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Dear Mr Madouros

A framework for stress testing the UK banking system: a discussion paper

Thank you for the opportunity to provide feedback on the proposals by the Bank of England ("BOE") to establish a framework for stress testing the UK banking system as set out in the above Discussion Paper ("DP").

This submission is made by PricewaterhouseCoopers LLP (PwC), the UK member firm of the PwC Network. In the UK, PwC has established a unit of dedicated specialists focusing on the impact of regulatory developments on the financial services sector. PwC audits and advises industry participants on prudential issues. This letter is not intended to represent the views of our clients, but rather to identify and to comment on certain aspects of the DP which we believe to have particular significance.

We believe that annual, concurrent stress testing of the banking system could play an important role in identifying and mitigating risks to financial stability, thereby reducing the likelihood of financial crises having an adverse impact on the wider economy. However, in order to achieve its financial stability objectives, the BOE will also have to capture the impact of adverse shocks beyond the banking system, including central counterparties and other systemically important non-bank institutions.

The experience of our US colleagues who have worked with banks subject to the Comprehensive Capital Analysis and Review ("CCAR") exercise suggests the BOE's proposed approach could lead to considerable investment, and tangible improvement, in UK banks' stress testing capabilities. This should support the credibility and effectiveness of the exercise and provide insights to individual banks on key vulnerabilities.

Our responses to the six questions set out in Section 12 of the DP are provided overleaf. Consistency is a recurring theme. In particular, we believe there are many operational benefits to aligning stress tests internationally (between regulatory authorities) and domestically (with other key processes).

There is potential for material inconsistency arising from bank-specific application of common stress scenarios and banks' design and application of bespoke scenarios, especially given the conflict of interest noted in the DP. The BOE could consider issuing guidelines to minimise inconsistencies between the BOE and banks' application of various scenarios. Regulatory standards or guidelines could also help to support the consistency of banks' own modelling approaches which might otherwise be the subject of considerable variation (justifiable or otherwise).

We hope that our response is helpful to you and we would be pleased to discuss our comments further at your request. If you would like to do so, please contact Anne Simpson on 0207 804 2093 or Keith Ackerman on 0207 213 2770.

1. What are respondents' views on the proposed coverage of the concurrent stress tests? Should medium-sized banks be included in the proposed framework?

The BOE should aim to adopt as consistent an approach as possible with other international stress testing requirements, including the forthcoming European Banking Authority ("EBA") stress tests. This is particularly important given the prevalence of local subsidiaries of foreign global systemically important financial institutions and the international reach of several UK-headquartered banks.

An initial focus on the major UK banks broadly mirrors the large bank holding company focus of the US CCAR exercise. An extension to capture medium-sized banks would result in similar coverage to that of the Dodd Frank Act ("DFA") stress tests (total assets > $10bn).

Proportionality for medium-sized banks will be important. Adopting a proportionate approach for medium-sized banks would be consistent with the less onerous requirements under the DFA stress tests for banks with total assets below $50bn. Stress testing capabilities among this peer group are likely to be more limited than for the larger banks, especially for banks that rely on the standardised approach to credit risk. Simplicity of scenario design and greater reliance on BOE modelling capability for these banks could be considered.

2. What are respondents' views on the merits of a stress-testing framework for other financial institutions, in particular central counterparties?

An exclusive focus on banks, individually and collectively, may be too narrow in the context of monitoring risks to financial stability. Ideally the concurrent stress testing approach should be applied to key components of the financial network including banks, central counterparties and other systemically important non-bank institutions.

The DP notes that some attempt will be made to model the impact of amplification mechanisms (e.g. funding and liquidity) and the BOE could seek to develop this over time into a comprehensive network modelling capability that captures effectively the high correlation in tail events. Absent this, the proposed approach may not sufficiently capture systemic risks.

The BOE could also consider employing a counterparty default scenario, similar to that used in the latest CCAR stress tests for banks with substantial trading or custodial operations. However, this may create difficulties in terms of disclosure, particularly for the institution assumed to have defaulted.

3. What are respondents' views on the proposed approach to scenario design, especially on the extent to which the severity of shocks should vary through the cycle?

There is some conceptual appeal to varying the severity of shocks through the cycle. This could build on the existing framework for estimating probability of default on both a through-the-cycle and point-in-time basis. However, it may be difficult for the BOE to judge the position of the economy within a cycle and to discriminate between cyclical and structural factors. For example, would the current economic and financial condition be considered a period of recovery towards pre-crisis conditions or a long-term adjustment to a ‘new normal’ of weaker growth, increased volatility and persistent inflation shocks from rising energy and commodity prices?

Once the infrastructure is in place to conduct annual concurrent stress tests, the BOE could consider introducing additional scenarios including some which may be considered less plausible but particularly insightful. For example, it is unlikely that all of the events of 2008 would have been considered plausible *ex ante*.

4. What are respondents’ views on the Bank’s proposal to use a suite of models to assess the impact of scenarios on banks’ capital ratios? How do respondents trade off the benefits of reduced reliance on a single model against the potential costs of the need to synthesise different model outputs?

The BOE could issue standards or guidelines to banks covering model governance (e.g. validation and review) and methodologies in order to maximise the reliability and consistency of the suite of models used. Any such efforts to support the quality of banks’ models should reduce the drawbacks associated with the use of multiple models. However, the use of multiple models inevitably results in the need to apply judgement to model outputs.

Applying judgement to the outputs of a suite of models (including bank-specific models) may lead to a more comprehensive assessment of risk but it will inevitably result in some inconsistencies, specifically when attempting to measure and compare the severity of banks’ bespoke scenarios. The BOE will need to consider carefully how to manage this trade-off, including in the context of consistency of disclosures. The incorporation of this judgement into the overall assessment should also be appropriately disclosed.

5. What are respondents’ views on the necessary degree of granularity of stress-test disclosures to help strengthen the credibility of the stress-testing framework and facilitate accountability of the FPC and the PRA Board?

Recent empirical evidence suggests that, during periods of uncertainty, markets respond favourably to the release of detailed bank-level granular data. Schuermann et al. compare the favourable market reaction (tightening sovereign and bank credit spreads) to granular disclosures of the Irish banks’ stress test in 2011 to the more muted reaction to limited disclosure of the results of the Committee of European Bank Supervisors (“CEBS”) European bank stress tests in 2010 and 2011.[1]

Consistency between disclosures provided by the BOE and the individual banks (in annual reports) will also be important. This should enhance the credibility of the stress testing exercise and improve its usefulness for investors and other stakeholders.

[1] Schuermann, Til and Wyman, Oliver (2013), Stress Testing Banks, Wharton Financial Institutions Center

6. **From an operational perspective, the Bank is keen to ensure that the annual stress tests are conducted in a manner that reduces any unnecessary 'peak-load' problems for banks in scope. It would therefore welcome respondents' views on the proposed annual stress-testing cycle.**

There are clearly operational benefits for banks, and to some extent regulators, in aligning annual stress tests both internationally (between regulatory authorities) and domestically (with other key processes). However, the increased predictability of a regular stress testing cycle may introduce incentives and opportunities for banks to arbitrage or window-dress some elements of the tests, thereby reducing their effectiveness as a supervisory tool.

Yours Sincerely

PricewaterhouseCoopers LLP