# MS 2018（4-6）

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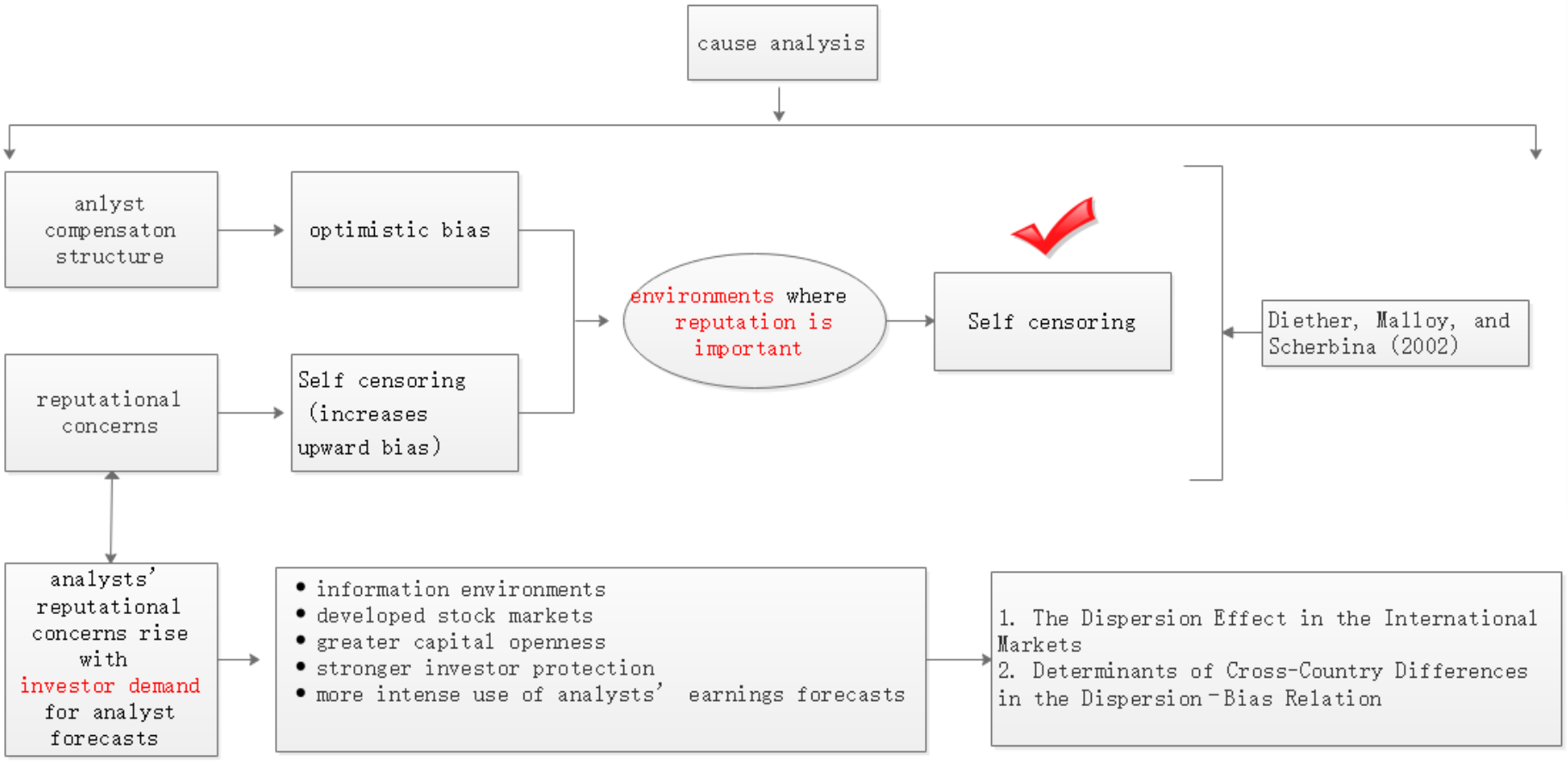
# Contents

# Analysts' Reputational Concerns, Self-Censoring,and the International Dispersion Effect

a negative cross-sectional relation between the dispersion in analysts' earnings forecasts and future returns of stocks.


cause analysis
anlyst compensaton structure
optimistic bias
reputational concerns
Self censoring (increases upward bias)
environments where reputation is important
Self censoring
Diether, Malloy, and Scherbina (2002)
analysts' reputational concerns rise with investor demand for analyst forecasts
• information environments
• developed stock markets
• greater capital openness
• stronger investor protection
• more intense use of analysts' earnings forecasts
1. The Dispersion Effect in the International Markets
2. Determinants of Cross-Country Differences in the Dispersion-Bias Relation

stock. This self-censoring is due to analysts' incentive structure. Analysts rely on firm management for tips about future earnings, and risk being cut off when they voice pessimism about a firm's prospects. Additionally, analysts earn a percentage on commissions from stock sales and get rewarded whenever their employer wins lucrative investment banking deals, which furthers their incentives to follow stocks for which they have an optimistic outlook.

The self-censoring of pessimistic analysts creates an upward bias in consensus earnings-per-share forecasts. This bias is higher the larger the initial magnitude of disagreement about the firm's earnings. The following argument shows the causality involved. It is natural to assume that the more spread out the earnings estimates, the lower will be the cut-off point below which analysts will not issue forecasts. Suppose that the true underlying

normal distribution, respectively.[13] This shows that the bias in the mean reported forecast increases with the dispersion of the underlying distribution. If stocks are priced correctly with respect to the mean reported earnings forecast, they will be more overvalued the higher the amount of disagreement about the firm's earnings. This argument is similar in spirit to

# Background

- Diether, Malloy, and Scherbina (henceforth DMS) (2002) document the dispersion effect: a negative cross-sectional relation between the dispersion in analysts' earnings forecasts and future returns of U.S. stocks. This is viewed as anomalous because dispersion is often considered as a proxy for risk, and we would normally expect the bearing of larger risk to be compensated by higher future expected return.
- The literature offers three explanations for the dispersion effect.
  - The first explanation by DMS (2002), based on Miller's (1977) theory, posits that forecast dispersion is a proxy for different opinions among investors (the difference-in-opinion explanation/ short-sale constraints).

- The second explanation, also by DMS (2002), is that analysts' incentive structure encourages them to self-censor their unfavorable earnings forecasts (the analyst-incentive explanation).
  - The more spread out the underlying earnings forecasts are, the more pessimistic the self-censored forecasts are, and the greater the upward bias in the mean reported forecast is. This leads to a positive relation between the upward bias in the mean reported forecast and the dispersion of analysts' reported forecasts (henceforth the **dispersion–bias relation**). If investors do not properly adjust for this bias, they will overvalue stocks with higher forecast dispersion, which results in a negative relation between forecast dispersion and future stock returns.
- The third explanation, by Johnson (2004), argues that forecast dispersion is a proxy for idiosyncratic parameter risk. In the presence of leverage, expected returns decrease with idiosyncratic parameter risk, as equity is a call option on a firm's assets and the option value increases with idiosyncratic asset risk (the parameter risk explanation)

# Main work

- Appendix: A Model of Analysts’ Incentives and Reputational Concerns
  - the positive dispersion–bias relation is stronger in countries where analysts have greater reputational concerns.
- Sample and Data
  - The data on analysts’ earnings forecasts are obtained from the Institutional Brokers Estimate System (I/B/E/S).
  - Dispersion in analysts’ earnings forecasts (DISP)： as the ratio of the standard deviation of analysts’ current fiscal year annual earnings per share forecasts to the absolute value of the mean forecast .
  - February 1990 to December 2013.
  - comprises 1,241,339 stock-month observations from 23 nonU.S. countries and 902,373 stock-month observations from the United States.

- The Dispersion Effect in the International Markets
  - ☑ Portfolio Strategy（investigate whether the dispersion effect exists in the international markets）
  - ☑

**Table 2.** International Dispersion Effect

| | Panel A: Portfolio return | | | | | |
|---|---|---|---|---|---|---|
| Country | D1 | D2 | D3 | D4 | D5 | D1 – D5 |
| Australia | 1.32 | 1.13 | 1.09 | 0.72 | 0.02 | 1.30 (3.64) |
| Brazil | 1.22 | 1.13 | 0.76 | 0.70 | 0.19 | 1.03 (2.84) |

$$RET_{i,t+1} = \beta_0 + \beta_1 DISP_{i,t} + \beta_2 LOGMV_{i,t} + \beta_3 LOGBM_{i,t} + \beta_4 BMDUM_{i,t} + \beta_5 MOM_{i,t} + \beta_6 MOMDUM_{i,t} + \varepsilon_{i,t+1}, \quad (1)$$

- Determinants of Cross-Country Differences in the Dispersion Effect
  - ☑ We then investigate how the dispersion effect varies across countries
    - transparent information environments（1990 (1995) CIFAR index/the World Economic Forum’s Global Competitiveness Report (GCR)）
    - developed stock markets
    - greater capital openness
    - stronger investor protection
    - more intense use of analysts’ earnings forecasts

$$\begin{aligned} RET_{i,j,t+1} &= \beta_0 + \beta_1 DISP_{i,j,t} + \beta_2 LOGMV_{i,j,t} + \beta_3 LOGBM_{i,j,t} \\ &\quad + \beta_4 BMDUM_{i,j,t} + \beta_5 MOM_{i,j,t} + \beta_6 MOMDUM_{i,j,t} \\ &\quad + \beta_7 DISP_{i,j,t} \times CHAR_{j,t} + \beta_8 CHAR_{j,t} + \varepsilon_{i,j,t+1}, \quad (2) \end{aligned}$$

- Determinants of Cross-Country Differences in the Dispersion–Bias Relation

- The Dispersion–Bias Relation in International Markets

$$BIAS_{i,t} = \beta_0 + \beta_1 DISP_{i,t} + \beta_2 LOGMV_{i,t} + \beta_3 LOGBM_{i,t} + \beta_4 BMDUM_{i,t} + \beta_5 MOM_{i,t} + \beta_6 MOMDUM_{i,t} + \varepsilon_{i,t}, \quad (4)$$

where $BIAS_{i,t}$ is bias in the mean reported forecast for stock $i$ in month $t$, which is measured as analysts' mean reported earnings per share forecast for stock $i$ in month $t$ minus the corresponding actual earnings per share announced in the future, scaled by the absolute value of the latter. The definitions of the explana-

- Country Characteristics and the Dispersion–Bias Relation Across Countries（ test whether the dispersion–bias relation is stronger in countries where investor demand for analyst forecasts is higher）

$$BIAS_{i,j,t} = \beta_0 + \beta_1 DISP_{i,j,t} + \beta_2 LOGMV_{i,j,t} + \beta_3 LOGBM_{i,j,t} + \beta_4 MOM_{i,j,t} + \beta_5 BMDUM_{i,j,t} + \beta_6 MOMDUM_{i,j,t} + \beta_7 DISP_{i,j,t} \times CHAR_{j,t} + \beta_8 CHAR_{j,t} + \varepsilon_{i,j,t}. \quad (5)$$

- A Natural Experiment: The Asian Financial Crisis of 1997–1998/capital controls

# Conclusion

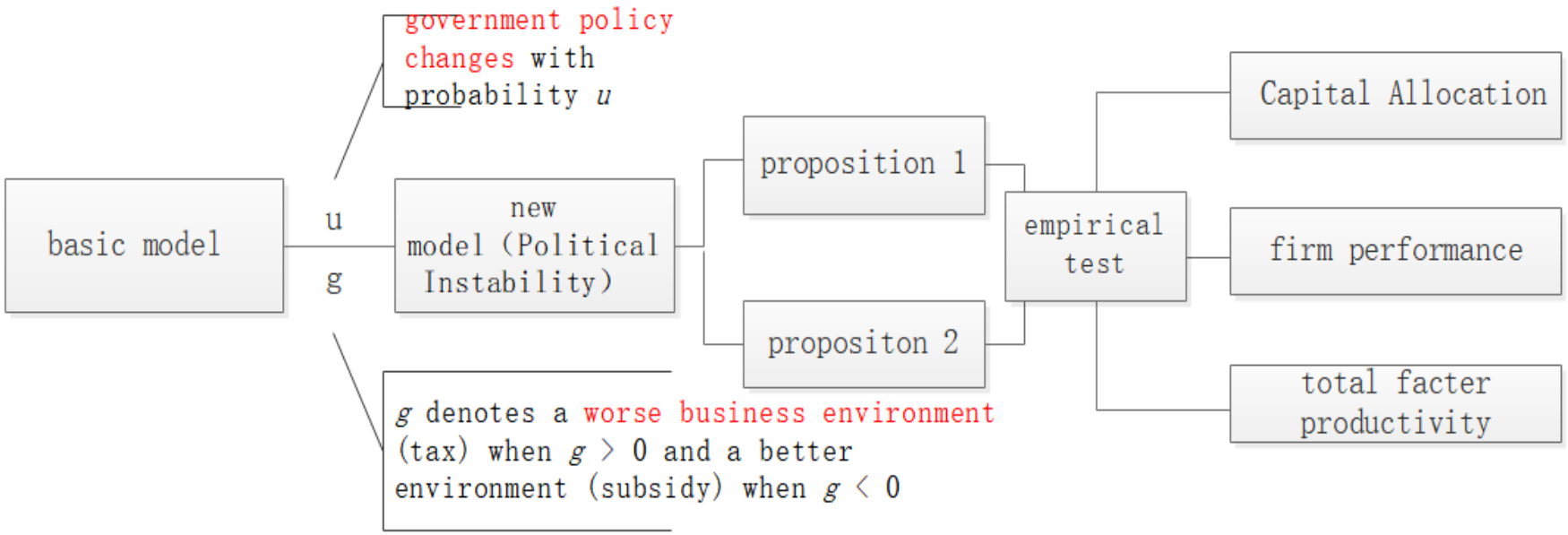
- the dispersion effect is an international phenomenon. Stocks with higher forecast dispersion earn lower future returns and have a greater upward bias in the mean reported earnings forecast in international markets.
- Both phenomena are stronger in countries with more transparent information environments, more developed stock markets, stronger investor protection, greater capital openness, and more intense usage of analysts' earnings forecasts.
- Using the 1997–1998 Asian financial crisis as a natural experiment, we find that both phenomena become weaker postcrisis in Malaysia, which imposed capital controls, relative to Thailand and South Korea, which opened their financial markets to foreigners.
- These results suggest that analysts in countries with greater demand for their forecasts and hence greater concerns for reputations are more likely to self-censor their low forecasts, which leads to a stronger dispersion–bias relation and a stronger dispersion effect.

# Contributions

- using international data, we provide an out-of-sample test for DMS's (2002) finding.
- our cross-country analyses and difference-in-differences tests offer new evidence that is consistent with the analyst incentive explanation for the dispersion effect.This is especially important, as the current literature seems to have largely ignored this explanation; most studies that mention the dispersion effect refer only to the difference-in-opinion explanation or, to a lesser extent, to the parameter-risk explanation.

# Foreign Risk, Domestic Problem: Capital Allocation and Firm Performance Under Political Instability

Burcin Col,[a] Art Durnev,[b] Alexander Molchanov [c]


government policy changes with probability u
basic model
u
g
new model (Political Instability)
proposition 1
propositon 2
empirical test
Capital Allocation
firm performance
total facter productivity
g denotes a worse business environment (tax) when g > 0 and a better environment (subsidy) when g < 0

# Background

- **EX：** export flows from the U.S. metal industry to Egypt
- Although a number of factors could potentially be responsible for this, it is intuitive to think that business activity in a politically volatile region channelled that instability into performance of domestic firms.
- Numerous reputable companies and think-tanks have pointed out that political instability, especially instability driven by national elections, and its impact on businesses are on the rise in both developing and developed countries.
- A new stream of literature argues that local economic and political risks affect how firms invest, and that higher risks deteriorate subsequent firm performance.

# Main work

- Model and Hypotheses

$$\max_{I_t, K_{t+1}, N_t} \quad V_0 = E_t \sum_{t=0}^{\infty} (1/(1+r))^t (A_t F(K_t, N_t) - \omega_t N_t - I_t - (b/2)(I_t/K_t)^2 K_t), \quad (1)$$

$$\text{subject to } K_{t+1} = K_t + I_t. \quad (2)$$

$$\max_{I_t, K_{t+1}, N_t} \quad V_e = E_e \sum_{t=e}^{\infty} (1/(1+r))^t (A_t F(K_t, N_t)(1-ug) - \omega_t N_t - I_t - (b/2)(I_t/K_t)^2 K_t), \quad (4)$$

$$\text{subject to } K_{t+1} = K_t + I_t. \quad (5)$$

$$L = E_e \sum_{t=e}^{\infty} (1/(1+r))^t (A_t F(K_t, N_t)(1-ug) - \omega_t N_t - I_t - (b/2)(I_t/K_t)^2 K_t + \dot{q}_t (K_t + I_t - K_{t+1})). \quad (14)$$

$$\partial L/\partial K_{t+1} = 0 \Leftrightarrow \dot{q}_e = 1/(1+r) E_e [A_{e+1} F_K(K_{e+1}, N_{e+1}) \cdot (1-ug) + (b/2)(I_{e+1}/K_{e+1})^2 + \dot{q}_{e+1}]. \quad (15)$$

*Proposition 1. When political instability increases, for the case of a worse business environment, marginal q temporarily decreases from the optimal level of 1, indicating initial overinvestment. In this case, investment drops, and capital stock drops. When political instability increases, for the case of a better business environment, marginal q temporarily increases from the optimal level of 1 indicating initial underinvestment. In this case, investment increases, and capital stock increases. The above effects are stronger for elections that result in larger policy changes.*

- *Proposition 2. When political instability increases, firm valuation is temporarily lower, independent of whether instability results in a worse business environment or a better business environment. Total factor productivity, on the other hand, decreases for a worse business environment and increases for a better business environment. The above effects are stronger for elections that result in larger policy changes.*

- *Data, Variables, and Empirical Setup*
  - two samples:a panel of firms and a panel of industries.
  - For the first sample, we consider firms from U.S. manufacturing industries (Standard Industrial Classification (SIC) codes 2000–3999). For the second sample, we aggregate variables at the three-digit SIC levels.
  - Sample years are from 1997 through 2006
  - Financial and accounting data come from COMPUSTAT and the Center for Research in Security Prices.

- Political Instability Indexes
  - Using elections and textual analysis of local media during national elections, we construct a novel index of political instability.
    - ✔ foreign sales–elections political instability index（ foreign sale shares/0.072×1+0.062×1+0.041×0=0.134）
    - ✔ number of countries–elections( the number of times a company mentions a foreign country in its 10-K financial statement,weigh it by the election dummy variables.)
    - ✔ foreign sales–text-based political instability index（newspaper : search words are as follows: “uncertain,” “unpredicted...”,the number of words/weigh the text-based instability by firm foreign sales）
- Marginal q Estimation and Justification
- Total Factor Productivity Estimation, Value
- Results

**Table 4.** The Effect of Political Instability on Capital Allocation and Value, Firm Analysis

| Dependent variable: | \|Firm $mq-1$\| | \|Firm $mq-1$\| | \|Firm $mq-1$\| | Firm value | Firm value | Firm value |
|---|---|---|---|---|---|---|
| Specification: | 1 | 2 | 3 | 4 | 5 | 6 |
| *Foreign sales–elections* | 0.168*** | — | — | −0.604*** | — | — |
| | (0.00) | | | (0.00) | | |
| *Number of countries–elections* | | 0.016*** | | | −0.038*** | |
| | | (0.00) | | | (0.00) | |
| *Foreign sales–text-based instability* | — | — | 0.093*** | — | — | −0.054*** |
| | | | (0.00) | | | (0.00) |
| *Foreign sales or number of countries* | −0.130 | −0.122 | −0.137 | 0.021* | 0.015* | 0.019* |
| | (0.17) | (0.14) | (0.12) | (0.07) | (0.07) | (0.08) |
| *Elections or text-based instability* | 0.022** | 0.025*** | 0.017** | −0.072 | −0.070 | −0.061 |
| | (0.03) | (0.00) | (0.05) | (0.24) | (0.26) | (0.28) |
| *Foreign sales or number of countries–U.S. elections* | 0.022 | 0.027 | 0.024 | −0.014* | −0.012* | −0.018* |
| | (0.17) | (0.19) | (0.18) | (0.10) | (0.08) | (0.07) |

Firm capital allocation efficiency is measured by the distance of Tobin’s marginal q to its optimal level.

# Conclusion

- As a political regime becomes less stable, independent of whether the regime becomes less business-friendly or more business-friendly, firms invest suboptimally (i.e., they either overinvest or underinvest), and their marginal q's diverge further from an optimal level.
- U.S. firms and industries with a greater exposure to election-induced political instability experience disruptions of investment efficiency that lead to lower firm valuations and lower total factor productivity.
- International trade is a significant conduit of foreign political instability into U.S. markets.

# Contributions

- First, we develop a theoretical model of political instability, firm investment, and capital allocation.
- Second, by analyzing thousands of media articles, we construct a novel text-based index of election instability.
- Third, we empirically relate foreign political instability to performance of domestic economy at the firm and industry levels.

# Asset Pricing with Spatial Interaction

Steven Kou,[a] Xianhua Peng,[b] Haowen Zhong[c]

# Background

- A central issue in financial economics is to understand the risk–return relationship for financial assets, as exemplified by the classical capital asset pricing model (CAPM) and arbitrage pricing theory (APT).
- In terms of empirical performance, APT improves on CAPM in that cross-sectional differences in expected asset returns are better accounted for by multiple factors in APT.
- However, the APT models with the famous factors in existing literature do not seem to capture all the cross-sectional variations in realized asset returns.

**Table 1.** The Stock Indices of the 11 Eurozone Countries with Developed Stock Markets

| Country | Austria | Belgium | Finland | France | Germany | Greece | Ireland | Italy | Netherlands | Portugal | Spain |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Stock index | ATX | BEL20 | HEX | CAC | DAX | ASE | ISEQ | FTSEMIB | AEX | BVLX | IBEX |

DATA：January 2001 to October 2013

$$r_{it} - r_{ft} = \alpha_i + \sum_{k=1}^{4} \beta_{ik} f_{kt} + \epsilon_{it},$$
$$i = 1, \ldots, 11;\ t = 1, \ldots, T, \quad (1)$$

To investigate potential spatial correlation among the 11 return residuals:

$$\tilde{\epsilon}_t = \kappa W \tilde{\epsilon}_t + a + \tilde{\xi}_t, \quad t = 1, 2, \ldots, T, \quad (2)$$

wij： the influence of the return of asset j on that of asset i due to spatial interaction, and wii =0.

where $W = (w_{ij})$ is a $11 \times 11$ matrix defined as $w_{ij} := (s_i d_{ij})^{-1}$ for $i \neq j$ and $w_{ii} = 0$, where $d_{ij}$ is the driving distance between the capital of country $i$ and that of country $j$ and $s_i := \sum_j d_{ij}^{-1}$; $\kappa$ is a scalar parameter; $a$ is a vector of free parameters; and $\tilde{\xi}_t$ is assumed to have a normal distribution $N(0, \sigma^2 I_{11})$, with $\sigma$ being an unknown parameter and $I_{11}$ being the $11 \times 11$ identity matrix. When $\kappa$ is not zero, each component of $\tilde{\epsilon}_t$ is influenced by other components to a degree dependent on their spatial distances.[2]

conditional likelihood ratio test：

$$H_0: \alpha_1 = \alpha_2 = \cdots = \alpha_{11} = 0; \quad H_1: \text{else}. \quad (3)$$

- Empirical importance of spatial interaction has already been found in the real estate markets. Coval and Moskowitz (2001) demonstrated empirically the importance of spatial information in the investment decisions and outcomes of individual fund managers.
- To better account for potential spatial correlation among residuals of APT models and to better capture the no asymptotic arbitrage constraint, in this paper, we attempt to link spatial econometrics, which emphasizes the statistical modeling of spatial interaction, with the classical CAPM and APT.

# Main work

- In this paper we study the impact of spatial information on overall markets in the form of CAPM or APT. More precisely, we first propose a spatial capital asset pricing model (S-CAPM) and a spatial arbitrage pricing theory (S-APT).
- we develop the S-CAPM\S-APT for both ordinary assets and futures contracts.
- then we study empirical implications of the models. The new models can be applied to financial assets that can be sold short, such as national/regional stock indices and futures contracts on the S&P/Case–Shiller Home Price Indices(凯斯希勒住宅价格指数期货合约) .

- The Spatial Capital Asset Pricing Model

$$r_i = \rho \sum_{j=1}^{n} w_{ij} r_j + \alpha_i + \epsilon_i, \quad i = 1, \ldots, n,$$

$$\tilde{r} = \rho W \tilde{r} + \alpha + \tilde{\epsilon}, \quad E[\tilde{\epsilon}] = 0, \quad E[\tilde{\epsilon}\tilde{\epsilon}'] = V.$$

$$\mu = E[\tilde{r}] = (I_n - \rho W)^{-1}\alpha,$$
$$\Sigma = \mathrm{Cov}(\tilde{r}) = (I_n - \rho W)^{-1} V (I_n - \rho W')^{-1}.$$

**Theorem 1** (S-CAPM for Both Ordinary Assets and Futures). *Suppose that there exists a risk-free return $r$ and that the $n = n_1 + n_2$ risky returns satisfy the model (6), of which the first $n_1$ are returns of ordinary assets and the others are returns of futures contracts. Suppose $n_1 > 0$.[5] Let $r_M$ be the return of market portfolio. If each investor holds a mean-variance efficient portfolio, then, in equilibrium, $r_M$ is mean-variance efficient, and every investor holds only the market portfolio and the risk-free asset. Furthermore,*

(i) *for the ordinary assets,*

$$E[r_i] - r = \frac{\mathrm{Cov}(r_i, r_M)}{\mathrm{Var}(r_M)}(E[r_M] - r) = \frac{\phi_M' \Sigma \eta_i}{\phi_M' \Sigma \phi_M}(E[r_M] - r), \quad i = 1, \ldots, n_1; \qquad (10)$$

(ii) *for the futures contracts,*

$$E[F_{i,1}] - F_{i,0} = \frac{\mathrm{Cov}(F_{i,1}, r_M)}{\mathrm{Var}(r_M)}(E[r_M] - r) = F_{i,0}\frac{\phi_M' \Sigma \eta_{n_1+i}}{\phi_M' \Sigma \phi_M}(E[r_M] - r), \quad i = 1, \ldots, n_2, \qquad (11)$$

*where $\Sigma$ is the covariance matrix of $\tilde{r}$, $\phi_M$ is the portfolio weights of the market portfolio, and $\eta_i$ is the $n$-dimensional vector with the $i$th element being 1 and all other elements being 0. Define*

$$1_{n_1,n_2} := (\underbrace{1, \ldots, 1}_{n_1}, \underbrace{0, \ldots, 0}_{n_2})'; \qquad (12)$$

*then $\tilde{r} - r1_{n_1,n_2}$ is the excess asset return,[6] and the S-CAPM Equations (10) and (11) are equivalent to a single equation,*

$$E[\tilde{r}] - r1_{n_1,n_2} = \frac{\mathrm{Cov}(\tilde{r}, r_M)}{\mathrm{Var}(r_M)}(E[r_M] - r). \qquad (13)$$

- The Spatial Arbitrage Pricing Theory
- Comparison with the Spatial Autoregressive Model
- Application 1: Eurozone Stock Indices
- Application 2: S&P/Case–Shiller Home Price Indices Futures

## Conclusion

- The S-CAPM and S-APT explicitly characterize the effect of spatial interactionon on the expected returns of both ordinary assets and future contracts.
- we carry out empirical studies on the eurozone stock indices and the futures contracts on S&P/Case–Shiller Home Price Indices using the S-APT model. spatial interaction is significant and plays an important role in explaining cross-sectional correlation.

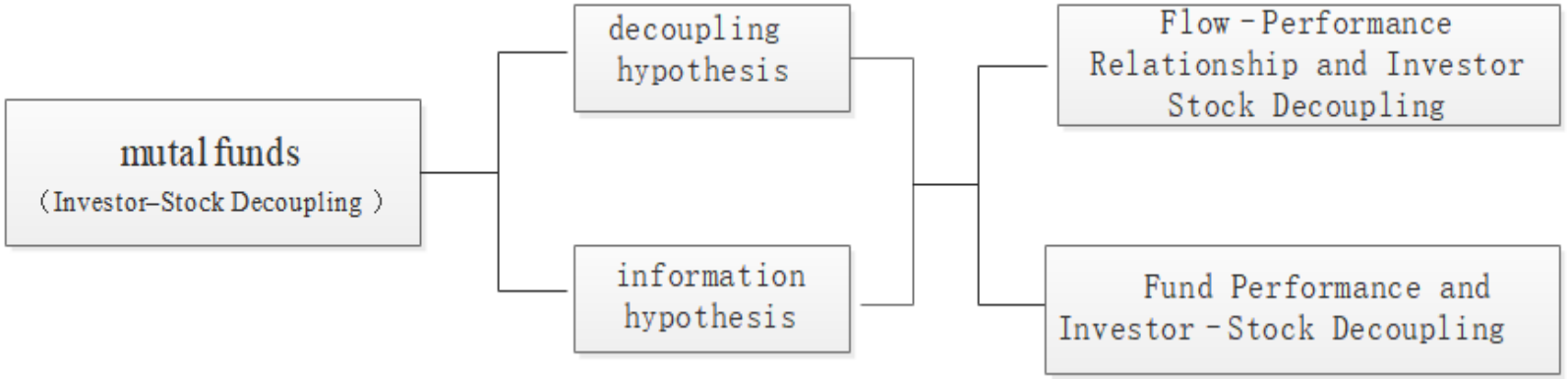
## Contribution

- Our paper significantly differs from existing literature that also incorporates spatial information.
  - In our S-CAPM, we assume that the spatial interaction between the returns of assets is exogenously given.
  - Our paper concerns the risk and return of real estate securities that are liquid and can be easily shorted, such as futures contracts on the CSI Indices.

investor location does not coincide with that of the stock holdings

# Investor–Stock Decoupling in Mutual Funds

Miguel A. Ferreira,[a] Massimo Massa,[b] Pedro Matos[c]


mutal funds
（Investor–Stock Decoupling ）
decoupling hypothesis
information hypothesis
Flow－Performance Relationship and Investor Stock Decoupling
Fund Performance and Investor－Stock Decoupling

# Background

- One source of informational advantage is geographical proximity. Using U.S. data, Coval and Moskowitz (1999, 2001) show that equity mutual funds perform better when investing in local stocks. However, the international evidence is mixed.
- Consider, for example, the Fidelity Magellan fund, which invests in U.S. stocks and is marketed to U.S. investors, and the Natixis Actions US Value fund, which invests in U.S. stocks but is marketed instead to French and UK investors.
- In the case of a negative shock leading to a drop in the U.S. stock market, the Fidelity fund is more likely to face withdrawals by its investors as they will experience a drop elsewhere in their U.S. assets and have increased liquidity needs. Fidelity will be forced into selling when asset prices are depressed. **In contrast**, the Natixis fund is less likely to face withdrawals from its European investors as flows from these investors do not depend just on the U.S. market performance because they are also linked to investors' home market conditions and foreign currency effects.

- We compare two hypotheses：

- decoupling reduces the negative implications for fund withdrawals, we expect that it will reduce flow–performance sensitivity, especially when performance is poor. We call this the “decoupling hypothesis.”
- Distance will hamper the ability of the fund managers to deliver better performance. This negative impact on fund performance will be stronger in the presence of marketwide downturns (e.g., financial crisis) when information is more valuable.We call this the “information hypothesis.”

# Main work

- Data and Variable Construction
  - Data： open-end, actively managed equity mutual funds are from the Lipper database for the 1997–2010 period. The final sample includes 22,330 unique funds in 26 countries.
  - IS: is a dummy variable that takes a value of one if the fund is sold to investors that are not located in the same country as the stocks in which the fund invests .
  - ISD: is the contemporaneous correlation between the measure of aggregate fund flows where a fund is approved for sale and the average stock market return of the countries where the fund invests using a 12-quarter rolling window . It captures the investor–stock sensitivity.
  - $$Flow_{i,t} = \frac{TNA_{i,t} - TNA_{i,t-1}(1+R_{i,t})}{TNA_{i,t-1}},$$ ： the percentage growth in total assets under management of the fund between the beginning and the end of quarter t.

$$d_{i,j} = arcos(deg_{latlon})\frac{2\pi r}{360},$$

where

$$deg_{latlon} = \cos(lat_i)\cos(lon_i)\cos(lat_j)\cos(lon_j) + \cos(lat_i)\sin(lon_i)\cos(lat_j)\sin(lon_j) + \sin(lat_i)\sin(lat_j),$$

- Flow–Performance Relationship and Investor–Stock Decoupling
  - ✔ we expect funds with high ISD to experience less investor outflows when a fund is underperforming, and that inflows should react less to good fund returns.
- Fund Performance and Investor–Stock Decoupling 加入物理距离变量，代表信息不对称程度
  - ✔ whether fund investor–stock decoupling is a source of strategic advantage for fund performance.

# Conclusion

- we find that funds with higher investor–stock decoupling exhibit higher performance, and this is more pronounced during the 2007–2008 financial crisis.
- We also find that decoupling allows fund managers to take less risk, be more active, and tilt their portfolios toward smaller and less liquid stocks.

# Contributions

- First, our findings add to the literature on the importance of geography in portfolio management, but instead of analyzing fund manager location, we focus on investor location.
- Second, we add to the literature on mutual fund performance and the importance of investor flows.
- In all, We contribute to this literature by showing that the geographical location of the fund flows and their correlation to fund performance play an important role.

# What Motivates Buy-Side Analysts to Share Recommendations Online?

Steven Crawford,[a] Wesley Gray,[b] Bryan R. Johnson,[c] Richard A. Price III[d]

# Background

- SumZero.com is a private, online community for verified buy-side investment professionals. Buy-side professionals with access to the site can provide a variety of information about their professional background and interests, network with other buy-side professionals in a Facebook-like environment, and share detailed investment recommendations.
- SumZero openly states that its purpose is to facilitate interaction among its members to help them "share actionable ideas, get jobs, and grow their professional networks." Thus, career and reputation building motives potentially play an important role in the decision to share information and recommendations on the website. Specifically, analysts who wish to change employment can demonstrate their expertise or value by issuing high-quality recommendations.
- In this paper, we examine why buy-side professionals from competing firms share potentially valuable investment recommendations with one another.

# Main work

- First，We use two key variables as proxies for measuring an analyst’s desire to develop a reputation and obtain better employment: (1) whether the analyst attended a top 10 school and (2) the value of the assets under management of the analyst’s current employer.
- Second，we explore whether analysts who actively participate on SumZero by posting recommendations to the website are successful in changing employers.
- Next, we examine the short- and long-run returns that accrue to the stocks that are recommended as buys or sells on SumZero..If analysts are sharing information to improve their labor market outcome or to ensure that others will push prices to fundamental values, we expect the recommendations shared on SumZero to generate returns in the direction of the recommendation.

- Data： SumZero / February 2010 and December 2010 / We examine 2,050 buy-side recommendations, including 1,751 buy recommendations and 299 sell recommendations, submitted by 1,089 analysts working for 891 funds.

- Empirical Prediction 1. Analysts with greater incentives to build a reputation are more likely to share investment ideas on SumZero.
- Empirical Prediction 2. Analysts who share investment ideas and build a reputation on SumZero are more likely to obtain new employment.
- Empirical Prediction 3. Recommendations shared on SumZero will generate returns in the direction of the recommendation.

**Table 4.** Hazard Regression of Which Analysts Submit Reports

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *ID* | 0\|0001<br>3.32*** | 0.0000<br>1.64 | 0.0001<br>2.80*** | 0.0000<br>1.30 |
| *PCT_COMPLETE* | 1.3241<br>8.10*** | 1.2965<br>7.36*** | 1.2972<br>7.50*** | 1.2191<br>6.51*** |
| *TTSCHOOL* | −0.1267<br>−2.31** | −0.1386<br>−2.36** | −0.0773<br>−1.25 | −0.0948<br>−1.41 |
| *NEWYORK* | 0.0378<br>0.77 | 0.0273<br>0.52 | 0.0525<br>0.97 | 0.0289<br>0.49 |
| *LOG_COUNTRES* | 0.5579<br>12.87*** | 0.4806<br>11.01*** | 0.5335<br>11.43*** | 0.4503<br>9.71*** |
| *AVG_RATING* | | 0.1355<br>8.34*** | | 0.1254<br>7.07*** |
| *AVG_CONTRARIAN* | | 0.3250<br>7.64*** | | 0.3543<br>7.99*** |
| *AVG_CAR60* | | −0.0629<br>−0.38 | | −0.0349<br>−0.21 |
| *LOG_MAX_FUNDSIZE* | | | −0.1351<br>−8.17*** | −0.1306<br>−7.47*** |
| Observations | 7,289 | 7,289 | 5,730 | 5,730 |

**Table 5.** Employment Change Descriptive Statistics

| | No employment change | | | | Employment change | | | |
|---|---|---|---|---|---|---|---|---|
| Variable | *N* | Mean | Median | Std. dev. | *N* | Mean | Median | Std. dev. |
| All analysts | | | | | | | | |
| *EMP_CHANGE* | 2,904 | 0.0000 | 0.0000 | 0.0000 | 178 | 1.0000 | 1.0000 | 0.0000 |
| *ID* | 2,904 | 1,790 | 1,790 | 969 | 178 | 1,874 | 1,956 | 993 |
| *PCT_COMPLETE* | 2,904 | 0.3590 | 0.3077 | 0.1276 | 178 | 0.4166 | 0.3846 | 0.1481 |
| *TTSCHOOL* | 2,830 | 0.2883 | 0.0000 | 0.4531 | 176 | 0.3068 | 0.0000 | 0.4625 |
| *NEWYORK* | 2,904 | 0.4573 | 0.0000 | 0.4983 | 178 | 0.5169 | 1.0000 | 0.5011 |
| *SUBMIT_REPORT* | 2,904 | 0.3082 | 0.0000 | 0.4618 | 178 | 0.5618 | 1.0000 | 0.4976 |
| *NEW_REPORT* | 2,904 | 0.1081 | 0.0000 | 0.3106 | 178 | 0.4382 | 0.0000 | 0.4976 |
| *COUNTRES* | 2,904 | 4.3609 | 3.0000 | 5.0878 | 178 | 5.3652 | 4.0000 | 4.4183 |
| *MAX_FUNDSIZE* | 2,263 | 4,306 | 500 | 6,217 | 134 | 3,187 | 250 | 5,296 |
| *AVG_RATING* | 2,904 | 0.5583 | 0.0000 | 1.6883 | 178 | 1.8056 | 0.0000 | 2.6862 |
| *AVG_CONTRARIAN* | 2,904 | 0.5907 | 0.0000 | 1.1031 | 178 | 1.3028 | 1.6278 | 1.3096 |
| *AVG_CAR60* | 2,904 | 0.0070 | 0.0000 | 0.1389 | 178 | 0.0185 | 0.0000 | 0.1888 |

COX回归模型，又称“比例风险回归模型(proportional hazards model，简称Cox模型)”，是由英国统计学家D.R.Cox(1972)年提出的一种半参数回归模型。该模型以生存结局和生存时间为应变量，可同时分析众多因素对生存期的影响，能分析带有截尾生存时间的资料，且不要求估计资料的生存分布类型。由于上述优良性质，该模型自问世以来，在医学随访研究中得到广泛的应用，是迄今生存分析中应用最多的多因素分析方法 [1] 。

Cox比例风险模型的基础

该模型的目的是同时评估几个因素对生存的影响。换句话说，它使我们能够检查特定因素在特定时间点如何影响特定事件（例如，感染，死亡）的发生率。这个速度通常被称为危险率。预测变量（或因子）在生存分析文献中通常被称为*协变量*。

## 基本原理

编辑

生存分析的主要目的在于研究变量X与观察结果即生存函数(累积生存率)$S(t,X)$ 之间的关系。当$S(t,X)$ 受很多因素影响，即$X=(X_1,...,X_m)$ 为向量时，传统的方法是考虑回归方程——即诸变量$X_i$ 对$S(t,X)$ 的影响。但由于生存分析研究中的数据包含删失数据。且时间变量t通常不满足正态分布和方差齐性的要求，这就造成了用一般的回归方法研究上述关系的困难 [2] 。

Cox回归模型的基本形式

D.R.Cox提出了Cox比例风险回归模型，它不是直接考察$S(t,X)$ 与X的关系，而是用$h(t,X)$ 作为因变量，模型的基本形式为：

$$h(t,X)=h_0(t)\exp(\beta_1X_1+\beta_2X_2+\cdots+\beta_mX_m). \qquad (1)$$

式中，$\beta_1,\beta_2,...,\beta_m$ 为自变量的偏回归系数，它是须从样本数据作出估计的参数；$h_0(t)$ 是当X向量为0时，$h(t,X)$ 的基准危险率，它是有待于从样本数据作出估计的量。公式(1)简称为**Cox回归模型**。

**Table 7.** CARs After Posting Date

| | *N* | (0,1) | (0,19) | (0,59) | (0,119) |
|---|---|---|---|---|---|
| Panel A: Buy recommendations | | | | | |
| All | 1,751 | **0.41%** | 0.78% | **2.18%** | **3.10%** |
| | | 0.002 | 0.064 | 0.003 | 0.003 |
| Partitioned by contrarian (I/B/E/S consensus is lower than hold) | | | | | |
| Contrarian | 139 | 0.85% | 2.29% | **7.25%** | **15.12%** |
| | | 0.095 | 0.154 | 0.009 | 0.000 |
| Not contrarian | 1,409 | **0.35%** | 0.62% | **1.82%** | 1.89% |
| | | 0.012 | 0.158 | 0.016 | 0.076 |
| Panel B: Sell recommendations | | | | | |
| All | 299 | **−0.69%** | **−4.03%** | **−7.30%** | **−15.33%** |
| | | 0.028 | 0.000 | 0.000 | 0.000 |
| Partitioned by contrarian (I/B/E/S consensus is higher than hold) | | | | | |
| Contrarian | 200 | −0.32% | **−3.31%** | **−6.82%** | **−15.57%** |
| | | 0.349 | 0.002 | 0.000 | 0.000 |
| Not contrarian | 79 | −1.22% | **−4.42%** | −6.29% | **−13.82%** |
| | | 0.109 | 0.067 | 0.132 | 0.019 |

**Contrarian**: An indicator variable set to 1 if a buy (sell) recommendation has an I/B/E/S consensus of sell or strong sell (buy or strong buy) and 0 otherwise.

**Table 8.** Regression Analysis Using Cumulative Abnormal Returns

| | Dependent variable: *CAR* (window) | | | |
|---|---|---|---|---|
| | (0,1) | (0,19) | (0,59) | (0,119) |
| Panel A: CAR regressions for buy recommendations | | | | |
| *CONTRARIAN* | 0.0021 | 0.0168 | 0.0252 | 0.0680 |
| | 0.65 | 2.12** | 1.83* | 3.32*** |
| *LOG_MVE* | 0.0003 | −0.0009 | −0.0083 | −0.0142 |
| | 0.24 | −0.33 | −1.70* | −1.81* |
| *LOG_BM* | 0.0064 | 0.0078 | 0.0385 | 0.0778 |
| | 2.39** | 1.16 | 3.36*** | 4.55*** |
| *LOG_ILLIQ* | 0.0098 | 0.0243 | 0.0072 | 0.0339 |
| | 0.72 | 0.76 | 0.11 | 0.40 |
| *MOM_RETURN* | −0.0120 | 0.0628 | 0.1588 | 0.3241 |
| | −0.92 | 2.36** | 3.39*** | 4.51*** |
| *LOG_THESIS_LEN* | 0.0033 | 0.0026 | −0.0031 | −0.0251 |
| | 1.59 | 0.38 | −0.29 | −1.52 |
| *TIME_LT_ONE* | 0.0021 | −0.0020 | −0.0195 | −0.0453 |
| | 0.56 | −0.19 | −1.10 | −1.64 |
| *RATING* | 0.0000 | −0.0016 | −0.0010 | −0.0009 |
| | 0.01 | −0.99 | −0.36 | −0.21 |
| *LOG_COUNTREPORT* | 0.0002 | −0.0038 | −0.0246 | −0.0216 |
| | 0.06 | −0.58 | −2.10** | −1.23 |
| *PCT_COMPLETE* | −0.0106 | 0.0559 | 0.0263 | 0.1332 |

# Conclusion

- We explore labor market motivations for information sharing and document that analysts with strong incentives to build a reputation (i.e., those who did not attend a top 10 university and those employed at small funds) are significantly more likely to share recommendations.
- analysts who share ideas are more likely to change jobs and that the likelihood of employment change is positively related to the ratings provided by peers.
- We also document that analyst recommendations generate significant returns when they are posted on SumZero and that prices drift in the direction of the recommendation.
- Long-window returns are particularly strong for contrarian buy recommendations and for most sell recommendations.
- Overall,we show that buy-side analysts share valuable private information in an online social network and that this can be an effective reputation-building and job-seeking tool.

# Contributions

- our study is among the first to examine a verified group of buy-side professionals choosing to share investment recommendations with their peers on a private website.
- the types of nontraditional recommendations studied in previous research typically only mention the recommended firm, along with a few brief arguments supporting the recommendation. By contrast, the recommendations posted on SumZero contain detailed investment theses similar to sell-side recommendation reports.
- previous buy-side research has been conducted primarily using either experimental methods or surveys of buy-side professionals. We using an exclusive sample of buy-side recommendations from analysts across many different buy-side investment firms.

# How Do Prior Gains and Losses Affect Subsequent Risk Taking? New Evidence from Individual-Level Horse Race Bets

Niko Suhonen, Jani Saastamoinen

# Background

- Many empirical studies have addressed the issue of how prior outcomes affect subsequent risk taking and reached conclusions that appear to contradict each other. While some studies report a tendency to take on less risk following a loss， others document the opposite.
- Barberis and Xiong's (2009) models of dynamic risk taking provide intriguing insights into how a decision maker's risk behavior changes in response to gains or losses. Their "annual" gain/loss model suggests that he or she is willing to take on more risk after experiencing gains and less of a risk after experiencing losses but in a manner such that his or her final position仓位 is at or slightly above the reference point.

- These results are of great interest because the model predicts the behavioral patterns suggested by Thaler and Johnson (1990): a “house money effect,” 赌场盈利效应/私房钱效应 which implies increased preference for risky gambles after experiencing gains; increased risk aversion following a loss, which in this paper we refer to as a “playing safe effect” 避险效应; and a “break-even effect,” 盈亏平衡效应 which refers to a preference for gambles that provide a chance to recover prior losses.
- In this paper, we use individual-level betting records from a horse race meeting of 10 consecutive races to explore how prior gains and losses affect subsequent risk taking.

# Main work

- The betting company Fintoto has a legal monopoly for horse race betting in Finland.
- This study concentrates on Vermo races because it is the main horse race meeting and also ends the betting day.
- Our sample includes 5,217 individual bettors who carried out 167,816 betting-related transactions during the race meeting .
- The bettor’ s gains and losses are defined as returns from betting after each race, and wagering opportunities present themselves until the last race is finished. At the end of the race meeting, the bettor ends up in the gain or loss domain with respect to his or her reference point (the initial account balance).在比赛结束时，投注者以他或她的参考点（初始账户余额）为基准，进入赢或输的领域GainD (LossD)。
- the variance/ skewness of the return on the set of bets placed on each race is an appropriate risk measure.

$$y_{gr} = \alpha_g + \mathbf{x}'_{gr}\beta + \varepsilon_{gr}, \quad g = 1, \ldots, G, r = 1, \ldots, R, \quad (2)$$

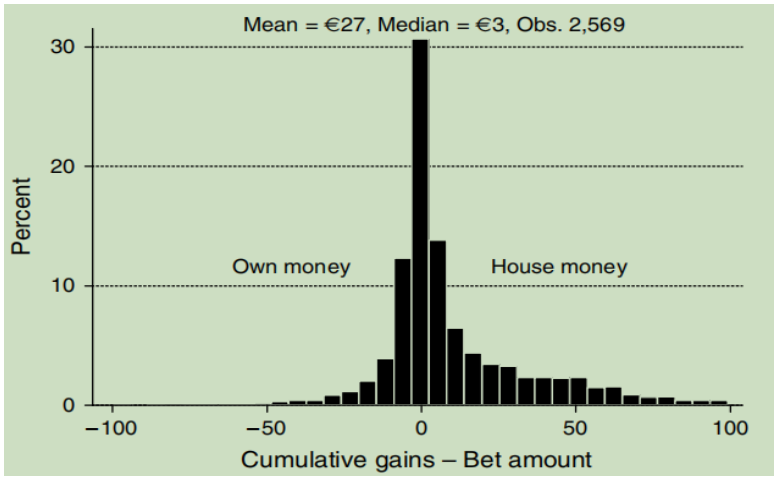
| Method | | | | | | |
|---|---|---|---|---|---|---|
| Fixed-effects model | | | | | | |
| Dependent variable: | ln(*Bet*) | | ln(*Var*) | | ln(*Skew*) | |
| Independent variable | Coefficient | Robust std. error | Coefficient | Robust std. error | Coefficient | Robust std. error |
| *GainD* | 0.0596** | 0.0245 | 0.1587*** | 0.0492 | 0.3617*** | 0.0899 |
| *LossD* | −0.0437** | 0.0203 | −0.0983** | 0.0381 | −0.2001*** | 0.0692 |
| *Cgain* | 0.0002 | 0.0003 | 0.0002 | 0.0006 | 0.0003 | 0.0010 |
| *Closs* | −0.0033*** | 0.0006 | −0.0033*** | 0.0009 | −0.0036** | 0.0014 |
| *Open Bets* | −0.0061*** | 0.0009 | −0.0094*** | 0.0013 | −0.0137*** | 0.0020 |
| *Race Rank* | −0.0248*** | 0.0071 | −0.0647*** | 0.0133 | −0.1199*** | 0.0238 |
| *Transfer* | 0.0009*** | 0.0002 | 0.0014*** | 0.0003 | 0.0022*** | 0.0005 |
| *Intercept* | 1.3678*** | 0.0224 | 4.5228*** | 0.0417 | 8.3393*** | 0.0747 |
| Race dummies | Yes | | Yes | | Yes | |
| Number of bettors | 5,217 | | 5,217 | | 5,152 | |
| Obs. | 18,346 | | 18,346 | | 17,697 | |
| Within $R^2$ | 0.12 | | 0.23 | | 0.23 | |

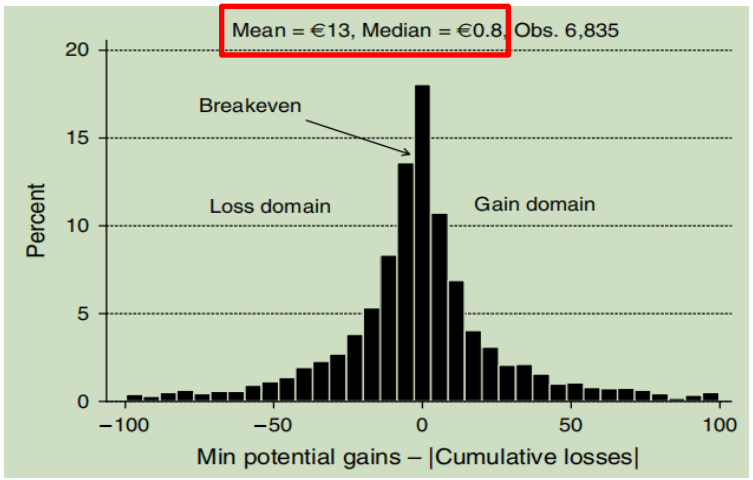
Cgain (Closs) is the value of the cumulative net gain (the absolute value of the cumulative net loss);
a dummy variable for the domain of gains (losses) GainD (LossD). It takes the value 1 for any race where, prior to the race, the bettor's accumulated returns since the first bet are positive (negative).

$$HouseMoney = Cgain - Bet.$$

$$MinGain = MinWin - Bet.$$

$$Breakeven = MinGain - Closs.$$




in most cases the amount staked does not exceed prior cumulative gains.

the median of the minimum potential gain is close to zero, which implies that bettors attempt to reach the domain of gains and, in particular, the break-even point. Although bettors take less risky bets when their losses increase, it is plausible that the break-even point remains their target.

# Conclusion

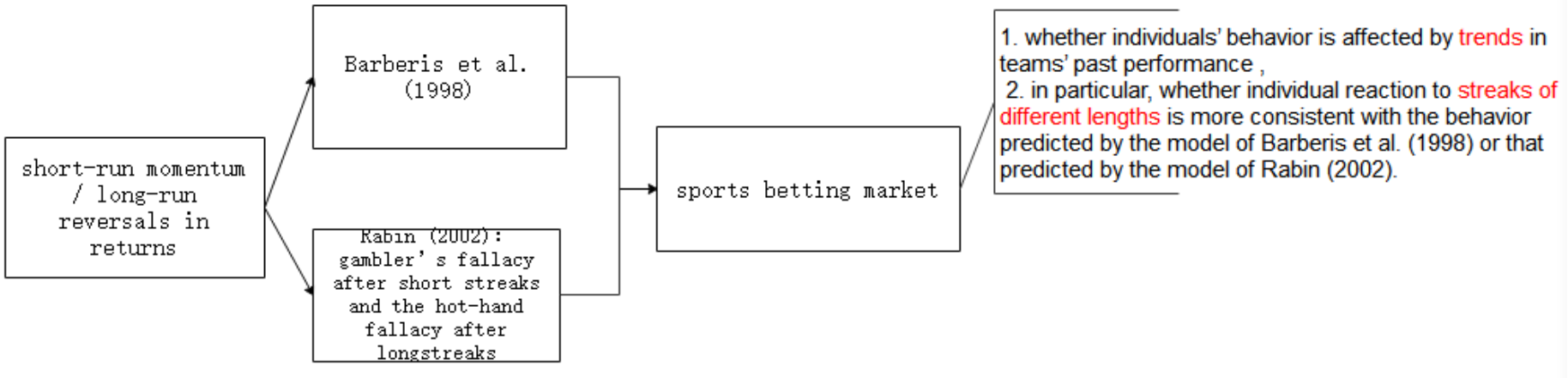
- We find evidence for
  - ☑ the “house money effect” as bettors take riskier wagers after gains and mostly spend the money they have won;
  - ☑ risk aversion after prior losses, which we label a “playing safe effect”;
  - ☑ a preference for breakeven. Contrary to the widely held conception in the empirical literature, our findings suggest that the “break-even effect” does not necessarily imply an increased preference for riskier bets because bettors may seek to break even with less risky wagers.盈亏平衡效应并不一定意味着对高风险押注的偏好增加，因为押注者可能会寻求用**风险较低的押注**来实现盈亏平衡.

# Contributions

- First, we show that the break-even effect and a decreasing appetite for risk are reconcilable, which is often overlooked in the literature of sequential risky decision making.
- Second, we provide an empirical test of Barberis and Xiong’ s (2009) model of dynamic risk taking under prospect theory of risky choices using field data.
- Finally, if a bet is regarded as a surrogate替代 for an investment decision (Sauer 1998, Jullien and Salani é2000), this paper may also provide insights into the behavior of investors in financial markets.

# Individual Reaction to Past Performance Sequences: Evidence from a Real Marketplace

Angie Andrikogiannopoulou, Filippos Papakonstantinou


short-run momentum / long-run reversals in returns
Barberis et al. (1998)
Rabin (2002): gambler's fallacy after short streaks and the hot-hand fallacy after longstreaks
sports betting market
1. whether individuals' behavior is affected by trends in teams' past performance ,
2. in particular, whether individual reaction to streaks of different lengths is more consistent with the behavior predicted by the model of Barberis et al. (1998) or that predicted by the model of Rabin (2002).

# Background

- A large literature in finance has uncovered various predictable patterns in stock returns. Two of the most robust patterns are short-run momentum and long-run reversals.
- Rational explanations of these patterns are proposed， However, direct tests of alternative theories using stock market data are very difficult because tests of market efficiency rely on a specific asset pricing model and therefore face a joint hypothesis problem. Instead, it may be more fruitful to use clean empirical settings to test for the individual behavior predicted by the proposed theories.
- The literature has so far focused on testing for these behaviors using data from experiments, but these tests also face objections, because they study behavior in artificial settings.

# Main work

- test two theories
- to explain short-run momentum and long-run reversals in returns—the regime-shifting model of Barberis et al. (1998) and the gambler’s/hot-hand fallacy model of Rabin (2002)
- the model of Barberis et al. (1998) predicts that people believe that the probability of streak continuation increases monotonically with its length. 事件发生了很多次，下次很有可能再次发生
- the model of Rabin (2002) predicts the gambler’s fallacy after short streaks and the hot-hand fallacy after longstreaks; the interaction of these two effects implies a nonmonotonic (first decreasing, then increasing) relation between streak length.
- we study whether individuals’ behavior is affected by trends in teams’ past performance and, in particular, whether individual reaction to streaks of different lengths is more consistent with the behavior predicted by the model of Barberis et al. (1998) or that predicted by the model of Rabin (2002).

- A Novel Individual-Level Data Set（sports betting market）
- Our analysis is based on the complete trading histories of a random sample of 500 individuals who placed wagers at an European online sportsbook over a period of five years (2005–2010).
  - we utilize only bets backing the home team or the away team; hence, we drop 15% of all bets because they back the draw outcome.
  - we observe the following information: (i) bet date, (ii) bet event (e.g., Premier League match between Chelsea and Liverpool), (iii) outcome chosen (i.e., home or away win), (iv) bet amount, and (v) prices associated with all outcomes of the bet event at the time the bet was placed. In addition, we have information about individual characteristics, such as the gender, age, and residence zip code.

- Variables of Interest

  - Streak连续性
  - construct four dummy variables： long winning, short winning（ at most three matches）, short losing, and long losing streaks.
  - control variables

- Contrary to the stock market：

  - no systematic risk, have an observable terminal value that is exogenously determined and revealed by match outcomes. That assets’ risk is idiosyncratic implies that an asset pricing model is unnecessary; no mispricing at termination; **therefore performance can be measured accurately and cleanly.**
  - These features make it possible to disentangle whether individual behavior is driven by sentiment or by superior information about potential mispricings.

- Individual Trading Behavior（betting portfolio）
  - teams are further subdivided into four price groups—strong favorites， favorites, long shots, and strong long shots—where the price cutoffs correspond to the 5th, 50th, and 95th percentiles.

$$Indiv_{ngt} := \frac{B_{ngt}}{\sum_g B_{ngt}}, \quad Market_{gt} := \frac{N_{gt}}{\sum_g N_{gt}},$$

This finding provides a first indication that individuals' expectation of streak continuation increases with streak length, as predicted by the model of Barberis et al. (1998).

**Table 2.** Composition of Individual and Market Portfolio by Odds Group and Team Past Performance Streaks

| | All | | | Strong favorite | | | Favorite | | | Long shot | | | Strong long shot | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Indiv. (%) | Market (%) | Ratio | Indiv. (%) | Market (%) | Ratio | Indiv. (%) | Market (%) | Ratio | Indiv. (%) | Market (%) | Ratio | Indiv. (%) | Market (%) | Ratio |
| *LongLose* | 2.5 | 6.5 | 0.38 | 0.06 | 0.02 | 2.54 | 1.85 | 2.03 | 0.91 | 0.55 | 3.72 | 0.15 | 0.06 | 0.78 | 0.07 |
| *ShortLose* | 32.4 | 42.0 | 0.77 | 3.52 | 0.97 | 3.63 | 24.16 | 18.55 | 1.30 | 4.36 | 19.99 | 0.22 | 0.37 | 2.44 | 0.15 |
| *ShortWin* | 48.7 | 43.7 | 1.11 | 6.93 | 1.81 | 3.82 | 35.55 | 18.88 | 1.88 | 5.67 | 20.99 | 0.27 | 0.53 | 2.06 | 0.26 |
| *LongWin* | 16.4 | 7.7 | 2.12 | 3.55 | 0.89 | 3.99 | 11.55 | 4.50 | 2.56 | 1.28 | 2.20 | 0.58 | 0.03 | 0.13 | 0.22 |

- Conditional Holding Decision（how team past performance affects which of the two teams participating in each match is backed to win, conditional on the matches selected by each individual/ a nonmonotonic effect of streak on behavior.

$$Bet_{nim} = \beta_1 \Delta ShortWin_{im} + \sum_{k=1}^{2} \beta_k \Delta ShortLose_{im} + \sum_{k=1}^{3} \beta_k \Delta LongLose_{im} + z'_{im}\gamma + \varepsilon_{nim}.$$

coefficients of $\Delta(LongLose_{im} + ShortLose_{im} + ShortWin_{im})$ $\Delta(LongLose_{im} + ShortLose_{im})$, and $\Delta LongLose_{im}$ and col

- Sentiment-Driven vs. Information-Driven Behavior
  - distinguish whether individual behavior is driven by an inherent cognitive bias, e.g., a misguided belief in momentum, or by superior information related to market mispricings.
  - If individual behavior is driven by superior information related to market mispricings, then we should find that individuals earn superior returns from wagers backing teams that are on long winning streaks relative to their other wagers. If individual behavior is driven by sentiment, then we should find that individuals do not earn superior returns from wagers on their preferred team groups.

$$Return_{nim} = \alpha_t + x'_{nim}\beta + \varepsilon_{nim},$$

**Table 4.** Realized Returns

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| *Price* | −0.003 | −0.003 | −0.000 | −0.003 | −0.003 |
| | −0.237 | −0.223 | −0.025 | −0.209 | −0.194 |
| *Home* | 0.003 | 0.003 | 0.008 | 0.007 | 0.006 |
| | 0.185 | 0.164 | 0.420 | 0.355 | 0.342 |
| *ΔVisibleTeam* | 0.017 | 0.017 | 0.016 | 0.016 | 0.016 |
| | 0.798 | 0.784 | 0.720 | 0.738 | 0.726 |
| *ΔMostBetTeam* | 0.048 | 0.047 | 0.050 | 0.046 | 0.046 |
| | 1.500 | 1.483 | 1.430 | 1.462 | 1.457 |
| *ΔStreak* | 0.000 | −0.000 | 0.001 | | |
| | 0.057 | −0.183 | 0.675 | | |
| *ΔShortWin* | | | | −0.009 | −0.012 |
| | | | | −0.459 | −0.472 |
| *ΔShortLose* | | | | −0.024 | −0.028 |
| | | | | −1.235 | −1.050 |
| *ΔLongLose* | | | | 0.017 | 0.021 |
| | | | | 0.624 | 0.559 |
| *LongWinPref* | | 0.042 | 0.046 | | 0.044 |
| | | 0.512 | 1.278 | | 0.552 |

# Conclusion

- an overwhelming majority of individuals (83%) are consistently affected by team performance streaks in their decisions: 78% (5%) exhibit momentum (contrarian) trading behavior as they systematically overweight teams on long winning (losing) streaks in their portfolios relative to the market, three-quarters of individuals exhibit trend-chasing behavior.
- seven times as many individuals exhibit behavior consistent with Barberis et al. (1998) as exhibit behavior consistent with Rabin (2002).
- the proportion of individuals who generate significant excess returns from backing teams that are on long winning streaks is negligible. no individuals earn superior returns from momentum trading.

# Contributions

- Target：what motivates the trading behavior of individual investors
- Prior papers：
  - Using data from the stock market
  - experimental data
  - inconsistent with the model of Barberis et al. (1998).
- the important difference between our study and the existing studies is that we use individual-level data from a marketplace with experimental-like features; this enables us to perform clean tests of individual behavior from real-world decisions.

# Analyst Information Discovery and Interpretation Roles: A Topic Modeling Approach

Allen H. Huang,[a] Reuven Lehavy,[b] Amy Y. Zang,[a] Rong Zheng[c]

# Background

- Financial analysts play an important information intermediary role in capital markets. The culmination of their efforts are the research reports distributed to investors, which contain several quantitative summary measures, including earnings forecasts, stock recommendations, and target prices, as well as a textual discussion about the company.
- Extant literature generally suggests that these analyst outputs provide value to capital market participants.
- To advance the literature, several review papers call for additional research to better understand the sources of analyst value.

- This study investigates how financial analysts serve their information intermediary role by conducting a large-scale comparison of the textual content of analyst research reports to that of closely preceding corporate disclosures. Specifically, we employ a topic modeling method to compare the thematic content of a large sample of analyst reports issued on the day of and the day following quarterly earnings conference calls (hereafter, prompt reports) to that of managers' narratives in these conference calls.

## Main work

- we partition the discussion in analyst reports into a discussion of topics already covered in the immediately preceding calls and a discussion of new topics. The former likely provides an interpretation of the information already contained in the calls, based on which we assess the analyst information interpretation role; the latter likely provides information beyond what managers had released publicly, based on which we assess the analyst information discovery role.
- To extract economically meaningful topics from a large sample of analyst reports and conference calls, we exploit a topic modeling approach called latent Dirichlet allocation (LDA)潜在的狄利克雷分配, an advanced textual analysis technique that uncovers underlying topics in a large set of documents based on the statistical correlations among words in these documents (Blei et al. 2003).

- Our empirical measures of the analyst information roles are based on a comparison of the thematic content of 159,210 prompt analyst reports (denoted as AR) to that of manager narratives in a sample of 17,750 earnings conference calls (denoted as CC). We first employ LDA to extract topics from AR and CC.
- When we compare the thematic content of AR and CC, we find that analysts spend an average of 31% of their discussion on exclusive topics that receive little or no mention by managers, and thus 69% of their discussion focuses on conference topics. This suggests that both analyst information discovery and interpretation roles are substantial.

| | |
|---|---|
| *Tone_Discovery*, *Tone_Interpret*, *Tone_NewLanguage*, *Tone_SimilarLanguage* | *Tone_Discovery* and *Tone_Interpret* are the textual opinions of the sentences labeled by LDA as non-*CC* and *CC* topics in *AR*, respectively. *Tone_NewLanguage* (*Tone_SimilarLanguage*) is the textual opinion of the sentences labeled by LDA as *CC* topics in *AR* using new (similar) language. A topic is defined as using new language if the Pearson's chi-square test for the homogeneity between *AR* and *CC* with respect to their word distributions in this topic is significant at the 10% level. The textual opinion of the sentences is calculated as the percentage of positive sentences minus the percentage of negative sentences as classified by the naïve Bayes approach (Huang et al. 2014). |

| | |
|---|---|
| *Discovery* | The number of sentences labeled by LDA as non-*CC* topics in *AR* scaled by the total number of sentences in *AR*. *CC* topics are the topics in which the discussion length exceeds 2% of the *CC*. |
| *NewLanguage* | The average of one minus within-topic cosine word similarity between *CC* and *AR* in the *CC* topics. The within-topic cosine word similarity between *CC* and *AR* for a given topic *k* is |

| | |
|---|---|
| *Competition* | Percentage of competition-related words in CC in the firm's previous conference call. Following Li et al. (2013), competition-related words include "competition," "competitor," "competitive," "compete," and "competing." We include words with an "*s*" appended and do not count words in phrases that contain negation, such as "less competitive" and "few competitors." |
| *LitigRisk* | The standard deviation of the monthly return of the firm in the 12 months prior to the conference call, winsorized at the top and bottom 1%. |

DATA：quarterly earnings conference call transcripts and analyst reports issued on the day of or the day following these conference calls for S&P 500 firms from 2003 to 2012.

- Do Investors Value Analyst Information Discovery and Interpretation Roles?

$$CAR[0,1] = \alpha_1 Tone\_Discovery + \beta_1 Tone\_Interpret + \gamma_1 Tone\_CC + Controls + \varepsilon, \quad (1)$$

- What Determines Investors' Value of Analyst Information Discovery and Interpretation?（ Proprietary Cost； Litigation Risk；Bad News；Processing Cost）

$$CAR[0,1] = \alpha_1 Tone\_Discovery + \sum \alpha_i Tone\_Discovery \times Determinants_i + \beta_1 Tone\_Interpret + \sum \beta_j Tone\_Interpret \times Determinants_j + \gamma_1 Tone\_CC + Controls + \varepsilon. \quad (2)$$

- Analysts’ Response to Investors’ Information Demands/Determinants of Analyst Information Discovery and Interpretation Roles 因变量：discoverg/new language
  - ☑ analysts increase their efforts in information discovery when managers have greater incentives to withhold relevant information during conference calls.（***Competition, and litigation risk***）
  - ☑ analysts increase their interpretation efforts when the conference call is more difficult to process.（***Uncertain and Qualitative***）
- Does Analyst Confirmation Provide Value to Investors?（***repeating CC topics enhances the reliability of the* statements *of managers***）

$$CAR[0,1] = \alpha_1 Tone\_Discovery + \beta_1 Tone\_NewLanguage + \beta_2 Tone\_SimilarLanguage + \gamma_1 Tone\_CC + Controls. \quad (4)$$

# Conclusion

- analysts discuss exclusive topics beyond those from conference calls and interpret topics from conference calls.
- investors place a greater value on new information in analyst reports when managers face greater incentives to **withhold** value-relevant information. Analyst interpretation is particularly valuable when the processing costs of conference call information increase.
- investors react to analyst report content that simply confirms managers' conference call discussions.

# Contributions

- First, we provide new insight into the sources of analyst value as information intermediaries and extend our understanding on the interplay between analyst research and corporate disclosures.
- Second, our study introduces a textual measurement of information content to the literature, which is based on comparing the discussions of economically meaningful topics in analyst reports and management disclosures.
- Finally, our study contributes to the emerging area of textual analysis by introducing the topic modeling approach to the accounting and finance literature and validating the approach for financial documents.expand their analyses of the textual content of corporate financial disclosures from "how texts are being said" to "what is being said" in these disclosures.

# Outsourcing Corporate Governance: Conflicts of Interest Within the Proxy Advisory Industry

## 外包公司治理:代理咨询行业的利益冲突

Tao Li

# Background

- Shareholder voting is a primary means by which investors can influence a company's operations and corporate governance. As institutional shareholders have become the dominant players in the stock market, they vote billions of shares each year on thousands of ballot items.
- Those diversified investors often lack proper incentives or necessary expertise to do research in order to vote in the best interests of their clients, and many of them rely on the advice of proxy advisory firms. These are third-party advisors that provide independent proxy voting research and recommendations on each issue on a company's agenda.
- Academic research has documented the influence proxy advisory firms exert on voting outcomes. Their recommendations are estimated to sway between 13% and 30% of shareholder votes, depending on the type of proposal.

- Investors and policy makers, however, are concerned about **potential conflicts of interest** inherent in some proxy advisors' business models. As an example, the leading advisory firm, Institutional Shareholder Services Inc. (ISS), sells both proxy voting services to investors and consulting services to corporate issuers seeking assistance with proposals to be voted on by shareholders.
- Entry into the proxy advisory market by Glass,Lewis & Co. (Glass Lewis), a major competitor has potentially disciplined ISS, the incumbent advisor.Since entering the market in early 2003, Glass Lewis has grown into a credible competitor of ISS, capturing a market share of more than 40% in 2011.
- **Target：to study** the impact of competition on the incumbent advisor's (ISS's) recommendations during that period.whether increased competition from Glass Lewis has mitigated conflicts.

# Main work

- Main Hypotheses
  - *Hypothesis 1. Increased competition lowers the incumbent advisor’s support rate for its corporate clients compared with nonclient firms.*
  - *Hypothesis 2. The drop in the incumbent advisor’s support rate for its corporate clients is smaller for proposal types associated with less information asymmetry or importance.*（透明度高、不太重要的议案）

- Data：ISS’s Voting Analytics database and Glass Lewis’s Proxy Paper database. Both data sets cover annual and special shareholder meetings during the period 2004–2011.

- Determinants of Glass Lewis’ s Coverage（probit regressions）
  - more likely to cover firms that are already covered by ISS.
  - better-performing companies as well as firms with higher governance quality.
- Effects of Glass Lewis’ s Coverage（Proposal-type：governance-related proposals/executive compensation plans/ capitalization proposals..）

$$ISS\_Rec_{it} = \alpha + \theta GL\_Cover_{it-1} + \lambda GL\_Cover_{it-1} \cdot Client_{it} + \rho Client_{it} + X'_{it}\beta + \psi_i + \eta_t + \eta_j + \epsilon_{it}. \quad (1)$$

| | Dependent variable: *ISS's recommendations for governance-related proposals* | | | |
|---|---|---|---|---|
| | "For" shareholder proposals | | "Against" management proposals | |
| | (1a) | (1b) | (2a) | (2b) |
| *GL's coverage t − 1* | −0.077*** [−3.85] | −0.070*** [−4.38] | −0.022* [−1.94] | −0.031* [−1.82] |
| *GL's coverage t − 1 × Large firms (client proxy)* | 0.119*** [3.23] | 0.141*** [3.67] | 0.027** [2.08] | 0.036** [1.99] |
| *Large firms (client proxy)* | −0.138*** [−3.17] | −0.157*** [−3.35] | −0.030** [−2.00] | −0.037* [−1.94] |

- Bias in Recommendations and Real Effects （描述性统计）
  - Potentially biased recommendation by ISS, is an indicator equal to 1 if ISS issues a “for” (“against”) recommendation for a management (shareholder) proposal, but the vote fails (passes).
  - operating performance/private benefits to management
- Bias in Recommendations and Shareholder Activism

| | Company proposals receiving pote | | |
|---|---|---|---|
| | Year *t* + 1 | | |
| | Narrowly pass in *t* (1a) | Narrowly fail in *t* (1b) | Diff. (1c) |
| Operating performance | | | |
| *ROA* | 0.081 | 0.088 | −0.007 [−1.52] |
| *Operating profit margin* | 0.039 | 0.048 | −0.009* [−1.68] |
| Investment decisions | | | |
| *Capex-to-assets* | 0.045 | 0.041 | 0.003* [1.75] |
| *Dividend yield* | 0.016 | 0.018 | −0.002 [−1.38] |
| Private benefits to management | | | |
| *Abnormal compensation* ($ million) | 0.263 | 0.181 | 0.082* [1.84] |

**Table 8.** Bias in Recommendations and Shareholder Activism

| | Dependent variable: *Potentially biased recommendation by ISS* | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| *Firm is targeted by activist investors in t − 1* | −0.027* [−1.80] | | |
| *Firm is targeted by activist hedge funds in t − 1* | | −0.036*** [−2.83] | |
| *Firm is targeted in a proxy contest in t − 1* | | | −0.050** [−2.38] |

# Conclusion

- for most types of proposals, competition from a new entrant reduces favoritism偏袒 toward management by an incumbent advisor that serves both corporations and investors.
- Similar to other information intermediaries, biased advice by proxy advisors is shown to have real, negative consequences that allow management to enjoy greater private benefits.
- These results suggest conflicts of interest are a real concern in the proxy advisory industry, and increasing competition could help alleviate them.

# Contributions

- this is the first paper seeking to empirically examine whether and when conflicts of interest can arise from serving both shareholders and issuers.
- only a few papers have studied the effects of Glass Lewis' recommendations, in addition to ISS's.this is the first to use Glass Lewis's comprehensive voting recommendations for the period 2004–2011.

target firm

# Institutional Trading and Hedge Fund Activism

Nickolay Gantchev, Chotibhak Jotikasthira

- 激进主义策略属于事件驱动型，在公开上市的标的公司中持有少数股东权益，以期施加影响、增加公司价值并提高股价。
- 对冲基金激进主义策略的特征：能够减少代理冲突、注重目标公司长期发展。
- 激进主义策略通过公司治理的方式来获得超额收益。一般的对冲基金策略是在不同市场运用套利的手段来营利，其关注的焦点是投资不同品类的证券、衍生品以及商品市场。激进主义策略则是在一家公开交易公司中持有少数股东权益，目的是对公司施加影响、增加公司价值并提高股价。

# Background

- Hedge fund activism is an important governance mechanism associated with significant improvements in the performance and governance of targeted firms.
- Prior literature has established that activists target firms with particular fundamentals, such as low payout and leverage , and market characteristics, such as high institutional ownership and stock liquidity . However, these characteristics alone cannot explain why certain firms are targeted at certain times while others that fit the same profile are not.
- In this paper, we provide new evidence that **institutional trading** is critical in determining an activist’ s specific target choice and time of entry, and ultimately the scale of activism.

# Main work

- To investigate the role of institutional selling in hedge fund activism, we develop a series of empirical hypotheses based on the theoretical contributions of Maug (1998) and other similar theories , to which we refer collectively as liquidity theories.
  - *Hypothesis 1 (Main). The probability of a firm becoming an activist target increases in institutional selling.*
  - *Hypothesis 2 (Timing). Conditional on the activist's recognizing the benefits of monitoring at a given firm, institutional selling accelerates the launch of a campaign.*
  - *Hypothesis 3 (Synchronicity). Target firms experience net institutional selling before campaign announcement, and institutional sales and activist purchases are synchronous in time. (trading gains)*
  - *Hypothesis 4 (Substitution). The synchronicity between institutional sales and activist purchases is lower among target firms with higher net benefits from activism.（activism benifits/trading gains）*

- Hedge Fund Activism Sample
  - The primary data set used in this paper is a comprehensive list of hedge fund activist campaigns from 2000 to 2007. The data are hand-collected from regulatory filings监管备案文件 and supplemented with information from SharkRepellent.net.
  - Institutional trading data are from Ancerno. Institutional ownership and holdings data are from Thomson Reuters-13F. Mutual fund holdings data are from Thomson Reuters-Mutual Funds.

- Hedge Fund Activism Sample

**Table 1.** Characteristics of Target and Nontarget Firms

| | Target firms | | | Nontarget firms | | | Difference | |
|---|---|---|---|---|---|---|---|---|
| | *N* | Mean | Median | *N* | Mean | Median | Mean | Median |
| log(*MV*) | 755 | 5.203 | 5.057 | 33,164 | 5.611 | 5.556 | −0.407*** | −0.499*** |
| *Tobin's Q* | 755 | 1.914 | 1.324 | 33,164 | 2.793 | 1.530 | −0.879*** | −0.206*** |
| *Leverage* | 755 | 0.276 | 0.231 | 33,164 | 0.300 | 0.258 | −0.024** | −0.027 |
| *Dividend yield* | 755 | 0.008 | 0.000 | 33,164 | 0.010 | 0.000 | −0.002 | 0.000 |
| *Sales growth* | 755 | 0.168 | 0.062 | 33,164 | 0.262 | 0.098 | −0.093*** | −0.036*** |
| *ROA* | 755 | 0.049 | 0.095 | 33,164 | 0.044 | 0.095 | 0.005 | 0.000 |
| *R&D/Assets* | 755 | 0.056 | 0.000 | 33,164 | 0.082 | 0.000 | −0.025* | 0.000 |
| *Inst. ownership* | 755 | 0.513 | 0.507 | 33,164 | 0.438 | 0.424 | 0.075*** | 0.083*** |
| log(*Analysts*) | 755 | 1.355 | 1.386 | 33,164 | 1.300 | 1.386 | 0.056 | 0.000 |
| −log(*Amihud*) | 755 | −1.259 | −1.074 | 33,164 | −1.245 | −0.973 | −0.014 | −0.101 |
| *Herfindahl index* | 755 | 0.037 | 0.028 | 33,164 | 0.036 | 0.027 | 0.000 | 0.001*** |
| *Returns* | 755 | 0.055 | −0.028 | 33,162 | 0.214 | 0.044 | −0.157*** | −0.072*** |
| *Inst. buy volume/SHROUT* | 731 | 0.024 | 0.015 | 30,643 | 0.028 | 0.017 | −0.004*** | −0.002** |
| *Inst. sell volume/SHROUT* | 731 | 0.030 | 0.019 | 30,643 | 0.027 | 0.017 | 0.003*** | 0.002** |
| *Inst. net volume/SHROUT* | 731 | −0.006 | −0.002 | 30,643 | 0.001 | 0.000 | −0.007*** | −0.002*** |

- Effect of Institutional Trading on Hedge Fund Activism

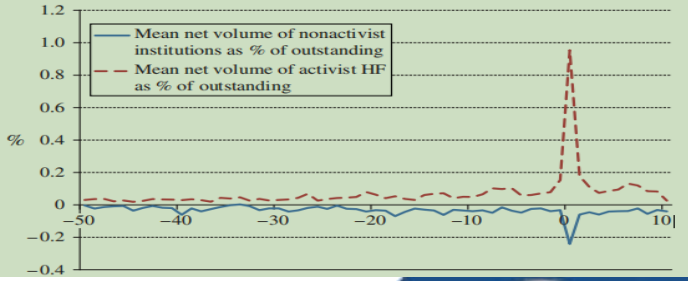
**Table 2.** Effect of Institutional Trading on Activist Targeting

| | OLS | | | |
|---|---|---|---|---|
| | *Target dummy* | | | |
| | (1) | (2) | (3) | (4) |
| *Inst. net volume/SHROUT* | | −0.168*** | | |
| | | (0.045) | | |
| *Inst. sell volume/SHROUT* | | | 0.135*** | |
| | | | (0.045) | |
| *Inst. buy volume/SHROUT* | | | −0.185*** | |
| | | | (0.055) | |
| *ΔMF holdings/SHROUT* | | | | −0.868*** |
| | | | | (0.126) |

**Table 5.** Effect of Institutional Trading on Activist Purchases of Target Shares (OLS)

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *Inst. net volume/SHROUT* | −0.166*** | | −0.167*** | |
| | (0.024) | | (0.026) | |
| *Inst. sell volume/SHROUT* | | 0.263*** | | 0.268*** |
| | | (0.030) | | (0.033) |
| *Inst. buy volume/SHROUT* | | 0.012 | | 0.014 |
| | | (0.023) | | (0.025) |

**Figure 3.** (Color online) Net Trading Volume of Activist Hedge Funds and Other Institutions



# Conclusion

- **institutional sales** raise a firm’s probability of becoming an activist target.
- activist purchases closely track institutional sales at the daily frequency. such synchronicity is stronger among targets with lower expected monitoring benefits, suggesting that gains from trading with other institutions supplement these benefits in the activist’s targeting decision.
- we find that institutional sales accelerate the timing of a campaign at firms already followed by activists rather than attract attention to unlikely targets.
- our findings offer a novel empirical perspective on the liquidity theories of activism; while activists screen firms on the basis of fundamentals, they pick specific targets at a particular time by exploiting institutional liquidity shocks.

# Managing Performance Signals Through Delay: Evidence from Venture Capital

## 通过延迟管理绩效信号:来自风险投资的证据

Indraneel Chakraborty, Michael Ewens

- 风险投资基金又叫创业基金，是当今世界上广泛流行的一种新型投资机构。它以一定的方式吸收机构和个人的资金，投向于那些不具备上市资格的中小企业和新兴企业，尤其是高新技术企业。
- 风险投资基金的经营方针是在高风险中追求高收益，多以股份的形式参与投资，其目的就是帮助所投资的企业尽快成熟，取得上市资格，从而使资本增值。一旦公司股票上市后，风险投资基金就可以通过证券市场转让股权而收回资金，继续投向其它风险企业。
- We identify agency conflicts by observing investment actions (valuation inflation / write offs / reinvestment decisioning) taken by VCs responding to fundraising.

# Background

- The evaluation of managerial talent can be difficult, particularly when managers themselves control the dissemination of information. This problem is important in the venture capital (VC) industry, in which investment characteristics are difficult for outsiders to observe. Investors' assessment of managerial talent impacts the VC's future fundraising ability.
- VCs typically raise funds from limited partners (LPs) every three to four years, where a newly raised fund guarantees a **performance-insensitive fee** for up to 10 years. (动机)

- This setting provides incentives to manipulate fund valuation, which may lead to inefficient capital allocation among managers. Such actions have yet to be investigated in the context of fundraising, yet they are central to understanding the extent and consequence of agency frictions.
- Despite extensive literature studying portfolio activity around fundraising in VC and private equity, whether agency issues manifest themselves in **fundraising** remains unresolved.

- This paper asks whether VC funds exhibit strategic delays in the dissemination of negative performance information during fundraising;
- whether reputation attenuates such agency conflicts;
- what the costs are, if any, of such actions.

# Main work

- Hypothesis
  - *Hypothesis 1 . High-reputation VC funds do not inflate valuations of investments in their fund prior to fundraising.*
  - *Hypothesis 2 . Write-offs of investments increase after the next fund closes.（Delay Strategies）*
    - ☑ *Hypothesis 2A . An increase in write-offs after fundraising is driven by delay in the realization of failure.*
    - ☑ *Hypothesis 2B . A new fund leads to effort capacity constraints for the VC or an opportunity to bundle bad news with good. This leads to an increase in previous fund write-offs.*

- *Hypothesis 3 . VCs postpone reinvestment in worse firms until after fundraising to delay bad news about their talent level.*
- *Hypothesis 4 . Any delayed write-off or reinvestment is confined to low-reputation VCs.*
  *Hypothesis 5 . Funds raised at the peak of the business cycle are the only funds with increased write-offs and delayed reinvestment.*
- *Hypothesis 6 . Current fund write-offs and refinancings predict fundraising success in the subsequent fund.*
- Data： use the VC financing database VentureSource provided by Dow Jones(see https://www.dowjones.com/products/pevc/) and supplemented by data from quantitative VC fund Correlation Ventures (see http://correlationvc.com/) .

- Do These Delay Strategies Matter?

**Table 3.** Learning from Interim Performance: Probability of Raising Fund and Fund Size

| | Raised fund? | | | Log fund $N+1$ size | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Log # *failure preclose* | −0.480*** | | | −0.298*** | | |
| | (0.108) | | | (0.109) | | |
| Log # *good exits preclose* | | 0.268** | | | 0.305*** | |
| | | (0.137) | | | (0.102) | |
| Log # *up rounds preclose* | | | 0.268*** | | | 0.287*** |
| | | | (0.0885) | | | (0.0822) |

- Portfolio Strategies Around Fundraising
  - ✔ Valuation Inflation
  - ✔ Write-offs Around Fundraising
  - ✔ Delayed Reinvestment Around Fundraising
  - ✔ Procyclical Fundraising

We estimate how write-offs and investments in lower-quality entrepreneurial firms change after fundraising **compared to** before using a hazard model

- Cost of Delay Strategies and Equilibrium Implications

# Conclusion

- we find that venture capitalists take actions hidden from their investors—i.e., limited partners (LPs)—that delay revealing negative information about VC fund performance until after a new fund is raised.
- After fundraising is complete, write-offs double and reinvestments in relatively worse-off entrepreneurial firms increase.
- We find that these observations cannot be explained by strategic bundling of news or effort constraints due to the newly raised fund.
- Funds with both long and short fundraising track record exhibit this behavior and the delay is costly for fund investors (LPs).
- The main **contribution** of this paper is to show that VC firms behave strategically in liquidating and reevaluating their existing investments 清算和重新评估其现有投资 around the fundraising events.

# Managerial Compensation in Multidivision Firms

Shashwat Alok, Radhakrishnan Gopalan

# Background

- Managerial decision making in multidivision firms(hereafter referred to as conglomerates) vis-à-vis single division firms has been of significant research interest. Of particular interest is whether asymmetric information and agency problems between the conglomerate’s headquarters and the manager of a division can result in inefficient managerial behavior .
- A properly designed incentive contract for the division manager (DM) can potentially minimize distortions in managerial decisions. For the most part, because of a lack of data, the literature on conglomerates has not studied if and how firms use incentive contracts for DMs to minimize agency costs. **The objective of this paper is to fill this gap.**

# Main work

- hypothesis
  - risk hypothesis (Holmstrom 1979)
    - DM pay should be related to the division's performance.
    - a negative relationship between DM pay and the performance of other divisions.
    - DM pay for division performance in industries with more informative accounting profits is higher that in industries with less informative accounting profits.
  - externality hypothesis
    - divisions within a conglomerate are often linked. such as when divisions produce complementary products , or financial, such as when divisions share a common pool of capital.
    - The actions of the DM can thus affect the value of not only her division but also the other divisions in the firm. This would call for linking DM pay to the performance of both her division and the other divisions in the firm.

- DATA
  - We obtain our data by hand matching two commonly used databases, ExecuComp高管薪酬资料库 and Compustat business segment files：***DM compensation*** (from ExecuComp) and ***division performance*** (from Compustat business segment files).
  - Our sample only includes DMs who are among the top-five highest-paid executives in their firm. Such executives manage the more important or larger divisions within a firm.
  - sample period extends from 1992 to 2009.
- To test predictions of the externality hypothesis, we construct two measures of relatedness.
  - *in the same three-digit SIC code industry*
  - *we estimate the degree of complementarity of the industries in which the divisions of a conglomerate are present (Hoberg and Phillips 2017)*

- DM Pay for Performance

$$y_{ijt} = \alpha + \beta_1 \times Division\_ROA_{jt} + \beta_2 \times Other\text{-}division\_ROA_{it} + \beta_3 \times \log(Total\_assets)_{it} + \beta_4 \times \log(Division\_assets)_{jt} + \text{Time FE} + \text{Firm FE},$$

- DM Pay for Performance and Relatedness of Divisions***(Related; Not related; High complementarity;Low complementarity )***
- Pay for Division and Firm Performance and Accounting Informativeness***(the volatility of earnings of firms in an industry/test for risk hypothesis)***
- DM Pay for Performance and Divisional Investment Opportunities

| High ind. MTB | Low ind. MTB | High sales growth | Low sales growth |
|---|---|---|---|
| (1) | (2) | (3) | (4) |

- DM Pay for Performance and Industry Distress(***differentiate between periods of industry distress and normal times***)
- DM Pay for Performance and Corporate Governance( Institutional_holding as a measure of governance)

# Conclusion

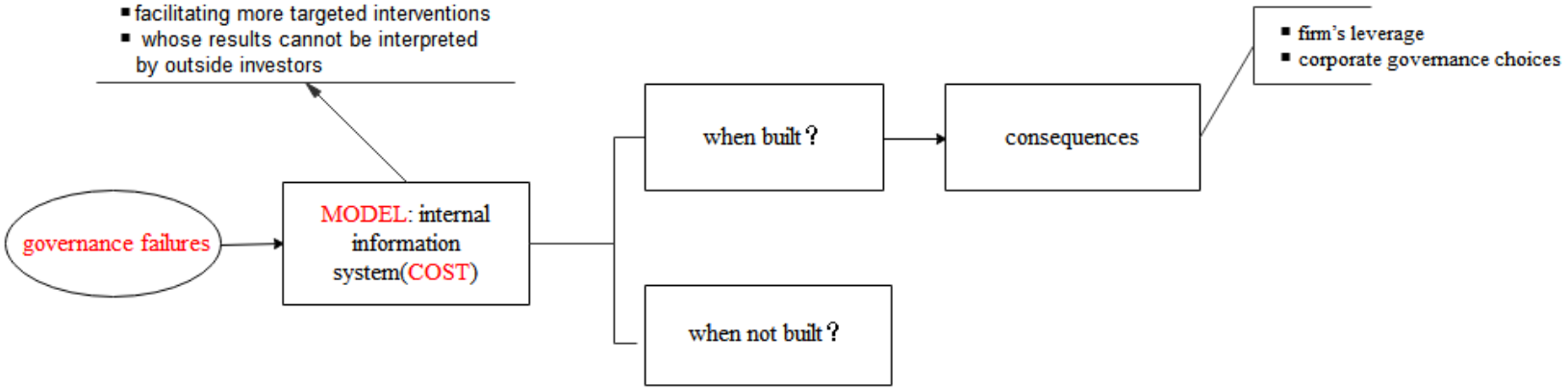
- DM pay is related to the performance of both the DM’s division and the other divisions in the firm.
- There is substantial heterogeneity in DM pay for performance.
  - ☑ DM pay for division performance is lower in industries with less informative accounting earnings.
  - ☑ DM pay is more sensitive to other-division performance
    - if the DM’s division is related to the rest of the firm,
    - if the DM’s division has fewer growth opportunities,
    - if the DM’s division receives less capital from the rest of the firm.
  - ☑ Consistent with optimal contracting view, DMs receive greater pay for other-division performance in better governed firms.

**Contribution:** The unique aspect of our paper is the data that combine DM pay with information about the performance of the divisions in the DM’s firm.

# The Adverse Effect of Information on Governance and Leverage

## 信息对治理和杠杆的不利影响

Christian Laux,[a] Gyöngyi Lóránth,[b] Alan D. Morrison[c]


facilitating more targeted interventions
whose results cannot be interpreted by outside investors
governance failures
MODEL: internal information system(COST)
when built?
when not built?
consequences
firm's leverage
corporate governance choices

# Background

- Since the start of this century, a series of high-profile governance failures have placed the quality of internal reporting systems in the regulatory spotlight.
- A well-governed firm should use information about its activities to identify possible managerial malpractice and then to intervene where necessary to ensure good practice.
- But even now, we continue to see governance problems that can be attributed either to poor information or to a failure to respond to the information generated by internal reporting systems.
- Several authors have argued that forcing firms to implement reporting systems and to codify制度化 their use in internal controls may generate costs so high as to reduce firm value.
- The effect of internal reporting/information systems on firm?

# Main work

- We analyze the **direct costs** of such legislation, presents an analysis of internal information systems and the way that firms respond to their output.
- MODEL
  - study the effect that internal information systems（facilitating more targeted interventions / whose results cannot be interpreted by outside investors） have on a firm’s leverage and corporate governance choices.
  - a firm：
    - headquarters that aims to maximize the value of the firm’s equity.
    - The firm’s managers have incentives that are imperfectly aligned with those of the headquarters: if they see an opportunity to extract personal benefits from a project at the expense of the shareholders, then they take it.（shirking）
    - The headquarters can intervene to improve the governance of specific projects and so to prevent managerial shirking.

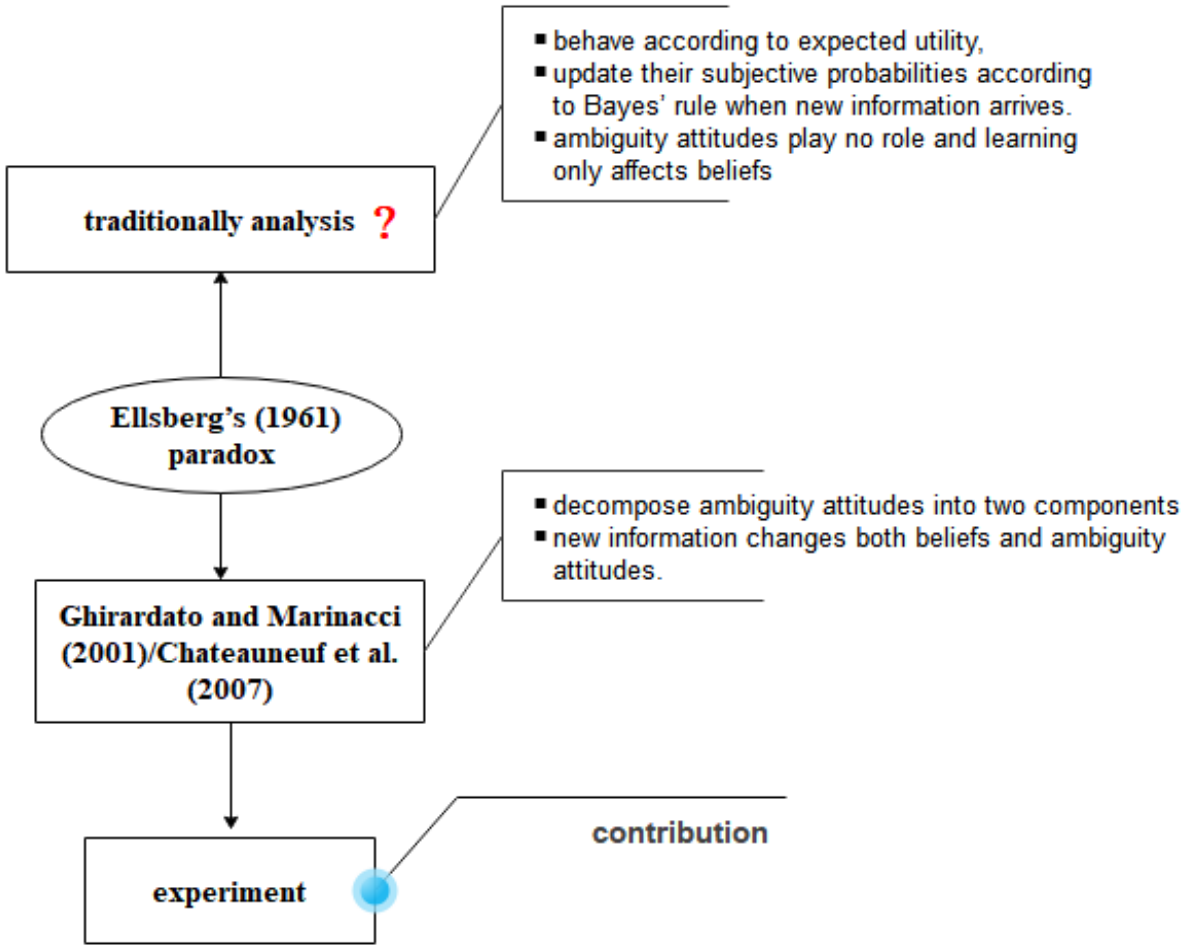
- We identify the conditions under which firms in this setup elect to invest in an information system.
- we also identify an additional potential problem, arising when information systems shift asymmetric information problems from within the firm to across its boundaries, thus causing new adverse selection problems between investors and corporate insiders.

# Conclusion

- Firms do not invest in an information system when their projects are either very likely to experience shirking (since it is cheaper in that case to **intervene indiscriminately**不加区别的进行干预 than to implement an information system) or very unlikely to do so (since in this case the cost of addressing shirking outweighs the benefits).
- Information systems lower governance costs by facilitating more targeted interventions.
- But they also generate asymmetric information between firms and their investors. As a result, firms may attempt to signal their superior quality by assuming more leverage.
- In some circumstances, this can reduce governance incentives and result in inferior outcomes. Investors anticipate this effect, and it renders information systems inefficient.

# The Effect of Learning on Ambiguity Attitudes

Aurélien Baillon,[a] Han Bleichrodt,[a] Umut Keskin,[b]
Olivier l' Haridon,[c] Chen Li[a]


traditionally analysis ?
behave according to expected utility,
update their subjective probabilities according to Bayes' rule when new information arrives.
ambiguity attitudes play no role and learning only affects beliefs
Ellsberg's (1961) paradox
Ghirardato and Marinacci (2001)/Chateauneuf et al. (2007)
decompose ambiguity attitudes into two components
new information changes both beliefs and ambiguity attitudes.
experiment
contribution

# Abstract


- This paper studies the effect of learning information on people’s attitudes toward ambiguity.
- We propose a method to separate ambiguity attitudes from subjective probabilities and to decompose ambiguity attitudes into two components. Under models like prospect theory that represent ambiguity through nonadditive decision weights, these components reflect pessimism and likelihood insensitivity. Under multiple priors models, they reflect ambiguity aversion and perceived ambiguity. (the biseparable preferences model of Ghirardato and Marinacci (2001)/Chateauneuf et al. (2007))
- We apply our method in an experiment where we elicit the ask prices of options with payoffs depending on the returns of initial public offerings (IPOs) on the New York Stock Exchange. IPOs are a natural context to study the effect of learning, as prior information about their returns is unavailable.
- Subjects perceived substantial ambiguity and they were insensitive to likelihood information. We did not observe much pessimism and ambiguity aversion Subjective probabilities were well calibrated and close to the true frequencies. Subjects’ behavior moved toward expected utility with more information, but substantial deviations remained even in the maximum information condition.

thanks for listening ！