Mark to Market *for Governments*

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Years of *Crisis*

Over the last two years, several factors have coincided to bring scrutiny to the derivative financial instruments environment, particularly how governments account for them. First, questionable practices in the financial services industry with respect to issuing risky and complex derivatives came close to toppling the U.S. economic system. Decisions made by a few individuals had such a worldwide social and economic impact that recovery will take years.

Next, financial firm executives and even congressional leaders were quick to accuse an accounting method, specifically mark to market, as being one of the main causes of the recent crisis. This public outcry forced the Financial Accounting Standards Board (FASB) to loosen some measurement requirements of Statement No. 157, *Fair Value Measurements*. At the same time, after several years of study and evaluation, the Governmental Accounting Standards Board (GASB) issued Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. Last, GASB has undertaken a research project specifically aimed at refining measurement and reporting issues associated with the measurement of fair value.

This article examines the role of mark to market in government accounting, specifically in the area of derivative instruments. It argues that mark to market, also called fair value accounting, while controversial and not without flaws, is the best way for governments to measure and report the financial activity of derivative instruments. As will be discussed, mark-to-market accounting is congruent with a government's multiple financial reporting objectives of accountability, transparency, consistency, interperiod equity and risk assessment.

Just What is *Mark-to-Market* Accounting?

Mark-to-market accounting refers to the accounting standards of assigning a value to a position held in a financial instrument based on the current fair market price, rather than its original cost or book value, for the instrument or similar instruments. Fair value has been part of U.S. generally accepted accounting principles (GAAP) since the early 1990s, and investor demand for the use of fair value when estimating the value of assets and liabilities has increased steadily since then as investors desire a more realistic appraisal of an institution's or company's current financial position. Mark to market is a measure of the fair value of accounts that can change over time, such as assets and liabilities. For example, financial instruments traded on a futures exchange, such as commodity contracts, are marked to market on a daily basis at the market close.

Both FASB and GASB have developed definitions of what each calls the fair value of a financial instrument. FASB Statement No. 157 defines fair value as: "The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at measurement date." GASB (Codification section 150.105) defines fair value as: "The amount at which an investment could be exchanged in a current transaction between willing parties other than in a forced or liquidation sale." As you can see, the definitions are quite similar.

What Was *(Is)* All the Fuss About?

FASB Statement No. 157 took effect in 2007. The statement was an attempt to increase consistency and comparability in fair value measurement and related disclosures, especially for complex and unusual financial instruments, such as credit default swaps and mortgage-backed securities. Statement No. 157 developed a fair value hierarchy that prioritized the inputs (information) used for valuation techniques to measure fair (market) value into three broad levels. These levels are:

Level 1 Inputs: These are quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at measurement date. These inputs have little controversy associated with them, as they are developed primarily from readily available public data. For example, if a company has an investment in Microsoft stock, marking to market would be a simple process of measuring the difference between the original cost and the publicly traded and readily available quoted market price of the stock at the measurement (generally year-end) date.

Level 2 Inputs: If Level 1 data are not available, the next choice is Level 2, which uses prices of similar or related securities as a guide. For example, this might be used for a stock option, the right to buy shares of a given stock at a set price during a certain period. There may be too little

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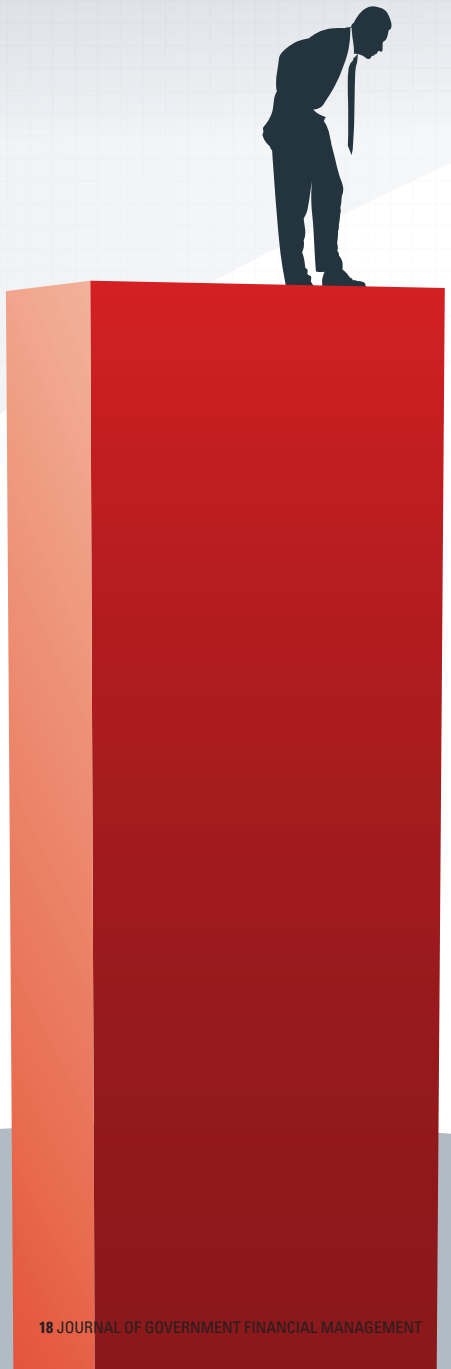
trading in identical options to use Level 1 pricing, but the option's value can be figured pretty closely by looking at the prices of the stock itself.

Level 3 Inputs: This is where the real controversy came about. Level 3 assets and liabilities have no observable analogous inputs. Therefore, forecasting models have to be used to establish value. These models are formally called "mark to model" but they have facetiously been referred to as "mark to myth," "mark to mythology" or "mark to make believe." In general, these estimates rely on calculations made by the institution itself, and methods could vary widely from firm to firm.



In 2008, when the market dropped so dramatically, banks and other financial institutions were required under GAAP to take massive write-downs on what became to be known as toxic assets.

Financial institutions complained bitterly that Statement No. 157 forced write-downs based on scanty or nonexistent or non-representative input prices. The basic view was that in cases of low market volume and activity, quoted prices may not be a fair determinant of value since market transactions that do occur may not reflect value in an orderly market. Banks argued that forcing them to write down the assets in the current environment was the equivalent of a forced liquidation sale, which FASB's definition of fair value specifically says is not what is intended. The banks got their way when in the spring of 2009, FASB amended Statement No. 157, allowing financial institutions more flexibility in measuring many of their esoteric securities. And profits once again climbed.

Meanwhile, Back at GASB

Mark-to-market (fair value) accounting is not new to GASB. *GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans* (issued November 1994) requires that pension plans provide information about the fair value and composition of pension plan assets. GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools,* (issued March 1997) requires fair value or mark-to-market accounting and reporting for most investments. Statement No. 42, *Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries,* (issued November 2003) requires impaired capital assets be reported at the lower of carrying value or fair value. In June 2003, GASB issued Technical Bulletin 2003-1, *Disclosure Requirements for Derivatives Not Reported at Fair Value on the Statement of Net Assets,* which requires detailed information about the reasons for derivatives contracts, estimates of their fair value and assessment of various risk factors such as interest rate or counterparty termination risk.

Government derivative reporting advanced in June 2008, when GASB issued Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments.* A major focus of Statement No. 53 is measuring derivative activity when the derivative instruments are used as part of an overall risk management strategy, principally when they are used for hedging. Statement No. 53 states that: "Hedging is one method that governments employ to reduce identified financial risks (for example, to counter increases in interest costs, to offset price increases in the acquisition of commodities, or to protect against fair value losses). Derivative instruments utilized in hedging relationships are designed to reduce identified financial risks by offsetting changes in cash flows or fair values associated with them."

In general, derivatives are required to be reported at fair value (marked to market) on the statement of net assets, and changes in that fair value should be reported as part of investment income (loss) on the statement of activities. However, if a derivative is specifically established as a hedging instrument to protect the government against the loss of fair value or cash flows, and is effective (as measured by Statement No. 53 guidelines) in doing so, then Statement No. 53 requires governments to report the change in the derivative's fair value as a deferred outflow or deferred inflow on the government's statement of net assets.

GASB defines a deferred outflow of resources as a consumption of net assets by the government that is applicable to a future reporting period (Concept Statement No. 4, *Elements of Financial Statements,* issued June 2007). Similarly, a deferred inflow of resources is an acquisition of net assets by the government that is applicable to a future reporting period. This is a logical conclusion for reporting hedge accounting as derivative instrument activity (for example, an interest rate swap on

long-term bonds) often flows over several reporting periods. Also, derivatives instruments generally begin and end with a fair value of zero, and therefore the intervening changes in fair values could be misleading if recognized as income.

A problem that exists is GASB did not provide additional guidelines as to what fair value is or how fair value should be measured with respect to more complex and less actively traded derivative instruments. GASB currently has a research project under way to "review and consider alternatives for the further development of the definition of fair value, the methods used to measure fair value and potential disclosures about fair value measurements." Major research questions identified for study in the project include:

- What is the objective of fair value measurements in financial reporting?
- Should derivatives be measured at fair value in the governmental funds? (Currently they are not.)
- What guidance should be provided for appropriate methods and inputs for the development of fair values?
- Should the standard indicate a hierarchy of inputs, such as between market-observed prices and model-based information, for the development of fair values? This is similar to what has been done in FASB Statement No. 157.

Mark-to-Market is *Here to Stay*

Certainly, mark-to-market reporting has its drawbacks, especially for derivatives. Fair values based on market prices can be difficult to determine for complex and lightly traded instruments. These types of derivatives are the Level 3 type mentioned above. These derivatives are usually measured using a mark-to-model process, which can be arbitrary at best and fraudulent at worst. Next, there is the theoretical issue, as banks successfully argued, as to whether market price does indeed represent "fair" value. Also, the relevance of market prices can be challenged with respect to intent. Some observers challenge the relevance of market prices because they believe that, if government officials do not intend to trade derivatives but rather hold them to maturity, as is usually the case with derivatives used for hedging, then the time and expense of determining fair value may not be worthwhile. Still, using fair value accounting is proper for derivative reporting because it enhances the following qualities or objectives of financial measurement and reporting: accountability, transparency, consistency, interperiod equity and risk measurement.

Accountability: GASB's financial reporting objectives consider public accountability to be the cornerstone on which all other financial reporting objectives should be built. The government financial reporting model stresses accountability over income measurement, as governments, unlike businesses, do not exist to generate a profit. Governments are accountable to the public, especially taxpayers. A government's primary purpose is to provide public services in accordance with public policy. The public has a right to know how their

involuntary contributions—that is, taxes—are being used by government officials. Measuring derivatives at market shows the users of government financial information how well the derivatives are currently doing relative to their original value, which could have been established months or even years ago.

Transparency: The government financial reporting model should make it clear what choices government officials have made with respect to using derivatives. Government officials, even if not elected, act on behalf of their constituent taxpayers. Derivatives can be esoteric and complex and easily explained away as being too difficult for the average taxpayer to understand. But interested readers need to know what the derivatives are being used for and how well they are doing. Some types of derivatives have no original cost, especially if no cash is exchanged in the derivative origination. For example, this is a common element of an interest rate swap, which is by far the most common type of derivative contract that governments enter into. Marking to market requires governments to record derivatives at the current value and brings to light activity that might otherwise go unnoticed or unreported.

Consistency: Despite political pressures, FASB has not abandoned fair value accounting. Indeed, the changes FASB implemented to soften the requirements of Statement No. 157 were incremental. Also, the International Accounting Standards Board (IASB) and FASB currently have a joint project titled *Fair Value Measurement and Disclosure*. The objective of the project is to "ensure that fair value has the same meaning in U.S. generally accepted accounting principles and international financial reporting standards." As mentioned above, GASB has already implemented mark-to-market accounting for pensions (Statement 25), investments (Statement 31) and capital assets in certain limited circumstances (Statement 42). Statement 53 requires fair value accounting for derivatives. GASB should continue the use of mark-to-market accounting to be consistent with itself and eventually the rest of the world.

Interperiod equity: Governments rarely liquidate even in the worst of economic times and generally do not operate in a competitive marketplace. Because of this, governments tend to depend upon the future to pay for the present, either by issuing debt or pushing expenditures to future periods and raising taxes to cover the costs. This shifting of a current burden to future taxpayers is known as interperiod equity. Marking derivatives to market, especially long-term derivatives such as interest rate swaps, lets readers know how well over time these financial instruments are doing.

Risk management: The major focus on derivative accounting for governments is measuring the effectiveness of hedging, that is, using derivatives to protect the government against unwanted changes in market conditions. For example, derivatives can protect the government from changes in interest rates and commodity prices such as heating oil. The goal of most derivative activity in a government should be part of a comprehensive risk management program, not an attempt to "make a killing" or "corner the market." Using market value allows governments to determine whether using derivatives has been a worthwhile endeavor.

Summary

Mark to market is not leaving the reporting scene, in either the public or private sector, nor should it if financial reporting models want to report relevant information for analysis and decision-making. GASB should ensure that it provides guidance in determining the fair value of derivative instruments. Whether this guidance follows the standards set forth by FASB and IASB is for the board to decide. New types of derivatives will appear over time. As memories fade the lessons of the last few years should not be lost. Governments must use derivatives with discretion and eyes wide open. Mark to market is a tool that is critical in the measurement, reporting and evaluation of derivatives and should be developed in such a way as to make government reporting as meaningful as possible.

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