MARSHALL STEVENS

Private Equity Valuations Built for Fund Managers

A practical guide to building defensible fair value processes and measurements from deal pricing through quarterly marks.

Darleen Armour, ASA

Managing Director
Financial Valuation & Consulting

Who is this for?

Designed for private equity and venture capital funds:

- CFOs and finance leaders
- Fund Administrators
- Valuation and portfolio investment teams
- Fractional CFOs, Controllers and audit-facing professionals

Table of Contents

This three-part playbook walks through the full fair value lifecycle and shows how firms can reduce audit friction and improve consistency.

Audit scrutiny is increasing, LP expectations are rising, and fair value processes are under more pressure than ever. Challenges rarely come from a single assumption, they come from misalignment across calibration, documentation, and quarterly execution.

This playbook brings those pieces together.

MARSHALL & STEVENS

MARSHALL & STEVENS

Click the provided link to continue reading the full document

MARSHALL & STEVENS

PART 1: AVOIDING FAIR VALUE AUDIT ISSUES

Introduction

Fair value audit scrutiny has intensified in recent years due to evolving regulatory expectations, increased LP demands for transparency, and tighter audit methodologies from the Big Four and national firms. Private equity fund managers face heightened pressure to produce valuation processes that are defensible, well-documented, repeatable, and aligned with observable market inputs. Audit issues do not generally arise because a valuation conclusion is "wrong," but because documentation, calibration, assumptions, and methodological rationale are incomplete or inconsistent.

This white paper provides a comprehensive framework to help private equity firms reduce audit friction, improve valuation defensibility, and build stronger internal governance around fair value procedures. It outlines the most common causes of audit challenges and provides actionable recommendations across seven critical areas: calibration, methodological consistency, market-based support for assumptions, forecast governance, documentation quality, model transparency, and proactive auditor engagement.

The Evolving Audit Environment for Fair Value Measurements

Recent trends have materially increased the scrutiny applied to Level 3 valuations:

Increasing Regulatory and LP Oversight

- The SEC has intensified its focus on valuation governance, policies, and board oversight.
- Limited partners have raised expectations for transparent, high-quality valuation processes.

Enhanced Audit Procedures

Auditors have increased their use of:

- Independent valuation specialists
- Back-testing and benchmarking against exit results
- Sensitivity and scenario testing
- Detailed walkthroughs of valuation governance and model controls

Implications for Private Equity

Managers must now demonstrate not only the accuracy of fair value estimates but also the process rigor used to arrive at them. Strong internal documentation and governance can materially reduce audit cycles and cost.

Strengthening Calibration: The Core to Audit Defensibility

Calibration at inception—tying the initial fair value to transaction pricing—continues to be the auditor's most important anchor point.

What Strong Calibration Looks Like

Effective calibration includes:

- Market-based support for deal multiples (revenue, EBITDA, ARR, etc.)
- Documentation of implied discount rates, growth expectations, and risk assumptions
- Comparison to public comps and recent transactions at the time of closing
- Clear mapping of deal economics to market participant assumptions

Common Audit Failures

- Incomplete "deal file" at inception
- Unexplained differences between deal pricing and market comps
- Lack of written rationale for adjustments

Recommendations

- Build a standardized calibration template used across all platforms
- Archive the deal model, investment memo, DD reports, and forecasts in a single workpaper
- Document the reasoning behind any differences between deal assumptions and observable market data

Maintaining Methodological Consistency Over Time

Quarter-to-quarter consistency is a major audit focus. Inconsistency—without explanation—raises red flags.

Sources of Inconsistency

- Switching between market and income approaches without rationale
- Changing comp sets without documentation
- Adjusting discount rates or multiples to "smooth" quarter-to-quarter results

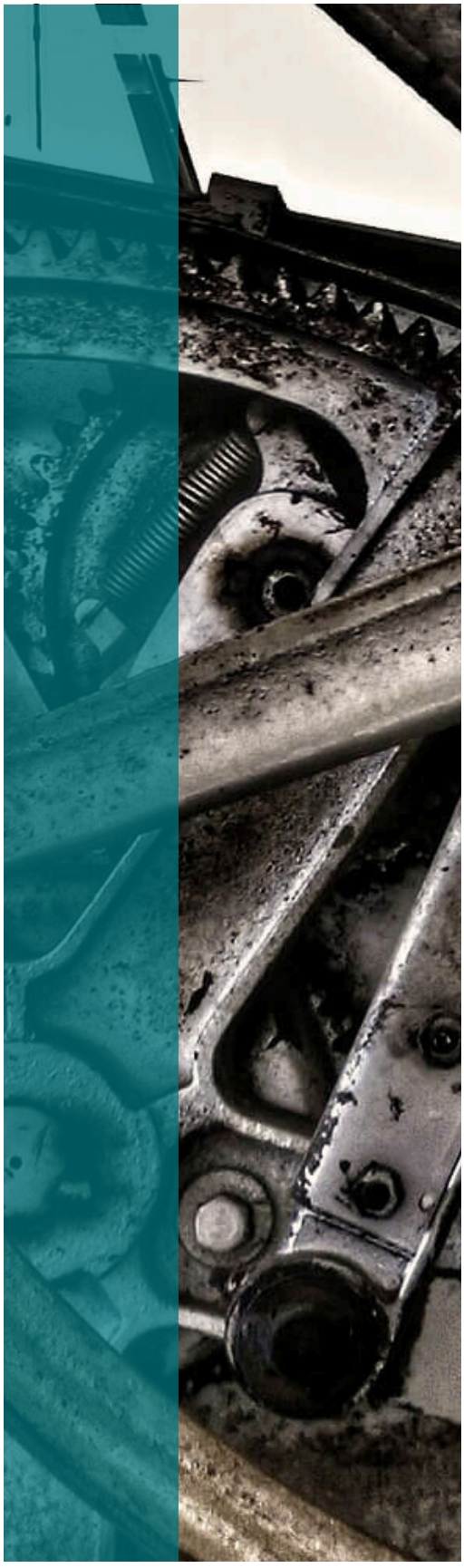
Governance Recommendations

- Adopt a valuation committee to review methodology consistency
- Maintain a quarterly methodology log explaining any changes
- Create standardized templates for DCF, market approach, and waterfall models

When Changes Are Justified

Certain events warrant updates, and auditors generally accept them if well-documented:

- Material changes in business model or revenue mix
- Major competitor or market disruptions
- Debt recapitalizations or structural changes



Supporting Multiples and Discount Rates With Market Evidence

Auditors require clear traceability between assumptions and observable market inputs.

Public and Transaction Comps

Best practices include:

- Using objective inclusion/exclusion criteria
- Documenting adjustments for size, growth, and margin differentials
- Maintaining a consistent comp set unless changes are justified

Discount Rate Support

A defensible WACC includes:

- Updated risk-free rate and ERP
- Beta based on sector averages
- Explicit size and company-specific risk adjustments

Common Issues

- Stale multiples carried over from prior quarter
- Arbitrary or unsupported WACC adjustments
- Missing sensitivity analysis for key inputs

Forecast Governance and Internal Consistency

Auditors place enormous weight on forecasts, not only on the numbers but also on the process used to approve them.

Best Practices

- Establish a formal forecast approval workflow
- Tie forecasts to historical performance and achievable operating plans
- Include sensitivity cases (management case, downside, stress)
- Document changes versus the previous forecast

Audit Red Flags

- Major forecast changes with no documented rationale
- Optimistic terminal value assumptions unsupported by market data
- Inconsistencies between budget reviews and valuation assumptions

Strengthening Controls

- Maintain version control on all forecast files
- Require investment professionals to summarize major changes and assumptions

Enhancing Workpapers, Model Transparency, and Documentation

Audit friction frequently arises from incomplete or unclear documentation.

Workpaper Best Practices

A complete valuation file should include:

- Calibration workpaper
- Public and transaction comp backup
- DCF model with labeled formulas and no hidden logic
- Capital structure and waterfall schedule
- Management forecast and approval documentation
- IC memos and risk assessments

The Importance of Model Traceability

- Avoid hard-coded values where possible
- Provide linking schedules and cross-references
- Maintain consistent cell referencing across all periods

Creating an Audit-Ready Package

A well-organized package:

- Reduces audit rework
- Shortens audit cycles
- Increases credibility and reduces challenge frequency

Proactive Auditor Engagement

The most efficient audit processes involve proactive, structured communication.

Pre-Audit Alignment

- Review methodology and assumptions with auditors early in the process
- Provide business updates and major changes ahead of fieldwork
- Share comps, forecast logic, and calibration frameworks

Ongoing Communication

- Maintain a running Q&A log
- Escalate recurring issues to valuation leadership
- Request final audit memos to help prevent repeat questions

Benefits of a Partnership Mindset

Engaging auditors early reduces surprises, increases efficiency, and builds trust.

Implementing a Scalable Valuation Governance Framework

A strong framework supports repeatability and audit readiness.

Governance Components

- Valuation policy & procedure manual
- Centralized documentation repository
- Standardized templates for all approaches
- Quarterly calibration updates
- Regular training for deal team

Benefits to the Firm

- More defensible valuations
- Faster audit cycles
- Reduced risk of audit adjustments
- Improved LP confidence

Conclusion

Avoiding fair value audit issues is not about creating a more complex valuation process—it is about creating a more transparent, consistent, and well-supported one. By strengthening calibration, aligning methods with market evidence, improving forecast governance, enhancing workpapers, and proactively engaging auditors, private equity firms can materially reduce audit friction while improving the quality and reliability of their fair value estimates.

MARSHALL & STEVENS

PART 2: IMPLEMENTING CALIBRATION

Introduction

Implementing calibration in a valuation engagement requires a structured, evidence-driven process that aligns the subject company's projected performance, discount rates, and risk-return expectations with those implied by the original transaction price. Although the specifics vary by asset class, transaction structure, and the type of interest being valued, the core objective is consistent: ensure that the valuation model produces an output on the transaction date that equals the price actually paid by a market participant. This alignment produces a "calibrated" set of inputs that can be reliably updated in subsequent measurement periods.

The implementation process generally occurs in four phases: (1) establishing the calibration date and relevant transaction, (2) mapping the transaction to an appropriate valuation framework, (3) solving for calibrated assumptions consistent with market pricing, and (4) applying the calibrated assumptions prospectively.

Identify the Calibration Date and Transaction

The calibration process begins by determining which transaction represents the relevant market-based benchmark. In most fair value contexts—particularly those governed by ASC 820 and ASC 350—this benchmark is the most recent orderly transaction involving the same or similar asset. For equity or profit-participation interests, this is often the most recent financing round, purchase of a comparable class of equity, or acquisition of control by a market participant. Key considerations include:

- Orderliness of the Transaction. Transactions involving distress, related-party considerations, or forced motivations typically cannot serve as reliable calibration points unless they are adjusted to reflect market behavior.
- Comparability of Security Class. When the transaction involves a different class of securities (e.g., preferred vs. common), calibration requires adjusting for rights, preferences, and capital structure differences.
- Availability of Transaction Documentation. Deal models, investor presentations, subscription agreements, and board materials often contain critical assumptions about expected cash flows and risk factors that inform the calibration process.

The selected transaction date becomes the "calibration date," establishing the baseline against which future fair value measurements are anchored.

Select and Structure the Valuation Model

Calibration must occur within a valuation framework appropriate for the subject asset and consistent with the transaction economics. Common models include:

- Discounted Cash Flow (DCF) Models for operating businesses or long-dated contractual interests.
- Option-Pricing Models (OPM) for complex capital structures or highly asymmetric payout profiles.
- Probability-Weighted Expected Return Method (PWERM) when multiple discrete exit scenarios drive expected returns.
- Hybrid Models that combine DCF, PWERM, and option-theoretic components, especially for early-stage companies.

Proper model selection is critical: calibration does not correct an improperly chosen model; rather, calibration aligns model inputs with observable transaction pricing. Thus, the valuation specialist must ensure that the chosen methodology reflects how market participants priced the asset.

Solve for Calibrated Inputs that Equal the Transaction Price

Once the model is selected, the analyst adjusts key inputs so that the model's output equals the actual price participants paid. These "calibrated" inputs generally fall into three categories:

Forecast Calibration

If the company prepared management projections at the time of the transaction, the analyst first evaluates how those forecasts compare with the actual performance embedded in the transaction pricing. Calibration involves determining whether the market accepted management's projections at face value or implicitly adjusted them.

For example:

- Investors may have required higher revenue growth to justify the paid valuation.
- Investors may have assumed slower margin expansion than management predicted.
- Investors may have priced in a higher probability of downside outcomes than reflected in management's base case.

The calibrated forecast should reflect investor expectations, not solely internal company forecasts.

Risk and Discount Rate Calibration

If the valuation model uses a discount rate, the analyst solves for the rate that reconciles the model with the transaction price. This discount rate becomes the calibrated rate, reflecting the market's implied required return for the security or ownership interest.

Calibration often reveals that:

- Market participants embedded a higher cost of capital than indicated by generic CAPM inputs, or
- Investors accepted a lower return because of strategic considerations, scarcity value, or high confidence in the company's trajectory.

The calibrated discount rate therefore incorporates company-specific, deal-specific, and market-implied risk characteristics.

Capital Structure and Waterfall Calibration

In models that allocate enterprise value to multiple security classes, calibration may involve adjusting:

- Volatility parameters in an OPM,
- Weighting and probabilities in a PWERM,
- Estimated timing and magnitudes of liquidity events.

The goal is to ensure that the economic rights of the calibrated class—whether preferred, common, or a contractual participation right—produce a fair value equal to the observed transaction price.

Apply Calibrated Inputs in Subsequent Measurement Periods

Once calibrated, the model's assumptions become the foundation for future fair value measurements. The calibrated inputs are updated only for:

- Changes in company performance relative to transaction-date expectations,
- Changes in market conditions, such as risk-free rates, volatility, industry multiples, and comparable-company trends,
- New company-specific information that would have been considered by a market participant as of the measurement date.

Importantly, calibration does not freeze assumptions; rather, it provides a structured reference point that maintains internal consistency across valuation periods. Subsequent valuations remain tied to the observable market transaction but evolve as new information emerges.

Documentation and Auditability

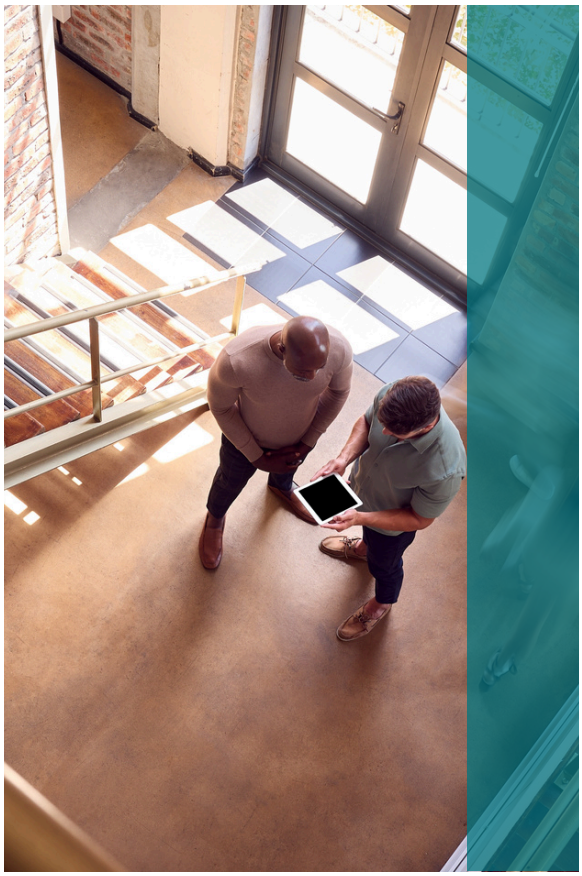
Calibrated valuations frequently undergo audit review, regulatory scrutiny, or board-level evaluation. Clear documentation is therefore essential. Analysts should retain:

- Transaction documentation and diligence materials,
- Copies of the original deal model (if available),
- Evidence of how projections and assumptions were interpreted by investors,
- Sensitivity analyses demonstrating the determination of calibrated inputs,
- A narrative explaining how updated measurements differ from the calibration date.

Comprehensive documentation ensures that the valuation is transparent, defensible, and consistent with ASC 820's emphasis on market-participant assumptions.

Conclusion

Implementing calibration is both a technical process and an interpretive exercise. It requires understanding how investors actually priced the asset—not merely how they said they priced it—and translating those observations into a valuation model whose outputs can be reliably updated over time. When implemented correctly, calibration produces valuations that are consistent, evidence-based, and aligned with real market behavior, thereby enhancing both reliability and audit defensibility.



MARSHALL & STEVENS

Part 3:
BEST PRACTICES FOR QUARTERLY MARKS

Introduction

Quarterly fair value measurements must balance efficiency with rigor. While the calibration analysis typically occurs at the transaction date or year-end, quarterly marks require a streamlined but disciplined process that updates fair value based on new information, changes in market conditions, and company-specific developments. The following best practices help ensure that quarterly valuations are consistent, supportable, and aligned with ASC 820's core principles: market participant perspective, exit price, and prioritization of observable inputs.

Anchor Quarterly Marks to the Calibrated Model

A properly calibrated model is the foundation for all subsequent measurement periods. Quarterly marks should not involve rebuilding the model from scratch. Instead, the previously calibrated assumptions (discount rate, volatility, scenario probabilities, liquidation preferences, etc.) should be carried forward and updated only to reflect:

- New company performance relative to expectations,
- Changes in market conditions,
- New information relevant to a market participant.

This approach produces consistency across periods and prevents model drift.

Focus on the Delta: What Changed Since Last Quarter?

Quarterly measurement is fundamentally a change detection exercise. Analysts should identify and evaluate only the information that a market participant would consider new relative to the last measurement date.

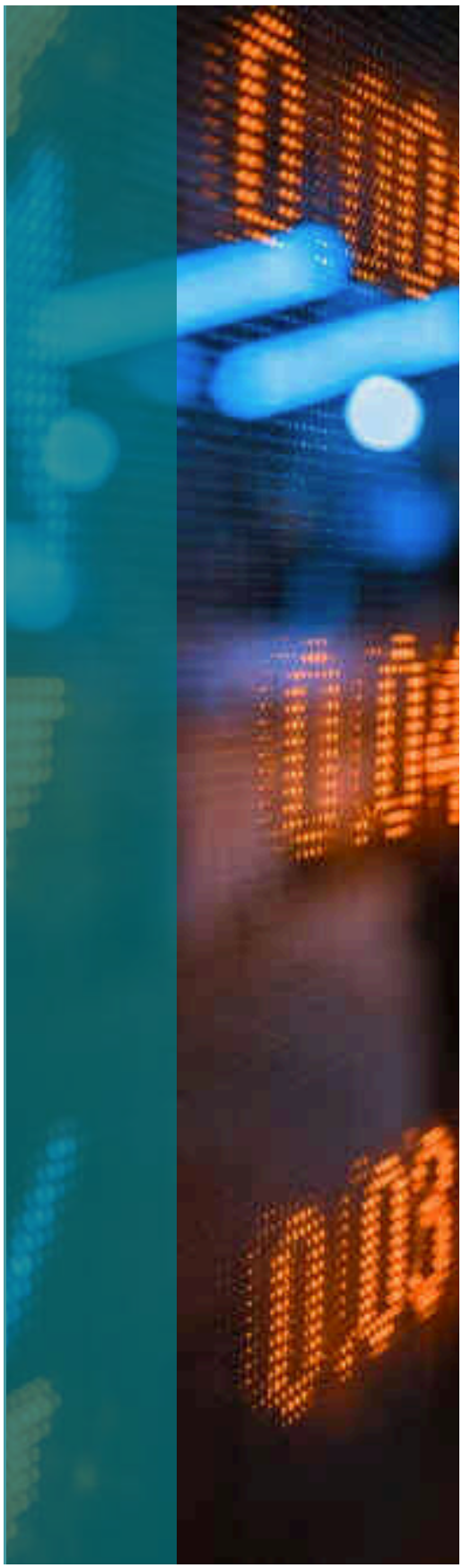
Examples of meaningful changes:
Company-specific changes

- Outperformance or underperformance relative to the calibrated forecast
- Customer wins/losses
- Updated cash burn, runway, or financing needs
- Delays in product development or regulatory approvals

Market-based changes

- Changes in guideline public company multiples
- Industry-specific multiples or transaction activity
- Interest rate changes affecting the risk-free rate and discount rate
- Broad shifts in market sentiment, volatility, or liquidity

Quarterly marks should not re-evaluate assumptions that have not changed; doing so both wastes effort and undermines the purpose of calibration.



Maintain Tight Expectation-to-Actual (E2A) Analyses

Every quarter, analysts should compare actual performance with the prior quarter's expected performance. The E2A analysis is one of the most useful tools for interpreting whether value has meaningfully changed.

Best practices include:

- Comparing actual revenue, EBITDA, cash flow, burn rate, and key operational metrics to forecast
- Identifying whether variances are timing-related or structural
- Assessing whether the variance would cause a market participant to revise expectations

A small one-quarter variance rarely justifies significant valuation movement unless the performance is indicative of a trend or structural break.

Use Market-Based Evidence Whenever Possible

Under ASC 820, observable market inputs must be used when available. Quarterly marks should incorporate:

- Current trading multiples of guideline public companies
- Changes in sector-specific dispersion or volatility
- Recent relevant M&A activity
- Updated market yields for credit instruments

A quarterly mark is not complete unless the analyst compares the updated valuation output to where the market is pricing comparable assets.

Avoid "Model Creep" or Unjustified Input Drift

One common issue in quarterly valuations is the gradual, unsupported modification of key assumptions—such as discount rates, volatility, or scenario probabilities—without market evidence.

Best practices include:

- Changes in discount rates should be tied explicitly to changes in risk-free rates, beta, or observable credit spreads
- Changes in volatility must be supported by updated market data, not intuition
- Scenario weightings should be revised only when new information makes prior assumptions outdated

If an assumption cannot be tied to evidence, it should not be changed.

Incorporate a Structured Materiality Framework

Quarterly marks do not require the same depth of analysis as annual valuations, but they must still be defensible. A materiality framework helps determine when changes in inputs or performance are significant enough to affect fair value.

Examples of materiality guidelines:

- Only update forecasts when the expected long-term impact exceeds a defined threshold
- Only revise discount rates when market conditions move beyond a tolerance band
- Only adjust valuation multiples when industry data shows statistically meaningful movement

This avoids unnecessary volatility in marks while ensuring responsiveness to real changes.

Document Everything That Changed— & Everything That Didn't

Auditors evaluate not only the quarterly conclusion, but also the logic behind what was updated and what remained unchanged. Good documentation enhances auditability and reduces back-and-forth.

Documentation should include:

- Summary of relevant new information
- E2A variance analysis
- Updated market data and peer set multiples
- Any changes in model inputs and the rationale behind them
- Sensitivities or reasonableness checks
- A clear bridge from prior quarter's value to the current quarter's value

If nothing material changed, the file should explicitly say so.

Perform Reasonableness Checks and Cross-Validation

Quarterly results should be cross-checked using multiple perspectives:

- Multiple-based sanity checks (e.g., implied revenue multiple vs. the peer set)
- Trend analysis (does the change in value align with operational performance?)
- Quarter-over-quarter value bridge (is the magnitude of change reasonable relative to new info?)
- Comparison to financing activity (if a transaction occurred, does the mark reconcile with it?)

Reasonableness checks are especially important in volatile quarters where model-based outputs may require context.

Identify and Highlight Potential Impairment or Inflection Signals

Quarterly marks should not merely update fair value—they should also flag developments that may warrant deeper analysis:

- Sharp declines in liquidity runway
- Negative changes in financing environment
- Loss of key customers or strategic partnerships
- Increased probability of down-round financing
- Emerging signs of exit delays or valuation compression

Catching these signals early helps management and auditors prepare for potential step-changes at year-end.

Maintain Audit Readiness Throughout the Year

Quarterly marks often face Q1 or year-end audit review, sometimes months after the measurement date. To avoid rushed reconstruction:

Analysts should:

- Maintain organized workpapers each quarter
- Implement standardized templates for E2A, market updates, and valuation bridges
- Save contemporaneous support for market data and assumptions

Audit-ready quarterly marks reduce the cost, time, and uncertainty of the audit process.

Conclusion

Quarterly marks should be efficient, consistent, and grounded in observable evidence. By anchoring all valuation updates to the calibrated model, focusing on changes since the prior period, and documenting each decision, valuation specialists can produce reliable, audit-defensible quarterly fair value measurements that align with ASC 820 and industry best practice.

Darleen Armour, ASA
Managing Director
Financial Valuation & Consulting
darmour@marshall-stevens.com
213.233.1516

Darleen Armour is a Managing Director, in the Financial Valuation & Consulting practice at Marshall & Stevens, where she leads complex valuation and multidisciplinary engagements and serves as National Lead of the Technical Standards Committee. With more than 35 years of valuation experience, she specializes in fairness and solvency opinions, fund valuations, purchase price allocations, equity compensation, ESOPs, tax reporting, and dispute-related matters across a broad range of industries. She has been qualified as an expert witness and has provided testimony in arbitration and legal proceedings. Previously, Ms. Armour served as Director, Valuation & Business Analytics at BDO and as Senior Vice President at Houlihan Lokey.

EXPERTISE IN ACTION

Marshall & Stevens is a leading provider of valuation consulting, transaction advisory, and litigation support services. For over 90 years, our specialists have helped companies, investors, and advisors navigate complex financial and legal matters with confidence.

From the boardroom to the courtroom, Marshall & Stevens delivers clarity, independence, and results.

Contact us today and let us put our expertise to work for you.

NEED ASSISTANCE OR WANT TO LEARN MORE?

CONTACT FORM:

Scan the QR Code or click HERE to fill out our contact form and a specialist from our team will connect with you soon.

PRIVATE EQUITY WEBPAGE:

To learn more about our Private Equity services and practice specialists, scan the QR Code or click HERE to visit our website.

EXPERTISE IN ACTION

Marshall & Stevens is a leading provider of valuation consulting, transaction advisory, and litigation support services. For over 90 years, our specialists have helped companies, investors, and advisors navigate complex financial and legal matters with confidence.

From the boardroom to the courtroom, Marshall & Stevens delivers clarity, independence, and results.

Contact us today and let us put our expertise to work for you.

NEED ASSISTANCE OR WANT TO LEARN MORE?

CONTACT FORM:

Scan the QR Code or click HERE to fill out our contact form and a specialist from our team will connect with you soon.

PRIVATE EQUITY WEBPAGE:

To learn more about our Private Equity services and practice specialists, scan the QR Code or click HERE to visit our website.