A wide-angle photograph of a city skyline viewed from across a body of water. In the foreground, there's a calm, blue-grey body of water. Behind it, a row of older, multi-story brick buildings with dark roofs and white window frames stretches across the middle ground. In the background, a dense cluster of modern skyscrapers with glass facades rises against a clear, light blue sky. The buildings vary in height and design, including some with curved or faceted exteriors. A few construction cranes are visible on the right side of the skyline. The overall scene is bright and clear, suggesting a sunny day.

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Proprietary trading

Exploiting their informational advantage


- ▶ Investment banks generate substantial profits by trading on their own account
- ▶ Investment banks use their capital base and informational advantage to make profits from trading in financial markets
- ▶ Investment banks trade in stock markets, bond markets, commodities, foreign exchange markets, derivatives markets, cryptoassets

Concerns about proprietary trading

- ▶ Concerns about proprietary trading arise from investment banks using information before revealing it to clients
- ▶ Investment banks could provide advice that allows their traders to generate profits
- ▶ Investment banks can take considerable risks when holding large positions
- ▶ Investment banks themselves are exposed to risks arising from the behaviour of traders
- ▶ We will look at incentives investment banks and traders seeking to maximize their own profits

Gaining knowledge

- ▶ In order to generate profits from trading, traders need to be informed
- ▶ The costs of acquiring and processing information has to be balanced against its benefits of generating profits
- ▶ We will investigate how much investment banks should invest into acquiring expertise



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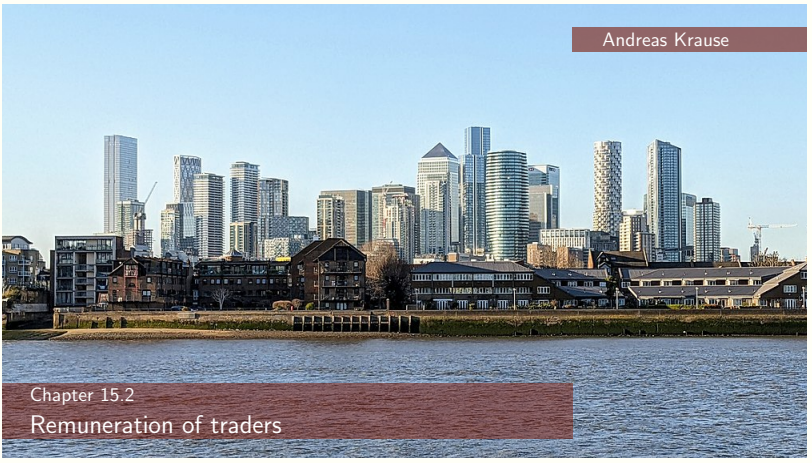
Chapter 15.1
Investment in expertise

Discussion of the model results

- ▶ Investment banks over-invest in expertise as an arms race against other investment banks
- ▶ Despite investing more into their expertise, traders do not generate additional profits
- ? If having no expertise would generate higher profits to all investment banks, why do they invest into expertise?
- ! Higher profits are only generated if all investment banks do not acquire expertise, but one investment bank acquiring expertise will increase that investment bank's profits and reduces the profits of other investment banks, leading to the arms race

Bonus culture in trading

- ▶ Traders are commonly paid bonuses based on their performance
- ▶ High remuneration of traders might make proprietary trading unprofitable
- ▶ We will investigate under which conditions proprietary trading is conducted and bonus payments are optimal



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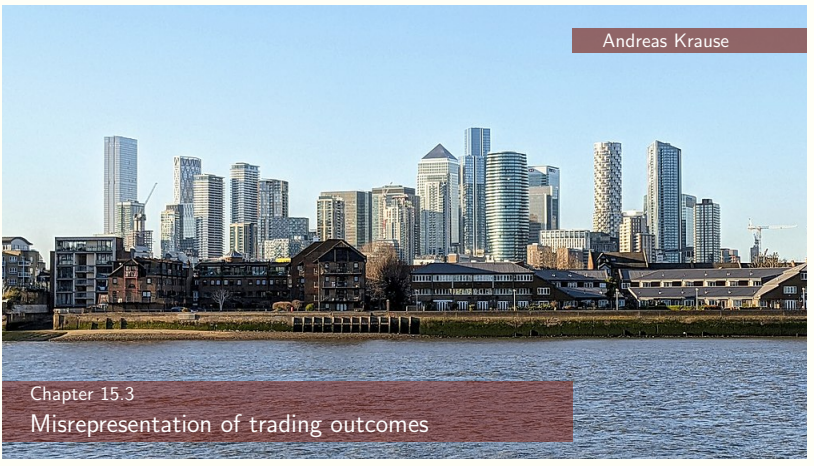
Chapter 15.2
Remuneration of traders

Discussion of the model results

- ▶ Proprietary trading is profitable if the informational advantage of investment banks is large enough to generate profits
- ▶ Investment banks use bonus payments as a tool to prevent low-quality traders from seeking employment
- ? Why would investment banks engage in proprietary trading where adverse selection is low?
- ! Investment banks might have strategic reasons to retain presence in a market, such as attracting clients or showing their expertise

Exaggerating trading profits

- ▶ There have been many cases where traders have claims to have generated profits, but actually hidden losses
- ▶ Supervision and control systems around proprietary trading are traditionally very slack
- ▶ We will look at the incentives of traders to exaggerate their profits and their supervisors to not thoroughly investigate their claims of making profits



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Chapter 15.3
Misrepresentation of trading outcomes

Discussion of the model results

- ▶ Traders weigh the benefits of misrepresenting their profits against the costs of being detected
- ▶ Their supervisors have few incentives to report such behaviour as they benefit from the reported profits
- ? Is misrepresenting their profits the only way traders can improve their remuneration?
- ! Traders can also make additional profits by engaging in larger positions than allowed, trading in securities they are not authorised to trade, or keep positions open for longer than they are allowed, for example over night

Summary of key results

- ▶ Investment banks will engage in proprietary trading only if the possible informational advantage is sufficiently high
- ▶ Traders in investment banks overinvest into their expertise
- ▶ Unless investment banks can identify the quality of their traders precisely, they will remunerate traders through bonuses
- ▶ This reliance on bonuses provides strong incentives for traders to exaggerate profits and the incentives for monitoring are weak



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