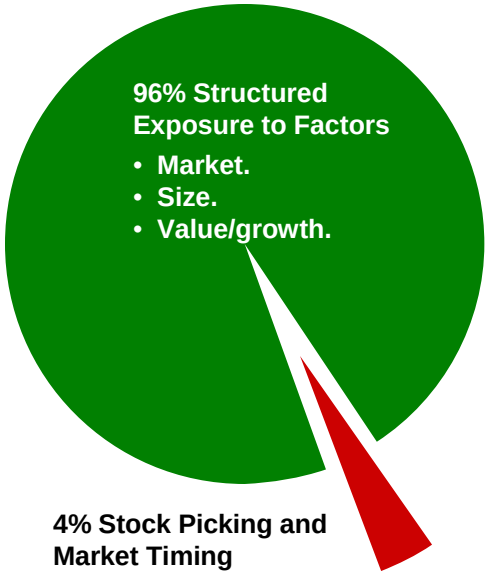
Structure Determines Performance

- Over 96% of the variation in returns is due to risk factor exposure.[1]
- This leaves only 4% of the variation to explain.
- After fees, traditional management typically reduces returns.



The Model Tells the Difference between Investing and Speculating

Average Expected Return [minus T-bills] = **Average Excess Return** + **Sensitivity to Market** [market return minus T-bills] + **Sensitivity to Size** [small stocks minus big stocks] + **Sensitivity to BtM** [value stocks minus growth stocks] + **Random Error e(t)**

Priced Risk
- Positive expected return.
- Systematic.
- Economic.
- Long-term.
- Investing.

Unpriced Risk
- Zero expected return.
- Noise.
- Random.
- Short-term.
- Speculating.

1. Source: Dimensional Fund Advisors study (2002) of forty-four institutional equity pension plans with $452 billion total assets.
Factor analysis run over various time periods, averaging nine years. Total assets based on total plan dollar amounts as of December 31, 2001.