Please note: This letter has been sent to CFOs of firms in scope of written auditor reporting and subsequently prepared for the website. Square brackets show where this letter may differ slightly, along with formatting, from those versions sent directly to firms.

Victoria Saporta
Executive Director, Prudential Policy
Prudential Regulation Authority

29 September 2023

Dear Chief Financial Officer,

Thematic feedback from the 2022/2023 round of written auditor reporting

Each year, we receive a written report from your auditor responding to our questions on issues of supervisory interest. This year, questions related to IFRS 9 expected credit loss accounting (ECL), accounting for climate-related financial risks (climate risks) [and fair value]. This letter sets out the main feedback from our review of auditors' responses with further detail set out in the annexes.

Thematic findings on IFRS 9 expected credit losses

We asked for your auditor's views on progress made in 2022 to adopt the 'high quality practices' for ECL set out in my letters of 2 October 2019[1] and on 11 October 2022.[2]

We were pleased to hear about the efforts made by firms to monitor and measure credit losses in an environment vulnerable to stress. While firms made progress, we saw

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1 October 2019: Written auditor reporting – thematic feedback from the 2018/2019 reporting period: **www.bankofengland.co.uk/prudential-regulation/letter/2019/written-auditor-reporting-thematic-feedback-from-the-2018-2019-reporting-period**.

2 October 2022: Written auditor reporting – thematic feedback from the 2021/2022 reporting period: **www.bankofengland.co.uk/prudential-regulation/letter/2022/october/thematic-feedback-2021-2022-written-auditor-reporting**.

variation in practice and more work is needed to further embed high quality practices. It is against that background that we set out below the main thematic findings:

- Model risk remains elevated. We consider it crucial that firms challenge the completeness of post model adjustments to ensure provision cover reflects actual expectations of credit losses. We encourage further efforts by firms to challenge whether models capture risks associated with affordability, including the impact of higher inflation and interest rates on vulnerable borrowers or sectors.
- We were pleased to see progress to update models to address long-standing limitations that have contributed to model performance being impaired. We encourage firms to actively monitor their plans for model redevelopment and ensure robust governance over key modelling decisions.
- Default experience has been limited in recent years. Given higher inflation and interest rates, we believe it is important to challenge recovery assumptions used in loss given default and compensate for model and data limitations through PMAs. To support effective governance and challenge, we encourage firms to use analytical tools to help identify loans or segments with the highest sensitivity to reasonably possible changes in recovery strategy.
- We encourage all firms to consider additional, more severe but plausible, economic scenarios that encompass shocks affecting those sectors or segments most vulnerable to higher inflation and interest rates.

Thematic findings on climate risks

We asked for your auditor’s views on the progress made in 2022 to develop capabilities to capture the impact of climate risks on balance sheets.

We were pleased to see firms taking action to enhance their governance, data, and risk assessments. It is against that background that we set out below the main thematic findings:

- Determining the right metrics to identify the loan portfolios and segments that could be most impacted by climate risks remains a challenge. We see scope for firms to consider a wider range of climate risk drivers relevant to their portfolios.

- Firms are at various stages of developing tools to quantify the impact of climate risks on ECL. As understanding of climate risk drivers improves, we see scope for these tools to become more quantitative, robust and data driven.
- Not all firms had documented their plans to develop climate accounting capabilities or put in place management information to oversee delivery. We encourage firms to establish clear plans and timeframes for developing climate accounting capabilities.
- Availability and quality of data remain pervasive challenges. While firms increased their use of data from internal and external sources, approaches to climate data appeared fragmented. We see scope to centralise the data needed to factor climate risks into balance sheet valuations and enhance controls over new data sources used for financial reporting.

Next steps

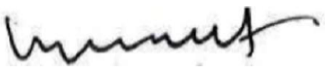
To help firms identify further improvements they can make in the areas above, annexes 1 and 2 set out areas of focus for 2024. For ECL, these highlight areas where we think further progress is important to navigate the current higher inflation and interest rate environment, and to enhance capabilities to better capture risk. For climate risks, these highlight areas where we saw a range of practice and scope for firms to take early action to enable them to make further progress over the next few years. We also highlight areas that we view as priority over the medium term where we envisage progress may take more time.

For the next round of written auditor reporting, we have asked for your auditor’s views on your progress covering model risk, recovery strategies, and quantifying the impact of climate risks on ECL. We encourage you to engage with your auditor by performing your own assessment against the areas of focus, and to make that assessment available to your auditor as part of the year-end audit.

The findings in this letter do not identify any particular firm or auditor. Supervisors will provide firm-specific feedback to firms and their auditors through continuous assessment meetings, regular auditor–supervisor bilateral meetings, and trilateral meetings involving supervisors, your auditor, and your audit committee chair.

We will be publishing this letter, including our findings from the review of the written auditor reporting policy,[3] on the PRA section of the Bank's website. If you have any questions concerning the letter, please get in touch with me by email and copy your usual supervisory contact.

Yours sincerely



Victoria Saporta

Executive Director, Prudential Policy, Prudential Regulation Authority

3 September 2023: **PRA statement on the evaluation of the written auditor reporting policy**.

Annex 1

Thematic findings on IFRS 9 expected credit loss accounting (ECL)

1. In this annex, we set out our thematic findings from our review of written auditor reports received in 2023, as well as discussions with auditors, firms, and other regulators and thematic work by PRA staff.

2. Our previous letters have explained the importance we attach to ECL being implemented well and in ways that achieve as much consistency of outcomes as is practicable. We have also made it clear that we expect firms' ECL methodologies to evolve for several years after initial implementation at the beginning of 2018, and that we expect the resources and budgets to be made available to enable that to happen.[4]

3. My 2019 and 2022 letters set out our views on 'high quality practices' that would contribute to a high quality and more consistent implementation of ECL, and so reduce the risk that firms will recognise inappropriate levels of provisions. We asked for your auditor's views on progress made in 2022 against these practices.

4. This annex is structured as follows for each area:

   - A description of the range of practice observed.
   - 'Areas of focus for 2024' highlights those high quality practices that the PRA views as priority for firms to adopt/further embed in 2024.
   - 'Areas of focus for the medium term' highlights those high quality practices where we envisage that further progress may take more time.

5. For ease of reference the 'areas of focus' are in tables below alongside the relevant high quality practices from my previous letters.

6. Our aim in providing this feedback is to encourage firms to identify improvements that can be made to risk monitoring and measurement, and to the management

4 November 2016: Implementation of IFRS 9 Financial Instruments: **www.bankofengland.co.uk/prudential-regulation/letter/2016/letter-from-sam-woods-implementation-of-ifrs-9-financial-instruments.**; and August 2017: IFRS 9 Financial Instruments: **www.bankofengland.co.uk/prudential-regulation/letter/2017/letter-from-sam-woods-ifrs-9-financial-instruments**.

information used to inform challenge of ECL estimates. The areas of focus and high quality practices have been developed with the size, nature, and complexity of firms in scope of written auditor reporting in mind. However, we think that the findings in this letter will also be helpful for firms applying IFRS 9 that are not within the scope of written auditor reporting.

7. As Sam Woods explained in his letters published on 25 November 2016, ‘Implementation of IFRS 9 Financial Instruments’, and 7 August 2017, ‘IFRS 9 Financial Instruments’, although it is not our role to set, interpret, or enforce accounting standards, we have an interest in how the standards are implemented, where the application of those accounting standards has an impact on our statutory objectives. We regard the effective implementation of ECL to be important in ensuring the safety and soundness of PRA-authorised firms. We will continue to work with firms to share concerns, facilitate cross-industry solutions, and promote high quality implementation.

Model risk

Areas of focus for 2024

8. Model risk remains elevated. All firms face challenges in understanding model limitations, identifying vulnerable borrowers, and considering the adequacy of post model adjustments (PMAs). We remain focused on the completeness of PMAs to ensure provision cover reflects actual expectations of credit losses.

9. We saw firms challenging whether higher inflation and interest rates had resulted in affordability risks that were not fully captured in retail and corporate models. In most cases, firms determined that PMAs were needed. This included where models lack segmentation and were not calibrated to capture the impact of higher inflation and interest rates on borrowers’ ability to repay. In outlier cases, firms relied on qualitative analysis to support that no PMAs are required.

10. Firms face challenges in identifying vulnerable sectors and borrowers. The depth of reviews varied across firms. For retail, some firms used more granular data to identify borrowers vulnerable to higher inflation and interest rates. These included:

    - Using data for banked customers to analyse trends in monthly spend and to stress future outgoings.

- Monitoring borrowers on fixed-term lending due to expire, including identifying where mortgage payments are a higher proportion of income.
- Reviewing prepayment assumptions used to calculate exposure at default for potential changes in borrower behaviour.

11. For corporate, firms typically performed reviews to identify high risk sectors for closer monitoring. Better practice included more granular analysis of sub-sectors and consideration of additional risks that might be missed by manual reviews, such as potential liquidity risks.
12. We saw some improvements in the analysis used to quantify PMAs for vulnerable borrowers or sectors. Better approaches included:
    - For retail, stressing loan-level probability of default (PDs) for factors like lower disposable income and the contagion effect of increased mortgage costs on unsecured borrowing.
    - For corporate, requiring enhanced name-by-name analysis for loans within higher risk sectors.
13. We see scope for firms to shift away from portfolio level adjustments to more targeted account level PMAs. Some firms appeared to use highly approximate approaches to quantify PMAs for vulnerable customers or sectors. While these approaches resulted in additional cover, we saw limited support and evidence of challenge whether they capture the combined effect of higher inflation and interest rates on affordability or debt serviceability. Approximate approaches included:
    - For retail, applying portfolio-level scalars to stage 1 loans based on the average cover on up-to-date stage 2 accounts.
    - For corporate, applying a one-notch downgrade to internal credit scores for all customers in a specific sector.
14. Addressing limitations in models remains an important area of focus. We understand that model changes will take time and sourcing data for new models remains a pervasive issue. Most firms had strategic model redevelopment plans in place. We saw some progress to build new models to address long-standing limitations that have contributed to model performance being impaired. This led to

the removal of PMAs where the root cause had been dealt with through redevelopment. However, the pace of progress varies across firms, with some firms continuing to use aged models rated as underperforming with known material weaknesses. For some firms we saw limited evidence that strategic plans had been established.

15. Given the above, we identified the following areas of focus for 2024 which are related to capturing the impact of affordability, including the impact of higher inflation and interest rates, on ECL and oversight of model redevelopment.

High quality practices from previous DCFO letters	Areas of focus for 2024
Capabilities and processes to support timely identification and granular analysis of vulnerable sectors and high risk retail segments in stress are regularly reviewed to identify enhancements that can be made. Timely and granular sector-level analysis is regularly used to challenge whether ECL captures the key risks relevant to vulnerable sectors and high risk retail segments, aligned to those risks being monitored by key risk committees.	Challenge whether models capture risks associated with affordability, including the impact of higher inflation and interest rates, and the longer-term refinance risk of fixed-term loans expiring in the years ahead. Enhance the quantification of PMAs to capture risks associated with higher inflation and interest rates by moving away from approximate approaches, such as portfolio level scalars.
Strategic plans to address model limitations and enhance model capabilities are subject to regular oversight by a senior and cross-function committee. This includes effective challenge of the capacity of modelling and validation resource to deliver those plans, and the scope of plans to reduce reliance on PMAs in future.	Strategic redevelopment plans are established and subject to oversight to ensure capabilities are enhanced to better capture risk and reduce reliance on material PMAs.

Areas of focus for the medium term

16. Model risk management remains a key priority. We are pleased with the evidence of progress we have seen in adopting high quality practices. This included:

- Extending the scope of validation to cover a broader set of models and introducing additional data quality checks.
- Greater automation in the generation of model monitoring results, which supported more granular monitoring of products and ECL components.
- Clearer links between model performance and remediation plans, with weaker rated models being prioritised for redevelopment and reviewed to consider need for PMAs.
- Efforts to enhance model segmentation. This included use of sensitivity analysis during model development to establish the appropriate segmentation, as well as ongoing independent validation over segmentation.

17. We continue to see a range of practice across firms and instances of model control deficiencies. We encourage firms to continue to enhance model controls and governance in the medium term in the following areas. These areas are aligned with, and build on, the expectations in SS1/23 on model risk management principles for banks which is effective from May 2024.[5]

High quality practices from previous DCFO letters	Areas of focus for medium term
Regular out-of-sample model testing is used to monitor model performance in accordance with a model risk framework set by an independent function.	As more recent loss experience becomes available, we see scope for firms to perform more frequent and detailed model back-testing across a broader set of models and segments, on both a pre- and post-PMAs basis.

5 Supervisory statement (SS)1/23 – **Model risk management principles for banks**, May 2023.

High quality practices from previous DCFO letters	Areas of focus for medium term
Regular validation of models by an independent function at a frequency based on complexity and materiality but generally not less than annually.	Extend model monitoring and validation to cover all material components of ECL, and to ensure model testing is sufficiently granular to identify model performance issues for specific segments and support more pro-active model risk mitigation.
A log of key model simplifications and limitations is maintained and kept up-to date as part of ongoing model validation. Sensitivity analysis is used to reassess the completeness of PMAs and the risk of bias from ongoing use of model simplifications across a range of economic scenarios.	Enhance both the documentation and testing of key model limitations, including the use of sensitivity analysis as part of ongoing model validation to both reassess the impact of using different modelling assumptions and challenge completeness of PMAs.
Model operating boundaries, under which model performance is expected to be acceptable, are clearly defined and used to help identify model performance issues in a timely manner, in order to challenge the completeness of PMAs.	Enhance and formalise frameworks to monitor the increased risk of using 'out-of-boundary' models calibrated on a sample data range that isn't reflective of the economic scenarios used to calculate ECL.

18. We felt it was too early to conclude on the range of practice in the following areas, given the early stages of model redevelopment. We encourage firms to continue to adopt the following practices.

High quality practices from previous DCFO letters
Granular analysis of sectoral risks and other high risk indicators is used to support the choice of model segmentation and documented as part of model development, and regularly reassessed as part of model validation.
A clear framework is in place for decisions on whether to include or exclude data from periods of stress in model redevelopment, calibration, and validation, supported by regular monitoring of the aggregate impact on model performance of such decisions by risk committees.

Recovery strategies

Areas of focus for 2024

19. Auditor reports noted that recent default experience has been limited. Given higher inflation and interest rates, past recovery outcomes may not necessarily be a good predictor of future recovery rates. It is important to challenge whether the recovery assumptions that drive loss given default (LGD) are realistic.

20. We saw some firms make use of LGD specific PMAs to reflect uncertainty in recovery outcomes. Examples included:

- Adjustments where models did not reflect recent recovery strategies, for example debt sale practices.
- Increasing LGD to reflect longer time to collect in high risk corporate sectors and for mortgage repossession.
- Applying additional LGD haircuts to reflect factors impacting property valuations not captured in the House Price Index (HPI).

21. In general, we saw limitations in firms’ approaches to challenge whether a change in recovery experience has occurred or is likely to occur. We encourage firms to closely monitor the assumptions made around forward looking recovery strategies to ensure foreseeable changes are detected early and fed into ECL calculations.

This is important to ensure use of all reasonable and supportable information that is relevant to LGD.

22. Firms continue to lack analytical tools to monitor the impact of different recovery strategies, whether ECL is modelled or individually assessed. Such tools could help to identify loans or segments with the highest sensitivity to reasonably possible changes in recovery strategies. We think such tools, together with insights on effectiveness of past strategies, would help support effective governance and challenge of recovery assumptions that drive LGD and inform targeted use of PMAs.

23. Some firms made progress in this area. Better practice included:

- Developing a ‘what-if tool’ that can be used to assess the impact on modelled ECL from alternative recovery strategies.
- Analysis to assess the ECL impact of assigning different probabilities to downside recovery scenarios across groups of individually assessed loans.

24. Given the above, we identified the following areas of focus for 2024 related to challenging realism in the recovery strategies that drive LGD.

High quality practices from previous DCFO letters	**Areas of focus for 2024**
Tools are in place to monitor the portfolio-level impact of changing recovery strategy and are used to challenge risk of bias where there is uncertainty over which recovery strategies will apply or how effective those strategies will be under different economic scenarios.	Closely monitor the assumptions made around forward-looking recovery strategies to ensure foreseeable changes are detected early and fed into ECL calculations. Enhance internal reporting to provide greater insights into loans or segments with the highest sensitivity to changes in recovery strategy, and which is used to help inform targeted use of PMAs.

Areas of focus for the medium term

25. We are pleased that progress has been made by some firms in adopting high quality practices for factoring recovery strategies into LGD.

26. For individual assessments, better practice included:

    - Incorporating the likelihood of recovery strategy failure as a downside scenario. The supporting evidence used to determine the appropriate strategies and weightings are subject to review and approval.
    - Applying scalars for groups of smaller wholesale stage 3 exposures, to ensure multiple outcomes are considered for all cases, subject to ongoing monitoring and validation.
    - Stressing recovery assumptions to challenge where individual assessments otherwise result in zero ECL.
    - Reassessing whether size thresholds, used to determine when multiple recovery scenarios are considered, are set too high.

27. For modelled LGD, better practice included:

    - Updating LGD models with improved segmentation to better capture different recovery outcomes.
    - Requiring specialist work-out teams to review ECL for corporate loans above a set size threshold that have been downgraded to more active review. Work-out teams are involved in setting ECL, use of PMAs, and identifying model and data limitations for remediation.
    - Incorporation of additional metrics into LGD models to better capture the impact of the economy on recovery rates, for example unemployment or consumer cycle indices.

28. Auditors continue to note limitations around the level of review and challenge of LGD models, in part driven by limited loss experience. We continue to encourage firms to improve the level of review and challenge over LGD models.

High quality practices from previous DCFO letters	Areas of focus for medium term
Effective review and challenge of LGD models is embedded into business-as-usual monitoring. Challenge of LGD metrics includes consideration of the need to remove bias towards historical recovery experience to better reflect future expectations and economic conditions.	As more recent loss experience becomes available, we see scope for firms to formalise periodic validation and monitoring of LGD models. For portfolios where loss experience is insufficient to support meaningful validation and monitoring, we see scope for firms to establish processes for tracking and challenging key LGD metrics to ensure modelled ECL reflects recent trends.

29. Consistent with last year, firms are generally less progressed in adopting the high quality practices relating to recovery strategies used in estimating LGD than in other areas of ECL. We encourage firms to continue to adopt the high quality practices below.

High quality practices from previous DCFO letters
The likelihood and impact of ‘recovery strategy failure’ on LGD is considered, by for example considering the possibility of a disposal scenario, as an additional challenge around whether adequate allowance is made for uncertainty.
Thresholds used to determine when multiple recovery outcomes are used to calculate LGD are regularly reassessed to ensure that they are sensitive to sectoral risks and updated for changes in those high risk sectors that are monitored.
The result of reviews when accounts are downgraded and moved to more active credit risk management are used to identify model and data limitations.
Work-out teams have a formal role in challenge of LGD metrics for vulnerable sectors and high risk retail segments.

Economic scenarios

Areas of focus for 2024

30. It is important that economic scenarios explore vulnerabilities in specific sectors or segments. This is particularly relevant given uncertainty over the impact that higher inflation and interest rates will have on different borrowers and asset classes.

31. We encourage all firms to consider additional, more severe but plausible, scenarios during their reporting process that encompass shocks affecting those sectors or segments most vulnerable to higher inflation and interest rates. For example, consider performing additional sensitivity analysis where core approaches are calibrated on high level economic inputs, such as country level gross domestic product (GDP), with limited indicators that would capture sector specific or regional risks.

32. [Firms continue to consider multiple economic scenarios differently. In 2024, we intend to discuss your firms' plans to make changes to your ECL approach that would result in improved consistency in use of economic scenarios, and how firms can work together and with us to improve access to timely, granular, and comparable peer benchmarking data in times of stress.]

Areas of focus for the medium term

33. We are pleased with the evidence of progress we have seen in adoption of the PRA high quality practices. This included:

    - Enhancing sensitivity capabilities as part of ongoing model redevelopment for faster and more automated estimation of the impact of late scenario adjustments on ECL.
    - Greater focus on use of peer benchmarking in decision making, to identify outlying assumptions and their impact on ECL as part of control frameworks.
    - Reassessing the suitability and relevance of economic indicators used to calculate ECL, as part of ongoing model redevelopment.
    - Use of additional quantitative analysis to support effective challenge of scenarios and probability weights.

34. We will not be asking about economic scenarios as part of the 2023/2024 round of written auditor reporting. However, we continue to see a range of practice across firms. We encourage all firms to make further improvements to embed high quality practice in the following areas over the medium term:

High quality practices from previous DCFO letters	Areas of focus for medium term
Approaches to capture economic uncertainty are regularly reviewed to identify enhancements that can be made to avoid relying too heavily on PMAs in future.	As part of ongoing model redevelopment, investigate the relevance of building interest rates and inflation into models where they are currently omitted, as more data emerge on the link between credit losses and interest rates and inflation.
Sensitivity analysis is used to identify which economic variables or assumptions have the most impact on ECL and to support effective challenge of using reasonably possible, alternative economic inputs. Separate sensitivity analysis is run for different portfolios and jurisdictions.	Build capabilities to perform more comprehensive economic sensitivity analysis more quickly and across more portfolios, and to embed greater use of sensitivity analysis as part of business as usual governance.
The aggregate impact on ECL of differences between base case scenarios and consensus data or market implied forward rates is monitored for indicators of potential bias.	Formalise and further enhance use of benchmarking data as part of control frameworks, including more clearly defining thresholds for follow-up actions.

Significant increase in credit risk (SICR)

Areas of focus for 2024

35. [Firms continue to consider SICR differently. We welcome progress made by firms participating in the consistency work to come up with recommendations to bring about greater consistency of SICR approaches. As part of that work, we encourage

firms to continue to work together, and with us, to identify industry standard principles and metrics that can be used as part of the control framework around the effectiveness of different approaches to SICR.]

36. We are pleased to see firms using PMAs to capture risks that are hard to assess at a loan level, such as affordability, in ECL. However, we see scope to improve the linkage between the application of PMAs and collective SICR assessments to ensure that risk factors that drive the use of PMAs are also considered for staging purposes. Better practice included:
    - A formal horizon scanning process is used to identify risks not yet captured in the loan level PDs.
    - Adjustments are applied at a PD level to ensure they are factored into both ECL and staging.
    - A documented framework sets out the criteria and process for assessing both the ECL and staging implications of adjustments.
37. We identified the following area of focus for 2024 related to capturing the impact of cost of living and affordability pressures on SICR.

High quality practices from previous DCFO letters	Areas of focus for 2024
A separate collective assessment is made to assess the impact of emerging risks and events that may not yet be reflected in loan-level PDs. Results are used to determine the need to move pools of higher risk loans to stage 2 and to reassess the completeness of SICR indicators.	Challenge the robustness of collective assessments, including ensuring that risk factors that drive the use of PMAs are considered for staging purposes.

Areas of focus for the medium term

38. We are pleased with the evidence of progress we have seen in adoption of high quality practices for SICR. This included enhancements to quantitative and/or

qualitative SICR triggers, and to monitoring and validation processes surrounding SICR thresholds.

39. We will not be asking about SICR as part of the 2023/2024 round of written auditor reporting. However, we continue to see a range of practice across firms. We encourage firms to continue to embed high quality practice in the following areas over the medium term:

High quality practices from previous DCFO letters	Areas of focus for medium term
Clear validation criteria and thresholds are set against which the performance of SICR criteria are regularly monitored. There is a clear escalation process for when thresholds are breached, including a process to determine when and how SICR thresholds should be adjusted. To ensure consistency within firms, common validation criteria are used where different SICR criteria are used across different portfolios.	Embed clear monitoring thresholds, and escalation processes when thresholds are breached, based on a sound understanding of the expected level for the metrics being used.

Annex 2

Thematic findings on accounting for climate risks

1. In this annex, we set out our thematic findings on accounting capabilities for climate risks. These findings were developed through review of written auditor reports received in 2023, discussion with auditors and firms, and thematic PRA work.

2. My previous letters have explained the proper identification of risks of material misstatement is important to supervisors, as it impacts the extent of audit work performed that supervisors can make use of in reviewing firms' own risk assessments.

3. The Bank of England's 2023 report on climate-related risks and the regulatory capital frameworks[6] explained that the development of capabilities to support high quality and consistent accounting practices for climate risks will help mitigate the risk of gaps in the capital framework, and that the PRA will play an active role in promoting high quality and consistent accounting for climate change.

4. My 2022 letter set out our views on 'key plan elements' that would contribute to robust planning for the development of capabilities to capture the impact of climate risks on balance sheets over time. We asked for your auditor's views on progress made in 2022 against these key plan elements to help us establish a baseline for future monitoring.

5. This annex is structured as follows for each of four key areas:

    - A description of the 'range of practice observed' where firms had made most progress against the key plan elements.
    - 'Areas of focus for 2024' highlight areas where we saw a range of practice and scope for firms to take early action to enable them to make further progress over the next few years.
    - 'Areas of focus for the medium term' highlight the key plan elements at earlier stages of development and we envisage progress will take more time.

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6 March 2023: **Bank of England report on climate-related risks and the regulatory capital frameworks**.

6. For ease of reference the 'areas of focus' are in tables below alongside the relevant key plan elements from my previous letter.
7. Our aim in providing these findings is to encourage firms to identify improvements that can be made in their financial reporting risk assessments, and capabilities to quantify the impact of climate risks on accounting valuations.
8. The areas of focus have been developed with the size, nature, and complexity of firms in scope of written auditor reporting in mind. However, we think the findings in this annex will be helpful for firms applying IFRS that are not in scope of written auditor reporting. The areas of focus are consistent with, and build upon, existing supervisory expectations.[7]
9. As Sam Woods explained in his letter of 21 October 2022,[8] we have an interest in firms being well prepared for the impact of climate change on their accounting practices, and increased focus on climate risks by external auditors. We consider the timely incorporation of climate risks in accounting valuations to be important in ensuring the safety and soundness of PRA-authorised firms,[9] so we will continue to work with firms to share concerns, facilitate cross-industry solutions, and promote high quality implementation of accounting standards.

Capabilities to quantify the impact of climate risks on expected credit losses (ECL)

10. We did not see firms adjust their IFRS 9 ECL methodologies or calculations. However, we saw progress in two key areas. Firstly, to quantify the firms' exposure

7 Including: PRA supervisory statement 3/19 – **Enhancing banks' and insurers' approaches to managing the financial risks from climate change**, April 2019; July 2020: Managing climate-related financial risks - thematic feedback from the PRA's review of firms' SS3/19 plans and clarifications of expectations: **www.bankofengland.co.uk/prudential-regulation/letter/2020/managing-the-financial-risks-from-climate-change**.; and October 2022: Thematic feedback on the PRA's supervision of climate-related financial risk and the Bank of England's Climate Biennial Exploratory Scenario exercise: **www.bankofengland.co.uk/prudential-regulation/letter/2022/october/managing-climate-related-financial-risks**.

8 Ibid.

9 Although it is not the PRA's role to set, interpret, or enforce accounting standards, where the application of accounting standards has an impact on our statutory objectives, we have an interest in how they are implemented.

to borrowers most at risk. Secondly, to quantify the impact of specific climate-related risk drivers on ECL for those borrowers most at risk. These analyses were used to determine whether PMAs are required to factor climate risks into ECL estimates due to limitations in models and data. Firms generally assessed ECL impacts to be immaterial or not reliably quantifiable.

Range of practice observed – exposure to borrowers most at risk

11. We saw a range of practice to quantify exposures to borrowers most at risk. Determining the right metrics to identify the loan portfolios and segments that could be most impacted by climate risks remains a challenge. Firms made some progress in identifying the climate-related risk drivers that could influence ECL for portfolios most exposed to climate risks.

12. Analysis for retail lending generally focused on use of external data to identify loans against properties at higher risk of flooding and ineligible for flood insurance, and buy-to-let properties with low Energy Performance Certificate (EPC) ratings. We saw auditors consider a wider range of potential risk factors where analysis was not available from firms. For example, auditors considered physical risks such as subsidence, transition risks relating to borrowers located in regions where employment is dependent on sectors exposed to transition risk (eg fossil fuel industry/agriculture), and residual value risk in motor vehicle lending.

13. Firms' analysis for corporate lending generally focused on identifying higher risk sectors more exposed to climate risks. Better practice we saw included:

    - Developing data-led frameworks using data on emissions, external indices, and impairment rates implied by the Climate Biennial Exploratory Scenario (CBES). We see scope to develop these frameworks further. Where used, they generally led to a significant proportion of balance sheet exposure being identified as exposed to heightened climate risk, but did not seem to identify cohorts of more vulnerable borrowers within those sectors.

    - Developing standardised Environmental, Social and Governance (ESG) scores using client level data to consider whether to move individual loans within higher risk sectors onto watchlists, and from stage 1 to stage 2.

14. Some firms used simplistic metrics to identify corporate exposures subject to climate risks focusing on the contractual term of lending. For example, considering exposure to lending maturing beyond three or five years to be higher risk, and those maturing before as lower risk. In general, it was not apparent to us whether or how firms had factored refinancing risk into their impact assessments for higher risk sectors. For example, how they had considered the impact of higher funding costs on debt capacity to support transition plans. Our concern is that reliance on overly simplistic, risk insensitive metrics may mask concentrations of risk that require active management.

15. We see scope for firms to consider a wider range of climate-related risk drivers relevant to their portfolios. This work is important to identify what attributes are required to measure climate risks per portfolio and to inform follow-on work on data quality. We encourage firms to consider the impact of refinancing risk, and the time horizon for refinancing or full recovery of amounts due, in their assessments of corporate borrowers in higher risk sectors.

Areas of focus for 2024

Key plan elements from previous DCFO letter	**Area of focus for 2024**
Identifying the climate-related risk drivers that could influence ECL for loan portfolios that have the highest sensitivity to climate risks.	• Completeness of the climate-related risk drivers used to identify potential ECL impacts and the portfolios most at risk, including consideration of refinancing risk.

Range of practice observed – the impact of climate risks on ECL

16. Firms appear to differ in their ability to quantify the impact of climate-related risk drivers on ECL. We saw improved use of quantitative assessments for some portfolios, with examples of better practice using borrower level data to make impact assessments risk sensitive and more likely to identify concentrations of risk. We saw limited evidence of challenge of why the implied impacts of climate were so small relative to the size of loan books. The range of practice we saw included:

- Firms with less advanced capabilities were only able to assess PD and LGD impacts qualitatively, and not always using recent information.

- We saw application of top-down climate scalars to adjust ECL. These scalars leveraged CBES data to estimate the impact on ECL across different climate scenarios. Limitations were noted with the use of such scalars and the development of more sophisticated and granular in-house models was encouraged.
- We saw some progress in developing new bottom-up analytical tools, including ECL emulators for some key portfolios. These tools were generally able to quantify the impact of aspects of climate risks. However, auditors noted limitations meant the estimates were not reliable.

17. These analyses were generally used to challenge the need for PMAs, rather than to adjust reported ECL. We saw some uncertainty over whether climate risks were captured by existing PMAs. We see scope for firms to improve their understanding of the interaction between climate risks and their existing PMAs to ensure they do not draw false comfort. Where a climate-specific PMA was applied, auditors encouraged the PMA calculation to be better linked to the overall climate risk assessment.
18. As the understanding of climate-related risk drivers improves, we see scope for the analytical tools that support conclusions on the need for climate-related PMAs to become increasingly quantitative, robust and data-driven. In particular, we see scope for firms to make further progress on the development of bottom-up climate assessments to quantify the impact of borrower specific risks on PD, and factor wider environmental factors into LGD.
19. Firms made some progress to embed the impact of climate risks into business as usual credit risk assessments for corporates.
    - More progress was noted on incorporating ESG risk into credit risk assessments for new lending decisions by gathering more data, such as emissions and transition plans, at application stage for larger loans.
    - Less progress was observed in embedding climate risks into ongoing monitoring and to assess the impact on collateral values and work-out strategies.
    - Examples of better practice included requiring relationship managers to comment on how climate risks have been factored into risk assessments, and

setting guidance for relationship managers on how to incorporate emissions and transition plans into those assessments.

20. As business as usual credit risk assessments continue to be enhanced, we encourage firms to consider how these can be subject to robust challenge and used to better understand firms' aggregate exposure to climate risks.

Areas of focus for 2024

Key plan elements from previous DCFO letter	Areas of focus for 2024
Increasing use of quantitative analysis on the impact of climate-related risk drivers on ECL and SICR at a portfolio level, to support challenge of the ECL calculation or inform use of PMAs.	• Completeness of overlays to address the risk that loan losses may exceed those predicted by current models. • Enhancing analytical tools used to ensure conclusions on need for PMAs, to capture the impact of climate risks, are supported by more robust, data-driven quantitative analysis – and less reliant on qualitative risk assessments. • Increased focus on more granular portfolio level assessments which consider the impact on PD, LGD and exposure at default (EAD) and explore sector or product specific vulnerabilities to climate risks. • Further embedding the impact of climate risks into business as usual credit risk assessments for corporate exposures. • Considering how business as usual credit risk assessments can be subject to appropriate levels of challenge and used to better understand firms' aggregate exposure to climate risks.

21. Efforts to adapt the economic variables used to factor climate-related risk drivers into ECL appeared to be at early stages. Better practice saw comparison of economic scenarios used to calculate ECL against external climate scenarios, considering the need to adjust the economic variables used to calculate ECL as a proxy for transition risk impacts, and running climate-centric macroeconomic scenarios through ECL emulators.

22. We saw a range of practice for second line review of climate scenarios and models. Some firms noted that it was too early to develop second line reviews. Some firms noted plans to develop in house modelling capabilities to reduce reliance on third party solutions and to support more robust controls over the assessment of the impact of climate risks. One firm had a dedicated model validation team to review climate risk models, including models used to derive ECL scalars. While these reviews focused on whether the outputs were broadly sensible, they were noted as helpful to identify data gaps to be addressed.

Areas of focus for the medium term

Identifying the requirements for data and models, and implementing the changes necessary, to factor climate-related risk drivers into loan-level ECL estimates.
Identifying how economic scenarios and weightings used for ECL calculations should be adapted to incorporate climate-related risk drivers.
Enhancing review and monitoring by second line risk teams of how models and scenarios used to calculate ECL incorporate climate-related risk drivers

Governance and financial reporting risk assessments

Range of practice observed

23. Some firms had made progress to factor climate risks into governance over financial reporting. Better practice included:

- Allocation of new responsibilities for climate risks within financial reporting functions, and increased focus on financial reporting impacts of climate risks.

- Regular updates to finance committees on how the business is managing climate risks.
- Establishing groups with responsibility for effective implementation of control frameworks over climate risk data and models used in financial reporting.

24. Greater oversight of climate risks by those responsible for financial reporting will be important to deliver a strong controls environment to measure the impact of climate risks on balance sheets more reliably. To ensure that progress to factor climate risks into financial reporting governance keeps pace with wider climate reporting, it will be important to integrate the risks and opportunities identified within sustainability reporting into the judgements and estimates which support financial reporting.
25. [We will continue to engage with the signatories of the UK Finance Disclosure Code[10] to benchmark climate-related disclosures in order to develop good practice, including improved linkage to financial reporting disclosures.]
26. Beyond credit risk, balance sheet risk assessments relied more on qualitative reasoning to identify line items most exposed to climate risks. Better practice we saw included:
    - Climate scenario analysis being more widely used, leveraging new internal models.
    - Setting plans and timelines to expand internal stress tests to consider further bespoke climate scenarios and explore sector or product specific vulnerabilities.
27. We saw limited evidence that robust and executable plans for timely development of climate accounting capabilities were in place and were being monitored by key committees. Some firms had not formally documented their plans or had not put in place management information to oversee delivery. We saw some work rescheduled due to budget constraints. More advanced firms seemed to have more detailed plans and timeframes to enhance their capabilities, with significant work

10 July 2017: UK Finance Code for Financial Reporting Disclosure: **www.ukfinance.org.uk/our-expertise/financial-and-risk-policy/uk-finance-disclosure-code**.

planned for 2023 generally focused on ECL modelling and scenario analysis capabilities.

Areas of focus for 2024

Key plan elements from previous DCFO letter	Areas of focus for 2024
Embedding governance and allocation of responsibilities within the financial reporting function to ensure timely capture of climate risks as part of SS3/19 integration of climate in governance structures.	• Greater oversight of climate risks by those responsible for financial reporting. • Ensuring risks and opportunities identified within sustainability reporting are integrated within the judgements and estimates which support financial reporting.
Increasing use of quantitative analysis in climate risk assessments to support strategic decision making for financial reporting, including use of climate scenario analysis.	• Improving use of quantitative analysis for decision making, including enhancing in-house scenario analysis capabilities to consider further bespoke scenarios, and greater use of customer level data, to explore sector or product specific vulnerabilities.
Developing management information to oversee plans to enhance data and models needed to factor climate risks into balance sheet valuations.	• Agreeing detailed plans and timeframes for developing climate accounting capabilities with key committees, to enable progress to be tracked and reported to ensure plans are executed in a timely way.

Areas of focus for the medium term

28. While we saw some good examples of quantitative analysis being brought to the audit committee, we generally saw limited evidence of progress in the following areas.

Embedding quantitative analysis on the impact of climate risks on balance sheet valuations into regular reporting to the audit committee, including use of sensitivity analysis, to support key decisions.
Developing management information to assess the overall significance and implications of limitations in data and models used to quantify the impact of climate risks on balance sheet valuations, including reporting of findings from second- and third-line testing

Controls to support use of a higher volume of forward-looking climate-related data in financial reporting

Range of practice observed

29. While the availability and quality of climate data remain a pervasive challenge, we saw firms increase their use of data from internal and external sources.

30. Some firms' approaches to climate data appear fragmented. This may make it harder to apply effective controls over data quality and to identify data relevant to financial reporting. Better practice included the development of centralised data repositories subject to an overarching data quality framework, dedicated central teams focusing on climate data and data analytics, and the use of gap analysis to drive use of new data sources.

31. Control environments around the quality of new data sources remain immature. Auditors raised numerous observations on the robustness of the control environment over data used to support climate risk assessments. Common themes included scope to further develop and automate controls to reduce reliance on manual processes, and to enhance the controls in place around new data sources such as data from third party vendors.

32. Firms made some progress in establishing ownership of data controls and establishing control frameworks for the data used to assess and measure climate

risks, including establishing new committees responsible for control frameworks over climate data. Better practice included:

- Regular reviews of gaps in control frameworks to inform remediation programs.
- Targets to ensure key climate data is reviewed in its entirety and to reduce reliance on unverified data.
- Use of multiple data sources to challenge or validate data, including data from third parties.

Areas of focus for 2024

Key plan elements from previous DCFO letter	**Areas of focus for 2024**
Developing a centralised process to source, manage, and enhance the data needed to factor climate risks into balance sheet valuations.	• Developing centralised data pools, subject to overarching data quality frameworks, which cover the data needed to factor climate risks into balance sheet valuations.
Improving controls over the data needed to factor climate risks into balance sheet valuations, including increasing the level of automation.	• Developing the control environment to improve the quality of new climate data sources – including data from third parties, unverified customer data and use of proxies – which are used to make judgements and estimates for financial reporting.

Areas of focus for the medium term

33. We generally saw limited evidence of progress in the following area.

Monitoring of quality of the data needed to factor climate risks into balance sheet valuations, including setting risk appetite for data quality and targets for reducing use of proxies and unverified data over time

Capabilities to quantify the impact of climate risks on balance sheets and financial performance

Range of practice observed

34. We saw a range of practice for factoring the impact of climate change into forecasts that support valuation of assets that rely on future profitability. Some firms are not explicitly including public commitments or had not demonstrated a clear link between strategies for climate targets and commitments and impact on costs or growth plans. Better practice included firms adjusting profit forecasts to reflect the estimate impact on costs (to meet climate ambitions and the impact on operating expenses of actions to move to net zero) and revenue (where exposure to certain sectors is reducing, and exposure to products with climate linked features increasing). Only one firm included anticipated ECL charges for some higher risk sectors, which we expect will increase over time.

35. Most firms are now offering loan products with ESG linked features. Better practice included monitoring whether adjustments to interest rates from ESG-linked terms exceeded set limits, and considering whether the potential variability of cashflows from climate-linked terms are in aggregate material.

Areas of focus for 2024

Key plan elements from previous DCFO letter	Areas of focus for 2024
Increasing use of quantitative analysis of the potential impact of climate risks on balance sheet valuations to support robust valuation processes.	• Reflecting the impact of public commitments relating to climate risks in medium-term plans and forecasts supporting assets that rely on future profitability.
Ensuring climate risks is sufficiently considered in accounting policies for new and existing products, including tracking exposure to instruments with climate-linked terms.	• Where ESG-linked lending has increased, monitoring whether the impact of climate-linked terms on interest cashflows could be material both for individual loans, and in aggregate.

Areas of focus for the medium term

36. We generally saw limited evidence of progress in the following area.

Enhancing monitoring and controls over processes used to factor climate risks into balance sheet valuations.

[Annex 3

Thematic findings on fair value

1. In this annex, we set out our thematic findings on mark-to-model fair values. The annex sets out a brief description of the supervisory concerns behind the question we asked auditors, progress we have observed since our last review in 2019, and our views on practices that would improve firms' financial reporting. The latter are in boxes for ease of reference.

Supervisory concern

2. Fair values may be misstated due to valuation models not capturing the relevant risk factors for portfolios with a history of differences between mark-to-model valuations and transaction prices or bid prices.

Findings

3. We were pleased to see improvements in the design of controls and governance to identify valuation issues, including linkages between the various model risk controls. These included:
   - Enhancing risk systems to allow for more granular analysis of exit losses and increased automation to enable better sharing of information and findings across risk functions.
   - Enhancing controls to check if third-party data vendors substantiate their data using executed transactions, and strategic programs to increase use of market data sources based on executed transactions.
4. We continue to see opportunities for firms to improve the review of differences between mark-to-model fair values and transaction prices. This would allow for systematic valuation issues – such as adjustments on capital intensive trades (KVA) – to be more easily identified.
5. We saw a range of practice in terms of the quality of evidence used to support conclusions on KVA. Weaker practice relied on others not booking KVA to support conclusions, with limited evidence of discussion or challenge at governance forums. Better practice we saw included:

- KVA being discussed as a regular item at governance forums, to consider capital as a potential driver for losses observed on exit of capital-intensive trades.
- Quantitative analysis of the impact of KVA across portfolios being discussed by key committees. This analysis involved consideration of whether there was a relationship between losses observed on exit of capital-intensive trades and a spread over counterparty credit risk.

6. We found evidence that some firms were not systematically conducting back-testing as part of their valuations process. We believe firms improving the use of back-testing will help to promote more systematic use of historical prices in the calibration of models and model adjustments, which in turn would reduce reliance on consensus prices that have not been substantiated by executed transactions.

7. Improve the approach to gathering evidence to support conclusions on the need to raise adjustments for systemic valuation issues, including on capital intensive trades (KVA).
8. Improve the use of back-testing, involving data that have been substantiated by executed transactions, to check model performance as part of the valuation process.

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