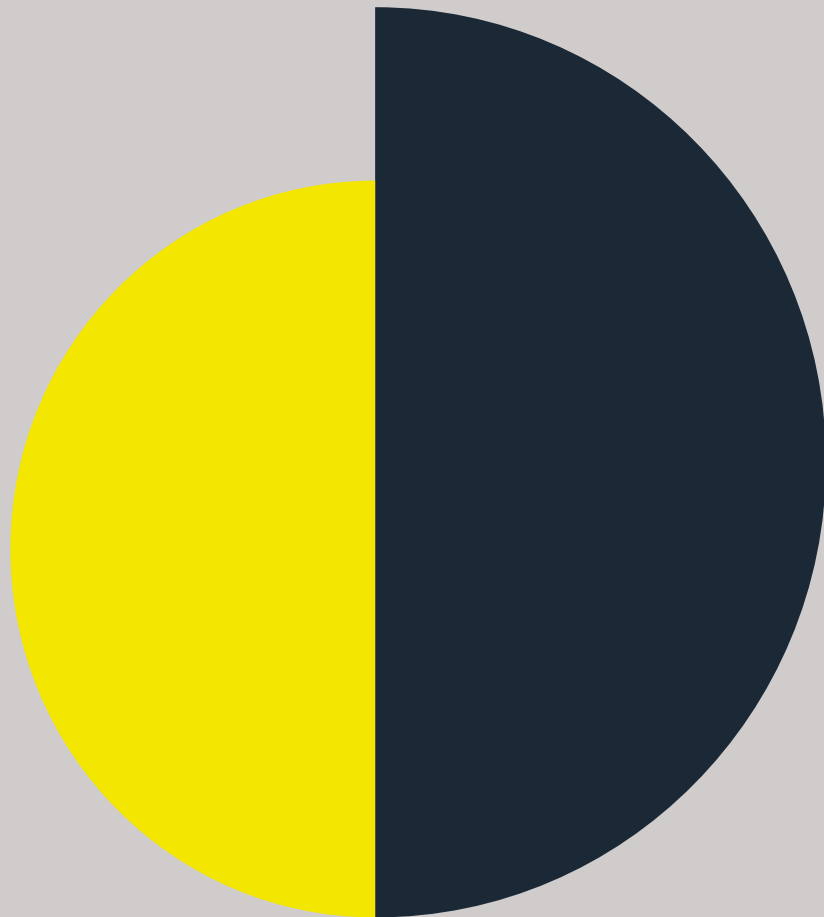


April 15, 2020

Coronavirus Job Retention Scheme: Who is on furlough and at what cost?

Indicative estimates of the percentage of employees furloughed and the Exchequer cost of the Coronavirus Job Retention Scheme by UK country, region, occupation, industry and wage quintile

Nick Spyropoulos
Sara Laabid



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Summary

This paper represents the first attempt to date to provide disaggregated estimates of the likely number of workers furloughed and the associated Exchequer cost. While we expect several key aspects of our results to prove robust and provide useful information to policy makers, there is substantial uncertainty and our estimates are subject to large revisions as new information is published.

We expect approximately one in three employees (31%) to be furloughed [estimate range: 23%-40%], at a cost to the Exchequer of £13.1 billion per month [£9.3bn-£17bn].

The less an employee earns, the more likely they are to be placed on furlough: we expect twice as many employees in the bottom 20% of the wage distribution to be furloughed compared to employees in the top 20%. Despite this, given the design of the scheme the highest proportion of the Exchequer cost is projected to go towards compensating furloughed employees at the upper-middle part of the wage distribution.

We expect accommodation & food services, wholesale & retail, and the arts, entertainment & recreation industries to be the most heavily affected, with more than 60% of all employees placed on furlough. In terms of occupations, sales and customer service occupations, skilled trades and elementary occupations will likely be the most heavily impacted, with professional, service and technical occupations at the other end of the scale. Variation between regions is projected to be relatively limited, with 36% of employees furloughed in the most affected region (West Midlands) compared to 30% in the least affected (London).

Background

The Coronavirus Job Retention Scheme (JRS) was introduced to prevent extensive jobs losses as a result of the coronavirus pandemic and associated government restrictions to economic activity in the UK. The scheme covers 80% of the salary of furloughed workers up to £2,500 a month for the period March-May, although the Chancellor has stated it may be extended further if needed.

No official costing of the measure was published at the time of implementation, and there is a very high level of uncertainty regarding the number of employees that are likely to be furloughed.

- The [Institute for Fiscal Studies](#) placed the cost of the JRS scheme at around £10 billion every 3 months for every 10% of private sector workers furloughed. The IFS did not attempt to estimate the number of workers likely to be furloughed, although it has used 10% as an indicative 'placeholder' value in discussing the overall fiscal impact of the measures.
- A [survey](#) of more than 1,000 companies undertaken by the British Chambers of Commerce (BCC) from 1-3 April found that 37% the companies surveyed were planning to furlough more than 75% their workers in the following week, while 20% were planning to furlough 100% of staff.
- Using the [BCC's 25-27 March survey](#) results, the [Resolution Foundation](#) estimated that more than 9 million workers are likely to be furloughed at a cost to the Treasury of £30-£40 billion for 3 months.
- The [Office for Budget responsibility in its Coronavirus reference scenario](#) published yesterday (April 14th) provides an indicative estimate that 30% of employees will be covered by the scheme at a cost of £42 billion.

Methodology

To our knowledge, this paper represents the first attempt to date to provide disaggregated estimates of the number of workers placed on furlough, as well as the associated Exchequer cost, by wage level, occupation, industry and wage level.

To arrive at our results, we combined detailed information on employee characteristics from the UK Labour Force Survey with relatively limited, ad hoc and often anecdotal sources of publicly available information on the impact Covid-19 related restrictions have had on different industry divisions.

Given the very accurate LFS data on the structure of the UK economy and the relatively high degree of certainty regarding the impact on certain industries (e.g. hospitality), we expect several aspects of our results – e.g. the estimated distributional impact or relative impact on different occupations – to prove fairly robust and provide useful information to policy makers. That said, it is important to keep in mind that we also rely heavily on necessarily tenuous information and subjective judgement. Hence, our estimates should be seen as indicative and potentially subject to large revisions as more information becomes available.

Below is an outline of our approach:

- We assigned own estimates – central, optimistic and pessimistic – of the percentage of furloughed workers in 90 industries based on available reports and other anecdotal information for each industry, as well as international evidence on the impact of lockdowns. While we utilised the best available information and expert judgement for each of the 90 industries, our estimates of the probability of different workers being furloughed remain highly speculative and subject to large errors.
- We combined our estimates of furlough probabilities with individual-level Labour Force Survey

data containing detailed information on workers' industry, occupation, region, and wages. We subsequently utilised the combined dataset to generate bottom-up estimates of the cost of JRS on different groups of workers by region, wage, occupation and industry at a higher level of classification.

- Our expectation is that the number of employees on furlough will likely keep increasing the longer Covid-19 related restrictions remain in place – in other words, we do not expect the monthly cost to the Exchequer to remain constant over time. Our central estimates attempt to quantify the number of employees furloughed (and hence the JRS Exchequer cost) during the month of May assuming restrictions in place in early April remain largely unaltered. We expect the monthly cost to be somewhat lower in March and April.
- Both part-time and full-time workers are included in the analysis unless otherwise stated.
- We assume no public sector workers will be furloughed.
- We assume that private sector workers earning more than £60,000 per year will not be furloughed. The reason behind this assumption is that the scheme's £2,500 cap makes it relatively expensive to furlough high earners.
- Our focus is exclusively on employees' main jobs, and we do not attempt to capture the cost of employees being furloughed in any additional jobs they may hold. Given that second jobs account for a relatively small amount of overall earnings for the vast majority of workers, we do not expect this assumption to significantly affect our analysis.
- Our costing only includes the gross wage element of the scheme – i.e. the estimates presented here do not attempt to capture the cost or covering employers' NI contributions.

Analysis

Aggregate results

Our analysis suggests the Job Retention Scheme will likely prove to be the single most expensive measure announced by the UK government in the wake of the pandemic, costing an estimated £13.1 billion per month, with a lower bound estimate of £9.3 billion and an upper bound estimate of £17 billion.

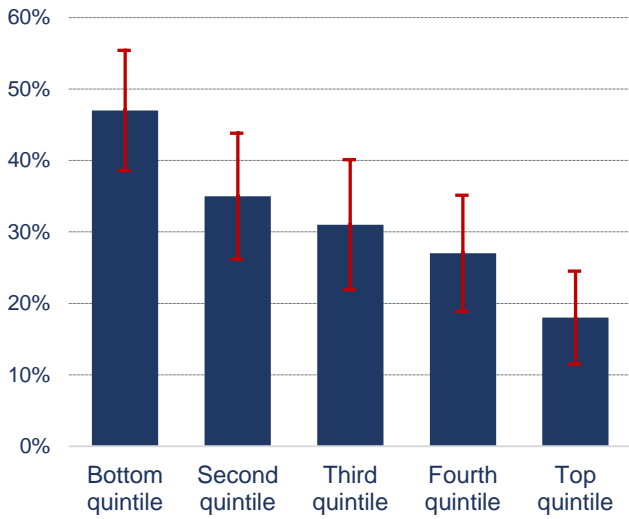
We expect approximately one in three employees (31%) to be furloughed [23% to 40%], at a cost to the Exchequer of £13.1 billion per month [£9.3bn -£17bn].

Wage levels

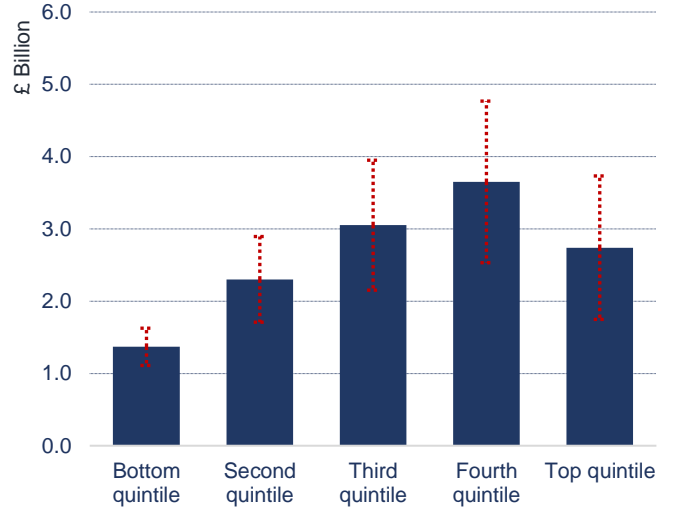
The less an employee earns, the more likely they are to be placed on furlough. Amongst full-time employees, we expect 42% in the bottom wage quintile to be furloughed, contrasting sharply with the 18% of employees furloughed amongst the top quintile of earners. This difference becomes even more pronounced when we look at all employees, as we expect a relatively higher proportion of part-time employees to be placed on furlough compared to full-time workers.

Despite this, given the scheme's design – covering 80% of wages up to £2,500 – the highest proportion of the Exchequer cost is expected to go towards compensating furloughed employees earning in the 4th wage quintile. The cost of furloughed full-time workers at the bottom 20% of the wage distribution is estimated to be around £1.8 billion, and £4.3 billion for the bottom 40%.

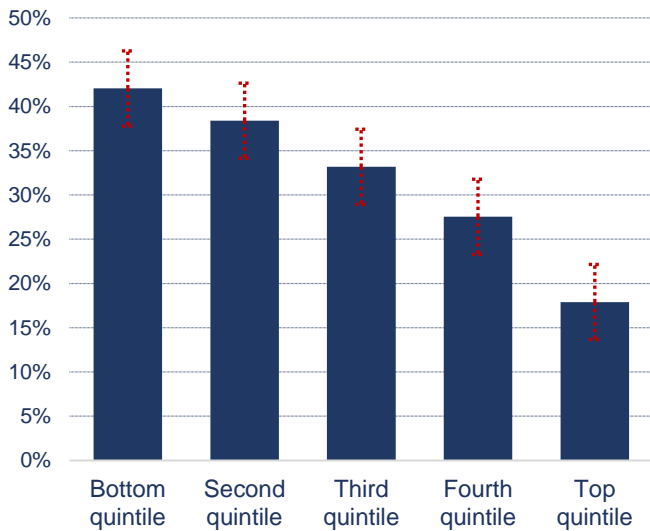
Percentage of all employees (full-time and part-time) furloughed, by wage quintile



Monthly cost of the Job Retention Scheme, by wage quintile
All employees (full-time and part-time) – £ billion



Percentage of full-time employees furloughed, by wage quintile



Monthly cost of the Job Retention Scheme, by wage quintile
Full-time employees only - £ billion

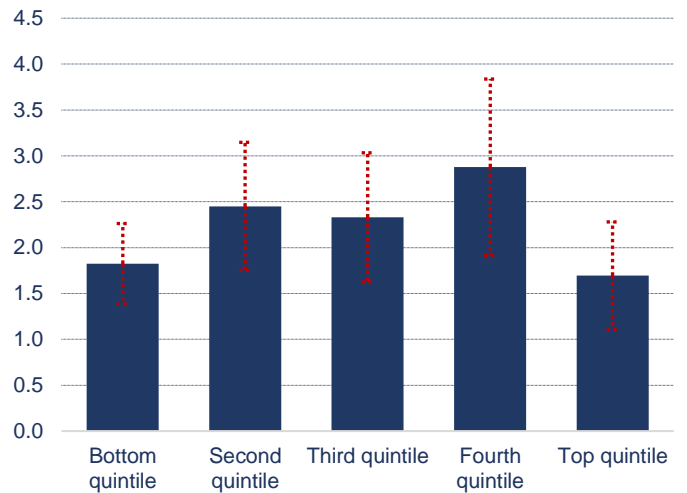


Table 1. Cost of the Job Retention Scheme by wage quintile – Full-time employees only

	Total cost (£ billion)			Cost per worker (active and furloughed)			Cost per furloughed worker
	Central estimate	Lower bound	Upper bound	Central estimate	Lower bound	Upper bound	
Bottom quintile	£1.8	£1.4	£2.3	£400	£304	£496	£991
Second quintile	£2.4	£1.8	£3.1	£514	£367	£660	£1,519
Third quintile	£2.3	£1.6	£3.0	£568	£396	£739	£1,983
Fourth quintile	£2.9	£1.9	£3.8	£628	£418	£838	£2,462
Top quintile	£1.7	£1.1	£2.3	£399	£261	£537	£2,500

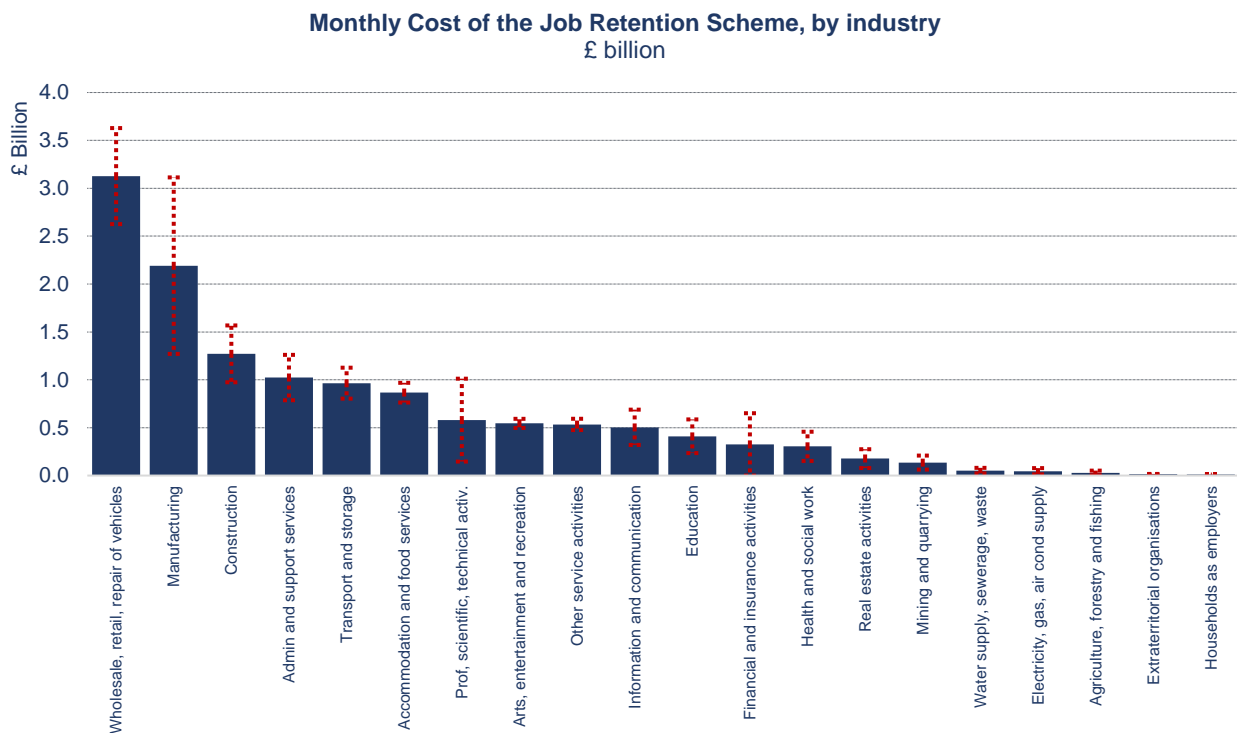
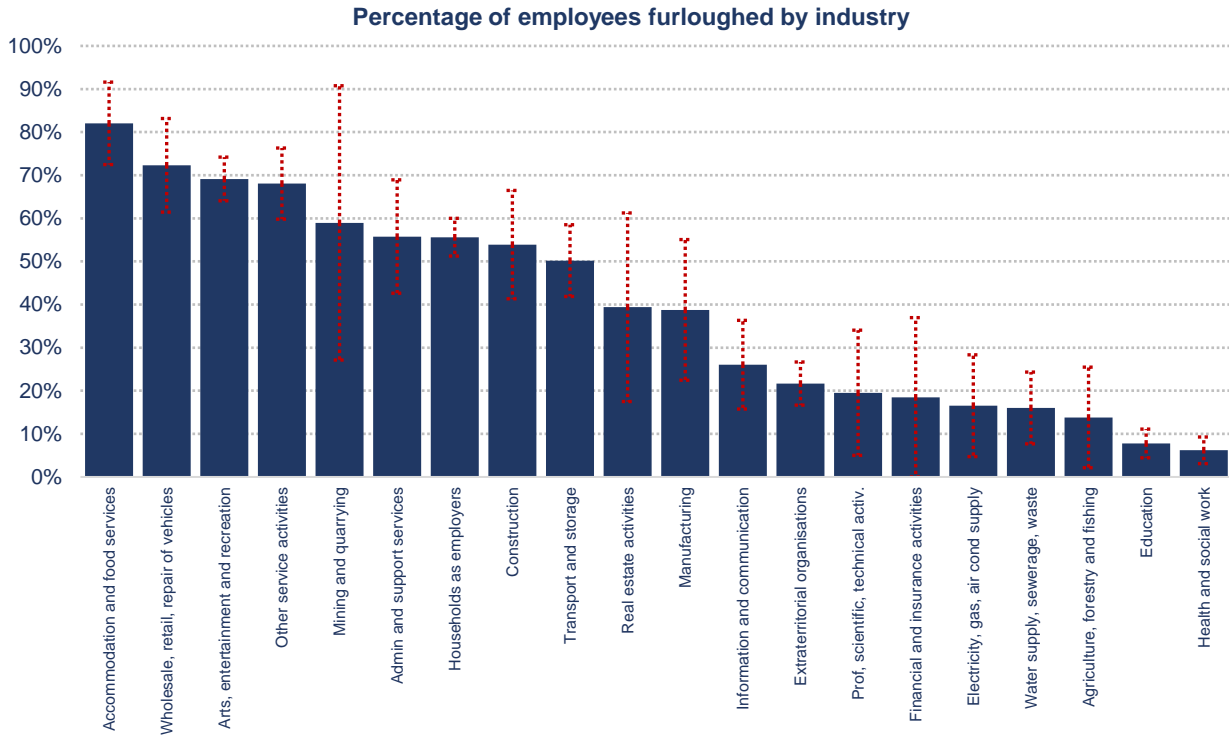
Table 2. Cost of the Job Retention Scheme by wage quintile – All employees (full-time and part-time)

	Total cost (£ billion)			Cost per employee (active and furloughed)			Cost per furloughed employee
	Central estimate	Lower bound	Upper bound	Central estimate	Lower bound	Upper bound	
Bottom quintile	£1.4	£1.1	£1.6	£223	£181	£265	£473
Second quintile	£2.3	£1.7	£2.9	£380	£282	£478	£1,101
Third quintile	£3.1	£2.2	£3.9	£500	£352	£647	£1,607
Fourth quintile	£3.6	£2.5	£4.8	£598	£415	£782	£2,253
Top quintile	£2.7	£1.7	£3.7	£449	£287	£612	£2,500

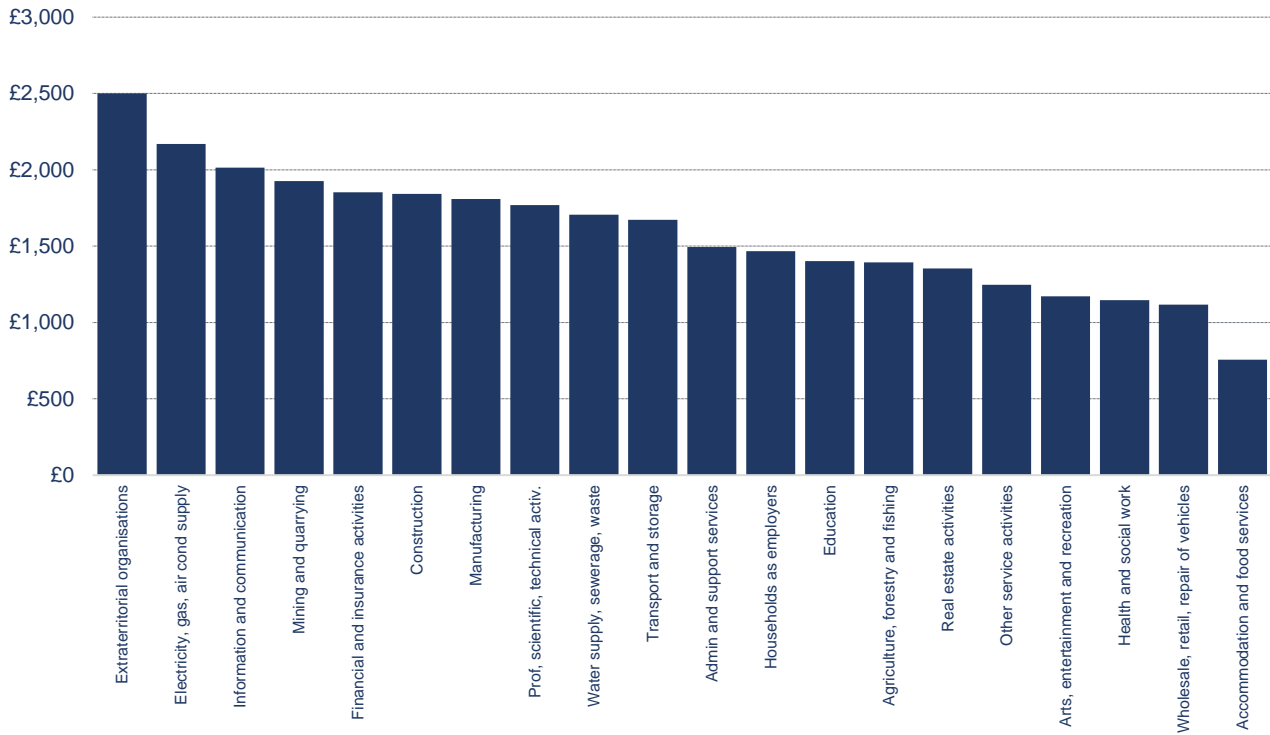
Industry

Accommodation and food services is the most heavily affected industry, with more than 80% of workers expected to be furloughed. It is closely followed by wholesale & retail and the arts, entertainment and recreation industry, with approximately 70% of employees placed on furlough.

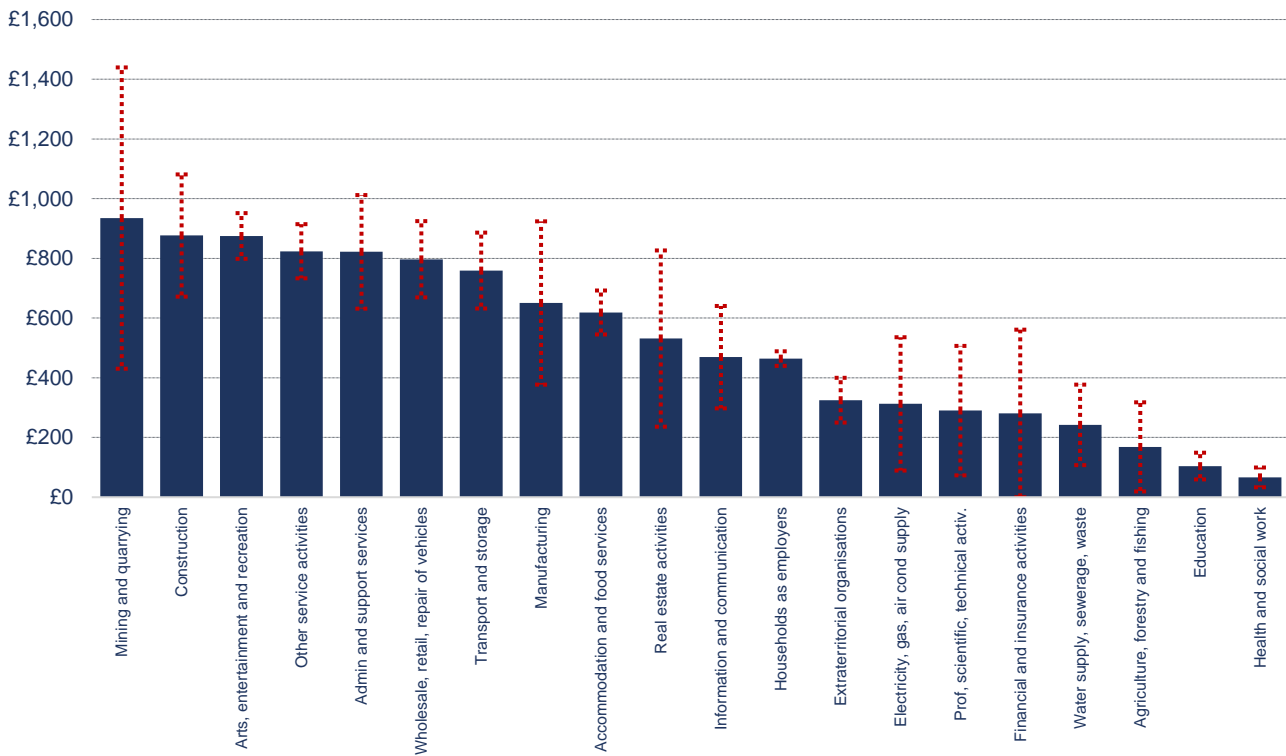
Due to its large size, the wholesale & retail industry accounts for almost a quarter of the overall cost of the scheme (£3.1 billion per month). Manufacturing (£2.2 billion) and construction (£1.3 billion) follow. Accommodation and food services account for £850 million per month, with the arts, entertainment and recreation industry at £550 million.



Job Retention Scheme monthly cost per furloughed employee, by industry



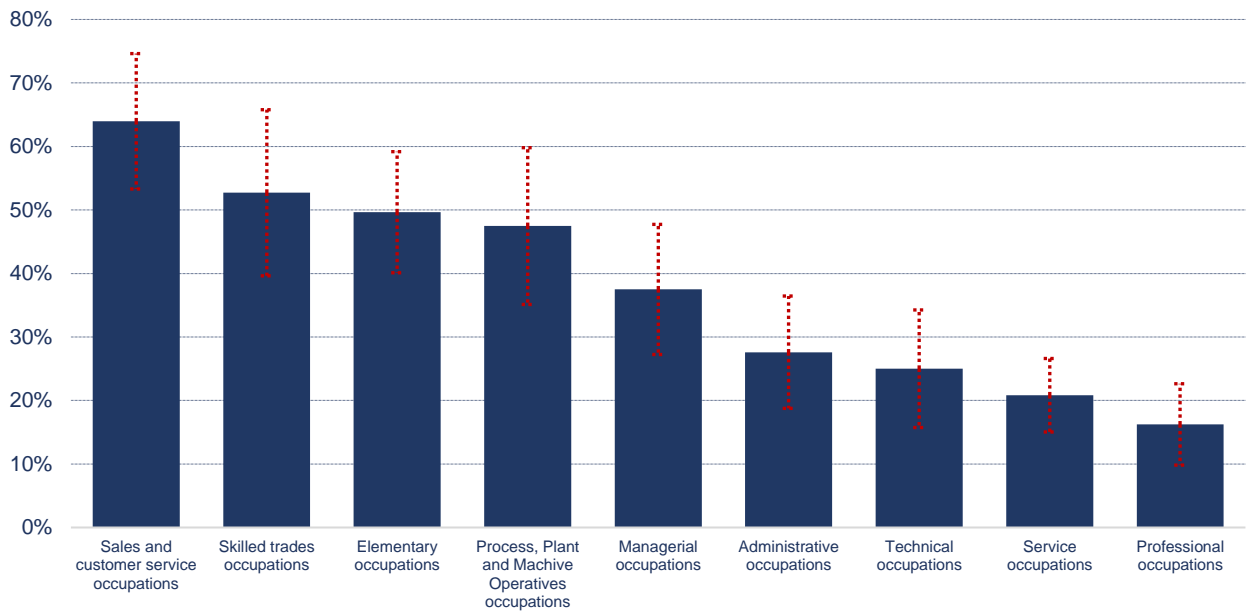
Job Retention Scheme monthly cost per employee, by industry (including both active and furloughed employees)



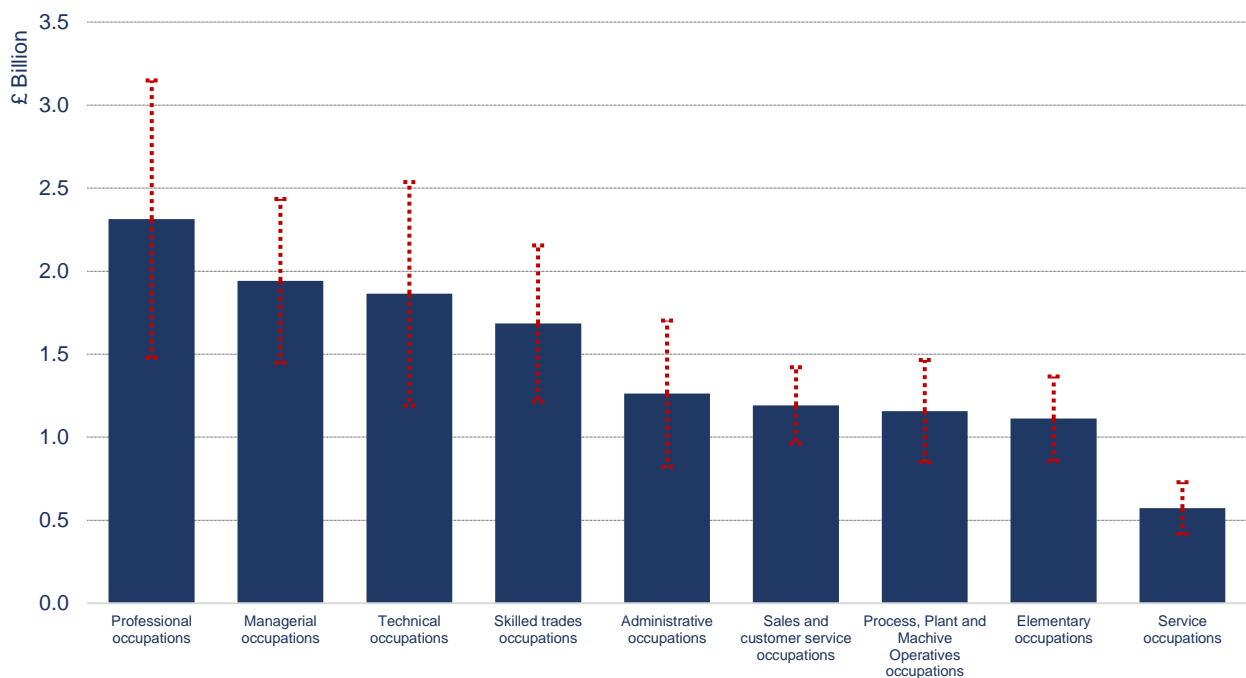
Occupation

We expect more than 60% of employees in sales and customer service occupations to be furloughed, followed by skilled trades (53%) and elementary occupations (50%). Professional occupations are the least affected (16% of employees furloughed), however they account for £2.3 billion (18% of the overall cost of the scheme) as they are the most populous occupational classification and they are associated with the highest cost per furloughed worker (estimated at more than £2,000 on average). Sales and customer service occupations account for £1.2 billion and service occupations for £550 million.

Percentage of employees furloughed by occupation



Monthly cost of the Job Retention Scheme, by occupation
£ billion



UK countries and English regions

While there is some variation between UK countries and English regions, this is less pronounced than might have been expected. The West Midlands is projected to be the most affected region (36% of employees furloughed) with London the least affected (30%).

Percentage of employees furloughed by UK country/ English region

