STAFF GUIDANCE

PCAOB
Public Company Accounting Oversight Board

Auditing the Fair Value of Financial Instruments

Insights for Auditors

Overview

New requirements for auditing the fair value of financial instruments will take effect for audits of financial statements for fiscal years ending on or after December 15, 2020. These requirements are included in AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements*. Appendix A of that standard provides specific requirements when auditing the fair value of financial instruments, primarily when pricing information is obtained from third parties. It applies when the auditor uses third-party pricing information to develop an independent expectation, as well as when the auditor evaluates third-party pricing information used by the company.

This publication highlights information for auditors as they begin to plan and perform work on audits subject to the new requirements. It also illustrates relevant considerations for auditing the fair value of financial instruments, especially when pricing information from pricing services, brokers and dealers, and other third party sources is used, including certain information from the adopting release. Appendix 3 of the adopting release includes a detailed discussion of the new requirements, including differences from and similarities to current requirements. The information in this publication is not a substitute for any rule or standard; only the rules and standards of the Board provide auditors with the definitive requirements.

More general staff guidance on new requirements for auditing accounting estimates in AS 2501 (Revised) is also available. (See *Staff Guidance: Auditing Accounting Estimates*). Guidance on the use of specialists, including in developing and auditing estimates, is also available. (See *Staff Guidance: Using the Work of a Company's Specialist* and *Staff Guidance: Supervising or Using the Work of an Auditor's Specialist*).

What's included?

Applying Appendix A of AS 2501 (Revised)

The approach to auditing the fair value of financial instruments based on third-party pricing information under Appendix A of AS 2501 (Revised) consists of identifying and assessing the risks of material misstatement associated with the valuation of financial instruments, and performing procedures to determine

This guidance was prepared by PCAOB staff to help auditors implement the new requirements for auditing the fair value of financial instruments. It does not constitute rules or standards of the Board, nor has it been approved by the Board. It supplements PCAOB Release No. 2018-005, *Auditing Accounting Estimates, Including Fair Value Measurements and Amendments to PCAOB Auditing Standards* (Dec. 20, 2018).

whether the pricing information provides sufficient appropriate evidence to respond to those risks. The risks of material misstatement and the specific procedures depend on the nature of the financial instruments and the pricing information.

Identifying and Assessing Risks of Material Misstatement

As with other types of estimates, auditing the fair value of financial instruments involves performing risk assessment procedures in accordance with the risk assessment standards. The risks of material misstatement associated with the valuation of financial instruments vary depending on, among other things, the nature of the financial instruments. As part of risk assessment, Appendix A of AS 2501 (Revised) requires the auditor is to obtain an understanding of the nature of the financial instruments being valued, taking into account the following matters:

- *Terms and characteristics of the financial instruments.* These might include, for example, information about structure, seniority, put and call features, guarantees, and limitations on the holder's ability to sell.
- *The extent to which the fair value of the type of financial instruments is based on inputs that are observable directly or indirectly.* In general, fair values of financial instruments based on trades of identical financial instruments in an active market have a lower risk of material misstatement than fair values derived from unobservable inputs or observable trades of similar financial instruments.
- *Other factors affecting the valuation of the financial instruments, such as credit or counterparty risk, market risk, and liquidity risk.* The values of some financial instruments may reflect adjustments for external factors and other risks. For example, the risk of material misstatement of the valuation of debt securities issued by a company with good credit standing may differ from the risk of material misstatement associated with an asset-backed security collateralized by cash flows of lower quality loans.

The auditor may group (or "stratify") the portfolio of financial instruments into types of instruments that are similar (based on the characteristics described above), and obtain an understanding of the nature of the instruments by type. In some circumstances, however, it may not be appropriate to group financial instruments–for example, where financial instruments are dissimilar, or where the auditor does not have a reasonable basis upon which to stratify the portfolio into groups.

Determining Whether Pricing Information Provides Sufficient Appropriate Evidence

Once the auditor identifies and assesses the risks of material misstatement associated with valuation of financial instruments, the auditor should design audit procedures responsive to those risks in accordance with the risk assessment standards. This involves performing procedures to determine whether the pricing information provides sufficient appropriate evidence to respond to the risks of material misstatement, including assessing the reliability and relevance of the pricing information in accordance with AS 1105, *Audit Evidence*. As the assessed risk of material misstatement increases, the auditor should design audit procedures to obtain more persuasive audit evidence.

The specific procedures to be performed to determine if pricing information provides sufficient appropriate evidence depend on the source of that information, namely whether it comes from:

- Pricing services,
- Brokers or dealers, or
- Other sources

Using Information from Pricing Services

What is a "pricing service"?

Under AS 2501 (Revised), pricing services are organizations that routinely provide uniform pricing information to users, generally on a subscription basis. This pricing information may be generated at various points in time, is available to all subscribers, and may relate to a wide variety of financial instruments. In general, financial instruments covered by these services tend to be those with more direct or indirect observable inputs (such as municipal bonds and corporate debt). Pricing services generally value financial instruments daily, using market data and prices from market makers and a number of other sources. For some instruments, pricing services use valuation techniques to derive estimated fair values and may also combine approaches to arrive at a price.

Pricing Service as Specialist: Pricing services are sometimes engaged to individually develop prices for specific financial instruments not routinely priced for their subscribers. When a pricing service provides this type of pricing information, it is considered a specialist under PCAOB standards. In those circumstances, the auditor would apply the requirements in Appendix A of AS 1105 when the company engages the pricing service, and would apply the requirements of AS 1210, *Using the Work of an Auditor-Engaged Specialist*, when the auditor engages the pricing service.

Pricing Service as Service Organization: If the services provided to a company by a pricing service are part of the company's information system over financial reporting, the pricing service is a service organization under PCAOB standards. In those instances, the auditor would apply the requirements of Appendix A of AS 2501 (Revised) when performing substantive procedures, and the requirements of AS 2601, *Consideration of an Entity's Use of a Service Organization*, when understanding and evaluating the controls of the pricing service relevant to the valuation assertion.

If the company uses an external service provider for investment accounting services, it is important for the auditor to understand whether the service provider is involved in developing a price or merely distributes pricing information obtained from other sources. In the latter situation, the service provider may be a service organization for some purposes, but it would not be considered a pricing service under AS 2501 (Revised) with respect to valuation.

Other Sources of Pricing Information: Websites that publish, for the general public, prices for exchange-traded securities in active markets are not pricing services as described in Appendix A of AS 2501 (Revised). Similarly, investment custodians, record-keepers, or other service providers that distribute pricing information obtained from pricing services, but do not themselves develop prices, would not be considered pricing services. The auditor's responsibilities in relation to information from other sources is discussed in "Using Pricing Information from Other Sources" below.

Assessing Reliability of Pricing Information

The reliability of audit evidence depends on the nature and source of the evidence and the circumstances under which it is obtained. The following factors affect the reliability of pricing information from a pricing service:

1. *Experience and expertise of the pricing service relative to the types of financial instruments being valued, including whether the types of financial instruments being valued are routinely priced by the pricing service.*

Pricing information obtained from a pricing service with experience and expertise relative to the type of instrument being valued is generally more reliable than a price developed by a pricing service that has limited or no experience. When assessing the experience and expertise of the pricing service, relevant considerations may include, among others,

- The number and financial industry experience levels of evaluators employed by the pricing service,
- The extent of informational resources that the pricing service provides to users to assist in understanding its data and evaluation methodologies, and
- The pricing service's evaluation quality controls and price challenge processes.

If a pricing service does not have extensive experience in pricing a particular instrument, it does not necessarily mean that the pricing service is incapable of providing relevant audit evidence. The evaluation of the pricing service's experience and expertise should be based on the particular facts and circumstances, including the risks of material misstatement related to the instruments being valued by the pricing service.

2. *Whether the methodology used by the pricing service in determining fair value of the types of financial instruments being valued is in conformity with the applicable financial reporting framework.*

Pricing services use different methodologies to determine fair value (for example, matrix pricing, consensus pricing, or model-derived evaluated pricing). Many pricing services provide information to their subscribers about their methodology, which can be assessed by the auditor in making the determination as to whether that methodology is in conformity with the applicable financial reporting framework. The evaluation of a pricing service's methodology can be performed for groups of financial instruments that are similar in nature and are priced by the pricing service using the same process.

3. *Whether the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service.*

In general, pricing information provided by a pricing service has less potential to be biased because the information is broadly available to its customers. The reliability of such information, however, decreases if the company being audited can control or significantly influence the pricing service. The results of procedures performed under AS 2410, *Related Parties*, should be taken into account in determining whether the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service.

Some pricing services provide a challenge process where subscribers can provide additional relevant information about the value of instruments. The existence of this type of challenge process does not, by itself, mean that company management has the ability to directly or indirectly control or significantly influence that pricing service.

Performing procedures to assess reliability at interim dates

Auditors may perform procedures at various times during the year with respect to assessing the pricing service and the methodology used. If the auditor performs procedures to assess the reliability of pricing information provided by a pricing service at an interim date, the auditor should evaluate whether the pricing service has changed its valuation process relative to the types of financial instruments being valued, and, if so, the effect of such changes on the pricing information provided at period end.

Assessing Relevance of Pricing Information

The relevance of audit evidence refers to its relationship to the assertion or to the objective of the control being tested. The factors affecting the relevance of pricing information from pricing services are highlighted in the table on the next page.

Characteristic of Instruments	Factors Affecting Relevance	Examples of Instruments	Examples of Additional Audit Procedures*
Fair values based on quoted prices in active markets for identical financial instruments *Instruments in this category are valued based on unadjusted quotes in markets with a regular volume and level of trading activity*	Whether based on recent trades of identical financial instruments on an exchange or other active market	Securities valued using Level 1 inputs	Depends on the extent to which the information reflects market data as of the measurement date (recent trades of identical exchange-listed financial instruments, for example, generally provide relevant audit evidence)
Fair values based on transactions of similar financial instruments *For many financial instruments, the available audit evidence consists of market data for trades of similar instruments or trades of the identical instruments in markets that are not active*	How the transactions are identified and considered comparable to the financial instruments being valued	Securities valued using Level 2 inputs, with readily available recent market observations	Evaluate the process used by the pricing service, including evaluating how transactions are identified, considered comparable, and used to value the types of financial instruments selected for testing
No recent transactions have occurred for either the financial instrument being valued or similar financial instruments *Pricing services may develop prices using models or broker quotes*	How the fair value was developed, including whether the inputs used represent the assumptions that market participants would use when pricing the financial instruments	Securities valued using Level 2 inputs with few recent market observations Securities valued using Level 3 inputs	Evaluate the appropriateness of the valuation method and the reasonableness of observable and unobservable inputs used by the pricing service (for unobservable inputs, see discussion below; also refer to AS 2501.A10.)

* These procedures are in addition to comparison of pricing information from the pricing sources to the prices used by the company to value the instruments in the financial statements. Depending on the risks of material misstatement and the facts and circumstances, additional audit procedures may be required.

The relevance of pricing information (and related audit effort) depends on whether there is available information about trades in the same or similar securities, and the extent to which the information reflects market data as of the measurement date.

Fair values based on transactions of similar financial instruments. As discussed above, pricing services may incorporate a mix of inputs in the methodology used to price financial instruments in this category. In those situations, the relevance of pricing information as audit evidence depends on how the pricing service identifies and considers transactions comparable to those relevant to the financial instrument being valued.

For financial instruments in this category, auditors are required to perform additional procedures to evaluate the process used by the pricing service, including evaluating how transactions are identified, considered comparable, and used to value the types of financial instruments selected for testing. The audit procedures necessary will vary in nature and extent based on factors such as the relevant risks and the process used by the pricing service—for example, matrix pricing, algorithm, or cash flow projections.

No recent transactions have occurred for the same or similar financial instruments. The relevance of the pricing information as audit evidence depends on how a pricing service develops prices for these financial instruments, including whether the inputs used represent the assumptions that market participants would use when pricing the financial instruments.

For financial instruments in this category, auditors are required to perform additional audit procedures, including evaluating the appropriateness of the valuation method and the reasonableness of the observable and unobservable inputs used by the pricing service. These types of financial instruments would generally be valued individually.

If an auditor is unable to obtain information from a pricing service about the method or inputs used, the auditor is required to perform additional procedures, such as obtaining and evaluating pricing information from a different pricing source, obtaining evidence about the inputs used from public data about similar trades (for example, data from the Trade Reporting and Compliance Engine (TRACE) or similar sources), or developing an independent expectation (for example, through the use of an auditor's specialist).

Multiple Pricing Services

For some financial instruments, pricing information may be available from more than one pricing service. Appendix A provides that less information is needed about the particular methods and inputs used by the individual pricing services when pricing information is obtained from multiple pricing services, subject to the following conditions:

- There are recent trades of the financial instrument or of financial instruments substantially similar to the financial instruments being valued;
- The type of financial instrument being valued is routinely priced by several pricing services;
- Prices obtained are reasonably consistent across pricing services, taking into account the nature and characteristics of the financial instruments being valued, and market conditions; and
- The pricing information for the type of financial instrument is generally based on inputs that are observable.

Grouping financial instruments

Audit procedures can be performed for financial instruments as a group, rather than for each instrument individually, if

- The financial instruments are similar in nature, taking into account the terms and characteristics, the extent to which the fair value is based on observable inputs, and other factors affecting the valuation; and
- The pricing service uses the same process to price the group of financial instruments.

In general, these conditions relate to situations in which there is reasonably consistent pricing information available from several sources with ample observable inputs.

The condition regarding whether prices obtained are reasonably consistent across pricing services is intended to be assessed as of a relevant point in time, taking into account the nature and characteristics of the financial instruments being valued and market conditions. For example, the range of prices that would be reasonably consistent would be narrower for a type of financial instrument with a number of recent observable market inputs, such as recent trades of identical or substantially similar instruments, than for a type of instrument with relatively few recent observable market inputs.

If the auditor can demonstrate that all of the preceding conditions are met, the remaining audit effort would generally be devoted to evaluating the reasonableness of the valuation of the financial instruments, based on the converged pricing information from the pricing sources. When the above conditions are not met (such as when there are no recent trades due to a lack of market liquidity), the auditor should perform additional audit procedures, including evaluating the appropriateness of the valuation method and the reasonableness of observable and unobservable inputs for a representative price for the type of financial instrument being valued.

Using Broker Quotes

When a fair value measurement is based on a broker quote (whether obtained by the company or by the auditor), the relevance and reliability of the evidence provided by the broker quote depend on whether:

- The broker or dealer has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the broker or dealer;
- The broker or dealer making the quote is a market maker that transacts in the same type of financial instrument;
- The broker quote reflects market conditions as of the financial statement date;
- The broker quote is binding on the broker or dealer; and
- There are any restrictions, limitations, or disclaimers in the broker quote and, if so, their nature.

Broker quotes generally provide more relevant and reliable evidence when they are timely, binding quotes, without any restrictions, limitations, or disclaimers from unaffiliated market makers transacting in the same type of financial instrument.

In evaluating the evidence provided by the broker quote, auditors should take into account the results of the procedures performed under AS 2410 in determining whether the broker or dealer has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the broker or dealer.

If the broker quote does not provide sufficient appropriate evidence, the auditor is required to perform procedures to obtain relevant and reliable pricing information from another source (for example, obtaining a quote from a different broker or dealer, obtaining pricing information from a pricing service, or developing an independent expectation).

Using Pricing Information from Other Sources

When pricing information is obtained from other sources, such as websites maintained by exchanges, financial publishers, or other web content providers, the auditor is responsible for evaluating whether the information provides sufficient appropriate evidence to respond to the risks of material misstatement. This includes evaluating whether the websites obtain the prices directly from original sources, such as stock exchanges. Quoted prices obtained from a stock exchange for exchange-traded securities in an active market generally provide sufficient appropriate evidence.

Unobservable Inputs

Unobservable inputs are used when there is little or no market activity for the asset or liability as of the measurement date. Examples of unobservable inputs for Level 3 may include volatility, growth rates, discounts for lack of marketability, and adjustments to historical third-party transactions and quotations. For some estimates, unobservable inputs are developed using a company's own data.

When the valuation of a financial instrument includes unobservable inputs that are significant to the valuation, the auditor is required to obtain an understanding of how unobservable inputs were determined and to evaluate the reasonableness of those inputs by taking into account:

- Whether modifications made to observable information generally reflect the assumptions that market participants would use when pricing the financial instrument, including assumptions about risk, and
- How the company determined its fair value measurement, including whether it appropriately considered available information.

For example, if management adjusts interest rates, credit spread, or yield curves used to develop a fair value measurement, the auditor would need to evaluate whether the adjustments reflect the assumptions that market participants would ordinarily use when pricing that type of financial instrument.