

Andreas Krause



Market efficiency

Information acquisition

- ▶ Some investors may want to acquire information to make additional profits
- ▶ Information will be costly and the additional profits should cover these costs
- ▶ Their trading behaviour will affect asset prices and may reveal some of the information
- ▶ If information is revealed through their behaviour, this might reduce their profits

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Performance of investments

- ▶ If investors are generating higher profits, they do not necessarily perform better
- ▶ To assess the performance of an investor, the risks they are taking need to be taken into account
- ▶ Investors can exploit differences between asset values and prices only if they generate sufficiently high returns
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Definition of market efficiency

A market is **efficient** if prices include all relevant information

Weak form efficiency: Prices reflect information from past prices

Semi-strong form efficiency: Prices reflect all publicly available information

Strong form efficiency: Prices reflect all available information, including private information

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Information acquisition and market efficiency

Implications of market efficiency

- ▶ If markets are efficient, no one can make profits from information (making costly information acquisition unprofitable)
- ▶ This leads to the paradox that markets which are too efficient, cannot exist
- ▶ If a market is not perfectly efficient, would all investors acquire information?
 - ! Firstly, the inefficiency must be large enough such that information costs can be recovered
 - ! Secondly, if all investors are informed, they will drive the market back to efficiency

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The importance of performance measurement

- ▶ If exploiting market inefficiencies, investors could generate higher returns than holding the asset
- ▶ However, relying on information is also risky as information can be wrong
- ▶ We need to take into account the risks investors take to assess if they are generating economic profits

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Performance evaluation

Assessing investment performance

- ▶ Investors need to take into account the risks of their trading strategies to determine whether they are profitable
- ▶ Which performance measure is chosen, will depend on the risk that is relevant to an investor
 - After taking into account the systematic risks taken, an investor shows a higher return than the market. Is he able to exploit market inefficiencies?
 - The investor might have taken on additional risks that need to be compensated. While it looks like the investor is successful, it might be compensation for idiosyncratic risks

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Summary of key results

- ▶ Efficient markets do not allow investors to generate profits and efficient markets cannot exist.
- ▶ Even if markets are not efficient, investors need relevant information to make profits.
- ▶ With relevant information, they can make economic profits only if they do not take on too much additional risk.

Summary of key results

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