Institute of Internal Auditors

SFAS 157 "*Fair Value Measurements*"

2 October 2008

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Agenda

- Fair Value Developments and Updates
- SEC & PCAOB Perspectives
- SFAS 157
  - Overview
  - Complex Securities
- Q & A

Presenter

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Fair value developments and update

Fair value developments and update

Agenda

- SFAS 157 Q1 implementation issues
- Current guidance
- Further guidance expectations
- Professional society activities
- International activities
- Q4-08 / Q1-09 fair value issues
- Summary

Fair value developments and update

SFAS 157 Q1 implementation issues

- Financial assets and liabilities (primarily)
- Hard to measure assets and liabilities (credit market liquidity crisis)
- Auction rate securities
- "Active" markets
- Choice of Level for quotes: a point in the bid / ask spread or bid prices? Level 1, 2 or 3?
- "Binding" vs. "non-binding" Quotes
- Correlation of Quotes to actual transactions
- Disclosure examples: IBM, Intel (includes Level 3 roll forward table)

Fair value developments and update

Current guidance

- FASB: FSP 157-1, FSP 157-2
- FASB: VRG deliberations
- FASB: Herz / McDonald paper on SFAS 157 "Understanding the Issues: Some Facts about Fair Value" (07May08)
- SEC: March 2008 SEC letter to CFO's
- PCAOB: Staff Audit Practice Alert #2 "Matters Related to Auditing Fair Value Measurements of Financial Instruments and the Use of Specialists" (10Dec07)
- CAQ: Center for Audit Quality white paper (03Oct07)
- ICI: Investment Company Institute memorandum (05Feb08)
- Others?

Fair value developments and update

Further guidance expectations

- FASB: Further FSP's: FSP 157-c, FSP 132(R)-a, others?
- VRG: Further deliberations
- SEC?
- PCAOB?
- Other organizations / trade groups (NVCA / PEIGG)?

Fair value developments and update

Professional society activities

- AICPA: SSVS 1-not specific to Fair Value Measurements, but applicable to all valuations by members
- Appraisal Foundation: Steering Committee and Working Groups on intangible assets: Contributory Assets, Customer Relationships
- ASA: Training courses in intangible assets
- Others?

Fair value developments and update

International activities

- IASB: Fair Value Measurement Discussion Paper
- IASB: Establishment of a Valuation Advisory Group
- IASB: Fair Value Measurement Project: Planned IFRS on Fair Value to be published in approx. 2010
- IVSC: Discussion Paper: “Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes”
- IASB / IVSC Session April 18th discussing Fair Value Issues
- GPPC: Global Public Policy Committee Whitepaper (13Dec07)
- Others?

Fair value developments and update

Q4-08 / Q1-09 Fair value issues

- SFAS 157 to be applied to all assets and liabilities with a fair value measurement attribute
- Pension plan issues: sync-up of measurement date and employer's fiscal YE reporting date (SFAS 158)
- FASB: FSP 132R-a: Disclosures about Plan Assets
- Implementations will be in full swing throughout 2008 and 2009!
- Credit market issues

Fair value developments and update

Summary

- WSJ Article 05/14/08
- Where do we go from here?

SEC & PCAOB perspectives – The current regulatory environment

SEC areas of concern regarding valuation

- Primary perspectives and source of questions
  - Is the registrant following the published guidance (“following the rules”)?
  - What is the registrant’s potential bias?
- Valuation methodology
  - Expected (“standard”) approaches, methods
  - Use of the residual approach to valuation
  - Use of the word “residual” in any context other than describing goodwill
- Lifing assumptions (SEC emphasis on registrant’s responsibility)
- Consistency with prior valuation analyses
- Consistency between publicly-available information and the fair value measurement
  - Press releases
  - Data found by searching the Internet
  - Industry analyst views
- Goodwill
- Extreme focus on customer related intangibles (SEC speeches in December of 2005 and 2006)

PCAOB areas of concern regarding valuation

- Experience and expertise of those performing the valuation analysis
- Stress-testing the prospective financial information (PFI)
  - Who has the responsibility? Management? The valuation specialist? The audit team?
  - How should they be stress-tested?
- Documentation ("if it isn't documented, it didn't happen")
- In recent audit reports to the Big 4, approximately 25% - 33% of issues pertain to fair value

SFAS 157 – Overview

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Context

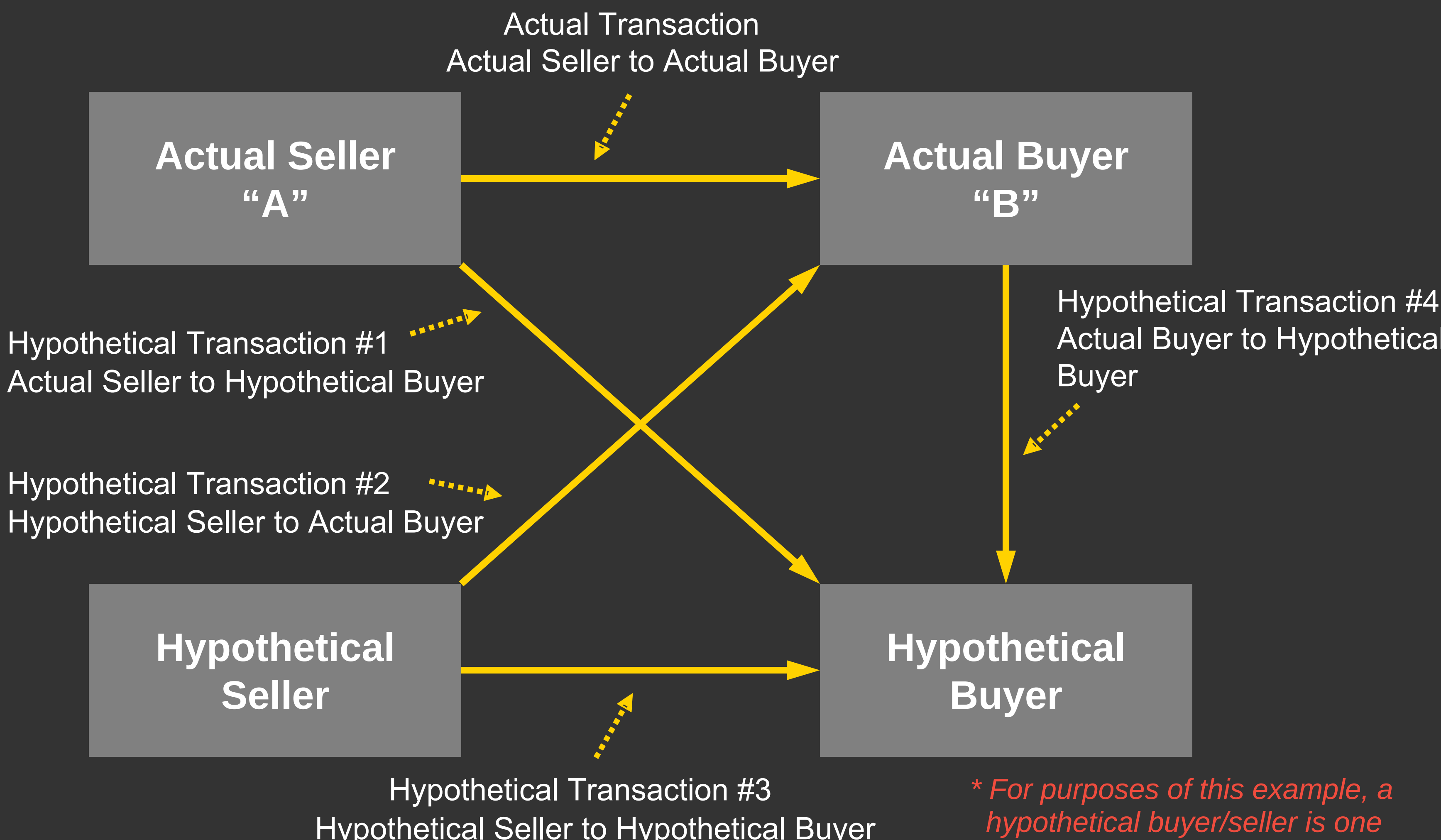
- Over 40 FASB standards require (or permit) fair value measurements
- Prior to SFAS 157
  - Different definitions of fair value in the literature
  - Limited guidance for applying the definitions of fair value
- Demands from users for more information about fair value measurements
  - The appraisal profession hasn't developed its own guidance – large divergence of practice
  - Until SFAS 157, the FASB's guidance was diverse
- Objective of SFAS 157
  - Defines fair value for financial reporting
  - Establishes a framework for measuring fair value (No new FV measurements)
  - Expands disclosures about fair value measurements
- Effective for fiscal years beginning after November 15, 2007, but deferred for all non financial assets and non financial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually).
  - The current FSP defers SFAS 157 for one year

Definition of Fair Value (SFAS 157)

- 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.
  - Price in a hypothetical transaction to sell an asset or transfer a liability (an exit price)
  - Not the price in an actual transaction to acquire an asset or assume a liability (an entry price)
  - Not adjusted for transaction costs
  - Codifies the “Market Participant” concept in the definition
  - Introduces the “Exit Value” concept in the definition

SFAS 157 emphasizes that fair value is a market-based measurement, not an entity-specific measurement

Asset allocation fair value illustration



** For purposes of this example, a hypothetical buyer/seller is one that acts as a market participant*

Key issues for consideration

- What has changed:
  - Additional analysis needed regarding “Exit Market”
  - Additional analysis needed for Market Participant selection
  - Additional analysis needed to determine highest and best use
  - Abandonment vs. Defensive use?
  - Additional documentation required regarding level of inputs
  - Expanded Disclosure Requirements
- Potential impact:
  - Potential impact to group earnings
  - Documentation and processes increased
  - Increased disclosure and transparency
  - More regulatory scrutiny

SFAS 157 conceptual framework

SFAS 157 framework

THE ASSET OR LIABILITY

Unit of Account

Valuation Premise

Highest and Best Use

Exit Market (Principal or Most Advantageous)

Market Participant Assumptions

Inputs to Valuation Techniques

Indicated Value Unit of Valuation

Attribute Value to Asset or Liability at Unit of Account Level

Fair Value Measurement

F/S Presentation and Disclosure

Definition of market participant

- Buyers and sellers in the principal market for the asset or liability that are:
  - Independent of the reporting entity (not related parties)
  - Knowledgeable, having a reasonable understanding about the asset or liability and the transaction based on available information, including information that might be obtained through usual and customary due diligence efforts
  - Able to transact for the asset or liability
  - Willing to transact for the asset or liability; motivated, but not forced or otherwise compelled to act

Fair value is determined based on the assumptions that market participants would use in pricing the subject asset or liability

Market participant considerations

- Potential buyers need not be in discussions with the target (these are hypothetical potential buyers)
- Potential buyers need the financial wherewithal (or the ability to obtain it) to complete the transaction, as well as a plausible post-combination strategy for the assets being valued
- All potential buyers, including strategic and financial buyers, should be considered market participants
- Reporting entity need not identify specific market participants; instead, identify characteristics that distinguish market participants generally, considering factors specific to:
  - The asset or liability
  - The principal or most advantageous market
  - Market participants with whom the reporting entity would transact in that market

Principal and most advantageous markets

- The principal market is the market in which the reporting entity would sell the asset or transfer the liability with the greatest volume and level of activity for the asset or liability
- The most advantageous market is the market in which the reporting entity would sell the asset or transfer the liability with the price that maximizes the amount that would be received for the asset or minimizes the amount that would be paid to transfer the liability
- While transactions costs are not included as part of a fair value measurement, they are considered in determining the most advantageous market

If there is a principal market, the fair value measurement shall represent the price in that market, even if the price in a different market is potentially more advantageous at the measurement date

Principal and most advantageous markets
Example 1

Scenario 1: Reporting Unit sells an asset in Market A 70% of the time, and in Market B 30% of the time

- The principal market is Market A

Scenario 2: Reporting Unit sells an asset in Market A 50% of the time and market B 50% of the time

- Must select market based on most advantageous market
  - Determined inclusive of transportation and transaction costs
  - Ultimate fair value excludes transaction costs

Scenario 3: Reporting Unit doesn't sell the asset, yet markets exist

- The principal market is based on the most advantageous market (See above)

Scenario 4: Reporting Unit doesn't sell the asset and no market exists

- Principal market is a hypothetical most advantageous market

Principal and most advantageous markets Example 2

Market	Price	Transaction Costs	Net Amount
A	$26	$3	$23
B	$25	$1	$24

- If Market A is the principal market for the asset, the fair value measurement based on Market A price ($26)
- If neither market is the principal market for the asset, the fair value measurement based on Market B price ($25) because that market is the most advantageous market for the asset, considering transaction costs
- Fair value measurement NOT adjusted for transaction costs

Transaction prices and fair value

- A transaction price <u>may</u> represent fair value; however, no longer a presumption under GAAP that needs to be rebutted. As such, consideration should be given to reasons why a transaction price may not represent fair value:
  - Related party transactions
  - Seller is under compulsion to sell or is experiencing financial difficulty
  - Unit of account of transaction is different from the unit of account for the asset or liability measured at fair value
  - Market in which the transaction occurs is different from the market in which the reporting entity would sell the asset or transfer the liability

SFAS 157 clarifies that in many cases the subject transaction price will represent fair value at initial recognition—but not presumptively

Highest and best use

- Fair value assumes the highest and best use of the subject asset
  - Refers to the use of an asset <u>by market participants</u> that would maximize the value of the asset or asset group within which the asset belongs
  - Anticipated asset usage <u>by market participants</u> determines highest and best use
  - Does not apply to liabilities subject to fair value measurement
- Highest and best use must be physically possibly, legally permissible and financially feasible
- Highest and best use of the asset establishes the valuation premise (e.g., in-use vs. in-exchange)
  - In-use assumption may be appropriate for certain financial instruments (e.g. derivatives) due to risk mitigation that occurs when the instrument is valued as part of a portfolio

Impact of SFAS 157 framework on asset groups

- Example: Entity acquires assets that are used together as a group (Assets A, B, C)
  - Unit of account is each individual asset
  - Unit of valuation is the group of assets within which the assets would be used by market participants (highest and best use is in-use)
  - Exit market is the acquisition market; therefore, market participants are other bidders for the assets (strategic and financial buyers)
  - Strategic buyers have related assets that would enhance the value of the assets as a group, including a replacement asset for Asset C (billing software); financial buyers do not

Asset	**Strategic Buyer**	**Financial Buyer**
A	$ 360	$ 300
B	260	200
C	30	100
Value	$ 650	$ 600

- Fair values of Assets A, B, C determined based on use within strategic buyer group because that use would maximize the fair value of Assets A, B, C as a group; need not individually (e.g. Asset C)

SFAS 157 disclosures

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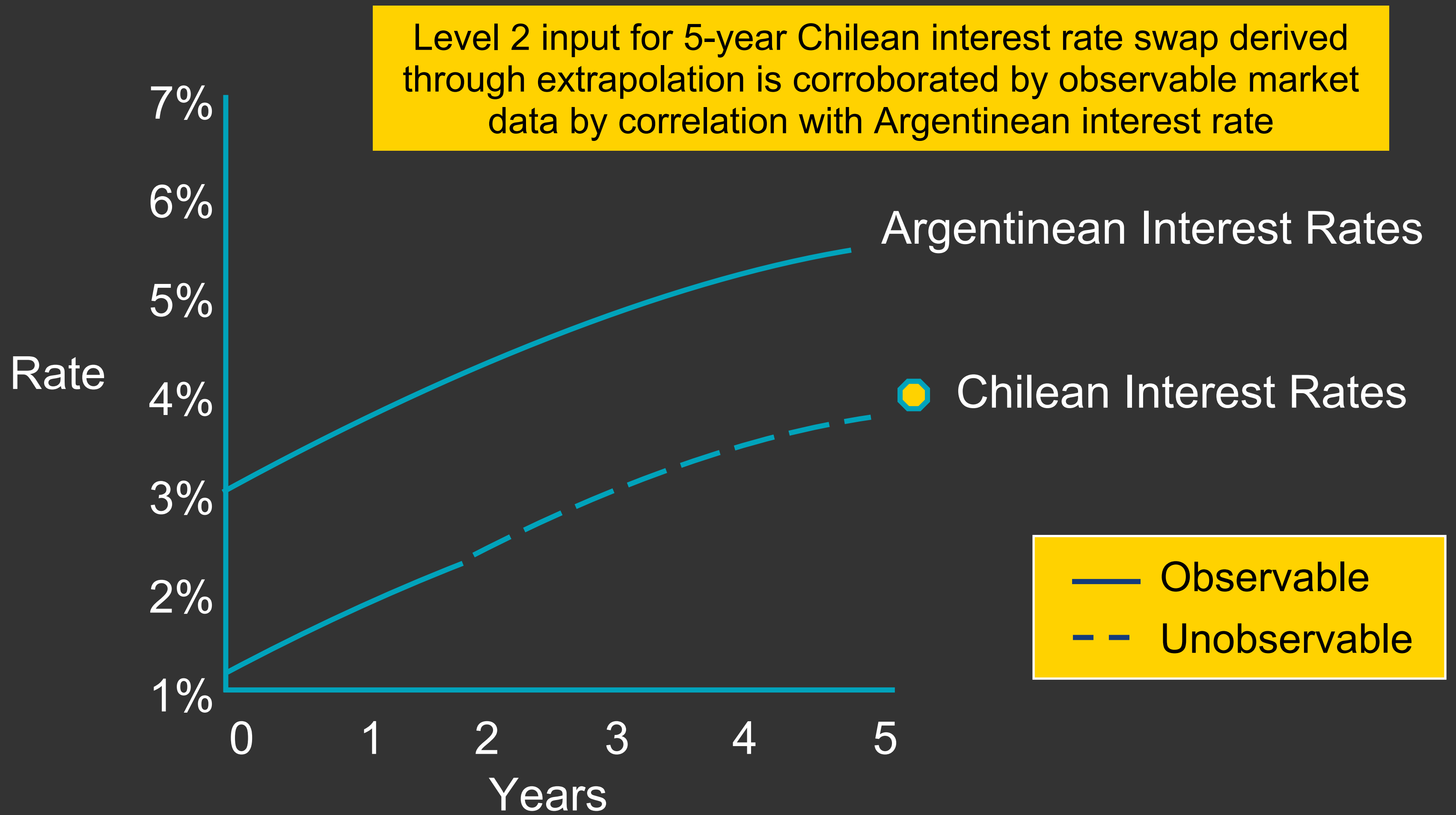
Fair value hierarchy

Level 1	Quoted prices in active markets for identical assets, liabilities (unadjusted); no blockage factors (P x Q)
Level 2	Other observable inputs; include quoted prices for similar assets, liabilities (adjusted) and market-corroborated inputs
Level 3	Unobservable inputs; entity's own assumptions about market participant assumptions, including assumptions about risk, developed based on the best information available in the circumstances (subject to cost benefit constraint); might include the entity's own data

Fair value hierarchy (continued)



Unobservable inputs key issues

- Unobservable inputs shall reflect management's assumptions about the assumptions that market participants would use in pricing the subject asset
  - Developed based on the best information available in the circumstances
  - Might include the entity's own data
  - Reporting entities need not undertake all possible efforts to obtain information about market participant assumptions
  - Reporting entity's own data shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions

The fair value hierarchy prioritizes the <u>inputs</u> to valuation techniques, not the valuation techniques themselves

Disclosure

- SFAS 157 disclosures are meant to provide additional transparency regarding the effect of FV measurements on earnings:
  - FV Hierarchy attempts to give users the ability to assess quality of earnings (where in the FV Hierarchy measurements fall)
- Information about fair value amounts:
  - Fair value estimates for each major category of assets and liabilities
    - Re-measured each reporting period on a recurring basis (e.g., trading securities)
    - Re-measured on non-recurring basis and the reason for re-measurement (e.g., impairment)
  - Where within the FV Hierarchy do the estimates fall (Level 1, 2, or 3)
- How amounts are determined:
  - Valuation technique used to measure fair value (annual disclosure)
  - For Level 3 non-recurring measurements a description of the inputs used to develop FV measurements and information used to develop the inputs

Disclosure (continued)

- Portfolio level valuation adjustments:
  - Allocate if the unit of account is the individual transaction and the portfolio is classified in different levels within the fair value hierarchy
- Effect of remeasurments on earnings:
  - Reconciliation of beginning and ending balances for recurring Level 3 measurements (by major category of asset and liability)
    - Total realized and unrealized gains and losses (included in income vs. OCI)
    - Purchases, issuances, and settlements
    - Transfers in and out of Level 3 (e.g., due to change in observability of inputs)
  - For gains and losses included in income:
    - Amount of total gains and losses attributed to unrealized gains and losses for Level 3 assets/liabilities still held at reporting date
    - Description of where gains and losses are classified in the income statement

Disclosure (continued)

- SFAS 157 disclosures only apply to fair value measurements subsequent to initial recognition: Fair Value Measurements at Initial Recognition Only - Disclosure Not Required (e.g., business combinations)

SFAS 157 best practices and potential mistakes

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SFAS 157 best practices

- Providing documentation for all matters of professional judgment:
  - Items selected to be valued
  - Valuation methodology
  - Significant assumptions used in valuation models
- Performing sensitivity analyses to identify key input variables
- Consistency checks and reconciliations built into the valuation process
  - Internally consistent
    - Within asset class
    - Within timeframe
    - Prior transactions
    - Within segments
  - Externally consistent
    - Public filings
    - Press releases
    - Marketing material
    - Benchmark analyses

SFAS 157 potential mistakes

- Lack of documentation regarding selection of assumptions and basis for the analysis
- Failing to perform sensitivity analyses and reconciliation procedures
- Positions taken that are contradictory to published guidance
- Information in the allocation that contradicts other known (and discoverable) information
- Inconsistent assumptions in the valuation analysis of one asset versus the valuation analysis of another asset
- Failing to adequately define and apply the concept of “market participant”
- Use of PFI that includes buyer-specific inputs
- Inconsistent models and analyses pre- and post-close

SFAS 157 – Complex securities

Financial assets and liabilities that need to be valued

Hybrid instruments
- Convertible debt and convertible preferred
- Embedded derivatives in convertible debt, convertible preferred, and other contingent contracts (FAS 133)
- Debt extinguishments (EITF 96-16, 06-6)
- Effective interest rate on convertible debt (FSP APB 14-a)

Equity instruments
- Warrants
- Complex capital structures of private companies (IRS Sec 409a, FAS 123R)
- Warrants on preferred (private equity)
- Tranched preferred (private equity)
- Equity based compensation (FAS 123R)
- PIPEs

Debt instruments
- Loans, loan portfolios, lines of credit
- Debt modifications (IRS Sec 249)

Interest, currency, commodity derivatives
- Interest rate, currency, and commodity swaps, swaptions, forwards, caps, and floors
- Hedge effectiveness testing and measurement (FAS 133)

Structured instruments
- Auction Rate Securities
- Asset Backed Securities
- Mortgage Backed Securities
- Collateralized Debt Obligations
- Other structured instruments

Other complex securities
- Financial and other guarantees (FIN45)
- Pension assets
- Carried interest
- Consolidation of Variable Interest Entities (FIN 46R)
- Loyalty program deferred revenue liability

SFAS 157 adoption schedule

- SFAS 157 effective date
  - Effective for fiscal years beginning after November 15, 2007
- Partial deferral – Nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value on a recurring basis
  - Mandatory adoption for these assets has been deferred for one year
  - Effective for fiscal years beginning after November 15, 2008
  - http://www.fasb.org/project/recent_effective_dates.shtml

Questions