash figures adjusted to 2014–15 price levels using GDP deflators (ONS release: 30 June 2015). The forecasts are consistent with the Summer Budget 2015. (3) Personal Social Services (Health) are grants previously paid by the Department of Health that are now included in CLG Local Government's budget. (4) Following implementation of ESA10, Network Rail is now classified to central government. Consequently from 2015–16 there is no longer a central government capital grant to Network Rail. The actual expenditure of Network Rail appears in the Department for Transport departmental AME budget. (5) Figures from 2013–14 reflect adjustments to budgets for changes to local government funding relating to the localisation of business rates and council tax benefit. (6) Departmental budgets include amounts carried forward through Budget Exchange; these increases will be offset by future deposits at Supplementary Estimates and are excluded from spending totals.

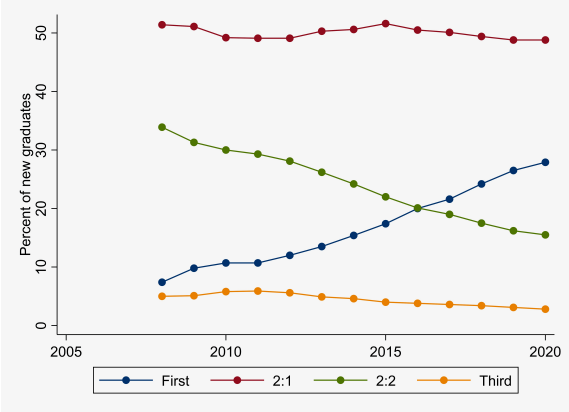


Figure A8: Share of new entrants by degree classification.

Notes: This figure shows the share of undergraduate new entrants by degree classification between 2008 and 2019. Grades are classified as First, 2:1, 2:2, and Third. The figure is taken from Cribb and O'Brien, 2024.

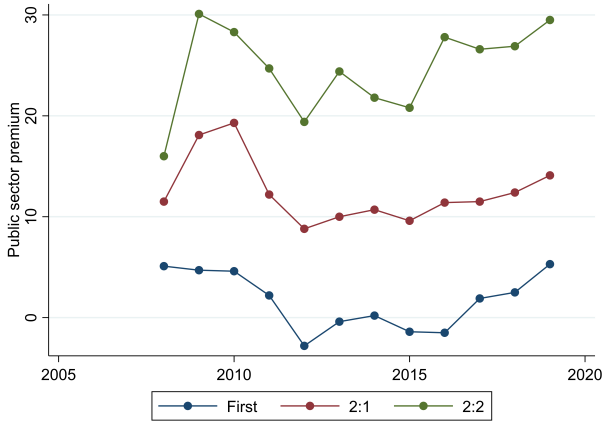
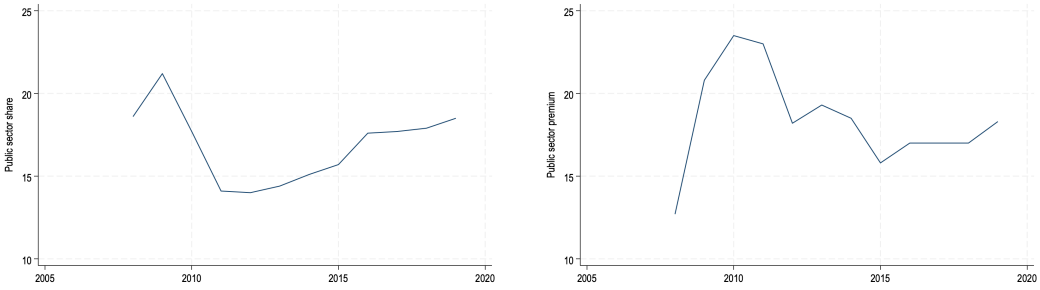


Figure A9: Public sector pay premium at labour market entry by final degree grade, 2008–2019.

Notes: This line plot shows the public-sector pay premium at labour market entry (Y-axis) from 2008 to 2019 (X-axis) by final degree grade. The premium is defined as the percentage difference in average pay between the public and private sectors in the labour market entry year. Degrees are grouped into five categories: First, 2:1, 2:2, Third, and Fail; the latter two categories are omitted as they represent a very small share of students.

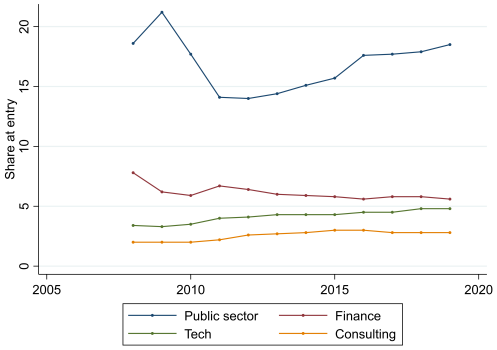


(a) Public sector share

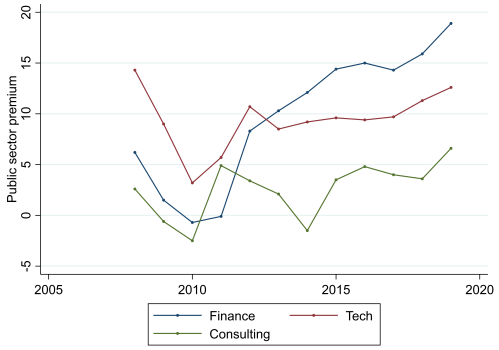
(b) Public sector pay premium

Figure A10: Public sector share and pay premium at labour market entry for entrants with an undergraduate degree, 2008–2019.

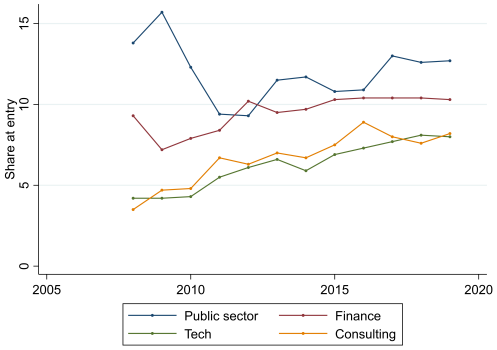
Notes: These line plots show the public sector share (left panel) and the public-sector pay premium (right panel) at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for entrants with an undergraduate degree. The premium is defined as the percentage difference in average pay between the public and private sectors in the labour market entry year.



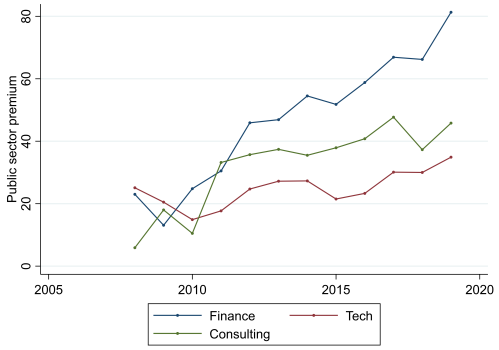
(a) Undergraduates — entry shares



(b) Undergraduates — average pay difference with the public sector



(c) Top five universities — entry shares



(d) Top five universities — average pay difference with the public sector

Figure A11: Selected industry shares and pay differences at labour market entry for undergraduates and for undergraduates from the top five universities, 2008–2019.

Notes: These line plots show entry shares (panels a and c) and the pay difference with the public sector (panels b and d) at labour market entry (Y-axis) from 2008 to 2019 (X-axis) for undergraduates (top row) and for graduates from the top five universities (bottom row). The pay difference is defined as the percentage difference in average pay between the respective industry and the public sector. Industries are classified using the UK Standard Industrial Classification (SIC): Finance is SIC 64–66; Tech is SIC 62–63; Consulting is SIC 7022.