

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Fair Value Accounting and Its Usefulness to Financial Statement Users

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/134601> since 2018-03-09T18:46:08Z

Published version:

DOI:10.1108/JFRA-04-2013-0021

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)



UNIVERSITÀ DEGLI STUDI DI TORINO

This is an author version of the contribution published on:

Questa è la versione dell'autore dell'opera:

Journal of Financial Reporting and Accounting, 2014, 10.1108/JFRA-04-2013-0021.

FAIR VALUE ACCOUNTING AND ITS USEFULNESS TO FINANCIAL STATEMENT USERS

1. INTRODUCTION

Standard setters and extensive academic literature maintain that fair value reporting provides the most relevant information to financial statement users (e.g. Barth, Beaver and Landsman 2001). Fair value reporting is expected to ensure a higher degree of transparency of financial statements, which in turn should lead to a higher value-relevance of accounting data and a better capability of financial markets to reflect the actual value of a firm. An extensive use of fair value reporting should increase the quantity of private information brought into public domain, thus leading to a more efficient resource allocation and capital formation.

Both the Financial Accounting Standards Board¹ (FASB) and International Accounting Standard Board² (IASB) have issued several standards that mandate disclosure or recognition of financial statement items using fair values. Among the most significant are those standards that explicitly relate to financial instruments. Fair values are in fact most frequently used for financial assets and liabilities both under the United States Generally Accepted Accounting Principles (US GAAP) and the International Financial Reporting Standards (IFRS³). Recently, the European Commission endorsed IFRS 13, *Fair Value Measurement*, which provides a single framework for measuring fair value, and is currently discussing the endorsement of IFRS 9, *Financial Instruments*, which extends the use of fair value for financial instruments⁴.

¹ The Financial Accounting Standards Board (FASB) is a private, not-for-profit organization responsible for setting accounting standards for public companies in the United States.

² The International Accounting Standards Board (IASB) is the independent, accounting standard-setting body of the IFRS Foundation. It is responsible for developing International Financial Reporting Standards and promoting the use and application of these standards. IFRS are used, for instance, in the European Union, Canada, Australia, Brazil, Russia.

³ For ease of exposition, the term IFRS is used to refer to both the International Accounting standards (IAS) and to the International Financial Reporting Standards (IFRS). IAS were issued by the International Accounting Standard Committee (IASC), predecessor of the International Accounting Standard Board (IASB) until 2000, whereas IFRS are issued by IASB.

⁴ IFRS have been introduced in the European Union by European Regulation 1606/2002. Regulation 1606/2002 requires that, for each financial year starting on or after 1 January 2005, companies governed by the law of a member state prepare their consolidated accounts in conformity with IFRS if, on their balance sheet date, their securities are admitted to trading on a regulated market of any member state. The Regulator has also provided an option for member states to permit or require the application of international accounting standards in the preparation of annual accounts and to permit or require their application by unlisted companies.

The recent financial crisis has turned the spotlight on fair value reporting and has led to a major policy debate involving among others the US Congress and the European Commission as well as banking and accounting regulators around the world. Critics argue that fair value reporting has significantly contributed to the financial crisis and exacerbated its severity for financial institutions all around the world. Opponents claim that fair value is not relevant and potentially misleading for assets which are held for a long period and, in particular, to maturity; that prices could be distorted by market inefficiencies, investor irrationality or liquidity problems; that fair values based on models are not reliable; and that fair value reporting contributes to the pro-cyclicality of the financial system (Barth 2004, Penman 2007, Benston 2008, and Ryan 2008). On the other extreme, proponents of fair value reporting have argued that it merely played the role of the proverbial messenger now being shot (e.g. Veron 2008). Proponents claim that fair values for assets or liabilities reflect current market conditions and hence provide timely information, thereby increasing transparency and encouraging prompt corrective actions.

Few dispute that transparency is important, but the controversy rests on whether fair value reporting is indeed helpful in providing it.

The goal of this paper is to discuss the contribution of fair value reporting to financial information quality. This paper therefore delineates the theoretical background for its adoption, provides evidence on its usefulness to investors, and highlights controversial issues. It makes sense of the wide literature on fair value reporting by organizing both theoretical issues and empirical evidence in a systematic way, so as to provide the reader with a comprehensive picture of the issue. Finally, this paper makes some suggestions for standard setting and policy-making discussion.

Regulation 1606/2002 also contains an endorsement mechanism which guarantees that IFRS are adopted only providing that they conform with a “true and fair view” and meet the criteria of understandability, relevance, reliability and comparability. All the IFRS must be evaluated along these lines before they are endorsed by the European Commission.

Prior to European Regulation 1606/2002, firms currently reporting under IFRS used domestic GAAP based on the fourth and seventh European Directives, in which historical cost accounting largely applied.

In tackling such issues, this paper focuses on IFRS. As mentioned, IASB has recently issued IFRS 13 *Fair Value Measurement* and is currently working on IFRS 9 *Financial Instruments*, which extends fair value for financial instruments. Moreover, IFRS or local variants have been adopted in countries as diverse as Australia, Canada, Hong Kong, Central and Eastern Europe, including Russia, parts of the Middle East and Africa. India, Japan, China and much of South America are also likely to adopt IFRS, at least for part of their economies, in the near future. Several other countries have not yet adopted IFRS, but have established convergence projects that are most likely to lead to their acceptance of IFRS, in one form or another, in the not too distant future. Moreover, in 2007 the Securities and Exchange Commission (SEC) in the United States of America announced that IFRS would be permitted in the US markets as an alternative to US GAAP, although in this case the timescale is lengthy and subject to various conditions. The details vary, but the trend towards IFRS as a single set of globally accepted accounting standards is clear and strong. Therefore, focusing on IFRS in this paper could be of interest to a wide range of standard-setting constituents.

The paper is organized as follows: Section 2 describes the background for fair value accounting, while Section 3 defines fair value according to IFRS 13. Section 4 outlines the theoretical background for the fair value definition as an exit price, whereas Section 5 provides empirical evidence on fair value relevance to investors. Section 6 makes some suggestions for standard setting purposes and discussion and Section 7 concludes.

2. BACKGROUND FOR FAIR VALUE REPORTING

For the past two decades, fair value accounting has been on the ascent. This marks a major departure from the centuries-old tradition of keeping books at historical cost. Historical cost accounting has been attacked by many, mainly on the basis that it does not report commercial reality or provide an up-to-date valuation of net worth (Godfrey *et al.* 2010 for a review). As a result, FASB and IASB have been slowly, but steadily shifting from historical cost to fair value reporting.

Currently, the financial reporting model still comprises a mixture of both historical costs and fair values. However, both standard-setters have made known their view that fair value reporting is here to stay, and will likely become the primary reporting basis for financial accounting in the future (Jordan *et al.* 2013). According to this view, the new IFRS 9 *Financial Instruments*, for instance, extends the use of fair value for financial instruments. The argument for this choice is that fair value is supposed to make financial reporting more relevant to investors' decisions.

According to the IASB's Conceptual Framework, investors, lenders and creditors need information that helps them assess the amount, timing and uncertainty of future net cash inflows to the firm (IASB 2010 OB 3). In such context, fair value accounting is expected to provide investors with useful information to predict the capacity of firms to generate such cash flows from the existing resource base. Fair value should play a key role in reducing the informative asymmetry between firms and investors, thus improving the quality of information.

By adopting fair value accounting, the concept of income changes from income produced to mixed income, which also includes potential revenues. The concept of net capital is divested of its strictly juridical connotation and takes a more economic meaning, making net capital converge toward its market value.

The former chairman of IASB, Mr. Tweedie, explains the reasons for extending fair values as follows: *"For too long, earnings have been smoothed in an effort to show investors a steady upward trajectory of profits. While this approach provides a simple and understandable model, it simply is not consistent with reality. Publicly traded companies are complex entities, engaged in a wide range of activities and subject to different market pressures and fluctuations. Accounting should reflect these fluctuations and risks (...) The current direction we are taking will be what I like to call, "tell it like it is" accounting. This means an increasing reliance on fair values, when these values can be determined accurately"*.

Fair value reporting, according to its supporters, reflects the current market situation of a company, creating its relevance for decision usefulness (Kang Cheng 2009). Many others, however, believe that historical costs still embody the most logical measurement basis for financial statements, as it is more conservative and reliable (Godfrey *et al.* 2010).

3. WHAT IS FAIR VALUE? DEFINITION AND MEASUREMENT IN IFRS 13

A number of IFRS require or permit firms to measure certain assets, liabilities or own equity instruments at their fair value or to disclose that measure. Since different IFRS requiring or permitting the use of fair value for measurement or disclosure purposes were developed at different points in time, guidance on fair value measurement was dispersed across various standards. Moreover, the guidance on how to measure fair value was inconsistent across different IFRS, and it was also less detailed. These inconsistencies led to diversity in practice and impaired comparability of information reported in financial statements. In addition, the recent financial crisis emphasised the importance of improving the guidance and disclosures about measuring fair value.

As a result, in 2011 IASB issued IFRS 13, *Fair Value Measurement*, which sets out a single framework for measuring fair value and provides comprehensive guidance on how to measure it. IFRS 13 is the result of a joint project conducted by the IASB together with FASB, which has led to the same definition of fair value as well as an alignment of measurement and disclosure requirements to FAS 157.

IFRS 13 defines fair value as the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. This definition of fair value reflects an exit price notion, that is the market price from the perspective of a market participant who holds the asset. Moreover, fair value must be market-based, not an entity-specific measurement, and the firm's intention to hold an asset is completely irrelevant. For instance, the application of a blockage factor to a large position of identical financial assets is

prohibited given that a decision to sell at a less advantageous price because an entire holding, rather than each instrument individually, is sold represents a factor which is specific to the firm.

If observable market transactions or market information are not directly observable, the objective of fair value measurement still remains the same, that is to estimate an exit price for the asset, and the firm shall use valuation techniques. Valuation techniques shall be consistent with the market approach, income approach or cost approach. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets. The income approach uses valuation techniques to convert future amounts (e.g. cash flows or income and expenses) to a single present amount. Such valuation techniques include present value techniques, option pricing models - such as the Black-Scholes-Merton formula and the binomial model – and the multi-period excess earnings method. The cost approach, rather, reflects the current replacement cost, that is the amount that would currently be required to replace the service capacity of an asset.

Inputs to valuation techniques are categorized into a fair value hierarchy which gives the highest priority to quoted prices (unadjusted) in active markets for identical assets (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs). Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets that the firm can access at the measurement date. With Level 1 inputs information asymmetry between management and investors is very low. Hence, quoted prices in active markets must be used whenever available. Level 2 inputs are inputs, other than quoted prices, that are observable - either directly or indirectly - for the asset. Level 2 inputs include quoted prices for similar assets in active markets; quoted prices for identical or similar assets in markets that are not active; inputs other than quoted prices that are observable for the asset, such as interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, default rates; inputs that are derived principally from or corroborated by observable market data by correlation or other means. Level 2 inputs are expected to

have great reliability as they are corroborated by observable market data. Adjustments to Level 2 inputs that are significant to the entire measurement result in a fair value measurement categorised within Level 3. Level 3 inputs are unobservable inputs for an asset fair value measurement. Unobservable inputs are inputs for which market data are not available and, therefore, need to be developed on the basis of the best information available about the assumptions that market participants would use when pricing the asset. Level 3 inputs are subject to the highest degree of information asymmetry between preparers and users.

4. THEORETICAL BACKGROUND FOR FAIR VALUE DEFINITION AS AN EXIT PRICE

As mentioned, fair value must be an *exit value*, that is, a market price from the perspective of market participants at the measurement date. The financial reporting system which uses market selling prices to measure a firm's financial position and financial performance is called exit price accounting. Exit price accounting is associated mainly with the works of Raymond Chambers (1966, 1975), Robert Sterling (1970), and Kenneth MacNeal (1970).

Chambers bases his proposal for exit price accounting on a notion of adaptive behaviour of a firm. The concept of adaptive behaviour sees the firm as always being ready to dispose of an asset if this action is in its best interest. For instance, the firm keeps a non-current asset only if the present value of the future net cash flow from the use of the asset is greater than the present value of the expected net cash flow from an alternative investment of the exit value of the asset. Therefore, at all times, the firm must consider whether an alternative opportunity for greater returns exists for its assets if they were sold and the proceeds invested. This is an opportunity cost concept, which uses the exit price as a measurement base. Adaptive behaviour therefore calls for knowledge of the cash and current cash equivalents of the firm's net assets. Chambers also considers the question of additivity to be a key factor in support of exit price accounting. If different measurement scales are used for the different items, they cannot logically be added together, and no practical or commercial meaning can be deduced from the aggregate. The use of either historical cost for some assets, replacement cost for

others, present value or cash does not lead to a meaningful balance sheet; nor can a jumble of historical costs based on different dates lead to a meaningful calculation of net assets.

MacNeal (1970) claims that historical cost accounting is based on conditions which have largely ceased to exist. In fact, in the twentieth century firms were generally owned by numerous shareholders who relied on financial statements and the media for their information about the company they owned. As a result, accounting has become more and more important for shareholders. MacNeal contends that shareholders cannot learn the current values of company assets from a balance sheet based on historical cost accounting and they are also at a disadvantage compared with insiders who have this information. The ideal solution is therefore to report all profits, losses and values as determined in competitive markets.

Sterling (1970) uses a simple model – a wheat trader in a perfect market with a stable price level – to show that exit price is better than all other accounting measurements. The wheat trader faces three issues: whether to enter and stay in the market, whether to hold either cash or wheat and the evaluation of past decisions. The present selling price of wheat is the only item of information that is relevant to all decisions. Even when the assumption of perfect competition and stable prices is relaxed, Sterling contends that the exit price is still superior.

5. EMPIRICAL EVIDENCE ON FAIR VALUE USEFULNESS

5.1. Fair value relevance and the link with the IASB's Conceptual Framework

According to IASB, the main objective of financial reporting is to provide information that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the firm (IASB 10, OB2). Therefore, when assessing the quality of fair value information, a natural question to ask is whether this information is useful to investors. Although financial reporting users include a large numbers of subjects, both the FASB and IASB focus on the needs of participants in capital markets. This is because investors are considered those who are most in need of information from financial reports, given that they

cannot usually request information directly from the firm. Moreover, as they provide risk capital to firms, financial statements that meet their needs also meet most of the needs of other users. As a result, investors' needs are considered as highly representative of the needs of a wide range of users (2010 BC 1.16).

For this reason, empirical research has mainly focused on the relation between fair values and share prices or returns. As outlined by Barth *et al.* (2001), in the accounting literature an accounting number is defined as value relevant if it has a predicted association with equity market values. The primary purpose for conducting tests of value relevance is to extend the knowledge regarding the relevance and reliability of accounting amounts as reflected in equity values. An accounting amount is relevant if it is capable of making a difference to financial statement users' decisions, whereas an accounting number is reliable if it represents what it purports to represent. Value relevance tests are therefore a way to operationalize the criteria of relevance and reliability (i.e. faithful representation): an accounting amount will be value relevant, i.e. it will have a predicted significant relation with share prices, only if the amount reflects information relevant to investors in valuing a firm and is measured reliably enough to be reflected in share prices. Only if an accounting amount is relevant to a financial statement user, can it make a difference to that user's decisions.

In capital market research, market efficiency (Fama 1970) is a central feature and deals with how capital markets process information in general, and financial reporting information specifically (Milburn 2008). An assumption of a reasonable level of market efficiency, in its semi-strong form, is implied in both the IASB and FASB's Conceptual Frameworks and therefore is at the heart of fair value measurement purposes. As stated by IASB, "*reporting financial information that is relevant and faithfully represents what it purports to represents (...) results in more efficient functioning of capital markets*" (IASB 2010, QC 37).

Market efficiency in the semi-strong form provides the best climate for financial reporting. In fact, once data are placed in the public domain, semi-strong form market efficiency provides the assurance that such data will be fully reflected in prices. However, as outlined by Scott (2009), financial reporting can also play a key role

under the hypothesis of market inefficiency. In fact, according to anomalies studies (Lee 2001 for a review), when share prices are mispriced relative to the prices they would have if markets were fully efficient, financial reporting drives prices towards fundamental values. Financial reporting therefore reduces inefficiencies by making the mispricing area between inefficient market price of firms and efficient market price as small as possible.

5.1. Fair value usefulness for financial instruments

Most of the research on fair value reporting has focused on the U.S., as fair value reporting has long been used there. Although this literature provides useful insights into the contribution of fair value to financial reporting quality, it must however be viewed with some caution. In fact, many studies were carried out prior to FAS 157 and IFRS 13, when fair value was not clearly defined as exit value, and the procedure for estimating fair values in the absence of active markets was not clearly laid-out. Furthermore, empirical studies have mainly focused on banks, which are largely comprised of financial assets and liabilities measured at fair value.

Most of the value relevance research on financial instruments has focused on a comparison between fair value and amortized cost. Barth (1994) and Ahmed and Takeda (1995) examine the pricing implications of banks' disclosures of gains and losses on their investment securities. Most of the banks' investment securities are reasonably liquid, so fair values are likely to be value-relevant in this setting. Barth (1994) focuses on a sample of U.S. banks with data from 1971-1990 and finds that investment securities' fair values are incrementally associated with bank share prices after controlling for their book values. However, when examined in an annual return context, results provide instead mixed evidence. One leading candidate for ambiguous findings is that the securities' gains and losses estimates contain too much measurement error relative to the true underlying changes in their market values. Using essentially the same database, Barth *et al.* (1995) confirms the Barth's (1994) findings and lends support to the measurement error explanation. In fact, fair value-based measures of net income are found to be more volatile than historical cost-based measures, but incremental

volatility is not reflected in bank share prices. Ahmed and Takeda (1995) argue that the weakness of Barth's findings are attributable in part to omitted changes in the value of other net assets resulting from interest rate movements. After controlling for the joint effects of the bank's exposure to interest rates and the change in interest rates during the year, Ahmed and Takeda find significant increases in the pricing implications of gains and losses in their return model. In their market valuation model, Petroni and Wahlen (1995) instead distinguish relatively liquid U.S. Treasuries and equity securities from less liquid corporate and municipal bonds, and find that fair values of the former are value-relevant, whereas fair values of the latter are not, thus suggesting that fair values of securities actively traded on the market are considered as more reliable.

Some other studies have focused on banks' entire balance sheets. Nelson (1996), Barth *et al.* (1996) and Eccher *et al.* (1996), for instance, examine commercial banks' various types of financial instruments in 1992 and 1993, generally showing that fair values provide information beyond amortized costs for these securities. Nelson (1996) documents that fair value of bank loans, deposits and long-term debt are not value-relevant, whereas Barth *et al.* (1996) find that fair values of loans are value-relevant, and Eccher *et al.* (1996) find the value relevance of loans only in limited settings. Finally, Venkatachalam (1996) examines the value relevance of derivative fair values and finds that such fair values are positively associated with equity market value.

Overall, the results of this empirical research suggest that fair value relevance varies according to the liquidity of the securities.

After FAS 157 adoption, some studies have focused on the different source of fair value information. As mentioned above, both FAS 157 and IFRS 13 categorize valuation inputs into a three level fair value hierarchy. Level 1 fair value is measured using liquid market prices for the identical item, which should be more reliable than Level 2 fair values measured using other observable inputs, which in turn should be more reliable than Level 3 fair value measured using unobservable firm-supplied inputs.

Using a sample of large financial institutions, Kolev (2009) documents a significant positive association between stock prices and fair values of net assets measured using all the inputs of the fair value hierarchy. However, the coefficients on mark-to-model estimates are consistently lower than those on the mark-to-market fair values (Level 1), even though the difference is significant only for Level 3 net assets. This study suggests that investors are aware of estimation errors and, therefore, value the three levels of the fair value hierarchy differently. Goh *et al.* (2009) also observe significant variation in the pricing of different levels of fair value assets, with the pricing being less for mark-to-model assets, i.e. assets with lower liquidity and greater information risk, than for mark-to-market assets. They also find that the pricing of mark-to-model assets declined over the course of 2008, consistent with increasing market concerns about illiquidity and information risk associated with these assets. Using a sample of quarterly reports from banking firms, Song *et al.* (2010) find evidence that fair value measurements of Level 1, Level 2, and Level 3 inputs are all value-relevant, consistent with prior research. However, Level 3 assets are valued less than Level 1 and Level 2 assets. In addition, coefficients on Level 3 fair values are less than 1, which suggests that investors perceive reliability concerns for Level 3 assets. As for Kolev, the lower valuation of Level 3 assets is consistent with investors decreasing the weight they place on less reliable fair value measurements.

Some studies have focused directly on the predictive capability of mark-to-model valuation techniques. Kim and Ritter (1999), for instance, examine the predictive ability of market multiples based on historical numbers and find that they do a relatively poor job without further adjustments for differences in growth and profitability. Instead, price-earnings multiples using forecasted earnings result in much more accurate valuation. Maino and Palea (2012) find that transaction and market multiples tend to overestimate exit values. Transaction multiples are in fact cases of 'revealed preferences', i.e. they refer only to successful transactions and incorporate synergy expectations as well as other positive factors which increase transaction prices, while market multiples tend to elide the idiosyncratic component of risk. Finally, Fiechter and Novotny-Farkas

(2011) provide evidence that the value relevance of fair value estimates also varies cross-sectionally and across time. Using an international sample of banks from countries adopting IFRS, they demonstrate that fair values are generally value relevant, although valuation coefficients vary with institutional and firm-specific factors. In fact, optionally fair valued assets appear to experience a discount in countries with low regulatory quality. Furthermore, they show that significant exposures to subprime investments result in substantially lower value relevance for financial assets at fair value. They also find that the value relevance of fair value assets has decreased as the financial crisis has worsened.

5.2 Fair value usefulness for non-financial assets

Much of the empirical research on non-financial assets has also focused on the United States as well as on Australia and the United Kingdom as these countries have long permitted upward asset revaluation for such assets. Most studies, including Easton *et al.* (1993), Barth and Clinch (1996), Barth and Clinch (1998) and Muller and Riedl (2002), examine revaluations of tangible fixed assets, which fall into the Level 3 category of the fair value hierarchy and are therefore subject to a greater amount of management discretion.

Using a sample of Australian firms with data from 1984-1990, Easton *et al.* (1993) estimate annual return regressions and find that asset revaluations of tangible long-lived assets have incremental explanatory power relative to earnings and changes in earnings. Barth and Clinch (1998) also use a sample of Australian firms but from a later period, 1991-1995, and estimate annual stock price regressions to determine whether financial, tangible, and intangible asset revaluations have incremental explanatory power relative to operating earnings and equity book value less the book value of revalued assets. Barth and Clinch (1998) find revalued investments are incrementally priced. Contrary to the view that intangible asset revaluations are likely to be noisy and uninformative, their study finds a positive association between such revaluations and share prices. With the exception of mining firms, they instead fail to find a significantly positive association between share prices and property, plant and equipment revaluations.

By focusing on investment property firms, Muller and Riedl (2002) find evidence that the market finds asset revaluation estimates made by external appraisers more informative than those made by internal appraisers, thus suggesting external appraisals to be more reliable. This result is in line with Cotter and Richardson (2002), who also find that external appraisals are more reliable than those made by directors for a sample of Australian firms from the 1981-1994 period.

Finally, Aboody *et al.* (1999) examine the performance prediction and pricing implications of fixed asset revaluations for a sample of UK firms from the 1983-1995 period. Findings show that upward revaluations are significantly positively related to changes in future performance, measured by operating income and cash from operations. Current year revaluations are also significantly positively related to annual stock returns, and current year asset revaluation balances are significantly positively related to annual stock prices. However, the study also finds that the relation between revaluations and future performance and prices is weaker for higher debt-to-equity ratio firms, thus suggesting that managerial manipulation affects the usefulness of asset revaluations made by managers of firms facing the pressure of financial distress.

6. A DUAL MEASUREMENT AND FINANCIAL REPORTING SYSTEM

As mentioned above, the main objective of financial reporting is to provide financial information that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the firm (IASB 2010, OB 2). IASB however states that besides the objective of providing information that is useful to users in making investment, credit and similar resource allocation decisions (“the resource allocation decision-usefulness objective”), financial reporting also plays a role in helping investors assess management’s stewardship (“the stewardship objective”) (IASB 2010, BC 1.26). Information about stewardship is in fact important for resource providers to make decisions on whether management has made efficient and effective use of the resources provided, and therefore to vote on, or otherwise influence, management’s actions (IASB 2010, BC 1.27 and BC 1.28).

Fair value has the great advantage that it provides a measure of what a certain investment is supposed to bring. However, as empirical research also raises some doubts on the fact that fair value provides all the information relevant to investors, opponents to fair value often call for a return of financial reporting to historical cost accounting. In fact, historical cost is useful to investors for two main reasons: it is based on actual, not merely possible transactions, and it provides investors with a measure of the resources that have been sacrificed to obtain that investment.

So far, the debate about accounting measurement has always been framed in terms of making a choice between fair value and historical cost, with the former usually providing a more faithful representation of the real-world phenomena, although not always reliable, and the latter a more conservative, reliable and stewardship-oriented view.

This paper suggests that such a debate should be reframed, and no longer considered in terms of the choice between fair value and historical cost. Choosing between historical cost and fair value implies sacrificing one of these two objectives, which are both included in the IASB's Conceptual Framework.

A dual measurement and reporting system could be the solution to such a controversy, as historical cost and fair value provide two different kinds of information which are both useful to investors. At the time of acquisition, fair value and historical cost are in most cases equal, but they do normally diverge in subsequent periods. Following acquisition, historical cost accounting and fair value accounting provide different information and serve different purposes. Fair value is needed for ranking and sorting out competing investment alternatives. Reporting how much the entity invested to acquire an asset is not, by itself, fully informative as it does not offer any insights about the quality of that investment. In order to assess that quality, users need to know what that investment is expected to bring in the future. With some cautions on fair value estimates' reliability, fair value reporting provides investors with useful information about expected benefits from a certain investment.

On the other hand, fair value alone cannot help investors to properly evaluate stewardship, that is, the careful and responsible management of funds. In fact, financial statement users would not know how many resources the management has paid to obtain that fair value. Historical cost is therefore useful for stewardship and controls decisions as it tracks the amount paid for resources. A given resources owned by two different entities will have the same fair value at any given time, but fair value does not inform investors that one entity has probably paid a different price for the same asset. In order to effectively evaluate stewardship, knowledge of fair value is not enough. Users also need to know the historical cost of the investment. Indeed, the best understood concept of profit is the excess of selling price over historical cost. Decisions on whether to continue a product line or division or factory depend to a large extent on whether there is a favourable spread between revenue and cost.

As a result, this paper claims that historical cost and fair value should not be considered as competitors and both of them should be provided. An attempt to choose either one would deprive financial statement users of access to complete and useful information for decision-making. For this reason, a dual measurement and reporting model should be a good solution. A dual measurement and reporting model could be more effective for assessing the success of an investment. Comparing expected events (i.e. fair values) with past events (i.e. historical costs) would improve the ability of financial statement users to evaluate both past performance, thus fulfilling a stewardship objective, and to predict future performance, thus fulfilling a decision-useful objective.

7. CONCLUSIONS

Academic research is a valuable resource for standard setting and policy-making purposes as financial reporting issues are often broad, difficult and complex. Academic research can therefore provide inputs to their resolution, it can help standard setters and regulators structure their thinking about such issues and provide evidence that inform the policy-making debate. According to such a view, this paper discusses the

usefulness of fair value to financial statement users by delineating the theoretical background for its adoption and providing evidence on its usefulness to investors. It also makes some suggestions for standard setting and policy-making discussion.

Proponents of fair value accounting have argued that fair values for assets or liabilities reflect current market conditions and hence provide timely information, thereby increasing transparency. At the other extreme, opponents claim that fair value is not relevant and potentially misleading for assets which are held for a long period and, in particular, to maturity; that prices could be distorted by market inefficiencies, investor irrationality or liquidity problems; and that fair values based on models are not reliable. As a matter of fact, empirical evidence raises some concerns about the reliability of fair value estimates and for this reason a return to historical cost accounting often comes up for discussion.

This paper argues that historical cost and fair value should not be considered as competitors, as they serve different purposes. Historical cost provides investors with the cost of an investment, while fair value gives a measure of what the management expect to get in return from it. Knowledge of fair value is important, although it is not enough. Users also need to know the cost of the investment. In fact, knowing how many resources have been sacrificed to obtain that fair value, they could effectively evaluate stewardship, which is also an objective of financial reporting.

This paper therefore concludes that both historical cost and fair value should be provided, as only together can they deliver complete and useful information to investors. As a consequence, the adoption of a dual measurement and reporting system should be considered and discussed at a standard setting level.

REFERENCES

- Abdel-Khalik, A.R. (2011), "Fair value accounting and stewardship", *Accounting Perspectives*, Vol. 9 No. 4, pp. 253-269.
- Aboody, D., Barth, M.E. and Kasznik, R. (1999), "Revaluations of fixed assets and future firm performance", *Journal of Accounting and Economics*, Vol. 26 No. 1-3, pp. 149-178.
- Ahmed, A. and C. Takeda (1995), "Stock market valuation of gains and losses on commercial banks' investment securities: An empirical analysis", *Journal of Accounting and Economics*, Vol. 20 No. 2, pp. 207-225.
- Barth, M.E. (1994), "Fair value accounting: evidence from investment securities and the market valuation of banks", *The Accounting Review*, Vol. 69 No. 1, pp. 1-25.
- Barth, M.E. and Landsman, W.R. (1995), "Fundamental issues related to using fair value accounting for financial reporting", *Accounting Horizons*, Vol. 9 No. 4, pp. 97-107.
- Barth, M.E., Landsman, W.R. and Wahlen, J. (1995), "Fair value accounting: effects on banks' earnings volatility, regulatory capital, and value of contractual cash flows", *Journal of Banking and Finance*, Vol. 19 No. 3-4, pp. 577-605.
- Barth, M., Beaver, W. and Landsman, W. (1996), "Value-Relevance of Banks' Fair Value Disclosures under SFAS No. 107", *The Accounting Review*, Vol. 71 No. 4, pp. 513-537.
- Barth, M.E. and Clinch, G. (1996), "International differences in accounting standards: evidence from UK, Australian, and Canadian firms", *Contemporary Accounting Research*, Vol. 13 No. 1, pp. 135-170.
- Barth, M.E. and Clinch, G. (1998), "Revalued financial, tangible, and intangible assets: associations with share prices and non market-based value estimates", *Journal of Accounting Research*, Vol. 36 Special Issue, pp. 199-233.
- Barth, M.E., Beaver, W.H. and Landsman, W.R. (2001), "The relevance of the value relevance literature for financial accounting standard setting: another view", *Journal of Accounting and Economics*, Vol. 31 No. 1, pp. 77-104.
- Barth, M.E. (2004), "Fair Values and Financial Statement Volatility", in Borio, C. (Ed.), *The Market Discipline Across Countries and Industries*, MIT Press, Cambridge, pp. 323-334.
- Benston, G.J. (2008), "The shortcomings of fair-value accounting described in SFAS 157", *Journal of Accounting and Public Policy*, Vol. 27 No. 2, pp. 101-114.
- Chambers, R.J. (1966), *Accounting, evaluation and economic behaviour*, Prentice Hall, Englewood Cliffs, NJ.
- Chambers, R.J. (1975), *Accounting for inflation – method and problems*, University of Sydney, Sydney.
- Cheng, K. (2009), "Fair value's 'how' meets 'when': the complications of applying mark-to-market accounting in an inactive market", *The CPA Journal*, Vol. 79 No. 8, pp. 26-29.
- Cotter, J. and Richardson, S. (2002), "Reliability of asset revaluations: the impact of appraiser independence", *Review of Accounting Studies*, Vol. 7 No. 4, pp. 435-457.
- Easton, P.D., Edey, P.H. and Harris, T.S. (1993), "An investigation of revaluations of tangible long-lived asset", *Journal of Accounting Research*, Vol. 31 Special Issue, pp. 1-38.
- Eccher, E.A., Ramesh, K. and Thiagarajan, S.R. (1996), "Fair value disclosures by bank holding companies", *Journal of Accounting and Economics*, Vol. 22 No. 1-3, pp. 79-117.
- Enria A., Capiello, L., Dierick, F., Grittini, S., Haralambous, A., Maddaloni, A., Molitor, P.A.M., Pires, F. and Poloni, P. (2004), "Fair Value Accounting and Financial Stability" *Occasional Paper No. 13*, 13 April, European Central Bank.
- Fama, E.F. (1970), "Efficient capital markets: a review of theory and empirical work", *Journal of Finance*, Vol. XXV, pp. 383-417.

- Fiechter P. and Novotny-Farkas, Z. (2011), "Pricing of fair values during the financial crisis: international evidence", working paper, University of Zurich and Goethe-University Frankfurt, 1 February.
- Godfrey, J., Hodgson, A., Tarca, A., Hamilton, J. and Holmes, S. (2010), *Accounting theory*, 7th ed., John Wiley & Sons, Australia.
- Goh, B., Ng, J. and Yong, K. (2009), "Market pricing of banks' fair value assets reported under SFAS 157 during the 2008 economic crisis", working paper, Singapore Management University, 11 February.
- IASB (2010), *Conceptual framework for financial reporting*, September.
- Jordan, C.E., Clark, S.J. and Pate, G.R. (2013), "The debate over fair value reporting : fact or fiction? Using Benford's law to find answers", *The CPA Journal*, Vol. 83 No. 2, pp. 46-51.
- Kim, M. and Ritter, J.R. (1999), "Valuing IPOs", *Journal of Financial Economics*, Vol. 53 No. 3, pp. 409-437.
- Kolev, K. (2009), "Do investors perceive marking-to-model as marking-to-myth? Early evidence from FAS No. 157 disclosure", working paper, New York University, 28 April.
- Koonce, L., Nelson, K.K. and Shakespeare, C.M. (2011), "Judging the Relevance of Fair Value for Financial Instruments", *The Accounting Review*, Vol. 86 No. 6, pp. 2075-2098.
- Landsman, W.R. (2007), "Is fair value accounting information relevant and reliable? Evidence from capital market research", *Accounting and Business Research*, Vol. 37 Special Issue, pp. 19-30.
- Larson, K. and Schattke, R. (1966), "Current cash equivalent, additivity, and financial action", *Accounting Review*, Vol. 41 No. 3, pp. 634-41.
- Lee, C.M.C. (2001), "Market efficiency and accounting research: a discussion of 'Capital market research in accounting' by S.P. Kothari", *Journal of Accounting and Economics*, Vol. 31 No. 1-3, pp. 233-253.
- Mac Neal, K. (1970), *Truth in Accounting*, Scholars Book co., Kansas.
- Maino, R. and Palea, V. (2012), "Private Equity Fair Value Measurement: A Critical Perspective on IFRS 13", *Australian Accounting Review*, forthcoming.
- Milburn, J.A. (2008), "The relationship between fair value, market value, and efficient markets", *Accounting Perspective*, Vol. 7 No. 4, pp. 293-316.
- Muller, K.A. III and Riedl, E.J. (2002), "External monitoring of property appraisal estimates and information asymmetry", *Journal of Accounting Research*, Vol. 40 No. 3, pp. 865-881.
- Nelson, K. (1996), "Fair value accounting for commercial banks: An empirical analysis of FAS No. 107", *The Accounting Review*, Vol. 71 No. 2, pp. 161-182.
- Penman, S.H. (2007), "Financial reporting quality: is fair value plus or minus?", *Accounting and Business Research*, Vol. 37 Special Issue, pp. 33-44.
- Petroni, K. and Wahlen, J.M. (1995), "Fair values of equity and debt securities and share prices of property-liability insurer", *The Journal of Risk and Insurance*, Vol. 62 No. 4, pp. 719-737.
- Ronen, J. (2008), "To fair value or not to fair value: A broader perspective", *Abacus*, Vol. 44 No. 2, pp. 181-208.
- Ryan, S. (2008), "Accounting in and for the Subprime Crisis", *The Accounting Review*, Vol. 83 No. 6, pp. 1605-1638.
- Scott, W.R. (2009), *Financial Accounting Theory*, 5th edn., Prentice-Hall, Toronto.
- Solomons, D. (1966), Review article, *Abacus*, Vol. 2 No. 2, pp. 208.
- Song, C.J., Thomas, W.B. and Yi, H. (2010), "Value Relevance of FAS No. 157 Fair Value Hierarchy Information and the Impact of Corporate Governance Mechanisms", *The Accounting Review*, Vol. 85 No. 4, pp. 1375-1410.
- Sterling, R. (1970), *Theory of the measurement of enterprise income*, University Press of Kansas, Kansas.
- Venkatachalam, M. (1996), "Value relevance of banks' derivatives disclosures", *Journal of Accounting and Economics*, Vol. 22 No. 1-3, pp. 327-355.
- Veron N. (2008), "The demographics of global corporate champions", working paper, Bruegel, 8 August.
- Watts, R.L. (2003a), "Conservatism in accounting part I: Explanations and implications", *Accounting Horizons*, Vol. 17 No. 3, pp. 207-221.

- Watts, R.L. (2003b), "Conservatism in accounting part II: Evidence and research opportunities", *Accounting Horizons*, Vol. 17 No. 4, pp. 287–301.
- Weston, F. (1970), "Response to evidence for a market selling price accounting system", in Sterling, R. (Ed.), *Theory of the measurement of enterprise income*, University Press of Kansas, Kansas.
- Whittington, G. (2008), "Fair Value and the IASB/FASB Conceptual Framework Project: a Different View", *Abacus*, Vol. 44 No. 2, pp. 139-16.