Bank of England *Systemic Risk Survey*

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Earlier this year, the Bank introduced a formal *Systemic Risk Survey* to supplement its regular dialogue with market participants. The survey is intended to elicit market participants' views about the prospects for financial stability in the United Kingdom. This article introduces the survey and reports the key results, following the summary published in the June 2009 *Financial Stability Report*.

Introduction

A core purpose of the Bank is to contribute to financial stability. This entails identifying, assessing and seeking to mitigate threats to the stability of the UK financial system. Such threats are detected, in part, through the Bank's surveillance and market intelligence functions. As a contribution to this activity, the Bank has developed a formal survey to gauge market participants' views about system-wide risks and prospects for financial stability in the United Kingdom.

A pilot survey was conducted in July 2008 to confirm both the value of the exercise and participants' support for the initiative. A full survey was subsequently conducted by the Bank in May 2009. The June 2009 *Financial Stability Report* summarised these results;[2] this article provides more detail.

Bank of England *Systemic Risk Survey*

The *Systemic Risk Survey*[3] has been designed to gauge market participants' perceptions of:

- key sources of risk to the UK financial system and how these have changed;
- those sources of risk that market participants would find hardest to manage; and
- overall risks to, and confidence about, the financial system's stability over the short and medium term.

The survey complements other sources of information on risks to the system, including regular dialogue with market participants. It is designed to enable the Bank to compare its view of key risks against those suggested by market participants: first, to ensure that the Bank is not missing risks that are of concern to survey respondents; and second, to highlight risks that the Bank considers to be important but are not cited by market participants. The survey may also help the Bank to decide where further analysis and research is needed and could help the Bank to target and prioritise mitigating actions.

The Bank conducted the first full survey over the period 27 April to 15 May 2009. It was sent to a range of market participants, including UK banks, large complex financial institutions (LCFIs), hedge funds, asset managers and insurance companies. The sectoral breakdown of respondents was broadly comparable to the pilot survey, although more hedge funds responded in the May 2009 survey (**Table A**). Overall, 61% of those invited to complete the May 2009 survey responded. The response rate may be expected to increase as the survey becomes more established. The Bank intends to conduct the survey regularly and to report the results in future *Financial Stability Reports*.

Table A Survey respondents, by sector

	May 2009		July 2008	
	Number	Response rate (per cent)	Number	Response rate (per cent)
LCFIs	9	69	9	56
Hedge funds	8	89	4	44
UK banks	7	70	9	69
Asset managers	5	45	4	40
Insurance companies	5	38	7	54
Total	34	61	33	54

Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

Summarising the results

The survey consists of five questions and is divided into two sections. Section 1 aims to identify key sources of risk to the UK financial system. Section 2 solicits market participants'

(1) The author would like to thank Will Kerry and Tomasz Wieladek for their help in producing this article.
(2) Box 5, '*Systemic Risk Survey* results', Bank of England *Financial Stability Report*, June 2009.
(3) The survey was carried out by the British Market Research Bureau (BMRB) on behalf of the Bank.

Table B Key risks to the UK financial system, May 2009 survey[a]

	Key risks[b]		Hardest risk to manage[c]		
	Number[d]	Per cent[a]	Number[e]	Per cent[a]	Per cent of responses in column A
	A	B	C	D	E
		(column A /34)		(column C /34)	(column C /A)
Economic downturn	28	82	12	35	43
Borrower defaults	16	47	8	24	50
Pressures in funding markets	11	32	4	12	36
Tight credit conditions	9	26	1	3	11
Regulatory and accounting changes	9	26	9	26	100
Sovereign risk	9	26	2	6	22
Failure of financial institutions	8	24	5	15	63
Financial market dislocation	8	24	4	12	50
Operational risk	8	24	1	3	13
Lack of confidence in pricing, disclosure and ratings	7	21	4	12	57
Loss of confidence in authorities	7	21	3	9	43
Property price falls	6	18	1	3	17
Disruption to derivatives and insurance markets	5	15	1	3	20
Infrastructure disruption	4	12	2	6	50

Sources: Bank of England *Systemic Risk Survey*, May 2009, and Bank calculations.

(a) Thirty four market participants provided the Bank with their views.
(b) Respondents were asked to list the five risks that they believe would have the greatest impact on the UK financial system if they were to materialise in order of potential impact.
(c) Respondents were asked for three of the risks they identified that would be most challenging to manage as a firm.
(d) The total of this column would be 170 if all respondents had listed five risks. Not all respondents listed five risks so the total of this column is less than expected.
(e) The total of this column would be 102 if all respondents had listed three risks. Not all respondents listed three risks so the total of this column is less than expected.

Table C Key risks to the UK financial system, July 2008 survey[a][b]

	Key risks[c]		Hardest risk to manage[d]		
	Number[e]	Per cent[b]	Number[f]	Per cent[b]	Per cent of responses in column A
	A	B	C	D	E
		(column A /33)		(column C /33)	(column C /A)
Economic downturn	20	61	14	42	70
Borrower defaults	4	12	2	6	50
Pressures in funding markets	11	33	7	21	64
Tight credit conditions	5	15	2	6	40
Regulatory and accounting changes	9	27	4	12	44
Sovereign risk	0	0	0	0	0
Failure of financial institutions	29	88	14	42	48
Financial market dislocation	10	30	3	9	30
Operational risk	10	30	5	15	50
Lack of confidence in pricing, disclosure and ratings	6	18	3	9	50
Loss of confidence in authorities	5	15	1	3	20
Property price falls	15	45	7	21	47
Disruption to derivatives and insurance markets	6	18	6	18	100
Infrastructure disruption	4	12	3	9	75

Sources: Bank of England *Systemic Risk Survey*, July 2008, and Bank calculations.

(a) Risks in the same order as **Table B**.
(b) Thirty three market participants provided the Bank with their views.
(c) Respondents were asked to list the five risks that they believe would have the greatest impact on the UK financial system if they were to materialise in order of potential impact.
(d) Respondents were asked for three of the risks they identified that would be most challenging to manage as a firm.
(e) The total of this column would be 165 if all respondents had listed five risks. Not all respondents listed five risks so the total of this column is less than expected.
(f) The total of this column would be 99 if all respondents had listed three risks. Not all respondents listed three risks so the total of this column is less than expected.

views on the stability of the UK financial system. A full list of the questions is reproduced in Annex 1.

Section 1: Key sources of risk to the UK financial system

The first question in Section 1 asks respondents to list the five risks that they believe would have the greatest impact on the UK financial system, if they materialised in a plausible worst-case scenario. The second question aims to identify those risks that institutions would find most challenging to control.

These two questions require free-format answers. To summarise the results, responses are grouped into broader generic categories. For example, responses citing economic risks, such as high unemployment, are grouped together in a generic economic downturn category. These broader categories are not intended to be comprehensive; new groups will be created over time if the risks identified do not fit into the categories used in previous surveys.

Key risks

Tables B and **C** report all of the risks identified in the May 2009 survey and in the pilot survey conducted in July 2008. In each case the number (column A) and percentage (column B) of respondents citing each risk is also provided.(1)

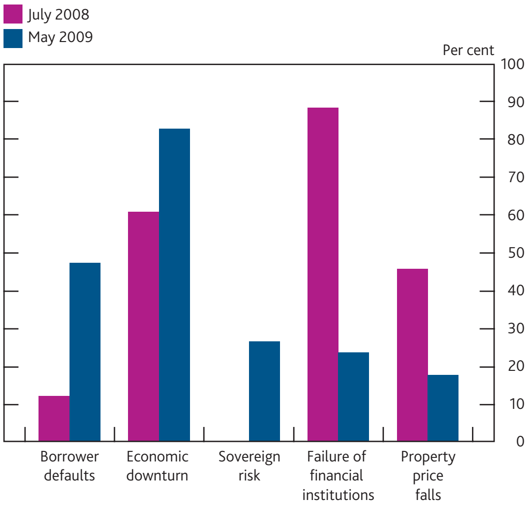
The top risks identified in the 2009 survey were:

- economic downturn (82% of respondents);
- borrower defaults (47%);
- pressures in funding markets (32%);
- tight credit conditions (26%);
- regulatory and accounting changes (26%); and
- sovereign risk (26%).

Most of these top risks were cited by a greater proportion of respondents than in the pilot survey (**Chart 1** and **Tables B** and **C**). In the case of the first two risks, this is consistent with financial institutions' exposure to the sharp deterioration in macroeconomic conditions in the intervening period.(2) Sovereign risk was cited for the first time. This category includes risks relating to increased government debt, potential sovereign downgrades by credit rating agencies, and loss of

(1) Annex 2 compares these figures with an alternative measure, which assigns a weight to risks according to how highly they were rated. The top risks identified are broadly the same under this measure.
(2) As discussed in the *Financial Stability Report*, which can be found at www.bankofengland.co.uk/publications/fsr/2009/fsrfull0906.pdf.

Chart 1 Selected key risks to the UK financial system[(a)(b)]



Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked to list the five risks that they believe would have the greatest impact on the UK financial system if they were to materialise in order of potential impact.
(b) Per cent of respondents citing risk.

confidence in the ability of sovereigns to fund their guarantees of bank assets and liabilities.

Respondents appeared to be less concerned, however, about several other risks that had been highlighted in the pilot survey. In particular, far fewer respondents highlighted property price falls and the potential failure of a financial institution, both of which had been in the top three risks in the pilot survey in July 2008 (**Chart 1**).

The apparent decline in concerns about these risks could be a reflection of events occurring between the two surveys. Concerns about the stability of the financial system during the crisis led to two waves of public sector support measures for the banking system, one in October 2008 and another in early 2009.[(1)] That may have reduced the perceived likelihood of financial institution failure. Similarly, falls in commercial and residential property prices may have led respondents to believe further substantial falls were less likely.

Hardest risks to manage

From the risks identified in the first question, participants were asked to identify the three that they would find most difficult to manage. Participants are likely to interpret this question in one of two ways. First, it could be interpreted in terms of costs to an organisation (for example, the costs associated with increased regulation). Second, it could be interpreted in terms of losses to an organisation (for example the losses associated with borrower defaults or the failure of a financial institution). It is important to note that respondents may see changes that impose costs on their organisation, for example alterations to regulation, as a risk to their business, but these changes may be designed to reduce risks to the system as a whole.

The risks most commonly identified as difficult to manage were (**Table B**):

- economic downturn (35% of respondents);
- regulatory and accounting changes (26%);
- borrower defaults (24%); and
- failure of financial institutions (15%).

Even where risks are cited by relatively few respondents, they may still be of concern if they would be challenging to manage. So it may be informative to consider a complementary measure that calculates the proportion of those respondents identifying a risk who also said it would be difficult to manage. For example, regulatory and accounting changes was cited as a key risk by only nine respondents, but all nine thought it would be difficult to manage (**Table B**, column E). In contrast, economic downturn was the most commonly cited risk, but only 43% of respondents identifying this as a top financial stability risk thought it would be difficult to manage.

Under this approach, the risks that were identified as most difficult to manage were:

- regulatory and accounting changes (100%);
- failure of financial institutions (63%); and
- lack of confidence in pricing, disclosure and ratings (57%).

Most of these risks were thought to be hard to manage by a higher proportion of respondents than in the pilot survey conducted in July 2008. By contrast, far fewer respondents were concerned with disruption to derivatives and insurance markets in May 2009, the risk identified as most difficult to manage in the pilot survey. Concerns about the manageability of operational risk, as well as risks relating to property price falls and tight credit conditions, were also significantly lower than the previous year.

Section 2: Aggregate risks to the UK financial system

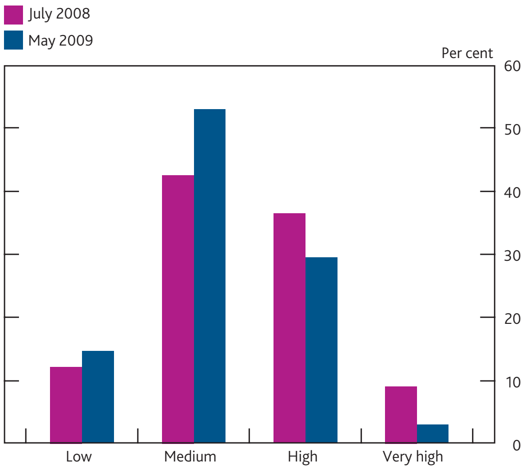
Section 2 of the survey consists of three questions on the likelihood of a high-impact event and confidence in the UK financial system.

Probability of a high-impact event

The first question in Section 2 asks participants to report their view of the likelihood of a high-impact event affecting the UK financial system over the short term and medium term. Although the survey does not define a high-impact event, this could be interpreted by respondents as, for example, the failure of a large financial institution or the closure of a key financial market. As in the July 2008 pilot survey, around one half of respondents judged a high-impact event to be

(1) As discussed in the June 2009 *Financial Stability Report*, which can be found at www.bankofengland.co.uk/publications/fsr/2009/fsrfull0906.pdf.

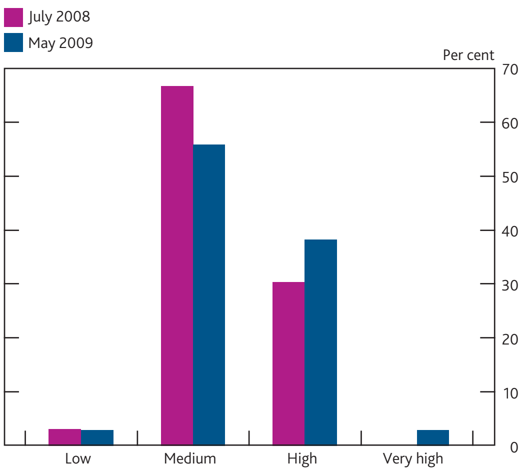
Chart 2 Probability of a high-impact event in the UK financial system in the short term(a)



Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked for the probability of a high-impact event in the UK financial system in the short term. Five possible answers: very high; high; medium; low; very low. There were no responses for very low.

Chart 3 Probability of a high-impact event in the UK financial system in the medium term(a)



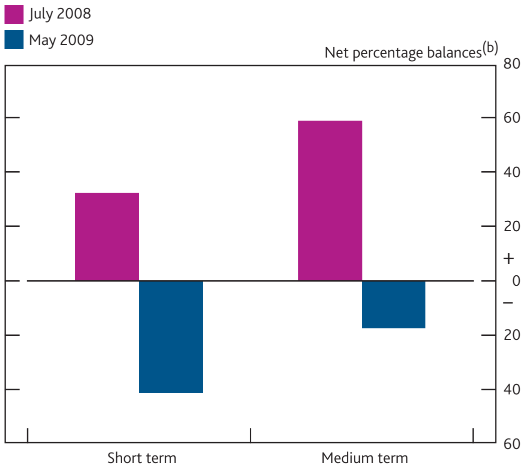
Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked for the probability of a high-impact event in the UK financial system in the medium term. Five possible answers: very high; high; medium; low; very low. There were no responses for very low.

reasonably likely and a third or more thought the likelihood was high or very high in both the short and medium term (**Charts 2** and **3**).

Participants were also asked to report their view on whether the probability of a high-impact event affecting the UK financial system in both the short and medium term had changed over the past six months. **Chart 4** shows the percentage of respondents who perceived an increase in the probability of a high-impact event, less the percentage perceiving a decrease, for both the pilot and the May 2009 full survey. It shows that the balance of respondents in May 2009 perceived a high-impact event to be less likely than six months earlier.

Chart 4 Change in probability of a high-impact event in the UK financial system over the past six months(a)



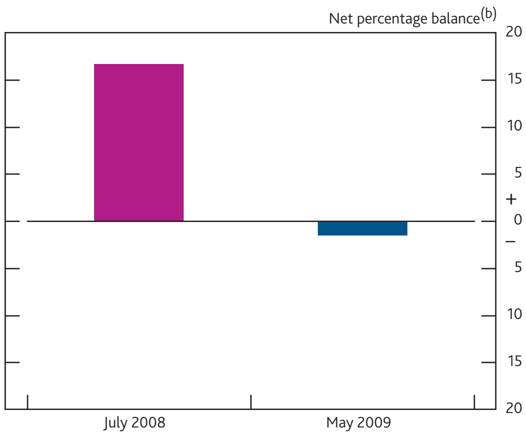
Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked how the probability of a high-impact event in the UK financial system has changed over the last six months in the short term and in the medium term. Three possible answers: increased; unchanged; decreased.
(b) The net percentage balance is calculated as the percentage of respondents who perceived an increase in the probability of a high-impact event, less the percentage perceiving a decrease.

Confidence in the financial system

Finally, survey participants were asked to report their overall confidence in the stability of the UK financial system over the next three years. **Chart 5** shows the percentage of respondents who were confident, less those who were not very confident. The net percentage balance was weighted according to the strength of the sentiment (see footnote (b) of **Chart 5**). Confidence was significantly lower than reported in July 2008, with a sharp decrease in those stating that they were very confident (from 36% to 15% of respondents), and an increase in those who were not very confident (from 3% to 18%).

Chart 5 Confidence in the stability of the UK financial system as a whole over the next three years(a)



Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked how much confidence they have in the stability of the UK financial system as a whole over the next three years. Five possible answers: complete confidence; very confident; fairly confident; not very confident; no confidence. No responses for complete confidence or no confidence.
(b) Net percentage balances are calculated by weighting together the responses as follows: complete confidence (1); very confident (0.5); fairly confident (0); not very confident (-0.5); no confidence (-1).

Looking at the responses to these last two questions together, although participants judged that the probability of a high-impact event in the UK financial system had decreased over the past six months, they had less confidence in the stability of the financial system than they had in July 2008. One interpretation is that this result reflects the timing of events in the financial crisis. Survey respondents were perhaps less confident in the stability of the system in May 2009 than in July 2008, as a result of the crisis worsening in the second half of 2008. But participants may have also thought that a high-impact event was less likely in May 2009 than during the period of instability six months earlier. This is consistent with the improvement in market sentiment in the second quarter of 2009, discussed in the June 2009 *Financial Stability Report*.

Conclusion

The Bank recently launched a biannual *Systemic Risk Survey* to improve its understanding of market participants' views on system-wide risks and on prospects for financial stability. The May 2009 survey highlighted a number of the risks that the Bank had also identified in its surveillance work. Several of these risks were discussed in the June 2009 *Financial Stability Report*. In addition, the survey helped to reveal those risks that market participants believed they would find difficult to manage. As future results are collected, it is hoped that the *Systemic Risk Survey* will become an increasingly important input into the Bank's assessment of systemic risk.

Annex 1
Survey questions

Section 1: Key sources of risk to the UK financial system

1.1 Looking ahead, which risks do you believe would have the greatest impact on the UK financial system if they were to materialise? Please list risks in order of potential impact (ie greatest impact first).
Respondents are asked to list five risks.

1.2 Which of these risks would you find most challenging to manage as a firm?
Respondents are asked to list three risks.

Section 2: Aggregate risks to the UK financial system

2.1 In your view, what is the probability of a further high-impact event in the UK financial system in the period ahead?
In the short term? Very high High Medium Low Very low
In the medium term? Very high High Medium Low Very low

2.2 How has this probability changed over the last six months?
In the short term? Increased Unchanged Decreased
In the medium term? Increased Unchanged Decreased

2.3 How much confidence do you have in the stability of the UK financial system as a whole over the next three years?
Complete confidence Very confident Fairly confident Not very confident No confidence

Annex 2
Additional results

The results described in the main article are based on the percentage of respondents citing certain risks. But the survey participants were asked to list their top five risks in order of potential impact. To take account of the relative importance that individual respondents attached to each risk, it is possible to construct a weighted average percentage for each risk. This measure places greater weight on those risks that tended to be ranked more highly in each respondent's top five. But as **Table A1** shows, for the May 2009 survey, the top risks are broadly the same, whichever method is used to calculate the results.

Table A1 Key risks to the UK financial system[a][b]

	May 2009[c]		July 2008[d]	
	Number of times cited	Weighted average percentage	Number of times cited	Weighted average percentage
Economic downturn	28	23	20	15
Borrower defaults	16	14	4	3
Pressures in funding markets	11	9	11	9
Sovereign risk	9	9	0	0
Failure of financial institutions	8	7	29	28
Regulatory and accounting changes	9	6	9	4
Financial market dislocation	8	5	10	7
Loss of confidence in authorities	7	5	5	2
Tight credit conditions	9	4	5	4
Disruption to derivatives and insurance markets	5	4	6	5
Lack of confidence in pricing, disclosure and ratings	7	4	6	4
Operational risk	8	4	10	6
Property price falls	6	4	15	11
Infrastructure disruption	4	2	4	2

Sources: Bank of England *Systemic Risk Survey*, July 2008 and May 2009, and Bank calculations.

(a) Respondents were asked to list the five risks that they believe would have the greatest impact on the UK financial system in order of potential impact.
(b) Table shows a weighted average percentage. Each risk's rank is assigned a weight as follows: risk 1 (5); risk 2 (4); risk 3 (3); risk 4 (2); and risk 5 (1). The number in the table is the weighted number of responses for each risk as a percentage of the total.
(c) Thirty four market participants provided the Bank with their views.
(d) Thirty three market participants provided the Bank with their views.