The Impact of Covid-19 on UK Firms

Nick Bloom (Stanford University), **Phil Bunn (Bank of England)**, Paul Mizen (University of Nottingham), Pawel Smietanka (Bank of England), Greg Thwaites (University of Nottingham)

ESCoE Conference on Economic Measurement

16 September 2020

Disclaimer: Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the Bank of England or its Committees.

Outline

Overview of the Decision Maker Panel (DMP)

The Impact of Covid-19 on UK Firms

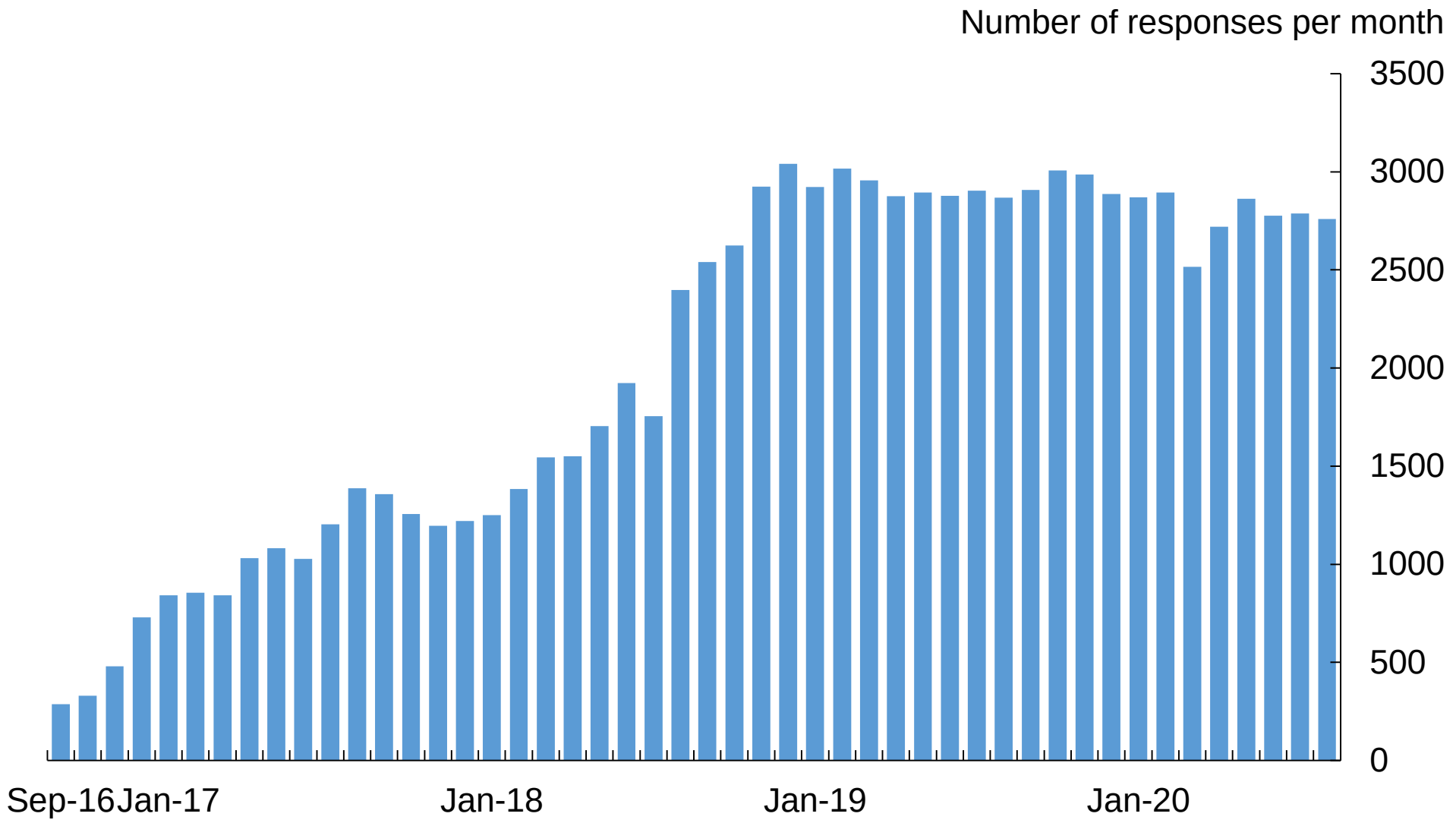
Overview of the DMP

- Launched in August 2016 by Bank of England in partnership with Stanford and Nottingham Universities
- Receives funding from ESRC
- Monthly 5-10 minute online survey
- Asks about current and expected future businesses conditions
- Closely based on Atlanta Fed Survey of Business Uncertainty
- Recruit randomly from population of 48,000 firms with 10+ employees
- Panel of about 8,000 firms with about 3,000 responses a month
- More information on survey website: www.decisionmakerpanel.co.uk

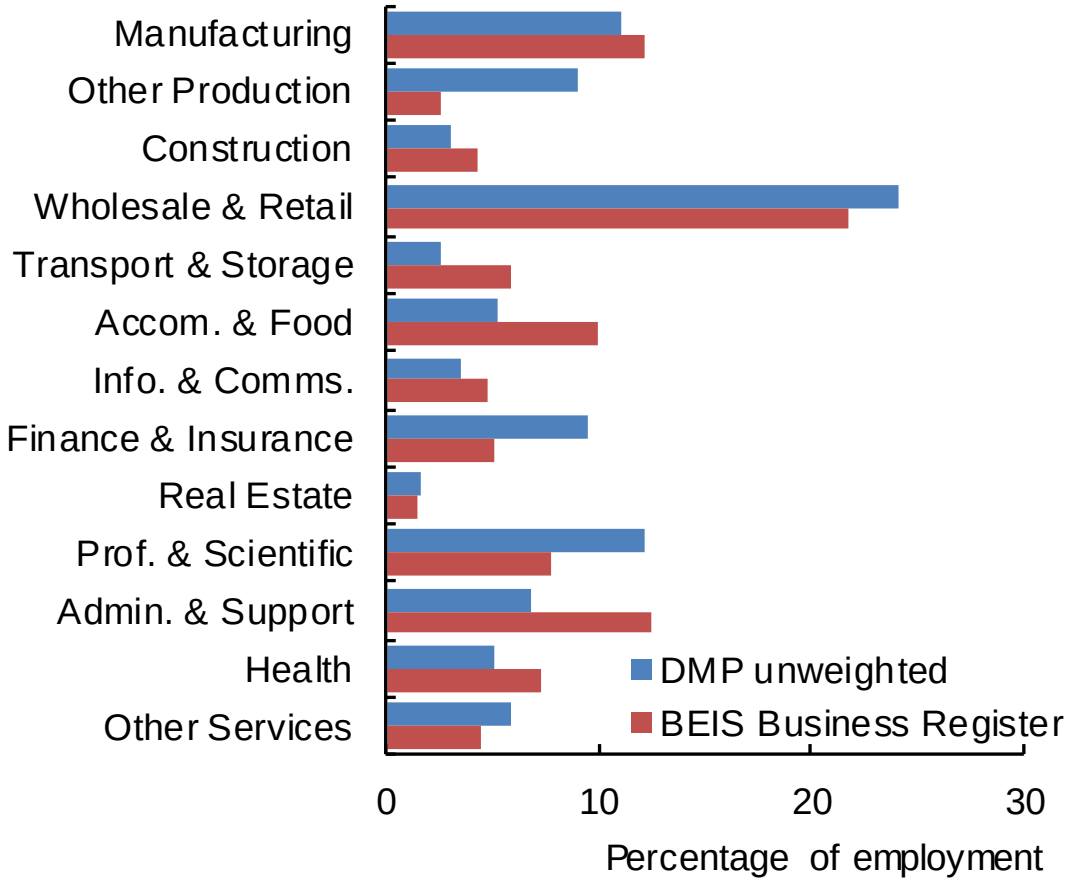
Advantages of the DMP

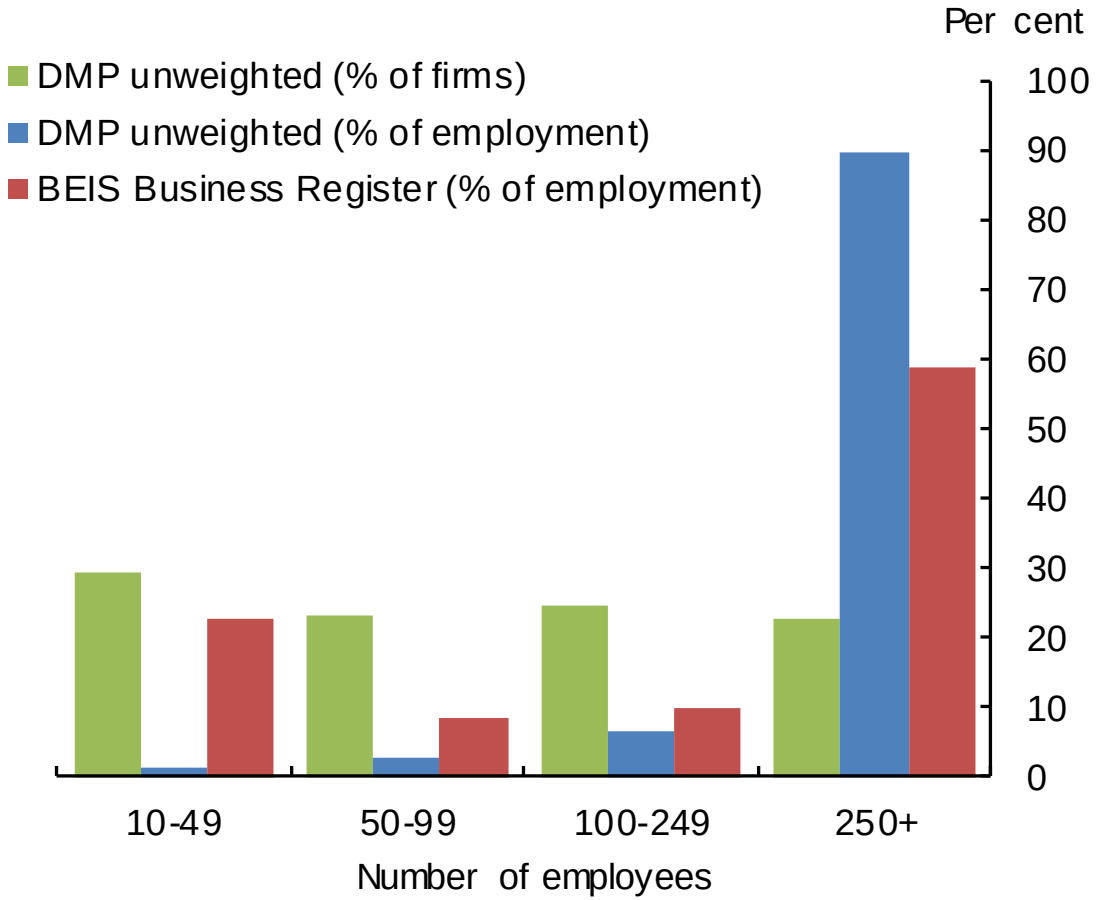
- The DMP is a large and representative survey of UK firms collecting data for both policy analysis and research.
- Completed by senior people. Matches company accounts data and official statistics well.
- Questions are quantitative.
- It is forward looking – collects data on the distribution of expectations not just most likely outcomes.
- The survey is flexible – can be adapted to collect data on current policy issues.
- It is also very timely – responses available to policymakers within days. Aggregated data published less than two weeks after each survey closes.

DMP sample size



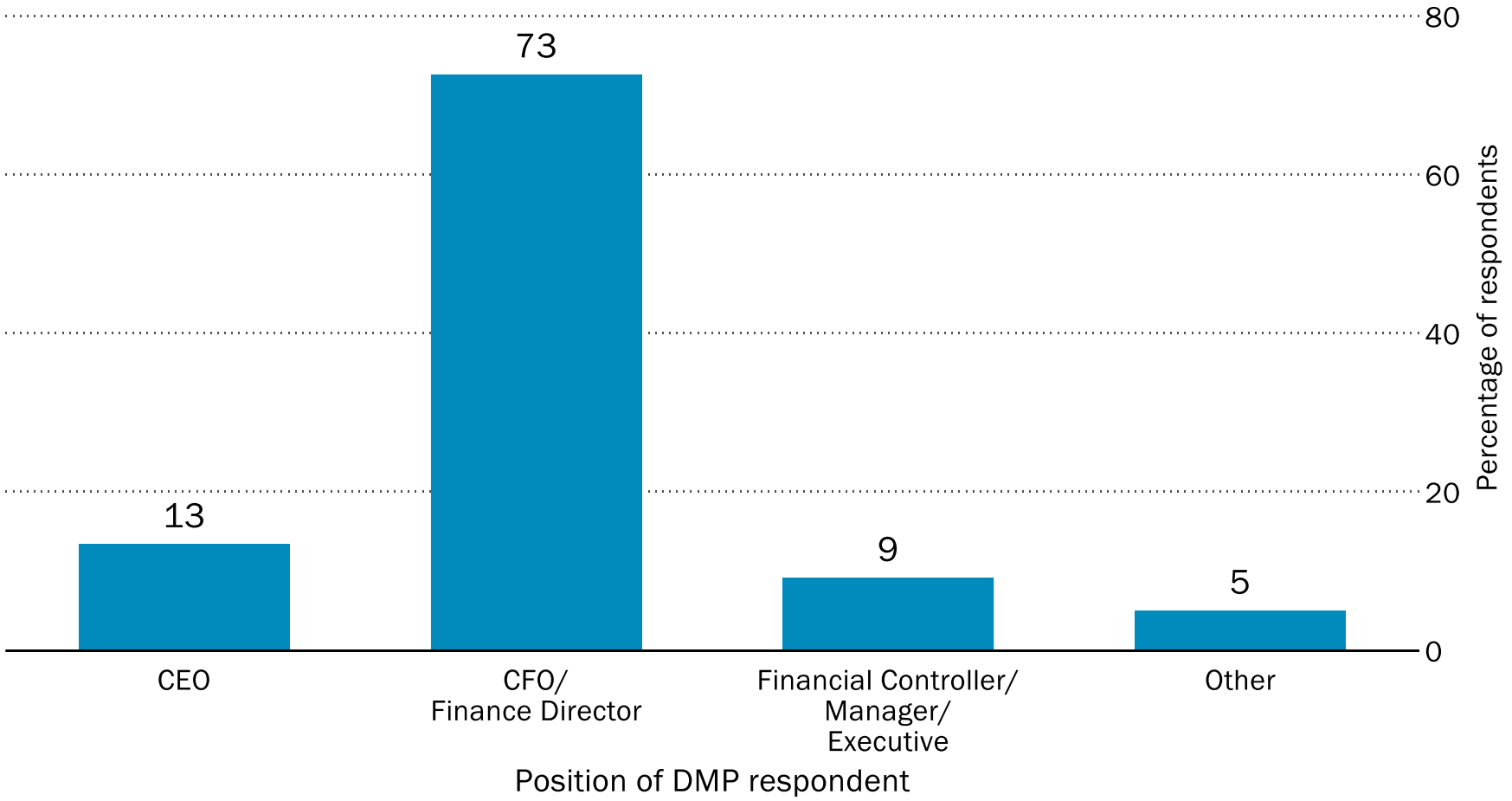
DMP members by industry and firm size



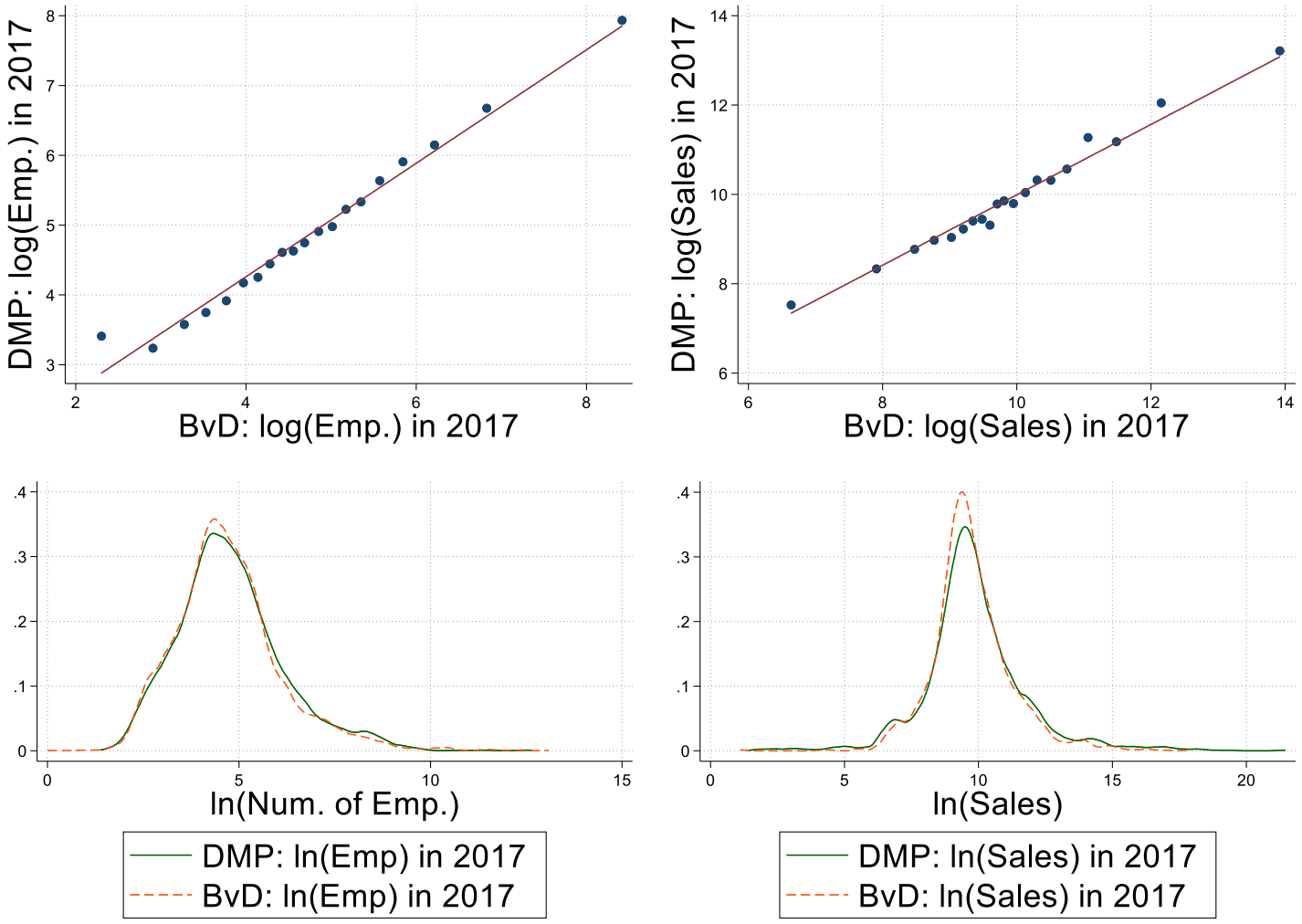


- DMP data are weighted by industry and firm size using employment data

86% of respondents are CEO/CFOs



Matches accounts data



Source: Bureau van Dijk FAME dataset, Decision Maker Panel and authors' calculations.
Notes: Sales values from the DMP survey are based on annualised quarterly sales reported by businesses.

Questions in the DMP

- Survey has a rotating three panel structure:
  - The survey has three questionnaires. Each panel members receives one questionnaire each month, and all 3 over the course of a quarter.

- Regular questions on sales, prices, employment and investment:
  - Growth over the past year
  - Distribution of expected growth over the next year – can use this to calculate mean, median, standard deviation

Regular DMP questions on sales

Regular DMP questions on sales

Regular DMP questions on sales

Decision Maker Panel

BANK OF ENGLAND

Looking a year ahead from the second quarter of 2020 to the second quarter of 2021, by what % amount do you expect your SALES REVENUE to have changed in each of the following scenarios?

Notes:

a) Please include sales of UK-based businesses only and not from any overseas part of the group.

b) Sales growth scenarios should be ordered from the lowest to the highest.

The LOWEST % change in sales revenue would be about:	-10 %
A LOW % change in sales revenue would be about:	0 %
A MIDDLE % change in sales revenue would be about:	5 %
A HIGH % change in sales revenue would be about:	10 %
The HIGHEST % change in sales revenue would be about:	20 %

Regular DMP questions on sales

Decision Maker Panel

BANK OF ENGLAND

Please assign a percentage likelihood (probability) to the % changes in SALES REVENUE you entered (values should sum to 100%)

LOWEST: The likelihood of realising about **-10%** would be:	5 %
LOW: The likelihood of realising about **0%** would be:	20 %
MIDDLE: The likelihood of realising about **5%** would be:	50 %
HIGH: The likelihood of realising about **10%** would be:	20 %
HIGHEST: The likelihood of realising about **20%** would be:	5 %
Total	100 %

Questions in the DMP

- Survey has a rotating three panel structure:
  - The survey has three questionnaires. Each panel members receives one questionnaire each month, and all 3 over the course of a quarter.

- Regular questions on sales, prices, employment and investment:
  - Growth over the past year
  - Distribution of expected growth over the next year – can use this to calculate mean, median, standard deviation

- Special questions on current policy issues:
  - Some questions asked a number of times, others just once
  - Since survey started in 2016 lots of special questions have been on Brexit
  - Focussed on the impact Covid-19 more recently

Outline

Overview of the Decision Maker Panel (DMP)

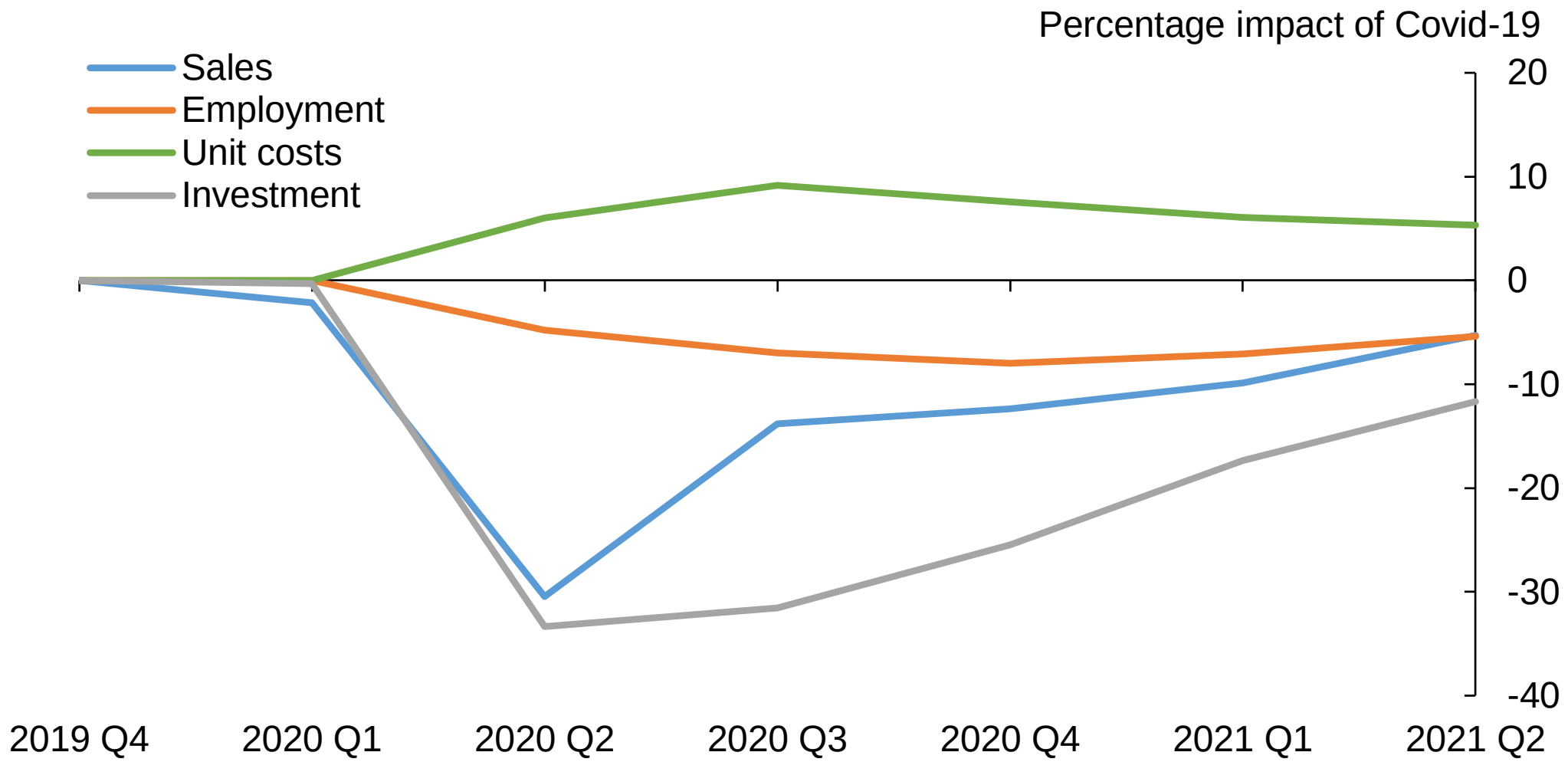
The Impact of Covid-19 on UK Firms

Using the DMP to assess the impact of Covid-19 on UK firms

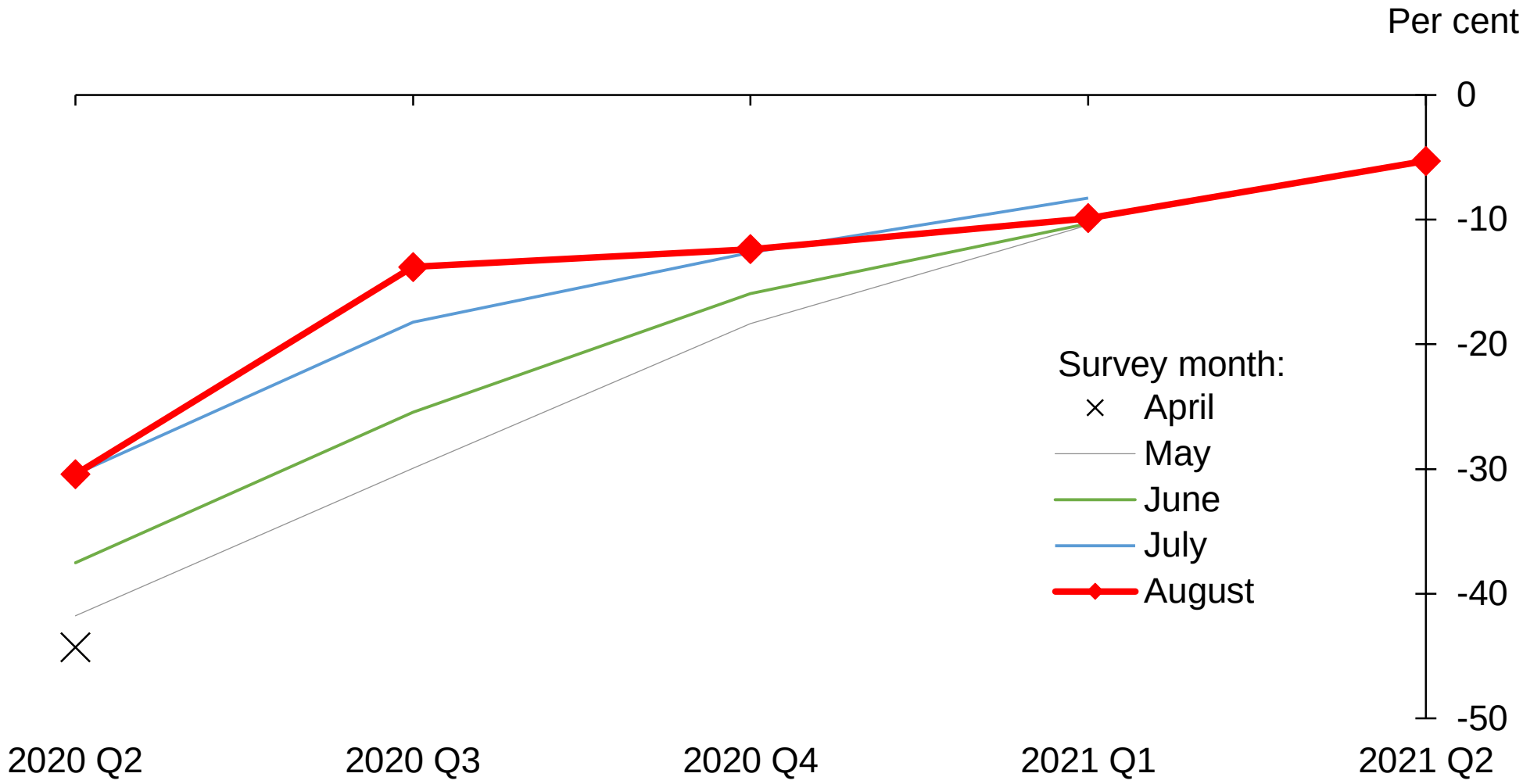
- Ask for best guess of marginal impact of Covid-19:
  - Point estimate. Quarter by quarter
  - Questions typically of the form, ‘Relative to what would otherwise have happened, what is your best estimate for the impact of the spread of Covid-19 on the sales of your business in each of the following periods?’
  - Asked about impacts on sales, employment, average hours worked, employees furloughed, investment, production capacity and unit costs

- Changes in distribution of expectations:
  - Assume all recent changes are Covid-related
  - Year-ahead growth only, not quarter by quarter
  - Can calculate impact on uncertainty and skewness too

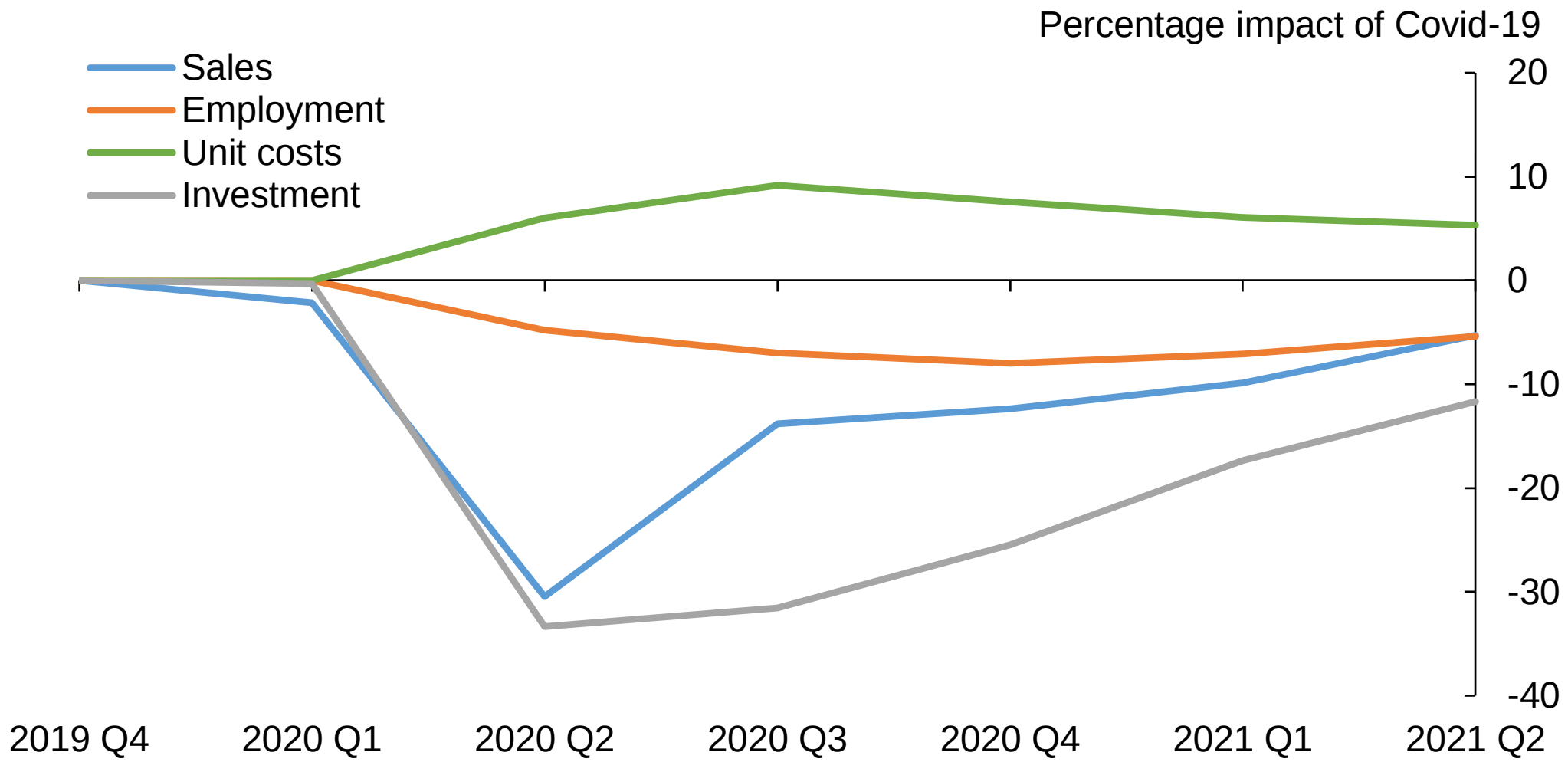
Covid-19 has had a large impact on UK firms



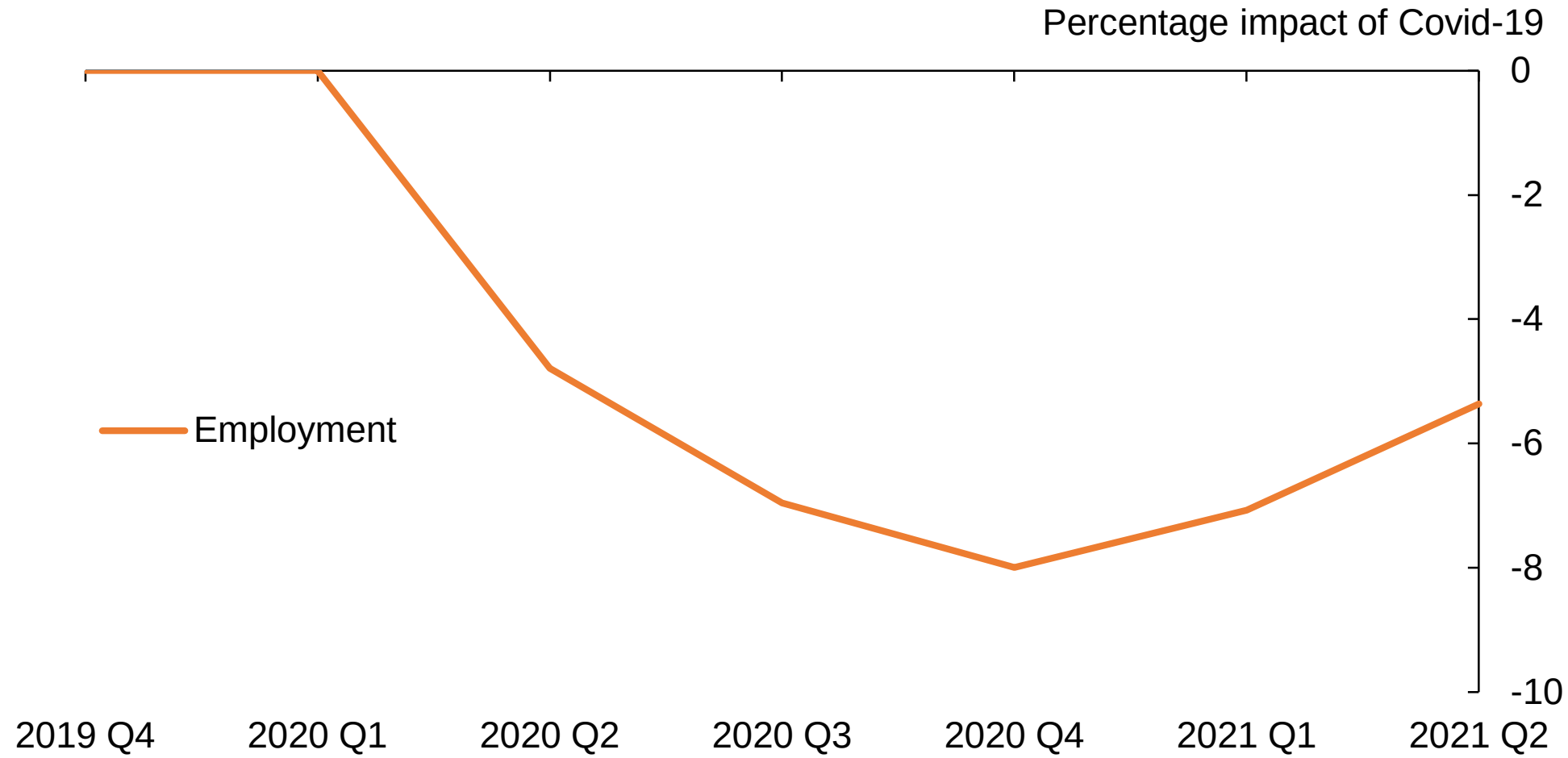
Businesses have become less pessimistic about Covid-19's likely impact on sales



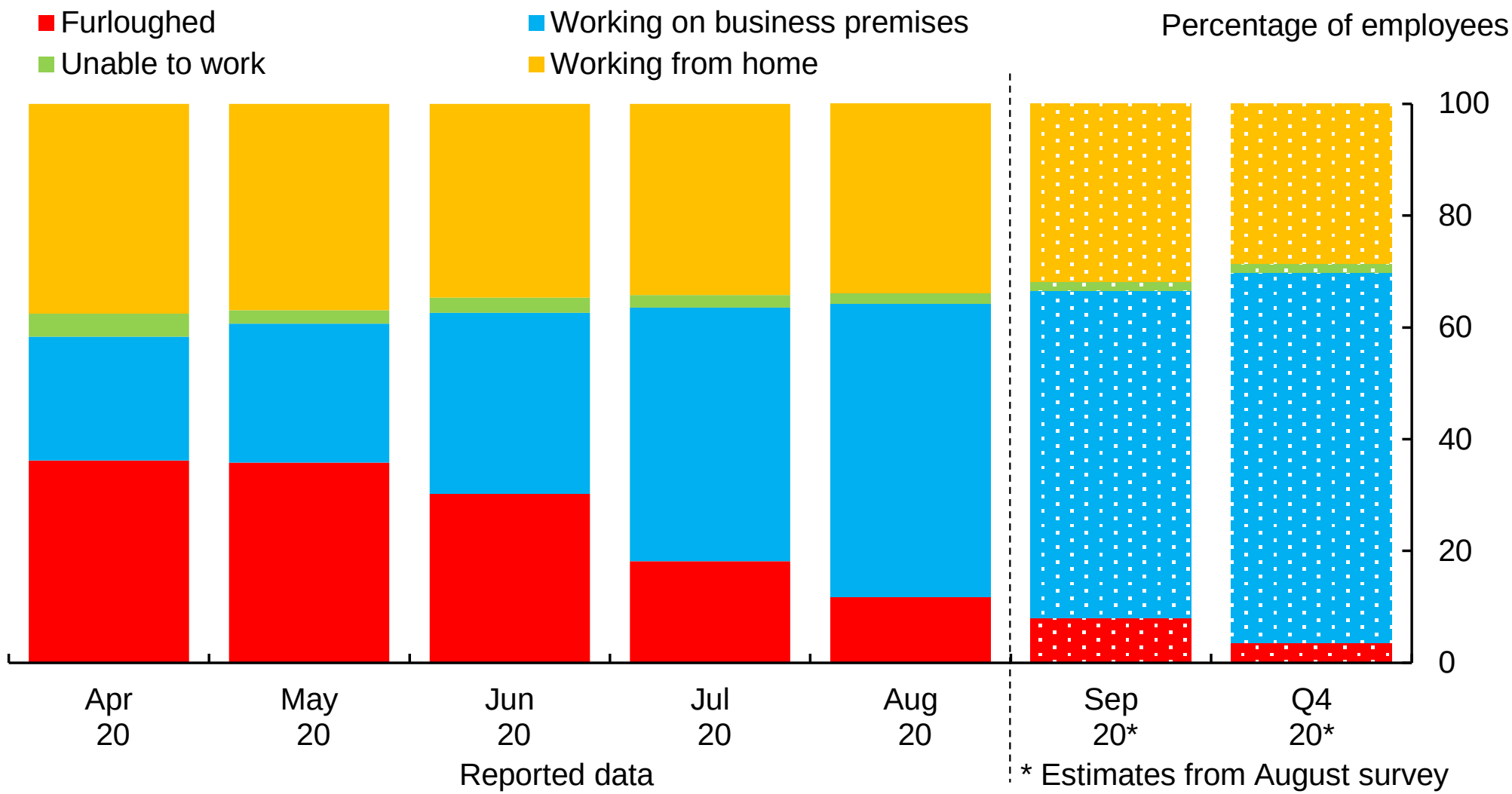
Covid-19 has had a large impact on UK firms



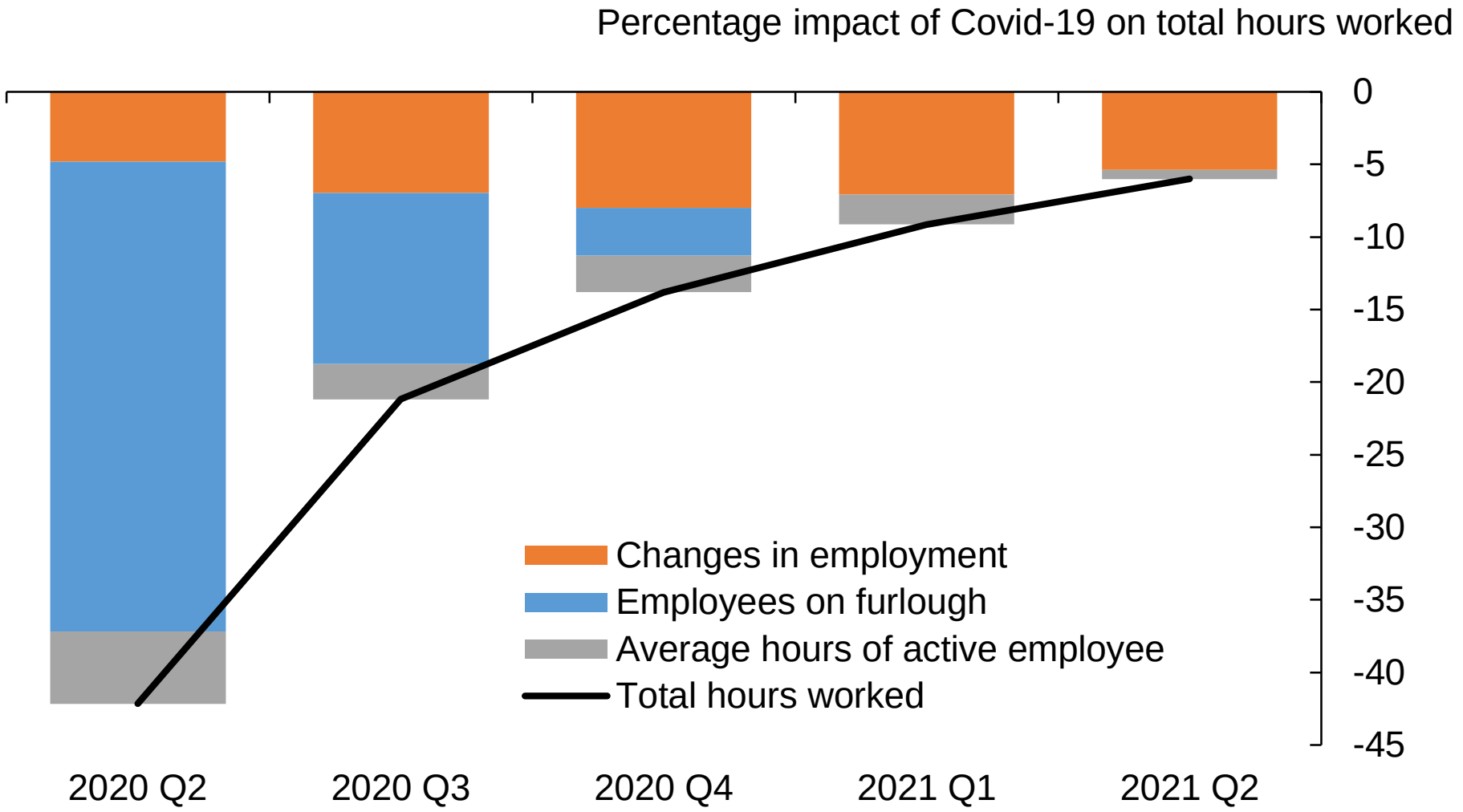
Further falls in employment are expected in 2020 H2



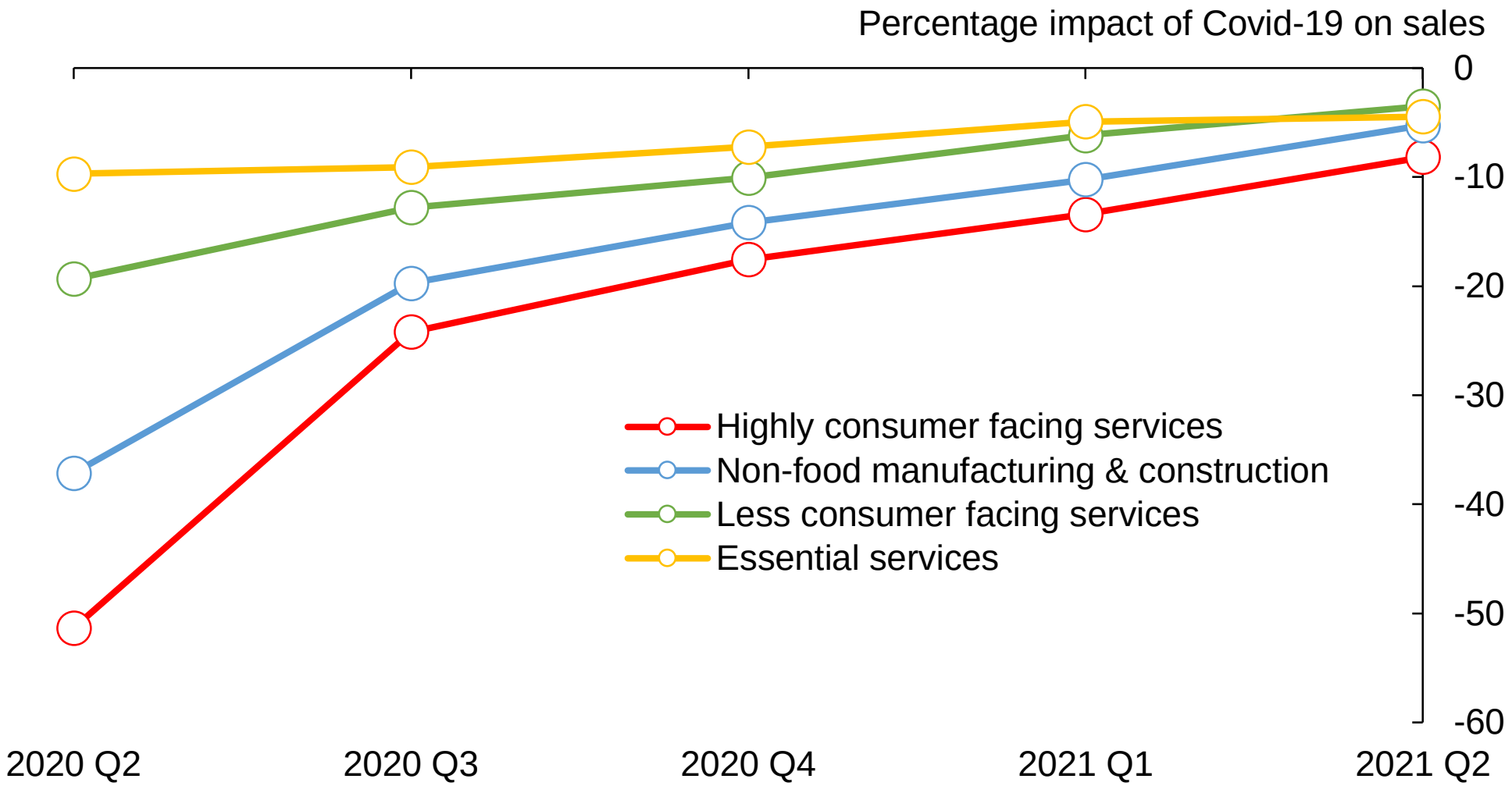
The percentage of employees on furlough has been falling



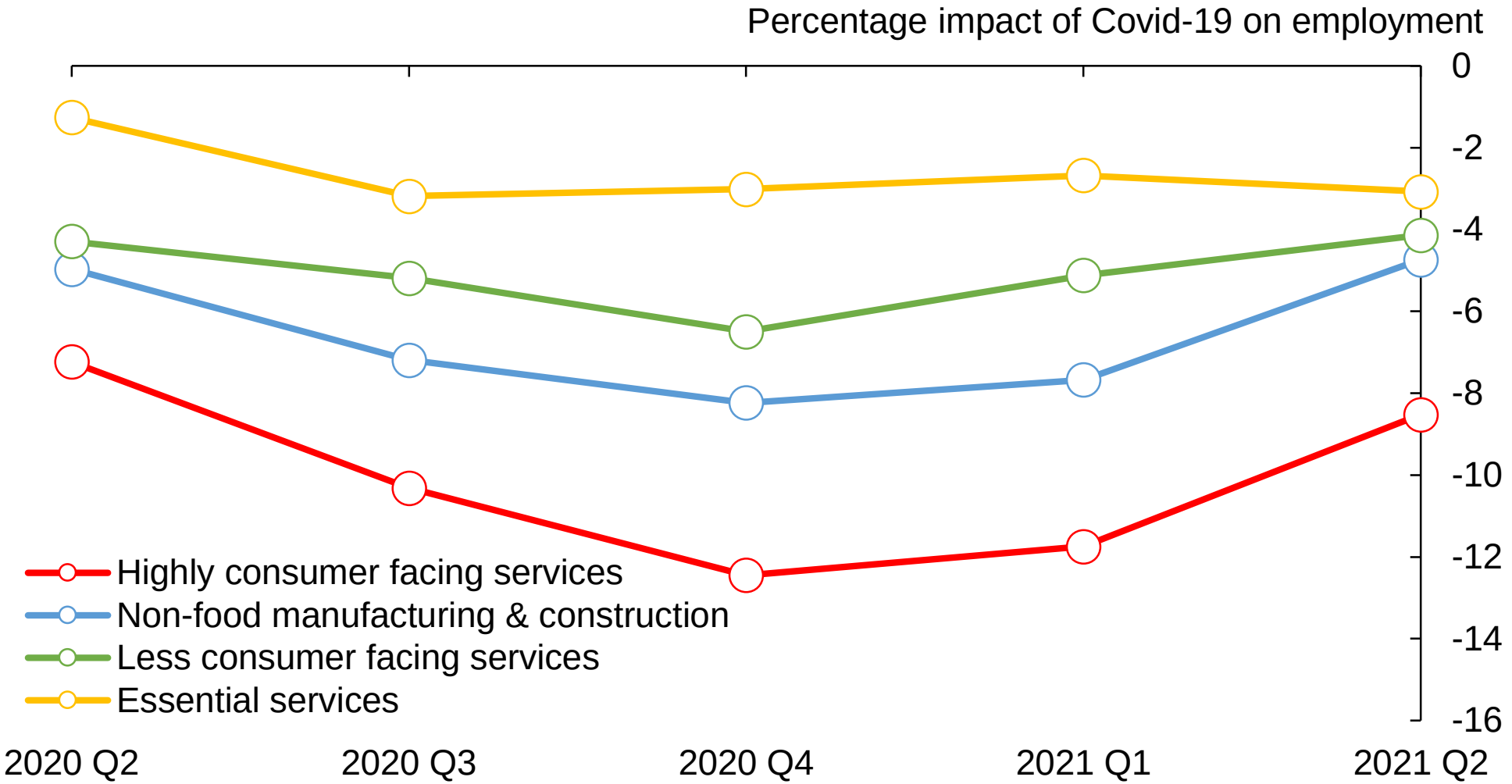
Workers being placed on furlough made biggest contribution to lower hours



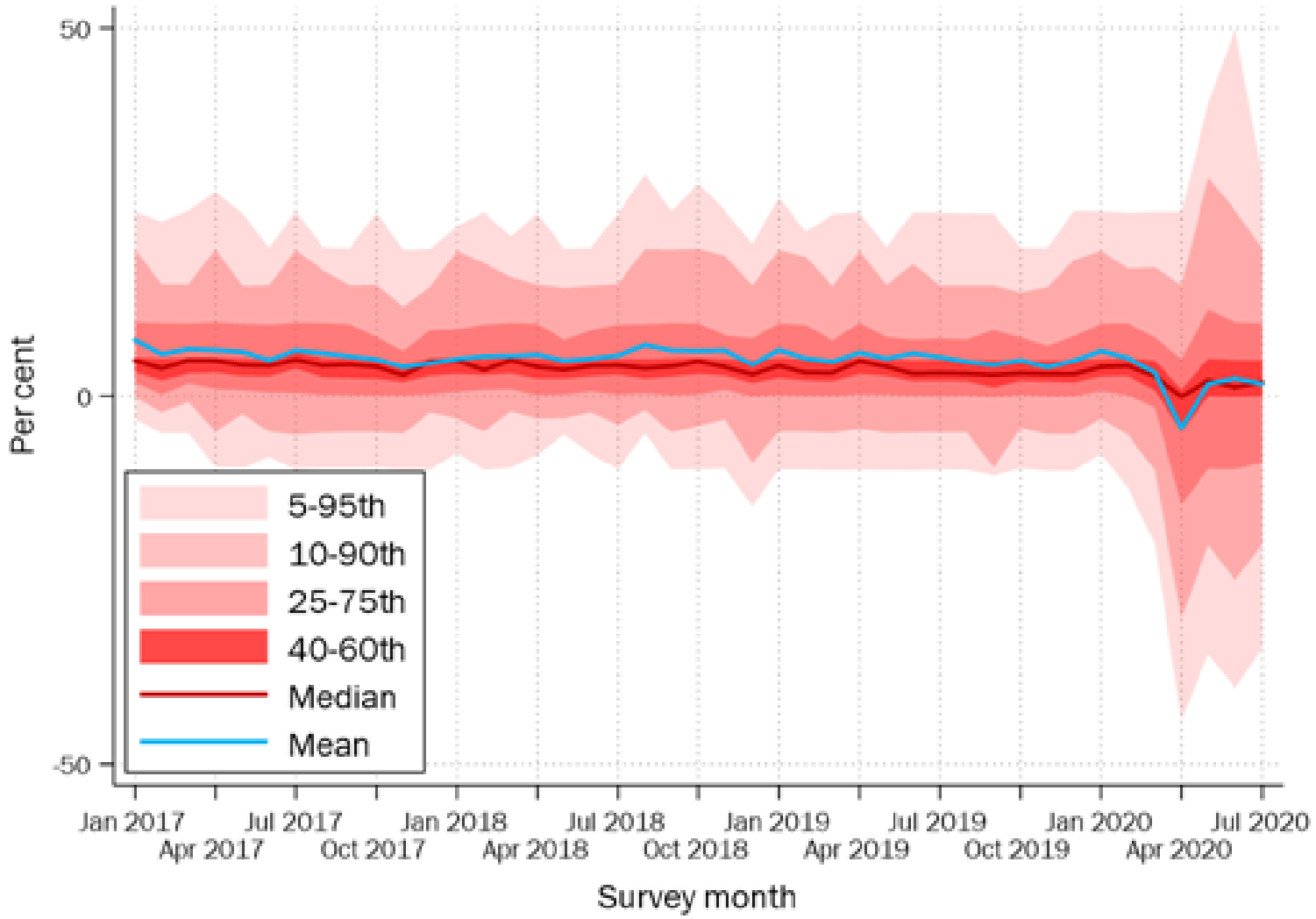
Sales in consumer-facing industries have been hardest hit



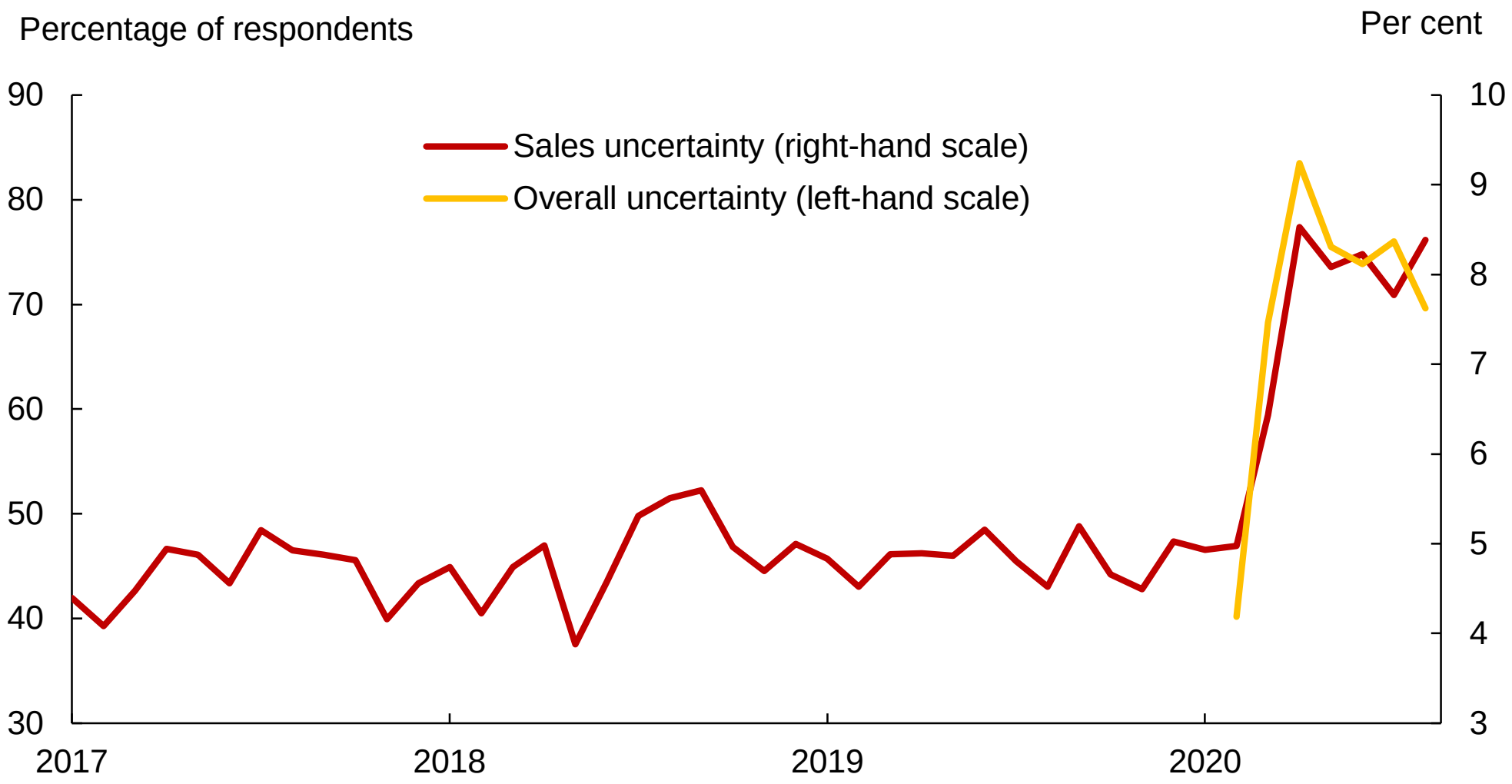
Consumer facing industries also expect to see the largest declines in employment



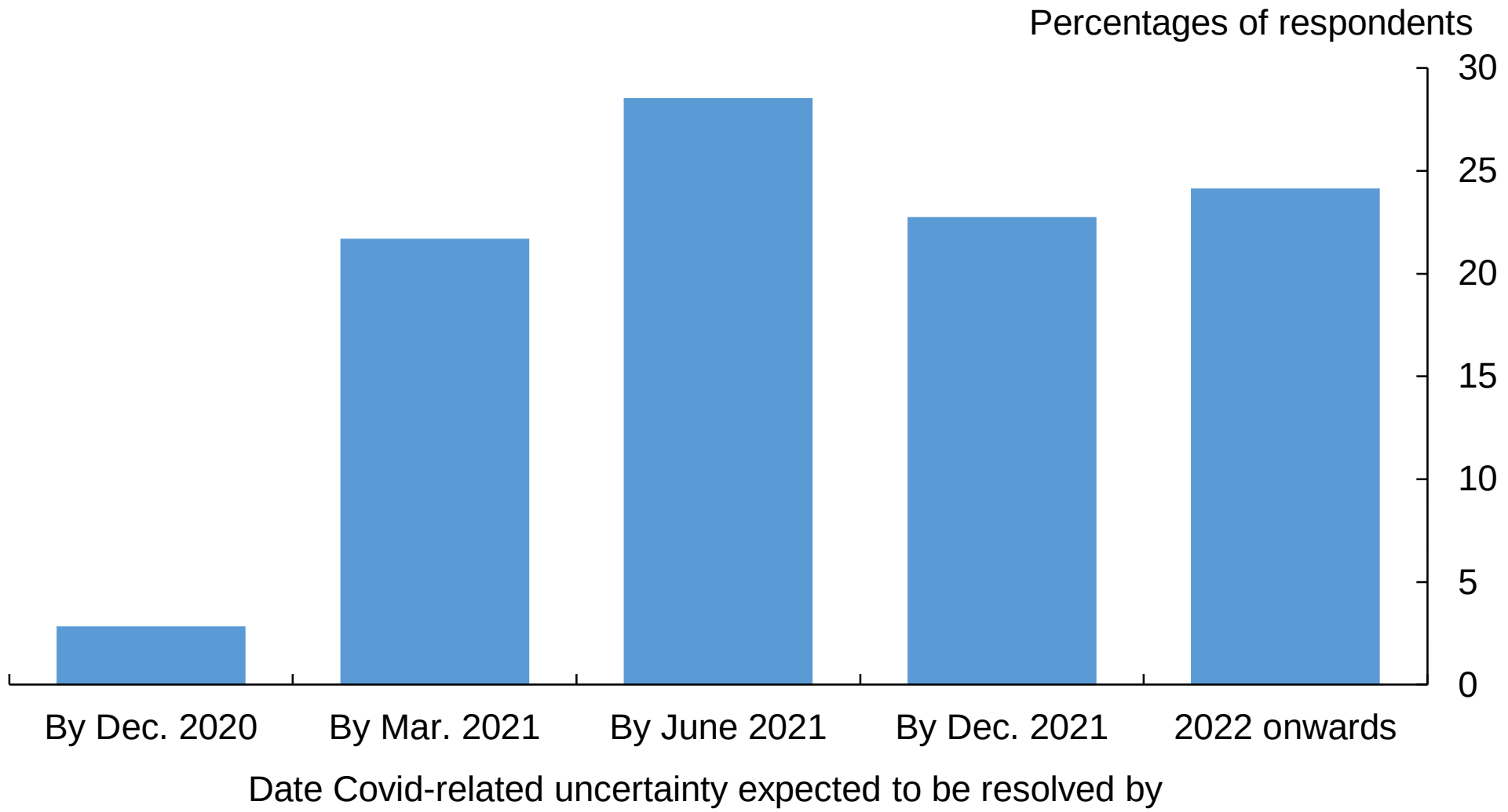
Distribution of year-ahead sales growth



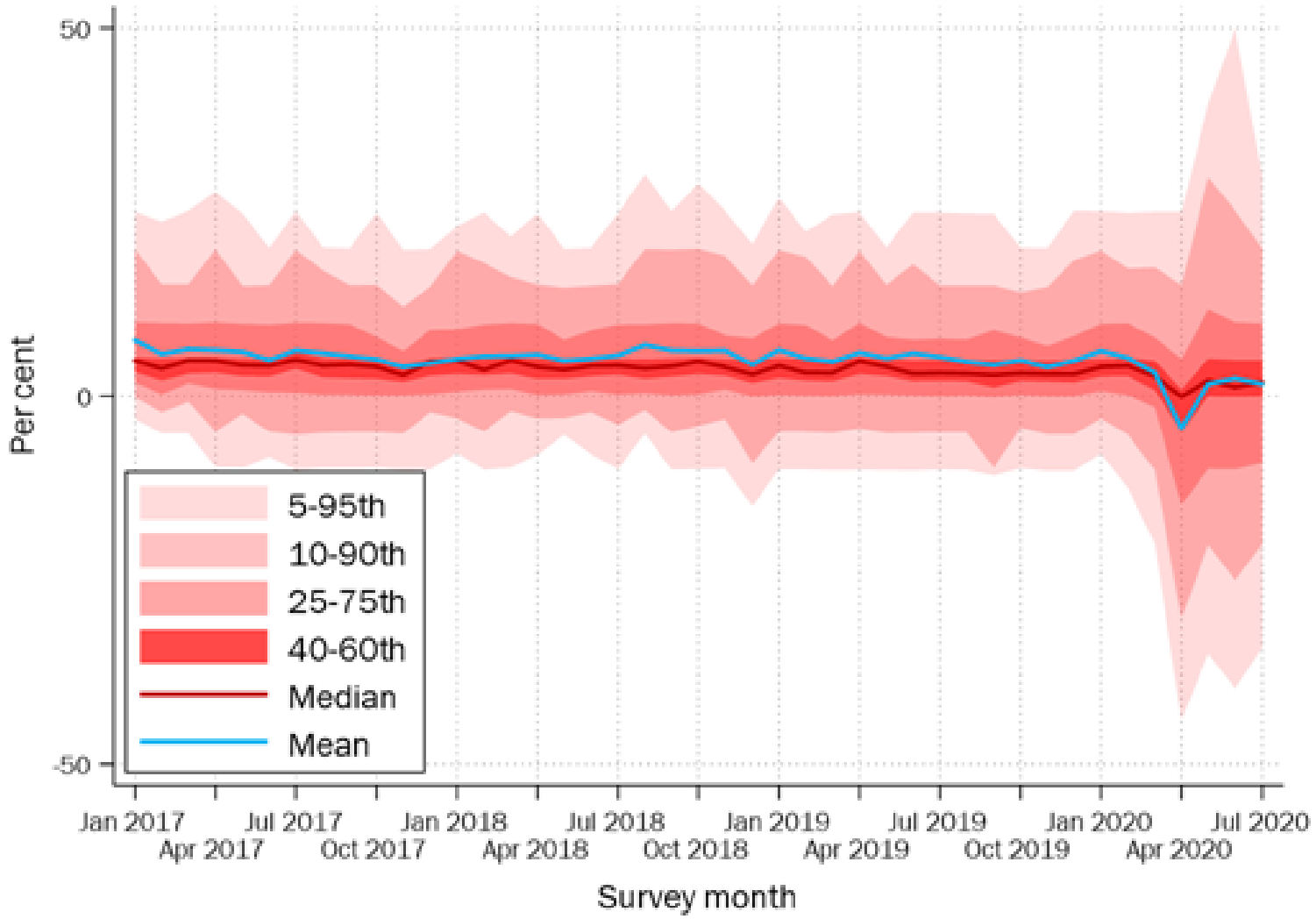
Measures of uncertainty rose sharply



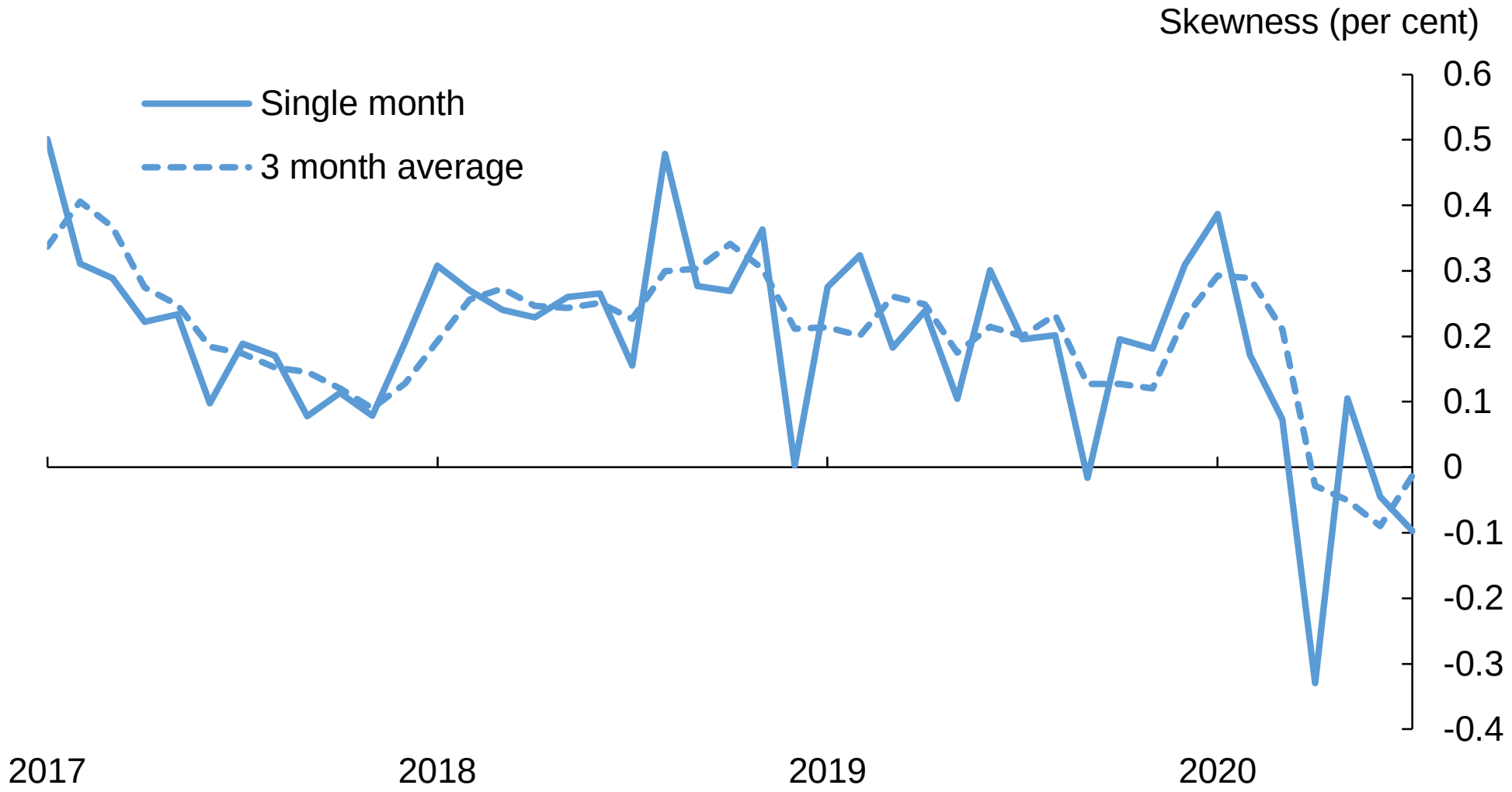
There are a range of views about when Covid-related uncertainty will be resolved



Distribution of year-ahead sales growth



Risks became more skewed to the downside



Notes: Uses Kelley's measure of skewness defined as [(p90-p50)-(p50-p10)]/(p90-p10) where p90, p50 and p10 represent the 90th, 50th and 10th percentiles of the distribution.

Summary

- The DMP is a large and representative survey of UK firms collecting data for both policy analysis and research.
- DMP data are quantitative and forward looking, includes information on the distribution of expectations too.
- Survey has been valuable to the Bank of England in helping to understand how the spread of Covid-19 has been affecting UK businesses.
- Covid-19 had a very large impact on UK firms in 2020 Q2. Gradual recovery in sales expected, but employment expected to fall further in second half of 2020.
- Consumer-facing sectors most affected so far, and expected to remain so.
- Uncertainty rose sharply and expectations became more skewed to the downside.

Useful links

- Survey website: www.decisionmakerpanel.co.uk
- Latest monthly data release: https://www.bankofengland.co.uk/decision-maker-panel/2020/august-2020
- 'Coronavirus expected to reduce UK firms' sales by over 40% in Q2', Vox EU, May 2020.
- 'Which firms and industries have been most affected by Covid-19?', Economics Observatory, May 2020.
- 'Results from the Decision Maker Panel 2020 Q2'. Published alongside the Bank of England Agents Summary of Business Conditions, June 2020.
- 'Economic Uncertainty Before and During the COVID-19 Pandemic', NBER working paper 27418, June 2020. Forthcoming in the Journal of Public Economics.
- August 2020 Monetary Policy Report (includes 7 DMP charts)
- 'Covid-19 and the expectations of businesses: Evidence from the Decision Maker Panel', forthcoming Bank of England Quarterly Bulletin article (out 25 September).