MN50324

Lecture 8:

Corporate Financing Decisions and Efficient Markets.

Efficient Markets

- All new information rapidly incorporated into share prices.
- Investors are fully rational
- But:
- Evidence of excessive volatility (in excess of volatility of news).
- Stock Market Bubbles.
- Over- and under-reaction to news.

Efficient Markets.

- In a perfect world (in absence of agency and information problems) a firm cannot create value by just re-packaging finance (MM irrelevance).
- But evidence that investors are fooled by repackaging of shares into complex securities:
- Twin shares.
- January effect and Friday effect

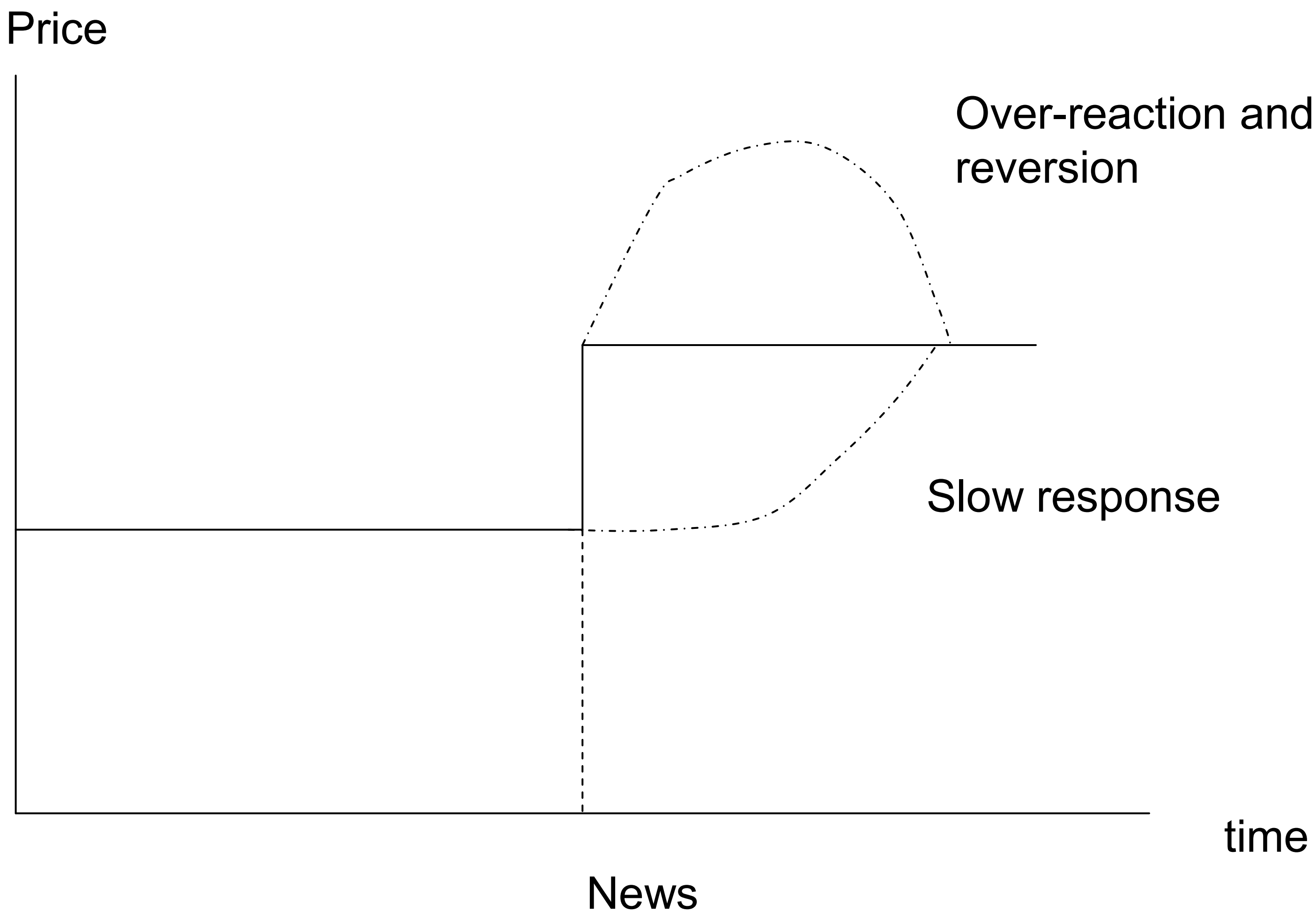
Market timing

- In an efficient market: no scope for mkt timing (eg share repurchases) or insider trading.
- But evidence to the contrary.

Example

- Firm X announces a new positive NPV project: market should immediately react.
- Investors should only expect to earn the normal (CAPM) rate of return.
- Investors should pay a fair price for their shares.
- All of the positive NPV should go to initial shareholders.

Efficient versus inefficient markets.

- 

Foundations of Market Efficiency

- Rationality
- Independent deviations from rationality.
- Arbitrage.

- BF: Limits to arbitrage.

Types of efficiency

- Weak Form efficiency: fully incorporates past information into current prices.

$$P_t = P_{t-1} + \exp ected.return + random.error$$

$\Rightarrow$Prices follow a random walk.

$\Rightarrow$Trading strategy: Buy a stock after it has gone up 3 days in a row.

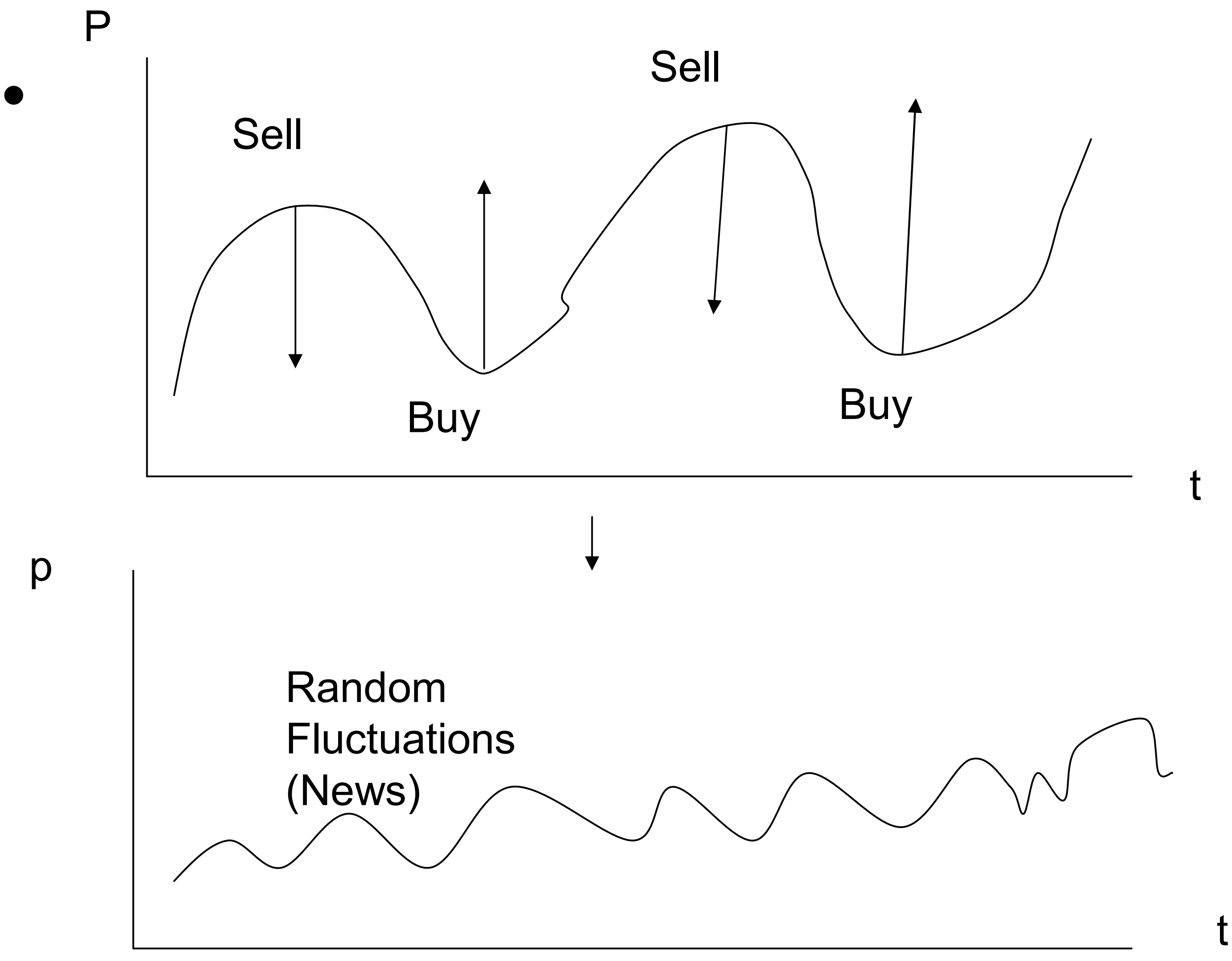
$\Rightarrow$Sell a stock after it has gone down 3 days in a row.

Therefore, strategy only uses past prices.

Not earnings, forecasts or fundamentals of companies.

Weak form efficiency (continued)

•



Semi-strong and strong- form Efficiency

- Semi-strong: prices incorporate all publically available information (eg news, published accounts, historical prices).
- Strong: Prices incorporate all information (public and private)

- Weak firm nested within semistrong nested within strong-form.

Are markets efficient?

- Weak-form? May be: Past prices easy to find and act on
- Semi-strong: requires more sophisticated investors, able to understand economics and statistics, and expert in individual companies and industries.
- Strong-form: But insider info/trading.

Implications of efficient markets.

- EMH: on average, a professional security analyst will not be able to achieve an abnormal or excess return.
- Dart-throwing!
- MV = FV.
- Price fluctuations.
- (heterogeneous investors).

Evidence

- Weak Form: serial correlation.
- Reversal/reversion to the mean.

- Semi-strong form: **<u>event studies</u>** (eg announcement of a dividend or share repurchase, or equity issue:
- Abnormal return

$$AR = R - (\alpha + \beta R_M)$$

Cumulative Abnormal Returns.

Strong Form: evidence of insider trading profits.

BCF.

- Human Irrationality
- Independent deviations from rationality.
- Arbitrage (mispricing today => greater mispricing tomorrow!).

BCF: empirical challenges to mkt efficiency.

- Empirical challenges: Limits to arbitrage: Twin stocks.
- Earnings surprises: investor overconfidence: investor conservatism
- Size.
- Value versus growth.
- Crashes and Bubbles.
- Chaos theory (Bernice Cohen).

Behavioural foundations

- Representativeness.
- Conservatism.
- Overconfidence.
- Bounded rationality.

BCF

- Inefficient markets: rational managers exploitation of irrational investors (eg repackaging of securities: twin stocks etc: timing (eg share repurchases).
- Later: we will look at managerial irrationality too!