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Securitization Accounting 11th edition

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Chapter 1
What's new since the last edition?

It is our pleasure to share with you this eleventh edition of our Securitization Accounting book. Our mission has always been to provide a roadmap that covers accounting, tax, and various regulatory changes impacting securitization and the overall markets that can be useful to a wide range of potential readers, beyond accounting professionals. As we have expressed over the years, with each edition's release, we remain strong in our belief that accounting will play a significant role in securitization and remain embedded in its evolving foundation. We feel that we met this goal once again with this new publication and hopefully you agree.

Some more expansive updates in this edition include a detailed discussion related to:

- The latest changes to consolidation guidance
- The interplay of risk retention rules to transfer accounting principles in commercial mortgage-backed securities (CMBS) structures
- The replacement of International Accounting Standards (IAS) 39 with International Financial Reporting Standards® (IFRS) 9, although guidance remains unchanged
- The introduction of the new current expected credit loss (CECL) model and the changes it has on various impairment methodologies
- The differences in impairment approach for the expected credit loss model under IFRS versus US Generally Accepted Accounting Principles (GAAP)
- Enhanced disclosure requirements for entities reporting financial assets at fair value on a recurring basis under Accounting Standards Codification (ASC) 820, *Fair Value Measurement*
- The impact of the Tax Cuts and Jobs Act of 2017
- The impact of regulatory changes under different supervisory regimes on market structure and capital requirements

In addition to the updates highlighted above and detailed throughout the chapters following, a brief discussion on the London Interbank Offered Rate (LIBOR) and reference rate reform impacting the securitization market is provided below.

Based on recommendations from the Financial Stability Board and the Financial Stability Oversight Council, global financial regulators have, over the last several years, been facilitating a transition away from using the various "interbank offered rates" to alternative reference rates. In the United States, those efforts are focused on LIBOR. While estimates of when the transition will take effect vary by jurisdiction, there is broad agreement that LIBOR's days are numbered.

In the United States, the Alternative Reference Rates Committee (ARRC) was convened in 2014 at the direction of the Federal Reserve Bank of New York and was initially tasked to identify LIBOR alternatives. The ARRC is composed of various private sector entities and public sector representatives. Since 2014, the remit of ARRC has expanded to help ensure an orderly transition away from LIBOR. Similar efforts are underway in various jurisdictions throughout the world.

The ARRC recommended the Secured Overnight Financing Rate (SOFR) as an alternative to LIBOR. Other jurisdictions have identified other rates—for example, in the United Kingdom, LIBOR will transition to the Sterling Overnight Interbank Average Rate (SONIA).

The transition, expected to take place over the next several years, will impact both new and existing contracts. The securitization market will be affected by the transition in several ways.

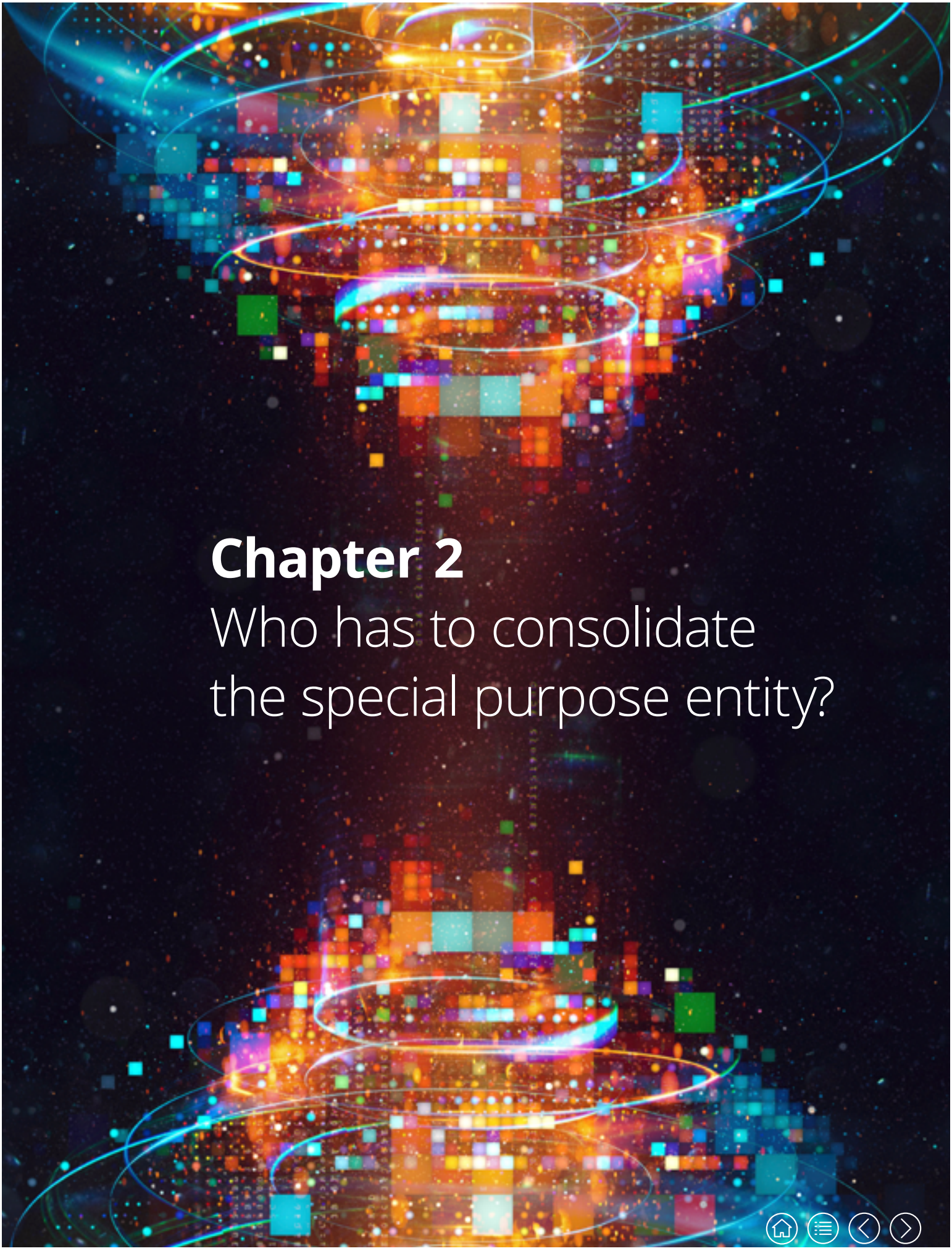
Currently, contracts governing various debt instruments, ranging from mortgage loans to collateralized debt obligations (CDOs), typically have "fallback" provisions that identify what actions are to be taken when LIBOR is not available as a reliable reference rate. Those fallback provisions usually only contemplate a temporary inability to source LIBOR, not a permanent state of affairs. As such, the existing fallback language may require amendment in order to appropriately identify a reference rate going forward, and any new LIBOR transactions would need to include fallback language, specifying what rate to use, should LIBOR not be available.

Changes to contractual terms to accommodate the transition are expected to have a number of operational and financial reporting implications for both issuers and investors. Some of the financial reporting and operational impacts may include:

- **Debt modifications** – Any potential updates to the existing contracts may result in an extinguishment or a modification of the debt agreement under the relevant financial reporting framework.
- **Fair value measurements** – Changing the floating rate on either a loan or a security will likely impact the fair value of the instrument, which could have both a financial reporting and operational impact.
- **Servicing assets** – LIBOR-based spot curves are widely used for fair value measurements. A new curve based on SOFR could impact the fair value measurement of servicing assets and liabilities.
- **Embedded derivatives** – The existence of an embedded interest rate derivative may need to be assessed for debt contracts that are modified themselves and for securitization transactions that may have basis differences between the collateral and the beneficial interests issued by a securitization vehicle.

Both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board® (IASB) have recognized the challenges presented by reference rate reform and have proposed relief related to some, but not all, of the challenges listed above. As of this writing, the amendments have not been finalized, and readers are encouraged to check with their accounting advisers and auditors to understand the accounting and financial reporting impact before taking any actions related to LIBOR transitions. We will continue to cover up-to-date issues and provide a point of view on such changes that may have a future impact on securitization.

We hope you find this edition informative, useful, and easy to navigate.



Chapter 2
Who has to consolidate the special purpose entity?

In accounting for securitizations, there are two baseline questions to answer:

- Do I have to consolidate the special purpose entity(ies) involved?
- Have I sold the transferred assets for accounting purposes?

Both US GAAP and IFRS require a reporting entity, as part of the derecognition assessment, to consider whether the transfer represents a transfer to a consolidated subsidiary. Therefore, logically, the first step in determining whether sale accounting has occurred is to determine if the transferor is required to consolidate the securitization entity.

Because many securitizations involve more than one transfer, and consolidated affiliates often prepare their own separate entity financial statements, the consolidation and sale questions will often need to be considered more than once for a transaction. As one might expect, different answers may be appropriate at different stages in the securitization or for different financial reporting purposes, depending on the facts and circumstances.

What accounting guidance applies?

For companies applying GAAP, the consolidation guidance is included in ASC 810, *Consolidation*—in particular, the Variable Interest Entity (VIE) subsections. Not all special purpose entities (SPEs) are VIEs, but generally all securitization SPEs are VIEs. A VIE does not usually issue equity instruments with voting rights (or other interests with similar rights) with the power to direct the activities of the entity, and often the total equity investment at risk is not sufficient to permit the entity to finance its activities without additional forms of credit enhancement or other financial support. If an entity does not issue voting or similar interests or if the equity investment at risk is insufficient, that entity's activities probably are predetermined or decision-making ability is determined contractually. Because securitization entities are typically insufficiently capitalized, with no (or little) true "equity" for accounting purposes, they are generally VIEs. The investments or other interests that will absorb portions of a VIE's expected losses or receive portions of its expected residual returns are called variable interests.

Under GAAP, all legal entities are required to be evaluated as either a VIE or a voting interest entity. The evaluation of whether a VIE should be consolidated is based on whether the reporting entity has both: (1) power and (2) exposure to potentially significant economics.

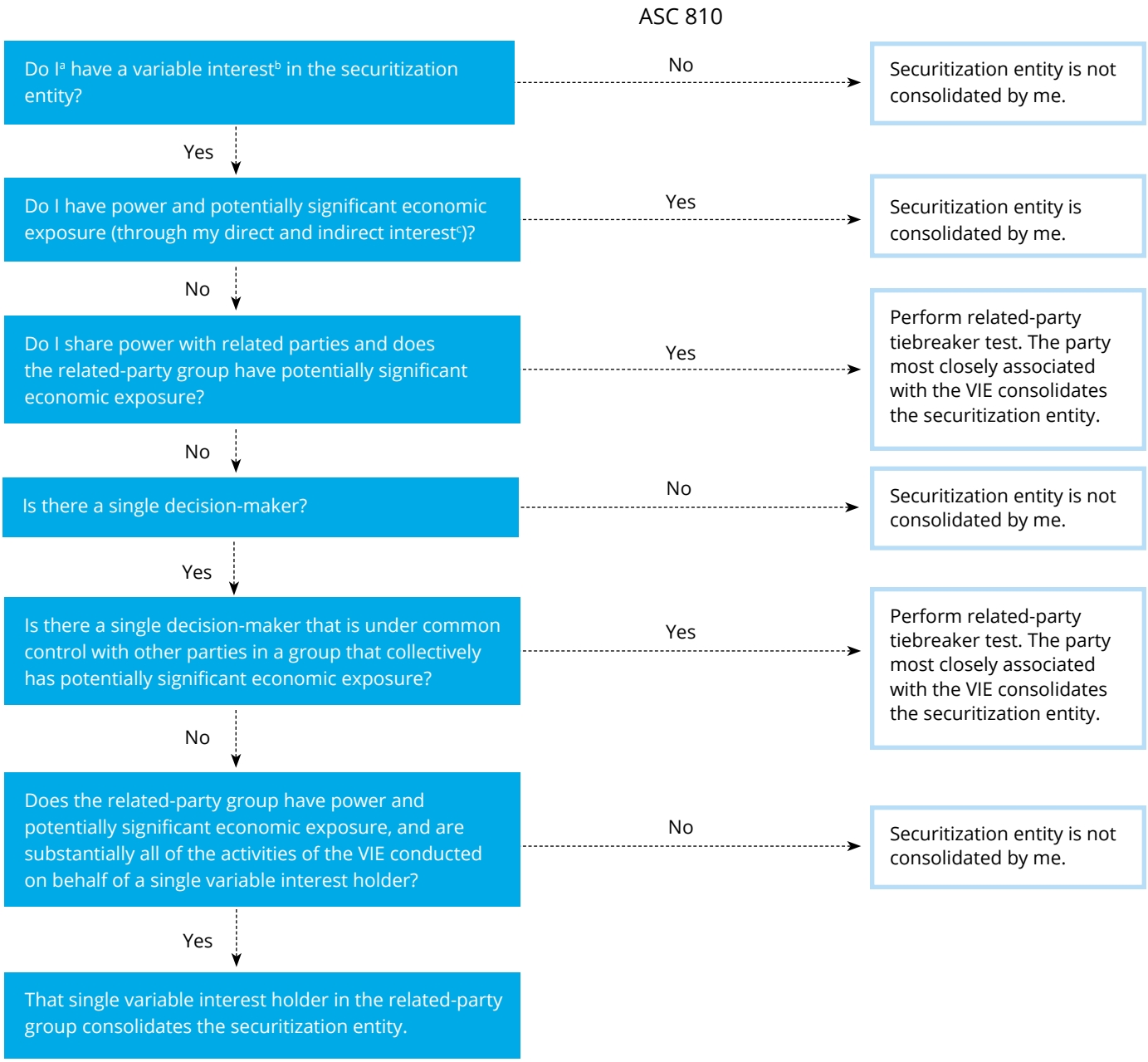
Under IFRS, the primary source of guidance on determining when and how to prepare consolidated financial statements is IFRS 10, *Consolidated Financial Statements*, which contains a single, control-based model for determining consolidation of a legal entity. In other words, IFRS 10 does not require an analysis of whether a legal entity is a VIE or a voting interest entity.

Who must consolidate the securitization entity?

The first step in determining who should consolidate the securitization entity is identifying all the parties to the deal and identifying which parties hold variable interests in the SPE. While there is no requirement for the transaction parties to compare their accounting conclusions (theoretically, only one entity should conclude that it has control), each participant needs to understand the various rights and obligations granted to each party in order to reach its own accounting conclusions for its interest(s) in the SPE.

The consolidation models under both GAAP and IFRS are largely similar and are based on control. ASC 810 requires identifying "the primary beneficiary," which is the party that has a "controlling financial interest" because it has both: (1) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. Under IFRS 10, an investor controls an entity if the investor has: (1) power over the investee, (2) exposure, or rights, to variable returns from its involvement with the investee, and (3) the ability to use its power over the investee to affect the amount of the investor's return.

GAAP consolidation decision tree

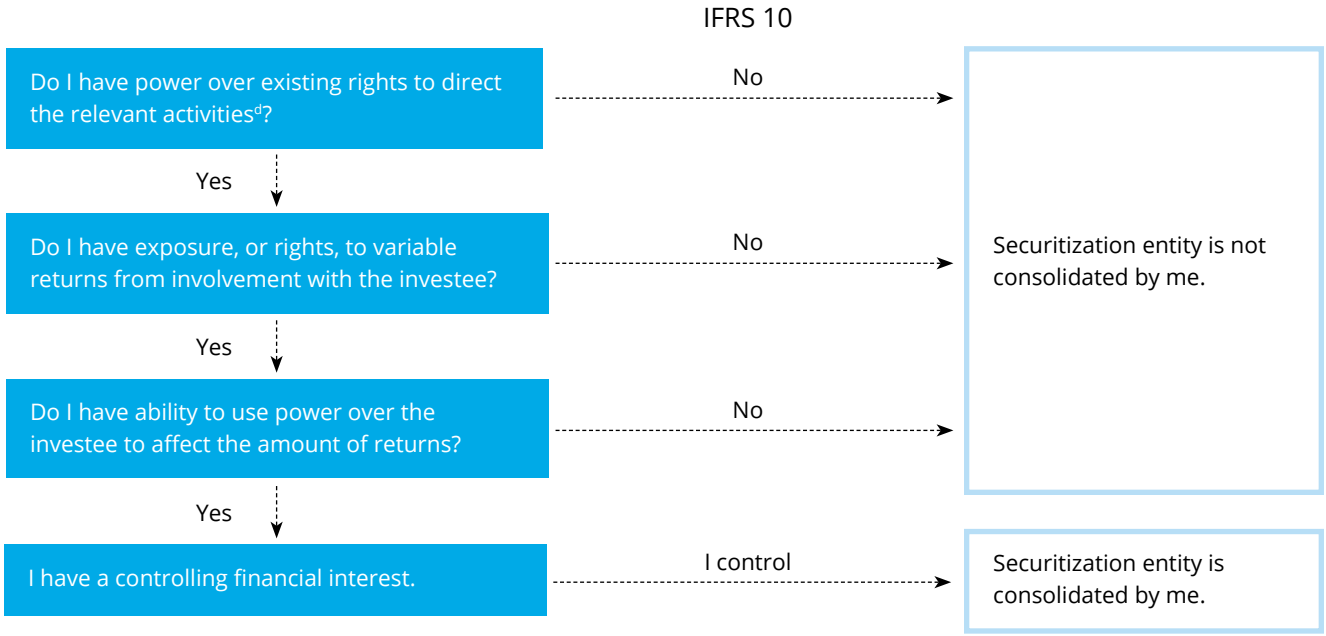


[a] In addition to their own activities and variable interests, reporting entities must also consider the activities and variable interests of both related parties and those parties deemed de facto agents under ASC 810.

[b] Some servicing fee and decision-making arrangements may not constitute a variable interest in a VIE, as discussed later in this chapter.

[c] Indirect interests represent an entity's proportion of interests held by related parties and de facto agents.

IFRS consolidation decision tree



[d] In addition to their own activities and variable interests, reporting entities must also consider the activities and variable interests of both related parties and those parties deemed de facto agents under IFRS 10.

ASC 810 provides that only substantive terms, transactions, and arrangements, whether contractual or noncontractual, shall be considered. Judgment, based on consideration of all facts and circumstances, is needed to distinguish substantive terms, transactions, and arrangements from those that are nonsubstantive. James L. Kroeker, the former Securities and Exchange Commission (SEC) chief accountant and current FASB vice chairman, told auditors and preparers "to remain vigilant when evaluating the substance, or lack thereof, of elements of transactions included to achieve specific accounting results" for off-balance-sheet transactions.[1] While not as explicit, IFRS 10 also states that only substantive rights over an investee are considered, and it provides examples of factors to consider in determining whether a right is substantive (such as penalties or incentives that would deter a holder from exercising its rights).

Only one reporting entity is expected to control a securitization entity (or any VIE). Although several deal participants could have variable interests, typically only one, if any, would have the power to direct the activities that most significantly impact the entity's economic performance. Further elaboration on interpreting what it takes to have variable interests that are potentially significant under GAAP and the ability to affect returns through power under IFRS is provided later in this chapter.

If a securitization entity must be consolidated, all of its assets and liabilities (to third parties) are included in the consolidated balance sheet of the party that consolidates, not just the party's proportionate ownership share. Interests in a consolidated securitization entity (e.g., beneficial interests) that are held by other investors are shown as liabilities in the consolidated financial statements. That is, even if the beneficial interests are issued in the form of equity (e.g., a share), the SEC staff believes those beneficial interests should be classified as liabilities in the consolidated financial statements of the parent entity.[2]

It is important to remember that all intercompany transactions, such as servicing or other fee arrangements between the securitization entity and the consolidating entity, have to be eliminated in consolidation.

1 Chief Accountant James L. Kroeker, Office of the Chief Accountant: "Remarks Before the 2009 AICPA National Conference on Current SEC and PCAOB Developments," AICPA SEC Conference, Washington, DC, December 7, 2009.
2 Professional Accounting Fellow Brian Fields, "Speech by SEC Staff: Remarks before the 2009 AICPA National Conference on Current SEC and PCAOB Developments," AICPA SEC Conference, Washington, DC, December 7, 2009.

Step 1: Power—identifying the most important activities

In securitizations, the economic performance of the entity is generally most significantly impacted by the performance of the underlying assets. Sometimes, in structures like commercial paper (CP) conduits, management of liabilities (e.g., selecting the tenor of CP) may also significantly impact the performance of the entity, but generally not most significantly. Some of the factors that might impact the performance of the underlying assets might be beyond the direct control of any of the parties to the securitization (e.g., voluntary prepayments) and therefore do not affect the power analysis. The activity that most significantly impacts the performance of the underlying assets is typically the management by the servicer of the inevitable delinquencies and defaults that occur; or, in a managed collateral loan obligation (CLO), the activities of the collateral manager in selecting, monitoring, and disposing of collateral assets.

When analyzing who has the power to direct those activities, the following questions should be answered:

- Do I hold the power unilaterally?
- Or do other parties also have relevant rights and responsibilities? For example:
  - Is there another party or other parties that direct other important activities of the trust? If so, which activities are the most important?
  - Is there another party that has to consent to every important decision?
  - Is there another party that can direct me to take certain actions?
  - Is there another party that can replace me without cause?
  - Is there another party or other parties that direct the same activities as me but with a different portion of the trust's assets?
- Is my right to exercise power currently available or contingent on some other event(s) occurring?

Kick-out rights (GAAP)/principal-agent (IFRS)

GAAP and IFRS include similar concepts with respect to kick-out or removal rights, but they are framed in slightly different contexts within each respective consolidation model. Substantive kick-out rights (i.e., those that can be exercised at will and not upon a contingent event) held by a single party result in the party performing the relevant activities not having power because it could be removed from that role at the whim of the party holding the removal right.

GAAP incorporates the concept of kick-out or removal rights as part of the power determination. If a single participant has the substantive right to unilaterally remove the party that directs the entity's most significant activities, that right, in and of itself, may indicate that the holder of the kick-out right has power over the securitization entity, but only if that right is substantive and can be exercised at will (e.g., not solely upon an event of an objectively determinable breach of contract or insolvency by the service provider).

A kick-out right would generally be considered substantive if there are no significant barriers to exercise that right. Barriers to exercise include, but are not limited to, the following:

- Conditions that make it unlikely they will be exercisable. For example, conditions that narrowly limit the timing of the exercise.
- Financial penalties or operational barriers associated with replacing the decision-maker that would act as a significant disincentive for removal.
- The absence of an adequate number of qualified replacement decision-makers or the lack of adequate compensation to attract a qualified replacement.
- Lack of a mechanism for the holder to exercise its kick-out right. For example, the right can be exercised only at an investor meeting, but meetings cannot be initiated by the holder.

When might a servicer or collateral manager not have power?

Situation	See related guidance topic above or below
The servicer can be replaced without cause by a single unrelated party	Kick-out rights (GAAP)/principal-agent (IFRS)
All important servicing decisions require the consent of one or more unrelated parties	Participating rights and shared power
The servicer services less than a majority of the assets in the VIE (assuming the assets are similar)	Multiple parties having power
The activities of the servicer are administrative in nature and there is a special servicer	Power to direct contingent on other events

- The inability of the parties holding the rights to obtain the information necessary to exercise them.

IFRS raises the issue of kick-out rights or removal rights in the determination of whether a party is acting as a principal to a transaction or as an agent on behalf of others (as further discussed later in this chapter). If a single party is able to exercise the kick-out right without cause or barriers then that fact—in isolation—is indicative of the decision-maker being an agent and not having control.

So how do these concepts apply to securitization structures? It is common in CMBS transactions for a controlling classholder, which is defined in the transaction documents as the party that holds the majority of a subordinated class of the issuer's securities, to be able to remove the special servicer in the transaction without cause.

In many cases, the controlling classholder is—or is affiliated with—the special servicer, so this provision would not have an effect on the consolidation analysis in those situations. If a vote of the holders of the subordinated class of the securitization entity's securities was needed in order to replace the service provider, and there was more than one unrelated holder of those securities, then the kick-out right would not—in isolation—be enough to conclude that the special servicer does not have power and control. But if the controlling classholder is a single party (say the primary servicer) that could remove the special servicer at will, then the special servicer would not be deemed to have control. Instead, control lies with the single party that is the controlling classholder. Replacement of a special servicer only upon an objectively determinable breach of contract or insolvency, however, does not provide a party with power.

Participating rights and shared power

Under GAAP, participating rights are the ability to block or participate in the actions through which a reporting entity exercises the power to direct the activities of an entity that most significantly impact the entity's economic performance. Protective rights are rights designed to protect the interests of the party holding those rights without providing that party with control. IFRS does not define participating rights but acknowledges the concept of protective rights and that such rights would not provide power to that party.

So what does that mean? If a single participant (including its related parties) can veto all important decisions made by the unrelated servicer, that right—if considered substantive—might cause the service provider to not have "power," and power would be shared between the service provider and the participant holding the veto right (unrelated parties). If, in addition to being able to veto servicer decisions, a single participant could direct the servicer on what actions to take on defaulted loans, the consolidation burden might shift to that single participant. It is unusual in securitization transactions for any single participant to have the ability to block servicer actions, other than in certain limited cases, such as when a monoline insurer is paying out losses. That case may reflect a shift in power.

The requirement to obtain consent is considered a substantive participating right when the consent is required for all of the activities that most significantly impact the entity's economic performance. When the consent relates only to activities that are unimportant or only to certain of the significant activities, the consent might be considered a protective right; however, power would not be considered shared. In addition, an enterprise would need to closely analyze the governance provisions of an entity to understand whether the consent requirements are substantive (e.g., the consequences if consent were not given).

Multiple parties having power

The concept of multiple parties having power can manifest itself in two ways:

- ***Multiple parties performing different activities***
  It is possible that in certain securitizations, one service provider might be engaged to perform asset management and another service provider to perform funding management. In those situations, one must determine which activity most significantly affects the economic performance of the entity. Judgment will be required based on an analysis of all of the facts and circumstances. This concept is consistent in both the GAAP and IFRS consolidation models.
- ***Multiple parties performing the same activities***
  Both GAAP and IFRS have similar concepts that if multiple unrelated parties must jointly consent over decisions related to directing the relevant activities of an entity, power is shared and no party would consolidate. However, ASC 810 includes a concept not specifically addressed in IFRS 10 that when multiple parties individually perform the same activities over separate pools of assets, the party that would consolidate would be the party that has unilateral decision making over a majority of the assets, assuming that the assets are similar (e.g., assuming that the pool representing the majority of the assets is expected to most significantly affect the economic performance of the entity).

Power to direct contingent on other events

GAAP

When a party can direct activities only upon the occurrence of a contingent event (such as a servicer, who, except for a borrower default, performs only administrative tasks), the determination of which party has power will require an assessment of whether the contingent event initiates the most significant activities of the entity (i.e., the entity's most significant activities only occur when the contingent event happens) or results in a change in power (i.e., power shifts from one party to another upon the occurrence of a contingent event) over the most significant activities of the entity (in addition, the contingent event may change the composition of the entity's most significant activities).

Determining whether the contingent event initiates the most significant activities of the entity or results in a change in power will be based on a number of factors, including:

- The nature of the activities of the entity and its design.
- The significance of the activities and decisions that must be made before the occurrence of the contingent event, compared with the significance of the activities and decisions that must be made once the contingent event occurs. If both sets of activities and decisions are significant to the economic performance of the entity, the contingent event results in a change in power over the most significant activities of the entity. However, if the activities and decisions before the contingent event are not significant to the economic performance of the entity, the contingent event initiates the most significant activities of the entity.

If a transaction participant concludes that the contingent event initiates the most significant activities of the entity, all of the activities of the entity (including the activities that occur after the contingent event) would be included in the evaluation of whether they have the power to direct the activities that most significantly affect the entity's economic performance. In such instances, the party that directs the activities initiated by the contingent event would be the enterprise with the power to direct the activities that most significantly affect the economic performance of the entity.

If the transaction participant concludes that the contingent event results in a change in power over the most significant activities of the securitization entity, the deal party must evaluate whether the contingency is substantive. This assessment should focus on the entire life of the VIE. Some items to consider in assessing whether the contingent event is substantive include:

- The nature of the activities of the entity and its design.
- The terms of the contracts the entity has entered into with the variable interest holders.
- The variable interest holders' expectations regarding power at inception of the arrangement and throughout the life of the entity.
- Whether the contingent event is outside the control of the entity's variable interest holders.
- The likelihood that the contingent event will occur (or not occur) in the future. This should include, but not be limited to, consideration of history of whether a similar contingent event in similar arrangements has occurred.

So how about some examples?

In CMBS, and potentially other asset classes, it is common that upon delinquency or default by the borrower—or when default is reasonably foreseeable—the responsibility for servicing of the loan is transferred from the primary servicer to a special servicer. In such cases, the activities that the primary servicer has the power to direct

are typically administrative in nature and do not significantly impact the entity's economic performance.

Thus, the primary servicer would not typically have power. But can the special servicer have power even at the outset of the transaction given that there were no loans in special servicing? The answer is yes. Because the activities performed by the primary servicer are not considered significant to the economic performance of the securitization entity, and it is considered likely that the special servicer will be performing services during the life of the securitization entity, the special servicer is considered, from the outset, to have the power to direct the relevant activities. Another important consideration is whether the special servicer can be replaced and by whom. If the primary servicer or another party can unilaterally remove the special servicer, then that party may have power instead.

Another example is that of a monoline insurer, who has guaranteed the senior class of a securitization against losses once all subordinated classes have been written down to zero. In certain transactions, upon the occurrence of such events, the power of the monoline insurer increases in ways such as gaining the ability to replace the servicer or to start directing the servicer in the actions it should take on defaulted loans. The occurrence of the contingent event would likely result in a change in power over the most significant activities of the securitization entity and a change in primary beneficiary.

Yet another example would be the controlling classholder in a securitization entity initially being the holder of the majority of the most subordinated class. However, if losses are such that the subordinated class is reduced below some prespecified level, then the controlling classholder is changed to the holder of the majority of the next senior class (e.g., a mezzanine class). The occurrence of the contingent event might result in a change in power and a change in which party consolidates.

IFRS

IFRS 10 has similar concepts with respect to power upon contingent events and specifically addresses the issue in the context of predetermined activities (see section below for further discussion around predetermined activities). In practice, virtually all structured entities that operate in a predetermined way have relevant activities. Relevant activities are not necessarily activities that require decisions to be made in the normal course of the entity's activities; such decisions may be required only when particular circumstances arise or events occur. A structured entity that operates in a largely predetermined way may be designed so the direction of its activities and its returns are predetermined unless, or until, particular circumstances arise or events occur. In such cases, the decisions about the entity's activities when the specified circumstances or events occur are the relevant activities of the structured entity because they can significantly affect the returns of the structured entity. The fact that the right to make decisions is contingent on particular circumstances arising or an event occurring does not in itself affect the assessment as to whether an investor has power over the structured entity. The particular circumstances or events need not have occurred for an investor with the ability to make those decisions to have power over the structured entity.

Are there situations in which entities will not have ongoing activities that significantly affect their economic performance?

GAAP

In limited situations, the ongoing activities performed throughout the life of a securitization entity, though they may be necessary for the entity's continued existence (e.g., administrative activities in certain re-securitization entities, such as re-securitizations of real estate mortgage investment conduits [RE-REMICs]), may not be expected to significantly affect the entity's economic performance. In such situations, determination of the primary beneficiary will need to focus on the activities performed and decisions made at the securitization entity's inception as part of the design, because in those situations the initial design had the most significant impact on the economic performance of the entity.

However, when the ongoing activities of a securitization entity are expected to significantly affect the entity's economic performance, a reporting entity will need to focus the power analysis on those ongoing activities.[3] That is, it would not be appropriate to determine the primary beneficiary solely on the basis of decisions made at the entity's inception as part of the entity's design when there are ongoing activities that will significantly affect the economic performance of the entity. In addition, as discussed below, an evaluation of involvement in design will generally only be determinative when one reporting entity (or related-party group) has an economic interest that is disproportionately greater than its ongoing, stated power to direct the activities of the securitization entity.

ASC 810-10-25-38F states that an enterprise's involvement in the design of an entity "may indicate that the reporting entity had the opportunity and the incentive to establish arrangements that result in the reporting entity being the variable interest holder with ... the power to direct the activities that most significantly impact [the VIE's] economic performance." However, it also notes that involvement in design does not, in itself, establish that enterprise as the party with power. In many situations, several parties will be involved in the design of an entity and an analysis of the decisions made as part of the design would not be determinative or would not result in the identification of a primary beneficiary. ASC 810-10-25-38G states, in part that "consideration should be given to situations in which an

3 In addition, in certain financial structures, a single reporting entity may have the unilateral ability to liquidate the entity. Such ability may indicate that the reporting entity has the power to direct the activity that most significantly affects the economic performance of the entity.

enterprise's economic interest in a VIE, including its obligation to absorb losses or its right to receive benefits, is disproportionately greater than its stated power to direct the activities of a VIE that most significantly impact the entity's economic performance."

Thus, in situations in which the ongoing activities of a securitization entity are not expected to significantly affect the entity's economic performance and one enterprise (or related-party group) holds an economic interest that is so significant that the other interest holders, as a group, do not hold more than an insignificant amount of the fair value of the entity's interests or those interests do not absorb more than an insignificant amount of the entity's variability, it would generally be appropriate to conclude that the enterprise (or an enterprise within the related-party group) with that significant economic interest made the decisions at the inception of the entity or that the decisions were essentially made on the entity's behalf. Therefore, in such situations, it may be appropriate to conclude—after all facts and circumstances associated with the entity have been considered—that the enterprise (or the enterprise within the related-party group) has a controlling financial interest in the entity. In addition, when analyzing the design of a securitization entity whose ongoing activities are not expected to significantly affect its economic performance, an enterprise should use judgment to determine whether the economic interest of an enterprise (or related-party group) is so significant that it suggests the decisions made during the design of the entity were made by that enterprise (or related-party group) or were made on its behalf.

Note that when the primary beneficiary analysis is based solely on the design of an entity, the determination of whether one enterprise (or related-party group) absorbs all but an insignificant amount of the variability in an entity depends, in part, on a consideration of the entity's expected losses and expected residual returns. By focusing on expected losses and expected residual returns, a party with a small overall ownership percentage in an entity could be exposed to a significant amount of an entity's variability (e.g., the holder of a residual interest when there is a large amount of senior interests). Conversely, a party with a large overall ownership percentage in an entity may not be exposed to a significant amount of an entity's variability (e.g., if the party holds senior interests in an entity whose capitalization also includes substantive subordinated and residual interests). In re-securitizations in which there are multiple underlying asset groups with no cross-collateralization, those determinations are made on a group-by-group basis, because each group would generally be considered a "silo."

IFRS

Under IFRS 10, the fact that a structured entity operates in a largely predetermined way does not necessarily mean that the entity has no relevant activities. In practice, virtually all structured entities that operate in a predetermined way have relevant activities.

A structured entity operating in a largely predetermined way will most commonly be established to invest in assets that are expected to provide a predictable level of return with little or no ongoing input from investors. However, decisions outside the predetermined parameters may need to be made when that return fails to materialize, such as the decision on how to pursue recovery in the event of default for a portfolio of mortgage loans. Such decisions significantly affect the returns of the securitization entity and, therefore, are the relevant activities of the entity. Consequently, the analysis of who has power over the securitization entity should focus on the ability to make those decisions.

IFRS 10:BC80 provides an example of a receivables securitization where the primary purpose of the entity is to allocate credit risk to the holders of the beneficial interests.[4] The design of the entity is such that the only relevant activity that can be directed, which significantly affects the returns of the entity, is managing receivables upon default. An investor that writes a put option on the receivables that is triggered when the receivables default might have the current ability to direct the activities that significantly affect the returns. The design of the entity ensures that the investor has decision-making ability when such decision making is required. In this scenario, the terms of the put agreement are integral to the overall transaction and the establishment of the investee.

The fact that an investor is involved in the design of an investee does not necessarily mean that the investor has decision-making rights to direct the relevant activities of the investee. Often, several parties are involved in the design of an investee, and the final structure of the investee includes whatever is agreed to by all those parties. Consequently, an investor's involvement in establishing an investee would not, in isolation, be sufficient evidence to determine that the investor has power over the entity.

However, in those extremely rare situations when there are no decisions to be made on relevant activities after the formation of a structured entity, the initial design of the entity may be the relevant activity that significantly affects the returns of the structured entity. Consequently, in determining whether an investor has power over the structured entity, the activities performed and decisions made as part of the entity's design at formation should be assessed carefully.

4 Beneficial interests are defined as rights to receive all or portions of specified cash inflows received by a trust or other entity, including, but not limited to, all of the following: (i) senior and subordinated shares of interest, principal, or other cash inflows to be passed-through or paid-through; (ii) premiums due to guarantors; (iii) commercial paper obligations; and (iv) residual interests, whether in the form of debt or equity.

In making that assessment, an investor should consider the significance of its interest in the investee and its involvement in the design of the investee (including an assessment of the scope of its decision-making authority during the design process). The more significant an investor's: (1) interest and (2) involvement in the design of the investee, the more indicative it is that the investor had the ability and incentive to make decisions for its own benefit and, therefore, that it has power over the investee.

Step 2: Variable interests in an entity

The second step in the consolidation assessment is very similar under GAAP and IFRS. That step requires consideration of whether an entity is exposed to variable returns. Under both standards, variable returns can include only upside benefit (a performance fee) or downside risk (a guarantee), or both (a debt or equity investment).

Where the models differ is how the variable interest is considered. GAAP simply looks at whether the variable returns have the potential to be significant. IFRS does not directly consider whether the variable interest is significant. Instead, IFRS 10 looks at whether the decision-maker's power can influence its variable returns, and whether that makes the decision-maker a principal to a transaction or just an agent acting on behalf of others. ASC 810 does not include principal/agent guidance[5] like IFRS 10. Instead, ASC 810 includes a list of criteria to consider in determining whether a fee received by a service provider doesn't represent a variable interest in an entity.

Fees paid to decision-makers or service providers (GAAP)

The determination of whether a decision-maker's fee arrangement is a variable interest has a significant impact on the consolidation conclusion. Fees paid to a decision-maker or service provider do not represent a variable interest if all of the following are met:

- The fees are compensation for services provided and are commensurate with the level of effort required to provide those services.
- The decision-maker or service provider does not hold other interests in the securitization entity that individually or in the aggregate would absorb more than an insignificant amount of the entity's expected losses[6] or receive more than an insignificant amount of the entity's expected residual returns.
- The service arrangement includes only terms, conditions, or amounts that are customarily present in arrangements for similar services negotiated at arm's length.

When applying those criteria, the reporting entity is allowed to exclude interests held by certain of its related parties (including de facto agents) when evaluating its economic exposure as part of determining whether, on the basis of its relationship with the related-party, its decision-making arrangement represents a variable interest.

Specifically, interests held by a decision-maker's or service provider's related parties (or de facto agents) that are not under common

5 The principal/agent evaluation is integrated within the determination of a variable interest and the primary beneficiary.
6 The quantitative approach described in the definitions of the terms expected losses, expected residual returns, and expected variability is not required and should not be the sole determinant as to whether a reporting entity meets such conditions.

control are only to be included in the evaluation of whether the decision-maker's or service provider's fee arrangement is a variable interest when the decision-maker or service provider has a variable interest in the related party. In those cases, it would include its economic exposure to the legal entity through its related party on a proportionate basis. For example, if a decision-maker or service provider owns a 20 percent interest in a related party, and that related party owns a 40 percent interest in the legal entity being evaluated, the decision-maker's or service provider's interest would be considered equivalent to an 8 percent direct interest in the legal entity. However, if the decision-maker or service provider did not hold the 20 percent interest in its related party, it would not include any of the related party's interest in its evaluation.

By contrast, interests held by a decision-maker's or service provider's related parties that are under common control should be included at their full amounts in the evaluation of whether the decision-maker's or service provider's fee arrangement represents a variable interest. However, in October 2018, the FASB issued Accounting Standards Update (ASU) 2018-17, which requires all indirect interests held through related parties (or de facto agents), regardless of whether they are under common control, be considered proportionately in the determination of whether a service provider's fee represents a variable interest.[7]

If fees do not meet all of the conditions above, then those fees are variable interests, and the decision-maker or service provider, would proceed to the next steps in the GAAP consolidation decision tree presented earlier in this chapter. The decision-maker must also determine whether that variable interest is a variable interest in the securitization entity as a whole, or whether it relates to particular specified assets of the entity. If the variable interest relates to specified assets representing more than half of the total fair value of all of the assets within the securitization entity, or if the decision-maker holds another variable interest in the entity as a whole, then the variable interest would be deemed to be a variable interest in the securitization entity, and the decision-maker or service provider would proceed to the next steps in the same decision tree referenced previously in this chapter.

In addition, fees or other arrangements that expose the decision-maker or service provider to risk of loss in the VIE would not be eligible for evaluation under the three conditions above. Instead, such fees are considered variable interests. Examples include:

a) Fees related to guarantees of the value of the assets or liabilities of a VIE

b) Obligations to fund operating losses

c) Payments associated with written put options on the assets of the VIE

d) Similar obligations, such as some liquidity commitments or agreements (explicit or implicit), that protect holders of other interests from suffering losses in the VIE

Meaning of "insignificant" in the analysis of fees paid to a decision-maker or service provider

ASC 810-10 does not define the term "insignificant" as used in ASC 810-10-55-37(c). However, as a general guideline, if the expected losses absorbed or expected residual returns received through variable interests (other than the fee arrangement) in the potential VIE exceed, either individually or in the aggregate, 10 percent or more of the expected losses or expected residual returns of the VIE, the condition in ASC 810-10-55-37(c) is not met, and the decision-maker or service provider fee would be considered a variable interest. However, because of the subjective nature of the calculation of expected losses and expected residual returns, 10 percent should not be viewed as a bright-line threshold or safe harbor. In light of those considerations, the reporting entity will need to apply professional judgment and assess the nature of its involvement with the VIE.

The analysis under ASC 810-10-55-37(c) deals with the expected outcome of the VIE. Therefore, when analyzing a decision-maker or service provider fee under this criterion, a reporting entity would identify and weigh the probability of the various possible outcomes in determining the expected losses and expected residual returns of the VIE. However, the reporting entity may not be required to prepare a detailed quantitative analysis to reach a conclusion under ASC 810-10-55-37(c). For example, if a decision-maker or service provider holds 100 percent of the residual interest in a legal entity (and the residual interest is substantive), a reporting entity may qualitatively conclude that holding all of a substantive residual interest would represent more than an insignificant amount of the legal entity's expected losses or expected residual returns. Conversely, if a decision-maker holds less than 10 percent of the residual interest in a legal entity, the reporting entity may qualitatively conclude that holding less than 10 percent of the residual interest would not represent more than an insignificant amount of the legal entity's expected losses or expected residual returns.

In accordance with ASC 810-10-25-38H, if fees paid to the decision-maker or service provider are both commensurate and at market,[8] such fees should not be considered for purposes of the economics test of ASC 810-10-25-38A(b). A reporting entity that does not have a

7 ASU 2018-17, Consolidation (Topic 810): Targeted Improvements to Related-party Guidance for Variable Interest Entities is effective for entities other than "private companies" for fiscal years beginning after December 15, 2019, and is applicable to privative companies for fiscal years beginning after December 15, 2020; early adoption is permitted.

8 Specifically, the fees are: (i) compensation for services provided and commensurate with the level of effort required to provide the services and (ii) part of a service arrangement that includes only terms, conditions, or amounts that are customarily present in arrangements for similar services negotiated at arm's length.

variable interest in a VIE (e.g., the entity's only involvement in the VIE is limited to a fee arrangement that has been determined not to be a variable interest) would never be the VIE's primary beneficiary.

However, if an enterprise determines that a fee paid to a decision-maker or service provider is a variable interest after considering the conditions above, the decision-maker or service provider will need to assess whether its interest represents an obligation to absorb losses of the entity or a right to receive benefits from the entity that could potentially be significant to the entity.

Potentially significant variable interest (GAAP)

ASC 810-10 describes a significant variable interest as one that either obligates the reporting enterprise to absorb losses or provides it with a right to receive benefits from the VIE that could potentially be significant to the VIE. No bright line exists to determine whether the variable interest is significant. Instead, the reporting entity should consider both quantitative and qualitative factors, including:[9]

- The purpose and design of the legal entity
- Terms of characteristics of the financial interest
- The reporting entity's business purpose for holding the variable interest

There may be situations in which a party with a variable interest will not have a right to receive benefits or the obligation to absorb losses of the securitization entity that could potentially be significant to the securitization entity. For example, a service provider's right to receive a fixed fee may represent a variable interest because the fee is not at market, and may not represent a benefit or obligation that could potentially be significant to the entity. While not included in ASC 810, this was discussed in the Basis for Conclusions when Statement of Financial Accounting Standards 167 (FAS 167)[10] was issued, which noted that the servicer may be able to conclude, on the basis of the magnitude of the fixed percentage, that the fee could never be significant to the entity because the fee would remain a constant percentage of the entity's assets. On the other hand, a fee that was considered insignificant under the criteria discussed above and the implicit probability notion might be considered potentially significant, as further discussed below.

The VIE subsections of ASC 810 do not define "economic performance" but indicate that an enterprise must assess the entity's purpose and design when evaluating the power to direct the activities of the entity. This assessment includes a consideration of all risks and associated variability that are absorbed by any of the entity's variable-interest holders. However, the quantitative calculations of expected losses and expected residual returns are not required. An enterprise should not consider probability when determining whether it has a variable interest that could be potentially significant. Therefore, even a remote possibility that an enterprise could absorb losses or receive benefits that could be significant to the entity causes the enterprise to meet such condition.

The evaluation of an enterprise's economic exposure through its interests should take into account the securitization's purpose and design. In addition, all risks and associated variability that are absorbed by any of the securitization entity's variable interest holders should be considered. The type of interest held by an enterprise will affect its economic exposure to the securitization. For example, a "first-loss" residual interest may be more likely to expose an enterprise to a significant amount of expected losses or the potential to receive significant expected residual returns than a more senior interest.

9 Professional Accounting Fellow Arie Wilgenburg, "Speech by SEC Staff: Remarks before the 2009 AICPA National Conference on Current SEC and PCAOB Developments," AICPA SEC Conference, Washington, DC, December 7, 2009.

10 FASB Statement of Financial Accounting Standards No. 167, Amendments to FASB Interpretation No. 46(R) (June 2009).

Am I a principal or am I an agent to the securitization? (IFRS)

For IFRS, an entity with decision-making rights has to consider whether it is acting as a principal or an agent. Likewise, an investor is required to determine whether another entity with decision-making rights is acting as an agent on behalf of the investor. An investor may delegate its decision making to an agent on certain specific issues (e.g., a special servicer that handles mortgage defaults) or on all relevant activities (e.g., a mortgage servicer that handles cash collections, distributions to note holders, and mortgage defaults).

A decision-maker is an agent when it is primarily engaged to act on behalf and for the benefit of others (the principal[s]). An agent does not control an investee by exercising its decision-making powers. However, a decision-maker is not an agent simply because other parties can benefit from the decisions that it makes; the decision-maker must also consider its own benefits and risks in determining whether it is truly an agent.

IFRS 10 states that, when a single party holds a substantive right to remove the decision-maker and can remove the decision-maker without cause, this—in isolation—is sufficient to conclude that the decision-maker is an agent. For a removal right to be considered substantive, one must determine that there are no barriers or disincentives to exercise, including consideration of the timing of the removal right. In the absence of single-party kick-out rights, the decision-maker is required to consider the overall relationship between itself, the investee being managed, and *other* parties involved with the investee. Each of the factors that follow below should be considered in making the principal/agent assessment; in certain instances, some factors may be stronger indicators than others and should receive greater weighting in assessing whether a decision-maker is a principal or an agent.

The scope of the decision-maker's authority over the investee

The scope of decision-making authority is evaluated by considering: (1) the activities that are permitted according to the decision-making agreement(s) and specified by law; and (2) the discretion that the decision-maker has when making decisions about those activities. This assessment requires the decision-maker to consider the purpose and design of the securitization entity, the risks to which the securitization entity was designed to be exposed (i.e., credit risk of the securitized asset pool), the risks it was designed to pass on to the parties involved, and the level of involvement the decision-maker had in the design of the investee. IFRS 10 notes that when a decision-maker is significantly involved in the design of the investee (including the determination of the scope of decision-making authority), this may indicate that the decision-maker had the opportunity and incentive to obtain rights that result in the decision-maker having the ability to direct the relevant activities. So what does that mean for securitizations? There generally should not be entities where the decisions are preprogrammed and therefore no one has power. Furthermore, the decision-maker being involved in the design of the securitization entity may indicate the decision-maker is acting in a capacity as a principal to the securitization entity.

The rights held by other parties

Substantive rights held by others may impact the decision-maker's ability to direct the relevant activities of a securitization entity. As mentioned above, if a single party can remove the decision-maker without cause, this—in isolation—is sufficient to conclude that the decision-maker is acting as an agent. If multiple parties are required to act together to remove the decision-maker (e.g., simple-majority kick-out rights), those rights are not—in isolation—conclusive in determining that a decision-maker acts primarily as an agent. The greater the number of parties required to act together to exercise the kick-out rights, and the greater the size and variability of the decision-maker's other variable interests (i.e., remuneration and other interests), the lower the weighting this factor should receive in the analysis. Substantive rights held by other parties that restrict a decision-maker's ability to exercise its rights (e.g., when a decision-maker is required to obtain approval from a small number of other parties for its actions) should be considered in a manner similar to removal rights. The basis for conclusions of IFRS 10 also notes that some other rights (such as some liquidation rights) may have the same effect on the decision-maker as removal rights. If those other rights meet the definition of removal rights, they should be treated as such regardless of their label.

The remuneration to which the decision-maker is entitled in accordance with the remuneration agreement(s)

The greater the size and variability of the decision-maker's remuneration relative to the expected returns from the securitization entity, the more likely it is the decision-maker is a principal. For a decision-maker to be considered an agent, its remuneration must be commensurate with the services provided and include only market-based terms, conditions, and amounts (unless, of course, single-party kick-out rights exist, and then the other criteria are not relevant). However, these two factors alone are not enough to make one an agent. The purpose of this requirement is to consider whether the remuneration for the decision-maker is truly compensation solely for its services as an agent.

The decision-maker's exposure to variability of returns from other interests that it holds in the investee

A decision-maker that holds other interests in a securitization entity (e.g., the super senior tranche or the equity tranche) should consider its exposure to variability of returns in assessing whether it is an agent. Holding other interests in the securitization entity indicates that the decision-maker may be acting as a principal. In evaluating its exposure to variability of returns from other interests, the decision-maker should consider: (1) the greater the size and variability of its economic interests (including its remuneration and other interests in aggregate), the more likely the decision-maker is a principal; and (2) whether its exposure to variability is different from other investors and, if so, whether this might influence its decision-making. This may be the case when the decision-maker holds subordinated interests in a securitization entity, or provides other forms of credit enhancement such as a liquidity facility to a CP conduit. The decision-maker should evaluate its exposure relative to the total variability of returns of the securitization entity, primarily based on returns expected from the activities of the entity, but also not ignoring the decision-maker's maximum exposure to variability of returns through other interests that the decision-maker holds.

The IFRS 10 determination of whether a decision-maker is a principal or an agent can require judgment. As noted above, in the evaluation of the aforementioned factors, some factors may be stronger indicators than others and should receive greater weighting in assessing whether a decision-maker is a principal or an agent.

Related-party considerations

In performing the primary-beneficiary analysis, a reporting entity must carefully consider related-party relationships. A reporting entity that concludes individually that it has not met both the power criterion and the economics criterion may still be required to consolidate a VIE as a result of interests held by its related parties. The term "related parties" includes certain other parties that are acting as de facto agents or de facto principals of the reporting entity. Both GAAP and IFRS require consideration of involvements of related parties or de facto agents in the consolidation assessment.

A reporting entity is always required to assess whether it individually meets both characteristics (the power criterion and the economics criterion) of a primary beneficiary after considering the guidance in the aggregation of interests for evaluating the economics criterion section below. If a reporting entity concludes that it does not meet the criteria for a primary beneficiary, but the related-party group (including de facto agents) meets the criteria as a group, the reporting entity may be required to determine which party is most closely associated with the VIE and is required to consolidate the VIE.

It is noteworthy that at the 2014 AICPA National Conference on Current SEC and PCAOB Developments the SEC staff discussed whether related parties under common control are always required to perform the related-party tiebreaker test to determine whether stated power is substantive. The SEC staff noted that while entities must carefully consider situations involving related parties under common control to determine whether stated power is substantive, "the staff does not believe there is a requirement to consider the related party tiebreaker guidance or that [such] guidance is necessarily determinative unless no party in the common control group individually meets both characteristics of a primary beneficiary." [11]

When evaluating whether a single decision-maker that meets the power criterion also meets the economics criterion, the reporting entity must consider its direct interests and indirect interests (i.e., those held through its related parties and de facto agents) in the VIE. If the single decision-maker meets the economics criterion through its direct interests, it is not necessary to further consider its indirect interests. The reporting entity would only consider its related party's or de facto agent's interests in the determination of whether it has met the economics criterion if the reporting entity has an interest in the related party. If the reporting entity does not have a direct interest in the related party, it would not be appropriate to attribute the related party's interests to the reporting entity.

Under ASC 810, if a single reporting entity is not identified as the primary beneficiary, additional analysis to identify the entity that is

[11] Professional Accounting Fellow Christopher F. Rogers, Office of the Chief Accountant, "Remarks before the 2014 AICPA National Conference on Current SEC and PCAOB Developments," December 8, 2014.

"most closely associated" with the VIE is required in the two following scenarios:

- A single decision-maker does not meet the economics criterion directly, or indirectly through its interests in related parties or de facto agents, but together with its related parties that are under common control, it possesses both characteristics of a controlling financial interest.
- Two or more related parties or de facto agents share power over the relevant activities and collectively hold potentially significant economic interests.

If either of those scenarios occur, then an assessment is performed to determine which party within the specified related-party group is considered most closely associated with the entity and therefore should consolidate. ASC 810 provides the following four criteria to consider in making this assessment:

- The existence of a principal-agency relationship between parties within the related-party group
- The relationship and significance of the activities of the entity to the various parties within the related-party group
- A party's exposure to the expected losses and/or residual returns of the entity
- The design of the entity

IFRS 10 is less prescriptive when it comes to related parties or de facto agents, requiring that when assessing control, consideration should be given to the nature of the relationships with other parties and whether those parties are acting on the investor's behalf.

Aggregation of interests for evaluating the economics criterion

In evaluating whether the economics criterion has been met, a decision-maker would consider only interests held by its related parties (including de facto agents) if the decision-maker has a direct interest in those related parties. Those interests would be considered on a proportionate basis (e.g., if the reporting entity owned 20 percent of a related party that in turn owned 10 percent of the VIE, the reporting entity would have a 2 percent indirect interest in the VIE). In contrast, if the decision-maker does not hold an interest in its related parties, it would not include any of its related parties' interests in its evaluation. In addition, a reporting entity should generally consolidate a VIE if: (1) the reporting entity is a related party to a single decision-maker that does not, individually, have both characteristics of a controlling financial interest, (2) no other party in the related party group is required to consolidate the VIE, and (3) substantially all of the activities of the VIE either involve or are conducted on behalf of the reporting entity.

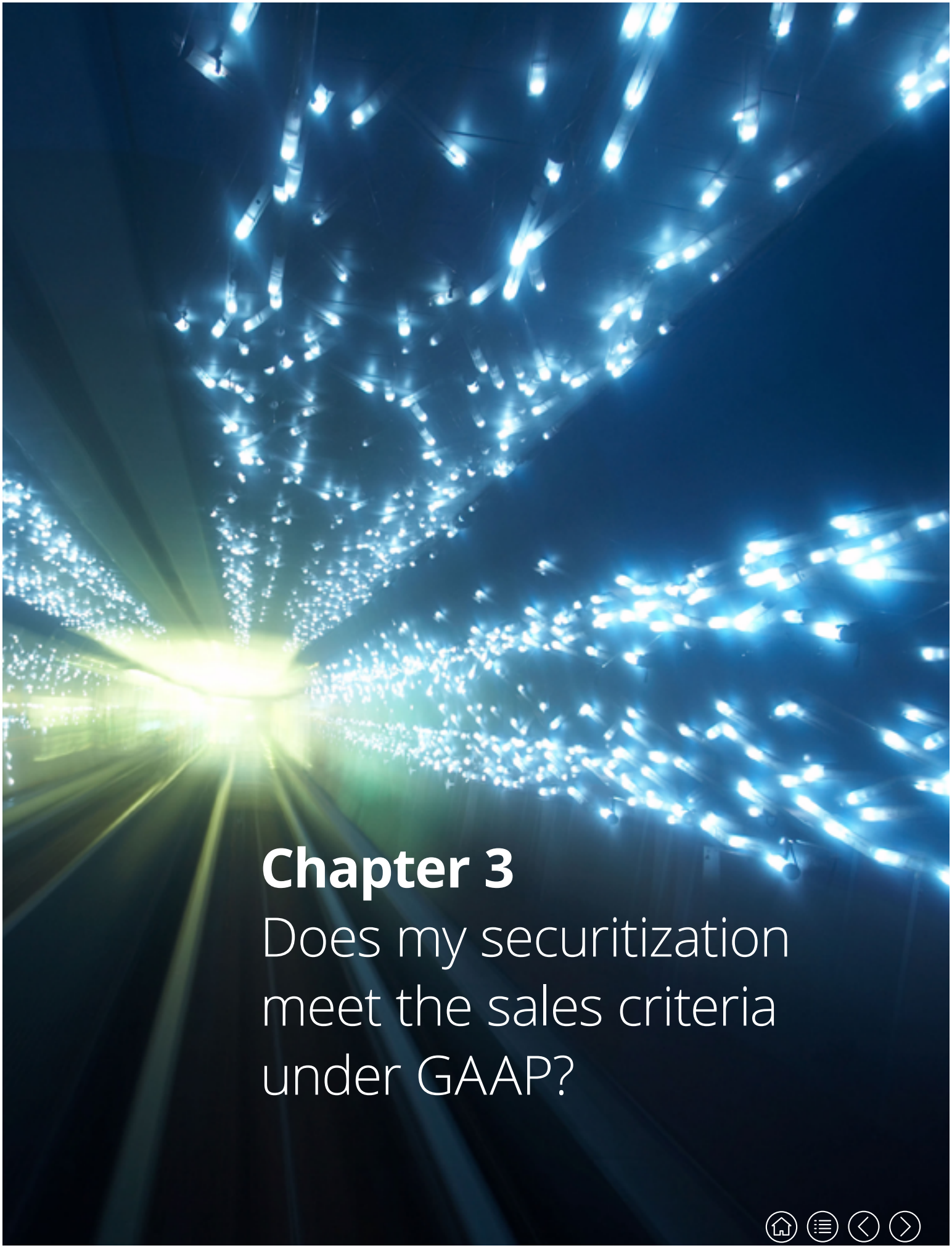
Reconsideration of who controls

The VIE guidance in ASC 810 requires that an enterprise continually reconsiders its conclusion regarding which interest holder is the entity's primary beneficiary. A change in the determination of whether an entity is required to consolidate could occur as a result of any of the following events or circumstances:

- There is a change in the design of the entity (e.g., a change in the governance structure or management, a change in the activities or purpose of the entity, or a change in the primary risks that the entity was designed to create and pass through to variable interest holders).
- The entity issues additional variable interests or retires or modifies the terms of the variable interests.
- There is a change in the counterparties to the variable interests of the entity (e.g., a reporting entity acquires or disposes of variable interests in a VIE, and the acquired or disposed-of interest, in conjunction with the reporting entity's other involvement with the entity, causes the reporting entity to gain or lose the power to direct the activities that most significantly affect the entity's economic performance).
- A significant change in the anticipated economic performance of an entity (e.g., as a result of losses significantly in excess of those originally expected for the entity) or other events (including the commencement of new activities by the entity) result in a change in the reporting entity that has the power to direct the activities that most significantly affect the entity's economic performance.
- Two or more variable interest holders become related parties or are no longer considered related parties, and such a related party group has (had) both the power to direct the activities of the entity and the obligation (right) to absorb losses (benefits) that could potentially be significant to the entity, but neither related party individually possesses (possessed) both characteristics.
- A contingent event occurs that transfers the power to direct the activities of the entity that most significantly affect an entity's economic performance from one reporting entity to another reporting entity.
- There is a troubled debt restructuring.

Because continual reconsideration is required, the securitization transaction participant may need to determine when, during the reporting period, the change in primary beneficiary occurred. If a deal party determines that it is no longer the primary beneficiary of a securitization entity, it would need to deconsolidate from the date that the circumstances changed and recognize a gain or loss.

Similarly, IFRS 10 requires an investor to reassess whether or not it controls an investee when facts and circumstances indicate that there are changes to one or more of the three elements of control. IFRS 10:B85 states that an "investor's initial assessment of control or its status as a principal or an agent would not change simply because of a change in market conditions (e.g., a change in the investee's returns driven by market conditions), unless the change in market conditions changes one or more of the three elements of control … or changes the overall relationship between a principal and an agent."



Chapter 3

Does my securitization meet the sales criteria under GAAP?

When is a securitization accounted for as a sale?

People often describe a securitization as being either a sale or a financing, and the FASB has confirmed that is the intended result of the guidance articulated in ASC 860, *Transfers and Servicing*. More specifically, ASC 860 stipulates that a transfer[1] of an entire financial asset, a group of entire financial assets, or a participating interest in an entire financial asset needs to be evaluated for relinquishment of control over those transferred assets.[2]

In performing this evaluation, the question to be answered is whether a transferor (including its consolidated affiliates) has surrendered control over the transferred financial assets. Therefore, it is important for the transferor to first complete its analysis with respect to the securitization SPE consolidation prior to evaluating the transfer of financial assets for its conformity with the requirements for sale accounting treatment.

In reaching a determination on whether control over the transferred financial assets has been surrendered, facts such as the transferor's or any of its consolidated affiliates' continuing involvement with the transferred assets must be considered in the analysis. Similarly, the analysis must also consider any other arrangements between the parties to the transaction that were entered into either contemporaneously with, or in contemplation of, the transfer.

Sale accounting criteria

For a financial asset transfer (e.g., a securitization of a financial asset or participating interest in a financial asset) to be accounted for as a sale, the transferor must surrender control over the assets transferred. Control is considered to be surrendered in a securitization only if all three of the following conditions are met:

- the assets have been legally isolated;
- the transferee has the ability to pledge or exchange the transferred assets; and
- the transferor otherwise no longer maintains effective control over the assets.

Legal isolation

The transferred assets have to be isolated—put beyond the reach of the transferor, or any consolidated affiliate of the transferor, and their creditors (either by a single transaction or a series of transactions taken as a whole)—even in the event of bankruptcy or receivership of the transferor or any consolidated affiliate. This is a facts and circumstances determination, which includes: (1) judgments about the kind of bankruptcy or other receivership into which a transferor or affiliate might be placed, (2) whether a transfer would likely be deemed a true sale at law, and (3) whether the transferor is affiliated with the transferee.

In contrast to the "going concern" determination, the transferor must address the possibility of bankruptcy, regardless of how remote insolvency may appear given the transferor's credit standing at the time of securitization, and irrespective of an entity's credit rating. That said, it is not enough for the transferor merely to assert that it is unthinkable that a bankruptcy situation could develop during the relatively short term of the securitization.

When thinking about the notion of legal isolation, consider an example of the typical two-step securitization structure:

- **Step 1:** The seller/company transfers assets to an SPE that, although wholly owned, is designed in such a way that the possibility that the transferor or its creditors could reclaim the assets is remote. This first transfer is designed to be judged a true sale at law, in part because it does not provide excessive credit or yield protection to the SPE.
- **Step 2:** The SPE transfers the assets to a trust or other legal vehicle with a sufficient increase in the credit and yield protection on the second transfer (provided by a subordinated retained beneficial interest or other means) to merit the high credit rating sought by investors.

1 For accounting purposes, the term "transfer" has a very specific meaning. It relates to non-cash financial assets only and involves a conveyance from one holder to another holder. Examples include selling a receivable, pledging it as collateral for a borrowing, or putting it into a securitization vehicle. The definition excludes transactions with the issuer or maker of the financial instrument (i.e., originating a receivable, collecting it, or restructuring it, such as in a troubled debt restructuring).

2 The scope of ASC 860 is limited to transfers involving financial assets, which are defined as "[c]ash evidence of an ownership interest in an entity, or a contract that conveys to one entity a right to do either of the following: (a) Receive cash or another financial instrument from a second entity [or] (b) Exchange other financial instruments on potentially favorable terms with the second entity." Transactions related to nonfinancial assets (e.g., many "whole-business" or aircraft securitizations) are beyond the scope of ASC 860.

The second transfer may or may not be judged a true sale at law and, in theory, could be reached by a bankruptcy trustee for the SPE. However, the first SPE's charter forbids it from undertaking any other business or incurring any liabilities, thus removing concern about its bankruptcy risk. The charter of each SPE must also require that the company be maintained as a separate concern from the parent to avoid the risk that the assets of the SPE would be substantively consolidated with the parent's assets in a bankruptcy proceeding involving the parent. It is important to note that this structure is often very important to an attorney's analysis.

The accounting conclusion as to whether the SPEs should be consolidated for financial statement purposes may factor into the attorney's reasoning as to whether the assets have been isolated from a transferor's creditors in the event of transferor bankruptcy but should not be determinative. Thus, it is perfectly acceptable to have the SPE in Step 1 consolidated for accounting purposes, but for the investors to still receive assurance in the form of the attorney's letters that the assets have been sold in a "true sale." Said another way, legal isolation must be determined from the perspective of the transferor and all of its consolidated affiliates. However, consolidated affiliates exclude those entities that are designed to be bankruptcy-remote (i.e., SPEs that have no other business purpose).[3] Further, while the legal analysis with respect to legal isolation may evaluate the entities distinctly, the accounting analysis with respect to consolidation still needs to be performed.

A legal opinion may not be required if a transferor has a reasonable basis to conclude that the appropriate legal opinion(s) would be given if requested. For example, the transferor might reach a conclusion without consulting an attorney if: (1) the transfer is a routine transfer of financial assets that does not result in any continuing involvement by the transferor, or (2) the transferor had experience with other transfers with similar facts and circumstances under the same applicable laws and regulations.

For entities that are subject to other possible bankruptcy, conservatorship, or receivership procedures (e.g., banks subject to receivership by the Federal Deposit Insurance Corporation [FDIC]) in the United States or other jurisdictions, judgments about whether transferred financial assets have been isolated need to be made in relation to the powers of bankruptcy courts or trustees, conservators, or receivers in those jurisdictions.

Ability of transferee to pledge or exchange the transferred assets

When the transferee is a securitization vehicle that is constrained from pledging or exchanging the transferred assets, each third-party holder of its beneficial interests must have the right to pledge or exchange those beneficial interests.

Any restrictions or constraints on the holder's rights to monetize the cash inflows (the primary economic benefits of financial assets) by pledging or selling those beneficial interests have to be carefully evaluated to determine whether the restriction precludes sale accounting, particularly if the restriction provides more than a trivial benefit to the transferor, which it is presumed to do. As explained in ASC 860, the FASB believes that, in the absence of evidence to the contrary, a condition imposed by a transferor that constrains the transferee presumptively provides more than a trivial benefit to the transferor.

An important factor in the analysis is whether the transferor has continuing involvement in the transferred assets. When Statement of Financial Accounting Standards No. 140 (FAS 140) was written, its Basis for Conclusions stated that "transferred assets from which the transferor can obtain no further benefits are no longer its assets and should be removed from its statement of financial position,"[4] as would be the case if the transferor has no continuing involvement in the transferred assets. Examples of continuing involvement include:

- Servicing responsibilities
- Recourse obligations other than standard representations and warranties
- Management's responsibilities
- Full or partial equity ownership of the vehicle containing the transferred assets
- Other participations in future cash flows

The assessment of whether the continuing involvement is such that a constraint on the transferee would ultimately provide more than a trivial benefit to the transferor requires judgment. Even if it is not a transferor-imposed constraint, the constraint must be evaluated if the transferor is aware of it.

Holders of an SPE's securities are sometimes limited in their ability to transfer their interests, typically due to a requirement that permits transfers only if the transfer is exempt from the requirements of the Securities Act of 1933. The primary limitation imposed by Rule 144A of the Securities Act, that a potential secondary purchaser must be a sophisticated investor, does not preclude sale accounting, assuming that a large number of qualified buyers exist. Neither does the absence of an active market for the securities.

3 As stated in ASC 860-10-40-5(a): "For multiple step transfers, a bankruptcy-remote entity is not considered a consolidated affiliate for purposes of performing the isolation analysis."

4 FASB Statement of Financial Accounting Standards No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities (a replacement of FASB Statement No. 125) (September 2000).

What about restrictions placed on qualified third-party purchasers (TPPs) used to comply with the Dodd-Frank Act credit risk retention requirements in some CMBS deals?

Certain federal financial regulatory agencies, under a Dodd-Frank Act mandate, adopted a rule in 2014 that requires asset-backed securities (ABS) sponsors, including CMBS sponsors, to retain at least 5 percent of the credit risk in a deal (a "risk retention interest").[5] The risk retention interest can be structured in various ways (e.g., retaining 5 percent of each class of beneficial interests issued [a "vertical" slice], the most subordinate interests that represent at least 5 percent of the fair value of the interests issued in the deal [a "horizontal" slice], or some combination of the two [an "L-shaped" piece]).

In lieu of retaining direct interests, a CMBS sponsor can transfer risk retention interests to a TPP. Among other requirements, the TPP's ability to transfer the risk retention interests is restricted. ASC 860-10-40-5(b) requires that transferees, including buyers of beneficial interests in a securitization, have the right to pledge or exchange their interests in order for the transferor to achieve sale accounting. Market participants have questioned whether restrictions placed on a TPP cause a deal to not meet the ASC 860-10-40-5(b) transfer requirements. We understand, based on the SEC staff response to a preclearance submission from the Securities Industry and Financial Markets Association, the SEC staff would not object to a conclusion that the restrictions placed on a TPP do not cause a transfer to fail to meet the conditions in ASC 860-10-40-5(b).[6]

Surrender effective control

The transferor, its consolidated affiliates, or its agents cannot effectively maintain control over the transferred assets or third-party beneficial interests related to those transferred assets through:

- An agreement that requires the transferor to repurchase the transferred assets before their maturity (in other words, the agreement both entitles and obligates the transferor to repurchase as would, for example, a forward contract or a repo).
- The ability to unilaterally cause the SPE to return specific assets, other than through a cleanup call, that conveys more than a trivial benefit to the transferor.
- An agreement that permits the transferee to require the transferor to repurchase the transferred assets, which is priced so favorably that it is probable that the transferee will, in fact, require the transferor to repurchase them.

The accounting literature precludes sale accounting if the transferee has any contractual mechanism to require the transferor to take back specific assets on terms that are potentially advantageous through a put option that, when it is written, is deep in the money. In these cases, the transferor maintains effective control because it has priced the transferee's option on terms so favorable that it is probable that the transferee will require the transferor to repurchase. If the put option is priced at fair value, or, when it is written, is priced sufficiently out of the money so that it is probable that it will not be exercised, then the option would not preclude sale treatment.

What if I fail to comply with the sale criteria?

If the securitization does not qualify as a sale, the proceeds (other than beneficial interests in the securitized assets) are accounted for as a liability—a secured borrowing. The assets will remain on the balance sheet with no change in measurement, meaning that no gain or loss is recognized. The assets should be classified separately from other assets that are unencumbered.

The securities relating to the transferred assets that are legally-owned by the transferor or any consolidated affiliate (i.e., the securities that are not issued for proceeds to third parties) do not appear on the transferor's consolidated balance sheet. They are economically represented as being the difference between the securitization-related assets and the securitization-related liabilities on the balance sheet.

Ongoing accounting for a securitization, even if treated as a financing, requires many subjective judgments and estimates and could still cause volatility in earnings due to the usual factors of prepayments, credit losses, and interest rate movements. After

5 Credit risk retention requirements issued jointly by the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, the Federal Housing Finance Agency, and the Department of Housing and Urban Development under Section 15G of the Securities Exchange Act of 1934, as added by section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

6 https://www.sifma.org/wp-content/uploads/2017/12/SIFMA-on-SEC-Interpretive-Guidance.pdf

all, the company still effectively owns a residual. Securitizations accounted for as financings are often not that much different economically than securitizations that qualify for sale accounting treatment. Therefore, the excess of the securitized assets (which remain on balance sheet) over the related funding (in the form of recorded securitization debt) is closely analogous economically to a retained residual.

Who is considered to be the transferor in a "rent-a-shelf" transaction?

Often, a commercial or investment bank will "rent" its SEC shelf registration statement to an unseasoned securitizer that does not have one. The loan originator first sells the loans to a depositor, which is typically a wholly owned, bankruptcy-remote, special-purpose corporation established by the commercial or investment bank. The depositor immediately transfers the loans to a special-purpose trust that issues the securities sold to the investors. The loan originator often takes back one or more (usually subordinated) tranches.

In this situation, even though the depositor subsidiary of the commercial or investment bank transferred the loans to the trust issuer, it was doing so more as an accommodation to the loan originator and was not taking the typical risk as a principal. If the securitization transaction with outside investors for some reason failed to take place, the depositor would not acquire the loans from the originator. Accordingly, it is the loan originator that would be considered the transferor for purposes of applying the sale criteria to the securitization.

ASC 860 emphasizes the role of an agent in evaluating transactions. As defined, an agent is a party that acts for and on behalf of another party; thus, in the preceding scenario, the depositor would be acting as an agent. Generally speaking, in transactions involving a third-party intermediary acting as agent on behalf of a debtor, the actions of the intermediary shall be viewed as those of the debtor in order to determine whether there has been an exchange of debt instruments or a modification of terms between a debtor and a creditor. On the other hand, commercial or investment banks often purchase whole loans from one or more loan originators (sometimes servicing retained) and accumulate those loans to be securitized using the dealer's shelf when and how the dealer chooses. In that situation, the commercial or investment bank would be considered the transferor for purposes of applying the sale criteria to the securitization.

When trying to determine whether an entity is acting as a principal or an agent in a transaction, securitizers may wish to consider the principal/agent guidance on debt modifications and revenue recognition by analogy.

If you don't put it to me, can I call it from you?

The accounting rules governing puts are easier than those that govern calls. It's interesting (and to some, counterintuitive) that options allowing investors to put their bonds back to the transferor generally do not preclude sale treatment (but be sure to check with legal counsel, as put options complicate the legal true sale analysis). The rules here are consistent with the theory that the seller has relinquished control over the transferred assets and the transferee has obtained control, even if only temporarily. But a put option that is sufficiently deep in the money when it is written, causing it to be probable that the transferee will exercise it, is problematic. These puts are viewed as the economic equivalent of a forward contract or repurchase agreement.

Put options have been used successfully in transactions to create guaranteed final maturities of short-term tranches to achieve "liquid asset" treatment for thrifts or "money market" treatment for certain other classes of investors, but a number of detailed accounting requirements must be considered. Also, hybrid adjustable rate mortgages have been securitized with a put exercisable at the point when the loans turn from a fixed rate to an adjustable rate. When a securitization with a put feature is accounted for as a sale, the transferor has to record a liability equal to the fair value of the put obligation.

Analyzing call options continues to be the area that probably is the most conceptual, confusing, and prone to misinterpretation. ASC 860 describes several types of calls, with each potentially having a different effect on the sale vs. financing determination:

- **Attached calls** are call options held by the transferor that become part of and are traded with the transferred asset or beneficial interest.
- **Embedded calls** are issuer call options held by the maker of a financial asset included in a securitization that is part of and trades with the financial asset. Examples are call options embedded in corporate bonds and prepayment options embedded in mortgage loans. A call might also be embedded in a beneficial interest issued by an SPE.
- **Freestanding calls** are calls that are neither embedded in nor attached to an asset subject to that call. For example, a freestanding call may be written by the transferee and held by the transferor of an asset but not travel with the asset. Freestanding calls (other than cleanup calls) are not commonly found in securitization transactions.
- **Conditional calls** are call options that the holder does not have the unilateral right to exercise. The right to exercise is conditioned on the occurrence of some event (not merely the passage of time) that is outside the control of the transferor, its affiliates, and its agents.
- **Cleanup calls** are options held by the servicer or its affiliate (which may be the transferor) to purchase the remaining transferred financial assets if the amount of outstanding assets or beneficial interests falls to a specified level at which the cost of servicing those assets or beneficial interests becomes burdensome in relation to the benefits of servicing. Note that some market participants think that "10 percent" is synonymous with a cleanup call. However, the amount 10 percent does not appear anywhere in the ASC 860 glossary definition of a cleanup call. That said, this analysis should be performed when the servicing arrangement commences and should focus on when servicing is burdensome.
- **In-substance call options** are deemed to exist when the transferor has the right to cause the transferee to sell the assets and: (1) has a right (such as a right of first refusal) to obtain the assets, or (2) has some economic advantage providing it, in-substance, with the practical right to obtain the asset because it is not penalized by paying more than the fair value of the asset. Examples of such advantages include ownership of the residual interest and a total return swap with the transferee.
- **Removal of accounts provisions (ROAPs)** permit the transferor to reclaim assets, subject to certain restrictions.

In revolving deals, exercise of a ROAP often does not require payment of any consideration, other than reduction of the transferor's received interest (the seller's interest). ROAPs are commonly, though not exclusively, used in revolving transactions involving credit cards.

Calling all calls?

As previously discussed, rights or obligations to reacquire specific transferred assets or beneficial interests that both constrain the transferee and provide more than a trivial benefit to the transferor preclude sale accounting. Consider, for example, a transaction where the beneficial interest holders agree to sell their interests back to the transferor at the transferor's request for a price equal to the holders' initial cost plus a stated return. In the absence of evidence to the contrary, a condition imposed by a transferor that constrains the transferee presumptively provides more than a trivial benefit to the transferor. Here, the transferor has the ability to reacquire the assets from the transferee at an amount potentially below current fair value; therefore, any such arrangement would be viewed as providing more than a trivial benefit to the transferor. On the other hand, if the call option's strike price was set equal to fair market value on date of exercise, it is less likely that the transferor would be viewed as retaining more than a trivial benefit. Other facts and circumstances may further impact this analysis—for example, if the assets are not readily obtainable, the transferee may be constrained.

Further, if the transferor holds a fixed-price call option to repurchase any loans it chooses from the portfolio transferred, then sale accounting is precluded for the transfer of the entire portfolio (even if the option is subject to some specified limit, assuming all loans in the pool are smaller than such limit). This

conclusion is based on the fact that the transferor can unilaterally remove specific assets at its sole election, and thus control has not been transferred.

How "conditional" must a conditional call be?

ASC 860 makes a distinction between call options that are unilaterally exercisable by the transferor and call options for which the exercise by the transferor is conditioned upon an event outside its control. If the conditional event is outside its control, the transferor is not considered to have retained effective control. An example of a conditional call would be a right to repurchase defaulted loans. Another example would be a right to call the remaining beneficial interests subject to a put option, which is exercisable only in the event that holders of at least 75 percent of the securities put their interests. Once the condition is met and if there is more than a trivial benefit to the transferor, the assets under option are to be brought back on balance sheet, regardless of the transferor's intent, until the option expires. When the assets under option are brought back on balance sheet, the transferor treats them as if they were newly purchased.

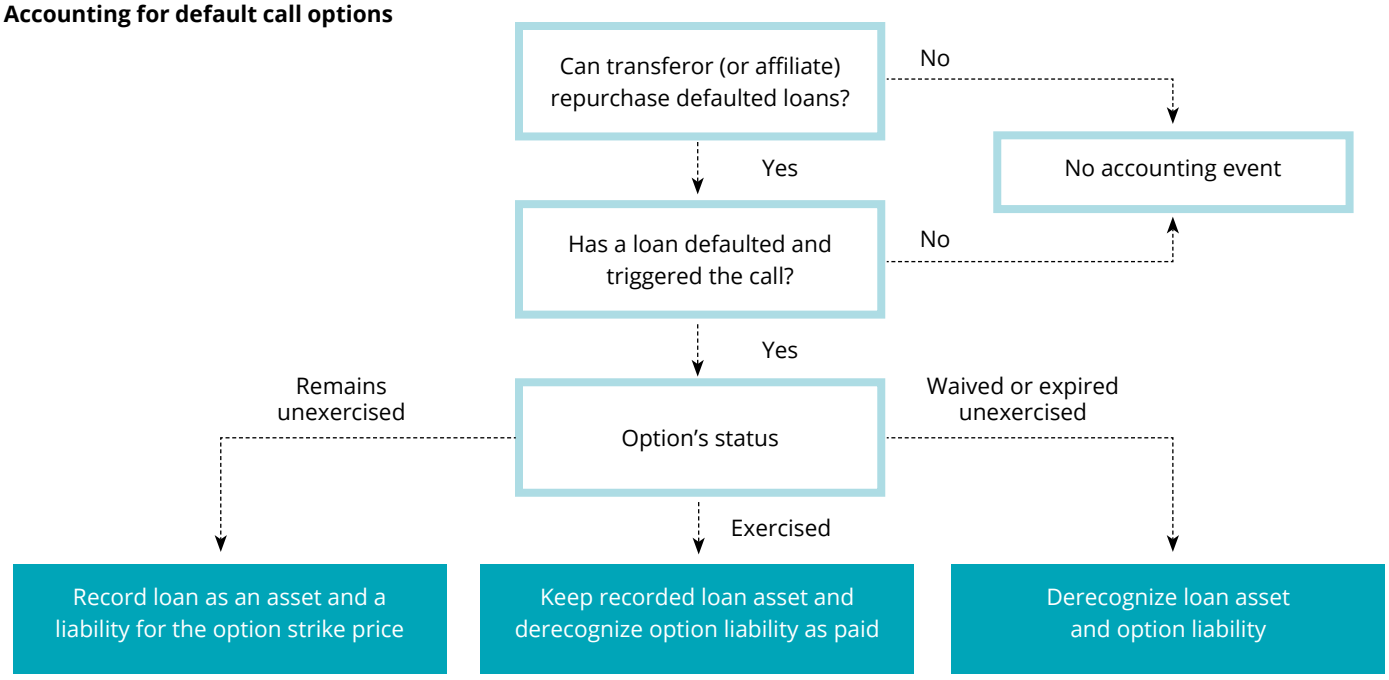
While later codified in ASC 860, *FASB Implementation Guide Q&A 140—A Guide to Implementation of Statement 140 on Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities* did not directly provide any guidance regarding the impact on sale accounting of a call option that is conditioned upon an event that is outside the transferor's control but is likely to occur. As a result, ASC 860 remains without an on-point example.

A hypothetical example follows: A transferor sells beneficial interests to third parties but retains the right to reacquire those beneficial interests if the LIBOR increases at any time during the life of the beneficial interests. Although the transferor has no control over the future level of LIBOR, it is highly likely that the call will become exercisable sometime during the life of the beneficial interests, perhaps very soon. Thus, most accountants would likely object to sale accounting because the contingency is not substantive. In contrast, depending on what level of LIBOR is set as the strike price, the option could be considered a conditional call because there is less certainty about whether the strike price will ever be reached. Separately, those types of options may also impact the views of the lawyers.

And batting cleanup

A transferor that is not the servicer is not permitted to hold the cleanup call. The underpinning for this is the notion that only a servicer is burdened when the amount of outstanding assets falls to a level at which the cost of servicing the assets becomes excessive—the defining condition of a cleanup call. Any other party would be motivated by some other economic incentive in exercising a call. A servicer cleanup call on beneficial interests is permitted because the same sort of burdensome costs vs. benefits may arise when the beneficial interests fall to a small portion of their original level. It should be noted, however, that the threshold test for this type of cleanup call is still the burden, or cost, to the servicer, not the benefit of keeping the transaction outstanding; presumably, the cost to the servicer in servicing the

Accounting for default call options



transaction differs from the costs associated with the servicing of the assets.

Can I still hold on to the ROAPs?

ROAPs permit the transferor to reclaim assets, subject to certain restrictions. In revolving deals, exercise of a ROAP often does not require payment of any consideration, other than reduction of the seller's interest. As a general rule, a ROAP for random removal of excess assets is permitted if the ROAP is sufficiently limited so that the transferor cannot remove specific assets (e.g., the ROAP is limited to the amount of the transferor's interest and to one removal per month).

ROAPs are used for a variety of business reasons. A bank might have an affinity relationship with an organization—say, the Association of Friends and Families of Overworked Accountants (AFFOA). If the bank securitizes member balances, it might become necessary to remove them from the deal if the bank loses the relationship with AFFOA. The balances would then be transferred to the credit card originator and then on to the new bank that holds the affinity relationship. The effect of such an arrangement on derecognition of the member balances is dependent on the specific facts and circumstances of the arrangement.

Can I account for a transaction as part sale/part financing?

ASC 860 makes it clear that the effective control criteria apply to transfers of:

- entire financial assets
- a group of entire financial assets
- participating interests

Consequently, if there is not a transfer of effective control over the entire pool of receivables placed into a securitization transaction, then the entire transaction is accounted for as a financing. Additionally, transferors must transfer a pool in its entirety; they may receive beneficial interests in the transferred assets, but only if the interests are issued by an unconsolidated transferee.

What about participations?

Banks often issue participations in loans that they have originated, and the requirements for the appropriate accounting for those transactions have always looked to the application of the guidance governing transfers of financial assets. Only participating interests, as defined below, are eligible for sale accounting:

a) Pro rata ownership interest
From the date of the transfer, the participation represents a proportionate (pro rata) ownership interest in an entire financial asset. The percentage interest held by the transferor may vary over time, while the entire underlying financial asset remains outstanding as long as the resulting portions held by the transferor and the transferee(s) meet the other characteristics of a participating interest. For example, if the transferor's interest in an entire financial asset changes because it subsequently sells another interest in the entire financial asset, the interest held initially and subsequently by the transferor must meet the definition of a participating interest.

b) Proportionate division of cash flows
From the date of the transfer, all cash flows—including both principal and interest—received from the underlying financial asset are divided proportionately among the participating interest holders in an amount equal to their share of ownership.

Compensation for services performed, such as servicing, shall not be included in this determination, provided those cash flows are not subordinate to the proportionate cash flows of the participating interest and are not significantly above an amount that would be considered market rate. These fees should include the profit that would be demanded in the marketplace. Finally, any cash flows received by the transferor as proceeds of the transfer of the participating interest shall be excluded from the determination of proportionate cash flows, provided that the transfer does not result in the transferor receiving an ownership interest in the financial asset that permits it to receive disproportionate cash flows.

c) No subordination
The rights of each participating interest holder, including the transferor in its role as a participating interest holder, have the same priority, and no one interest holder's interest is subordinated to another's. That priority may not change in the event of bankruptcy or other receivership of the transferor, the original debtor, or any other participating interest holder. Participating interest holders may have no recourse to the

transferor (or its consolidated affiliates or its agents) or to each other, other than standard representations and warranties, ongoing contractual obligations to service the entire financial asset and administer the transfer contract, and contractual obligations to share in any setoff benefits received by any participating interest holder. No participating interest holder is entitled to receive cash before any other participating interest holder under its contractual rights as a participating interest holder. If one of the participating interest holders is the servicer of the asset, and that entity receives cash first in that role as compensation, it would not violate this requirement.

d) Disposition of the underlying asset
No party has the right to pledge or exchange the underlying financial asset unless all participating interest holders agree to pledge or exchange the underlying financial asset. If the transferor transfers an entire financial asset in portions that do not individually meet the participating interest definition, sale accounting criteria shall only be applied to the entire financial asset once all portions have been transferred.

One might wonder how a third-party guarantee affects the evaluation of a participating interest. The transfer of a portion of a financial asset represents a participating interest if, among other things, the participating interest holders do not have recourse to any other participating interest holder (other than standard representations or warranties, as defined in ASC 860, and obligations to service, administer, and share in setoff benefits). ASC 860 indicates that cash flows subject to a third-party guarantor do not fail the analysis of a participating interest because the third-party guarantee is considered a "separate unit of account." The FASB's conclusion is based on its belief that a third-party guarantee represents a separate arrangement in which the guarantor will assume ownership of the participating interest in the event of default (i.e., upon default, the third-party guarantee no longer exists, because the guarantor assumes the ownership of the participating interest and the rights and obligations of the other participating interest holders do not change).

Many securitizations of trade receivables traditionally relied on a structure in which a company transferred a pool of receivables to a bankruptcy-remote entity, which then issued a senior undivided beneficial interest in the pool to a multi-seller commercial paper conduit. The bankruptcy-remote entity is part of the transferor's consolidated group. Consequently, using the criteria set forth above, the undivided beneficial interest issued in the pool to the conduit needs to be evaluated to see if it meets the definition of a participating interest. Because the interest is "senior," the undivided beneficial interest would not meet the definition of a participating interest. Because ASC 860 mandates that only transfers of entire assets, an entire pool of assets, or participating interests be subjected to the sale criteria, sellers of trade receivables using this structure would be precluded from accounting for their transactions as sales. Of course, one alternative would be to sell the entire pool of assets in exchange for the same amount of cash and some sort of receivable from the conduit. See chapter 5 for an illustrative example.

What is an entire financial asset?

The emphasis in ASC 860 that the requirements for sale accounting must be applied only to a financial asset in its entirety, a pool of financial assets in its entirety, or participating interests highlights that, inherent in this concept, is that a financial asset (or pool of assets) may not be divided into components prior to transfer unless all of the components meet the definition of a participating interest. What, then, is an entire financial asset—what is the unit of account?

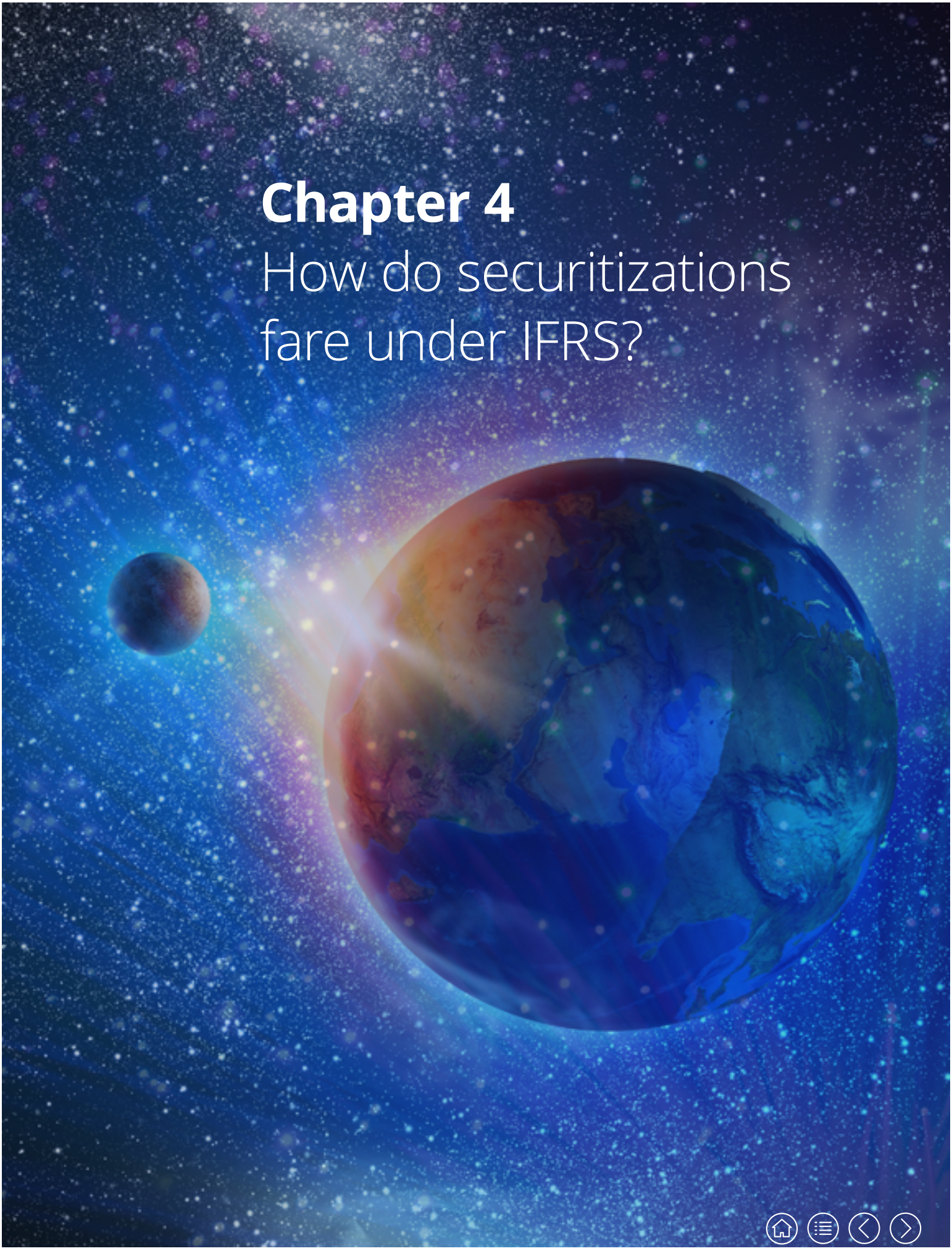
Here are some examples:

- A loan to one borrower in accordance with a single contract that is transferred to a securitization entity shall be considered an entire financial asset.
- Similarly, a beneficial interest in securitized financial assets after the securitization process has been completed shall be considered an entire financial asset.
- In a transaction in which the transferor creates an interest-only (IO) strip from a loan and then transfers the IO strip, the IO strip does not meet the definition of an entire financial asset.
- In contrast, if an entire financial asset is transferred to a securitization entity that it does not consolidate and the transfer meets the conditions for sale accounting, the transferor may obtain an IO strip as proceeds from the sale. An IO strip received as proceeds of a sale is an entire financial asset for purposes of evaluating any future transfers that could then be eligible for sale accounting.

If multiple advances are made to one borrower, in accordance with a single contract (such as a line of credit, credit card loan, or a construction loan), an advance on that contract would be a separate financial asset if the advance retains its identity, does not become part of a larger loan balance, and is transferred in its entirety. However, if the advances lose their separate identity as part of a larger loan balance, then a participating interest in that larger balance may be eligible for sale accounting; however, the advances themselves would not be eligible for sale accounting.

Overall, the legal form of the asset and what the asset conveys to its holders are the principal considerations in determining what constitutes an entire asset.

Chapter 4
How do securitizations fare under IFRS?



International securitization accounting—IFRS 9[1]

The derecognition criteria under US GAAP was discussed in chapter 3. But what about transfers involving companies following international standards? The securitization accounting framework under IFRS is included within IFRS 9, *Financial Instruments*.

Does IFRS 9 use the same control-based approach as ASC 860?

No. While ASC 860 focuses on whether a transferor has surrendered control over a financial asset, IFRS 9 applies a combination of risks and rewards and control tests. The risks and rewards tests seek to establish whether, having transferred a financial asset, the entity continues to be exposed to the risks of ownership of that asset and/or the benefits that it generates. The control tests are designed with a view to understanding which entity controls the asset (i.e., which entity can direct how the benefits of that asset are realized).

The use of both types of tests is often criticized for being a mix of two accounting models that can create confusion in application. IFRS 9 addresses this criticism by providing a clear hierarchy for application of the two sets of tests: risks and rewards tests are applied first, with the control tests used only when the entity has neither transferred substantially all the risks and rewards of the asset nor retained them.

Inherent in the IFRS 9 derecognition model is the notion of "stickiness"; it is more difficult to remove an asset from an entity's balance sheet than it is to recognize that asset in the first place. Derecognition cannot be achieved by merely transferring the legal title to a financial asset to another party. The substance of the arrangement must be assessed in order to determine whether an entity has transferred the economic exposure associated with the rights inherent in the asset (i.e., its risks and rewards) and, in some cases, control of those rights.

What is the IFRS 9 framework for derecognition following a transfer?

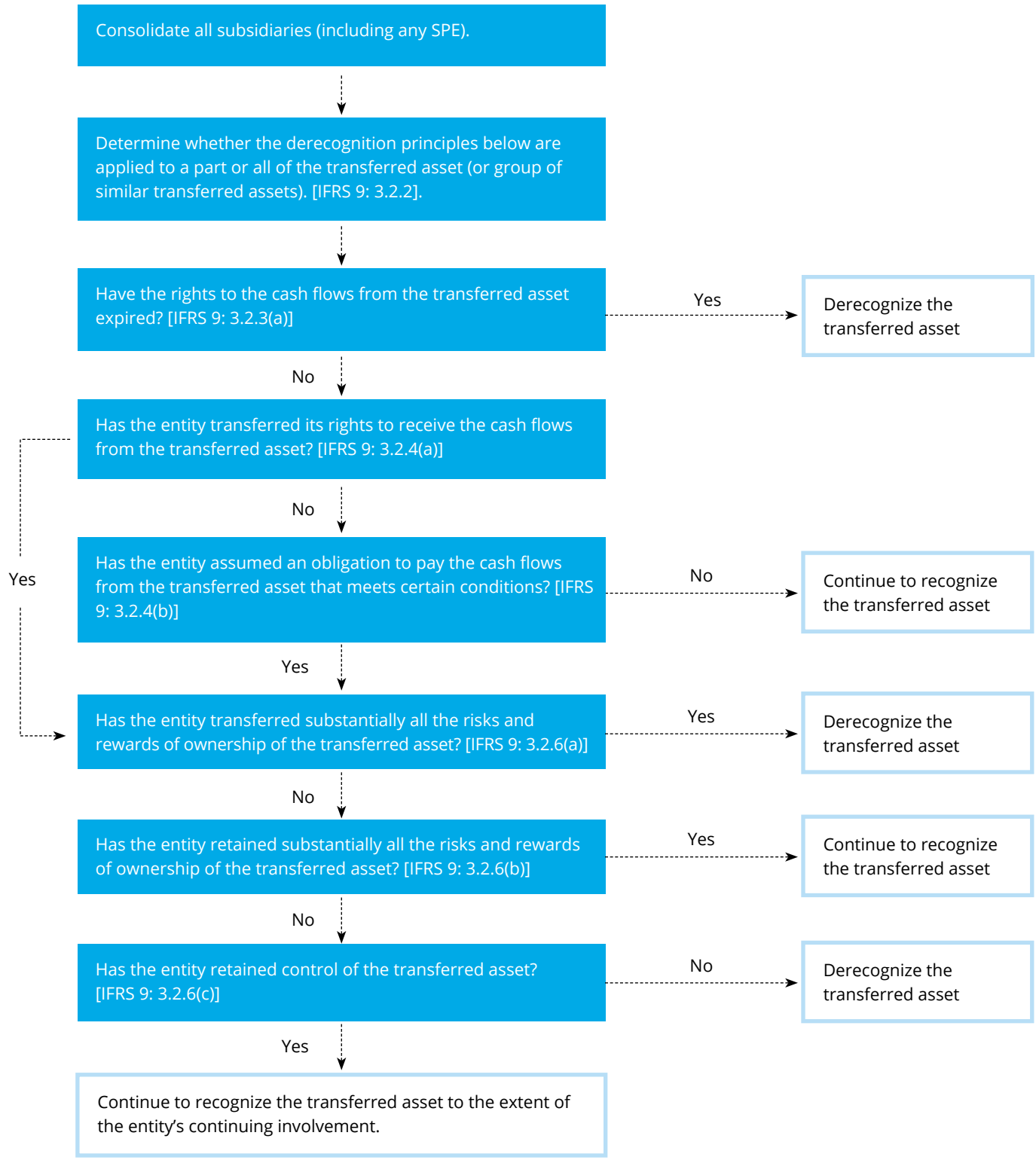
Whether a transfer qualifies for derecognition does not directly depend on whether the transfer is directly to investors in a single step or goes through an SPE that transfers assets or issues beneficial interests to investors.

Securitizers first consolidate all subsidiaries according to IFRS 10 (see chapter 2) and then evaluate the transaction in its totality. Whether the transfer qualifies for full, partial, or no derecognition will depend on the proportion of risks and rewards transferred to the investors compared to the amount retained by the transferor:

1) If substantially all the risks and rewards of ownership of the financial asset are transferred, the transferor derecognizes the financial asset and recognizes separately as assets or liabilities any rights and obligations created or retained in the transfer.
2) If substantially all the risks and rewards of ownership of the financial asset are retained (e.g., the transferor continues to absorb most of the likely variability in net cash flows), the transferor continues to recognize the financial asset and any associated liability for the proceeds.
3) If neither the transferee nor the transferor has substantially all the risks and rewards of ownership (e.g., a significant amount, but not substantially all, of the risks and rewards has been passed), the transferor either:
   - Derecognizes the transferred assets as in (1) above, if the transferor has not retained control of the financial assets, or
   - Continues to recognize the financial assets only to the extent of its continuing involvement in them, if the transferor has retained control of them.

[1] In 2018, the IASB decided to extend the temporary exemption for insurers to apply IFRS to 2022 so that both IFRS 9 and IFRS 17, *Insurance Contracts*, can be applied at the same time. Although insurers may continue to apply IAS 39 for the time being, the applicable guidance in IAS 39 as it relates to this chapter is similar to what is prescribed under IFRS 9.

IFRS 9 derecognition decision tree



Step 1: Have I consolidated all subsidiaries, including any SPEs?

See chapter 2 for a discussion of the consolidation requirements under IFRS.

Step 2: Do I look at the entire asset or just the transferred portion?

The second step is determining exactly what is being considered for derecognition purposes. Specifically, this involves determining whether a whole financial asset, a group of financial assets, a part of a financial asset, or a part of a group of similar financial assets is being evaluated for derecognition.

A part of a financial asset (or a group of similar financial assets) is considered separately for derecognition only if it comprises: (1) specifically identified cash flows (e.g., an IO or principal-only strip), (2) a fully proportionate (pro rata) share of the cash flows (e.g., rights to 90 percent of all cash flows of a financial asset), or (3) a fully proportionate (pro rata) share of specifically identified cash flows (e.g., 90 percent of the cash flows of an IO strip). In all other cases, the financial asset (or assets) is considered in its entirety.

For example, if an entity transferred to a securitization trust all the principal and all but 1 percent of the interest flows from a pool of financial assets, and the retained interest strip was pari passu with the transferred interest cash flows, the transferred interest receipts and all of the principal would be the financial asset for which the transfer would be evaluated. On the other hand, if the 1 percent interest strip was subordinated for purposes of providing credit enhancement to the investors' principal, then the entire asset (e.g., pool of loans) would be the financial asset for which the transfer would be evaluated. These conclusions are not affected by whether the trust issued to outside investors' various classes of beneficial interests to achieve credit or time tranching.

IFRS 9 does not provide guidance on what makes assets "similar." Similar generally means that the two instruments have contractually specified cash flows similar in amounts, timings, and risk characteristics. Consideration should be focused on the similarity of terms such as prepayment features, interest rates, and currency denomination. By definition, there will always be some differences between similar instruments—otherwise they would be identical. A portfolio of mortgages transferred by a bank is often deemed to contain similar financial assets. Similarly, a portfolio of corporate bonds transferred by a bank is often deemed to contain similar financial assets. However, no two portfolios are ever precisely alike. A transfer of a portfolio of mortgages would need to be assessed separately from a transfer of a portfolio of corporate bonds even if the two transfers are made at the same time.

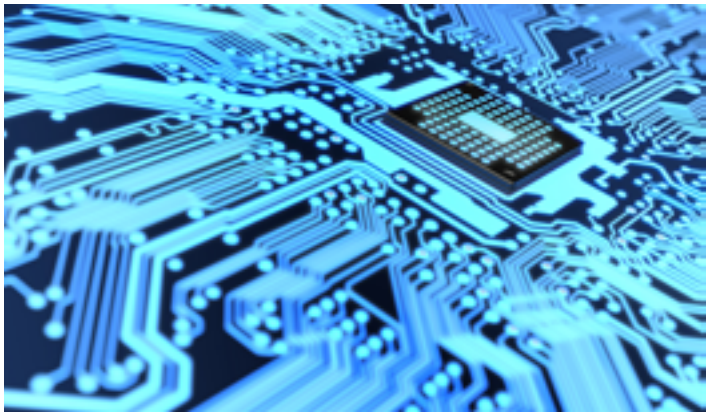
Step 3: Have the rights to the cash flows from the asset expired?

A financial asset is derecognized when the rights to the cash flows from that asset expire. The rights to the cash flows expire when, for example, a financial asset reaches its maturity and there are no further cash flows arising from that asset, or a purchased option reaches its maturity unexercised. An entity may have a right to receive certain or all cash flows from a financial asset over a specified period of time, which may be shorter than the contractual maturity of that financial asset. In that case, the entity's right to the cash flows expires once the specified period expires.

Step 4: Have I transferred my rights to receive the cash flows from the asset?

A transfer may involve transferring the contractual rights to the cash flows of a financial asset, or it may involve retaining the contractual rights to the cash flows, but assuming a contractual obligation to pass on those cash flows to other recipients (i.e., a pass-through arrangement). In a pass-through arrangement, the transaction is treated as a transfer of a financial asset if, and only if, all of the following conditions are met:

- There is no obligation to pay amounts to the eventual recipients unless equivalent collections are received from the original asset.
- The terms of the transfer arrangement prohibit selling or pledging the original asset other than as security to the eventual recipients for the obligation to pay them cash flows (i.e., no control of the future economic benefits associated with the transferred asset).
- An obligation exists to pass on or remit the cash flows that it has collected on behalf of the eventual recipients without material delay and is prohibited from reinvesting the cash flows received in the short settlement period between receiving them and remitting them to the eventual recipient in anything other than cash or cash equivalents, and any interest earned on such investments must be passed on to the eventual recipients.



Outright transfers of contractual rights

What if I don't transfer legal title to the asset(s)?

In 2006, the IASB considered a number of derecognition issues, including whether any transfer in which legal ownership of the asset is not transferred can be considered an outright transfer of contractual rights under IFRS 9: 3.2.4(a). In other words, would the pass-through test be applicable to all transfers in which legal ownership of the financial asset is not transferred? The IASB indicated that a transaction in which an entity transfers all the contractual rights to receive the cash flows, without necessarily transferring legal ownership of the financial asset, would not be treated as a pass-through pursuant to IFRS 9: 3.2.4(b) and would be considered an outright transfer of contractual rights. An example might be a situation in which an entity transfers all the legal rights to specifically identified cash flows of a financial asset (e.g., a transfer of the interest or principal of a debt instrument). Conversely, application of the pass-through test would be required in situations in which the entity does not transfer all the contractual rights to cash flows of the financial asset, such as disproportionate transfers. The IASB's view on this issue would mean that a transfer of all the legal rights to cash flows for a full proportionate interest in an asset (say, 50 percent of all cash flows), even though legal title of the asset was not transferred to the transferee, the transferor would apply the outright transfer test to the transfer and would, therefore, avoid the pass-through tests in IFRS 9: 3.2.4(b).

What if the transfer involves conditions?

The IASB has also previously considered whether conditional transfers should be treated as pass-through transactions. Conditions attached to a transfer could include provisions ensuring the existence and value of transferred cash flows at the date of transfer or conditions relating to the future performance of the asset. The IASB indicated that such conditions would not affect whether the entity has transferred the contractual rights to receive cash flows. However, the existence of conditions relating to the future performance of the asset might affect the conclusion related to the transfer of risks and rewards (as further discussed below) as well as the extent of any continuing involvement by the transferor in the transferred asset.

Can I retain servicing rights?

IFRS 9: 3.2.4(a) focuses on whether an entity transfers the contractual rights to receive the cash flows from a financial asset. The determination as to whether the contractual rights to cash flows have been transferred is not affected by the transferor retaining the role of an agent to administer collection and distribution of cash flows. Retention of servicing rights by the entity transferring the financial asset does not, in itself, cause the transfer to fail the requirements in IFRS 9: 3.2.4(a). However, careful judgment must be applied to determine whether the entity

providing servicing is acting solely as an agent for the owner of the financial asset (i.e., whether it has transferred all risks and rewards). The existence of servicing does not prevent an entity from transferring the contractual rights to the cash flows of the asset under IFRS or US GAAP.

A transferor may retain the right to a part of the interest payments on transferred assets as compensation for servicing those assets. The part of the interest payments that the entity would give up upon termination or transfer of the servicing contract is allocated to the servicing asset or servicing liability. The part of the interest payments that the entity would not give up is an IO strip receivable. For example, if the entity would not give up any interest upon termination or transfer of the servicing contract, the entire interest spread is an IO strip receivable. The fair values of the servicing asset and IO strip receivable are used to allocate the carrying amount of the receivable between the part of the larger asset that is derecognized and the part that continues to be recognized. If there is no servicing fee specified or the fee to be received is not expected to compensate the entity adequately for performing the servicing, a liability for the servicing obligation is recognized at fair value.

Pass-through arrangements

Does the possibility of default by the transferor matter?

The likelihood that the transferor will default under a pass-through arrangement as a result of a default on other creditor obligations is not considered an impediment to meeting the pass-through criteria because the transferor is assumed to be a going concern. In most instances, the transferee will limit this risk by ensuring that the transferred assets reside in a bankruptcy-remote SPE so that the wider credit risk of the transferor is not borne by the transferee.

What about inclusion of credit enhancement?
A transferor may provide credit enhancement in a transfer arrangement so that it suffers the first loss on the asset up to a specified amount. In these circumstances, if the debtor fails to pay, the transferor absorbs the first loss fully, with the eventual recipient suffering a loss only after the first loss has been fully absorbed. A credit enhancement may be in the form of overcollateralization or may be in the form of purchasing a subordinated interest in a consolidated SPE (in the latter case, the entity is applying the pass-through tests at a consolidated level). Providing credit enhancement will not, in itself, result in failure of the pass-through tests if all cash received by the transferor on transferred assets is paid on to the eventual recipient, although the credit enhancement may result in failure of derecognition due to the transferor retaining substantially all the risks and rewards of ownership of the assets (see further discussion below on consideration of retaining risks and rewards). The pass-through tests must be considered prior to considering the entity's exposure to risks and rewards.

If a greater amount of cash is realized on the assets than is needed to pay the eventual recipient (i.e., the eventual recipient's initial investment is fully paid), then the entity will retain the remainder of the cash and will not pass it on. In all cases, the entity passes any cash it collects on behalf of the eventual recipients.

How is "without material delay" interpreted?
"Without material delay" does not mean instantaneously, nor does it imply an extended length of time. The contractual arrangement will need to be considered in full in order to make an assessment as to whether the time frame between the collection of cash flows on the underlying assets and the point at which they are passed on to the eventual recipients is material in the context of the contractual arrangements of the transfer.

In some arrangements, the cash collected on the underlying assets occurs sporadically throughout a period of time. For example, if an entity retains the rights to the cash flows arising on a group of credit card receivables, the payments arising on those credit cards are likely to occur on any given day throughout the month. The contractual arrangement of the transfer may require that those cash flows are remitted to the eventual recipients weekly, monthly, quarterly, or even annually. There is a trade-off between passing on the cash flows almost as soon as they arise and the administrative burden that goes along with passing on those cash flows. It is likely that biannual payments to the eventual recipients (and certainly annual payments) would be considered to be subject to a material delay because the conditions specified above fail and, therefore, derecognition would be inappropriate in these circumstances. It appears reasonable that the entity can invest the cash flows from the assets for up to three months without breaching the condition that all cash flows must be passed to the eventual recipient without material delay.

Any significant delay in passing on the cash flows of a transferred asset alters the credit risk characteristics for the eventual recipient when compared to the original transferred asset. The holder is exposed not only to the original transferred asset but also to additional credit risk from the reinvestment of the cash flows from the original asset.

How does this apply to revolvers?
In a revolving structure, cash received on the assets is reinvested in buying new receivable assets. In other words, cash revolves into new assets instead of being returned immediately to the investors. Upon maturity, the reinvested assets are used to repay the beneficial interest holders. Such revolving structures do not meet the pass-through tests because they involve a material delay before the original cash is passed on to the eventual recipients, and the reinvestment would typically not be in cash or cash equivalents.

Step 5: Have I transferred substantially all of the risks and rewards of ownership of the asset?

Determining the extent to which the risks and rewards of the transferred asset have been transferred and retained is critical in determining the accounting outcome for a transfer. The greater the risks and rewards retained, the greater the likelihood of continued recognition. The degree to which risks and rewards have been transferred and its effect on the accounting outcome can be illustrated in the table below.

More risk/reward transferred to investors ↑

Situation		Accounting
Substantially all risks/rewards transferred		Derecognize old assets
Transferred and retained risks/rewards are both less than substantially all	Control passed—transferee can unilaterally sell entire asset	Recognize any new assets and liabilities
	Control retained	Recognize assets and liability up to continuing involvement level plus any retained interest
Substantially all risks/rewards retained		Recognize all assets, proceeds are liability

When an entity transfers substantially all of the risks and rewards of ownership of the financial asset, the asset should be derecognized. The entity may have to recognize separately any rights and obligations created or retained in the transfer.

IFRS 9 provides three examples of transferring substantially all the risks and rewards of ownership:

1) Unconditionally selling a financial asset
2) Selling a financial asset together with an option to repurchase the financial asset at its fair value at the time of repurchase
3) Selling a financial asset together with a put or call option that is deeply out of the money (i.e., an option that is so far out of the money it is highly unlikely to go into the money before expiring)

In the first example, it is clear that there has been a transfer of all the risks and rewards of ownership of the asset. In the second example, the entity has sold the asset and, although it can call the asset back, this can only be done at the fair market value of the asset at the time of reacquisition. The entity is in the same economic position as having sold the asset outright, with the ability to go into the market to reacquire the asset (i.e., it has transferred the full price risk of the asset). In the third example, the option is highly unlikely ever to be exercised and has very little value, which is substantially the same economic position as an unconditional sale.

There is no bright line provided in IFRS 9 as to what is meant by a transfer of "substantially all" of the risks and rewards of ownership, and a significant degree of judgment is required when applying the risks and rewards test. There are other references in IFRS 9 to various yardsticks that need to be met when applying certain paragraphs. For example, when comparing the old and new terms of a financial liability, the terms are considered to be "substantially different" if the present value of the cash flows under the new terms is at least 10 percent different from the discounted present value of the remaining cash flows of the original financial liability. While IFRS 9 does not apply the 90 percent test to derecognition of financial assets, it would seem imprudent to conclude that substantially all the risks and rewards of ownership have been transferred when the computations show that the entity still retains more than 10 percent of the exposure to the variability in present value of the expected future cash flows post-transfer.

IFRS 9 acknowledges that in many cases it will be clear whether or not substantially all of the risks and rewards of ownership have been transferred. When it is unclear, then an entity will have to evaluate its exposure before and after the transfer by comparing the variability in the amounts and timing of the net cash flows of the transferred asset. If the exposure to the present value of the future net cash flows from the financial asset does not change significantly as a result of the transfer, then the entity has not transferred substantially all of the risks and rewards of ownership.

Typical risks included in a risk and reward analysis are interest rate risk, credit risk (i.e., risk of default), prepayment risk, late-payment risk, and currency risk. The overall securitization has liquidity risk associated with the fact that there is a mismatch in the timing of cash inflows and outflows. It is important to recognize that liquidity risk arising in the securitization entity from differences in the contractual timing of cash flows of the assets and the notes issued to acquire the assets is not part of the transferred asset. This compares to late-payment risk and credit default risk, which are inherent in the asset. However, if an asset pays late, the transferee may not be able to meet its obligations under the notes. This liquidity risk is not part of the transferred asset because it arises only when the assets are placed inside the securitization entity. The liquidity risk associated with late-payment risk is, therefore, not included in the transferor's risks and rewards assessment in determining derecognition for the transferor. However, the impact of liquidity risk would be included as part of the risks and rewards analysis of the securitization entity in determining whether an entity should consolidate the entity. Derivatives are also often included in contractual arrangements that transfer financial assets and may affect the analysis of whether the risks and rewards of those assets have been transferred. Their presence and contractual terms may not be obvious, and careful review of all the terms of the transfer agreement is required.

The computational comparison is an expected value approach (i.e., all reasonably possible outcomes should be considered, with a greater weight given to those outcomes that are more likely to occur and considering all risks inherent in the expected cash flows) using a discount rate based on appropriate current-market interest rates. There is no example in IFRS 9 of the methodology to be used in performing the risks and rewards assessment. Whichever methodology is used, it should be applied consistently to all transfers that are similar in nature (i.e., one can't simply "cherry pick" the methodology that indicates the desired degree of transfer of risks and rewards). A common approach is to use a standard deviation statistic as the basis for determining how much variability has been transferred and retained by the transferor. To apply this approach, the transferor will need to consider various future scenarios that will impact the amount and timing of cash flows of the transferred assets and calculate the present value of these amounts both before and after the transfer. In the case of a transfer of debt instruments, scenarios will incorporate, among other factors:

- Changes in the amount of cash flows due to changes in the rate of default by the borrower and recovery of any collateral in the case of default
- Changes in the timing of when cash flows are received due to changes in prepayment rates

The expected cash flows on the transferred assets will be allocated to the transferor and the transferee based on the rights and obligations following the transfer. For example, if the transferor guarantees

part of the transferred assets or invests in a subordinated loan, a subordinated IO strip or excess spread issued by the transferee, this will result in some of the exposure to the assets coming back to the transferor.

The transferor will need to assess the probability of the various scenarios occurring so that it can take the various present values described above and multiply them by those probabilities in order to determine probability-weighted present values. These values are used for calculating the standard deviation, which can be thought of as the exposure, or volatility, that the transferor has to the transferred asset both before and after the transfer. This will form the basis for judging whether the transferor has retained or transferred substantially all the risks and rewards of ownership of the transferred assets.

Example

Entity A has a portfolio of similar prepayable fixed-rate loans with a remaining maturity of two years and a coupon and effective interest rate of 10 percent. The principal and amortized cost is $10,000. On 1/1/X0, Entity A transfers the loans for cash consideration of $9,115 to Entity B, an entity not consolidated in Entity A's consolidated financial statements. In order to acquire the loans, Entity B issues a senior note, linked to the performance of the transferred assets, to third parties where the holders of the notes obtain the right to $9,000 of any collections of principal plus interest thereon at 9.5 percent. Entity A agrees to retain rights to $1,000 of any collections of principal plus interest thereon at 10 percent, plus the excess spread of 0.5 percent on the remaining $9,000 of principal. Collections from prepayments are allocated between the transferor and the transferee proportionately in the ratio of 1:9, but any defaults are deducted from Entity A's retained interest of $1,000 until that interest is exhausted. Entity A's retained interest is therefore subordinate to the senior notes because it suffers the loss of any defaults on the transferred assets prior to the holders of the senior notes. Interest is due on the transferred assets annually on the anniversary of the date of transfer.

In order to determine the extent to which Entity A has retained the risks and rewards of the transferred assets, Entity A considers a number of scenarios where amounts and timings of cash flows on the transferred assets vary and assigns a probability for each scenario occurring in the future. For illustrative purposes, only four scenarios are included in the table that follows, although, in practice, a larger number of scenarios is likely to be required. A risk-free rate of 8.5 percent is used to determine net present values.

Note: The net present values for each scenario are multiplied by the probability of each scenario to determine a probability-weighted present value. The variance before and after the transfer is determined using the profitability-weighted present values as illustrated below.

Probability-weighted present value (using 8.5% risk-free discount rate)[2]

Scenario	Probability	Total Loans	Transferred Senior	Retained Subordinate & IO
1	20%	$2,000	$1,800	$200
2	30%	3,041	2,725	316
3	30%	3,079	2,747	332
4	20%	1,980	1,817	163
Total		**$10,100**	**$9,089**	**$1,011**

Probability-weighted squared deviations[3]

Scenario	Probability	Total Loans	Transferred Senior	Retained Subordinate & IO
1	20%	$2,000	$1,584	$24
2	30%	403	10	538
3	30%	8,003	1,374	2,746
4	20%	8,000	3	7,683
Total variance		**$18,406**	**$2,971**	**$10,991**
Standard deviation (square root of variance)		$136	$55	$104

Entity A determines whether substantially all of the risks and rewards of ownership of the transferred assets are retained by dividing the variability retained after the transfer by the variability of the portfolio as a whole ($104/$136 = 76 percent). Consequently, Entity A concludes that substantially all the risks and rewards of ownership are neither transferred nor retained. Entity A would then need to address whether it has control of the transferred asset (described in detail further below) to determine whether Entity A can derecognize the asset in full or continue to recognize its continuing involvement in the transferred assets.

It is worth noting that the sum of variability of Entity A after the transfer ($104) plus variability of the senior note holders ($55) is greater than the variability of the portfolio as a whole ($136). This arises because the portfolio of loans as a whole has less risk due to the diversification of the loans within the portfolio. Some of this diversification is reversed when the portfolio is split into pieces. More complex mathematical techniques can be applied to show Entity B's variability to the loans after transfer that includes the diversification effect that exists in the portfolio prior to the transfer. Such techniques are beyond the scope of this manual.

If a transfer results in a financial asset being derecognized in its entirety, but the transferor obtains a new financial asset or assumes a new financial liability, or a servicing liability, the transferor recognizes those new assets, liabilities, or servicing at fair value, and any resulting gain or loss is reflected in current earnings. If the asset derecognized was part of a larger financial asset, the carrying amount of the larger asset is allocated between the part sold and the part retained based on their relative fair values as of the transfer date.

Step 6: Have I retained substantially all of the risks and rewards of ownership?

The previous section discussed how to perform the "substantially all" risks and rewards assessment. If substantially all of the risks and rewards of ownership of a financial asset have been retained, one would continue to recognize that financial asset.

IFRS 9 provides examples of retaining substantially all the risks and rewards of ownership, including:

a) Selling and repurchasing the same financial asset where the repurchase price is a fixed price or the sale price plus a lender's return

2 For example, under Scenario 2, the loan pays a total of $11,000 one year from today. Of that amount, $9,855 is paid to the senior interests, and $1,145 is retained by the subordinated interests. The present values of those amounts, discounted for one year at 8.5 percent, are $10,138, $9,083, and $1,055, respectively. Weighting each by the 30 percent probability assigned to Scenario 2 gives us $3,041, $2,725, and $316, respectively.

3 For example, the deviation of the total loan amount in Scenario 1 from the overall average is the difference between $10,000 and $10,100, which equals $100. Squaring that deviation gets us to $10,000, and weighting it by the 20 percent probability of Scenario 1 yields $2,000.

b) Lending securities

c) Selling a financial asset together with a total return swap that transfers the market risk exposure back to the seller

d) Selling a financial asset together with a deep in-the-money put or call option (i.e., an option that is so far in the money that it is highly unlikely to go out of the money before expiring)

e) Selling short-term receivables with a guarantee by the seller to compensate the transferee for credit losses that are likely to occur

Derivatives commonly found in transfers of financial assets include put options, call options, forward or repurchase contracts, forward sales contracts, and swap agreements. Put options provide the transferee with the right to require the transferor to repurchase some or all of the financial assets that were sold (e.g., to repurchase delinquent receivables). Call options provide the transferor with the right to repurchase some or all of the financial assets sold to the transferee. Forward or repurchase agreements require the transferee to sell and the transferor to buy some or all of the financial assets that were sold before their scheduled maturity. Forward sales contracts require the transferor to sell and the transferee to buy additional financial assets in the future. Swap agreements effectively change one or more cash flows of the underlying transferred assets (or debt issued by a special purpose entity). For example, an interest-rate swap may convert a variable-rate asset to a fixed-rate asset.

Derivatives can operate automatically or require exercise by one of the parties; they can be exercised freely or only after the occurrence of a future event. Such a future event may be certain of occurring (e.g., the passage of time), or may be conditional upon another event (e.g., a loan becoming delinquent). For conditional events, the certainty of occurrence varies—their occurrence may be considered to be probable, possible, or remote. The exercise price of a derivative can be fixed above, below, or equal to the market value of the financial assets at inception or it can be variable, equal to the market value at exercise date, or the result of a formula that is a function of market conditions or other future events. Derivatives can be combined to form different types of derivatives. Each of these factors impacts the extent to which risks and rewards have been retained by the transferor.

A fixed-price repurchase transaction, in essence, establishes a lending arrangement where the transferor is always going to reacquire the asset in the future. The fixed price is usually set to reflect the cost of borrowing over the period of the transaction. Because the transferor is required to reacquire the asset for a fixed price, the transferor is exposed to the market risk of the asset. The same analysis would apply to a securities lending transaction.

A sale of a financial asset combined with a total return swap that transfers the market risk of the asset back to the transferor also establishes what, in essence, is a lending arrangement. Under the terms of total return swaps, the transferor usually pays an amount equivalent to a borrowing rate to the transferee over time, and the transferee will settle with the transferor amounts based on the performance of the asset. For example, in the transfer of an equity security with a total return swap, if the equity price goes up, the transferor receives the benefits of the rise in value of the transferred equity security from the transferee and pays an amount equivalent to a borrowing rate to the transferee. And if the equity security price decreases, the transferor pays an amount equivalent to a borrowing rate and, in addition, pays an amount equivalent to the fall in value of the equity security. The transferor continues to be exposed to the market risk in the equity security price after the transfer and therefore has retained substantially all of the risks and rewards of ownership of the asset.

When an entity sells an asset but retains the right to buy the asset back at a price that is sufficiently low that the option is highly likely to be exercised (e.g., a deep-in-the-money option), the entity retains substantially all the risks and rewards of ownership. Similarly, when an entity sells an asset and gives the transferee the right to put the asset back at a sufficiently advantageous price so that the option is likely to be exercised, the entity retains substantially all the risks and rewards of ownership. However, the same analysis is not appropriate when the option is not deep in the money and further derecognition tests should be applied.

If the transferor has retained substantially all the risks and rewards of ownership, derecognition of the financial asset does not occur, and the transferor continues to recognize the transferred asset in its entirety. The transferor also records a financial liability for the consideration received. Going forward, the transferor continues to recognize any income on the transferred asset and any expense incurred on the financial liability. The asset and liability are not offset, and there is no offsetting of income from the transferred asset against expense incurred from the associated liability. If the transferred asset is measured at amortized cost, the option in IFRS 9 to designate a financial liability at fair value through profit or loss is not permitted for the associated liability.

For transfers that do not qualify for derecognition, the transferor's contractual rights or obligations related to the transfer are not accounted for separately as derivatives if doing so would result in recognizing both the derivative and either the transferred asset or the liability arising from the transfer twice. For example, a call option retained by the transferor may prevent a transfer of financial assets from being derecognized and therefore would not

be separately recognized as a derivative asset. Also, the transferee does not recognize the transferred asset as its own asset. The transferee derecognizes the consideration paid and recognizes a receivable from the transferor. If the transferor has both a right and an obligation to reacquire control of the entire transferred asset for a fixed amount (such as under a repurchase agreement), the transferee may account for its receivable as a loan or receivable.

Step 7: I have neither transferred nor retained substantially all risks and rewards. What now?

If an entity has neither transferred nor retained substantially all of the risks and rewards of ownership of transferred assets, an assessment as to whether or not it has retained control of the asset is then required. A financial asset is controlled when an entity has the ability to sell the asset. When the transferee has the practical ability to sell the asset in its entirety to an unrelated third party and is able to exercise that ability unilaterally and without the imposition of additional restrictions on the transfer, the transferee controls the asset and, therefore, the transferor must have relinquished control.

When the transferred asset is traded in an active market, the transferee generally has the practical ability to sell the asset. This is because there is a ready market and the transferee can repurchase the asset if and when it is required to return the asset back to the transferor. However, the fact that the transferred asset is traded in an active market is not in itself sufficient to conclude that the transferee has the "practical ability" to sell the asset. For example, the settlement terms of repurchase, which are driven by the market conventions, may differ significantly from the settlement terms in the transfer agreement such that the transferee will not be able to gain access to the asset quickly enough to deliver the asset to the transferor so as to comply with the contractual provisions of the transfer agreement. In this case, the transferee is forced to hold the asset in order to ensure that it can deliver the asset back to the transferor when required.

Other factors may affect the entity's practical ability to sell an asset:

- A financial asset that would satisfy the call option or forward contract may have to be purchased from a third party at a price significantly above its estimated fair value, thus indicating that the assets are not liquid.
- Financial assets available to satisfy the call option or forward contract may be held by one or a small number of investors, thus indicating that the assets are not liquid.
- The quantity of financial assets necessary to satisfy the call option or forward contract may be too large compared to that traded in the market, and the terms of the transfer do not allow delivery of the assets over a period of time.

Intuitively, the wider the range of assets that may be used to satisfy the call option, the more likely it is that the entity has the practical ability to sell the asset. For instance, assets identical to those originally transferred may not be readily obtainable; however, if the call option permits delivery of assets that are similar to the transferred assets, they may be readily obtainable. When a call option permits settlement in cash as an alternative to delivering the financial asset, and the cash settlement alternative does not contain an economic penalty rendering it unfeasible, the transferee has the practical ability to sell the asset as cash, which is a readily obtainable asset.

Unilateral and unrestricted ability to sell means that there can be no strings attached to the sale. If the transferee has to attach a call option over the asset when it sells it, or introduce conditions over how the asset is serviced, in order to satisfy the terms of the original transfer, then "strings" exist and the test of practical ability is not met.

The "strings" can be created by other instruments that form a contractual part of the transfer arrangement and are sufficiently valuable to the transferee, so that if the transferee were to sell the asset, it would rationally include similar features within that sale. For example, a guarantee may be included in the initial transfer and may have such potential value to the transferee that the transferee would be reluctant to sell the asset and forgo any payments that may fall due under the guarantee. The transfer agreement may have an explicit restriction that prohibits the transferee from selling the asset. When that restriction is removed or lapses, and, as a result, the transferee has the practical ability to sell the asset, derecognition would be appropriate.

The fact that the transferee may or may not choose to sell the asset should not form part of the decision-making process; it is the transferee's practical ability to do so that is important. If control of the financial asset is not retained, the financial asset is derecognized,

and any rights and obligations created or retained in the transfer would be separately recognized.

If control of the financial asset is retained, the financial asset should continue to be recognized to the extent of the continuing involvement in the financial asset. Continuing involvement represents the extent to which the transferor continues to be exposed to the changes in the value of the transferred asset. A corresponding liability is also recognized and measured in such a way that the net carrying amount of the asset and the liability is:

- The amortized cost of the rights and obligations retained, if the asset is measured at amortized cost, or
- The fair value of the rights and obligations retained, if the asset is measured at fair value.

The liability that is recognized at the date of transfer will not necessarily equate to the proceeds received in transferring the asset, which would ordinarily be the case if the asset continued to be fully recognized and the proceeds received were recognized as a collateralized borrowing. In some cases, the liability appears to be the "balancing figure" that results from applying the specific guidance for continuing involvement accounting. IFRS 9 acknowledges that measuring the liability by reference to the interest in the transferred asset is not in compliance with the other measurement requirements of the standard. This requirement for consistent measurement of the asset and the associated liability means that the entity is not permitted to designate the liability as at fair value through profit or loss if the transferred asset is measured at amortized cost.

The entity cannot offset the asset and the associated liability, and any subsequent changes in the fair value of the asset and the liability are measured consistently. Any income on the asset to the extent of the entity's continuing involvement and any expense incurred on the associated liability are also not offset.

When an entity transfers assets but retains a guarantee over the transferred assets that absorb future credit losses, and that guarantee (as well as other continuing involvement) results in the transferor neither transferring nor retaining substantially all the risks and rewards of ownership, the transferor must recognize the guarantee as part of its continuing involvement. Assuming, for illustrative purposes only, that the guarantee represents the transferor's only continuing involvement in the transferred asset, then:

- The transferred asset at the date of transfer will be measured at the lower of: (i) the carrying amount of the asset and (ii) the maximum amount of the consideration received in the transfer that the entity could be required to repay, and
- The associated liability is measured initially at the amount in (ii) above plus the fair value of the guarantee.

The initial fair value of the guarantee is recognized in profit or loss on a time-proportion basis in accordance with IFRS 15, *Revenue from Contracts with Customers*, and the carrying amount of the asset is reduced by any impairment losses.

What are some common forms of "continuing involvement"?

Cleanup calls

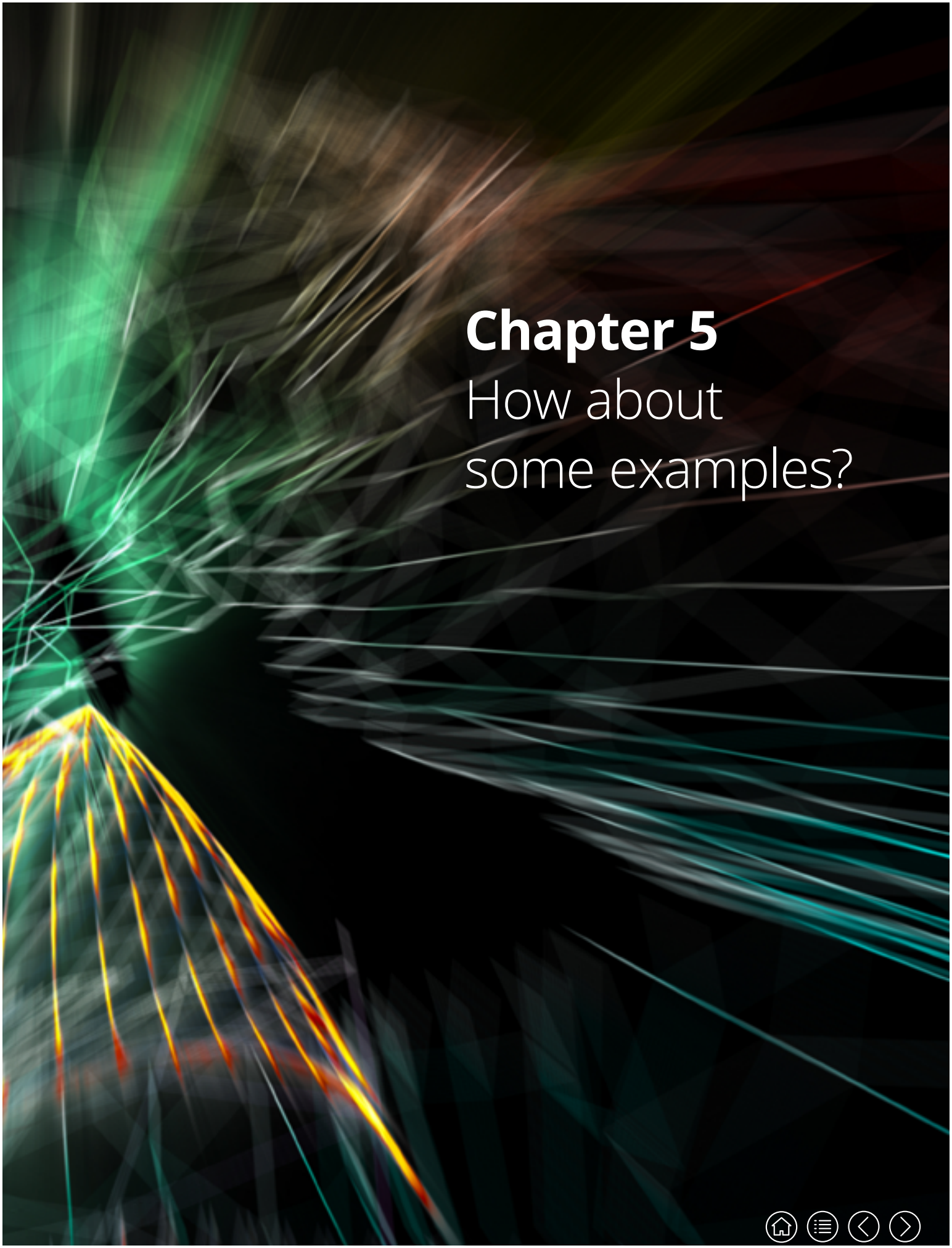
The servicer of transferred assets, which may be the transferor, may hold either of two types of options to reclaim previously transferred assets. A removal-of-accounts provision is an option to repurchase assets, usually subject to certain limitations on how the particular assets are selected for call, how frequently, and in what total amount the call can be exercised. A cleanup call is an option to purchase remaining transferred financial assets if the amount of outstanding assets falls to a specified level at which the cost of servicing those assets becomes burdensome in relation to the benefits of servicing. Provided that such a removal-of-accounts provision or cleanup call results in the transferor neither retaining nor transferring substantially all the risks and rewards of ownership and the transferee cannot sell the assets, it precludes derecognition only to the extent of the amount of the assets that is subject to the call option.

Amortizing interest rate swaps

A transferor may transfer a fixed-rate financial asset that is paid off over time and enter into an amortizing interest-rate swap with the transferee to receive a fixed interest rate and pay a variable interest rate. If the notional amount of the swap amortizes such that it equals the outstanding balance on the transferred financial assets at any point in time, the swap would generally result in the transferor retaining substantial prepayment risk. As such, the transferor either continues to recognize the entire transferred asset or continues to recognize the transferred asset to the extent of its continuing involvement. However, if the amortization of the notional amount of the swap is not linked to the principal amount outstanding of the transferred asset, such a swap would not result in the transferor retaining prepayment risk on the asset. Therefore, it would not preclude derecognition of the transferred asset if the payments on the swap are not conditional on interest payments being made on the transferred asset, and the swap does not result in the transferor retaining any other significant risks and rewards of ownership.

Subordinated retained interests and credit guarantees

The transferor may provide credit enhancement by subordinating some or all of its interest retained in the transferred asset. Or, the transferor may provide a credit guarantee that could be either unlimited or limited. If the transferor retains substantially all the risks and rewards of ownership of the transferred asset, the asset continues to be recognized in its entirety. If the transferor retains some, but not substantially all, of the risks and rewards of ownership and has retained control, the transferor continues to recognize the assets to the extent of the amount of cash or other assets that the transferor could be required to pay.


Chapter 5
How about
some examples?

Private label residential mortgage-backed securities (RMBS)—the traditional two-stepper

"Private label" (i.e., nongovernmental-agency-guaranteed) residential mortgage securitizations would typically have the structure shown below. Notwithstanding all the boxes, this structure would be referred to as the prototype "two-step" securitization transaction. The sponsor, which may or may not be the originator, forms the pool of loans and transfers them to the depositor, which is a bankruptcy-remote SPE. The depositor, which traditionally has been consolidated with the sponsor for accounting purposes, transfers the pool to the issuer, which issues the bond classes back to the depositor, which, in turn, surrenders them to the underwriter to be sold to investors.

What role does the originator play besides origination? What is the impact if the originator is the servicer? What happens if the originator holds the bottom classes or if the originator holds the bottom classes and is the servicer?

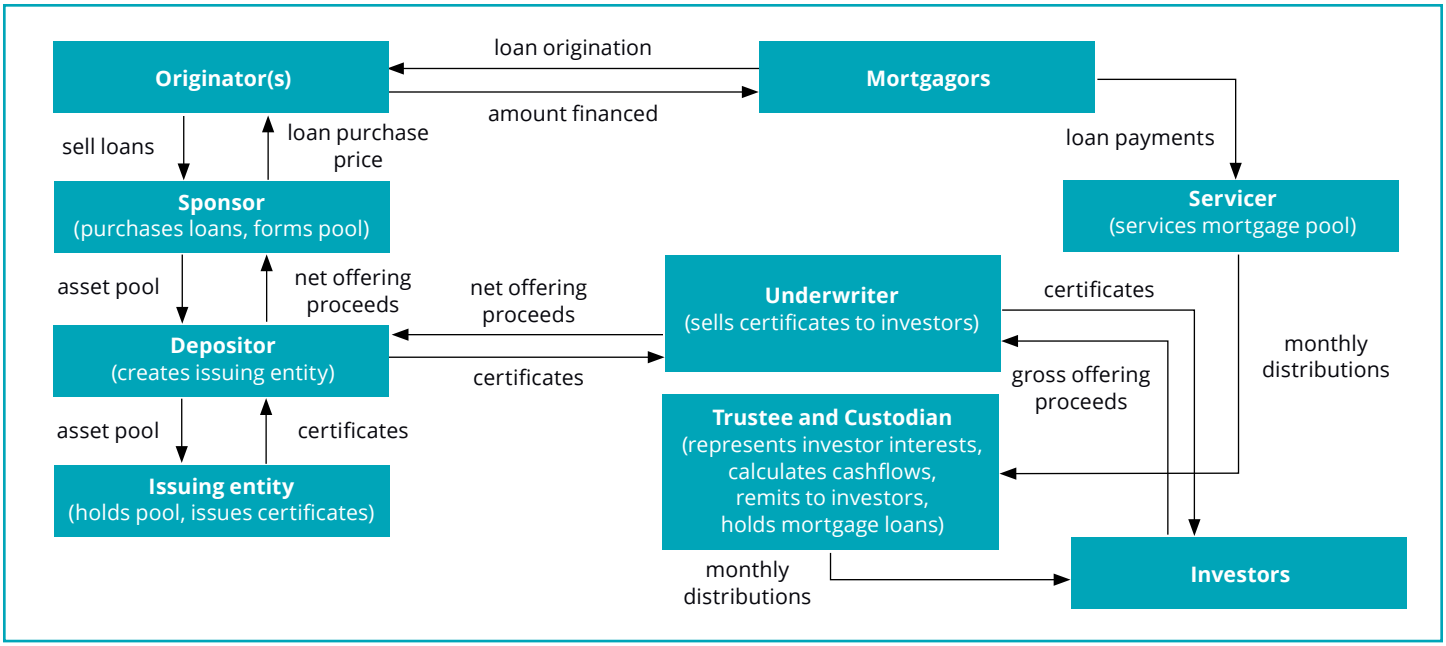
US GAAP analysis

In most securitizations, the sponsor is intimately involved in the design of the transaction; therefore, it is likely that one of the primary purposes of this transaction is to facilitate the liquidity needs of the transferor. Thus, it is important to identify: (1) which of the parties has a variable interest in the deal that would potentially expose them to the obligation to absorb losses or to receive benefits that could be significant to the issuer, (2) what are the activities that would most significantly impact the economic performance of the issuer, and (3) which entity is in control of those activities?

Often, the sponsor retains the servicing function, for which it receives a fee. A sponsor may also retain an interest in the equity tranche of the issuer (as well as possibly one or more of the subordinate classes).

The servicing fee could be considered a variable interest (after considering the guidance in ASC 810-10-55-37 on whether fees are considered a variable interest) if the sponsor holds the equity tranche or the servicing fees paid to the sponsor are not commensurate and at market.[1] On the other hand, the fees would not be a variable interest if the sponsor: (1) receives fees commensurate with the level of effort required to provide services, (2) the sponsor does not hold other interests that individually or, in the aggregate, would absorb or receive more than an insignificant amount of the entity's expected losses or residual returns, and (3) the terms and conditions are customarily present in arrangements for similar services negotiated at arm's length.

With respect to activities that would most significantly impact the economic performance of the issuer, in practice many believe that the default-management function has the most significant impact on the economic activities of the trust. In RMBS, the servicer has the ability to work with the obligor in granting loan workouts or forbearance. The servicer also would generally be responsible for selling the underlying property should the obligor default and the real estate become the property of the issuer trust.



1 Specifically, the fees are: (i) compensation for services provided and commensurate with the level of effort required to provide the services and (ii) part of a service arrangement that includes only terms, conditions, or amounts that are customarily present in arrangements for similar services negotiated at arm's length.

Assuming the sponsor retains the servicing function and holds a variable interest that could potentially absorb losses or receive benefits that may be significant to the issuer, the sponsors of private label RMBS would generally meet both tests.[2] Accordingly, they would be deemed the primary beneficiary of the issuer trust, and thus the consolidator of the trust. As a result, they will keep the mortgage loans and issued bond classes on their books, thus "grossing up" both sides of the balance sheet and precluding gain on sale or establishment of a servicing asset.

A closer look at fees paid to decision-makers or service providers

GAAP emphasizes whether decision-maker or service provider fees are commensurate and at market when evaluating whether such fees: (1) are variable interests and (2) should be included in the economics test in ASC 810-10-25-38A(b). It is common for servicers in securitizations and other loan transfers to receive more than "adequate compensation" for their servicing of the financial assets. However, this does not necessarily lead to a conclusion that the fees are not commensurate or at market.

Under ASC 860-50, if a servicer is entitled to compensation considered above adequate, a servicing asset must be recorded. The amount in excess of adequate compensation may still be considered commensurate and at market. The reporting entity should evaluate the arrangement, including whether: (1) it was negotiated at arm's length, (2) there are more than insignificant unrelated investors in the securitization, (3) the arrangement is consistent with other arrangements entered into with unrelated parties or other arrangements in the marketplace, and (4) there are other benefits or elements embedded in the fee arrangement unrelated to the services provided.

Although adequate compensation would be considered commensurate and at market because the fee is, by definition, consistent with "the amount demanded by the marketplace to perform the specific type of servicing," because in practice unrelated market participants determine the service provider fee (e.g., servicers for government-sponsored entity trusts generally receive 25 basis points), an amount in excess of adequate compensation may still be considered commensurate and at market. Conversely, if a servicer recognized a servicing liability at inception (i.e., the fees are below adequate compensation), those fees generally would not be commensurate or at market; therefore, they would be deemed a variable interest and included in the analysis of whether the servicer has satisfied the economics criterion.

Not all fees that are commensurate and at market can be excluded from the evaluation of whether the economics criterion has been met. If the fee arrangement is designed to expose a reporting entity to risk of loss in the potential VIE, such as a guarantee, the fees will be

included in the reporting entity's economics-criterion evaluation. In other words, a fee arrangement that exposes a reporting entity to risk of loss in a potential VIE should never be eligible for exclusion from the evaluation of whether: (1) the reporting entity has met the economics criterion or (2) the fee arrangement is a variable interest. This serves as a safeguard to ensure that if the fee arrangement is structured as a means to absorb risk of loss that the entity was designed to pass on to its variable interest holders, the arrangement will be included in the consolidation analysis. Therefore, even if such fees are otherwise "commensurate" and "at market," they would not be eligible for: (1) exclusion from the primary beneficiary evaluation or (2) the fee arrangement evaluation under ASC 810-10-55-37.

Therefore, when evaluating whether the fees are a variable interest, a decision-maker or service provider should carefully consider the design of the VIE to determine whether the fee arrangement actually compensates for absorbing a risk that the entity was designed to pass to its variable interest holders. For example, the fee arrangement may be substantially a fee-for-service contract and have certain protections that are customary and standard, but it does not expose the decision-maker or service provider to any of the primary risks for which the VIE was designed to pass. In this case, the fees received are not compensating for the exposure to risk of loss in the VIE, so they would be eligible for assessment as a variable interest under ASC 810-10-55-37.

IFRS analysis

As discussed in chapter 2, the consolidation models under GAAP and IFRS for securitization trusts are largely similar with a few notable exceptions. In IFRS 10, the consolidation considerations focus on: (1) power over the relevant activities, (2) exposure to variable returns, and (3) the ability to utilize that power to influence the amount of returns received.

2 In accordance with ASC 810-10-25-38H, fees paid to the servicer that are both commensurate and at market should not be considered for purposes of the economics test of ASC 810-10-25-38A(b).

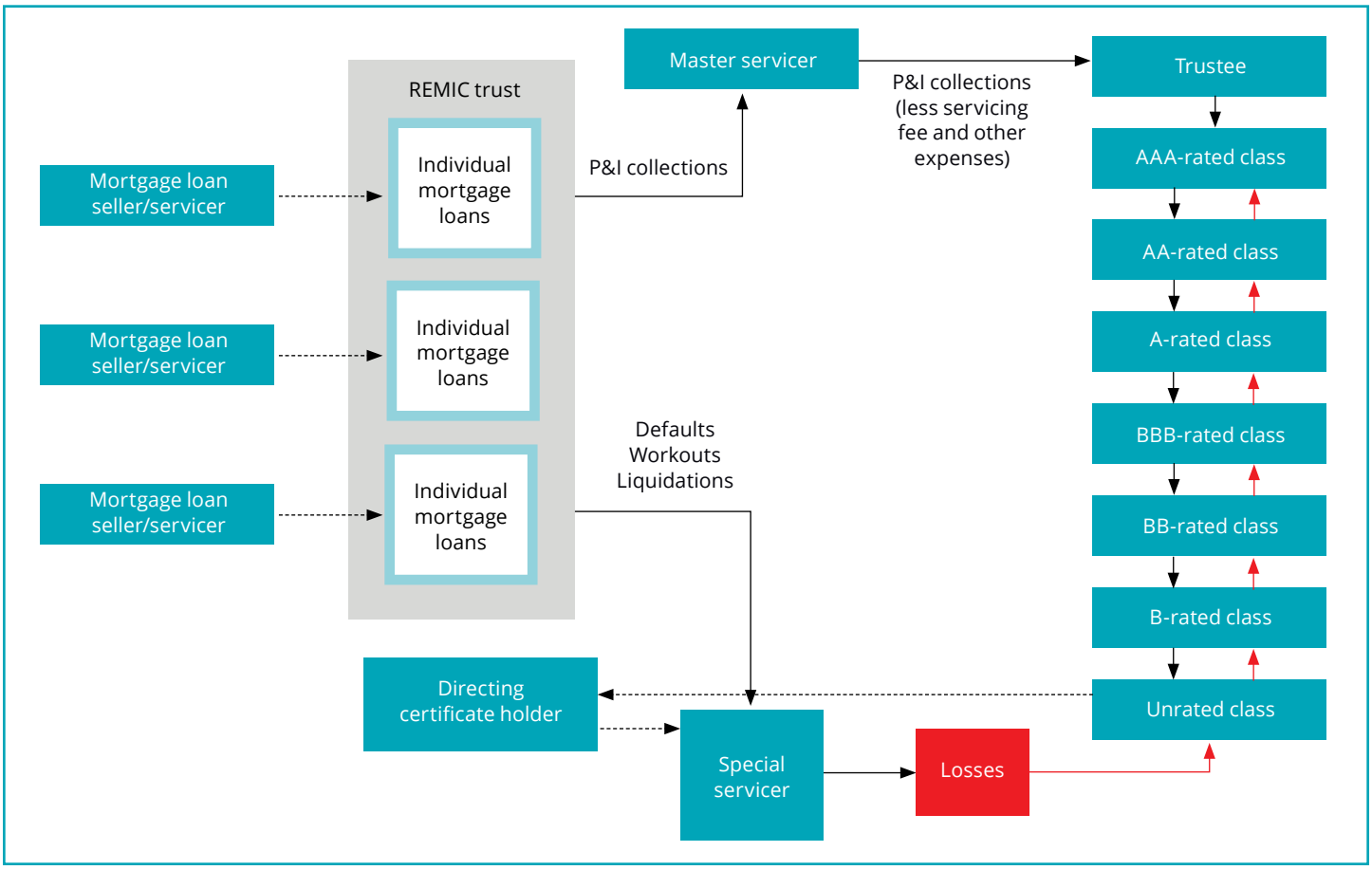
As noted above, in a private label RMBS, default management is typically the activity that most significantly impacts the economics of the trust. And the servicer, which is generally the sponsor, is typically the one responsible for default management. So the servicer meets the first criterion, but does it meet the second and third criteria?

IFRS 10 does not have specific criteria on when a fee does not represent a variable interest. Instead, a servicing fee would be considered exposure to variable returns in criteria of the consolidation model. However, criteria (ability to utilize power to influence returns) introduces the concept of a party that is acting in the capacity of an agent, rather than a principal to a transaction. So the servicer would have to consider the principal-agent guidance discussed in chapter 2 in determining whether it meets the third criterion. The holding of a significant portion of a subordinated interest (such as the equity tranche) may be indicative of the sponsor being a principal to the transaction rather than an agent, and therefore the sponsor would be required to consolidate the issuer trust.

Commercial mortgage securitization—where the transferor may not be the primary beneficiary

Like their RMBS cousins, CMBS generally have the same parties present in the transaction: the transferor of the loans, the servicer, underwriters and trustees, and the issuer of the notes, which is typically set up as a real estate mortgage investment conduit (REMIC) trust. However, given the complexities of working out troubled commercial mortgages and managing the underlying properties, CMBS transactions also typically include a special servicer should the obligor default.

Typically, CMBS involve mortgages with individually large principal balances. If the borrower or property encounters financial or operational difficulties, experienced workout specialists are needed to maximize ongoing cash flows from the loan or prevent further deterioration in value. When commercial mortgage loans are securitized, a special servicer with the relevant expertise and experience is hired to take over from the servicer and perform these functions with respect to each loan that becomes a troubled loan. The special servicer may have a subordinated beneficial interest in the securitized assets and/or a right to call defaulted loans. Sometimes, the special servicer is the same entity as the primary servicer.



When a loan is assigned to the special servicer, a range of responses is available. Absent any external constraints, the possible responses fall into the following general categories: the special servicer on behalf of the trust could: (1) modify the terms of the existing loan, (2) commence foreclosure proceedings, or (3) sell the loan for cash (either in the markets or in response to a call by the special servicer or a subordinated interest holder).

Thus, in evaluating who is in control of the activities that have the most significant impact on the trust's economic performance (under both ASC 810 and IFRS 10), it is generally difficult to avoid the conclusion that the special servicer fits that role.

What happens if the special servicer is not a mortgage loan seller but buys the subordinate bonds? What happens if the special servicer does not hold the subordinate bonds?

In CMBS, the special servicer is typically not the transferor of the mortgages. Additionally, the special servicer also may, but does not always, hold a subordinate class of bonds; the special servicing fee also may vary with the economic results of the trust, thus providing an incentive to the special servicer to maximize loan performance. In the event that a special servicer holds an interest in the equity tranche, fees paid to the special servicer would represent a variable interest under ASC 810-10-55-37(c). If the special servicer: (1) received fees that were only commensurate and at market, (2) did not hold an interest in equity tranche, and its other interests individually, and/or in the aggregate, and (3) does not absorb or receive more than an insignificant amount of the entity's expected losses or residual returns, then the fees would not be considered a variable interest.

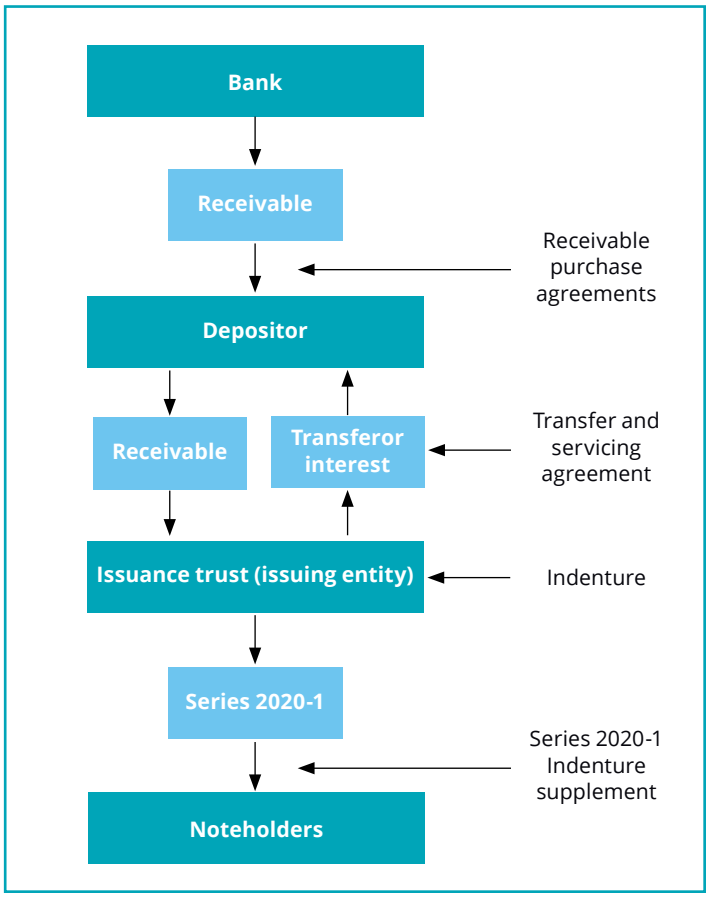
Holding a subordinate position in the transaction, in combination with the default management required in the role of special servicer (and absent any kick-out rights held by a single noteholder), may lead to the conclusion that the special servicer would control and, therefore, consolidate, even if the special servicer were not the original transferor. Under ASC 810, the special servicer would have power, and the significant subordinated interest could provide a potentially significant variable interest. Under GAAP, if the fees paid to the special servicer are both commensurate and at market, they would not be considered in the economics test of ASC 810-10-25-38A. Under IFRS 10, the special servicer would also have power, and the combination of the fee and the significant subordinated interest would lead to a conclusion that the special servicer was a principal, rather than an agent, in the transaction.

CMBS transactions also generally have the concept of a controlling classholder, and this controlling classholder often may have the discretion to remove the special servicer. Often, the special servicer may hold the class of bonds, which also makes it the controlling classholder, but typically the transaction documents provide for the circumstance where losses erode the controlling classholder's interest, and thus the next more senior class of noteholders would become the controlling classholder. In a scenario such as this, the continual assessment assumption underlying both GAAP and IFRS may result in the identification of a new party becoming the primary beneficiary, assuming the next, more senior class of notes was held by a single party.

Revolving securitizations

Credit cards

Credit card securitizations have some unique considerations. Unlike mortgage securitizations, in which a static pool of long-term loans is placed into a structure, credit cards are assets whose maturities are substantially shorter than a mortgage loan. Often, a pool of credit card receivables will turn over in a period as short as 18 to 24 months. Since the tenor of the receivables is much shorter than the life of the issued bonds, credit card securitizations are called "revolving securitizations"; the transferor may, for some extended period of time, use collections from the issuer trust as proceeds in the purchase of new receivables, thus replacing those that have been entirely collected.



During this revolving period, bondholders receive interest on their holdings, but not principal. At a time defined in the transaction, based on the estimated time it would take to collect a static pool of receivables, the revolving period will end and principal collections will accumulate in an account held in the issuer trust. This is called the accumulation period. Finally, when it is time for the deal to unwind, collections that have been accumulated are used to pay the bondholders during a period that is called the amortization period. Obviously, triggers are built into these structures, and if some adverse event happens, the revolving period stops early and the deal starts to unwind. This is called an early amortization event.

Credit card securitizations are unique in that the transferor, which is the bank that issued the credit cards and has the receivables, will often transfer them directly into a master trust, which is a bankruptcy-remote SPE designed to issue different series of bonds at different intervals. Such a structure raises questions as to whether the issuance of series of bonds should be viewed as "silos" (a similar concept under both GAAP and IFRS), or whether it is the trust as a whole that needs to be evaluated for consolidation. Therefore, issuers of credit card securitizations should look to the degree of cross-collateralization, if any, that exists among the series in order to determine if the master trust essentially represents a single entity, or an entity that comprises a series of silos or separate entities requiring individual consolidation consideration.

Currently, because most credit card securitizers retain servicing as well as the account relationship with the customers, and have variable interests in the master trust through its seller's interest, interests in cash collateral accounts, IO strip, and servicing fee, the credit card bank would be identified as the party that controls and, therefore, consolidates under both GAAP and IFRS.

Asset-backed CP conduits

Most commonly, when people think about securitization, there is a tendency to think that the transferred assets are interest-bearing and that the sponsor of the securitization will establish a trust or use some other vehicle to issue securities directly into the markets. Well, not all financial assets are interest-bearing, and not all securitizations are term transactions sold directly into the capital markets.

Sellers of trade receivables, issuers of very senior tranches of credit card and auto loan securitizations, and transferors of asset classes that are considered to be esoteric asset classes (such as lottery receivables and life settlements) are all users of CP conduits. While some would contend that CP conduits were established primarily to facilitate securitizing assets with a short tenor, such as trade receivables, they now have expanded to include most asset types.

Asset-backed CP conduits

By matching the liquidity and duration of the commercial paper to the underlying receivables, CP conduits greatly enhanced the access of Main Street companies and nontraditional securitizers to the capital markets.

These CP conduit deals also allow securitizers to maintain a level of confidentiality regarding their customer base. In this fashion, CP conduits allow companies to:

- Securitize their trade receivables in smaller transaction sizes
- Pay lower transaction costs
- Get better execution, even if their name is not familiar to the marketplace
- Learn about the nuances of securitization and the consequent reporting in the process

CP conduits, typically sponsored by commercial banks, have historically taken various forms, but today multiseller conduits are the norm. The sponsoring commercial bank plays some traditional roles with respect to a multiseller conduit. The bank generally markets the transactions with the sellers of the receivables and is actively involved in the deal's structuring. Additionally, the bank usually acts as the administrator of the conduit, for which it receives a fee. Finally, the bank generally also extends credit enhancement and liquidity facilities to the conduit, although some of that exposure may be syndicated out to other banks.

What is the originator's accounting analysis for revolvers?
A typical originator of trade or other receivables in a revolving securitization will first transfer the financial assets to a bankruptcy-remote SPE (the "Seller" in the above diagram).

Those SPEs typically issue interests in the receivable pools to a CP conduit, which then issues the commercial paper. The proceeds of the issuance are forwarded to the originator's SPE from the conduit, and that is the cash that the SPE uses to purchase the receivables from the transferor. Most CP conduits protect themselves from credit defaults in the underlying receivables by requiring a fair degree of overcollateralization. This could be done in a variety of ways, such as the conduit purchasing a senior interest in the pool of receivables or with the purchase price paid to the seller being settled in a combination of cash and a deferred purchase price note (contingent upon the performance of the underlying receivables) issued by the conduit.

Consolidation of the Seller
Because of the overcollateralization required by the CP conduit, the Seller needs additional financing for its receivables purchased from the originator either in the form of a note or a capital contribution from the originator. As a result, the Seller established and discussed above would be consolidated by the Seller under both GAAP and IFRS because the originator has a variable interest in the entity through its note or capital contribution and certainly exhibits power over the Seller's activities through retention of servicing. Because the Seller is consolidated, the consideration focuses on the accounting for the transfer of interests in the receivables to the conduit.

Consolidation of the conduit
The commercial paper issued by the conduit is typically cross-collateralized by all receivable interests acquired by the conduit, so no silos exist under either GAAP or IFRS. As a result, the CP conduit would be analyzed in its entirety.

As noted above, the sponsoring commercial bank serves many key roles with respect to the CP conduit, such as determining which originators participate in the program and overall structuring of the conduit. Thus, from the bank's perspective, it is an active participant in directing the economic activities of the conduit: it finds the deals, structures the transactions, and administers the conduit. The bank also has variable interests in the conduit in the form of the extended credit and liquidity lines as well as the fees that it receives from administration. The administration fees would not be considered in the economics test of ASC 810-10-25-38A if they are both commensurate and at market. Through its variable interests in credit and liquidity lines, the bank typically has the obligation to absorb losses and to receive benefits from the vehicle. Consequently, under both GAAP and IFRS, most commercial banks consolidate the conduits that they sponsor.

So, if the originators of the receivables also perform servicing of the receivables, why would one of them not consolidate the CP conduit? Well, the originators would still need to perform their own assessment as to the activities they perform and what variable interests they may hold. The first step in this analysis (for both GAAP and IFRS) is to determine whether the CP conduit should be considered for consolidation in its entirety, or whether any specified assets or silos exist and should be considered separately.

GAAP provides in ASC 810-10-25-55 that "a variable interest in specified assets of a VIE ... shall be deemed to be a variable interest in the VIE only if the fair value of the specified assets is more than half of the total fair value of the VIE's assets or if the holder has another variable interest in the VIE as a whole." ASC 810-10-25-57 goes on to say that "a reporting entity with a variable interest in specified assets of a VIE shall treat a portion of the VIE as a separate VIE if the specified assets (and related credit enhancements, if any) are essentially the only source of payment for specified liabilities or specified other interests."

ASC 810-10-25-58 further discusses silos:

> *"a specified asset (or group of assets) of a VIE and a related liability secured only by the specified asset or group shall not be treated as a separate VIE if other parties have rights or obligations related to the specified asset or to residual cash flows from the specified asset. A separate VIE is deemed to exist for accounting purposes only if essentially all of the assets, liabilities, and equity of the deemed VIE are separate from the overall VIE and specifically identifiable. In other words, essentially none of the returns of the assets of the deemed VIE can be used by the remaining VIE, and essentially none of the liabilities of the deemed VIE are payable from the assets of the remaining VIE."*

As previously noted, CP conduits typically involve cross-collateralization where the issued commercial paper is collateralized by all of the assets rather than specific assets of the conduit. If each of the originators' assets represents less than 50 percent of the total assets of the CP conduit, then no silos exist and the originators would not have a variable interest in the CP conduit as a whole. Without a variable interest (assuming no related parties hold a variable interest), the originators would not consolidate the CP conduit. Therefore under GAAP, the question then shifts to whether the transfer of receivable interests to the conduit meet the derecognition requirements. IFRS also has a concept of "silos" and treating a portion of an entity as a deemed separate entity. IFRS 10:B77 states that a silo exists if "specified assets of the investee (and related credit enhancements, if any) are the only source of payment for specified liabilities of, or specified other interests in, the investee. Parties other than those with the specified liability do not have rights or obligation related to the specified assets or to residual cash flows from those assets..."

Similar to the analysis under GAAP, because of the cross-collateralization that typically exists within a CP conduit, there would be no silos that should be separately considered. IFRS 10 does not have the majority concept that exists under GAAP in determining whether a variable interest in the whole entity exists. However, as noted in chapter 2, IFRS 10 includes an example of a multiseller CP conduit and notes that the most relevant activities of the CP conduit are performed by the sponsoring bank, rather than by any of the individual originators.

Transfer of receivables to the conduit

GAAP

The considerations around participating interests now come into play. As discussed in chapter 3, to be considered a participating interest, the cash flows must be divided proportionately with no difference in priority or subordination among the cash flow holders.

For transfers of a senior interest in the receivables to the CP conduit, because these transactions are structured to leave the sellers

in a first-loss position, such subordination runs counter to the requirement that all holders of interests in the pool must have the same priority without subordination. As a result, derecognition of the transferred senior interest would be precluded.

However, a transfer on an entire interest in the receivables that involves a combination of cash and a deferred purchase price note (contingent upon the performance of the underlying receivables) issued by the conduit may still meet the derecognition criteria. The basis of conclusion of the Statement of Financial Accounting Standards No. 166 Accounting for Transfers of Financial Assets an amendment of FASB Statement No. 140 (FAS 166) noted in paragraph A18 that "in a transfer of an entire financial asset or a group of entire financial assets, the assets obtained may include a beneficial interest in a transferred financial asset that is similar to a component, but only if a transferor transfers and surrenders control over the entire original financial asset or the group of entire financial assets." However, the transaction must still conform to the requirements in ASC 860-10-40-5. With respect to legal isolation, both the true sale and non-consolidation opinions traditional to term securitizations are needed. As is traditionally the case, the legal documents serve as the basis for determining if control over the receivables has been ceded.

One common area of trouble that will result in a transaction not achieving sale treatment is a seemingly benign feature that allows the Seller to prepay the conduit at any time. By definition, the Seller should have only three sources of cash: (1) proceeds from the conduit's issuance of commercial paper, (2) collections, and (3) cash coming from the transferor. In the prepayment scenario, it would make no sense for the conduit to issue more commercial paper in order for the Seller to use the proceeds to pay off existing commercial paper—this trade would leave the Seller and the conduit in the same position. Using cash from collections is a logical thing for the Seller to do; after all, having the receivables liquidate and using the collections to pay the investor is inherent in any securitization. It is when the originator has the ability to infuse the Seller with cash in order for it to make the prepayment that the analysis gets complicated. This may be viewed as effective control, because the transferor would have the ability to get the receivables back in exchange for its cash.

IFRS

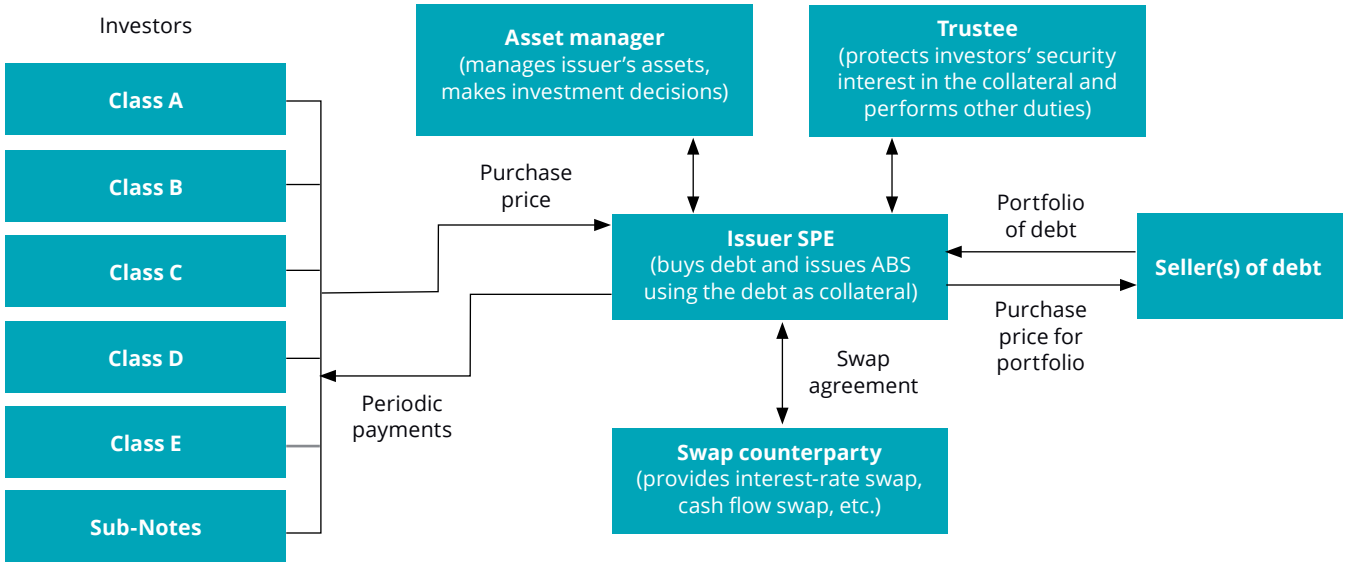
Proceeding through the IFRS 9 decision tree, the first thing to consider would be whether the transfer is a portion or an entire financial instrument. Like GAAP, the IFRS requirements for transfers of part of a financial asset focus on their being specifically identified cash flows, fully proportionate cash flows, or both. Given the similarities of the criteria for transfers of portions of financial assets, the analysis would be largely the same (i.e., the focus is on whether a senior interest is transferred or whether an interest in all the receivables is transferred with some other form of overcollateralization in place).

However, IFRS has another major stumbling block when it comes to transfers with revolvers. When moving down the IFRS 9 decision tree flowchart, after considering whether the rights to the cash flows have expired, one then moves to considering whether the rights to receive the cash flows of the asset have been transferred. One of the key considerations in this step is whether the entity has an obligation to remit any cash flows it collects on behalf of the eventual recipients without material delay. This requirement to remit the cash flows back to the investors poses an inherent problem for structures of a revolving nature, where the cash collections are reinvested back in to the pool of receivables rather than returned to investors. Such structures do not meet the pass-through tests in IFRS 9 because they involve a material delay before the original cash is passed on to the eventual recipients and the reinvestment would not qualify as cash or cash equivalents. This view is consistent with discussions of the International Financial Reporting Interpretations Committee (IFRIC).[3]

CLOs—What's an asset manager to do?

CLOs are unique securitizations in that there is not a transferor of assets to an SPE. Instead, the SPE purchases the assets—senior syndicated loans—from the open market using proceeds first

Will the collateral manager consolidate the CLO?



3 A summary of the IFRIC discussion can be found here: https://www.iasplus.com/en/meeting-notes/ifrs-ic/not-added/2005/ias-39-revolving-structures.

from a warehouse line and then with proceeds from the sale of its securities (which are used to pay off the warehouse line and purchase any remaining assets needed). The CLO SPE issues notes and preferred shares or subordinated notes into the capital markets. The SPE typically employs a trustee to protect the noteholders' interests, and a collateral administrator (often the same party as the trustee) to provide back-office support and an independent board of directors. The SPE also employs a collateral manager (typically the bank or asset manager that sponsors the SPE), which performs different functions for a CLO than a servicer does for a typical securitization. Here, the collateral manager is charged with managing the composition of the issuer's collateral such that specific measures and concentrations of assets are in compliance with the transaction documents. Consequently, the collateral manager determines which assets need to be replaced in a transaction for credit or other reasons and determines which assets may be purchased to add to the issuer's portfolio. In addition, during the CLO's reinvestment period, the collateral manager invests principal proceeds received from the underlying loans in new loans.

GAAP

Assume that an asset manager creates a CLO and retains a portion (say, 35 percent) of the equity tranche of securities. The senior and mezzanine securities are distributed to several investors. The equity class provides credit support to the higher tranches and was sized to absorb a majority of the expected losses of the CLO. For its role as collateral manager, the asset manager receives remuneration, including a senior management fee paid senior to the notes; a subordinate management fee, which is paid senior to the CLO's preferred shares; and an incentive fee (typically, a percentage of residual cash flows after the equity holders have received a specified internal rate of return). The fees paid to the asset manager represent a variable interest, according to ASC 810-10-55-37, because the asset manager holds an equity tranche. The fees would not be a variable interest if the asset manager was receiving fees commensurate and at market, did not hold the equity tranche, and did not indirectly absorb economics through its related parties that absorbed a more than insignificant amount of the VIE's expected losses or expected residual returns.

The asset manager will generally be the entity that has the power to direct activities that most significantly impact the CLO's economic performance. Through its ability to determine which assets are acquired and which assets are sold, the asset manager is in a unique position to direct the activities that most significantly impact the economic activities of the CLO.

While only one party will have power over the relevant activities, several of the CLO investors may have investments that create an obligation to absorb potentially significant expected losses or to receive potentially significant expected benefits from the performance of the issuer trust.

Assuming the fee paid to the asset manager is both commensurate and at market, such fee would not be considered in the economics test of ASC 810-10-25-38A. The asset manager would evaluate its exposure through the equity tranche of securities when considering whether it has rights to receive benefits or obligations to absorb losses that could potentially be significant to the issuer trust.

As a result, the asset manager would have power over the relevant activities of the CLO and a potentially significant variable interest through its equity tranche investment. Therefore, it would be considered the primary beneficiary and needs to consolidate the

CLO under GAAP. Accounting for a consolidated CLO has its own complications. See chapter 9 for a discussion on consolidating a collateralized financing entity, where the assets and liabilities are measured at fair value.

The GAAP evaluation of whether fees paid to a decision-maker or service provider constitute a variable interest has been simplified over time. Whereas the old model examined aspects such as fees' level of seniority, the significance of anticipated fees relative to anticipated economic performance, and fees' ability to absorb variability associated with economic performance, the new model deemphasizes those characteristics and focuses instead on whether the fees compensate for services and are commensurate with the effort required to provide them. As such, issues like fee subordination and significance to the VIE's economics are now less likely to be areas of concern when determining if fees should be considered variable interests.

Situations might evolve over a deal's life in which the asset manager no longer receives any future cash flows through its equity investment and the fee streams become the sole remaining substantive income to be earned by the asset manager. Because of ASC 810's ongoing consolidation reconsideration requirements, such change would trigger greater scrutiny of whether the asset manager's fee is a variable interest under ASC 810-10-55-37 since the remaining fee streams would be the only source of economic exposure through which to assess if the asset manager is still the primary beneficiary of the CLO.

IFRS

As discussed in chapter 2, the consolidation model under GAAP for structured entities and IFRS is very similar. Both models consider having power over the most significant activities and having a variable interest. Where they differ is in the consideration of how the entity's power impacts those variable interests, with IFRS 10 looking at whether an entity is able to use its power to influence the amount of returns from its interest (i.e., whether the entity is acting in a role of principal or agent). Using the same scenario as above, under IFRS the asset manager would also be considered to have power over the relevant activities through its decision-making over acquiring, originating, and disposing of assets within the collateral pool. The manager would also have a variable interest through its fee arrangement as well as its 35 percent equity tranche investment. So the question focuses on whether the asset manager is able to use its power to influence the amount of its returns and, in doing so, whether it is acting as a principal (i.e., on its own behalf) or strictly as an agent for the other investors in the CLO. In performing the principal-agent assessment, the fees are considered commensurate with the services provided, as they are standard CLO management fee terms. The remuneration aligns the interests of the fund manager with those of the other investors.

Although operating within the parameters set out in the CLO's legal documents, the asset manager has the current ability to make investment decisions that significantly affect investor returns. Greater emphasis is placed on the exposure to variability of returns of the fund from the asset manager's 35 percent equity interest, which is subordinate to the senior and mezzanine debt securities. Holding 35 percent of the equity tranche and the fee arrangement creates subordinated exposure to losses and rights to returns, which are of such significance that it indicates that the asset manager is a principal to the CLO and thereby controls and should consolidate.

Chapter 6

How do you determine gain or loss on a sale?

Simplified gain or loss calculation

Say what you want about the evolution of accounting guidance for transfers of financial assets over the years, but at least the calculation of gain or loss on sale of assets has been greatly simplified. There are three principal reasons for this:

- Achieving sale accounting and deconsolidation is now a higher hurdle than had been previously the case.
- Under ASC 860, one can sell only an entire financial asset, an entire pool of assets, or a participating interest; no part sale/part financing.
- Retained or acquired interests are initially recorded at fair value rather than allocated cost basis.

Many of the steps in the process of calculating a gain or loss on sale will sound familiar. It remains useful to remember that for a securitization that has achieved sale accounting, the transferor has sold an entire pool of assets. There are no "retained" pieces—any beneficial interests received are all proceeds.

To calculate the gain or loss, sellers must first accumulate the elements of carrying value of the pool of assets securitized, including any premiums and discounts, capitalized fees or costs, lower-of-cost-or-fair-value valuation reserves, and allowances for losses. Second, sellers must identify any assets received and any liabilities incurred as part of the securitization. Third, sellers must estimate carefully the fair values of every element received or incurred based on current market conditions. This estimate must use realistic assumptions and appropriate valuation models for only existing assets that have been transferred (without anticipating future transfers). Finally, for those transfers that qualify as a sale, sellers must:

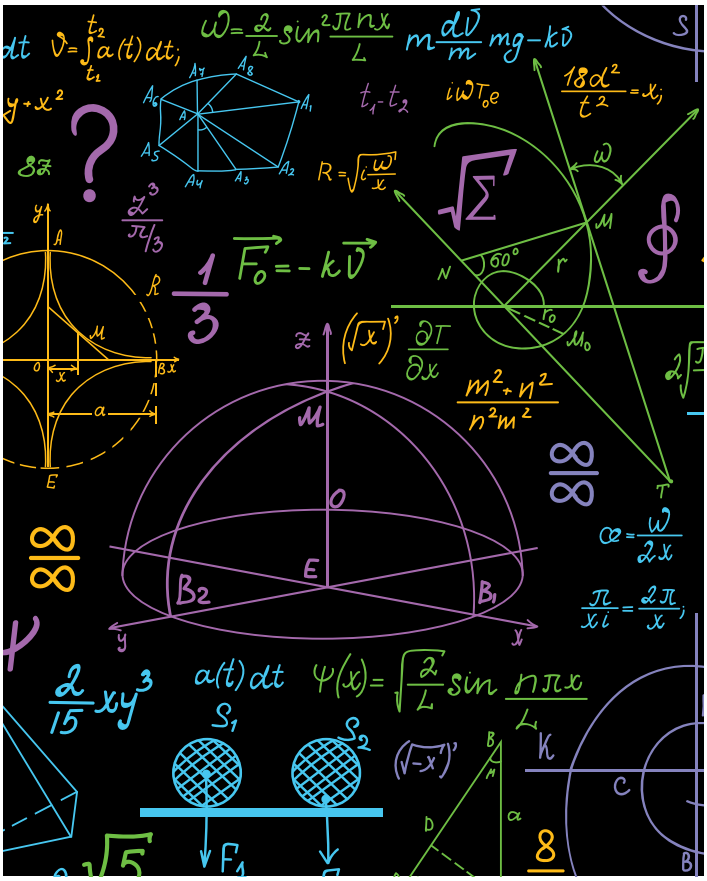
- Recognize gain or loss on the assets sold by comparing the net sale proceeds (after transaction costs and liabilities incurred) to the carrying value attributable to the assets sold.
- Record as proceeds, and on the balance sheet at fair value, any beneficial interest received in the transferred assets, which may include: (1) a separate servicing asset or liability and/or (2) debt or equity instruments in the SPE.
- Subtract from proceeds and record on the balance sheet the fair value of any new liabilities issued, including guarantees; recourse obligations or derivatives, such as put options written; forward commitments; and interest rate or foreign currency swaps.

Financial modeling of securitization transactions is an integral part of the accounting process, both at the date of the transaction and on an ongoing basis. Reasonable financial modeling requires quantitative processes that appropriately reflect: (1) the nature of the assets securitized, (2) the structural features and terms of the securitization transaction, and (3) the applicable accounting theory. It also requires accurate data about current amounts and balances in the securitization, as well as observable market data (e.g., yield curves and credit spreads) and supportable assumptions about future events (e.g., prepayment behavior, default probability, and loss severity). Securitization transactions are too complex to analyze intuitively, given the level of precision required for financial reporting.

How is gain or loss calculated in that rare revolving structure that does not have to be consolidated?

Gain or loss recognition for relatively short-term receivables, such as credit card balances, drawdowns on home equity lines of credit, trade receivables, or dealer floor plan loans sold to a relatively long-term revolving securitization trust, is limited to receivables that exist and have been sold (i.e., not those that will be sold in the future pursuant to the revolving nature of the deal). Recognition of servicing assets is also limited to the servicing for the receivables that exist and have been sold.

A revolving securitization involves a large initial transfer of balances generally accounted for as a sale. Ongoing, smaller subsequent months' transfers funded with collections of principal from the previously sold balances ("transferettes") are each treated as



separate sales of new assets with the attendant gain or loss calculation, provided that these transfers meet the unit of account definition discussed in chapter 3. The recordkeeping burden necessary to comply with these techniques can be quite onerous, particularly for master trusts.

The implicit forward contract to sell new receivables during a revolving period, which may become more or less valuable as interest rates and other market conditions change, is to be recognized at its fair value at the time of sale. Its value at inception will be zero if entered into at the market rate. ASC 860 does not require securitizers to mark the forward to fair value in accounting periods following the securitization. (Note: The application of derivative accounting under ASC 815, *Derivatives and Hedging*, may require securitizers to mark the forward to fair value in accounting periods following the securitization, but it is outside the scope of this publication, as are any considerations of electing fair value accounting under ASC 825, *Financial Instruments*.)

Certain revolving structures use a "bullet provision" as a method of distributing cash to their investors. Under a bullet provision, during a specified period preceding liquidating distributions to investors, cash proceeds from the underlying assets are reinvested in short-term investments, as opposed to continuing to purchase revolving period receivables. These investments mature to make a single lump sum or "bullet" payment to certain classes of investors on a predetermined date. In a controlled amortization structure, the investments mature to make a series of scheduled payments to certain classes of investments on predetermined dates. As stated earlier in this chapter, sellers must record as proceeds any beneficial interests received, and the bullet or controlled amortization provision should be taken into account in determining the fair values of the beneficial interests received in the transferred assets sold, assuming that the beneficial interests are issued by an unconsolidated trust.

That said, for transferred credit card receivables, it is inappropriate to report as "loans receivable" the receivables for income related to accrued fees and finance charges income, commonly referred to as accrued interest receivable (AIR). The AIR asset should be accounted for as a beneficial interest received in the pool.

Is there a sample gain on sale worksheet that I can use as a template?

A term securitization example

Assumptions (All amounts are hypothetical, and the relationships between amounts do not purport to be representative of actual transactions.)

- Aggregate principal amount of pool: $100,000,000
- Net carrying amount (principal amount + accrued interest [if it has to be remitted to the trust] + purchase premium + deferred origination costs – deferred origination fees – purchase discount – loss reserves): $99,000,000
- Classes IO and R are acquired by transferor

Deal structure			
Scenario	**Principal amount**	**Price***	**Fair value**
Class A	$96,000,000	100	$96,000,000
Class B	4,000,000	95	3,800,000
Class IO			1,500,000
Class R			1,000,000
Total	**$100,000,000**		**$102,300,000**

*Including accrued interest

Servicing asset at fair value	$700,000
Up-front transaction costs (underwriting, legal, accounting, rating agency, printing, etc.)	$1,000,000

Calculation of gain	
Total proceeds	
Total cash from bond classes sold, Class A & B (net of transaction costs)	$98,800,000
Class IO (fair value)	1,500,000
Class R (fair value)	1,000,000
Servicing asset (fair value)	700,000
Net proceeds (with accrued interest, after transaction costs)	$102,000,000
Net carrying amount	$99,000,000
Pretax gain on sale	$3,000,000

Journal entries	Debit	Credit
Cash	$98,800,000	
Servicing asset	$700,000	
Class IO	$1,500,000	
Class R	$1,000,000	
Loans — net carrying amount		$99,000,000
Pretax gain on sale		$3,000,000

A credit card example

Assuming that the sponsor is not consolidating, each month during the revolving period, the investor's share of principal collections would be used to purchase transferettes, and an analysis similar to the following would be made with a new gain or loss recorded. This example illustrates the gain calculations the transferor would prepare at the transaction's inception, assuming that the transfer is to an unconsolidated entity and the transaction achieves sale accounting.

Assumptions (All amounts are hypothetical, and the relationships between amounts do not purport to be representative of actual transactions.)

- Aggregate principal amount of pool: $650,000,000
- Carrying amount, net of specifically allocated loss reserve: $637,000,000
- Fair value of cash collateral account: $5,000,000
- Value of fixed-price forward contract for future sales: $—
- Up-front transaction costs (assumed as given): $4,000,000

Calculation of proceeds			
Scenario	**Principal amount**	**Price**	**Proceeds**
Class A	$500,000,000	100	$500,000,000
Class B	25,000,000	100	25,000,000
Initial funding of cash collateral account			(7,000,000)
Beneficial interest in overcollateralization (fair value)			125,000,000
IO strip			10,000,000
Beneficial interest in cash collateral account			5,000,000
Amortization of transaction costs[1]			(1,000,000)
Total			**$657,000,000**

Calculation of gain	
Total proceeds	
Net proceeds after transaction costs (assumes 25% allocation to the initial sale)	$657,000,000
Net carrying amount	$637,000,000
Pretax gain	$20,000,000

Journal entries	Debit	Credit
Cash	$514,000,000	
IO strip	$10,000,000	
Cash collateral account	$5,000,000	
Seller's interest	$125,000,000	
Deferred transaction costs	$3,000,000	
Pretax gain on sale		$20,000,000
Loans — net carrying amount		$637,000,000

[1] To the extent the transaction costs incurred up front relate to future sales to occur during the revolving period of a securitization transaction—for example, the credit card securitizations discussed herein—the cost should be deferred and expensed upon the earlier of: (1) the completion of future related transactions or (2) the date the entity determines no future benefits can be derived from the deferred costs.

What about sales of participating interests?

Assume Commercial Loan Bank and Trust (CLBT) has sold an eight-tenths participating interest in a commercial loan with a carrying amount of $20,000,000 to Partaker Bank for $15,200,000. Additionally, CLBT has sold a 10 percent participating interest in the same loan to Group Bank for $1,900,000. Given the total cash proceeds are $17,100,000 and the participating interests were sold at fair value, it implies that the fair value of the loan is $19,000,000. Thus, CLBT's remaining 10 percent interest would stay on the books at a basis of $2,000,000 (multiplying the carrying amount by the percentage retained). This participation transaction would not give CLBT an opening to elect to carry that interest at fair value.

This example may be slightly oversimplified. In the first instance, even though they are buying their interests at the same time, Partaker Bank and Group Bank might pay somewhat different prices. Also, the example ignores servicing, which could result in a liability (if the servicing fee would not fairly compensate a substitute service) or a small asset (however, the fee cannot be significantly above fair compensation and still meet the participating interest definition).

Basis allocation of carrying value

				Allocated carrying amount	
Component	**Fair value**	**% of Total fair value**	**($20 million × %) Allocated carrying amount**	**Sold**	**Retained**
Sold to Partaker Bank	$15,200,000	80%	$16,000,000	$16,000,000	
Sold to Group Bank	1,900,000	10	2,000,000	2,000,000	
Interest held by CLBT	1,900,000	10	2,000,000		2,000,000
Total	**$19,000,000**	**100%**	**$20,000,000**	**$18,000,000**	**$2,000,000**
Net proceeds				$17,100,000	
Pretax loss				$900,000	

Journal entries	Debit	Credit
Cash	$17,100,000	
Loss on sale	$900,000	
Loans — net carrying amount		$18,000,000

How do I calculate fair value?

Because it would be unusual for a securitizer to find quoted market prices for many financial components arising in a securitization, the measurement process requires estimation techniques. ASC 860 discusses these situations as follows:

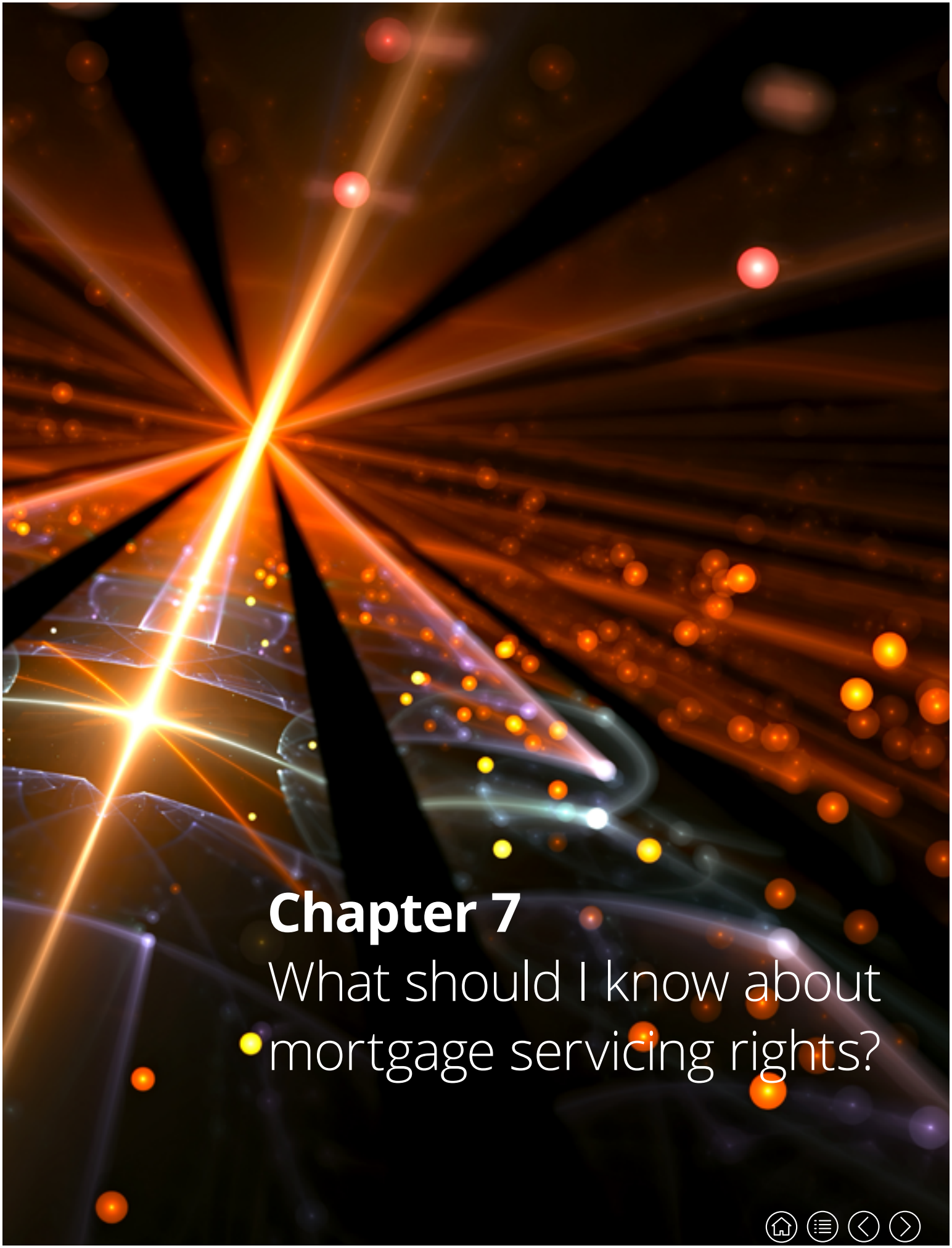
- The underlying assumptions about interest rates, default rates, prepayment rates, and volatility should reflect what market participants would use.
- Estimates of expected future cash flows should be based on reasonable and supportable assumptions and projections.
- All available evidence should be considered, and the weight given to the evidence should be commensurate with the extent to which the evidence can be verified objectively.

For further discussion on fair value see chapter 9.

How do I record credit risk? Is it part of the beneficial interest in the asset?

The transferor should focus on the source of cash flows in the event of a loss by the trust. If the trust can only look to cash flows from the underlying financial assets, the transferor is absorbing a portion of the credit risk through its beneficial interest and should not record a separate obligation. However, possible credit losses from the underlying assets do affect the measurement of fair value and accounting for the transferor's beneficial interest. In contrast, if the transferor could be obligated to reimburse the trust beyond losses charged to its beneficial interest (i.e., it could be required to "write a check" to reimburse the trust or others for credit-related losses on the underlying assets or the trust—investors have the right to put assets back to the transferor), then a separate liability should be recorded at fair value on the date of transfer.

Caution: Should this fact pattern present itself, care should be taken in the determination of whether the transferor should consolidate the transferee and if legal isolation has been achieved.



Chapter 7
What should I know about mortgage servicing rights?

What is a mortgage servicing right?

The coupon paid by the borrower on an originated mortgage loan includes both compensation for servicing the loan and a reasonable investment return to the lender. If a loan is held for investment by the originator, there is generally no contractual separation of the investment return from the servicing component. However, if the originator decides to sell the loan to another party, that sale can be structured with the servicing either retained or released. If the loan is sold and servicing is released, then the originator will receive a price to compensate them for the full market-based value of the whole loan, including servicing.

Conversely, if the loan is sold and servicing is retained, there is a contractual separation of the mortgage loan coupon into the servicing component and the interest rate paid to the purchaser or new investor of the loan. This results in the potential recognition of a mortgage servicing right (MSR) asset or liability by the originator retaining the servicing component.

Initial recording

An entity must recognize a servicing asset or liability upon execution of a contract to service financial assets. A servicing contract is either: (1) undertaken in conjunction with selling or securitizing the financial assets being serviced or (2) purchased or assumed separately. A servicing asset or liability would be recorded related to this contract to service only when there is a contractual separation of the servicing from the loan. A servicer that also owns the loan would not record a separate servicing asset or liability. Typically, the benefits of servicing are expected to be more than adequate to compensate the servicer for performing the servicing, and the contract results in a servicing asset. However, if the benefits of servicing are not expected to adequately compensate a servicer for performing the servicing, the contract results in a servicing liability. If a servicer is just adequately compensated, no servicing asset or liability should be recorded. Adequate compensation[1] is a market-based factor and does not necessarily consider the servicer's internal costs to service.

A servicing asset or servicing liability that requires separate recognition is required to be initially measured at fair value in accordance with ASC 820. Fair value is defined as the price that would be received to sell the asset or would be paid to transfer a liability in an orderly transaction between market participants. The price used must be based on the principal market for the asset or liability, where the principal market is presumed to be the market in which the reporting entity normally transacts. In the absence of a principal market, participants may use the most advantageous market, which is the market that is most advantageous for the transferor, after taking into account transaction costs.

MSRs may be acquired in bulk or flow transactions: either retained as part of the transfer of a loan or through separate acquisition after separation from the related mortgage loan. The fair value recorded for an MSR retained as part of a loan transfer will impact the gain on sale of the transferred loan as discussed in chapter 6. Separate acquisition of an MSR may also include the acquisition of other related assets, such as servicing advances and delinquent servicing fees. For the separate acquisition of an MSR, the consideration paid should generally be allocated to the fair value of the MSR and the relative fair value of other assets acquired in the transaction. While there are many inputs that the marketplace considers in the fair valuation of an MSR, generally, this value will comprise the net impact of: (1) the cash inflows related to the benefits of servicing, such as the base servicing fee and any float or other ancillary income expected, and (2) the cash outflows related to the obligations of servicing, including cost of funds.

Subsequent measurement

Servicing assets or servicing liabilities can be accounted for subsequent to acquisition, using one of two methods: amortization or fair value.

Different elections can be made for different classes of servicing assets and servicing liabilities. Classes of servicing assets and servicing liabilities are identified based on the availability of market inputs used in determining fair value, as well as an entity's method for managing the risks of its servicing assets or servicing liabilities. For example, a company may choose to categorize its single-family residential mortgage loan servicing in a separate class from its multi-family mortgage loan servicing. Once fair value is elected for a particular class, the fair value election is irrevocable. Servicing assets and liabilities held within an amortized cost class may be transitioned to a fair value class at the beginning of any fiscal year.

1 ASC 860-50-20 defines adequate compensation as: "The amount of benefits of servicing that would fairly compensate a substitute servicer should one be required, which includes the profit that would be demanded in the marketplace. It is the amount demanded by the marketplace to perform the specific type of servicing. Adequate compensation is determined by the marketplace; it does not vary according to the specific servicing costs of the servicer."

Subsequent measurement of the servicing assets and servicing liabilities at fair value should be applied prospectively with a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year to reflect the difference between the fair value and the carrying amount, net of any related valuation allowance, of the servicing assets and servicing liabilities that exist at the beginning of the fiscal year in which the entity makes the fair value election. Once a servicing asset or a servicing liability is reported in a class of servicing assets and servicing liabilities that an entity elects to subsequently measure at fair value, that servicing asset or servicing liability cannot not be placed in a class of servicing assets and servicing liabilities that is subsequently measured using the amortization method.

It is important to note, however, that a servicing asset may also become a servicing liability, or vice versa, as a result of changes in the relationship of contractual servicing fees to adequate compensation. Adequate compensation may be impacted by changes in the market-based costs to service loans due to evolution in loan performance as well as other factors.

Amortization method

The MSR is amortized in proportion to and over the period of estimated net servicing income (if servicing revenues exceed servicing costs) or net servicing loss (if servicing costs exceed servicing revenues). The resulting amortized cost basis of the MSR is assessed periodically for impairment or increased obligation based on fair value at each reporting date.

Stratification

The MSR portfolio is stratified within separate tranches based on one or more predominant risk characteristics of the underlying financial assets. Characteristics may include financial asset type, size, interest rate, date of origination, term, and geographic location. This stratification should be at a granular enough level so that the loans within the stratum generally behave in a similar manner as market risk factors fluctuate.

The stratification decision shall be applied consistently unless significant changes in economic facts and circumstances indicate clearly that the predominant risk characteristics and resulting strata should be changed.

Amortized cost should be calculated for each stratum individually. Additionally, each stratum should be assessed for impairment by comparing the amortized cost to the fair value at the measurement date. If the fair value of any stratum is less than the amortized cost of that stratum, then the differential should be recorded as an impairment. If the impairment is considered temporary, it may be recognized through a valuation allowance. Subsequent changes in the fair value of the stratum may be impacted through the valuation allowance; however, fair value in excess of the carrying amount of servicing assets for that stratum shall not be recognized. If an impairment is considered other than temporary, a direct write-down of the MSR asset may be warranted.

Fair value method

An entity can also elect to use the fair value method for a class of servicing assets or servicing liabilities. Under the fair value method, each class of servicing assets or liabilities is adjusted to fair value at the reporting date, and changes in the fair value are recorded in earnings in the period in which the changes occur along with the servicing fee income for the period servicing is performed.

The MSR market has historically never been liquid enough to provide participants with readily available quoted market prices. Trades, if any, are transacted between parties through brokers, rather than through an exchange. Therefore, companies commonly rely on valuation models to estimate the fair value of the asset or liability. Certain significant assumptions within the MSR valuation are unobservable and therefore, under ASC 820, an MSR is typically considered a Level 3 asset or liability.

There are robust disclosure requirements in ASC 820 and ASC 860, which include, but are not limited to, requiring information to enable users to assess the valuation techniques and inputs used to develop the fair value of the MSR (for both impairment evaluation under the amortization method and subsequent accounting at fair value) as well as to determine the effect of the measurements on earnings for the period.

Transfers of servicing

Sale accounting versus a financing transaction

When an MSR is transferred between parties, it may be accounted for as either an asset sale or a secured lending transaction, depending on certain key facts and circumstances.

It is important to note that under US GAAP, MSRs are not considered financial assets. Because of their nature, there is unique guidance to account for transfers of servicing in ASC 860-50-40.

Sale accounting criteria

Transferred servicing rights are accounted for as a sale if the following conditions are met by the seller:

- The transferor has received written approval from the investor if required.
- The transferee is a currently approved transferor-servicer and is not at risk of losing approved status.
- If the transferor finances a portion of the sales price, an adequate nonrefundable down payment has been received (necessary to demonstrate the transferee's commitment to pay the remaining

sales price) and whether the note receivable from the transferee provides full recourse[2] to the transferee. Nonrecourse notes or notes with limited recourse (such as to the servicing) do not satisfy this criterion.

- Temporary servicing performed by the transferor for a short period of time shall be compensated in accordance with a subservicing contract that provides adequate compensation.
- Title has passed.
- Substantially all risks and rewards of ownership have irrevocably passed to the buyer.
- Any protection provisions retained by the seller are minor and can be reasonably estimated.

Based on this guidance, among other things, significant consideration is given to whether the seller is entitled to the risks and rewards of ownership. Rewards of servicing include the right to earn servicing fees and other contractually entitled payments (e.g., ancillary income, float). Rewards can also be earned through the rights to sell the MSRs for a return in the market place. Risks of servicing include the incurrence of the associated costs to service and understanding that those are not fixed but may vary based on the needs of the particular borrower and mortgage loan. Risks also include the potential for nonpayment by the borrower and the servicer's recovery of lost fees from the investor or through the sale of the foreclosed property, depending on the contractual provisions. Recoveries in this manner can cause the servicer to incur carrying costs of capital prior to recovery.

A transfer of MSRs can qualify as a sale only if the transferee has an appropriate license to service the MSRs transferred. The accounting guidance does not specify the type of entity that can retain or acquire an MSR; however, for transactions where servicing is retained, investors will typically require a licensed servicer to be the named servicer. In bulk transactions, the derecognition requirements will be applicable, thus consideration of ownership is critical in determining who records the MSR.

When the requirements for sale accounting have been met, but the transferor establishes a subservicing arrangement with the transferee, the ability to recognize the gain on sale could be impacted and deferral may be required, despite the ability to derecognize the MSR. Special attention should be given to the role the seller may play subsequent to the sales transaction.

Considerations for a financing transaction

Certain transfers of MSRs will not meet the sale accounting criteria and should be accounted for as a financing or secured borrowing. This would result in a liability recorded by the transferor in the amount of the cash received. This liability should reflect the expected future cash payments that will be passed through to the purchaser of

2 ASC 860 defines recourse as: "The right of a transferee of receivables to receive payment from the transferor of those receivables for any of the following: (a) Failure of debtors to pay when due, (b) The effects of prepayments or (c) Adjustments resulting from defects in the eligibility of the transferred receivables."

the MSR and would not reduce to zero or be considered extinguished until the last payment is made.

While a transaction may initially be accounted for as a secured borrowing, subsequent facts may change and allow for the transaction to meet the requirements for sale accounting. These facts might include transfer of title and/or approval of the transferee as the servicer by the investor of a loan, among other possible factors.

Other considerations

For servicing liabilities subsequently measured using the amortization method, if subsequent events have increased the fair value of the liability above the carrying amount—for example, because of significant changes in the amount or timing of actual or expected future cash outflows relative to the cash outflows previously projected—the entity shall revise its earlier estimates and recognize the increased obligation as a loss in earnings.

Certain transactions could involve the sale of cash flows related to an MSR or even the sale of excess servicing. The guidance in ASC 860-50-25 provides a definition for excess servicing and guidance for distinguishing servicing from an IO strip. While the sale of cash flows related to the MSR and the base servicing fees would be considered a transfer of nonfinancial assets, an excess servicing strip or IO strip in certain circumstances, could meet the definition of a financial asset and would be considered under the guidance in ASC 860-10. Under the GAAP definition, excess servicing would be considered the "rights to future interest income from the serviced assets that exceed contractually specified servicing fees." The right to this income is held outside of the servicing contract and may include rights to residual income of a securitization or an actual IO certificate. This form of excess servicing would be considered a financial asset.

Additionally, some transactions may include more than just the transfer of assets, and the acquiring party may need to consider the guidance in ASC 805, *Business Combinations*, to determine whether the acquisition should be accounted for as a business combination.

MSRs under IFRS

GAAP separately identifies an MSR as a unique nonfinancial asset and provides specific guidance with regards to the accounting and valuation of MSRs. IFRS identifies MSRs within the intangible asset guidance in IAS 38, *Intangible Assets*. While the accounting for MSRs is largely similar under both bodies of accounting standards, there could be some differences, beyond the balance sheet classification, in the application of the accounting guidance. The nuances of specific transactions and structures will be determinative of any differences in conclusions.

IFRS addresses accounting for MSRs in conjunction with the accounting for other intangible assets and does not provide unique accounting for MSRs specifically. Under IFRS, acquired intangible assets should be initially recognized at "relative fair value." Depending on the structure of the transaction, relative fair value may differ from true market-based fair value.

IFRS requires an intangible asset with a finite useful life to be amortized after initial recognition on a systematic basis over its useful life in accordance with the economic benefits to be derived from the asset. This is very similar to the amortization method under GAAP. IFRS also requires that the MSR be analyzed for impairment; however, it does not require the MSR to be tranched into risk buckets for purposes of this impairment assessment. This approach could result in different carrying amounts of the MSR under GAAP vs. IFRS. In addition, IFRS does not allow for the option to measure the MSR at its full fair value subsequent to initial recognition, as does GAAP.

IFRS does not provide specific guidance on MSR transfers. However, guidance does exist in IAS 38 related to transfers of intangible assets. This guidance defers to general revenue recognition concepts under IFRS 15. The application of the IFRS guidance to a transfer of MSRs may result in a similar accounting conclusion; however, the potential does exist for differences. Most notably, the concept of a secured financing is not specifically mentioned in IFRS related to transfers of intangible assets. As such, when the derecognition guidance for an intangible asset is not met under IFRS, there could be differences between GAAP and IFRS.

Chapter 8
What about the investors?

How do I account for my investments in plain-vanilla mortgage-backed securities (MBS) and ABS?

All interests in securitized financial assets, whether purchased for cash or obtained as consideration in a transfer accounted for as a sale, should be initially recorded at fair value. In addition, the investor, if not an entity that is required to measure investments at fair value on a recurring basis (e.g., investment companies or broker-dealers), will need to make at least one and perhaps several accounting elections immediately upon recognizing its investment.

The first accounting election is whether the investor wants to continue to report the interest in the securitized financial assets at fair value on every subsequent balance sheet, thereby recognizing unrealized gains and losses due to fair value changes currently in earnings. This "fair value option" is available for most financial instruments, including securitized financial assets. The irrevocable election generally must be made on an item-by-item basis at initial recognition. The election, however, cannot be used as an alternative to consolidation. If the investor decides not to use the fair value option, then the decision of what to do requires more thought.

Most interests in securitized financial assets (including most preferred shares issued by a securitization trust and other equity beneficial interests) will meet the definition of a debt security. Those investments, therefore, are governed by the accounting guidance in ASC 320, *Investments—Debt and Equity Securities*. Transferors, however, may at times structure a transaction so that they obtain financial interests that do not meet the definition of a debt security. Typically, this is done by leaving the transferor's interests represented by contractual rights under the pooling and servicing agreement or other operative transfer document and not having them embodied in any book entry security or other instrument (i.e., leaving them "uncertificated"). Nonetheless, if such interests can be prepaid or otherwise contractually settled in such a way that the holder (e.g., transferor) would not recover substantially all of its recorded investment, GAAP requires that they be accounted for like a debt security and classified either as trading or available for sale (AFS). If a beneficial interest does not fall into any of the categories above, investors will need to evaluate the specific characteristics of the instrument to determine the appropriate accounting literature to apply. In all cases, if the interest in securitized financial assets is not measured at fair value on a recurring basis through earnings, it is necessary to search for possible embedded derivatives.

An investor that does not avail itself of the fair value option must elect to classify debt securities as either trading, AFS, or held to maturity (HTM). For the most part, this initial classification cannot be changed so long as the holder retains the security. Only transfers from the AFS category to the HTM category are readily permitted. Investor accounting for securities classified as AFS or HTM depends on whether the investor has adopted, ASU 2016-13, which established ASC 326, *Financial Instruments—Credit Losses*. Investor adoption of ASC 326 has been permitted since calendar-year 2019. Mandatory adoption depends on the characteristics of an investor. Calendar-year Public Business Entities (PBEs) that are SEC filers, except for Smaller Reporting Companies (SRCs), must have adopted ASC 326 by January 1, 2020.[1] All other calendar-year entities are required to adopt ASC 326 by January 1, 2023.

Trading securities

Trading securities are carried at fair value with unrealized gains and losses recognized currently in earnings. Securities that are acquired to be sold in the near term and are therefore expected to be held only for a short period of time, must be classified as trading securities. An investor may also voluntarily designate other debt securities as trading securities. Therefore, the trading category is essentially similar to the fair value option.[2]

1 PBE and SEC filers are defined by US GAAP, and SRCs are defined by the SEC.

2 825-10-15-4 considerably expands the availability of fair value accounting to financial liabilities and financial assets other than securities. 320-10-25-1 allows for an initial election to classify debt securities as "trading securities," even if the investor is not actively trading in the position.

AFS securities
AFS securities are also carried at fair value on the balance sheet. However, some changes in fair value are recognized on the balance sheet, net of tax effects, in a separate component of equity known as other comprehensive income (OCI) rather than in current earnings. All unrealized gains are recognized in OCI. The recognition of interest income and unrealized losses depends on the specific nature of the investment and the investor's specific facts and circumstances (e.g., if the investor intends to sell or will more likely than not be required to sell the impaired investment, and whether the investor has adopted ASC 326). Those accounting matters are discussed later in this chapter.

HTM securities
HTM securities are carried at their amortized historical cost basis, adjusted for credit losses. Like AFS securities, the recognition of interest income and measurement of credit losses depends on the nature of the investment and whether the investor has adopted ASC 326. Those accounting matters are discussed later in this chapter.

HTM classification can only be used in limited circumstances. Certain securities cannot be classified in HTM. For example, investments such as IO strips, which can be prepaid or otherwise contractually settled in such a way that the investor would not recover substantially all of its recorded investment, may not be classified as HTM. Those investments must be classified as either AFS or trading. No specific guidance precisely defines "substantially all," but premiums of 10 percent or more warrant consideration. The probability of prepayment is not relevant in deciding whether this provision should apply. So, the potential for the loss of a portion of the investment would not be evaluated differently for a wideband planned amortization class versus a support class.

In order to classify an investment as HTM, the holder must have the positive intent and ability to hold the security until its maturity. There are strict limits on the ability of an investor to sell HTM securities without impugning management's ability to claim the intent to hold other securities until they mature. The permissible reasons to sell or reclassify HTM securities that are most frequently applicable to holders of ABS or MBS are:

- Evidence of a significant deterioration in the issuer's creditworthiness, such as a credit downgrade
- A significant increase in the holder's regulatory capital requirement, causing it to downsize its portfolio
- A significant increase in the risk weights associated with the particular securities
- A sale near enough to contractual maturity so that interest rate risk is no longer a pricing factor (e.g., within three months of contractual maturity)
- Collecting a substantial portion of the principal balance outstanding at the date the security was acquired, either due to prepayments or scheduled payments over its term

In contrast, sales or reclassifications due to changes in interest rates, prepayment rates, liquidity needs, alternative investment opportunities, funding or foreign currency exchange rates are not permissible reasons to sell an HTM investment. The SEC staff has expressed the view that selling even one HTM security for an impermissible reason would call into question management's ability to make a credible assertion about the intent to hold other securities to maturity. In that case, the SEC staff has indicated that all other HTM securities should be reclassified to AFS and no new securities may be classified as HTM for a period of two years (commonly referred to as the "tainting period").

HTM securities, however, may be pledged as collateral in a financing transaction (including a securitization) that does not qualify for sale treatment without calling into question management's intent to hold the security to maturity.

Additionally, in connection with an amendment to the hedge accounting model in ASC 815, investors that have not yet adopted that amendment have an opportunity to transfer certain HTM investments that can be prepaid to AFS upon adoption of that amendment.[3]

Hedge accounting is not available for interest rate hedges of HTM securities. On the other hand, hedge accounting is permitted for interest rate hedges of the liabilities used to fund HTM securities.

Do I have to worry about derivative accounting with MBS and ABS?

The accounting definition of a derivative is quite broad and also applies to certain derivative characteristics embedded within so-called hybrid instruments. Certain beneficial interest in securitization structures must be accounted for as derivatives. Additionally, given the potential complexity of various interests in securitization transactions, it might seem obvious that many securitization interests would be considered hybrid instruments, resulting in an accounting treatment that requires the embedded derivative to be split from the non-derivative host and accounted for separately.

Fortunately, the FASB has provided exceptions for the most common approaches used in securitization transactions to allocate both prepayment and credit risk inherent in the underlying pool of financial assets. GAAP does not require an investor in a securitization tranche to consider whether the transfer of credit risk from one securitization tranche to another merely as a result of subordination

[3] In August 2007, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, which amends the hedge accounting recognition and presentation requirements in ASC 815. PBE adoption of the ASU was required on January 1, 2019; all other entities have until January 1, 2021, to adopt the ASU.

gives rise to an embedded derivative. That said, other embedded credit derivative features—for example, synthetic structures that include credit default swaps—could give rise to derivatives that potentially require separate recognition.

At the end of the day, whether a securitization interest will need to be split into a non-derivative host and a derivative instrument will generally come down to whether the derivative and the host instrument are considered clearly and closely related—for example, changes in a commodity index generally would not be considered closely related to a debt instrument. Given the fairly detailed nature of the guidance that governs the analysis for derivatives, we recommend you refer to ASC 815.

How are discounts and premiums amortized?

Frequently, the initial carrying value of an interest in a securitization will not be exactly par (e.g., due to purchase discounts or premiums, or other factors). Any difference between the initial carrying value and par affects interest income, including for those investors that account for investments at fair value (to the extent that interest income is separately presented).

The most straightforward method applies to circumstances when credit and prepayment risks are not substantial (e.g., the investment is highly rated and cannot be prepaid such that the investor would not recover substantially all of its initial investment). In those circumstances, the method used to accrete interest income depends on whether the debt security is a beneficial interest backed by a pool of prepayable financial assets. Generally, for purposes of amortization, an investor can only consider the contractual terms of the investment. However, if the investment is a beneficial interest backed by a group of prepayable financial assets and the timing and amount of prepayments can be reasonably estimated. Estimates of future principal prepayments may be considered in the calculation of the effective yield.

If an investor chooses not to estimate prepayments, or is precluded from estimating prepayments, the premium or discount is amortized over the maximum contractual life of the investment. If prepayments cause the principal balance to decay more quickly, then a pro rata portion of the unamortized amount would be recognized in earnings in order to catch up with actual prepayments. Alternatively, if an investor elects to estimate prepayments, any premium or discount is amortized or accreted based on an initial estimate of prepayments. That estimate is periodically revised as actual prepayments run faster or slower.

Adjustable interest rates add an additional level of complexity. In addition to dealing with prepayments, the investor needs to deal with changes in the coupon interest rate over time. For interest rates indexed to the market index or rate, the amortization schedule for the premium or discount can be established based on the projected cash flows using either the index or rate in effect at inception, or the amortization schedule can be recalculated periodically as that index or rate changes over the life of the security. If there is an artificially high or low contractual rate in effect during the early periods, that would be leveled out over the life so long as the accreted balance does not rise to exceed the amount that would be immediately recognizable if the borrower elected to prepay (considering any prepayment or similar penalties).

Again, the various level yield methods just mentioned do not cover securities and uncertificated interests that are of lower credit quality or could be contractually repaid in a way that the holder would recover less than substantially all of its initial investment, nor do they cover positions purchased after they have experienced significant credit deterioration. Read on for additional questions and answers covering those types of positions.

When do I need to write down underwater positions?

The recognition of credit losses and other impairments depends on the classification of the investment and whether the investor has adopted ASC 326. There is no need to consider impairment guidance for investments accounted for at fair value through earnings (i.e., those investments classified as trading or for which the investor has otherwise elected to account for at fair value). Said differently, recognition and measurement of credit losses and other impairments are only necessary for investments classified as AFS or HTM. Additionally, the recognition of interest income and credit losses for many investments in beneficial interests can be intertwined and, therefore, more complex.

AFS investments

Under both the legacy and new accounting guidance (ASC 326), at every balance sheet date, the investor needs to identify individual security positions whose fair values are underwater (i.e., below their

amortized cost basis), even if they are already carried at fair value as AFS securities. Once these impaired positions are identified, the next step is to determine whether all or a portion of the the impairment should be recognized in earnings.

For debt securities such as securitization interests, an impairment comes in two basic varieties. If the investor either intends to sell a security or is more likely than not to be required to sell the underwater security before it recovers (e.g., for regulatory reasons), then the investor must write down the security to its fair value. The entire write-down is charged to earnings. Thereafter, the investor accounts for the security as if it were purchased at fair value at the date of the write-down. This accounting does not change as a result of ASC 326.

If the investor does not intend to sell a security and it is not more likely than not that it will be required to sell the security, the recognition and measurement of any impairment depends on whether the investor has adopted ASC 326.

Before adoption of ASC 326

If the investor does not expect to recover the security's entire amortized cost through the present value[4] of future expected cash flows, the write-down is split between the portion representing credit losses and the remainder related to all other factors. The entire write-down is presented in the income statement along with an offsetting amount to move the portion relating to all non-credit factors to OCI. Thereafter, the amortized cost basis of the impaired positions is reduced by the credit impairment. Amounts included in OCI due to other-than-temporary impairment charges for HTM and AFS securities should be shown separately.

For investments in beneficial interests that are not of high credit quality, or that expose the investor to significant prepayment risk, credit loss recognition and interest income recognition are intertwined. In those circumstances, an investor should use the effective interest method to recognize the excess of all estimated cash flows (determined at acquisition) over its initial investment in the beneficial interest as interest income. The cash flow estimate used to accrete interest income is updated any time (on the basis of current information and events) there is a favorable or adverse change in estimated cash flows. Any adjustment to the interest method that results from such an update is applied prospectively. The amount of any decrease in the estimated cash flows generally represents the current period impairment recognized in earnings (as discussed above).

There are, however, some differences to consider if the investment was purchased after it had experienced certain deteriorations in credit quality.[5] Those investments are referred to as purchased credit impaired (PCI). After initial recognition, the estimated cash flows used to accrete interest income for a debt security are required to be updated only if: (1) the estimated cash flows have increased significantly, (2) the estimated cash flows have declined (in which case, an impairment would be recognized), or (3) if the actual cash flows received are significantly greater than previously projected.

After adoption of ASC 326

The investor will need to consider whether the decline in fair value is related to a credit loss. Any credit loss, measured as the amount, if any, that the amortized cost basis exceeds the present value of the investor's best estimate of the cash flows expected to be collected from the security, is recognized as an allowance for credit losses. The allowance, however, cannot exceed the amount by which the amortized cost basis of the investment exceeds fair value. The allowance should be remeasured each period on the basis of new expectations and facts and circumstances.

There are certain additional considerations for investments in beneficial interests that are of low credit quality or that expose the investor to significant prepayment risk, and those acquired after credit indicators suggest that a credit loss has already occurred, or there is a significant difference between contractual cash flows and expected cash flows at initial recognition (purchased credit deteriorated [PCD] investments).[6]

For beneficial interests that are not of high credit quality, or expose the investor to significant prepayment risk, an investor must initially estimate the timing and amount of all future cash inflows from the investment by employing assumptions used in the determination of fair value upon recognition. The excess of those expected future cash flows over the initial investment is the accretable yield. Investors recognize that excess as interest income over the life of the investment by using the effective interest method. Subsequent to initial recognition, an adjustment to expected cash flows is recognized as a yield adjustment affecting interest income or, if related to credit, may be recognized through earnings by means of an allowance for credit losses. In other words, a cumulative adverse change in expected cash flows would be recognized as an allowance, and a cumulative favorable change in expected cash flows would be recognized as a prospective yield adjustment.

4 This present value calculation would be based on the yield currently being used by the investor to recognize interest income on the security.

5 Debt investments, including all beneficial interests accounted for as debt securities, are within the scope of ASC 310-30, *Receivables — Loans and Debt Securities Acquired with Deteriorated Credit Quality*, if: (1) it is acquired at a discount that is attributable, at least in part, to deterioration in the credit quality since its origination and (2) it is probable that all the contractually required payments will not be collected.

6 ASU 2016-13 superseded and replaced the PCI guidance in ASC 310-10 with new PCD guidance.

For PCD investments, at initial recognition the investor would present an allowance for expected credit losses equal to the estimate of expected credit losses and add that allowance to the purchase price to determine the initial amortized cost basis of the PCD investment. Subsequently, cumulative adverse changes in expected cash flows would be recognized currently as an increase to the allowance for credit losses. However, the allowance is limited to the difference between the investment's fair value and its amortized cost. Favorable changes in expected cash flows would first be recognized as a decrease to the allowance for credit losses (recognized currently in earnings), and as a prospective yield adjustment only when the allowance is reduced to zero. A change in expected cash flows that is attributable solely to a change in a variable interest rate on a plain-vanilla debt investment does not result in a credit loss and would be accounted for as a prospective yield adjustment.

HTM investments

Prior to the adoption of ASC 326, accounting for impairments of HTM investments generally follows the model for AFS investments. After the adoption of ASC 326, credit loss accounting for HTM investments is similar to that for loans—the CECL model. That is, an allowance will be recognized on the basis of expected credit losses. The CECL model does not have a recognition threshold. Investors, therefore, are required to recognize expected credit losses upon initial recognition of an HTM investment without regard to fair value. Additionally, if investments share similar risks, then expected losses are evaluated on a collective basis. Like AFS investments, there are special considerations for certain investments (e.g., PCD investments).

When can I put my investments on non-accrual status?

GAAP does not explicitly address when investments should be put on non-accrual status. Regulated entities, however, should refer to regulatory guidance in determining when non-accrual status is appropriate. In all cases, the non-accrual designation should not be used to circumvent the requirements to recognize impairment.

How does international accounting compare?

For investors applying IFRS, IFRS 9 supersedes IAS 39 and governs the accounting for investments in financial assets, including investments in securitized financial assets. Subsequent to initial recognition, all assets within the scope of IFRS 9 are measured at either:[7]

- Amortized cost
- Fair value through other comprehensive income (FVTOCI)
- Fair value through profit or loss (FVTPL)

IFRS 9 classification is based on both:

- the entity's business model of managing financial assets; and
- the contractual cash flow characteristics of the financial assets

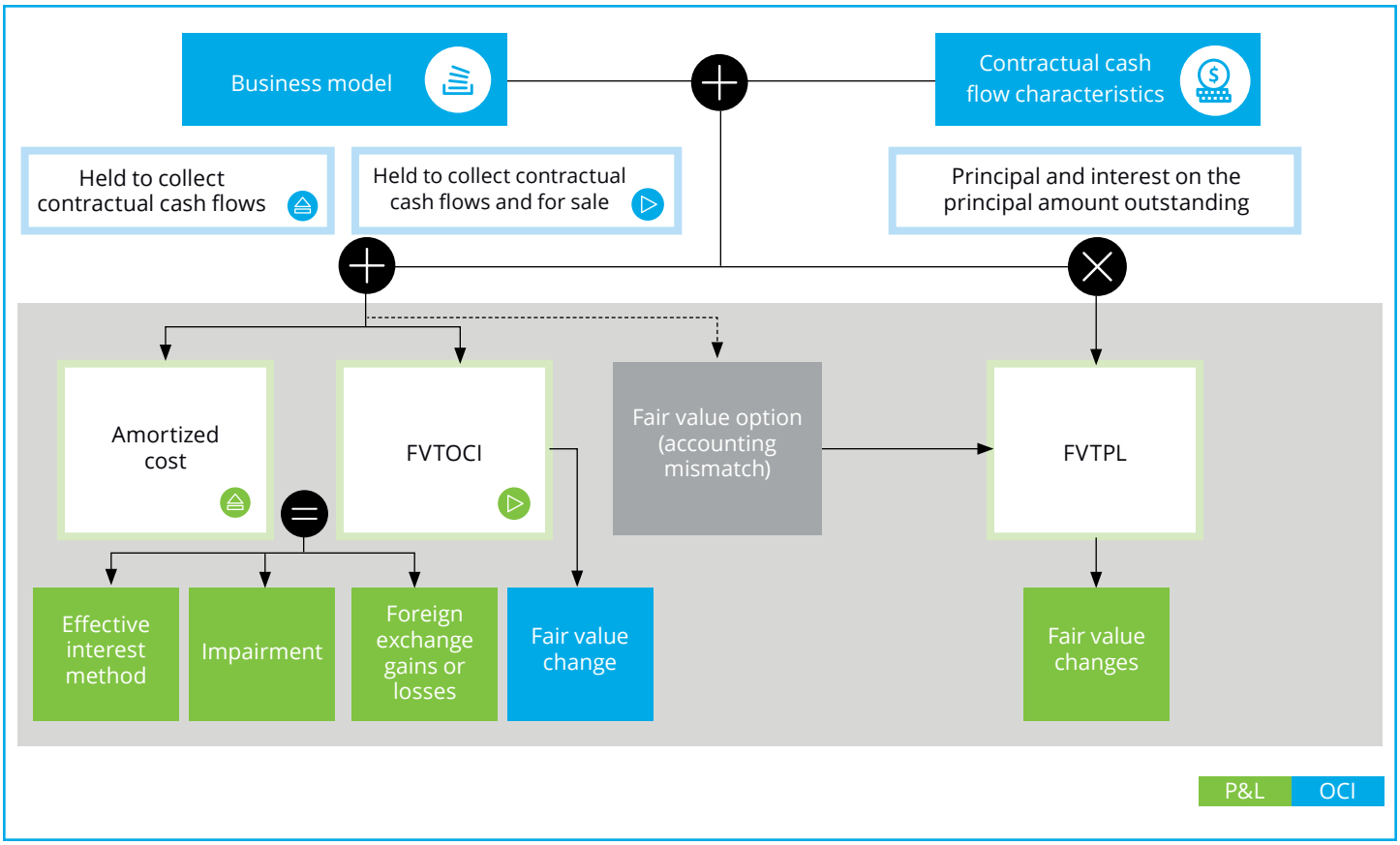
Like GAAP, IFRS 9 provides an option for investors to account for their interests at FVTPL (i.e., a fair value option). However, unlike GAAP, IFRS permits use of the FVTPL designation in situations where the election eliminates or significantly reduces an accounting mismatch that would have occurred if the financial asset had been measured at amortized cost or FVTOCI respectively.

A debt instrument that meets the business model and contractual cash flow characteristics (discussed in detail below) must be measured at amortized cost unless the asset is designated as FVTPL under the fair value option.

A debt instrument that meets the cash flow characteristics test and is not designated at FVTPL under the fair value option must be measured as FVTOCI if it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and sell financial assets.

For debt instruments that are measured at amortized cost or FVTOCI, interest income (calculated using the effective interest rate method), foreign currency gains or losses, and impairment gains or losses are recognized directly in profit or loss.

[7] Unlike US GAAP, IFRS 9 precludes the separation of any embedded derivatives investments; instead, the investment, inclusive of the embedded derivative, follows one of the identified measurement approaches.



Business model test
An assessment of business models for managing financial assets is fundamental to the classification of financial assets. For a financial asset to be measured at amortized cost, it must be held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. For a financial asset that is a debt instrument to be measured at FVTOCI, it must be held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Financial assets held in a business model that is not "hold to collect" or "hold to collect and sell" are required to be measured at FVTPL, unless the instrument is a non-held for trading investment in an equity instrument designated at FVTOCI at initial recognition.

The business model assessment is performed at a level that reflects how groups of financial assets are managed together to achieve a particular business objective.

Hold to collect contractual cash flows business model
Financial assets are held with the objective to collect the contractual cash flows over their life. The intention is to collect the contractual cash flows of the assets instead of managing the overall return on the portfolio by both holding and selling assets. However, the entity need not hold all of those instruments until maturity. Thus, an entity's business model can be to hold financial assets to collect contractual cash flows even when sales of financial assets occur or are expected to occur in the future.

Hold to collect contractual cash flows and for sale business model
Financial assets are held with the objective of maximizing the return on the portfolio to meet the liquidity needs of the entity by both collecting contractual cash flows and selling financial assets.

Other business model
This is the residual business model (i.e., the entity's objective of holding financial assets does not meet either of the business models discussed above).

Contractual cash flows characteristic test

For a financial asset that is a debt instrument to be measured at amortized cost or FVTOCI, its contractual terms must give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding—derivative assets and investments in equity instruments will not meet this test. For the purpose of applying this requirement, principal is the fair value of the financial asset at initial recognition; however, that principal amount may change over the life of the financial asset (e.g., prepayment). Interest consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time, and for other basic lending risks and costs, as well as a profit margin. Contractual cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding are consistent with a basic lending arrangement.

Financial assets may have contractual cash flows that vary in amount and/or timing. Judgment is needed in assessing whether a payment (or nonpayment) of a contractual cash flow that only arises as a result of the occurrence or non-occurrence of a contingent event leads to the instrument failing the contractual cash flow characteristics test.

Contractually linked subordinated instruments

In some securitized products, an issuer may prioritize payments to the holders of financial assets using multiple contractually linked instruments that create concentrations of credit risk (tranches). Each tranche has a subordination ranking that specifies the order in which any cash flows generated by the issuer are allocated to the tranche. In such situations, the holders of a tranche have the right to payments of principal and interest only if the issuer generates sufficient cash flows to satisfy higher-ranking tranches.

Agency RMBS are securities issued, or guaranteed, by the US Government National Mortgage Association (Ginnie Mae) or Federal National Mortgage Association (Fannie Mae) or Federal Home Loan Mortgage Corporation (Freddie Mac). The guarantee pertains to the timely payment of principal and interest regardless of whether the underlying homeowners make their payments. As a result, holders of agency RMBS, regardless of the tranche held, may have little or no credit risk arising from the underlying pools of assets. The underlying pools of assets can be composed of various types of US mortgages and agency securities (e.g., pass-through certificates or other CMOs, and REMICs).

Accordingly, while all tranches have little or no exposure to credit risk because of the guarantee issued (Ginnie Mae, Fannie Mae, or Freddie Mac), they have different exposures to other risks, notably prepayment and liquidity risks. Accordingly, for the purpose of the SPPI analysis, it would be appropriate to apply the requirements of IFRS 9, with respect to contractually linked instruments, to such instruments. In particular, a look-through analysis should be conducted to determine whether the nature of the cash flows of the underlying pool of assets meets the SPPI criterion.

An investment in a tranche of contractually linked instruments meets the contractual cash flow characteristics test only if ***all*** of the following three criteria are met:

1) The tranche must only have contractual cash flow characteristics that are solely payments of principal and interest without looking through to the underlying pool of instruments.

   In many instances, tranches—such as investments in CDOs—have a fixed and/or floating contractual interest return and, therefore, may meet this condition. In cases where the tranche has contractual cash flows linked to risks or indices that are not based on interest rates (e.g., equity price risks or commodity price risks), the investor's tranche will not pass the contractual cash flow characteristics test and would need to be measured through FVTPL.

2) The underlying pool of instruments held by the entity issuing the tranche must contain one or more financial assets whose contractual cash flows are only payments of principal and interest. The underlying pool of instruments can contain other instruments as well (e.g., derivatives) for specified purposes.

   It is a requirement for the investor in the tranche to understand the operations of the structured entity, and to be able to "look through" the structured entity in order to pass the contractual cash flow characteristics test.

SPPI test—Derivatives included in underlying pool of investments

It is common for a structured entity that issues tranches to enter into derivative financial instruments in order to align the contractual cash flows of its pool of financial assets (e.g., loans, credit card receivables, corporate bonds) with the contractual cash flows of the tranches it issues. Derivatives that merely align the cash flows of the pool of assets with the tranches (e.g., interest rate and currency swaps) do not generally cause a tranche to fail the contractual cash flow characteristics test. However, if derivatives result in leverage in the structure (e.g., the notional of the interest rate swaps or currency swaps is larger than the aggregate notional of the pool of financial assets), the tranches are exposed to cash flows from derivatives that do not merely align the cash flows on the pool of assets with the tranches.

If an issuer of a tranche invests exclusively in derivative financial instruments, the investor's tranche would not meet the contractual cash flow characteristics test because the pool of financial instruments does not contain financial assets whose contractual cash flows are only payments of principal and interest on the principal outstanding.

Contractually linked instruments with nonfinancial assets as the underlying pool

A SPE may hold, as its underlying pool, one nonfinancial asset (e.g., a single commercial real estate property with operating lease arrangements with third parties) along with a financial asset. If an investor holds an investment in one of the senior tranches that derives its cash flows from the nonfinancial asset (i.e., cash flows received on operating leases), it may not meet the SPPI test—as the cash flows from an operating lease are not solely payment of principal and interest—but may also depend on other factors such as the real estate market.

3) The exposure to credit risk in the underlying pool of financial instruments inherent in the tranche is equal to or lower than the exposure to credit risk of the underlying pool of financial instruments (e.g., the credit rating of the tranche being assessed for classification is equal to or higher than the credit rating that would apply to a single tranche that funded the underlying pool of financial instruments).

   The credit risk assessment is an attempt to differentiate between tranches that have average, or less than the average, exposure to credit losses of the pool of financial instruments held by the issuer and those that have more than the average exposure to credit losses. Those that have an exposure equal to the average credit losses, or less, may pass the contractual cash flow characteristics test, while those tranches that have more than the average are required to be measured subsequent to initial recognition at FVTPL.

   To perform this assessment, a detailed instrument-by-instrument analysis of the pool may not be necessary. However, an investor must use judgment and perform sufficient analysis to determine whether the instruments in the pool meet the conditions.

If any of the three conditions specified above is not met, the contractually linked subordinated instrument will not meet the contractual cash flow characteristics test and, therefore, the investor will be required to measure the instrument subsequent to initial recognition at FVTPL.

Comparison between IFRS and GAAP

Topic	IFRS	GAAP
FVTPL	The assets have contractual cash flows that are not SPPI or are not held within a business model with the objective to: (1) collect contractual cash flows or (2) both collect contractual cash flows and sell financial assets.	Financial assets that are acquired with the intent of selling them within hours or days; or, the investor otherwise elects to account for the financial asset at fair value (e.g., as a trading security, or pursuant to a fair value option).
Amortized cost	The assets are held within a business model with the objective to collect contractual cash flows that are SPPI.	Financial assets that are debt securities and for which the investor has both the positive intent and ability to hold the security until maturity.
FVTOCI	The assets have contractual cash flows that are SPPI and are held within a business model with the objective of both collecting contractual cash flows and selling financial assets.	Financial assets that are classified as AFS.

An entity must look through until it can identify the underlying pool of instruments that are creating, rather than passing through, the cash flows. If it is impracticable to assess the underlying pool of instruments, the tranche must be classified at initial recognition as at FVTPL. When the underlying pool of instruments can change, all possible instruments must be considered as part of the assessment. If the underlying pool of instruments can change after initial recognition so that the pool may not meet the conditions mentioned above, the tranche must be measured subsequent to initial recognition at FVTPL.

IFRS 9—Expected Credit Loss (ECL) Model

Overview

IFRS 9 requires an expected loss impairment model for financial assets not measured at FVTPL. Under that model, a loss allowance is recognized based on ECLs. The model mandates that at initial recognition, for all the financial instruments in the scope of IFRS 9 that expose the entity to credit risk, a loss allowance shall be recognized. The recognition of loss allowance is not triggered by the occurrence of a loss; rather, it is based on expected losses at initial recognition. The model is similar in concept to the CECL model under US GAAP.

What is an ECL?

ECLs are defined as the weighted average of credit losses with the respective risks of default occurring as the weights. An investor is required to calculate an ECL provision that represents an unbiased probability-weighted estimate of the present value of cash shortfalls, which is determined by evaluating a range of possible outcomes, and where cash shortfalls are the difference between the cash flows that are due to an entity in accordance with the contractual terms of a financial instrument and the cash flows that it expects to receive. Unbiased means the range of outcomes used as part of the ECL provision calculation are aimed at being neutral and neither optimistic nor pessimistic but realistic. In practice, this may not need to be a complex analysis. A relatively simple modeling approach may be sufficient, without the need for a large number of detailed simulations of scenarios.

Basics of ECL Model

An allowance for a loss is always recognized for ECLs and is remeasured at each reporting date for changes in those expected credit losses. The loss allowance under IFRS 9 is recognized at an amount equal to:

a) 12 months expected credit losses (expected credit losses that result from those default events on the financial instruments that are possible within 12 months after the reporting date); or
b) lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instruments).

However, the determination of whether a loss allowance should be based on 12-month expected credit losses or lifetime expected credit losses depends on whether there has been a significant increase in credit risk of the financial instrument since initial recognition.

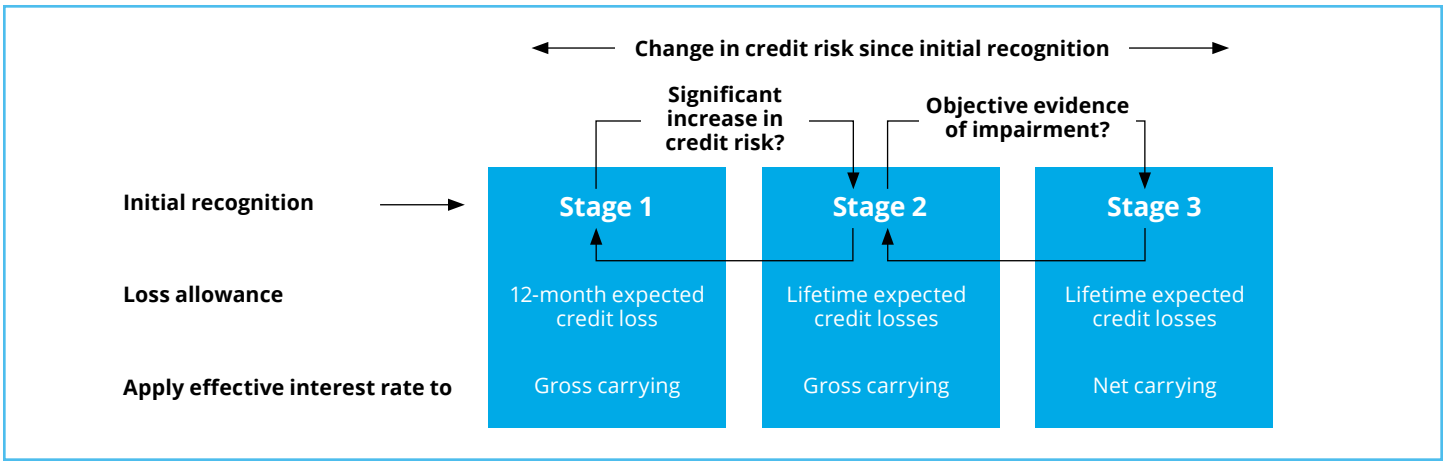
If at the reporting date, the credit risk has significantly increased since initial recognition, then the loss allowance should be based on lifetime expected credit losses; otherwise, the loss allowance should be the 12-month expected credit losses.[8]

What are lifetime expected credit losses and 12-month expected credit losses?

Lifetime expected credit losses are the expected credit losses that result from all possible default events over the expected life of a financial instrument.

Twelve-month expected credit losses are a portion of the lifetime expected credit losses that represent the expected credit losses that result from default events on a financial instrument that are possible within the 12 months following the reporting date. They should not be interpreted as cash shortfalls over the next 12 months or forecast to actually default in the next 12 months. The amount is computed by multiplying the probability of default occurring on the instrument in the next 12 months with the lifetime expected credit losses that would result through the default.

[8] If the investment is a purchased or originated credit-impaired investment, then interest income is recognized based on a credit-adjusted effective interest rate, and the loss allowance is measured based on the changes in lifetime expected credit losses.



Application of general impairment approach
The general approach to recognizing impairment is based on a three-stage process that is intended to reflect the deterioration in credit quality of a financial instrument.

Stage 1: Covers instruments that have not deteriorated significantly in credit quality since initial recognition or (where the optional low credit risk simplification is applied) that have low credit risk.

Stage 2: Covers financial instruments that have deteriorated significantly in credit quality since initial recognition (unless the low credit risk simplification has been applied and is relevant) but that do not have objective evidence of a credit loss event.

Stage 3: Covers financial assets that have objective evidence of impairment at the reporting date.

Twelve-month expected credit losses are recognized in stage 1, while lifetime expected credit losses are recognized in stages 2 and 3.

The terms default and a significant increase in credit risk are not defined under IFRS, and investors will need to apply significant judgment in practice.

An investor will have to establish its own policy for what it considers a default and apply a definition consistent with that used for internal credit risk management purposes for the relevant financial instrument. This should consider qualitative indicators (e.g., financial covenants) when appropriate. IFRS 9 includes a rebuttable presumption that a default does not occur later than when a financial asset is 90 days past due unless an entity has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Because the assessment of significant increase in credit risk is performed at the reporting date, it is important that entities make use of information that is available without undue cost and effort up to the reporting date. Regardless of the way in which an entity assesses significant increases in credit risk, there is a rebuttable presumption that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due.

Individual versus collective assessment
Depending on the financial instrument and the information available about its credit risk, it may not be possible to identify significant changes in credit risk at the individual instrument level before the financial instrument becomes past due. It may therefore be necessary to assess significant increases in credit risk on a collective or portfolio basis. This is particularly relevant to financial institutions with a large number of relatively small exposures such as retail loans. In practice, the lender may not obtain or monitor forward-looking credit information about each customer. In such cases the lender would assess changes in credit risk for appropriate portfolios, groups of portfolios, or portions of a portfolio of financial instruments. Any instruments that are assessed collectively must possess shared credit risk characteristics. This is to prevent significant increases in credit risk being obscured by aggregating instruments that have different risks. When instruments are assessed collectively, it is important to remember that the aggregation may need to change over time as new information becomes available.

Examples of shared credit risk characteristics may include, but are not limited to, instrument type, credit risk ratings, collateral type, date of initial recognition, remaining term to maturity, industry, geographical location of the borrower, and the value of collateral relative to the financial asset if it has an impact on the probability of a default occurring.

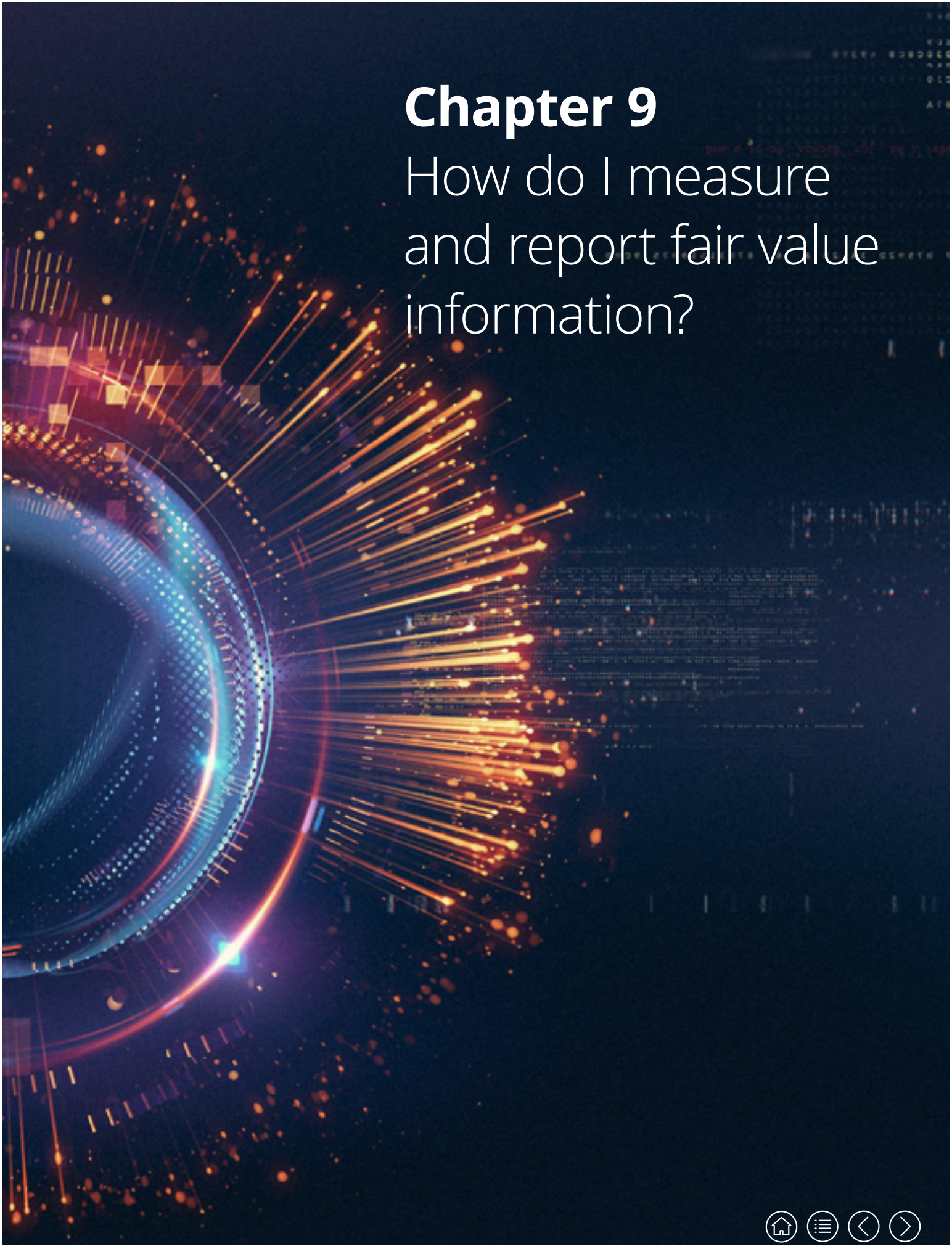
Instruments measured at FVTOCI
For debt instruments measured at FVTOCI, the general approach for recognizing and measuring a loss allowance is the same for financial instruments measured at amortized cost, but the loss

allowance should be recognized in other comprehensive income and should not reduce the carrying amount of the financial asset in the statement of financial position. This ensures that the carrying amount of the asset is always measured at fair value in the statement of financial position.

Comparison of the requirements of IFRS 9 and ASC 326

Both the ECL model under IFRS and CECL model under US GAAP are aimed at transitioning from incurred loss model to expected credit loss model; however, there are differences in the approach followed under each GAAP.

IFRS 9	ASC 326
An impairment loss on a financial asset accounted for at amortized cost or at FVTOCI is recognized immediately on the basis of ECLs. Depending on the financial asset's credit risk at inception and changes in credit risk from inception, as well as the applicability of certain practical expedients, the measurement of the impairment loss will differ. The impairment loss would be measured as either: (1) the 12-month credit loss or (2) the lifetime expected credit loss. Further, for financial assets that are credit impaired at the time of recognition, the impairment loss will be based on the cumulative changes in the lifetime expected credit losses since initial recognition.	For financial assets measured at amortized cost (e.g., HTM investments), an estimate of the ECLs generally should be recognized as an allowance immediately, upon either origination or acquisition of the asset, and adjusted as of the end of each subsequent reporting period. There is no specified threshold for the recognition of an impairment. The ECLs should: (1) reflect losses expected over the contractual life of the asset and (2) consider historical loss experience, current conditions, and reasonable and supportable forecasts. An allowance for credit losses may be measured by using various methods. Use of the discounted cash flow model is not required.
N/A	For debt securities held as AFS, an allowance for credit losses should be recognized when the present value of cash flows expected to be collected from the debt security is less than the security's amortized cost basis. The allowance for credit losses is limited by the difference between the debt security's fair value and its amortized cost basis.



Chapter 9
How do I measure and report fair value information?

What is fair value?

ASC 820, sets forth guidance on how to determine the fair value measurement of assets and liabilities—including interests in securitizations (e.g., securitization certificates, IO strips, underlying collateral)—and also outlines the disclosures that must accompany fair value measurements. Before diving into the details, it is important to note one thing: ASC 820 does not prescribe when fair value is required; rather, it creates a uniform definition for determining fair value under GAAP—using an "exit price" notion—when other areas of GAAP require fair value to be measured either for financial statement or footnote disclosure purposes. ASC 820 also makes clear that fair value is a market-based, not an entity-specific, measurement. ASC 820's three-level fair value measurement hierarchy, described below, strives to bring increased transparency, consistency, and comparability to fair value estimates.

Consistency and comparability are clearly desirable in financial reporting; however, ASC 820's goals are squarely at odds with the wide range of valuation techniques used to value securitization interests. The friction between the numerous valuation practices and ASC 820's desire for consistency and comparability is at the core of fair value controversies. However, no matter how complicated or detailed the technique or methodology, the end goal for accounting purposes remains the same: to derive an estimate of the price at which assets may be sold or liabilities may be transferred in the market at the valuation date under current market conditions.

Do I need to measure the fair value of each position individually or can I use a portfolio approach?

Generally speaking, ASC 820 views an individual security as the appropriate unit of valuation for financial instruments. For example, the fair value of a large holding of a particular security would generally be determined as the product of the price per unit (e.g., per share or dollars of par value) times the quantity of units held. In fact, using "blockage" factors is specifically prohibited.

That said, ASC 820 does permit an entity to make an accounting policy choice to measure the fair value of a specific group of financial assets and financial liabilities on the basis of what would be received to exit a net-long or net-short position if all of the following conditions are met:

- The entity manages the group of assets and liabilities on the basis of its net exposure to either market risks (e.g., interest rate risk, currency risk, or other price risk) or credit risk.
- The entity provides information about the group on a net basis to management.
- All of the financial assets and liabilities are measured at fair value in the balance sheet (either by requirement or through election of the fair value option).

While the fair value measurement may be performed on a net basis, the presentation of those financial assets and financial liabilities would still be reported on a gross basis unless they meet the offsetting criteria in ASC 210, *Balance Sheet*. Therefore, even if an entity avails itself of the portfolio-based fair value practical expedient, it will have to use judgment to develop a reasonable and consistent methodology to attribute the portfolio fair value measurement to the individual financial assets and financial liabilities that constitute the group for presentation in the financial statements.

1, 2, 3—What level to be?

The three-level fair value hierarchy exists to communicate the reliability of the inputs used to estimate fair value and requires entities to prioritize the use of observable inputs. That is, when estimating fair value, entities are required to maximize the use of relevant observable inputs using the following hierarchy:

Level 1: Quoted prices for the identical asset in an active market, without adjustment.

Level 2: Anything that is not Level 1 but is directly or indirectly observable, including:

- Quoted prices for similar assets or liabilities in active or inactive markets.
- Inputs other than quoted prices that are observable, such as yield curves, prepayment speeds, default rates, and loss severities.
- Inputs derived principally from, or corroborated by, observable market data.

Level 3: Unobservable inputs that reflect the reporting entity's own assessment about the assumptions market participants would use to estimate fair value, including assumptions about risk.

One approach for estimating the fair value of beneficial interests issued in a securitization is a three-step present value technique that:

- Creates the best estimate of cash flows generated from the underlying assets.
- Applies the asset cash flows to the cash outflows per the transaction documents (i.e., the waterfall).
- Discounts the cash flows for the securities held at the yield a buyer will demand.

Is the market always right? What if it dries up?

An investor will look to the markets to obtain observable information to be utilized in the fair value estimation process. But before arriving at the inputs for the valuation technique above, investors must evaluate the market so they can make the appropriate judgments about the information being conveyed through various pricing signals.

If an investor reaches a conclusion that there has been a significant decline in the volume or activity in a given market, further analysis of the transactions or quoted prices is needed, and an adjustment to the transactions or quoted prices, or a change in the valuation methodology employed, may be necessary to estimate fair value. Adjustments also may be necessary in other circumstances (e.g., if a price for a similar asset requires adjustment to make it more comparable to the asset being measured or when the price is stale).

To determine that a decrease in volume or level of activity has occurred, the investor needs to evaluate the following factors that are indicative of illiquid markets:

- There are few recent transactions.
- Price quotations are not based on current information.
- Price quotations vary substantially either over time or among market makers (e.g., some brokered markets).
- Indices that previously were highly correlated with the fair values of the asset or liability are demonstrably uncorrelated with recent indications of fair value for that asset or liability.
- There is a significant increase in implied liquidity risk premiums, yields, or performance indicators (such as delinquency rates or loss severities) for observed transactions or quoted prices when compared with the reporting entity's estimate of expected cash flows, considering all available market data about credit and other non-performance risk for the asset or liability.
- There is a wide bid-ask spread or significant increase in the bid-ask spread.
- There is a significant decline or absence of a market for new issuances for the asset or liability or similar assets or liabilities.
- Little information is publicly available (e.g., a principal-to-principal market).

Together, an investor's observations of information in the market and judgments about the conditions of the market will drive the ultimate estimate of inputs into the present value technique described above.

What is the best estimate of cash flows? How do I know whether my model of the structure is correct? What yield should I use to discount the cash flows?

As is usually the case, the answer to these questions is, "it depends." As a general rule, however, investors must answer these questions based on what a market participant would use and not based on their own view. Investors need not undertake exhaustive efforts to obtain information about market participant assumptions, but they need to incorporate information that is reasonably available without undue cost and effort.

The continuing proliferation of detailed information on asset pools underlying securitizations results in an environment where the amount of information that might be considered in estimating the asset cash flows is often overwhelming. Consequently, there are sophisticated forecasting models that take into account a variety of factors—such as regional unemployment, home price appreciation or depreciation, the length of time a court will take to liquidate a property in bankruptcy, and the degree to which loan modification programs will take hold—in an effort to arrive at a forecast of securitization collateral cash flows to be applied to the structure.

Further complicating the situation, some structures incorporate bespoke or custom features that are difficult to model and may be highly subjective. In certain cases, these features are major drivers of value, potentially rendering the first step of the process (asset cash flow estimation) incredibly difficult. For example, many of the "event of default" and subordination provisions in collateralized debt obligations challenge investors to conclude on interpretations of waterfalls described within transaction documents, often with very little or no precedent.

Once an investor has the appropriate inputs to make an estimate of the asset cash flows, and those cash flows are applied to the structure through an accurate model, the investor needs to determine the appropriate rate of return that a market participant would demand should some or any of the beneficial interests be sold.

To that end, ASC 820 provides a useful example of one technique a market participant might use to arrive at a market rate of return for an RMBS. In this example, a market participant begins with an observable risk-free rate, and then makes adjustments by adding or subtracting basis points for product type, length of time outstanding, market conditions at inception versus the valuation date, credit risk, liquidity risk, and other factors. The result is an estimate of a market rate of return that incorporates and quantifies adjustments based on other observable and unobservable factors. The example also highlights one way to incorporate the difference between the cash nature of the asset and the synthetic nature of an index, as well as the difference between assets backing the security and those backing the index. Many of the adjustments are tied to concepts that highlight indicators for when a market has seen a decline in volume or activity.

Do I need to mark my book to indices?

The creation of indices to track prices for securities at different levels of the capital stack for different products issued in certain vintages provides ever-increasing flexibility to investors in terms of hedging capabilities, speculation, and price discovery. Unfortunately, the indices only directly translate to fair value for the exact same portfolio of securities; consequently, adjustments are required in order to determine the fair value of a single security. Ultimately, one needs to determine whether the adjustments that must be made to indices in order to arrive at a market rate of return result in a more reliable estimate than the return one would estimate using another less observable, but perhaps more relevant, input.

Can I book a gain or loss at inception? How do I calibrate my models?

To the extent sale accounting is achieved, gains or losses from a securitization will arise for the seller when the fair value of the proceeds from the transaction is greater or less than the carrying amount of the assets and/or liabilities transferred. If the seller receives a beneficial interest in the transferred assets, care must be exercised in the estimation of fair value for those interests.

The determination of fair value for securitization interests must adhere to the exit price notion called for in ASC 820, which recognizes the potential for the transaction price to be different from the exit price. Many in the securitization community interpret parts of ASC 820 to support an attack on the use of "mark to model" for received beneficial interests, or newly acquired investments, because the fair value established through the use of a model might result in higher estimates of exit price than would a negotiated transaction price.

In a speech in 2006, the SEC staff made it clear that models used to estimate fair value must be calibrated to reflect market conditions on the transaction date in a way that results in the exit price equaling transaction price, absent circumstances where the transaction price does not reflect fair value.[1] Transaction price might not reflect fair value when the transaction is between related parties, when one or more of the parties is transacting under duress, or when the transaction price is established in a market that is not the principal or most advantageous market.

1 Speech by SEC Staff: Remarks Before the 2006 AICPA National Conference on Current SEC and PCAOB Developments by Joseph D. McGrath, December 11, 2006, https://www.sec.gov/news/speech/2006/spch121106jdm.htm.

What if I need to change valuation methods? What other information about fair value estimates should I disclose?

Changes in valuation techniques or the application thereof could arise for many reasons. Techniques can be refined, or become less effective than alternatives, and markets could develop, consequently providing greater insight and stronger pricing signals, or they could diminish, leaving a dearth of pricing information.

When changes occur, diligent consideration of the significance of valuation inputs must be given in order to appropriately classify the estimate in the fair value hierarchy. In accounting parlance, the change in valuation technique or its application is typically accounted for as a change in accounting estimate under ASC 250, *Accounting Changes and Error Corrections*. While ASC 250 has its own disclosure requirements, those criteria are not applicable because of existing fair value disclosures under ASC 820 that require disclosure of changes in valuation techniques. In any interim or annual period, reporting entities must discuss the valuation techniques used to measure fair value, as well as any changes in the techniques and inputs used for each major security type. Examples of major security types could include:

- Equity securities (segregated by industry type, company size, or investment objective)
- Debt securities issued by the US Treasury and other US government corporations and agencies
- Debt securities issued by US states or municipalities
- Debt securities issued by foreign governments
- Corporate debt securities
- RMBS
- CMBS
- CLOs
- Other debt obligations

How do I measure the fair value of financial assets and financial liabilities of a collateralized financing entity I am required to consolidate?

The fair value of the financial assets of a collateralized financing entity may differ from the fair value of its financial liabilities even when the financial liabilities have recourse only to the financial assets. ASC 810, provides a measurement alternative such that the reporting entity should measure both the financial assets and financial liabilities of that consolidated financing entity in its consolidated financial statements using the more observable of the fair value of the financial assets and the fair value of the financial liabilities as follows:

- If the fair value of the financial assets of the collateralized financing entity is more observable, those financial assets should be measured at fair value, and the financial liabilities should be measured in consolidation as: (1) the sum of the fair value of the financial assets and the carrying value of any nonfinancial assets held temporarily, less (2) the sum of the fair value of any beneficial interests retained by the reporting entity (other than those that represent compensation for services) and the reporting entity's carrying value of any beneficial interests that represent compensation for services. The resulting amount should be allocated to the individual financial liabilities (other than the beneficial interests retained by the reporting entity) using a reasonable and consistent methodology.
- If the fair value of the financial liabilities of the collateralized financing entity is more observable, those financial liabilities should be measured at fair value, and the financial assets should be measured in consolidation as: (1) the sum of the fair value of the financial liabilities (other than the beneficial interests retained by the reporting entity), the fair value of any beneficial interests retained by the reporting entity (other than those that represent compensation for services), and the reporting entity's carrying value of any beneficial interests that represent compensation for services, less (2) the carrying value of any nonfinancial assets held temporarily. The resulting amount should be allocated to the individual financial assets using a reasonable and consistent methodology.

This update also clarifies that when this measurement alternative is elected, a reporting entity's consolidated net income (loss)

should reflect the reporting entity's own economic interests in the collateralized financing entity, including: (1) changes in the fair value of the beneficial interests retained by the reporting entity and (2) beneficial interests that represent compensation for services. Beneficial interests retained by the reporting entity that represent compensation for services (e.g., management fees or servicing fees) and nonfinancial assets that are held temporarily by a collateralized financing entity should be measured in accordance with other applicable topics.

When the measurement alternative is not elected for a consolidated collateralized financing entity, (1) the fair value of the financial assets and the fair value of the financial liabilities of the consolidated collateralized financing entity should be measured using the requirements of ASC 820, and (2) any differences in the fair value of the financial assets and the fair value of the financial liabilities of that consolidated collateralized financing entity should be reflected in earnings and attributed to the reporting entity in the consolidated statement of income (loss).

What are the disclosure requirements?

There are a number of disclosures required by entities that report financial assets at fair value on a recurring basis. Among others, these include:

a) The fair value measurements at the reporting date.

b) The level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3).

c) For Level 2 and Level 3 fair value measurements, a description of the valuation techniques and inputs used in determining fair value. If there has been a change in either or both a valuation approach and a valuation technique, a description of the change and reason for making it.

d) For fair value measurements categorized within Level 3, quantitative information about the significant unobservable inputs used in the fair value measurement. The range and weighted average of significant unobservable inputs should be provided, including how weighted average is calculated.

e) For fair value measurements using significant unobservable inputs (Level 3), a reconciliation of the beginning and ending balances, separately presenting changes during the period attributable to the following:

   1) Total gains or losses for the period (realized and unrealized), segregating those gains or losses included in earnings (or changes in net assets), and a description of where those gains or losses included in earnings (or changes in net assets) are reported in the statement of income (or activities).

   2) Total gains or losses for the period recognized in other comprehensive income, and the line item(s) in other comprehensive income in which those gains or losses are recognized.

   3) Purchases, sales, issuances, and settlements (each presented separately).

   4) Transfers in and/or out of Level 3 (e.g., transfers due to changes in the observability of significant inputs) and the reasons for those transfers. Transfers into Level 3 should be disclosed and discussed separately from transfers out of Level 3.

f) For recurring fair value measurements categorized within Level 3, a narrative description of the uncertainty of the fair value measurement from the use of significant unobservable inputs if those inputs reasonably could have been different at the reporting date. For example, how a change in those significant unobservable inputs to a different amount might result in a significantly higher or lower fair value measurement at the reporting date.

g) For recurring fair value measurements categorized within Level 3, the amount of the total gains or losses for the period in subparagraph (e)(1) above included in earnings (or changes in net assets) and in subparagraph (e)(2) above included in other comprehensive income that are attributable to the change in unrealized gains or losses relating to those assets and liabilities still held at the reporting date and a description of where those unrealized gains or losses are reported in the statements of comprehensive income (or activities).

h) If the reporting entity elects the measurement alternative for consolidated collateralized financing entities, for the less observable of the fair value of the financial assets and the fair value of the financial liabilities, it shall disclose that the amount was measured on the basis of the more observable of the fair value of the financial liabilities and the fair value of the financial assets for those financial assets and financial liabilities that are not incidental to the operations of the collateralized financing entity and have carrying values that approximate fair value (e.g., cash, broker receivables, or broker payables).

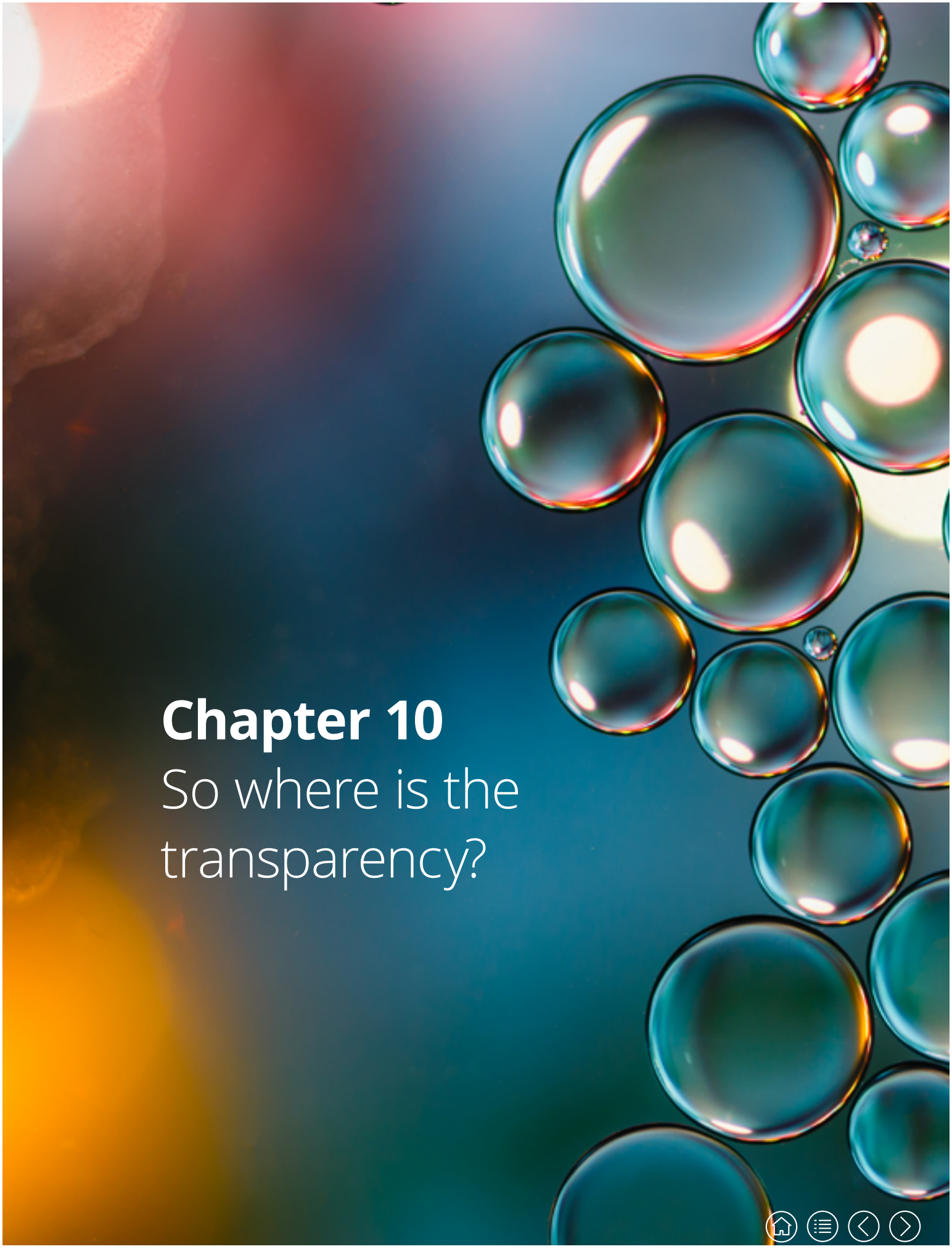
i) For the nonpublic entities, in lieu of item e above: (1) the purchases and issues (each of those types of changes disclosed separately) and (2) the amounts of any transfers into or out of Level 3 of the fair value hierarchy and the reasons for those transfers with transfers into Level 3 separately disclosed and discussed from transfers out of Level 3.

How does international accounting compare?

For investors applying IFRS 13, *Fair Value Measurement* governs fair value measurements and the related disclosure requirements. IFRS 13, which became effective January 1, 2013, is substantially

converged with GAAP. That is, a fair value measurement under IFRS should be essentially the same as a fair value measurement determined under GAAP. That said, some of the more notable remaining differences between IFRS 13 and ASC 820 are listed here.

Subject	GAAP	IFRS
Practical expedient: net asset value	An entity may measure its investment in entities that do not have readily determinable fair values and meet the definition of an investment company under ASC 946, *Financial Services - Investment Companies*, at net asset value as a practical expedient.	IFRS does not have this practical expedient.
Initial recognition: day-one gains and losses	GAAP does not prohibit the immediate (or day-one) recognition of differences between initial fair value and transaction price, including differences that arise when unobservable inputs are used in the initial fair value measurement.	Under IAS 39 and IFRS 9, an entity is prohibited from immediately recognizing gains and losses related to unobservable inputs.
Disclosure: offsetting fair value measurements disclosed in Level 3 roll-forward	ASC 820 permits entities to present derivative assets and liabilities on either a gross or a net basis in the reconciliation disclosure.	IFRS generally does not permit net presentation for derivatives.
Disclosure: sensitivity analysis	ASC 820 requires a narrative description of the uncertainty in recurring Level 3 measurements from the use of significant unobservable inputs if those inputs reasonably could have been different at the reporting date. Quantitative sensitivity analysis is not required.	IFRS 13 requires quantitative information about significant changes in recurring Level 3 measurements resulting from changes in one or more unobservable inputs to reflect reasonably possible alternative assumptions, including the amount of the change in inputs, the amount of the change in the measurement, and how the effect was calculated.
Disclosure: exemptions available to nonpublic entities	Nonpublic entities are exempt from these disclosure requirements under ASC 820: • Narrative description of the uncertainty in recurring Level 3 measurements from the use of significant unobservable inputs if those inputs reasonably could have been different at the reporting date. • For recurring fair value measurements categorized within Level 3, the amount of the total gains or losses for the period included in earnings (or changes in net assets) and included in other comprehensive income that are attributable to the change in unrealized gains or losses relating to those assets and liabilities still held at the reporting date and a description of where those unrealized gains or losses are reported in the statements of comprehensive income (or activities). • The range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements.	Nonpublic entities are not exempt from any of the disclosure requirements in IFRS 13.
Measurement alternative for consolidated collateralized financing entities	GAAP provides a measurement alternative such that the reporting entity should measure both the financial assets and financial liabilities of that consolidated financing entity in its consolidated financial statements using the more observable of the fair value of the financial assets and the fair value of the financial liabilities.	IFRS does not contain any guidance specific to the measurement of consolidated collateralized financing entities.



Chapter 10
So where is the transparency?

Disclosures, disclosures, and more disclosures

Having already discussed the many disclosures that are necessary for fair value measurements, one would think the gamut of disclosures required under both GAAP and IFRS has been covered. Not even close.

That said, ASC 810 and ASC 860 under GAAP and IFRS 7, *Financial Instruments: Disclosures,* and IFRS 12, *Disclosure of Interests in Other Entities,* require significant disclosures intended to provide financial statement users with: (1) an understanding of the nature and extent of a transferor's continuing involvement with transferred financial assets, (2) how a transfer affects a transferor's financial statements, and (3) an entity's involvements with SPEs. These requirements expand on the disclosures that may also be required under related guidance, such as financial instruments, credit losses, and fair value.

Rules of the disclosure road

A transferor of financial assets into a securitization should be attuned to the following objectives of the disclosure requirements under ASC 860 to provide information on:

- A transferor's continuing involvement with financial assets previously transferred
- Any restrictions on assets included in the balance sheet of the reporting entity relating to transferred financial assets, including their carrying amounts
- The reporting of servicing assets and servicing liabilities
- Transfers accounted for as either: (1) sales where the transferor has continuing involvement or (2) secured borrowings and how the transfer impacts each of the transferor's financial statements

There are increased disclosure requirements as a result of the need for enhanced qualitative information concerning any risk related to a transferor's exposure from transferred financial assets and any restrictions on the transferred assets.

Transferors are provided discretion when preparing the disclosures with respect to presenting information at an aggregated level; as always, the preparer should present information in the footnotes to maximize their usefulness. If aggregated reporting is presented, then the transferor should disclose how similar transfers are aggregated and clearly distinguish between transfers accounted for as sales and those accounted for as secured borrowings.

When determining if aggregation is appropriate, information about the characteristics of the transfer should be considered including:

- The nature of any continuing involvement
- The types of financial assets transferred
- Any risks to which the transferor continues to be exposed after the transfer, and the change in the transferor's risk profile as a result of the transfer
- Whether certain loan products increase the reporting entity's exposure to credit risk and thereby may result in a concentration of credit risk

The transferor must find the right balance between obscuring critical information as a result of too much aggregation versus providing excessive detail that makes it difficult to understand the transferor's exposure.

What if I have a secured borrowing?

If a transaction is accounted for as a secured borrowing, it could either result from the requirement to consolidate the securitization trust or a failure to relinquish effective control.

The objectives of the disclosures around secured borrowings are to provide the financial statement users with information on how the transfer of financial assets affects a transferor's financial position, financial performance, and cash flows.

Additionally, for secured borrowings resulting from the transferor consolidating the securitization trust, the following information should be disclosed:

- The significant judgments and assumptions made by a transferor in determining whether it must consolidate a VIE and/or disclose information about its involvement with a VIE
- The nature of restrictions on a consolidated VIE's assets and on the settlement of its liabilities reported by the transferor in its balance sheet, including the carrying amounts of such assets and liabilities
- The nature of, and changes in, the risks associated with the securitizer's involvement with the VIE
- How a securitizer's involvement with the VIE affects the securitizer's financial position, financial performance, and cash flows

The requirements also provide that depending on the facts and circumstances surrounding the VIE and the securitizer's interest in that entity, the information may also be aggregated by similar entities to the extent that separate reporting would not provide more useful information. Thus, a securitizer with multiple RMBS transactions that need to be consolidated may aggregate the information to the degree that disaggregation does not improve the disclosure, such as term transactions of prime loans versus subprime loans and subprime loans of different vintage. Securitizers should consider both qualitative and quantitative information about the differing risk characteristics of the VIEs, as well as the significance of the VIE to the securitizer, in determining the appropriate level of aggregation.

Differentiation should be made between those VIEs that are consolidated and those that are not consolidated but the securitizer has a variable interest in the entity. Additionally, the disclosure requirements under ASC 810 can be provided within more than one footnote of the financial statements so long as there is appropriate cross-referencing between the various footnotes.

Now, for the actual requirements

Whether a securitizer is the primary beneficiary and thus must consolidate the VIE, or even if the securitizer just has a variable interest in a VIE, the following must be disclosed:

- The methodology for determining whether the securitizer is the primary beneficiary of the VIE, including significant judgments and assumptions made in reaching that conclusion
- If the facts and circumstances have changed leading to a change in the previously reached consolidation conclusion, the securitizer is required to disclose the primary factors that caused the change and the consequent impact on the financial statements
- If, during the period covered by the financial statements, the securitizer has provided any financial or other support to the VIE that was not contractually required, including through implicit arrangements, or if the securitizer intends to provide such support, the financial statements should disclose information regarding the type and amount of support provided and the primary reasons the support was provided

Additionally, the securitizer should provide qualitative and quantitative information about involvement with the VIE, including the nature, purpose, size, activities, and financing of the VIE.

If the securitizer is also the consolidator of a transaction, it should disclose:

- The gain or loss recognized upon initial consolidation of the vehicle
- The carrying amounts and classifications of the VIE's assets and liabilities, including information regarding the relationships between those assets and liabilities. For example, if the assets may only be used to settle specific liabilities, that relationship should be disclosed
- When the VIE's creditors or the beneficial interest holders do not have recourse to the general credit of the reporting entity
- The terms of any explicit or implicit arrangements that could require the reporting entity to provide financial support to the SPE, including events or circumstances with the potential for the securitizer to incur a risk of loss

What about those variable interest holders who are not the consolidator?

ASC 810 also requires specific disclosures for those reporting entities that hold a variable interest in a VIE but are not the primary beneficiary. In these circumstances, the disclosures include the carrying amount and classification of the assets and liabilities within the balance sheet that relate to the entity's variable interest in the VIE and the maximum exposure to loss from involvement with the VIE. The reporting entity will also need to disclose qualitative information about how the reporting entity's maximum exposure to loss was determined and the significance sources of exposure to the VIE. If the maximum exposure to loss cannot be quantified, that also must be disclosed.

Information with respect to the carrying amount of the assets and liabilities and the securitization party's exposure to loss should be presented in a tabular format. Both qualitative and quantitative information to provide a sufficient understanding of the differences between the two amounts should also be provided, including the terms of arrangements (both explicit and implicit) potentially requiring the variable interest holder to provide additional financial support. The reporting entity should also provide information about any support committed by third parties, including liquidity arrangements, guarantees, or other commitments.

More importantly, if the party to the transaction has not been identified as the primary beneficiary because of the existence of a shared power arrangement, the securitizer should disclose the significant factors that were considered and judgments that were made in determining that conclusion.

To the degree not disclosed already, for transfers of financial assets accounted for as secured borrowings, the securitizer should disclose the carrying amounts and classifications of both assets and liabilities recognized within the transferor's balance sheet for each period presented. Additionally, the securitizer should include qualitative information regarding the relationship between those assets and liabilities, such as if assets are restricted to satisfying a specific obligation and the nature of the restrictions placed on those assets.

Is separate presentation required for consolidated VIEs?

The guidance requires that entities consolidating a VIE separately present on the face of the balance sheet the: (a) assets of that VIE that can only be used to settle its own obligations and (b) liabilities of that VIE for which the creditors or beneficial interest holders of

the VIE do not have recourse to the general credit of the primary beneficiary. This requirement has generated much discussion and debate, primarily because of the lack of guidance on how to apply this requirement to the balance sheet and that there is no similar requirement for presentation within the income statement and the statement of cash flows.

One of the common misconceptions about the separate presentation requirement is whether collapsing all of the VIE's assets into a single line item and all of the VIE's liabilities into a single line item is permitted. It is not permitted. Rather, this information should be presented on a line-by-line basis, so that a VIE's assets should not be combined as a single asset line item and its liabilities should not be combined as a single liability line item. Accordingly, the assets of the securitization trust (e.g., cash, loan receivables, and real estate-owned property) should not be combined on the face of the balance sheet as a single line item unless they are the same category of asset.

Because ASC 810 does not provide specific guidance on application of the separate presentation requirement, there are various presentation alternatives available. One alternative would be for an enterprise to present receivables as one line item and parenthetically disclose the amount of receivables that are in a VIE and that meet the separate presentation criteria. A second alternative would be for an enterprise to present receivables in two separate line items (one line item for those that are in a VIE and meet the separate presentation criteria and another line item for all other receivables). There may be other acceptable alternatives. Fortunately, the separate presentation requirement does not need to be applied on a VIE-by-VIE basis.

Also, as mentioned above, ASC 810 is silent with regard to presentation requirements on the income statement and the statement of cash flows. An entity is permitted to present the activities of consolidated VIEs separately in both statements through an accounting policy election applied consistently to all consolidated VIEs.

I have sale accounting. What do I need to disclose?

For securitizations that achieve sale accounting and the transferor has some form of continuing involvement with those transferred assets, ASC 860 requires specific disclosures for each income statement period presented in the financial statements. The transferor should disclose:

- Information about the characteristics of the transfer, including the nature of the continuing involvement
- The type and initial fair value of the assets obtained and any liabilities incurred as part of the transfer
- The gain or loss recognized resulting from the sale

For those initial fair value measurements, the transferor also should disclose the level at which the measurements fall within the fair value hierarchy, the key inputs and assumptions used in the measurement, and the valuation techniques utilized. For the key considerations in determining the fair value of the interests, see chapter 9.

Also, the footnote disclosure needs to contain information about the cash flows between the transferor and transferee. ASC 860 requires disclosure of proceeds from new transfers, proceeds from collections reinvested in revolving facilities, purchases of previously transferred assets, servicing fees, servicing advances, and cash flows received from a transferor's beneficial interests in the transferred assets.

For each balance sheet presented in the financial statements, the following disclosures are required regardless of when the transfer occurred:

- Transferors should provide qualitative and quantitative information regarding their continuing involvement. The purpose of this requirement is to provide users of financial statements with information necessary to assess the reason for the continuing involvement and the exposure to risks the transferor retains

- Transferors should also disclose the extent of any changes in their risk profile as a result of the transaction, including consideration of credit risk, interest rate risk, and other risks. Information to be disclosed as a result includes:
  - The total outstanding principal amount, the amounts derecognized, and any amounts that continue to be recognized in the balance sheet
  - Information on any arrangements that could require the transferor to potentially provide financial support to the transferee or its beneficial interest holders and whether any financial support has been provided in the periods presented, including the type and the amount of support and the primary reasons for providing the support
  - Information about any third-party-provided liquidity arrangements, guarantees, or other commitments related to the transferred financial assets
- Securitizers should disclose their accounting policies for subsequent measurements of the assets or liabilities related to the continuing involvement, as well as the key inputs and assumptions used in measuring the fair value of those assets or liabilities, including quantitative information about discount rates, expected prepayment speeds, and anticipated credit losses
- Transferors should conduct a sensitivity analysis or stress test, usually presented in tabular format and displaying the hypothetical effect on the fair value of the transferor's interests in the transaction of two or more unfavorable variations from the expected levels for each key assumption. To this table, a description of the objectives, methodology, and limitations of the sensitivity analysis or stress test should also be disclosed
- Finally, the securitizer should disclose information on the quality of the transferred financial assets, along with information on the same asset classes that are managed by the securitizer. This information should be categorized as pertaining to those assets derecognized and those that continue to be recognized within the balance sheet, and should include, but is not limited to, delinquencies and credit losses, net of recoveries

What are the disclosure requirements with respect to servicing assets and servicing liabilities?

For recognized servicing assets and servicing liabilities, securitizers should disclose:

- The basis for determining the classes of servicing assets and servicing liabilities
- A description of the inherent risks associated with servicing assets and servicing liabilities, and a description of any instruments used to mitigate the income statement impact of changes in fair value of servicing assets and servicing liabilities
- The amount of contractually specified servicing fees, late fees, and ancillary fees earned, including where each of those amounts is recorded, for each income statement period presented
- Quantitative and qualitative information regarding the assumptions used to estimate fair value, such as discount rates, anticipated credit losses, and prepayment speeds

For those servicing assets and servicing liabilities subsequently measured at fair value, ASC 860 also requires a disclosure of where the changes in fair value are reported in the income statement for each period presented and a rollforward of the activity for each class of servicing assets and servicing liabilities, including the beginning balance, additions from: (1) purchases of servicing assets or assumptions of servicing obligations and (2) recognition of servicing obligations that result from transfers of financial assets, disposals, changes in fair value, and the ending balance.

For those servicing assets and servicing liabilities carried at amortized cost, ASC 860 requires: (1) disclosure of the changes in the carrying amount of the servicing assets and servicing liabilities, (2) where such changes are reported in the income statement, and (3) a rollforward of the activity for each class of servicing assets and servicing liabilities. These disclosures should include: (1) the beginning balance, (2) additions from purchases of servicing assets or assumptions of servicing obligations, and (3) additions from recognition of servicing obligations that result from transfers of financial assets, disposals, amortization, application of any valuation allowance to adjust the carrying value of servicing assets, any other-than-temporary impairments, any other changes that affect the balance and a description of those changes, and the ending balance. Additionally, for each class of servicing assets and servicing liabilities carried at amortized cost, securitizers should disclose the fair value of those recorded servicing assets and servicing liabilities at the beginning and end of the period. Finally, the risk characteristics considered in the measurement of any impairment of servicing assets and a rollforward by class for any recognized impairment of servicing assets carried at amortized cost should also be disclosed.

What about segment reporting?

Footnote reporting of operating segments in ASC 280, *Segment Reporting,* is driven by the boss. The identification of operating segments depends on how the company reports operating results to the chief executive officer, chief operating officer, or whichever person or group makes resource allocation decisions for the company as its "chief operating decision-maker." A primary purpose of segment disclosures is to show readers how a company is managed, so different companies will likely have different segments, even if they are in similar businesses.

Depending on how previously unconsolidated VIEs are reported internally for management purposes, they could either represent one or more separate segments or they could become part of an existing segment or two. One could even imagine the now-consolidated VIEs reducing the number of reportable segments. An example might be a mortgage banker whose management reporting

follows its external financial reporting. If it no longer reports gain on sale and service fee income to the chief operating decision-maker, it might no longer have separate reportable segments for origination and servicing. It might conclude that it now only has a single mortgage lending segment.

It is hard to imagine that a consolidated VIE would not be an operating segment, or part of one, because even VIEs would have the segment characteristics of:

- Business activities generating revenues and expenses, reported as
- Discrete financial information, subject to
- Regular review to assess performance and allocate resources

A segment should be reported if it meets one of the 10 percent significance thresholds (combined internal and external revenues, absolute value of segment profit or loss, and combined segment assets). Segments representing at least 75 percent of external revenue should be shown. Segments with similar economic characteristics, such as gross margin, products, services customers, production, distribution, and regulatory environment, can be combined for reporting. Segment reporting is required in both annual and interim financial statements for public companies.

Are there any other disclosures to consider?

In addition to the disclosures discussed above, there are likely incremental disclosures that should also be considered. These additional requirements may include, but are not limited to, those related to fair value measurements, derivatives, or disclosures required for credit losses (e.g., for those loans within consolidated securitization structures measured on an amortized cost basis). Reporting entities will need to consider all the potential additional disclosures that may be required from the consolidation of the securitization structures where they are determined to be the primary beneficiary.

Illustrative disclosure[1]—sale accounting securitizations with continuing involvement[2]

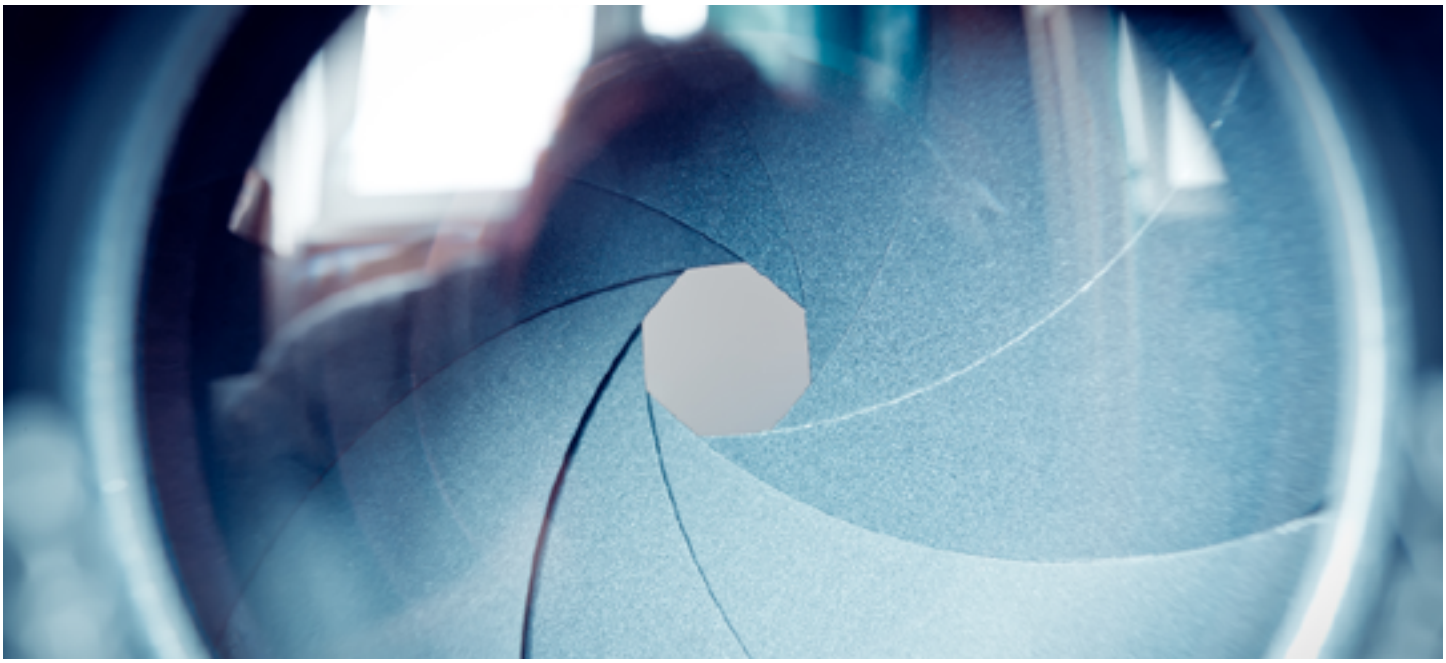
The bank securitizes a variety of loans, including residential mortgage, commercial real estate, credit card, and automobile loans through sponsored SPEs. In a securitization, the bank transfers assets to an SPE, which then converts those assets into cash through the issuance of debt and equity instruments, certificates, commercial paper, and other notes of indebtedness. The bank's continuing involvement with securitizations for which sale accounting is achieved typically is in the form of servicing the loans held by the SPEs or through holding a residual interest in the SPE. These transactions are structured without recourse, so the bank's exposure is limited to standard representations and warranties as seller of the loans and responsibilities as servicer of the SPE's assets.

The following table details the total principal outstanding as well as historical loss and delinquency amounts for the managed portfolio for 20X3 and 20X2 ($ in millions) [for simplicity, disclosures for 20X2 are not included below]:

	Total principal amount of loans	Delinquent principal over 60 days	Average balance (optional)	Credit losses (net of recoveries)
Type of loan	**At December 31, 20X3**		**Year ended December 31, 20X3**	
Auto	$120	$6.3	$132	$4.6
Residential mortgage	982	46.8	970	35.6
Commercial mortgage	744	38.1	720	26.2
Credit card balances	74	5.0	79	6.0
Total loans managed	**$1,920**	**$96.2**	**$1,901**	**$72.4**
Composed of:				
Loans held in portfolio	$452	$22.6		
Loans held for sale or securitization	119	1.2		
Loans securitized	1,349	72.4		
Total loans managed	**$1,920**	**$96.2**		

1 This disclosure example is for illustrative purposes only and does not necessarily detail all information that may be required depending on specific facts and circumstances.

2 Some disclosure information has been provided on an aggregated basis rather than detailing out by product type, which may be more appropriate depending on the specific circumstances.



The following table provides information about the bank's maximum exposure to loss from continuing involvement with the sponsored SPEs.

		Maximum exposure to loss in significant unconsolidated VIEs			
		Funded exposures		Unfunded exposures	
	Total involvement with SPE assets	Debt investments	Equity investments	Funding commitments	Guarantees and derivatives
Auto	$96	$—	$18.6	$—	$—
Residential mortgage	741	30	18.8	—	—
Commercial mortgage	438	25	11.5	—	—
Credit card balances	74	—	14.2	—	—
Total	**$1,349**	**$55**	**$63.1**	**$—**	**$—**

The bank recorded net gains from securitizations of $53 million, $78 million, and $67 million during 20X3, 20X2, and 20X1, respectively. Net gains reflect: (1) the gain (loss) from new securitizations, (2) the reversal of the allowance for credit losses associated with receivables sold, and (3) the net gains on replenishing the SPE assets offset by any other-than-temporary impairments. The bank continues to perform servicing for some of these securitizations and recognized servicing assets of $12 million, $49 million, and $32 million in 20X3, 20X2, and 20X1, respectively.

The following table summarizes selected cash flow information related to securitizations for the years 20X3, 20X2, and 20X1 ($ in millions):

	20X3	20X2	20X1
Proceeds from new securitizations	$118.4	$326.8	$23.2
Proceeds from collections reinvested in revolving receivables	$90.1	$165.8	$124.5
Contractual servicing fees received	$11.8	$12.2	$12.0
Cash flows received on retained interests and other net cash flows	$6.2	$16.3	$14.2

The bank carries retained interests in the bank's sponsored securitization SPEs as trading securities carried at fair value with changes in fair value recognized in earnings. The key economic assumptions used in measuring the fair value of the bank's retained interests resulting from securitizations completed during 20X3 and 20X2 (weighted based on principal amounts securitized) were as follows [for simplicity, disclosures for 20X2 are not included]:

	Auto loans	Credit card loans	Residential mortgage loans	Commercial mortgage loans
Prepayment speed (annual rate)	1.00%	15.00%	10.00%	8.00%
Weighted-average life (in years)	1.80	0.50	7.80	6.50
Expected credit losses	1.10%–2.40%	6.10%	1.25%	1.30%
Residual cash flow discount rates	13.3%	12.2%	11.6%	10.1%
Interest rates on adjustable loans and bonds	Forward eurodollar yield curve plus contractual spread over LIBOR ranging from 30 to 80 basis points			

At December 31, 20X3, key economic assumptions and the sensitivity of the current fair value of residual cash flows to immediate 10 percent and 20 percent adverse changes in those assumptions are as follows ($ in millions):

	Auto loans	Credit card loans	Residential mortgage loans	Commercial mortgage loans
Balance sheet carrying value of retained interests-fair value	$18.60	$14.24	$48.76	$36.45
Weighted-average life (in years)	1.7	0.4	6.5	6.1
Prepayment speed assumption (annual rate)	1.3%	15.0%	11.5%	9.3%
Impact on fair value of 10% adverse change	$0.3	$0.6	$6.3	$4.6
Impact on fair value of 20% adverse change	$0.7	$1.2	$12.8	$9.0
Expected credit losses (annual rate)	3.0%	6.1%	0.9%	1.8%
Impact on fair value of 10% adverse change	$2.2	$3.3	$1.1	$1.2
Impact on fair value of 20% adverse change	$4.4	$6.5	$2.2	$3.0
Residual cash flows discount rate (annual)	14.0%	14.0%	12.0%	12.0%
Impact on fair value of 10% adverse change	$1.0	$0.1	$1.6	$1.2
Impact on fair value of 20% adverse change	$1.8	$0.1	$2.9	$2.5
Interest rates on variable and adjustable loans and bonds	Forward eurodollar yield curve plus contractual spread			
Impact on fair value of 10% adverse change	$0.8	$1.2	$1.4	$2.5
Impact on fair value of 20% adverse change	$1.5	$2.4	$2.7	$4.8

These sensitivities are hypothetical and should be used with caution. As the figures indicate, changes in fair value based on a 10 percent variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. Also, in this table, the effect of a variation in a particular assumption on the fair value of the retained interest is calculated without changing any other assumption; in reality, changes in one factor may result in changes in another (e.g., increases in market interest rates may result in lower prepayments and increased credit losses), which might magnify or counteract the sensitivities.

Illustrative disclosure—involvements with securitization SPEs[3]

The bank has various types of involvements with SPEs that hold financial assets and raise capital by issuing debt to third-party investors, which is supported by the cash flows of those financial assets. The SPEs are considered VIEs under GAAP. The bank is required to consolidate any VIEs in which the bank is deemed to be the primary beneficiary through having: (1) power over the significant activities of the entity and (2) an obligation to absorb losses or the right to receive benefits from the VIE, which are potentially significant to the VIE.

The bank is typically considered to have the power over the significant activities of those VIEs in which we act as the servicer or special servicer to the financial assets held in the VIE. The bank's servicing fees are typically not considered variable interests in the securitization SPEs; however, when the bank retains a residual interest in the SPE, either in the form of a debt note or equity interest, the bank will often have an obligation to absorb losses or the right to receive benefits that would potentially be significant to the SPE. In those instances, the bank would be identified as the primary beneficiary of the securitization SPE and required to consolidate the SPE within the bank's consolidation financial statements.

The bank is not required, and does not currently intend, to provide any additional financial support to the sponsored securitization SPEs. Investors and creditors only have recourse to the assets held by the SPE.

The following table summarizes the bank's involvements with VIEs for the years ended December 31, 20X3 and 20X2 [for simplicity, disclosures for 20X2 are not included] ($ in millions):

	Consolidated		Unconsolidated		
Variable interest entities—December 31, 20X3	**Carrying amount of assets**	**Carrying amount of liabilities**	**Principal amount of assets**	**Carrying amount of liabilities**	**Maximum exposure to loss**
Automobile securitizations	$88	$80	$—	$—	$—
Residential mortgage securitizations	645	607	328	328	6*
Commercial mortgage securitizations	432	396	212	212	4*
Credit card revolving securitizations	172	138	—	—	—
Total variable interest entities	**$1,337**	**$1,221**	**$540**	**$540**	**$10**

* The bank's maximum exposure to loss results from the recorded mortgage servicing asset related to the residential and commercial mortgage securitizations.

3 This disclosure example is for illustrative purposes only and does not necessarily detail all information that may be required depending on specific facts and circumstances.

Does IFRS have specific disclosure requirements?

Similar to GAAP, the disclosure requirements for securitization-related transactions under IFRS hit across multiple standards and have undergone enhancement as a result of the financial downturn. Historically, IFRS 7 has included all the disclosure requirements for exposures to financial instruments. In 2010, the IASB issued amendments to IFRS 7 to increase the disclosure requirements for transactions involving transfers of financial assets. These amendments were intended to provide greater transparency around risk exposures of transactions where a financial asset is transferred but the transferor retains some level of continuing exposure in the asset. The amendments also require disclosure where transfers of financial assets are not evenly distributed throughout the period (e.g., where transfers occur near the end of a reporting period). Most recently, IFRS 7 disclosure requirements were amended in 2014 by IFRS 9, which introduced new disclosures for credit losses and hedge accounting.

IFRS 7 requires specific disclosures relating to transfers of financial assets because it is considered to be important for users of financial statements to be able to evaluate the significance of such transactions and the risks retained, the nature of the risks and rewards to which the entity continues to be exposed, and the extent of its continuing involvement with the transferred asset.

The disclosures for transfers of financial assets required by IFRS 7 are by class of financial asset and can be provided either by type of financial assets (i.e., differentiating by characteristics of the assets) or by type of risks or rewards of ownership to which the entity remains exposed.

The objective of the disclosures is to help users of financial statements:

a) To understand the relationship between transferred financial assets that are not derecognized in their entirety and the associated liabilities

b) To evaluate the nature of and risks associated with the entity's continuing involvement in derecognized financial assets

Transferred financial assets that are not derecognized in their entirety

When a transferred asset is not derecognized in its entirety, the transferor is required to disclose all of the following:

a) The nature of the transferred assets

b) The nature of the risks and rewards of ownership to which the entity is exposed

c) A description of the nature of the relationship between the transferred assets and the associated liabilities, including restrictions arising from the transfer on the reporting entity's use of the transferred assets

d) When the counterparty(ies) to the associated liabilities has (have) recourse only to the transferred assets, a schedule that sets out the fair value of the transferred assets, the fair value of the associated liabilities, and the net position (the difference between the fair value of the transferred assets and the associated liabilities)

e) When the entity continues to recognize all of the transferred assets, the carrying amounts of the transferred assets and the associated liabilities

f) When the entity continues to recognize the assets to the extent of its continuing involvement, the total carrying amount of the original assets before the transfer, the carrying amount of the assets that the entity continues to recognize, and the carrying amount of the associated liabilities

Entity's continuing involvement in derecognized financial assets

If a transferred asset is derecognized and the transferor retains a continuing involvement in the transferred financial asset, IFRS 7 requires the transferor to provide extensive disclosures. A transferor has a continuing involvement in the transferred asset if, as part of the transfer, the transferor retains any of the contractual rights or obligations inherent in the transferred financial asset or obtains any new contractual rights or obligations relating to the transferred financial asset.

The transferor is required to disclose, at a minimum, for each type of continuing involvement at each reporting date:

a) The carrying amount of the assets and liabilities that are recognized in the entity's statement of financial position and represent the entity's continuing involvement in the derecognized financial assets, and the line items in which the carrying amount of those assets and liabilities are recognized

b) The fair value of the assets and liabilities that represent the entity's continuing involvement in the derecognized financial assets

c) The amount that best represents the entity's maximum exposure to loss from its continuing involvement in the derecognized financial assets, and information showing how the maximum exposure to loss is determined

d) The undiscounted cash outflows that would or may be required to repurchase derecognized financial assets (e.g., the strike price in an option agreement) or other amounts payable to the transferee in respect of the transferred assets. If the cash outflow is variable, then the amount disclosed should be based on the conditions that exist at each reporting date

For each type of continuing involvement, the transferor is also required to disclose the following:

a) The gain or loss recognized at the date of transfer of the assets.

b) Income and expenses recognized, both in the reporting period and cumulatively, from the entity's continuing involvement in the derecognized financial assets (e.g., fair value changes in derivative instruments).

c) If the total amount of proceeds from transfer activity (that qualifies for derecognition) in a reporting period is not evenly distributed throughout the reporting period (e.g., if a substantial proportion of the total amount of transfer activity takes place in the closing days of a reporting period):

   1) When the greatest transfer activity took place within that reporting period (e.g., the last five days before the end of the reporting period).

   2) The amount (e.g., related gains or losses) recognized from transfer activity in that part of the reporting period.

   3) The total amount of proceeds from transfer activity in that part of the reporting period.

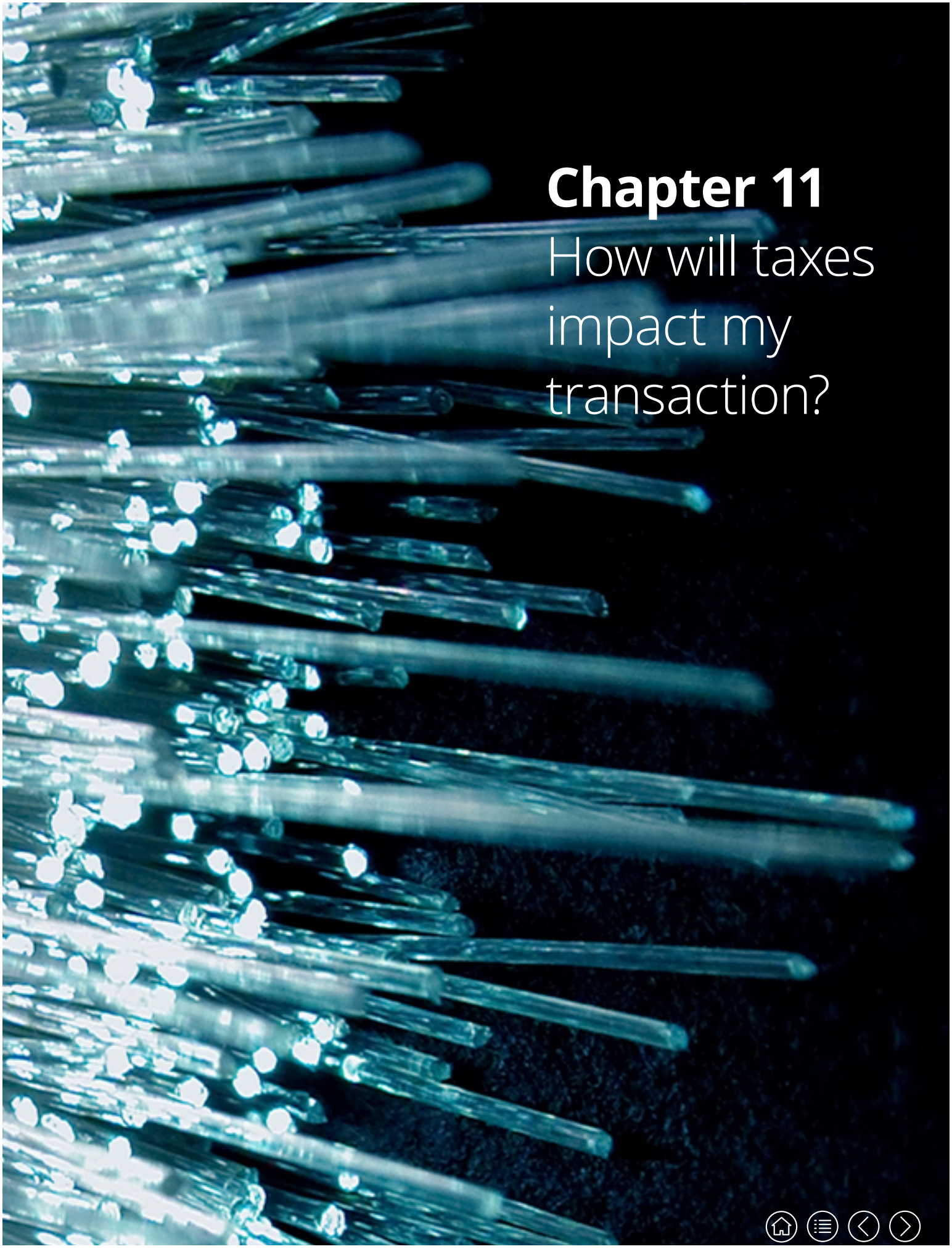
In 2011, the IASB issued IFRS 12, which requires extensive disclosures relating to an entity's interests in subsidiaries, joint arrangements, associates, and unconsolidated structured entities. An entity is required to disclose information that helps users of its financial statements evaluate the nature of and risks associated with its interests in other entities and the effects of those interests on its financial statements.

For consolidated subsidiaries, an entity that is a parent should disclose information regarding:

- The composition of the group.
- Non-controlling interests (including summarized financial information about each subsidiary with material non-controlling interests).
- Significant restrictions on the parent's ability to access or use the assets and settle the liabilities of its subsidiaries.
- The nature of, and changes in, the risks associated with interests in consolidated structured entities.
- The effects of changes in its ownership interest that did or did not result in a loss of control during the reporting period.

IFRS 12 requires extensive disclosures to help users understand the nature and extent of an entity's interests in unconsolidated structured entities and the risks associated with those interests. IFRS 12 defines a structured entity as "an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity." Examples of structured entities include securitization vehicles, asset-backed financings, and certain investment funds. The required disclosures include (among others):

- The nature, purpose, size, and activities of the structured entity.
- How the structured entity is financed.
- The carrying amounts of assets and liabilities relating to interests in unconsolidated structured entities and how they compare to the maximum exposure to loss from those interests.
- Any support provided to an unconsolidated structured entity when there is no contractual obligation to do so (including the reasons for providing such support).



Chapter 11
How will taxes impact my transaction?

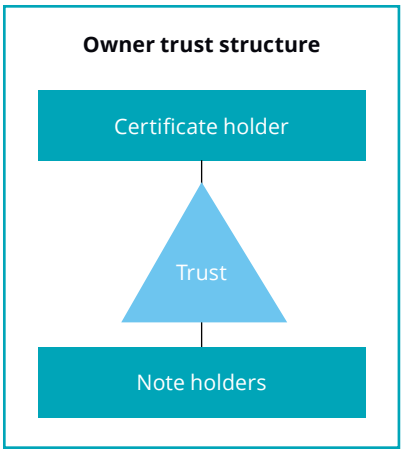
Tax Rules versus GAAP

The current US income tax rules (Tax Rules)[1] for securitization transactions can be quite different from applicable US GAAP. Understanding the tax implications of each class of ownership allows issuers and investors to properly assess the after-tax return—clearly vital to all involved. When considering taxes, it is essential to understand the timing, character, and source of taxable income or loss that may result from the transaction:

- **Timing:** Determination of the proper tax reporting period including the application of the correct tax accounting methodology, such as cash vs. accrual method, or the application of mark-to-market principles
- **Character:** Categorization of income as ordinary vs. capital, determination of any special tax rates, limitations, or other rules that may apply
- **Source:** Jurisdictional and related issues, such as where income should be subject to tax, taxation of non-US investors, ability to utilize foreign tax credits, and state and local apportionment

Of course, a key tax consideration for most issuers is whether their transaction is considered a sale or financing under the Tax Rules. The term "sale" includes a sale, exchange, or other transaction that results in a realization of gain or loss for US income tax purposes.

Taxation of a securitization structure is determined by the entity type/jurisdiction chosen and accounting methods utilized.



What is the tax impact of choosing an entity type?

From a tax perspective, the type of entity used in a securitization transaction can be an important consideration. For an issuing entity that is not otherwise a corporation[2] and does not qualify as an investment trust, a limited liability company, or a partnership, the so-called check-the-box rules provide added flexibility in determining the tax treatment of the entity. Absent an election by the taxpayer to the contrary, these rules provide that a domestic entity is considered a partnership if it has two or more members or is disregarded as an entity separate from its owner if it has a single owner.

A foreign entity is treated as a partnership if it has two or more members and at least one member does not have limited liability; an association (taxable as a corporation) if all members have limited liability; or a disregarded entity (DRE) if it has a single owner that does not have limited liability. The determination of whether an interest constitutes debt or equity for US income tax purposes is a key consideration in applying the check-the-box rules.

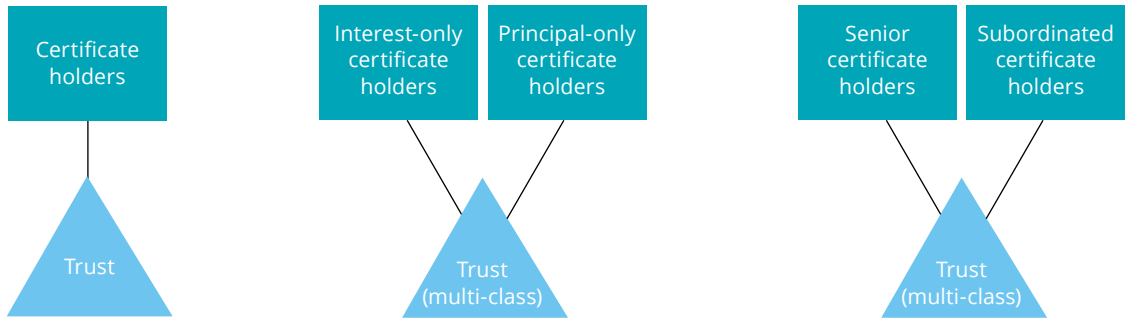
1 Unless otherwise noted, all tax-related references are to the income tax rules contained in the Internal Revenue Code of 1986, as amended, and regulations thereunder as of December 31, 2019.
2 The status of certain enumerated foreign entities as corporations is provided in Treasury Regulation Section 301.7701-2(b)(8).

Select US tax considerations for securitization transactions

Consideration	Investment trust	Other entities	Corporations	REMICs
Asset class limitations	No	No	No	Yes
Debt or equity analysis required	N/A	Yes	Yes	No
Time tranching allowed	N/A	Yes[a]	Yes[a]	Yes
Restricted ownership/transfer:[b]				
Debt	N/A	No	No	No
Equity	No	No	No	Yes
Gain or loss recognition:				
Transfer of assets to entity	No	No[c]	No[c]	No
Transfer of interests	Yes	Yes[d]	Yes[d]	Yes
Entity-level taxation	No	No[a]	Yes[c]	No
Equity holder treatment:				
Owner of assets	Yes	No[e]	No	No
Issuer of debt	Yes	No[e]	No	No
Taxable income determination	Holder level	Entity level[e]	Entity level	Entity level
Excess inclusion rules	N/A	N/A[c]	N/A[c]	Yes

a) Subject to the Taxable Mortgage Pool rules
b) Tax withholding rules should be considered
c) Special rules may apply
d) In the case of an equity interest
e) Except in the case of a disregarded entity

Investment trust structures



Investment trust structures

The use of an investment trust (sometimes called a grantor trust) can accomplish several objectives—including no entity-level taxation and exemption from withholding tax. Under the Tax Rules, an investment trust is meant to include a trust that is not a business trust and has either a single class of ownership interests representing an undivided interest or multiple classes that are incidental to facilitating direct investment in the assets of such trust. Such classes could include creation of an IO class or a senior subordinate structure, where principal and interest generally are paid pro rata, but losses are allocated to just one of the classes.

In addition, there must be no power under the trust agreement to vary the investment of the certificate holders. An example of such a "power to vary" generally would include reinvestment of amounts collected on the trust assets (e.g., principal, interest, sales proceeds)—so a revolving structure would not qualify.

Other pass-through structures

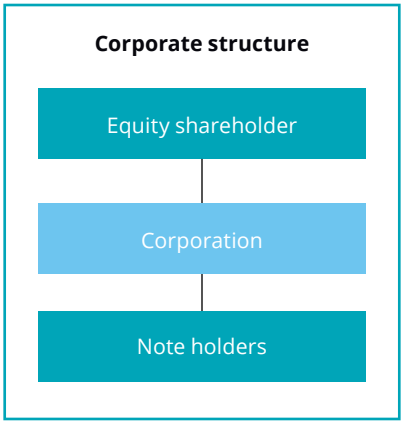
If an entity does not qualify as an investment trust, pass-through treatment may still be achieved for tax purposes by utilizing a DRE for entities with only one equity owner or a partnership for entities

with two or more equity owners. Owners of DREs are treated as if the entity did not exist—they are considered the tax owner of all of the assets and the tax issuer of any debt. When assets are first transferred to an SPE—even if the transfer might otherwise qualify as a sale under the Tax Rules—the transfer may not result in a current federal income tax liability, and the assets may obtain carryover basis for tax purposes under rules applicable to an entity classified as a DRE or a partnership.

Owners of interests in a partnership are also taxed on their share of all items of income and deduction. However, determination of each partner's share is based on a complex set of rules intended to recognize the economic arrangements between the parties. Accordingly, partnership structures may be useful when the parties have interests that are not strictly pro rata in nature. For example, the "carried interest" arrangements common in private equity partnerships are possible because of the partnership allocation rules.

Corporate structures

The imposition of entity-level tax on US corporations is one of several tax and non-tax considerations resulting in the infrequent use of these entities for securitization transactions. Foreign corporations (or similarly treated entities) that do not engage in a US trade or business are frequently the issuer in securitization transactions such as CLOs. These non-US entities are typically characterized as passive foreign investment companies (PFICs) for US tax purposes and all income is typically from passive activities (interest, dividends, etc.). Non-US entities may also be Controlled Foreign Corporations (CFCs). As a result, US investors that hold interests in a PFIC or CFC that are not characterized as debt for US income tax purposes are generally subject to special rules. In the case of a PFIC, an investor can choose to include currently its pro rata share of the PFIC's net income (but not losses) in taxable income by making a qualified electing fund (QEF) election on IRS Form 8621. If the QEF election is not made, the investor may be subject to certain interest charges. A US investor that owns 10 percent or more of the total voting power or value of an entity that is characterized as a CFC is required to currently include its pro rata share of the CFC's net income (but not losses) in taxable income.



Real estate mortgage investment conduit structures

A specific set of statutory Tax Rules provides for a specialized vehicle that can be used as the issuing entity in the securitization of mortgage loans. This vehicle is called a REMIC. While a number of requirements and special rules apply, the REMIC structure provides tax certainty regarding the treatment of debt and equity classes. A REMIC generally is not subject to an entity-level income tax because its income is taxable to the owners of the interests in the REMIC. However, REMICs are subject to a 100 percent tax on their net income from certain "prohibited transactions." REMICs have significant flexibility in structuring cash flows, unhampered by the need to consider if a class should be treated as debt or equity for tax purposes.

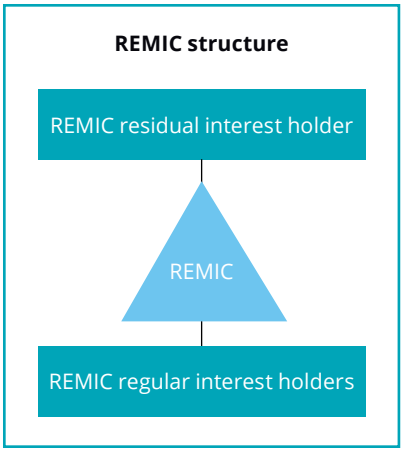
Debt issued by a REMIC, termed a "regular" interest for tax purposes, is subject to the Tax Rules applicable to all debt investments, discussed below. A REMIC is a pass-through entity for tax purposes, and therefore the holder of the tax equity interest, known as the "residual" interest and often designated as an "R" bond, is subject to tax on the net taxable income of the REMIC.

A REMIC generally is required to have a US person as the holder of its tax equity interest. While this interest represents the tax equity, the tax equity interest frequently does not have an economic interest in the cash flows. Accordingly, it is commonly referred to in the marketplace as a noneconomic residual interest (NERD). Ownership of this class may result in negative tax consequences to the holder of this interest, including recognition of phantom income and application of the excess inclusion rules outlined below. These interests are often considered to have negative economic value equal to the net present value of the tax impact of ownership. Due to the negative tax consequences associated with ownership of the NERD, it is common for sponsors of REMICs to pay an inducement fee to the original purchaser of this interest.

In exchange for the greater flexibility and certainty, REMICs are subject to fairly stringent initial and ongoing qualification requirements. In addition, the REMIC sponsor is required to recognize gain or loss upon the sale, exchange, or other taxable disposition of the REMIC's regular and residual interests. Lastly, the taxable income reportable by a REMIC residual interest holder may also be considered "excess inclusion" income. Excess inclusion income cannot be offset by losses from other business operations, net operating losses, or even losses from other REMICs. Excess inclusion income is determined quarterly and equals the excess of REMIC taxable income over an assumed investment return at 120 percent of the applicable federal rate. In the case of a NERD, the amount of excess inclusion income generally equals the taxable income of the REMIC.

Important rule

Absent a REMIC election, when time tranching is desired (i.e., a multi-class issuance with different maturities) in a mortgage securitization, the issuing entity may be characterized as a taxable mortgage pool (TMP) and become subject to an entity-level tax and additional special rules. The Tax Rules treat a TMP as a separate corporation that is subject to entity-level taxation and not includible in a consolidated tax return. Special exemptions apply for real estate investment trusts (REITs) and certain other entities, allowing REITs to issue mortgage securitizations outside of REMIC form. These "REIT securitizations" are commonly issued by commercial mortgage loan originators.



A REMIC is an entity that has:

1) A valid REMIC election;
2) Only regular interests or residual interests;
3) Only one class of residual interests (and all distributions, if any, with respect to such interests are pro rata);
4) As of the close of the third month beginning after its startup day and at all times thereafter, substantially all of its assets consist of qualified mortgages and permitted investments;
5) A calendar taxable year; and
6) Reasonable arrangements designed to ensure:
   a) Its residual interests are not held by "disqualified organizations" and
   b) Information necessary for imposition of tax on any transfer to a disqualified organization will be made available.

How does the concept of "consolidation" apply for tax purposes?

Similar to the accounting concept, consolidation may result in one or more legal entities or business operations joining together in the filing of a single report that consolidates their tax results and generally serves to eliminate the effect of intercompany transactions. Common examples include the filing of a consolidated federal income tax return or state tax filings that are made on a unitary or "combined" basis. Tax consolidation is generally a form-driven question based on ownership, legal entity form, and any check-the-box elections made, and does not have the nuance of the GAAP rules. For example, foreign corporations are not consolidated for tax purposes and may be classified as a DRE, a partnership, or a corporation.

The key takeaway here is that GAAP and the Tax Rules do not apply the concept of consolidation in a similar fashion. Also important, the answer for federal income tax purposes may not be the same for state tax purposes.

When is a securitization vehicle subject to entity-level taxation?

Because any imposition of tax on the issuer will reduce the amount of funds otherwise available to pay investors, thereby increasing the overall cost of borrowing for the transferor, a primary objective is the selection of a vehicle that will not be subject to an entity-level tax. In the absence of a REMIC election, the commonly preferred characterization would be either a partnership or a DRE, because neither is subject to a separate entity-level income tax. The check-the-box regulations contained in Treasury Regulation §301.7701-3 have made structuring to achieve either characterization a reasonably simple process for transferors. For REMICs, the tax answer is simple, regardless of the entity's legal form: a REMIC essentially is treated as a pass-through vehicle and is generally not subject to an entity-level income tax. Foreign corporations will not generally be subject to tax (other than certain withholding taxes) if they do not engage in a US trade or business. In order to reduce the risk of US taxation, foreign entities often follow certain self-imposed trading and operational restrictions determined through consultation with their tax advisers.

When is a securitization treated as a sale for tax?

Generally, the income tax results of a transaction are decided based upon its substance, rather than its form, and—importantly—a "sale" is not always required for gain or loss recognition to occur. For example, certain assumptions of liabilities by the transferee made in connection with the transfer of assets may result in gain recognition.

Typically, the determination of whether a transaction is properly characterized as a sale for tax purposes, rather than a mere pledge of the assets as security for a financing, requires an analysis of the specific facts and circumstances of the transaction. The result will depend on the answer to several questions, outlined in the "Sale or financing?" graphic that follows.

The determination of whether a transaction is considered a sale or a financing for tax purposes is often directly linked to the tax characterization of the interest(s) that are being transferred. Consequently, the "debt or equity" question can be an important consideration for both sponsors and investors.

If the transaction is characterized as the transfer of an ownership or equity interest in the assets, for tax purposes, the sponsor typically recognizes gain or loss to the extent of such transfer. It is important to note that because the sponsor generally receives cash in addition to any debt or equity interests retained, common tax non-recognition provisions for transfers to controlled entities may be limited or unavailable. If the transaction is characterized as a financing for tax purposes, the sponsor typically recognizes no gain or loss for US income tax purposes. The investor is similarly interested in the characterization, because it can be an important consideration when determining their tax reporting and withholding tax requirements.

Sale or financing?

Benefits and burdens of ownership

- Who bears the risk of loss?
- Who has the opportunity for gain?
- Who possesses power to dispose of the assets?
- Does the agreement provide for a fixed price?
- Are the payment terms of the receivables and the certificates significantly different?

Servicing arrangement

- Who controls servicing of the assets?
- Who is obligated to collect receivables?
- Who bears the cost of collection?
- Is the transferee held harmless for acts of collection agent?

Form of transaction

- Are borrowers notified of a change in receivable ownership?
- Who is liable for property, excise, sales or similar taxes?
- Does the transferor have the right to inspect the books and records of the transferee?
- Is the transferee a shell subsidiary?

How is tax gain or loss determined?

Once a transaction has been determined to result in a tax sale, the amount of gain or loss recognized generally is determined by comparing the net value received to the allocated tax basis of the interests sold—but special rules can apply to limit or disallow the deductibility of losses where related parties participate. Tax basis typically differs from GAAP carrying value for various reasons that can stem from differences in accounting methodology. For example, the allowance for loan losses, while reducing carrying value, typically would not reduce tax basis. Differences can also result from the use of lower of cost or fair value accounting for GAAP and mark-to-market (applicable to dealers in securities, including loan originator/sellers and certain traders) or non-mark-to-market for tax. Another common example is the recognition of a servicing asset for GAAP that is not recorded as an asset for tax purposes.

Special rules for REMICs

Additional rules apply to the sponsor of a REMIC. A REMIC sponsor is defined as any person who directly or indirectly transfers qualified mortgages and related assets to a REMIC in exchange for its regular and residual interests. The Tax Rules provide that no gain or loss is recognized as a result of the initial transfer of assets to a REMIC, with the sponsor's tax basis in the assets transferred to the REMIC simply being allocated among the regular and residual interests issued by the REMIC in proportion to their fair market value. Gain or loss is recognized upon the subsequent sale of the REMIC interests (including the sale of the REMIC regular interests). The amount of such gain or loss would equal the difference between the sponsor's net proceeds (i.e., proceeds received less selling expenses) and the allocated tax basis of the REMIC interest sold.

Generally, gain or loss attributable to REMIC interests that are retained by the sponsor is deferred and recognized over time. The amount of such unrecognized gain or loss is equal to the difference between the fair market value of the retained REMIC interest at the startup date of the REMIC and its allocated tax basis.

What determines whether an interest is debt or equity?

Once the securitization has been completed, the sponsor and investors must begin to report their ongoing taxable income from the related interests that they have either acquired or retained. The tax accounting will depend to some degree on whether the interest held constitutes debt or equity for tax purposes. The tax characterization of an interest ultimately depends upon the nature and degree of participation that the investor has in the activities/success of the issuing entity or the assets underlying the transaction. For example, interests issued by the securitization trust that represent a passive investment to its holder, based on a limited risk of loss, stable return, and a fixed maturity would be more consistent with debt issued in a lending arrangement than an equity interest.

Alternatively, if the interest is more closely tied to the overall performance and success of the issuing entity (or underlying assets), it suggests that the interest is more akin to an equity investment. Invariably, the tax characterization of the interest will fall somewhere along the continuum between pure debt and pure equity due to the blending of the risks, rewards, and related contingencies negotiated by the parties. Subject to much debate over the years, the Tax Rules for analyzing whether an interest represents debt or equity are the product of a variety of income tax rulings and court decisions.

Debt or equity?

The factors determining whether a security will be considered debt or equity for US federal income tax purposes include:

1) Whether there is an unconditional promise on the part of the issuer to pay a sum certain on demand;
2) Whether holders possess the right to enforce the payment of principal and interest;
3) Whether the rights of the holders of the instrument are subordinate to rights of general creditors;
4) Whether the instruments give the holders the right to participate in the management of the issuer;
5) Whether the issuer is thinly capitalized;
6) Whether there is identity between holders of the instruments and stockholder of the issuer;
7) The label placed upon the instrument by the parties; and
8) Whether the instrument is intended to be treated as debt or equity for non-tax purposes, including regulatory, rating agency, or financial accounting purposes.

How is periodic income for debt instruments determined?

The Tax Rules provide special rules for interest, discount, and premium and distinguish between debt instruments acquired at the issue date and those purchased in the secondary market. While discount or premium that results from an investor's purchase of a debt instrument in the secondary market (i.e., after the issue date) does not affect the issuer's taxable income calculation, it must be considered in determining the ongoing income of the investor. Typically investors must account for each of the following items separately, based upon the applicable Tax Rules. However, the Tax Rules provide an election that allows for all interest, discount, and premium of a debt instrument to be accounted for in aggregate.

Special rules for amortization of discount or premium are prescribed for debt instruments where principal can be accelerated due to prepayments on the underlying collateral (prepayable debt instruments [PDI securities]) or for contingent payment debt instruments (CPDI securities). Common examples of PDI securities include REMIC regular interests, other MBS and ABS, and mortgage and consumer loan pools. Examples of CPDI securities include debt instruments that provide for a payment based upon the gross receipts of the issuer or that pay based upon the fluctuations in the price of a publicly-traded stock. The mere possibility of impairment due to insolvency, default, or similar circumstances does not cause a debt instrument to provide for contingent payments. Because PDI securities are the more common type of debt instrument encountered in securitization transactions, discussion is limited to the Tax Rules that generally apply to them. Similarly, for ease of illustration, there will be no discussion of the effects of the mark-to-market method of tax accounting that generally can apply in the case of dealers in securities and electing traders in securities.

Interest

For tax purposes, interest falls into two general categories: qualified stated interest (QSI) and nonqualified stated interest (non-QSI). Generally, QSI includes all interest that is unconditionally payable at least annually (i.e., typical coupon interest from loans that may not be paid in kind). QSI is considered to be interest income for tax purposes. While standard tax accounting methods generally apply to its recognition, QSI earned with respect to a REMIC regular interest must be recognized using the accrual method, regardless of the general tax accounting method of the holder. All payments other than QSI and principal are non-QSI payments and typically are accounted for as part of original issue discount (OID).

Original issue discount

Subject to certain de minimis rules, a debt instrument with an issue price that is less than its stated redemption price (SRP) at maturity is generally considered to have OID. The SRP of a debt instrument equals the sum of all payments expected to be made with respect to the debt instrument other than QSI (i.e., the sum of principal and non-QSI payments).

OID accrues and is recognized currently based upon the debt instrument's yield to maturity (the tax yield). There are two methods that can apply for purposes of determining the amount to be accrued. The standard method IRC 1272(a)(3) applies to debt instruments that are not CPDI and not otherwise subject to the prepayment assumption catch-up (PAC) method IRC 1272(a)(6). Note: The PAC method was used to amortize discount and premium in the simplified tax example below.

The methods differ both in their determination of tax yield and in the amount of OID that must be recognized each period. Under the PAC method, the determination of tax yield allows for the use of a prepayment assumption (the tax prepayment assumption) while the standard method does not. Regardless of the method employed, the Tax Rules do not allow a loss assumption to be used when determining the tax yield. See further discussion of tax loss below.

In addition, the legislative history to the PAC method clarifies that a negative OID accrual is not permitted. Instead, the amount of OID is treated as zero for the period, and the computation of OID for the next period would be made as though that period and the preceding period were a single period (i.e., OID would not be accrued until the cumulative result produces a positive amount).

Premium

There are two types of premium under the Tax Rules: (1) market premium and (2) acquisition premium. Market premium occurs when a debt instrument is acquired at a price that is greater than its SRP. If the debt instrument was issued with OID, only the market premium is accounted for by the holder, because the holder is not required to account for the OID. While holders are not required to amortize market premium for taxable debt instruments, they may elect to amortize it based upon the debt instrument's yield to maturity (i.e., its tax yield). In the case of debt instruments that are subject to the PAC method, the legislative history suggests that holders may apply rules for amortizing premium similar to those provided for the accrual of market discount (discussed below).

Debt instruments subject to the PAC method

1) Any regular interest in a REMIC or qualified mortgage held by a REMIC;
2) Any other debt instrument if payments under such debt instrument may be accelerated by reason of prepayments of other obligations securing such debt instrument (or, to the extent provided in regulations, by reason of other events); or
3) Any pool of debt instruments, the yield on which may be affected by reason of prepayments (or to the extent provided in regulations, by reason of other events).

Note: The referenced regulations have not yet been issued.

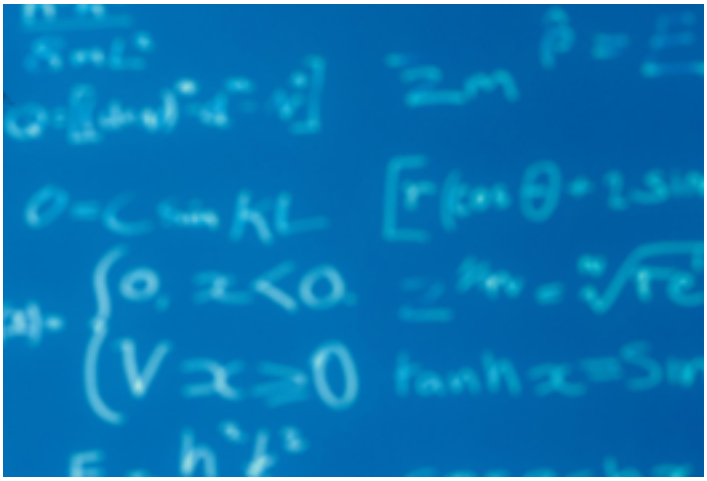
Acquisition premium occurs when a debt instrument is purchased at a premium to its adjusted issue price (AIP), but at a price that is less than its SRP. The AIP is the issue price of the debt instrument increased for previous accruals of OID and decreased for payments of principal and non-QSI. In this case, the holder must continue to account for OID from the debt instrument. The amortization of acquisition premium is mandatory, and the amount amortized each period equals the product of the OID accrual for the period and the fixed ratio of acquisition premium to the OID remaining at the holder's date of acquisition.

Market discount

A debt instrument has market discount when it is acquired subsequent to its date of issuance for a price that is less than its SRP (or, in the case of a debt instrument issued with OID, for a price less than its AIP). Market discount is very important to many investors, as these rules serve to recharacterize all or part of the holders' gain to ordinary income that is not eligible for the beneficial capital gains rates. In short, the Tax Rules require that any gain upon sale is ordinary income to the extent of market discount accrued prior to the sale date. Additionally, any payments on the instrument are recognized as ordinary income to the extent of market discount accrued prior to the payment date. Alternatively, holders may elect to recognize market discount as it accrues, which may be beneficial to holders seeking to increase taxable income or decrease differences between amounts calculated pursuant to GAAP and those determined under the Tax Rules.

The default calculation of market discount is ratable amortization over the period between the purchase date and maturity date, based upon the number of days held during the period. Alternatively, the holder can elect to accrue market discount based upon a constant interest rate determined in a manner similar to the standard method used for calculating the tax yield. It should be noted that the constant yield method would generally result in a more beneficial calculation for taxpayers seeking to limit market discount amortization.

For debt instruments that provide for two or more principal payments, a special rule applies that requires market discount to be accrued based upon a method provided in regulations. Although these regulations have not yet been issued at publication date of this book, the legislative history for the rule provides that a holder may not use the ratable method for these instruments. The history provides that a holder may accrue market discount based upon either a constant interest method or an applicable ratio method, the



market discount accrual ratio (MDAR). The MDAR that applies will vary depending upon whether the debt instrument was issued with OID. The stated interest ratio method applies to debt instruments issued without OID, and the OID ratio method applies to debt instruments issued with OID.

The amount of a holder's deductible net direct interest expense may be limited where market discount has accrued but has not been recognized.

The Treasury Department issued Proposed Regulations in September 2019[3] that provide that accrued market discount does not fall under IRC Section 451(b), added by the Tax Cuts and Jobs Act of 2017. As such, rules for the timing of market discount accretion are unchanged.

Tax accounting methods

Constant interest methods for accrual of OID

- IRC 1272(a)(3) – The standard method [a x b – c]
  The amount of OID accrued generally equals the product of (a) the debt instruments AIP at the beginning of the period and (b) the tax yield of the debt instrument less (c) the amount of QSI for the period.
- IRC 1272(a)(6) – The PAC method [a + b - c]
  The amount of OID accrued generally equals the sum of (a) the present value of cash flows remaining at the end of the period (based upon the tax prepayment assumption) and (b) any principal and non-QSI payments during the period less (c) the debt instrument's AIP at the beginning of the period.

The market discount accrual ratio method [a x b]

The amount of market discount accrual equals the product of (a) the MDAR for the period and (b) the amount of market discount remaining (i.e., not previously accrued) at the beginning of the accrual period. Use tax prepayment for instruments that would have been subject to the PAC method if issued with OID. The MDAR that applies will vary depending upon whether the debt instrument was issued with OID. The stated interest ratio applies to debt instruments issued without OID, and the OID ratio applies to debt instruments issued with OID.

Market discount accrual ratios [a/b]

- Stated interest ratio equals (a) the interest (other than OID) for the accrual period divided by (b) the sum of such interest and the interest (other than OID) remaining at the end of the period, using the tax prepayment assumption for instruments that would have been subject to the PAC method if issued with OID.
- OID ratio equals (a) the OID for the accrual period divided by (b) the total OID remaining at the beginning of the period using the tax prepayment assumption for instruments that would have been subject to the PAC method if issued with OID.

Acquisition premium [a x b]

The amount of amortization equals the product of (a) the OID accrual for the period and (b) the fixed ration of acquisition premium to the OID remaining at the holder's date of acquisition.

3 Proposed Treasury Regulation Section 1.451-3, REG-104870-18.

An investor example

Assume Much Pursued Investment Fund (MPIF) purchased $100,000 par of REMIC regular interest Class O for a price of 65 on the first day of the January accrual period. The Class O has OID and no QSI, and has made no principal or interest payments since Investor's purchase. At the end of the quarter, MPIF contacted the REMIC and obtained a statement containing the following information for the calendar quarter:

Period	QSI	OID	Beginning AIP	MDAR
January 2019	$0	$2,000	$80,000	0.10000
February 2019	0	5,000	82,000	0.27778
March 2019	0	3,200	87,000	0.24615

Based upon this information, MPIF determined that its taxable income for the calendar quarter was as follows:

Period	Market Discount	MDAR	Market Discount Accrued
January 2019	$15,000	0.10000	$1,500
February 2019	13,500	0.27778	3,750
March 2019	9,750	0.24615	2,400

However, because no principal payments have been made during the accrual periods, if MPIF has not otherwise elected to currently recognize market discount, the total amount of income to be reported by MPIF for the first calendar quarter would be $10,200—the amount of OID.

Note: The Issuer-provided information shown is based upon Investor's specific facts for ease of illustration only; actual information provided by the Issuer is typically on a "per unit of original face amount" or similar basis.

How are MSRs treated for tax purposes?

MSRs are assets that can represent two different types of instruments for tax purposes. "Normal" servicing is the right to reasonable compensation for the services to be performed. "Excess" servicing is the right to receive any amounts greater than the normal amount. There is no specific guidance available with respect to the numeric amounts that should be considered normal vs. excess, though an election is available under which a safe harbor may be utilized for one- to four-unit residential loans.

Amounts paid by a servicer for normal servicing are amortized for tax purposes over either nine or 15 years, depending on the circumstance. Amounts paid for excess servicing are treated as paid for an IO strip off the mortgage itself. Accordingly, income from excess MSRs must be recognized as OID income related to an IO strip and requires calculations on the PAC method. Additionally, because excess MSRs are considered to be IO interests in the mortgages, they are qualified assets for REITs.

What is the tax accounting that applies to interests that are classified as equity for tax purposes?

For owners of investment trusts and similarly DREs, the determination of taxable income or loss is made at the investor level. For other entities, the determination of taxable income or loss is made at the entity level. In each case, the rules described above for determining the ongoing income (and expense) from debt instruments continue to apply.

Why is taxable income to the interest holders sometimes more than the cash they received?

Taxable income greater than cash distributions to equity holders is sometimes referred to as "phantom" income. Phantom income can result from differences that exist between the weighted average yield on the debt instruments held by the issuing entity and the weighted average yield on the debt instruments issued by the entity. For example, in a traditional sequential pay structure, if the yield curve is upward sloping on the date of the securitization, the issued debt will have different yields. Specifically, the shorter-term issued debt will have lower yields than the longer-term issued debt. In contrast, the yield on the assets held by the issuing entity will be a fixed, medium-term yield. The weighted average yield (and, therefore, interest/OID expense) on the issued debt will increase over time as the lower yielding classes are retired. This effect creates net taxable income in early periods (phantom income) and net deductions in later periods (phantom deductions).

Phantom income can also result from structural features that result in the utilization of cash for purposes other than distribution to the equity holders. For example, in CLO structures, it is common for

cash from sales of assets to be reinvested in additional assets during the reinvestment period. Any net gain, market discount or OID associated with these positions therefore creates phantom income to the equity investors during this period.

Finally, phantom income can result from straightforward differences between tax accounting methods and cash distributions. For example, accruals of OID will result in taxable income without receipt of corresponding cash amounts. Additionally, taxable items must be reported on an accrual method, while securitization entities make distributions only on specific payment dates.

Example: CLO equity

Investor owns 40 percent of the preference shares of RCLO, Ltd. (RCLO), a Cayman CLO that is in its reinvestment period. Investor has been informed that RCLO is not a CFC. Investor receives a PFIC annual information statement informing him that the earnings and profits (E&P) of RCLO are $4,125,000. Investor received cash distributions of only $1,000,000 from RCLO during the taxable year. Upon inquiry, Investor learns from the collateral manager and RCLO's tax adviser that the E&P of RCLO is calculated as follows:

Interest income	$12,500,000
OID	250,000
Market discount	587,500
Gain on sale of loans	787,500
Interest expense	(8,750,000)
Management/admin expenses	(1,250,000)
E&P	$4,125,000

If Investor makes or has made a QEF election with respect to RCLO, it will report $1,650,000 of taxable income (40 percent of $4,125,000) with respect to its ownership in RCLO. Its tax basis in RCLO will be increased by this amount and decreased by the cash distributions that it received during the taxable year.

When are losses taken into account for tax purposes?

Generally speaking, the effect of less-than-desirable credit performance may only be taken into account for tax purposes once it can be demonstrated that an actual credit event has occurred. Moreover, the Tax Rules do not permit the use of a loss assumption when projecting the cash flows to be used in determining the tax yield of a debt instrument. Consequently, while a reserve established based upon the general expectation that credit losses will occur in the future is not deductible for tax purposes, the specific write-off of a debt instrument due to a credit loss may result in a properly deductible tax expense (see below).

Non-accrual of interest

The Tax Rules require that interest income continues to be accrued to the point it is no longer collectible. In those circumstances where interest has been properly accrued and is subsequently determined to be uncollectible, the holder may not reverse the accrual but may record a bad debt expense or loss deduction (see below). If, however, it can be demonstrated that the interest income is "uncollectible" at the date it otherwise would be accrued, then the accrual of interest is not required. For this purpose, interest would be considered "uncollectible" where, based upon the surrounding facts and circumstances, no reasonable expectation exists at the time of accrual that the interest will be collected.

Bad debt expense

Typically, a holder is entitled to a deduction for bad debt expense when there is clear evidence that a debt instrument it owns has become wholly or partially worthless. In the case of a deduction for partial worthlessness, the holder must be able to demonstrate that the debt instrument was "charged off" on the holder's books and records during the same tax year as the deduction is taken. Special rules can apply to require the recognition of gain or loss upon foreclosure of a loan to the extent that the fair market value of property acquired in foreclosure differs from the holder's tax basis in the loan. In addition, a modification to the terms of a debt instrument that is considered to be "significant" under the Tax Rules can result in the recognition of taxable gain or loss.

The ability to deduct bad debt expense does not apply to certain debt instruments considered a "security" for this purpose, such as debt issued by a corporation in registered form. Also, noncorporate holders are entitled to an ordinary deduction only if the debt

instrument was created or acquired in connection with the holder's trade or business. The inability to meet this requirement would cause such a loss to be available only at the time of complete worthlessness, and to be characterized as a short-term capital loss.

Worthless securities

In the case of a security that is a capital asset in the hands of the investor and becomes worthless during the taxable year (i.e., if the investor does not otherwise qualify for a bad debt expense), the loss is treated as resulting from the sale or exchange of a capital asset on the last day of the same taxable year. The term "security" includes a share of stock in a corporation; a right to subscribe for, or to receive, a share of stock in a corporation; or a bond, debenture, note, or certificate, or other evidence of indebtedness, issued by a corporation or by a government or political subdivision thereof, with interest coupons or in registered form.

Effect of the Tax Cuts and Jobs Act of 2017 (2017 Tax Act)

Global intangible low-taxed income (GILTI)

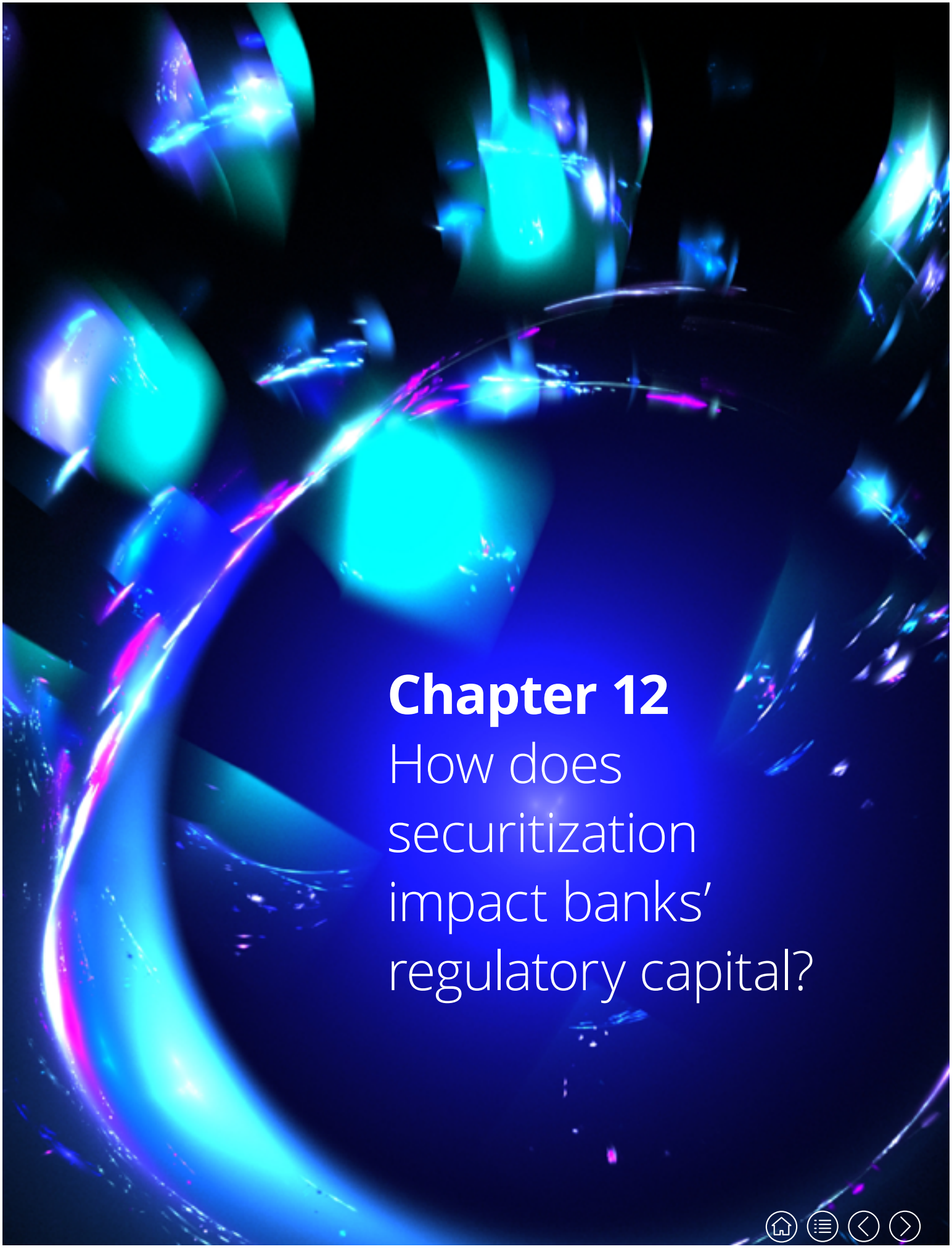
Foreign securitization entities are often domiciled in low-tax jurisdictions, such as the Cayman Islands, so there may be concern that these entities or their shareholders would be subject to an additional tax under the GILTI rules. The starting point for the GILTI calculation is an aggregate of a shareholder's "net CFC tested income" from its CFCs. An item that is specifically excluded from the net CFC tested income is gross income taken into account in determining the corporations' subpart F income (passive income items such as interests, dividends, rents, royalties, or gain from the sale of the assets giving rise to this income). These make up most, if not all, of the income for securitizations. As such, securitizations generally do not have additional tax due to the GILTI regime. However, for a securitization entity structured as a foreign corporation that does generate a portion of its income from non-passive activities, the holders of interest treated as equity could be subject to the additional tax.

Limitations on deductibility of interest expense (IRC Section 163(j))

The 2017 Tax Act added Section 163(j) (163(j)) to the Tax Rules, which potentially limits a taxpayer's ability to deduct the full amount of its interest expense. Under 163(j), business interest expense is generally limited to the amount of one's business interest income plus 30 percent of its adjusted taxable income. The limitation is complex and applies differently to different entity types. Interest expense attributable to a securitization transaction may be included in the 163(j) calculations of the owner of interests treated as equity, as described above. It is important to remember that many securitization vehicles hold interest-income-generating assets, therefore frequently the interest income generated by a securitization vehicle will exceed the interest expense of the vehicle. For transactions holding non-interest-income-generating assets, such as those securitizing lease income, 163(j) will likely become a significant planning concern.

Non-deductible expenses

The 2017 Tax Act suspends deductions for individuals for miscellaneous itemized deductions that exceed 2 percent of an individual's adjusted gross income. These deductions were previously allowable under IRC Section 212. Within a securitization, examples of these expenses are management fees, servicing fees, and other administrative fees. These previously could have been the largest deduction of a securitization partnership, aside from interest expense. Individuals holding interests treated as equity in flow-through entities, such as partnerships or grantor trusts, should consider the impact of this provision.



Chapter 12
How does securitization impact banks' regulatory capital?

The changed regulatory capital landscape

The last several years have yielded a new banking regulatory landscape as supervisory agencies globally have focused on strengthening the financial system. Large financial institutions (especially those deemed "too big to fail") have seen significant changes in regulatory requirements due to an increased focus on the systemic risk posed by globally interconnected firms. Banks both in the United States and abroad have been focused on implementing and fine-tuning regulatory compliance solutions to meet the new wave of regulations, which continues to evolve.

US regulators passed new risk-based capital regulations (commonly referred to as Basel III), introduced new methodologies for charging deposit insurance premiums, overhauled derivatives regulation, curtailed banking activities considered proprietary trading, and created new rules intended to limit banks' relationships with hedge funds and private equity funds. Rules have also been finalized requiring securitizers to retain "skin in the game" by retaining a portion of their securitizations.

All these regulations, directly and indirectly, affect the securitization market, changing the responsibilities of securitizers and impacting investors' yield demands. In trying to determine whether a securitization is economical for a bank, it is necessary to review US Basel III capital and related regulations and their impact on a bank's appetite for issuing or investing in structured finance securities.

Basel III restructured the current regulatory capital rules (Basel I and Basel II) into a harmonized, comprehensive framework that is applicable to all banks:[1]

- Replacing the Basel I risk-weighting standards with the new Standardized Approach.[2]
- Updating the Basel II risk-weighting standards with the new Advanced Approaches.[3]
- Introducing a new methodology to calculate the amount of regulatory capital (i.e., the numerator in the capital ratio), and the applicable minimum capital thresholds and buffers common to both Basel III Standardized and Advanced Approaches.
- Revising the market risk rule.[4]
- Adding new leverage and liquidity requirements.

Basel III had a very aggressive implementation timeline. Advanced Approach banks were required to comply beginning in January 2014; all other banks needed to comply with the Standardized Approach beginning in January 2015. However, in both cases, the transition period from Basel II to Basel III extended through the end of 2018.

Before proceeding further, some explanations are in order to provide context on the basic construct of the Basel regulations, which is as follows:

$$\frac{\text{Regulatory capital}}{\text{Risk weighted assets}} \geq \text{Minimum capital ratios}$$

Regulatory capital

- Basel III strengthens the quality and quantity of regulatory capital by introducing the Common Equity Tier 1 (CET1) category, making the eligibility criteria stricter for Tier 1 and Tier 2 capital, and eliminating a Tier 3 category.

Risk-weighted assets (RWA)

- Under Basel I and under the Basel III Standardized Approach, RWA for credit risk is generally derived by applying fixed risk-weight (RW) factors, based on borrower/exposure characteristics; also fixed credit conversion factors (CCF) are applied to off-balance-sheet exposures to obtain the exposure amount.
- Under Basel II and the Basel III Advanced Approaches, banks use internal models to calculate RWA for credit risk for the majority of wholesale and retail exposures, while requiring fixed RW factors for other types of exposures (e.g., equity and unsettled trades). Banks also use internal estimates for CCF factors for most types of off-balance-sheet exposures.
- Additionally, Market Risk banks have to calculate RWA for market risk for their eligible trading book assets, and Advanced Approach banks have to calculate RWA for operational risk.

Minimum required capital ratios[5]

- Under Basel I and Basel II, regulatory capital ratios were 4 percent for Tier 1 capital and 8 percent for total capital. Basel III introduces the new CET1 threshold of 4.5 percent, increases the current Tier 1 threshold to 6 percent, and keeps the total capital ratio at 8 percent.

1 Bank generally includes depository institutions (DI), bank holding companies (BHC), savings and loan holding companies (SLHC) (except those that are substantially engaged in insurance or commercial activities), and also non-bank financial companies (covered non-bank) designated by the Financial Stability Oversight Council (FSOC).
2 Basel III Standardized Approach banks include all banks, except BHC < $500 million, that are not Advanced Approach banks.
3 Basel III Advanced Approach banks are BHC or SLHC, and their consolidated DIs, with > $250 billion in total assets or $10 billion in foreign exposure (excluding insurance subsidiaries), covered non-banks, and opt-in banks.
4 Basel III Market Risk banks include those with significant trading activity (i.e., trading portfolio > $1 billion, or 10 percent of total assets).
5 Regulatory capital ratios are defined as a percentage of RWA. Given minimum capital requirement of 8 percent of RWA, 100 percent RWA is equivalent to 8 percent capital (i.e., 1,250 percent RWA is broadly equivalent to capital deduction, or 100 percent capital).

- Under Basel III, as per Section 171 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (commonly known as the Collins Amendment) the Standardized Approach acts as a capital floor for the Advanced Approaches, which means that Advanced Approach banks need to calculate capital under both the Standardized and Advanced Approaches.
- Basel III additionally defines various capital buffers (e.g., conservation buffer, countercyclical buffer, etc.) over and above the minimum ratios and increases the capital ratios required as per prompt corrective action regulations.
- Systemically important financial institutions (SIFIs) have to maintain additional capital buffers. In addition, US regulators have finalized rules that require large banks to maintain sufficient long-term debt and capital to meet the total loss-absorbing capacity (TLAC) requirement that went into effect January 2019.

The following is a summary of the evolution of regulatory capital treatment for securitization across the Basel I, II, and III standards. The Basel III framework and definitions are covered in more detail later in the chapter.

Basel I

When Basel I was implemented in 1988, it did not have any securitization-specific provisions, but as the market grew, US regulators incorporated securitization-specific rules[6] in 2001.

- For issuers, securitized assets were generally treated as off-balance sheet and attracted no minimum capital requirements.
- For the credit risk calculation in the banking book, securitization exposures retained or invested in attracted 20 percent to 200 percent RWs based on external ratings (or internal ratings under certain conditions) or a Gross-up Approach.
- Basel I also included a low-level exposure rule, which limited capital requirements to the maximum contractual exposure. Exposures subject to the low-level recourse rule, and residual interests ineligible for the ratings-based approach (RBA), attracted approximately 1,250 percent RW.
- Credit-enhancing interest-only (CEIO) strips in excess of 25 percent of Tier 1 capital were deducted from Tier 1 capital.
- For the market risk calculation of positions in the trading book, if applicable, securitizations were generally treated like debt instruments.

Basel II

Basel II came into effect in 2007 in the United States and aimed for greater risk sensitivity and alignment of capital requirements with the underlying risk of an exposure.

- It introduced a broader definition of securitization exposures and a new hierarchy of approaches comprising RBA, internal assessment approach (IAA), supervisory formula approach (SFA), and deduction.
- Certain positions (e.g., CEIO strips, residual interests, etc.) continued to be deducted from capital. These changes resulted in risk-weight estimates ranging from 7 percent to 1,250 percent.
- Also, certain changes to US GAAP, in particular, Statement of FAS 166 and FAS 167, disallowed off-balance-sheet treatment for certain securitized assets.
- These changes all focused on the banking book; the market risk rules did not change.

Basel III

As it relates to securitization, Basel III introduces a number of key changes. These include:

- Retaining the Basel II definition of securitization, with certain incremental changes.
- Revising the hierarchy of approaches by removing references to external ratings (i.e., the RBA and the IAA), retaining SFA for Advanced Approach banks, and introducing a new methodology called simplified SFA (SSFA). It also raises the Basel II risk-weighting floor from 7 percent to 20 percent for the most senior securitization positions; increases the risk-based capital requirements for most other classes in a securitization; and introduces rigorous due diligence requirements for all securitization exposures.
- Changing the exposure calculation methodology.
- Prescribing more punitive treatment for re-securitizations.
- Changing the market risk rules to extend the banking book credit risk treatment (i.e., SSFA and SFA) for calculation of the specific risk component for securitization positions.
- Defining treatment of securitization exposures for leverage and liquidity ratios.

6 Risk-Based Capital Guidelines; Capital Adequacy Guidelines; Capital Maintenance: Capital Treatment of Recourse, Direct Credit Substitutes and Residual Interests in Asset Securitizations; Final Rules, November 29, 2001.

Basel III impacts securitization transactions in multiple ways

Overall, Basel III increases the regulatory capital for most securitization exposures, and introduces new due diligence requirements a bank must perform if it wishes to invest in securitizations.

Definition of securitization exposures

The broad regulatory definition of traditional securitizations,[7] introduced in Basel II and retained in Basel III with some modifications, is based on a set of criteria, including:

1) All or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties other than through the use of credit derivatives or guarantees.
2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority.
3) Performance of the securitization exposures depends upon the performance of the underlying exposures.
4) All or substantially all of the underlying exposures are financial exposures.
5) The underlying exposures are not owned by an operating company.
6) Regulators may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance-sheet exposures is not a traditional securitization based on the transaction's leverage, risk profile, or economic substance.

This broad regulatory definition also excludes structures where the underlying assets are held by a small business investment company, a firm investment that qualifies as a community development investment, an investment fund, a collective investment fund, an employee benefit fund, a company registered with the SEC under the Investment Company Act of 1940, or foreign equivalents thereof.

The boundary between what is and what is not a securitization exposure for regulatory capital purposes can be challenging to determine in some circumstances (a determination that must be done based on economic substance, rather than strict legal form). Similarly, supervisors retain the power to expand the scope of the securitization definition to include any transaction if it is supported by the economics of the transaction.

> Adding to the misalignment, securitization exposures may be reported under loans (e.g., loans to SPEs and servicer cash advances), debt securities (e.g., tranches of ABS, RMBS, and CMBS), equity (e.g., investments in hedge funds), other assets (e.g., CEIOs, and accrued interest and fees), trading assets (e.g., derivatives with SPEs), and off-balance-sheet items (e.g., synthetic securitizations and liquidity facilities).

This determination is further complicated by the fact that the broad regulatory definition may deviate from generally employed industry conventions. The primary regulatory determinant of securitization exposures is tranching of credit risk exposure arising out of a pool of underlying assets (i.e., non-pro rata or non-pass-through). For example, the regulatory definition excludes certain securitization-type structures involving nonfinancial assets (e.g., physical real estate or commodities) or recourse (e.g., covered bonds). It also includes exposures to non-operating companies (e.g., hedge funds) that are commonly not viewed in the industry as securitizations. Exposures to non-operating companies has been a source of major industry feedback, and regulators have issued additional guidance[8] that provides clarity on how regulatory approval may be granted to exposures to investment firms that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance-sheet exposures.

Operational criteria for originated securitizations

In addition to the securitization definition requirements, Basel III continues to require originating banks to satisfy the following four additional operational criteria to apply securitization treatment:

1) The exposures are not reported on the bank's consolidated balance sheet under GAAP.
2) The bank has transferred to one or more third parties' credit risk associated with the underlying exposures.
3) Any cleanup calls relating to the securitization are eligible cleanup calls defined under Basel III.
4) The securitization does not: (a) include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit, and (b) contain an early amortization provision.

Failure to meet these four operational criteria will require a bank to hold regulatory capital on all the underlying assets of the originated transaction as if they had not been securitized.[9]

7 Synthetic securitizations definition is largely similar, except that tranching of credit risk occurs through the use of credit derivatives and/or guarantees instead of through the sale of assets. It also has specific operational criteria.
8 Federal Reserve Basel Coordination Committee (BCC) Bulletin 13-2: Excluding Exposures to Investment Firms from the Definition of "Traditional Securitization."
9 The criteria shown are for traditional securitizations; this differs for synthetic.

Criterion 4 was new under Basel III and applicable to many securitizations of revolving credit facilities (e.g., credit card receivables) containing provisions that require the securitization be wound down and investors repaid if the excess spread falls below a certain threshold. An early amortization event can increase a bank's capital needs if new draws on the revolving credit facilities need to be financed by the bank using on-balance-sheet sources of funding.

Thus, given the consolidation rules under ASC 810, the operational criteria, and other factors like implicit support, many securitization structures are being consolidated. The fact that a bank may have to hold more capital for a securitization than for the underlying loan pool means consolidation may lead to a more capital-efficient outcome in some cases.

All of the above complexities, along with misalignments between industry terminology and regulatory definitions of securitizations, make proper asset classification quite challenging in the regulatory capital calculation process.

Hierarchy of methodologies for securitization risk-based capital

Securitization exposures are subject to a hierarchy of approaches for determining regulatory capital. As noted, the hierarchy of approaches has changed under Basel III, including the elimination of the RBA available under Basel I and Basel II, as required by Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and the introduction of SSFA. Under the Advanced Approaches, Basel III also retains the SFA that was available under Basel II, and for the Standardized Approach (for non-Market Risk banks), retains the Gross-up Approach defined under Basel I.

SFA

Basel III retained the SFA available under Basel II with certain modifications. It is only available to Advanced Approach banks and must be applied unless data is not available, in which case SSFA may be applied. However, supervisors expect banks to use the SFA rather than the SSFA in all instances where data to calculate the SFA is available.

SFA capital is based on the capital estimate of the underlying pool of assets as if held directly on the balance sheet, adjusted for the degree of subordination (i.e., loss absorbance by junior tranches) of a given tranche.

The SFA requires level seven pool- and tranche-level parameters:

Tranche-level parameters	
L	Credit enhancement level of the securitization exposure within the tranche structure
T	Thickness of the securitization exposure within the tranche structure
TP	Tranche percentage of the securitization exposure the bank owns
Pool-level parameters	
UE	Amount of the underlying exposures within the pool
Kirb	Capital requirement of the underlying pool based on the Advanced Approaches • This requires transaction data of the underlying pool of loans, and also development of risk models to generate the risk parameters (i.e., probability of default and loss-given default)
EWALGD	Exposure-weighted average loss given default of the underlying pool
N	Effective number of exposures in the underlying pool

Based on the above inputs, SFA uses a supervisory prescribed formula to calculate the capital requirement. It results in 1,250 percent RW for portions of the tranche with subordination level below the Kirb threshold (similar to the Low Level Exposure Rule under Basel I) and applies progressively lesser capital to more senior tranches above the Kirb threshold, subject to a 20 percent RW floor. The SFA formula is unchanged from Basel II, except to reflect that Basel II required deduction for exposures below the Kirb threshold, and the RW floor was 7 percent.

Interestingly, SFA, as it requires the Kirb calculation of the underlying pool of assets, is not eligible for transactions with any non-internal-ratings-based underlying assets (i.e., not a wholesale, retail, equity, or securitization exposure as defined under Basel III). While under Basel II such transactions required deduction, they will now be eligible for SSFA instead.

The implementation of SFA includes several hurdles associated with obtaining the transaction data for underlying pools and developing risk models. Supervisors have issued guidance[10] to provide flexibility in the Kirb calculation to circumvent data and modeling challenges.

[10] Federal Reserve BCC Bulletin 13-7: Implementing the Supervisory Formula Approach for Securitization Exposures and Federal Reserve BCC Bulletin 15-1: Supervisory Guidance for Implementation of the Simplified Supervisory Formula Approach for Securitization Exposures under the Advanced Approaches Risk-Based Capital Rule.

SSFA
The SSFA is newly introduced in Basel III and is available under both the Standardized and Advanced Approaches. Under Advanced Approaches, SSFA is allowed only if SFA is not possible, while under Standardized Approaches, SSFA is the primary option, especially for Market Risk banks. Additionally, as per the Collins Amendment, Advanced Approach banks, if applying SFA for any transaction, will still need to calculate capital based on SSFA for that transaction for Standardized Approach capital floor calculation.

As the name indicates, SSFA uses a similar approach to SFA and is also based on the capital estimate of the underlying pool of assets as if held directly on the balance sheet, adjusted for the degree of subordination (i.e., loss absorbance by junior tranches) of a given tranche. It requires five pool-level and tranche-level parameters.

Tranche-level parameters	
A	Attachment point of securitization exposure within the tranche structure
D	Detachment point of securitization exposure within the tranche structure
Pool-level parameters	
K_G	Weighted average total capital requirement of the underlying pool based on the Standardized Approach
W	Ratio of delinquent exposures in the underlying pool
P	Supervisory calibration parameter (0.5 for securitizations and 1.5 for re-securitizations)

Similar to SFA, SSFA also results in 1,250 percent RW for portions of the tranche with a subordination level below the K_G threshold, and applies progressively lesser capital to more senior tranches above the K_G threshold, subject to the RW floor of 20 percent.

Gross-up approach
Non–Market Risk Standardized Approach banks also have the option of using the Gross-up Approach, instead of the SSFA, as long as it is applied across all securitization exposures. The Gross-up Approach, similar to Basel I, is also based on the subordination of the tranche and the RW applicable to the underlying pool of assets. It requires four inputs:

- Exposure amount
- Pro rata share (similar to tranche percentage in SFA)
- Enhanced amount: par value of all other senior tranches
- Average RW of the underlying pool of assets, as per the Basel III Standardized Approach (similar to K_G)

The final RWA is calculated by applying the average RW to the sum of the exposure amount plus pro rata share times the enhanced amount, subject to a RW floor of 20 percent.

1,250 percent RW
Securitization exposures to which none of these approaches can be applied must be assigned a 1,250 percent RW (i.e., 100 percent capital charge).

Exceptions and alternatives for specific exposure types

Gain-on-sale
This refers to an increase in equity capital resulting from a traditional securitization, other than an increase in equity capital resulting from the bank's receipt of cash in connection with the securitization or reporting of a mortgage servicing asset (MSA).

While Basel III retains the Basel I and Basel II approach of deduction for any after-tax gain-on-sales, the deduction is applied to CET1 instead of Tier 1, and also amends the definition to exclude MSA.

CEIO
This is an on-balance-sheet asset that in form or in substance: (1) represents a contractual right to receive some or all of the interest and no more than a minimal amount of principal due on the underlying exposures of a securitization, and (2) exposes the holder of the CEIO to credit risk directly or indirectly associated with the underlying exposures that exceeds a pro rata share of the holder's claim on the underlying exposures, whether through subordination provisions or other credit-enhancement techniques.

Under Basel III, any portion of a CEIO that does not constitute a gain-on-sale attracts a 1,250 percent RW. Basel II required 50 percent Tier 1 and 50 percent Tier 2 deduction for CEIOs, whereas under Basel I only amounts in excess of 25 percent of Tier 1 are deducted from Tier 1.

Senior purchased credit derivatives and non-credit derivatives with securitization SPE counterparties
Counterparty credit risk for such exposures is calculated using the securitization framework, as per the applicable hierarchy. However, an alternative option of 100 percent RW is also available. The 50 percent RW cap for derivatives under Basel I is no longer available.

Transactions failing due diligence requirements
Basel III imposes a new requirement around due diligence for all securitization transactions, which banks need to satisfy prior to acquiring and on an ongoing basis (no less frequently than quarterly). It requires a bank to demonstrate a comprehensive understanding of the features of the securitization that would materially affect the performance of the exposure (e.g., triggers, enhancements, and pool performance). The analysis is required to be commensurate with the

complexity of the exposure and the materiality of the exposure in relation to capital.

Failure to comply with initial and ongoing due diligence requirements for any securitization exposures requires a 1,250 percent RW to be assigned to such exposures.

Certain asset-backed mortgage commercial paper (ABMC) exposures
This provides the option of applying the RW based on the highest RW applicable to any of the individual underlying exposures for eligible ABCP liquidity facilities and eligible second-loss position or better exposures to an ABCP.

Implicit support
In case a bank provides implicit support (i.e., support in excess of its contractual obligations), it must hold capital on the entire pool of underlying assets and is also subject to additional disclosure requirements.

IO RMBS
Like Basel I and Basel II, Basel III retains the 100 percent RW floor for IO RMBS strips.

Trust-preferred security collateralized debt obligations (TruPS CDOs)
TruPS CDOs are synthetic exposures to the capital of unconsolidated financial institutions and are subject to deduction from capital (i.e., significant and nonsignificant financial institution threshold deduction tests). Any amounts of TruPS CDOs that are not deducted are subject to the securitization treatment (unless treated as a covered fund under Section 619 of the Dodd-Frank Act, known informally as the Volcker Rule).

Credit risk mitigation (CRM) for securitization exposures

CRM methodology provides a capital benefit by recognizing certain collateral or guarantees/credit derivatives supporting securitization exposures. CRM is recognized for financial collateral, as per the "collateral haircut" approach.[11] For eligible guarantees and eligible credit derivatives obtained from an eligible guarantor, CRM is recognized as per the borrower substitution approach rules.

The definition of eligible guarantor is updated in Basel III to exclude insurance companies predominantly engaged in providing credit protection (i.e., monoline bond insurers), borrowers with positive correlation (i.e., wrong-way risk) with the guaranteed exposures, and entities without investment-grade unsecured long-term debt.

Securitization exposure amount calculation

For the RWA calculations, securitization exposure amount is calculated based on the on-balance-sheet and off-balance-sheet amounts.

For on-balance-sheet assets, a securitization exposure amount is determined as per GAAP (see chapter 8). An accumulated other comprehensive income (AOCI) adjustment is no longer required under Basel III; the exposure amount calculation of all AFS debt securities, including securitization exposures, is based on the fair value. However, Basel III retains the AOCI opt-out option for Standardized Approach banks. If exercised, such banks will continue to follow the Basel I and Basel II approach of calculating exposure amount based on book value for their AFS debt securities portfolio.

Exposure amounts for counterparty credit risk exposures with securitization SPE counterparties are calculated using the same approach as for other wholesale counterparties (i.e., primarily using the Current Exposure Methodology [CEM][12] approach for

[11] Under the collateral haircut approach, exposure amount is determined based on the value of the exposure less the value of any financial collateral plus adjustments based on collateral type and any currency mismatch.
[12] Under the CEM approach, exposure amount is the sum of a contract's mark-to-market value plus a potential future exposure (PFE) amount. The PFE amount is calculated based on notional principal amount and a conversion factor determined based on the type of derivative contract and remaining maturity.

derivatives). For sold credit derivatives, exposure amount is the full notional amount of protection provided, and for credit protection provided through an n^{th}-to-default credit derivative, exposure amount is the largest notional amount of all the underlying exposures.

For other off-balance-sheet commitment amounts, exposure amount is generally set at the full notional amount.

- For an off-balance-sheet exposure to an ABCP program, such as an eligible ABCP liquidity facility, the notional amount may be reduced to the maximum potential amount that could be required to fund given the ABCP program's current underlying assets (calculated without regard to the current credit quality of those assets).
- Exposure amount for eligible ABCP liquidity facilities for which SSFA does not apply is calculated by applying a CCF of 50 percent to the notional amount, but the full notional amount (i.e., a CCF of 100 percent) is applicable for such facilities where SSFA is applied.
- For overlapping or duplicative facilities, duplicative capital is not required for the overlapping position. The applicable risk-based capital treatment that is applied is the one that results in the highest risk-based capital requirement.
- For facilities to all other customer SPEs, a reduction is not available, and the full notional amount is used to calculate exposure amount.

Eligible servicer cash advance facilities are required to hold risk-based capital against any funded advances, but not any future potential cash advances under the facility.

Ineligible servicer cash advance facilities must hold risk-based capital against both any funded advances and the amount of all potential future cash advance payments that it may be contractually required to provide during the subsequent 12-month period.

Subject to certain conditions, for small business obligations sold with recourse, exposure amount is calculated only for the contractual exposure.

Definition and treatment of re-securitizations

Re-securitization refers to a securitization that has more than one underlying exposure, in which one or more of the underlying exposures is a securitization exposure. Basel III modifies the definition from Basel II to exclude re-tranching of a single securitization exposure (e.g., RE-REMIC).

The RWA calculation for re-securitizations is subject to the same hierarchy of approaches (i.e., SFA and SSFA) and requires a look-through approach to the ultimate underlying pool supporting the underlying securitization position.

Re-securitization exposures generally attract higher capital under both SFA and SSFA. For example, SFA requires the EWALGD input be set to 100 percent, and SSFA requires the parameter P input be set to 1.5 for all re-securitizations. Additionally, re-securitizations are ineligible as financial collateral.

Treatment of securitizations exposures under the market risk framework

As noted earlier, the market risk framework applies only to the Market Risk banks (banks with trading assets in excess of $1 billion, or 10 percent of total assets). The market risk framework-related changes in Basel III (sometimes referred to as Basel 2.5) have been effective since January 1, 2013.

Under Basel I, and also left unchanged in Basel II, market risk RWA rules required calculation of a general risk component (based on internally developed value at risk model) and a specific risk add-on (based on either internal models or supervisory add-on factors). Generally, securitization exposures in the trading book, subject to market risk rules, required lower capital than similar exposures in the banking book, which were subject to credit risk rules.

However, Basel III introduces multiple changes aimed at overall increase of market risk capital in the trading book, with a focus on securitizations. In particular, Basel III imposes due diligence requirements and also, outside of the correlation trading portfolio, increases the specific risk add-on to be equal to the banking book credit RWA charges (i.e., as per SSFA and SFA), as applicable. Also, Basel III strengthens the eligibility criteria for market risk covered treatment, such that certain trading book portfolios are no longer eligible for market risk treatment.[13]

For market risk covered correlation trading portfolio positions, an internally modeled approach is allowed but with strict qualification criteria. Thus, securitization exposures in the trading book now receive an equal number of governance requirements and, in most cases, higher capital than similar exposures in the banking book.

The Basel Committee on Banking Supervision (BCBS) published a revised international standard for market risk in January 2016. The boundary between trading book and banking book has now been revised to make it more difficult for banks to arbitrage their capital requirements. Also, the internal models approach has been modified to better capture "tail risks" and market illiquidity risks, improve the model approval process, and place limits on capital reduction that can be achieved through hedging and portfolio diversification. The standardized approach for market risk has also been revised to make it more risk-sensitive.

[13] Basel 2.5 and Basel III market risk framework revisions restrict the applicability of market risk treatment to exposures with "trading intent" regardless of trading or banking book classification from an accounting perspective.

US regulators have yet to publish a proposal for implementing the corresponding changes in the US rules. BCBS finalized the new framework on January 14, 2019.

BCBS revisions to securitization framework

Since the publication of the Basel III international capital framework, the BCBS has been in the process of revising various aspects of the rules, including those related to the Standardized Approach for Credit Risk, Counterparty Credit Risk, Market Risk (as mentioned in the previous section), and the Securitization Framework. Certain significant enhancements to the Basel Securitization Framework were finalized internationally by the BCBS with an effective date of January 1, 2018. Overall, the changes to the international framework make it more aligned with the existing US rules. However, there will continue to be certain divergences in capital charges for similar securitization exposures across jurisdictions (such as between the United States and European Union [EU]).

The revised set of calculation approaches and hierarchy per the new BCBS securitization framework is discussed below:

Internal Ratings-Based Approach (SEC-IRBA)

This is at the top of the hierarchy and is analogous to the existing SFA approach, but with certain modifications. In addition to the input parameters required by SFA (Kirb, A, D, EWALGD, etc.), the new methodology also requires effective maturity (Mt), defined as either the cash flow-weighted average maturity or 80 percent of the remaining contractual maturity.

Based on the above inputs, a supervisory prescribed formula is used to calculate the RWA with a RW floor of 15 percent. The SEC-IRBA approach can be applied only if the bank is able to calculate Kirb for at least 95 percent of the underlying assets.

External Ratings-Based Approach (SEC-ERBA)

The revised international framework retains the external rating approaches (RBA, inferred RBA, and IAA). However, to better align with jurisdictional differences, especially given that it is disallowed in the United States under Basel III rules, the SEC-ERBA approach is required only in jurisdictions that allow external ratings.

Standardized Approach (SEC-SA)

In general, this is analogous to the US Basel III SSFA approach, but with a RW floor of 15 percent. If the delinquency status is unknown for no more than 5 percent of the underlying pool, an adjustment factor applies, beyond which the exposure will attract 1,250 percent RW.

Securitization exposures within the Basel III leverage ratios

There is already a leverage ratio requirement as part of Basel I, which has also been retained under Basel III, defined as the ratio of Tier 1 capital to total on-balance-sheet assets.[14] Additionally, the Basel III Advanced Approach also includes a supplementary leverage ratio requirement, which is similar to the leverage ratio but also includes a measure for off-balance-sheet assets.

Both leverage ratios require total on-balance-sheet assets to be measured as per GAAP, or any other accounting framework no less stringent than GAAP. Accordingly, all exposures that are consolidated as per ASC 810 are included. For off-balance-sheet commitments, 10 percent of the notional amount is used only for unconditionally cancelable commitments; otherwise, the full notional amount is used as the off-balance-sheet measure. For derivatives, the CEM approach, as defined in the Basel III capital requirements, is used to calculate the exposure amount.

Securitization exposures within the Basel III liquidity ratios

Basel III also introduced measures to strengthen the liquidity profile of the banking sector. Liquidity ratio requirements comprise two ratios: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR promotes the short-term resilience of a bank's liquidity profile, and the NSFR requires banks to maintain a stable funding profile in relation to its activities over a longer period.

The US LCR rule requires covered banks to maintain minimum amounts of high-quality liquid assets (HQLA) to withstand cash outflows over a 30-day horizon. The LCR final rule mandates a minimum LCR ratio of 90 percent by January 2016 and 100 percent by January 2017 for financial institutions with more than $50 billion in assets. However, the smaller banks covered by the rule that are not "Basel Advanced Approach" banks are subject to a less-stringent modified LCR rule.

$$\text{LCR:} \quad \frac{\text{Stock of HQLA}}{\text{Net cash outflows over a 30-day stress period}} \geq 100\%$$

Assets that qualify for HQLA treatment (and can be included in the numerator of the LCR) include government securities, investment-grade corporate bonds, and agency MBS. There are minor differences in the definition of HQLA between the international standards finalized by the BCBS and the US regulations (e.g., private-label securitizations do not qualify in the US as HQLAs). HQLAs are further classified as level 1, 2A, and 2B based on the relative asset quality and haircuts, and limitations are defined for how much of these assets can be included in the numerator. As a result, Fannie Mae and Freddie Mac securities that qualify for HQLA level 2A and Ginnie Mae securities that qualify for HQLA level 1 are preferable to private-label securitization holdings from an LCR perspective.

[14] Less assets deducted from Tier 1 capital.

The denominator of the LCR is computed based on net cash outflow amounts prescribed by regulators over a 30-day stress period. Specifically related to securitizations, the following outflow rates are defined:

- Undrawn amounts of liquidity facilities or credit enhancement facilities to SPEs that issue or have issued commercial paper or securities are assigned a 100 percent outflow rate.
- Similarly, undrawn amounts of facilities extended to SPEs that are consolidated subsidiaries of certain customers or counterparties are assigned outflow rates ranging from 10 percent to 100 percent based on the type of facility and the type of counterparty consolidating the SPE.
- Also, if a bank is a sponsor of a structured transaction where the issuing entity is not consolidated on the bank's balance sheet, then the outflow amount required is the greater of: (i) the total maturing obligations of the issuing entity and all commitments made to purchase assets within the next 30 days, or (ii) the maximum funding the bank may be required to provide the issuing entity within the next 30 days.
- And a 100 percent outflow rate is assigned to undrawn amounts related to other facilities to SPEs not outlined above.

The NSFR measures liquidity risk over a longer time period, which extends to one year.

$$\text{NSFR:} \quad \frac{\text{Available amount of stable funding (ASF)}}{\text{Required amount of stable funding (RSF)}} \geq 100\%$$

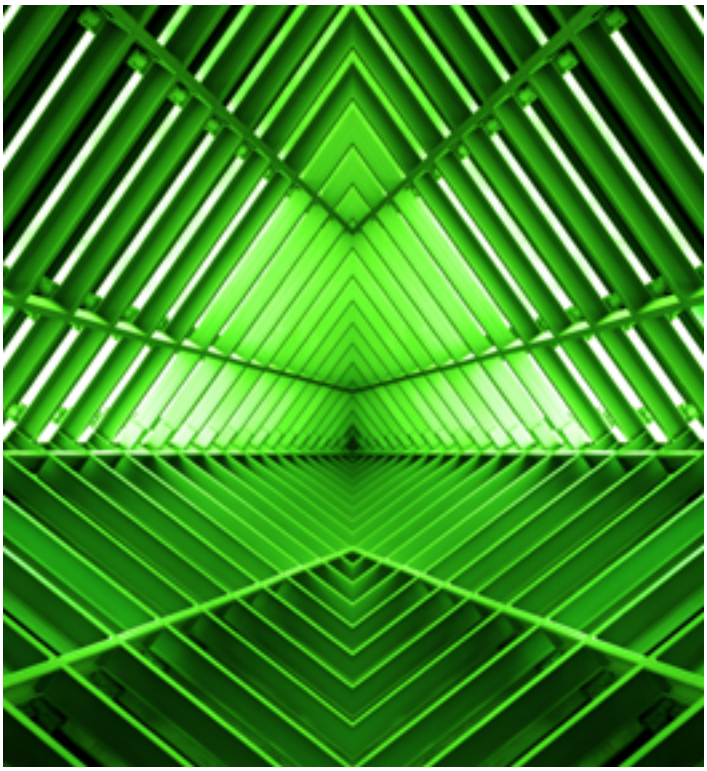
Per the international framework finalized by the BCBS, a 50 percent required amount of stable funding (RSF) factor has been assigned to RMBS securities with a credit rating of at least AA. Assets with greater RSF factor tend to reduce the NSFR and are likely to be less desirable from a liquidity perspective. The NSFR rules are not yet finalized in the United States.

Fundamental review of the trading book (FRTB)

The BCBS conducted a FRTB, shortly after the financial crisis, to develop a more robust framework to establish minimum capital requirements for market risk, which was finalized in January 2019. While BCBS has finalized the standards, they have yet to be implemented in the United States. The finalized market risk framework includes three key enhancements. First, it clarifies the boundary between the trading book and the banking book to impede regulatory arbitrage by moving positions across regulatory books. The changes to boundary could lead to structural changes in securitization market participants including borrowers, investors, lenders, and issuers.

1996	First framework for minimum capital requirements for market risk
2009	Basel 2.5 reforms
2016	Revised market risk framework
2019	Finalized market risk framework
2022	FRTB go-live

Second, the framework has an overhauled standardized approach. The overall capital charge is sum of capital calculated under: a) sensitivities-based method (SbM); b) default risk capital charge (DRC); and c) residual risk add-on (RRAO). SbM aggregates three sensitivities—Delta, Vega, and Curvature—calculated for seven risk classes to estimate the losses under a defined stress scenario. DRC captures the jump-to-default risk for instruments subject to credit risk. RRAO estimates capital requirement for any other risks not addressed by the main risk factors included in SbM or DRC.



Third, the framework enhanced the internal models approach by replacing Value-at-Risk (VaR) with the Expected Shortfall (ES) method as ES captures the tail risks, which are not accounted for in VaR. Under the finalized framework, the risk factors are classified across five liquidity horizon categories, ranging from 10 days to 120 days instead of a uniform 10-day horizon. ES is calculated at a 10-day liquidity horizon and extrapolated to appropriate liquidity horizon.

FRTB implementation imposes a significantly higher market risk capital requirement, implementation cost, and ongoing operational maintenance cost.

CMBS and RMBS could potentially be impacted by FRTB regulation as the dealers will have to reserve higher capital amount, reducing market-making activity in specific types of securitizations.

Other regulatory considerations impacting securitizations

Apart from the regulations discussed above, which directly affect capital, there are a variety of regulations that have an impact on the overall securitization industry, while indirectly affecting risk management and capital requirements.

Risk retention rules

Risk retention rules finalized by the US regulators generally require the sponsors[15] of ABS to retain at least 5 percent credit interest in these transactions. These rules are intended to align the interest of the sponsors to the interest of the investors by ensuring that the sponsors maintain "skin in the game" and curb the "originate to distribute" model (whereby loans are originated with the sole purpose of offloading them into securitization pools, thus reducing incentive to maintain high underwriting and credit standards). On the other hand, the rule also permits an exemption from risk retention when the securitization pool contains particular types of underlying assets and is subject to conditions that enable prudent underwriting standards.

The rule prescribes the following standard options to retain credit risk:

Eligible horizontal interest retention

Under this option, the sponsor must retain at least 5 percent of economic interest in the credit risk of the first to default or first loss tranche of the securitization pool. The tranche has to have the most subordinate claim to any principal and interest payments and absorbs losses resulting from any shortfalls before any other interests in the pool. The 5 percent interest is measured using the GAAP fair value measurement framework, and additional disclosures are required related to the fair value calculation method employed.

Eligible vertical interest retention

Under this option, the sponsor must retain at least 5 percent of economic interest in the credit risk across all the tranches of the securitization pool. The rule requires the sponsor to hold a proportional interest in each tranche of the pool to make up the 5 percent. However, unlike the horizontal risk retention option, fair value measurement is not mandatory.

Hybrid interest retention

The rule also allows the sponsor to meet the requirements by retaining a combination of the horizontal and vertical interests, provided that the combination adds up to 5 percent. However, the rule does not specify separate minimums for either the horizontal or vertical interest that a sponsor should hold when opting for the hybrid interest retention.

Eligible horizontal cash reserve account

The sponsor may also meet the risk retention requirement by establishing an eligible horizontal cash reserve account in an amount equal to 5 percent of the securitized assets. The account has to be held by a trustee and may only be composed of cash and cash equivalents. The use of these funds is severely restricted by rule, but they can be used to absorb losses, similar to an eligible horizontal tranche.

Outside the standard retention options defined above, the sponsor can also employ alternative ways to satisfy the risk retention requirements specific to certain asset class categories (provided certain conditions are met).

The rule specifies a number of exemptions related to different categories of qualifying underlying assets, which would not require sponsors to retain the 5 percent. For example, the rule specifies that the sponsor is not required to retain any risk in securitization pools that are solely composed of qualified residential mortgages, as defined by the Consumer Finance Protection Bureau (CFPB) under the Truth in Lending Act. In case of a blended pool of qualifying residential mortgages and other assets, the risk retention requirements can be prorated and reduced to 2.5 percent of the total securitization pool.

Additionally, Ginnie Mae transactions are also fully exempt from risk retention requirements because such transactions are federally insured or guaranteed. Similarly, Fannie Mae and Freddie Mac transactions can also satisfy risk retention requirements by guaranteeing interest and principal payments on the investor interests, as long as they continue to operate under conservatorship.

[15] Risk retention is required by either the sponsor or the depositor (if the depositor is not the sponsor).

The Volcker Rule

The Volcker Rule restrictions generally exempt securitization activities but classify some securitization vehicles (CDOs and CLOs that are not solely composed of loans) as "covered funds," which are then subject to strict de minimis limits and punitive capital treatment (i.e., deduction from Tier 1 capital). Grandfathering exemptions are allowed for TruPS CDOs issued before May 19, 2010, by bank holding companies (BHCs) less than $15 billion in size, or by mutual holding companies that were acquired by a bank on or prior to December 10, 2013.

Single-counterparty credit limit (SCCL)

In May 2018, the Federal Reserve issued the SCCL final rule to establish single-counterparty credit limits for covered large US bank holding companies, foreign banking organizations, and intermediate holding companies. Per the final rule, no covered company may have an aggregate net credit exposure to any counterparty that exceeds 25 percent of the Tier 1 capital of the covered company, and no major covered company (global systemically important bank [GSIB]) may have aggregate net credit exposure to any major counterparty that exceeds 15 percent of the Tier 1 capital of the major covered company.

$$\text{SCCL ratio} = \frac{\text{Net credit exposure to a counterparty group}}{\text{Tier 1 capital}}$$

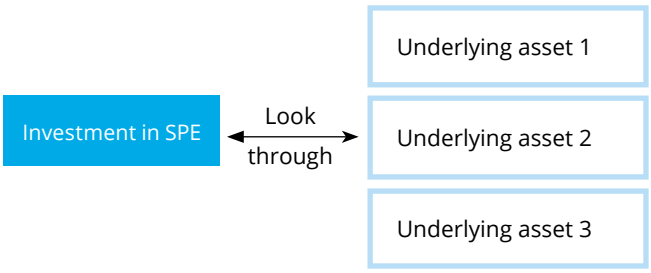
In order to compute single-counterparty exposures due to securitization exposures, a look-through approach is prescribed. The approach measures the bank's exposure to each issuer of assets in the SPE. This regulation would mandate banks to monitor their gross credit exposures to the single unaffiliated counterparties due to securitization more closely. It will require banks to have detailed data available on underlying assets and issuers of those assets in the SPE. GSIBs must comply with the rule by January 1, 2020, and all other entities have until July 1, 2020, to comply.

Securitization exposure calculation for underlying issuers

For each securitization exposure, a bank must determine whether the amount of its gross credit exposure to an issuer of assets in an SPE, due to an SPE exposure, is equal to or greater than 0.25 percent of the bank's Tier 1 capital using either one of the following two methods:

1) The sum of all the issuer's assets in the SPE; or

2) The application of the look-through approach



If the amount of its gross credit exposure to an issuer of assets in an SPE is less than 0.25 percent of the bank's Tier 1 capital, the amount of gross credit exposure to that issuer may be attributed to either that issuer of assets or the SPE. If the bank determines its gross credit exposure to an issuer of assets in an SPE to be 0.25 percent or more of its Tier 1 capital, a look-through approach is applied, where the gross credit exposure with respect to an issuer of assets is calculated per the rank of investors.

A bank must also recognize the gross credit exposure to a third party that has a contractual obligation to provide credit or liquidity support to an SPE whose failure or material financial distress would cause a loss in the value of the covered company's SPE exposure.

The issuer of assets in the SPE must be then identified as a counterparty, and the gross credit exposures must be aggregated with any other gross credit exposures to that same counterparty prior to reporting.

FR 2590 reporting of securitization exposures

For its top 50 counterparties, banks are required to submit the exposures in all SPEs in an FR 2590 quarterly report. Schedule G reports securitization exposures arising from the look-through approach. Gross credit exposure to a securitization that does not require application of the look-through approach is reported as either debt securities or investments equity securities, as applicable.

Securitization exposure is defined in the rule as an investment in the debt or equity of an SPE, or a credit derivative or equity derivative between the covered company and a third party where the covered company is the protection provider and the reference asset is an obligation or equity security of, or equity investment in, an SPE.

"Covered companies" are defined as any US GSIB and any BHC that has $250 billion or more in total consolidated assets.

FR 2590 Top 50 counterparties reporting form contents	• Schedule G Gross Credit Exposures • Summary of Net Credit Exposure

FDIC Safe Harbor Rule

The FDIC has proposed changes to certain provisions of its securitization safe harbor rule, which relates to the treatment of financial assets transferred in connection with a securitization or participation transaction. 12 C.F.R. § 360.6. The proposed change would eliminate the requirement that the securitization documents require compliance with Regulation AB of the SEC, 17 C.F.R. §§ 229.1100 et. seq. (Regulation AB), in circumstances where Regulation AB by its terms would not apply to the issuance of obligations backed by such financial assets.

This would mean that, unlike under the rule as currently in effect, the documents governing a private placement, or an issuance not otherwise required to be registered would not be required to mandate compliance with Regulation AB (as currently in effect). This proposal was made in response to feedback that it is difficult for institutions to comply with Regulation AB as applied to certain types of securitization transactions, namely residential mortgage securitizations.

EU updates

A new comprehensive securitization framework comprising two regulations—Regulation (EU) 2017/2402 (the Securitization Regulation) and Regulation (EU) 2017/2401 (the Securitization Prudential Regulation [SPR])—came into force in EU on January 1, 2019. Legacy securitizations are grandfathered but still eligible to use the simple, transparent, and standardized (STS) designation after January 1, 2019, subject to compliance with new rules around transparency, risk retention, and other requirements.

The revised framework promotes standardization of the European securitization market vis-à-vis different roles for market participants (i.e., investors, originators, sponsors, original lenders, and securitization special purpose entities) for whom the existing regulations (Capital Requirements Regulation [CRR], Solvency II Delegated Act, Alternative Investment Fund Managers Regulation, European Market Infrastructure Regulation, etc.) are sector specific.

A new hierarchy of methods with precedence for supervisory formula-based methods (i.e., SEC-IRBA, SEC-SA) over external credit ratings based method (i.e., SEC-ERBA) are to be used for calculating the risk-weighted exposure amounts for securitization positions discouraging reliance on external credit ratings.

The new framework also bans re-securitizations with a few exceptions in cases such as facilitating liquidation or preservation of investor interests in the event of distressed positions and securitizations whose securities were issued before January 1, 2019.

While the risk retention level is left unchanged at 5 percent, it's no longer only institutional investors' responsibility to ensure risk retention requirements. The Securitization Regulation imposes uniform and streamlined due diligence and transparency requirements for all types of regulated institutional investors (covering a broader audience including pension funds, insurers, reinsures, etc., as opposed to only credit institutions and investment firms covered earlier under CRR) doing business in the EU.

The Securitization Regulation also extensively lays out eligibility criteria for applying the STS designation for traditional securitizations segregated as long-term (also referred to as term transactions) securitizations and short-term securitizations (ABCP securitizations). Synthetic securitizations are currently not eligible for the STS label.

Noncompliance sanctions are subjective and based on member-state discretion with generic guidelines to consider materiality, gravity, and intent of violation.

Regulatory capital considerations will continue to exert pressure

Given the current environment of regulatory overhang, banks have to deal with the impact of higher regulatory capital, leverage, and liquidity charges for securitizations, and increased implementation and compliance challenges. Ultimately, certain assets may migrate to the non-bank sector that is not subject to capital regulations.

The pace of regulatory reform continues to force banks to evolve their overall strategy and operating model to ensure long-term sustainability while meeting regulatory expectations. In general, regulatory capital remains an area in which banks, and other market participants, will have to continue to navigate carefully.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