Bank of England-Nottingham-Stanford Decision Maker Panel



BANK OF ENGLAND

20 September 2017

Any views expressed here are those reported to us by DMP members and do not necessarily reflect those of the Bank of England or any of its Committees or state Bank of England policy.

Outline

- 1. How the Decision Maker Panel operates (online survey)
- 2. The characteristics of the survey (sample size, composition)
- 3. Four questions we have put to UK firms in the last year
- 4. Other questions we can address
- 5. A final caveat
- 6. Questions from the floor

Overview

In partnership with Nicholas Bloom (Stanford) and Paul Mizen (Nottingham) the Bank of England has launched a new monthly survey of CFOs in UK businesses – the **Decision Maker Panel**. It receives £1.3m funding from the ESRC and other sources.

CFOs are recruited from a sample frame of firms matching the Business Register by trained analysts at Nottingham.

We have **2500+** firms in the panel.

DMP members are polled regularly about their expectations for business conditions (sales, prices, costs) and decisions (hiring, investment, borrowing). Survey asks one subjective probability question each month. This one is on sales. <u>First</u>, it asks about expected outcomes:



Decision Maker Panel

4. Looking <u>ahead</u>, from now to four quarters from now, what approximate sterling value of SALES REVENUE would you assign to each of the following scenarios in thousands?

The LOWEST value of sales revenue would be about:	£ 100	
A LOW value of sales revenue would be about:	£ 200	
A <u>MIDDLE</u> value of sales revenue would be about:	£ 300	
A <u>HIGH</u> value of sales revenue would be about:	£ 400	
The HIGHEST value of sales revenue would be about:	£ 500	



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Survey asks one subjective probability question each month. This one is on sales. <u>Second</u>, it asks about probabilities:



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5. Please assign a percentage likelihood (probability) to the SALES REVENUE sterling values you entered (values should sum to 100%).

LOWEST: The likelihood of realising about £ 100K would be:	10 %
LOW: The likelihood of realising about £ 200K yould be:	25 %
MIDDLE: The likelihood of realising abou £ 300K yould be:	40 %
HIGH: The likelihood of realising about £ 400K would be:	20 %
HIGHEST: The likelihood of realising about £ 500K would be:	5 %
Total	100 %

Distribution of expected sales growth for different scenarios



Number of DMP members is rising and so is the number of responses



The panel covers a broad range of sectors



DMP sample versus Business Register data



Panel members covered **2.2** million employees, **12%** of employment in firms that could be eligible for the DMP (1.4 million for those who responded)

Q1: How important is Brexit as a source of uncertainty?

In August 2016 we asked the question:

'How much has the result of the EU-referendum impacted the level of uncertainty affecting your business?'

We asked the same question in February-April 2017 and in August 2017.

Brexit is considered an important source of uncertainty



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Firms perceive Brexit differently in different industries

Manufacturing Construction Wholesale & Retail Transport & Info Accommodation & Food **Real Estate** Prof & Admin Human Health Other Services Total 10 20 30 60 0 40 50 70

Share of respondents (unweighted), %

Q2: How does Brexit impact on business decisions and conditions?

Companies expect that it is more likely than not that Brexit will reduce their sales and investment; they expect an increase in their unit costs, labour costs and financing costs. Exports are more or less unchanged.



Share of respondents (unweighted), %

Impact of Brexit on business decisions and economic conditions is rather negative

When we weight these responses by firm size – placing more importance on the responses of larger firms – the expected impact of Brexit becomes even more negative.

Larger firms are **more pessimistic** about the impact of Brexit than smaller firms.



(weighted), %

Expected impact of Brexit on investment

When asked about how they expected Brexit to affect their investment plans over the next year. The average probability of Brexit having no impact increased from **57%** in October 2016 to 68% in May to July 2017. Balance still skewed towards the negative.



Exporters in our sample

Just under 60% of our panel do not export at all. 25% export <25% of their output. 5% export 25-50% of their output. 5% export 50-75% of their output, and 7% export \geq 75%.



Expected impact of Brexit on investment is slightly more positive among exporters than non-exporters



Exporters seem to be more optimistic about the impact of Brexit on investment than nonexporters.

Past year vs. expectations for year ahead



Q3: How does Brexit impact decisions about relocating abroad?



Between May and July 2017, panel members were asked about the possibility of moving parts of their business abroad.

Vast **majority** said that the chance is **zero** or close to zero.

One in six panel members said that the chance is 10% or more.

Brexit impacts decisions about relocating back to UK

Considering relocation back to the UK:

- 69% said that the question was not applicable (no overseas operations);
- 27% said that there was less than 10% chance of relocation to the UK;
- and 4% said that there was more than 10% chance of relocation.



Share of respondents

- Within the next 2 years
- Not until after the UK has left the EU

Q4: How is Brexit likely to affect productivity?

Total Factor Productivity (national average=100)



Remain vote share

Productivity has been higher in areas where more people voted to remain.

Expected growth in investment lower in areas where more people voted to remain.



Mean expected growth in investment for the year to 2018Q1

Questions we can ask about Brexit from our data

We have matched our firms with other data sets including the Bureau van Dijk FAME database.

We can compare firms' responses by

- Size based on assets or employment
- Age
- Financial characteristics e.g. debt levels, cash holdings, leverage ratios
- Exporter/non-exporter status
- Region
- Sector

We can interact characteristics to find out responses for combinations e.g. Scottish manufacturing firms that export.

Subject to a large enough sample and response rate we can make detailed assessments of effects of Brexit on firms

We can also ask specific questions about Brexit responses/effects.

A Final Caveat: Firms are more negative about Brexit than the general population



Additional Slides



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Quick Summary of Special Questions:

- Special questions on exports:
 - "Does your business export goods and services from the United Kingdom: 1=Yes, 2=No"
 - "Roughly what percentage your business' sales revenue is accounted for by exports?"
 - "Within that, roughly what percentage of your exports go to the EU?"

• Special questions on relocation:

- "We would now like to ask you a couple of questions concerning how likely it is that your business will shift the location of some of its operations as a consequence of the UK's decision to leave the EU? Roughly, what is the probability (as a %) that your business will move some of its UK operations abroad as a consequence of the UK's decision to leave the EU?"
- "If you were to move some of your operations abroad, when would this be most likely to take place: 1=Within next 2 years, 2=Until after we leave EU"
- "Roughly, what is the probability (as a %) that your business will move some of its foreign operations back to the United Kingdom as a consequence of the UK's decision to leave the EU? (If your firm does not have any foreign operations please type N/A next to Not Applicable)"
- "If you were to move some of your foreign operations back to the United Kingdom, when would this be most likely to take place: 1= Next 2 years, 2=until after we leave EU"

• Special questions on impact of Brexit:

- "The Prime Minister has said that the UK government does 'not seek membership of the Single Market. Instead we seek the greatest possible access to it through a new, comprehensive, bold and ambitious Free Trade Agreement.' How likely do you think it is that the eventual agreement will have the following effects, compared to what would have been the case had the UK remained a member of the EU? What is the likelihood (probability) that it will: 1=add 10% or more to sales, 2=add less than 10% to sales, 3=make little difference, 4=subtract less than 10% from sales, 5=subtract more than 10% from sales."
- "Could you say how the UK's decision to vote 'leave' in the EU referendum is likely to influence your AVERAGE WAGE GROWTH per employee over the next year? What is the percentage likelihood (probability) that it will have: 1=add 1% or more, 2=add less than 1%, 3=no material impact, 4=subtract less than 1%, 5=subtract 1% or more."

Quick Summary of Special Questions:

• Special questions on attitude toward Brexit:

- "How much has the result of the EU referendum affected the level of uncertainty facing your business? Is it: 1=Not important, 2= One of the many drivers of uncertainty, 3= one of the top two or three drivers of uncertainty for our business, 4= the largest source of uncertainty for our business".
- "Taking everything into account, how do you personally view the UK voting to leave the European Union in the June referendum?"

Special questions on impact of Brexit:

- "The Prime Minister has said that Brexit negotiations will be tough and 'no deal is better than a bad deal'. If the UK leaves the EU without a deal then there could be an increase in non-tariff barriers to trade with the EU (for example from a higher cost of meeting required standards and regulation in EU markets, or an inability to acquire the necessary permissions). How likely do you think it is that this outcome will have the following effect on the sales of your business, compared to what would have been the case had the UK remained a member of the EU. What is the likelihood (probability) that it will: 1=add 10% or more to sales, 2=add less than 10% to sales, 3=make little difference, 4=subtract less than 10% from sales, 5=subtract more than 10% from sales."
- "The Prime Minister has said that the UK Government will ensure that it gets 'control of the number of people coming to Britain from the EU'. How likely do you think it is that the eventual agreement will have the following effects, compared to what would have been the case had the UK remained a member of the EU: 1=add 10% or more to labour costs, 2=adding less than 10% to labour costs, 3=Make little difference, 4=subtract less than 10% to labour costs, 5=subtracting 10% or more"
- "Looking ahead to 2020, how do you think the UK's decision to leave the EU will affect the revenue your business generates by selling UK-sourced goods and services in international markets, compared to what would have been the case had the UK remained a member of the EU. What is the percentage likelihood (probability) that it will: 1=add 10% or more to sales, 2=add less than 10% to sales, 3=make little difference, 4=subtract less than 10% from sales, 5=subtract more than 10% from sales."
- "Looking ahead to 2020, how would you expect the UK's decision to leave the EU to affect the average unit costs of your business, compared to what would have been the case had the UK remained a member of the EU. What is the percentage likelihood (probability) that it will:1=add 10% or more, 2=adding less than 10%, 3=have no material impact, 4=subtracting less than 10%, 5=subtract 10% or more."

Quick Summary of Special Questions:

- Special questions on impact of Brexit (continued):
 - "Looking ahead to 2020, how do you think the UK's decision to leave the EU will affect the cost of finance to your business, compared to what would have been the case had the UK remained a member of the EU. What is the percentage likelihood (probability) that it will: 1=add over 1 percentage points to spreads over base rate, 2=add up to 1 percentage point to spreads over base rate, 3=have no material impact on the cost of financing my business, 4=subtract up to 1 percentage point from spreads over base rate, 5=subtract over 1 percentage points from spreads over base rate."
 - "Could you say how the UK's decision to vote 'leave' in the EU referendum is likely to influence your CAPITAL EXPENDITURE over the next year. What is the percentage likelihood (probability) that it will: 1=add 5% or more, 2=add less than 5%, 3=have no material impact on capital expenditure, 4=subtract less than 5%, 5=subtracting 5% or more."