

# THREATENING NATURE OF LEVEL 3 INPUTS UNDER THE HIERARCHY OF FAIR VALUE ACCOUNTING

Yrd. Doç. Dr. Can Tansel KAYA\*

## ABSTRACT

Accounting academia along with practitioners has been long debating on the pros and cons of the transition from Historical Cost Accounting into Fair Value Accounting. Within this transition period, both sides have solid arguments in various areas. As far as the hierarchy set by the International Accounting Standards Board (IASB) is concerned, this area raises the main cluster of questions which deserves the most attention. The aim of this paper is to criticize the threatening nature of the levels of the hierarchy; especially the level 3 inputs, by pointing out specific deficiencies.

**Keywords:** Level 3 inputs, hierarchy, fair value

**Jel Codes:** M40, M41, M49.

## ÖZET

Gerek muhasebe disiplinine ait akademik çevreler, gerekse de muhasebe meslek kuruluşları, uzun süredir tarihi maliyet esaslı muhasebeden gerçeğe uygundeğer muhasebesine geçişin artıları ve eksileri üzerinde tartışmaktadırlar. Bu geçiş süreci içerisinde, her iki tarafın da farklı alanlarda güçlü savları olduğu söylenebilir. Uluslararası Muhasebe Standartları Kurulu tarafından ortaya konulan hiyerarşi ise, eleştirilerin en büyük hedefi haline gelmiştir. Bu çalışmanın amacı, özellikle 3. seviye girdileri üzerinde yoğunlaşarak ortaya konmuş olan hiyerarşi seviyelerine eleştirel bir bakış açısı getirmektir.

**Anahtar Kelimeler:** Seviye 3 girdileri, hiyerarşi, gerçeğe uygun değer

**Jel Kodlar:** M40, M41, M49.

\* Yeditepe Üniversitesi, İktisadi İdari Bilimler Fakültesi, İşletme Bölümü, Muhasebe Finansman Anabilim Dalı Öğretim Üyesi

## 1. INTRODUCTION

IASB has developed a three level fair value hierarchy so that it would act as a guide for financial statement preparers on how to determine the fair value through more reliable and comparable manner. Certainly, as much as the financial statement preparers, primarily investors as well as all stakeholders will benefit from this aid to a great extent. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs cover a series of areas. This level inputs range from the observable quoted prices in active markets for similar assets or liabilities; prices for identical or similar assets or liabilities in markets that are not active, in addition to directly observable market inputs for substantially the full term of the asset or liability, and market inputs that are not directly observable but are derived from or corroborated by observable market data (Zacharski ve diğerleri 2007). In other words, level 2 simply refers to cases in which hypothetical market prices must be estimated based on observable inputs (Ronen 2008). Level 3 inputs are *unobservable* inputs for the asset or liability that reflect the firm's *own assumptions* regarding valuation. So it is fair to say these are inputs that reflect the reporting entity's own assumptions about the assumptions market participants *would* use in pricing the asset or liability. Fundamentally, market value and fair value each require that level 3 form of analysis to be applied when transaction data are tainted or non-existent because they do not meet all of the requirements of the relevant value definition (Dorchester 2010).

## 2. "LEVEL 3" INPUTS

Accounting profession has always proposed alternatives in valuation in almost all aspects ranging from, on the matters of, inventories to depreciation to receivables. Alternatives though should not be mingled with loopholes. Such latitude in professional standards clearly set the stage for the liberties taken by financial institutions in valuing the bad assets on their books. On an objective ground, it is rational to state that as long as level 1 inputs are available, fair value provides little room for manipulation and generally provides reliable information. As for level 2 inputs, things get interesting; fair value accounting offers some discretion for managers. Last but not the least, as far as level 3 inputs are concerned, things get very interesting; and this time, management has considerable discretion (Laux and Leuz 2010). In comparison with the prior levels, level 3 allocates a great deal of emphasis on unobservable inputs. Unobservable inputs,

subjectively determined by the firm's management, and subject to random errors and moral hazard, may cause significant distortions both on the balance sheet and on the income statement (Ronen 2008). The extent to which Level 3 measurements contributed to the economic crisis was not known until the economic crisis hit. The Level 3 overvaluations permitted to be used by financial institutions acted as a catalyst in fueling the economic crisis (Cortese-Danile ve diğçerleri 2010).

The importance of inputs cannot be underestimated, for it is these upon which reliance is placed and these which are most susceptible to manipulation. Observable inputs, used in level 1 and 2 fair values, include the data sources and market prices that are available and visible outside the entity which is gathered from independent sources. Observable inputs are external to the entity and more objective than the internal unobservable inputs of level 3. However, unobservable inputs are the data and analysis that are developed within the entity to assess the fair value. To better explain, these are the inputs which are solely based on the reporting entity's *own* assumptions about while pricing of an asset or liability by the buyer and seller based on the best information *available* (IASB 2007). Though valuation techniques should place the highest necessity on the use of observable, rather than unobservable inputs, because of the fact that the term "best available information" is a broad area, subjectivity is inevitable. With the introduction and application of fair value accounting, valuation behavior shifted from entity-specific, in terms of internal valuation; to a more market-oriented conduct which involves what is, and would be in the market. This has created colossal flexibility, and therefore subjectivity. Through subjective discretion only come greater problems. When markets are severely illiquid, firm's financial statement preparers are driven into imagination. This imagination spins over hypothetical exist prices. Deaconu and colleagues (2009) believe that understanding and controlling economic phenomena, and developing a better prevention system for financial instability, is linked to disclosed accounting information and its quality. The only accounting information that can provide such guidance is objective information. In this context, fair value and its applications, which are believed to outline the role of accounting information, should be properly known. Clark and Mills (2009) also point out the probable subjective nature of fair value that once a market becomes inactive, the fair value inputs become less reliable and definitely subjective. Metzger (2009) defines the accounting professional as someone who must have a multifaceted personality and be able to integrate the past and present to affect

the future. Especially in the light of recent accounting scandals, without any reservations, is it possible to speak of all accounting professionals as people in conjunction with the above definition? Yahanpath and Joseph (2011) relate the recent financial crisis, among other things, in addition to fair value, with inadequate governance and regulations, agency problems, executive compensation and inappropriate incentives, ethics and social responsibility. Is it not fair to say that the above mentioned factors are easier to be practiced in an environment where there is high measure of assumption, subjectivity, lack of uniformity, and complexity on valuation? Chuck Mulford of Georgia Tech firmly believes that the subjectivity of fair value is very much of a problem. He states that financial statements are supposed to be objective and verifiable, and that there is significant effort for replacing it with something much more subjective (Whitehouse 2010). Cozma (2009) also argues that other components (alternative to historical cost) are inherently subjective that since valuations are based on the estimates of people who use only the available objective data-at-the-time; therefore applying their personal interpretations on the matter, results in the precision that no valuation conducted by different people for the same item submitted to valuation will be identical. Penman (2007) emphasizes the importance on where to draw the line on estimates especially concerning level 3. He argues that it is difficult to handle a priori, for resolution rides largely on one's assessment, not only of the integrity of managers but also of their (honest) subjective biases. Penman's view on the issue is noteworthy:

*"The competence and independence of monitors – auditors, assessors, and corporate boards – must also be evaluated, along with the effectiveness of controls. (Honest) managers are naturally optimistic, for it is their business plan. Accounting, however, serves as a counterweight to managements' optimism, so raising their estimates to the level of accounting information contaminates. Some argue that such estimates elicit information from management that might not otherwise surface. The stewardship perspective underscores the downside; rewarding managers based on their estimates exposes the shareholder to moral hazard"* (2007, 41).

Emerson and his colleagues (2010) second Penman's views. Moral hazard will occur when managers benefit by using their private information to manipulate the information they disclose. Further, adverse selection implies that the market will view similar instruments that are held by different entities similarly, even though their actual values are significantly diffe-

rent. Although the intense scrutiny that companies are subjected to has the effect of keeping firms and their managers honest; it does so with a noticeable time lag. An effective countermeasure to the estimation measurement problem is a requirement for disclosure of the underlying assumptions used when estimating fair value.

Orin (2008) argues that it is very difficult to detect errors because of the subjectivity, lack of uniformity and complexity of the fair valuation process. Everyone agrees that fair value accounting is out there to provide the best utility for investors for decision making purposes. On the other hand, investors, beyond any doubt, are more concerned with risk and transparency and are therefore looking for financial statements with verifiable numbers.

As mentioned above, level 1 application is in line with serving investors with aid to make decisions as well as the transparency since these are the quoted prices that there is particular corroboration. The fact that levels 2 and 3 numbers are not verifiable, and since use of mark to market accounting, instead of historical cost accounting, relies on assumed inputs to pricing models which placed emphasis on future cash flows, while considerably less emphasis has been placed on the reliability and integrity of information (Wagner and Garner 2010).

The historical accounting system is independent of the accountant's ability to measure the market component. The accounting valuation of the fair-value accounting system depends on the quality of the accountant (Christensen 2010). The quality of the accountant, or generally speaking, the *valuer*, depends strictly on their ability of judgment far from bias or subjectivity.

On the banking side, criticisms continue towards fair value accounting. When the Basel Committee on Banking Supervision reported to G7 finance ministers on International Accounting Standards (IASs) earlier in 2000, it related the concern expressed by the banking industry over the proposed fair value measurement of the banking book. It concluded that further research was needed in order to determine whether fair value disclosure could meet investors' needs and for a view to be taken on "whether further steps towards fair value accounting in the primary financial statements are actually necessary" (Chisnall 2001). The American Bankers Association (ABA) argument really faults the major accounting firms for trying to apply "rules" regarding the fair value of a particular security and determining

by that rule when an impairment exists and must be recorded. Yet there are no formal rules in the United States Generally Accepted Accounting Principles (GAAP) as to the determination of “the market.” The real determination of fair value or fair market value involves judgment (King 2009), and only with robust judgment we can prevent subjectivity. By the same token, banking institutions claim that fair value accounting has led to procyclical behavior by forcing impairment write-downs to amounts that do not reflect the true economic values of the assets. They say that the write-downs have caused a downward spiral that has exacerbated the financial crisis and that fair value accounting should be suspended or modified (MacDonald 2010). According to Ryan (2008), virtually all traditional banks and other financial institutions, most bank regulators, and some investors and accounting academics believe that fair value accounting hurts investors compared to historical cost, at least in some circumstance. Anagnostopoulos and Buckland (2005) argue that fair value models incorporate numerous assumptions and trivial changes which can lead to substantial alterations of income as it is a known fact about the uniqueness and the lending terms of many banks.

The real question is, what happens when formerly liquid securities abruptly become illiquid and are no longer being traded, such as with collateralized debt obligations (CDOs) in which have become clear with the latest crisis? In the absence of market information, an entity is allowed to use its very own assumptions about what the price would be if a willing buyer actually existed (Wagner ve Garner 2010). The Financial Accounting Standards Board (FASB) on the matter of allowing the use of specifically level 3 inputs should have foreseen the potential pitfalls of allowing companies to value assets based on in-house models. This type of action violates both the spirit and substance of GAAP, and in particular the role of stewardship. The level of financial creativity is outpacing the FASB’s attempt to create appropriate GAAP (Moore ve Baker 2008).

Benston (2006) believes, among many causes, there is strong reason to believe that Enron’s early and continuing use of level 3 fair-value accounting played an important role in its demise. He also asserts that Enron initially used level 3 fair-value inputs without any intent to mislead investors, but rather to motivate and reward managers for the economic benefits they achieved for shareholders.

The questionable reliability of fair value measures, especially for model-based estimates relies on management’s expectations and projections.

Hitz' (2007) findings indicate that the decision relevance of fair value measurement can be justified from both perspectives, yet the conceptual case is not strong. Correspondingly, according to Bies (2004), the fact that management uses significant judgment in the valuation process, particularly for level-3 estimates, increases concerns about reliability. Management bias, whether intentional or unintentional, may result in inappropriate fair value measurements and misstatements of earnings and equity capital. In addition, there is little disclosure to investors regarding whether, when, and how fair values are calculated, who is performing fair valuations, and the impact on portfolio valuation and share pricing (Freeman 2003). Beyond all, according to Benston (2006), the Enron experience should give the FASB, IASB, and others who would permit (indeed, mandate) level 3 fair value accounting, wherein the numbers reported are no well grounded in relevant market prices, reason to be cautious.

## CONCLUSION

Remarkably subjective nature of level 2 and especially 3 inputs, particularly with respect to the lack of adequate control over the unobservable inputs, endanger the financial system overall. Dealing with unobservable inputs is nothing more than gambling, since they are clearly based on the reporting entity's own assumptions about the assumptions hypothetical market participants would use (Zyla 2009, 188). This kind of an approach generates significant questions about the integrity of hierarchy of inputs. The ambiguous nature of unobservable inputs during times of illiquidity in the markets, particularly under level 3 regarding valuation assets or liabilities which are solely based on the firm's *own assumptions* disregards the very nature of accounting through the involvement of hypothetical estimations.

## REFERENCES

- Anagnostopoulos Y.ve Buckland R. 2005. Historical cost versus Fair Value Accounting in Banking: Implications for Supervision, Provisioning, Financial Reporting and Market Discipline, *Journal of Banking Regulation* (2005) 6, 109–127; doi:10.1057/palgrave.jbr.2340186
- Benston, G. J. 2006. Fair Value Accounting: A Cautionary tale from Enron, *Journal of Accounting and Public Policy*, 25, pp. 465-484
- Bies, S. S. 2004. Fair Value Accounting, Bank for International Settlements, Remarks by Ms Susan Schmidt Bies, Member of the Board of Governors of the US Federal Reserve System, to the International Association of Credit

Portfolio Managers General Meeting, New York, 18 November 2004.

Christensen, J. 2010. Accounting Errors and Errors of Accounting *The Accounting Review*, American Accounting Association Vol. 85, No. 6 DOI: 10.2308/accr.2010.85.6.1827, 2010, pp. 1827-1838

Clark, A. ve Mills, A. 2009. "Fair Value Accounting" CAPITA Financial Group, KPMG, [http://www.capitafinancial.co.uk/files/KPMG\\_Fair\\_Value\\_Accounting..pdf](http://www.capitafinancial.co.uk/files/KPMG_Fair_Value_Accounting..pdf)

Cortese-Danile, T. M., Mautz Jr., veM. D. and McCarthy, I. M. 2010. Ethics is Imperative to Effective Fair, *Review of Business*, March 22, 2010, <http://www.highbeam.com/doc/1G1-232824951.html>

Cozma, D. I. 2009. Historical Cost versus Fair Value, *The Journal of the Faculty of Economics - Economic*, University of Oradea, May 2009, pp. 860-865

Deaconu, A., Nistor, C. ve Cuzdriorean, D. 2009. Considerations on the fair value of revenues recognized in financial statements, *International Conference of European Integration Volume - New challenges for the Romanian economy*, ed. a V-a, Oradea, 2009

Dorchester Jr, J. 2010. Market Value, Fair Value, and Duress, *Journal of Property Investment and Finance*, Vol. 29, No. 4/5, 2011, pp. 428-447.

Emerson, D. J., Karim, K. E. ve Rutledge, R. W. 2010. Fair Value Accounting: A Historical Review Of The Most Controversial Accounting Issue In Decades, *Journal of Business & Economics Research -April, 2010 Volume 8, Number 4*

Freeman, D. F. jr 2003. The Fair Value Mess, *The Journal of Investment Compliance*, Summer 2003

Hitz, J-M. 2007. The Decision Usefulness of Fair Value Accounting – A Theoretical Perspective

International Accounting Standard Board (IASB), 2007. "Statement of Financial Accounting Standards No 157 Fair Value Measurements" Discussion Paper, United Kingdom, paragraphs 5, 12-35.

Laux, C. ve Leuz C. 2010. Did Fair-Value Accounting Contribute to the Financial Crisis?, *Journal of Economic Perspectives*, Vol. 24, No. 1, Winter 2010, pp. 93–118



MacDonald, L. A. 2010. Fair Value Changes Ahead, The CPA Journal, January 2010, Vol. 80 Issue 1, p24-27, 4p

Metzger, L. 2009. The Past as Prologue: Connecting History to Accounting Ethics, Management Accounting Quarterly, Spring 2009, Vol. 10, No. 3, pp. 51-57

Moore, W.B. ve Baker, C. A. 2008. The 2008 financial crisis: FAS 157 and SAS 59 – did they reflect reality?, Journal of Finance and Accountancy, The 2008 financial, Page 1

Orin, Richard M. 2008. Ethical Guidance and Constraint under the Sarbanes-Oxley Act of 2002. Journal of Accounting, Auditing & Finance, Winter 2008, Vol. 23 Issue 1, p141-171, 31p, 2 Charts

Penman, S. H. 2007. Financial reporting quality: is fair value a plus or a minus?, *Accounting and Business Research* Special Issue: International Accounting Policy Forum. pp. 33-44. 2007

Ronen, J. 2008. To Fair Value or Not to Fair Value: A Broader Perspective, *Abacus*, Vol. 44, No. 2, 2008, doi: 10.1111/j.1467-6281.2008.00257.x

Ryan, S. G. 2008. Fair Value Accounting: Understanding the Issues Raised by the Credit Crunch, Council of Constitutional Investors, July 2008.

Wagner, A. ve Garner, D. 2010. Fair Value Accounting - Fact Or Fancy?, *Journal of Business & Economics Research* — November, 2010 Volume 8, Number 11

Whitehouse, T. 2010. Mixed Approaches, Messages on Financial Reports, Accounting & Auditing, June 2010, www.complianceweek.com, 888.519.9200

Yahanpath, N. ve Joseph, T. 2011. A Brief Review of the Role of Shareholder Wealth Maximisation and Other Factors Contributing to the Global Financial Crisis, *Qualitative Research in Financial Markets* Vol. 3 No. 1, 2011, pp. 64-77, Emerald Group Publishing Limited 1755-4179 DOI 10.1108/17554171111124621

Zacharski, A. H., Rosenblat and A., Teufel, A. 2007. FASB Statement on Fair Value Measurements, *Journal of Investment Compliance*, Vol 8, No. 1., pp. 36-39, Emerald Group Publishing Limited, ISSN 1528-5812

Zyla, M. L. 2009. Fair Value Measurements: Practical Guidance and Implementation, Wiley Corporate F&A, second edition, 188.

