



The Decision Maker Panel

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**The views expressed here are those of the authors, and not necessarily those of the Bank of England or its committees.*

The Decision Maker Panel (DMP)

- ▶ **Motivation:** The DMP was established following Brexit to collect detailed and timely information on business conditions and expectations.
- ▶ Launched in August 2016 and is run by the Bank of England, University of Nottingham, and King's College London.
- ▶ Monthly online panel survey of UK businesses (5-10 minute survey).
- ▶ Similar in style to the Survey of Business Uncertainty run in the US by the Federal Reserve Bank of Atlanta (Altig et al., 2022).
- ▶ Mainly completed by CFOs/Finance Directors and CEOs of firms.
- ▶ Receives around 2,500 monthly responses, covering around 4% of UK employment.
- ▶ Asks regularly about recent developments and year-ahead expectations for sales, prices, employment, wages, and investment, and special questions on topical issues.

The DMP has been used to study

Brexit

Bloom et al. (2018)
Bloom et al. (2019)

The Covid-19 Pandemic

Altig et al. (2020)
Bloom et al. (2023)

The Russia-Ukraine War

Anayi et al. (2022)

Inflation

Bunn et al. (2022)

The Impact of Higher Interest Rates on UK Firms

Shah et al. (2024)

The Response of Firms to CPI Inflation Data Releases

Yotzov et al. (2024)

The DMP has several key features

1. The DMP focuses on questions that ask firms to provide precise numerical values for past developments and expectations.
2. The DMP survey asks firms about the distribution of their expectations, not just the single most likely outcome.
3. The DMP surveys monthly frequency provides a timely and regular flow of data.
4. The DMP survey asks regularly about recent developments and expectations for sales, prices, employment, wages, unit costs, and investment.
5. The DMP asks special questions on a rotating basis which are very topical and adapt to the immediate informational needs of Bank policymakers.
6. The DMP can be linked to company accounts data and ONS datasets available within the SRS.

Accessing the DMP Data

- ▶ Aggregated DMP data are published on the Bank of England and Decision Maker Panel websites, usually on the first Thursday of every month.
- ▶ Once a quarter, a more detailed set of quarterly data tables are also published on the Bank of England and Decision Maker Panel websites.
- ▶ Accredited researchers can also access anonymised DMP microdata via the Office for National Statistics' (ONS) Secure Research Service (SRS).

The screenshot shows the Bank of England website. The header includes the Bank of England logo, navigation links (Topics, About, News and publications, Museum, Contact), and a search bar. The main content area features the title 'Monthly Decision Maker Panel data - March 2025' and a sub-header 'Home / Monthly Decision Maker Panel data - March 2025'. Below the title is a paragraph: 'The Decision Maker Panel (DMP) is a survey of Chief Financial Officers from small, medium and large UK businesses. We use it to monitor developments in the economy and to track businesses' views.' At the bottom, it states 'Published on 03 April 2025'.

The screenshot shows the Bank of England website. The header includes the Bank of England logo, navigation links (Topics, About, News and publications, Museum, Contact), and a search bar. The main content area features the title 'Latest results from the Decision Maker Panel survey - 2025 Q1' and a sub-header 'Home / Agents' summary of business conditions - 2025 Q1 / Latest results from the Decision Maker Panel survey - 2025 Q1'. Below the title is a paragraph: 'The Decision Maker Panel (DMP) is a survey of Chief Financial Officers from small, medium and large UK businesses. We use it to monitor developments in the economy and to track businesses' views. This is a summary of results up until February 2025.' Below the paragraph are three sections: 'Price growth' with a Euro symbol icon, 'Wage expectations' with a person icon, and 'Employment expectations' with a bar chart icon. Each section has a short summary of the results.

Outline

1 The DMP Survey

2 Response Rates

3 Cleaning & Weighting

4 Evaluating Data Quality

5 Research & Applications

6 Conclusion

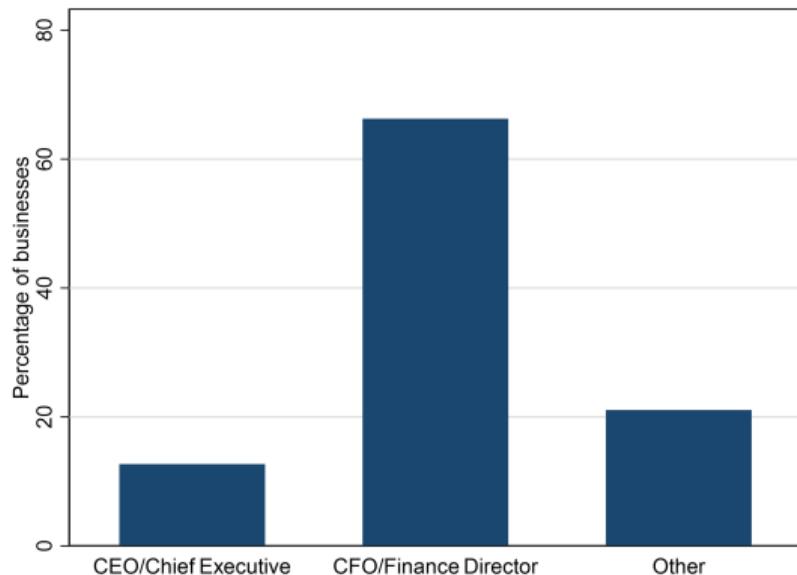
The DMP Survey Design

- ▶ The sampling frame consists of active UK businesses with 10+ employees, as listed in the Bureau van Dijk FAME database.
- ▶ Firms are randomly selected from this sampling frame and invited by telephone to join the panel by a recruitment team based at Nottingham.

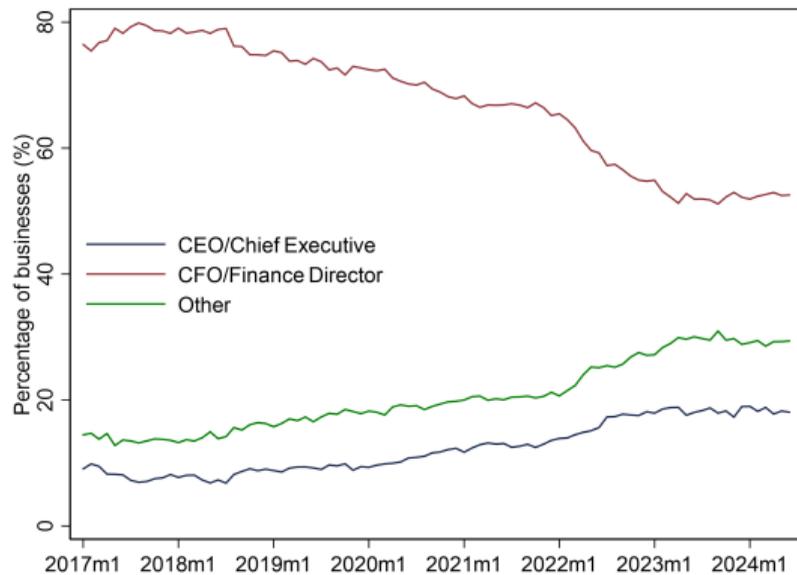


79% of DMP respondents hold senior positions, 66% are CFOs and 13% are CEOs

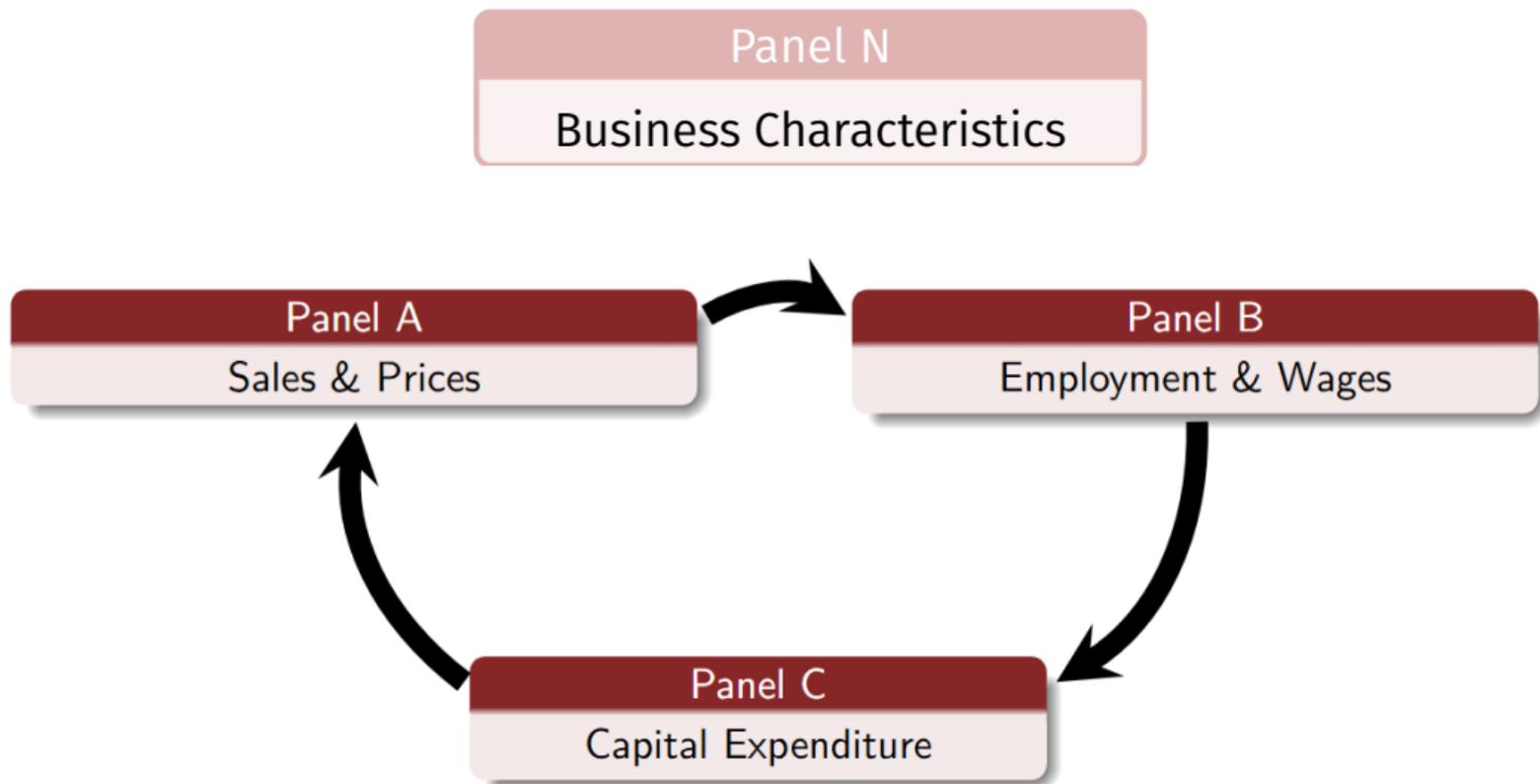
Panel A: Average 2017 to 2024



Panel B: Average by survey wave



The DMP's unique rotating three-panel structure helps to keep the survey short for respondents



Firms estimate growth across five distinct scenarios themselves and then assign a probability to each scenario

Panel A: Scenarios

Decision Maker Panel



BANK OF ENGLAND

Looking a year ahead from the second quarter of 2024 to the second quarter of 2025, 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:

%

A LOW % change in sales revenue would be about:

%

A MIDDLE % change in sales revenue would be about:

%

A HIGH % change in sales revenue would be about:

%

The HIGHEST % change in sales revenue would be about:

%

Panel B: Probabilities

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 2% would be:

%

LOW: The likelihood of realising about 3% would be:

%

MIDDLE: The likelihood of realising about 4% would be:

%

HIGH: The likelihood of realising about 5% would be:

%

HIGHEST: The likelihood of realising about 8% would be:

%

Total

%

The DMP has featured special questions covering a diverse set of topics including major economic events such as Brexit and Covid

Panel A: Brexit Uncertainty

Decision Maker Panel



BANK OF ENGLAND

How important is the result of the EU referendum affected the level of uncertainty affecting your business?

Not important

One of many drivers of uncertainty

One of the top two or three drivers of uncertainty for our business

The largest current source of uncertainty for our business

Bank of England | [Decision Maker Panel](#)

Panel B: Impact of AI

Decision Maker Panel



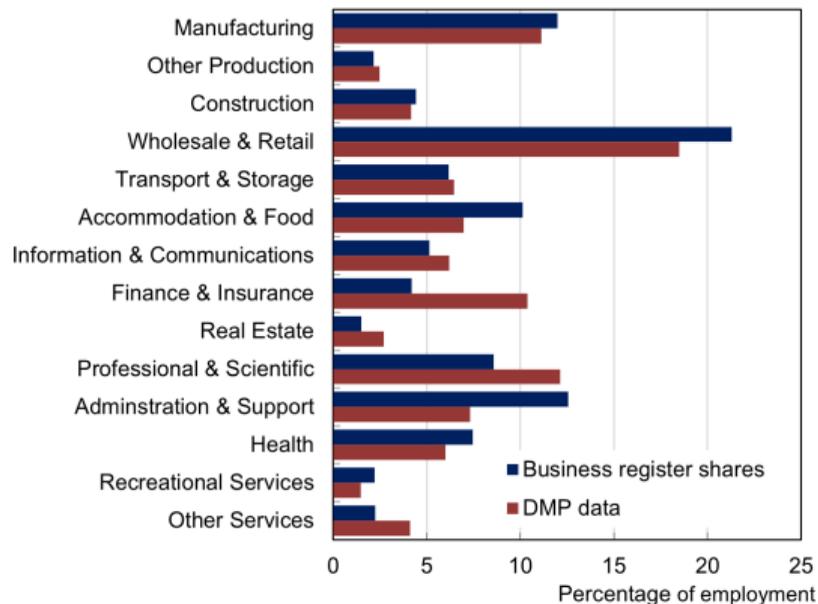
BANK OF ENGLAND

How has the adoption of artificial intelligence technologies affected the NUMBER OF EMPLOYEES in your business over the past three years? And how do you expect this to affect your NUMBER OF EMPLOYEES over the next three years?

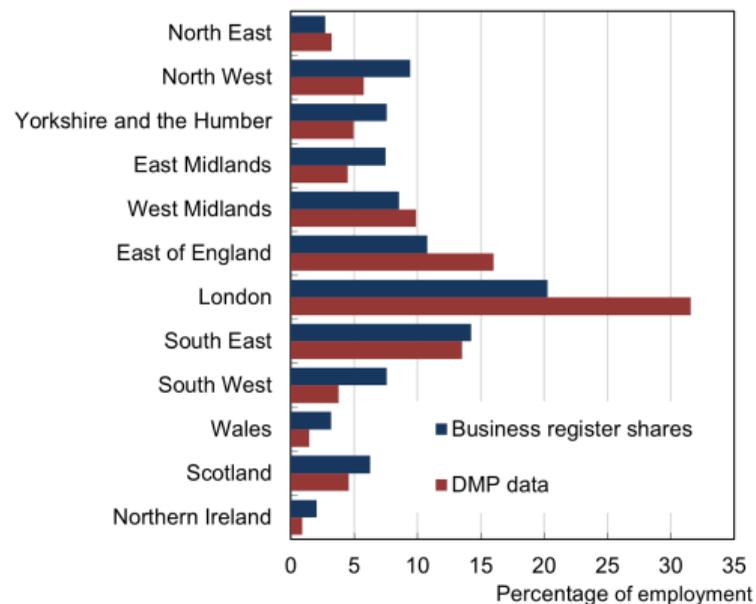
	Past 3 years	Next 3 years
A large positive influence, adding 5% or more	<input type="radio"/>	<input type="radio"/>
A minor positive influence, adding less than 5%	<input type="radio"/>	<input type="radio"/>
No material impact	<input type="radio"/>	<input type="radio"/>
A minor negative influence, subtracting less than 5%	<input type="radio"/>	<input type="radio"/>
A large negative influence, subtracting 5% or more	<input type="radio"/>	<input type="radio"/>

The DMP survey covers all industrial sectors of the UK economy and all regions, including Northern Ireland.

Panel A: Industrial composition by employment share



Panel B: Regional composition by employment share



Outline

1 The DMP Survey

2 **Response Rates**

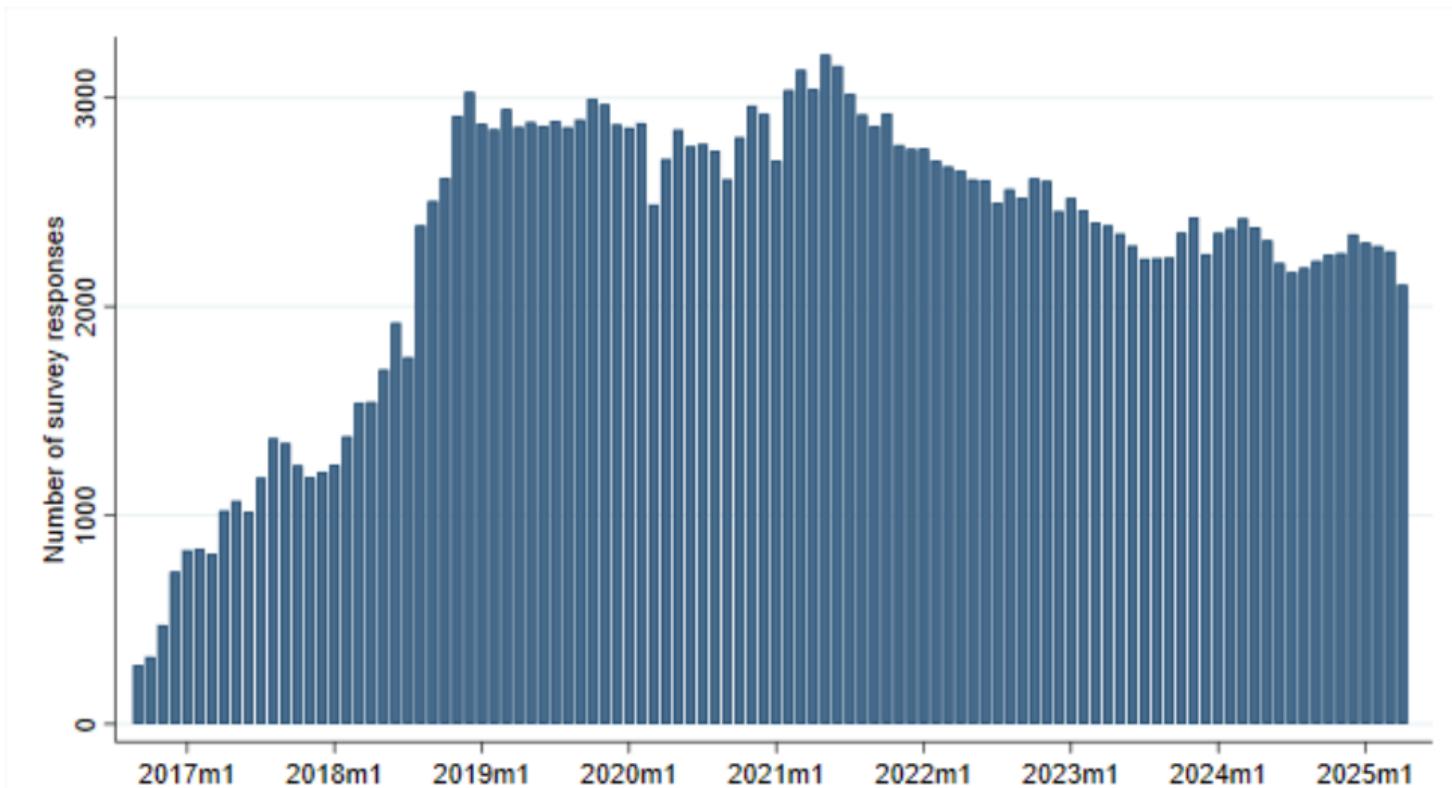
3 Cleaning & Weighting

4 Evaluating Data Quality

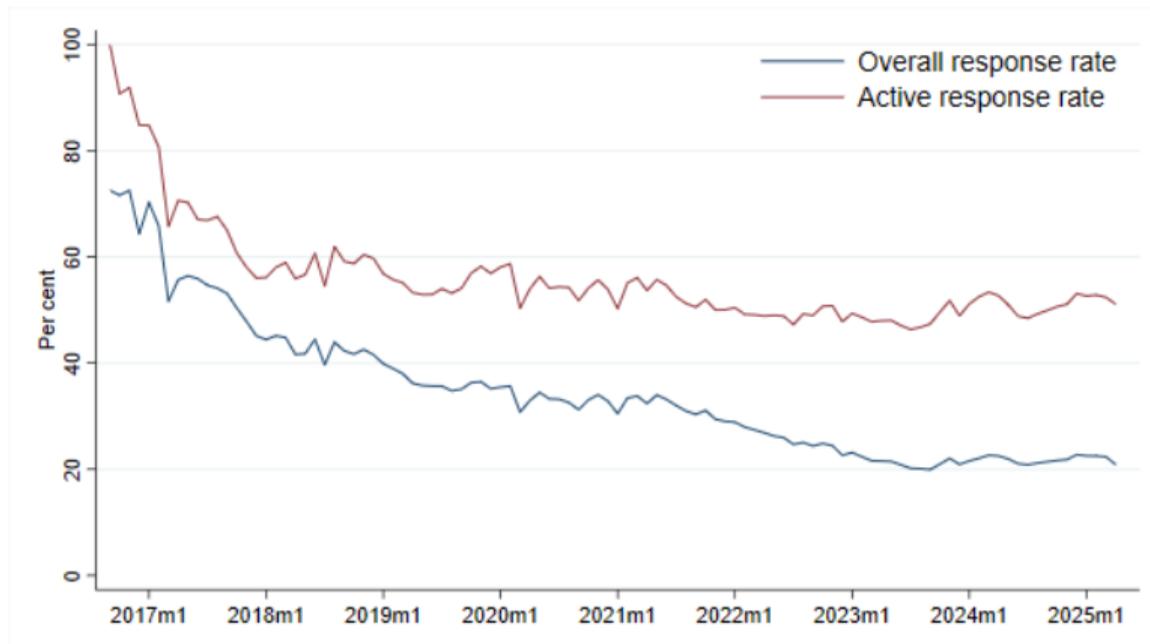
5 Research & Applications

6 Conclusion

Since 2022, the survey has received an average of around 2,500 responses each month



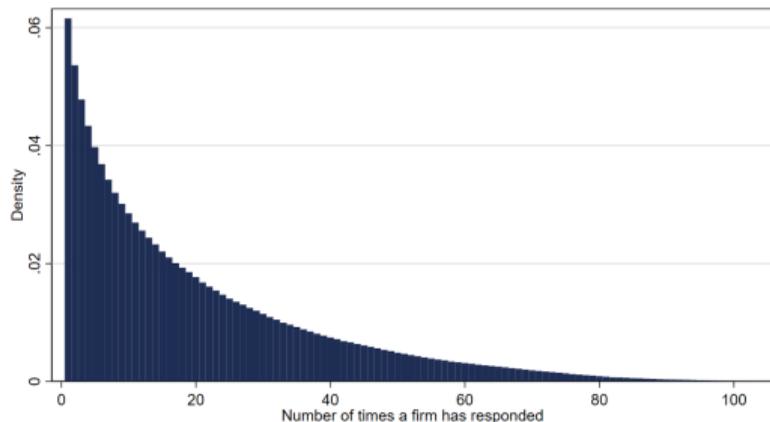
As the number of firms who participating in the DMP has increased, the response rate has gradually declined, although this has begun to level off at just over 20%



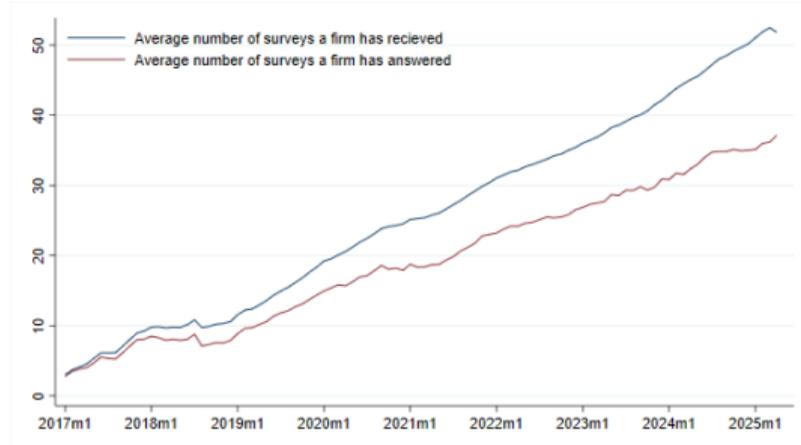
Notes: The overall response rate is the the number of completed surveys as a percentage of the number of surveys sent out in each month. The response rate of active panel members is calculated as the the response rate of panel members who had completed at least one survey over the last twelve months.

Some firms that only stay in the panel for relatively short periods of time but there are others who have responded to a large number of surveys

Panel A: Survey tenure histogram



Panel B: Avg. surveys received/completed



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The DMP has several checks and strategies in place to remove outliers and implausible responses

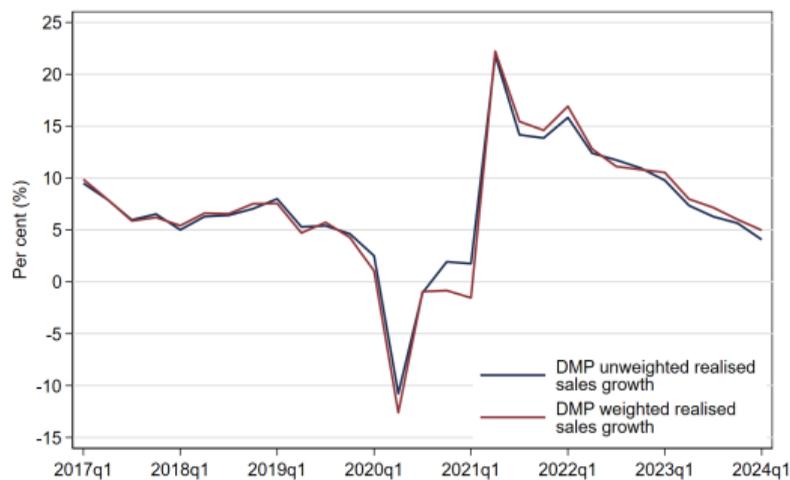
- ▶ Extreme values are classified as outliers and are recoded as missing.
- ▶ Corresponding expectations are recoded as missing if respondents assign 100% weight to a single growth scenario or if probabilities do not sum to 100%.
- ▶ Firms classified as having low employment, defined as fewer than three employees, are dropped from the sample.

Variable	Outliers		100% weight on one scenario	Probabilities not summing to 100%
	Realised growth	Expected growth	Expected growth	Expected growth
Sales	2.03%	4.61%	1.32%	0.007%
Price	0.56%	0.61%	3.65%	0.002%
Employment	1.37%	2.65%	1.30%	0.014%
Cost	0.34%	0.82%	3.31%	0.012%
Wage	0.10%	0.11%	2.40%	0.009%
Capital Expenditure	14.32%	14.14%	3.60%	0.059%

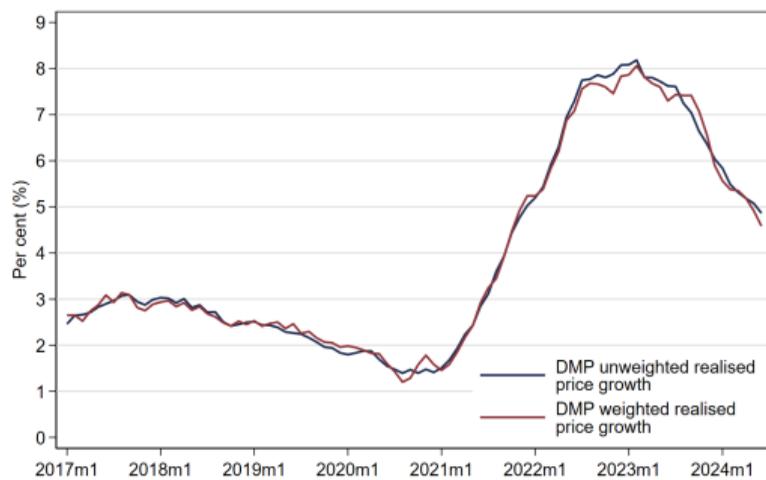
Responses are weighted so that the sample becomes more representative of the business population of the UK

- ▶ To construct the weights, respondents are divided by industry (14 industries) and firm size (two size categories).

Panel A: Sales growth



Panel B: Price growth

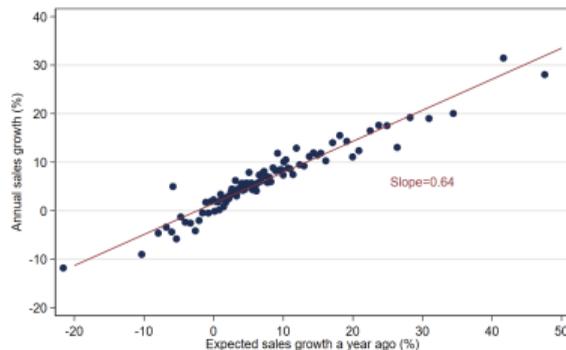


Outline

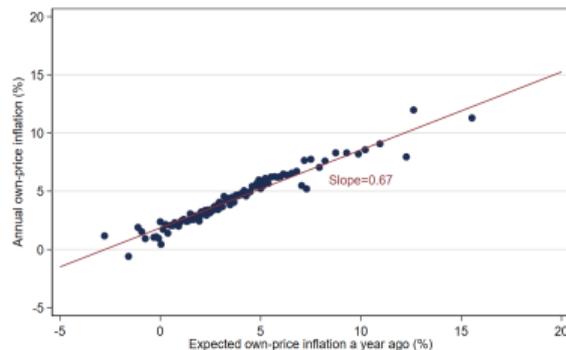
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Firms make reasonably accurate predictions in the cross-section

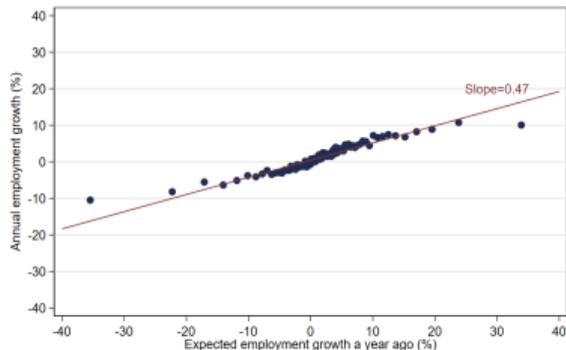
Panel A: Sales growth



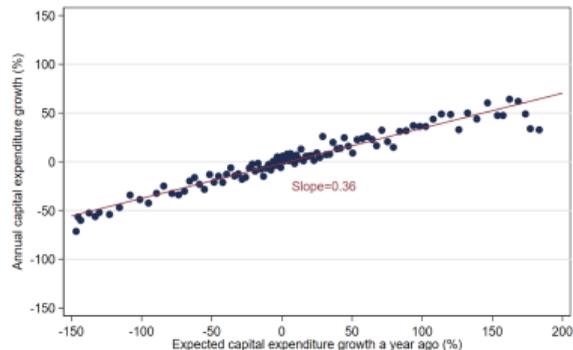
Panel B: Price growth



Panel C: Employment growth

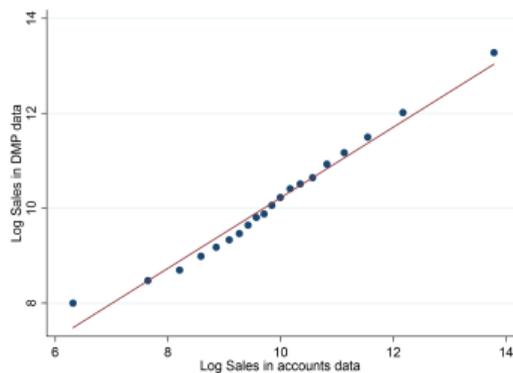


Panel D: Investment growth

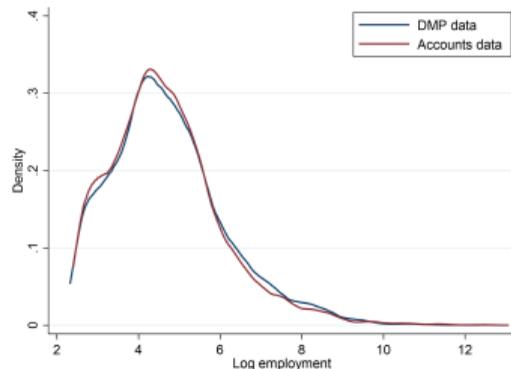
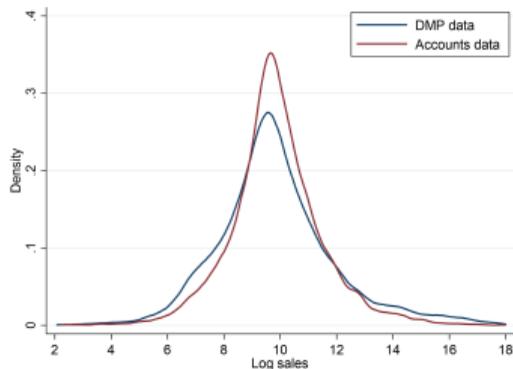
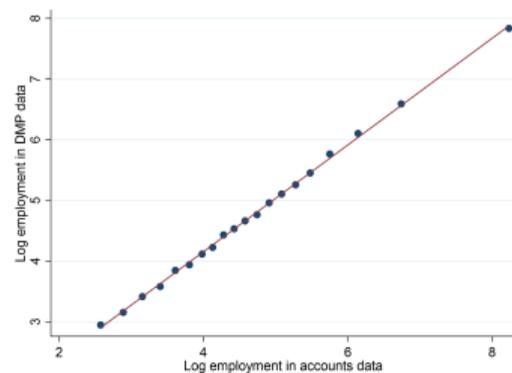


The DMP's estimates of employment and sales in levels and growth rates closely match annual firm-level accounts data

Panel A: Sales

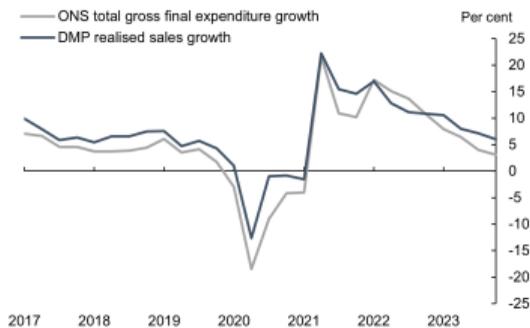


Panel B: Employment

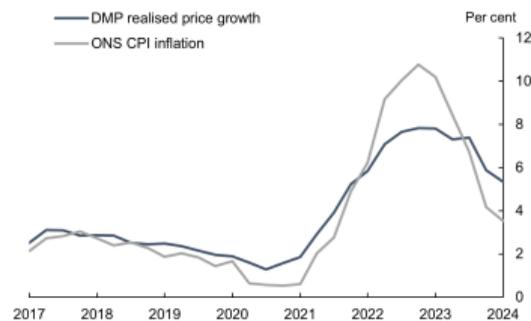


The strength of the alignment between DMP and ONS series can be further enhanced by mean/variance adjusting the DMP data

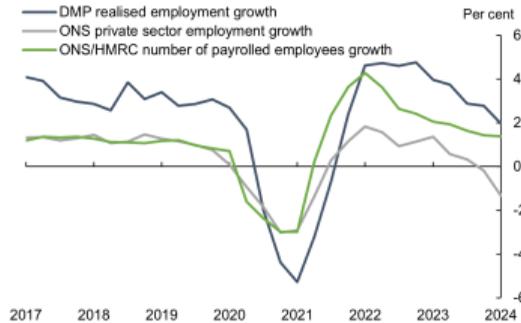
Panel A: Sales growth



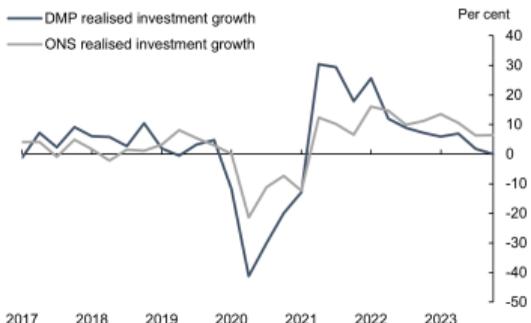
Panel B: Price growth



Panel C: Employment growth

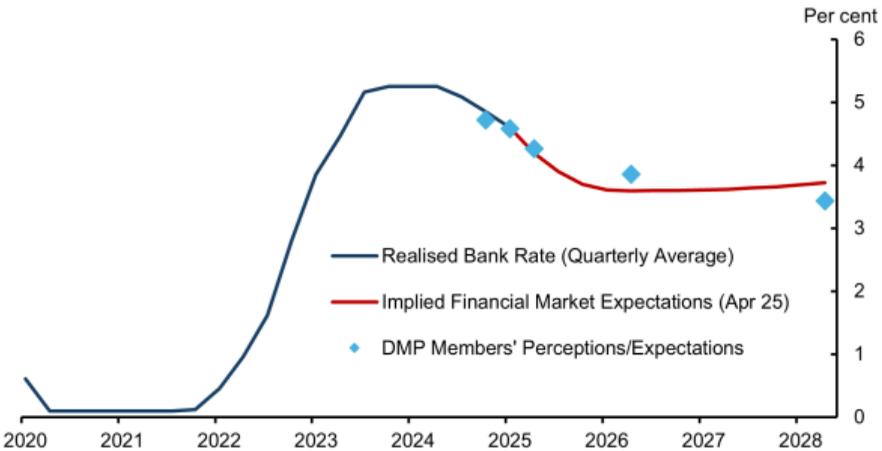


Panel D: Investment growth

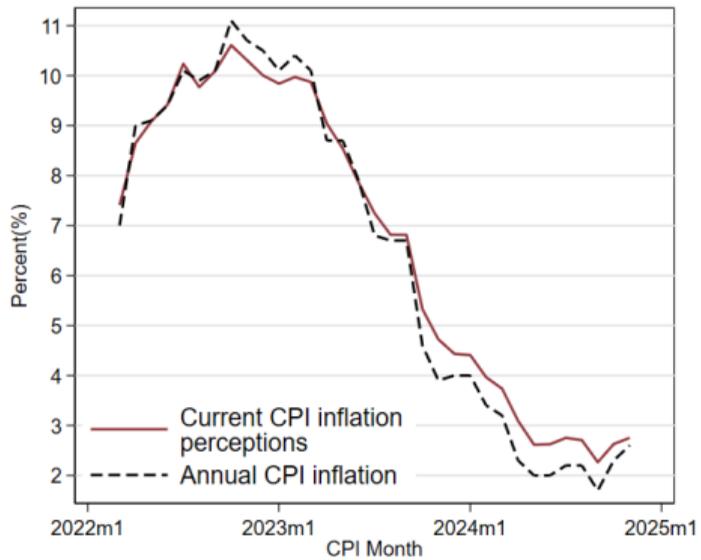


DMP panel members are well-informed and pay close attention to macroeconomic developments in the UK economy

Panel A: Bank Rate



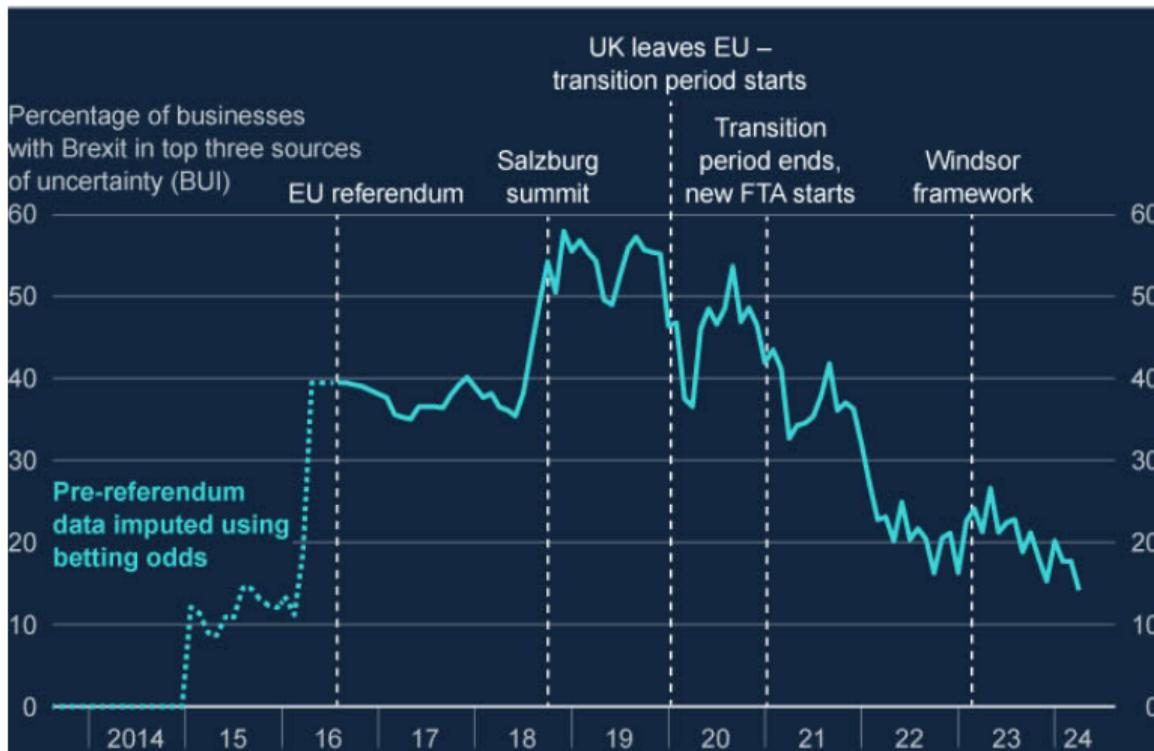
Panel B: CPI Inflation



Outline

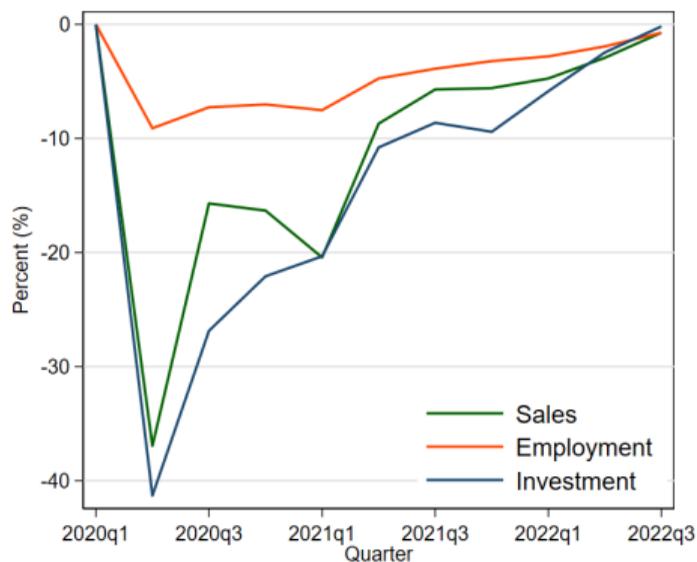
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The DMP data shows that the result of the Brexit Referendum created an unexpected, large, and persistent uncertainty shock for UK firms

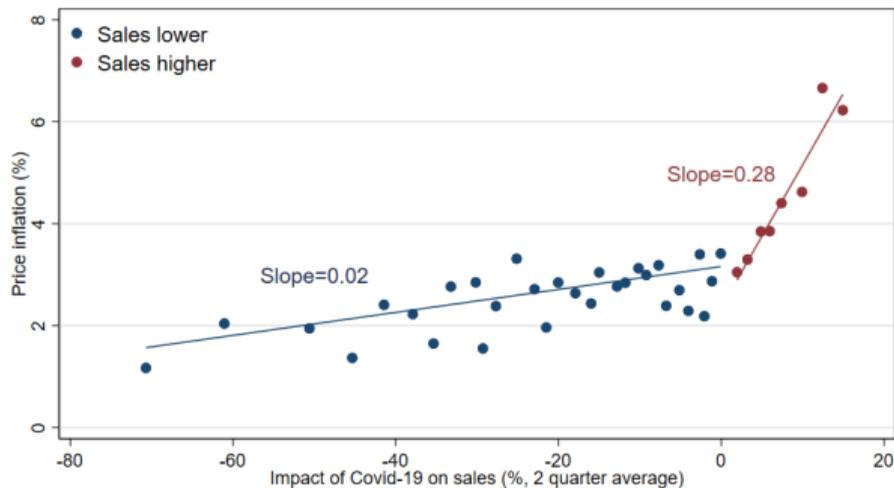


The DMP was a key source of real-time high-frequency data during the pandemic. It was used to demonstrate the significant economic shock the pandemic had on firms

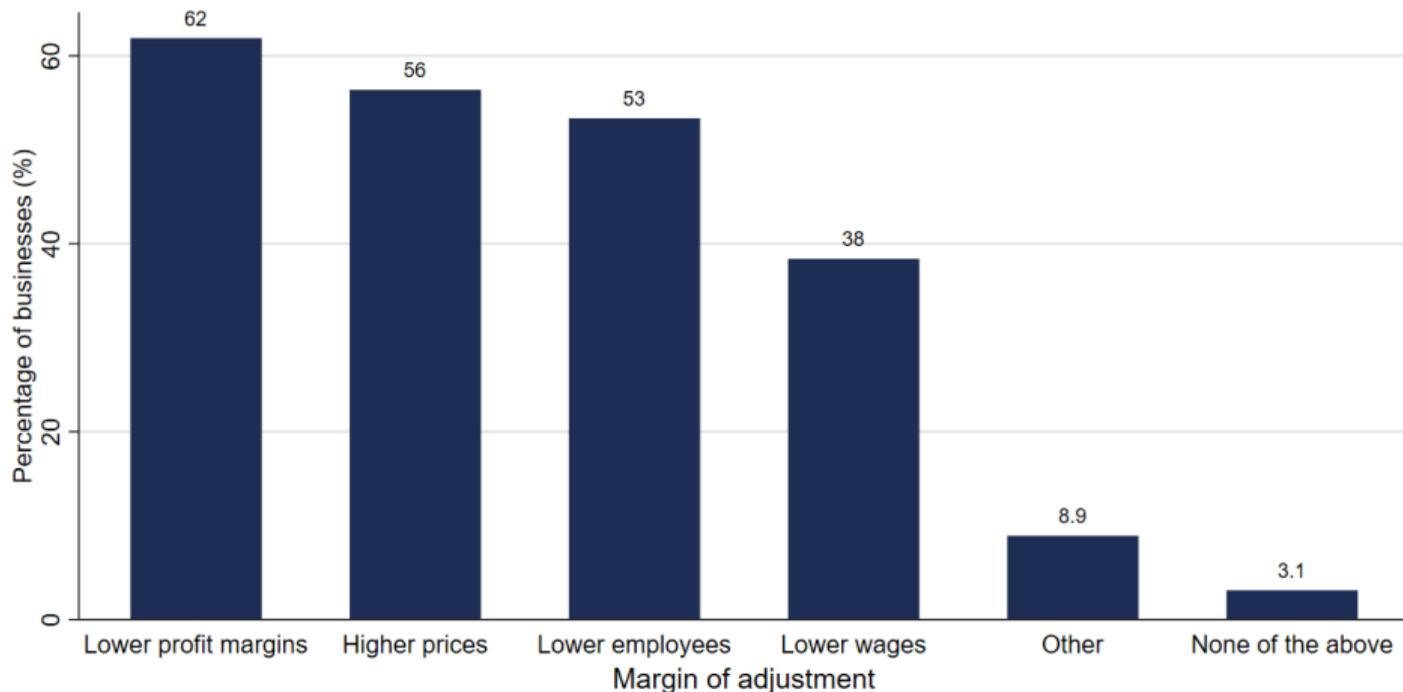
Panel A: Estimated impact of Covid-19



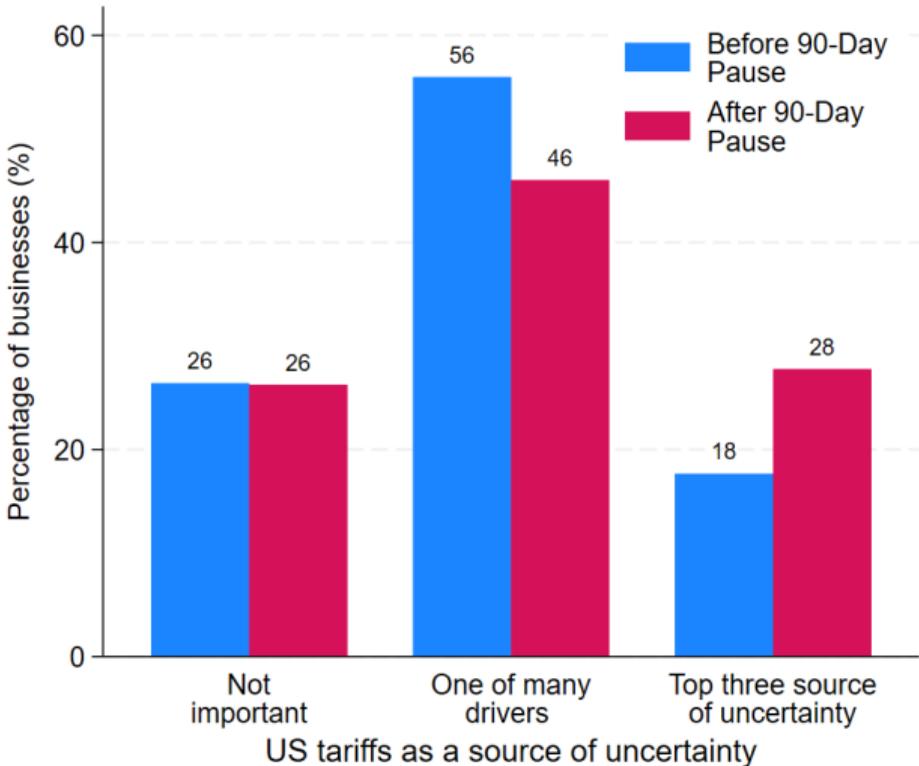
Panel B: Realised inflation and Covid-19 impact



The DMP survey was used to study how UK firms expected to respond to the April 2025 increases in employer National Insurance Contributions



The DMP survey was used to study the expected impact of US tariffs on UK firms



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Conclusion

- ▶ Established in August 2016 and is run by the Bank of England, University of Nottingham, and King's College London.
- ▶ Monthly online panel survey of UK businesses that provides a timely stream of representative data and has flexibility to adapt to new economic issues as they arise.
- ▶ Gathers detailed quantitative data mainly from CFOs on business conditions and future expectations, including their distribution and uncertainty.
- ▶ Data have been shown to be high quality as DMP firms have high prediction accuracy and the data matches official statistics well.
- ▶ Has been used to study the effects of several key economic issues and events including Brexit, Covid-19, Inflation, AI, NICs and US Tariffs.
- ▶ Aggregated DMP data are published on a monthly and quarterly basis, and anonymised microdata are available to researchers via the Office for National Statistics' Secure Research Service.

References I

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- Yotzov, I., N. Bloom, P. Bunn, P. Mizen, and G. Thwaites (2024). The speed of firm response to inflation. *NBER Working Paper Series*. No. 32731.

Thank You!



Website: www.decisionmakerpanel.co.uk

LinkedIn: [www.linkedin.com/company/
decision-maker-panel-bank-of-england](http://www.linkedin.com/company/decision-maker-panel-bank-of-england)

The Decision Maker Panel

For more information about accessing the DMP data, use the QR code or visit:

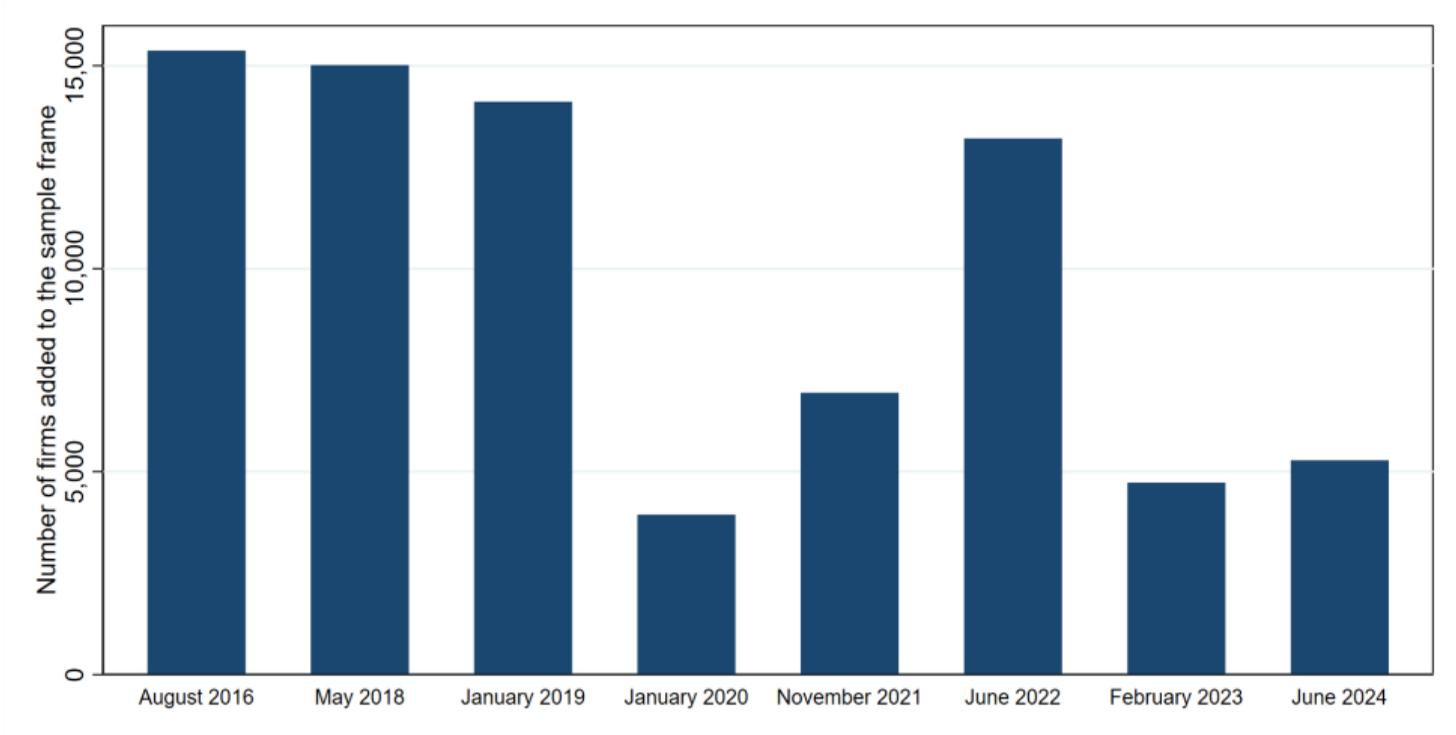
www.decisionmakerpanel.co.uk/data



Outline

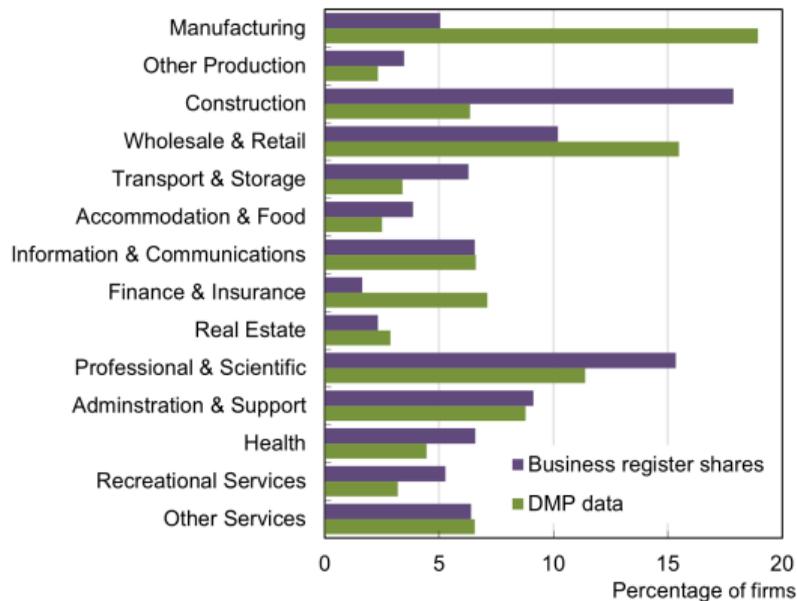
7 Appendix

The DMP survey sampling frame contains approximately 73,000 firms and has expanded multiple times

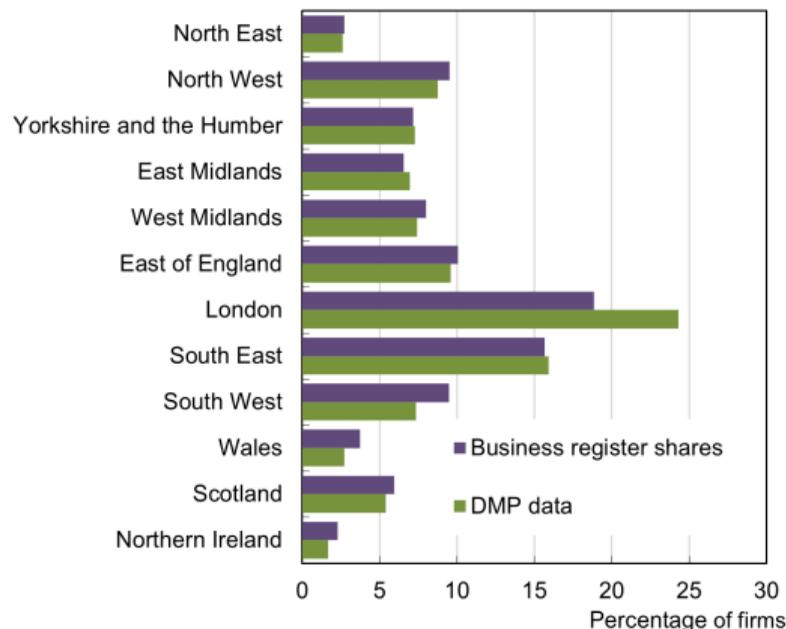


The DMP survey covers all industrial sectors of the UK economy and all regions, including Northern Ireland.

Panel A: Industrial composition by firm share

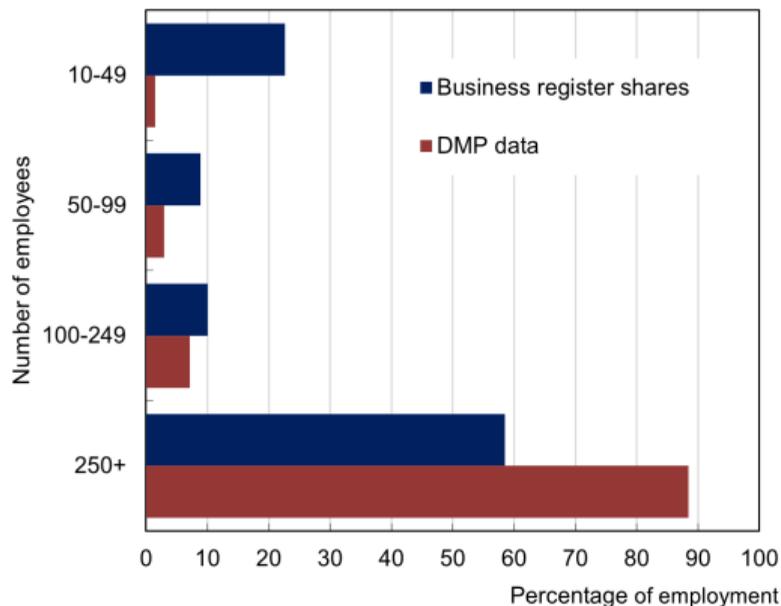


Panel B: Regional composition by firm share

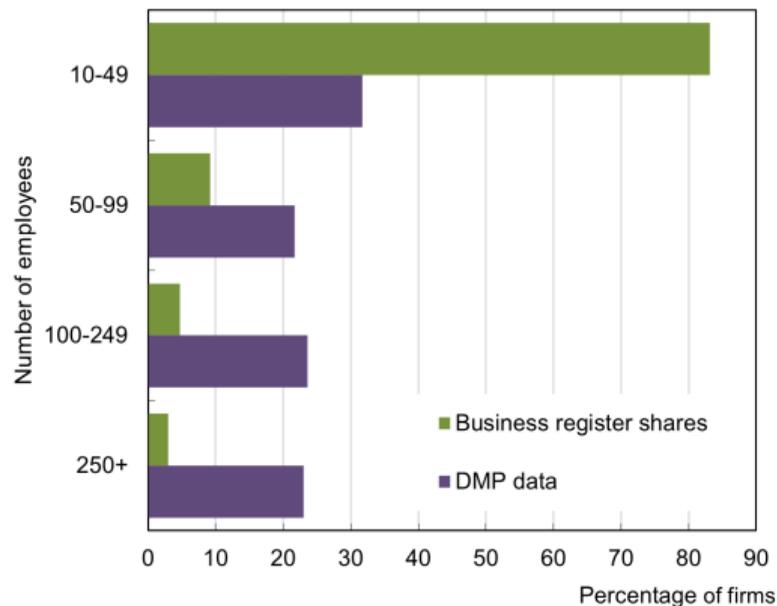


The DMP survey also covers large, medium-sized and small businesses; only firms with less than ten employees are not covered

Panel A: Employment share



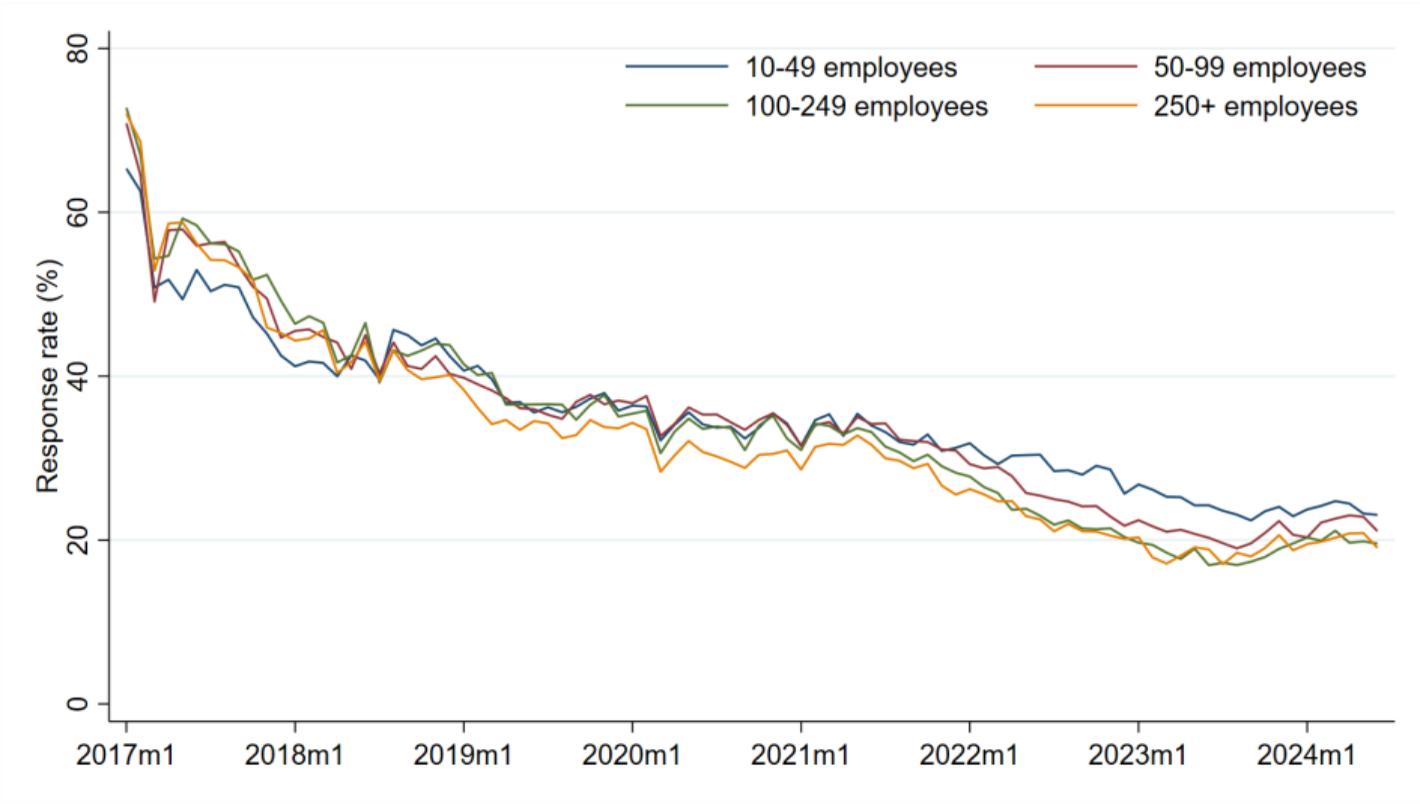
Panel B: Firm share



Conditional on being in the sampling frame larger, older and more productive firms are more likely to respond, but survey response is uncorrelated with a firms' Brexit exposure

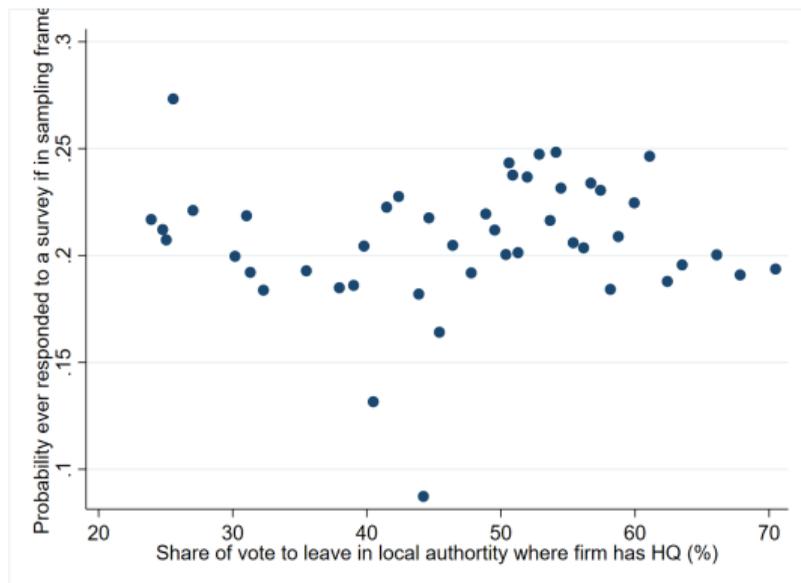
Dependent variable: Ever responded to a survey if in sampling frame	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Leave vote share	0.005 (0.013)	0.013 (0.013)	-0.011 (0.013)	-0.010 (0.013)	-0.004 (0.013)	-0.008 (0.013)	-0.008 (0.013)
Log of employment			0.026*** (0.001)	0.010*** (0.002)	0.008*** (0.002)	0.008*** (0.002)	0.011*** (0.002)
Log of sales				0.010*** (0.002)	0.005** (0.002)	0.006*** (0.002)	0.001 (0.002)
Log of assets					0.007*** (0.001)	0.005*** (0.001)	0.004*** (0.001)
Log of firm age						0.019*** (0.002)	0.018*** (0.002)
Log of labour productivity							0.008** (0.003)
1 digit industry dummies	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	62,651	62,651	62,651	62,651	62,651	62,651	62,651
R-squared	0.000	0.006	0.029	0.033	0.034	0.035	0.036
F-test for joint significance of industry dummies (p-value)	-	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Response rates by firm size broadly track each other

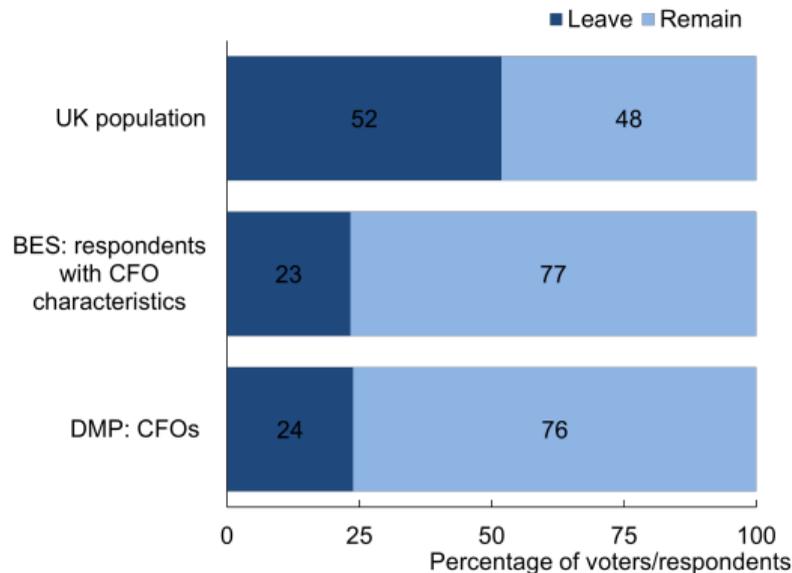


No clear evidence of a correlation between firms' exposure to Brexit and their propensity to respond to the DMP survey

Panel A: Response-Brexit scatter



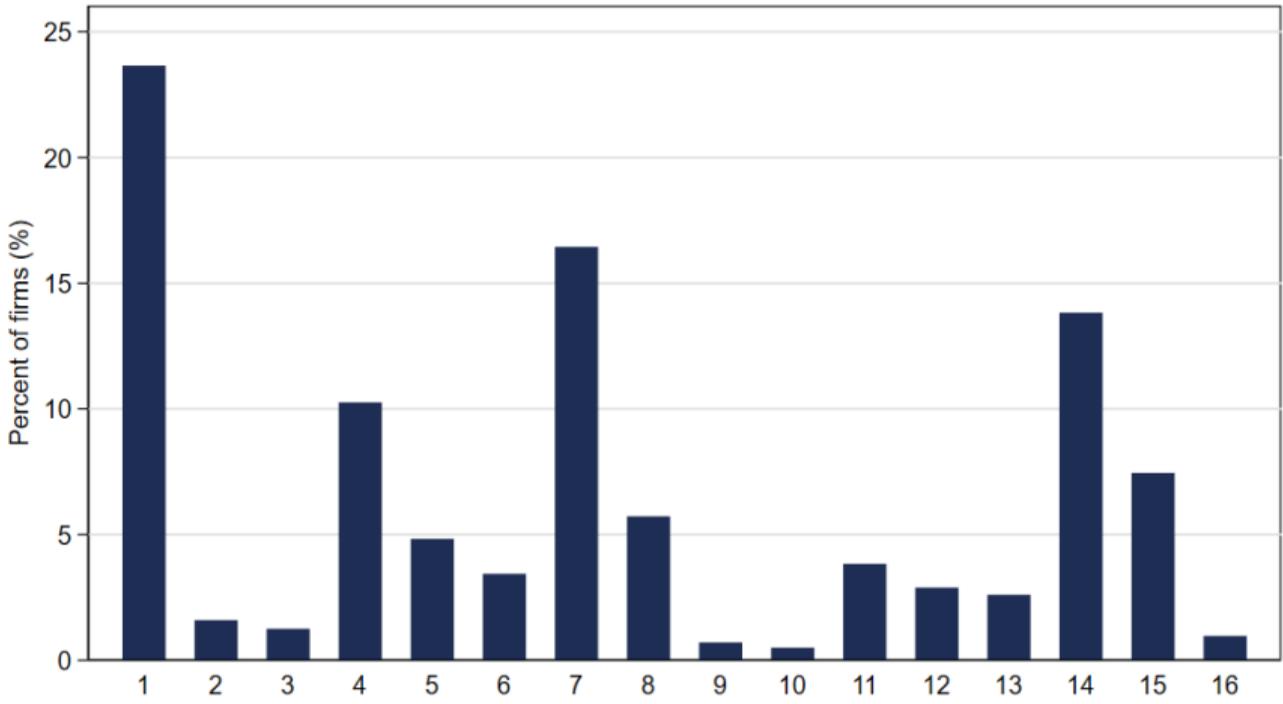
Panel B: Personal views on Brexit



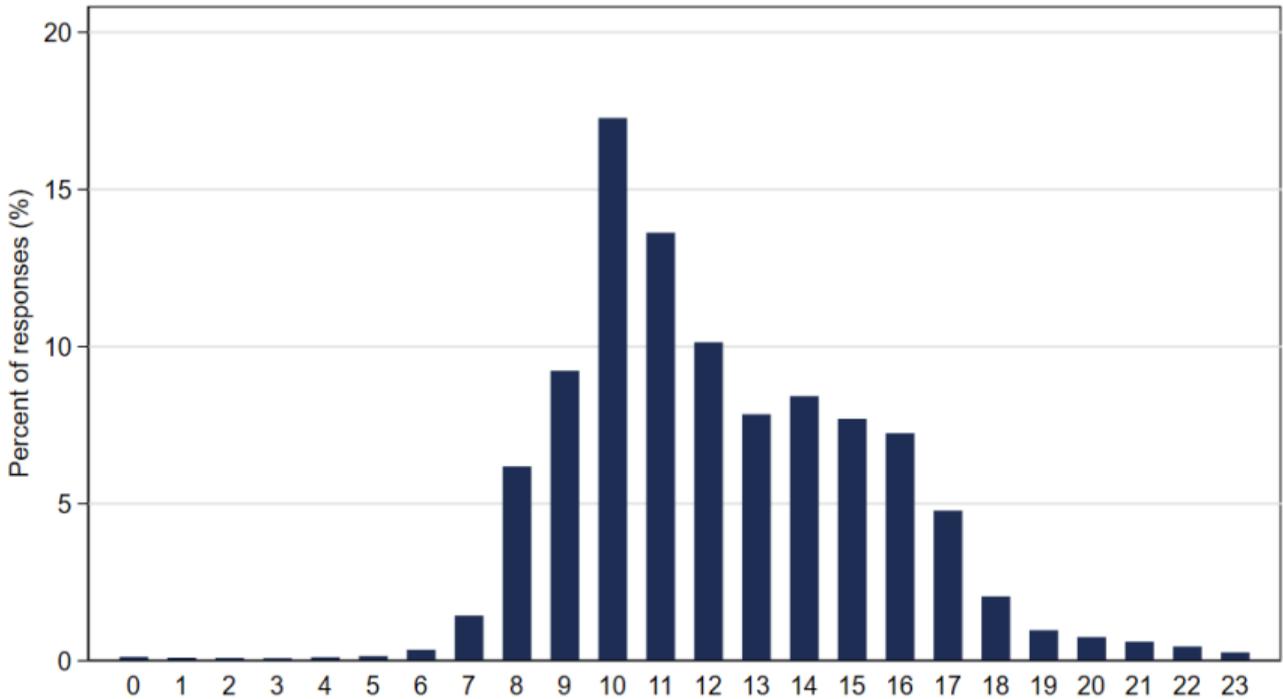
Changes in response rates were not larger in sectors more heavily impacted by the pandemic

Dependent variable: Responded to a survey if in sampling frame	(1) 2020	(2) 2020	(3) 2021	(4) 2021	(5) 2022	(6) 2022
Impact of Covid-19 on sales (2020 Q2-2022 Q3 industry-level average)	0.0000 (0.0003)	-0.0000 (0.0003)	-0.0001 (0.0003)	-0.0002 (0.0003)	0.0004** (0.0002)	0.0003 (0.0002)
Leave vote share		0.0057 (0.0121)		0.0053 (0.0122)		-0.0085 (0.0087)
Log of employment		0.0093*** (0.0014)		0.0099*** (0.0013)		0.0071*** (0.0010)
Log of sales		-0.0027** (0.0013)		-0.0040*** (0.0013)		-0.0024** (0.0010)
Log of assets		0.0013 (0.0009)		0.0020** (0.0009)		0.0012** (0.0006)
Log of firm age		0.0289*** (0.0019)		0.0298*** (0.0021)		0.0190*** (0.0016)
Log of labour productivity		0.0077*** (0.0021)		0.0103*** (0.0021)		0.0044*** (0.0017)
1 digit industry dummies	No	No	No	No	No	No
Observations	44,206	44,206	43,516	43,516	62,110	62,110
R-squared	0.000	0.007	0.000	0.007	0.000	0.004

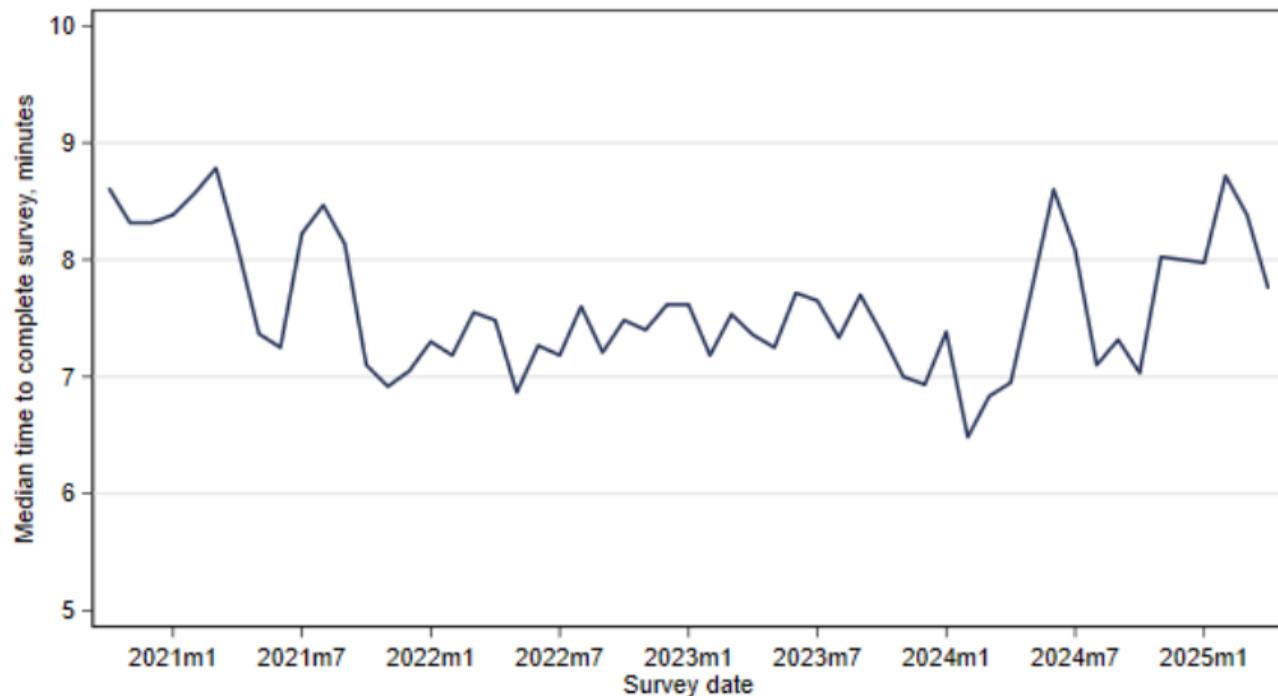
Firms are given a 15-day window to complete the DMP survey



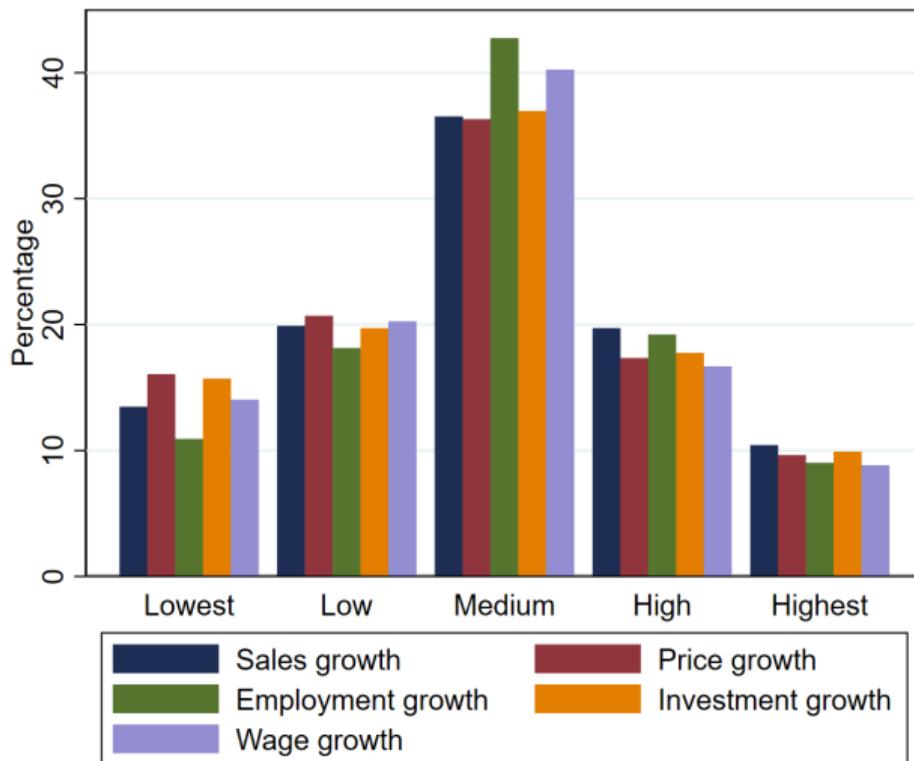
Late morning and early afternoon are the most common times to complete the survey



The median DMP survey takes around 7 and a half minutes to complete from first being opened to being submitted

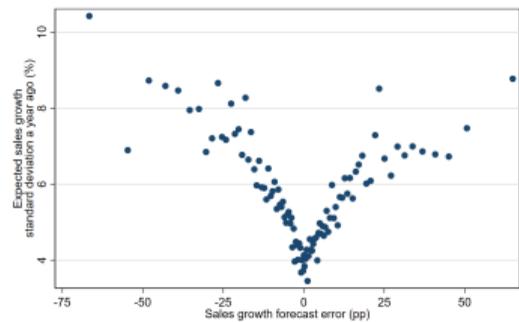


The average probability distribution does not exhibit a significant skew

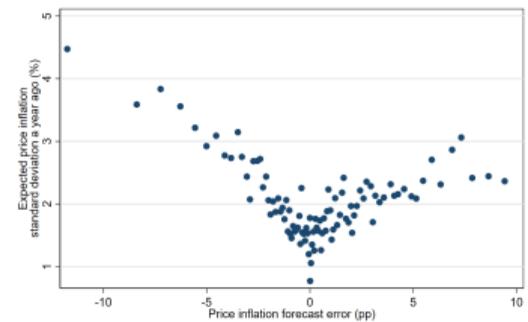


Firms cannot always accurately predict the future and sometimes they make forecast errors

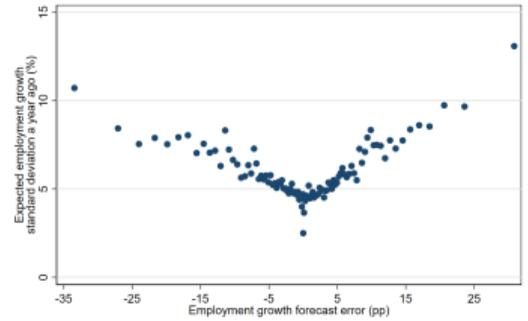
Panel A: Sales growth



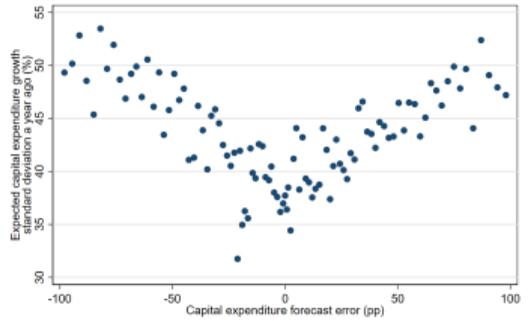
Panel B: Price growth



Panel C: Employment growth



Panel D: Investment growth



DMP data generally forecasts future growth rates quite accurately

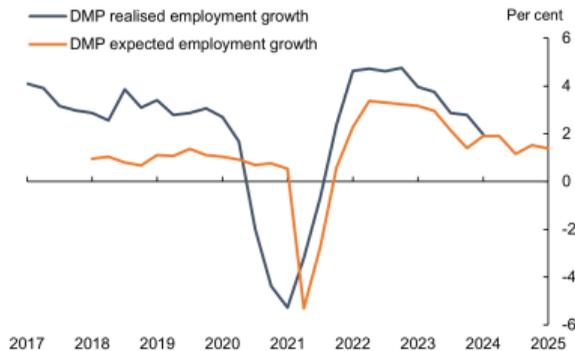
Panel A: Sales growth



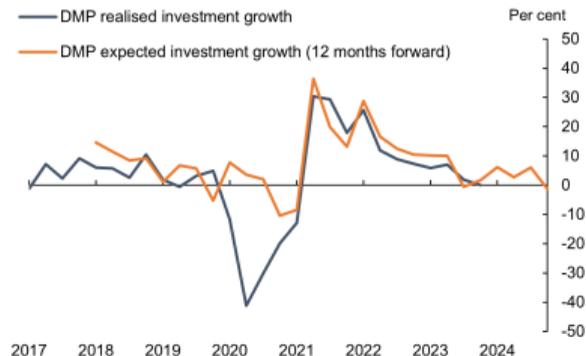
Panel B: Price growth



Panel C: Employment growth

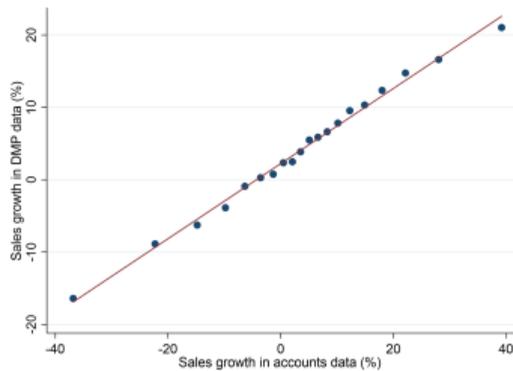


Panel D: Investment growth

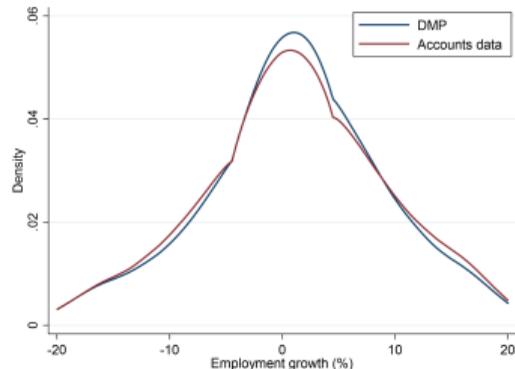
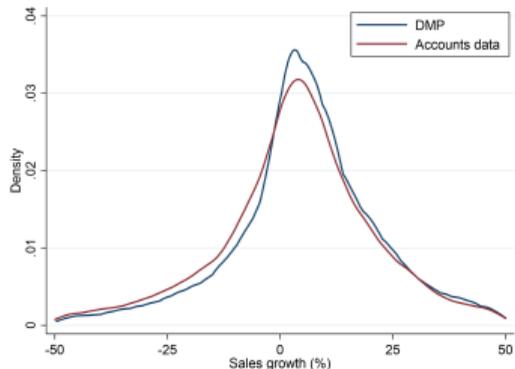
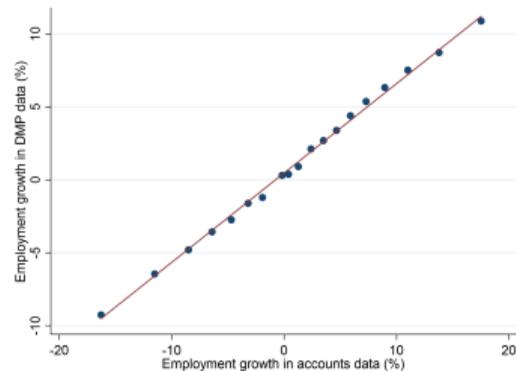


The DMP's estimates of employment and sales in levels and growth rates closely match annual firm-level accounts data

Panel A: Sales Growth

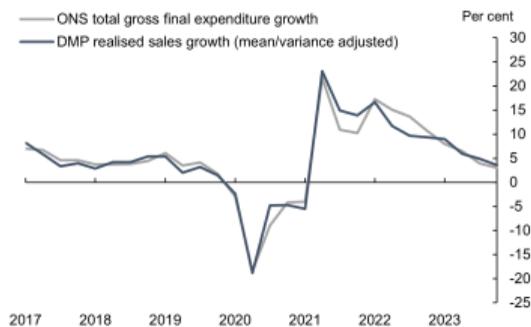


Panel B: Employment Growth

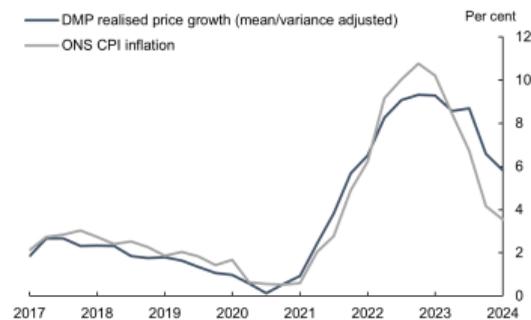


A strong alignment exists between the DMP aggregate data series and their official ONS counterparts

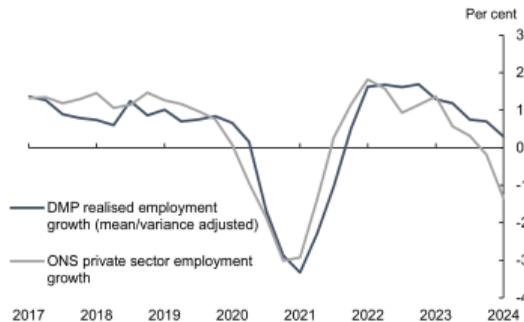
Panel A: Sales growth



Panel B: Price growth



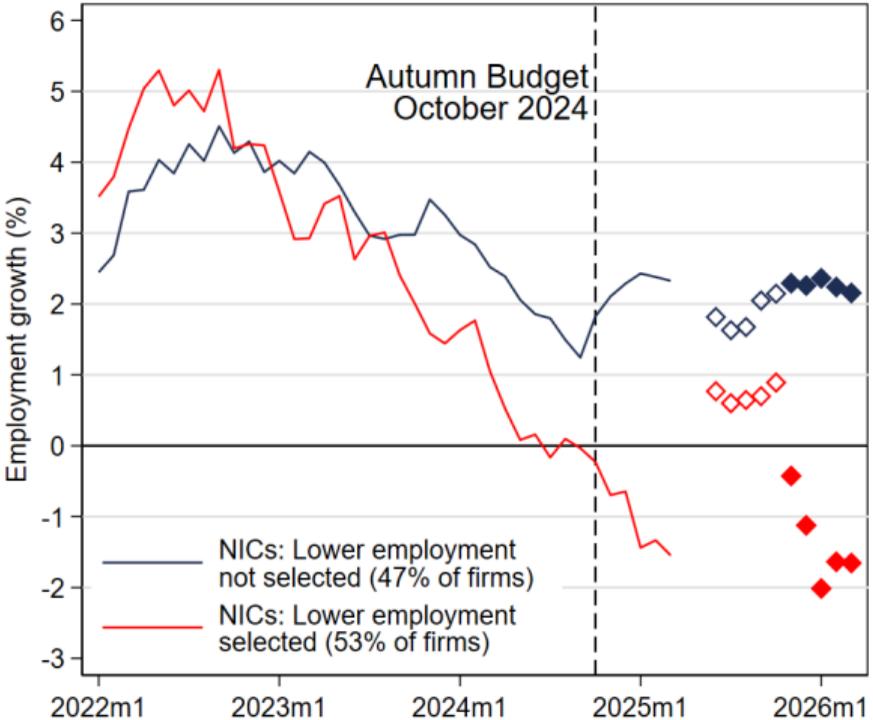
Panel C: Employment growth



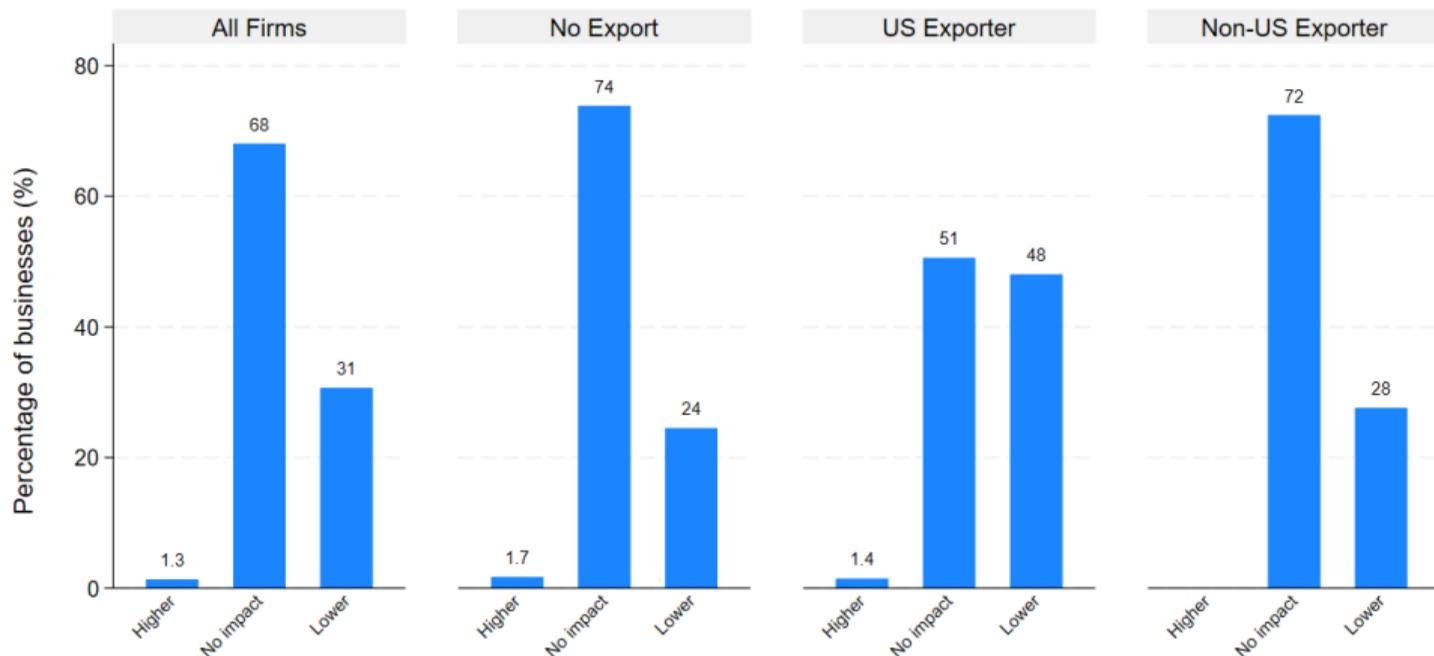
Panel D: Investment growth



The DMP survey was used to study how UK firms expectations responded to the April 2025 increases in employer National Insurance Contributions



The DMP survey was used to study the expected impact of US tariffs on UK firms



Graphs by exporter_status

Expected impact of tariffs on sales over next year (% of businesses)