



# TREASURY Topics

## Investment Accounting Considerations

*In February 2005, PriceWaterhouseCoopers announced that they would no longer qualify auction rate securities as cash equivalents on the balance sheet. Overnight, the balance sheets of companies that held these securities shifted cash into short-term investments. The consequences of PriceWaterhouseCoopers' decision highlight the impact of the accounting community's effort to clarify investment accounting assumptions.*

*The broad lack of standardized investment accounting assumptions indicates that this is not the last time companies will have to deal with the headache of an investment reclassification or restatement. Changes in investment accounting assumptions are a fact of life.*

### The Case for Consistent Investment Accounting Assumptions

Consistent investment accounting assumptions across all company portfolios are critical to the accuracy and

clarity of financial statements. Combining disparate assumptions to create general ledger entries introduces ambiguity and errors in reporting.

If your company currently generates investment entries using accounting reports from more than one investment service provider (i.e. investment manager, custody or safekeeping bank, etc.) your company may well be using inconsistent accounting assumptions as the basis for the investment entries. This is analogous to recognizing revenue differently from customer to customer depending on the customer's preference.

As a test, have each of your investment service providers define exactly what investment accounting assumptions are used to generate the fiscal period-end reports. Compare their responses. Or you could review each provider's SAS70 Type II. This examination should reveal the level of consistency or disparity of accounting assumptions being utilized among your service providers. Most often this inspection reveals significant inconsistency and a need to remedy a potentially serious situation.

### Major Investment Accounting Assumptions, Options and Suggested Standards

The following is a list of investment accounting assumption alternatives that will be discussed later in detail.

1. Trade date vs. settlement date accounting
2. Tax lot vs. average cost security costing method
3. First-in-first-out (FIFO), LIFO, average cost vs. specific-lot selection tax lot inventory method
4. FASB interest/constant yield/scientific vs. straight-line amortization method
5. Amortization on callable securities to the first call date and accretion to the legal final maturity vs. amortization/accretion to final maturity
6. Amortization on bonds with embedded options
7. Amortization on securities with an embedded prepay option (e.g., asset backed, mortgage backed securities) to a static effective maturity date (weighted average life) defined on trade date and accretion to the legal final maturity vs. amortization/accretion to a dynamic effective maturity date
8. Balance sheet classification to legal final maturity on all products including variable rate products and bonds with an embedded option (i.e. callable bonds), classification according to the next reset date vs. product specific

classification (i.e. auctions classified as short term)

9. Amortization and accretion calculated and presented on an actual/actual basis vs. using the securities' stated day count.

If it is a surprise that there are various investment accounting assumptions with no accepted standard, take this opportunity to address this issue before it becomes an audit issue. Identify the assumptions that drive your current investment accounting entries, define a single, consistent set of accounting assumptions for all investment portfolios and require each of your service providers to comply.

In the case of multiple investment service providers where each provides reports based on inconsistent accounting assumptions, an organization should strongly consider alternative methods of obtaining investment accounting entries, such as master custodian services or a comprehensive investment accounting solution.

### **Trade date accounting**

The CPA Journal's New Guide on Brokers and Dealers in Securities, a standard for corporate investment accounting contains the following statement on trade date accounting:

"There are two critical dates in all securities transactions: trade date and settlement date. On trade date, an agreement is entered into that establishes the negotiated elements of the transaction including the security description, quantity, price, and delivery terms. The date the securities must be delivered and payment received is referred to as the settlement date. Since generally accepted accounting principles require use of accrual accounting, the financial statements should be presented on a trade-date basis since the potential risks and benefits of each transaction become effective on that date."

For this reason, the majority of professional custody banks and corporate clients use trade date accounting for accounting entries and investment policy compliance monitoring.

To illustrate let's say a company purchases \$2 million of 2-year maturity corporate note at a price of 100.25 on July 11, 2005 for settlement 3 days later on July 14,

2005. If the \$2 million corporate note defaults the day after trade date (July 12, 2005) the company is contractually obliged to deliver cash to the counterparty in exchange for the now heavily discounted bonds. The company owns the securities at the agreed upon price on trade date regardless of the performance of the securities prior to settlement. Because the company has contractually agreed to terms and owns the risk, it is logical that the company should report transactions as of trade date.

The consequences of settlement date accounting on SOX controls can be profound. Certain companies that use settlement accounting on transactions spanning a fiscal period end (traded before the fiscal period-end for settlement after the period) have been cited by their auditors for "a significant deficiency or material weakness" in financial controls because the auditor decided the company was not reporting the outstanding liability (and off-setting asset) on the financial statements.

In one case the auditor stated that using settlement date accounting provided no way to monitor manager activity and the company's liabilities prior to trade settlement, generally days after the trade occurred. The auditor was alluding to a general concern with settlement date accounting; the potential for manipulation and abuse. For example, a manager could buy a security and record no transaction until settlement date, exposing the company to financial, compliance and regulatory risk that is unknown to anyone within the company for days or weeks prior to settlement date.

For companies that use trade date accounting there are often questions about how best to classify the position pending settlement and the related payable on the balance sheet (FAS115 classification). In brief, the security pending settlement should be classified on the balance sheet according the number of days to final maturity and the related payable (due on settlement date) should be classified as cash & cash equivalents.

### **Tax lot security costing method**

Each time you execute a securities transaction, the new position comprises a distinct tax lot. For example, if a company bought \$1 million par value of a specific security (defined by an individual CUSIP or ISIN

number) on a particular date and bought an additional \$2 million par value of the same security on a different date, then the company would have two distinct tax lots. Each lot has its own original cost, amortized cost and unrealized gain or loss.

There are two basic ways to account for multi-lot holdings. One approach is the average cost method, where the company would average the cost for all lots. The other approach is to use tax lot accounting, where the company would track each lot separately.

Tax lot accounting provides an easier, more accurate method for investment accounting and tax reporting while minimizing the investment income statement volatility that can accompany the average cost method.

The process of dollar-cost averaging the purchase price of new lots with the amortized cost of the previous lots can be complex and prone to mistakes if done manually by the investment manager. Most companies prefer to use the tax lot method because it is simpler, more transparent and avoids adjusting the amortized cost on existing positions when a new position is purchased at a different price.

#### ***First-in-first-out (FIFO) tax lot inventory method***

With the tax lot security costing method the company has to choose a tax lot inventory method that defines the order in which the tax lots are to be sold.

First-in-first-out (FIFO) is the most common inventory method and the default used by the IRS. Other methods include last-in-first-out (LIFO) and specific lot.

Specific lot inventory method is becoming less and less common in corporate cash investment accounting because of the potential for auditor misinterpretation. The specific lot method allows the investment manager to choose which lot to sell. In effect, it allows the manager to directly affect portfolio income by choosing the lot with more or less realized gains or losses (for portfolios that are available for sale). In most companies, accountants and auditors are not comfortable allowing the manager full authority to subjectively choose the lots to sell, thereby controlling the portfolio income through realized gains and losses.

First-in-first-out is the most commonly used and straightforward tax lot inventory method. It is less susceptible to manipulation and misinterpretation.

#### ***FASB interest/constant yield/scientific amortization method***

Accounting assumptions dealing with amortization and balance sheet classification of investment assets are among the most important. This significance stems from the fact that they are commonly misunderstood by investment service providers and clients and when booked, flow directly to the income statement (in the case of amortization) and the balance sheet (in the case of investment classification).

Allowing the investment manager to choose the amortization method or balance sheet classification of assets lets the manager directly affect the company's financial statements. In this case, the manager should be subject to an independent audit, SAS70 Type II, verifying the financial statement decisions the manager makes for the company.

The chosen amortization method will directly affect the portfolio P&L, as well as company earnings. Therefore, consistency across portfolios is absolutely critical.

If you have two portfolios with the exact same securities, each with a different amortization method, the two portfolios will record different income. Recording different income for the same securities in different portfolios can be a material accounting concern.

The constant-yield/scientific method of amortization uses a uniform interest rate based on a changing loan balance and provides for an increasing premium or discount amortization each period. The straight-line method provides for the recognition of an equal amount of premium or discount amortization each period.

The constant-yield/scientific method is the amortization method prescribed by GAAP; however, as described in Opinions of the Accounting Principles Board No. 21, the straight-line method is acceptable so long as its application results in periodic interest expense that does not differ

materially from the amounts the company would report using the constant-yield/scientific method. As such, each client is given the choice between the constant-yield/scientific and straight-line methods.

Constant-yield/scientific is the most common corporate cash amortization method, the method preferred by GAAP and the one that allows the greatest flexibility and accuracy.

### ***Amortization on callable securities to the first call date and accretion to the legal final maturity.***

A bond with an embedded call option purchased above the call price (generally, par or 100), according to the market, will most likely be called. Since the bond is trading above par, the option is “in the money” and will most likely be exercised (prepaid on the call date) by the option holder.

Conversely, a bond with an embedded call option that is purchased below the call price will likely not be called, but will survive to maturity. Since the bond is trading below par, the option is “out of the money” and therefore it is not profitable for the option holder to exercise.

The amortization/accretion assumption for callable bonds should reflect the most conservative profit and loss recognition method and the economic reality of the portfolio defined on the purchase date. Callable securities purchased above par (or above the premium call price) are amortized to the first call date (or to the premium call price). An aggressive amortization to the call date represents the most conservative accounting rationale. Callable securities purchased below par accrete to the final maturity date.

Accreting securities create a credit effect on the company’s profit and loss statements. By accreting to the final maturity, the company has taken the stance that accreting securities to the legal final maturity date—the most conservative approach to booking this income to the profit and loss statement—is optimal.

### ***Amortization on bonds with embedded options***

In February 2003, Fannie Mae was accused of illegal accounting practices. Following several rounds of discovering new irregularities, tens of billions of dollars in accounting related restatements, fines paid in excess of \$100 million and the removal of many top executives including the CEO, investors hoped the worst was over. In November 2005, Fannie Mae announced the restatement of at least \$10.8 billion of earnings as a result of additional accounting errors. It is no wonder a prudent investor would carefully evaluate the creditworthiness of their investment in Fannie Mae!

As a corporate cash investor and holder of Fannie Mae bonds, you might be surprised to learn that Fannie Mae’s creditworthiness could, in the end, be of significantly less concern than the “illegal accounting practices” or “accounting irregularities” that got Fannie Mae into trouble in the first place. According to the popular financial press, Fannie Mae’s indiscretions are generically referred to as their inability “to follow the rules in accounting for complex financial instruments known as derivatives”, including accusations of ambiguous “smoothing” practices in accounting for their investment portfolio.

According to a report from the Office of Federal Housing Enterprise Oversight (OFHEO), Fannie Mae’s accounting indiscretions include: 1) applied accounting methods and practices that do not comply with GAAP in accounting for the enterprise’s derivatives transactions and hedging activities (translation: problems with FAS133); 2) employed an improper “cookie jar” reserve in accounting for amortization of deferred price adjustments under GAAP (translation: incorrect amortization of investments, specifically mortgages); and 3) tolerated related internal control deficiencies (no translation needed).

Problems with accounting for derivatives and amortization on investments and internal controls sound all too familiar to corporate treasury departments.

A government agency referring to inaccurate amortization as “illegal accounting practices” or an “accounting irregularity” is more than enough to warrant a review of the company’s investment



assumptions regarding amortization and accretion on bonds with embedded options, which include: callable, puttable, asset backed and mortgage backed securities (including CMO's, CDO's, CBO's, etc).

***Amortization on securities with an embedded prepay option (i.e. asset backed, mortgage backed securities, etc.) to a static effective maturity date (weighted average life) defined on trade date and accretion to the legal final maturity.***

Amortization/accretion on bonds with an embedded prepay option, including asset backed or mortgage backed securities, is similar to amortization/accretion on callable bonds, except there is no predefined call date on bonds with an embedded prepayment option.

Bonds with an embedded option purchased above the prepayment price (generally par) are amortized to the amortization date. Bonds with an embedded option purchased below the prepayment price are accreted to the final maturity date.

A bond with an embedded prepayment option can prepay at any time leaving the date the company should amortize to in question. It is important in this case to select a consistent method for determining the amortization date.

A company can either choose a static or dynamic amortization date for bonds with an embedded call option.

Amortizing a bond premium to a static prepayment date defined at purchase as the weighted average life (WAL) of the bond is the most transparent and least operationally intensive option. The amortization date would be set at purchase and would not change throughout the life of the bond, regardless of the movement in interest rates and its effect on the bond prepayments.

If a bond prepays earlier than the amortization date defined at purchase, the bond will realize a loss (this is not an acceleration to amortization or extra amortization expense, which could have a negative impact on tax reporting).

If a company elects to use a dynamic amortization date, there are five potential complications: 1) the amortization date is subjective, complex and ripe for abuse (extend amortization date and increase P&L or retract the amortization date and decrease P&L); 2) the consistent model used for calculating all mortgage amortization dates that is auditable requires, deep knowledge of prepayment models and their shortfalls; 3) the investor must decide whether to adjust each period amortization on the security since inception or to allow a catch-up entry (what audit trail is available to ensure the catch-up entries are accurate and booked correctly); 4) who decides how often the company will reset the amortization date (daily, weekly, monthly, quarterly)?; and 5) what additional value does the dynamic adjustment of amortization dates provide to the company and its investors?

Aside from the issues mentioned above, a company that elects to use a dynamic amortization date on prepaying securities should under no circumstances allow the investment manager the ability to select the amortization date. The risk of a manager using his/her discretion to manipulate the amortization date, effectively increasing or decreasing portfolio P&L with no audit control, has potential for Fannie Mae-like consequences.

According to OFHEO, Fannie Mae used its accounting discretion in various areas of their business, including the amortization date for their portfolio of mortgages to create a "cookie jar." Accountants could then dip in and pull out appropriate amounts of income or expenses to guarantee the desired accounting results. The jar would allow the excess profits stored from the profitable years to be extracted in the down years to guarantee executive bonuses.

***Balance sheet classification to legal final maturity on all products including variable rate products and bonds with an embedded option (i.e. callable bonds)***

Securities should be classified on the balance sheet according to the legal final maturity, including callable bonds, bonds with embedded prepayment options and auction rate securities. A case can be made for classifying auction rate products according to their next reset (cash equivalent) or legal final maturity (long

term), but there is little rationale for the bond to be classified as short term.

The accounting community made the decision to require companies to reclassify auction rate products as short term from cash equivalent, often requiring previous period restatements for large holders of the product. It is unlikely the accounting community will reverse this decision. More likely, a single liquidity event or busted auction will cause the accounting community to reconsider the rationale behind classifying auction rate products as short term and require auction rate products, like other products, to be classified as long term according to their legal final maturity.

Several companies were severely impacted by the initial reclassification of auction rate products to short term and cannot afford another restatement. Consequently, these companies have decided upon the most conservative approach: classifying all products according to their legal final maturity.

### ***Amortization and accretion calculated and presented on an actual/actual basis, rather than using the securities' stated day count.***

Bond interest is calculated according to a predefined day count.

### **Disclaimer**

The information provided in this article is the result of experience with investment accounting issues and interaction with accountants and investment service providers. It is not intended to be relied upon substantively; rather, it is intended to inform and provide a discussion framework that treasury practitioners, internal management, and accounting and audit staff can use to discuss the impairment process.

For example, many corporate bonds accrue interest on a 30/360 basis, assuming 30 days

per month and 360 days per year regardless of the actual number of days. So, when calculating interest for the month of January for a bond with a 30/360 day count, the bond will only earn 30 days of interest even though January has 31 days.

This begs the question of whether it is best to amortize according to the bond day count (30/360) or according to the actual number of days in the period. Amortization and accretion calculated and presented on an actual/actual basis is the most consistent and common method for corporate cash clients.

### **The Conclusion**

Consistency of investment accounting assumptions across all company portfolios is vital to the clarity and accuracy of a company's financial statements. Ambiguity and errors increase as disparate assumptions are used to create general ledger accounting entries. Every organization needs to review current practices, consider the accounting assumption options and determine a consistent course to clarify reporting now and into the future.



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