Margin Call

Director: J. C. Chandor

US (2011)

Synopsis (without spoilers)

- A Wall Street bank needs to dump all its mortgage-backed securities
  - before the market realises they are worthless
  - but triggers that very realization
- Given survival, there is big money to be made in the ensuing crisis

Quantitative models (in the movie)

- The Value at Risk of the bank (based on historical simulation) seems enormous:
  - Within few days there is a non-trivial probability of a massive depreciation of the bank's assets
- It sends a warning signal
  - The boss John Tuld uses it to justify his order: «We must be the first to sell»

Algorithms and markets

- Did program trading exacerbate the 1987 Wall Street Crash?
  - Sale in a deteriorating market
- Did spoofing algorithms trigger the 2010 Flash Crash?
  - Creating an illusion of exchange pessimism to attract high-frequency traders

Artificial-Intelligence Investment Strategies

- “Hedge fund Renaissance pulls back on hunt for market trends” (Financial Times, April 8, 2019)
  - Some trades have become too crowded
  - *Data is not information, and information is not insight*

The Human Factor

- Top managers may not be quantitative wizards

- Humans read a signal the way they like

- Aristotle (*Politics,* 1259 a 6-23) tells us that Thales of Miletus cornered the oil market via the monopoly of the olive presses