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Financial Services Risk and Regulation

FSRR briefing

Bank of England stress test results

The Bank of England has published the results of the 2015 Concurrent Stress Test.

While all banks passed the quantitative hurdles, the Bank clearly believes that banks have considerable work to do to enhance their stress testing capabilities.

Stress testing is an important part of the Bank's tool-kit used to assess financial stability and individual firms' capital adequacy. This means that firms need to develop long-term strategic solutions.

On 1 December 2015, the Bank of England ('the Bank') published the results of its second annual Concurrent Stress Test (CST) of the seven largest UK banking institutions. All firms passed the quantitative hurdles set by the regulator but, as expected, given the nature of the economic scenario provided, those banks with significant Asian, emerging markets and trading exposures were most affected. Two banks came close to the hurdle rate and were subject to additional scrutiny by the Bank. However, both banks had taken or had planned capital management actions, which meant that the Bank was satisfied with their capital positions.

Since the inception of the CST, in addition to the quantitative results, the Bank has been evaluating qualitative aspects of firms' stress testing processes. As with the Comprehensive Capital Analysis and Review (CCAR) in the US, the qualitative standards rise each year.

The Bank recognised the significant progress made by the UK banks since 2014 including: oversight and governance; data quality and accuracy; application of expert judgement; and model management standards (at least for some banks). This year, the 'must-try-harder' areas are largely related to net interest income and traded risk projections, including data quality, models, governance and documentation. Scenario expansion processes and the embedding of stress testing process and frameworks are also highlighted as areas for improvement.

The Bank described its medium term stress testing framework in its document '*The Bank of England's approach to stress testing the UK banking system*' published in October which describes how it plans to use stress testing as part of its prudential tool-kit. This has implications for banks' improvement plans, in addition to the Bank's objectives for developing its own stress testing capabilities.

Most banks are planning to make further investments to strengthen their stress testing processes. Each bank will receive bilateral feedback on the areas where the Bank believes it needs to improve. However, the Bank does not usually provide its view of what good looks like. This means that banks have to play their hands blind as they try to judge the optimal level of investment needed to meet Bank expectations and to keep up with their peers.

In today's cost-constrained world, clarity on the likely business benefits and the implications for improved capital management and (hopefully) a reduced Pillar 2B capital buffer, of a stronger stress testing process and infrastructure is critical for investment decisions and determining an acceptable level of ongoing annual spend.

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Analysis of results

The Bank's publication, *'Stress testing the UK banking system: 2015 results'* provides comprehensive analysis of the results, revealing some interesting insights into the sensitivity of the major UK banks to a range of stress events.

As illustrated in Figure 1 below, the impact of the scenario was well-balanced with a broadly equal impact on impairments, traded risk losses and misconduct costs, which accounted for a CET1 ratio impact (after management actions) of 4.8 percentage points. Interestingly, the increase in risk-weighted assets only accounted for a CET1 ratio impact of 1.2 percentage points.

A leverage ratio hurdle of 3% was applied for the first time this year. As expected, the impact on the leverage ratio is more muted due to its lack of risk sensitivity. However, given the significant impact of the stress on available capital resources and the relatively lower headroom in relation to leverage, many of the UK banks came close to the 3% hurdle rate at the trough of the stress.

Figure 1: Contribution to CET1 ratio change (baseline to stress - %)

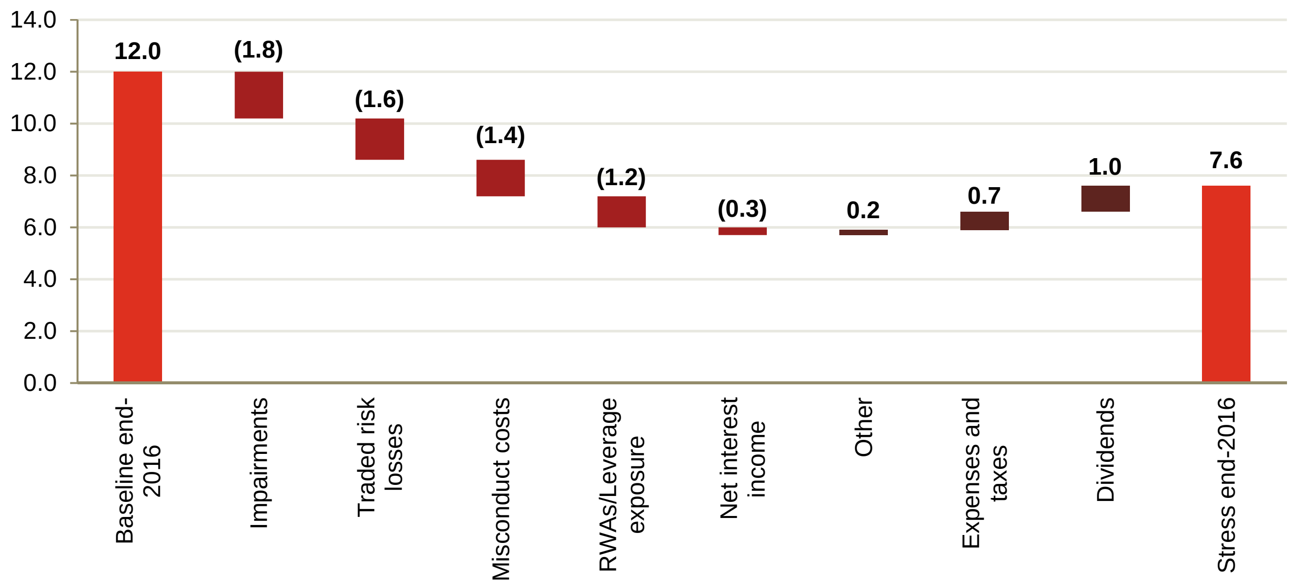

Figure 2 below shows the individual banks' stressed CET1 ratio results, and shows that each bank remained above the hurdle rate throughout the five-year stress period. The banks have different business models and, as one would expect given the stress scenario, those with greater concentrations in Asia, emerging markets and traded market risk were affected the most.

The two banks that came closest to the hurdle rate were subject to additional scrutiny by the Bank. The additional scrutiny included consideration of the minimum Tier 1 ratio and Pillar 2A capital requirements. As both banks had taken or had planned appropriate capital management actions, the Bank was satisfied with their capital positions. We note that, as set out in the Bank's medium-term framework, Pillar 2A will form part of the hurdle rate from 2016.

Figure 2: Stress impact on banks' CET1 ratios

	CET1 ratio (%)		Fall in CET1 ratio	
	Actual 2014	Minimum during stress*	Absolute (pp)	Percent of actual 2014
Standard Chartered	10.5	5.4	5.1	49%
RBS	11.1	6.1	5.0	45%
HSBC	10.9	7.7	3.2	29%
Barclays	10.2	7.3	2.9	28%
Lloyds	12.8	9.5	3.3	26%
Santander	11.9	9.8	2.1	18%
Nationwide	19.8	19.1	0.7	4%

Quality of the stress testing process

The CST is a significant undertaking which consumes large teams of people over a long period of time and incurs significant costs. In our experience, participant banks have all invested considerably over the past year in improving their stress testing capabilities, but the bar continues to rise.

The Bank acknowledges the improvements made by many of the banks in the following areas:

- **Oversight and governance:** the Bank notes earlier and more frequent engagement by senior executives and boards, performing active challenge of results and assumptions. Our observation is that most banks recognise that there is still work to do on the design and documentation of underlying processes and controls.
- **Data quality and accuracy:** the quality of submitted results was an area of notable improvement. From our experience, this is an area where most firms have invested in processes and tools. However, for most banks, upstream data management remains a challenge requiring strategic infrastructure changes.
- **Application of expert judgement:** expert judgement will always feature in the stress testing process; particularly in areas not captured by models. The Bank describes mixed levels of improvement in this area. In our experience firms recognise this issue and are improving the effectiveness and transparency of these processes.
- **Model management standards:** the coverage, scope and adequacy of model management standards were found to have improved in some banks. This area was prioritised in some banks, leading to improvements in processes for documenting the model universe, setting model validation scope and the standards, understanding model limitations and the rationale for overlays.

The Bank has focused on the following as areas for future improvement across the industry:

- **Data quality in net interest income, traded risk and structured finance submissions:** these areas have a material impact on stress test results and continue to pose challenges for banks when compiling their structured submissions.
- **Methodologies used to support assumptions and modelling decisions (and documentation thereof):** the Bank notes variability in quality across different aspects of the submissions, emphasising the importance of having a consistently applied, rigourous framework for setting assumptions (including the expansion of international macro-economic variables) for models and other projections approaches, supported by documented rationale and challenge.
- **Net interest income projections processes and governance:** this was highlighted in last year's stress testing results as needing improvement. The Bank recognises that this is a complex process and while many banks are currently investing in this area, this is a multi-year journey.

Bilateral discussions with each bank will continue on areas for focus ahead of the 2016 stress test. In addition, the Bank may consider publishing further guidance to clarify its qualitative expectations.

Future direction

Our take on the PRA's medium-term framework

The Bank published its medium-term framework for stress testing earlier this year. This provided welcome relief for banks that do not currently participate in the CST by confirming that they will remain out of scope until at least 2019. However, we expect that the stress tests of the major banks will raise Bank expectations for the ICAAP stress tests of other banks with potential implications for their Pillar 2B assessments.

For the seven existing participants – the household names which together account for 80% of lending to the UK economy – the CST will become more demanding, both financially and operationally.

The hurdle rate, or 'pass mark', for future CSTs will incorporate Pillar 2A capital requirements and systemic risk buffers. The former is likely to result in an increase in the hurdle rate of 1-1.5 percentage points. The systemic risk buffer, which will apply to all of the seven banks over time, will lead to a further 1-3 percentage point addition to the hurdle rate. This implies a potential CET1 ratio hurdle of 6.5% – 9.0% by 2019.

If the economy continues to improve, banks' capital positions are likely to follow suit. However, the severity of future scenarios should also be expected to increase as the Bank seeks to embed counter-cyclicality in its stress testing framework. Taken together, these developments will ensure that future stress tests continue to represent a meaningful financial challenge to the participant banks, even as they continue to enhance their resilience.

The new requirement to run an incremental 'exploratory' scenario every other year will challenge banks' operational bandwidth which is already severely limited in many areas. And it will not be a case of simply running an additional scenario through the same process as that used for the annual cyclical scenario as the 'exploratory' scenario is intended to challenge some of the key historical relationships inherent in the calibration of models used and judgements applied.

Strategic enhancements

Most firms are thinking beyond exceeding today's hurdles and expectations and are putting in place or executing change programmes aimed at using stress testing to their advantage – strategically and competitively. However many banks have told us that they would value greater clarity from the PRA on its qualitative expectations.

Infrastructure design and implementation

Most banks have continued to invest in model development and data aggregation tools over the past year. However we think that there is still considerable work to do over the coming years. In our view, supporting the priorities identified by the Bank, we believe the key areas for banks to address are:

- Creation or enhancement of statistical, approaches to project and stress assets and liabilities and related income;
- Pushing data and projection quality issues upstream, taking advantage of risk data aggregation and reporting enhancements linked to BCBS 239 principles; and
- Migrating from bespoke models and ad hoc processes to enterprise planning management solutions that increase automation, reduce cycle times, enhance controls and strengthen reporting capabilities.

Integration and alignment

The CST is one of several exercises requiring strong capability in scenario analysis, risk and finance data management, projections and modelling and aggregation and reporting of high volumes of data. Two years in and the CST is still a hugely resource-intensive and lengthy exercise. It must be completed alongside recovery planning (which requires a stress testing analysis), ICAAP, ILAAP, other business line or enterprise-wide stress testing as well as business-as-usual planning.

There is a strong case for aligning these processes, both operationally (data, systems, processes, timing and scheduling) and functionally (across functions and teams). This will not only rationalise the effort required, but will also create a more joined-up set of outputs with which to analyse the business and communicate with external stakeholders.

Business and risk usage

There is sub-optimal value in investing all this time, resource and money only to achieve regulatory compliance. Significant business benefit can and should be gained from stronger stress testing capabilities.

Leading banks already actively use stress testing in setting and monitoring risk appetite. Most already bring a stronger stress testing discipline to business planning and some are considering how to join up the two processes even more closely. The list of other uses of stress testing in the business includes informing new product development, pricing, remuneration and strategic decision-making.

Conclusions: What to do next

This was a very different stress test compared to 2014 in terms of the design of the scenario and the impact on the participating banks. Despite the variation in scenarios and expectations for the nature of future scenarios, strong themes have emerged over the past two years about areas where stress testing needs to improve.

The feedback in the Bank's publication of the results, and the more tailored ongoing bilateral conversations, will inform the development of the next phase of banks' enhancement plans. Clear priority should be given to themes such as model management, underlying data quality, and control and documentation standards.

Banks should not, however, lose sight of the need for a defined strategic solution that incorporate short to medium-term enhancements along with integration of stress testing into the business, alignment with other processes, improved risk management and generation of business insight and value.

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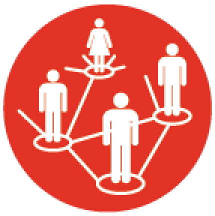

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