FAIR VALUE ACCOUNTING: VISIONARY THINKING OR OXYMORON?

Aswath Damodaran

Three big questions about fair value accounting

- □ Why fair value accounting?
- □ What is "fair value"?
- □ What are the first principles that should govern fair value accounting?

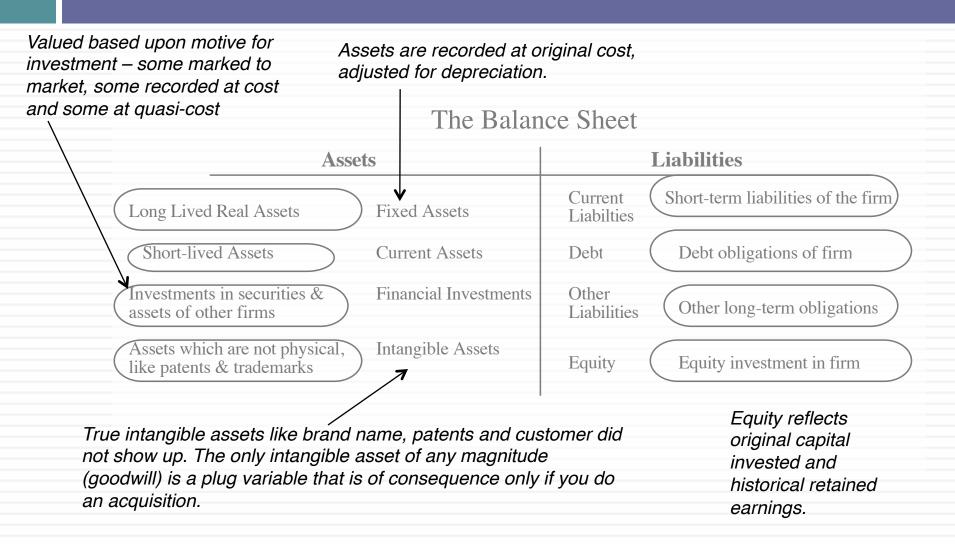
Why fair value accounting? Three points of view...

- □ The Dreamer: To make accounting value (book value) a reasonable measure of the true value of a company.
- □ The Pragmatist: If we mark assets up to fair value, investors will have a better idea of what a firm is worth and there should be therefore less uncertainty about the true value and lower variance in that value.
- □ The Marginalist: Fair value accounting, even if imperfect and noisy, will provide investors with useful additional information which they can use to estimate value in a company or assess its risk.

1. A New World Order Accountants as the final arbiters of value!!

- There are some (accountants, theorists and others) who believe that it is possible to replace the current accountant balance sheet with one that reflects the true value of the company.
- □ In their vision, investors would not look at the market to assess the fair value of a company but at accounting statements.

The traditional accounting balance sheet...



The intrinsic value balance sheet

Recorded at intrinsic value (based upon cash flows and risk), not at original regular vestments Generate cashflows today Includes long lived (fixed) and short-lived (working		Debt Fixed Claim on cash flows Little or No role in management Fixed Maturity Tax Deductible	
	Growth Assets Industry the desired of the second s		Residual Claim on cash flows Significant Role in management Perpetual Lives Intrinsic value of equity, reflecting intrinsic value of assets, net of true value of debt outstanding.

The "market value" balance sheet

Assets recorded at market value, i.e, what

investors will be willing to pay for the assets

today (rather than original cost or intrinsic value)

Assets Liabilities Existing Investments Generate cashflows today Investments already made Debt Borrowed money Expected Value that will be created by future investments be made Equity Owner's funds

Should equate to market value

of equity, if publicly traded.

Accounting Balance Sheet = Intrinsic value Balance Sheet: The impossible dream!

- Even in a well functioning market, there will be a divergence between intrinsic and market value of both assets (and equity).
 The dreamer has to first decide which balance sheet he would like the accounting balance sheet to converge on.
- Even if we were able to write up every asset to intrinsic value, all that we will obtain is the fair value of the assets in place of a company.
- Growth assets will be either impossible to value (since they do not exist and may not even be identified yet) or valued haphazardly.
- Bottom line: Fair value accounting, even if done precisely, will create a two tier system, providing accounting values that are close to true value for mature businesses and divergent values for growth businesses.

2. Fair value accounting = Lower volatility in markets

- Fair value accounting has had its deepest roots in the financial service businesses, where mark to market has been part of accounting practice for several years now. If the premise of fair value accounting is right, the variance in stock prices should be lower for financial service firms than for otherwise equivalent (in terms of size and maturing) industrial companies.
- Some countries have been quicker to jump on the fair value bandwagon than others. In particular, many countries with high inflation currencies adopted variants of the fair value accounting approach, allowing companies to revalue assets at least to current replacement cost. If the hypothesis is right, securities in these countries should be less volatile than securities elsewhere.

Less volatility.. Says who?

- While it may be a little unfair to use the current crisis to make any long standing arguments, the securities with the most volatility were, in face, stocks in financial service companies that marked-to-market.
 - Marking to market gave little or no advance indication of problems to come.
 - Even more problematic was the feedback loop created by marking to market in a sliding market. Markets dropped and book values were written down. As book values were written down, investors worried about regulatory capital ratios being breached, which led stock prices to drop even further.
- Even controlling for inflation differences, there is no evidence of lower stock price volatility in countries that adopted inflation accounting. On the the contrary, stock prices were often more volatile in these countries.
- □ Bottom line: The acceptance of fair value accounting is going to do little to dampen stock price volatility. It may actually increase it.

3. Useful information for investors!

- Accounting rule changes have been motivated to either protect investors (by providing warnings about dangers lurking in a company) or to provide information to investors (so that they can better assess value). Thus, rules about showing pension obligations on balance sheets are protective, whereas rules about estimating the impairment of goodwill are designed to provide information.
- The ultimate test of whether investors actually find these rules to be protective or informative comes from how they react to changes in these numbers. For instance, if there is information in the impairment of goodwill, we should expect to see stock prices react to news about impairment.

Do investors care about accounting changes? SFAS 121 versus SFAS 142

- In 2002, the accounting standards governing goodwill measurement and reporting were changed. In particular, firms were required to estimate the fair value (as opposed to undiscounted cash flows) of acquired firms (and hence goodwill) every year (instead of when significant events occurred). The intent was to make the goodwill number more informative to investors.
- A study of stock price reactions to goodwill impairments(>5%) compared impairments and reactions in 1996-2001 (the SFAS 121 regime) with impairments in the second half of 2002 and all of 2003. It found that:
 - Goodwill impairments, on average, cause stock prices to decline albeit by about 3% (in the two days around the impairment charge).
 - The decline is larger for firms with fewer analysts (more informational content?) and for larger firms (better assessments?), but has little or no correlation with the complexity of the firm.
 - The effect on the stock price of goodwill impairments dropped significantly (about 1.2%) in the 2002-03 period, after the adoption of SFAS 142.

Why is there so little information in accounting changes?

- □ Takes too long: Accountants are deliberative. They take time to make their judgments. By the time they do, though, markets already have priced in the information.
- Too structured: Accounting rules have to be structured to prevent the unethical 10% from taking advantage of them. Every rule takes away some of the discretionary power that makes a valuation a "good" one.
- Mixing of the large with the small: The nature of accounting is to worry just as much about the small items as the large ones.
 The end result is an information dump, where investors have a difficult time separating what matters from what does not.

Bottom line: If investors wait for accounting statements to tell them what is happening in real time in a firm, it is already too late.

Fair Value: What is it?

- □ While the notion that fair value is in the eye of beholder is too loose for my taste, the fair value of an asset or business can vary depending upon how it is defined.
- □ It can be different, depending upon the following:
 - <u>How you value</u>: Intrinsic versus Relative Valuation, and within relative valuation, depending upon what you value it relative to.
 - Who you value it for: The valuation can be different depending upon whether you are valuing it for a passive investor or an active investor, and whether and what the latter plans to do with the asset.
 - <u>For transaction or appraisal</u>: The value attached to an asset can be different depending on whether you are planning to sell the asset or hold on to it for its cash flows.

A Test: Estimate the fair value of this company-Intrinsic Value

	Expected next year (in millions)
Revenues	\$400
- Operating Expenses	\$250
- Depreciation	\$30
Operating Income	\$120
- Taxes	\$40
Operating Income after tax	es \$80

- Operating income is expected to remain the same (zero growth) forever (perpetuity). Capital expenditures offset depreciation and there are no working capital requirements.
- \Box The firm is all equity funded and has a cost of equity of 10%.

Estimate the fair value again: Different management

- □ Assume now that the firm, run by superior (optimal) management, would make the following changes:
 - The after-tax operating margin will increase to 25% (from 20%). As a result the after-tax operating income would be \$100 million instead of \$80 million.
 - Changing the mix of debt and equity will lower the cost of capital to 8%.
- □ What is the intrinsic value of the firm, with new management?

"Expected" Intrinsic Value

- We have two estimates of fair value \$ 800 million with the status quo and \$1,250 million with optimal management.
- Assume now that there is a 40% probability that the management of this firm will change and a 60% probability that it will not. In an efficient market, what is the "expected" intrinsic value of this firm?

And again: Relative Valuation

- Now assume that the firm is a mid-size chemical company and that publicly traded mid-size chemical companies trade at 5 times EBITDA.
- ☐ Given that this firm is expected to have EBITDA of \$ 150 million, estimate the value of the firm.

Yet again: For sale now!

- Now as a final estimate, assume that equity markets are fairly illiquid right now and that selling the entire business today can be accomplished only by discounting the value.
- □ If the illiquidity discount is 20% on estimated value, estimate the expected proceeds from selling the business today.

So what is the fair value? You be the judge

- We now have five estimates of fair value for this firm.
 Which of the following is the "right" fair value?
- \$ 800 million: Intrinsic value, with status quo.
- \$ 1250 million: Intrinsic value, with optimal management
- \$ 980 million: Expected intrinsic value, with probability of change built in
- \$ 750 million: Relative value, based upon sector multiple
- \$ 600 million: Relative value, adjusted for illiquidity Why?

So, what is FASB's vision? Glimmers from FAS 157

- The ubiquitous "market participant": Through the entire statement, homage is paid to the ubiquitous market participants and what they think about risk and will be willing to pay for an asset. In effect, accountants are asked to attach values to assets/liabilities that market participants would have been willing to pay/ receive.
- Tilt towards relative value: "The definition focuses on the price that would be received to sell the asset or paid to transfer the liability (an exit price), not the price that would be paid to acquire the asset or received to assume the liability (an entry price)." The hierarchy puts "market prices", if available for an asset, at the top with intrinsic value being accepted only if market prices are not accessible.
- Consideration of illiquidity: Accountants are asked to give consideration to specific restrictions on the sale/use of an asset in valuing it. Presumably, if there are restrictions on selling an asset, the value will have to be discounted for illiquidity.

My Road map for fair value accounting (as a user)

- The ultimate role of accounting is to provide investors who follow a company with information that they can use to estimate value and measure performance.
- □ Fair value accounting done right should make it easier for investors to value companies, not more difficult. It should follow these principles:
 - Do no harm.
 - Don't overreach.
 - Keep it simple.
 - Less is more.

Do no harm...

- The fundamental questions: Financial statements should (and have been designed to) answer three questions:
 - How much did you earn last year?
 - What do you own and how much did you invest to get what you own?
 - What do you owe?
- ☐ In the process of moving to fair value accounting, we should not lose information that has been used to answer these questions. Therefore:
 - Replacing existing book values of assets (which measure capital invested) with the fair or market value of those assets replaces a useful piece of information with one that is redundant (if it just reflects market value), misleading (if it incorrectly tries to reflect market value) or confusing (if no one is quite sure).
 - Adjusting earnings for past mistakes in fair value assessment (inevitable with all fair value accounting) will make earnings less informative.
 - Trying to include potential, possible and imagined liabilities in balance sheet dilutes the meaning of debt.

Focus.. And don't over reach

- Be clear about what you want to accomplish: Fair value accounting has to be clear about what it is trying to accomplish. Rather than reaching for the ultimate, settle for the incremental.
- <u>Be realistic</u>: Accept the proposition that an accounting statement cannot be all things to all people. It will always be a reflection of the past and lag both intrinsic and market value.
- <u>Don't over reach</u>: Accounting statements will not replace or even compete with market values and book values will be poor replacements for market values. Accountants are not (and should not try to be) analysts, appraisers or evaluators.

Keep it simple

- Stick with the easy assets: The assets that can be valued with simple rules should be the first targets. Assets that will require complicated or complex rules are best left untouched.
- Let others deal with complex assets: Provide the information (or raw data) for assessing fair value but don't take on the responsibility of doing it yourself.
- Principle based valuation, not rule based valuation: Less rules and more focus on first principles will lead to better valuations.

Less is more...

- □ Data is not information: Financial statements are increasingly becoming data dumps. There is little evidence that that 10Ks of today are more informative than the 10Ks of 20 years ago, but they are definitely more voluminous.
- Prioritize: Not all information is equally important.
 The level of detail (and effort spent) on any item should be proportionate to its importance.