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Research questions on which policymakers at the Bank of England would welcome more behavioural economics findings from academics – some initial thoughts by Ben Norman (Bank of England)

The Bank of England launched its "One Bank Research Agenda" (OBRA) in February 2015. The "One Bank" moniker reflects the determination that this Research Agenda should provide insights from academic research into and across <u>all</u> aspects of the Bank's responsibilities, including monetary, macroprudential and microprudential policies. Engagement with academics from outside the Bank is positively encouraged.<sup>2</sup>

There is considerable scope for behavioural economics to inform the OBRA. Among other things, the OBRA Discussion Paper (cf. footnote 1) posits the following issues / questions for research:

[p17] The [financial] crisis also re-emphasised the important role of judgment in the approach towards supervision and resolution [of financial institutions]. Discretionary models have real merits, allowing greater flexibility and information assimilation. But as with any area of technical decision-making, they can also be subject to some drawbacks, including various behavioural biases. How significant are these biases in the supervisory and resolution spheres? And are there useful insights from other professions on how to enhance judgement-based decision-making?

[p22] Potential biases that may arise in judgement-based supervision include, for example, 'group-think', conservatism bias (ie failure to adapt opinion in light of new evidence, perhaps due to 'sunk investment' in the prevailing view), confirmation biases (ie noticing / seeking evidence which supports your point of view), anchoring biases (putting too much weight on the recent past) and making overly defensive decisions (eg overweighting 'bad' outcomes). In order to meet its objectives, it is important that the Bank understands these potential risks and biases and ensures its decision-making processes are robust to them. Some potential areas for further exploration include:

- What is the risk of such biases and how could they be detected/measured?
- How could an enhanced understanding of potential behavioural biases help to assess mechanisms, structures and rules which could be used to support effective judgement-based supervision?
- What role might heuristics play in handling uncertainty and supporting decision-making?

[p25] Behavioural economics points out that households, corporates and investors do not always make decisions that maximise their wealth or profitability (Kahneman and Tversky (1979), Rabin (1998)). Moreover, such behaviour can be persistent and predictable (eg FCA (2013)). With this in mind, it may be fruitful to collect first-hand data from surveys or experiments to improve understanding of market participants' choices and demands, for example when entering insurance or mortgage contracts. Among other things, this could help inform our understanding of risk-taking behaviour, indebtedness, and the potential drivers of waves of exuberance and pessimism, both within and across countries. Some specific research questions include: ...

<sup>&</sup>lt;sup>1</sup> The OBRA Discussion Paper is available at <a href="http://www.bankofengland.co.uk/research/Documents/onebank/discussion.pdf">http://www.bankofengland.co.uk/research/Documents/onebank/discussion.pdf</a> And a webcast of the OBRA launch conference is available at <a href="http://www.bankofengland.co.uk/research/Pages/onebank/conference.aspx">http://www.bankofengland.co.uk/research/Pages/onebank/conference.aspx</a> alongside several of the presentation slides.

<sup>&</sup>lt;sup>2</sup> See <a href="http://www.bankofengland.co.uk/research/Pages/onebank/externaleng.aspx">http://www.bankofengland.co.uk/research/Pages/onebank/externaleng.aspx</a> for various practical ways that academics might interact with Bank staff.

- What role do behavioural biases, heuristics, social interactions and prior personal experiences play in driving household, corporate and financial institution behaviour? How can such factors be quantified and incorporated into conventional economic or agent-based models?
- How can we use market research, laboratory experiments, field experiments or randomised controlled trials, to analyse market-wide issues that can accelerate or exacerbate financial crises?

[p27] How can we better model and assess risks to the financial system, the economy and their interaction?

The crisis has brought home the importance of the two-sided transmission channels between the real and financial sectors of the economy and re-emphasised the need to enhance models to assess risks to the financial system. ... As a tool for assessing systemic risk and gauging the resilience of the financial system, stress testing has become a central aspect of financial stability surveillance as exemplified by the Bank of England's RAMSI model (Burrows, Learmonth and McKeown (2012)). [Among other things]...some models might...usefully incorporate non-optimising behaviour on the part of economic agents, including insights from behavioural economics and other disciplines. ... Specific questions include: ...

• Can the insights of behavioural economics and other disciplines be incorporated into stress-testing models?

An exposition of a number of such behavioural biases, and how to make central bank policy frameworks more robust to them, has recently also been the subject of one of Bank Chief Economist Andy Haldane's speeches – entitled "Central bank psychology".<sup>3</sup>

So how can academics working in the field of behavioural economics best contribute to key public policy issues that the Bank of England is working on?

In view of the fact that it has recently been publicly launched, any behavioural economics research on topics set out in the OBRA discussion paper is in a good position to influence policy at the Bank of England. Hopefully the extracts above have whetted your appetite to contribute to that!

In addition to the OBRA, the Bank has previously undertaken research informed by behavioural economics; so too have other central banks, and other financial regulators. A non-exhaustive set of such research is summarised in the appendix. It may be that you have an interest in some of those topics too – in which case, the links in the appendix hopefully provide you with ideas of other areas of behavioural economics research where central banks / other financial regulators have (previously) revealed an interest.

We look forward to seeing the fruits of your behavioural economics research in the coming months / years, where it can shed light on the issues of interest to the Bank!

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<sup>&</sup>lt;sup>3</sup> See Haldane (2014), available at

## OTHER RESEARCH INFORMED BY BEHAVIOURAL ECONOMICS UNDERTAKEN BY THE BANK OF ENGLAND, OTHER CENTRAL BANKS AND OTHER FINANCIAL REGULATORS

This appendix contains examples of where the Bank of England, other central banks and (within the category of other financial regulators) the Financial Conduct Authority (FCA) have themselves undertaken and/or drawn on others' behavioural economics insights. This appendix does not pretend to be exhaustive.

## Behaviour economics research undertaken and/or drawn on by the Bank of England

- Lombardelli, Proudman & Talbot (2002) conducted an experiment to establish whether (in the context of the Monetary Policy Committee) individuals or committees were better at decision-making.
  - (http://www.bankofengland.co.uk/archive/Documents/historicpubs/workingpapers/2002/wp16 5.pdf)
- Brazier, Harrison, King & Yates (2006) developed a model in which individuals use simple
  heuristics (rather than rational expectations) to set their expectations of future inflation. They
  used this model to compare the performance of different monetary policy rules.
  (http://www.bankofengland.co.uk/research/Documents/workingpapers/2006/WP303.pdf)

Since the onset of the financial crisis, policymakers at the Bank have increasingly drawn on behavioural economics to inform their thinking, for example,

- observing, on the one hand, that individuals' use of rough heuristics result in a propensity to
  underestimate the probability of adverse outcomes, in particular when the last occurrence of an
  adverse outcome was a long time in the past; and on the other hand, that simpler decision-rules
  of certain heuristics may help regulators of complex financial systems. (See the section on
  "Disaster Myopia" in Haldane (2009);
  - http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2009/speech374.pdf; the section on "Psychological Scarring" in Haldane (2011),
  - http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2011/speech513.pdf; and the section "Less is More" in Haldane & Madouros (2012),
  - http://www.bankofengland.co.uk/publications/Documents/speeches/2012/speech596.pdf)
- observing that individuals demonstrate a higher degree of faith in their judgment than would (objectively) be warranted, and have a tendency to understate uncertainty, as a rationale for why stress-testing scenarios used by banks were not sufficiently realistic pre-crisis. (See section 4 onwards of Aikman, Barrett, Kapadia, King, Proudman, Taylor, de Weymarn & Yates (2010); <a href="http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech432.pdf">http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech432.pdf</a>)
- assessing the role of patience in financial decision-making, and the investment implications of short-termism. (Haldane (2010);
  - http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/speech445. pdf; and Haldane & Davies (2011);
  - http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2011/speech495.pdf)

Research undertaken by other central banks has used behavioural economics to investigate other areas of core interest to central bank policy issues / operations. For example,

- the Federal Reserve Bank (FRB) of Boston has used behavioural economics to investigate the
  policy implications of household overborrowing and undersaving see Benton, Meir & Sprenger
  (2007) <a href="http://www.bostonfed.org/commdev/pcadp/2007/pcadp0704.pdf">http://www.bostonfed.org/commdev/pcadp/2007/pcadp0704.pdf</a>
- a joint FRB Boston and Swiss National Bank economics experiment investigated the link between economic literacy / demographics and the formation of inflation expectations – see Burke & Manz (2010) <a href="https://www.newyorkfed.org/research/conference/2010/consumer/BurkeManz.pdf">http://www.newyorkfed.org/research/conference/2010/consumer/BurkeManz.pdf</a>
- De Nederlandsche Bank has published the results of a succession of behavioural experiments they have undertaken investigating the effects of disruptions in payment systems see Abbink, Bosman, Heijmans & van Winden (2010)
   <a href="http://www.dnb.nl/en/binaries/Working%20paper%20No%20263\_tcm47-240366.pdf">http://www.dnb.nl/en/binaries/Working%20paper%20No%20263\_tcm47-240366.pdf</a>; and Heemeijer & Heijmans (2015)
   <a href="http://www.dnb.nl/en/binaries/Working%20paper%20466\_tcm47-319676.pdf">http://www.dnb.nl/en/binaries/Working%20paper%20466\_tcm47-319676.pdf</a>

There are other financial regulators, not present at this RES Easter School, who are actively using behavioural economics to inform their work – notably the Financial Conduct Authority (FCA). See, for example, the following from them on financial conduct issues:

- de Meza, Irlenbusch & Reyniers (2008), "Financial Capability: A Behavioural Economics Perspective" (https://www.fca.org.uk/static/fca/documents/research/fsa-crpr69.pdf)
- Erta, Hunt, Iscenko & Brambley (2013), "Applying behavioural economics at the Financial Conduct Authority", Occasional Paper No. 1 (<a href="https://www.fca.org.uk/static/documents/occasional-papers/occasional-paper-1.pdf">https://www.fca.org.uk/static/documents/occasional-papers/occasional-paper-1.pdf</a>)
- Adams & Hunt (2013), "Encouraging consumers to claim redress: evidence from a field trial",
   Occasional Paper No. 2 (<a href="http://www.fca.org.uk/static/documents/occasional-papers/occasional-papers/occasional-paper-2.pdf">http://www.fca.org.uk/static/documents/occasional-papers/occasional-papers/occasional-paper-2.pdf</a>)
- Iscenko, Duke, Huck & Wallace (2014), "How does selling insurance as an add-on affect consumer decisions? A practical application of behavioural experiments in financial regulation", Occasional Paper No. 3 (<a href="http://www.fca.org.uk/static/documents/occasional-papers/occasional-papers/occasional-papers-3.pdf">http://www.fca.org.uk/static/documents/occasional-papers/occasional-papers/occasional-papers-3.pdf</a>)
- Financial Conduct Authority (2014), "Does the framing of retirement income options matter? A
  behavioural experiment" (<a href="http://www.fca.org.uk/static/fca/documents/rims-framing-experiment.pdf">http://www.fca.org.uk/static/fca/documents/rims-framing-experiment.pdf</a>)