

EFFICIENT MARKETS

- Random walks: no predictable pattern in stock prices.

Q: What if prices were predictable?

A: They would adjust immediately (who would wait around).

- So, market prices should reflect available information.

Q: Why do prices move then?

A: must move when there is new (unexpected) information.

Q: Is new information predictable?

A: Would expect new information to be random (some good, some bad).

- So, would expect deviations of prices from true value to be random (1/3 of stocks overpriced, 1/3 under, 1/3 fairly priced...).
- THIS IS WHAT IS MEANT BY MARKET EFFICIENCY.

EFFICIENT MARKETS

Q: If markets are efficient, why search for stocks?

THE NOTION OF EFFICIENT MARKETS IS A HYPOTHESIS.

➤ TO CHECK IT, YOU TEST WHAT TYPES OF INFORMATION IS REFLECTED IN MARKET PRICES.

- Markets are efficient in the weak-form IF information from trading data such as past price and volume is reflected in prices.
- Markets are semi-strong form efficient IF all public info, (trading + fundamental) is reflected in prices.
- Markets are strong form efficient IF all info (public + private) is reflected in prices.

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IMPLICATIONS OF THE EFFICIENT MARKET HYPOTHESIS (EMH).

If prices reflect available information and new information affects prices randomly THEN:

You wouldn't expect people to generate risk-adjust alpha's consistently.

A: Technical analysis

Technical analysts look at past trading data, prices, volumes, odd lots, short interest etc to develop trading strategies.

IF these trading strategies are successful (i.e they generate positive risk adjusted alpha) => markets not efficient in the weak form.

IMPLICATIONS OF THE EFFICIENT MARKET HYPOTHESIS (EMH).

Introduction to Investments
Prof S G Badrinath
Efficient Markets-Theory

If prices reflect available information and new information affects prices randomly THEN:

You wouldn't expect people to generate risk-adjust alpha's consistently.

A: Technical analysis

B: Fundamental analysis

Fundamental analysts look at financial statements, earnings, dividends, interest rates, risk etc., and develop fair values for stock prices based on some sort of DCF or relative value analysis.

IF their trading strategies are consistently successful THEN

=>markets are not efficient in the semi-strong form.

IMPLICATIONS OF THE EFFICIENT MARKET HYPOTHESIS (EMH).

If prices reflect available information and new information affects prices randomly THEN:

You wouldn't expect people to generate risk-adjust alpha's consistently.

A: Technical analysis

B: Fundamental analysis

C: Portfolio manager, insiders and others with private information

PMs spend resources on information

Insiders often know things that are not public.

IF even these guys cannot consistently generate risk-adjusted alpha,
=> markets are not efficient in the strong form.

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