Challenges in Asset and Liability Valuation: Bridging Fair Value and Historical Cost Accounting

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Review Article

ABSTRACT

In contemporary economic environments, the valuation of assets and liabilities plays a critical role in financial reporting, influencing investor confidence, regulatory decisions, and systemic stability. This paper examines the complexities inherent in asset valuation, particularly through the contrasting lenses of fair value and historical cost accounting from existing secondary data from academic literature, regulatory standards, and empirical studies. While fair value accounting provides real-time asset valuations, it often introduces market volatility and heightens systemic risk, especially during economic downturns. Historical cost, by contrast, offers stability by valuing assets at acquisition cost but fails to reflect changing market conditions. Key case studies, such as the 2008 financial crisis, highlight the risks of fair value's market-driven valuations, which can amplify declines in asset values during periods of market distress. Additionally, the rise of complex asset types, including intangibles and digital assets, further challenges traditional valuation methods, complicating both fair value and historical cost applications. Through an analysis of existing

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literature and historical data, this study explores the implications of these valuation approaches on financial stability, investor transparency, and market dynamics. The findings suggest a need for a hybrid approach that combines elements of both fair value and historical cost accounting, to better align asset values with economic realities while mitigating excessive volatility. This balanced framework aims to enhance the reliability of financial reporting and offers policy recommendations for refining valuation standards in light of evolving market complexities.

1. INTRODUCTION

In today's complex economic landscape, valuing assets and liabilities accurately is essential to reliable financial reporting and decision-making. The definition of an asset as a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity has been revised as a present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits (IFRS, 2018). The challenges of valuation have grown as globalization, financial innovation, and digitalization introduce new asset types, including derivatives and digital assets, which lack active markets. Fair value reflects the market price of an asset or liability, enabling timely adjustments to reflect current economic conditions (Nurmadi et al., 2020). Historical cost, by contrast, records an asset at its original purchase price, providing stability but sometimes missing shifts in market value (Greenberg et al., 2013). Fair value, or "mark-to-market" accounting, is often favored for its ability to provide a transparent view of asset worth in real time, yet it can also lead to volatility, especially when market prices are unavailable. In these instances, companies may rely on "mark-to-model" approaches that use subjective estimates, increasing the risk of inaccuracies. This reliance on model-based valuations has, at times, led to significant errors and misrepresentations, as seen in cases like Enron, where model-based methods were used to inflate asset values (Dichev, 2008). The debate over fair value's role in financial transparency continues. Supporters value its ability to provide real-time reflections of asset values, while critics argue it can amplify economic downturns, particularly in banking. For instance, Boyer (2007) noted that during the 2008 financial crisis, frequent revaluations of bank assets contributed to declines in value, deepening financial instability. This phenomenon is especially pronounced in complex asset portfolios, where the growing role of intangible assets complicates true valuation.

As markets evolve, the complexities of asset and liability valuation continue to increase. The rise of intangible assets, coupled with innovations in securitization and digital finance, has added layers of complexity to valuation models, complicating liquidity assessment and risk management (Devereux & Sutherland, 2008). Historically, valuation has played a critical role in helping stakeholders make informed decisions. However, recent market volatility has revealed limitations in traditional valuation methods, as they sometimes fail to capture risks when asset prices diverge from intrinsic values. This paper examines the challenges of asset and liability valuation in current economic conditions, focusing on two primary valuation methods: fair value and historical cost. It further investigates the current challenges of asset and liability valuation, exploring the theoretical foundations, practical issues, and policy implications of prevailing valuation approaches to improve transparency and accuracy in financial reporting.

2. METHODOLOGY

This paper examines asset and liability valuation under modern economic conditions by analyzing secondary data from academic literature, regulatory standards, and empirical studies. A literature review approach is used to evaluate the evolution and performance of valuation methods, particularly historical cost and fair value accounting. Key case studies, such as those from the 2008 financial crisis, illustrate how these valuation approaches impact systemic risk and financial stability. Analytical frameworks are also incorporated to evaluate valuation effects in global markets, especially during periods of volatility. This research seeks to provide a comprehensive analysis that supports best practices and policy recommendations for effective asset and liability valuation.

3. THEORETICAL FOUNDATIONS OF ASSET VALUATION

The principles behind modern asset valuation trace their origins to early mathematical studies of compound interest and present value. Pioneers like Simon Stevin as cited by Damodaran (2006) and Francesco Pegolotti laid the groundwork by developing early methods for calculating investment values, which would eventually influence corporate finance practices (Damodaran 2006; Parker, 1968). These foundational ideas were particularly significant in industries requiring long-term investment evaluations, such as the railroad industry in the late 19th century. As the need for analyzing delayed returns and large-scale investments grew, scholars like A.M. Wellington introduced innovative valuation tools to compare future cash flows with upfront investments, a concept further refined by economists such as Alfred Marshall and Irving Fisher (Wellington, 1887; Marshall, 1907; Fisher, 1930). These early concepts formed the basis for present-day valuation methods, including Discounted Cash Flow (DCF) techniques, which are central to the valuation of assets and liabilities in modern economic systems.

4. DISCOUNTED CASH FLOW (DCF) VALUATION

The Discounted Cash Flow (DCF) model remains one of the most critical methods of asset valuation, particularly for long-term investments. It emphasizes the present value of future cash flows, under the assumption that assets that generate higher and more predictable cash flows are more valuable than those with lower or uncertain cash flows (Fisher, 1930). DCF valuation requires discounting these future cash flows to their present value using a rate that reflects the risk and time value of money. However, applying DCF consistently across different types of assets presents challenges, particularly for those with volatile or highly uncertain cash flows. The model's effectiveness can be undermined when future cash flows are difficult to predict or are subject to significant market fluctuations. Despite these challenges, DCF continues to play a pivotal role in asset valuation, especially when considering long-term investments that are expected to generate steady returns.

5. FAIR VALUE ACCOUNTING (FVA) AND ITS IMPORTANCE

Fair Value Accounting (FVA) measures assets based on current market prices, offering the advantage of reflecting real-time economic conditions. Additionally, fair value may affect asset liquidity by often pricing assets at distressed levels that do not reflect a company's long-term strategy (Kothari et al., 2009). This method is valuable in providing up-to-date information for stakeholders, thus improving decision-making in rapidly changing markets (Greenberg et al., 2013). However, FVA's dependence on market prices exposes it to volatility, particularly in illiquid markets or during financial crises. As Dichev (2008) highlights, during periods of market inactivity, FVA can become reliant on "mark-to-model" techniques, which are prone to significant estimation errors and manipulation by firms for earnings management. This issue was notably evident during the Enron scandal, where fair value measurements were used to manipulate financial results (Dichev, 2008). Furthermore, Kothari et al. (2009) and Biondi (2011) argue that the integration of unrealized gains and losses in FVA can distort a company's true financial position. While FVA aims to present an accurate snapshot of asset values, it may inadvertently create an illusion of profitability during market downturns by reflecting unrealized gains. This can mislead investors and obscure the long-term sustainability of firms. Additionally, as Benston (2008) and Ryan (2008) point out, the application of FVA during periods of economic instability can exacerbate financial crises. In the 2008 financial crisis, for instance, the widespread devaluation of assets under FVA led to severe liquidity shortages, amplifying the financial downturn.

6. HISTORICAL COST ACCOUNTING (HCA) IMPORTANCE IN VALUATION

Historical Cost Accounting (HCA), which records assets at their original acquisition cost, has long been regarded as a stable and conservative approach to valuation. This method avoids the volatility inherent in market-driven price changes, providing a consistent basis for financial reporting (Nurmadi et al., 2020). Advocates of HCA argue that it protects investors and stakeholders from the misinterpretations that can arise from market fluctuations. By avoiding unrealized gains or losses, HCA provides a clearer, more conservative picture of a company's financial standing, especially during

Table 1. Comparison of fair value and historical cost accounting

Criterion	Fair Value Accounting	Historical Cost Accounting
Volatility	High, reflects real-time market changes	Low, more stable over time
Transparency	Provides current market information	May obscure current asset values
Use in Financial Crises	Can exacerbate declines through revaluation cycles	Provides stability but may mask risks
Application	Common for liquid assets	Preferred for long-term, illiquid assets
Applicability in Crises	Can amplify downturns via revaluation cycles	Conservative, avoids excessive write-downs
Long-Term Asset Suitability	Less suitable, may reflect temporary market variations	Stronger, aligns with held-to-maturity investments

Source: Author's Compilation

periods of economic stress (Greenberg et al., 2013). However, the limitation of HCA is its failure to account for changes in market conditions over time. As economic environments evolve, the market value of assets may diverge significantly from their historical cost, leading to financial statements that do not reflect the true value of a company's holdings. This outdated perspective is particularly problematic in volatile markets or during inflationary periods, where asset values may appreciate or depreciate rapidly, but these changes are not reflected under HCA. As Laux and Leuz (2009) argue, this can lead to a lack of transparency and misinform investors about the true value of a firm's assets. In comparison to FVA, HCA may be seen as failing to provide a real-time reflection of a company's financial health, especially when market conditions change dramatically.

7. CHALLENGES IN VALUING DIFFERENT ASSET CLASSES

The Institute of Asset Management (2012) points out that asset can be managed by obtaining value more than what you do to assets, it is about using assets to deliver value and reach the organization's business goals. Valuation practices become even more complex when applied to different asset types, as each class presents unique challenges.

1. **Fixed Assets**: The valuation of fixed assets typically relies on historical cost methods, but in cases where markets for similar assets exist, fair value can be used. Fixed assets have long-term utility and generate future cash flows, yet their valuation can be affected by factors like market conditions, wear, and technological obsolescence (Nurmadi et al., 2020). Fixed assets, such as property, plant, and equipment, are typically valued using historical cost methods due to their long-term utility and depreciation over time (Nurmadi et al., 2020). While fair value can provide a more accurate reflection of current market conditions, this method can also introduce volatility in the financial statements, as market fluctuations may lead to substantial revaluations that do not align with the asset's ongoing economic utility.

2. **Intangible Assets**: The valuation of intangible assets, such as intellectual property and goodwill, is particularly complex, as these assets lack a physical form and are less likely to have active markets. The value of intangibles often fluctuates significantly due to rapid innovation cycles and the changing legal landscape of intellectual property rights (Tellmann et al., 2024). These assets often lack active markets or clear valuation benchmarks, making them difficult to value accurately under both fair value and historical cost accounting methods. Under FVA, intangible assets are especially vulnerable to valuation volatility, as their worth can change dramatically with shifts in market sentiment or legal circumstances (Tellmann et al., 2024). As Bignon et al. (2009) observe, this can result in inflated valuations during periods of economic boom and sharp declines during downturns, further complicating the financial reporting process.

3. **Current Assets**: For current assets like cash, receivables, and inventories, fair value provides a closer approximation of realizable value, yet certain assets, like inventory, can pose challenges in valuation due to changes in market demand and supply chains (Devereux & Sutherland,

2008). Current assets, such as cash, receivables, and inventories, benefit more directly from fair value accounting, as real-time valuations offer a closer approximation of realizable value. However, market instability can still skew these valuations. For example, during the 2007–2008 financial crisis, the fair value of asset-backed securities saw substantial devaluations, revealing the limitations of fair value in times of market turbulence (Benston, 2008; Ryan, 2008). Thus, while FVA can be effective in providing timely information on certain assets, its effectiveness is compromised during periods of financial instability, highlighting the need for a more balanced approach to asset valuation.

8. SYSTEMIC RISKS AND THE ROLE OF FAIR VALUE ACCOUNTING IN ECONOMIC STABILITY

One of the key criticisms of fair value accounting is its contribution to systemic risk in financial markets. The 2008 financial crisis serves as a stark example of how FVA can exacerbate economic downturns by forcing asset write-downs during periods of market panic. As Bignon et al. (2009) and Plantin et al. (2008) argue, this can trigger a "contagion effect," where the devaluation of one institution's assets leads to cascading losses in others, creating a downward spiral of financial instability. The interconnections between financial institutions mean that a sudden and significant change in asset values can have far-reaching consequences across the entire system. Moreover, the "accounting accelerator" effect identified by Boyer (2007) highlights how fair value accounting amplifies economic cycles. During periods of market growth, fair value can inflate asset values, encouraging increased financial leverage and risk-taking. However, when market conditions turn sour, the same

mechanism can exacerbate declines in asset values, heightening systemic risk. Ramanna and Watts (2007) also discuss how market-based valuations may encourage short-termism, where firms focus on immediate market reactions rather than long-term stability. This behavior can lead to profit manipulation, particularly when asset markets are illiquid or distorted.

8.1 Impact of Emerging Asset Classes on Valuation Standards

In today's economy, new asset types, including digital assets like cryptocurrencies, NFTs, and intellectual properties, are gaining prominence. These assets differ substantially from traditional ones, lacking active markets and standard valuation practices. The unique nature of these assets challenges traditional fair value and historical cost methods, as valuation must account for rapidly fluctuating markets, intangible qualities, and legal considerations (Baek et al., 2007). This section will examine how these emerging classes push for valuation methods that can handle the volatility and subjectivity of non-tangible assets (EY, 2021).

8.2 International Perspectives on Valuation Standards

Valuation practices vary globally due to different regulatory frameworks, such as the International Financial Reporting Standards (IFRS) and Generally Accepted Accounting Principles (GAAP) in the U.S. This section will compare approaches to fair value and historical cost accounting across regions, considering their influence on transparency, investor confidence, and market stability (Aluko et al., 2004; Havard, 2001). Understanding these differences reveals challenges in global standardization, especially for multinational entities.

Table 2. Valuation challenges by asset class

Challenges in Valuing Different Asset Classes	Fixed Assets	Intangible Assets	Current Assets
Preferred Method	Historical cost	Fair value (with caution for market assumptions)	Fair value for liquidity approximation
Volatility	Low to moderate	High, sensitive to market and model assumptions	Moderate to high during market volatility
Systemic Risk	Limited	High, may lead to inflated values in booms	Moderate, impacted by financial sector health

Source: Author's Compilation

8.3 Behavioral Influences and Heuristics in Valuation

Valuers are subject to cognitive biases, such as heuristics, which can skew asset valuation. According to Kahneman et al. (1982), heuristics simplify decision-making under uncertainty but can lead to systematic errors. This section will explore how valuers' reliance on past experiences and familiarity with the asset or client can lead to biased decisions (Agarwal et al., 2015; Hardin, 1997). Recognizing these behavioral patterns is essential for developing guidelines that help mitigate biases and improve valuation accuracy (Akinjare et al., 2013).

8.4 Technology and Its Role in Modern Valuation Practices

Technological advancements, including artificial intelligence (AI), machine learning, and big data analytics, offer promising solutions for enhancing valuation accuracy and efficiency (EY, 2021). This section will discuss how digital platforms and automated valuation models (AVMs) are beginning to assist valuers by processing complex data sets and providing real-time market insights. However, dependence on technology also raises concerns about over-reliance and potential cybersecurity risks (Aliyu et al., 2014).

9. POLICY IMPLICATIONS AND THE NEED FOR A BALANCED APPROACH

Given the challenges associated with both fair value and historical cost accounting, there is a growing consensus among policymakers that a hybrid approach may be necessary. Fair value accounting, while offering real-time insight into asset values, can lead to excessive volatility and systemic risk during times of economic instability. On the other hand, historical cost accounting provides stability but fails to reflect current market realities. As Laux and Leuz (2009) propose, integrating both methods could offer a more resilient framework for financial reporting that balances the need for transparency with the avoidance of market distortions. Further policy considerations include introducing safeguards that limit the extent of asset write-downs during crises, thereby mitigating the impact of market volatility on financial statements (Greenberg et al., 2013). Given the challenges and limitations of both fair value and historical cost accounting, there is a growing call for a hybrid approach that incorporates elements of both methods. By creating a more flexible and adaptive valuation framework, regulators can ensure that financial statements provide useful, accurate information while protecting against the risks associated with both overvaluation and undervaluation.

10. CONCLUSION

The valuation of assets and liabilities in modern economic conditions presents significant challenges, particularly with the use of fair value and historical cost accounting. While both methods offer distinct advantages, their application in volatile markets reveals notable limitations. Fair value accounting provides real-time asset values but can introduce excessive volatility, potentially exacerbating financial crises. Historical cost accounting, though stable, may not accurately reflect current market conditions. A balanced approach that integrates elements of both methods could improve financial reporting by providing transparency without amplifying systemic risks. This hybrid model could support a more consistent valuation framework across asset classes, enhancing investor confidence and financial stability. Future policy considerations should focus on creating adaptable valuation standards to support informed decision-making in evolving markets.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declares that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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