# THE HISTORY OF

# MARK-TO-MARKET ACCOUNTING

(Adapted from the Security and Exchange Commission Study on Markto-Market Accounting)

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## **Introduction, Definition and Background**

Market-to-market accounting is also known as fair market value accounting.

Currently, the Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements*, issued by the Financial Accounting Standards Board (FASB) in 2006, provides a standardized definition of fair value. Early adoption of SFAS No. 157 was permitted but it became a tax reporting requirement for all businesses in 2008.

SFAS No. 157 defines "fair value" as follows:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Some of the key principles supporting the definition of fair value according to SFAS No. 157 include:

- Fair value should be based on a transaction or exchange price. Specifically, SFAS No. 157 states that fair value is based on the concept of the *exit price* or sale price of a hypothetical transaction—the price to be received on sale of an asset as opposed to the price to be paid on a purchase of an asset.
- The transaction price should be the price that would be received in an *orderly transaction* which allows for due diligence. It should not be from a distressed sale or a forced transaction. Fair value measurement assumes that the asset is sold in its principal or most advantageous market.
- Fair value is determined based on all the assumptions that market participants would typically use in pricing the asset. A fair value measurement should include an *adjustment for various risks* if market participants would typically consider such risks in pricing the related asset or liability—even if the adjustment is difficult to determine.
- When relevant information is not observable in the market, *company-specific information* should be included in fair value measurement.
- SFAS No. 157 provides a hierarchy for inputs used in fair value measurement based on the degree to which the inputs are observable in the market.

Level 1 in the hierarchy includes inputs that are based on *quoted prices in active* markets for the identical asset or liability.

Level 2 includes quoted prices of similar instruments in active markets, quoted prices for identical or similar instruments in inactive markets and observable market information on valuation parameters or market-corroborated information.

Level 3 represents measurements that incorporate significant unobservable inputs that reflect the *reporting entity's own assumptions* regarding valuation parameters that market participants would use.

Whenever possible, valuation techniques used to measure fair values should maximize the use of relevant observable inputs (i.e. quoted prices in active markets) and minimize the use of unobservable inputs (i.e. reporting entity's own assumptions). In short, when Level 1 inputs are available, those inputs should be used.

In April of 2009, the Financial Accounting Standards Board (FASB) issued a FASB Staff Position (FSP) intended to provide additional application guidance regarding fair value measurements:

FSP FAS 157-4, Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly, provides guidelines for making fair value measurements more consistent with the principles presented in FASB Statement No. 157, Fair Value Measurements.

FSP FAS 157-4 relates to determining fair values when there is no active market or where the price inputs being used represent distressed sales. It reaffirms what Statement 157 states is the objective of fair value measurement—to reflect how much an asset would be sold for in an orderly transaction (as opposed to a distressed or forced transaction) at the date of the financial statements under current market conditions. Specifically, it reaffirms the *need to use judgment* to ascertain if a formerly active market has become inactive and in determining fair values when markets have become inactive.

Before SFAS No. 157, *fair value* measurement was not defined in a single accounting standard which led to various *fair value* calculations and measurements under various accounting standards. Accordingly, SFAS No. 157 was issued to provide a single set of measurement principles to be uniformly applied for *fair value* measurement when

U.S. GAAP required reporting entities to measure and disclose the *fair value* of an asset. In short, SFAS No. 157 defined and established a unified framework for measuring *fair value*.

Importantly, SFAS No. 157 did not change which assets are subject to *fair value* accounting or when *fair value* should be applied. Other accounting standards and requirements specify which assets are subject to *fair value* accounting and when *fair value* measurements should be applied.

### The Great Depression

Before the development of mandatory accounting standards following the Great Depression, companies had significant latitude in selecting their own accounting practices and policies. In the early-twentieth century, prior to the Great Depression, the use of *current values* or *appraised values* for assets and the recording of upward asset revaluations were common. Balance sheets often included upward revaluations of long-term assets such as property, plant, equipment and intangible assets.

For example, a survey of large industrial firms between 1925 and 1934 revealed that 75% of the sample firms recorded upward or downward asset revaluations during this period, including write-ups of property, plant, equipment, intangibles and investments.

In fact, prior to 1938, banking organizations were required for supervisory purposes to use *market value* accounting for their investment securities portfolios.

However, in 1938, serious concerns on the part of the U.S. Treasury and the bank regulators over how this affected the banks' financial performance and investment

decisions led the agencies to abandon the use of *market value* accounting for supervisory purposes.

#### **Historic Cost or Book Value**

In the aftermath of the Great Depression, there was a general move toward more "conservative" accounting. This included a move away from the use of *current values* or *appraised values* for long-lived assets such as fixed assets and intangibles.

The move away from *current value* accounting and towards the use of *historic cost* accounting for long-lived assets was strongly supported by Robert E. Healy, the first Chief Accountant of the Securities and Exchange Commission (SEC). Healy had participated in the Federal Trade Commission (FTC) investigation of business practices that preceded the formation of the SEC. The investigation uncovered widespread use of asset writeups which the FTC viewed as arbitrary. Commenting on the findings of this investigation, Healy observed that, "You can capitalize in some states practically everything except the furnace ashes in the basement."

During Healy's tenure, the newly-formed SEC strongly endorsed *historic cost* accounting for long-lived assets and moved to curtail the use of *appraised values*. By 1940, the practice of the upward revaluation of fixed assets—a practice that had been commonplace in the late 1920s—was virtually extinct from financial reporting in the U.S.

#### **Anything Goes**

From WWII until 1975, there was a lack of consistency in accounting literature which resulted in a variety of accounting practice, especially with respect to marketable

securities. Accounting practices included carrying securities at *historic cost*, at *market value* and, in some cases, companies and accountants used a combination of both for different classes of securities.

### **Something Must Be Done**

The use of *fair value* measurement expanded significantly in 1975 with the issuance of authoritative accounting literature that mandated its use in certain circumstances due to concerns about the appropriate measurement attribute for equity securities.

During 1973 and 1974, there were substantial declines in the market values of many securities. These declines, in many cases, were not reflected in financial reports.

When the market recovered in 1975, the accounting guidance was unclear on whether securities previously written down could be written up to previous carrying amounts. As a result of these issues, in December 1975, the FASB issued SFAS No. 12, *Accounting for Certain Marketable Securities*, which required that all marketable equity securities be recorded at the *lower-of-cost-or-fair-value*.

#### The Savings and Loan Banking Crisis

In the late 1970s and early 1980s, interest rates were driven up by high inflation. Many savings and loans banks found themselves in a position where they had to pay a higher rate of interest on their deposits than they were earning on their existing fixed-rate mortgage loans.

The savings and loan crisis of the 1980s exposed challenges with the *historic cost* model of accounting for financial institutions. Specifically, savings and loan institutions

accepted short-term deposits and used these deposits to fund long-term (30-year) fixedrate mortgage loans.

When these savings and loan institutions sold their low-yielding mortgage assets to repay their high-yielding deposits, they had to severely discount their mortgage assets because the new market rates were much higher than they had been when the mortgages were originated.

In some cases, the *current value* of their assets was less than the value of their liabilities, so these institutions were economically insolvent. However, under the *historic cost* accounting model, these losses were not reflected in their financial statements—with the effect of reducing transparency surrounding the solvency position of these institutions.

This, in turn, created an incentive for the management of economically less solvent institutions to take-on more risky investments such as commercial real estate in the hope they could work their way out of their economically less solvent positions.

In effect, the *historical-cost-based* financial statements obscured underlying economic losses and allowed troubled financial institutions to go undetected. This led to various calls in the late 1980s and early 1990s for more use of market values in regulatory accounting for financial institutions.

#### **Gains Trading**

Historical-cost-based financial statements also allowed financial institutions to engage in *gains trading*. With the greater interest rate volatility in the 1980s, financial institutions were increasingly in the position of holding assets or liabilities where the

current market values of these financial instruments differed markedly from their historical cost values shown in their financial statements.

Management could opportunistically choose which assets to sell in order to realize gains (i.e. to appear profitable) or losses (i.e. to avoid paying taxes) in particular accounting periods. This afforded management a powerful income statement management tool.

In addition, for financial institutions short of capital, this created an incentive for the management to sell their well-performing assets in order to realize gains to boost their capital but to retain their poorly-performing assets which had unrealized losses.

The change in the business environment during the 1980s also provides the backdrop that is necessary to understand the progress of *fair value* accounting.

Historically, many financial institutions did not have dynamic risk management strategies and would rarely sell investments before their maturity. Deregulation of interest rates during this period caused a change in the strategies of financial institutions and securities positions were traded more actively. New financial instruments were created in response to changes in the market, such as deregulation, tax law changes, volatility and other factors. U.S. GAAP for such changes in financial instruments was being developed on an issue-by-issue basis.

Accounting literature issued during the 1980's included SFAS No. 52, *Foreign Currency Translation*, issued in 1981, which required *fair value* accounting for certain foreign exchange contracts through the income statement and SFAS No. 80, *Accounting for Futures Contracts*, issued in 1984, which required futures contracts that do not qualify for hedge accounting to be measured at *fair value* through income.

## **Broadening the Scope**

Due in part to the savings and loan crisis, the Financial Accounting Standards
Board (FASB) recognized the need to develop disclosure and accounting requirements on
a broader basis for all classes of financial instruments. The broader project was added to
the FASB's agenda in 1986 "to address financial reporting issues that were arising, or
that were given a new sense of urgency, as a result of financial innovation."

A disclosure project was viewed as an interim step in addressing accounting issues surrounding such financial instruments and off-balance sheet financing. This project resulted in the issuance of SFAS (Statement of Financial Accounting Standards)

No. 105 in March 1990 and SFAS No. 107, *Disclosures about Fair Value of Financial Instruments*, in December 1991.

The FASB continued its work on a second phase of the broader project of accounting for financial instruments to address issues of inconsistent literature, the perceived greater relevance of *fair value* information, *gains trading* practices and the inequitable result of *lower-of-cost-or fair-value* accounting. This work resulted in the FASB issuing SFAS No. 115 in 1994. This statement requires companies to classify their investments in debt or equity securities as *trading*, *AFS* (Available-for-Sale) or *HTM* (Held-to-Maturity), with different accounting models for each classification.

In June 1997, the FASB issued SFAS No. 130, *Reporting Other Comprehensive Income*. This statement was issued in response to user concerns that changes in certain assets and liabilities were being recorded directly in equity, bypassing the income statement.

In an attempt to improve the transparency and prominence of such items, the FASB required that changes in equity needed to be reported individually and with the same prominence as other financial statements included in a full set of financial statements. Unrealized gains and losses on *AFS* securities were one category required to be so reported.

The impact of SFAS No. 130 was to make changes in value of *AFS* securities—which continue to be excluded from income—more transparent.

## The Challenge of Derivatives

The *historical cost* accounting model was not well-suited to address the development and proliferation of derivative instruments in the 1990's. These instruments often involve little or no initial investment but, given the leveraged nature of the positions, subsequent changes in value can be dramatic.

The historical accounting model did not appropriately capture the associated risks and uncertainties or subsequent changes in value. An increase in the use of derivatives, lack of transparency around their values, and major losses incurred by various entities as a result of investments in derivatives were factors that led the FASB to develop a new accounting standard on derivative instruments, resulting in the issuance of SFAS No. 133 in June 1998.

SFAS No. 133 requires that all derivatives be accounted for at *fair value* on the balance sheet (with minor exceptions). Changes in the *fair value* of the derivatives are to be recorded in income unless the derivatives qualify for special accounting treatment known as *hedge* accounting.

## Security and Exchange (SEC) Report on Mark-To-Market Accounting

In early 2009, the SEC released a comprehensive study on mark-to-market accounting.

The study was conducted because some people blamed *mark-to-market* or *fair* value accounting for causing or at least contributing in a significant way to the global financial crisis.

In the months preceding passage of the Emergency Economic Stabilization Act of 2008, some people asserted that *fair value* accounting, along with the accompanying guidance on measuring *fair value* under SFAS No. 157, contributed to instability in the financial markets.

According to these critics, *fair value* accounting did so by requiring what some believed were potentially inappropriate write-downs in the value of investments held by financial institutions, most notably due to concerns that such write-downs were the result of inactive, illiquid, or irrational markets that resulted in values that did not reflect the underlying economics of the securities.

These voices pointed out the correlation between U.S. GAAP reporting and the regulatory capital requirements of financial institutions, highlighting that this correlation could lead to the failure of long-standing financial institutions if sufficient additional capital is unavailable to offset investment write-downs.

Further, they believed the need to raise additional capital, the effect of failures, and the reporting of large write-downs would have broader negative impact on markets and prices, leading to further write-downs and financial instability.

The events leading up to the Congressional call for the SEC study illustrated the need for identifying and understanding the linkages that existed between *fair value* accounting standards and the usefulness of information provided by financial institutions.

### **Background to the SEC Study on Mark-to-Market Accounting**

From mid-2007 through 2008, the world economy experienced economic conditions that affected financial and non-financial institutions. What at one time some viewed as an isolated crisis in the subprime mortgage sector had spread to the global economy as a whole.

Factors that have been cited as causing or contributing to the economic crisis included, among others, low interest rates, rapid housing appreciation, alternative mortgage products, relaxed underwriting standards, increased leverage, innovative new investments that were believed to be safer than perhaps warranted and insufficient regulation.

While financial institutions were experiencing the brunt of increasing mortgage defaults, housing foreclosures, bank failures and tighter credit, other industries experiencing losses, liquidity issues, rapid decreases in market capitalization, layoffs and lower consumer confidence—all underscored by the National Bureau of Economic Research's recent announcement that the U.S. had been in a recession since December 2007 which was expected to "likely be the longest, and possibly one of the deepest, since World War II."

While analysis of the causes of this crisis is still underway, some believed that *fair value* accounting standards had contributed to or exacerbated the crisis, arguing that

use of *fair value* accounting, particularly when markets were illiquid, had resulted in the valuing of assets well below their "true economic value." Opponents of *fair value* accounting also argued that the write-downs had caused a downward spiral, as they had triggered margin and regulatory capital calls—"have forced rapid asset liquidation, exacerbating the loss of value, diminished counterparty confidence, and constrained liquidity."

Proponents countered that *fair value* accounting provided useful information to investors and its suspension would increase market uncertainty and decrease transparency. It was in this context that the SEC performed its study of mark-to-market accounting to fulfill the Congressional mandate.

Furthermore, although not mandated for study by the Emergency Economic Stabilization Act of 2008, the SEC believed that it was important to recognize what many believed to be the larger problem in the financial crisis that led to the financial distress at financial institutions other than banks, including Bear Stearns, Lehman Brothers and Merrill Lynch.

#### The Cause of the Global Economic Crisis

The SEC study concluded that rather than a crisis precipitated by *fair value* accounting, the crisis was a *run on the bank* at certain institutions, manifesting itself in counterparties reducing or eliminating the various credit and other risk exposures they had to each firm. This was, in part, the result of the massive de-leveraging of balance sheets by market participants and reduced appetite for risk as margin calls increased, putting enormous pressure on asset prices and creating a *self-reinforcing downward* 

spiral of higher haircuts, forced sales, lower prices, higher volatility, and still lower prices. The trust and confidence that counterparties required in one another in order to lend, trade or engage in similar risk-based transactions evaporated to varying degrees for each firm very quickly.

What would have been more than sufficient in previous stressful periods was insufficient in more extreme times.

Although not detailed in the SEC *mark-to-market* study, the SEC also believed that the liquidity pressures faced by Bear Stearns, Lehman and the other investment banks were also encountered by many other financial institutions, including AIG and other banks.

Furthermore, the SEC observed that *fair value* measurements were used to measure a minority of the assets (45%) and liabilities (15%) included in financial institutions' balance sheets. The percentage of assets for which changes in *fair value* affected income was significantly less (25%), reflecting the *mark-to-market* requirements for trading and derivative investments. However, for those same financial institutions, the SEC observed that *fair value* measurements did significantly affect financial institutions' reported income.

The SEC concluded that *fair value* accounting did not appear to play a meaningful role in bank failures occurring during 2008. Rather, bank failures in the U.S. appeared to be the result of growing probable credit losses, concerns about asset quality, and, in certain cases, eroding lender and investor confidence. For the failed banks that did recognize sizable *fair value* losses, it does not appear that the reporting of these losses was the reason the bank failed.

The SEC's research on this issue reflects that, based on these sources, investors generally support measurements at *fair value* as providing the most transparent financial reporting of an investment, thereby facilitating better investment decision-making and more efficient capital allocation amongst firms. While investors generally expressed support for existing *fair value* requirements, many also indicated the need for improvements to the application of existing standards. Improvements to the impairment requirements, application in practice of SFAS No. 157 (particularly in times of financial stress), *fair value* measurement of liabilities and improvements to the related presentation and disclosure requirements of *fair value* measures were cited as areas warranting improvement.

## **SEC Conclusions and Recommendations on Mark-To-Market Accounting**

In light of the global economic crisis, the conclusions and recommendations of the comprehensive SEC study on mark-to-market accounting included:

- SFAS No. 157 should be improved but not suspended.
  - The guidance in SFAS No. 157 does not determine when fair value should be applied but only provides a common definition of fair value and a common framework for its application.
  - Suspending SFAS No. 157 would only revert practice to inconsistent and sometimes conflicting guidance on fair value measurements.
- Existing fair value and mark-to-market requirements should not be suspended.

- Fair value and mark-to-market accounting has been in place for years and abruptly removing it would erode investor confidence in financial statements.
- Fair value and mark-to-market accounting do not appear to be the "cause" of bank and other financial institution failures.
- Mark-to-market accounting is generally limited to investments
  held for trading purposes and for certain derivative instruments.
   For many financial institutions, these represent a minority of their total investment portfolio.
- While the SEC does not recommend a suspension of existing fair value standards, additional measures should be taken to improve the application and practice related to existing fair value requirements particularly as they relate to both Level 2 and Level 3 estimates.
  - Fair value requirements should be improved through development
    of application and best practices guidance for determining fair
    value in illiquid or inactive markets. This includes consideration of
    additional guidance regarding:
    - How to determine when markets become inactive
    - How to determine if a transaction or group of transactions is forced or distressed
    - How and when illiquidity should be considered in the valuation of an asset or liability, including whether additional disclosure is warranted

- How the impact of a change in credit risk on the value of an asset or liability should be estimated
- When observable market information should be supplemented with unobservable information in the form of management estimates
- How to confirm that assumptions utilized are those that would be used by market participants and not just by a specific entity
- Existing disclosure and presentation requirements related to the effect of fair value in the financial statements should be enhanced.
- FASB should assess whether the incorporation of changes in credit risk in the measurement of liabilities provides useful information to investors, including whether sufficient transparency is provided.
- Educational efforts to reinforce the need for management judgment in the determination of fair value estimates are needed.

Joshua Persky has been written about in hundreds of headlines and publications across the globe for his innovative and inspiring job-hunting techniques. A lay-off from a prestigious investment bank amidst the economic crisis of 2008 led him to his city streets wearing a homemade sandwich board with the handwritten advertisement: "Experienced MIT Grad for Hire." He was dubbed the "Face of the American Economy" by the BBC, "Sign of the Times" by the Associated Press—and a "Better Sign of the Times" by the New York Post when he landed a job in his field at the height of the global economic crisis as Senior Manager Valuation & Corporate Finance at a large accounting firm. Joshua's time is now devoted to business valuation and business development consulting, writing, inspirational speaking and teaching others practical, forward-looking and creative job hunting techniques. He has five children and lives with his wife and their two children in New York City. Please visit him at <a href="https://www.oracleofnewyork.com">www.oracleofnewyork.com</a>.