# Comparing the Decision Maker Panel and the Business Insights and Conditions Survey

## ESCoE Conference on Economic Measurement 2026

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May 2026

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

# Motivation

- Business surveys have become a vital input to UK policymaking, providing **timely, high-frequency** data in a volatile economic environment.
- Two surveys launched in response to major economic shocks:
  - **Decision Maker Panel (DMP)** — launched August 2016 following the UK's vote to leave the EU.
  - **Business Insights and Conditions Survey (BICS)** — launched April 2020 in response to the Covid-19 pandemic.
- This paper asks **two** questions:
  - What can we learn by *comparing* the two surveys?
  - What *novel research* can be unlocked by linking them at the firm level?

# The Two Surveys

## Decision Maker Panel (DMP)

- Monthly online panel; run by the Bank of England with King's College London & University of Nottingham.
- $\sim$2,500 responses/month; $\sim$50% active response rate. DMP Response Rate
- Surveys Chief Financial Officers; covers $\sim$4% of UK employment.
- *Quantitative*: regular questions on recent developments and year-ahead expectations for sales, prices, employment, wages, and investment.
- Special questions on topical issues.

## Business Insights & Conditions Survey (BICS)

- Twice-monthly online survey run by the ONS.
- $\sim$39,000 businesses sampled per wave; $\sim$10,000 responses ($\sim$26% response rate). BICS Response Rate
- All large firms ($\geq$250 employees) sampled; smaller firms via stratified random sample.
- *Qualitative*: regular tracking of key economic variables, with questions adapting to respond to topical issues.

# Advantages of the DMP and BICS

1. **Timeliness** — DMP monthly, BICS twice-monthly; both released rapidly after the reference window, enabling real-time tracking of economic shocks.
2. **Panel structure** — repeated observation of the same firms allows researchers to relate prior expectations to subsequent outcomes.
3. **Complementary data** — DMP provides precise quantitative expectations; BICS captures qualitative breadth across a large firm population.
4. **Firm-level linkage** — the two surveys can be matched at the firm level, enabling:
   - ⇒ *Micro-level comparisons* between businesses responding to both surveys — the initial motivation for this paper.
   - ⇒ *Research* beyond what either survey can support alone.

# Outline

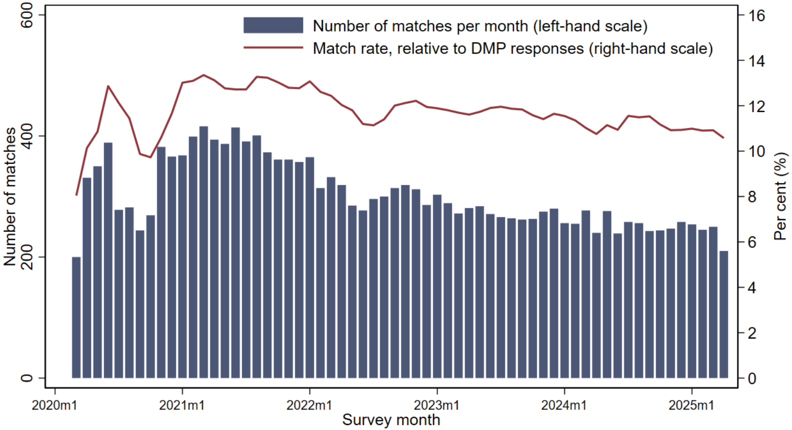
1. Data and Matching
2. Survey Comparisons
   - Price Growth
   - CPI Inflation
   - Artificial Intelligence
3. Discussion
4. Next Steps
5. Conclusion

# Matching the DMP and BICS

- Firms in each survey linked by the ONS using the **Companies House Registration Number (CRN)** — a high-quality, unique business identifier.
- Matched dataset made available via the ONS **Secure Research Service (SRS)**.
- Standalone DMP and BICS datasets further linked within the SRS via a reporting unit reference (RUREF), matching each monthly DMP observation to both BICS response periods within that month.
- Matched dataset covers **March 2020 to April 2025**.

# The DMP-BICS Matched Dataset

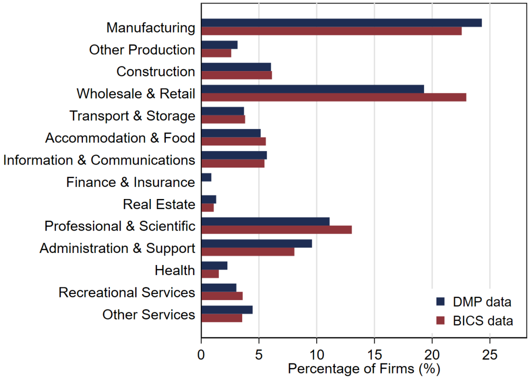
- $\sim$**18,750 matches** across all waves.
- These matches form the basis for micro-level comparisons between the two surveys.



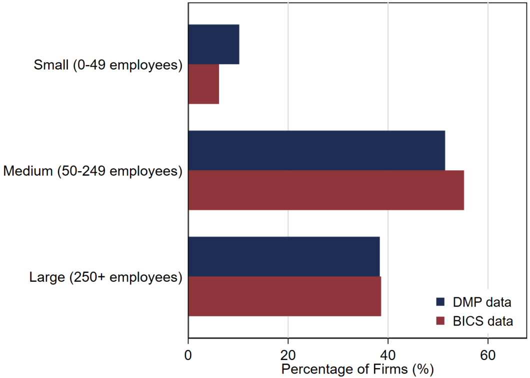
# Industry and size classification aligns closely across the matched sample

Aggregate Composition Comparison

## Panel A: Industry




## Panel B: Firm Size



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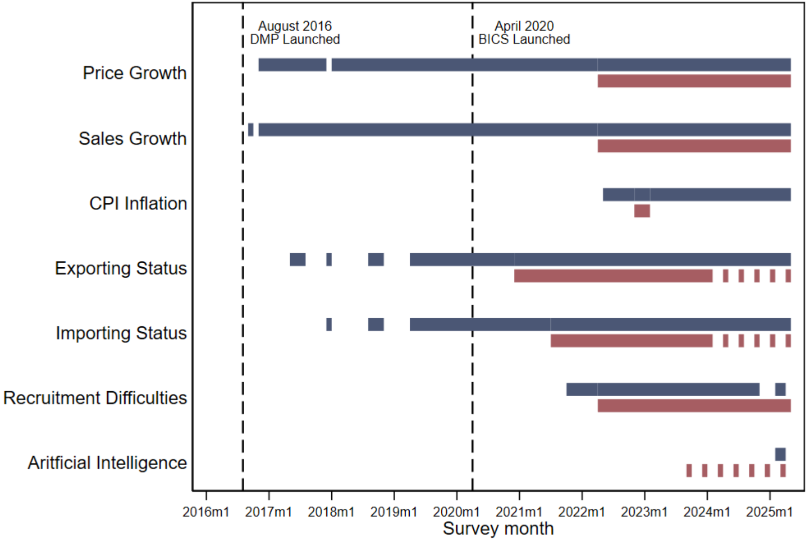
# What Do We Compare?

- The DMP and BICS differ in **design** but share **related purposes** and **overlapping topic coverage**.
- We focus on **six** areas where alignment is strongest:
  - Growth
    - **Price growth**
    - Sales growth
  - **CPI inflation**
  - Exporter and importer status
  - Recruitment difficulties
  - **Artificial intelligence (AI)**
- For each topic, we compare at both the **aggregate** and **firm level**.

# Periods of question crossover between the DMP and BICS



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# DMP captures the intensive margin of realised price growth

Decision Maker Panel

BANK OF ENGLAND

Looking back, from 12 months ago to now, what was the approximate % change in the AVERAGE PRICE you charge, considering all products and services?

*Notes:*

*(a) Please reply to two significant figures (e.g., 1.5%, 15%).*

*(b) If you are completing this survey on behalf of an organisation which does not charge regular prices or for which this question does not apply, please leave the first field empty and complete the second field only.*

| | | |
|---|---|---|
| Per cent (%) | 4 | % |
| Not applicable (please denote using NA) | | |

# DMP captures the intensive margin of expected price growth

## Panel A: Scenarios

**Decision Maker Panel**

BANK OF ENGLAND

Looking ahead, from now to 12 months from now, what approximate % change in your AVERAGE PRICE would you expect in each of the following scenarios?

*Note:*
*Price growth scenarios should be ordered from the lowest to the highest.*

| | | |
|---|---|---|
| The LOWEST % change in my prices would be about: | 2 | % |
| A LOW % change in my prices would be about: | 3 | % |
| A MIDDLE % change in my prices would be about: | 4 | % |
| A HIGH % change in my prices would be about: | 5 | % |
| The HIGHEST % change in my prices would be about: | 8 | % |

## Panel B: Probabilities

**Decision Maker Panel**

BANK OF ENGLAND

Please assign a percentage likelihood (probability) to the % changes in your AVERAGE PRICES you entered (values should sum to 100%).

| | | |
|---|---|---|
| LOWEST: The likelihood of realising about **2%** would be: | 5 | % |
| LOW: The likelihood of realising about **3%** would be: | 15 | % |
| MIDDLE: The likelihood of realising about **4%** would be: | 25 | % |
| HIGH: The likelihood of realising about **5%** would be: | 20 | % |
| HIGHEST: The likelihood of realising about **8%** would be: | 35 | % |
| Total | 100 | % |

# BICS captures the extensive margin of realised and expected price growth

## Panel A: Realised

**How did the prices of goods or services sold by your business in November 2022 compare with the previous calendar month?**

**Shortcode:** 4

**Question type:** QuestionPage

**Guidance:**

> Exclude seasonal changes

**Answers:**

**Q-Code:** 162

**Type:** Radio

**Answer options (Q-Code):**

- Prices increased
- Prices stayed the same
- Prices decreased
- Not sure
- Not applicable

## Panel B: Expected

**What are your business's expectations for the prices of goods or services sold in January 2023?**

**Shortcode:** 4a

**Question type:** QuestionPage

**Description:** When considering expectations, compare to your business's current prices of goods or services.

**Guidance:**

> Exclude seasonal changes

**Answers:**

**Q-Code:** 163

**Type:** Radio

**Answer options (Q-Code):**

- Prices will increase
- Prices will stay the same
- Prices will decrease
- Not sure
- Not applicable

# To compare surveys we construct a BICS growth index using a novel approach

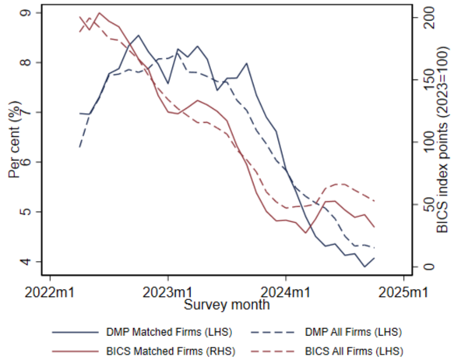
- Questions overlap every month between **April 2022** and **October 2024**.
- DMP captures the **intensive margin**; BICS the **extensive margin** — we encode BICS responses following Hack and Rostam-Afschar (2025) and baseline the index to 2023.

$$Growth_t = \frac{1}{N_t} \sum_{i=1}^{N_t} \widetilde{Growth}_{it} \text{ with } Growth_{it} \begin{cases} +100 & \text{if increase} \\ 0 & \text{if stayed the same} \\ -100 & \text{if decrease} \end{cases}$$

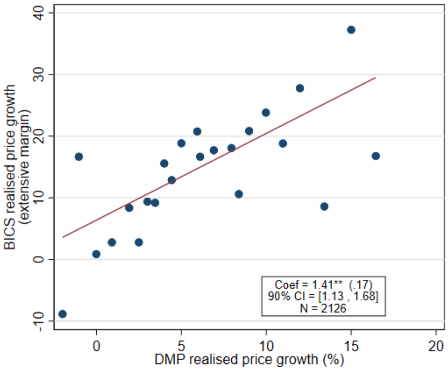
# Realised price growth tracks closely across both surveys

- Both surveys capture the **inflationary surge** and subsequent **moderation**; patterns hold beyond the matched sample.

## Panel A: Monthly Averages



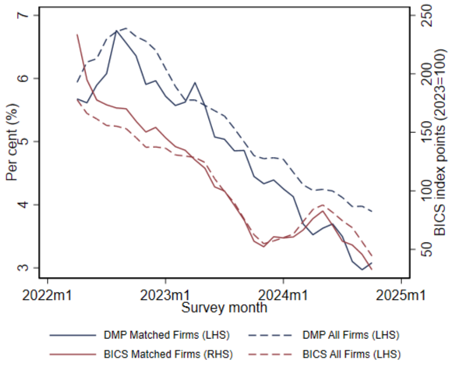

## Panel B: Binscatter



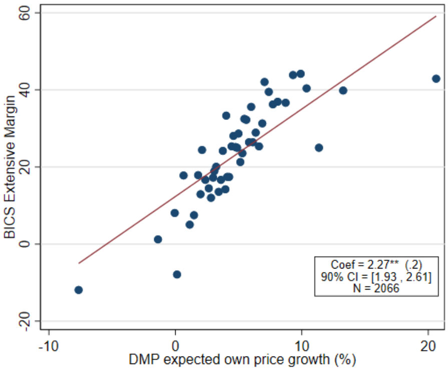
# Expected price growth measures very closely aligned across both surveys

- Both surveys reflect the anticipated **decline in inflation** and projected **upticks** going into 2025.

**Panel A: Monthly Averages**




**Panel B: Binscatter**



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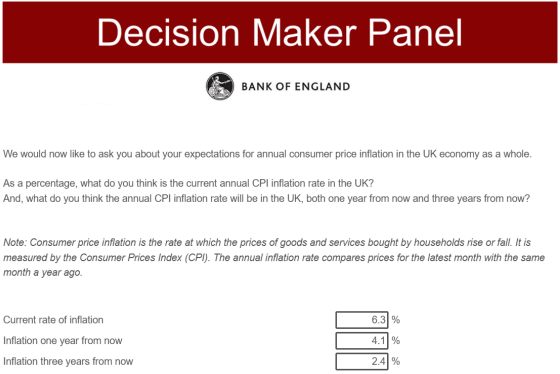
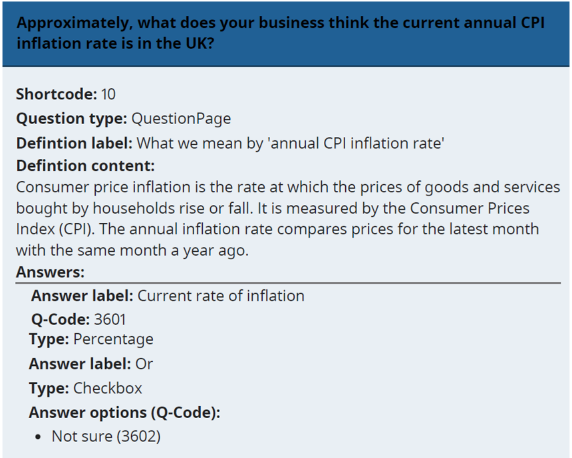
# CPI inflation questions asked in an almost identical way across both surveys

## DMP




## BICS

Expectation Questions

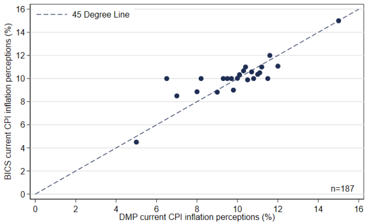


# Firm-level responses cluster around the 45-degree line, though dispersion increases with horizon

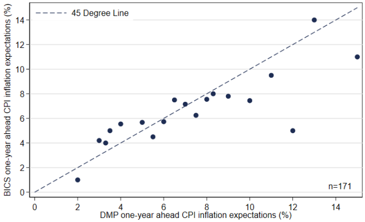
▸ Matched CPI Averages ▸ Full and Matched CPI Averages Over Time

- Three-month overlap between Dec 2022 – Feb 2023.

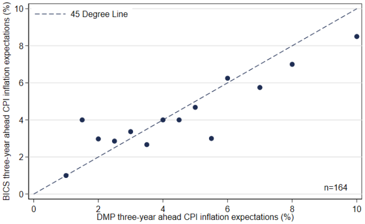
**Panel A: Perceptions**




**Panel B: 1-year ahead**




**Panel C: 3-year ahead**



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# AI adoption questions are identical across both surveys

- Current overlap in the SRS covers **February 2025** to **April 2025**, though question crossover extends beyond this period.

## Panel A: DMP

Decision Maker Panel

BANK OF ENGLAND

Which of the following artificial intelligence technologies, if any, does your business currently use? And which do you expect to make use of over the next three years?

Please select all that apply.

| | Currently using | Expect to use in next 3 years |
|---|---|---|
| Autonomous vehicles | ☐ | ☐ |
| Data processing using machine learning | ☐ | ☐ |
| Image processing using machine learning | ☐ | ☐ |
| Robotics | ☐ | ☐ |
| Text generation using Large Language Models | ☐ | ☐ |
| Visual content creation | ☐ | ☐ |
| Other AI technology | ☐ | ☐ |
| Don't know | ☐ | ☐ |
| Not using/Do not expect to use any artificial intelligence technologies | ☐ | ☐ |

## Panel B: BICS

**Which of the following artificial intelligence technologies, if any, does [Ru Name] currently use?**

**Shortcode:** 9
**Question type:** QuestionPage
**Definition label:** What we mean by 'artificial intelligence technologies'
**Definition content:**
This refers to computer programs or machines that can learn from data and perform tasks usually done by humans.
**Answers:**

**Q-Code:** 20001X
**Type:** Checkbox
**Answer options (Q-Code):**

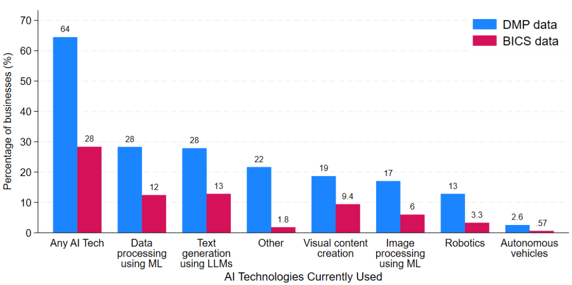
- Autonomous vehicles
- Data processing using machine learning
  **Description:** For example, personalisation of shopping or product recommendations, fraud prevention or cybersecurity
- Image processing using machine learning
  **Description:** For example, for facial recognition, quality control or object detection
- Robotics
  **Description:** For example, for carrying goods in hospitals or warehouses
- Text generation using Large Language Models
  **Description:** For example, chatbots that interact in a conversational way and can answer complex questions, computer coding assistance, creating first drafts of papers or topic research or social media posts and public communications
- Visual content creation
  **Description:** For example, for use in graphic design or videos
- Other
  **Other label:** Please describe
- Not sure

**Q-Code:** 200018
**Type:** MutuallyExclusive
**Answer options (Q-Code):**

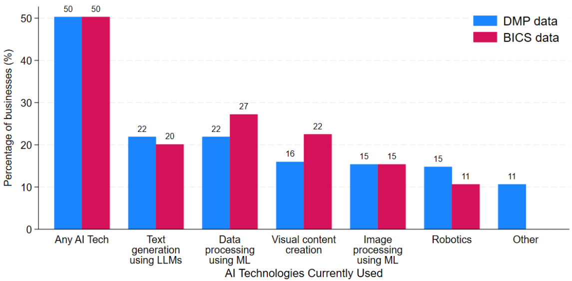
- Business does not currently use artificial intelligence technologies

# AI adoption closely aligned at the firm level; DMP suggests higher adoption in aggregate ▸ Full Sample Over Time

## Panel A: Full Sample




## Panel B: Matched




$n$ = 169

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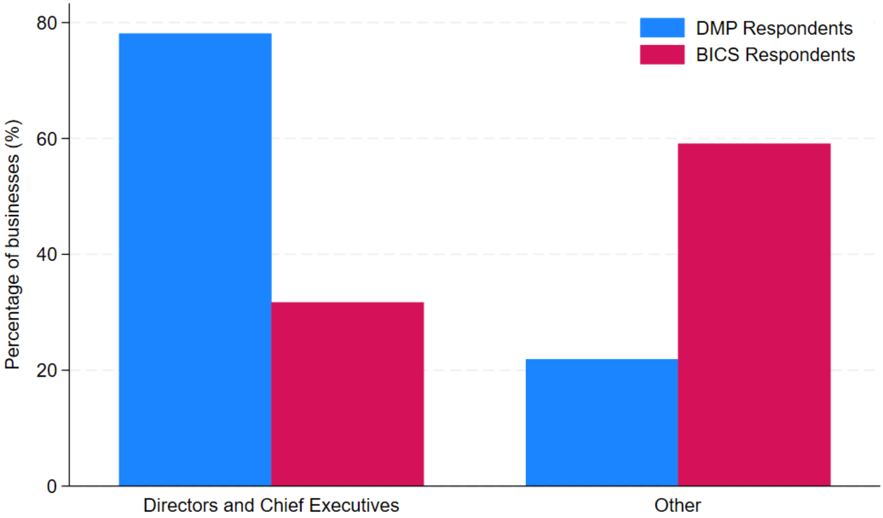
# Why Do Discrepancies Exist?

1. **Type of respondent** — $\sim$80% of DMP respondents are directors or chief executives vs $\sim$20% in BICS.
2. **Reference period** — annualised (DMP) vs month-on-month (BICS); divergence amplified in volatile conditions.
3. **Timing** — small differences in response timing can matter in fast-changing conditions (Yotzov et al., 2025).
4. **Question wording and collection style** — Differences in format can directly drive divergence in responses; qualitative responses are also quicker to complete, potentially introducing noise.

# DMP respondents are predominantly directors and chief executives



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# Linking the surveys unlocks several potential research avenues

- **Labour costs and workforce adjustment** — DMP data on firm responses to the National Insurance Contributions increase and the National Living Wage linked to BICS data on use of flexible and zero-hours contracts.
- **Pricing and cost pass-through** — DMP unit cost and price uncertainty measures linked to BICS data on the share of input price increases passed on to customers.
- **Supply chain disruption and firm performance** — DMP sales and investment uncertainty linked to BICS data on global supply chain disruption and stockpiling behaviour.

*These applications are still to be explored.*

**Question:** Are there other questions you think the matched dataset could help answer?

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# Conclusion

- The DMP and BICS are **complementary surveys** — different in design but generally consistent in what they tell us about UK business conditions.
- At the **firm level**, responses are **mostly aligned** across price and sales growth, CPI inflation, trade status, recruitment difficulties and AI.
- At the **aggregate level**, there exists some broad agreement, but divergence does exist.
- **Divergences** are likely driven by differences in respondent type, reference period, timing, and collection style rather than contradictory signals.
- **Policymakers** can draw on either survey with confidence.
- The **matched dataset** opens up research beyond what either survey alone can already support – used **together** they can provide a richer, more complete picture of the UK business landscape.

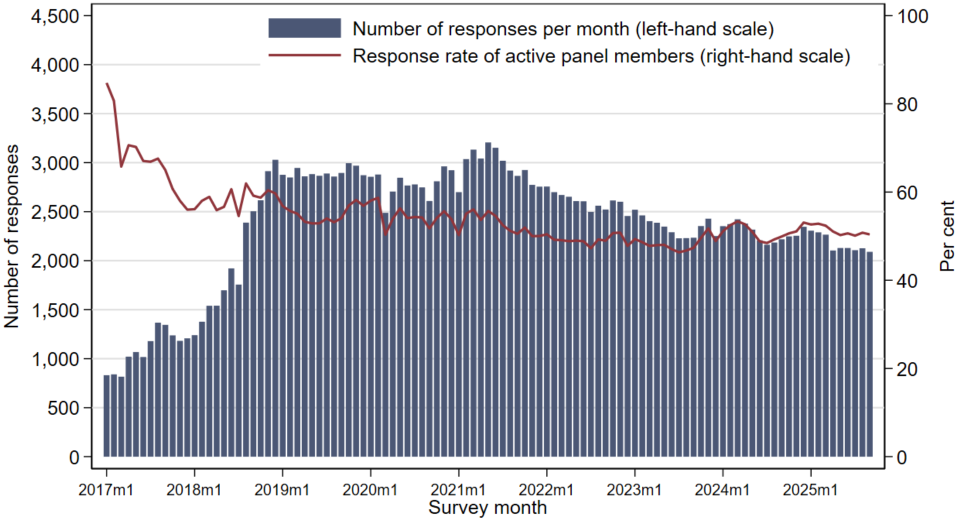
# References I

HACK, L. AND D. ROSTAM-AFSCHAR (2025): “Which Macroeconomic News Matters for Price-Setting?” *IZA Institute of Labour Economcics Discussion Paper Series*, 113, no. 17935.

YOTZOV, I., N. BLOOM, P. BUNN, P. MIZEN, AND G. THWAITES (2025): “The Speed of Firm Response to Inflation,” *Journal of the European Economic Association*.

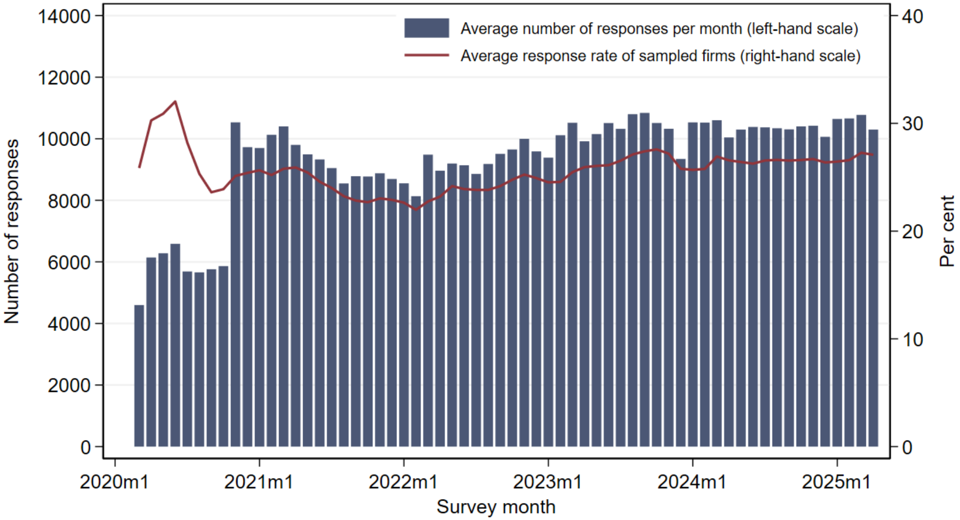
# DMP response rate

◂ Return



# BICS response rate

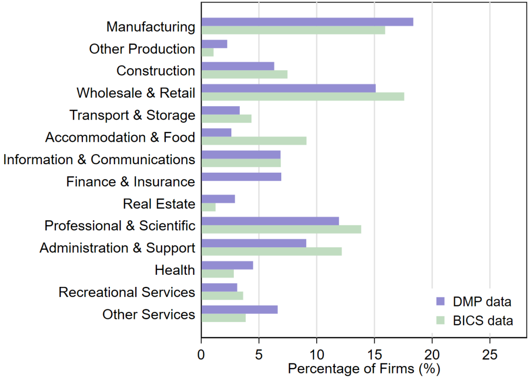
Return



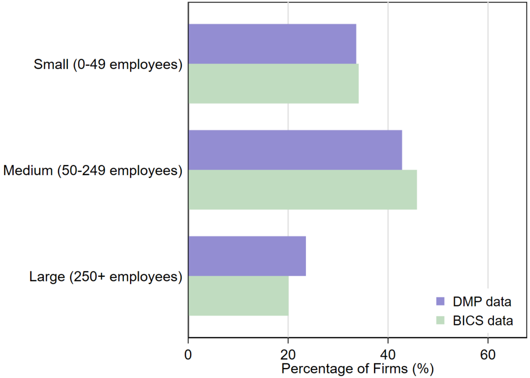
# Industry and size composition across the full survey samples

Return

## Panel A: Industry




## Panel B: Firm Size



# BICS CPI inflation expectation questions

Return

## Panel A: 1-year ahead expectations

**Approximately, what does your business expect the annual CPI inflation rate will be in the UK 12 months from now?**

**Shortcode:** 10a

**Question type:** QuestionPage

**Defintion label:** What we mean by 'annual CPI inflation rate'

**Defintion content:**
Consumer price inflation is the rate at which the prices of goods and services bought by households rise or fall. It is measured by the Consumer Prices Index (CPI). The annual inflation rate compares prices for the latest month with the same month a year ago.

**Answers:**

- **Answer label:** Expected inflation in 12 months
- **Q-Code:** 3603
- **Type:** Percentage
- **Answer label:** Or
- **Type:** Checkbox
- **Answer options (Q-Code):**
  - Not sure (3604)

## Panel B: 3-year ahead expectations

**Approximately, what does your business expect the annual CPI inflation rate will be in the UK three years from now?**

**Shortcode:** 10b

**Question type:** QuestionPage

**Defintion label:** What we mean by 'annual CPI inflation rate'

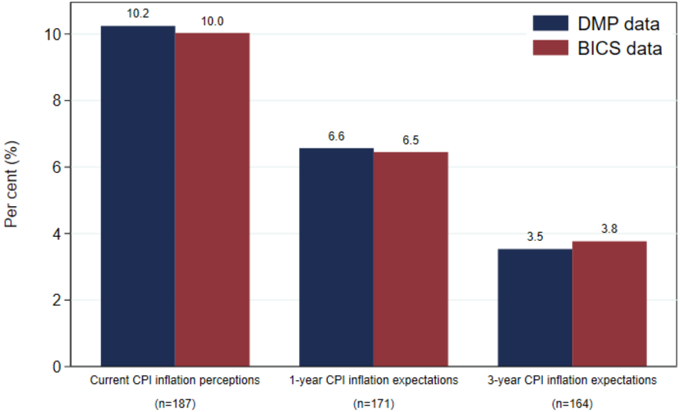
**Defintion content:**
Consumer price inflation is the rate at which the prices of goods and services bought by households rise or fall. It is measured by the Consumer Prices Index (CPI). The annual inflation rate compares prices for the latest month with the same month a year ago.

**Answers:**

- **Answer label:** Expected inflation in three years
- **Q-Code:** 3605
- **Type:** Percentage
- **Answer label:** Or
- **Type:** Checkbox
- **Answer options (Q-Code):**
  - Not sure (3606)

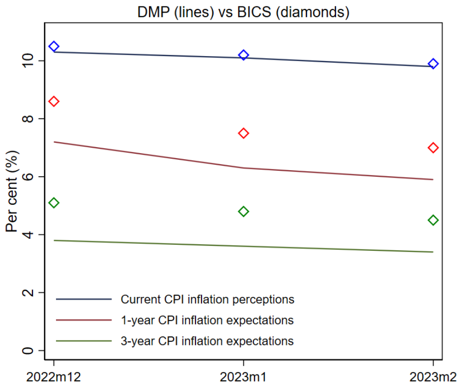
# On average, matched firms report similar CPI perceptions and expectations ◂ Return

- Average perceptions and expectations differ by only **0.1 to 0.3 percentage points** across the two surveys

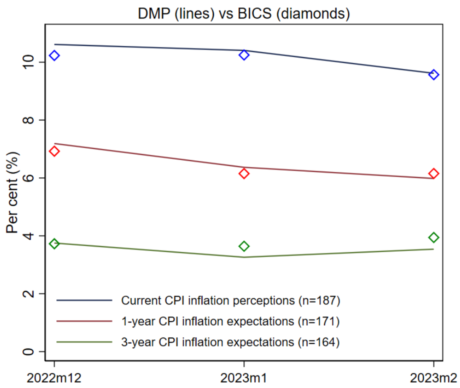


# Perceptions align closely at both levels; expectations aligned at the firm level but diverge slightly in aggregate ◂ Return

## Panel A: Full Sample




## Panel B: Matched



# Some convergence in AI technology over time, and some correlation, but overall volatile, reflecting the rapidly evolving landscape

Return