Assignment

- Build a **linear** model to find a best portfolio.
- First build your model in Excel (Use the file Portfolio.xls)
- Then build your model in AMPL (Use the file Portfolio.mdb)
- Deliverables
  - Models (Self documenting)
  - Solutions (Self documenting)
- Due Date: Beginning of Class, Lecture 7

Portfolio Management

- Individuals with over $100,000 to invest
- Invest in no-load mutual funds
- Quarterly fees based on value, not trades
- An analytical approach

Three Stages

- Financial Analysis
  - Define goals
  - Assess Risk vs. Return
- Asset Allocation
  - Allocate assets among classes of investments
  - Track and forecast market swings
- Fund Selection
  - No-Load Funds
  - At least $40 million
  - Established Performance

The Philosophy

How well a portfolio performs depends more on the markets selected than on the individual securities within the markets

Asset Allocation

- Asset Classes
  - Treasury Bills
  - Small Value Funds
  - Large Growth Funds
  - Europe
  - Emerging Markets
  - HighYield
- Asset Allocation
  - Each Investor has target for each asset class

Fund Selection

- Screen Funds
- Rank in each Class for each Fund
  - Fidelity Equity Income II
    - LV LG SV JA EU GV HY
    - 66 4 16 2 1 6 5
    - Roughly speaking, the rank is the % of each funds investments that is in the asset class, e.g., Fidelity Equity Income II has 4% of its assets in Large Growth.
- Select Funds that meet the target allocation
  - Minimize the total "deviation" from the targets
  - Deviation is |Actual - Target|

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