Interaction between Noise Traders and Rational Investors in Financial Markets

Tim Chung

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Today’s Agenda

Prospect Theory and
Efficient Market Hyp.

Noise Traders and
Rational Investors

Explanation of Irrational
Market Behavior

A stock (or share) is a fraction of a company

A stock's price can be viewed as a representative of the **value** of a company

Investors earn money from stocks through two different methods

Source: Google Finance, finance.google.com

Dividend Payment

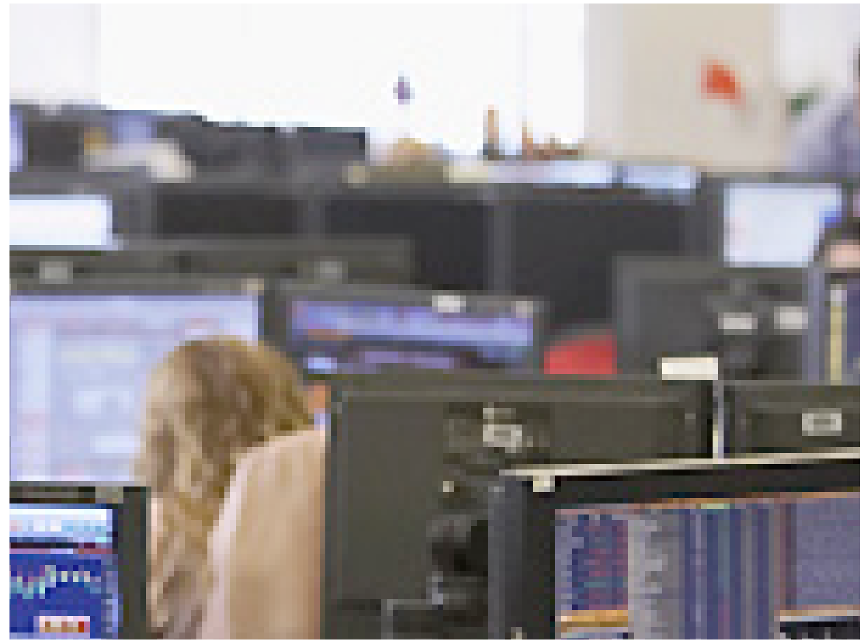
Speculation

* Dividends: a portion of a company's earnings to each of their owners (shareholders)

The combination of dividends and the expectation of growth creates a "**fair value**"

The Efficient Market Hypothesis (EMH) suggests a model for market behavior under two assumptions

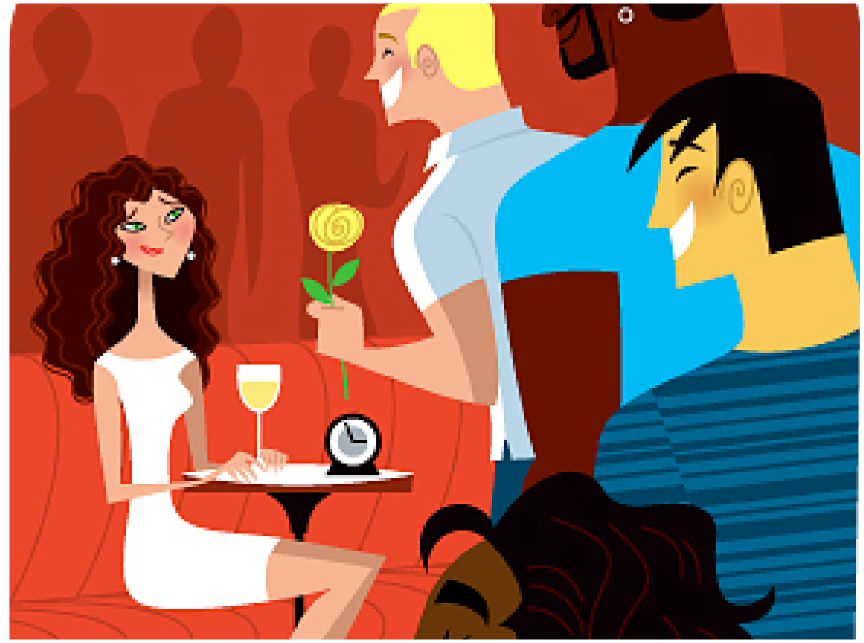
“Investors will take every **rational** step to maximize their wealth”



“Investors have all the **information** available to find the ‘fair value’”

“Any stock that trades over or under its fair value creates a **risk-free** opportunity”

Prospect Theory corrects problems that arise from assumptions given by the EMH



"People can become **irrational** under risky situations"

"People usually take **risky** bets with high potential gains and take **safe** bets with high potential losses"

Such **biased** behavior creates **irrational** market behavior such as market bubbles

Market behavior is defined by the coexistence of rational investors and noise traders

* Rational Investors: informed investors defined by the EMH

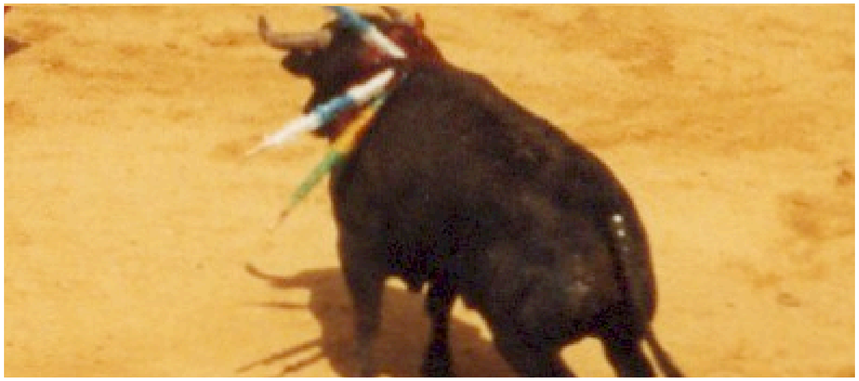
* Noise Traders: uninformed traders defined by Prospect Theory

The **combination** of rational investors and noise traders creates a market dynamic that is initiated by rational investors and executed by noise traders

The coexistence of rational investors and noise traders increases market volatility

Rational Investors + Noise Traders = **lots of volatility**

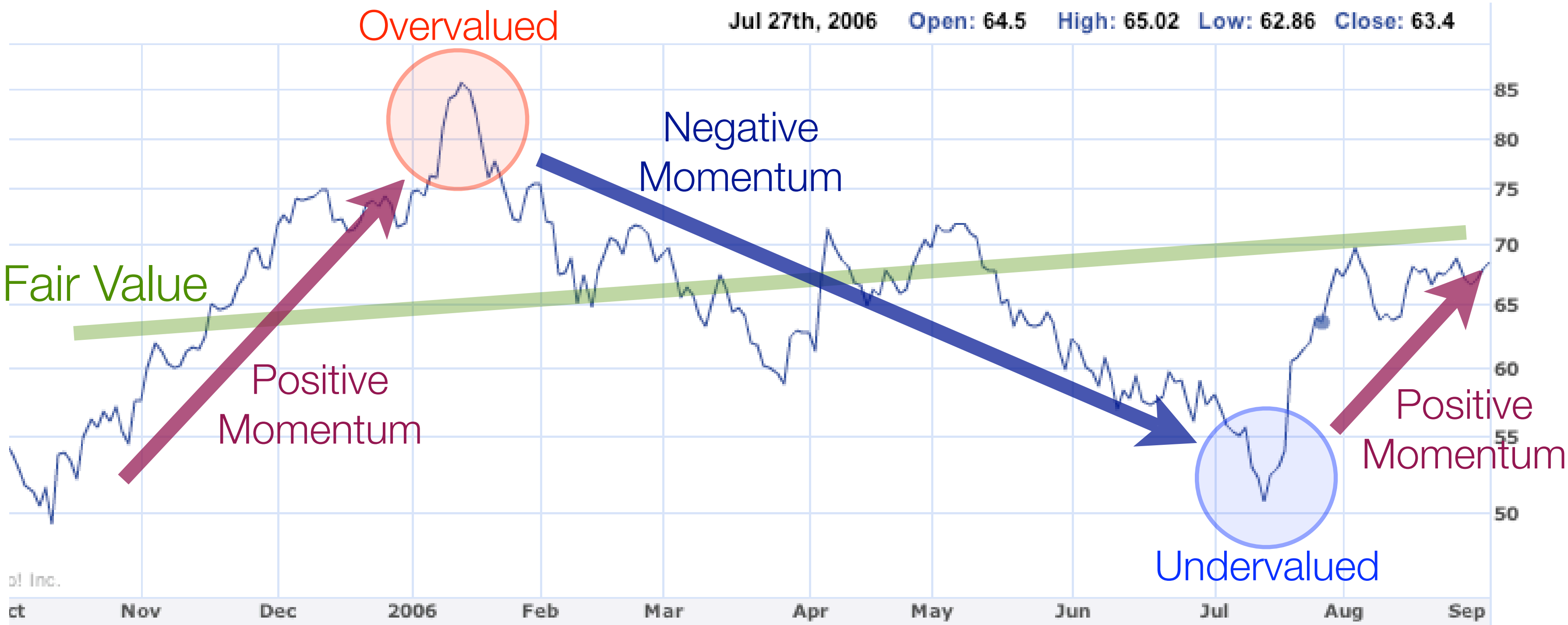
Rational Investors (EMH) : **stable**



Noise Traders (Prospect Theory): **volatile**

Rational investors will **pre-anticipate** stocks prices while noise traders assume that **momentum** will drive prices, resulting in a larger combined market volatility

The difference in trading strategy of the two groups defines market prices and creates volatility



Source: Yahoo! Finance, finance.yahoo.com

"Rational investors make educated guesses to find '**misvalued**' stocks"

"Noise traders find stocks with positive or negative **momentum**"

Such market dynamics create '**harmony**' where severe irrationality will be corrected

Situations when a stock's market price is much higher than its fair value are called market bubbles

Source: Yahoo! Finance, finance.yahoo.com

.com bubble, NASDAQ
1999-2002

Where did the **harmony** go?

Stock market bubbles are created for two reasons

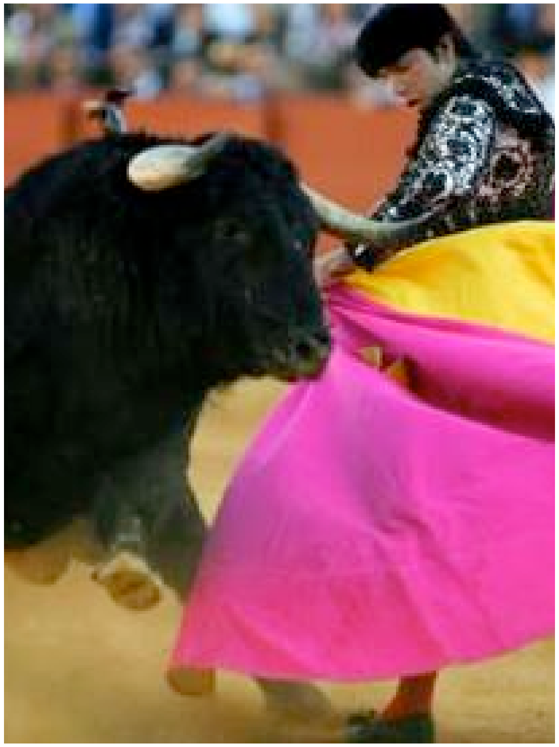
"Rational investors may act like irrational traders at times"

"Rational investors may not have the means to stop irrational prices"

Rational traders **restrain** the market from becoming too irrational and too volatile

Overview


intuit
icos
GENTEX
CORPORATION
NASDAQ
NASDAQ COMPOSITE DAILY VALUE
02:27:18
NASDAQ




POP!