

Fair value accounting in the USA

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In reviewing fair value in financial reporting in the USA, I will first analyse the different approaches to measurement that are to be found within US GAAP in order to put fair value in context. The latter part of this chapter then looks at FASB standards that concern fair value and problems that are experienced in applying these in the USA.

How a firm reports an asset or liability in a balance sheet is typically rooted in one of the following valuation concepts: historical cost (either 'pure' cost or cost adjusted for price-level changes), market value (both current entry value and current exit value) and present value. It should be emphasized that GAAP in the USA is historical cost by default, but there are countless instances where departures from historical cost are either allowed or required under certain standards in certain circumstances.

Different measurement bases found in US GAAP

Historical cost accounting

The advantages of 'pure' historical cost (i.e. unadjusted for any changes in price level) are as follows:

- *Survival concept:* Historical cost accounting has met the Darwin survival test for thousands of years. One of the most noted books advocating historical cost is *Introduction to Corporate Accounting Standards* by William Paton and A.C. Littleton (Sarasota: American Accounting Association, 1940). Probably no single book has ever had so much influence or is more widely cited in accounting literature than this slim volume.

Except in hyperinflation nations, unadjusted historical cost is still the primary basis of accounting, although there are numerous exceptions for certain types of assets and liabilities. Most notable among these exceptions are financial instruments assets and liabilities where SFAS 115 and SFAS 133 spell out highly controversial exceptions.

- *The matching concept:* Costs of resources consumed in production should be matched against the revenues of the products and services of the production function. (This assumes costs attach throughout the production process in spite of complicating factors such as joint costs, indirect

costs, fungible resources acquired at different costs, changing price levels, basket purchases such as products and their warranties, changing technologies, and other complications.) Profit is the 'residuum (as efforts) and revenues (as accomplishments) for individual enterprises'. This difference (profit) reflects the effectiveness of management. One overriding concept, however, is conservatism that Paton and Littleton concede must be resorted to as a basis for writing inventories down to market when historical cost exceeds market. This leads to a violation of the matching concept, but it is necessary if investors will be misled into thinking that inventories' historical costs are surrogates for value.

- *The audit trail:* Historical costs may be traced to real rather than hypothetical market transactions. They leave an audit trail that may be followed by auditors.
- *Predictive value:* Empirical studies post to reasonably good predictive value of past historical cost earnings on future historical cost earnings. In some cases, historical cost statements are better predictors of bankruptcy than are current cost statements.
- *Accuracy:* Historical cost measurement is more accurate and, relative to its alternatives, more uniform, consistent, and less prone to measurement error.

No one I know holds the mathematical wonderment of double entry and historical cost accounting more in awe than Yuji Ijiri (*Theory of Accounting Measurement*, Sarasota: American Accounting Association Studies in Accounting Research No. 10, 1975. Online. <<http://accounting.rutgers.edu/raw/aaa/market/studar.htm>>).

Historical cost also has disadvantages:

- Does not eliminate or solve such controversial issues as what to include/

exclude from balance sheets and does not overcome complex schemes for off-balance sheet financing (OBSF). It is too simplistic for complex contracting. For instance, many derivative financial instruments having current values of millions of dollars (e.g. forward contracts and swaps) have zero or negligible historical costs. For example, a firm may have an interest rate swap obligating it to pay millions of dollars even though the historical cost of that swap is zero. Having such huge liabilities remain unbooked may easily mislead investors. Historical cost accounting has induced game-playing when writing contracts (e.g. leases, employee compensation) in order to avoid having to book what are otherwise assets and liabilities under fair value reporting.

- Historical cost mixes apples and oranges such as LIFO inventory dipping that may match costs measured in 1950s purchasing power with inflated dollars in the twenty-first century that have much less purchasing power. Historical cost income in periods of rising prices overstates earnings and understates how a firm is maintaining its capital assets. Even historical cost advocates admit that historical cost accounting is useless in economies subject to hyperinflation.
- Historical cost accrual accounting assumes a going concern. Under current US GAAP, historical cost is the basis of accounting for going concerns. If the firm is not deemed a going concern, the basis of accounting shifts to exit (liquidation) values. For many firms, however, it is difficult and/or misleading to make a binary designation of going versus non-going. Many firms fall into the grey area on a continuum. Personal financial statements seldom meet the going concern test since they are generally used in estate and divorce settlements. Hence, exit (liquidation)

value is required instead of historical cost for personal financial statements.

- Historical cost is perpetuated by a myth of objectivity when there are countless underlying subjective estimates of asset economic life, allocation of joint costs, allocation of indirect costs, bad debt reserves, warranty liabilities, pension liabilities and so on.

Price-level adjusted (PLA) historical cost accounting

The primary basis of accounting in the USA is unadjusted historical cost, but one of the numerous exceptions is that, for example, price-level adjustments may be required for operations in hyperinflation nations. The IASB standards also require PLA accounting in hyperinflation nations.

The SEC issued ASR 190 requiring PLA supplemental reports. This was followed by the FASB's 1979 SFAS 33 short-lived standard. Follow-up studies did not point to investor enthusiasm over such supplemental reports. Eventually, both ASR 190 and SFAS 33 were rescinded, largely due to lack of interest on the part of financial analysts and investors because of relatively low inflation rates in the USA. However, PLA adjustments are still required for operations in nations subject to high rates of inflation.

The advantages of PLA accounting are:

- Attempts to perfect historical cost accounting by converting costs to a common purchasing power unit of measurement.
- Has a dramatic impact upon ROI calculations in many industries even in times of very low inflation.
- Is essential in periods of hyperinflation.
- Uses a readily available and reasonably accurate government-generated consumer price index (usually the CPI for urban households).

Its disadvantages are:

- There is no general agreement regarding what is the best inflation index to use in the PLA adjustment process. Computing a price index for such purposes is greatly complicated by constantly changing technologies, consumer preferences and so on.
- There is no common index across nations, and nations differ greatly with respect to the effort made to derive price indices.
- Empirical studies in the USA have not shown PLA accounting data to have better predictive powers than historical cost data not adjusted for inflation.

Entry value (current cost, replacement cost) accounting

Market values are reflected in the current entry and exit models. Entry value is a buyer's acquisition cost (net of discounts) plus transaction fees and installation expenses. Suppose Company B wants to buy 100 million shares of Company A. Entry value in theory is viewed as the acquisition value of all 100 million shares of Company A in an optimal and practical manner such as buying them in one block, a few blocks or one share at a time. Buying 100 million shares one share at a time may be impractical and take an unreasonable amount of time. Buying shares in one block may add value to the aggregate of the single share market price due to the added value that 100 million shares may have on controlling Company A. But there may also be blockage discounts to take into account. It may only be practical to buy shares in smaller blocks such as ten purchases of 10 million share blocks.

Beginning in 1979, SFAS 33 required large corporations to provide a supplementary schedule of condensed balance sheets and income statements comparing annual outcomes under three valuation bases: Unadjusted historical cost, Price-level adjusted (PLA) historical cost, and Current cost entry value (adjusted for depreciation and amortization). Companies complained heavily that

users did not obtain value that justified the cost of implementing SFAS 33. Analysts complained that the FASB allowed such crude estimates that the SFAS 33 schedules were virtually useless, especially the current cost estimates. The FASB rescinded SFAS 33 when it issued SFAS 89 in 1986.

Current cost accounting by whatever name (e.g. current or replacement cost) entails the historical cost of balance sheet items with current (replacement) costs. Depreciation rates can be reset based upon current costs rather than historical costs.

Beginning in 1979, SFAS 33 required large corporations to provide a supplementary schedule of condensed balance sheets and income statements comparing annual outcomes under three valuation bases: Unadjusted historical cost, PLA-adjusted historical cost, and Current cost entry value (adjusted for depreciation and amortization). Companies are no longer required to generate SFAS 33-type comparisons.

The advantages of entry value (current cost, replacement cost) accounting are:

- It conforms to capital maintenance theory that argues in favour of matching current revenues with what the current costs are of generating those revenues. For example, if historical cost depreciation is \$100 and current cost depreciation is \$120, current cost theory argues that an excess of \$20 may be wrongly classified as profit and distributed as a dividend. When the time comes to replace the asset, the firm may have mistakenly eaten its seed corn.
- If the accurate replacement cost is known and can be matched with current selling prices, the problems of finding indices for price-level adjustments are avoided.

The disadvantages are as follows:

- Discovery of accurate replacement costs is virtually impossible in times of

changing technologies and newer production alternatives. For example, some companies are using data-processing hardware and software that can no longer be purchased or would never be purchased even if it were available due to changes in technology. Some companies are using buildings that may not be necessary as production becomes more outsourced and sales move to the internet. It is possible to replace used assets with used assets rather than new assets. Must current costs rely only upon prices of new assets?

- Discovering current costs is prohibitively costly if firms have to repeatedly find current replacement prices on thousands or millions of items.
- Accurate derivation of replacement cost is very difficult for items having high variations in quality. For example, some ten-year old trucks have much higher used prices than other used trucks of the same type and vintage. Comparisons with new trucks is very difficult since new trucks have new features, different expected economic lives, warranties, financing options, and other differences that make comparisons extremely complex and tedious. In many cases, items are bought in basket purchases that cover warranties, insurance, buy-back options, maintenance agreements and so on. Allocating the 'cost' to particular components may be quite arbitrary.
- Use of 'sector' price indices as surrogates compounds the price-index problem of general price-level adjustments. For example, if a 'transportation' price index is used to estimate replacement cost, what constitutes a 'transportation' price index? Are such indices available and are they meaningful for the purpose at hand? When SFAS 33 was rescinded in 1986, one of the major reasons was the cost and confusion of

using sector indices as surrogates for actual replacement costs.

- Current costs tend to give rise to recognition of holding gains and losses not yet realized.

Current exit value (liquidation, fair value) accounting

Exit value is the seller's liquidation value (net of disposal transaction costs). Whereas entry value is what it will cost to replace an item for a buyer, exit value is the value of disposing of the item. Exit value in theory is viewed as the liquidation value of all 100 million shares of Company A in an optimal and practical manner such as selling them in one block, a few blocks, or one share at a time. Selling 100 million shares one share at a time may be impractical and take an unreasonable amount of time. Selling shares in one block may add value to the aggregate of the single share market price due to the added value that 100 million shares may have on controlling Company A, but there may also be blockage discounts to take into account. It may only be practical to sell shares in smaller blocks.

Exit can even be negative in some instances where costs of clean-up and disposal make the exit price negative. Exit value accounting is required under GAAP for personal financial statements (individuals and married couples) and companies that are deemed likely to become non-going concerns (see Mancuso, A. (1992), 'Personal Financial Statements', *The CPA Journal*, September. Online. <<http://www.nyscpa.org/cpajournal/old/13606731.htm>>).

Some theorists advocate exit value accounting for going concerns as well as non-going concerns. Both nationally (particularly under SFAS 115 and SFAS 133) and internationally (e.g. under IAS 32 and 39), exit value accounting is currently required in some instances for financial instrument assets and liabilities. Both the FASB and the IASB have exposure drafts advocating fair value accounting for all financial instruments.

Box 21.1. FASB's exposure draft for fair value adjustments to all financial instruments

On 14 December 1999 the FASB issued Exposure Draft 204-B entitled *Reporting Financial Instruments and Certain Related Assets and Liabilities at Fair Value*.

If an item is viewed as a financial instrument rather than inventory, the accounting becomes more complicated under SFAS 115. Traders in financial instruments adjust such instruments to fair value with all changes in value passing through current earnings. Business firms who are not deemed to be traders must designate the instrument as either available-for-sale (AFS) or hold-to-maturity (HTM). A HTM instrument is maintained at original cost. An AFS financial instrument must be marked-to-market, but the changes in value pass through OCI rather than current earnings until the instrument is actually sold or otherwise expires. Under international standards, the IASB requires fair value adjustments for most financial instruments. This has led to strong reaction from businesses around the world, especially banks. There are now two major working group debates. In 1999 the Joint Working Group of the Banking Associations sharply rebuffed the IAS 39 fair value accounting in two White Papers (available online at <http://www.iasc.org.uk/frame/cen3_112.htm>):

- *Financial Instruments: Issues Relating to Banks* (strongly argues for required fair value adjustments of financial instruments). The issue date is 31 August 1999.
- *Accounting for Financial Instruments for Banks* (concludes that a modified form of historical cost is optimal for bank accounting). The issue date is 4 October 1999.

Advantages of exit value (liquidation, fair value) accounting:

- In the case of financial assets and liabilities, historical costs may be meaningless relative to current exit values. For example, a forward contract or swap generally has zero historical cost but may be valued at millions at the current time. Failure to require fair value accounting provides all sorts of misleading earnings management opportunities to firms. The above references provide strong arguments in favour of fair value accounting.
- Exit value does not require arbitrary cost allocation decisions such as whether to use FIFO or LIFO or what depreciation rate is best for allocating cost over time.
- In many instances exit value accounting is easier to compute than entry values. For example, it is easier to estimate what an old computer will bring in the used computer market than to estimate what is the cost of 'equivalent' computing power in the new computer market.

Exit value reporting is not deemed desirable or practical for going concern businesses for a number of reasons that are not covered in great depth here.

Disadvantages of exit value (liquidation, fair value) accounting:

- The exit value is the seller's liquidation value of a particular asset or liabilities at a particular time and place. It may differ greatly from 'valuation in use' among a larger set of items in an entire department, division, or company as a whole. For example, liquidation value of a particular asset such as a hotel (land and building) may differ greatly from the economic value of the hotel itself. This is discussed below in the 'Days Inn illustration'. Some items such

as financial assets and liabilities have nearly identical liquidation and economic (discounted cash flow) values. The gap between exit and economic value is greater with respect to operating items such as a hotel as a going concern. This is particularly the case for the aggregated exit values of, say, 200 hotels in a company where the economic value of these hotels in a going concern is generally much higher than the aggregation of local exit values the real estate.

- Operating assets are bought to use rather than sell. For example, as long as no consideration is being given to selling or abandoning a manufacturing plant, recording the fluctuating values of the land and buildings creates a misleading fluctuation in earnings and balance sheet volatility. Who cares if the value of the land went up by \$1 million in 1994 and down by \$2 million in 1998 if the plant that sits on the land has been in operation for 60 years and no consideration is being given to leaving this plant?
- Some assets such as software, knowledge databases and web servers for e-commerce cost millions of dollars to develop for the benefit of future revenue growth and future expense savings. These assets may have immense value if the entire firm is sold, but they may have no market as unbundled assets. In fact it may be impossible to unbundle such assets from the firm as a whole. Examples include the Enterprise Planning Model SAP system in firms such as Union Carbide. These systems costing millions of dollars have no exit value in the context of exit value accounting even though they are designed to benefit the companies for many years into the future.
- Exit value accounting records anticipated profits well in advance of transactions. For example, a large home-

building company with 200 completed houses in inventory would record the profits of these homes long before the company even had any buyers for those homes. Even though exit value accounting is billed as a conservative approach, there are instances where it is far from conservative.

- Value of a subsystem of items differs from the sum of the value of its parts. Investors may be lulled into thinking that the sum of all subsystem net assets valued at liquidation prices is the value of the system of these net assets. Values may differ depending upon how the subsystems are diced and sliced in a sale.
- Appraisals of exit values are both too expensive to obtain for each accounting report date and are highly subjective and subject to enormous variations of opinion. The US savings and loan scandals of the 1980s demonstrated how reliance upon appraisals is an invitation for massive frauds. Experiments by some, mostly real estate companies, to use exit value-based accounting died on the vine, including well-known attempts decades ago by TRC, Rouse and Days Inn.
- Exit values are affected by how something is sold. If quick cash is needed, the best price may only be half of what the price will be by waiting for the right time and the right buyer.
- Financial contracts that for one reason or another are deemed to be 'held-to-maturity' items may cause misleading increases and decreases in reported values that will never be realized. A good example is the market value of a fixed-rate bond that may go up and down with interest rates but will always pay its face value at maturity no matter what happens to interest rates.
- Exit value markets are often thin and inefficient markets.

Economic value (discounted cash flow, present value) accounting

There are over 100 instances where present GAAP requires that historical cost accounting be abandoned in favour of discounted cash flow accounting (e.g. when valuing pension liabilities and computing fair values of derivative financial instruments). These apply in situations where future cash inflows and outflows can be reliably estimated and are attributable to the particular asset or liability being valued on a discounted cash flow basis.

Advantages of economic value (discounted cash flow, present value) accounting are as follows:

- Economic value is based upon management's intended use for the item in question rather than upon some other use such as disposal (exit value) or replacement (entry value).
- Economic value conforms to the economic theory of the firm.

Disadvantages of economic value (discounted cash flow, present value) accounting are as follows:

- How does one allocate a portion of the cash flows of General Motors to a single welding machine in Tennessee? Or how does one allocate the portion of the sales price of a single car to the robot that welded a single hinge on one of the doors? How does one allocate the price of a bond to the basic obligation, the attached warrants, the call option in the fine print, and other possible embedded derivatives in the contract? The problem lies in the arbitrary nature of deciding what system of assets and liabilities to value as a system rather than individual components. Then what happens when the system is changed in some way? In order to see how complex this can become, note the complicated valuation assumptions in a paper

entitled 'Implementation of an Option Pricing-based Bond Valuation Model for Corporate Debt and Its Components', by M.E. Barth, W.R. Landsman and R.J. Rendleman, Jr., *Accounting Horizons*, December 2000, pp. 455–480.

- Cash flows are virtually impossible to estimate except when they are contractually specified. How can Amazon.com accurately estimate the millions and millions of dollars it has invested in online software?
- Even when cash flows can be reliably estimated, there are endless disputes regarding the appropriate discount rates.
- Endless disputes arise as to assumptions underlying economic valuations.

Fair value and US GAAP

Fair value accounting

The term 'fair value' is more ambiguous than the above valuation concepts. The default assumption is that it is an exit (liquidation) value with some departures from the exit value definition above. Suppose that a firm has 100 million shares of A Company common stock. Exit value is defined as the liquidation value of all 100 million shares in an optimal manner such as selling them in one block versus multiple blocks. Fair value under FASB definitions is the aggregation of the current exit value of one share and ignores added blockage values or discounts for block sales. Also in many instances the FASB requires fair value to be something other than exit value such as when economic discounted cash flow is required for pension obligations.

Fair value accounting departs from historical transaction cost. There are numerous instances where it is required under present US GAAP, especially when historical cost is either zero or highly misleading. Such is the case for derivative financial instruments that often have zero cost at the date when contracts become effective. This is why SFAS 133

requires fair value accounting for all derivative instrument contracts but not all financial instrument contracts in general since financial instruments other than derivative contracts have meaningful historical costs and immediate transfers of risk at the time of the original transaction.

Fair value is the estimated best disposal (exit, liquidation) value in any sale other than a forced sale. It is defined as follows in Paragraph 540 of SFAS 133:

The amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets is the best evidence of fair value and should be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price. If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets or similar liabilities and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated expected future cash flows using discount rates commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring assets and liabilities should be consistent with the objective of measuring fair value. Those techniques should incorporate assumptions that market participants would use in their estimates of values, future revenues, and future expenses, including assumptions about interest rates, default, prepayment, and volatility. In measuring forward contracts, such as foreign currency forward contracts, at fair value by discounting estimated future cash flows, an entity should base the estimate of future cash flows on the changes in the forward rate (rather than the spot rate). In measuring financial liabilities and

nonfinancial derivatives that are liabilities at fair value by discounting estimated future cash flows (or equivalent outflows of other assets), an objective is to use discount rates at which those liabilities could be settled in an arm's-length transaction (see Chapter 3 for a discussion of SFAS 157 *Fair Value Measurement*).

The main problem of fair value adjustment is that many (most?) of the adjustments cause enormous fluctuations in earnings, assets and liabilities that are washed out over time and never realized. The main advantage is that interim impacts that 'might be' realized are booked. It is a war between 'might be' versus 'might never be'. The war has been waging for over a century with respect to booked assets and two decades with respect to unbooked derivative instruments, contingencies and intangibles.

The Chartered Financial Analysts group favours full fair value reporting. The CFA Centre for Financial Market Integrity – a part of the CFA Institute – has published a new financial reporting model that, they believe, would greatly enhance the ability of financial analysts and investors to evaluate companies in making investment decisions. The Comprehensive Business Reporting Model proposes twelve principles to ensure that financial statements are relevant, clear, accurate, understandable and comprehensive (see below).

'Analysts' group favours full fair value reporting', *IAS Plus*, 31 October 2005 (online at <http://www.iasplus.com/index.htm>):

This pits financial analysts against bankers and corporate preparers of financial statements who contend that fair value too often requires estimation subject to enormous measurement error and subjectivity. Even when there is zero estimation error there are controversial problems of how to offset changes in fair value in a double-entry book-keeping system. The balance sheet may be more informative at the expense of the income statement if changes in fair value are offset by changes in current earnings. A basic problem

Box 21.2. CFA Institute Centre for Financial Market Integrity comprehensive business reporting model – principles

- 1 The company must be viewed from the perspective of a current investor in the company's common equity.
- 2 Fair value information is the only information relevant for financial decision-making.
- 3 Recognition and disclosure must be determined by the relevance of the information to investment decision-making and not based upon measurement reliability alone.
- 4 All economic transactions and events should be completely and accurately recognized as they occur in the financial statements.
- 5 Investors' wealth assessments must determine the materiality threshold.
- 6 Financial reporting must be neutral.
- 7 All changes in net assets must be recorded in a single financial statement, the *Statement of Changes in Net Assets Available to Common Shareowners*.
- 8 The *Statement of Changes in Net Assets Available to Common Shareowners* should include timely recognition of all changes in fair values of assets and liabilities.
- 9 The cash flow statement provides information essential to the analysis of a company and should be prepared using the direct method only.
- 10 Changes affecting each of the financial statements must be reported and explained on a disaggregated basis.
- 11 Individual line items should be reported based upon the nature of the items rather than the function for which they are used.
- 12 Disclosures must provide all the additional information investors require to understand the items recognized in the financial statements, their measurement properties and risk exposures.

is that gains and losses from *incurred transactions* become confounded with gains and losses of *hypothetical transactions* that never took place when fair value adjustments are made for financial assets and liabilities that are still on the books.

On 25 January 2006, the Financial Accounting Standards Board issued Exposure Draft (ED) No. 1250–001 providing investors and creditors with a fair value option (FVO) to report certain financial assets and liabilities at fair values. This extends fair value reporting beyond those items such as derivative financial instruments, trading securities and available-for-sale instruments that are already required under other standards to be reported at fair values. The accompanying news release reads as follows (available online at <<http://www.fasb.org/news/nr012506.shtml>>):

The Financial Accounting Standards Board (FASB) today issued an Exposure Draft that would provide companies with the option to report selected financial assets and liabilities at fair value. Under the option, any changes in fair value would be included in earnings. The proposed Standard seeks to reduce both complexity in accounting and volatility in earnings caused by differences in the existing accounting rules.

At the time of writing, the FASB had decided to split the project into two phases. Phase 1 creates a fair value option for financial assets and financial liabilities, and a final standard should have been issued by the time this book is published. Phase 2 will address creating a fair value option for selected non-financial items. Phase 2 would take the FASB's fair value option beyond what is currently allowed in IFRS.

Current GAAP uses different measurement attributes for different assets and liabilities, which can lead to earnings volatility. The proposed Standard helps to mitigate this type of accounting-induced volatility by enabling companies to achieve a more consistent accounting for changes in the fair value of related assets and liabilities without having to apply complex hedge accounting provisions.

Under this proposal, entities would be able to measure at fair value financial assets and liabilities selected on a contract-by-contract basis. They would be required to display those values separately from those measured under different attributes on the face of the balance sheet. Furthermore, the proposal would require companies to provide additional information that would help investors and other users of financial statements to more easily understand the effect on earnings.

'The option to measure related financial instruments at fair value should simplify accounting and encourage the display of more relevant and understandable information for investors and other users of financial statements,' said Leslie F. Seidman, FASB member and Board collaborator on the project. 'Today's proposal also helps achieve further convergence with the International Accounting Standards Board, which has previously adopted a fair value option for financial instruments.'

On 11 May 2006 the FASB provided updates prior to issuing the new standard (available online at <http://www.fasb.org/project/fv_measurement.shtml>). This is the next step in an ongoing effort of the FASB to require fair value reporting of all financial items apart from operating items used in mainline operations such as manufacturing and service operations. But the FVO standard for now would be optional and exclude some financial items. Page 3 of the FVO reads as follows:

Issue 1: The scope of this proposed Statement includes the following financial assets and financial liabilities that some may not have considered as being included:

- (a) An investment being accounted for under the equity method
- (b) Investments in equity securities that do not have readily determinable fair values, as described in paragraph 3 of FASB Statement No. 115, *Accounting for Certain Investments in Debt and Equity Securities*
- (c) Insurance and reinsurance contracts that are financial instruments, as

discussed in FASB Statements No. 60, *Accounting and Reporting by Insurance Enterprises*, No. 97, *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments*, and No. 113, *Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts*

- (d) Warranty obligations that are financial liabilities and warranty rights that are financial assets
- (e) Unconditional purchase obligations that are recorded as financial liabilities on the purchaser's statement of financial position as discussed in paragraph 10 of FASB Statement No. 47, *Disclosure of Long-Term Obligations*.

Additionally, Paragraph A6 reads as follows:

The Board decided to exclude from the scope of this Statement the following financial assets and financial liabilities for the reasons indicated:

- (a) An investment (principally an investment in a subsidiary) that would otherwise be consolidated. The Board believes the fair value option project should not be used to make significant changes to consolidation practices.
- (b) Employers' and plans' financial obligations for pension benefits, other postretirement benefits (including health care and life insurance benefits), postemployment benefits, employee stock option and stock purchase plans, and other forms of deferred compensation arrangements as defined in Statements 35, 87, 106, 112, 123 (revised December 2004), 43, and 146, and Opinion 12. The Board believes that any modifications should be part of a reconsideration of those individual areas.
- (c) Financial liabilities recognized under lease contracts as defined in State-

ment 13. (This exclusion does not include a contingent obligation arising out of a cancelled lease and a guarantee of a third-party lease obligation.) The Board wanted to avoid undermining the lease accounting provisions of Statement 13 (as amended), which requires measuring the lessee's obligation for a capital lease at an amount that may not be the fair value of that liability. The Board believes those lease accounting provisions should not be changed by the fair value option project without a comprehensive reconsideration of the accounting for lease contracts. The Board believes also that no scope exception is needed for the assets recognized by lessors under sales-type leases, direct financing leases, or leveraged leases because those assets are not purely financial assets and, thus, are not included in the scope of this Statement.

- (d) Written loan commitments that are not accounted for as derivatives under Statement 133. The Board will include such written loan commitments in the deliberations of Phase 2 because nonfinancial components affect the determination of the fair value of those written loan commitments.
- (e) Financial liabilities for demand deposit accounts. The Board will include the liability for demand deposit accounts in the deliberations of Phase 2 because nonfinancial components affect the determination of the fair value of those demand deposit accounts.

The Board also affirmed that the election of the fair value option is not permitted for current or deferred income tax assets or liabilities because such assets and liabilities are not contractual and, thus, are not financial assets or financial liabilities.

The FVO also excludes written loan commitments and financial liabilities for demand deposits.

Disclosure requirements are as follows in Paragraph 12 of the FVO proposal:

An entity shall disclose the following with respect to financial assets and financial liabilities for which the fair value option has been elected:

- (a) The difference between the carrying amount of any financial liabilities reported at fair value due to election of the fair value option and the aggregate principal amount the entity would be contractually required to pay to the holders of the obligations at maturity (or through the maturity date for any debts whose principal amounts are payable in installments), if any
- (b) Information sufficient to allow users of financial statements to understand the effect on earnings (or other performance indicators for entities that do not report earnings) of changes in the fair values of the financial assets and financial liabilities subsequently measured at fair value as a result of a fair value election
- (c) Quantitative information by line item indicating where in the income statement gains and losses are reported that arise from changes in the fair value of financial assets and financial liabilities for which the fair value option has been elected
- (d) A description indicating how interest and dividends are measured and reported in the income statement.

The fact that this extension of fair value accounting is optional creates inconsistencies in financial reporting between otherwise similar companies. Not making it optional, however, is politically explosive at this point in time with heavy resistance coming from various sectors of the economy, particularly banks and other firms that are heavily into financial assets and liabilities apart from derivative financial instruments.

A major component of the FVO is the option to book a firm commitment. Under

present standards firm commitments are not booked even when hedged. For example, if a bank agrees to loan a customer \$10 million in 60 days it is a forecasted transaction that is not booked until the loan transpires. If an 'underlying' interest rate such as 10 per cent is specified, the forecasted transaction becomes a firm commitment under SFAS 133 definitions. Neither forecasted transactions (at forward prices) nor firm commitments (at contracted prices) are booked even though both types of commitment may be hedged. The ED gives a company the option of booking its firm commitments and recognizing changes in value to current earnings. If the firm commitment is hedged with respect to fair value, the change in the hedge contract value may offset the change in the firm commitment to fair value. Failure to book firm commitments, under existing rules, creates very confusing hedge accounting treatments under current SFAS 133 rules that would be greatly simplified if firm commitments could be booked and carried at fair value at all times.

The FVO standard does not change rules for accounting for investments under the equity method (APB 18) and investments requiring consolidated financial statements. The equity method adjusts historical cost for proportionate changes in the earnings of the company that is owned with 20 per cent or more of the voting shares.

The FVO proposal pushes US GAAP closer to the fair value provisions in the International Accounting Standards Board IAS 39. At present the FASB's SFAS 133 involves very complex hedge accounting rules that would be greatly simplified in certain hedging situations where a company elects the FVO.

There is also a very important statement of intent for future standards. The FVO proposal states explicitly that if the fair value accounting option for financial items becomes a standard, the FASB will next propose extending the option to certain types of non-financial items.

Differences between US and international fair value accounting

Paragraphs A21–A23 of the FVO proposal read as follows:

A21. The IASB has included a fair value option for financial instruments in IAS 39. Its provisions are similar to those in this Statement insofar as the fair value options in both pronouncements require that the election:

- (a) Be made at the initial recognition of the financial asset or financial liability
- (b) Is irrevocable

A22. The differences between the provisions in this Statement and international standards pertain principally to disclosures, scope exceptions, and whether certain eligibility criteria must be met to elect the fair value option.

- (a) IAS 32, Financial Instruments: Disclosure and Presentation (as revised in 2005), requires disclosure of the amount of change during the period and cumulatively in the fair value of the financial instrument that is attributable to changes in credit risk for loans, receivables, and financial liabilities for which the fair value option has been elected. This Statement does not require any disclosures related solely to the portion of a change in fair value attributable to changes in credit risk, although it does require a qualitative disclosure of reasons for significant changes in fair value of financial liabilities.
- (b) This Statement includes a scope exception for financial liabilities for demand deposit accounts, whereas IAS 39 does not. However, IAS 39 stipulates in paragraph 49 that ‘The fair value of a financial liability with a demand feature (eg a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount could

be required to be paid.’ The Board will reconsider this scope exception as part of Phase 2 of the fair value option project.

- (c) This Statement includes a scope exception for written loan commitments that are not accounted for as derivative instruments under Statement 133, whereas IAS 39 does not. The Board will reconsider this scope exception as part of Phase 2 of the fair value option project.
- (d) This Statement has no eligibility criteria for financial assets and financial liabilities, whereas IAS 39 (as revised in 2005) indicates that, for other than hybrid instruments, the fair value option can be applied only when doing so results in more relevant information either because it eliminates or significantly reduces a measurement or recognition inconsistency (that is, an accounting mismatch) that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases, or because a group of financial assets, financial liabilities, or both is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the entity’s key management personnel.

A23. The inability to elect the fair value option for financial liabilities for demand deposit accounts under this Statement would likely not result in a significantly different reporting outcome than election of the fair value option for those liabilities under IAS 39. The extent of the other differences between the FASB and IASB standards related to eligibility criteria will depend on the circumstances and the extent to which entities desiring to elect the fair value option under IAS 39 will be able to meet those criteria.

Comprehensive income versus current income

As mentioned above, a huge controversy surrounding fair value accounting entails where to put double-entry offset when an asset or liability is adjusted to fair value. These offsets are hypothetical in the sense that the gains and losses are unrealized and in many instances will never be realized. It may be known that they will never be realized in the case of items intended to be 'held to maturity'. For example, SFAS 133 requires that a commodity derivative contract be continuously adjusted to fair value with offsets going to current earnings. Periodic fluctuations in income (earnings) before its expiration date are strictly unrealized and hypothetical. Quite often it is known in advance that they will totally offset one another over time such that the ultimate effect is zero impact on retained earnings even though the earnings have fluctuated up and down for fair value adjustments prior to contract expiration.

SFAS 130 created a special comprehensive income (OCI) equity account mainly for fair value adjustment offsets that are temporary until the ultimate gain or loss is realized. The existence of such a 'special equity account' arose prior to the formal definition of 'comprehensive income' in SFAS 130 in 1997. For example, SFAS 115 in 1993 requires that financial instruments be classified as 'trading' versus 'available for sale' (AFS) versus 'held to maturity' (HTM). Trading securities must be continuously adjusted to fair value with offsets going to current earnings, thereby creating hypothetical fluctuations in earnings. HTM securities must be carried at cost and are not adjusted for fair value. AFS securities are adjusted to fair value with offsets going to a 'special equity account', which after 1997 became known as 'other comprehensive income' in the USA.

SFAS 133 requires all derivative financial instruments to be adjusted to fair value. Speculative contract changes in fair value are

charged to current earnings. Contracts that qualify for special SFAS 133 hedge accounting relief require fair value adjustment in a manner that does not impact upon current earnings to the extent that the hedges are deemed effective. Fair value changes of cash flow and foreign currency hedges are offset by entries to OCI that do not impact on current earnings. Fair value changes in fair value hedges are offset in other ways, including possible change of accounting for the hedged item from historical cost to fair value accounting during the hedging period.

Originally the FASB wanted all fair value changes in derivative financial instruments to be charged to current earnings whether they were hedges or speculations. Preparers of financial statements, especially banks, objected heatedly to having earnings fluctuate hypothetically in the case where hedges were entered into to guarantee cash flow outcomes (in the case of cash flow hedges) or lock-in value (in the case of fair value hedges). SFAS 133 subsequently became the most complicated of all FASB standards due to the complexity of trying to keep current earnings from fluctuating in thousands of different types of very complicated hedging contracts.

A hybrid instrument is a structured instrument that contains combinations of one or more embedded derivatives. In September 2006, the recent SFAS 155 on *Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140* went into effect. This Statement:

- 1 Permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation.
- 2 Clarifies which interest-only strips and principal-only strips are not subject to the requirements of Statement 133.
- 3 Establishes a requirement to evaluate interests in securitized financial assets to identify interests that are free-standing derivatives or that are hybrid financial instruments which contain

- an embedded derivative requiring bifurcation.
- 4 Clarifies that concentrations of credit risk in the form of subordination are not embedded derivatives.
 - 5 Amends Statement 140 to eliminate the prohibition on a qualifying special-purpose entity from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument.
 - 6 Amends Statement 140 to eliminate the prohibition on a qualifying special-purpose entity from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument.

A major purpose of SFAS 155 is to allow fair value measurement of a hybrid instrument that would otherwise have to be bifurcated into multiple fair value estimates of embedded parts under SFAS 133. Many such complications are eliminated if and when Exposure Draft (ED) No. 1250-001 is adopted as a standard.

It should be especially noted that the proposed FVO standard explicitly states that optional changes in fair value must be offset by debits or credits to current earnings. The FVO does not extend the present options for comprehensive income offsets to the new optional adjustments to fair value. This greatly discourages firms from choosing fair value adjustments in situations where the FVO adds to earnings volatility. However, in some instances the FVO leads to less earnings volatility, particularly in hedging situations. This is especially the case when certain financial assets are related to financial liabilities. For example, suppose an airline enters into a firm commitment to purchase jet fuel in six months, time for \$5 million. The firm commitment is not carried on the books since no purchase transaction has transpired. If the company hedges this value with a forward contract, the forward contract must be booked and carried at fair value. SFAS 133

rules for accounting for this hedge are complex and confusing. The new FVO would allow the firm commitment to be booked at fair value along with its related forward contract. Perfect hedges would offset in value such that reported earnings volatility is reduced without having to apply complicated and confusing FAS 133 accounting for fair value hedges.

One problem with the FVO is that companies may cherry-pick those items that the fair value option is chosen and those for which it is rejected. It would seem that financial statements accordingly become more confusing as long as fair value adjustments are selectively an option. This is especially true if items are either designated as held to maturity (HTM) or are so deeply embedded in operations that disposal is virtually impractical such as land under a new manufacturing plant. Extending the FVO to non-financial items exacerbates the problem of fictional unrealized gains and losses overwhelming realized gains and losses in periodic income statements. The FVO declares that fair value adjustments must be booked as current income rather than comprehensive income. Earnings per share therefore might become heavily influenced by unrealized adjustments that will in fact never be realized for HTM and related locked-in items.

Fair value changes caused by credit risk

One of the major reasons for the FASB push towards fair value accounting of financial instruments is the booking of alternations of value caused by changes in credit risk. For example, when an investor such as a bank buys Company A bonds, the price (fair value) of the bonds is a function of the contracted interest cash flow levels, economy-wide interest rates at the time, industry risk, and company-specific risk. The price of the bonds on the open market fluctuates with significant changes in any one or all of the underlying variables. Among the most important of these

variables is the change in credit risk in Company A caused by changes in industry and company-specific risk. Bonds are generally rated as to risk such as AAA low-risk bonds versus BBB higher risk bonds. If a company's risk classification changes, the fair value of its bonds changes accordingly. Amortized historical cost accounting ignores those changes in credit risk.

Fair value accounting immediately recognizes changes in credit risk. Historical cost accounting only recognizes such changes in risk if the likelihood of actual default reaches a certain threshold. Some companies, especially banks, have a history of understating default risks in their outstanding loan investments. Fair value accounting makes it more difficult to overvalue investments in cases of increased credit risk of creditors. This is one of the main reasons why bankers in particular oppose fair value accounting requirements.

Credit risk is not so much a problem in some types of derivative financial instruments. For example, the huge notionals are not at risk in interest rate swaps whereas they are at risk in traditional financial instruments such as bond investments where notionals themselves change hands. Swap payments may even be guaranteed by an intermediary which negotiated the swap. Credit risks of derivatives purchased on major exchanges such as the Chicago Board of Trade are absorbed by the exchanges themselves.

Hence the change in the fair value of an interest rate swap is entirely due to change in underlying interest rates. The change in the fair value of bonds is due to changes in underlying interest rates and/or changes in credit standing. The point here is that the aggregated change in fair values of derivative and non-derivative financial statements confounds the impact of interest rate risk and credit risk.

It should be noted that the FASB new fair value option (FVO) requires that fair value be adjusted for all changes in risk. For example, an instrument having both credit risk and interest rate risk cannot be adjusted for

changes in value due to just one of those risk components.

Fair value estimation and bifurcation problems

Earnings fluctuation caused by fair value departures from historical cost is the major reason why companies oppose having to book fair value adjustments. Fair value estimation problems are also reasons for opposition, but sometimes estimation problems seem to be more excuses than reasons relative to the bigger problem of hypothetical earnings fluctuations discussed above. In fairness, however, there are often serious costs of estimation systems and high error bands around some types of estimates.

Literature focused on opposition to fair value accounting is replete with complaints by banking leaders on the softness and volatility of fair value estimates. For example, interest rate swaps have become enormously popular instruments that are not traded on active markets and, thereby, become exceedingly complicated to value day to day. Databases available via Bloomberg and Reuter terminals help somewhat, but estimations entail very complicated processes that many companies still do not understand and/or trust (see online at <http://www.trinity.edu/rjensen/acct5341/speakers/133swapvalue.htm>).

Fair value accounting is complicated for acquisitions of multiple items for one price. This is especially the case for structured financing and securitizations that have become popular in the USA. These require bifurcation of basket purchases into values of basket components. A common example is a financial contract that has embedded derivative contracts. For example, a mortgage note often has an embedded option to pay the note prior to maturity. In theory, the investor is paying for both the principal item and embedded derivatives in one price of the 'basket'. Partitioning the fair value of the basket into component values is often a nightmare, especially when the components

may interact in a manner that destroys simple additivity and when there are no trading markets for some of the basket's components. Valuing basket components is bad enough when the item is initially acquired. Problems are compounded if such bifurcation of value must take place at every fair value adjustment point in time.

Fair value blockage problems

The value of a \$100 bill is exactly equal to the sum of the value of 100 \$1 bills. This is not necessarily the case for property that is subdivided. For example, if the current trading (marginal) price of Company A securities is \$1 per share ignoring odd-lot trading commissions, then the value of 100 shares most likely is \$100. But the value of 100 million shares is almost certainly different from \$100 million. The reason is that 100 million shares most likely have added 'blockage' costs and values due to such things as varying transaction costs, sloping supply/demand curves and powers of control.

A shareholder cannot simply set an asking price on the New York Stock Exchange for 100 million shares at the average price of the last trade of 100 shares. Unloading 100 million shares takes special brokering and price negotiations with a different class of buyers. Brokerage and negotiating efforts may increase the cost and volume discounting may be required for 'blockage' trades. These tend to drive per share trading prices downward relative to marginal trading prices.

However, per share prices may be much higher for 'blockage' trades due to other factors, particularly when the volume of shares traded carries added powers of control. Obviously a block trade of over 50 per cent of the voting shares transfers controlling interest in a corporation. But in a very large company such as General Motors, having more than 5 per cent of the outstanding shares gives a shareholder tremendous voting power when the other 95 per cent of the shareholders are not of one mind on contentious issues. Under

APB 18, ownership of 5 per cent of the shares requires carrying the shares at cost, but the proposed fair value option in the FASB's ED would allow switching to fair value when ownership is less than 20 per cent of the shares.

Blockage factors greatly complicate fair value accounting. Suppose that the marginal price of Company A shares is currently \$1 per share. When Company B purchases 100 million shares for \$140 million in one block, the investment is recorded at \$140 million that reflects \$40 added value due to blockage enhancements caused by such things as blockage voting power.

If soon afterwards the marginal share price jumps to \$2 per share, what is the fair value adjustment? If the 100 million shares are less than 20 per cent of outstanding shares, the proposed FVO allows Company B to make a fair value adjustment of the investment to \$200 million, but the \$40 million blockage is not carried at an incremental fair value. The original blockage value may have changed by many millions of dollars as well, but this is ignored under present and proposed GAAP. The FASB's Action Alert 05-23 on 9 June 2005 states the following (available online at <<http://www.fasb.org/action/aa060905.shtml>>):

The Board continued redeliberations of the FASB Exposure Draft, Fair Value Measurements, focusing on issues relating to blocks and disclosures.

The Board reconsidered its previous decision to allow a broker-dealer to use a blockage factor to estimate the fair value of a large position of an unrestricted security with a quoted price in an active market (block). Instead, the Board decided to preclude the use of a blockage factor in all cases. Accordingly, a quoted price in an active market should be used to estimate the fair value of an unrestricted security within Level 1 of the fair value hierarchy, even if an entity (including a broker-dealer or an investment company) holds a large position of the security. A final Statement will make a

conforming change to the AICPA Audit and Accounting Guides for broker-dealers and investment companies.

If standards allowed revaluing the \$40 million blockage factor, this is very difficult and expensive to do in practice. Generally the sale of 100 million shares requires seeking out special buyers and there may be tremendous differences between cash offers versus proposed stock or non-cash property trades. Fair value estimation of incremental blockage factors would add enormous measurement error to fair value accounting. This is why blockage factors are not revalued under existing and proposed standards for revaluing investments.

Fair value aggregation problems

Financial Accounting Standards Board Exposure Draft No. 1250-001 describing the FVO explicitly states that the long-run objective of the FASB is to extend fair value accounting beyond financial instruments into the realm of non-financial items. It is too soon to surmise which non-financial items might be revalued, but we have some required revaluation requirements under existing standards. For example, if an ethanol manufacturing company has natural gas inventory costing \$10 million in assets, existing GAAP requires historical cost with possible lower-of-cost-or-market (LCM) adjustments for damage. But if a diamond ring company has \$10 million in gold inventory used diamond ring manufacturing, GAAP requires fair value adjustments from historical cost using current gold commodity prices.

Suppose a conglomerate Company C makes ethanol fuel and makes diamond rings with \$10 million historical cost in natural gas inventory (currently valued at \$15 million) and \$10 million in gold inventory (currently valued at \$12 million). Total inventory reported in the consolidated balance sheet is \$22 million that is neither the aggregation of \$20 million historical cost nor \$25 million fair

value. Furthermore, none of the alternative inventory valuations ranging from \$20 to \$25 million really tell us how these inventory items will impact on profits from selling bread and gold watches. For example, the impacts on ultimate profits can vary widely depending upon the demand functions for ethanol and diamond rings, demand functions that are only partly impacted by prices of natural gas and gold. Ethanol is impacted more by corn prices, and diamond rings are impacted more heavily by diamond markets.

If the company has locked in ethanol and diamond ring sales prices with firm commitments at current prices rather than forward prices, all fair value adjustments of natural gas and gold inventory value will wash out to zero when manufactured product sales ultimately take place. Forward pricing will perhaps allow us to realize holding values of commodity inventories if these value changes can be passed on to bread and watch customers.

The point here is that balance sheet aggregations of accounting values assigned to components of assets and liabilities are quite misleading aggregations of natural gas (historical costs) and gold (fair value) and assorted combinations thereof due to depreciation and other accrual adjustments. If fair value adjustments are intended to make such aggregations more useful, the prospects for doing so in going concerns are bleak unless ultimate product prices (e.g. for ethanol and diamond rings) are almost perfectly correlated with commodity prices. This is seldom the case. For example, prices of General Motors vehicles are impacted by so many things such as pension and healthcare costs as well as labour costs in general that correlations between vehicle prices and sheet steel prices are far from perfect.

Intangible and unbooked item valuation problems

In economist dreams, the net value of assets

minus the net value of liabilities with fair value adjustments is equal to the current value of the equity if that equity is sold in the open market. Apart from blockage factors and fair value estimation problems of booked items, this dream will never become reality because it is impossible to book all items of value. Unbooked items are generally included in what accountants call the firm's intangible items, including such unbooked items as a skilled labour force, company reputation, political connections, customer/supplier relations, R&D items, unbooked contingency/environmental liabilities, and everything else that separates value of equity from the balance sheet total asset amount minus recorded liabilities.

The difference between equity value and balance sheet equity value can be enormous, which is why financial analysts pay little attention to the balance sheet valuation of net equity. Fair value accounting for booked items will not solve the enormous problem of the valuation of unbooked items.

The capitalized value of a firm is generally viewed as the share price times the number of shares outstanding. This is complicated by all sorts of potential dilutions arising from executory contracts that we will ignore here. It is also greatly complicated by blockage factors. Even if dilution and blockage factors are assumed to be zero, the capitalized value (share price multiplied by outstanding shares) is a poor estimate of 'the' value of the firm. Share prices day to day are impacted by a multitude of market (unsystematic) factors outside the firm itself such as global politics and economic fluctuations.

Some analysts have proposed finding fair values of intangibles and equity by analysing capitalized value based on current share prices. This defeats the purpose of accounting. The purpose of accounting is to help investors make bid and ask prices in the stock market and to provide risk information to creditors and investors. Using share prices to set accounting values puts the cart before the horse. The accounting horse is supposed

to pull the cart; the cart is not supposed to pull the horse.

Another problem of intangibles valuation is that such values are often extremely unstable. A new discovery may destroy huge components of patent, skilled labour and other knowledge capital intangibles. Some intangibles are particularly prone to enormous value shifts with economic bubbles in the economy. For example, computer science experts were being paid enormous signing fees and bonuses during the technology bubble of the 1990s. Many of them could not find work after the bubble burst around the turn of the century. Estimated values of firms' intangibles in technology crashed at the same time.

The main point in this module is that fair value adjustment of all financial and non-financial items on the balance sheet will not necessarily bring the balance sheet significantly closer to the fair value of the firm as a whole. The problem is that the value of the firm is most likely highly impacted by unbooked items that are not on the balance sheet and cannot be adjusted for fair value.

Lessons from Days Inns in 1987

On 30 September 1987, Days Inns of America anticipated taking private ownership shares public. Days Inns issued an interesting and controversial annual report containing traditional financial statements audited by Price Waterhouse, financial forecasts reviewed by Price Waterhouse and an exit value set of complete financial statements attested to by an appraisal firm called Landhauer Associates. Traditional historical financial statements showed booked assets aggregating to a value of \$87,356,000. The exit value aggregate booked assets were valued more than double at \$194,812,000. Real estate appraisals are notoriously subjective and most of the difference between the two reported aggregate values for Days Inns in 1987 was due to appraisals of real estate.

Even if the \$194,812,000 was entirely

accurate at the balance sheet date, the figure is misleading to investors. As a going concern, the real estate of Days Inn is locked into going concern operations. Value of this real estate in use, in terms of discounted future cash flows, is likely to be very different in the hands of this chain of hotels. Real estate appraisals are localized estimates of local liquidation values. In the hands of a large company, however, many unbooked intangibles enter into the valuation process such as the reputation of the chain as a whole, its millions spent on prior advertising, its unbooked network of skilled and dedicated employees, and its unbooked contingent liabilities, especially pending lawsuits.

Suppose the exit value total for booked assets shifted mostly upwards by as much as 20 per cent per year in this fast-growing company in the 1980s and early 1990s. Fair value accounting gives rise to considerable fiction (unrealized revenues that are highly subjective in measurement) in the reported earnings per share when there is no intent in this fast-growing concern to liquidate most of the hotel properties. There might be some informational value in this fiction, but if the company has no intent to liquidate and if the value in use of these properties is very different to the aggregated exit values, naive analysts are likely to place too much emphasis on the fiction.

The hotch potch the USA calls accounting valuation

In agency theory a corporation is defined as a nexus of contracts. In that context, the task of accounting is to account for those contracts with measurements specified in thousands of pages of measurement rules. In the USA, the financial statements are a nexus of components derived from a complicated and inconsistent measurement basis ranging from historical cost, arbitrarily depreciated cost, amortized cost, inflation adjusted cost from some foreign investments, lower of cost or market, replacement cost, exit (liquidation)

value and discounted cash flow valuation. SFAS 133 requiring the booking of virtually all derivative financial instruments and carrying them at fair values greatly complicated the financial statements due to intricate and seldom understood hedge accounting rules put in place to reduce earnings volatility of qualified hedging derivatives. Some changes in value impact on current earnings; others are buried in something other than current earnings.

Accounting valuation is sometimes based on elemental levels that ignore blockage factors. In other cases valuation is based at basket levels that ignore component items such as when the cost of 100 million shares of Company A are booked initially for \$140 million even though the per-share marginal trading price is only \$1 per share. Derivative financial instruments are carried at fair value even when used as hedges of forecasted transactions and firm commitments that are not even booked in the financial statements.

The fair value option is a step in the direction of making US GAAP more harmonized with international GAAP, but it is a very small step. The fact that it is optional and allows firms to cherry-pick when the option is used and when it is ignored muddies the waters. Chefs in the USA would conclude that fair value accounting is not even close to being fully baked. In the meantime, financial statements in the USA remain a hotch potch of booked components measured on different bases and options. When added to the huge problem of unbooked assets and liabilities one has an uncooked stew simmering on a really expensive stove comprising thousands upon thousands of complex rules.

In fairness, US GAAP is more complicated than anywhere else in the world because US companies and their lawyers and accountants more actively circumvent new rules until another new rule is added to plug a leak. Some exceedingly complicated contracts such as interest rate swaps were invented largely to keep debt off the balance sheet. New, complicated rules emerged to get the debt on the

balance sheet. Now the companies are working harder and harder to circumvent the new rules. It is a costly and complex game in the

world of high finance in the USA. Fair value accounting adds more hype than hope to restraining this game.