Federal Accounting Standards Advisory Board

April 17, 2015

Memorandum

To: Members of the Board

Robin M. Gilliam

From: Robin M. Gilliam, Assistant Director

Wendy M. Payne

Through: Wendy M. Payne, Executive Director

Subject: Risk Assumed—Insurance Programs [Phase 1]—**TAB D**[1]

MEETING OBJECTIVE

To review and approve the revised draft of the proposed standards.

BRIEFING MATERIALS

This memo discusses revisions to the risk assumed—insurance program draft proposed standards and attachment:

- Attachment I**:** Proposed Insurance Standards with track changes

- Appendices: (Optional Reading for Reference)

  - Appendix A: Risk Assumed - Project Decision History and Milestones

  - Appendix B: AU-C Section 540: Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures

[1] The staff prepares Board meeting materials to facilitate discussion of issues at the Board meeting. This material is presented for discussion purposes only; it is not intended to reflect authoritative views of the FASAB or its staff. Official positions of the FASAB are determined only after extensive due process and deliberations.

BACKGROUND

The Board reviewed the proposed standards during the February 2015 meeting and approved the following:

Scope Section #2: add qualifying language to address accounting for such items as borrowing, investing, and appropriations that are found in other Statements to the new sentence—*Matters not addressed in this Statement should be reported in accordance with other standards*.

Criteria for Insurance Programs:

1. Include **a.i**. in the basis for conclusions.

2. Move **a.ii**. criteria as follows:
   - Exchange criteria is now included in the premiums definition,
   - Nonexchange will be presented in a future version,
   - Recoveries is now its own definition, and
   - Investment income and budget authority is included in the disclosure section.

3. Consolidating **a.iii – v** criteria into the insurance contract definition

Insurance Program Classifications: staff will conduct more research to identify and present classifications that will capture all current and future insurance programs.

Liability for Losses for Remaining Coverage: adopt the name Liability for Losses for Remaining Coverage instead of Liability for Premium Deficiency.

Disclosure for Breaking out Insurance Program Information:

- “Major” in relation to “*For each **major insurance program”*** is hard to define in relation to materiality,

- FASAB, as a standard setting body, cannot define “program,” and “Major category of insurance,” might work better.

- Staff will continue to work on what detail to include and at what level to report it for the component and consolidated financial report (CFR).

Revenue and Measurement: remove the word the word “liability” from unearned revenue.

Paragraph 16: change the word “billed” to “collected or due.”

Paragraph 17: remove paragraph 17 because future adjustments to premiums based on experience ratings should be recognized as normal premium revenue over the contract period and is covered in paragraph 15.

Paragraph 18b: restate the second sentence to read: *Recoveries should **not** be recognized as revenue, but rather as reductions of claims expense.*

Paragraph 21: change the word “less” to “over:”

Paragraph 21 a & d: delete the word “probable” and focus on measuring liabilities using the expected value of estimated outflows net of remaining insurance coverage recognized at the end of the reporting period.

Paragraph 21.b: change 21.b. to read: *Management’s judgment based on experience, and in some cases, the views of independent experts.*

Paragraph 21.e: remove a reference to a range because paragraph 21 will be rewritten to focus on the expected value and all numbers for expected value carry the same weight.

Paragraph 22: update paragraph 22 to read: *Adjustments to the liability for remaining insurance coverage should be recognized as losses* ***or gains*** *on remaining insurance coverage*.

Paragraph 23: include a brief description of the insurance programs similar to the standards for loan programs.

Paragraph 23.c: change “paid claims” to “payments.”

STAFF ANALYSIS AND RECOMMENDATIONS FOR PROPOSED STANDARDS

I. Crop Insurance’s Challenge with Incurred but not Reported (IBNR):

Introduction:

Staff attended a meeting with crop insurance (Crop) to discuss reporting challenges as a follow up to the education session in December 2014.

Crop’s biggest challenge is estimating claims incurred but not reported (IBNR) for the liability for unpaid insurance claims because:

- an insurable (adverse) event may occur over time such as a drought or excessive moisture,
- the type of insurance plan determines the conditions required to determine if losses have occurred, for example:
    - **Yield only plans** can only determine losses once the amount of production can be determined, such as at harvest time when the actual production can be measured.
    - **Revenue plans** can only determine losses after the amount of production is determined (to calculate yield) **and** after harvest prices are released.
    - **Whole Farm Revenue Plans** cannot determine losses until the farm’s taxes are filed.

Because of this challenge, crop insurance asked the FASAB to clarify IBNR. Staff has determined that the definitions for adverse event and IBNR together with the proposed standards for the liability for unpaid claims will provide the necessary clarity. Below please find the staff analysis and recommendation for:

A. Adverse Event Definition:

Staff Analysis:

The current adverse event definition is:

> **Adverse event**—an "adverse event" may be a single or cyclical event or situation, except a default of a debt obligation, that causes losses to the beneficiary (ies) as identified in the insurance contract.

There are two issues with the current adverse event definition as identified by crop insurance and the Board member's review of the draft proposal: 1) the word "cyclical," and 2) the phrase "except a default of a debt obligation."

Issue 1 – use of the word *cyclical*:

In using the word "cyclical," staff was trying to address Crop's challenge and capture when an adverse event must include more than one event to create losses. The word "cyclical" is not the correct term—as it speaks to repeating a pattern over time. Crop suggested the term "prolonged." Prolong is defined as: to lengthen in time—continue or to lengthen in extent, scope, or range.[2] Staff agrees and has included it in the updated definition.

Issue 2 – use of the phrase *except a default of debt obligation*:

During the preliminary review, a number of Board members asked why we specifically identify debt obligations and suggest removing it from the definition and address it in the standards instead.

The following is the history of why we specifically identified debt obligations:

Prior to the August 2014 Board meeting, we discussed the similarities between insurance programs and credit programs and the Board decided that an insurable adverse event did not include defaulted debt obligations. Therefore, staff included the term *(other than a debt obligation)* in the definition and criteria in the August 2014 memorandum. As the definitions developed, *(other than a debt obligation)* was removed from the insurance program definition and criteria and included in the adverse event definition as "*except a default debt obligation.*"

Address debt obligations in the standards instead:

The current proposed standards—Definitions, #5, b—does exclude any programs that administer direct loans and loan guarantees and refers the user to SFFAS 2, *Accounting for Direct Loans and Loan Guarantees*. Therefore, defaults do not need to be excluded again in the adverse event definition.

[2] http://www.merriam-webster.com/dictionary/prolong

Staff Recommendation:

Staff recommends the following rewrite for the adverse event definition to support Crop's IBNR challenge and to address the Board's concern with specifically identifying defaulted debt obligations:

> **Adverse event**—an "adverse event" may be a single event or prolonged events or conditions that cause losses to the beneficiary (ies) as identified in the insurance contract.

Question I-A: Does the Board agree with the revised adverse event definition?

B. Incurred but not reported (IBNR) Definition:

Staff Analysis:

The second piece of information that will clarify IBNR for Crop's challenge with prolonged adverse events is the IBNR definition. The current IBNR definition is:

> **Incurred but not reported (IBNR)**—"Claims incurred but not reported (IBNR)" are estimated claims from adverse events that have occurred as of the end of the reporting period but have not been reported to the insurance program for settlement.

Staff Recommendation:

Addressing and updating the adverse event definition to include prolonged events provides clarity to the IBNR definition. Therefore, staff does NOT recommend any changes to the IBNR definition.

Question 1-B: Does the Board approve leaving the IBNR definition as is?

C. Proposed Standards for the Liability for Unpaid Insurance Claims:

Staff Analysis:

The third piece of information that will clarify IBNR for Crop's challenge with prolonged adverse events is the proposed standards for the liability for unpaid insurance claims. The current proposed standards for the liability for unpaid insurance claims are:

18. A liability for unpaid insurance claims should be recognized for adverse events that occurred before the end of the reporting period. The liability should be initially recorded at the estimated settlement amount and reestimated at the end of each reporting period.

    a. The estimated settlement amount includes outflows to liquidate claims that have been reported but not paid; estimated claims incurred but not reported (IBNR), related estimated claim adjustment expenses, and estimated inflows from recoveries not realized at the end of the reporting period.

The proposed standards for the liability for unpaid insurance claims emphasizes "estimated settlement amount." However, the adverse event must have occurred by the end of the reporting period to create losses. For a prolonged adverse event, insurance programs may demonstrate that the required conditions have not occurred at the end of the reporting period. Instead, the likelihood of these conditions occurring would be considered in estimating any losses on remaining coverage.

Staff Recommendation:

In order to clarify IBNR in support of Crop's challenge, staff recommends the following updates to the liability for unpaid claims recognition and measurement:

18. A liability for unpaid insurance claims should be recognized for adverse events that occurred before the end of the reporting period. The liability should be initially recorded at the estimated settlement amount and remeasured at the end of each reporting period.

19. The estimated settlement amount includes:

    a. outflows to liquidate claims that have been reported but not paid,

    b. estimated claims incurred but not reported (IBNR),

        i. If a prolonged adverse event(s) begins prior to the reporting date, and additional conditions are required to create losses, then it is not considered an adverse event and should not be included in the estimated settlement costs for IBNR.

        ii. Management should use judgement to determine if a prolonged adverse event creates an IBNR prior to the reporting date.

    c. related estimated claim adjustment expenses, and

    d. estimated inflows from recoveries not realized at the end of the reporting period.

Question I-C: Does the Board approve the updated proposed recognition and measurement for the liability for unpaid claims?

II. Liability for Losses on Remaining Coverage

Staff Analysis:

The following are all the decisions concerning the liability for losses on remaining coverage:

- At the October 2014 Board meeting, staff introduced separating the liability now required by SFFAS 5 into two components—liability for unpaid claims and liability for premium deficiency.
- At the December 2014 meeting, the Board approved the two liabilities but did not agree with the term “premium deficiency,” since this related to industry’s tracking of solvency for regulated insurance companies.
- Staff presented the following at the February 2015 meeting:

20. A liability for remaining insurance coverage should be recognized at the end of the reporting period if:

    a. A net future outflow or other sacrifice of resources during the remaining open contract period is probable, and

    b. The net future outflow of sacrifice of resources is measurable.

21. The amount of the liability is the excess of the estimated settlement amount for probable claims to be incurred during the remaining open contract period less the unearned premium at the end of the reporting period. The following should be considered in estimating the liability amount:

    a. Claims are probable if it is more likely than not that an adverse event will occur during the remaining open contract period for which beneficiaries will be eligible to receive compensation.

    b. Management’s judgment supplemented by experience with similar transactions and, in some cases, the views of independent experts will be needed.

    c. The probability of future claims is determined by considering a portfolio of contracts rather than individual contracts. A portfolio includes insurance contracts that:

       i. Are subject to similar risks, and
       ii. Have a similar duration of coverage.

    d. If the portfolio includes a large population of contracts, outflows may be estimated by weighing all possible outcomes by their associated probabilities; that is, the expected value.

e. If the estimate is a range of amounts and, if due to uncertainty, no amount within the range is a better estimate than any other amount within the range, then using the mid-point of **the range** is appropriate.

- At the February 2015 meeting, the Board requested that staff remove SFFAS 5 contingent liability language captured in 20 a. and b. and 21 a. and the range language captured in 21 e. and focus the recognition and measurement standards on expected cash flows.

Staff requested and received input from the following insurance program staff on their experience with using expected cash flows:

Crop:

- The indemnity estimate is an attempt to project loss payments in the near future – a few months or so.
- The indemnity estimate method RMA currently uses does not explicitly examine a set of discrete potential outcomes; assign a probability weight to each, and then average. Instead, RMA uses a regression model to quantify the historical relationship between yields and indemnity payments. This historical relationship then forms the basis of the indemnity estimates. While this approach is not explicitly a probability-weighted average, it follows that same idea. The use of a regression model essentially identifies a midpoint expectation – which is analogous to a probability-weighted average, and so presents the **same level of difficulty**.
- To do a probability-weighted average, one would need to determine what outcomes would be appropriate to include in the average. Then probabilities for each of those outcomes would need to be determined. To make those determinations, one would need to look at historical data/relationships – at which point the exercise becomes essentially the same as the regression model approach.
- The effectiveness of a probability-weighted average is only as good as the outcomes and probabilities that are used in the average. The challenge that RMA faces with its indemnity estimate is that there is little information to draw upon to identify which potential outcomes are most appropriate, and what probabilities should be applied to those outcomes. This leaves RMA with having to make an indemnity estimate that is inherently (and significantly) uncertain, regardless of the exact method of estimation used.

FAA (Program discontinued):

- They did not use probability weighted averages in loss estimates.
- They did not estimate.
- They used a small contingency fund apportioned every year to cover small claims or initial response expenses to a large claim.
- In the event of a major claim estimate since it was way too broad of a spectrum to even they would ask OMB for an apportionment.

Flood:

- Cannot predict because they do not know over the next few months past the year end what events if any will happen that will go against unearned premiums.
- They do not use actuarial methods for their contingencies due to extreme uncertainty.
- It takes at least three weeks after a storm hits to estimate damages, so even if a storm hit within a few days of publishing the financial statements, accurate estimates would not be available to predict.
- Implementing expected cash flows tends to imply a precision that does not exist for flood.

Chart I addresses Board questions and concerns received during the preliminary review:

Staff received the following questions and concerns about the liability for losses on remaining coverage utilizing expected cash flows	
A	If we require a liability for losses on remaining coverage [based on expected cash flows] what happens to those insurance programs that cannot estimate losses on remaining coverage with reasonable certainty?
	Staff Analysis: In effect, we would be requiring management to estimate future losses on the remaining coverage period to determine if they exceed the unearned premiums. If management is unable to assign probabilities based on past experience then the expected cash flow would be a simple average of the lowest reasonable claim amount and the highest reasonable claim amount. Staff believes that there is no certainty in estimates and the current model provides for an estimate of “zero” if management believes the cash flows are not estimable. Expected cash flows (ECF) will provide a consistent model to address uncertainty by reviewing past transactions and historical trends and assigning probabilities accordingly. See the following discussion on why requiring expected cash flows for estimating future losses will better address uncertainty than the current SFFAS 5[3] standards.

[3] Statement of Federal Financial Accounting Standards 5: *Accounting for Liabilities of The Federal Government*

Staff received the following questions and concerns about the liability for losses on remaining coverage utilizing expected cash flows	
B	Should we require the following additional disclosures? 1) Information to assist the reader in understanding that a liability for losses on remaining coverage is not recognized, 2) The reasons that a liability cannot be determined with reasonable certainty or are not reasonably estimable.
Staff updated disclosure #29.e.i. to address the above question/concern: A discussion about the liability for losses on remaining coverage to include the basis and methods, historical and trend information, and risk assumptions and factors used in determining the mean distribution of possible cash flows for future losses included in the liability for losses on remaining coverage.	
C	How do programs like terrorism risk insurance that do not have claims or premiums use this measurement?
Staff analysis: Terrorism risk insurance is a non-exchange transaction and will be discussed in the future with the non-exchange transactions.	
D	What level of evidence is expected to support management's estimate of probabilities?
Staff analysis: See Appendix B: AU-C Section 540. As noted by Crop (see page 8 of this memo), current estimates are based on similar methods. While challenging, staff believes evidence similar to current methods would be sought during the audit.	
E	How to account for subsequent events that might occur after the balance sheet date?

Staff received the following questions and concerns about the liability for losses on remaining coverage utilizing expected cash flows
Staff updated recognition and measurement #23 to address the above question/concern: Estimates should be based on expected cash flows using all available information that existed at the balance sheet date, experience with previous transactions and historical trends, and as appropriate the view of independent experts., Therefore, expected cash flows should not be adjusted based on actual events that occur subsequent to the balance sheet date that were not estimable using information that existed at the balance sheet date.

The following is a discussion as to why the requirements in SFFAS 5 are not sufficient for consistent reporting for insurance programs and how the proposed liability for losses on remaining coverage addresses these shortfalls

Current SFFAS 5 Standards:

38. A contingent liability should be recognized when all of these conditions are met:

- A past event or exchange transaction has occurred.
- A future outflow or other sacrifice of resources is probable.
- The future outflow or sacrifice of resources is measurable

Shortfall:

The three conditions that must be met are not sufficient to recognize a contingent liability for insurance programs because:

- Even though an exchange transaction has occurred when premiums were collected, individuals are confused about the relevant past events that have occurred at the balance sheet date. Some interpret the past event requirement to be an adverse event covered under a contract. This may allow unearned premiums to be the only recognized liability despite the fact that entering into an onerous contract is also a past event.

- Some question whether the future outflow or other sacrifice of resources is probable and measurable. In some cases, “zero” is recognized even though it is virtually certain that “zero” is not probable. SFFAS 5 attempts to address this shortcoming through disclosure.

39. The estimated liability may be a specific amount or a **range** of amounts. If some amount within the range is a better estimate than any other amount within the range, that amount is recognized. If no amount within the range is a better estimate than any other amount, the

minimum amount in the range is recognized and the range and a description of the nature of the contingency should be disclosed.

Shortfall:

- There is no consistent actuarial method to estimate a range, let alone a number within a range.

- Some task force members and some Board members did not believe that the minimum amount in a range was the conservative or accurate amount.

105—[Table 9, Column (4)].

Risk assumed information is important for all federal insurance and guarantee programs (except social insurance, life insurance and loan guarantee programs) and will be considered in the context of the Stewardship reporting.

Risk assumed is generally measured by the present value of unpaid expected losses net of associated premiums, based on the risk inherent in the insurance or guarantee coverage in force.

Shortfall:

The following is a summary of material presented in the August 2014 Board Memo:

The risk assumed standard was intended for agencies to disclose future oriented projections.

However in working with the Task Force (TF), staff discovered that, while most insurance programs are providing historical data for up to the past ten years, most are not providing the information as requested in SFFAS 5 because they found the requirement unclear.

For example most TF members:

- Thought "The present value of unpaid expected losses…" meant claims incurred but not reported (IBNR).

- Did not understand that this standard required them to project out losses since it was not clear what the time frame was for the future oriented information.

    - For example, does "associated premiums" mean in relation to the expected losses for adverse events that already occurred or premiums related to future events, say five or ten years in the future, that could occur and cause losses

- Did not understand what, "…based on the risk assumed as a result of insurance or guarantee coverage," means.

Proposed Standards:

Recognition and Measurement:

21. A liability for losses on remaining coverage should be recognized if the expected cash flows[4] to settle claims arising during the remaining open contract period are greater than the related unearned premiums as of the end of the reporting period for the current and prior years.

22. Estimates should be determined by considering a portfolio[5] of contracts rather than individual contracts, when feasible.

23. Estimates should be based on expected cash flows using all available information that existed at the balance sheet date, experience with previous transactions and historical trends, and, as appropriate the view of independent experts. Therefore, expected cash flows should not be adjusted based on actual events that occur subsequent to the balance sheet date because information did not exist at the balance sheet date for those subsequent events.

24. The expected cash flows should be discounted, unless the effect of the time value of money is not significant. (See SFFAS 33, par. 28 - 32 for guidance on selecting discount rates.)

Disclosures:

29.e. A discussion about the liability for losses on remaining coverage to include:

i. The basis and methods, historical and trend information, and risk assumptions and factors used in determining the mean distribution of possible cash flows for future losses included in the liability for losses on remaining coverage.

ii. Any additional information that would provide an understanding of the nature and magnitude of uncertainty in calculating the liability for losses on remaining coverage.

How shortfalls have been addressed:

The SFFAS 5 shortfalls have created an environment of uncertainty for what and how to disclose risk assumed information. While reasonable certainty cannot be accomplished within the realm of the uncertainty faced by insurance programs, utilizing expected cash flows will provide a consistent model for estimating losses.

In addition, the following phrases included in recognition and measurement provides additional clarity when dealing with uncertainty of future losses:

1. *"Remaining contract period"* clarifies that the time period for measuring the estimated losses is from the end of the reporting period through to the end of the contract period.

[4] The probability-weighted average (that is, mean of the distribution) of possible future cash flows.

[5] See component reporting entity disclosure requirements for information on portfolios.

2. *"…by considering a portfolio"*, provides guidance for management to identify groups of contracts with similar risk characteristic and factors that can be considered in determining the related probabilities.

3. *"...all available information that existed at the balance sheet date …"* provides preparers and auditors with evidence as to what information will be used to set the related probabilities.

4. *"…experience with previous transactions and historical trends..."* provides consistent guidance on what management should base their estimates on.

5. *"…and, as appropriate, the views of independent experts…"* provides an independent level of evidence.

6. *"…expected cash flows should not be adjusted based on actual events that occur subsequent to the balance sheet date…"* provides specific guidance on the timing of what events should be included.

7. *"…expected cash flows should be discounted, unless…(SFFAS 33, par. 28-32…"* provides consistent guidance on using the risk free rates of marketable Treasury securities versus market rates that may be highly uncertain.

The member requesting that staff address this matter referenced the inability to estimate claims as well as the audit challenges. Staff acknowledges that such estimates are uncertain. In some cases, the data do not exist to support estimates. For example, a December 11, 2014, GAO report on the flood insurance program (GAO-15-111) notes in summary:[6]

> The actual forgone premiums—the difference between subsidized and full-risk premiums—to the National Flood Insurance Program (NFIP) due to subsidies cannot be measured. The Federal Emergency Management Agency (FEMA) does not collect flood risk information for all subsidized policies, which is needed to calculate their full-risk premium rates. **GAO recommended in July 2013 that FEMA develop and implement a plan to obtain this information. FEMA agreed with the recommendation, but has not yet fully implemented it.** Although FEMA is phasing out subsidies through statutorily required rate increases, collecting this information remains important because the number of subsidized policies—and associated financial impacts—could grow over time with the restoration of certain subsidies under the Homeowner Flood Insurance Affordability Act of 2014 that previous legislation had eliminated. Working with available data and FEMA's published statements describing the size of the subsidies, GAO estimated forgone premiums in the range of $16–25 billion for 2002–2013 but estimates vary based on the calculation used. As FEMA would have incurred additional expenses if it had been able to collect the forgone premiums, GAO estimated that FEMA might have had $11–17 billion in premiums net of expenses, or as much as $1 billion a year, for losses or debt repayment.

The above report points to efforts to improve data so that full-risk premiums can be developed. So, another challenge is whether amounts are estimable with data currently available or potentially available. Even with improved data, uncertainty will remain.

[6] http://www.gao.gov/products/GAO-15-111

The issue of auditor association with highly uncertain estimates has been raised increasingly in recent years. The issue is relevant to standards setters because clear communication about uncertain estimates and the auditor's association with them is important to users of financial reports. Some argue communication can be improved through presentation and disclosure requirements. For example, some have suggested presentation of a range on the face of financial statements as well as disclosure of sensitivity analyses. In the context of the auditor, some suggest the auditor is challenged to assert that financial statements "present fairly, in all material respects" when an estimate – although reasonable – may be a single amount within a range of reasonable amounts that is multiple times larger than materiality.

Staff believes the following is a fair discussion of the challenge:

> As extreme estimation uncertainty in account values and net income have become more common, we question whether auditing and financial reporting standards provide for effective conveyance of the uncertainty contained in financial statements. Further, we consider whether the expectations of standards setters, regulators, and users are placing an increasingly difficult, and likely unrealistic, burden on auditors. This is not a negative reflection on the value provided by audits, nor does our analysis question the competence of auditors. Rather, we suggest that auditors are operating as best as can be expected given the current state of auditing and financial reporting standards. **No amount of auditing can remove the underlying estimation uncertainty of reported values that are determined by management-derived estimation models that are hypersensitive to small changes in inputs-inputs that are subjectively chosen by management from within a reasonable range.** (From Brant Christensen, Steven Glover, and David Wood in "Extreme Estimation Uncertainty in Fair Value Estimates: Implications for Audit Assurance," *Auditing: A Journal of Practice and Theory*, Vol. 31, No. 1 February 2012)

This and other articles note that changes to the audit report as well as changes in how estimates are presented in financial statements may be needed to communicate effectively.

On balance, staff believes moving to the expected cash flow measurement approach is appropriate. Where data are not currently available, staff believes improvements are underway and could be furthered by a financial reporting requirement. If members would like to consider ways to more clearly communicate the uncertainty inherent in such estimates, staff would develop alternatives for a future meeting.

Question II: Does the Board approve the updated proposed recognition and measurement and disclosure standards for the liability for losses on remaining coverage?

III. Premium Pricing Policy and Subsidy Disclosure

Staff Analysis:

Some members have asked about disclosing subsidy rates. SFFAS 7 presently requires disclosure of policies that require rates to be set below full cost. We included a reference to existing requirements but expanded it to clarify that this relates to subsidy information for insurance programs. Note that “subsidy” may imply not only comparisons to full cost but also to market rates.

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Staff Recommendation:

Staff has updated disclosure #29. as follows:

d. Premium pricing policies (in accordance with SFFAS 7, par. 46) including:

  i. risk characteristics used in determining premiums

  ii. requirements to set prices that are not based on full cost or on market price and, if available, an estimate of the subsidy rate provided and changes in that rate over time

Question III: Does the Board approve the updated disclosure for premium pricing policy and subsidy rate?

IV. Condensed Information Disclosure for Component Entities:

Staff Analysis

Through research with the task force and our December 2014 education session, staff understands that risk is not a single number. Risk assumed revolves around how much revenue is collected and dedicated to cover the many uncertainties and different risk factors covered by each federal insurance program. Financial statement users should have the opportunity to understand the entire picture through condensed information that will help to connect financial and performance reporting and illustrate what type of revenue was collected to cover claims.

At the February 2014 Board meeting, staff presented the following disclosure requirement:

22. For each major insurance program and collectively for all other insurance programs the following information should be disclosed:

    a. Condensed information about the balances at the end of the reporting period for assets, liabilities, and net position, including at a minimum balances for: …

Recommended Updates for Proposed Standards:

The Board was concerned with the term "major" and "program," therefore staff has provided the following updates:

26. Specific information should be disclosed for selected insurance portfolios, and/or in aggregate for all remaining insurance portfolios, and/or insurance contracts. Selecting insurance portfolios to be presented individually requires judgment…

30. Condensed information should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts about balances at the end of the reporting period, including at a minimum balances for:…

The following is an example of the condensed information disclosure:

	FY 2XX1	FY 2XX0
ASSETS		
Investments in Treasury securities	$XXX	$XXX
Other Assets	XXX	XXX
Total Assets	**$XXX**	**$XXX**
Outstanding debt	$XXX	$XXX
LIABILITIES		
Unearned premiums	XXX	XXX

Liability for unpaid claims	XXX	XXX
Liability for losses on remaining insurance coverage	XXX	XXX
Other liabilities	XXX	XXX
Total Liabilities	$XXX	$XXX
Unexpended Appropriations	$XXX	$XXX
Cumulative results of operations	$XXX	$XXX
	FY 2XX1	**FY 2XX0**
CHANGE IN NET POSITION		
Net position, beginning of period	$XXX	$XXX
Gross cost of:		
Claims expense	(XXX)	(XXX)
Claims adjustment expenses	(XXX)	(XXX)
Recoveries	XXX	XXX
Interest expense	(XXX)	(XXX)
Losses on remaining coverage	(XXX)	(XXX)
Other gross costs	(XXX)	(XXX)
Total gross costs	($XXX)	($XXX)
Premiums earned	XXX	XXX
Interest earned	XXX	XXX
Net cost	($XXX)	($XXX)
Nonexchange revenue	XXX	XXX
Appropriations used	XXX	XXX
Other financing sources	XXX	XXX
Change in net position, end of period	$XXX	$XXX

Staff Recommendation

Staff recognizes that this is the first time that they have challenged the Board to consider requiring condensed information for a specific type of program.

> NOTE: according to the recommended updated requirement, management's judgement will determine if and whether to disaggregate this information by portfolio.

By breaking out this information users will better understand the risk the government takes through insurance programs by helping to answer the following questions:

(1) How much money was collected through premiums?

(2) The amount of claims filed and paid?

(3) What do we expect to pay out for the remaining coverage?

(4) Did the programs need to use tax payer money in the form of borrowings (which cost us more due to interest) or appropriated funds because premiums did not cover claims?[7]

Therefore, staff recommends that FASAB approve this disclosure to take a positive step toward closing the financial-performance reporting gap.

Question IV: Does the Board approve the condensed disclosure for insurance programs?

V. Recommended Disclosures for US Consolidated Financial Report (CFR):

Staff Analysis:

During the February 2015 meeting, staff presented the recommended condensed disclosure discussed above. While, the Board agreed that the recommended information was important at the component level, they were concerned about providing that much detail in the consolidated financial report (CFR).

Staff has reviewed the current CFR to understand the disclosure structure. In accordance with current standards in SFFAS 5, the CFR includes one note for insurance and guarantee program liabilities, one note for contingent liabilities, and a write up for risk assumed under required supplementary information (RSI), as follows:

Current Disclosures and RSI-Risk Assumed - CFR:

Note 16. Insurance and Guarantee Program Liabilities Insurance and Guarantee Program Liabilities as of September 30, 2014, and 2013
(In billions of dollars)

	2014	2013
Insurance and Guarantee Program Liabilities:		
Pension Benefit Guaranty Corporation - Benefit Pension Plans	146.9	114.9
Federal Deposit Insurance Corporation Funds	13.2	16.9
Department of Agriculture - Federal Crop Insurance	7.3	6.9
All other insurance and guarantee programs	0.8	1.2
Total insurance and guarantee program liabilities	168.2	139.9

PBGC insures pension benefits for participants in covered defined benefit pension plans. As a wholly-owned corporation of the Government, PBGC's financial

[7] There are a number of reasons why premiums could not cover claims, such as, legislation set premiums that are not set according to full risk, and/or one or more high impact/low probable events that are hard to predict.

activity and balances are included in the consolidated financial statements of the Government. However, under current law, PBGC's liabilities may be paid only from PBGC's assets and not from the General Fund of the Treasury or assets of the Government in general. As of September 30, 2014, and 2013, PBGC had total liabilities of $151.6 billion and $120.6 billion, and its total liabilities exceeded its total assets by $61.8 billion and $35.6 billion, respectively.

In addition, as discussed in Note 20—Contingencies, PBGC reported reasonably possible contingent losses of about $184.4 billion and $328.9 billion as of September 30, 2014, and 2013, respectively. Of the total FDIC amount as of September 30, 2014, and 2013, $1.9 billion and $1.2 billion, respectively, represents the recorded contingent liability and loss provision for institutions insured by the Deposit Insurance Fund that are likely to fail. In addition, $11.3 billion and $15.8 billion pertain to liabilities due to resolutions of failed or failing institutions and to pending depositor claims as of September 30, 2014, and 2013, respectively.

As of September 30, 2014, and 2013, $7.3 billion and $6.9 billion, respectively, pertain to the USDA's Federal Crop Insurance Program. The Federal Crop Insurance Program is administered by the Federal Crop Insurance Corporation, whose mission is to provide an actuarially sound risk management program to reduce agricultural producers' economic losses due to
Natural disasters.

Note 20. Contingencies

Financial Treatment of Loss Contingencies

Loss contingencies that are assessed to be at least reasonably possible are disclosed in this note. Loss contingencies involve situations where there is an uncertainty of a possible loss. The reporting of loss contingencies depends on the likelihood that a future event or events will confirm the loss or impairment of an asset or the incurrence of a liability. Terms used to assess the range for the likelihood of loss are probable, reasonably possible, and remote. Loss contingencies that are assessed as probable and measurable are accrued in the financial statements. Loss contingencies that are assessed as remote are not reported in the financial statements, nor disclosed in the notes. All other material loss contingencies are disclosed in this note. The following table provides criteria for how federal agencies are to account for loss contingencies, based on the likelihood of the loss and measurability.3

Likelihood of future outflow or other sacrifice of resources	Loss amount can be reasonably measured	Loss range can be reasonably measured	Loss amount or range cannot be reasonably measured
Probable Future confirming event(s) are more likely to occur than not.	Accrue the liability. Report on Balance Sheet and Statement of Net Cost.	Accrue liability of the best estimate or (if there is no best estimate) minimum amount in loss range, and disclose nature of contingency and range of estimated liability.	Disclose nature of contingency and include a statement that an estimate cannot be made.
Reasonably possible Possibility of future confirming event(s) occurring is more than remote and less than likely.	Disclose nature of contingency and estimated loss amount.	Disclose nature of contingency and estimated loss range.	Disclose nature of contingency and include a statement that an estimate cannot be made.
Remote Possibility of future event(s) occurring is slight.	No disclosure.	No disclosure.	No disclosure.

The Government is subject to loss contingencies that include insurance and litigation cases[8]. These loss contingencies arise in the normal course of operations and their ultimate disposition is unknown. Based on information currently available, however, it is management's opinion that the expected outcome of these matters, individually or in the aggregate, will not have a material adverse effect on the financial statements, except for the insurance and litigation described in the following section, which could have a material adverse effect on the financial statements.

Insurance Contingencies

At the time an insurance policy is issued, a contingency arises. The contingency is the risk of loss assumed by the insurer, that is, the risk of loss from events that may occur during the term of the policy. The Government has insurance contingencies that are reasonably possible in the amount of $186.4 billion as of September 30, 2014, and $332.8 billion as of September 30, 2013. The major programs are identified below:

- PBGC reported $184.4 billion and $328.9 billion as of September 30, 2014, and 2013, respectively, for the estimated aggregate unfunded vested benefits exposure to the PBGC for private-sector single-employer and multi-employer defined benefit pension plans that are classified as a reasonably possible exposure to loss.
- FDIC reported $1.7 billion and $3.6 billion as of September 30, 2014, and 2013, respectively, for identified additional risk in the financial services industry that

[8] For loss contingencies related to litigation, probable is defined as the future confirming event or events that are more likely than not to occur, with the exception of pending or threatened litigation and unasserted claims. For the pending or threatened litigation and unasserted claims, the future confirming event or events are likely to occur.

could result in additional loss to the DIF should potentially vulnerable insured institutions ultimately fail. Actual losses, if any, will largely depend on future economic and market conditions.

Deposit Insurance

Deposit insurance covers all types of deposit accounts such as checking, Negotiable Order of Withdrawal and savings accounts, money market deposit accounts, and certificates of deposit received at an insured bank, savings association, or credit union. The insurance covers the balance of each depositor's account and shares, dollar-for-dollar, up to the insurance limit, including principal and any accrued interest through the date of the insured financial institution's closing. As a result, the Government has the following exposure from federally-insured financial institutions:

- FDIC has estimated insured deposits of $6,131.9 billion as of September 30, 2014, and $5,969.0 billion as of September 30, 2013, for the DIF.
- National Credit Union Administration (NCUA) has estimated insured shares of $895.7 billion as of September 30, 2014, and $869.0 billion as of September 30, 2013, for the National Credit Union Share Insurance Fund.

United States Government Required Supplementary Information (Unaudited) For the Years Ended September 30, 2014, and 2013

Risk Assumed (page 200)

Risk assumed information is important for all federal insurance and guarantee programs (i.e., USDA-Federal Crop Insurance Corporation programs, DHS-National Flood Insurance Program, NCUA-Credit Unions), except social insurance, life insurance, and loan guarantee programs. Risk assumed is generally measured by the present value of unpaid losses net of associated premiums, based on the risk inherent in the insurance or guarantee coverage in force. In addition to the liability for unpaid insurance claims included in Note 16-Insurance and Guarantee Program Liabilities, for events that have already occurred, the Government also is required to report as supplementary information risk assumed amounts and the periodic changes in those amounts.

The assessments of losses using the risk assumed are made by actuarial or financial methods that include information and assumptions applicable to the economic, legal, and policy environment in force at the time the assessments are made. Management has estimated the loss amounts based on the risk assumed as well as the periodic changes.

Fiscal year 2013 amounts have been restated to exclude PBGC, as amounts presented for PBGC are reasonably possible contingent losses. Please refer to Note 16—Insurance and Guarantee Program Liabilities and Note 20 Contingencies, Insurance Contingencies section for details. In addition, amounts for USDA and OPIC have been restated as a result of revisions made by USDA and OPIC to correct prior year reporting errors.

Please refer to the individual financial statements of the USDA, DHS, and NCUA for further detailed information, including information as to the indicators of the range of uncertainty around expected estimates and the indicators of the sensitivity of the estimates to changes in major assumptions. The table does not include all federal insurance and guarantee programs.

Risk Assumed Information as of September 30, 2014, and 2013		
(In billions of dollars)	**2014**	**2013 (Restated)**
Present value of unpaid losses, net of associated premiums:		
Department of Agriculture - Federal Crop Insurance Corporation programs	7.6	4.9
Department of Homeland Security - National Flood Insurance program	0.4	0.6
National Credit Union Administration - Credit Unions	0.2	0.2
Total	8.2	5.7
Period changes in risk assumed amounts:		
Department of Agriculture	2.7	(13.4)
National Credit Union Administration	-	(3.2)
Department of Homeland Security	(0.2)	-
Total	2.5	(16.6)

Staff Recommendation:

Recommended Disclosure for the CFR:[9]

Staff recommends the following disclosure for the US CFR:

34. The U.S. government-wide financial statements should disclose:[10]

    a. broad description of insurance programs or selected portfolios of insurance,
    b. general reference to component reporting entity[11] reports, and
    c. balances for each of the following, including a break out for insurance programs that are material:
        i. unearned premiums,

[9] Modeled after SFFAS 32: Consolidated Financial Report of the United States Government Requirements: Implementing Statement of Federal Financial Accounting Concepts 4 "Intended Audience and Qualitative Characteristics for the Consolidated Financial Report of the United States Government."
[10] Disclosure is "Reporting information in notes or narrative regarded as an integral part of the basic financial statement."
[11] The term "component reporting entity" is used to distinguish between the U.S. Federal government and its components. The U.S. Federal government is composed of organizations that manage resources and are responsible for operations. These include major departments and independent agencies, which are generally divided into sub organizations, i.e., smaller organizational units with a wide variety of titles, including bureaus, administrations, agencies, and corporations.

ii. liability for unpaid claims,

iii. liability for losses on remaining coverage,

iv. gross claims expense and related earned revenue,

v. borrowing by programs and a narrative discussion of repayment requirements including the ability to repay the borrowing, and

vi. The amount of coverage provided through insurance in force at the end of the reporting period, including:

   a) A narrative discussion that this amount represents the maximum risk exposure during the remaining contract period, and

   b) Appropriate information to aid in avoiding the misleading inference that there is a more than remote likelihood of a loss of that amount.

Questions V: Does the Board approve the recommended disclosures for the CFR?

VI. <u>Additional Comments/Edits</u>

Staff sent out a preliminary review of the draft proposed standards. The comments and edits received from Board members have been addressed in the proposed standard presented in Attachment I as track changes with attached comments. Board member comments are identified by their initials.

Please review the comments in Attachment I to see if you agree or if additional edits are required.

Question VI: Does the Board have any additional comments or edits on the proposed standards?

QUESTIONS FOR THE BOARD:

Question I-A: Does the Board agree with the revised adverse event definition?

Question I-B: Does the Board approve leaving the IBNR definition as is?

Question I-C: Does the Board approve the updated proposed recognition and measurement for the liability for unpaid claims?

Question II: Does the Board approve the updated proposed recognition and measurement and disclosure standards for the liability for losses on remaining coverage?

Question III: Does the Board approve the updated disclosure for premium pricing policy and subsidy rate?

Question IV: Does the Board approve the condensed disclosure for insurance programs?

Question V: Does the Board approve the recommended disclosures for the CFR?

Question VI: Does the Board have any additional comments on the proposed standards?

NEXT STEPS

Continue developing the proposed exposure draft for insurance programs. Develop categories and related standards.

MEMBER FEEDBACK

Please contact me as soon as possible to convey your questions or suggestions. Communication before the meeting will help me to prepare answers to your questions in order to make the meeting more productive. You can contact me by telephone at 202-512-7356 or by e-mail at gilliamr@fasab.gov with a cc to paynew@fasab.gov

TAB D
– Attachment 1–

Risk Assumed—Insurance Programs

Proposed Standards

PROPOSED STANDARDS

SCOPE

1. This Statement applies to federal entities that present general purpose federal financial reports (GPFFRs), including the consolidated financial report of the U.S. Government (CFR), in conformance with generally accepted accounting principles (GAAP), as defined by paragraphs 5 through 8 of Statement of Federal Financial Accounting Standards (SFFAS) 34, *The Hierarchy of Generally Accepted Accounting Principles, Including the Application of Standards Issued by the Financial Accounting Standards Board*.

2. This Statement provides general principles that should guide preparers of GPFFRs in accounting for and reporting on premium revenue, related claims and liabilities, and losses and costs of insurance programs. Items such as revenue types, direct loans and loan guarantees, borrowing, investing, and/or appropriations used not addressed in this Statement should be reported in accordance with other standards.

3. This Statement rescinds the section: Insurance and Guarantee Programs in Federal Financial Accounting Standards (SFFAS) 5, *Accounting for Liabilities of The Federal Government*, paragraphs 97-121.

DEFINITIONS

4. **Insurance program**—"Insurance program[1]" is used broadly to refer to a program that is authorized by law to financially compensate a designated population of beneficiaries by accepting all or part of the risk for losses incurred as a result of an adverse event.

5. The following are excluded from Insurance Programs:

a. Programs that administer direct loans and loan guarantees[2]

b. Programs that qualify as social insurance[3]

c. Programs authorized to engage in disaster relief activities.[4]

d. Entitlement programs

e. Programs which self-insure their own activities, but whose missions are not by statute to provide insurance[5]

f. Programs which process claims through an administrative or judicial process, but whose missions are not by statute to provide insurance[6]

[1] An insurance program is hereinafter referred to as either insurance program or program

[2] Statement of Federal Financial Accounting Standards 2 (SFFAS 2): *Accounting for Direct Loans and Loan Guarantees*

[3] Programs identified in the Statement of Federal Financial Accounting Standards 17 (SFFAS 17): *Accounting for Social Insurance* including unemployment insurance.

[4] The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-707), commonly referred to as the Stafford Act, is the act that authorizes and regulates disaster relief programs.

[5] GAO, Catalogue of Federal Insurance Activities, GAO-05-265R, page 4.

Comment [RG1]: HS requested the word "costs" be included.

Comment [RG2]: SS requested to change the word "matters" since everything but revenue types are activities.

Comment [RG3]: Revenue types are exchange and non-exchange and may be used for categories, but definitions can be found in other standards

Deleted: other

Deleted: Matters

Comment [RG4]: Added because we removed it from the adverse event definition.

Comment [RG5]: SM restructured the definition to remove duplicate words and make it more efficient. SS also commented on extra words.

Comment [RG6]: MG asked why program is in ( ). Staff removed it from definition and added a footnote.

Deleted: program)

Deleted: by financially compensating a designated population of beneficiaries who incur losses as a result of an adverse event.

Deleted: Disaster relief programs

Comment [RG7]: BD asked if these terms are clearly defined: **answer** Entitlement programs are defined in the FASAB glossary and will be included in the ED glossary. Staff added a footnote with the act that designates which agencies are disaster relief programs. The information was removed during the August 2014 Board meeting for consistency since no other exception referenced an act.

Deleted: but which self-insure their own programs

Comment [RG8]: MG asked why the use of the negative for e, f, and g. Staff has restructured e, f, and g.

Comment [RG9]: SS – Footnote 4 updated to remove GAO example to avoid confusion.

Deleted: but which process claims through an administrative or judicial process

g. Programs which provide security against loss or damage through contractual indemnification of another party, but whose missions are not by statute to provide insurance.[7]

6. Adverse event—an "adverse event" may be a single event or prolonged events or conditions that cause losses to the beneficiary(ies) as identified in the insurance contract.

7. Claim adjustment expenses (CAE)—"Claim adjustment expenses (CAE)" are incremental costs directly attributable to investigating, settling, and/or adjusting claims. An incremental cost is one that would not have been incurred if the entity had no claims. CAE include but are not limited to legal and adjuster's fees. CAE may be incurred by federal employees and/or through contracts.

8. Contract period—"Contract period" is the period over which adverse events that occur are covered.

9. In Force—"In force" refers to contracts that are unexpired as of a given date.

10. Incurred but not reported (IBNR)—"Claims incurred but not reported (IBNR)" are estimated claims from adverse events that have occurred as of the end of the reporting period but have not yet been reported to the insurance program for settlement.

11. Insurance claim—an "insurance claim" is a formal request for payment for losses as authorized under the insurance contract.

12. Insurance contract (contract)— An "insurance contract (contract)" is a general term used for an explicit insurance or non-loan guarantee agreement or arrangement between an insurance program and specific parties such as but not limited to: individuals, state, local, or foreign governments, other federal agencies, or businesses. A contract may include and/or identify:

a. the term the insurance contract is in force,
b. the insurance program's responsibilities,
c. the risk assumed by the insurance program as:
   i. all risk for covered losses;
   ii. partial risk by filling a gap where commercial Insurance companies are not able or willing to provide the insurance; or
   iii. a timing risk wherein the insurance program provides compensation for losses in anticipation that future funding sources will be sufficient to cover all or part of past benefits paid.
d. the adverse event,
e. the insured party(ies) and their premium requirements,
f. the beneficiary(ies) and their responsibilities for filing claims, and/or
g. the financial compensation.

[6] An example may include an administrative settlement or tort claim resulting from military events.
[7] These are administrative settlements for transactions occurring by contractors with Federal Acquisition Regulation authorized indemnification clauses or first responders within programs that do not have a statutory insurance or guarantee mission.

Deleted: but which provide security against loss or damage through contractual indemnification of another party

Comment [RG10]: See April Memo Section I.A

Deleted: cyclical

Deleted: situation(s),

Deleted: except a default of a debt obligation,

Comment [RG11]: SM concern with use of term "incremental." Incremental is included to be crystal clear that staff that might work claims but who are paid even if there are no claims would not have to be accrued as a liability.

Comment [RG12]: Updated by MG

Deleted: These

Comment [RG13]: Change to address SS concern about capturing interagency agreements that may use federal employees and not just employees or contract of the insurance program.

Deleted: of the insurance program

Comment [RG14]: Change to 8 and 9 for consistence with other definitions per MG

Comment [RG15]: Deleted per MG

Deleted: ; that is from inception until its termination date

Deleted: , and 2) GSA self-insuring their vehicle fleet instead of using a commercial insurance company

13. Liability for Losses on Remaining Coverage—the "liability for losses on remaining coverage" is an accrued obligation to beneficiaries attributable to coverage of insured events anticipated to occur after the end of the reporting period through the open contract period.

Comment [RG16]: Change per SS

Deleted: occurring

14. Premiums— "Premiums" is a general term used to refer to exchange revenue billed by insurance programs. Programs may refer to their exchange revenue by various terms including but not limited to premiums, assessments, and/or fees.

Comment [RG17]: Change per SS

Deleted: in this Statement

15. Recoveries—" Recoveries" include monies recouped or recovered from:

Comment [RG18]: Change requested by SM and MG

Deleted: may be

a. another agency through an indemnification agreement,
b. a third party or commercial insurance company to repay all or part of a loss originally paid for by the program,
c. the sale of salvageable parts through acquisition and disposal or salvage of assets, and/or
d. adjustments to previously paid insurance claims.

RECOGNITION AND MEASUREMENT

REVENUE AND LIABILITY FOR UNEARNED PREMIUMS

16. Premiums should be recognized as revenue evenly over the contract period.

Comment [RG19]: Evenly covers the same thing as …in proportion… per MG and SS comments

Deleted: in proportion to the amount of insurance protection provided

17. A liability for unearned premiums should be recognized for the amount of premiums collected and/or due by the end of the reporting period that have not yet been earned in proportion to the insurance protection to be provided during the remaining contract period.

Comment [RG20]: Updates per HS, SM and SM

Deleted: billed

CLAIMS EXPENSE AND LIABILITY FOR UNPAID INSURANCE CLAIMS

18. A liability for unpaid insurance claims should be recognized for adverse events that occurred before the end of the reporting period.The liability should be initially recorded at the estimated settlement amount and remeasured at the end of each reporting period.

Comment [RG21]: SS – most standard setters refer to this process as remeasured and not reestimated.

Deleted: reestimated

19. The estimated settlement amount includes:

a. outflows to liquidate claims that have been reported but not paid,
b. estimated claims incurred but not reported (IBNR),
    i. If a prolonged adverse event(s) begins prior to the reporting date, and additional conditions are required to create losses, then it is not considered an adverse event and should not be included in the estimated settlement costs for IBNR.
    ii. Management should use judgement to determine if a prolonged adverse event creates an IBNR prior to the reporting date.
c. related estimated claim adjustment expenses, and
d. estimated inflows from recoveries not realized at the end of the reporting period.

i. If estimated recoveries exceed the related claims for a portfolio of contracts then recognition is limited to the amount of the related claim.[8] Recoveries should be recognized as reductions of claims, rather than as revenue.

20. Adjustments to the liability for unpaid insurance claims, other than those resulting from payments made to liquidate existing liability balances, should be recognized as claims expense.

LOSSES ON REMAINING COVERAGE AND LIABILITY FOR LOSSES ON REMAINING COVERAGE

21. A liability for losses on remaining coverage should be recognized if the expected cash flows[9] to settle claims arising during the remaining open contract period are greater than the related unearned premiums as of the end of the reporting period.

22. Estimates should be determined by considering a portfolio[10] of contracts rather than individual contracts, when feasible.

23. Estimates should be based on expected cash flows using all available information that existed at the balance sheet date, experience with previous transactions and historical trends, and as appropriate, the view of independent experts. Therefore, expected cash flows should not be adjusted based on actual events that occur subsequent to the balance sheet date that were not estimable using information that existed at the balance sheet date.

24. The expected cash flows should be discounted, unless the effect of the time value of money is not significant. (See SFFAS 33, par. 28 - 32 for guidance on selecting discount rates.)

25. Adjustments to the liability for losses on remaining coverage should be recognized as losses or gains over the remaining insurance coverage.

[8] Any amount expected to be recovered in excess of the recognized claim, which will result in a gain, should not be recognized until any contingencies relating to the recovery have been resolved because a contingent gain cannot be recognized until realized.

[9] The probability-weighted average (that is, mean of the distribution) of possible future cash flows.

[10] See component reporting entity disclosure requirements for information on portfolios.

Deleted: <#>The estimated settlement amount includes outflows to liquidate claims that have been reported but not paid, estimated claims incurred but not reported (IBNR, related estimated claim adjustment expenses, and estimated inflows from recoveries not yet realized at the end of the reporting period. ¶

Comment [WP22]: BD asks if this is on a claim by claim basis or a portfolio basis. Staff recommends clarifying that it is on a portfolio basis.

Comment [RG23]: Proposed by MG

Deleted: Recoveries are not recognized as revenues since they reduce claims expenses.

Deleted: Recoveries should not be recognized as revenue, but rather as reductions of claims expense

Comment [RG24]: Proposed by SS

Deleted: for future claims

Comment [WP25]: Robin – Since this addresses recognition it is always applicable to all periods presented. What is intended by adding this "for the current and prior years." ?

Deleted: for the open contract period

Deleted: for the current and prior years

Deleted: A liability for remaining insurance coverage should be recognized at the end of the reporting period if:¶
<#>A net future outflow or other sacrifice of resources during the remaining open contract period is probable, and ¶ ... [1]

Comment [RG26]: Rewrite and consolidation per SS & BD.

Comment [WP27]: To address subsequent events. Modeled after the AICPA Accoun ... [2]

Deleted: for those subsequent events

Deleted: Estimates should not include adverse events that occur subseque ... [3]

Deleted: <#>The following should be considered in estimating the liability amou ... [4]

Comment [RG28]: Restructured by SS.

Comment [RG29]: BD noted that this relates to long -duration policies which we will ad ... [6]

Deleted: <#>If the portfolio includes a large population of contracts, outflows may b ... [5]

Deleted: If the effect of the time value of money is material,

Deleted: estimated outflow

Deleted: insurance

Comment [RG30]: To clarify re SS

Deleted: on

COMPONENT REPORTING ENTITY DISCLOSURE REQUIREMENTS

26. Specific information should be disclosed for selected insurance portfolios, and/or in aggregate for all remaining insurance portfolios, and/or insurance contracts. Selecting insurance portfolios to be presented individually requires judgment. Quantitative and qualitative criteria should be considered in selecting individual portfolios for disaggregated disclosure.

27. Acceptable quantitative criteria may include whether certain groups of contracts are accumulating large claim expenses or unpaid claim liability balances.

28. Acceptable qualitative factors may include whether a group of contracts is of immediate concern to constituents, politically sensitive, and/or controversial.

29. The The following information should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts:

a. A description of what is being insured, why, and for whom.

b. A narrative description of the sources of revenue, such as premiums received from insureds, non-exchange revenue, and/or appropriations

c. Renewal characteristics such as non-cancelable or guaranteed renewals.

d. Premium pricing policies (in accordance with SFFAS 7, par. 46) including:

i. risk characteristics used in determining premiums

ii. requirements to set prices that are not based on full cost or on market price and, if available, an estimate of the subsidy rate provided and changes in that rate over time

e. A discussion about the liability for losses on remaining coverage to include:

i. The basis and methods, historical and trend information, and risk assumptions and factors used in determining the mean distribution of possible cash flows for future losses included in the liability for losses on remaining coverage.

ii. Any additional information that would provide an understanding of the nature and magnitude of uncertainty in calculating the liability for losses on remaining coverage.

f. The amount of coverage provided through insurance in force at the end of the reporting period, including:

i. A narrative discussion that this amount represents the maximum risk exposure during the remaining contract period, and

Comment [RG31]: Updated to provide more clarity - SS

Deleted: quantitative factors, such as the percentage of the reporting entity's:¶
claims, or¶
liability for unpaid claims; and¶
qualitative factors, such as whether an insurance portfolio is:of immediate concern to constituents,politically sensitive or controversial, and/oraccumulating large liabilities.¶
A description of the

Comment [RG32]: Requested by HS & BD.

Deleted: <#>For each major insurance program and collectively for all other insurance programs the following information should be disclosed:¶

Moved (insertion) [1]

Deleted: A narrative discussion about the

Comment [WP33]: Some members have asked about subsidy rates. SFFAS 7 presently requires disclosure of policies requiring rates to be set below full cost. Staff included a reference to existing requirements but expanded it here to clarify that this relates to subsidy information. Note that "subsidy" may imply not only comparisons to full cost but also to market rates. Staff used it with its general meaning here to allow for reporting of currently available subsidy information.

Comment [RG34]: Updated in relation to questions./comments received – see memo section II

Deleted: Risk characteristics and factors used in estimating claims and losses

Moved (insertion) [2]

Deleted: estimating the

Deleted: <#>Renewal characteristics such as noncancelable or guaranteed renewa¶
Other funding sources¶
The basis, methods, and/or assumptions used in estimating the liability for losses on remaining coverage. ¶
Any additional information that would provide an understanding of the nature and magnitude in calculating the liability for losses on remaining coverage.¶

Moved up [2]: The basis, methods, and/or in estimating the liability for losses on remaining coverage. ¶
Any additional information that would provide an understanding of the nature and magnitude in calculating the liability for losses on remaining coverage.¶

ii. Appropriate information to aid in avoiding the misleading inference that there is a more than remote likelihood of a loss of that amount.

30. Condensed information should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts about balances at the end of the reporting period, including at a minimum balances for:

Comment [RG35]: HS recommends reversing 28 with 27. Any preference?

Deleted: for assets, liabilities, and net position,

Comment [WP36]: BD asks if this is envisioned to be comparative. FASAB is generally silent with respect to comparative unless more than two years are to be presented. OMB requires comparative data. If that continues, the result would be comparative disclosures.

a. Investments in Treasury securities,

b. Total Assets

c. Outstanding debt (borrowing),

d. Liabilities for:

i. Unearned premiums,

Deleted: revenue

ii. Unpaid claims, and

iii. Losses on remaining insurance coverage.

Deleted: losses

e. Total Liabilities

f. Unexpended appropriations

g. Cumulative results of operations

31. The following information should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts for:

Deleted: Condensed

Deleted: about the net cost and change in net position for the reporting period, including at a minimum amounts

a. Gross cost:

i. Claims expense

ii. Claims adjustment expense

iii. Recoveries

iv. Interest expense

v. Losses or gains on remaining coverage

vi. Other gross costs

b. Total gross cost

c. Earned Revenue

Comment [RG37]: Clarified per SM

i. Premiums earned

ii. Interest earned

d. Total Earned Revenue

e. Net cost

i. Nonexchange revenue

ii. Appropriations used

iii. Other financing sources

f. Change in net position

32. Changes in the liability balance for unpaid insurance claims should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts as follows:

a. Beginning balance

b. Incurred claims attributable to insured adverse events of:

i. the current fiscal year, and

ii. prior fiscal years

c. Payments attributable to insured adverse events of:

i. the current fiscal year, and

ii. prior fiscal years

d. Recoveries and other adjustments

e. Ending balance

33. A narrative discussion consolidated for all insurance portfolios, or a reference to one, about:

a. borrowing authority including but not limited to: balances, interest expense, repayment requirements, the ability to repay borrowing used to fund insurance claims, financing sources for repayment, and other terms of borrowing authority used in accordance to already existing standards.

b. investment activities,

c. appropriations requested, used, and/or available to return to Treasury, and

d. any event(s) that caused a material change in the required disclosures, such as changes in laws and/or actuarial assumptions.

FINANCIAL REPORT OF THE US GOVERNMENT DISCLOSURES

34. The U.S. government-wide financial statements should disclose:[11]

a. broad description of insurance programs or selected portfolios of insurance,

b. general reference to component reporting entity[12] reports, and

[11] Disclosure is "Reporting information in notes or narrative regarded as an integral part of the basic financial statement."

[12] The term "component reporting entity" is used to distinguish between the U.S. Federal government and its components. The U.S. Federal government is composed of organizations that manage resources and are responsible for operations. These include major

Deleted: Paid claims

Moved up [1]: <#>A narrative discussion about the premium pricing policies (in accordance with SFFAS 7, par. 46) including the information about risk characteristics used in determi

Deleted: ¶
<#>Information on the liability for losses on remaining coverage should be provided for insurance portfolios selected for disaggregated disclosure, and/or aggregated for all remaining insurance portfolios, and/or insurance contracts including:¶

Deleted: <#>Risk factors that may influence the ¶
<#>The basis, methods, and/or assumptions used in estimating the liability for losses on remaining coverage or a statement that the amount is not measurable. If the recognized amount is based on a range of amounts rather than a specific amount, the range and the relationship of the recognized amount to the range (for example, whether the recognized amount is a better estimate than the other amounts in the range or represents the mid-point of the range).¶

Deleted: <#>Other information that would provide an understanding of the naturemagnitude, and specific risk factors in calculating the liability for remaining coverage.If losses on remaining coverage are reasonably possible but not probabl¶
<#>A discussion of the nature of the contingency and key risk factors, and¶
A reasonable estimate of the loss exposure (which may be a range) or a statement that the amount is not measurableThe amount of coverage provided through insurance in force at the end of the reporting period, an explanation that this amount represents the maximum risk exposure during the remaining contract period, and appropriate narrative to aid in avoiding the misleading inference that there is a more than remote likelihood of a loss of that amount.

c. balances for each of the following, including a break out for insurance programs that are material:

   i. unearned premiums,

   ii. liability for unpaid claims,

   iii. liability for losses on remaining coverage,

   iv. gross claims expense and related earned revenue,

   v. borrowing by programs and a narrative discussion of repayment requirements including the ability to repay the borrowing, and

   vi. The amount of coverage provided through insurance in force at the end of the reporting period, including:

      a) A narrative discussion that this amount represents the maximum risk exposure during the remaining contract period, and

      b) Appropriate information to aid in avoiding the misleading inference that there is a more than remote likelihood of a loss of that amount.

departments and independent agencies, which are generally divided into sub organizations, i.e., smaller organizational units with a wide variety of titles, including bureaus, administrations, agencies, and corporations

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Page 5: [1] Deleted	GAO	3/16/2015 12:29:00 PM

A liability for remaining insurance coverage should be recognized at the end of the reporting period if:

A net future outflow or other sacrifice of resources during the remaining open contract period is probable, and

The net future outflow of sacrifice of resources is measurable.

The amount of the liability is the excess of the estimated settlement amount for probable claims to be incurred during the remaining open contract period less the unearned premium at the end of the reporting period.

1.

Page 5: [2] Comment [WP27]	Wendy M Payne	4/15/2015 2:18:00 PM

To address subsequent events. Modeled after the AICPA Accounting and Auditing Guide for Property and Life Insurance (para. 3.94.b)

Page 5: [3] Deleted	Wendy M Payne	4/15/2015 1:48:00 PM

Estimates should not include adverse events that occur subsequent to the balance sheet date and that were not known to be occurring at the balance sheet date.

However, in those rare circumstances when an infrequent, high severity event is known at the balance sheet date and expected to occur in the subsequent accounting period, expected losses relating to that adverse event should be included in the liability for losses on remaining coverage using all available information up through the date that the financial statements are issued.

Page 5: [4] Deleted	Robin Gilliam	4/8/2015 12:39:00 PM

The following should be considered in estimating the liability amount:

Estimates should be based on expected cash flows as of the balance sheet date.

Claims are probable if it is more likely than not that an adverse event will occur during the remaining open contract period for which beneficiaries will be eligible to receive compensation.

Weighing all possible outcomes by their associated probabilities to calculate the expected cash flows to settle future claims.

A future claim may result from a multiple situational adverse event where one or more situations/events have occurred, but not all of the required situations/events have occurred to activate a claim by the end of the reporting period.

Management’s judgment supplemented by experience with similar transactions and, in some cases, the views of independent experts will be needed.based on trend experience, and in some cases, the views of independent experts.

he probabilityexpected cash flows of futureto settle claims is should be determined by considering a portfolio of contracts rather than individual contracts where feasible. A portfolio may includes insurance contracts that are related. The relationship may be based on items such as, but not limited to: because they:

providing coverage for similar risks, and. and

having a similar duration of coverage.

Page 5: [5] Deleted	GAO	3/11/2015 11:48:00 AM

If the portfolio includes a large population of contracts, outflows may be estimated by weighing all possible outcomes by their associated probabilities; that is, the expected value.

If the estimate is a range of amounts and, if due to uncertainty, no amount within the range is a better estimate than any other amount within the range, then using the mid-point of the range is appropriate.

Page 5: [6] Comment [RG29]	Robin Gilliam	4/15/2015 2:18:00 PM

BD noted that this relates to long -duration policies which we will address separately. Staff did not remove the reference to discounting because-while uncommon-some casualty settlements span multiple years.

TAB D – Appendices

(Optional Reading for Reference)

Risk Assumed:
Insurance Programs

TAB D – Appendix A

(Optional Reading for Reference)

Risk Assumed:
Insurance Programs

Project Decision History and Milestones

April 2015

Risk Assumed: Insurance Programs Project Decision History and Milestones

February 2015:

The Board reviewed the proposed standards during the February 2015 meeting and approved the following:

Scope Section #2: add qualifying language to address accounting for such items as borrowing, investing, and appropriations that are found in other Statements to the new sentence—*Matters not addressed in this Statement should be reported in accordance with other standards*.

Criteria for Insurance Programs:

1. Include **a.i**. in the basis for conclusions.
2. Move **a.ii**. criteria as follows:
   - Exchange criteria is now included in the premiums definition,
   - Nonexchange will be presented in a future version,
   - Recoveries is now its own definition, and
   - Investment income and budget authority is included in the disclosure section.
3. Consolidating **a.iii – v** criteria into the insurance contract definition

Insurance Program Classifications: staff will conduct more research to identify and present classifications that will capture all current and future insurance programs.

Liability for Losses for Remaining Coverage: adopt the name Liability for Losses for Remaining Coverage instead of Liability for Premium Deficiency.

Disclosure for Breaking out Insurance Program Information:

- "Major" in relation to "*For each* ***major insurance program"*** is hard to define in relation to materiality,
- FASAB, as a standard setting body, can not define "program," and "Major category of insurance," might work better.
- Staff will continue to work on what detail to include and at what level to report it for the component and consolidated financial report (CFR).

<u>Revenue and Measurement:</u> remove the word the word “liability” from unearned revenue.

<u>Paragraph 16:</u> change the word “billed” to “collected or due.”

<u>Paragraph 17:</u> remove paragraph 17 because future adjustments to premiums based on experience ratings should be recognized as normal premium revenue over the contract period and is covered in paragraph 15.

<u>Paragraph 18b:</u> restate the second sentence to read: *Recoveries should **not** be recognized as revenue, but rather as reductions of claims expense.*

<u>Paragraph 21:</u> change the word “less” to “over:”

<u>Paragraph 21 a & d:</u> delete the word “probable” and focus on measuring liabilities using the expected value of estimated outflows net of remaining insurance coverage recognized at the end of the reporting period.

<u>Paragraph 21.b:</u> change 21.b. to read: *Management’s judgment based on experience, and in some cases, the views of independent experts.*

<u>Paragraph 21.e:</u> remove a reference to a range because paragraph 21 will be rewritten to focus on the expected value and all numbers for expected value carry the same weight.

<u>Paragraph 22:</u> update paragraph 22 to read: *Adjustments to the liability for remaining insurance coverage should be recognized as losses **or gains** on remaining insurance coverage*.

<u>Paragraph 23:</u> include a brief description of the insurance programs similar to the standards for loan programs.

<u>Paragraph 23.c:</u> change “paid claims” to “payments.”

<u>**December 2014:**</u>

<u>Claims Adjustment Expenses:</u> The Board approved including Claims Adjustment Expenses in the Liability for unpaid claims if they are related to claims.

<u>Liability for Premium Deficiency/Net Future Losses:</u> The Board approved including a Liability for Premium Deficiency in addition to the Liability for Unpaid Claims.

<u>Additional Items:</u>

The Board approved:

- Differentiating between insurance programs who receive appropriations to finance subsidies and those who borrow to finance subsidies,
- Classifying revenue for insurance programs that receive subsidies as exchange or non/exchange revenue, and
- Distinguishing between short-duration and long-duration insurance contracts.

<u>October 2014:</u>

<u>Borrowing Disclosure:</u> The Board decided to require insurance programs to disclose their borrowing authority, borrowing balances, interest expense, the ability to repay the borrowing, and explain any material differences in accordance with SFFAS 1, SFFAS 5, and SFFAS 7, but will not prescribe how or where the program will logistically place the disclosures.

<u>Earned/Unearned Premiums:</u> In relation to recognizing and disclosing earned and unearned premiums, the Board directed staff to begin with the revenue standards available in SFFAS 7, paragraphs 36–37, and include in the new standards guidance specific to insurance contracts but consistent with SFFAS 7.

<u>Proposed Standard:</u> In relation to the wording for the proposed standard, staff noted that the criteria for insurance programs will most probably be moved to the Basis for Conclusion section because it did not add anything to the insurance program definition.

The Board requested that staff:

- Rewrite paragraph 19 to allow for more flexibility in aggregating types of insurance programs

- Merge 19a and 19b in order to reduce duplicity and tie any explanations for material differences to the chart line items.

- Rewrite 19g to request a disclosure on how premium prices are determined and contribute to managing risk.

<u>August 2014:</u>

The Board approved changing the name of this phase to Risk Assumed: Insurance Programs.

The Board approved the following definition, criteria, and exclusions:

A. DEFINITION:

Insurance programs[1] are authorized by law to accept all or part of the risk for losses incurred by a designated population of beneficiaries as a result of an adverse event by financially compensating them.

B. CRITERIA:

- Insurance programs are administered by an agency established to do so or within an agency that administers many programs.

- Insurance programs collect exchange or non-exchange revenue that may be earned through, but is not limited to, any or all of the following: premiums,[2] fees paid, excise taxes, penalties and/or fines, recoveries,[3] interest received from investments and/or receivables, and/or budget authority including appropriations and borrowing authority.[4]

- Insurance programs create an agreement[5] or arrangement that specifically states:
    - the role the program will play,
    - who the parties are that may contribute funding,
    - the designated population that may be beneficiaries and their responsibilities for receiving compensation for losses,[6]
    - funding requirements,
    - financial compensation to be paid,
    - the adverse event (other than a defaulted debt obligation), and
    - if and how much to place in reserves.
- Insurance programs assume risk for the uncertainty of an adverse event occurring (other than a defaulted debt obligation), and the amount of compensation expected to be paid for losses.

[1] Insurance programs will also include guarantee programs not designed for loan/debt guarantees.
[2] The term "premiums" will be used to mean premiums, fees paid, excise taxes, penalties and/or fines.
[3] Recoveries may be monies recouped or recovered from: (1) another agency through an indemnification agreement, (2) a third party or commercial insurance company to repay all or part of a loss originally paid for by the program, and/or (3) the sale of salvageable parts through acquisition and disposal or salvage of assets. Recoveries may also be adjustments to already paid claims where the claimant owes money back to the program for a loss that wasn't realized.
[4]Sources of funding are broad and the charging of "premiums" (or other fees) is not necessary for a program to qualify as an insurance program.
[5]Insurance programs may enter into explicit arrangements or agreements with specific individuals, state, local, or foreign governments, other federal agencies, or businesses to carry out their mission.
[6] Beneficiaries may or may not directly participate in an explicit agreement/arrangement prior to becoming eligible to receive compensation. An example where a beneficiary does directly participate and receives compensation is when a U.S. investor purchases risk insurance for political violence and upon an act of politic violence that impacts their business investment may receive compensation. An example where beneficiaries do not directly participate is when a service provider pays premiums directly to a federal insurance program and upon failure provides a list of customers as beneficiaries whom the program may compensate.

- Through insurance programs the federal government assumes:
    - all risk for covered losses;
    - partial risk by filling a gap where commercial Insurance companies are not able or willing to provide the insurance; or
    - a timing risk wherein the insurance program provides compensation for losses at the time claims are received and processed in anticipation that future funding sources will be sufficient to cover all or part of past benefits paid.

C. EXCLUSIONS:

a. Loan guarantee programs as defined in SFFAS 2 (as amended) are not included as insurance programs.

b. Social insurance programs as defined in SFFAS 17 (as amended) are not included as insurance programs.[7]

c. Disaster relief programs that provide discretionary funding, goods, and/or services are not included as insurance programs.[8]

d. Entitlement programs that administer eligibility requirement applications to provide means tested benefits are not included as insurance programs.

e. "Self-insurance," where the government assumes the risk of loss for some its own activities[9] is not included as insurance programs.

f. Programs whose missions are not by statute to provide insurance but which process claims through an administrative or judicial process[10] are not included as insurance programs.

g. Programs whose missions are not by statute to provide insurance but which provide security against loss or damage through contractual indemnification of another party[11] are not included as insurance programs.

Insurance in Force: The Board agreed to disclose insurance in force—the amount the program would pay out if all contracts experienced maximum loss for the remaining coverage at the end of the reporting period.

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[7] Includes unemployment insurance as this is captured also in SFFAS 17.

8Criteria updated due to discussion with Chairman Allen concerning funding that was provided to Washington State mud slide victims in addition to goods and services. In addition, it is the Stafford Act that authorizes and regulates disaster relief programs

9 GAO, Catalogue of Federal Insurance Activities, GAO-05-265R, page 4.

10An example is an administrative settlement of tort claim resulting from military events.

11These are administrative settlements for transactions occurring by contractors with FAR authorized indemnification clauses or first responders within programs that do NOT have a statutory insurance or guarantee mission.

Projections: The Board tentatively agreed not to require projections for insurance programs. However, the Board did agree that the issue for projections would remain open, because they might want to address it for other types of programs in future phases of the risk assumed project.

April 2014

The Board revisited the definition and reviewed the similarities and differences with loan guarantee programs under the Federal Credit Reform Act and asked staff to address the following questions/concerns:

1) Distinguish insurance/non-loan guarantee programs from loan guarantee programs in the definition.
2) What value does the term “non-loan guarantees” add? Can it be removed from the definition?
3) Clarify the exclusion of disaster relief programs in relation to the type of compensation provided.

March 2014:

The Board generally agreed with the insurance/non-loan guarantee definition, upon updates from Mr. Dacey, as well as the characteristics and exclusions presented in the staff memo with the understanding that as staff develops the standard and new information is discovered changes are possible and will be finalized within the standard.

Staff worked with Mr. Dacey to update some of his concerns with the definition.

The following is the revised definition:

> A federal insurance/non-loan guarantee program is a program authorized by law to accept all or part of the risk by financially compensating the designated population for losses incurred as a result of an adverse event as defined by the:
>
> A. law or otherwise enforceable by law,
>
> B. related regulations,
>
> C. agency policies, or
>
> D. explicit arrangements or agreements

December 2013:

1. The Board agreed with staff's recommendation that it would be difficult to apply the FASB proposed insurance contracts definition to federal insurance/guarantee programs
   - Board requested and Staff agreed to present FASB's proposed definition to the Task Force during the development of the federal definition

2. The Board agreed with Staff's next step to develop a general definition and specific characteristics of insurance and guarantee programs.

June 2013:

1. The Board agreed with staff's recommendation to ask the four federal entities identified to respond to specific questions on FASB's insurance contracts proposal. Staff would use those responses to identify application concerns that would be unique to a federal entity.

2. The Board agreed to further narrow the scope to federal insurance and guarantee **programs** rather than contracts to support the structure of the federal environment and president's budget.

February 2013:

The risk assumed project will be addressed in a **phased approach**:

- Phase I: Insurance and Guarantees
- Phase II: Entitlement Programs, including: national defense, security and disaster response; and other potential effects on future outflows, such as regulatory actions, GSE's, etc.
- Phase III: Commitments and Obligations and other risk areas

AU-C Section 540-Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures

Professional Standards (AICPA)

AU-C Section 540

Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures

Source: SAS No. 122.
[Click here for the Original Pronouncements for:
SAS No. 122: Clarification and Recodification]

Effective for audits of financial statements for periods ending on or after December 15, 2012.

Introduction

Scope of This Section

.01 This section addresses the auditor's responsibilities relating to accounting estimates, including fair value accounting estimates and related disclosures, in an audit of financial statements. Specifically, it expands on how **section 315** , *Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement*; **section 330** , *Performing Audit Procedures in Response to Assessed Risks and Evaluating the Audit Evidence Obtained*; and other relevant AU-C sections are to be applied with regard to accounting estimates. It also includes requirements and guidance related to misstatements of individual accounting estimates and indicators of possible management bias.

Nature of Accounting Estimates

.02 Some financial statement items cannot be measured precisely but can only be estimated. For purposes of this section, such financial statement items are referred to as *accounting estimates.* The nature and reliability of information available to management to support the making of an accounting estimate varies widely, which thereby affects the degree of estimation uncertainty associated with accounting estimates. The degree of estimation uncertainty affects, in turn, the risks of material misstatement of accounting estimates, including their susceptibility to unintentional or intentional management bias. (Ref: **par. .A1-.A10** and **.A136**)

.03 The measurement objective of accounting estimates can vary, depending on the applicable financial reporting framework and the financial item being reported. [1] The measurement objective for some accounting estimates is to forecast the outcome of one or more transactions, events, or conditions giving rise to the need for the accounting estimate. For other accounting estimates, including many fair value accounting estimates, the measurement objective is different and is expressed in terms of the value of a current transaction or financial statement item based on conditions prevalent at the measurement date, such as estimated market price for a particular type of asset or liability. For example, the applicable financial reporting framework may require fair value measurement based on an assumed hypothetical current transaction between knowledgeable, willing parties (sometimes referred to as *market participants* or equivalent) in an arm's length transaction, rather than the settlement of a transaction at some past or future date. [2]

1 · **Paragraph .14** of section 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance With Generally Accepted Auditing Standards*, defines *financial report framework* and the term *fair presentation framework*.

2 · Different definitions of *fair value* may exist among financial reporting frameworks.

.04 A difference between the outcome of an accounting estimate and the amount originally recognized or disclosed in the financial statements does not necessarily represent a misstatement of the financial statements; rather, it could be an outcome of estimation uncertainty (see **paragraph .02**). This is particularly the case for fair value accounting estimates because any observed outcome may be affected by events or conditions subsequent to the date at which the measurement is estimated for purposes of the financial statements.

Effective Date

.05 This section is effective for audits of financial statements for periods ending on or after December 15, 2012.

Objective

.06 The objective of the auditor is to obtain sufficient appropriate audit evidence about whether, in the context of the applicable financial reporting framework

a. accounting estimates, including fair value accounting estimates, in the financial statements, whether recognized or disclosed, are reasonable and

b. related disclosures in the financial statements are adequate.

Definitions

.07 For purposes of generally accepted auditing standards, the following terms have the meanings attributed as follows:

Accounting estimate. An approximation of a monetary amount in the absence of a precise means of measurement. This term is used for an amount measured at fair value when there is estimation uncertainty, as well as for other amounts that require estimation. When this section addresses only accounting estimates involving measurement at fair value, the term *fair value accounting estimates* is used.

Auditor's point estimate or auditor's range. The amount or range of amounts, respectively, derived from audit evidence for use in evaluating the recorded or disclosed amount(s).

Estimation uncertainty. The susceptibility of an accounting estimate and related disclosures to an inherent lack of precision in its measurement.

Management bias. A lack of neutrality by management in the preparation and fair presentation of information.

Management's point estimate. The amount selected by management for recognition or disclosure in the financial statements as an accounting estimate.

Outcome of an accounting estimate. The actual monetary amount that results from the resolution of the underlying transaction(s), event(s), or condition(s) addressed by the accounting estimate.

Requirements

Risk Assessment Procedures and Related Activities

.08 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 **section 315** , the auditor should 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: **3** (Ref: **par. .A11**)

a. The requirements of the applicable financial reporting framework relevant to accounting estimates, including related disclosures. (Ref: **par. .A12-.A14**)

b. How management identifies those transactions, events, and conditions that may give rise to the need for accounting estimates to be recognized or disclosed in the financial statements. In obtaining this understanding, the auditor should make inquiries of management about changes in circumstances that may give rise to new, or the need to revise existing, accounting estimates. (Ref: **par. .A15-.A20**)

c. How management makes the accounting estimates and the data on which they are based, including (Ref: **par. .A21-.A22**)

i. the method(s), including, when applicable, the model, used in making the accounting estimate;

(Ref: **par. .A23-.A25**)

ii. relevant controls; (Ref: **par. .A26-.A27**)

iii. whether management has used a specialist; (Ref: **par. .A28-.A29**)

iv. the assumptions underlying the accounting estimates; (Ref: **par. .A30-.A35**)

v. whether there has been or ought to have been a change from the prior period in the method(s) or assumption(s) for making the accounting estimates and, if so, why; and (Ref: **par. .A36**)

vi. whether and, if so, how management has assessed the effect of estimation uncertainty. (Ref: **par. .A37**)

3 · **Paragraphs .05-.06** and **.12-.13** of section 315, *Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement*.

.09 The auditor should review the outcome of accounting estimates included in the prior period financial statements or, when applicable, their subsequent reestimation for the purpose of the current period. The nature and extent of the auditor's review takes account of the nature of the accounting estimates and whether the information obtained from the review would be relevant to identifying and assessing risks of material misstatement of accounting estimates made in the current period financial statements. However, the review is not intended to call into question the auditor's professional judgments made in the prior periods that were based on information available at the time. (Ref: **par. .A38-.A44**)

Identifying and Assessing the Risks of Material Misstatement

.10 In identifying and assessing the risks of material misstatement, as required by **section 315** , the auditor should evaluate the degree of estimation uncertainty associated with an accounting estimate. **4** (Ref: **par. .A45-.A46**)

4 · **Paragraph .26** of section 315.

.11 The auditor should determine whether, in the auditor's professional judgment, any of those accounting estimates that have been identified as having high estimation uncertainty give rise to significant risks. (Ref: **par. .A47-.A51**)

Responding to the Assessed Risks of Material Misstatement

.12 Based on the assessed risks of material misstatement, the auditor should determine (Ref: **par. .A52**)

a. whether management has appropriately applied the requirements of the applicable financial reporting framework relevant to the accounting estimate and (Ref: **par. .A53-.A57**)

b. whether the methods for making the accounting estimates are appropriate and have been applied consistently and whether changes from the prior period, if any, in accounting estimates or the method for making them are appropriate in the circumstances. (Ref: **par. .A58-.A59**)

.13 In responding to the assessed risks of material misstatement, as required by **section 330** , the auditor should undertake one or more of the following, taking into account the nature of the accounting estimate: **5** (Ref: **par. .A60-.A62**)

a. Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate. (Ref: **par. .A63-.A67**)

b. Test how management made the accounting estimate and the data on which it is based. In doing so, the auditor should evaluate whether (Ref: **par. .A68-.A71**)

i. the method of measurement used is appropriate in the circumstances, (Ref: **par. .A72-.A77**)

ii. the assumptions used by management are reasonable in light of the measurement objectives of the applicable financial reporting framework, and (Ref: **par. .A78-.A89**)

iii. the data on which the estimate is based is sufficiently reliable for the auditor's purposes. (Ref: **par. .A70**)

c. Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures. (Ref: **par. .A90-.A92**)

d. Develop a point estimate or range to evaluate management's point estimate. For this purpose (Ref: **par. .A93-.A97**)

i. if the auditor uses assumptions or methods that differ from management's, the auditor should 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: **par . .A98**)

ii. if the auditor concludes that it is appropriate to use a range, the auditor should narrow the range, based on audit evidence available, until all outcomes within the range are considered reasonable. (Ref: **par. .A99-.A101**)

5 · **Paragraphs .05-.06** of section 330, *Performing Audit Procedures in Response to Assessed Risks and Evaluating the Audit Evidence Obtained*.

.14 In determining the matters identified in **paragraph .12** or in responding to the assessed risks of material misstatement in accordance with **paragraph .13** , the auditor should consider whether specialized skills or knowledge with regard to one or more aspects of the accounting estimates is required in order to obtain sufficient appropriate audit evidence. (Ref: **par. .A102-.A107**)

Further Substantive Procedures to Respond to Significant Risks (Ref: par. .A108)

Estimation Uncertainty

.15 For accounting estimates that give rise to significant risks, in addition to other substantive procedures performed to meet the requirements of **section 330** , the auditor should evaluate the following: **6**

a. How management has considered alternative assumptions or outcomes and why it has rejected them or how management has otherwise addressed estimation uncertainty in making the accounting estimate (Ref: **par. .A109-.A112**)

b. Whether the significant assumptions used by management are reasonable (Ref: **par. .A113-.A115**)

c. When relevant to the reasonableness of the significant assumptions used by management or the appropriate application of the applicable financial reporting framework, management's intent to carry out specific courses of action and its ability to do so (Ref: **par. .A116**)

6 · **Paragraph .18** of section 330.

.16 If, in the auditor's professional judgment, management has not addressed adequately the effects of estimation uncertainty on the accounting estimates that give rise to significant risks, the auditor should, if considered necessary, develop a range with which to evaluate the reasonableness of the accounting estimate. (Ref: **par. .A117-.A118**)

Recognition and Measurement Criteria

.17 For accounting estimates that give rise to significant risks, the auditor should obtain sufficient appropriate audit evidence about whether

a. management's decision to recognize or not recognize the accounting estimates in the financial statements and (Ref: **par. .A119-.A120**)

b. the selected measurement basis for the accounting estimates (Ref: **par. .A121**)

are in accordance with the requirements of the applicable financial reporting framework.

Evaluating the Reasonableness of the Accounting Estimates and Determining Misstatements

.18 The auditor should evaluate, based on the audit evidence, whether the accounting estimates in the financial statements are either reasonable in the context of the applicable financial reporting framework or are misstated. (Ref: **par. .A122-.A127**)

Disclosures Related to Accounting Estimates

.19 The auditor should obtain sufficient appropriate audit evidence about whether the disclosures in the financial statements related to accounting estimates are in accordance with the requirements of the applicable financial reporting framework. (Ref: **par. .A128-.A129**)

.20 For accounting estimates that give rise to significant risks, the auditor also should evaluate the adequacy of the disclosure of estimation uncertainty in the financial statements in the context of the applicable financial reporting framework. (Ref: **par. .A108** and **.A130-.A132**)

Indicators of Possible Management Bias

.21 The auditor should review the judgments and decisions made by management in the making of accounting estimates to identify whether indicators of possible management bias exist. Indicators of possible management bias do not, themselves, constitute misstatements for the purposes of drawing conclusions on the reasonableness of individual accounting estimates. (Ref: **par. .A133-.A134**)

Documentation

.22 The auditor should include in the audit documentation **7**

a. for those accounting estimates that give rise to significant risks, the basis for the auditor's conclusions about the reasonableness of accounting estimates and their disclosure and

b. indicators of possible management bias, if any. (Ref: **par. .A135**)

7 · **Paragraphs .08-.12** and **.A8** of section 230, *Audit Documentation*.

Application and Other Explanatory Material

Nature of Accounting Estimates (Ref: par. .02)

.A1 Because of the uncertainties inherent in business activities, some financial statement items can only be estimated. Further, the specific characteristics of an asset, a liability, or a component of equity or the basis or method of measurement prescribed by the financial reporting framework may give rise to the need to estimate a financial statement item. Some financial reporting frameworks prescribe specific methods of measurement and the disclosures that are required to be made in the financial statements whereas other financial reporting frameworks are less specific.

.A2 Some accounting estimates involve relatively low estimation uncertainty and may give rise to lower risks of material misstatements. For example

- accounting estimates arising in entities that engage in business activities that are not complex.
- accounting estimates that are frequently made and updated because they relate to routine transactions.
- accounting estimates derived from data that is readily available, such as published interest rate data or exchange-traded prices of securities. Such data may be referred to as *observable* in the context of a fair value accounting estimate.
- fair value accounting estimates in which the method of measurement prescribed by the applicable financial reporting framework is simple and applied easily to the asset or liability requiring measurement at fair value.
- fair value accounting estimates in which the model used to measure the accounting estimate is well-known or generally accepted, provided that the assumptions or inputs to the model are observable.

.A3 However, for some accounting estimates, relatively high estimation uncertainty may exist, particularly when they are based on significant assumptions. For example

- accounting estimates relating to the outcome of litigation.
- fair value accounting estimates for derivative financial instruments not publicly traded.
- fair value accounting estimates for which a highly specialized entity-developed model is used or for which there are assumptions or inputs that cannot be observed in the marketplace.

.A4 The degree of estimation uncertainty varies based on the nature of the accounting estimate, the extent to which there is a generally accepted method or model used to make the accounting estimate, and the subjectivity of the assumptions used to make the accounting estimate. In some cases, estimation uncertainty associated with an accounting estimate may be so great that the recognition criteria in the applicable financial reporting framework are not met, and the accounting estimate cannot be made.

.A5 Not all financial statement items requiring measurement at fair value involve estimation uncertainty. For example, this may be the case for some financial statement items when an active and open market exists that provides readily available and reliable information on the prices at which actual exchanges occur, in which case the existence of published price quotations ordinarily is the best audit evidence of fair value. However, estimation uncertainty may exist even when the valuation technique and data are well-defined. For example, valuation of securities quoted on an active and open market at the listed market price may require adjustment if the holding is significant in relation to the market or is subject to restrictions in marketability. In addition, general economic circumstances prevailing at the time (for example, illiquidity in a particular market) may affect estimation uncertainty.

.A6 Additional examples of situations when accounting estimates, other than fair value accounting estimates, may be required include the following:

- Allowance for doubtful accounts
- Inventory obsolescence
- Warranty obligations
- Depreciation method or asset useful life
- Provision against the carrying amount of an investment when uncertainty regarding its recoverability exists
- Outcome of long-term contracts
- Costs arising from litigation settlements and judgments

.A7 Additional examples of situations when fair value accounting estimates may be required include the following:

- Complex financial instruments, which are not traded in an active and open market
- Share-based payments
- Property or equipment held for disposal
- Certain assets or liabilities acquired in a business combination, including goodwill and intangible assets

- Transactions involving the exchange of assets or liabilities between independent parties without monetary consideration (for example, a nonmonetary exchange of plant facilities in different lines of business)

.A8 Estimation involves judgments based on information available when the financial statements are prepared. For many accounting estimates, these include making assumptions about matters that are uncertain at the time of estimation. The auditor is not responsible for predicting future conditions, transactions, or events that, if known at the time of the audit, might have significantly affected management's actions or the assumptions used by management.

Management Bias

.A9 Financial reporting frameworks often call for neutrality (that is, freedom from bias). However, accounting estimates are imprecise and can be influenced by management judgment. Such judgment may involve unintentional or intentional management bias (for example, as a result of motivation to achieve a desired result). The susceptibility of an accounting estimate to management bias increases with the subjectivity involved in making it. Unintentional management bias and the potential for intentional management bias are inherent in subjective decisions that are often required in making an accounting estimate. 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.

.A10 Management bias can be difficult to detect at an account level. It may only be identified when considered in the aggregate of groups of accounting estimates or all accounting estimates or when observed over a number of accounting periods. Although some form of management bias is inherent in subjective decisions, in making such judgments, there may be no intention by management to mislead the users of financial statements. However, when intention to mislead exists, management bias is fraudulent in nature.

Risk Assessment Procedures and Related Activities (Ref: par. .08)

.A11 The risk assessment procedures and related activities required by **paragraphs .08- .09** assist the auditor in developing an expectation of the nature and type of accounting estimates that an entity may have. The nature and extent of the risk assessment procedures and activities are matters of professional judgment. The auditor's primary consideration is whether the understanding that has been obtained is sufficient to identify and assess the risks of material misstatement related to accounting estimates and to plan the nature, timing, and extent of further audit procedures. When the risk of material misstatement related to an accounting estimate has been significantly reduced by audit evidence relating to events occurring after management has made the estimate (for example, if litigation has been settled, the entity has sold an impaired asset, or receivables have been collected), the nature and extent of the procedures and activities required by **paragraphs .08*c*** and **. 09** may be significantly reduced or may not be necessary at all.

Obtaining an Understanding of the Requirements of the Applicable Financial Reporting Framework (Ref: par. .08a)

.A12 Obtaining an understanding of the requirements of the applicable financial reporting framework assists the auditor in determining, for example, whether it

- prescribes certain conditions for the recognition, 8 or methods for the measurement, of accounting estimates.
- specifies certain conditions that permit or require measurement at a fair value.
- specifies required or permitted disclosures.

Obtaining this understanding also provides the auditor with a basis for discussion with management about how management has applied those requirements relevant to the accounting estimate and the auditor's determination of whether they have been appropriately applied.

8 . Most financial reporting frameworks require incorporation in the balance sheet or income statement of items that satisfy their criteria for recognition. Disclosure of accounting policies or adding notes to the financial statements does not rectify a failure to recognize such items, including accounting estimates.

.A13 Financial reporting frameworks may provide guidance for management on determining point estimates when alternatives exist. For example, some financial reporting frameworks require that the point estimate selected be the alternative that reflects management's judgment of the most likely outcome; 9 others may require the use of a discounted probability-weighted expected value. In some cases, management may be able to make a point estimate directly. In other cases, management may be able to make a reliable point estimate only after considering alternative assumptions or outcomes from which it is able to determine a point estimate.

9 . Different financial reporting frameworks may use different terminology to describe point estimates determined in this way.

.A14 Financial reporting frameworks may require the disclosure of information concerning the significant assumptions to which the accounting estimate is particularly sensitive. Furthermore, when a high degree of estimation uncertainty exists, some financial reporting frameworks do not permit an accounting estimate to be recognized in the financial statements, but certain disclosures may be required in the notes to the financial statements.

Obtaining an Understanding of How Management Identifies the Need for Accounting Estimates (Ref: par. .08b)

.A15 The preparation and fair presentation of the financial statements requires management to determine whether a transaction, an event, or a condition gives rise to the need to make an accounting estimate and that all necessary accounting estimates have been recognized, measured, and disclosed in the financial statements in accordance with the applicable financial reporting framework.

.A16 Management's identification of transactions, events, and conditions that give rise to the need for accounting estimates is likely to be based on

- management's knowledge of the entity's business and the industry in which it operates.
- management's knowledge of the implementation of business strategies in the current period.
- when applicable, management's cumulative experience of preparing the entity's financial statements in prior periods.

In such cases, the auditor may obtain an understanding of how management identifies the need for accounting estimates primarily through inquiry of management. In other cases, when management's process is more structured (for example, when management has a formal risk management function), the auditor may perform risk assessment procedures directed at the methods and practices followed by management for periodically reviewing the circumstances that give rise to the accounting estimates and reestimating the accounting estimates as necessary. The completeness of accounting estimates is often an important consideration of the auditor, particularly accounting estimates relating to liabilities.

.A17 The auditor's understanding of the entity and its environment obtained during the performance of risk assessment procedures, together with other audit evidence obtained during the course of the audit, assist the auditor in identifying circumstances or changes in circumstances that may give rise to the need for an accounting estimate.

.A18 Inquiries of management about changes in circumstances may include, for example, inquiries about whether

- the entity has engaged in new types of transactions that may give rise to accounting estimates.
- terms of transactions that gave rise to accounting estimates have changed.
- accounting policies relating to accounting estimates have changed as a result of changes to the requirements of the applicable financial reporting framework or otherwise.
- regulatory or other changes outside the control of management have occurred that may require management to revise, or make new, accounting estimates.
- new conditions or events have occurred that may give rise to the need for new or revised accounting estimates.

.A19 During the audit, the auditor may identify transactions, events, and conditions that give rise to the need for accounting estimates that management failed to identify. **Section 315** addresses circumstances in which the auditor identifies risks of material misstatement that management failed to identify, including determining whether a significant deficiency or material weakness in internal control exists with regard to the entity's risk assessment processes. [10]

10 · **Paragraph .17** of section 315.

Considerations Specific to Smaller, Less Complex Entities

.A20 Obtaining this understanding for smaller entities is often less complex because their business activities are often limited, and transactions are less complex. Further, often, a single person (for example, the owner-manager) identifies the need to make an accounting estimate, and the auditor may focus inquiries accordingly.

Obtaining an Understanding of How Management Makes the Accounting Estimates (Ref: par. .08c)

.A21 The preparation and fair presentation of the financial statements also requires management to establish financial reporting processes for making accounting estimates, including adequate internal control. Such processes include the following:

- Selecting appropriate accounting policies and prescribing estimation processes, including appropriate estimation or valuation techniques, including, when applicable, the appropriate models
- Developing or identifying relevant data and assumptions that affect accounting estimates
- Periodically reviewing the circumstances that give rise to the accounting estimates and reestimating the accounting estimates as necessary

.A22 Matters that the auditor may consider in obtaining an understanding of how management makes the accounting estimates include, for example

- the types of accounts or transactions to which the accounting estimates relate (for example, whether the accounting estimates arise from the recording of routine and recurring transactions or whether they arise from nonrecurring or unusual transactions).
- whether and, if so, how management has used recognized measurement techniques for making particular accounting estimates.
- whether the accounting estimates were made based on data available at an interim date and, if so, whether and how management has taken into account the effect of events, transactions, and changes in circumstances occurring between that date and the period end.

Method of Measurement, Including the Use of Models (Ref: par. .08c(i))

.A23 In some cases, the applicable financial reporting framework may prescribe the method of measurement for an accounting estimate (for example, a particular model that is to be used in measuring a fair value estimate). In many cases, however, the applicable financial reporting framework does not prescribe the method of measurement or may specify alternative methods for measurement.

.A24 When the applicable financial reporting framework does not prescribe a particular method to be used in the circumstances, matters that the auditor may consider in obtaining an understanding of the method or, when applicable, the model used to make accounting estimates include, for example

- how management considered the nature of the asset or liability being estimated when selecting a particular method.

- whether the entity operates in a particular business, industry, or environment in which methods commonly used to make the particular type of accounting estimate exist.

.A25 There may be greater risks of material misstatement, for example, in cases when management has internally developed a model to be used to make the accounting estimate or is departing from a method commonly used in a particular business, industry, or environment.

Relevant Controls (Ref: par. . 08c(ii))

.A26 Matters that the auditor may consider in obtaining an understanding of relevant controls include, for example, the experience and competence of those who make the accounting estimates and controls related to

- how management determines the completeness, relevance, and accuracy of the data used to develop accounting estimates.
- the review and approval of accounting estimates, including the assumptions or inputs used in their development, by appropriate levels of management and, when appropriate, those charged with governance.
- the segregation of duties between those committing the entity to the underlying transactions and those responsible for making the accounting estimates, including whether the assignment of responsibilities appropriately takes account of the nature of the entity and its products or services (for example, in the case of a large financial institution, relevant segregation of duties may include an independent function responsible for estimation and validation of fair value pricing of the entity's proprietary financial products staffed by individuals whose remuneration is not tied to such products).
- services provided by a service organization, if any, to provide fair value or other accounting estimates measurements or the data that supports the measurement. When an entity uses a service organization, **section 402** , *Audit Considerations Relating to an Entity Using a Service Organization*, applies.

.A27 Other controls may be relevant to making the accounting estimates, depending on the circumstances. For example, if the entity uses specific models for making accounting estimates, management may put into place specific policies and procedures around such models. These may include, for example, those established over

- the design and development or selection of a particular model for a particular purpose.
- the use of the model.
- the maintenance and periodic validation of the integrity of the model.
- security, such as controls that prevent changes to the model or data without authorization.

Management's Use of Specialists 11 *(Ref: par. .08c(iii))*

11 · See **paragraph .08** of section 500, *Audit Evidence*, which addresses management's specialists.

.A28 Management may have, or the entity may employ individuals with, the experience and competence necessary to make estimates. In some cases, however, management may need to engage a specialist to make estimates or assist in making them. This need may arise because of, for example

- the specialized nature of the matter requiring estimation (for example, the measurement of mineral or hydrocarbon reserves in extractive industries).
- the technical nature of the models required to meet the relevant requirements of the applicable financial reporting framework, as may be the case in certain measurements at fair value.
- the unusual or infrequent nature of the condition, transaction, or event requiring an accounting estimate.

.A29 *Considerations specific to smaller, less complex entities.* Discussion with the owner-manager early in the audit process about the nature of any accounting estimates, the completeness of the required accounting estimates, and the adequacy of the estimating process may assist the owner-manager in determining the need to use a specialist.

Assumptions (Ref: par. .08c(iv))

.A30 Assumptions may be characterized by predictions of future conditions, transactions, or events used in making an estimate and are integral components of accounting estimates. Matters that the auditor may consider in obtaining an understanding of the assumptions underlying the accounting estimates include, for example

- the nature of the assumptions, including which of the assumptions are likely to be significant assumptions.
- how management assesses whether the assumptions are relevant and complete (that is, that all relevant variables have been taken into account).
- when applicable, how management determines that the assumptions used are internally consistent.
- whether the assumptions relate to matters within the control of management (for example, assumptions about the maintenance programs that may affect the estimation of an asset's useful life) and how they conform to the entity's business plans and the external environment or to matters that are outside its control (for example, assumptions about interest rates, mortality rates, potential judicial or regulatory actions, or the variability and timing of future cash flows).
- the nature and extent of documentation, if any, supporting the assumptions.

Assumptions may be made or identified by a specialist to assist management in making the accounting estimates. Such assumptions, when used by management, become management's assumptions.

.A31 In some cases, assumptions may be referred to as *inputs* (for example, when management uses a model to make an accounting estimate), though the term *inputs* may also be used to refer to the underlying data to which specific assumptions are applied.

.A32 Management may support assumptions with different types of information drawn from internal and external sources, the relevance and reliability of which will vary. In some cases, an assumption may be reliably based on applicable information from either external sources (for example, published interest rate or other statistical data) or internal sources (for example, historical information or previous conditions experienced by the entity). In other cases, an assumption may be more subjective (for example, when the entity has no experience or external sources from which to draw).

.A33 In the case of fair value accounting estimates, assumptions reflect, or are consistent with, what knowledgeable, willing arm's length parties (sometimes referred to as *market participants* or equivalent) would use in determining fair value when exchanging an asset or settling a liability. Specific assumptions also will vary with the characteristics of the asset or liability being valued; the valuation technique used (for example, a market approach or an income approach); and the requirements of the applicable financial reporting framework.

.A34 With respect to fair value accounting estimates, assumptions or inputs vary in terms of their source and bases, as follows:

a. Those that reflect what market participants would use in pricing an asset or a liability, developed based on market data obtained from sources independent of the reporting entity (sometimes referred to as *observable inputs* or equivalent)

b. Those that reflect the entity's own judgments about what assumptions market participants would use in pricing the asset or liability, developed based on the best information available in the circumstances (sometimes referred to as *unobservable inputs* or equivalent)

In practice, however, the distinction between *a* and *b* is not always apparent. Further, it may be necessary for management to select from a number of different assumptions used by different market participants.

.A35 The extent of subjectivity, such as whether an assumption or input is observable, influences the degree of estimation uncertainty and, thereby, the auditor's assessment of the risks of material misstatement for a particular accounting estimate.

Changes in Methods or Assumptions for Making Accounting Estimates (Ref: par. .08c(v))

.A36 In obtaining an understanding of how management makes the accounting estimates, the auditor is required to obtain an understanding about whether there has been or ought to have been a change from the prior period in the methods or assumptions for making the accounting estimates. A specific estimation method or assumption may need to be changed in response to changes in the environment or circumstances affecting the entity or in the requirements of the applicable financial reporting framework. If management has changed the method or assumption for making an accounting estimate, it is important that management can demonstrate that the new method or assumption is more appropriate or is responsive to such changes. For example, if management changes the basis of making an accounting estimate from a liquid market approach to an illiquid market approach, the auditor challenges whether management's assumptions about the marketplace are reasonable in light of economic circumstances.

Estimation Uncertainty (Ref: par. .08c(vi))

.A37 Matters that the auditor may consider in obtaining an understanding of whether and, if so, how management has assessed the effect of estimation uncertainty include, for example,

- whether and, if so, how management has considered alternative assumptions or outcomes by, for example, performing a sensitivity analysis to determine the effect of changes in the assumptions on an accounting estimate.
- how management determines the accounting estimate when analysis indicates a number of outcome scenarios.
- whether management monitors the outcome of accounting estimates made in the prior period and whether management has appropriately responded to the outcome of that monitoring procedure.

Reviewing Prior Period Accounting Estimates (Ref: par. .09)

.A38 The nature and extent of the review of the outcome of accounting estimates included in the prior period financial statements is a matter of professional judgment. In performing the procedures required in **paragraph .09**, it may not be necessary to review the outcome of every accounting estimate included in the prior period.

.A39 The outcome of an accounting estimate will often differ from the accounting estimate recognized in the prior period financial statements. By performing risk assessment procedures to identify and understand the reasons for such differences, the auditor may obtain

- information regarding the effectiveness of management's prior period estimation process, from which the auditor can judge the likely effectiveness of management's current process;
- audit evidence that is pertinent to the reestimation, in the current period, of prior period accounting estimates; or
- audit evidence of matters that may be required to be disclosed in the financial statements, such as estimation uncertainty.

.A40 The review of prior period accounting estimates may also assist the auditor, in the current period, in identifying circumstances or conditions that increase the susceptibility of accounting estimates to, or indicate the presence of, possible management bias. The auditor's professional skepticism assists in identifying such circumstances or conditions and in determining the nature, timing, and extent of further audit procedures.

.A41 A retrospective review of management judgments and assumptions related to significant accounting estimates is also required by **section 240** , *Consideration of Fraud in a Financial Statement Audit.* **12** That review is conducted as part of the requirement for the auditor to design and perform procedures to review accounting estimates for biases that could represent a risk of material misstatement due to fraud, in response to the risks of management override of controls. As a practical matter, the auditor's review of prior period accounting estimates as a risk assessment procedure in accordance with this section may be carried out in conjunction with the review required by **section 240** .

12 · **Paragraph .32** of section 240, *Consideration of Fraud in a Financial Statement Audit*.

.A42 The auditor may judge that a more detailed review is required for those accounting estimates that were identified during the prior period audit as having high estimation uncertainty or for those accounting estimates that have changed significantly from the prior period. On the other hand, for example, for accounting estimates that arise from the recording of routine and recurring transactions, the auditor may judge that the application of analytical procedures as risk assessment procedures is sufficient for purposes of the review.

.A43 For fair value accounting estimates and other accounting estimates based on current conditions at the measurement date, more variation may exist between the fair value amount recognized in the prior period financial statements and the outcome (or the amount reestimated for the purpose of the current period). This is because the measurement objective for such accounting estimates deals with perceptions about value at a point in time, which may change significantly and rapidly as the environment in which the entity operates changes. Therefore, the auditor may focus the review on obtaining information that would be relevant to identifying and assessing risks of material misstatement. For example, in some cases, obtaining an understanding of changes in market participant assumptions that affected the outcome of a prior period fair value accounting estimate may be unlikely to provide relevant information for audit purposes. If so, then the auditor's consideration of the outcome of prior period fair value accounting estimates may be more appropriately directed toward understanding the effectiveness of management's prior estimation process (that is, management's track record) from which the auditor can judge the likely effectiveness of management's current process.

.A44 A difference between the outcome of an accounting estimate and the amount recognized in the prior period financial statements does not necessarily represent a misstatement of the prior period financial statements. However, it may do so if, for example, the difference arises from information that was available to management when the prior period's financial statements were finalized or that could reasonably be expected to have been obtained and taken into account in the preparation of those financial statements. **Section 560** , *Subsequent Events and Subsequently Discovered Facts*, addresses situations when facts become known to the auditor after the date of the auditor's report that, had they been known to the auditor at the date of the auditor's report, may have caused the auditor to revise the auditor's report. The applicable financial reporting framework may contain guidance on distinguishing between changes in accounting estimates that constitute misstatements and changes that do not and the accounting treatment required to be followed.

Identifying and Assessing the Risks of Material Misstatement

Estimation Uncertainty (Ref: par. .10)

.A45 The degree of estimation uncertainty associated with an accounting estimate may be influenced by factors such as

- the extent to which the accounting estimate depends on judgment.
- the sensitivity of the accounting estimate to changes in assumptions.
- the existence of recognized measurement techniques that may mitigate the estimation uncertainty (though the subjectivity of the assumptions used as inputs may, nevertheless, give rise to estimation uncertainty).
- the length of the forecast period and the relevance of data drawn from past events to forecast future events.
- the availability of reliable data from external sources.
- the extent to which the accounting estimate is based on observable or unobservable inputs.

The degree of estimation uncertainty associated with an accounting estimate may influence the estimate's susceptibility to bias.

.A46 Matters that the auditor considers in assessing the risks of material misstatement may also include the following:

- The actual or expected magnitude of an accounting estimate
- The recorded amount of the accounting estimate (that is, management's point estimate) in relation to the amount expected by the auditor to be recorded
- Whether management has used a specialist in making the accounting estimate
- The outcome of the review of prior period accounting estimates

High Estimation Uncertainty and Significant Risks (Ref: par. .11)

.A47 Examples of accounting estimates that may have high estimation uncertainty include the following:

- Accounting estimates that are highly dependent upon judgment (for example, judgments about the outcome of pending litigation or the amount and timing of future cash flows dependent on uncertain events many years in the future)
- Accounting estimates that are not calculated using recognized measurement techniques
- Accounting estimates in which the results of the auditor's review of similar accounting estimates made in the prior period financial statements indicate a substantial difference between the original accounting estimate and the actual outcome
- Fair value accounting estimates for which a highly specialized, entity-developed model is used or for which there are no observable inputs

.A48 A seemingly immaterial accounting estimate may have the potential to result in a material misstatement due to the estimation uncertainty associated with the estimation (that is, the size of the amount recognized or disclosed in the financial statements for an accounting estimate may not be an indicator of its estimation uncertainty).

.A49 In some circumstances, the estimation uncertainty is so high that a reasonable accounting estimate cannot be made. The applicable financial reporting framework may, therefore, preclude recognition of the item in the financial statements or its measurement at fair value. In such cases, the significant risks relate not only to whether an accounting estimate should be recognized or whether it should be measured at fair value but also to the adequacy of the disclosures. With respect to such accounting estimates, the applicable financial reporting framework may require disclosure of the accounting estimates and the high estimation uncertainty associated with them (see **paragraphs .A128-.A131**).

.A50 If the auditor determines that an accounting estimate gives rise to a significant risk, the auditor is required by **section 315** to obtain an understanding of the entity's controls, including control activities. **13**

13 · **Paragraph .30** of section 315.

.A51 In some cases, the estimation uncertainty of an accounting estimate may lead the auditor to consider whether such estimation uncertainty indicates that substantial doubt could exist about the entity's ability to continue as a going concern. **Section 570** , *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* , addresses such circumstances. [Revised, August 2012, to reflect conforming changes necessary due to the issuance of SAS No. 126.]

Responding to the Assessed Risks of Material Misstatement (Ref: par. .12)

.A52 **Section 330** requires the auditor to design and perform audit procedures whose nature, timing, and extent are responsive to the assessed risks of material misstatement related to accounting estimates at both the financial statement and relevant assertion levels. **14** **Paragraphs .A53-.A121** focus on specific responses at the relevant assertion level only. Based on the assessed risks of material misstatement, the auditor is required to exercise professional judgment **15** in determining the nature, timing, and extent of the procedures necessary to conclude whether management appropriately applied the requirements of the financial reporting framework, including that the methods used for making the estimates are appropriate.

14 · **Paragraph .18** of section 330.

15 · **Paragraph .18** of section 200.

Application of the Requirements of the Applicable Financial Reporting Framework (Ref: par. .12a)

.A53 Many financial reporting frameworks prescribe certain conditions for the recognition of accounting estimates and specify the methods for making them and required disclosures. Such requirements may be complex and require the application of judgment. Based on the understanding obtained in performing risk assessment procedures, the requirements of the applicable financial reporting framework that may be susceptible to misapplication or differing interpretations become the focus of the auditor's attention.

.A54 Determining whether management has appropriately applied the requirements of the applicable financial reporting framework is based, in part, on the auditor's understanding of the entity and its environment. For example, the measurement of the fair value of some items, such as intangible assets acquired in a business combination, may involve special considerations that are affected by the nature of the entity and its operations.

.A55 In some situations, additional audit procedures, such as the inspection by the auditor of the current physical condition of an asset, may be necessary to determine whether management has appropriately applied the requirements of the applicable financial reporting framework.

.A56 Collateral often is assigned for certain types of investments in debt instruments that either are required to be measured at fair value or are evaluated for possible impairment. If the collateral is an important factor in measuring the fair value of the investment or evaluating its carrying amount, it may be necessary for the auditor-in determining whether management has appropriately applied the requirements of the applicable financial reporting framework-to obtain sufficient appropriate audit evidence regarding the existence; value; rights; and access to, or transferability of, such collateral (including consideration of whether all appropriate liens have been filed and appropriate disclosures have been made).

.A57 The application of the requirements of the applicable financial reporting framework requires management to consider changes in the environment or circumstances that affect the entity. For example, the introduction of an active market for a particular class of asset or liability may indicate that the use of discounted cash flows to estimate the fair value of such asset or liability is no longer appropriate.

Consistency in Methods and Basis for Changes (Ref: par. .12b *)*

.A58 The auditor's consideration of a change in an accounting estimate or in the method for making it from the prior period is important because a change that is not based on a change in circumstances or new information is considered arbitrary. Arbitrary changes in an accounting estimate result in inconsistent financial statements over time and may give rise to a financial statement misstatement or be an indicator of possible management bias.

.A59 Management often is able to demonstrate good reason for a change in an accounting estimate or the method for making an accounting estimate from one period to another based on a change in circumstances. What constitutes a good reason and the adequacy of support for management's contention that there has been a change in circumstances that warrants a change in an accounting estimate or the method for making an accounting estimate are matters of judgment.

Responses to the Assessed Risks of Material Misstatements (Ref: par. .13 *)*

.A60 The auditor's decision about which response, individually or in combination, in **paragraph .13** to undertake to respond to the risks of material misstatement may be influenced by such matters as the following:

- The nature of the accounting estimate, including whether it arises from routine or nonroutine transactions
- Whether the procedure(s) is expected to effectively provide the auditor with sufficient appropriate audit evidence
- The assessed risk of material misstatement, including whether the assessed risk is a significant risk

.A61 For example, when evaluating the reasonableness of the allowance for doubtful accounts, an effective procedure for the auditor may be to review subsequent cash collections in combination with other procedures. When the estimation uncertainty associated with an accounting estimate is high (for example, an accounting estimate based on a proprietary model for which unobservable inputs exist), it may be that a combination of the responses to assessed risks in **paragraph .13** is necessary in order to obtain sufficient appropriate audit evidence.

.A62 Additional guidance explaining the circumstances in which each of the responses may be appropriate is provided in **paragraphs .A63-.A101** .

Events Occurring Up to the Date of the Auditor's Report (Ref: par. .13a)

.A63 Determining whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate may be an appropriate response when such events are expected to

- occur and
- provide audit evidence that confirms or contradicts the accounting estimate.

.A64 Events occurring up to the date of the auditor's report may sometimes provide sufficient appropriate audit evidence about an accounting estimate. For example, sale of the complete inventory of a superseded product shortly after the period-end may provide audit evidence relating to the estimate of its net realizable value. In such cases, there may be no need to perform additional audit procedures on the accounting estimate, provided that sufficient appropriate evidence about the events is obtained.

.A65 For some accounting estimates, events occurring up to the date of the auditor's report are unlikely to provide audit evidence regarding the accounting estimate. For example, the conditions or events relating to some accounting estimates develop only over an extended period. Also, because of the measurement objective of fair value accounting estimates, information after the period-end may not reflect the events or conditions existing at the balance sheet date and, therefore, may not be relevant to the measurement of the fair value accounting estimate. **Paragraph .13** identifies other responses to the risks of material misstatement that the auditor may undertake.

.A66 In some cases, events that contradict the accounting estimate may indicate that the amount recorded is misstated, that management has ineffective processes for making accounting estimates, or that management bias exists in the making of accounting estimates.

.A67 Even though the auditor may decide not to undertake the approach referred to in **paragraph .13*a*** with respect to specific accounting estimates, the auditor is required to comply with **section 560** . The auditor is required to perform audit procedures designed to obtain sufficient appropriate audit evidence that all subsequent events that require adjustment of, or disclosure in, the financial statements have been identified. **16** Because the measurement of many accounting estimates, other than fair value accounting estimates, usually depends on the outcome of future conditions, transactions, or events, the auditor's work under **section 560** is particularly relevant.

16 · **Paragraphs .09** and **.11** of section 560, *Subsequent Events and Subsequently Discovered Facts*.

Testing How Management Made the Accounting Estimate (Ref: par. .13b)

.A68 Testing how management made the accounting estimate and the data on which it is based may be an appropriate response when the accounting estimate is a fair value accounting estimate developed on a model that uses observable and unobservable inputs. It may also be appropriate when, for example

- the accounting estimate is derived from the routine processing of data by the entity's accounting system.
- the auditor's review of similar accounting estimates made in the prior period financial statements suggests that management's current period process is likely to be effective.
- the accounting estimate is based on a large population of items of a similar nature that individually are not significant.

.A69 Testing how management made the accounting estimate and the data on which it is based may involve, for example, the following:

- Testing the extent to which data on which the accounting estimate is based is accurate, complete, and relevant and whether the accounting estimate has been properly determined using such data and management assumptions
- Considering the source, relevance, and reliability of external data or information, including that received from management's specialists, **17** to assist in making an accounting estimate
- Determining how management has taken into account the effect of events, transactions, and changes in circumstances occurring between the date that the estimate or inputs to the estimate were determined and the reporting date, if the estimate was not made as of a date that coincides with the reporting date (for example, a valuation by an independent appraiser may be as of a different date)
- Recalculating the accounting estimate and reviewing, for internal consistency, information used to determine the estimate
- Considering management's review and approval processes

17 · **Paragraph .05** of section 500 defines a *management's specialist* as "[a]n individual or organization possessing expertise in a field other than accounting or auditing, whose work in that field is used by the entity to assist the entity in preparing the financial statements."

.A70 In accordance with **section 500** , *Audit Evidence*, the auditor is required to evaluate whether the data on which the estimate is based is sufficiently reliable for the auditor's purposes, including, as necessary **18**

a. obtaining audit evidence about the accuracy and completeness of the data.

b. evaluating whether the data is sufficiently precise and detailed for the auditor's purposes.

18 · **Paragraph .09** of section 500.

.A71 *Considerations specific to smaller, less complex entities.* In smaller entities, the process for making accounting estimates is likely to be less structured than in larger entities. Smaller entities with active management involvement may have limited descriptions of accounting procedures, unsophisticated accounting records, or few written policies. Even if the entity has no formal established process, management may still be able to provide a basis upon which the auditor can test the accounting estimate.

.A72 *Evaluating the method of measurement (Ref:* ***par. .13b(i)*** *).* When the applicable financial reporting framework does not prescribe the method of measurement, evaluating whether the method used (including any applicable model) is appropriate in the circumstances is a matter of professional judgment.

.A73 For this purpose, matters that the auditor may consider include, for example, whether

- management's rationale for the method selected is reasonable.
- management sufficiently and appropriately has evaluated and applied the criteria, if any, provided in the applicable financial reporting framework to support the selected method.
- the method is appropriate and sufficient data is available in the circumstances, given the nature of the asset or liability being estimated and the requirements of the applicable financial reporting framework relevant to accounting estimates.
- the method is appropriate with regard to the business, industry, and environment in which the entity operates.

.A74 In some cases, management may have determined that different methods result in a range of significantly different estimates. In such cases, obtaining an understanding of how the entity has investigated the reasons for these differences may assist the auditor in evaluating the appropriateness of the method selected.

.A75 *Evaluating the use of models.* In some cases, particularly when making fair value accounting estimates, management may use a model. Whether the model used is appropriate in the circumstances may depend on a number of factors, such as the nature of the entity and its environment, including the industry in which it operates and the specific asset or liability being measured.

.A76 The extent to which the considerations in **paragraph .A77** are relevant depends on the circumstances, including whether the model is one that is commercially available for use in a particular sector or industry, or a proprietary model. In some cases, an entity may use a management specialist **19**

to develop and test a model.

19 · **Paragraph .08** of section 500.

.A77 Depending on the circumstances, matters that the auditor may also consider in testing the model include, for example, whether

- 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 model's theoretical soundness and mathematical integrity, including the appropriateness of model parameters.
  - the consistency and completeness of the model's inputs with market practices.
  - the model's output compared with actual transactions.
- appropriate change control policies and procedures exist.
- the model is periodically calibrated and tested for validity, particularly when inputs are subjective.
- adjustments are made to the output of the model, including in the case of fair value accounting estimates whether such adjustments reflect the assumptions that market participants would use in similar circumstances.
- the model is adequately documented, including the model's intended applications and limitations and its key parameters, required inputs, and results of any validation analysis performed.

.A78 *Assumptions used by management (Ref:* ***par. .13b(ii)*** *).* The auditor's evaluation of the assumptions used by management is based only on information available to the auditor at the time of the audit. Audit procedures dealing with management assumptions, including those used as inputs to valuation models, are performed in the context of the audit of the entity's financial statements and not for the purpose of providing an opinion on the assumptions themselves.

.A79 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.
- in the case of fair value accounting estimates, whether the assumptions appropriately reflect observable market assumptions.

.A80 In evaluating the reasonableness of the assumptions supporting an accounting estimate, the auditor may identify one or more significant assumptions. If so, the existence of one or more significant assumptions may be an indicator that the accounting estimate has high estimation uncertainty and may, therefore, give rise to a significant risk related to recognition, measurement, or disclosure. Additional responses to significant risks are described in **paragraphs .A108-.A121** .

.A81 The assumptions on which accounting estimates are based may reflect what management expects will be the outcome of specific objectives and strategies. In such cases, the auditor may perform audit procedures to evaluate the reasonableness of such assumptions by considering, for example, whether the assumptions are consistent with

- the general economic environment and the entity's economic circumstances.
- the plans of the entity.
- assumptions made in prior periods, if relevant.
- the experience of, or previous conditions experienced by, the entity to the extent this historical information may be considered representative of future conditions or events.
- other assumptions used by management relating to the financial statements.

.A82 The reasonableness of the assumptions used may depend on management's intent and ability to carry out certain courses of action. Management often documents plans and intentions relevant to specific assets or liabilities, and the financial reporting framework may require it to do so. Although the extent of audit evidence to be obtained about management's intent and ability is a matter of professional judgment, the auditor's procedures may include the following:

- Review of management's history of carrying out its stated intentions
- Review of written plans and other documentation, including, when applicable, formally approved budgets, authorizations, or minutes
- Inquiry of management about its reasons for a particular course of action
- Review of events occurring subsequent to the date of the financial statements and up to the date of the auditor's report
- Evaluation of the entity's ability to carry out a particular course of action given the entity's economic circumstances, including the implications of its existing commitments

Certain financial reporting frameworks, however, may not permit management's intentions or plans to be taken into account when making an accounting estimate. This is often the case for fair value accounting estimates because their measurement objective requires that assumptions reflect those used by market participants.

.A83 Matters that the auditor may consider in evaluating the reasonableness of assumptions used by management underlying fair value accounting estimates, in addition to those discussed previously, when applicable, may include, for example

- when relevant, whether and, if so, how management has incorporated market-specific inputs into the development of assumptions.
- whether the assumptions are consistent with observable market conditions and the characteristics of the asset or liability being measured at fair value.
- whether the sources of market-participant assumptions are relevant and reliable and how management has selected the assumptions to use when a number of different market participant assumptions exist.
- when appropriate, whether and, if so, how management considered assumptions used in, or

information about, comparable transactions, assets, or liabilities.

.A84 Further, fair value accounting estimates may comprise observable inputs, as well as unobservable inputs. When fair value accounting estimates are based on unobservable inputs, matters that the auditor may consider include, for example, how management supports

- the identification of the characteristics of market participants relevant to the accounting estimate.
- modifications it has made to its own assumptions to reflect its view of assumptions market participants would use.
- whether it has incorporated appropriate information.
- when applicable, how its assumptions take account of comparable transactions, assets, or liabilities.

If there are unobservable inputs, it is more likely that the auditor's evaluation of the assumptions will need to be combined with other responses to assessed risks in **paragraph .13** in order to obtain sufficient appropriate audit evidence. In such cases, it may be necessary for the auditor to perform other audit procedures (for example, examining documentation supporting the review and approval of the accounting estimate by appropriate levels of management and, when appropriate, those charged with governance).

.A85 Challenges may exist for management when fair value accounting estimates have unobservable inputs, in particular, as a result of illiquid markets. Management may not have the expertise internally to value illiquid or complex financial instruments, and there may be limited sources of information available to establish their values. It may be necessary for management to make assumptions, including assumptions utilized by management based upon the work of a specialist, to develop fair value measurements for illiquid assets.

.A86 The reliability of audit evidence is influenced by its source and nature. For example, management may use a broker quote to support a fair value measurement; however, when the quote is obtained from the institution that initially sold the instrument, this evidence may be less objective and may need to be supplemented with evidence from one or more other brokers or information from a pricing service. Pricing services and brokers may use methods of valuation that are not known to management or the auditor. In accordance with **paragraph .08*c*(i)** , the auditor is required to obtain an understanding of how such information was developed. For example, the auditor might inquire whether the value is based on private trades, trades of similar instruments, a cash flow model, or some combination of inputs. Inquiry into the nature of a broker quote is directed at its reliability and consistency with the objective of fair value measurement.

.A87 Changes in market conditions may require changes in valuation techniques. Consistency is generally a desirable quality in financial information but may be inappropriate if circumstances change. **Paragraph .A57** gives the example of the introduction of an active market as an illustration of changed circumstances leading to a move from valuation by model to valuation by market price. In a period of market instability, the changes could be in the opposite direction because markets could become inactive. Even when models have been consistently used, a need for management to examine the continuing appropriateness of the assumptions exists. Further, models may have been calibrated in times when reasonable market information was available but may not provide reasonable valuations in times of unanticipated stress. Consequently, the degree of consistency of valuation techniques and the appropriateness of changes in technique or assumptions require the auditor's attention.

.A88 A change in valuation technique does not, however, justify a change in the underlying measurement objective (that is, fair value as defined in the financial reporting framework) to a different standard of value, such as an individual opinion of value. **Section 500** addresses what constitutes audit evidence, the quantity and quality of audit evidence to be obtained, and the audit procedures that the auditor uses for obtaining that audit evidence. Unless management is able to support its valuations, it will be difficult for the auditor to obtain sufficient appropriate audit evidence. However, as evidence about assumptions and the validity of models is necessarily less reliable than evidence of a market price taken from an active market, it may be necessary to look at more sources of evidence to accumulate sufficient appropriate evidence because the audit evidence needed is affected by the risk of misstatement (the greater the risk, the more audit evidence is likely to be required). For example, an auditor or auditor's specialist may use an independent model to compare its results with those of the model used by management in order to evaluate whether the values determined by management's model are reasonable.

.A89 In addition, the auditor may consider whether external sources provide audit evidence to which the auditor could benchmark an entity's practices. For example, sources that track losses recorded by institutions may provide the auditor with audit evidence about whether the entity's valuations are reasonable if it has invested in similar instruments as those institutions.

Testing the Operating Effectiveness of Controls (Ref: par. .13c)

.A90 Testing the operating effectiveness of the controls over how management made the accounting estimate may be an appropriate response when management's process has been well-designed, implemented, and maintained. For example

- when controls exist for the review and approval of the accounting estimates by appropriate levels of management and, when appropriate, those charged with governance.
- when the accounting estimate is derived from the routine processing of data by the entity's accounting system.

.A91 Testing the operating effectiveness of the controls is required by **section 330** when **20**

a. the auditor's assessment of risks of material misstatement at the relevant assertion level includes an expectation that controls over the process are operating effectively or

b. substantive procedures alone do not provide sufficient appropriate audit evidence at the relevant assertion level.

20 · **Paragraph .08** of section 330.

.A92 *Considerations specific to smaller, less complex entities.* Controls over the process to make an accounting estimate may exist in smaller entities, but the formality with which they operate varies. Further, smaller entities may determine that certain types of controls are not necessary because of active management involvement in the financial reporting process. In the case of very small entities, however, there may not be many controls that the auditor can identify. For this reason, the auditor's response to the assessed risks is likely to be substantive in nature, with the auditor performing one or more of the other responses in **paragraph .13** .

Developing a Point Estimate or Range (Ref: par. .13d)

.A93 Developing a point estimate or range to evaluate management's point estimate may be an appropriate response when, for example

- an accounting estimate is not derived from the routine processing of data by the accounting system.
- the auditor's review of similar accounting estimates made in the prior period financial statements suggests that management's current period process is unlikely to be effective.
- the entity's controls within and over management's processes for determining accounting estimates are not well-designed or properly implemented.
- events or transactions between the period-end and the date of the auditor's report contradict management's point estimate.
- there are alternative sources of relevant data available to the auditor that can be used in developing a point estimate or range.

.A94 Even when the entity's controls are well-designed and properly implemented, developing a point estimate or range may be an effective and efficient response to the assessed risks. In other situations, the auditor may consider this approach as part of determining whether further procedures are necessary and, if so, their nature and extent.

.A95 The approach taken by the auditor in developing either a point estimate or range may vary based on what is considered most effective in the circumstances. For example, the auditor may initially develop a preliminary point estimate and then assess its sensitivity to changes in assumptions to ascertain a range with which to evaluate management's point estimate. Alternatively, the auditor may begin by developing a range for purposes of determining, when possible, a point estimate.

.A96 The ability of the auditor to develop a point estimate, as opposed to a range, depends on several factors, including the model used, the nature and extent of data available, and the estimation uncertainty involved with the accounting estimate. Further, the decision to develop a point estimate or range may be influenced by the applicable financial reporting framework, which may prescribe the point estimate that is to be used after consideration of the alternative outcomes and assumptions or prescribe a specific measurement method (for example, the use of a discounted probability-weighted expected value).

.A97 The auditor may develop a point estimate or range in a number of ways. For example, by

- using a model (for example, one that is commercially available for use in a particular sector or industry or a proprietary or an auditor-developed model).
- further developing management's consideration of alternative assumptions or outcomes (for example, by introducing a different set of assumptions).
- employing or engaging a person with specialized expertise to develop or execute the model or provide relevant assumptions.
- making reference to other comparable conditions, transactions, or events or, when relevant, markets for comparable assets or liabilities.

Understanding Management's Assumptions or Method (Ref: par . .13d(i))

.A98 When the auditor develops a point estimate or range and uses assumptions or a method different from those used by management, **paragraph .13*d*(i)** requires the auditor to obtain a sufficient understanding of the assumptions or method used by management in making the accounting estimate. This understanding provides the auditor with information that may be relevant to the auditor's development of an appropriate point estimate or range. Further, it assists the auditor to understand and evaluate any significant differences from management's point estimate. For example, a difference may arise because the auditor used different, but equally valid, assumptions, compared with those used by management. This may reveal that the accounting estimate is highly sensitive to certain assumptions and, therefore, subject to high estimation uncertainty, indicating that the accounting estimate may be a significant risk. Alternatively, a difference may arise as a result of a factual error made by management. Depending on the circumstances, the auditor may find it helpful in drawing conclusions to discuss with management the basis for the assumptions used and their validity and the difference, if any, in the approach taken to making the accounting estimate.

Narrowing a Range (Ref: par. . 13d(ii))

.A99 When the auditor concludes that it is appropriate to use a range to evaluate the reasonableness of management's point estimate (the auditor's range), **paragraph .13*d* (ii)** requires that range to encompass all reasonable outcomes, rather than all possible outcomes. The range cannot be one that comprises all possible outcomes if it is to be useful because such a range would be too wide to be effective for purposes of the audit. The auditor's range is useful and effective when it is sufficiently narrow to enable the auditor to conclude whether the accounting estimate is materially misstated.

.A100 Ordinarily, a range that has been narrowed to be equal to or less than performance materiality (see **section 320** , *Materiality in Planning and Performing an Audit*) is adequate for the purposes of evaluating the reasonableness of management's point estimate. [21] 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 .A108-.A121** .

21 · **Paragraph .11** of section 320, *Materiality in Planning and Performing an Audit*.

.A101 Narrowing the range to a position at which all outcomes within the range are considered reasonable may be achieved by

a. eliminating from the range those outcomes at the extremities of the range judged by the auditor to be unlikely to occur and

b. 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.

Considering Whether Specialized Skills or Knowledge Are Required (Ref: par. .14 *)*

.A102 In planning the audit, the auditor is required by **section 300** , *Planning an Audit*, to ascertain the nature, timing, and extent of resources necessary to perform the audit engagement. **22** This may include, as necessary, the involvement of those with specialized skills or knowledge. In addition, **section 220** , *Quality Control for an Engagement Conducted in Accordance With Generally Accepted Auditing Standards*, requires the engagement partner to be satisfied that the engagement team and any auditor's specialists who are not part of the engagement team collectively have the appropriate competence and capabilities to perform the audit engagement. **23** During the course of the audit of accounting estimates, the auditor may identify, in light of the experience of the auditor and the circumstances of the engagement, the need for specialized skills or knowledge to be applied regarding one or more aspects of the accounting estimates.

22 · **Paragraph .08** of section 300, *Planning an Audit*.

23 · **Paragraph .16** of section 220, *Quality Control for an Engagement Conducted in Accordance With Generally Accepted Auditing Standards*.

.A103 Matters that may affect the auditor's consideration of whether specialized skills or knowledge is required include, for example, the following:

- The nature of the underlying asset, liability, or component of equity in a particular business or industry (for example, mineral deposits, agricultural assets, or complex financial instruments)
- A high degree of estimation uncertainty
- Complex calculations or specialized models are involved (for example, when estimating fair values when no observable market exists)
- The complexity of the requirements of the applicable financial reporting framework relevant to accounting estimates, including whether there are areas known to be subject to differing interpretation or practice is inconsistent or developing
- The procedures that the auditor intends to undertake in responding to assessed risks

.A104 For the majority of accounting estimates, even when estimation uncertainty exists, it is unlikely that specialized skills or knowledge will be required. For example, it is unlikely that specialized skills or knowledge would be necessary for an auditor to evaluate an allowance for doubtful accounts.

.A105 However, the auditor may not possess the specialized skills or knowledge required when the matter involved is in a field other than accounting or auditing and may need to obtain it from an auditor's specialist. **Section 620** , *Using the Work of an Auditor's Specialist*, addresses determining the need to employ or engage an auditor's specialist and the auditor's responsibilities when using the work of an auditor's specialist.

.A106 Further, in some cases, the auditor may conclude that it is necessary to obtain specialized skills or knowledge related to specific areas of accounting or auditing. Individuals with such skills or knowledge may be employed by the auditor's firm or engaged from an external organization outside of the auditor's firm. When such individuals perform audit procedures on the engagement, they are part of the engagement team, and accordingly, they are subject to the requirements in **section 220** .

.A107 Depending on the auditor's understanding of, and experience working with, the auditor's specialist or those other individuals with specialized skills or knowledge, the auditor may consider it appropriate to discuss matters such as the requirements of the applicable financial reporting framework with the individuals involved to establish that their work is relevant for audit purposes.

Further Substantive Procedures to Respond to Significant Risks (Ref: par. .15-. 17 and .20)

.A108 In auditing accounting estimates that give rise to significant risks, the auditor's further substantive procedures are focused on the evaluation of

- *a.* how management has assessed the effect of estimation uncertainty on the accounting estimate and the effect that such uncertainty may have on the appropriateness of the recognition of the accounting estimate in the financial statements and
- *b.* the adequacy of related disclosures.

For estimates that give rise to significant risks, the procedures that the auditor is required to perform to address the requirements in **paragraphs .12-.13** may be performed in conjunction with the procedures performed to address the requirements in **paragraphs .15-.17** .

Estimation Uncertainty

Management's Consideration of Estimation Uncertainty (Ref: par. .15a)

.A109 Management may evaluate alternative assumptions or outcomes of the accounting estimates through a number of methods, depending on the circumstances. One possible method used by management is to undertake a sensitivity analysis. This might involve determining how the monetary amount of an accounting estimate varies with different assumptions. Even for accounting estimates measured at fair value, there can be variation because different market participants will use different assumptions. A sensitivity analysis could lead to the development of a number of outcome scenarios, sometimes characterized as a range of outcomes by management, such as "pessimistic" and " optimistic" scenarios.

.A110 A sensitivity analysis may demonstrate that an accounting estimate is not sensitive to changes in particular assumptions. Alternatively, it may demonstrate that the accounting estimate is sensitive to one or more assumptions that then become the focus of the auditor's attention.

.A111 This is not intended to suggest that one particular method of addressing estimation uncertainty (such as sensitivity analysis) is more suitable than another or that management's consideration of alternative assumptions or outcomes needs to be conducted through a detailed process supported by extensive documentation. Rather, it is whether management has assessed how estimation uncertainty may affect the accounting estimate that is important, not the specific manner in which it is done. Accordingly, when management has not considered alternative assumptions or outcomes, it may be necessary for the auditor to discuss with management, and request support for how it has addressed, the effects of estimation uncertainty on the accounting estimate.

.A112 *Considerations specific to smaller, less complex entities.* Smaller entities may use simple means to assess the estimation uncertainty. In addition to the auditor's review of available documentation, the auditor may obtain other audit evidence of management consideration of alternative assumptions or outcomes by inquiry of management. In addition, management may not have the expertise to consider alternative outcomes or otherwise address the estimation uncertainty of the accounting estimate. In such cases, the auditor may explain to management the process or the different methods available for doing so and the documentation thereof. This would not, however, change the responsibilities of management for the preparation and fair presentation of the financial statements.

Significant Assumptions (Ref: par. .15b)

.A113 An assumption used in making an accounting estimate may be deemed to be significant if a reasonable variation in the assumption would materially affect the measurement of the accounting estimate.

.A114 Support for significant assumptions derived from management's knowledge may be obtained from management's continuing processes of strategic analysis and risk management. Even without formal established processes, such as may be the case in smaller entities, the auditor may be able to evaluate the assumptions through inquiries of, and discussions with, management, along with other audit procedures, in order to obtain sufficient appropriate audit evidence.

.A115 The auditor's considerations in evaluating assumptions made by management are described in **paragraphs .A78-.A89** .

Management Intent and Ability (Ref: par. .15c)

.A116 The auditor's considerations regarding assumptions made by management and management's intent and ability are described in **paragraphs .A12** and **.A82** .

Development of a Range (Ref: par. .16)

.A117 In preparing the financial statements, management may be satisfied that it has adequately addressed the effects of estimation uncertainty on the accounting estimates that give rise to significant risks. In some circumstances, however, the auditor may view the efforts of management as inadequate. This may be the case, for example, when, in the auditor's professional judgment

- sufficient appropriate audit evidence could not be obtained through the auditor's evaluation of how management has addressed the effects of estimation uncertainty.
- it is necessary to explore further the degree of estimation uncertainty associated with an accounting estimate (for example, when the auditor is aware of wide variation in outcomes for similar accounting estimates in similar circumstances).
- it is unlikely that other audit evidence can be obtained (for example, through the review of events occurring up to the date of the auditor's report).
- indicators of management bias in the making of accounting estimates may exist.

.A118 The auditor's considerations in determining a range for this purpose are described in **paragraphs .A93-.A101** .

Recognition and Measurement Criteria

Recognition of the Accounting Estimates in the Financial Statements (Ref: par. .17a)

.A119 When management has recognized an accounting estimate in the financial statements, the focus of the auditor's evaluation is on whether the measurement of the accounting estimate is sufficiently reliable to meet the recognition criteria of the applicable financial reporting framework.

.A120 With respect to accounting estimates that have not been recognized, the focus of the auditor's evaluation is on whether the recognition criteria of the applicable financial reporting framework have, in fact, been met. Even when an accounting estimate has not been recognized and the auditor concludes that this treatment is appropriate, there may be a need for disclosure of the circumstances in the notes to the financial statements. The auditor may also determine that there is a need to draw the reader's attention to a significant uncertainty by adding an emphasis-of-matter paragraph to the auditor's report. **Section 706** , *Emphasis -of-Matter Paragraphs and Other-Matter Paragraphs in the Independent Auditor's Report*, addresses the use of such paragraphs.

Measurement Basis for the Accounting Estimates (Ref: par. .17b)

.A121 With respect to fair value accounting estimates, some financial reporting frameworks presume that fair value can be measured reliably as a prerequisite to either requiring or permitting fair value measurements and disclosures. In some cases, this presumption may be overcome when, for example, no appropriate method or basis for measurement exists. In such cases, the focus of the auditor's evaluation is on whether management's basis for overcoming the presumption relating to the use of fair value set forth under the applicable financial reporting framework is appropriate.

Evaluating the Reasonableness of the Accounting Estimates and Determining Misstatements (Ref: par. .18)

.A122 Based on the audit evidence obtained, the auditor may conclude that the evidence points to an accounting estimate that differs from management's point estimate. When the audit evidence supports a point estimate, the difference between the auditor's point estimate and management's point estimate constitutes a misstatement. When the auditor has concluded that using the auditor's range provides sufficient appropriate audit evidence, a management point estimate that lies outside the auditor's range would not be supported by audit evidence. In such cases, the misstatement is no less than the difference between management's point estimate and the nearest point of the auditor's range.

.A123 When management has changed an accounting estimate, or the method in making it, from the prior period based on a subjective assessment that there has been a change in circumstances, the auditor may conclude, based on the audit evidence, that the accounting estimate is misstated as a result of an arbitrary change by management or may regard it as an indicator of possible management bias (see **paragraphs .A133-.A134**).

.A124 **Section 450** , *Evaluation of Misstatements Identified During the Audit*, provides guidance on distinguishing misstatements for purposes of the auditor's evaluation of the effect of uncorrected misstatements on the financial statements. [24] With regard to accounting estimates, a misstatement, whether caused by fraud or error, may arise as a result of

- misstatements about which no doubt exists (factual misstatements).
- differences arising from management's judgments concerning accounting estimates that the auditor considers unreasonable or the selection or application of accounting policies that the auditor considers inappropriate (judgmental misstatements).
- the auditor's best estimate of misstatements in populations involving the projection of misstatements identified in audit samples to the entire population from which the samples were drawn (projected misstatements).

In some cases involving accounting estimates, a misstatement could arise as a result of a combination of these circumstances, making separate identification difficult or impossible.

24 · **Paragraph .A3** of section 450, *Evaluation of Misstatements Identified During the Audit* .

.A125 Evaluating the reasonableness of accounting estimates and related disclosures included in the notes to the financial statements, whether required by the applicable financial reporting framework or disclosed voluntarily, involves essentially the same types of considerations applied when auditing an accounting estimate recognized in the financial statements.

Written Representations

.A126 Part of the auditor's audit evidence includes obtaining representations from management about whether management believes significant assumptions used in making accounting estimates are reasonable. See **section 580** , *Written Representations.* **25**

25 · **Paragraph .16** of section 580, *Written Representations*.

Communication With Those Charged With Governance

.A127 **Section 260** , *The Auditor's Communication With Those Charged With Governance*, addresses the auditor's communications of certain matters related to the conduct of an audit to those charged with governance. The auditor is required by **section 260** to communicate the auditor's views about the qualitative aspects of the entity's significant accounting practices, including accounting estimates, and, when applicable, is required to determine that those charged with governance are informed about the process used by management in formulating particularly sensitive accounting estimates and about the basis for the auditor's conclusions regarding the reasonableness of those estimates. **26**

26 · **Paragraph .12** of section 260, *The Auditor's Communication With Those Charged With Governance*.

Disclosures Related to Accounting Estimates

Disclosures in Accordance With the Applicable Financial Reporting Framework (Ref: par. .19)

.A128 The presentation of financial statements in accordance with the applicable financial reporting framework includes adequate disclosure of material matters. The applicable financial reporting framework may permit or prescribe disclosures related to accounting estimates, and some entities may disclose voluntarily additional information in the notes to the financial statements. These disclosures may include, for example

- the assumptions used.
- the method of estimation used, including any applicable model(s).
- the basis for the selection of the method of estimation.
- the effect of any changes to the method of estimation from the prior period.
- the sources and implications of estimation uncertainty.

Such disclosures are relevant to users in understanding the accounting estimates recognized or disclosed in the financial statements, and sufficient appropriate audit evidence needs to be obtained about whether the disclosures are in accordance with the requirements of the applicable financial reporting framework.

.A129 In some cases, the applicable financial reporting framework may require specific disclosures regarding uncertainties. For example, some financial reporting frameworks prescribe the following:

- The disclosure of key assumptions and other sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities. Such requirements may be described using terms such as *key sources of estimation uncertainty* or *critical accounting estimates.*
- The disclosure of the range of possible outcomes and the assumptions used in determining the range.
- The disclosure of information regarding the significance of fair value accounting estimates to the entity's financial position and performance.
- Qualitative disclosures, such as the exposures to risk and how they arise; the entity's objectives, policies, and procedures for managing the risk; and the methods used to measure the risk, and any changes from the previous period of these qualitative concepts.
- Quantitative disclosures, such as the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel, including credit risk, liquidity risk, and market risk.

Disclosures of Estimation Uncertainty for Accounting Estimates That Give Rise to Significant Risks (Ref: **par. .20** *)*

.A130 Regarding accounting estimates having significant risk, even when the disclosures are in accordance with the applicable financial reporting framework, the auditor may conclude that the disclosure of estimation uncertainty is inadequate in light of the circumstances and facts involved. The auditor's evaluation of the adequacy of disclosure of estimation uncertainty increases in importance the greater the range of possible outcomes of the accounting estimate in relation to materiality (see the related discussion in **paragraphs .A98-.A101**).

.A131 In some cases, the auditor may consider it appropriate to encourage management to describe the circumstances relating to the estimation uncertainty in the notes to the financial statements.

.A132 **Section 705** , *Modifications to the Opinion in the Independent Auditor's Report*, addresses the implications for the auditor's opinion when the auditor believes that management's disclosure of estimation uncertainty in the financial statements is inadequate or misleading.

Indicators of Possible Management Bias (Ref: par. .21)

.A133 During the audit, the auditor may become aware of judgments and decisions made by management that give rise to indicators of possible management bias (see **paragraph .A9**). Such indicators may affect the auditor's conclusion about whether the auditor's risk assessment and related responses remain appropriate, and the auditor may need to consider the implications for the rest of the audit. Further, they may affect the auditor's evaluation of whether the financial statements as a whole are free from material misstatement, as discussed in **section 700** , *Forming an Opinion and Reporting on Financial Statements.*

.A134 Examples of indicators of possible management bias with respect to accounting estimates include the following:

- Changes in an accounting estimate, or the method for making it, when management has made a subjective assessment that there has been a change in circumstances
- The use of an entity's own assumptions for fair value accounting estimates when they are inconsistent with observable market assumptions
- The selection or construction of significant assumptions that yield a point estimate favorable for management objectives
- The selection of a point estimate that may indicate a pattern of optimism or pessimism

Documentation (Ref: par. .22)

.A135 Documentation of indicators of possible management bias identified during the audit assists the auditor in concluding whether the auditor's risk assessment and related responses remain appropriate and in evaluating whether the financial statements as a whole are free from material misstatement. See **paragraph .A134** for examples of indicators of possible management bias.

Exhibit - Examples of Accounting Estimates (Ref: par. .02)

.A136 The following are examples of accounting estimates that are included in financial statements. The list is presented for information only. It is not considered to be all-inclusive.

- **Receivables**
  - Uncollectible receivables
  - Allowance for loan losses
  - Valuation of long-term unconditional promises to give
- **Inventories**
  - Obsolete inventory
  - Net realizable value of inventories when future selling prices and future costs are involved
  - Losses on purchase commitments
- **Financial instruments**
  - Valuation of securities
  - Probability of high correlation of a hedge
  - Sales of securities with puts and calls

- **Productive facilities, natural resources, and intangibles**
  - Useful lives and residual values
  - Depreciation and amortization methods
  - Impairment analysis
  - Recoverability of costs
  - Recoverable reserves
- **Accruals**
  - Property and casualty insurance company loss reserves
  - Compensation in stock option plans and deferred plans
  - Warranty claims
  - Taxes on real and personal property
  - Renegotiation refunds
  - Actuarial assumptions in benefit costs
- **Revenues**
  - Airline passenger revenue
  - Subscription income
  - Freight and cargo revenue
  - Dues income
  - Losses on sales contracts
- **Contracts**
  - Revenue to be earned
  - Costs to be incurred
  - Percent of completion
- **Leases**
  - Initial direct costs
  - Executory costs
- **Litigation**
  - Probability of loss
  - Amount of loss
- **Rates**
  - Annual effective tax rate in interim reporting
  - Imputed interest rates on receivables and payables
  - Gross profit rates under program method of accounting
- **Other**
  - Losses and net realizable value on disposal of segment or restructuring of a business
  - Fair values in nonmonetary exchanges
  - Interim period costs in interim reporting
  - Current values in personal financial statements