



BANK OF ENGLAND

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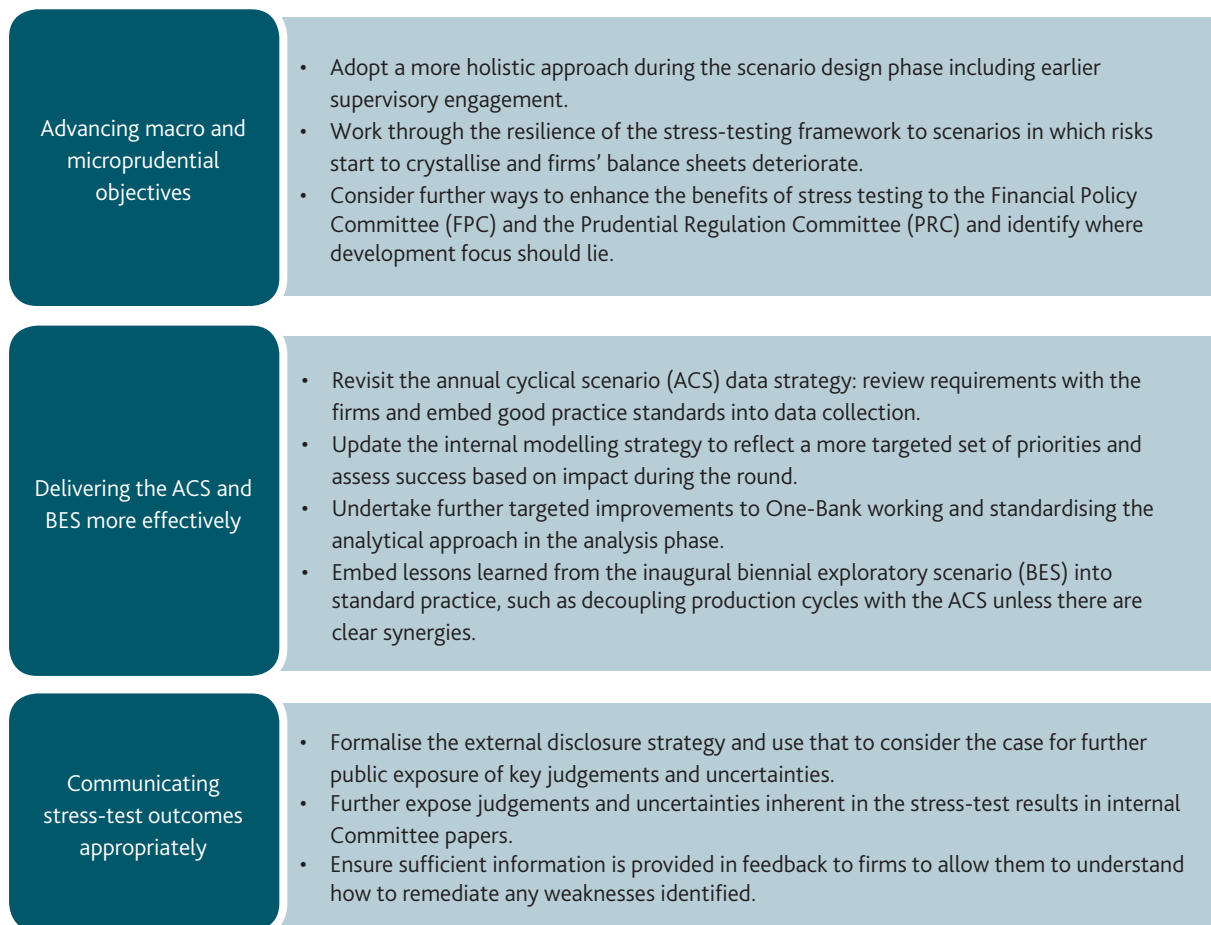
# The Bank of England's response to the Independent Evaluation Office's evaluation of its approach to concurrent stress testing

1 The Bank of England (Bank) welcomes the Independent Evaluation Office's (IEO's) evaluation of the effectiveness of the Bank's approach to concurrent stress testing. The IEO report finds that the approach is successfully delivering on its principal objective and recommends a number of ways that the stress tests could be improved further.

2 The Bank is committed to implementing all of the IEO's recommendations. This response details how it will respond to most of the recommendations made. A small number of recommendations will require further work and the Bank will report on these later in the year as part of an update to its 'Approach to stress testing' document.

3 The IEO has set out ten recommendations around three main themes (**Figure 1**). The Bank's response to each of these is set out below. The Annex summarises the actions proposed by the Bank.

**Figure 1** Summary of recommendations



### Theme 1: Advancing macro and microprudential objectives

4 As the IEO notes, linking the view of the risk environment to a countercyclical stress scenario for both the UK and global economies and, in turn, to both macro and microprudential policy decisions remains at the forefront among central bank peers. The Bank welcomes the suggestions for further enhancement in the three areas proposed by the IEO.

#### Adopt a more holistic approach during the scenario design phase including earlier supervisory engagement

5 The Bank recognises the importance of ensuring that risks, including those identified by supervisors of individual banks, are reflected in the stress tests applied to banks. That is why the annual cyclical scenario (ACS) stress test has responded to risks such as consumer credit (in 2017) and leveraged lending (in 2018).

6 To enhance this further, from 2019:

- Bank staff will prepare a report to the Financial Policy Committee (FPC) and the Prudential Regulation Committee (PRC) in Q4 each year, which synthesises supervisory intelligence and sets out a supervisory view on key emerging risks and firm-specific issues that should be captured in upcoming stress tests.
- The Committees will then consider whether risks highlighted in this report can be captured within the ACS, for example, by adding more detail to the scenario or focus in the analysis phase, or whether they should be considered through other mechanisms, such as the biennial exploratory scenario (BES) or firms' Internal Capital Adequacy Assessment Process (ICAAP).

#### **Work through the resilience of the stress-testing framework to scenarios in which risks start to crystallise and firms' balance sheets deteriorate**

7 The ACS incorporates an integrated framework for decisions around the setting of capital buffers in response to the results, which was set out when the Bank's approach to stress testing was published in 2015. The Bank's stress-testing framework is explicitly countercyclical, with the severity of the test, and associated regulatory capital buffers, varying systematically: increasing when risks are judged to have increased, and decreasing when risks diminish or crystallise. Like the IEO, the Bank recognises that this systematic approach has not yet been fully tested. Given this:

- As part of work to update its approach to stress testing, the Bank will lay out in more detail how it would expect the stress-test severity to behave in a downturn (as well as in an upswing) in the business and financial cycles.

#### **Consider further ways to enhance the benefits of stress testing to the FPC and the PRC and identify where development focus should lie**

8 As the IEO report notes, one important benefit that the stress-testing framework delivers is improved risk and capital management capabilities within banks. To enhance this further:

- In 2019, the Bank will undertake a qualitative review of the effectiveness of the banks' stress-testing frameworks against the BCBS stress-testing principles.<sup>(1)</sup>
- This qualitative review will assess the effectiveness of banks' stress-testing frameworks for both regulatory stress tests such as the ACS and also internal stress tests, ensuring that the Bank looks systematically across the framework. The PRC is minded to include reference to qualitative review outcomes in this year's publication of bank specific assessments.
- The Bank will continue to use the qualitative review in a systematic way to improve banks' capital management capabilities and will set out further details as part of work to update its approach to stress testing.

9 The IEO also highlights an appetite from policymakers to 'test the stress test' and proposes that the ACS be supplemented with sensitivity analysis exploring variants of the scenario, such as different property price profiles, or interest rate and exchange rate paths. So from 2019:

- The Bank will, where valuable, conduct analysis of the sensitivity of banks' stress-test results to issues highlighted in the annual supervisory risk assessment (described in paragraph 6 above).
- This analysis will be conducted in parallel to the ACS, using, for example, firms' ICAAPs, and its design will be determined in the context of policymakers' risk tolerance.

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(1) 'Stress testing principles', Basel Committee on Banking Supervision, October 2018.

## Theme 2: Delivering the ACS and BES more effectively

10 The IEO highlights a desire in both the Bank and the firms participating in the stress test to have more time to reflect on lessons learned from the stress test and effect change. Reflecting this:

- The Bank will compress the stress-testing timetable for the ACS. After seeking views from firms, it will set out in the revised 'Approach to stress testing' document a target timetable for the Bank's stress-testing cycle and a path for reaching it.
- The Bank will establish an annual forum on stress testing with participating banks and other key stakeholders. This forum will discuss how stress-testing processes and methodologies could be improved further, and share stress-testing best practice.

### Revisit the ACS data strategy: review requirements with the firms and embed good practice standards into data collection

11 The IEO notes that both the firms' and the Bank's efforts have led to an improvement in data quality and processes over time. To produce high-quality and robust stress-test results the Bank will continue to require a significant amount of data, but the Bank is committed to minimising the volume of data collected. In addition, the Bank is committed to making continued improvements in the efficiency of stress-testing data collection, in order to avoid unnecessary burdens on firms.

12 To reflect more systematically the views of firms in the Bank's data strategy going forward, one area of focus for the annual forum on stress testing (see paragraph 10) will be data. This forum will be one of the inputs into an annual review of data collected for stress testing, which will be conducted with a view to identifying which data deliver most value and cutting out from future requests any data that were not used actively. The Bank will report annually on the outcome of this review and explain any change in the burden placed on participating firms. In addition, the Bank will:

- Move all of the core data templates that banks must submit to a stable format by 2020. These templates will be amended or added to in the future only if there is a strong case for change and, for material changes, only after seeking views from participating firms. This will give firms certainty about the core data that will be required each year.
- Migrate all of these templates onto a common data format with integrated data quality controls. This will improve data quality further, and automate data collection and processing. A time-path for this migration will be set out in the Bank's updated 'Approach to stress testing' document.
- Review in 2019 its approach to requesting qualitative and scenario-specific information from participating banks ('unstructured' data requests). Although such requests will continue to be needed to assess the implications of emerging or scenario-specific risks and understand the methodologies behind the banks' projections, the Bank will ensure that such requests do not exceed what is necessary. From 2020, the Bank will disclose annually the number of such 'unstructured' requests.

### Update the internal modelling strategy to reflect a more targeted set of priorities and assess success based on impact during the round

13 The IEO highlights that the Bank adopted an ambitious agenda to build out its modelling infrastructure in 2015 and notes good evidence of progress on this agenda. The Bank agrees with the IEO's view that there is now merit in making its modelling strategy more targeted.

14 The Bank's modelling strategy recognises that the models it develops should be complementary to firms' models and not seek to replace them, with the Bank's models being used for benchmarking and providing an independent challenge for the stress projections submitted by banks. Reflecting this, the Bank will focus on the development of models that allow it to:

- Benchmark firms' results against historical and international experience of stress, and to test the sensitivity of stress-test results to a range of key modelling assumptions.
- Explore the feedback and amplification mechanisms between financial institutions. These models are intended to allow it to simulate how stress could propagate across the financial system as a whole, not just across the banks participating in the ACS.

15 To support this strategy, the Bank is also investing in more granular models for key UK credit books that will allow it to explore risks that may not have been observed in historical macro-level data.

### **Undertake further targeted improvements to One-Bank working and standardising the analytical approach in the analysis phase**

16 As the IEO notes, the cross-Bank processes during the delivery of the ACS have been improving over time. To engage staff from across the organisation better, the Bank has recently introduced regular briefing meetings to keep staff informed throughout the ACS process. To enhance this further, the Bank will:

- Conduct an immediate review of access rights to its existing data portal, which securely warehouses key stress-testing data and facilitates efficient data access and analysis, to ensure all relevant stakeholders benefit from the ACS data.

17 The Bank agrees with the IEO's recommendation that there are further efficiency gains to be achieved in the delivery of the stress test. The Bank will:

- As part of working towards its aim to shorten the ACS timetable, consider whether any further process efficiencies can be made in the staff-level results and analysis phase.

### **Embed lessons learned from the inaugural BES into standard practice, such as decoupling production cycles with the ACS unless there are clear synergies**

18 The BES is a novel exercise and only one has been conducted to date. In line with the IEO's recommendation, the Bank is committed to embedding lessons learned from the inaugural exercise into future practice. To deliver this:

- The Bank has already decoupled the BES from the ACS for 2019, and will continue to do this going forward.
- For future BES exercises, the Bank will provide fuller information and at an early stage on the link between the scenario design and the Bank's objectives; ensure that the data requirements are bespoke to the scenario and the delivery and data strategy for the exercise are communicated to firms with sufficient notice; provide clearer feedback to firms on the results, which goes beyond the narrative in the results publication.

## **Theme 3: Communicating stress-test outcomes appropriately**

19 The Bank welcomes the IEO's view that it has responded well to the challenges associated with both internal and external communication.

### **Formalise the external disclosure strategy and use that to consider the case for further public exposure of key judgements and uncertainties**

20 As the IEO notes, the external disclosure of stress-test results has evolved over time and supported both confidence and public accountability objectives. To facilitate more systematic discussion of public disclosure strategy by the Committees, the Bank will:

- As part of work to update its approach to stress testing, establish principles for external disclosure for the FPC and the PRC to use when choosing between different disclosure options.

**Further expose judgements and uncertainties inherent in the stress-test results in internal Committee papers**

21 As the IEO notes, key judgements and uncertainties in the results are always highlighted to the FPC and the PRC prior to sign off of the results. To make this process more systematic, the Bank will:

- From 2019, adopt a set of standard stress-test results templates to be presented to the Committees each annual stress-testing cycle.
- From 2019, establish and maintain a single ongoing record of the most material judgements embodied in the ACS results. These are assumptions made by staff or banks that could yield materially different stress-test results if an alternative view was taken. Examples of key judgements that could be included in this record are: consumer credit adjustments in the 2017 ACS; the extent to which banks pass on changes in Bank Rate to deposits; the composition and behaviour of deposits over time.
- Continue to maintain a detailed record of where adjustments have been made to firms' own submissions.
- Share both of these records with the policy Committees during the results phase of the stress test.

22 If it is consistent with the external disclosure principles described in paragraph 20, the Bank will publish the record of the most material judgements in the ACS.

**Ensure sufficient information is provided in feedback to firms to allow them to understand how to remediate any weaknesses identified**

23 The IEO finds that qualitative review of banks' own stress tests undertaken by the Bank has been improving over time and helped improve firms' understanding of risks. In the 2018 ACS, the Bank sought to provide firms with more consistent, thematic feedback on their stress-test results and the adjustments made to them. To embed this further:

- From 2019, the Bank will focus feedback to individual firms on the main areas where concerns have been raised and the reasons for these concerns. Supervisors will continue to report back to the PRC (and the FPC as relevant) annually on progress made to remediate these concerns.
- As part of work to update its approach to stress testing, the Bank will consider providing banks with more quantitative information on adjustments to their stress projections, to the extent that such disclosure is compatible with the Bank's objectives.
- Changes being made to the qualitative review in 2019 (see paragraph 8) will also ensure banks are provided with more systematic feedback on the effectiveness of their stress-testing framework.



Recommendations	Actions proposed
<b>Theme 1: Advancing macro and microprudential objectives</b>	
Adopt a more holistic approach during the scenario design phase including earlier supervisory engagement	<ul style="list-style-type: none"> <li>From 2019, Bank staff will prepare a report to the FPC and the PRC in Q4 each year, which synthesises supervisory intelligence and sets out a supervisory view on key emerging risks and firm-specific issues that should be captured in upcoming stress tests.</li> <li>The Committees will then consider whether risks highlighted in this report can be captured within the ACS, or whether they should be considered through other mechanisms, such as the BES or firms' ICAAPs.</li> </ul>
Work through the resilience of the stress-testing framework to scenarios in which risks start to crystallise and firms' balance sheets deteriorate	<ul style="list-style-type: none"> <li>As part of work to update its approach to stress testing, the Bank will lay out in more detail how the stress-test severity would be expected to behave in a downturn (as well as in an upswing) in the business and financial cycles.</li> </ul>
Consider further ways to enhance the benefits of stress testing to the FPC and the PRC and identify where development focus should lie	<ul style="list-style-type: none"> <li>In 2019, the Bank will undertake a qualitative review of the effectiveness of the banks' stress-testing frameworks against the BCBS stress-testing principles. The PRC is minded to include reference to qualitative review outcomes in this year's publication of bank specific assessments.</li> <li>The Bank will continue to use the qualitative review in a systematic way to improve banks' capital management capabilities and will set out further details as part of work to update its approach to stress testing.</li> <li>From 2019, the Bank will, where valuable, conduct analysis of the sensitivity of banks' stress-test results to issues highlighted in the annual supervisory risk assessment. This analysis will be conducted in parallel to the ACS, and its design will be determined in the context of policymakers' risk tolerance.</li> </ul>
<b>Theme 2: Delivering the ACS and BES more effectively</b>	
Revisit the ACS data strategy: review requirements with the firms and embed good practice standards into data collection	<ul style="list-style-type: none"> <li>The Bank will compress the stress-testing timetable for the ACS. After seeking views from firms, it will set out in the revised 'Approach to stress testing' document a target timetable for the Bank's stress-testing cycle and a path for reaching it.</li> <li>The Bank will establish an annual forum on stress testing with participating banks and other key stakeholders. This forum will discuss how stress-testing processes and methodologies could be improved further, and share stress-testing best practice.</li> </ul> <p>On the ACS data strategy:</p> <ul style="list-style-type: none"> <li>To reflect more systematically the views of firms in the Bank's data strategy going forward, one area of focus for the annual forum on stress testing will be data. This forum will be one of the inputs into an annual review of data collected for stress testing. The Bank will report annually on the outcome of this review and explain any change in the burden placed on participating firms.</li> <li>The Bank will move all of the core data templates that banks must submit to a stable format by 2020.</li> <li>The Bank will migrate all of these templates onto a common data format with integrated data quality controls. A time-path for this migration will be set out in the Bank's updated 'Approach to stress testing' document.</li> <li>The Bank will review in 2019 its approach to requesting qualitative and scenario-specific information from participating banks ('unstructured' data requests). From 2020, the Bank will disclose annually the number of such 'unstructured' requests.</li> </ul>
Update the internal modelling strategy to reflect a more targeted set of priorities and assess success based on impact during the round	<p>The Bank will focus on the development of models that allow it to:</p> <ul style="list-style-type: none"> <li>Benchmark firms' results against historical and international experience of stress, and to test the sensitivity of stress-test results to a range of key modelling assumptions.</li> <li>Explore the feedback and amplification mechanisms between financial institutions. These models are intended to allow it to simulate how stress could propagate across the financial system as a whole, not just across the banks participating in the ACS.</li> </ul>

Recommendations	Actions proposed
<b>Theme 2: Delivering the ACS and BES more effectively (continued)</b>	
Undertake further targeted improvements to One-Bank working and standardising the analytical approach in the analysis phase	<ul style="list-style-type: none"> <li>The Bank will conduct an immediate review of access rights to its existing data portal, which securely warehouses key stress-testing data and facilitates efficient data access and analysis, to ensure all relevant stakeholders benefit from the ACS data.</li> <li>As part of working towards its aim to shorten the ACS timetable, the Bank will consider whether any further process efficiencies can be made in the staff-level results and analysis phase.</li> </ul>
Embed lessons learned from the inaugural BES into standard practice, such as decoupling production cycles with the ACS unless there are clear synergies	<ul style="list-style-type: none"> <li>The Bank has already decoupled the BES from the ACS for 2019, and will continue to do this going forward.</li> <li>For future BES exercises, the Bank will provide fuller information and at an early stage on the link between the scenario design and the Bank's objectives; ensure that the data requirements are bespoke to the scenario and the delivery and data strategy for the exercise are communicated to firms with sufficient notice; provide clearer feedback to firms on the results, which goes beyond the narrative in the results publication.</li> </ul>
<b>Theme 3: Communicating stress-test outcomes appropriately</b>	
Formalise the external disclosure strategy and use that to consider the case for further public exposure of key judgements and uncertainties	<ul style="list-style-type: none"> <li>As part of work to update its approach to stress testing, the Bank will establish principles for external disclosure for the FPC and the PRC to use when choosing between different disclosure options.</li> </ul>
Further expose judgements and uncertainties inherent in the stress-test results in internal Committee papers	<ul style="list-style-type: none"> <li>From 2019, the Bank will adopt a set of standard stress-test results templates to be presented to the Committees each annual stress-testing cycle.</li> <li>From 2019, the Bank will establish and maintain a single ongoing record of the most material judgements embodied in the ACS results.</li> <li>The Bank will continue to maintain a detailed record of where adjustments have been made to firms' own submissions.</li> <li>The Bank will share both of these records with the policy Committees during the results phase of the stress test.</li> <li>If it is consistent with the external disclosure principles, the Bank will publish the record of the most material judgements in the ACS.</li> </ul>
Ensure sufficient information is provided in feedback to firms to allow them to understand how to remediate any weaknesses identified	<ul style="list-style-type: none"> <li>From 2019, the Bank will focus feedback to individual firms on the main areas where concerns have been raised and the reasons for these concerns. Supervisors will continue to report back to the PRC (and the FPC as relevant) annually on progress made to remediate these concerns.</li> <li>As part of work to update its approach to stress testing, the Bank will consider providing banks with more quantitative information on adjustments to their stress projections, to the extent that such disclosure is compatible with the Bank's objectives.</li> </ul>