BEHAVIORAL CORPORATE FINANCE

DEVIATIONS FROM STANDARD CORPORATE FINANCE

- Corporate finance:
  - aims to explain the financial contracts and the real investment behavior that emerge from the interaction of managers and investors
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  - Irrational investor behavior
  - Irrational managerial behavior

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- Irrational Investors:
  - assumes that securities market arbitrage is imperfect, and thus that prices can be too high or too low
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- Two approaches have very different normative implications
  - If irrationality is on investor: efficiency requires insulating managers from short-term share price pressures
  - If irrationality is on manager: efficiency requires reducing discretion and obligating managers to respond to market price signals

BCF: IRRATIONAL INVESTORS

- Two requirements for theory/empirics:
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- Why assume (2):
  - corporate managers have superior information about their own firm
  - corporate managers also have fewer constraints than equally "smart" money
  - managers might just follow intuitive rules of thumb that allow them to identify mispricing even without a real information advantage

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- $\lambda = 1$: managers cares about long run
- $\lambda = 0$: managers cares about short run

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- **Cross-Sectional**: managerial horizons varies across firms in a measurable way

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  - Overall, investment seems to respond to mispricing, but:
    - magnitude uncertain
    - efficiency implications unclear
    - possible that managers are overoptimistic rather than strategic

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  - Why do managers prefer a stock-for-stock merger to an equity issue if the market timing gains are similar:
    - merger more effectively hides the underlying market timing motive from investors
    - price impact of a stock-financed merger can be much smaller than the price impact of an SEO

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  - Empirically:
    - choice between debt and equity does appear to be swayed by the level of interest rates
    - aggregate share of long-term debt issues, negatively related to the term spread
    - debt issues are followed by low equity returns

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        - negative relationship between “external finance weighted-average” of a firm’s past MTB and leverage
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  - Empirically, international market timing:
    - foreign firms tend to issue more debt in the US and the UK when rates there are low relative to domestic rates

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  - Empirically:
    - firms changed to “dotcom” name during internet boom and earn 74% AR; internet crash remove “dotcom” and earn 70% AR
    - mutual fund name changes do not predict fund performance, yet inflows increase dramatically

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- Empirical support:
  - optimism can be modeled as an overestimate of a mean and overconfidence as an underestimate of a variance
  - overconfidence leads naturally to more risk-taking
  - responsibility of future success can lead to biases

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- Differentiating wrt e: <u>Financial Policy</u>

$$(1+\gamma)f_e(K,.)=\gamma\left(f(K,.)+ef_e(K,.)\right)$$

BCF: COMPARISON

- **Irrational Investors**:

$$\max_{\mathbf{K},\mathbf{e}} \boldsymbol{\lambda}[\mathbf{f}(\mathbf{K},.) - \mathbf{K} + \mathbf{e}\boldsymbol{\delta}(.)] + (\mathbf{1}-\boldsymbol{\lambda})\boldsymbol{\delta}(.)$$

$$f_K(K,.) = 1 - \left(e + \frac{1-\lambda}{\lambda}\right)\delta_K(.)$$

$$-f_e(K,.) = \delta(.) + \left(e + \frac{1-\lambda}{\lambda}\right)\delta_e(.)$$

- **Irrational Mangers**::

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  - need to sepearate γ sue to overconfidence and γ due to agency or AI problems

BCF: IRRATIONAL MANAGERS & INVESTMENT POLICY

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  - entrepreneurial startups: generally made under a halo of overconfidence and optimism
    - French CEOs: at startup, 56% expect “development” in the near future, and 6% expect “difficulties”

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  - Mature firms:
    - comparison forecast and actual construction costs: strong optimism bias in costs; actual costs typically more than double the initial estimates
    - nice manager proxy for optimism (MPO): the propensity for a manager to voluntarily hold in-the-money stock options in his own firm
    - sensitivity of investment to cash flow is higher for the more optimistic CEOs; especially in equity-dependent firms

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    - investors are more skeptical about bid announcements when they are made by optimistic CEOs

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    - need to check whether behavior is more prevalent in firms run by optimists: distinguish optimism from other explanations of pecking order behavior
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  - optimal contract transfers control when changes are necessary: optimists are inefficient
  - optimal contract "pays the entrepreneur with dreams"
    - French firms: use of short-term debt is positively related to an *ex post* measure of optimistic expectations
    - use of short-term debt is positively related to psychological expectations (mental depression)

BCF: IRRATIONAL MANAGERS & OTHER DECISIONS

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  - "throw good money after bad"
    - early stage firms appear highly reluctant to abandon their only project even when prospects seem bad
    - positive AR for termination of historically bad projects