

# Too Fast: The Greed of Speed

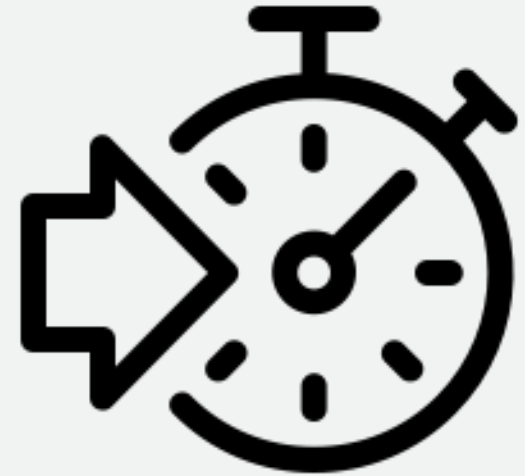
馬健原 Jeffrey Ma, 林鈞樂 Jules Linden

# Agenda

- What is the speed of market?
- Disadvantage of too fast: stock trading
- Benefit of a faster market: Victorian Internet
- Law clerk example
- Conclusion

# What is the speed of market ?

Speed is an indicator of a market, measuring if transactions in the market fast or slow.



# What is the speed of market ?

Speed can influence the thickness of a market.

Moreover, speed can make a market thrive or tear it apart.

# Agenda

- What is the speed of market?
- Disadvantage of too fast: stock trading
- Benefit of a faster market: Victorian Internet
- Law clerk example
- Conclusion

# Disadvantage of too fast: stock trading

- “First come, first serve”
- By sending trade order faster, traders can make higher profit.
- Thus, people started to seek high speed channel to send their order.



# Disadvantage of too fast: stock trading

- However, speed chasing caused several problem.....

# Disadvantage of too fast: stock trading

The market's liquidity becomes worse

Trading with high speed channels is like a kind of arbitrage, so professional traders will do less trade to avoid loss.



# Disadvantage of too fast: stock trading

A risk of losing control

There were several incidents that people couldn't completely control their trading machine and caused harm.

# Disadvantage of too fast: stock trading

How to solve these problem?

A better market design. Speed chasing is a way with low efficiency (Just like queuing), so a system that higher bid wins is more effective.



# Agenda

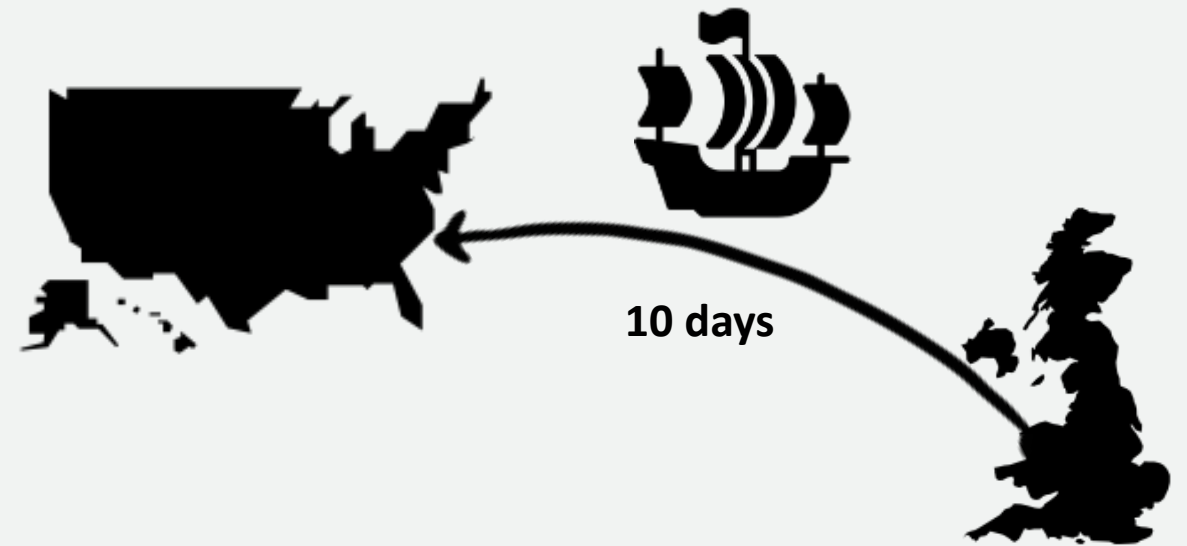
- What is the speed of market?
- Disadvantage of too fast: stock trading
- Benefit of a faster market: Victorian Internet
- Law clerk example
- Conclusion

# Benefit of a faster market: Victorian Internet

- Beneficial to slow down markets to human speed
- Speed needs to be able to reflect changes in the world

# Benefit of a faster market: Victorian Internet

- 19<sup>th</sup> century cotton market
- Information traveled slow
- Matching D&S was difficult



# Benefit of a faster market: Victorian Internet

Solution: Telegraph

- Allowed to exchange information within hours
- Supply of cotton better matched the Demand
- Prices became less volatile



# Agenda

- What is the speed of market?
- Disadvantage of too fast: stock trading
- Benefit of a faster market: Victorian Internet
- Law clerk example
- Conclusion

# Law clerk example

- Last week: making decisions too early creates bad matches
- What about making decision too fast?





# Law clerk example

I received the offer via voicemail while I was in flight to my second interview. The judge actually left three messages. First, to **make the offer**. Second, to tell me that I should respond soon. Third, to **rescind the offer**. It was a **35 minute** flight.

- -2005 applicant for a Federal Judicial Clerkship

# Law clerk example

- Exploding offers
- Moving to early? Set up rules: earliest offering dates
- Congestion: Not enough time to consider all options

# Law clerk example

## Why exploding offers?

- Judges made offers fast
- Leave offer open for too long, the next best clerk might be gone

# Law clerk example

Who benefits most from exploding offers?

- Low-prestige judges?
- Top-prestige judges?
- Almost-top judges!!



# Law clerk example

## Consequences:

- Top students may not be allocated to Top courts
- Students have to make uninformed choices under time-pressure
- Rules are broken

# Law clerk example

Changes in design fail if they address the symptoms  
and not the cause of market failure



# Agenda

- What is the speed of market?
- Disadvantage of too fast: stock trading
- Benefit of a faster market: Victorian Internet
- Law clerk example
- Conclusion

# Conclusion

Even when the market was thick and offers were made at the same time

➤ Exploding offers:

- Force to decide before receiving other offers
- Without full information
- Rules were not sufficient



# Conclusion

How to allow different offers to be made and considered at the same time?

- Without congestion
- Without exploding offers