Review of Business
The Peter J. Tobin College of Business
8000 Utopia Parkway
Queens, NY 11439
www.stjohns.edu

☐ Remove from list.

☐ Change as shown.
Please detach address label and mail to address shown above
The Impact of the Accounting Profession’s Movement Toward Fair Value Reporting in Financial Statements: An Interview with Theresa Ahlstrom, Managing Partner, KPMG

New Requirements for Measuring and Reporting Fair Value in GAAP

Fair Value Measurements in Impairment Testing: How SFAS No. 157 Increases Consistency and Comparability

Business Combinations: Convergence and Fair Value

The New Fair Value Hierarchy: Key Provisions, Implications, and Effect on Information Usefulness

Audit Procedures on the Use of Fair Value of Share-Based Compensation

Ethical Implications of Reporting Fair Value in Financial Statements

New Valuation Rules Apply to the Charitable Donations of Vehicles
editorial review board

Suhail Abboushi
Duquesne University

Raj Aggarwal
Kent State University

Frederich Amling
George Washington University

Rolph E. Anderson
Drexel University

Karen Bahnik
University of Wisconsin–Superior

Anthony Barbera
SUNY Old Westbury

Nat R. Briscoe
Northwestern State University

Bruce Buzby
University of Connecticut–Stamford

Patrick Casabona
St. John’s University

John K.S. Chong
Southeastern Oklahoma State University

James Cox
Illinois State University

Randy F. Cray
University of Wisconsin–Stevens Point

Dennis Duchon
University of Texas–San Antonio

James Don Edwards
University of Georgia

Fred Engleander
Fairleigh Dickinson University

P. Everett Fergerson
Iona College

Allan Filley
University of Wisconsin–Madison

Alan B. Flaschner
University of Toledo

David Flynn
Hofstra University

Frank Forman
Department of Education

Eugene Garaventa
CUNY Staten Island

Juan E. Gonzalez
TVA

David J. Good
Central Missouri State University

Donald Grunewald
Iona College

David Hanson
Duquesne University

Alfred C. Holden
Fordham University

Gail Hudson
Arkansas State University

Sharon Johnson
Cedarville College

Tiffany Keller
Purdue University

Bruce H. Kemelgor
University of Louisville

Dominique Khactu
University of North Dakota

James Kidney
University of Southern Connecticut

Linda S. Kein
University of Connecticut–Storrs

Deborah Kleiner
St. John’s University

Susan Kogler Hill
Cleveland State University

Anthony C. Koh
University of Toledo

Chidem Kurdas
Penn State University–York

David Kurtz
University of Arkansas

Kern Kwong
California State University–Los Angeles

Jeffrey Lenn
George Washington University

William Lesch
University of North Dakota

Aaron Liberman
University of Central Florida

John E. Logan
University of South Carolina

Dianne B. Love
Houston – Clear Lake

F. Victor Lu
St. John’s University

W. Glynn Mangold
Murray

J. Kenneth Matejka
Duquesne University

Mary Maury
St. John’s University

Donald C. McCrory
Memphis–Port Commission

Foster Morrison
Turtle Hollow Association

Karen Moustafa
Indiana University–Purdue University at Fort Wayne

Jay Nathan
St. John’s University

Maria Nathan
Lynchburg College in Virginia

Robert Paul
Kansas State University

George Peek
Western Illinois University

Lucia Peek
Western Illinois University

Robin T. Peterson
New Mexico State University

James Poindexter
Duquesne University

Simcha Pollack
St. John’s University

Russ Ray
University of Louisville

Denis Ridley
Florida A & M

Lloyd C. Russow
Philadelphia College

Anthony M. Sabino
St. John’s University

Charles S. Sherwood
California State University–Fresno

Ronald R. Sims
College of William and Mary

Lloyd Soobrian
AT&T

M. Richard Sussman
Central Michigan

John Thanopoulos
University of Piraeus, Greece

John E. Triantis
The Gillette Company

Nancy Upton
Baylor University

Farok Vakil
St. John’s University

Iris Varner
Illinois State University

Robert Whitis
Arkansas State University

Matthew Wong
St. John’s University
From the Editors: ................................................................. 2
Patrick A. Casabona and Sylwia Gornik-Tomaszewski

The Impact of the Accounting Profession’s Movement Toward Fair Value Reporting in Financial Statements: An Interview with Theresa Ahlstrom, Managing Partner, KPMG. ............... 6
Interviewed by Patrick A. Casabona

New Requirements for Measuring and Reporting Fair Value in GAAP ........................................... 10
Patrick Casabona and Victoria Shoaf

Fair Value Measurements in Impairment Testing: How SFAS No. 157 Increases Consistency and Comparability ......................................................... 19
Omar Esquivel and Sylwia Gornik-Tomaszewski

Business Combinations: Convergence and Fair Value .......................... 25
Ibrahim M. Badawi and Nina T. Dorata

The New Fair Value Hierarchy: Key Provisions, Implications, and Effect on Information Usefulness. .... 31
James M. Fornaro and Anthony T. Barbera

Audit Procedures on the Use of Fair Value of Share-Based Compensation ................................. 38
Benjamin R. Silliman and Adrian P. Fitzsimons

Ethical Implications of Reporting Fair Value in Financial Statements ............................................. 46
Teresa M. Danile and Irene N. McCarthy

New Valuation Rules Apply to the Charitable Donations of Vehicles .............................................. 51
Richard Lai and Laura Lee Mannino
During most of the last century, standard setters emphasized historical cost accounting. Under this traditional accounting model, the income statement, which results from matching an entity’s revenues with expenses during a period of time, was considered the primary financial statement conveying useful information about a company’s performance and value to shareholders. The balance sheet was considered a by-product of the matching process, since it contained such categories as prepaid expenses, unearned revenues, accrued expenses, and accrued revenues. Financial statements prepared under the historical cost convention were and are still perceived by many today to be reliable, relatively easy to verify, and straightforward to understand.

Historical cost accounting was sufficient as long as a company’s assets consisted mostly of identifiable tangible assets. With the increased prominence of intangible assets, such as intellectual capital, human resources, brand names, technology advances, or corporate culture, this accounting model resulted in under-valuing and under-recording assets that contributed significantly to the achievement of a company’s strategic goals and objectives. For example, intangible assets that are recorded in the balance sheet – purchased copyrights, patents, and other legal rights – are recorded at historical cost. Other intangible assets, such as brand assets, arise from marketing and supplier relationships, and knowledge assets developed from research and development are not recorded at all. Consequently, great disparities between companies’ book and market values have been observed, and the users of financial statements have pressed for more relevant fair-value information.

For the past decade, to improve the decision-making relevance of financial statements, the Financial Accounting Standards Board (FASB) has been adding more fair value recognition, measurement, and disclosure standards to the body of U.S. generally accepted accounting principles (U.S. GAAP). The International Accounting Standards Board (IASB) follows a similar approach. As a result, a mixed accounting model has been developed, which is still primarily based on historical cost but with an ever increasing application of fair value accounting. Consequently, a shift has occurred in recent years towards using the balance sheet as the primary financial statement conveying information to shareholders, and the income statement reporting economic income as simply the change in value over a period of time.

Although recent accounting standards reflect increasing acceptance of fair value as a measurement attribute, the shift towards the fair value accounting model has not been without controversies. Fair value accounting information continues to be criticized as being less reliable than historical cost, especially when based on subjective assumptions. Estimation errors introduce distortion not only into the balance sheet, but also into the income statement. Furthermore, unrealized changes in fair values from one period to the next, which must now be reported as gains and losses in financial statements, distort the results of operations, if and when they flow through the income statement each period. And finally, fair value accounting requires proper matching of assets and liabilities, which is even more difficult to implement than the matching of revenues and expenses under a historical cost model.

Existing empirical evidence does not resolve these controversies. Empirical findings suggest that the reliability of fair value estimates varies with the extent to which fair value estimates include publicly observed market-based versus management-produced information. The most consistent evidence regarding the reliability of fair value estimates is found for investment securities traded in active markets. The evidence regarding the reliability of other fair value estimates is rather limited. Furthermore, the empirical research on the reliability of fair value estimates is largely derived from the analysis of banks and other financial institutions for which financial instruments comprise core operating assets and liabilities. Such firms may be fundamentally different from companies holding inventory, property, plant and equipment, and other assets whose value comes from an execution of a business plan rather than fluctuations in market prices. Therefore, a generalization of these research findings to all sectors of the economy can be questioned [1].

This Special Issue of the Review of Business describes the FASB’s movement towards fair value accounting and reporting, which reflects a pursuit of one of the most important international accounting convergence objectives the Board shares with the IASB. This theme permeates the articles presented in this journal, which discuss various new accounting pronouncements requiring fair value accounting and reporting, complexities involved in the application of fair value accounting and reporting, as well as problems associated with auditing of the fair-value based financial results.

The majority of this Special Issue focuses on the implications of Statement of Financial Accounting Standards (SFAS) No. 157, Fair Value Measurements, issued by the FASB in September 2006. SFAS 157 provides procedural guidance for measuring fair value estimates required by other authoritative accounting pronouncements [2]. This Special Issue also includes articles dealing with other aspects of fair value reporting, such as auditing the fair value of share-based payments, ethical issues associated with the fair value measurements required to be reported in financial statements, and tax accounting applications of the fair value concept.

This issue begins with an interview featuring Theresa P. Ahlstrom, Managing Partner, Long Island Office, KPMG, LLP, who discusses the impact that the Financial Accounting Standards Board’s movement toward fair value accounting and reporting is having on the accounting profession. She makes it very clear why there has been an increasing trend toward the use of fair value reporting, especially since this is one of the key international accounting convergence efforts it shares with the IASB. According to Ms. Ahlstrom, there has been considerable dissatisfaction within Corporate America for quite a while that financial statements are irrelevant to financial analysts, in light of the current techniques being used to determine the fair market value of an entity.

The objective of fair value accounting, on the other hand, provides users of financial statements with a clearer picture of the current economic state of a company, making that company’s financial statements more useful or “relevant” in the marketplace. Although fair value reporting may clearly be more relevant, Ms. Ahlstrom is not totally convinced of the reliability of financial reporting using more fair value accounting methods. She suggests that the increased subjectivity and estimation process that underpins all aspects of fair value accounting calls the “reliability” of such information into question. For her, however, she believes that fair value has a fair better chance of providing more reliable information, in most cases, than the old historical cost model. Finally, she provides a brief explanation of the impact the changes in the financial reporting environment are having on accounting professionals and their education requirements.
The interview is followed by seven articles dealing with various aspects of fair value accounting, reporting, and auditing:

- Patrick A. Casabona and Victoria Shoaf illustrate the FASB's movement toward fair value accounting by providing a broad overview of recent major standards requiring fair value accounting and reporting in financial statements. They then summarize and evaluate the formal guidance for measuring fair value estimates provided in the FASB's SFAS 157, Fair Value Measurements. The authors explain how SFAS 157 increases consistency and comparability in fair value measurements by providing a single definition of fair value, establishing a framework for measuring fair value, and expanding required disclosures about fair value measurements. Although SFAS 157 does not require any new fair value measurements, the application of this Statement might change current practice for some entities.

- Omar Esquivel and Sylwia Gornik-Tomaszewski examine how fair value is used in GAAP, and provide further clarification of the guidance provided in SFAS 157. They also explain how the new standard affects the fair-value-based impairment testing models for tangible and intangible assets, and provide a numerical illustration of its application to impairment testing under SFAS 144, Accounting for the Impairment or Disposal of Long-Lived Assets.

- On June 30, 2005, the FASB and the IASB each issued a preliminary view of the provisions of FASB's SFAS 157 and its differences to existing fair value measurement guidance. These comments will be considered in conjunction with the reviewers' comments, as well as the provisions of SFAS 157, by April 2, 2007. The IASB published a discussion paper in November 2006, which indicates the Board's preliminary view of the provisions of FASB's SFAS 157 and its differences to existing fair value measurement guidance in IFRS. The Board invites respondents to comment on its preliminary views, as well as the provisions of SFAS 157, by April 2, 2007. These comments will be considered in conjunction with the development of an IASB exposure draft on fair value measurements, which the Board aims to issue in early 2008.

- SFAS 157 introduces fair value hierarchy, which prioritizes inputs into valuation techniques used to measure fair value. In the next article, James M. Fornaro and Anthony T. Barbera discuss the key provisions of SFAS 157's fair value hierarchy, and assess whether the fair value information assists users in making more informed business decisions. They also discuss the influence of the fair value hierarchy on the role of external auditors.

- SFAS 157's fair value measurement guidance applies broadly to financial and nonfinancial assets and liabilities, and there are only a few scope exceptions to this Statement. Although SFAS 123(R), Share-Based Payment, is scope out of SFAS 157, it requires that share-based payments provided to employees by companies be measured at the fair value of the awards at the date of grant. Because employee stock option arrangements are not publicly traded instruments, the fair value of such options must be estimated using option-pricing models and such measurements are difficult to audit by accounting professionals. Benjamin R. Silliman and Adrian F. Fitzsimons examine the Public Company Accounting Oversight Board's (PCAOB) audit guidance provided in the Staff's questions and answers (Q&A), issued in October 2006. These Q’s and A’s provide detailed guidance to CPAs who audit the fair value estimates involved in employee share-based payment arrangements. This article discusses some of the difficulties and complexities in auditing the fair value of stock option transactions.

- The article written by Teresa M. Danile and Irene N. McCarthy deals with ethical implications in reporting fair value. Prior to the issuance of SFAS 157, use of diverse and inconsistent methods for measuring fair value promoted abuses. The authors examine whether the enhanced fair value framework and fair value hierarchy established in SFAS 157 improve financial reporting. They conclude that although better consistency and comparability are achieved, serious ethical concerns remain, especially regarding the Level-3 inputs in SFAS 157's hierarchical framework. These are unobservable inputs based on the reporting entity's own assumptions about the assumptions that market participants would use to estimate the fair values of certain assets and liabilities, when observable market data is not available. Level-3 estimates require considerable judgment in terms of both the selection and application of valuation techniques, and therefore require effective controls and competent independent auditors and other corporate governance mechanisms to thwart potential abuses. This article also discusses the implications of SFAS 157 for academic programs.

- The final article in this Special Issue deals with a tax accounting application of the fair value measurement concept. Richard Lai and Laura Lee Mannino review the rules for determining the amount of a deduction for a charitable contribution of a vehicle, as recently amended by the American Jobs Creation Act of 2004. Although charitable contributions of property are generally based on fair market value, the new rules limit the amount of the deduction to the gross sales proceeds from the subsequent sale of the vehicle by the charity. This volume would not have been possible without the support and collaboration of numerous individuals. First of all, as the guest editors of this special issue, we would like to express our sincere appreciation to Brenda Massetti, Editor of the Review of Business, for her support during the publication process. In addition, we would like to thank all the reviewers for their insightful comments. All manuscripts were reviewed by academics and technical experts in the area of fair value accounting. Each manuscript was reviewed at least twice before final acceptance.

Endnotes


2. The IASB has also been working on a similar fair value measurement project. This project forms part of the Memorandum of Understanding between the IASB and the FASB, which sets out a Roadmap of Convergence between International Financial Reporting Standards (IFRS) and U.S. GAAP 2006-2008. The IASB published a discussion paper in November 2006, which indicates the Board’s preliminary view of the provisions of FASB’s SFAS 157 and its differences to existing fair value measurement guidance in IFRS. The Board invites respondents to comment on its preliminary views, as well as the provisions of SFAS 157, by April 2, 2007. These comments will be considered in conjunction with the development of an IASB exposure draft on fair value measurements, which the Board aims to issue in early 2008.
In my view, SFAS 157 was long overdue. With the increased complexity and estimation process that underpins all aspects of fair value accounting, calls the "reliability" of such information into question for me. Having said that, I do believe that fair value has a far better chance of providing more reliable information in most cases than the old historical cost model.

Look at the last four Statements on Financial Accounting Standards (SFAS) issued by the Financial Accounting Standards Board (FASB), which all require some form of fair value reporting (i.e., SFAS 133, Accounting for Certain Hybrid Financial Instruments, SFAS 156, Accounting for Servicing of Financial Assets, SFAS 157, Fair Value Measurements, and SFAS 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R), and SFAS 159, The Fair Value Option for Financial Assets and Financial Liabilities, Including an amendment of FASB Statement No. 115). It is very clear from these standards that the "fair value train" has left the station, has accelerated quickly, and in my view will not return anytime soon.

Q: How do you think fair value affects the reliability and relevancy of the financial statements?
A: There have been grumbles within Corporate America for well over a decade that financial statements are irrelevant to financial analysts, in light of the current estimation process that underpins all aspects of fair value accounting. Calls the "reliability" of such information into question for me. Having said that, I do believe that fair value has a far better chance of providing more reliable information in most cases than the old historical cost model. However, I am not convinced on the topic of reliability of financial reporting using more fair value accounting methods. The increased subjectivity and estimation process that underpins all aspects of fair value accounting calls the "reliability" of such information into question for me. Having said that, I do believe that fair value has a far better chance of providing more reliable information in most cases than the old historical cost model.

Q: During September 2006, the FASB issued SFAS 157, "Fair Value Measurements." Please comment on what impact this will have on the current accounting standards that require fair value measurements. Does this standard add to the complexity? Does it enhance the consistency of fair value reporting?
A: In my view, SFAS 157 was long overdue. With numerous existing accounting standards requiring varying degrees of fair value estimates, SFAS 157 clearly provides some consistent "how to" requirements for calculating fair value. However, it is likely to add some complexity in financial reporting, as well as audit risk, associated with such reporting and disclosures. Moreover, based upon the assumptions within the "inputs" used to make the fair value calculations, the Financial Accounting Standards Board established a hierarchy of fair value measurements for financial disclosure, referred to as Levels 1, 2 and 3. This hierarchy, which is explained thoroughly in some of the articles presented in this journal issue, is intended to convey information about the nature of the inputs.

Q: Similarly, what is your view on whether employing fair value accounting measures increases or decreases the complexity and "quality" of financial reporting?
A: While I and probably most other practitioners, think that today's accounting couldn't possibly get more complex, I believe the trend to recording more assets, liabilities, and the associated transactions at fair value will prove us wrong. Fair value accounting does not ensure, in my eyes, enhanced "quality" in financial accounting, while perhaps easier to follow and "bookkeep," has seen its day and more than outdated its usefulness. So I think most preparers and users of financial statements are sold on the enhanced relevancy point. However, I am not convinced on the topic of reliability of financial reporting using more fair value accounting methods. The increased subjectivity and estimation process that underpins all aspects of fair value accounting calls the "reliability" of such information into question for me. Having said that, I do believe that fair value has a far better chance of providing more reliable information in most cases than the old historical cost model.

The Impact of the Accounting Profession's Movement Toward Fair Value Reporting in Financial Statements: An Interview with Theresa Ahlstrom, Long Island Office Managing Partner, KPMG LLP

Interviewed by Patrick A. Casabona, The Peter J. Tobin College of Business, St. John's University
(This interview took place on January 29, 2007.)

KPMG LLP, the audit, tax and advisory firm, turns knowledge into value for the benefit of its clients, people, communities and the capital markets. Its professionals work together to provide clients access to global support, industry insights, and a multidisciplinary range of services. KPMG LLP (www.us.kpmg.com) is the U.S. member firm of KPMG International. In 1993, KPMG International was the first multidisciplinary professional services organization to establish itself along industry-specific lines of business. This enabled KPMG to tailor services and strategies to the needs of clients across a range of global industry markets. KPMG International's member firms have 103,000 professionals, including 6,700 partners, in 144 countries.

Theresa P. Ahlstrom is KPMG's Long Island Office Managing Partner and the Northeast Audit Quality Support Partner, supporting the Northeast Audit Area Risk Management Partner, and playing a key role in the development and execution of the area's quality enhancement initiatives. She started her career at KPMG, LLP, in 1982 as a pre-professional in the firm's National Department of Professional Practice (DPP), and joined the audit professional staff of the Long Island office in 1983. In 1993, after a two-year rotation in DPP and the Office of General Counsel, she was admitted into the partnership.

Ms. Ahlstrom has served as lead engagement partner for numerous clients in the healthcare, biotech, consumer and industrial market, and non-profit industries. Because of her technical experience and client service record, she was designated an SEC Reviewing Partner, Professional Practice Partner; Employee Benefit Resource Partner, Primary Campus Recruiter, and National Training Instructor. Graduating summa cum laude with a B.S. degree in accounting from St. John's University in 1983, she was inducted into the YWCA Academy of Women Achievers in 1998 and the Long Island's Top 50 Women Hall of Fame in 2000, 2001 and 2003. Ms. Ahlstrom is also very active in numerous community activities and professional associations, and received the 2003 Long Island Fund for Women and Girls Achievement Award. She resides in South Huntington, New York, with her husband Bob and their two young sons.
with Level 1 being the “most reliable,” which includes inputs that are only quoted prices in active markets, versus Level 3, which consists of unobservable inputs [that may reflect the Company’s own assumptions].

Of course, this new standard will require that entities expend more effort than in the past, as they are forced to use more complex valuation models and calculations that are claimed to produce more reliable valuation estimates. Who is to make the final decision as to what valuation technique is most appropriate in each situation, especially when economists have been arguing about these issues for years? I also foresee many instances where there will be a lively debate about what the most appropriate “hierarchical level” a particular valuation estimate should be classified as, as Level 3 valuation requires more detailed and costly reconciliations and roll-forward disclosures for all activities that occurred during the period. Nonetheless, this debate is healthy as it should improve the transparency of fair value estimates to the astute reader and analyzer of the financial statements.

The benefit of having one set of guidelines for calculating fair value measures codified within one accounting standard will hopefully improve consistency and transparency which may outweigh the costs associated with the complexity of the calculations. The disclosures within the financial statements should be a good step in allowing investors to understand the inputs and assumptions used by a Company to determine fair value and in turn, make their own judgments on the reliability and relevance of the information within the financial statements.

Q: How does the greater use of fair value accounting measurements affect the audit procedures of the independent auditor?

A: The impact on the independent audit has been relatively extensive, particularly in auditing the more complex fair value calculations using valuation models, for example as required by SFAS 123(R), Share-Based Payment, or in situations (which are becoming more and more common) where a company uses third-party specialists to determine a fair value measurement. In short, in these situations the subjectivity and complexity has had a direct impact on audit risk and the cost of the audit.

At KPMG, timely, extensive and on-going training programs for its professionals worldwide are developed and delivered on each new accounting and audit standard. Additionally, our engagement teams are typically armed with a list of procedures and steps they use to effectively and efficiently audit complex accounting areas, such as fair value measures, referred to as audit program guides. Our firm also specifically trains experienced audit and advisory professionals to assist engagement teams in working through more difficult accounting standards, such as SFAS 157.

More often than not, our core audit engagement teams are assisted by valuation specialists, actuaries, financial derivative resources or share-based payment specialists. These professionals, most of whom are specially-trained audit partners and senior managers, principally assist the auditors in assessing the qualifications of third-party specialists engaged by a client to calculate fair value measurements and disclosures and determining the reasonableness of the assumptions and methodologies used in such measurements. Of course, where valuations and estimates are used to determine fair values, there are numerous other audit procedures that are employed. These include documentation and testing of management’s process over calculating fair value measures, including assumption development, as well as testing completeness, accuracy, and relevancy of the underlying data used in the valuations and other calculations.

Q: How could accounting programs appropriately prepare students for the fair value accounting measurements they will inevitably deal with when they enter the business world?

A: There is no doubt that the movement toward the increased use of fair value accounting and estimation methods requires additional skill sets in accountants, auditors, analysts and financial reporting specialists, than were previously required. I would argue that the enhanced fair value requirements may significantly increase the workloads of these individuals, given the complexity and the need for more continuous updating of fair values estimates than before. Unfortunately, this comes at a time of already stretched resources of both corporate accounting and financial reporting staffs and external auditors.

Accounting programs are going to have to ensure that there is a focus on teaching the next generation of CPAs valuation techniques and in-depth financial statement analysis tools. Additionally, higher education institutions may need to consider providing more opportunities for students to specialize in areas of economics, finance, and statistics (in addition to accounting degrees), to ensure that today’s students are adequately prepared to tackle tomorrow’s challenges.
SFAS 157 provides a definition of fair value that replaces all of the inconsistent definitions provided in previous GAAP literature...thereby codifying related guidance about fair value measurements within applicable GAAP.
The FASB intends for the standard to increase the consistency and comparability of estimates of fair value provided in financial statements, and to provide a formal hierarchy for measuring and evaluating those estimates.

- SFAS 133, Accounting for Derivative Instruments and Hedging Activities, as amended, was issued in 1998. This standard requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position, and measure those instruments at fair value. It also provides that a derivative may be specifically designated as: a hedge of the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment; a hedge of the exposure to uncertain cash flows of a foreclosed transaction (such as the future issuance of a bond); or a hedge of the foreign currency exposure of a net investment in a foreign operation, an unrecognized firm commitment, an available-for-sale security, or a foreign-currency-denominated forecasted transaction.

- SFAS 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities (as amended), issued in 2000, provides accounting and reporting requirements for a transfer and servicing of a financial asset and the extinguishment of a liability, as well as the definition of the fair value of an asset (or liability). It defined fair value as the amount at which the asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. After a transfer of financial assets, an entity must recognize the financial and servicing assets it controls and the liabilities it has incurred, and derecognize financial assets when control has been surrendered and liabilities when they are extinguished.

- SFAS 141, Business Combinations, issued in 2001 (and expected to be replaced by a new Statement in 2007), requires that all business combinations be accounted for using one method, the purchase method, based on the fair values exchanged. The acquisition cost of an acquired business entity is allocated first to the fair values of the assets and liabilities (i.e., the net assets) acquired, with the excess, if any, reported as goodwill in the consolidated financial statements. SFAS 141 supersedes APB Opinion No. 16, Business Combinations, which allowed two vastly different methods to be used for acquisitions: the pooling-of-interests method (now eliminated), which ignored the fair values of the net assets acquired, and the purchase method, which required fair-value accounting.

- SFAS 142, Goodwill and Other Intangible Assets, issued in 2001, requires that goodwill and other intangible assets with indefinite lives be periodically tested for impairment, using certain specified valuation procedures, and written down if impaired (that is, when the fair value of the intangible asset is less than its book value).

- SFAS 143, Accounting for Asset Retirement Obligations, issued in 2001, addresses financial reporting of obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. It requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset.

- SFAS 144, Accounting for the Impairment or Disposal of Long-Lived Assets, issued in 2001, requires impairment testing for long-term assets used in the business, assets to be disposed of, and intangible assets with finite lives. It retains the requirements of SFAS 121, issued in 1995, to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted cash flows, and to measure an impairment loss as the difference between the carrying amount and fair value of the asset.

- SFAS 146, Accounting for Costs Associated with Exit or Disposal Activities, issued in 2002, addresses financial accounting and reporting for costs associated with exit or disposal activities. It requires that a liability for a cost associated with an exit or disposal activity be recognized only when the liability is incurred, i.e., when the definition of a liability in FASB Statement of Financial Accounting Concepts No. 6, Elements of Financial Statements (CON 6), is satisfied.

- SFAS 153, Exchanges of Nonmonetary Assets—an amendment of APB Opinion No. 29, revises the guidance in APB Opinion No. 29, Accounting for Nonmonetary Transactions, which is based on the principle that exchanges of nonmonetary assets should be measured based on the fair value of the assets exchanged, but included certain exceptions to that principle. SFAS 153 amends Opinion 29 to eliminate the exception for nonmonetary exchanges of similar productive assets, and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange.

- SFAS 155, Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140, includes amendments that, among other things, resolve issues related to the application of SFAS 133 to beneficial interests in securitized financial assets and permit fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation under SFAS 133.

- SFAS 159, The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115, was issued in February 2007. This standard allows a company to irrevocably elect fair value as the initial and subsequent measurement dates for most financial assets and liabilities on a contract-by-contract basis, with few exceptions. Instruments within the scope of the standard include: equity method investments; equity securities without readily determinable fair values; insurance and reinsurance contracts that are financial instruments; warranty obligations that are financial liabilities and warranty rights that are financial assets; and unconditional purchase obligations, etc.

- Proposed SFAS, Business Combinations—a replacement of FASB Statement No. 141, is expected to be issued in 2007 and will require fair value measurements for: contingent consideration; acquired contingent assets and liabilities; accounts and loans receivable; and liabilities for restructuring or exit activities.

Note that there are many other types of FASB pronouncements (i.e., FASB Interpretations, Technical Bulletins, and FASB Staff positions) that require fair value reporting and disclosure that were not discussed above. Three significant FASB Interpretations (FIN) that were recently issued are:

- FIN 45: Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others: an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB interpretation No. 34.

- FIN 46(R): Consolidation of Variable Interest Entities: an interpretation of ARB No. 51.

- FIN 47: Accounting for Conditional Asset Retirement Obligations.

In addition, FASB Statement of Financial Accounting Concepts No. 7, Using Cash Flow Information and Present Value in Accounting Measurements (CON 7), issued in 2002, provides a framework for using future estimated cash flows as the basis for measuring the fair value of an asset or a liability. It provides general principles that govern the use of present value, especially when the amount of future cash flows, their timing, or both are uncertain. It also provides a common understanding of the objective of present value in accounting measurements.

**SFAS 157, FAIR VALUE MEASUREMENTS**

SFAS 157 provides a definition of fair value that replaces all of the inconsistent definitions provided in previous GAAP literature (such as CON 7, SFAS 107, SFAS 115, SFAS 133, SFAS 140, SFAS 142, etc.), thereby codifying related guidance about fair value measurements within applicable...
GAAP. The FASB intends for the standard to increase the consistency and comparability of estimates of fair value provided in financial statements, and to provide a formal hierarchy for measuring and evaluating those estimates. Although the new standard does not require any new fair value measurement methodologies to be used, it will still result in a change to the current practice of some entities. The changes to current practice resulting from the application of SFAS 157 relate to its new definition of fair value, the methods used to measure fair value, and the expanded disclosures about fair value measurements that it will require.

The scope of SFAS 157 applies broadly to fair value measurements encountered in GAAP, both financial (i.e., investments accounted for under SFAS 115 and derivative assets and liabilities within the scope of SFAS 133), and non-financial (i.e., certain assets and liabilities measured at fair value under SFAS 141 and assets tested for impairment under SFAS 142 and 144). The few exceptions are discussed in ¶2 and ¶3 of SFAS 157. For example, it does not apply to fair value measurements in transactions involving share-based payment transactions under SFAS 123(R), inventory pricing under Accounting Research Bulletin 43, Chapter 4, and vendor-specific evidence related to software revenue recognition. It also does not eliminate the practicality exceptions to fair value measurements in accounting pronouncements within the scope of the standard, such as SFAS 107 and FIN 45.

The guidance in SFAS 157 will also apply to all future FASB standards that will require or permit fair value measurements. The FASB is currently working on projects that may broaden the scope of what is permitted or required to be measured at fair value.

Defining Fair Value

SFAS 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 the measurement date (¶5). This definition of fair value retains the exchange-price notion contained in many earlier GAAP definitions of fair value. However, SFAS 157 clarifies that the basis for a fair value measure is the price at which a company would sell or otherwise dispose of an asset or pay to settle a liability (i.e., an exit price), not the market price at which a company acquires an asset or assumes a liability (i.e., an entry price). The exit price concept is based on current expectations about the future inflows associated with the asset and the future outflows associated with the liability from the perspective of market participants. SFAS 157 explains key concepts, discussed below, that are needed to apply the new definition of fair value, including market participants, the markets in which an entity would exchange the asset or liability, and the valuation premise that follows from assumptions market participants would make about the use of an asset.

Market participants are defined in the standard as buyers and sellers in the principal (or most advantageous) market for the asset or liability who have certain characteristics, such as being independent of the reporting entity (that is, not a related party), knowledgeable about factors relevant to the asset or liability under consideration, and legally and financially able, and willing, to transact for the asset or liability, but not forced or otherwise compelled to do so (¶10). SFAS 157’s fair value measurement assumes that the transaction to sell the asset or transfer the liability occurs first in the principal market for the asset or liability, if one exists, which is the market with the greatest volume and level of activity for the asset or liability. If there is no principal market, or if there are multiple markets for the asset or liability with different prices, and no single market represents a principal market, the fair value measurement assumes an orderly transaction in the most advantageous market for the asset or liability, i.e., with the price that maximizes the net amount that would be received for the asset or minimizes the net amount that would be paid to transfer the liability (¶6), after considering transactions costs. Note that if there is a principal market for the asset or liability, the fair value measurement should reflect the price in that market (whether that price is directly observable or otherwise determined using a valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

The price in the principal market used to measure the fair value should not include transaction costs (e.g., incremental direct cost to sell an asset or transfer a liability). However, in situations in which the location of an asset or liability is an attribute of the asset or liability (for example, a commodity), the price in the principal market used to measure the fair value of the asset or liability should include transportation costs (e.g., costs incurred to transport the asset or liability to or from its principal or most advantageous market). For an asset, SFAS 157’s fair value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible, and financially feasible at the measurement date (¶12). Highest and best use refers to the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used by market participants, even if that intended use is different from that of the reporting entity.

The highest and best use of the asset establishes the valuation premise used to measure the fair value of the asset (¶13). The valuation premise described in SFAS 157 is an assumption about how market participants would use an asset, based on its highest and best use. For example, the highest and best use of the asset is in-use if the asset would provide maximum value to market participants principally through its use in combination with other assets as a group (as installed or otherwise configured for use). On the other hand, the highest and best use of the asset is in-exchange if the asset would provide maximum value to market participants principally on a standalone basis (e.g., a financial asset).

Thus, the highest and best use concept addresses what to do when there is potentially more than one way to use an asset or asset group. What this concept suggests is that in determining an asset’s fair value, the manner of use of the asset or asset group that maximizes its fair value to market participants should be used, regardless of how the entity intends to use it. If market participants are expected to continue to use an asset as part of an asset group, an in-use valuation premise would be applied in determining the asset’s fair value, which would reflect any synergies that a market participant could realize from using the asset as a group. However, if market participants would not continue to use an asset as part of an asset group, the asset would then provide value principally on a standalone basis, or equivalent assets can be substituted for the asset, and an in-exchange premise would be applied in determining the asset’s fair value. Under an in-exchange valuation premise, the asset’s fair value would be based on its exit price when sold on a stand-alone basis.

As explained in ¶15 of SFAS 157, a fair value measurement for a liability assumes that the liability is transferred to a market participant of comparable credit standing who would similarly perform (or similarly bear the consequences of not performing) the obligation. Therefore, the reporting entity should consider the effect of its credit standing on the fair value of the liability in all periods in which the liability is measured at fair value. Prior to SFAS 157, GAAP was not explicit on this subject, and this requirement was controversial due to its counterintuitive impact on earnings—that is, because deteriorations in credit rating result in higher required market yields, which causes the fair values of entities’ liabilities to decrease, which then requires recognition of gains in earnings. The FASB did consider these concerns, but ultimately concluded that there should be symmetry in how fair value is determined for assets and liabilities, and that any concerns about realizability should be considered as the Board decides what liabilities to allow to be measured at fair value.
Valuation Techniques
SFAS 157 allows the use of the following three valuation techniques for measuring fair value:

1. The **market approach** uses observable prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities (including a business). The measurement is based on the value indicated by those market transactions. Even in markets, however, prices for financial instruments may vary depending on the particular market in which they trade. The four types of markets in which assets and liabilities trade, and where observable market assumptions are available, are discussed below.

   1. **Exchange Market**: An exchange or “auction” market provides high visibility and order to the trading of financial instruments. In an active exchange, such as the New York Stock Exchange or American Stock Exchange, closing prices are both readily available and generally representative of fair value.

   2. **Dealer Market**: In a dealer market, dealers stand ready to trade (either buy or sell) for their own account; thereby providing liquidity to the market. Typically, bid and ask prices are more readily available than information about transaction prices and volume traded. An “over-the-counter” market such as NASDAQ is an example of a dealer market.

   3. **Brokered Market**: In a brokered market, such as an electronic network in which buyers and sellers are matched, and in real estate markets, intermediaries attempt to match buyers with sellers but do not stand ready to trade for their own account. The broker knows the prices bid and asked by the respective parties, but each party is typically unaware of another party’s price requirements.

   4. **Principal-to-Principal Market**: In principal-to-principal transactions, both originations and resales are negotiated independently with no intermediary and, if any, information is typically released publicly. Complex interest rate swaps between principals are an example of financial instruments that are available only in principal-to-principal markets.

2. The **income approach** uses valuation techniques to convert projected future amounts (for example, cash flows or earnings) to a single current amount by appropriate discounting. The measurement is based on the value indicated by market expectations about future amounts. Those valuation techniques include present value techniques, option-pricing models, and the multi-period excess earnings method.

3. The **cost approach** is based on the amount that currently would be required to replace the service capacity of an asset (often referred to as current replacement cost).

SFAS 157 requires that valuation techniques that are appropriate in the circumstances, and for which sufficient market data are available, should be used (and consistently applied) to measure fair value, when available. If multiple valuation techniques are used to measure fair value, the fair value estimates should be evaluated and weighted, as appropriate, in determining fair value.

Fair Value Hierarchy
SFAS 157 establishes a fair value hierarchy, whose purpose is to prioritize the market inputs to valuation techniques used to measure fair value into three broad levels (hopefully maximizing the use of observable market data and minimizing the use of unobservable inputs), to establish a classification of fair value measurements for disclosure purposes. The availability of market inputs relevant to the asset or liability and the relative reliability of the inputs may affect the selection of appropriate valuation techniques. However, the fair value hierarchy focuses on the market inputs to valuation techniques, not the valuation techniques themselves.

Market inputs refer broadly to the assumptions that market participants would use in making pricing decisions. Market inputs are either observable or unobservable. Observable market inputs refer to inputs that are developed based on market data obtained from sources independent of the reporting entity. Unobservable market inputs refer to inputs that reflect the reporting entity’s own assumptions of market inputs. All valuation techniques used to measure fair value should maximize the use of observable market inputs and minimize the use of unobservable market inputs.

**Level-1 inputs** are observable market inputs that reflect quoted prices for identical assets or liabilities in active markets that the reporting entity has the ability to access at the measurement date. In an active market (for example, an active exchange market), transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis; a quoted price in that market will be both readily available and representative of fair value.

**Level-2 inputs** are used when observable market inputs for identical assets or liabilities in active markets are not available, but the entity can apply observable market inputs other than quoted prices for identical assets or liabilities in active markets that the reporting entity has the ability to access at the measurement date (R28), including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active, or in which little information is released publicly (for example, a principal-to-principal market); market inputs other than quoted prices that are directly observable for the asset or liability, for example, interest rates, yield curves, or volatilities. An example would be a privately placed bond of a company whose value is derived from a similar bond that is publicly traded. Another example is an over-the-counter interest rate swap, valued based on a model whose inputs are observable London Interbank Offered Rate (LIBOR) forward interest rates.

**Level-3 inputs** are unobservable inputs for an asset or liability (e.g., future cash flows and discount rates) that reflect the reporting entity’s own assumptions about the assumptions market participants would use in pricing the asset or liability (including assumptions about risk). An example would be common stock of a privately held company whose value is based on projected future cash flows and discount rates that cannot be corroborated by observable market input data for a similar company. Level-3 inputs should be used to measure fair value only if observable market inputs are not available. However, they should not ignore the assumptions that market participants would use in pricing the asset or liability, including assumptions about the amount a market participant would demand to assume the risk related to the unobservable market inputs used to measure fair value, if that information is reasonably available without undue cost and effort.

The new required disclosures in SFAS 157 are designed to increase transparency regarding how fair value is determined. They apply to fair value measurements of assets and liabilities that are both recurring (e.g., trading securities) and non-recurring (e.g., goodwill impairment testing). Tabular disclosure by major category, with columns for each level in the hierarchy, is required. In addition, in the period of adoption (and annually thereafter), an entity should describe the valuation techniques used, and any changes to those valuation techniques. Additional disclosures for Level 3 measurements (unobservable market data) are required.
Unless readily available in active markets, fair value measurements, however determined, can be subjective, and subjectivity can be abused.
SFAS 157: (1) provides a single definition of fair value, (2) sets out a framework for measuring fair value, and (3) expands disclosures about fair value measurements.

SFAS 157 emphasizes that fair value is a market-based measurement, which should be determined based on the assumptions that market participants would use in pricing the asset or liability. In the context of SFAS 157, market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability that are:

- Independent of the reporting entity;
- Knowledgeable about the asset (or liability) and the transaction;
- Able to transfer the asset (or liability); and
- Willing to transact for the asset (or liability).

The statement also explains that a fair value measurement of an asset assumes its highest and best use by market participants. Such use would maximize the value of the asset or the group of assets within which the asset would be used, regardless of the intended use of the asset by the reporting entity.

SFAS 157 does not remove practicality exceptions that exist in other standards dealing with fair value measurements. Also, the statement requires the use of market participant information when it is reasonably available without undue cost and effort. But it is important to note that even in the absence of market-based information, SFAS 157 reminds preparers that they still must use a market-based perspective.

Valuation Techniques

Three valuation techniques are specified for estimating fair values:

- The market approach – uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities;
- The income approach – uses valuation techniques to convert future amounts, such as cash flows or earnings, to a single present-value amount. The measurement is based on expectations developed by current market participants about those future amounts;
- The cost approach – uses the current replacement cost that is the amount that currently would be required to replace the service capacity of an asset.

Single or multiple valuation techniques may be used, depending on circumstances and availability of data. If multiple valuation techniques are used, the results must be evaluated and weighted appropriately. A fair value measurement is the point within the reasonable range of the results that is most representative of fair value in the circumstances. Valuation techniques should be consistently applied, but can be changed if the change results in a measurement that is equally or more representative of fair value in the circumstances. A change in the valuation technique is a change in accounting estimate, not a change in accounting principle.

Inputs into the Valuation Techniques and Fair Value Hierarchy

In SFAS 157, inputs into valuation techniques used to measure fair value refer to the assumptions that market participants would use in pricing the asset or liability. Some academic research on the relevance and reliability of fair value estimates has concluded that fair value measurements based on inputs from actively traded markets are more closely associated with share prices than fair market measurements derived from entity-specific inputs [5]. According to SFAS 157 inputs may be divided into:

- Observable – that is, assumptions based on market data obtained from sources independent of the reporting entity. Use of observable inputs should be maximized.
- Unobservable – that is, the reporting entity's own assumptions based on the best information available in the circumstances. Use of unobservable inputs should be minimized.

Consistent with the definition of an asset (liability), as it provides expectations about future inflows (outflows), SFAS 157 emphasizes that fair value is a market-based measurement, which should be determined based on the assumptions that market participants would use in pricing the asset or liability. In the context of SFAS 157, market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability. In the case of SFAS 157, market participants are independent of the reporting entity. They are knowledgeable about the asset (or liability) and the transaction, able to transfer the asset (or liability), and willing to transact for the asset (or liability).

The statement also explains that a fair value measurement of an asset assumes its highest and best use by market participants. Such use would maximize the value of the asset or the group of assets within which the asset would be used, regardless of the intended use of the asset by the reporting entity. SFAS 157 does not remove practicality exceptions that exist in other standards dealing with fair value measurements. Also, the statement requires the use of market participant information when it is reasonably available without undue cost and effort. But it is important to note that even in the absence of market-based information, SFAS 157 reminds preparers that they still must use a market-based perspective.

Valuation Techniques

Three valuation techniques are specified for estimating fair values:

- The market approach – uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities;
- The income approach – uses valuation techniques to convert future amounts, such as cash flows or earnings, to a single present-value amount. The measurement is based on expectations developed by current market participants about those future amounts;
- The cost approach – uses the current replacement cost that is the amount that currently would be required to replace the service capacity of an asset.

Single or multiple valuation techniques may be used, depending on circumstances and availability of data. If multiple valuation techniques are used, the results must be evaluated and weighted appropriately. A fair value measurement is the point within the reasonable range of the results that is most representative of fair value in the circumstances. Valuation techniques should be consistently applied, but can be changed if the change results in a measurement that is equally or more representative of fair value in the circumstances. A change in the valuation technique is a change in accounting estimate, not a change in accounting principle.

Inputs into the Valuation Techniques and Fair Value Hierarchy

In SFAS 157, inputs into valuation techniques used to measure fair value refer to the assumptions that market participants would use in pricing the asset or liability. Some academic research on the relevance and reliability of fair value estimates has concluded that fair value measurements based on inputs from actively traded markets are more closely associated with share prices than fair market measurements derived from entity-specific inputs [5]. According to SFAS 157 inputs may be divided into:

- Observable – that is, assumptions based on market data obtained from sources independent of the reporting entity. Use of observable inputs should be maximized.
- Unobservable – that is, the reporting entity's own assumptions based on the best information available in the circumstances. Use of unobservable inputs should be minimized.

According to SFAS 157 inputs may be divided into:

- Observable – that is, assumptions based on market data obtained from sources independent of the reporting entity. Use of observable inputs should be maximized.
- Unobservable – that is, the reporting entity's own assumptions based on the best information available in the circumstances. Use of unobservable inputs should be minimized.

In the statement, a hierarchy of inputs is established to use in determining fair value estimates. The hierarchy refers to the reliability of inputs relative to a valuation technique used in arriving at a fair value estimate. Exhibit 1 presents the hierarchy, with Level-1 representing the most reliable inputs, and Level-3 the least reliable inputs. For measurements that use inputs from different levels, professional judgment shall be used to determine the lowest level input that is significant, in which the measurement will fall in its entirety.

The three-level hierarchy is essential to the statement's disclosure requirements, because the lower the level of the fair value measurement input, the more extensive the disclosure requirement.

Additional Disclosures About Fair Value Measurements

SFAS 157 requires the following disclosures to be presented separately for each major category of assets and liabilities at each annual and interim balance sheet date:

- For items that are measured at fair value on a nonrecurring basis, such as an impaired asset: the fair value measurements recorded during the period and the reasons for the measurements, the level within the hierarchy in which the measurement falls, a description of and information used to develop significant Level-3 inputs, and, in annual periods only, the valuation technique(s) used in the measurements.
- For items that are measured at fair value on a recurring basis, such as an investment held for trading: the fair value measurements as of the reporting date and disclosures similar to those for items measured on a nonrecurring basis, above. In addition, if the measurement falls within Level-3, the entity shall disclose a reconciliation of the beginning and ending balances, and the total gains or losses included in earnings (or changes in net assets attributable to the change in unrealized gains or losses relating to assets still held at the reporting date).

Fair Value Measurements in Impairment Testing of Assets

In certain specified circumstances, U.S. GAAP requires or allows the use of fair value in financial statements in four main ways:

- For the measurement of transactions at initial recognition (e.g., an intangible asset acquired individually);
- For the allocation of the initial amount at which a transaction is recognized among its constituent parts (e.g., in a business combination);
The FASB expressed its preference for exit-price based as opposed to entry-price based fair value measurements, and for market-based as opposed to entity-specific inputs into the valuation process.

This is because there were no other market participants who would use the bottling operation in a different manner. Therefore, the fair value was determined by discounting the estimated future cash flows from step 1, considering information reasonably available without undue cost and effort about the assumptions that market participants would use in pricing the bottling operation. ABC would recognize an impairment charge of $200 (the carrying amount exceeding the fair value of $800), which is accounted for as a direct result of the use of the assets in its operations. Since the carrying amount is greater than the expected undiscounted cash flows from operations, ABC must proceed to step 2. ABC determines that the fair value in accordance with the guidance provided in SFAS 157 of the bottling operation is $800. The fair value was determined considering the highest and best use of the bottling operation, which was determined to be in-use in this case.

### Impairment Models

Impairment models under U.S. GAAP vary depending on the asset subject to the impairment test. The impairment model for long-lived assets to be held and used, and intangibles with a finite useful life, includes, for practical reasons, a recoverability test that uses undiscounted cash flows as a first step to determine impairment. For intangible assets that are not amortizable, impairment is only based on the fair value of the asset, with no recoverability test performed since the indefinite useful lives of the assets could render such test unlikely to fail. For goodwill impairment testing, the model also uses a two-step process to lessen the cost of performing the test, and the implied fair value of goodwill is used to measure impairment. Finally for long-lived assets that are to be disposed of by sale, rather than recovered through operations, the valuation process uses the fair value of the asset less cost to sell.

### Examples

- **Intangible assets not subject to amortization:**
  - Fair value is used to determine and measure the impairment loss.
  - If the carrying amount exceeds its implied fair value, the impairment loss is in an amount equal to that excess.
- **Goodwill:**
  - Fair value of the reporting unit is used to measure the potential impairment.
  - Impaired fair value of goodwill is then used to measure the impairment loss.
  - If the carrying amount of the reporting unit exceeds its implied fair value, recognize impairment loss in an amount equal to the excess computed in step 2.
- **Long-lived assets to be disposed of by sale:**
  - Fair value (less costs to sell) is used to write-down.
  - If a decline in fair value is determined to be other than temporary, write down to fair value.

### Fair Value in Impairment Testing

**Summary:**

- **Step 1:** Compare the fair value of the asset to its carrying amount. If the fair value is lower, proceed to step 2.
- **Step 2:** Compare the fair value to the asset's book value. If fair value is lower, recognize an impairment loss equal to the difference.

### References


---

**Exhibit 2. FAIR VALUE IN THE MEASUREMENT OF IMPAIRMENT OF ASSETS**

<table>
<thead>
<tr>
<th>Asset Category</th>
<th>How Fair Value Is Used</th>
<th>Details of Impairment Test</th>
<th>Impact of SFAS 157</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-lived assets held and used, and intangibles subject to amortization</td>
<td>Fair value is used to measure the impairment loss.</td>
<td>If the carrying amount exceeds its fair value, recognize impairment loss in an amount equal to that excess.</td>
<td>Provides guidance on how to measure fair value and clarifies that the measurement date is not required.</td>
</tr>
<tr>
<td>Intangible assets not subject to amortization</td>
<td>Fair value is used to determine and measure the impairment loss.</td>
<td>If the carrying amount exceeds its fair value, recognize impairment loss in an amount equal to that excess.</td>
<td>Requires that the measurement date be the date of the impairment test.</td>
</tr>
<tr>
<td>Goodwill</td>
<td>Fair value of the reporting unit is used to measure the potential impairment.</td>
<td>If the carrying amount of the reporting unit exceeds its fair value, recognize impairment loss in an amount equal to the excess computed in step 2.</td>
<td>Requires the use of entity-specific inputs into the valuation process.</td>
</tr>
<tr>
<td>Long-lived assets to be disposed of by sale</td>
<td>Fair value (less costs to sell) is used to write-down.</td>
<td>If a decline in fair value is determined to be other than temporary, write down to fair value.</td>
<td>Requires that the measurement date be the date of the disposal.</td>
</tr>
</tbody>
</table>

---

**Table of Fair Value and Impairment Test**

- **Category:**
  - Asset
  - Long-lived assets held and used, and intangibles subject to amortization
  - Intangible assets not subject to amortization
  - Goodwill
  - Long-lived assets to be disposed of by sale
- **How Fair Value Is Used:**
  - Fair value is used to measure the impairment loss.
  - Fair value is used to determine and measure the impairment loss.
  - Fair value of the reporting unit is used to measure the potential impairment.
  - Fair value (less costs to sell) is used to write-down.
- **Details of Impairment Test:**
  - If the carrying amount exceeds its fair value, recognize impairment loss in an amount equal to that excess.
  - If the carrying amount of the reporting unit exceeds its fair value, recognize impairment loss in an amount equal to the excess computed in step 2.
  - If a decline in fair value is determined to be other than temporary, write down to fair value.
- **Impact of SFAS 157:**
  - Provides guidance on how to measure fair value.
  - Requires that the measurement date be the date of the impairment test.
  - Requires the use of entity-specific inputs into the valuation process.
  - Requires that the measurement date be the date of the disposal.

---

**Questions and Issues**

ABC allocates the fair value of the bottling operation ($800) to the individual assets (such as land, plant, and equipment, etc.) for accounting purposes. Changing the facts in the example above slightly, assume that in determining the fair value under step 2, ABC determines that the bottling facility is located in an area that has recently seen development for commercial purposes (e.g., a retail shopping mall). Further assume that ABC determines that the highest and best use of the bottling operation would be in-exchange (i.e., assuming that a market participant would demolish the bottling facility and make necessary adaptations to use the land for commercial purposes). Based on recent sales of land in the area (adjusted for costs to use for commercial purposes), ABC estimates that an in-exchange fair value of the bottling operation is $1,200, primarily driven by the value of land. SFAS 157 requires ABC to consider the highest and best use from a market participant perspective, even if ABC does not intend such use of the asset. Consequently, no impairment would be recognized, since the fair value of $1,200 exceeds the carrying amount of $1,000. SFAS 157's highest and best use concept does present some practical issues. For instance, how much effort does ABC have to put forth in determining possible alternative uses of the asset(s), as well as whether the alternatives are physically possible, legally permissible, and financially feasible, as required by SFAS 157? The statement does indicate that undue cost and effort is not required to be put forth; however, undue cost and effort is not defined – professional judgment is required.

**Conclusions**

SFAS 157 does not require additional fair value measurements; however, it may impact current practice for some entities. In particular, as it relates to fair-value-based impairment testing models, SFAS 157 clarifies that entities should use a market participant perspective in determining fair value.
Fair values used in impairment testing must rest on assumptions that market participants would use in pricing the asset or liability. SFAS 157 places additional emphasis on market participant assumptions.

Endnotes
1 Unaffected by SFAS 157 are measurements that are: (1) related to share-based payments; (2) based on (or that otherwise use) vendor-specific objective evidence of fair value, and (3) related to inventory.
2 The principal market is the market in which the reporting entity would sell the asset (transfer the liability) with the greatest volume and level of activity for the asset (liability). If an entity has no principal market for the asset (liability), it would determine its most advantageous market. The most advantageous market is the market in which the reporting entity would sell the asset (transfer the liability) with the price that maximizes the amount that would be received for the asset (minimizes the amount that would be paid to transfer the liability), considering transaction costs in the respective market(s). Transaction costs, however, are not included in the fair value measurement.
3 The highest and best use of an asset will result in either an in-use premise, when the fair value is determined based on its use together with other assets as a group; or an in-exchange premise, when the fair value is determined as the price that would be received to sell the asset on a stand-alone basis.
4 Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (SFAS 142), defines a reporting unit as “an operating segment or one level below an operating segment (referred to as a component).” The determination of whether a component is a reporting unit “is a matter of judgment based on an entity’s individual facts and circumstances.” The reporting unit is intended to be “the level of internal reporting that reflects the way an entity manages its business or operations and to which goodwill naturally would be associated.”
5 A direct measure of the fair value of goodwill is impracticable since goodwill is measured as a residual amount at the moment of a business combination. Accordingly, SFAS 142 requires calculating the implied fair value of goodwill using a method similar to that used in the allocation of the purchase price to the net assets at the moment of a business combination and initial recognition of goodwill, i.e., subtracting the fair value of the net assets of a reporting unit from the fair value of the reporting unit as a whole, to determine the implied fair value of that reporting unit’s goodwill.

Business Combinations: Convergence and Fair Value

Ibrahim M. Badawi, The Peter J. Tobin College of Business, St. John’s University
Nina T. Dorata, The Peter J. Tobin College of Business, St. John’s University

Abstract
The exposure drafts issued by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) are considered a major joint project on business combinations. This paper discusses the significant proposed accounting changes, which include the application of the acquisition method, recognition of full goodwill in partial business combinations, use of fair value measurements, and expense treatment for certain acquisition-related costs.

Introduction
On June 30, 2005, the U.S. Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) each issued a number of exposure drafts (EDs) dealing with both business combinations and consolidation procedures. The FASB issued two EDs, which include Business Combinations and Consolidated Financial Statements, Including Accounting and Reporting of Noncontrolling Interests in Subsidiaries. The IASB issued three related EDs, which include: proposed amendments to International Financial Reporting Standard No. 3, Business Combinations (IFRS 3); proposed amendments to International Accounting Standard No. 27, Consolidated and Separate Financial Statements (IAS 27), proposed amendments to IAS No. 37, Provisions, Contingent Liabilities and Contingent Assets (IAS 37), and IAS No. 19, Employee Benefits (IAS 19).

Most importantly, the FASB and the IASB EDs on business combinations are jointly developed and contain virtually the same accounting concepts, and therefore represent a major joint convergence project between these two Boards. The objectives of this joint project are twofold. The first is to provide a single high-quality standard for accounting for business combinations that could be used for both domestic and international financial reporting; and the second is to promote the international convergence of accounting standards.

The jointly developed EDs on business combinations are a product of two phases. During the first phase, the FASB and the IASB deliberated the issue of accounting for business combinations separately. The FASB concluded the first phase in June 2001 by issuing Statement of Financial Accounting Standards No. 141, Business Combinations (SFAS 141), and Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (SFAS 142). The IASB concluded their first phase in March 2004 by issuing IFRS 3, Business Combinations. In these standards, both Boards required the use of the purchase method as one method of accounting for business combinations.

During the second phase of the project, FASB and the IASB simultaneously addressed the guidance for applying the acquisition method, and decided to conduct this phase as a joint effort, with the objective of reaching the same conclusions and similar standards for accounting for business combinations. Accordingly, the new joint proposed standard would replace the existing requirements of the SFAS 141 and IFRS 3. Furthermore, the proposed standard requires simultaneous adoption of the FASB proposed statement Consolidated Financial Statements, Including Accounting and Reporting of Non-Controlling Interests in Subsidiaries, which would replace the existing requirements of Accounting Research Bulletin 51, Consolidated Financial Statements, dated August 1959.

The FASB and the IASB believe that the new proposed standard will help users and preparers by improving the comparability of financial information reported by companies around the world that issue consolidated
...the FASB and the IASB [exposure drafts] on business combinations are jointly developed and contain virtually the same accounting concepts, and therefore represent a major joint convergence project between these two Boards.

Financial statements in accordance with either U.S. generally accepted accounting principles (GAAP) or the IFRS. Both Boards expect to issue final standards for business combinations and non-controlling interests during the third quarter of 2007. The Boards will probably defer the effective dates of the proposed standards to sometime in 2008 or even beyond.

**FASB/IASB EDs - Significant Changes**

The accounting proposals in both exposure drafts on business combinations retain the fundamental requirement of SFAS 141 and of IFRS 3, which is to account for all business combinations using a single method (acquisition method), where one party (the acquirer) is always identified as acquiring the other entity (the acquiree). However, the EDs propose significant accounting changes that would drastically alter current accounting practices for business combinations. The proposed accounting changes could result in considerably more immediate charges to the income statement in connection with business combinations. The following are the significant accounting changes, and explanations of their accounting implications.

1. **Acquisition Method, Goodwill, and Noncontrolling Interest**

The proposed business combination rules in the EDs would apply to transactions in which an acquirer obtains control of one or more businesses. The EDs require that all business combinations be accounted for by applying the acquisition method, where the acquirer measures and recognizes the acquiree, as a whole, and the assets acquired and liabilities assumed, including all identifiable contingent assets and liabilities, are recognized at their fair values at the acquisition date. The EDs revise the acquisition date to the date that the acquirer obtains control of the acquired business (the closing date). The EDs recognize that in the absence of evidence to the contrary, the consideration transferred is the best evidence of the fair value. However, in some business combinations, where either no consideration is transferred on the acquisition date or the consideration transferred is not the best indicator of the acquisition’s fair value, the acquirer would need to determine the fair value of the acquiree. Excluded from the fair value measurement are assets held for sale, deferred taxes, operating leases, employee benefit plans, and goodwill.

According to the EDs, goodwill is still an unidentifiable residual value and is computed as the difference between the fair value of the acquire as a whole and the fair value of the net assets acquired. The residual measurement according to the EDs differ from the measurement prescribed by the purchase method, which computes goodwill as the difference between the cost of acquisition and the acquirer’s share of the fair values of the net assets acquired. The significant differences in the computation are as follows: (1) goodwill computed according to the EDs includes the share or portion attributable to the noncontrolling interest, and (2) goodwill computed according to the EDs focuses on fair value of the acquire.

Business combinations presently exempt from SFAS 141 (e.g., cooperatives and mutual entities), will be required to use the acquisition method under the proposed rules. Furthermore, there may be a requirement for greater involvement of valuation specialists to measure the fair value of an acquiree as a whole, in a partial acquisition that qualifies as a business combination. The recognition of full goodwill, including the noncontrolling interest’s portion, would result in higher amounts of goodwill that will be subject to annual impairment testing.

2. **Accounting for Acquisition Transaction Costs**

Under SFAS 141, direct acquisition transaction costs, such as payments made by the acquirer to third parties for legal and consulting fees, banking fees, accounting fees, and fees for valuation services all associated with acquisition, are included in the purchase price. The EDs now require that these transaction costs be accounted for separately from the business combination, as they do not represent assets acquired and liabilities assumed. Accordingly, these costs are expensed as incurred rather than capitalized as part of the business combination cost under current practice. Hence, the proposed accounting of acquisition-related costs will be more transparent and may result in lower earnings in the year of acquisition.

3. **Accounting for Contingencies**

One of the most controversial proposed changes in the EDs relate to the accounting for contingent assets and liabilities. They are identifiable assets acquired or liabilities assumed, whose ultimate benefit or settlement is contingent or conditional on the outcome of some future event. Such contingencies are recognized at the acquisition date, separately from goodwill, and at fair value. The inherent difficulty in measuring the fair value of contingent assets and liabilities is the quality and availability of information as of the acquisition date. The fair value estimate of contingent assets and liabilities will be based on certain assumptions, such as the probability of an occurrence that would result in payment of the contingency, and will likely require significant input from external parties, such as environmental experts or attorneys.

Contingent consideration is an obligation of the acquirer to transfer assets or equity interests if future events occur or certain conditions are met. A significant challenge acquirers may face is to measure, on the acquisition date, the fair value of contingent liabilities associated with earnout arrangements. Earnouts typically include payments to acquiree shareholders that are contingent on the achievement of financial or other performance goals following the closing date of the business combination. Earnout arrangements under the EDs require specific measurement on the acquisition date, and it is that measurement that may create unintended consequences of future performance, particularly associated with managing the acquirer’s risk and retaining key target firm managers. Changes in the values of contingent assets and liabilities (that are not financial instruments) will be adjusted to fair value in each reporting period, with changes in fair value recorded in the income statement.

4. **Accounting for Acquired In-Process Research and Development**

Under SFAS 141, in-process research and development (IPR&D) acquired is measured at fair value and expensed. Under the EDs, the acquirer recognizes separately from goodwill an acquirer’s intangible asset if it meets the definition of a separately identifiable intangible asset. The EDs propose that IPR&D acquired be measured at fair value, and capitalized with an indefinite life. As is the case with other indefinite-life assets, acquired IPR&D will be tested regularly for impairment but not amortized. When its life becomes determinable (e.g., upon project completion), acquired IPR&D will be amortized over its expected remaining life.

The implications are that there are only limited circumstances in which the fair value of the asset cannot be reliably measured, and that uncertainty enters into the measurement of the asset’s fair value rather than demonstrating an inability to measure fair value reliably. These restrictive recognition requirements for intangible assets would result in a re-allocation from goodwill to intangible assets, and consequently, amortization charges would lower earnings in years following the acquisition.

...the EDs propose significant accounting changes that would drastically alter current accounting practices for business combinations.
A significant challenge acquirers may face is to measure, on the acquisition date, the fair value of contingent liabilities associated with earnout arrangements.

Fair Value and the EDs

A. Criticisms of the EDs

The EDs define fair value of the target firm as the fair value of the consideration transferred on the acquisition date, unless it can be demonstrated otherwise that the consideration transferred is not the best measurement of fair value. Fair value measurement of the consideration exchanged is sufficiently supported for a 100 percent acquisition.

The major criticisms of the EDs requirement to use fair value measurements focus on the lack of guidance in fair value measurement in partial and step-acquisitions that ultimately require business combinations. Paragraph A11 of the FASBs ED states that for partial acquisitions that require business combination accounting, the fair value of the consideration given up is not representative of the fair value of the target firm as a whole. As an example, the consideration given up in a 100% acquisition may include control premiums paid to acquiree shareholders having significant equity interests. The payment of control premiums allows the acquirer to direct the strategy and policies of an acquired firm. The acquisition of a series of minority positions, taken individually, may not include control premiums, but could ultimately result in a majority ownership that meets the requirement for business combination procedures. The value of the control premium leading to the majority ownership may be considered to measure the fair value of the acquiree as a whole. The EDs do not provide guidance for imputing control premiums. Paragraph A11 of the FASB ED requires that in these types of situations, the acquirer of partial acquisitions that qualify as a business combination must use the fair value of the consideration given with any other available information to estimate the fair value of the acquiree as a whole.

In certain circumstances, such as non-transfer of consideration, transactions under duress or through related parties, the fair value of the consideration given cannot be reliably used to measure the fair value of the acquiree. In these circumstances, the FASB ED recommends the use of

the market or income valuation techniques which are consistent with measurement guidance found in SFAS No. 157, Fair Value Measurements (SFAS 157).

Certain respondents criticized the EDs for providing too much fair value measurement guidance, which could mislead preparers into thinking they possess valuation expertise. These respondents caution of undesirable outcomes that could result in highly unreliable financial reporting.

Those respondents who supported the EDs proposal to measure contingent consideration at fair value based their support for the use of the acquisition date fair value as the best evidence of fair value of the target firm. Any adjustment to the fair value of the consideration given is evidence to review for goodwill impairment in later periods, because the acquirer will have the benefit of hindsight in acquiree valuation. Those respondents who criticized the EDs suggested that the use of contingent consideration is evidence that fair value is not completely determinable on the acquisition date. Some respondents even suggest that requiring fair value measurement for contingencies on acquisition date motivate managers to engage in earnings management by overstating contingent liabilities, so any lower settlement results in income in future periods.

The EDs prohibit the inclusion of acquisition-related transaction costs incurred by the acquirer in the measurement of the business combination. Transaction costs would be expensed, or would reduce the fair value of equity securities transferred as part of the consideration given. The thrust of the argument lies in the irrelevancy of transaction costs in assessing the future performance of the target firm, and thus do not provide any future economic benefit. This argument is consistent with paragraph 9 of SFAS 157, which states that transaction costs do not possess attributes of assets; but rather are specific to the transaction and will differ depending on how the reporting entity transacts.

Most respondents to the EDs disagree with the proposed treatment of acquisition-related costs, citing the proposal as a significant departure from current accounting standards that base the measurement of the business combination on a cost-accumulation model.

B. SFAS 141 and SFAS 157

SFAS 157, issued in September 2006, establishes a framework for measuring fair value in GAAP and expands disclosures about fair value measurements. The standard provides guidance on how to measure fair value where it is permitted or required under more than 60 other accounting pronouncements.

Paragraph 35 of SFAS 141 requires that the acquiring entity allocates the cost of an acquired entity to assets and liabilities acquired, except goodwill and deferred income taxes, based on their estimated fair values at the date of acquisition. Sources of information to be used to estimate fair values include independent appraisals, actuarial or other valuations. Paragraph 37 provides general guidance specific to the elements. This list includes the following measurements:

1. Marketable securities – fair value;
2. Receivables – present value of amounts expected to receive;
3. Inventories – use of lower-of-cost-or-market (LCM) or current replacement cost;
4. Plant and Equipment – current replacement cost;
5. Intangible assets other than goodwill – fair value;
6. Other assets such as land, natural resources, and nonmarketable securities – appraised values;
7. Liabilities, accruals and commitments – present values of amounts to be paid;
8. Pension and other postretirement benefit obligations – actuarial determined present values; and
9. Preacquisition contingencies – fair value if determinable.

Valuation techniques to measure fair value under SFAS 157 include three approaches: (1) market approach – measurement comes from market transactions involving identical or comparable assets or liabilities, (2) income approach – measurement comes from the conversion of future amounts (earnings and cash flows) to a single discounted value through the use of present value techniques and pricing models, and (3) cash approach – measurement comes from current replacement cost of an asset.

Although broad approaches to fair value measurements in SFAS 157 (market, income, and replacement cost) seem to coincide with the guidance found in paragraph 37 of SFAS 141, the FASB acknowledges the practical exceptions to fair value measurements in SFAS 141, but does not resolve in SFAS 157 its inconsistencies with SFAS 141.

Business Combinations: Convergence and Fair Value

SFAS 157 provides a single definition of fair value. Paragraph 5 states that 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. SFAS 157, paragraph 16, states that the transaction price represents the price paid to acquire the asset or received to assume the liability (an entry price). In contrast, the fair value of the asset or liability represents the price that would be received to sell the asset or paid to transfer the liability (an exit price, which is conceptually different from an entry price). In many cases, the transaction price will equal the exit price and, therefore, represent the fair value, but not always, as discussed in paragraph 16 of SFAS 157. Therefore, SFAS 157 provides detailed guidance on how fair value measurements should be attained, which includes a hierarchical structure for ranking the inputs that should be used in valuations techniques for measuring fair values.
SFAS 157 provides detailed guidance on how fair value measurements should be attained, which includes a hierarchal structure for ranking the inputs that should be used...

The New Fair Value Hierarchy

The New Fair Value Hierarchy: Key Provisions, Implications, and Effect on Information Usefulness

James M. Fornaro, School of Business, SUNY-College at Old Westbury
Anthony T. Barbera, School of Business, SUNY-College at Old Westbury

Abstract

Statement of Financial Accounting Standards No. 157, Fair Value Measurements, introduces a fair value hierarchy that prioritizes the quality and reliability of information used to develop such measurements, and expands disclosure of specific fair value information by level within this hierarchy. The hierarchy’s influence on the external auditor’s role is also discussed.

Introduction

Statement of Financial Accounting Standards No. 157, Fair Value Measurements (SFAS 157), standardizes existing practices companies use to measure assets and liabilities at fair value [5]. Appendix D to the Standard lists over 60 accounting pronouncements that refer to various aspects of fair value reporting, but many contain conflicting or limited implementation guidance. The volume of pronouncements mentioning fair value is evidence of the gradual, but relentless, shift away from the long-standing historical cost (or transaction-based) system [7].

The shift results from increased emphasis by standards setters on the relevance of information provided to financial statement users, over its reliability. The standard introduces a three-level fair value hierarchy that prioritizes the quality and reliability of information used to develop such measurements, and expands disclosure of specific fair value information by level within this hierarchy. These requirements should help financial statement users better assess the reliability of reported fair value information, determine the consistency of its application, and improve comparability with other companies.

This paper provides a brief overview of the major fair value measurement principles in SFAS 157, followed by an examination of the fair value hierarchy and its impact on financial reporting. The benefits and criticisms of the hierarchy are discussed, and its impact on the usefulness of fair value information for decision-making is assessed. Finally, the hierarchy’s likely influence on the external auditor’s role is also examined.

Overview of Fair Value Measurements in SFAS 157

SFAS 157 clarifies existing approaches to fair value measurements currently dispersed throughout the accounting literature. The new guidance has three main components, the goal of which is to standardize the measurement and disclosure of the fair values of existing assets and liabilities.

• First, SFAS 157 (par. 5) defines fair value as the price that a company would receive to sell an existing asset or pay to transfer a liability (i.e., an exit price) in an orderly transaction between third parties (i.e., marketplace participants). In other words, fair value measurements reflect assumptions that knowledgeable, independent market participants would make to hypothetically price the asset or liability, as opposed to relying on management’s internal or entity-specific assumptions.

SFAS 157 introduces a fair value hierarchy that prioritizes the information used for such measurements.
The new guidance has three main components, the goal of which is to standardize the measurement and disclosure of the fair values of existing assets and liabilities.

- Second, SFAS 157 establishes a framework for companies to follow when measuring assets and liabilities at fair value. This framework includes the techniques or models companies use to compute fair value. The three primary valuation techniques discussed in the standard are: (1) the market approach, which generally uses quoted prices that are readily available (e.g., the New York Stock Exchange); (2) the income approach, which generally uses present value techniques to discount future cash flows, or certain option-pricing models; and (3) the cost approach, which generally represents current replacement cost. Although SFAS 157 does not specify when a particular valuation technique should be used, it does require that the technique(s) be appropriate in the circumstances and applied on a consistent basis.

- The accuracy and reasonableness of fair value measurements largely depend upon the reliability of the data and assumptions used in these techniques. Accordingly, SFAS 157 introduces a fair value hierarchy that prioritizes these inputs into three levels. Highest priority (Level-1) is given to observable unadjusted quoted prices in active markets for identical assets or liabilities. Intermediate priority (Level-2) is given to all other observable inputs. Lowest priority (Level-3) is given to observable inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. These assumptions should be based upon market-based information from sources independent of the company. Sources of observable inputs include the following:
  1. Exchange Markets such as the New York Stock Exchange (NYSE);
  2. Dealer Markets such as NASDAQ or other Over-the-Counter (OTC) markets;
  3. Brokered Markets such as real estate; and
  4. Principal-to-principal market transactions which are privately negotiated with little public information available.

- Finally, SFAS 157 expands interim and annual disclosures about fair value measurements. These disclosures include tables containing the fair values of major categories of assets and liabilities, the level within the hierarchy from which the measurements were derived, and gains and losses recognized during the period. For valuations involving Level-3 inputs, additional disclosures are required relative to the other two levels in order to partially compensate for their weaker reliability, as highlighted in the hierarchy below.

### The Fair Value Hierarchy of Measurement Inputs

Information used to measure fair value can be derived from many sources and varies as to the level of reliability. Reliability relates to the degree of assurance capable of being obtained through verification that information faithfully represents what it purports to represent. Accounting methods and techniques used to measure information contribute to its degree of reliability.

It is essential that fair value measurements be derived from data and assumptions from the viewpoint of market participants. To highlight differences in reliability and enhance the consistency and comparability of fair value measurements, SFAS 157 establishes a framework that prioritizes the information (inputs) to fair value measurements. Inputs are first categorized as either observable or unobservable. Observable inputs reflect assumptions that market participants would make, based upon market-based information from sources independent of the company. Sources of observable inputs include the following:

1. Exchange Markets such as the New York Stock Exchange (NYSE);
2. Dealer Markets such as NASDAQ or other Over-the-Counter (OTC) markets;
3. Brokered Markets such as real estate; and
4. Principal-to-principal market transactions which are privately negotiated with little public information available.

Oftentimes, situations exist where little, if any, market activity for the asset or liability exists at the measurement date. In such cases, the use of unobservable inputs is permitted. However, management must examine and consider assumptions that market participants would make to price the asset or liability. These assumptions should be based on the best information available in the circumstances, including a company's internal data. For example, information to ascertain the fair value of a specific operating division of a company is generally not readily available in an active market. In this type of situation, the fair value computation will likely require management to:

1. Derive assumptions concerning future cash flows from an external viewpoint and (2) employ one or more valuation techniques. Such measurements are less reliable than identifiable information or quoted prices in established markets. In general, companies should “maximize the use of observable inputs and minimize the use of unobservable inputs” to their valuation models [5: par. 21].

The fair value hierarchy prioritizes these observable and unobservable inputs into three categories, or levels, based on their degree of reliability. The components of the hierarchy are summarized below:

<table>
<thead>
<tr>
<th>Exhibit 1. COMPONENTS OF THE FAIR VALUE HIERARCHY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree of Reliability</strong></td>
</tr>
<tr>
<td>Higher</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Lower</td>
</tr>
</tbody>
</table>
Given the extent and complexity of existing fair value guidance, the benefits of the hierarchy should be evaluated by assessing whether it improves current theory and practice. Statement of Financial Accounting Concepts No. 2, Qualitative Characteristics of Financial Information (CON 2), provides guidance helpful in making this assessment. First, the hierarchy should enhance the relevance and reliability of fair value information for users. Relevance is enhanced if the hierarchy improves a user's ability to make a decision involving fair values compared to existing practice. In other words, the information should help users to better assess a company's future outcomes, confirm the results of prior expectations, and be available on a timely basis. On the other hand, reliability is enhanced if users are provided with fair value measurements that are more verifiable, faithfully represented, and unbiased than they are under existing practices.

The benefits of the hierarchy can also be assessed by examining improvements in the comparability and consistency of fair value information, since both of these qualities impact the relationship between relevance and reliability [6]. Comparability is enhanced if the hierarchy better enables different companies to measure, report and disclose the fair values of assets and liabilities in a similar manner. Consistency is enhanced if an individual company is better able to measure fair values in a similar manner from period to period. An assessment of the hierarchy in light of these qualitative characteristics follows.

Relevance and Reliability: A Traditional Assessment

Accounting methods, such as some fair value measurement techniques, may increase the relevance of the information produced while simultaneously decreasing its reliability [6]. Though a longstanding debate continues, the FASB has concluded that improvements in relevance generated by the use of fair value information for assets and liabilities is often worth the trade-off of a reduction in the reliability of such information. Fair value better reflects current market conditions, and is more representative of a company's existing financial position than valuations using historical cost, although the latter is usually considered more reliable. A higher degree of usefulness is therefore achievable if fair value information causes better decisions, and thus increased relevance, without unduly sacrifice as to its reliability. An analysis of the trade-offs inherent in using fair value reporting, Ernst & Young [4] suggests that "reliability is a necessary precondition that must be met for information to be relevant."

An assessment of SFAS 157 suggests that financial statement users will be provided with more useful information and insights into the reliability of fair value measurements within the hierarchical structure in the following ways:

- Companies now have better guidance on the considerations in making assumptions for performing Level-2 calculations or, as a last resort, performing Level-3 calculations in those situations where quoted prices in active markets for identical assets or liabilities (Level-1) are absent.
- Financial statement readers are more aware of the degree to which fair value measurements are derived from observable versus unobservable inputs.
- Disclosing the ranking of inputs provides better transparency and insights into the degree of subjectivity and judgment in a company's reported fair value measurements.
- Formal guidance is now available on the proper ranking when significant inputs are derived from more than one level of the hierarchy (i.e., use the lowest ranking).
- Having an established framework to derive fair values will improve the external auditor's ability to verify a company's fair value measurements, as discussed in more detail in the following section.

On the other hand, the hierarchy does not resolve issues that can potentially erode the reliability of fair value data, and therefore, its relevance for decision-making. Concerns will continue to exist, particularly with respect to the nature of Level-3 inputs, which are used to estimate fair value. By definition, these inputs are unobservable and are derived by company management. They may very well represent inputs based on hypothetical assumptions that would be made by hypothetical third parties (i.e., market participants), and are thus another form of an accounting estimate. Some critics assert that such measurements may increase the likelihood of manipulation by opportunistic managers and may, in fact, be worse than using less relevant, but more reliable, historical costs. They also fear that this trend "has the potential for widespread deception of investors" [9]. Accordingly, Level-3 inputs will probably continue to be subject to management bias, susceptible to measurement error, and difficult to independently verify. In SFAS 157 (par. C87), the FASB acknowledges that some Level-3 inputs may be of such a hypothetical nature that they "would seem to be of questionable relevance to users of financial statements." However, given the general trend toward fair value reporting, the FASB believes that the hierarchy enhances the overall reliability of those measurements as well as its relevance to decision-makers.

Relevance and Reliability: Another View

Whether a specific trade-off between relevance and reliability is warranted also depends on the relative weights attached to each by a particular financial statement user. Accordingly, another (direct) relationship between relevance and reliability exists among the inputs used to derive fair values. Some believe that "information needs to pass a reliability threshold before it can be considered relevant at all" [4]. In other words, fair value measurements using Level-1 inputs can be viewed as being more reliable and more relevant than those using Level-2 and Level-3 inputs. Though this debate will continue, the FASB expects that the expanded disclosures required in SFAS 157 will enable users to "make more informed judgments" about the reliability of the accounting estimates and the method(s) used to derive them, and to identify fair value measurements that were estimated using "inherently subjective" input data and assumptions, which may not be very reliable (par. C98).

Comparability and Consistency

The fair value hierarchy should also enhance the comparability of information among companies, and improve the consistency from period to period of an entity's reported fair value estimates, because of the following changes in practices:

- All companies must follow the same framework to identify, rank, and then use the best inputs in their valuation techniques.
- Inputs to value specific assets and liabilities should be derived and ranked in a similar way using the new hierarchical structure.
- Pricing inconsistencies in certain Level-1 inputs have been eliminated, particularly with respect to instances when a company has a large holding of a particular asset (e.g., prohibition of blockage discounts) and adjustments to the values of restricted securities.
- Significant events or transactions that impact fair value (e.g., material announcements or large trades) may occur in "after-hours trading" on the measurement date. In such cases, SFAS 157 (par. 26) requires companies to establish and consistently apply a policy for identifying those events and how to classify the resultant fair value measurement in the hierarchy.
- Expanded required disclosures ensure a minimum level of clarity and similarity by having valuation information provided in a structured format, which will be more meaningful than existing disclosures.
- Expanded disclosures during interim periods of fair value measurements and related inputs will provide users with more current, and possibly more timely, information than in the past.

However, certain drawbacks to the comparability of fair value information are expected to persist despite the existence of the new hierarchy. This is due to the use of subjective management judgment at various points in the valuation process. For example, fair value measurements for many assets (e.g., intangibles, long-lived assets, etc.) are likely to require the use of present value techniques, and incorporate inputs from both Levels-2 and -3. In such cases, management must determine: (1) the principal (or most advantageous) market for the asset, (2) the underlying...
The fair value hierarchy should also enhance the comparability of information among companies, and improve the consistency from period to period of an entity’s reported fair value estimates...

The introduction of the fair value hierarchy and related expanded disclosures will alert auditors [and financial statement users] to those measurements that require extra care due to their low reliability.

Audit tests that could be performed include determining whether the data is accurate, complete, and relevant; verifying the source of the data; mathematical recalculations; and reviewing information for internal consistency [2]. In some cases, the auditor may develop an independent fair value estimate and compare it to the client’s, and/or review events occurring after the balance sheet date that provide evidence supporting or refuting the client’s fair value measurement. Furthermore, measuring fair value may be so complex that the client and/or the auditor will hire a valuation professional to assist in the calculation. In those cases the requirements of SAS No. 73, Using the Work of a Specialist, would apply [3].

As inputs used in fair value measurements shift from observable to unobservable (i.e., from Level-1 to Level-2 to Level-3), the measurements are more difficult for the auditor to verify using independent sources. In fact, these measurements become more of a management estimate containing much uncertainty, due to such factors as the length of the forecast period, the number of significant and complex assumptions, the degree of subjectivity associated with the assumptions, the degree of uncertainty associated with future outcomes, and the lack of objective data [2]. The introduction of the fair value hierarchy and related expanded disclosures will alert auditors to those measurements that require extra care due to their low reliability. Such disclosures will also alert financial statement users as to fair value estimates that may be relevant but are less reliable, even after having been audited.

Conclusion

SAS 157 represents an important milestone in the evolution of fair value measurement and reporting. In particular, the introduction of the hierarchy is consistent with the FASB’s objective that fair value information assist users in making more informed business decisions. The prioritization of inputs to these measurements and expanded disclosures will provide users with additional insights into the composition and relative reliability of a company’s fair value measurements as well as the consistency and comparability of such information.

Audit tests that could be performed include determining whether the data is accurate, complete, and relevant; verifying the source of the data; mathematical recalculations; and reviewing information for internal consistency [2]. In some cases, the auditor may develop an independent fair value estimate and compare it to the client’s, and/or review events occurring after the balance sheet date that provide evidence supporting or refuting the client’s fair value measurement. Furthermore, measuring fair value may be so complex that the client and/or the auditor will hire a valuation professional to assist in the calculation. In those cases the requirements of SAS No. 73, Using the Work of a Specialist, would apply [3].

As inputs used in fair value measurements shift from observable to unobservable (i.e., from Level-1 to Level-2 to Level-3), the measurements are more difficult for the auditor to verify using independent sources. In fact, these measurements become more of a management estimate containing much uncertainty, due to such factors as the length of the forecast period, the number of significant and complex assumptions, the degree of subjectivity associated with the assumptions, the degree of uncertainty associated with future outcomes, and the lack of objective data [2]. The introduction of the fair value hierarchy and related expanded disclosures will alert auditors to those measurements that require extra care due to their low reliability. Such disclosures will also alert financial statement users as to fair value estimates that may be relevant but are less reliable, even after having been audited.

Conclusion

SAS 157 represents an important milestone in the evolution of fair value measurement and reporting. In particular, the introduction of the hierarchy is consistent with the FASB’s objective that fair value information assist users in making more informed business decisions. The prioritization of inputs to these measurements and expanded disclosures will provide users with additional insights into the composition and relative reliability of a company’s fair value measurements as well as the consistency and comparability of such information.

The new guidance will impact the methods by which management derives these measurements and the external auditor’s approach in assessing the fairness of the information. Looking forward, the FASB has established a foundation upon which it can provide future guidance concerning fair value measurements for additional types of assets and liabilities. All parties will need to pay particular attention to future developments as fair value reporting remains high on the agenda of the FASB and other standards setters, especially the SEC.

References


Additional/Further Reading


Audit Procedures on the Use of Fair Value of Share-Based Compensation

Benjamin R. Silliman, Queens College of the City University of New York
Adrian P. Fitzsimons, The Peter J. Tobin College of Business, St. John’s University

Abstract

In October 2006, the Public Company Accounting Oversight Board (PCAOB) issued a series of “questions and answers” (Q&A) to provide guidance to CPA firms auditing public company estimates of the fair value of employee stock option arrangements [4]. Using the PCAOB Q&A and other audit procedures, this article examines some of the complexities in auditing the fair value of stock option transactions.

Introduction

In 2006, the Financial Accounting Standards Board (FASB) established a framework for measuring fair value with the issuance of Statement of Financial Accounting Standards No. 157, Fair Value Measurements (SFAS 157). This pronouncement and the underlying requirements it places on independent auditors to properly apply its provisions to fair value reporting and disclosure will greatly affect financial statement reporting and the role of auditors in the United States. In addition, two years ago, when the FASB issued Statement of Financial Accounting Standards No. 123(R), Share-Based Payment (SFAS 123(R), revised 2004), it allowed corporations flexibility in their use of valuation models to measure the fair value of stock option arrangements.

SFAS 123(R) is not included in the scope of SFAS 157. Employee stock option arrangements are not publicly traded instruments, and therefore the fair value of such options is not easily determinable and must be estimated using an option pricing model, such as Black-Scholes-Merton or the Lattice model [3]. The compensation expense recognized on the income statement and the value of the stock options on the balance sheet are based on reasonable estimates using “forward-looking information,” and can be material in amount [2].

On October 17, 2006, the Public Company Accounting Oversight Board (PCAOB) issued a series of “questions and answers” (Q&A) to provide guidance to CPA firms auditing public company estimates of the fair value of employee stock option arrangements [4]. Using the PCAOB Q&A and other audit procedures, this article examines some of the complexities in auditing the fair value of stock option transactions.

Specifically, it addresses:

(a) understanding the process used by an entity to develop the estimated fair value of employee share options,

(b) testing of an entity’s share-based payment database and activity,

(c) comparing the two fair value estimate models,

(d) testing procedures used to estimate fair value, including the assumptions employed and the appropriateness of the adopted model used, and

(e) testing the recording and proper classification of the resulting compensation expense and financial statement presentation and disclosures.

In addition, the auditor’s use of internal or external fair value specialists will be discussed throughout.

Developing an Understanding of a Corporation’s Process Used to Develop Fair Value of Employee Share Options

In the Q&A, the PCAOB Staff noted that in AU 328.09 (Auditing Fair Value Measurements) auditors are required to obtain a thorough understanding of the company’s process for determining fair value measurements and disclosures, as well as the relevant controls sufficient to develop an effective audit approach [1, 5]. Specifically, in examining a public company’s process for accounting for share-based compensation transactions, documentation of such understanding might include (but is not limited to) the following inquiries of management and its board of directors. The PCAOB Staff note that the auditor should document:

• The terms and conditions of the existing policies granting employee stock options, paying close attention to terms allowing exercise prices that are not equal to the market price on the grant date (as well as terms that delegate option award issuance authority to management).

• The extent the company uses third-party specialists in determining its fair value measurements and disclosures.

• The process for approving and communicating option awards to employees, ensuring that the company determines that the grant date used is consistent with FAS 123(R). Their understanding of the general terms of the stock compensation plan, reviewing contractual terms, settlement alternatives, number of options available, and other relevant terms must be examined.

• The process for tracking stock option awards granted, exercises, forfeitures, cancellations, and option expirations, along with the company’s process used to review plan documents and the accounting for each individual grant.

• The process the company uses to measure and record the stock compensation expense, including those personnel authorized to record such entry.

• The process for identifying and effectuating modifications to existing award terms or conditions, including those authorized personnel. The PCAOB Staff noted that the previous year’s fair value estimates should be examined to ensure consistency of methods and assumptions employed.

The PCAOB Staff noted that AU 328.23 provides three approaches for testing fair value measurement, including [1, 5]:

1. Testing management’s significant assumptions, the valuation model, and the underlying data related to the fair value estimate,

2. Developing independent fair value estimates for corroborative purposes, or

3. Reviewing subsequent events and transactions.

In the Q&A, the PCAOB Staff stressed that the first approach is the more practical method for auditing fair value of employee share options, given that calculating independent fair value estimates (second approach) is not often practical and the “limited usefulness” of testing subsequent events (third approach) [5]. Therefore, auditors should examine and document the significant management assumptions used in determining fair value, the selection of the option pricing model (SFAS 123(R), paragraphs A13-A15), and the expertise and experience of those individuals responsible for determining such estimates [2].

The PCAOB Staff reiterated that some corporations develop assumptions that affect fair value data either internally, by employing their own specialists to prepare the fair value estimate, or externally, by engaging third-party specialists for determining fair value estimates. Referring to AU 328.12, the PCAOB Staff writes that auditors should document the extent to which management uses such specialists, either internally or externally [1]. The PCAOB Staff also cited AU 324 (Service Organizations) when a company engages outside service organizations, and the impact this has on the audit process [1].

Whether fair value assumptions used by management were developed internally or externally, the PCAOB Staff expects auditors to first determine the process used to develop and apply such fair value assumptions, including the processes used to monitor any changes in management’s assumptions. In doing so, the controls over the process in which fair value estimates are derived should be examined, including any internal controls over the data. Auditors should also examine the segregation of duties between those responsible for authorizing and carrying out the underlying transactions involving the fair value of stock options with those responsible for preparing the respective valuations.
On October 17, 2006, the Public Company Accounting Oversight Board (PCAOB) issued a series of “questions and answers” (Q&A) to provide direction to CPA firms auditing public company estimates of the fair value of employee stock option arrangements [4].

The PCAOB Staff stated that auditors should test the integrity of change controls and security procedures for the valuation model adopted, as well as controls that ensure consistency, timeliness, and reliability of data inputs in the valuation model. As the auditors test fair value measurements and disclosures, the PCAOB Staff expects the auditors to perform procedures to “evaluate whether management’s assumptions are reasonable and to evaluate the source and reliability of the evidence supporting management’s assumptions” [5]. In doing so, each auditor performing such high level attestations is required to possess relevant “special skill or knowledge,” and be a member of the audit engagement team.

If a public company engages an external fair value specialist, the auditor should determine the objectivity of the specialist, as well as ascertain the necessary skill sets of the specialist. Because fair value estimates prepared by such external valuation specialists could materially impact the public company’s results of operations and financial position, the auditor should first test the objectivity of such specialists. In doing so, the auditor should request a copy of the engagement letter disclosing the objectives and scope of the work involved, including if the specialist provides other services. The auditor should also ascertain if there is a relationship between the external specialist and the company that could impair the specialist’s objectivity and compromise the integrity of the work performed. Other items the PCAOB Staff believe the auditors should ascertain the external valuation specialist’s knowledge, experience, and understanding of the valuation concepts central to the determination of fair value estimates. In addition, the auditors should evaluate the specialist’s knowledge of the relevant laws, regulations, and FASB standards, as well as guidance from the Emerging Issues Task Force (EITF), American Institute of CPAs (AICPA), and the Securities Exchange Commission (SEC).

Testing an Entity’s Share-based Payment Database and Activity

Once an understanding of the public company’s process for developing estimates of the fair value of employee share options has been documented, the auditor should perform tests of the share-based payment database and recorded activity. A schedule presenting all share-based award activity should be obtained, including:

- The number of options outstanding at the beginning and end of the period;
- Options that are exercisable at the end of the period; and
- The number of options granted, exercised, forfeited, cancelled, or expired during the period.

In addition, exercise prices, including non-vested shares, should be included on the schedule. The schedule should contain options granted, along with the fair value on the grant date and the resulting compensation expense, which is reconciled to the general ledger. The auditor should examine any inherent or existence, and the conditions exist indicating any previously identified risks regarding share-based payment. In particular, items the auditor should examine include:

- The existence of a high percentage of grants awarded in a period;
- Arrangements where share-based compensation is a major portion of executive compensation arrangements;
- High variation in grant dates;
- Patterns of significant increases in stock prices subsequent to the grant date; and
- High levels of stock-price volatility.

After a preliminary examination of the current period’s schedule, the auditors should use the prior-year working papers to determine that the outstanding stock options at the beginning of the period (on the schedule) for the current period, agree with the outstanding stock options at the end of the previous period. In addition, a sample of stock option awards should be selected from the beginning of the period (each sample should represent one individual issued at a single grant date), with balances based on the total unamortized fair value of those options.

To determine if the options selected remain outstanding, the auditors should obtain appropriate evidence corroborating that the employee is still employed with the entity, and that the option has not been cancelled or forfeited. The auditors should also determine if the terms of each option have been modified during the period, and whether or not each option is exercisable, and they should trace the option to ensure it agrees with the schedule of options exercisable at the end of the period. The PCAOB Staff noted that auditors should test the completeness of the various share-based payment award activities by making inquiries of responsible persons outside of the accounting function, including the corporate secretary and members of the board’s compensation committee, and they should read the board’s minutes.

Comparison of Two Option Pricing Models

The PCAOB staff writes that in testing the estimated value of employee share options, auditors should [5]:

- Evaluate the consistency of the process;
- Evaluate the reasonableness of the company’s fair value model, and assumptions employed in the model, including expected term and expected volatility; and
- Verify both the accuracy and completeness of data underlying the fair value measurements.

Once the awards granted are corroborated for the current period in the schedule discussed above, the fair value of each award must be tested. Auditors are expected to evaluate the reasonableness of the option-pricing model selected by the company for calculating the fair value of employee options. The FASB states in SFAS 123 (R), Paragraph A13, “a lattice model (e.g., a binomial model) and a closed-form model (e.g., the Black-Scholes formula) are among the valuation techniques that meet the criteria required by this Statement for estimating the fair value of employee share options and similar instruments” [2]. The FASB, however, does not offer any preference as to which valuation technique a company may adopt. Initially the Board recommended the lattice model, but removed the preference from the exposure draft after receiving public comment [3]. The PCAOB staff further states that auditors should evaluate if the valuation model selected [5]:

- Is applied in a manner consistent with SFAS 123(R)’s fair value measurement objective;
- Is based on established principles of financial economic theory; and
- Reflects all of the substantive characteristics of the share options granted to employees.

In order to understand the substantive differences in each of the main option pricing models, both the Black-Scholes-Merton and Lattice option pricing models will be briefly discussed, respectively.
A. The Black-Scholes-Merton Option Pricing Model

The Black-Scholes-Merton (BSMOP) model, a closed-form option pricing model, measures the relationship between "call option value and . . . factors that determine the premium of an option's market value over its expiration value" [6]. Paragraph 18, specifies six assumptions used to calculate the fair value of share-based payment [2].

1. Expected term of the option;
2. Expected volatility of the price of the underlying share for the expected term of the option;
3. Exercise price of the option;
4. Current price of the underlying share;
5. The risk-free interest rate(s) for the expected term of the option; and
6. Expected dividends of the underlying share for the expected term of the option.

These six variables represent auditable components and are used in both the BSMOP and the lattice models. The BSMOP model assumes that stock option exercises occur only at maturity, with other variables (using weighted-average estimates) such as expected dividends, expected volatility, and risk-free interest rates remaining constant over the option term [5].

The BSMOP model is simpler to apply than the lattice-based models, but it has limitations in that it prevents the ability to consider "varying assumptions" over the option term; further, since most of the inputs used in the BSMOP model remain constant, none of the input data can describe any "unique" features of the employee stock option plans [4].

The BSMOP model was originally developed for valuing exchange-traded options; therefore, it does not take into consideration any differences between traditional exchange-traded stock options and those options granted to employees, possibly causing the value of stock options to be overstated. Barli et al. argue that BSMOP model's use is more appropriate for companies that grant relatively few stock options [4]. Unlike the static assumptions used in BSMOP model, the lattice-based models accommodate multiple dynamic assumptions.

B. The Lattice-Based Model

Because employee stock options cannot be transferred and are subject to vesting requirements and strict forfeiture clauses, more often such share options are exercised prior to their maturity. The lattice-based models take into consideration many unique assumptions that reflect conditions under which employee options are typically granted, such as early exercise of the option. The most common lattice model is the binomial model (although trinomial and multinomial formulas also exist), where the period of time from the grant date to the maturity date is divided into small increments representing intervals. The lattice model estimates how changes in prices over the term of the option would affect the employee's exercise behavior during each interval. While BSMOP is simpler and more commonly used, the lattice model (binomial) requires considerable technical expertise.

As indicated, the six assumptions discussed earlier are also used in the lattice model, with one exception: the expected term of the option is an output of the lattice model, not an input. Specifically, the lattice model calculates the effects of changes in volatility factors (risk-free interest rate, dividend rate, and estimates of expected early exercise) over the option term, requiring more data analysis in building its assumptions. The PCAOB staff stated that the lattice model "might more fully reflect the substantive characteristics of a particular employee share option" [5].

The PCAOB staff noted that auditors should be aware of circumstances in which the BSMOP model would not be appropriate, and it offers one specific example: "an exercise condition that is satisfied when the share prices exceeds a specified value for a specified period of days . . . [Black-Scholes] is not designed to take into account that type of market condition" [5].

If the company uses the lattice model, the PCAOB staff recommends that the auditor should evaluate whether the adopted model meets the fair value measurement objective of SFAS 123(R). The PCAOB staff stated that a company should not frequently switch between valuation models and should demonstrate why a change in valuation technique is warranted. Changing valuation models from period to period to lower compensation expense does not meet the fair value measurement objective of SFAS 123(R). The PCAOB staff noted that frequent changes in models might indicate the presence of fraud, and that auditors therefore should determine management's reasons for the change.

Testing Procedures Used to Estimate Fair Value: Assumptions Employed and the Appropriateness of the Adopted Model Used

The auditor must assess the reasonableness of each of the six assumptions used in the adopted option-pricing model (explained above). As previously mentioned, if such estimates were developed by either an internal or external fair value specialist, auditors should ensure such specialists possess the skills and experience in valuing share-based payment. For each option selected for audit, the exercise price must agree with appropriate supporting documentation (e.g., board of directors minutes). In addition, documentation should be obtained revealing the expected term of the option, taking into consideration several auditable items.

The expected term of an option is the first one of the six assumptions used in an option-pricing model, as discussed above. Because this is a central input to the BSMOP model, the PCAOB Staff recommends that auditors consider the following procedures [5]:

1. Verify the length of the option's vesting period (option life cannot exceed vesting period);
2. Determine if the company has taken into consideration factors impacting employee exercise behavior;
3. Verify that the company has considered the term of the option and the effects of employees' post-vesting employment termination behavior, as well as employees' expected exercise behavior (excluding any pre-vesting termination behavior);
4. Evaluate whether adjustments, if any, to the historical exercise behavior are reasonable and can be supported; and
5. Test the data used in the estimate.

In addition, the PCAOB staff expects the auditor to examine evidence documenting the average length of time similar options remained outstanding (historical exercise patterns of employees as well as post-vesting employment behavior for similar grants). The PCAOB staff noted that auditors should verify a company's calculations to include options not exercised during the contract term (evaluate whether the company's numbers include all vested options, including those never exercised, ensure mathematical accuracy, and test underlying data upon which the company's calculations were based) [5].

The second assumption audited is the expected volatility of the price of the underlying share for the expected term of the option. In measuring the volatility of the underlying stock price, on average, employees tend to exercise options earlier on stocks possessing higher volatility than those with lower volatility. The PCAOB staff noted that auditors should perform the following procedures to evaluate the reasonableness of the expected stock volatility [5]:

1. Obtain an understanding of the company's process for estimating expected volatility;
2. Evaluate whether the company's process considers all applicable factors in Paragraph A32 of SFAS 123(R) in calculating expected volatility [1];
3. Evaluate the reasonableness of the assumptions, supporting information, judgments, and weightings;
Once an understanding of the public company’s process for developing estimates of the fair value of employee share options has been documented, the auditor should perform tests of the share-based payment database and recorded activity.

The PCAOB staff noted that if the company uses the BSMOP model, the auditor should verify that the company correctly used its risk-free interest rate a zero-coupon U.S. Treasury bond with a remaining term to maturity equal to the remaining term of the option (since the grant date) [5]. Auditors should also ensure that the correct yield was calculated, and if the yield was interpolated, auditors should determine if the calculation was correct. If the company uses a lattice model that incorporates a term structure of fixed volatilities, then the auditor should verify that the yield curve is properly calculated over the option contract term, and was accurately entered into the model [5].

The final assumption entered into the models used to estimate fair value is expected dividends. In general, a higher dividend yield used over the option term decreases the value of the option. The auditor should determine that the entity’s methodology for determining expected dividends is reasonable. In doing so, the auditor should ensure that the company’s dividend payment history during a period is commensurate with the expected term of the option. Secondly, the auditor should determine if there is any available company information on plans for future dividends.

In addition, the PCAOB staff notes that in examining the expected dividend yield, auditors should evaluate whether the company has the “intent and ability to pay the dividends” used in such assumptions (by examining sufficient cash levels and observable past dividend trends) [5]. If the company has adjusted its current or historic dividend yield, auditors should also evaluate if such adjustments were reflected in the expected dividend yield (by examining press releases, historic dividend yield rates, etc.) [5].

Testing the Proper Recording and Classification of the Resulting Compensation Expense and Presentation and Disclosure

Once the adopted option pricing model assumptions have been tested, the auditor should determine that the numbers are accurate, complete and relevant. The auditor should obtain a schedule providing the amounts of all share-based payment compensation costs for the current period. The schedule should be tested for mathematical accuracy. The compensation costs determined should be reconciled to the schedule presenting all share-based award activity (as discussed above). The auditor should insure that the journal entries related to share-based compensation expense were made by an authorized person and the amounts recorded are valid, appropriate and authorized, and should investigate unusual journal entries, if any.

In addition, the auditor should obtain a schedule of financial statement disclosures related to employee stock option arrangements, test completeness of the schedule, and insure all proper disclosures agree with beginning balances from the prior period’s financial statements. The auditor should also consider whether any subsequent events or transactions occurred involving fair value measurements and disclosures after the balance sheet date, but prior to the completion of the audit.

Conclusion

The implementation of and proper reporting of share-based payment awards under SFAS 123(R) has caused enormous complexities in auditing such transactions. The PCAOB Staff recently issued its Q&A to provide greater direction to auditors who audit public company estimates of the fair value for employee share-based payment award, especially in light of all of the negative publicity surrounding the backdating and other questionable activities related to the financial reporting of share-based payment awards that have recently been published in the news.

References
Ethical Implications of Reporting Fair Value in Financial Statements

Teresa M. Danile, The Peter J. Tobin College of Business, St. John’s University
Irene N. McCarthy, The Peter J. Tobin College of Business, St. John’s University

Abstract

Statement of Financial Accounting Standards No. 157, Fair Value Measurements, issued by the Financial Accounting Standards Board (FASB) on September 15, 2006 provides enhanced guidance for estimating the fair values of assets and liabilities reported in financial statements. Prior to the issuance of this standard, methods for measuring fair value were diverse and inconsistent. The new standard establishes a fair value hierarchy that prioritizes the inputs that should be used when estimating fair value. Level-3 fair value estimates in the hierarchical structure, which invoke the highest levels of management judgment and subjectivism, provide the greatest area of ethical concern.

Introduction

On September 15, 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 157, Fair Value Measurements (SFAS 157). This standard provides a single definition of fair value and enhanced guidance for estimating fair values of assets and liabilities to be reported in financial statements. Appendix D in SFAS 157 lists over 60 generally accepted accounting principles (GAAP) that require or permit entities to measure assets and liabilities at fair value. Prior to the issuance of SFAS 157, methods for measuring fair value were diverse and inconsistent, especially for items that were not actively traded. The new standard provides a hierarchical structure for measuring fair value, and also requires expanded disclosure of fair value measurements reported in financial statements, especially for those items measured using unobservable data. This Statement applies under other accounting pronouncements that require or permit fair value measurements; however, it does not require any new fair value measurements [2]. What the standard does do is to establish a fair value hierarchy that prioritizes the inputs (assumptions) that market participants will use when estimating the fair value of an asset or liability. The fair value estimates produced within levels one and two of the hierarchical structure use observable market inputs. However, the Level-3 fair value estimates involve the highest levels of management judgment and subjectivism, so they hold significant potentials for abuse and ethical concern.

Background of the Problem

There has long been resistance to fair value measurement replacement of the historical cost model by accounting professionals. Many professionals believe that historical cost gives the auditor a solid base upon which to form an opinion, thereby reducing the subjectivity in accounting. In contrast, they believe, for example, that the highly subjective pricing of long-term natural gas contracts was an open invitation to unethical, greedy people to manipulate earnings, which led to the great frauds of recent years. It was felt that the larger problem was with the execution of the accounting standards themselves, especially for those items measured using unobservable data. This Statement applies letter in which he outlined the origin of these accounting changes. He states his position on the need for reliable data and stewardship in accounting. Mr. Flegm represents the accounting profession’s resistance to fair value measurement in place of a historical cost model. We cite the 1971 Trueblood Committee’s conceptual framework for accounting, which proposed two radical shifts in financial accounting:

• The primary purpose of financial statements should be to provide investors and creditors with information to make rational decisions regarding their investments. (The longstanding stewardship function of accounting was relegated to a secondary position.)
• “Earnings” should be determined from an economist’s rather than an accountant’s view (historical cost model).

In this approach, earnings for a given period could be determined by the discounted change in the values of the beginning and ending balance sheet, ideally. However, determining the rate to be used was open to question. The debate on this has continued to this day, e.g., the radical shift in financial accounting to a balance sheet view of income, which was to lay the groundwork for a move from the historical-cost model to a fair value one.

In short, Eugene Flegm believes that the many frauds committed by top management, the largest in history, can be traced not only to the general decline in values in the past 30 years, but also to the steady move to fair value accounting by the FASB. We concur; we believe that subjectivity in accounting must be reduced, and the way to do that is through maintenance of the historical-cost model [3].

We believe that subjectivity in accounting must be reduced, and the way to do that is through maintenance of the historical-cost model.

An Enhanced Fair Value Framework

Nevertheless, on September 15, 2006, the FASB issued SFAS 157. As mentioned earlier, SFAS 157 provides a new definition of fair value, which is:

• 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.

In addition, SFAS 157:

• Retains the notion that the exchange price is that of an orderly transaction to sell an asset or transfer a liability in its principal or most advantageous market;
• Emphasizes that fair value is a market-based— not entity-specific— measurement, and that a fair value measurement should be based on assumptions market participants would use in pricing an asset or liability;
• Clarifies that assumptions include those about risk and about the effect of a restriction on the sale or use of an asset, and that a fair value measurement for a liability reflects its nonperformance risk;
• Affirms that the fair value of a position in a financial instrument that trades in an active market should be measured as the product of the quoted price for the individual instrument multiplied by the quantity held, with no adjustments for blockage factors;
• Expands disclosures about the use of fair value to measure assets and liabilities in interim and annual periods, subsequent to initial recognition. SFAS 157 is generally effective for financial statements issued for fiscal years beginning after November 15, 2007, and related interim periods [5].

Ethical Implications of Reporting Fair Value in Financial Statements

We believe that subjectivity in accounting must be reduced, and the way to do that is through maintenance of the historical-cost model.
... The Level-3 fair value estimates involve the highest levels of management judgment and subjectivism, so they hold significant potentials for abuse and ethical concern.

Fair Value Hierarchy
SFAS 157 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value estimate should be determined based on the assumptions that market participants would use in pricing an asset or liability. As a basis for considering market participant assumptions in fair value measurements, SFAS 157 establishes a fair value hierarchy that distinguishes between market participant assumptions developed from market data obtained from sources independent of the reporting entity (observable market inputs), and the reporting entity’s own assumptions about market participant assumptions developed from the best information available in the circumstances (unobservable inputs). This fair value hierarchical structure is aimed at increasing the consistency and comparability in fair value measurements, and related disclosures that are reported in financial statements, since it prioritizes the inputs to valuation techniques used to measure fair value into three broad levels, Level-1, Level-2, and Level-3. Level-1 containing the best and most reliable form of market inputs and Level-3 containing virtually none. Although the availability of market inputs relevant to the asset or liability, and the relative reliability of the inputs, may affect the selection of appropriate valuation techniques, “the hierarchy is intended to convey information about the nature of the inputs (the assumptions, not the valuation technique) used in creating the reported fair values.” [4]

Market inputs refer to the assumptions that market participants would use in making pricing decisions (that is, in estimating fair values). Market inputs are either observable or unobservable. Observable market inputs refer to inputs developed based on market data obtained from sources independent of the reporting entity. Unobservable market inputs refer to inputs that reflect the reporting entity’s assumptions of market inputs.

Level-1 inputs are observable market inputs that reflect quoted prices for identical assets or liabilities in active markets that the reporting entity has the ability to access at the measurement date. An example is a quoted price on the New York Stock Exchange.

Level-2 inputs are inputs other than quoted prices included within Level-1 that are observable for the asset or liability, either directly or indirectly through corroboration with observable market data (market-corroborated inputs).

Level-3 inputs are unobservable inputs for the asset or liability; that is, inputs that reflect the reporting entity’s own assumptions about the assumptions market participants would use in pricing the asset or liability (including assumptions about risk), developed based on the best information available in the circumstances. Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model), and/or the risk inherent in the inputs to the valuation technique [2].

Fair Value Disclosures
SFAS 157 (paragraphs 32-35) requires disclosures about the fair value of assets and liabilities recognized in the statement of financial position in periods subsequent to initial recognition, whether the measurements are made on a recurring basis or on a nonrecurring basis. Quantitative disclosures using a tabular format are required in all periods (interim and annual). Qualitative (narrative) disclosures about the valuation techniques used to measure fair value are required in all annual periods.

Ethical Implications of Level-3’s Fair Value Measurements and Audit Considerations

The Level-3 fair value estimates in the hierarchical structure are estimated with the most unreliable valuation inputs (assumptions), and therefore involve the most uncertainty and highest levels of management judgment and subjectivism. This is because market prices and other market inputs that would first be used to estimate their fair values are not available. Thus, management can employ their own assumptions about the inputs necessary to calculate fair values (such as future estimated cash flows and discount rates). Therefore, it is with the Level-3 fair value estimates reported in financial statements that the ethical problems will be the greatest, as managers try to over- or underestimate fair values to accommodate their own objectives.

It is noted, however, that SFAS 157 requires the most detailed disclosures for the Level-3 fair value estimates reported in financial statements, to apprise readers of financial statements of management’s assumptions, and the reliability (or unreliability) of their fair value estimates. These requirements, combined with the expanded guidance of Statement on Auditing Standard No. 101, Auditing Fair Value Measurements and Disclosures (SAS 101), provide stakeholders with greater assurance about the reliability of the estimates. Specifically, SAS 101 provides a general framework for auditing fair value measurements and disclosure—providing guidance on understanding management’s process for developing fair value estimates and evaluating whether the measurement conforms to GAAP.

The new guidance in SFAS 157 and the additional information reported in financial statements must also be considered during periodic audits. For example, the auditor must understand the new GAAP requirements for each type of fair value estimate and disclosure. The new GAAP does not specify methods or processes that should be used for measuring assets and liabilities at fair value. If observable market inputs are not available (i.e., a Level-3 valuation measurement), management techniques for estimating fair value should incorporate assumptions that individuals in the marketplace would use. If that information is not available without excessive cost and effort, then GAAP permits an entity to use its own assumptions as long as there is no indication that marketplace participants would use different assumptions [6].

Specifically, the auditor must evaluate the significant input assumptions, consider the appropriateness of the valuation model used, and test the underlying data and valuation estimates. The auditor does this even when management uses a valuation specialist to prepare the estimate. When management uses a qualified and objective specialist for the fair value measurement it uses for financial reporting purposes, it is still management that is responsible for the data that form the basis for the measurement, as well as the approach, methods, and assumptions the specialist used in arriving at the fair value of an item [6].

... The auditor must evaluate the significant input assumptions, consider the appropriateness of the valuation model used, and test the underlying data and valuation estimates.

Implications for Academia and Corporate Governance

It has been suggested that investors and accountants will have to broaden their knowledge of fair value measurement methodologies, since there are already a large number of standards that require fair value estimates, that academic programs at universities should provide joint accounting and finance programs that include courses on valuation techniques in financial reporting, that there still remains the problem of greedy CEOs, CFOs, and challenged accounting professionals. Various approaches to address ethical lapses have been suggested. The Sarbanes-Oxley Act has been a boon. Education could be a remedy. To improve corporate governance and mindful accounting professionals, it has been recommended that business schools focus on integrity at the individual, company and societal levels—that is, on business in society, not just business in economy [7].
In addition, it has been suggested that the principal problem that financial accounting should deal with is top management's fraud. Some authors have suggested that a cultural audit would provide a means for assessing the tone at the top and the attitude toward internal controls and ethical decision making recommended by the Treadway Commission almost two decades ago. A cultural audit would be a tool for creating ethical companies suggested by the authors Castellano and Lightle [1]. They propose that the board of directors, through the audit committee, retain an outside firm to conduct a cultural audit every three years. The authors cite three issues that need to be addressed:

- The degree to which preoccupation with meeting the analyst's expectations permeates the organizational climate;
- The degree of fear and pressure associated with meeting numerical goals and targets; and
- The compensation and incentive plans that may encourage unacceptable, unethical, and illegal forms of earnings management.

This means of assessment recognizes the critical role of internal controls over financial reporting for creating and maintaining ethical companies.

References

New Valuation Rules Apply to the Charitable Donations of Vehicles

Richard Lai, The Peter J. Tobin College of Business, St. John’s University
Laura Lee Mannino, The Peter J. Tobin College of Business, St. John’s University

Abstract
The rules for determining the amount of a deduction for charitable contributions made during the taxable year to a qualified organization. When the contribution takes the form of property, rather than cash, special rules apply. Generally, contributions of property that would normally yield long term capital gain or Section 1231 gain upon its disposition entitle donors to a deduction equal to the fair market value (FMV) of the contributed property. However, when the FMV is used to value a contribution of property to a public charity such as a church, hospital, or educational organization, the maximum deduction is generally limited to 30% of an individual donor’s Adjusted Gross Income for the year of the contribution.

No deduction is allowed for claimed donations of $250 or more unless it is substantiated by written documentation from a qualified donee charity indicating the cash amount or property description of donated property. In the past, the amount claimed for donated vehicles did not have to be substantiated by the donee charity. Instead, the FMV was determined by the donor who used a variety of methods, such as the vehicle’s blue book value or other less reliable methods that usually inflated the contribution amount.

For property contributions of more than $500, the donor must attach Form 8283 – Noncash Charitable Contributions to his tax return. The form requires specific information including the name and address of the donee charity, the date of the contribution, the donor’s tax basis, the FMV of the donated property, and the method used to arrive at this value. For property contributions with a value greater than $5,000, a qualified appraisal of the donated property is generally required.

New Valuation Rules Apply to the Charitable Donations of Vehicles

Richard Lai, The Peter J. Tobin College of Business, St. John’s University
Laura Lee Mannino, The Peter J. Tobin College of Business, St. John’s University

Abstract
The rules for determining the amount of a deduction for charitable contributions made during the taxable year to a qualified organization. When the contribution takes the form of property, rather than cash, special rules apply. Generally, contributions of property that would normally yield long term capital gain or Section 1231 gain upon its disposition entitle donors to a deduction equal to the fair market value (FMV) of the contributed property. However, when the FMV is used to value a contribution of property to a public charity such as a church, hospital, or educational organization, the maximum deduction is generally limited to 30% of an individual donor’s Adjusted Gross Income for the year of the contribution.

No deduction is allowed for claimed donations of $250 or more unless it is substantiated by written documentation from a qualified donee charity indicating the cash amount or property description of donated property. In the past, the amount claimed for donated vehicles did not have to be substantiated by the donee charity. Instead, the FMV was determined by the donor who used a variety of methods, such as the vehicle’s blue book value or other less reliable methods that usually inflated the contribution amount.

For property contributions of more than $500, the donor must attach Form 8283 – Noncash Charitable Contributions to his tax return. The form requires specific information including the name and address of the donee charity, the date of the contribution, the donor’s tax basis, the FMV of the donated property, and the method used to arrive at this value. For property contributions with a value greater than $5,000, a qualified appraisal of the donated property is generally required.
The new section ... contains reporting requirements relating to contributions of vehicles, which generally require the donor to substantiate the contribution with a contemporaneous written acknowledgment from the donee charity.

Gross Sales Proceeds Limit

Pursuant to AICPA, the deduction for donated qualified vehicles (autos, boats or airplanes) which are valued at greater than $500 is generally limited after 2004 to the amount of the gross proceeds from the subsequent sale of the vehicle by the charity. This amount is often significantly less than the blue book retail value and may not be higher than the fair market value limit of Section 170(a).

Additionally, no deduction is allowed unless the contribution is substantiated by a contemporaneous written acknowledgment that meets the requirements of Section 170(f)(12)(B). An acknowledgment is contemporaneous if it is obtained within 30 days of either the contribution or the sale of the vehicle by the charity, whichever is applicable.

All acknowledgments of vehicle contributions must contain the following information:

• The name and taxpayer identification number of the donor;
• The vehicle identification number; and
• The date of the contribution.

Additional information may also be required depending on the circumstances. For example, if the vehicle is later sold by the charity, the acknowledgment given to the donor must also indicate the following:

• The date the vehicle was sold;
• A certification that the vehicle was sold in an arm’s length transaction;
• The amount of the gross proceeds from the sale; and
• A statement that the donor’s deduction may not exceed the amount of the gross proceeds.

This type of acknowledgment is due within 30 days of the sale, and must be attached to the donor’s tax return.

Exceptions

Under limited circumstances, the gross proceeds limit—often the amount the auto is auctioned at—may not have to be used. Instead, the fair market value of the auto may be used, and provides an avenue to deduct a substantially higher amount. This will occur when the donee charity has made:

• Significant intervening use;
• Material improvement; or
• A sale or gratuitous transfer of the donated vehicle to a needy individual.

Significant Intervening Use. This exception is met if the donee charity puts the auto to significant use in its normal activities in the furtherance of the charity’s mission. Incidental use is not significant, and the nature, frequency, and duration of the use of the vehicle will determine significant intervening use. Thus, a donated vehicle used to instruct trainees in vehicle repair or used to provide transportation on a regular basis will meet this standard. However, use of the vehicle merely to enhance general business skill training will not. When this exception applies, the charity’s acknowledgment should indicate that the charity has or intends to make significant use of the vehicle, and a detailed description and duration of such use, as well as a notation indicating that the vehicle will not be sold before completion of their intended use.

Material Improvement. If major repairs are done to the vehicle by the donee without any additional funding from the donor, the gross proceeds limitation may not apply whereby the taxpayer may use the fair market value of the donated vehicle. Thus, in situations where the donee increases the potential sales price of the donated vehicle as a result of significant improvements, taxpayers may claim a deduction equal to the fair value at the date of the contribution rather than the value at which it would have been sold in its original condition on the contribution date. Material improvement includes substantial improvement that significantly increases the value and not merely minor or cosmetic improvements such as minor paint finishes, rust proofing, dent and scratch touchups, minor interior repair, or any anti-theft device installation.

Sale or Gratuitous Transfer to Needy Individual in Direct Furtherance of Donee Organization’s Charitable Purpose. This condition is met if the donated vehicle is sold to a needy individual at a significantly lower price than the fair market value, or is gratuitously given to such a person in furtherance of the charity’s mission of aiding the poor and underprivileged in need of transportation. Simply giving the gross proceeds to the needy upon sale of the auto will not satisfy this condition.

In response to some charities who have inappropriately interpreted this sale to the needy exception to conveniently bypass the gross proceeds limitation, the IRS has declared that vehicles sold at auction are not sold at prices significantly below fair market value and do not qualify for the sale to the needy exception.

Fair Market Value

When the fair market value will be used to determine the amount of the charitable contribution deduction, the taxpayer is required to substantiate this fair market value. Generally, FMV is defined as the dollar amount at which the vehicle would be sold to a willing buyer by a willing seller, assuming both have knowledge of all relevant facts and neither is required to buy or sell. This value may be established by any reasonable method or through the use of an established used vehicle pricing guide, but only if the guide lists the sales price of a vehicle that is:

• of the same make, model, and year;
• in similar condition,
• sold in the same area,
• with similar options or accessories, and
• with similar warranties or guarantees.

For contributions after June 3, 2005, the dealer retail value listed in the vehicle pricing guide is not acceptable in determining the fair market value. Rather, the acceptable measure of the FMV is the private party sales price listed in the used vehicle pricing guide.

Where one of these exceptions exists, an acknowledgment must be furnished by the donee charity within 30 days of the date of the contribution. In addition to the general requirements, under these circumstances the acknowledgment must also indicate the following:

• A description of the intended significant intervening use (including duration of the use) or material improvement;
• A certification that the vehicle will not be sold until such use or improvement is completed.

Penalties

For those donee organizations that are required to furnish necessary acknowledgments to donors, new Section 6720 imposes penalties to those who file misleading false or fraudulent acknowledgments, and to those who knowingly fail to furnish any required acknowledgments. Any charity which issues written acknowledgment of amounts greater than the actual auction price received will be subject to penalties under Sections 6701 and 6720. Generally, Section 6720 assesses penalties equal to the higher of (1) the product of the highest current individual tax rate (35%) times the stated sales price on the acknowledgment, or (2) the gross proceeds from the sale of the donated vehicle. For other vehicles, with a claimed value of higher than $500, which are not actually sold but where a false acknowledgment is issued by the donee charity, the penalty is the higher of (1) the product of the highest current individual tax rate (35%) times the claimed value or (2) $5000.
IRC Section 170 allows a deduction for charitable contributions made during the taxable year to a qualified organization.

Examples

The following examples illustrate application of the new rules:

Example 1 - The C Charity uses a for-profit entity to solicit, process, and accept donated vehicles and act as its authorized agent. Ted, an individual, donates his 2000 Toyota Camry CE sedan to the agent in October 2006. The Kelley blue book suggested retail value for a similar auto in the same condition and sold in the same area is listed at $8,400, and the Kelley blue book private party value is $5,400. The auto is auctioned in November 2006 for a gross amount of $4,000 by the for-profit agent, with a portion of the proceeds going to the agent. The agent issues Ted a written acknowledgment indicating the gross sales proceeds and date of sale within 30 days of the sale. Since the donee clearly did not significantly use, materially improve, or sell or give the auto to a needy individual in furtherance of its charitable purpose, Ted is limited to a deduction of $4,000 for the 2006 tax year.

If, however, the charity had significantly used the auto for its charitable purpose, made material improvements to the auto that significantly increased its value, or gave or sold it for a price significantly below fair market value to a needy individual, Ted could have taken a deduction of $5,400.

Example 2 - Assume that in order to entice Ted to donate his auto, the agent promised to issue a written acknowledgement to Ted indicating a gross proceeds sales price equal to the blue book retail value of $8,400, instead of the actual auctioned price of $4,000. Under Section 6720, C Charity may be subject to a penalty of $4,000. The penalty is calculated as the higher of the claimed deduction times the highest individual rate (i.e., $.8,400 x 35% = $2,940) or the gross proceeds ($4,000).

Example 3 - Assume C Charity makes a false statement indicating that it will use the auto for its charitable needs for an extended period of time and Ted deducts the fair market value of $5,400. C Charity may be subject to a penalty of $5,400. The penalty is calculated as the higher of the claimed deduction times the highest individual rate (i.e., $.5,400 x 35% = $1,890) or the gross proceeds or $5,000.

When the [Fair Market Value] is used to value a contribution of property to a public charity ... the maximum deduction is generally limited to 30% of an individual donor’s Adjusted Gross Income for the year of the contribution.

Additional Considerations

It should be noted that trouble may arise if the donated vehicle is not sold in the year of contribution. Taxpayers are allowed a deduction only in the year of donation and only when written acknowledgment is attached to their return. Accordingly, where a donated vehicle is sold by the charity in a year subsequent to the year of donation, the taxpayer may have to file an amended return to properly claim the deduction.

The IRS has released two publications to assist taxpayers: Publication 4302, A Charity’s Guide to Car Donations, and Publication 4303, A Donor’s Guide to Car Donations. As indicated above, a higher deduction will be available to taxpayers where any one of the three noted exceptions applies which will result in the fair market value of the donated vehicle to be utilized. Since most charities merely have their agent auction off donated vehicles, whenever a taxpayer has a fairly attractive vehicle to donate, it should be given on the condition that it will either be put to significant intervening use by the charity, materially improved, or sold and gratuitously transferred to a needy individual. This will allow for a charitable contribution deduction equal to the fair market value, which will normally be significantly higher than the gross proceeds from an auction. However, this fair market value may not be the retail value indicated in a pricing guide since it will be limited to no more than the private party value. Accordingly, a thorough search of potential charities should be made before donating your vehicle.

New Section 6720 imposes penalties to those who file misleading false or fraudulent acknowledgements, and to those who knowingly fail to furnish any required acknowledgements.

Endnotes

2 Unless otherwise noted, all section references are to the internal Revenue Code of 1986, as amended.
3 Treas. Reg. § 1.170A-1(c)(1).
5 IRC § 170(f)(12)(B).
6 IRC § 170(f)(12)(C).
8 Notice 2005-44, § 3.03(1).
Master of Science in Taxation

This intensive program allows the candidate to select tax courses that are most applicable to his or her career. The degree requires 11 upper level graduate course (31 credits). Ten of these courses are in taxation and one may be a general business elective.

Required tax courses are:
- Research and Writing
- Estates and Gifts
- Corporations
- Practice and Procedure
- Partnerships
- Research Project
- Planning for High Net-Worth Individuals
- Income of Trusts and Estates
- Consolidated Tax Returns
- Interstate Commerce
- Foreign Operations
- Compensation, Benefits and Retirement Plans
- Real Estate
- Financial Products
- Tax-Exempt Institutions
- Specialized Industries
- Tax Accounting
- Special Topics

The elective Business Course (three credits) allows the candidate to select one course from the offerings of the Graduate Division of the Tobin College of Business or one additional tax course.

Admission Requirements

Candidates for admission must satisfy the following requirements:
- Possess an undergraduate or graduate degree in accounting or a related business field. Students must have completed core business courses or must take such courses before completing the degree.
- Successful completion of the GMAT (or an appropriate alternative examination). The successful completion of the uniform certified public accountants examination (CPA), the certified management accountants examination (CMA) or an equivalent examination could be used in lieu of the GMAT examination.