Agents' survey on preparations for EU withdrawal and results from the Decision Maker Panel survey

- **The majority of companies surveyed have not made any change to their business plan, or are still in the process of doing so, in preparation for Brexit. Just under a third of companies have already made some change to their plans.**

- **When asked about the impacts of 'deal and transition' and 'no deal and no transition' Brexit scenarios on a range of variables, two of the biggest differences between company responses in each scenario were on output and employment expectations.**

- **The expected quantitative impact on companies' output under both scenarios can be estimated by assigning a percentage change value to individual responses and aggregating them. Using simple calculations, the survey suggests that companies expect output to fall by between 2.5% and 6.9% over the next twelve months in a 'no-deal and no transition' scenario, but to rise by between 0.8% and 2.7% if a deal and transition period are agreed.**

As referenced in the Treasury Committee (TC) hearing on 20 November,[1] the Bank's Agents have conducted a survey[2] of business contacts about their preparedness for Brexit, to support the Bank's analysis of the impact of EU withdrawal on the UK economy. At the request of the Treasury Committee, publication of the survey has been brought forward to coincide with the TC hearing to discuss this analysis.[3]

This publication also includes two boxes that summarise related Agency intelligence on the preparedness for Brexit of contacts in the transport and logistics sector, and the latest results from the Decision Maker Panel survey.

Agents' survey on preparations for EU withdrawal[4]

Changes to business plans in preparation for Brexit

Companies were asked whether they had changed their business plans since the EU Referendum, and if any changes were planned before or after Brexit. Just under a third of respondents – weighted by employment – had already made some change to their business plan **(Chart A)**, for example by setting up new legal entities, changing sourcing and/or supply chains, and, in some cases relocating

[1] See http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/treasury-committee/bank-of-england-inflation-reports/oral/92656.html for a transcript of the hearing.
[2] The survey was conducted between 22 October and 29 November 2018. Responses were received from 369 companies, employing over 663,000 people, and accounting for around £124bn of turnover. Responses have been weighted by employment. For whole economy results, responses have been weighted by industry shares of employment.
[3] Chair: "… Is there an opportunity perhaps for more transparency than there would normally be in relation to agents' reports? We will need to have more transparency in order to fully appreciate the basis on which the report is given to us, I suppose."
Dr Carney: "… In terms of the specific issues around Brexit preparedness and the potential impact, the survey was in the field for a subsequent policy round and it was not for these purposes. We will look at the possibility of having something. It is finishing on the day we are doing the report, but depending on the time that we were back here, if we can get it in a position that it is rigorous enough to be published, we would provide it to the Committee and publish it on the day that we appeared. If we can do it, we will do that, so you have the same transparency as you have with the agent references."
[4] Companies were asked how they had changed their business plan since the EU Referendum in 2016. They were also asked how various aspects of their business, such as output, employment and investment, would be affected in two Brexit scenarios: if a deal and transition period are agreed, and in a 'no deal and no transition' scenario.

offices. A higher proportion of business services companies had changed their business plans than those in other sectors.

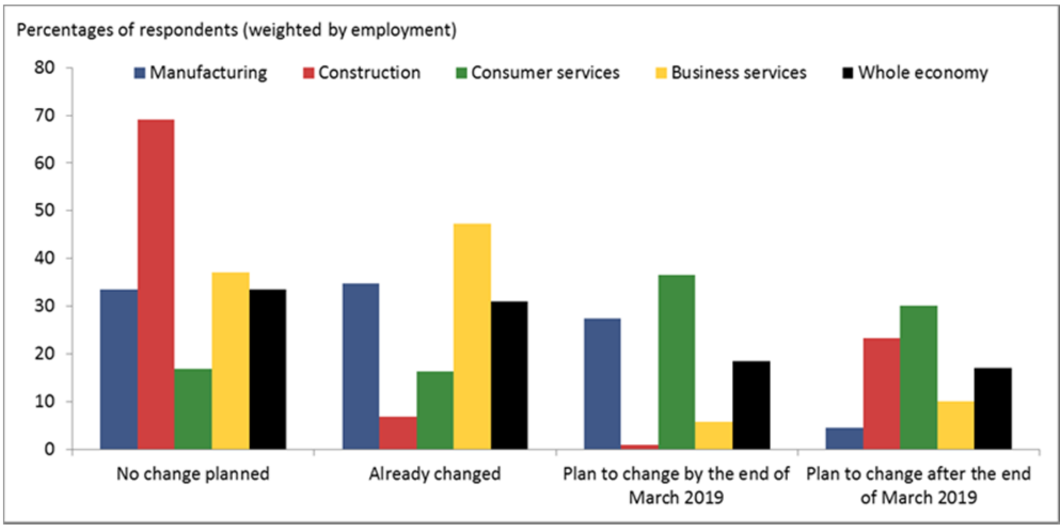
A third of respondents were not planning to make any changes. This may reflect caution by companies about committing cashflow to preparatory actions until it is absolutely necessary. A number of contacts have said that they need more clarity on the potential Brexit outcome before deciding whether to take concrete actions; some anticipate that a deal will be agreed and so action is unlikely to be required; and some don't think they'll be affected by Brexit, for example because they do not trade with the European Union directly.

Just under a fifth expected to change their business plan by the end of March 2019, but were still formulating their plans, for example by assessing their potential stockbuilding requirements.

And just under a fifth of respondents plan to wait until after March 2019 before changing their business plan, when it is hoped there will be more clarity about the Brexit outcome and how it will impact their business.

Chart A Just under a third of companies have already made some change to their business plans to prepare for Brexit [a]

Have companies adjusted their business plans since the EU Referendum?



(a) Companies were asked 'Thinking of your business plan before the EU Referendum, what best describes your current plan?' Respondents were asked to select one of the following options: 'No change planned'; 'Already changed'; 'Plan to change by the end of March 2019'; and 'Plan to change after the end of March 2019'.

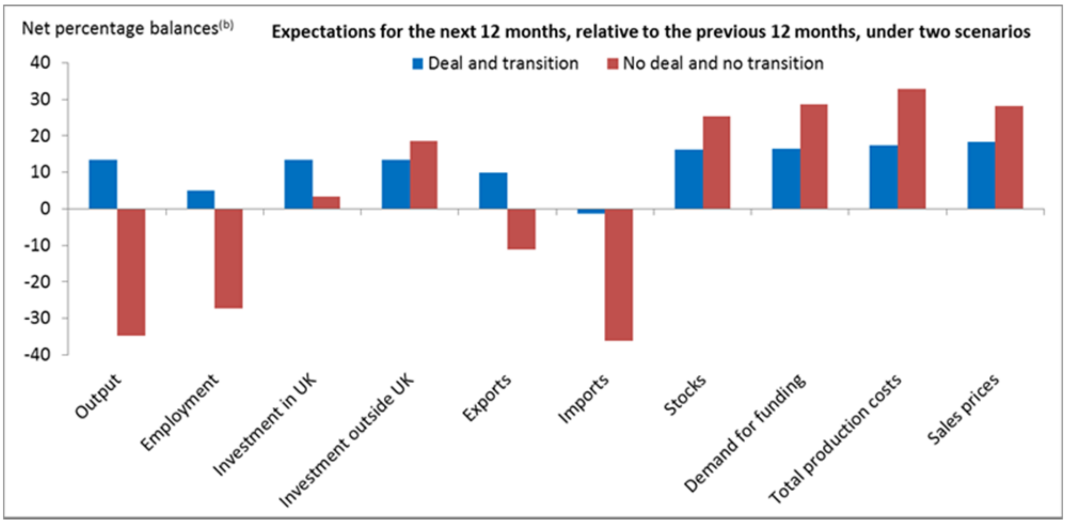
Estimated impact of Brexit on business

Contacts were also asked how various aspects of their business, such as output, employment and investment, would be affected if a Brexit deal and transition period is agreed, and the effect if there is no deal and no transition **(Chart B)**. For each factor, companies were asked to indicate whether they expected little change, or a moderate or large increase or decrease over the next 12 months compared with the previous 12 months.

Two of the biggest differences between respondents' expectations for the year ahead under 'deal' and 'no deal and no transition' scenarios were reported in output and employment. The net balance of investment intentions was positive in both scenarios. Companies expected their costs and prices to increase in both scenarios, albeit by more if there is a 'no deal and no transition' Brexit, and demand for funding was also expected to rise. Stockbuilding was also expected to increase in both scenarios.

Chart B Companies expect output and employment to fall in a 'no deal and no transition period' Brexit

Deal with transition period compared to no deal without transition period[a]



(a) Companies were asked 'Relative to the last 12 months, what is the likely impact on the following for your business over the next year in each scenario: (a) A deal and transition period and (b) No deal and no transition period?'. For each relevant business factor, respondents were asked to choose between 'Fall greater than 10%'; '-10 to -2%'; 'Little change'; '+2 to +10%', and 'Rise greater than 10%'.

(b) Net percentage balances of companies reporting increases or declines in each factor, weighted by employment. Half weight was given to the +/- 2-10% response, and full weight was given to those that responded "rise/fall greater than 10%".

In a 'deal and transition' scenario, companies expect output to grow modestly over the next 12 months compared with the previous year. However, under a 'no deal and no transition' Brexit, companies expect there to be a significant fall in output. Exporters, particularly those with significant trade with the EU, anticipate lower export activity.

Contacts in aerospace, car production and other sectors with highly integrated international supply chains are amongst the most concerned about how their business models would be affected in a 'no deal and no transition' Brexit. Hotels, restaurants and airlines contacts are concerned that any additional restrictions on travel could reduce both international business and leisure activity. And contacts in professional services anticipate fewer merger and acquisition deals and other expansion or development plans in the near term, as businesses assess the actual impact of no deal.

There is also uncertainty about the regulatory or licencing impact of a 'no deal and no transition' outcome, which could require companies to seek new permissions from UK bodies, or EU ones if related to exports or travel. There is general uncertainty among contacts about how increased trade frictions will affect the export and import of perishable goods and just-in-time supply chains.

The potential magnitude of the rise or fall in each variable in both the 'deal and transition' and 'no deal and no transition' Brexit scenarios, in absolute terms, can be estimated by assigning a fixed percentage change value to each of the response categories. One set of estimates can be constructed using a value of +/-2% for the +/- 2–10% buckets, and +/-10.5% for the tail buckets, and another set can be constructed using values of +/-10% and +/-19.5% respectively.[5]

Using this methodology, the survey suggests that companies expect output to rise by between 0.8% and 2.7% over the next twelve months if there is a deal and transition period, but to decline by between 2.5% and 6.9% in a 'no deal and no transition' Brexit.

Companies also expect a sharp drop in employment over the next twelve months in the event of a 'no deal and no transition' Brexit. Contacts said that they expected to reduce headcount via a combination of attrition and cutting back on hiring. Some respondents said that in a 'no deal and no transition' scenario, they may need to reduce headcount more quickly than had been the case during the financial crisis. Some contacts that employ a high proportion of EU nationals said they expected staff recruitment and retention to become more challenging in the event of a 'no deal and no transition' Brexit.

Using the methodology described above, the survey suggests that companies expect employment to fall by between 2.1% and 5.4% in a 'no deal and no transition' Brexit. They expect a small increase of between 0.2% and 1% if a deal and transition period are agreed.

Companies expect investment growth to be slower, but still positive, in a 'no deal and no transition' scenario. This is consistent with the Agents' survey on capital investment, published in November, in which contacts cited Brexit uncertainty as the biggest headwind to investment intentions over the next 12 months.

Respondents said that they expected to increase investment outside the UK over the next 12 months so that they can continue to service non-UK customers. Companies expected investment outside the UK to increase by more in a 'no deal and no transition' scenario.

Companies expect to build stocks whatever the Brexit outcome, though the degree of stock building varies across sectors. Contacts that plan to increase inventory levels expect to raise holdings of both raw materials and finished goods. And some larger companies are trying to ensure higher levels of stocks and finished goods along the supply chain.[6]

In both Brexit scenarios, demand for funding including working capital is expected to increase. For some contacts, demand for funding is related to holding more stock directly or in supply chains. Others anticipate slower payment terms. In a 'no deal and no transition' scenario, the need to absorb some cost increases in the near term from tariffs or additional customs or other processing costs might increase working capital demands.

Companies expect total production costs to increase in the year ahead but, in a 'no deal and no transition' outcome, the increase in costs is expected to be higher. Some of these increased costs are likely to be passed on in higher sales prices. However, some companies have been asked by customers to quote fixed prices beyond March 2019 to give some degree of certainty around cost inflation.

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[5] A value of 0% was used for 'little change' in both sets of estimates.

[6] See Box 2A 'UK companies' preparedness for Brexit: evidence from the Bank's Agents' in "EU withdrawal scenarios and monetary and financial stability".

Box 1 Preparations for EU withdrawal by transport and logistics companies

In parallel with the formal survey on Brexit preparations, the Agents have augmented their intelligence gathering among contacts in the transportation and logistics sector – in particular airlines, ports, hauliers and warehousing – to gauge their preparedness for EU withdrawal. This box contains a summary of recent information provided by contacts in the sector.

Airlines

Agents' contacts have become much more confident that EU and UK authorities will reach an agreement that will allow flights between the UK and EU to continue to operate largely as normal in the event of a 'no deal' Brexit. This increase in confidence follows the release of a European Commission note in November, which provides for interim reciprocal arrangements on EU-UK flights.

Current flights to non-EU countries are also expected to be protected. There is less clarity, however, on the clearance for UK airlines flying within the EU.

Some UK airlines are seeking to change their ownership structure to ensure that they can continue to be covered by existing EU agreements, since that will allow them to use existing open sky agreements with non-EU countries.

In the longer term, agreement to secure reciprocity on safety regulations and use of air space is still likely to be the subject of complex negotiations, according to contacts.

Ports

Contacts have expressed concern about the lack of capacity to accommodate additional customs requirements for the movement of goods in the event of a 'no deal' Brexit, both in terms of staffing and space, for example, to carry out goods inspections or parking for delayed vehicles. Currently, the vast majority of goods that pass through the busiest ports, such as Dover, are not subject to any customs checks.

Any delays resulting from additional checks could therefore have consequences for road traffic in the vicinity of ports. There could also be a severe impact on just-in-time supply chains and food transportation – in particular of perishable goods. Even if the UK were to waive checks on imports from the EU, delays could still occur if there are checks on exports to the EU.

There is some evidence that freight is already being diverted from Dover to some other ports, for example in northern England, where some contacts have reported an increase in activity over the past six months. However, it is unclear whether there is sufficient capacity for this method of offsetting constraints to be viable. Some ports do not have the capacity to absorb a significant increase in freight, or are not able to operate roll-on/roll-off services for vehicles. Contacts said that businesses might use other modes of transport to freight goods; for example, air freight for fresh produce or containers for ambient food and general merchandise. There could also be a shift towards unaccompanied freight using load-on/load-off trailers, which might be spurred by a shortage of lorry drivers.

Contacts have also flagged that existing IT systems are unlikely to be able to cope with the quantity of declarations and checks that would be required, unless there is a lengthy transition period. Building up the capacity and training sufficient numbers of staff to carry out these processes is likely to take a number of years. It would also require significant investment, and it was not clear who would bear the cost of this. SME importers and exporters could be the hardest hit in such a scenario, due to the costs of complying with new rules and processes.

Road haulage

Contacts expect activity to be higher than usual in January and February next year due to a combination of companies exporting more goods and stockpiling imported materials because of a risk of disruption at the end of March 2019.

They have expressed concern about the recognition of commercial driver licensing in the EU, as well as the availability of permits to drive in the EU following Brexit. In the event of a 'no deal' Brexit, UK haulage firms would require European Conference of Ministers of Transport (ECMT) permits to drive in the EU. The UK's annual allocation of Euro VI ECMT permits is currently 1,224, which is very low relative to the number of Community Licenses currently issued to UK-based hauliers to operate in the EU.

There is also uncertainty about permissions for non-UK hauliers to continue to operate within the UK after Brexit, known as "cabotage". If permissions are not granted, this could exacerbate constraints in the haulage industry caused by a shortage of drivers. Delays at ports could make the situation even worse by cutting into regulatory limits on driving hours.

Delays resulting from additional checks at ports could make it uneconomic for haulage companies to undertake longer UK-EU routes. A backlog of lorries travelling out of the UK could soon lead to a shortage of vehicles able to bring goods back into the UK, due to the fact that European lorry capacity is already very constrained.

Warehousing/storage

Demand for warehousing space has increased sharply, according to contacts, as some companies start to build stocks. Logistics contacts report that large corporates have been more active than smaller companies in reserving warehousing space and stock building. And many businesses in the supply chain for non-perishable goods are planning to build inventory of one-and-a-half to two times their normal levels to cover possible disruption around EU withdrawal, consistent with an expectation of 2-4 weeks of disruption. Businesses that trade in perishable goods are likely to delay action, though not planning, until Q1 2019.

Logistics contacts report that advance booking of warehousing space is the highest it has been in some time. There have been reports of some companies taking short-term leases on chilled storage even for non-perishable goods, in order to secure the space. Other contacts have reported an increase in enquiries for storage from customers worried about supply chains.

However, availability of warehousing in the UK in general is limited, especially in southern England and in strategic locations, though constraints may ease slightly after Christmas.

Box 2 Results from the Decision Maker Panel Survey

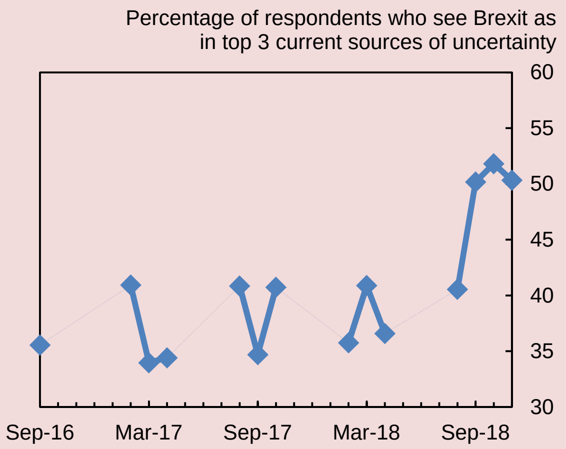
Together with academics from Stanford University and the University of Nottingham, the Bank has developed the Decision Maker Panel (DMP) survey to help monitor recent developments in the UK economy and assess the implications of the United Kingdom's withdrawal from the European Union.[7] This online survey complements the intelligence gathered by the Bank Agents from their business contacts.

The panel comprises Chief Financial Officers (CFOs) from small, medium and large companies operating in a broad range of industries and is designed to be representative of the population of UK businesses. 6600 firms had agreed to be part of the panel at the time of the November 2018 survey with around 45% responding that month. This box summarises the latest findings relating to Brexit.[8]

Uncertainty created by Brexit

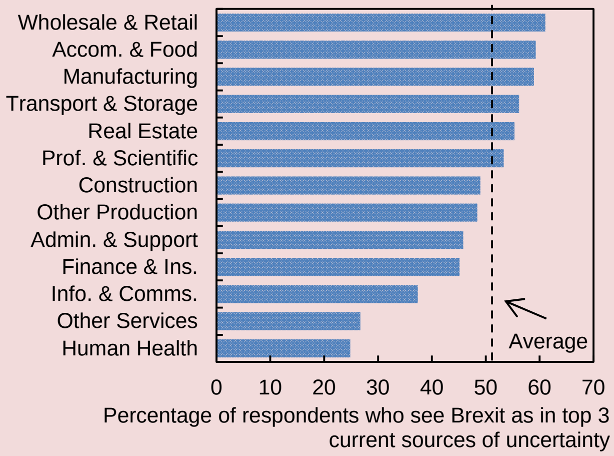
Brexit has created uncertainty for many businesses, and the DMP data suggest that Brexit's importance as a source of uncertainty has risen further in recent months. Half of DMP members reported that Brexit was in their top three current sources of uncertainty in the November survey. That was similar to in the September and October surveys but 12 percentage points higher than the average of earlier waves (**Chart A**).

Chart A Brexit as a source of uncertainty[(a)]



Sources: DMP and Bank calculations.
(a) Question: 'How much has the result of the EU referendum affected the level of uncertainty affecting your business?' Chart shows the percentage of firms who responded 'Largest current source' or 'One of top 2 or 3 sources'. Monthly data are for one-third of the panel. Diamonds are for months when this question was asked. Dashed lines show months when the question was not asked.

Chart B Brexit as a source of uncertainty by industry[(a)]



Sources: DMP and Bank calculations.
(a) Question is defined in the footnote to Chart A. Data are for September to November 2018.

The November DMP survey was conducted between 9 and 23 November 2018. Around one-third of responses were received before the Brexit deal was announced on 12 November but there was little difference in views on Brexit uncertainty between these responses and those received later in the

[7] This project is supported by the Economic and Social Research Council (grant number ES/P010385/1).
[8] The survey runs monthly with panel members receiving one third of a quarterly questionnaire each month. Where monthly data are shown they are based on only one-third of the sample. For the November 2018 survey there were around 1000 responses to each of the three different questionnaires. Aggregate data for all questions for August to October will be published on 20 December 2018. Data for November to January will be released in March 2019. All results are weighted by employment unless otherwise stated.

survey window.

Companies who reported that Brexit was an important source of uncertainty tended to have higher productivity, have a higher share of sales that are exports to the EU, have a higher share of costs that are imports and be more dependent on EU migrant labour. By sector, the share of businesses reporting that Brexit was an important source of uncertainty was highest in wholesale and retail (highest share of costs that are imports); accommodation and food (highest share of workforce who are EU nationals), and manufacturing (highest share of sales exported to the EU) (**Chart B**).

There are many different aspects to the uncertainty created by Brexit, for example around what the UK's eventual relationship with the EU will be, how it will affect businesses and whether Brexit will take place in an orderly way. The November survey asked panel members about the probability that they attach to a disorderly Brexit whereby no deal is agreed by the end of March 2019. The average probability attached to a disorderly Brexit was 42% (46% unweighted). That was slightly higher than when this question was last asked in February to April (when the average was 40% weighted, 41% unweighted).

The expected impact of Brexit

On average, businesses expect Brexit to eventually reduce their sales. In the DMP, panel members have been asked to attach probabilities to different outcomes for the eventual impact that they expect Brexit to have on their sales. No guidance is provided on what to assume about the form Brexit eventually takes, it simply reflects respondents' opinions. In the November survey, the average probability of Brexit eventually reducing sales was 36%, with a 10% chance of a positive impact (**Chart C**).

A point estimate for the expected eventual impact of Brexit on sales can be constructed by multiplying some simple mid-points for the five response categories shown on **Chart C** by the probabilities assigned to them.[9] This exercise suggests that respondents to the November survey expect Brexit to eventually reduce their sales by 2.8% on average, close to the average of 3% since the survey began. Using a similar approach, other recent DMP surveys suggest that Brexit will have a slightly smaller eventual impact on exports and employment of around 2.4% for each.

As well as assessing the longer term impact of Brexit on businesses the DMP can also be used to understand how Brexit is affecting shorter-term decisions. Firms who are more exposed to Brexit reported lower investment growth in the year after the referendum.[10] DMP members have also been asked a forward-looking question about how they expect Brexit to affect their investment over the next year. In the latest survey, the average probability attached to Brexit having a negative effect on investment was 29%, compared to 22% in May to July 2018 (**Chart D**). The average probabilities of a positive effect were 8% and 10% respectively.

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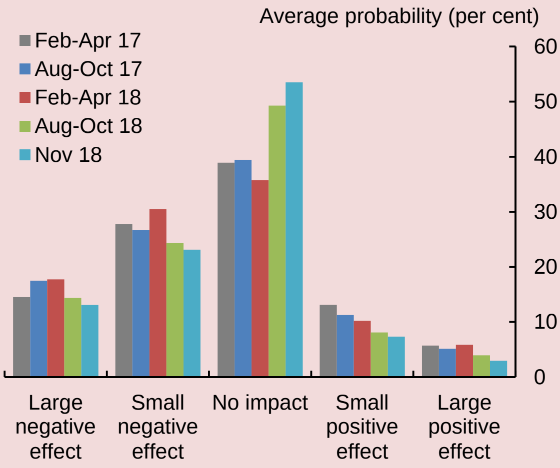
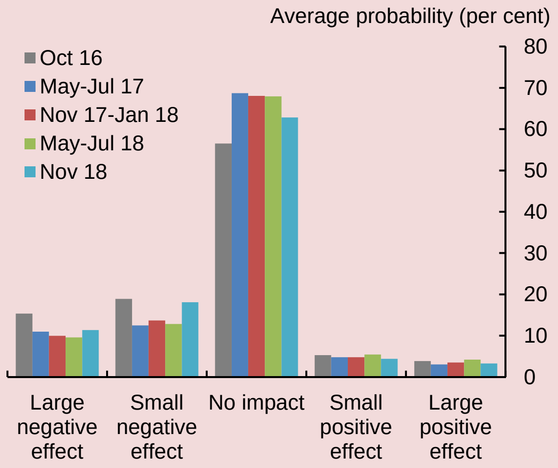
[9] Values of ±20% are used for large positive/negative impact and ±5% for a small positive/negative effect. Zero is used for no impact.
[10] For example see here.

Chart C Expected eventual impact of Brexit on sales(a)



Sources: DMP and Bank calculations.
(a) Question: 'How do you expect the eventual Brexit agreement to affect your sales once the UK has left the EU, compared to what would have been the case had the UK remained a member of the EU?'. A large positive/negative effect on sales corresponds to adding/subtracting 10% or more to/from sales at home and abroad; a small effect is defined as less than 10%. Prior to August 2018, this question also referred to the fact that the Prime Minister had said that the UK will leave the Single Market.

Chart D Expected impact of Brexit on investment over the next year(a)

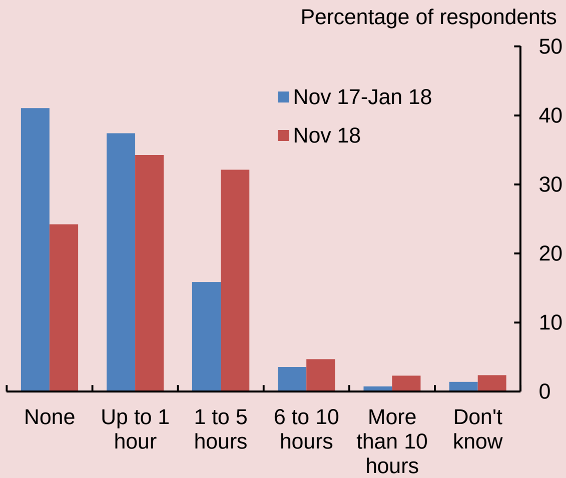


Sources: DMP and Bank calculations.
(a) Question: 'Could you say how the UK's decision to vote 'leave' in the EU referendum is likely to influence your capital expenditure over the next year?' A large positive/negative effect on investment corresponds to adding/subtracting 5% or more to/from investment; a small effect is defined as less than 5%.

Preparations for Brexit

The November DMP survey also asked about the amount of time being spent on planning for Brexit by senior management. Around three quarters of firms reported that their CFO or CEO was currently spending some time on preparing for Brexit, compared to 60% a year ago. **Chart E** shows the results for CFOs. The amount of time spent on planning for Brexit was also reported to have increased, for example, in November 37% of firms reported their CFO spending more than an hour a week on Brexit planning compared to 19% a year earlier. Note that this question only asked about time spent planning for Brexit, not whether businesses felt that they were fully prepared or had implemented contingency plans.

Chart E CFO time spent planning for Brexit(a)



Sources: DMP and Bank calculations
(a) Question: 'On average, how many hours a week are the CEO and CFO of your business spending on preparing for Brexit at the moment?'