

What is fair value accounting and why be concerned?

An economist's view

Vincent Reinhart

Resident Scholar

*The American Enterprise
Institute*

◆ *April 8, 2008*

- ◆ *Two* points of review
- ◆ *Four* reasons fair-value accounting amplifies market price dynamics
- ◆ *Two* different rationales for accounting schemes
- ◆ *One* idiosyncratic conclusion (mine)



Review

FASB Statement no. 157 provides guidance on fair value measurements.

- ◆ Fair value is “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”
 - It can be thought of as an “exit price.”
- ◆ The hierarchy of fair value measurements:
 - LEVEL 1: Quoted prices in active markets for identical instruments
 - LEVEL 2: Quoted prices for similar instruments in active markets or for identical instruments in markets that are not active.
 - LEVEL 3: Unobservable inputs reflecting assumptions market participants would use in pricing the instrument.

Among the qualms expressed in the comment period were:

Reliability and comparability problems:

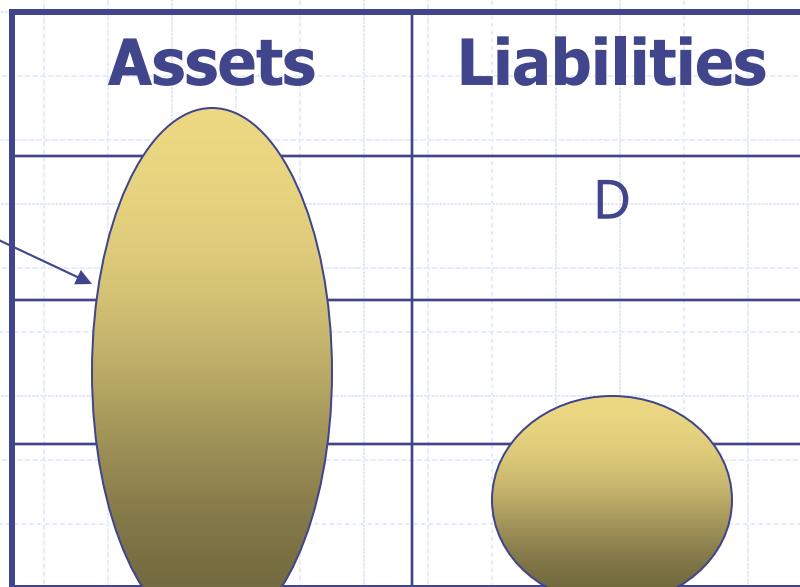
- ◆ Fair value estimates for similar instruments can vary greatly in practice
- ◆ Management can use significant judgment in selecting market inputs when prices are not available
- ◆ Minor changes in assumptions in a pricing model can have a substantial effect
- ◆ Verification of prices based on unobservables will be difficult.



Fair value accounting and market dynamics

Two issues are involved in fair value accounting

How to value assets?

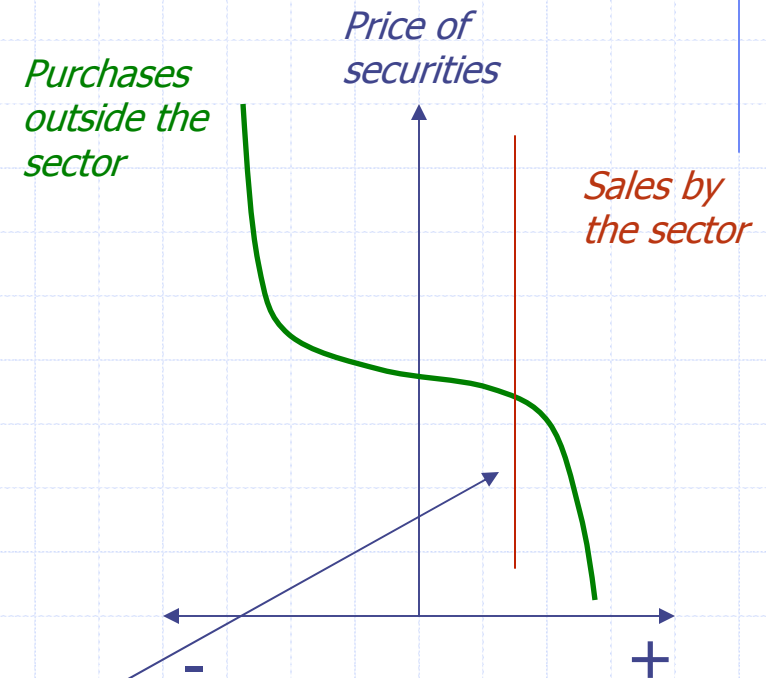


How do changes in asset values pass through the income statement to affect equity?

1. Direct adverse price dynamics of balance-sheet repricing

Assets	Liabilities
↓ S1	D
S2	
S3	↓ Equity

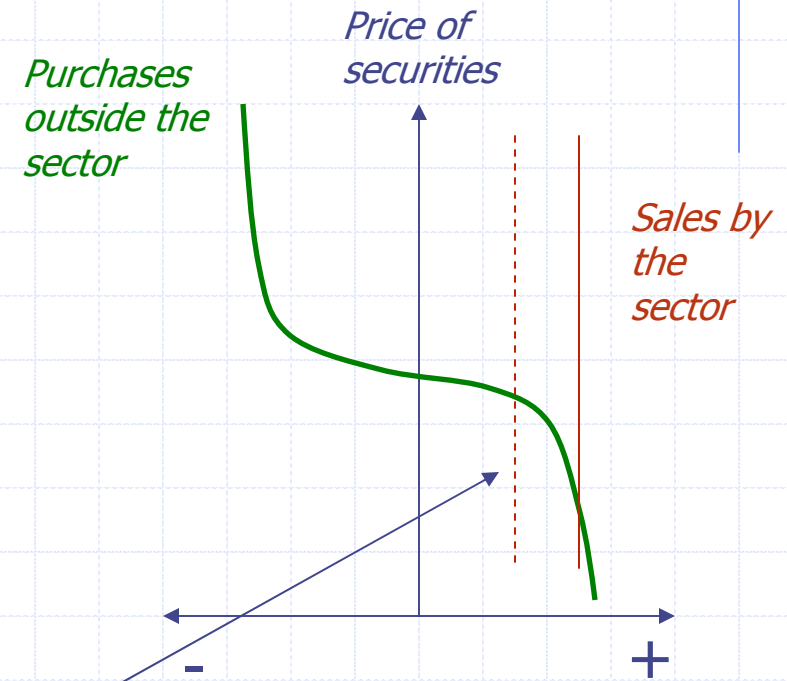
- If the value of some market assets goes down,
- The impairment of the capital-asset ratio may force deleveraging.
- The sale of those assets in the market can further impair prices.



2. Indirect adverse price dynamics of balance-sheet repricing

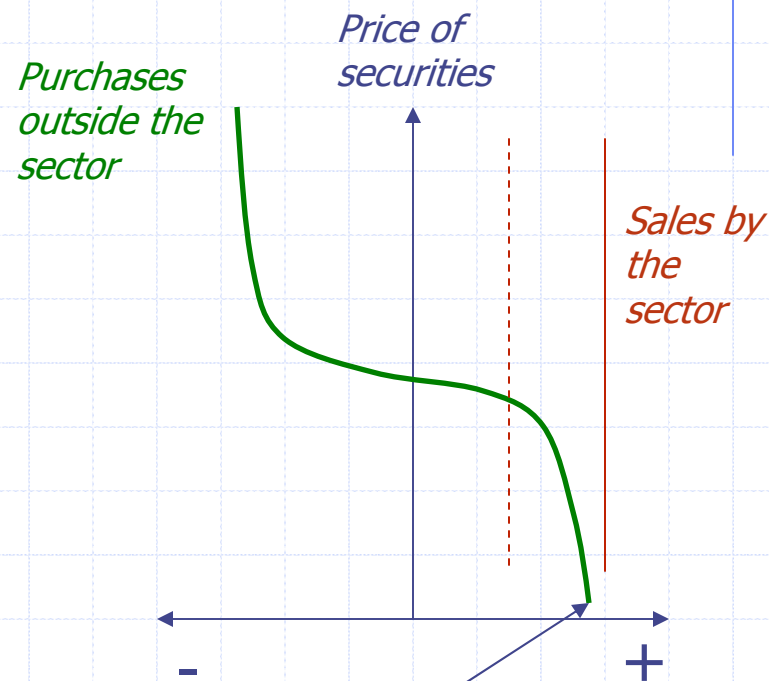
Assets	Liabilities
↓ S1	D
↓ S2	
↓ S3	↓ Equity

- As the value of assets priced in the market declines,
- The prices of comparable assets and those marked to model also decline.
- The deleveraging sale of assets



3. Herding magnifies these price changes

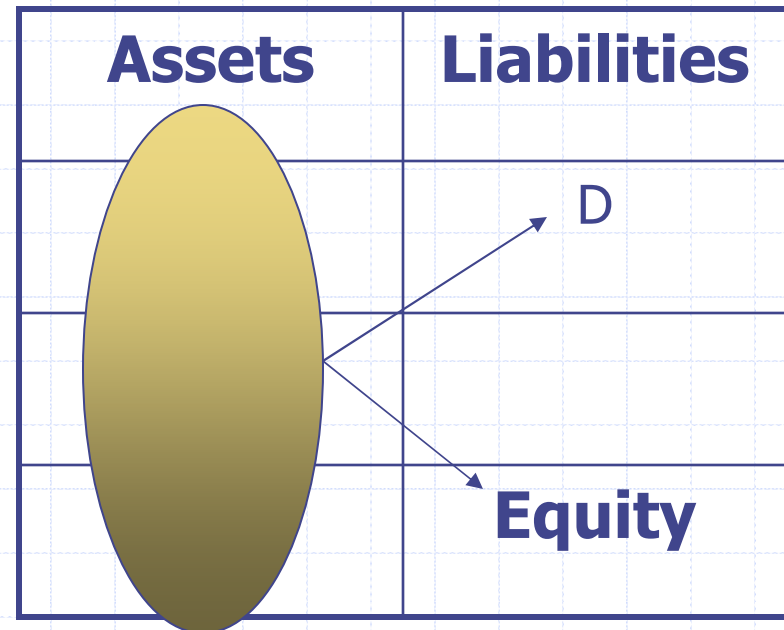
- Everyone in the sector follows the same rules and uses the same small pool of auditors.
 - And the interpretation of the rules become stricter at a time of stress
- This introduces a fallacy of composition.
 - Deleveraging might make an individual firm safer, but when everyone does it at once, everyone is worse off.



The market may not even clear.

4. Herding applies to both sides of a firm's balance sheet: Everyone uses the Merton model.

- ◆ Merton: Equity is a call option on the value of a firm's assets given the current value of the debt.
- ◆ This can be used to calculate the distance to default consistent with current equity values.
- ◆ That distance to default
 - Is generated by many firms
 - And is used widely to set credit risk spreads and price default protection.



A decline in the fair market value of assets shortens the distance to default, making new debt more expensive and increasing rollover risk.

Fair value accounting

- ◆ Amplifies price movements in financial markets,
- ◆ And this may be an asymmetric effect through its influence on credit risk spreads and rollover risk.



Other thoughts

What's the rationale for a valuation scheme?

"Securities view"

- ◆ Investors need the information to evaluate each component of a firm's balance sheet
 - So as to better predict earnings and dividends.
- ◆ It is useful to take discretion out of managers' hands to eliminate excessive smoothing of reported earnings.

"Banking view"

- ◆ A decision to add an asset to a balance sheet is also a decision to fund that asset.
- ◆ The "exit price" of the asset should be what it returns when sold if the funding is not rolled over.
 - Assets funded short-term should be repriced frequently.
 - Assets funded long-term can be repriced less frequently.

The past few months have shown that

- ◆ The greatest risk to an investor in a financial firm is a run on its funding.
- ◆ In that environment,
 - What a securities regulator might term as excessive smoothing of earnings,
 - A banking regulator would term prudent accumulation of reserves.