

AN UPDATE ON THE PROJECT AND INITIAL THINKING ON THE AUDITING CHALLENGES ARISING FROM THE ADOPTION OF EXPECTED CREDIT LOSS MODELS

This publication has been prepared by the ISA 540 Task Force (the Task Force) of the International Auditing and Assurance Standards Board (IAASB). It does not constitute an authoritative pronouncement, nor does it amend or override the International Standards on Auditing (ISAs). Further, this publication is not intended to be exhaustive. Reading this publication is not a substitute for reading the ISAs, the text of which alone is authoritative.

Part A of this publication describes the project to revise ISA 540 and is intended to be of relevance to auditors, management, those charged with governance, users (including investors), regulators and audit oversight bodies, particularly for those involved in entities where the financial statements have one or more accounting estimates that require significant judgment. Part B of this publication is intended to help auditors understand the audit challenges that may arise from entities' adoption and future application of Expected Credit Loss (ECL) models, and to help auditors develop appropriate audit procedures in that respect.

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Executive Summary

- In December 2015 the IAASB approved the commencement of a standard-setting project to revise ISA 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures*. This project is intended to address auditing challenges that have arisen as a result of new accounting standards, as well as issues identified by regulators, auditors and others.
- Part A of this publication summarizes the objectives of the project, the history of ISA 540, and the development process and timetable for the project.
- The Task Force has begun initial exploration of the issues identified to date, with an initial emphasis on those anticipated to arise in the adoption of ECL models.¹ Exploration and targeted engagement with key stakeholders has already begun and will be continued in 2016. This outreach will identify and further explore broader issues relative to accounting estimates that arise in practice under existing accounting standards or are anticipated to arise from adoption of new and forthcoming accounting standards.
- Part B of this publication explains the Task Force's initial thinking on the special audit considerations arising from the adoption of ECL models, including related challenges due to estimation uncertainty. ECL models are being introduced in many financial reporting frameworks and will have a significant impact on the accounting for loan losses for some entities, particularly banks and other financial institutions. Accordingly, Part B is of particular relevance to auditors of financial institutions, but may also be relevant for auditors of other entities. Key messages in Part B include:
 - The adoption and implementation of the ECL model will likely bring significant challenges for auditors, management, those charged with governance, financial institution supervisors, and users. It is important that auditors are aware of the challenges and potential audit consequences.
 - Often, ECL models are complex, have high estimation uncertainty, result in material ECL provisions, and require judgment regarding certain key data and assumptions. Accordingly, ECL models are likely to give rise to one or more significant risks of material misstatement. The Task Force has identified a number of audit challenges that arise from the adoption of ECL models and these will be addressed in the project to revise ISA 540.
 - Part B summarizes the audit challenges identified as well as the Task Force's initial thinking on how these challenges may be addressed by the auditor under the current ISAs. Part B also discusses how the project to revise ISA 540 will seek to further address these challenges.

¹ The term "models" has been used in this paper to describe an array of tools that may be used in practice, ranging from spreadsheets to complex software programs.

Introduction

1. Financial reporting frameworks are evolving and the IAASB recognizes that the ISAs and other IAASB pronouncements need to evolve as well. Increasingly, accounting estimates may be more prevalent, involve more complex processes and management judgment, exhibit greater estimation uncertainty, and are more critical to a user's understanding of the financial position and financial performance of an entity.



2. Part A of this publication provides an overview of the IAASB's recently approved project² to revise ISA 540, which deals with auditing accounting estimates. It is intended to inform the IAASB's stakeholders of the forthcoming activities in this area and the implications of those activities.

3. Part B of this publication discusses the Task Force's initial thinking on the special audit considerations in addressing loan loss provisions under an ECL model.³ The release of new accounting standards, such as IFRS 9,⁴ and the forthcoming finalization of FASB's Current Expected Credit Loss

(CECL), will change how entities applying those accounting standards will account for loan loss provisions. In some industries, particularly those that have extensive activities involving financial instruments, such as banks and similar financial institutions, the upcoming adoption of ECL⁵ will be a significant challenge for preparers (including those charged with governance), auditors, regulators, and users.

Part A: Overview of the IAASB's Project to Revise ISA 540

Background to Extant ISA 540

4. ISA 540 was approved by the IAASB in December 2007 with an effective date for audits of financial statements for periods beginning on or after December 15, 2009. The standard was redrafted in accordance with the IAASB's Clarity conventions and also incorporated ISA 545⁶ in order to have a single, comprehensive ISA dealing with accounting estimates, including fair value accounting estimates.

² www.ifac.org/publications-resources/project-proposal-revision-isa-540

³ It should be noted that the scope of ECL accounting will be wider than loans in accordance with the applicable financial reporting framework.

⁴ International Financial Reporting Standard (IFRS) 9, *Financial Instruments*

⁵ Hereafter, the term ECL is used to encapsulate both the IASB's ECL model and FASB's CECL model.

⁶ ISA 545, *Auditing Fair Value Measurements and Disclosures*. ISA 545 was withdrawn for periods beginning on or after December 15, 2009.

New Accounting Standards

Accounting standards issued by the International Accounting Standards Board (IASB) and under development by the Financial Accounting Standards Board (FASB) will require the use of an ECL model. These new standards will significantly affect certain industries, such as banks and similar financial institutions that have substantial credit risk exposures through holdings of loans and similar financial assets. The key concepts of the ECL model under IFRS 9, are summarized by the IASB in its July 2014 publication [Project Summary IFRS 9 *Financial Instruments*](#). FASB maintain a [website](#) with the latest information on their project and expect to issue a final standard in Q2, 2016.

The requirements around ECL are likely to raise particular issues for auditors in the lead up to its implementation in 2018 (for entities using IFRS) as auditors will likely be actively engaged, ahead of the implementation, in understanding the entity's plan for the adoption and implementation of its ECL models. The increasing use of fair value and expected loss measurements, including in illiquid markets and when observable inputs are not available, may also give rise to particular audit challenges.

These standards, and other new and anticipated accounting standards covering revenue recognition⁷ and leases,⁸ will be relevant for the revision of ISA 540. The new revenue recognition standards apply a principles-based approach to revenue recognition and, in some cases, may result in a greater use of accounting estimates. For example, an entity has to use judgement in identifying its performance obligations and determining the timing of satisfaction of those performance obligations. An entity is also required to make estimates of variable consideration in measuring the transaction price to be recognised as revenue. The IASB's new standard on leases requires management to estimate the lease liability based on the present value of lease payments, including lease payments associated with renewals and cancellations that are reasonably certain to occur. This may result in the need for estimation in some cases. While not yet issued, new accounting standards addressing insurance contracts are likely to be released in the near future. These standards may raise new issues in the audit of accounting estimates, and auditors, preparers, regulators and others may be in need of additional requirements or guidance to respond to those issues.

The IAASB will continue to monitor developments regarding these standards and will address any issues raised as the project to revise ISA 540 progresses.

The Project to Revise ISA 540

5. Extant ISA 540 was developed to address all accounting estimates, including and with a particular focus on fair value accounting estimates. Since the finalization of extant ISA 540 there have been many changes in accounting standards, with more changes expected because of new accounting standards. Developments in the business environment and these changes in accounting standards have given rise to new audit challenges. For example, the use of third party data sources as inputs to models or valuations has increased and new challenges have emerged with regard to loan loss provisioning (see box titled "New Accounting Standards"). Further, the use of disclosures by investors, and the importance of disclosures related to accounting estimates, continues to increase. In addition to addressing challenges related to auditing the measurement of accounting estimates,

⁷ See, for example, IFRS 15, *Revenue from Contracts with Customers*

⁸ IFRS 16, *Leases*, FASB Topic 842, [Leases](#)

consideration will be given within the ISA 540 project as to whether changes are needed in the standard to address auditing challenges arising from changes in the requirements relating to recognition and disclosure of accounting estimates.

6. The ISA Implementation Monitoring project,⁹ the IAASB's consultations in developing its Strategy¹⁰ and Work Plan,¹¹ specific requests from banking¹² and insurance regulators and outreach activities by the Task Force,¹³ have identified issues with respect to auditing accounting estimates. These issues arise for all types of entities, particularly due to the new accounting standards referred to above, but are particularly relevant in relation to audits of financial institutions. Also, inspection finding reports¹⁴ from audit regulatory bodies consistently highlighted issues with respect to the audit of accounting estimates, including in relation to audits of financial institutions. This has resulted in calls for clearer or additional requirements or guidance to enable auditors to appropriately deal with increasingly complex accounting estimates and related disclosures, including the need to better guide auditors in obtaining sufficient appropriate audit evidence about accounting estimates on which to base the auditor's opinion on the financial statements as a whole. The Task Force's focus in early 2016 will be on outreach regarding accounting estimate issues that may arise in audits of entities other than financial institutions.
7. Discussions and outreach conducted to date have shown a need for enhancement and clarification of specific aspects of the ISA and this may result in proposals for more fundamental changes to the ISA. It is, therefore, in the public interest that the IAASB contributes to enhancing the quality of audit procedures performed on accounting estimates through appropriate revisions to ISA 540.

The IAASB will consider what revisions will be necessary to ISA 540 to promote audit quality in the varied and complex scenarios that arise today, and that are likely to continue to evolve in the future

8. Specifically, the IAASB will consider what revisions will be necessary to ISA 540 to promote audit quality in the varied and complex scenarios that arise today, and that are likely to continue to evolve in the future. In particular, the IAASB will consider how specific requirements in ISA 540 could be further enhanced or clarified to drive auditors to perform appropriate procedures relating to specific types of accounting estimates, taking into consideration the processes and controls in place

⁹ The issues raised by respondents to the ISA Implementation Monitoring project can be summarized in four themes: (i) applying ISA 540 to complex accounting estimates, such as loan loss provisioning, the valuation of certain financial instruments, and goodwill impairments, (ii) risk assessment procedures, (iii) work effort on management assumptions and (iv) the relationship between estimates and significant risks. For details, see: <https://www.ifac.org/publications-resources/clarified-isas-findings-post-implementation-review>

¹⁰ <http://www.ifac.org/publications-resources/iaasb-strategy-2015-2019>

¹¹ <http://www.ifac.org/publications-resources/iaasb-work-plan-2015-2016>

¹² http://www.iaasb.org/system/files/meetings/files/20150316-IAASB-Agenda_Item_5-B-BCBS%20Letter.pdf

¹³ The IAASB's Work Plan includes a project to address special audit considerations relevant to financial institutions. A Task Force was formed in 2015 to commence the activities contemplated for that project. This Task Force has since been reformulated as the ISA 540 Task Force, given the IAASB's agreement that a broader focus on ISA 540 as an initial priority would be more appropriate.

¹⁴ www.ifiar.org/IFAR/media/Documents/General/IFAR%20Global%20Survey%20Media%20Coverage/IFAR-2014-Survey-of-Inspection-Findings.pdf

at the entity in developing the accounting estimates, and reinforcing the application of professional judgment and professional skepticism.¹⁵ Another focus of the IAASB's work will be the auditor's approach to disclosures regarding accounting estimates, particularly when there is high estimation uncertainty.

9. The IAASB will also consider what guidance is needed for auditors to understand the various contexts in which ISA 540 can be applied – ranging from the simplest accounting estimates (for example, depreciation of tangible assets), to those that arise in environments where complex models or input are used (for example, financial instruments at level 3 of the fair value hierarchy). Further, auditors will benefit from guidance that addresses challenges that may be encountered in practice, in particular in relation to:
 - Accounting estimates with high estimation uncertainty;
 - Accounting estimates developed using models that involve complex methodologies or multiple inputs with complex inter-relationships, or that use data from outside the traditional accounting system (such as historical data from internal business processes or subjective predictive inputs from external sources);
 - Accounting estimates that need the involvement of management's or auditor's experts; and
 - How the auditor can approach disclosures relating to specific accounting estimates.

The IAASB will closely follow the US Public Company Accounting Oversight Board (PCAOB's) projects on auditing estimates and fair value measurements¹⁶ and the use of the work of specialists,¹⁷ and consider if there are opportunities for the IAASB to benefit from the PCAOB's work on this project.

10. As ISA 540 progresses, the IAASB will consider whether specific guidance, perhaps in the form of an International Auditing Practice Note, should be developed for audits of financial institutions.
11. The IAASB's Project Proposal is available on the IAASB's website. The Project Proposal notes that the IAASB's current plan is to issue an exposure draft of a revised ISA 540 in 2016 and a final pronouncement in 2017 or shortly thereafter.
12. By way of background, the Task Force was initially formed by the IAASB in early 2015 and includes members from diverse backgrounds representing key stakeholder groups. Originally formed to investigate special audit considerations relative to financial institutions, it now also has primary responsibility for making recommendations to the IAASB regarding the revision of ISA 540. The Task Force's outreach, and discussions within the Task Force itself, have informed the IAASB's discussions on ISA 540 and the development of this section. The IAASB has discussed these issues

¹⁵ The IAASB has a project looking at professional skepticism more broadly. For details, see www.iaasb.org/projects/professional-skepticism.

¹⁶ On August 19, 2015 the PCAOB issued for public comment a staff consultation paper that seeks input on certain issues related to auditing accounting estimates and fair value measurements.

¹⁷ On May 28, 2015 the PCAOB issued for public comment a staff consultation paper that seeks input on potential changes to the PCAOB's standards for the auditor's use of the work of specialists, specifically the objectivity and oversight of specialists and the use of their work in audits. The IAASB response to the PCAOB's staff consultation paper is available at: <http://www.ifac.org/news-events/2015-08/iaasb-comments-pcaob-staff-consultation-paper-auditor-s-use-work-specialists>.

at its September and December 2015 meetings. As noted above, in due course the IAASB will consider whether specific guidance is needed on the audit of financial institutions.

Areas to be Explored in the ISA 540 Project

The Task Force will further focus attention and outreach on identifying issues with auditing accounting estimates, including the new accounting standards mentioned above. In addition to the consideration of matters related to ECL as set out in Part B, other areas for exploration include:

- *The use of third-party data sources, including for pricing and market participants' assumptions as may be required for fair value measurements;*
- *Unobservable inputs to models, particularly for fair value measurements;*
- *Responses to estimation uncertainty*
- *Appropriate application of professional skepticism; and*
- *The auditor's work in relation to disclosures.*

Considering the broader implications of the project will be a focus of discussion at the March 2016 IAASB meeting.

Development Process and Project Timetable

13. The project will be conducted in accordance with the *Due Process and Working Procedures*¹⁸ The preliminary timetable is provided below, although specific project milestones and outputs may change as the project develops.

Timing	Action
March 2016 – September 2016	Obtain input from the IAASB Consultative Advisory Group ¹⁹ (CAG) on the issues and proposals, including an exposure draft of revised ISA 540 (including possible revisions or conforming amendments to other ISAs)
	IAASB deliberation of issues, proposals and draft versions of the exposure draft. This includes consideration of whether additional pronouncements, such as International Auditing Practice Notes are necessary to address specific issues
	Consideration of any relevant feedback from the IAASB’s December 2015 Invitation to Comment, <i>Enhancing Audit Quality in the Public Interest—A Focus on Professional Skepticism, Quality Control, and Group Audits</i> (the ITC), and related IAASB outreach activities
	Dialogue with stakeholders on key issues and proposals ²⁰
December 2016	IAASB approval of exposure draft, with a 120-day comment period, including possible conforming amendments to other ISAs
2017	Obtain IAASB CAG input on consideration of the responses to the exposure draft and proposed changes to ISA 540 (Revised) as a result of those responses
	IAASB deliberation of responses to the exposure draft and resulting proposed changes to ISA 540 (Revised)
Q4 2017	IAASB approval of ISA 540 (Revised)

Way Forward and Consultation Opportunities

14. The IAASB is interested in stakeholders’ views and perspectives on its activities. One recent initiative is the Invitation to Comment, [Enhancing Audit Quality in the Public Interest: A Focus on Professional Skepticism, Quality Control and Group Audits](#) (the ITC) which stakeholders may find a useful avenue to providing input to the IAASB on issues broader than ISA 540. The ITC highlights the IAASB’s discussions on the topics of professional skepticism, quality control and group audits – and flags potential standard-setting activities the IAASB could take to enhance audit quality. The IAASB also has released a companion publication, an [Overview of the ITC](#), designed to solicit feedback from

¹⁸ www.ifac.org/system/files/uploads/PIAC-Due_Process_and_Working_Procedures.pdf

¹⁹ Comprised of over 30 Member Organizations representing global regulators, business and international organizations, and users and preparers of financial statements, the CAG, in its independent capacity, provides valuable public interest input into the IAASB’s strategy, agenda and priorities, and technical issues.

²⁰ This timeline also acknowledges the possibility that the IASB may issue its new Insurance Contracts standard by the end of 2016, which would require further consideration by the Task Force and IAASB.

investors, audit committees, and preparers. It summarizes the key areas the IAASB is exploring and the direction it may take and may be useful in facilitating outreach by stakeholders to develop their responses.

15. In addition to these activities, IAASB leadership and the Task Force will continue a program of targeted outreach regarding ISA 540 to key regulatory bodies, firms, and other stakeholders throughout the course of the project.
16. As the ISA 540 project progresses, the Task Force may issue further updates to inform stakeholders on the project's progress.

Part B: Initial Thinking on the Special Audit Considerations Relating to Expected Credit Loss Provisions, Including Related Estimation Uncertainty

Key Messages for Auditors:

- The adoption and implementation of the ECL model will in many cases bring significant challenges for auditors, management, those charged with governance, supervisors, and users.
- Auditors need to be aware of the changes related to ECL and the implications for audits, particularly for audits of financial institutions.
- Although IFRS 9 is effective for annual periods beginning on or after 1 January 2018, the time to act is now – in order for management, those charged with governance, and auditors to understand the nature of changes needed to effectively implement an ECL model and for auditors to adequately prepare for the challenges that may arise in an audit as a result of its use.
- For audits of entities where the impact of these changes is likely to be significant, robust, active, and ongoing communication with management, those charged with governance, as well as with regulators as appropriate, throughout 2016 and 2017 is likely to be needed. This is because entities will need to develop or change systems and models and obtain the necessary data and expertise in this period, and auditors will need to engage with management and those charged with governance and monitor this process as appropriate.
- Due to the likely complexity, estimation uncertainty, materiality of the ECL provision, and the need for complex or difficult judgments regarding certain key data and assumptions, the use of ECL models is likely to give rise to one or more significant risks of material misstatement.
- Disclosures related to ECL, including transitional disclosures, are likely to warrant substantial auditor attention given the likelihood that there is high estimation uncertainty.
- ISA 540 and other ISAs (e.g., ISA 315, ISA 330, ISA 500, and ISA 620) are relevant to the auditing of ECL. While the principles-based nature of the requirements provides an appropriate framework for auditing ECL models, the IAASB's project to revise ISA 540 will assist auditors in responding to the challenges posed by ECL models.
- The Task Force has already identified a number of audit challenges that arise from the adoption of ECL models and plans to address them in the project to revise ISA 540. A brief summary of how these challenges may be addressed is included below.

Background to the Development and Requirements of ECL Models

17. As a result of the financial crisis, concerns were raised about whether the use of an incurred loss model for loan loss provisioning (particularly in the banking industry) had contributed to the crisis as the incurred loss approach did not take into account losses that could be expected in a loan portfolio.²¹ The incurred loss model required an event to take place or a circumstance to become evident before a loan impairment could be accounted for, meaning that the loan loss provision likely lagged economic reality.

²¹ Entities other than banks may have a loan portfolio.

18. In response, some accounting standard-setters, including the IASB and FASB, are adopting an ECL model for loan loss provisioning. An ECL model estimates losses that are expected over the life of a loan. For example, the IASB model initially requires a portion of lifetime expected credit losses (a 12-month measure) to be recognized and subsequently, for loans that have experienced a significant increase in credit risk since initial recognition, lifetime expected credit losses are required to be recognized. The FASB model also requires the estimation of losses by requiring lifetime expected credit losses to be measured at all times. In comparison with an incurred loss model, an expected loss model will likely result in earlier loss provisions, and more judgment from management will be needed given the need to estimate future losses.
19. Many financial instruments will be subject to ECL. However, under some financial reporting frameworks, there are a number of practical expedients (such as the use of a provision matrix) which may serve to simplify the accounting requirements for entities holding relatively simple portfolios of financial instruments (for example trade receivables, contract assets, lease receivables and low credit risk assets). Therefore, the most significant impact is likely to be for banks and other financial institutions who may hold more complex portfolios of financial instruments.
20. The Task Force believes that, subject to applicable independence requirements, auditors will need to be actively monitoring, at an early stage, the entity's adoption and implementation of its ECL models. This is because of (a) the significance of, and the development time needed for, the ECL models and (b) the fact that the models are likely to have a significant impact on the auditor's risk assessment and audit approach for financial statements of entities with many financial instruments subject to ECL. Further, many entities will be required to make disclosures about the likely impact of ECL models prior to their adoption.²² Of particular relevance is that entities are likely to be identifying and sourcing data from outside the traditional accounting systems and building and testing the necessary models in 2016–2017 in anticipation of the implementation of the ECL requirements in 2018 (for entities applying IFRS).
21. This section describes the auditing challenges identified by the Task Force relating to ECL models. These audit challenges were identified as a result of the Task Force's outreach to regulators, auditors, preparers (including those charged with governance), and users. It also includes the Task Force's views on how these audit challenges may be addressed under the current ISAs.
22. This section also highlights how the IAASB will explore these issues in its revision of ISA 540. As the project progresses, there may be opportunities to update the discussion of these issues and how the IAASB plans to respond to them, and to consider other issues that emerge as the project progresses. The papers prepared for each IAASB meeting will be available on the IAASB's [website](#).

The Task Force believes that, subject to applicable independence requirements, auditors will need to be actively monitoring, at an early stage, the entity's adoption and implementation of its ECL models.

Relevant IAASB Standards

23. This section includes references to IAASB pronouncements, many of which are relevant when an entity adopts an ECL model. The main ISA addressing the issues is ISA 540, which deals with the

²² See box below titled "Other Sources of Information."

audit of accounting estimates, including fair value measurements, and related disclosures. ISA 540 builds on the requirements of other ISAs including ISA 240,²³ ISA 315,²⁴ ISA 330,²⁵ ISA 500,²⁶ and ISA 620.²⁷ Further, International Auditing Practice Note (IAPN) 1000²⁸ provides background information about financial instruments and a discussion of audit considerations relating to financial instruments. While IAPN 1000 does not address loan loss provisioning, some elements of the IAPN are nevertheless helpful when considering the audit issues raised by ECL in some environments. This section is focused on ECL issues, and does not address other aspects of IFRS 9, the forthcoming FASB standard or other accounting standards.

Part B-1: Challenges with Data and Assumptions

Issue

Data and assumptions from outside the traditional accounting systems

24. Use of an ECL model may require an entity to bring together data and assumptions from systems that may be developed by different functions of the entity, including systems that may not be part of traditional accounting systems, such as risk management or credit management systems. Data from outside of the entity may also be needed, which cover matters such as economic forecasts and loss statistics from credit bureaus or government agencies. For example, certain entities may have a simple loan portfolio and use simpler processes and procedures – such as using data from a third-party credit rating agency to assist in determining whether a significant increase in credit risk has taken place. For other entities, including larger financial institutions, the control environment is likely to be more complex and involve different departments of the entity.
25. These systems, and the data obtained from outside the entity, may be the responsibility of departments that have not been historically subject to audit procedures (as the information from these departments was not directly used for financial reporting) and, therefore, may not have the necessary controls in place, or there may be a lack of documentation regarding such controls. As the ECL model may draw on data and assumptions, including forward looking and historical data, from these systems, it will be a challenge for auditors to determine how to address such systems and data in the audit.
26. Depending on the loan portfolio and the ECL model, some data sources and assumptions may have a greater effect on the output of the model than others. For example, an ECL model for a portfolio of residential mortgages may be particularly sensitive to changes in prepayment rates or to unemployment rates in the geographical region concerned.

²³ ISA 240, *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*

²⁴ ISA 315 (Revised), *Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment*

²⁵ ISA 330, *The Auditor's Responses to Assessed Risks*

²⁶ ISA 500, *Audit Evidence*

²⁷ ISA 620, *Using the Work of an Auditor's Expert*

²⁸ IAPN 1000, *Special Considerations in Auditing Financial Instruments*

Forward-looking data and assumptions

27. Entities and, as a consequence, auditors may find the use of forward-looking data and assumptions to be a particular challenge when implementing ECL models due to the significance of those data and assumptions to the measurement of the ECL, and the degree to which forward-looking data and assumptions is obtained from outside the entity. Unlike previous incurred loss models, the IFRS 9 ECL model requires an entity to estimate future expected losses and requires the use forward-looking data and assumptions that are not directly related to the entity such as forward-looking macro-economic information related to external events. The increased required use of forward-looking data and assumptions under certain accounting standards may raise considerations regarding:
- How many and which scenarios should be taken into account and how auditors should be challenging the appropriateness of different scenarios;
 - The probability and related weight for each scenario, including how this is determined;
 - Where to obtain the information;
 - How forward-looking data and assumptions can be aggregated and linked to credit quality;
 - How to match the forward-looking data and assumptions with the maturity of the financial instruments subject to ECL; and
 - How to factor in inputs from various sources.

Extracts from Related IAASB Pronouncements and Task Force Discussions

28. Paragraph 8(c) of ISA 540 requires the auditor to obtain an understanding of how management makes the accounting estimates, and an understanding of the data on which they are based. Paragraph 8(c)(ii) of ISA 540 requires the auditor to obtain an understanding of the relevant controls around the accounting estimate. IAPN 1000 notes that controls are needed to ensure that data is completely and accurately picked up from external sources and from the entity's records and is not tampered with before or during the entity's use of such data.
29. The Task Force's discussion of this issue noted that, for most financial institutions, the complexity of, and interactions between, the systems that will feed into the ECL models, the need for controls over the data, and the high volume of financial instruments subject to ECL may lead to specific challenges to the audit that need to be addressed in the planning phase. These challenges may include:
- (a) Identifying and understanding key data sources and assumptions: There may be a large number of discrete data sources and assumptions relevant to credit quality, some of which may be correlated with each other. By obtaining an understanding of the data and assumptions on which the estimate is based, the auditor may be able to target the data that is most important to the ECL model's output and to concentrate audit procedures on those data sources.
 - (b) Controls and governance over data: Obtaining an understanding of the controls over, and governance of, data is important at an early phase of the audit. See the section headed "Governance and Controls over Models and Data" below for more information about controls in a highly complex environment.

- (c) Consideration of alternative data sources and assumptions: The Task Force notes that it may be helpful for the auditor to inquire of management about possible alternative data sources and assumptions, and why the particular data source(s) or assumption(s) were chosen. The Task Force also notes that a factor for consideration is whether the data source contains an inherent bias.
 - (d) Determining the level of work effort: The Task Force's discussions noted professional judgment is key to determining the nature and extent of audit procedures to apply to data sources and assumptions in response to the assessed risk of material misstatement. The Task Force also notes that judgment may be needed to determine what information can be used as audit evidence when considering forward-looking data and assumptions, including whether there is evidence that the forward-looking data is linked to actual economic conditions.
 - (e) Data analytics: The Task Force notes that use of new data analytics tools may be valuable in dealing with large data sources that feed into the ECL process.
 - (f) System interactions: Data may move between systems within the entity, there may be more opportunities for intentional or unintentional manipulation or changes to the data. The Task Force notes that information technology risk is also relevant when considering how data is generated and moves through the organization.
 - (g) Data from outside of the entity: Data obtained from outside of the entity may bring particular challenges to the audit. Some forward looking data for the ECL model may be obtained from sources such as central banks or regulatory authorities, while other data may come from private sources. For some third-party data sources, it may be difficult to determine how the data was prepared and whether there were appropriate controls and governance over that data. The Task Force notes that judgment will be needed to determine the nature and extent of audit procedures, if any, needed on data obtained from outside the entity.
 - (h) Addressing emerging and "one-off" events: Some events may cause a particular challenge, such as major changes in financial markets due to currency devaluations, sovereign debt crises, changes in the real estate markets, and political events. The Task Force notes that entities may find obtaining reasonable and supportable data difficult in such circumstances.
30. The Task Force also noted that the following considerations may aid the auditor in understanding management's use of data, including forward looking data:
- (a) Whether the entity has written criteria for considering the impact of forward-looking and macroeconomic data: Such criteria, and the basis for its development, formally documented and overseen by the appropriate levels of management and those charged with governance, may help the auditor understand management's rationale for selecting one data source over another, as well as for changing data sources.
 - (b) Process for developing the appropriate scenarios used in the measurement of the ECL: When developing scenarios, management and those charged with governance will make decisions about what scenarios are likely to take place in the future. For example, an overvalued housing market may be subject to a correction at some point in the future or it may be likely that a high unemployment rate improves. In some cases, the entity may use scenarios defined by the vendor of a service or model, while in other cases the entity may generate its own scenarios.

The auditor's procedures may include consideration of the process management used to select the scenarios, subject to the requirements of the applicable financial reporting framework.

- (c) Use of market indicators of credit quality: Market indicators of credit quality, including traded instruments such as credit default swaps, may provide evidence of changes in credit quality for some larger borrowers. Documented processes of how market indicators of credit quality will be incorporated into the entity's ECL models may aid the auditor in understanding management's incorporation of such data into the model.
- (d) Consistent use of similar data and assumptions: Within the entity, there are processes and reporting obligations that are concerned with forecasting similar economic phenomena, e.g. internal forecasting, regulatory reporting, and impairment calculations for other assets. The Task Force's discussions focused on the interactions between these processes and reporting obligations, and noted that auditors may consider whether these processes and reports use data and assumptions consistently. For example, if the entity's internal forecasting indicates that the Gross Domestic Product in a certain jurisdiction is likely to increase by 2% over the next year, the ECL model may use the same assumption for its base economic scenario, or management may be able to explain why a different assumption was used. The Task Force also noted that benchmarking across the industry may be useful in some circumstances to identify outliers (see also paragraph 64).
- (e) Comparing data and assumptions with external sources, including supervisors of financial institutions: The Task Force noted that, if the auditor has access to a central economic forecasting unit (as may be publicly available from a central bank or government treasury), the auditor may be able to benchmark the entity's data and assumptions with external sources. In the context of financial institutions, the Task Force noted that meetings with the financial institution's supervisor may provide an opportunity, subject to law, regulation and relevant ethical requirements, for the auditor and the supervisor to share information about the reasonableness of management's data, including forward looking data, and assumptions.
- (f) Transition to ECL: As noted above, the transition to ECL is likely to involve audit procedures being performed on systems that are currently outside the traditional accounting systems. The Task Force notes that discussion with management, those charged with governance, and supervisors (when applicable) early in, and throughout, the implementation process may assist the auditor in planning their audit procedures and prompting these parties to take action early.



In this regard, the requirements and application material in ISA 260 (Revised)²⁹ and ISA 265³⁰ may be relevant. The Task Force also notes that the Enhanced Disclosure Task Force (EDTF) has recommended that financial institutions make transitional disclosures.³¹

Areas to Be Explored in the ISA 540 Project

The ISA 540 project will look at including additional requirements or application material to more directly address issues around data, including forward looking data, and assumptions given their importance in the modelling of accounting estimates including, for example, certain fair value accounting estimates and ECL. Topics to be discussed include:

- *Whether there are additional or more granular considerations that should be taken into account in the planning phase;*
- *Whether the applicable financial reporting framework has guidance on obtaining data or making assumptions;*
- *The importance of focusing the auditor's effort of key data sources and assumptions;*
- *How and when to address alternative data sources and assumptions;*
- *The impact of IT systems in assessing IT risks and planning audit procedures performed on data obtained for accounting estimates; and*
- *The implications of, and work effort on, data obtained from outside the entity.*

Consideration will also be given as to the nature and extent of the work effort on models, data and assumptions obtained from third parties envisaged to meet the intent of the requirement in paragraph 13 of ISA 540. The Task Force will also engage with the IAASB's Data Analytics Working Group regarding the use of data analytics in audits of accounting estimates.

Part B-2: Identification of Significant Risks of Material Misstatements Related to an ECL Model

Issue

31. The ECL model calculation requires management to make judgments about inputs to the model, assumptions, segmentation of the portfolio into pools, individual exposures, and, under some financial reporting frameworks, may include whether significant increase in credit risk has occurred since initial recognition. Accordingly, the ECL provision is likely to have high estimation uncertainty in all but the simplest loan portfolios and may, therefore, give rise to one or more significant risks of material misstatement (hereafter referred to as "significant risks"). ECL provisions may also be complex, and have a high degree of subjectivity, both of which are indicators of the existence of one or more significant risks.³²

²⁹ ISA 260 (Revised), *Communication with Those Charged With Governance*

³⁰ ISA 265, *Communicating Deficiencies in Internal Control to Those Charged with Governance and Management*

³¹ See box below titled "Other Sources of Information."

³² ISA 315 (Revised), paragraph 27

Extracts from Related IAASB Pronouncements and Task Force Discussions

32. In identifying and assessing the risks of material misstatement, as required by ISA 315 (Revised), the auditor is required to evaluate the degree of estimation uncertainty associated with an accounting estimate.³³ Based on this, the auditor is then required to determine whether, in the auditor's judgment, any of those accounting estimates that have been identified as having high estimation uncertainty give rise to significant risks.³⁴
33. From the Task Force's discussions, it was noted that professional judgment is key to identifying whether there are one or more significant risks related to ECL³⁵ and that it is important that the audit effort is focused on the risks that give rise to the greatest risk of material misstatement. To do this, the Task Force noted that auditors will likely need to obtain an understanding of the detail of the ECL model to be able to perform the risk assessment, including the determination of the existence of one or more significant risks, at an appropriately granular level.

The following circumstances were seen by the Task Force as possible indications of the existence of one or more significant risks:

- High estimation uncertainty related to the ECL provision;¹
- A large portfolio of financial instruments subject to ECL relative to the size of the entity, or a varied portfolio with different risk profiles;
- The existence of complex financial instruments subject to ECL; or
- The outcome of the ECL model has a significant effect on regulatory ratios or profitability, or may be subject to management bias.³⁷

The Task Force's discussion also covered factors specific to the portfolio that may indicate that ECL does not give rise to one or more significant risks, such as a low value of financial instruments subject to ECL relative to the size of the entity or a small number of loans to customers with high credit quality.

³³ ISA 540, paragraph 10

³⁴ ISA 540, paragraph 11

³⁵ A significant risk may exist in relation to an element of an accounting estimate, as well as the accounting estimate as a whole.

Areas to Be Explored in the ISA 540 Project

The Task Force notes that ISA 540 already draws a link between accounting estimates with high estimation uncertainty and the existence of one or more significant risks. The Task Force will investigate whether and how to draw a stronger link between selected accounting estimates, including those with high estimation uncertainty, and the existence of one or more significant risks.

The Task Force will explore whether the requirements and guidance are sufficient to facilitate identification and assessment of significant risks at an appropriately granular level and whether more guidance could be helpful. The Task Force will also investigate how and when communications should be undertaken with management, those charged with governance, and (in some circumstances) supervisors about the auditor's risk assessment in relation to accounting estimates. The Task Force will also consider whether there should be a rebuttable presumption about the existence of one or more significant risks when estimation uncertainty is high for a given accounting estimate (see also Part B-6).

Closely related to the issue of identification and assessment of risk of material misstatement for accounting estimates is the appropriate response to related risks that have not been assessed as being at an acceptably low level, whether significant or not. The Task Force will explore whether ISA 540 can more clearly articulate an appropriate work effort for the risks of each accounting estimate, which may be higher or lower than the work effort currently required. For example, ISA 540 currently requires the auditor to obtain an understanding of relevant controls over the accounting estimate, even when the estimate is simple and is determined using a commonly accepted approach (such as may be the case with some depreciation calculations). By contrast, the Task Force will also look at the work effort on risks that, while they may have a higher level of risk, are not significant risks.

The Task Force will engage with the IAASB's ISA 315 Working Group regarding broader issues around the risk assessment process, including the identification of significant risks.

Part B-3: Audit Procedures on Models: Understanding and Assessing Models and Controls Thereon

Issue

34. The risk assessment and consideration of the appropriateness of management's method of measuring the ECL will be important for the audit of the financial statements of entities with a material portfolio of financial instruments subject to ECL. For many entities, particularly financial institutions, these accounting estimates occur in a complex data environment, are the result of extensive systems containing many processes and controls, and may involve bespoke models.

Other Sources of Information

Some regulators have issued guidance to assist auditors in dealing with ECL issues for banks and, more broadly, model risk management. In December 2015, the Basel Committee issued [Guidance on Credit Risk and Accounting for Expected Credit Losses](#) which provides banks with supervisory guidance on how the ECL accounting model should interact with a bank's overall credit risk practices and regulatory framework. This guidance may be of use to auditors when considering management's adoption and implementation of ECL in banks. Another Basel Committee document that may be of use is [External Audit of Banks](#), which was issued in March 2014

In 2011, the Federal Reserve and Office of the Comptroller of the Currency issued Supervisory and Regulation Letter 11-7, [Supervisory Guidance on Model Risk Management](#), which describes key aspects of an effective model risk management framework, including robust model development, implementation, and use; effective validation; and sound governance, policies, and controls.

The EDTF issued in November 2015 a report, [Impact of Expected Credit Loss Approaches on Bank Risk Disclosures](#), which highlighted the impact of ECL on bank risk disclosures. The EDTF noted that significant changes to systems and processes may be required to develop and enhance governance over the recognition and measurement of credit losses and particularly forward-looking information. In this report, the EDTF made 28 recommendations regarding disclosures that may be useful to help the market understand the upcoming changes as a result of ECL approaches (whether under IFRS or US Generally Accepted Accounting Principles) and to promote consistency and comparability. Examples of transitional disclosures include disclosures that describe and explain:

- The general concepts within an ECL approach;
- The current impairment approach compared with the approach under the ECL model;
- The implementation strategy including timeline, key milestones, key responsibilities and accountabilities;
- How the key concepts of the ECL will be implemented and the credit risk modelling techniques that will be used;
- The governance, processes and controls expected to operate and how they will relate to the current credit risk and other governance, processes and controls; and
- How ECL requirements are expected to have an impact on capital planning.

35. While some entities may choose to use a third-party model for their ECL models with appropriate enhancements for the entity, many entities, particularly larger financial institutions, will develop their own models. These models may be subject to significant management judgment and are complex, and the auditor may need access to specific skills in order to perform the audit (see section B-5 below). An overall ECL model for a large bank may contain models for each significant portfolio and jurisdiction, each with their own assumptions about future economic conditions in the respective portfolio and jurisdiction and their own data sources. Models can be used both to measure the ECL and to develop assumptions as inputs to another model.

Extracts from Related IAASB Pronouncements and Task Force Discussions

Extract from ISA 540

8. When performing risk assessment procedures and related activities to obtain an understanding of the entity and its environment, including the entity’s internal control, as required by ISA 315 (Revised), the auditor shall obtain an understanding of the following in order to provide a basis for the identification and assessment of the risks of material misstatement for accounting estimates: (Ref: Para. A12)

.....

(c) How management makes the accounting estimates, and an understanding of the data on which they are based, including: (Ref: Para. A22–A23)

(i) The method, including where applicable the model, used in making the accounting estimate; (Ref: Para. A24–A26)

(ii) Relevant controls; (Ref: Para. A27–A28)

.....

36. The Task Force discussed different challenges auditors may face in obtaining an understanding of the model used in making an ECL measurement. The following sections summarize the Task Force’s discussions on:

- The Auditor’s Approach to the Entity’s Model development and validation; and
- Responding to the assessed risks of material misstatement in models.

The Auditor’s Approach to the Entity’s Model development and validation

37. ISA 540 requires the auditor to obtain an understanding of the model, if any, used in making an accounting estimate³⁶. To aid auditors in understanding complex models, paragraph 49 of IAPN 1000 explains matters that an entity may address when establishing or validating a model, whether management’s own model or a third party model. While this guidance is written in the context of fair value accounting estimates, many of the matters are equally relevant to financial instruments subject to ECL. The Task Force’s discussions of the application of paragraph 49 of IAPN 1000 to financial instruments subject to ECL focused on the following matters that may vary depending on the circumstances:

- The model is validated prior to usage, with periodic reviews to ensure it is still suitable for its intended use. The entity’s validation process may include evaluation of:
 - The methodology’s theoretical soundness and mathematical integrity, including the appropriateness of parameters and sensitivities.
 - The consistency and completeness of the model’s inputs with market practices, and whether the appropriate inputs are available for use in the model.
 - Back testing of the model using existing historical data.
- There are appropriate change control policies, procedures and security controls over the model

³⁶ ISA 540, paragraph 8(c)(i)

as minor changes to the model can produce significant changes in the outcome of the model.

- Whether the model has controls to mitigate the risk of historical bias in the data, such as when the historical data does not include events that would have an impact on the ECL, even if the probability of the event is remote.
 - The model is periodically calibrated, reviewed and tested for validity by a separate and objective function, possibly including back testing.
 - The model is adequately documented, including the model's intended applications and limitations and its key parameters, required data, results of any validation analysis performed and any adjustments made to the output of the model.
 - When management has used a third-party model, whether the design of the model and the assumptions used are reasonable in light of the facts and circumstances of the entity;
38. The Task Force notes that performance of risk assessment procedures and related activities early in the audit, including at the model development and validation stage, will aid auditors in focusing on those areas of the models of ECL at a portfolio or jurisdiction level that have the most significant impact on the model's output, and which drive the identification of the risks of material misstatement. The early performance of risk assessment procedures and related activities also enables professional skepticism to be applied at this early stage, as well as throughout the audit. The Task Force also notes that engagement with management and those charged with governance early in the process may assist in addressing some of the audit challenges that arise during the development process of the models. Guidance issued by regulators may be useful to the auditor in understanding the entity's environment and may assist in performing these risk assessments.

Responding to the assessed risks of material misstatement

Extract from ISA 540

13. In responding to the assessed risks of material misstatement, as required by ISA 330, the auditor shall undertake one or more of the following, taking account of the nature of the accounting estimate: (Ref: Para. A59–A61)
- (a) Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate. (Ref: Para. A62–A67)
 - (b) Test how management made the accounting estimate and the data on which it is based. In doing so, the auditor shall evaluate whether: (Ref: Para. A68–A70)
 - (i) The method of measurement used is appropriate in the circumstances; and (Ref: Para. A71–A76)
 - (ii) The assumptions used by management are reasonable in light of the measurement objectives of the applicable financial reporting framework. (Ref: Para. A77–A83)
 - (c) Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures. (Ref: Para. A84–A86)
 - (d) Develop a point estimate or a range to evaluate management's point estimate. For this

purpose: (Ref: Para. A87–A91)

- (i) If the auditor uses assumptions or methods that differ from management's, the auditor shall obtain an understanding of management's assumptions or methods sufficient to establish that the auditor's point estimate or range takes into account relevant variables and to evaluate any significant differences from management's point estimate. (Ref: Para. A92)
- (ii) If the auditor concludes that it is appropriate to use a range, the auditor shall narrow the range, based on audit evidence available, until all outcomes within the range are considered reasonable. (Ref: Para. A93–A95)

39. Paragraph 13 of ISA 540 requires the auditor to apply one or more procedures from a list of four procedures. However, given that the nature of the models used to measure the ECL include many inputs, assumptions, and parameters, and will be complex for all but the simplest loan portfolios, the Task Force's discussions focused on the challenges of obtaining sufficient appropriate audit evidence about the ECL model if certain procedures listed in paragraph 13 of ISA 540 were the only procedures performed.
40. For example, under some financial reporting frameworks, given that information on subsequent events regarding credit products is unlikely to be consistently available on a timely basis, events occurring up to the date of the auditor's report may not provide sufficient appropriate audit evidence regarding the accounting estimate. The Task Force noted, however, that it may be helpful in considering whether management's system for estimating credit losses is functioning as designed.
41. Further, the Task Force noted that auditors may have difficulties in developing a point estimate or range of the overall complex ECL calculation. This is because the requirements for systems and data feeds may be difficult or impractical for the auditor to replicate. However, the Task Force noted that the auditor may be able to use management's model to test alternative data or assumptions, or develop their own model over part of the ECL calculation. The Task Force also notes that reperforming or recalculating parts of management's model may also provide audit evidence.
42. As a way of approaching management's model with independence of mind and demonstrating professional skepticism, another approach discussed by the Task Force is for the auditor to use their knowledge of the market to develop their own assumptions (or engage an expert to do so) prior to evaluating management's assumptions. This may not be possible or practicable for all assumptions, but may be helpful for certain assumptions such as discount rates and inflation rates.

Areas to be Explored in the ISA 540 Project

The project to revise ISA 540 will consider whether paragraph 13 of ISA 540 should contain more options, to respond to the risk of material misstatement. The Task Force notes that a combination of the procedures listed in paragraph 13 is likely to be necessary for some complex accounting estimates involving significant risks, and will investigate whether and how to include this in the ISA. There may also be an opportunity to incorporate material from IAPN 1000 regarding audit procedures on models and relevant considerations for planning, communicating with those charged with governance, and applying professional judgment and professional skepticism (for example, by challenging management's model). The Task Force will also investigate whether data analytics has a role to play in auditing models, in co-operation with the IAASB's Data Analytics Working Group.

Part B-4: Governance and Controls over Models and Data

Issue

43. The extent of an entity's use of financial instruments and the degree of complexity of the instruments, are important determinants of the necessary level of sophistication of the entity's internal control environment. For example, certain entities may have a simple loan portfolio and use simpler processes and procedures such as data from a third-party credit rating agency as a check on management's assessment of whether significant increase in credit risk has taken place. For other entities, including large financial institutions, the control environment is likely to be more complex and may involve different departments of the entity.
44. For ECL models, there is expected to be governance and controls over both the model itself and the data that feeds into the model.

Extracts from Related IAASB Pronouncements and Task Force Discussions

45. ISA 315 deals with the auditor's responsibility to identify and assess the risks of material misstatement in the financial statements, through understanding the entity and its environment, including the entity's internal control. Also of relevance to this issue is IAPN 1000, which contains a discussion of audit considerations relating to financial instruments, including internal control considerations. While IAPN 1000 does not apply to loan loss provisioning, aspects of the discussion on controls over fair value models may be applicable, amended as appropriate, for ECL models. Paragraph 21 of IAPN 1000 notes that "Management and, where appropriate, those charged with governance are also responsible for designing and implementing a system of internal control to enable the preparation of financial statements in accordance with the applicable financial reporting framework."
46. The Task Force discussed the factors of an effective internal control over ECL. The discussion focused on the auditor's assessment of the entity's risk management process, including the challenges posed for preparers of different sizes and whose operations have varying degrees of complexity. It was noted that:
 - Governance and controls over models become more challenging when the entity has a bespoke model;

- Data and assumptions obtained from third parties may be subject to controls to ensure their suitability for the entity's circumstances;
- ECL models will require data from departments that are not part of the traditional accounting system. In this circumstance, the nature and extent of controls over information drawn from the general and subsidiary ledgers may not be present in those other departments, or may only be newly implemented;
- Some financial reporting frameworks require the recognition of lifetime ECL for financial instruments that have experienced a significant increase in credit risk and this judgment is likely to have a material effect on the financial statements. The Task Force notes that assessing whether a significant increase in credit risk has taken place may be subjective and professional judgment and professional skepticism may be needed to evaluate management's approach. Obtaining data to determine whether a significant increase in credit risk has taken place, and controls around that determination, may be a particular challenge; and
- There is likely to be a need for appropriate levels of challenge and skepticism within the entity including, for example, robust discussions between risk management, lending, and finance departments in relation to assumptions and forward looking information.

There is likely to be a need for appropriate levels of challenge and skepticism within the entity including, for example, robust discussions between risk management, lending, and finance departments in relation to assumptions and forward looking information.

47. The Appendix to IAPN 1000 provides examples of controls that may exist in an entity that deals in a high volume of financial instrument transactions. While written in the context of complex financial instruments measured at fair value, many of the controls described are also relevant for loan portfolios.

48. For large financial institutions, the Task Force noted the complexity and interactions between the systems used in an ECL model, the controls likely to be in place, and that the high volume of financial instruments subject to ECL may lead to specific challenges to the audit. The Task Force noted that, for large

financial institutions, auditors may more commonly have an expectation that controls are operating effectively, and therefore controls testing may be an effective means of obtaining audit evidence. The Task Force noted that, due to the reliance financial institutions place on automated processes to manage the data flows, and the related internal control, substantive tests alone may not provide sufficient appropriate audit evidence.³⁷

³⁷ ISA 330, paragraph 8(b) states "The auditor shall design and perform tests of controls to obtain sufficient appropriate audit evidence as to the operating effectiveness of relevant controls if...substantive procedures alone cannot provide sufficient appropriate audit evidence at the assertion level."

Areas to Be Explored in the ISA 540 Project

The project to revise ISA 540 will consider whether there should be a greater or more explicit focus on governance and controls over how management made the accounting estimate. This could take the form of requirements or guidance addressing:

- *The need to focus on key controls and data, particularly when substantive testing alone is unlikely to be able to provide sufficient appropriate audit evidence;*
- *The differences in auditing standardized models versus bespoke models, including the implications for when the entity has a model development function;*
- *The implications of data and assumptions obtained from third parties, including the appropriate work effort; and*
- *Factors that may be taken into account in evaluating the governance and controls over models, including the management structure of the entity, the existence of a model validation department, the role of those charged with governance, and the IT controls present.*

The Task Force notes that material from IAPN 1000 may be useful in this regard.

Part B-5: Management's and Auditor's Experts

Issue

49. As management's process to measure the ECL may involve sophisticated, extensive, and bespoke processes, management and the auditor often make extensive use, in different ways, of experts on valuations, credit risk, modelling and other areas of expertise.
50. Management may have internal experts in these area (for example, a model development or credit risk management function), or may use external experts.
51. For the auditor, there may be a challenge in obtaining access to the skills and expertise needed to perform an audit of estimates involving complex ECL models.

Extracts from Related IAASB Pronouncements and Task Force Discussions

52. ISA 500 contains requirements and guidance addressing management's use of an expert, whether the expert is within the entity or external to the entity. ISA 620 contains requirements and guidance on the auditor's use of an expert, while ISA 220³⁸ contains requirements and guidance for the auditor regarding quality control procedures for an audit of financial statements. As part of the work effort, ISA 540 requires the auditor to consider whether specialized skills or knowledge in relation to one or more aspects of the accounting estimates are required in order to obtain sufficient appropriate audit evidence.³⁹
53. Under ISA 220, the engagement partner is required to be satisfied that the engagement team, and any auditor's experts who are not part of the engagement team, collectively have the appropriate competence and capabilities to perform the audit engagement. Further, the auditor is required to ascertain the nature, timing and extent of resources necessary to perform the engagement.

³⁸ ISA 220, *Quality Control for an Audit of Financial Statements*

³⁹ ISA 540, paragraph 14.

54. The Task Force's discussions focused on the importance of the auditor having access to the right skills and expertise, including access to internal or external experts as needed, as well as being able to adequately supervise or evaluate their work. The Task Force noted the need for such experts may depend on how sophisticated, extensive, and bespoke management's process is for measuring the ECL. The Task Force also noted that an inability to access the requisite skills and experience would be detrimental to audit quality, and may prevent the auditor from accepting the engagement.
55. The Task Force's discussions also focused on the challenges around accessing the right skills and expertise for an audit involving financial instruments subject to ECL, including the following areas:
- (a) Understanding of the legal and regulatory environment including, if appropriate, laws and regulations specific to financial institutions, such as capital requirements;
 - (b) Modelling of ECL;
 - (c) Governance and controls over models, data and assumptions, including data obtained from outside the traditional accounting system or outside the entity;
 - (d) Credit risk analysis, using credit risk data obtained in-house or from third-parties; and
 - (e) Interactions between systems controlled by different parts of the business (i.e. trading, risk management, finance).

The Task Force also noted that an inability to access the requisite skills and experience would be detrimental to audit quality, and may prevent the auditor from accepting the engagement.

Areas to Be Explored in the ISA 540 Project

The Task Force acknowledges the importance of the involvement of auditor's experts in performing appropriate audit procedures over certain complex accounting estimates. Accordingly, the ISA 540 project will consider whether ISA 540 addresses the use of auditor's experts appropriately and whether amendments to ISA 620 may be necessary to more clearly address the need for the auditor to consider whether and when an auditor's expert should be involved. The Task Force will also consider how management's use of an expert differs from using a third party source to obtain data. The Task Force will also consider whether the ISAs should give more clarity regarding the skills and expertise needed within the engagement team to conduct audits of entities which have complex financial instruments – and the Task Force will cooperate with the IAASB's Quality Control Working Group in this regard.

As noted in paragraph 9, the IAASB will closely follow the PCAOB's projects on auditing estimates and fair value measurements and the use of the work of specialists..

Part B-6: Addressing the Estimation Uncertainty Implicit In ECL Models

Issue

56. As noted above, it may be possible for the auditor to generate a point estimate or a range by, for example, varying the assumptions in management's model, using other reasonable assumptions, and comparing the output with that obtained using management's assumptions or using an expert.⁴⁰

⁴⁰ See also paragraph 40.

Given the complexity and uncertainty implicit in an ECL model, and the significant level of judgment that is involved in measuring the ECL, it is possible that the auditor's range, or the difference between management's estimate and the auditor's point estimate, may be multiples of performance materiality. This may be because:

- The level of judgment required could be greater than for other accounting estimates. For example, the assessment of whether a given financial instrument subject to ECL has experienced a significant increase in credit risk may be highly judgmental in some cases;
- The number and sensitivity of assumptions may be greater than for other accounting estimates;
- The length of the forecasted period may be longer than for other accounting estimates; and
- An entity may need to consider information from external sources that may pose challenges for the audit. For example, the financial reporting framework may require that all reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecast of future economic conditions.^{41,42}

57. For financial institutions, such large ranges can result from only minor differences in assumptions due to the size of the exposures and the sensitivity of the output to changes in the assumptions. It is possible that well-credentialed and experienced experts may disagree with respect to the appropriate assumptions for a given circumstance.

Extracts from Related IAASB Pronouncements and Task Force Discussions

The challenges posed by ranges wider than performance materiality

58. Paragraph 13(d)(ii) of ISA 540 requires that an auditor-developed range encompass all "reasonable outcomes".⁴³
59. Paragraph A94 of ISA 540 states:

Ordinarily, a range that has been narrowed to be equal to or less than performance materiality is adequate for the purposes of evaluating the reasonableness of management's point estimate. However, particularly in certain industries, it may not be possible to narrow the range to below such an amount. This does not necessarily preclude recognition of the accounting estimate. It may indicate, however, that the estimation uncertainty associated with the accounting estimate is such that it gives rise to a significant risk. Additional responses to significant risks are described in paragraphs A102–A115.

60. Paragraph A95 of ISA 540 notes that the range may be narrowed by:
- Eliminating from the range those outcomes at the extremities of the range judged by the auditor to be unlikely to occur; and

⁴¹ See, for example, IFRS 9, paragraph B5.5.15.

⁴² The Basel Committee on Banking Supervision's publication, *Guidance on Credit Risk and Accounting For Expected Credit Losses*, states "The Committee expects that the use by internationally active banks of the practical expedients [in IFRS 9] will be limited, particularly because – given their business – the cost of obtaining relevant information is not considered by the Committee to be likely to involve "undue cost or effort".

⁴³ See also paragraph A93 of ISA 540.

- Continuing to narrow the range, based on audit evidence available, until the auditor concludes that all outcomes within the range are considered reasonable. In some rare cases, the auditor may be able to narrow the range until the audit evidence indicates a point estimate.
61. The Task Force notes that an inability to narrow the range below performance materiality may be an indication that the estimation uncertainty associated with the ECL model is such that it gives rise to one or more significant risks (see Section B-2 above).
62. The Task Force's discussion on how auditors might deal with such wide ranges noted that audit procedures are unable to reduce estimation uncertainty that is a result of the application of an accounting treatment mandated by an applicable financial reporting framework. When the estimation uncertainty associated with ECL gives rise to a significant risk, the Task Force noted that focusing on the disclosures about the estimation uncertainty of the ECL model in the financial statements is required by paragraph 20 of ISA 540 and is likely to be most helpful to users in understanding the level of estimation uncertainty. The Task Force also noted that the matter may be discussed with those charged with governance⁴⁴ or a financial institution's supervisor. The Task Force also noted that there is also a need for management to adequately document judgments and other activities.
63. In addition to disclosures, the Task Force notes that revised Auditor Reporting standards requires auditors of listed entities to communicate key audit matters in the auditor's report. Section B-8 below discusses how this may be useful when dealing with ranges that are multiples of performance materiality.

Reasonableness of assumptions

64. Both paragraphs 13(b)(ii) (for when the auditor chooses to test how management made the accounting estimate and the data on which it is based) and 15(b) (for significant risks) of ISA 540 require the auditor to evaluate whether the significant assumptions used by management are reasonable. Paragraph A78 of ISA 540 notes:

Matters that the auditor may consider in evaluating the reasonableness of the assumptions used by management include, for example:

- Whether individual assumptions appear reasonable.
- Whether the assumptions are interdependent and internally consistent.
- Whether the assumptions appear reasonable when considered collectively or in conjunction with other assumptions, either for that accounting estimate or for other accounting estimates.

65. In the context of ECL models, the Task Force's discussions about how the auditor may be able to evaluate the reasonableness of assumptions used by management focused on the following matters:
- Whether the auditor's dialogue with financial institution supervisors, and associated benchmarking inside and outside the entity, provides indications that the assumptions are not inconsistent with the supervisor's or the auditor's understanding of the circumstances. The

⁴⁴ Paragraph 15 of ISA 260 (Revised) requires the auditor to communicate with those charged with governance about the significant risks identified by the auditor.

Task Force noted that the supervisors may have different objectives (for example, stability and capital adequacy objectives) that may explain differences in views; and

- Whether the auditor's retrospective review of management judgments and assumptions related to prior period significant accounting estimates provides an indication of a possible bias on the part of management.⁴⁵

Areas to Be Explored in the ISA 540 Project

The Task Force notes that additional specificity around the auditor's work effort when dealing with ranges that are greater than materiality may be warranted in light of the issues around ECL and other highly judgmental estimates. The Task Force notes that such large ranges are an issue for many types of accounting estimates, and that seeking input from experts in other types of accounting estimates will be needed as the project moves forward. The Task Force will also investigate whether ISA 540 should more comprehensively address the audit implications of estimation uncertainty through disclosures and reporting implications, beyond the improvements already made in the recently completed Disclosures project.

The Task Force also notes that:

- *Paragraph A78 of ISA 540 could be expanded to include additional considerations about how the auditor can evaluate the reasonableness of the assumptions used by management.*
- *In some circumstances, the auditor may decide to use a range to evaluate management's point estimate. In this regard, paragraph A94 of ISA 540 could include discussion about the implications of very wide ranges, and when a management estimate that falls within the auditor's range may nevertheless require further audit procedures as the auditor's range is too wide to be determinative.*

Part B-7: Management Bias

Issue

66. In the context of an entity's use of an ECL model, there are many judgments and decisions that may be subject to management bias, whether intentional or unintentional. Indicators of management bias may include:
- (a) Changes in model methodologies, data, or assumptions that are unreasonable; and
 - (b) Management decisions that have the effect of moving the ECL estimate within the auditor's range estimate from year to year, for example from a more conservative ECL estimate to a less conservative estimate, when this move is not supported by a valid business reason.
67. Management bias may also be unconscious such as when a modelling technique or data source has an implicit bias which should be adjusted for as necessary. For example, economic forecasts may overestimate or underestimate economic outcomes depending on when the forecast is made in the economic cycle. Management may have various processes to identify and adjust for these biases, some of which will be done through the modelling process and some outside of the modelling process. Management overlays, which are outside of the modelling process, adjust for the bias by,

⁴⁵ ISA 240, *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*, paragraph 32(b)(ii)

for example, increasing the ECL provision when the historical data source chosen includes a particularly favorable set of economic circumstances that is unlikely to be repeated.

Extracts from Related IAASB Pronouncements and Task Force Discussions

68. Paragraph 21 of ISA 540 states that “the auditor shall review the judgments and decisions made by management in the making of accounting estimates to identify whether there are indicators of possible management bias.” As noted in paragraph A9 of ISA 540, for continuing audits, indicators of possible management bias identified during the audit of the preceding periods influence the planning and risk identification and assessment activities of the auditor in the current period.
69. ISA 240 contains requirements and application and other explanatory material regarding the auditor’s responsibilities relating to fraud in an audit of financial statements. The Task Force notes that the auditor is required to review accounting estimates for bias and evaluate whether the circumstances producing the bias, if any, represent a risk of material misstatement due to fraud.⁴⁶
70. Difficult financial market conditions may give rise to increased incentives for management or employees to engage in fraudulent financial reporting: to protect personal bonuses, to hide employee or management fraud or error, to avoid breaching regulatory, liquidity or borrowing limits or to avoid reporting losses. For example, in a favorable economic climate there may be incentives for management to build up an excessive provision to draw upon in challenging economic times.
71. In the context of ECL, the Task Force notes that the following circumstances may be examples of management bias, whether intentional or unintentional:
 - (a) Override of controls over data, assumptions, and processes;
 - (b) Selecting data sources to present a biased view of the ECL. As noted in paragraph 34, historical data may not include events or scenarios that would be required to be addressed in the forecasts meaning the data is biased;
 - (c) Choosing scenarios, and assigning probabilities to those scenarios (when required by the applicable financial reporting framework), that are not in compliance with the applicable financial reporting framework;
 - (d) Changing from one data source or assumption to another data source or assumption;
 - (e) When management overlays are overstated or understated.
72. The Task Force notes that there may be controls and governance arrangements that are able to reduce the risk of management bias. For example, appropriate levels of challenge and skepticism between different functions within the entity (such as risk management, lending, and finance departments) may reduce the risk of management bias in some cases. The Task Force also notes that auditors may discuss the risk of management bias with those charged with governance and financial institutions’ supervisors, particularly when considering the implementation of new systems or controls relevant to the ECL model.

⁴⁶ ISA 240, paragraph 32

Areas to Be Explored in the ISA 540 Project

The Task Force will investigate whether ISA 540 can better describe the role of professional skepticism when reviewing management's judgments and decisions. The Task Force will consider the feedback from the ITC and input from the IAASB's Professional Skepticism Working Group in this regard.

The Task Force will also look at whether:

- *More guidance is needed on retrospective reviews of the outcomes of previous accounting estimates;*
- *More guidance is needed on paragraph 18 of ISA 540 in light of the complexity of some accounting estimates; and*
- *Additional requirements or guidance are needed in regard to specific aspects of the application of professional skepticism, such as testing data, challenging and comparing assumptions, and appropriately considering and addressing inconsistent or contradictory evidence.*

Part B-8: Implications for Reporting

Issue

73. ISA 701⁴⁷ requires the communication of key audit matters in the auditor's report for listed entities, when the auditor otherwise decides to communicate key audit matters in the auditor's report, or when the auditor is required to do so by law or regulation. In the context of an audit of a listed entity when ECL gives rise to one or more significant risks, the auditor's evaluation of the ECL may be a key audit matter.

Extracts from Related IAASB Pronouncements and Task Force Discussions

74. The Task Force's discussions focused on how the new Auditor's Report, including the disclosure of key audit matters, gives the auditor greater scope to communicate directly with users about matters relating to the ECL. The Task Force noted that the following information may be helpful to users:
- A qualitative or quantitative description of the level or degree of estimation uncertainty of the ECL;
 - A description of what matters were most significant to the auditor with regards to the ECL;
 - How the audit addressed the ECL, including the choice of procedures made under paragraph 13 of ISA 540, or how experts were used;
 - If the auditor's range was greater than materiality, or when the auditor's point estimate was materially different to management's accounting estimate, what additional audit procedures were performed to address this; and
 - How the auditor addressed the risk of management bias.

⁴⁷ ISA 701, *Communicating Key Audit Matters in the Independent Auditor's Report*

Areas to Be Explored in the ISA 540 Project

The Task Force's discussions in this area have noted the opportunities that KAM provide to communicate with users about:

- How the auditor approached the ECL provision;
- The auditor's consideration of the governance and controls over the ECL model; and
- The auditor's approach to disclosures about accounting estimates, including the ECL provision.

The Task Force will consider whether and how to incorporate relevant guidance into ISA 540 to demonstrate the linkage between ISA 540 and ISA 701.

For More Information

The IAASB encourages stakeholders to follow the progress of this project by looking at the project history page⁴⁸ on our website.

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⁴⁸ www.iaasb.org/projects/accounting-estimates-isa-540-and-special-audit-considerations-relevant

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