Georgia Institute of Technology

Computational Investing, Part I

043: Company Value

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Find out how modern electronic markets work, why stock prices change in the ways they do, and how computation can help our understanding of them. Learn to build algorithms and visualizations to inform investing practice.

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What's a Company Worth?

- Fundamental analysis: Value is sum of
  - Book value
  - Future returns, or "intrinsic" value

Intrinsic Value

- “future income generated by the asset, and discounting it to the present value.”
- sum(dividend*gamma^i)
  - = dividend * 1/(1-gamma)

Book Value

- “total assets minus intangible assets and liabilities.”

What's a Company Worth?

- Why not ask the market?
- How does the market know?

- value = #shares outstanding * price

- S&P 500

Objective Recap:

- Understand multiple methods of estimating a company's value:
  - Market cap
  - Future dividends
  - Book value