Paper 1: Seeing is Believing: Analysts' Corporate Site Visits

Authors: Qiang Cheng, Fei Du, Xin Wang, Yutao Wang
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Presenter: Shuai Li

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Introduction

Background

Analyst Research and Information Acquisition

- Analysts rely on their skills to process public information and acquire private information (Healy & Palepu, 2001; Ivkovic & Jegadeesh, 2004).
- Past research has inferred analysts' reliance on private information but lacks direct evidence (Bradshaw, 2011; Soltes, 2014).

Challenges in Studying Analyst Information Acquisition

- Analysts' information acquisition activities are largely private, making data collection challenging (Bradshaw, 2011).
- Recent calls for more research on direct information acquisition methods (Brown et al., 2015).

Mandatory Disclosure in China: Unique Opportunity: Recent regulation in China requires firms to disclose information on corporate site visits, providing a unique dataset (SZSE, 2009).

Research Motivation

- **Corporate Site Visits as an Information Channel**
  - Analysts use corporate site visits as a direct form of information acquisition to observe operations, production processes, and corporate culture.
  - In-depth face-to-face talks with IR managers and divisional managers offer detailed insights that may not be available through public disclosures.
- **Research Gap:** Prior studies have focused on indirect methods of information acquisition, but there is limited direct evidence regarding site visits.

Research Questions

- Do corporate site visits improve analysts' forecast accuracy?
- How do characteristics like industry type and visiting frequency influence the effect of site visits?
- Can non-local analysts overcome their information disadvantages compared to local analysts through site visits?

Related Literature

Role of Analysts in Capital Markets

- Analysts help reduce information asymmetry between managers and investors, improving market efficiency (O'Brien & Bhushan, 1990).
- Their superior forecasting abilities come from active information acquisition and processing.

Factors Affecting Forecast Performance

- **Industry Specialization**: Analysts with industry-specific expertise provide better forecasts (Jacob et al., 1999).
- **Firm-Specific Experience**: Experience with a particular firm leads to better forecasts (Mikhail et al., 1997).
- **Brokerage Size**: Larger brokerages provide more resources, leading to more accurate forecasts (Clement, 1999).

Types of Information Acquisition

- **Conference Calls**: Analysts asking questions during calls demonstrate superior information acquisition (Mayew et al., 2013).
- **Investor Conferences**: Analysts hosting conferences also acquire better information (Green et al., 2014).
- **Corporate Site Visits**: Unlike other methods, site visits provide exclusive information to visiting analysts, giving them a unique advantage.

Hypothesis Development

Institutional Background

- **Corporate Site Visits**: Site visits involve analysts visiting firms to speak with managers and observe production and operational facilities.
- **SZSE Guidelines**: Encourages firms to accommodate site visit requests to help investors understand business operations.

H1: Improvement in Forecast Accuracy

- **Hypothesis H1**: Analysts who conduct site visits have better forecast accuracy compared to non-visiting analysts.

H2: Cross-Sectional Hypotheses on Site Visits' Effectiveness

The improvement in forecast accuracy is more pronounced for:

- **Manufacturing Firms**: Firms with observable and tangible activities (production processes).
- **Firms with Higher Asset Tangibility**: Tangible assets provide clearer operational cues.
- **Firms with Concentrated Business Lines**: On-site operations better represent overall business performance.

H3: Effect of Visit Characteristics on Forecast Accuracy

The impact of site visits on forecast accuracy varies based on specific visit characteristics:

- **Analyst-Only Visits**: Sell-side analysts visiting alone for information acquisition have better outcomes.
- **Nonlocal Analysts**: Analysts from outside the local area benefit more, reducing information disadvantage.
- **Fewer Preceding Visits**: Visits with fewer prior visits yield more novel information, improving forecast accuracy.

Research Design & Main Results

Data and Sample Description

Sample Description

- **Data Source**:
  - Corporate site visit data for firms listed on SZSE from 2009-2012.
  - Hand-collected site visit records from annual reports, including event dates and visiting institution names.
- **Sample Size**: 6,651 site visits to 931 unique firms during 2009-2012.

Sample Selection Criteria

- Exclude non-site-visit events (e.g., webinars, email exchanges).
- Include only site visits involving at least one sell-side Chinese broker.
- At least one forecast must be issued within six months before to one month after the visit by both visiting and non-visiting analysts.

Control Variables and Fixed Effects

- **Control Variables**
  - Forecast horizon, firm-specific experience, brokerage size, institutional ownership, board independence, firm size, earnings volatility, etc.
  - **Purpose**: Control for factors affecting forecast accuracy to isolate the effect of site visits.
- **Fixed Effects**
  - **Industry Fixed Effects**: Control for industry-specific factors that may affect forecast accuracy.
  - **Clustering**: Firm- and year-level clustering to adjust standard errors.

Univariate Tests

Univariate Tests for Forecast Accuracy

- **Descriptive Statistics** (Table 2)
  - **Pre-Visit Period**: Visiting and nonvisiting analysts have similar forecast accuracy.
  - **Post-Visit Period**: Visiting analysts show significantly lower forecast errors than nonvisiting analysts (1.077 vs. 1.201, p-value = 0.01).
  - **Improvement in Forecast Accuracy**: Visiting analysts have a larger improvement in forecast accuracy compared to nonvisiting analysts (0.164 vs. 0.041, p-value = 0.00).

- **Analyst Characteristics**
  - **Visiting Analysts**: Smaller change in forecast horizon, slightly more firm-specific experience, more likely to work for larger brokers.
  - **Group Size**: Visiting group size (1.385) is much smaller than nonvisiting group size (7.234).
- **Firm Characteristics**
  - **Average Market Value**: RMB 10.3 billion (~USD 1.6 billion).
  - **Average Institutional Ownership**: 44%.
  - **Other Metrics**: Book-to-market ratio (0.36), sales growth (28%).

Table 2 Descriptive statistics

Variables	Obs.	Mean	STD	Q1	Median	Q3
For visiting analyst group						
Pre-visit forecast errors	6651	1.241	1.955	1.609	0.659*	0.231
Post-visit forecast errors	6651	1.077***	1.771	1.359	0.533***	0.183
ΔAccuracy	6651	0.164***	0.869	0.000	0.000***	0.090
Pre-visit horizon	6651	183.765***	67.532	126.400	186.000***	241.000
Post-visit horizon	6651	126.125***	66.916	71.000	125.000***	185.000
ΔHorizon (raw)	6651	57.641***	30.182	33.000	53.000***	77.000
Firmexp	6651	2.435***	1.865	1.000	2.000***	3.000
Brokersize	6651	33.691***	12.559	26.000	33.333***	42.000
ANA_group	6651	1.385***	0.934	1.000	1.000***	1.000
For non-visiting analyst group						
Pre-visit forecast errors	6651	1.242	2.038	1.588	0.699	0.248
Post-visit forecast errors	6651	1.201	2.103	1.524	0.671	0.237
ΔAccuracy	6651	0.041	0.557	0.000	0.000	0.003
Pre-visit horizon	6651	190.310	64.901	129.537	195.800	244.333
Post-visit horizon	6651	121.053	66.322	66.200	121.000	180.000
ΔHorizon (raw)	6651	69.256	23.491	52.889	67.612	84.316
Firmexp	6651	2.243	1.236	1.250	2.000	3.000
Brokersize	6651	28.774	7.424	24.500	28.571	32.750

Multivariate Test for H1

$$\begin{aligned}\Delta Accuracy_{k,j,t} = \alpha + \beta Visit_{k,j,t} + \gamma_1 \Delta horizon_{k,j,t} + \gamma_2 Firm\exp_{k,j,t} + \gamma_3 Bro\ker size_{k,j,t} \\ + \gamma_4 ANA\_group_{k,j,t} + \gamma_5 MV_{j,t} + \gamma_6 NI\_std_{j,t} + \gamma_7 Inst\_holding_{j,t} + \gamma_8 Indep_{j,t} \\ + \gamma_9 BM_{j,t} + \gamma_{10} Growth_{j,t} + \gamma_{11} Loss_{j,t} + \gamma_{12} BHAR_{j,t} + Industry_{j,t} + \varepsilon_{k,j,t},\end{aligned} \tag{1}$$

Control Variables

- **Forecast Horizon (ΔHorizon)**: Positive coefficient suggests that shorter horizon forecasts post-visit are more accurate.
- **Brokerage Size and Firm Size**: Analysts from larger brokerages and covering larger firms experience smaller improvements (likely due to more information pre-visit).
- **Firms with Higher Earnings Volatility, Book-to-Market Ratios, and Losses**: Larger improvements in forecast accuracy observed.

Table 3 The change in forecast accuracy for visiting and nonvisiting analyst groups around site visits

	Coeff. *(t value)*
Visit (H1: +)	0.1292***
	(5.13)
ΔHorizon	0.0582***
	(8.23)
Firmexp	−0.0014
	(−0.20)
Brokersize	−0.0384*
	(−1.92)
ANA_group	0.0073
	(0.75)
MV	−0.0265**
	(−2.53)
NI_std	0.2977***
	(4.74)
Inst_holding	0.0444
	(0.97)
Indep	−0.0176
	(−0.26)
BM	0.1235***
	(2.58)
Growth	−0.0380
	(−1.12)
Loss	0.2506**
	(2.36)
BHAR	0.0107
	(0.80)
Industry fixed effects	Yes
Observations	13,302
Adj. R^2	0.039

Regression Analysis Results

Cross-Sectional Analysis for H2 and H3

Hypothesis H2: Improvement in Forecast Accuracy by Firm Characteristics

$$\Delta Accuracy_{k,j,t} = \alpha + \beta_1 Visit_{k,j,t} + \beta_2 Firm\_char_{j,t} + \beta_3 Visit_{k,j,t} \times Firm\_char_{j,t} + \boldsymbol{\gamma Controls} + \varepsilon_{k,j,t}, \quad (2)$$

- **Manufacturing Firms**: Positive coefficient on Visit × Manufacture (t = 2.08).
- **High Tangibility Firms**: Positive coefficient on Visit × Tangibility (t = 2.30).
- **High Business Concentration**: Positive coefficient on Visit × Concentration (t = 2.81).
- **Conclusion**: Forecast accuracy improvement is more pronounced for manufacturing firms, firms with tangible assets, and firms with concentrated business lines.

Table 4 The effect of firm characteristics on the usefulness of analysts' site visits

	Column (1) *Firm_char = Manufacture*	Column (2) *Firm_char = Tangibility*	Column (3) *Firm_char = Concentration*
Visit	0.1096***	0.1121***	0.1005***
	(4.28)	(6.25)	(3.00)
Firm_char	−0.0116	0.0027	0.0127
	(−0.31)	(0.49)	(1.13)
Visit × Firm_char (H2:+)	0.0294**	0.0354**	0.0524***
	(2.08)	(2.30)	(2.81)
ΔHorizon	0.0581***	0.0584***	0.0591***
	(8.21)	(8.12)	(7.61)
Firmexp	−0.0017	−0.0031	−0.0038
	(−0.24)	(−0.40)	(−0.60)
Brokersize	−0.0377*	−0.0365*	−0.0386*
	(−1.87)	(−1.82)	(−1.87)
ANA_group	0.0072	0.0078	0.0091
	(0.73)	(0.80)	(0.93)
MV	−0.0265**	−0.0262**	−0.0280***
	(−2.52)	(−2.48)	(−2.74)
NI_std	0.2974***	0.3215***	0.2969***
	(4.73)	(5.60)	(4.18)
Inst_holding	0.0445	0.0416	0.0370
	(0.97)	(0.92)	(0.78)
Indep	−0.0177	−0.0081	−0.0204
	(−0.26)	(−0.12)	(−0.31)
BM	0.1236**	0.1165**	0.1229**
	(2.58)	(2.36)	(2.57)
Growth	−0.0380	−0.0380	−0.0379
	(−1.12)	(−1.14)	(−1.10)
Loss	0.2506**	0.2453**	0.2481**
	(2.36)	(2.32)	(2.33)
BHAR	0.0107	0.0098	0.0092
	(0.80)	(0.70)	(0.71)
Industry fixed effects	Yes	Yes	Yes
Observations	13,302	13,302	13,134
Adj. R^2	0.039	0.039	0.040

Hypothesis H3: Effectiveness of Site Visits by Visit Characteristics

$$\Delta Accuracy_{k,j,t} = \alpha + \beta_1 Visit_{k,j,t} + \beta_2 Visit_{k,j,t} \times Visit\_char_{k,j,t} + \boldsymbol{\gamma Controls} + \varepsilon_{k,j,t}, \tag{3}$$

- **Analyst-Only Visits**: Positive coefficient on Visit × AnalystOnly (t = 7.07).
- **Nonlocal Analysts**: Positive coefficient on Visit × Remote (t = 9.90).
- **Fewer Preceding Visits**: Positive coefficient on Visit × Unpreceded (t = 2.84).
- **Conclusion**: Site visits improve forecast accuracy more when conducted by analysts only, by nonlocal analysts, and when preceded by fewer site visits.

Table 5 The effect of visitors' characteristics on the usefulness of analysts' site visits

	Column (1) *Visit_char = AnalystOnly*	Column (2) *Visit_char = Remote*	Column (3) *Visit_char = Unpreceded*
Visit	0.1034***	0.0933***	0.1093***
	(4.23)	(4.01)	(5.58)
Visit × Visit_char (H3: +)	0.0787***	0.0509***	0.0318***
	(7.07)	(9.90)	(2.84)
ΔHorizon	0.0561***	0.0580***	0.0591***
	(8.01)	(8.20)	(8.19)
Firmexp	−0.0013	−0.0005	−0.0017
	(−0.20)	(−0.07)	(−0.25)
Brokersize	−0.0308	−0.0385*	−0.0378*
	(−1.63)	(−1.95)	(−1.90)
ANA_group	0.0115	0.0083	0.0053
	(1.22)	(0.84)	(0.58)
MV	−0.0277***	−0.0276***	−0.0249**
	(−2.80)	(−2.64)	(−2.44)
NI_std	0.3159***	0.3024***	0.2877***
	(5.52)	(4.86)	(4.82)
Inst_holding	0.0456	0.0429	0.0464
	(1.02)	(0.95)	(1.02)
Indep	−0.0179	−0.0134	−0.0176
	(−0.29)	(−0.21)	(−0.27)
BM	0.1176**	0.1231**	0.1211**
	(2.50)	(2.55)	(2.56)
Growth	−0.0388	−0.0377	−0.0377
	(−1.20)	(−1.11)	(−1.11)
Loss	0.2491**	0.2474**	0.2485**
	(2.33)	(2.33)	(2.35)
BHAR	0.0113	0.0108	0.0104
	(0.86)	(0.79)	(0.80)
Industry fixed effects	Yes	Yes	Yes
Observations	13,302	13,296	13,302
Adj. R^2	0.043	0.040	0.039

Additional Analyses - Self-Selection of Visiting Analysts

Skilled analysts may self-select into conducting site visits, leading to better forecast accuracy.

Strategy to Address Self-Selection Bias: **DID**

- **Evidence Against Self-Selection**:
  - **Pre-Visit Analysis**: No significant difference in forecast accuracy between visiting and nonvisiting analysts before the visit (Table 6, t = -0.35).
  - **Post-Visit Analysis**: Forecast accuracy improves significantly for visiting analysts after site visits (t = 3.07).
  - **Regression with Pre- and Post-Visit Indicator**: Post-visit indicator is significantly positive, confirming improved forecast accuracy for visitors (t = 5.67).

Table 6 Analysts' site visits and the level of forecast accuracy

	Column (1) *Accuracy* Before site visit	Column (2) *Accuracy* After site visit	Column (3) *Accuracy* Full sample
Visit	−0.0068	0.1056***	−0.0049
	(−0.35)	(3.07)	(−0.24)
Post			0.0451***
			(6.24)
Visit × *Post (H1: +)*			0.1084***
			(5.67)
Horizon	−0.6069***	−0.5879***	−0.5974***
	(−3.04)	(−3.28)	(−3.15)
Firmexp	−0.2380***	−0.2483***	−0.2433***
	(−4.29)	(−4.97)	(−4.63)
Brokersize	0.0212	−0.0187	0.0013
	(0.42)	(−0.27)	(0.02)
ANA_group	0.1263***	0.1144***	0.1204***
	(6.63)	(6.08)	(6.63)
MV	0.1505	0.1364	0.1435
	(1.47)	(1.47)	(1.47)
NI_std	−0.0016	−0.0019	−0.0018
	(−0.94)	(−1.21)	(−1.07)
Inst_holding	−0.0536	−0.0462	−0.0498
	(−0.20)	(−0.21)	(−0.21)
Indep	−0.9623*	−1.0193**	−0.9907**
	(−1.91)	(−2.21)	(−2.06)
BM	−1.3967***	−1.2814***	−1.3390***
	(−4.13)	(−3.87)	(−4.01)
Growth	−0.0001***	−0.0001***	−0.0001***
	(−3.03)	(−3.33)	(−3.17)
Loss	−3.6138***	−3.2916***	−3.4527***
	(−19.21)	(−28.35)	(−23.87)
BHAR	−0.0035	0.0069	0.0017
	(−0.03)	(0.07)	(0.01)
Industry fixed effects	Yes	Yes	Yes
Observations	13,302	13,302	26,604
Adj. R^2	0.273	0.263	0.269

- **Robustness Check**:
  - **Comparable Nonvisiting Analysts**: Restricted nonvisiting group to those who visited the same firm at other times.
  - **Results**: Coefficient on Visit remains positive (t = 6.94), supporting that information obtained during visits drives the improvement.

Table 7 The change in forecast accuracy for visiting and nonvisiting analyst groups around site visits: (1) excluding nonvisiting analysts who do not conduct site visits, (2) excluding analysts who issued strong-buy recommendations or had investment banking relationships

	Column (1) *Coeff.* *(t value)*	Column (2) *Coeff.* *(t value)*
Visit (H1: +)	0.1184***	0.1446***
	(6.94)	(5.67)
ΔHorizon	0.0469***	0.0577***
	(5.44)	(5.81)
Firmexp	−0.0011	0.0013
	(−0.13)	(0.32)
Brokersize	−0.0321*	−0.0378*
	(−1.85)	(−1.89)
ANA_group	0.0175***	0.0131
	(3.93)	(0.91)
MV	−0.0296***	−0.0311**
	(−3.46)	(−2.28)
NI_std	0.3579***	0.2272***
	(4.53)	(3.20)
Inst_holding	0.0492	0.0530
	(1.18)	(1.00)
Indep	0.0054	−0.0665
	(0.05)	(−0.74)
BM	0.1234**	0.1401**
	(2.00)	(2.43)
Growth	−0.0222	−0.0545
	(−0.59)	(−1.27)
Loss	0.1917***	0.2696**
	(12.24)	(2.47)
BHAR	0.0002	0.0140
	(0.01)	(0.71)
Industry fixed effects	Yes	Yes
Observations	13,302	13,302	26,604
Adj. R^2	0.273	0.263	0.269

Additional Analyses - Selective Disclosure

- **Potential Bias**: Managers may selectively disclose favorable information during site visits.
- **Cases Examined**:
  - Selective disclosure is more likely to occur during site visits to the firms that violated disclosure rules and later were investigated by regulators.
  - Analysts with favorable relationships with the firm are more likely to visit it regularly.
- They **failed to find any evidence** consistent with selective disclosure.

Alternative Research Design - Same-Analyst Comparison

- **Objective**: Address concerns of unobservable analyst characteristics.
- **Two Tests Conducted**:
  - **Within-Year Comparison**: Compared forecast accuracy for firms visited by an analyst versus firms not visited by the same analyst in the same year.
  - **Cross-Year Comparison**: Compared accuracy for years when an analyst visited a firm versus years when they did not.
- **Results**: Forecast accuracy is significantly higher for visited firms ($t = 10.63$ and $t = 4.36$, respectively).

Table 8 Comparisons based on the same-analyst observations

	Column (1) *Coeff.* *(t value)*	Column (2) *Coeff.* *(t value)*
Visit_freq	0.0462***	0.0413***
	(10.63)	(4.36)
Horizon	−0.2819***	−0.2608***
	(−5.74)	(−4.31)
Firmexp	0.1152***	0.0642
	(6.30)	(1.55)
Genexp	0.0138	−0.0109
	(1.06)	(−0.75)
Brokersize	0.0158	0.0065
	(0.93)	(0.21)
Numind	−0.0282	−0.0077
	(−0.71)	(−0.22)
MV	0.0102*	0.0010
	(1.74)	(0.07)
Industry fixed effects	Yes	Yes
Observations	26,103	5469
Adj. R^2	0.090	0.083

Investors’ Response and Local Advantage

Investors’ Response to Forecast Revisions

- **Credibility of Forecasts**:
  - **Investor Reaction**: Investors respond more positively to forecast revisions issued by visiting analysts (t = 2.35).
  - **Conclusion**: Site visits enhance the credibility of visiting analysts’ reports.

Site Visits and Local Analyst Advantage

- **Local vs. Nonlocal Analysts**:
  - **Local Analysts’ Advantage**: Forecasts by local analysts are more accurate than those by nonlocal analysts (t = -2.86).
  - **Site Visits Impact**: Site visits help nonlocal analysts overcome their disadvantage, especially when conducted multiple times.

Table 9 Site visits and market reaction

	Coeff. *(t value)*
EF_Rev	0.2537***
	(6.26)
EF_Rev × *Visit_prev_month*	0.0448**
	(2.35)
Visit_prev_month	0.0031***
	(3.54)
Revenue_Forecast	−0.0022
	(−1.07)
Horizon	−0.0003**
	(−2.19)
Numcom	−0.0015
	(−1.42)
Numind	0.0019
	(0.97)
Brokersize	−0.0003
	(−0.24)
Star	0.0040***
	(2.91)
Genexp	−0.0003
	(−0.36)
FE	0.2117***
	(8.29)
MV	−0.0003
	(−0.63)
Industry fixed effects	Yes
Observations	17,317
Adj. R^2	0.021

Table 10 Site visits and local advantage

	Column (1) *Coeff.* *(t value)*	Column (2) *Coeff.* *(t value)*	Column (3) *Coeff.* *(t value)*	Column (4) *Coeff.* *(t value)*
Non_local	−0.0190***		−0.0168**	−0.0300***
	(−2.86)		(−2.39)	(−3.96)
Visit_freq		0.0364***	0.0359***	0.0108***
		(8.15)	(7.99)	(2.96)
Non_local × *Visit_freq*				0.0364***
				(5.24)
Horizon	−0.2734***	−0.2711***	−0.2711***	−0.2711***
	(−6.80)	(−6.71)	(−6.72)	(−6.71)
Firmexp	0.1450***	0.1429***	0.1424***	0.1424***
	(5.37)	(5.50)	(5.42)	(5.44)
Genexp	0.0147	0.0157	0.0152	0.0151
	(1.08)	(1.14)	(1.12)	(1.12)
Brokersize	0.0195	0.0161	0.0161	0.0158
	(0.73)	(0.60)	(0.60)	(0.59)
Numind	−0.0365	−0.0368	−0.0361	−0.0357
	(−1.20)	(−1.20)	(−1.18)	(−1.18)
MV	0.0096***	0.0093***	0.0098***	0.0097***
	(4.02)	(2.84)	(2.94)	(2.83)
Industry fixed effects	Yes	Yes	Yes	Yes
Observations	17,714	17,714	17,714	17,714
Adj. R^2	0.083	0.084	0.084	0.084

Why Don’t All Analysts Conduct Site Visits?

Factors Affecting Analysts’ Decision to Visit (Section 5.6)

- **Cost-Benefit Analysis**:
  - **Cost Factors**: Analysts less likely to visit distant firms or if they work for smaller brokerages (Distance: z = -7.84, Brokerage Size: z = 5.38).
  - **Benefit Factors**: More likely to visit firms with higher asset tangibility and greater business concentration (Tangibility: z = 2.77, Concentration: z = 2.84).
- **Control Variables**:
  - **Positive Factors**: Higher disclosure ratings, analyst coverage, and favorable firm opinion increase visit likelihood.
  - **Negative Factors**: State-owned enterprises (SOEs) less likely to be visited.

Table 11 Determinants of analyst site visits

	Coeff. *(z-value)*
Variables related to the cost of conducting site visits	
Distance	−0.1028***
	(−7.84)
Brokersize	0.5847***
	(5.38)
Variables related to the benefit of conducting site visits	
Manufacture	0.0715
	(1.64)
Tangibility	0.0770***
	(2.77)
Concentration	0.0576***
	(2.84)
Control variables	
StrongBuy	0.1328*
	(1.87)
Disclosure_rating	0.1664***
	(4.38)
ANA	0.1809***
	(9.77)
SOE	−0.2576***
	(−6.79)
MV	0.0059
	(0.20)
ROA	−0.3379
	(−1.15)
Age	0.0423***
	(7.74)
BM	0.1069
	(1.43)
Debt	0.0108
	(0.11)
Industry fixed effects	Yes
Observations	49,553
Pesudo-R^2	0.0434

Conclusions

Summary of Findings

- **Main Findings**:
  - **Forecast Improvement**: Visiting analysts experience significant improvement in forecast accuracy after site visits.
  - **Cross-Sectional Results**: Improvement is more pronounced for:
    - **Manufacturing Firms**: More observable activities.
    - **High Tangibility Firms**: Tangible assets lead to clearer insights.
    - **High Business Concentration Firms**: More representative observations during visits.
  - **Visit Characteristics**:
    - Greater improvement when visits are conducted by analysts only.
    - Improvement is larger for nonlocal analysts and for visits preceded by fewer prior visits.

- **Additional Analyses**:
  - **No Self-Selection Bias**: Results are not driven by pre-existing attributes of visiting analysts.
  - **No Selective Disclosure**: No evidence that firms selectively disclose information during site visits.
- **Market Response**:
  - Stronger market response to forecast revisions by visiting analysts, confirming the informational advantage gained through site visits.
  - **Nonlocal Analysts**: Site visits help overcome information disadvantages faced by nonlocal analysts.

Future Research Opportunities

- **Site Visits to Non-Covered Firms**:
  - Some analysts visit firms they do not formally cover.
  - **Research Questions**:
    - What benefits do these analysts gain?
    - Do they gather information about peers, customers, or suppliers of the firms they cover?
- **Site Visits as Buy-Side Services**:
  - Analysts often provide site visits as a service to buy-side clients.
  - **Potential Benefits**:
    - Do analysts gain more commissions or votes as top analysts?
    - How do these services affect their influence and standing in the market?

- **Detailed Meeting Minutes** (Available from 2013):
  - The SZSE provides detailed meeting minutes of site visits.
  - **Textual Analysis**: Use these transcripts to better understand the information acquisition process during site visits.
  - **Research Opportunity**: Analyze the specific types of questions and interactions that contribute most to analysts' forecast improvements.
- **Other Active Information Acquisition Channels**:
  - **Comparison**: How do site visits compare to other forms of information acquisition like conference calls or investor meetings?
  - **Integration**: Examine the combined effect of multiple channels on analysts' overall performance.

Paper 2: Do Analysts Gain an Informational Advantage by Visiting Listed Companies?

Authors: Bing Han, Dongmin Kong, Shasha Liu

Contemporary Accounting Research, 2018

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Motivation

Why This Question Matters

- Analysts play a crucial role in information acquisition and dissemination in financial markets. Despite their importance, little research has been done on how analysts collect information and how it affects their forecasts.
- This study focuses on a specific channel: **company visits by analysts from brokerage firms**
- Understanding whether these visits provide an informational advantage could shed light on how analysts improve their forecast accuracy and the broader role of private information in financial markets.

Conceptual Framework

- Analysts may gain unique insights from company visits
  - **Direct interaction** helps evaluate management quality and company strategy.
  - **Private discussions** may allow more candid responses from management compared to public statements.
  - Visits enable analysts to use a **"mosaic" approach**, combining various small pieces of information for a broader understanding.
- **Expected Outcomes:** Improved forecast accuracy, especially for companies with limited public information

Research Question and Hypothesis

Key Research Question

- Do company visits provide analysts with an informational advantage that improves their earnings forecast accuracy?

Hypothesis

- Analysts who visit companies will have improved forecast accuracy compared to those who do not, particularly for companies that are less accessible or receive less attention.

Research Approach, Data, and Methodology

Research Approach

Research Approach

- The primary focus is on whether analysts who visit companies provide more accurate earnings forecasts compared to those who do not
- Data integration with methodology allows for robust testing of hypotheses

Data Sources

- **Company Visits Data**: Unique database from the Shenzhen Stock Exchange (SZSE)
  - Detailed information on visits to listed companies by individual investors, fund managers, and brokerage firm analysts
  - SZSE has required listed companies to disclose visit records since 2006
  - Sample period: 2007-2014, focusing on visits by analysts employed by brokerage firms
- **Earnings Forecast Data**: China Stock Market and Accounting Research Database (CSMAR)
  - Includes analysts' earnings per share (EPS) forecasts and company financials
  - Additional data: EPS, net profit, book-to-market ratio, market capitalization, stock returns, annual report dates, and headquarters locations of brokerages and companies

- **Mutual Fund Data**: Wind Information database
  - Total commission payments and stock holdings of mutual funds
  - Used to measure buy-side business pressures faced by brokerage firms

Sample and Variables

- Basic unit of observation: brokerage firm - listed company pair in a given year
  - Focus on earnings forecasts issued by brokerage firms before company earnings announcements
  - Visits without corresponding forecasts before announcements are excluded from the sample
- Key variable: **Forecast Accuracy**
  - Measured using post-visit earnings forecast accuracy for the same company
  - Definitions and additional variable details are provided in Appendix 2

Summary statistics

Panel A: Average earnings forecast accuracy before and after company visits

	Visit Group	NonVisit Group	Visit − NonVisit	*t*-statistic
Before	−0.960	−0.947	−0.013	(−0.330)
After	−0.684	−0.848	0.165***	(4.897)
After − Before	0.276***	0.099***	0.178***	(3.557)
t-statistic	(7.857)	(2.782)		

Determinants of company visits

- They further explore the factors that affect brokerage firms' decisions to visit companies using a probit model, with the dummy variable Visit as the dependent variable.
- They also estimate an ordered probit model with TVisit (defined as the number of visits by a brokerage firm to a company in a given year) as the dependent variable.

$$
\begin{aligned}
Visit_{ijt}(orTVisit_{ijt}) = {} & \alpha + \beta_1 BrokerSize_{it-1} + \beta_2 GEXP_{it-1} + \beta_3 FEXP_{ijt-1} \\
& + \beta_4 LagAccuracy_{ijt-1} + \beta_5 CoverCompanies_{it-1} + \beta_6 FCFreq_{ijt-1} \\
& + \beta_7 Horizon_{ijt} + \beta_8 Follow_{jt-1} + \beta_9 Size_{jt-1} + \beta_{10} Stkret_{jt-1} \\
& + \beta_{11} Loss_{jt-1} + \beta_{12} Leverage_{jt-1} + \beta_{13} Local_{ij} \\
& + FixedEffects + \varepsilon_{ijt}, \qquad (1)
\end{aligned}
$$

TABLE 3
Probit analysis of company visits

	Full sample		Subsample of nonlocal companies	
	D.V.: *Visit*	D.V.: *TVisit*	D.V.: *Visit*	D.V.: *TVisit*
Variable	A	B	C	D
BrokerSize	0.118	0.124	0.109	0.127
	(1.179)	(1.370)	(1.073)	(1.363)
GEXP	−0.319*	−0.329**	−0.295*	−0.310*
	(−1.823)	(−1.961)	(−1.661)	(−1.825)
FEXP	−0.002	−0.033	0.005	−0.028
	(−0.074)	(−1.414)	(0.190)	(−1.063)
LagAccuracy	−0.002	0.003	−0.001	0.004
	(−0.339)	(0.573)	(−0.147)	(0.773)
CoverCompanies	−0.145*	−0.132**	−0.139*	−0.128*
	(−1.932)	(−1.969)	(−1.819)	(−1.874)
FCFreq	−0.017	0.024	−0.016	0.020
	(−0.783)	(1.278)	(−0.710)	(0.999)
Horizon	−0.346***	−0.358***	−0.342***	−0.354***
	(−28.434)	(−33.265)	(−28.084)	(−32.398)
Follow	−0.013	−0.024	−0.012	−0.025
	(−0.587)	(−1.082)	(−0.482)	(−1.091)
Size	−0.037***	−0.013	−0.037***	−0.012
	(−2.612)	(−0.843)	(−2.638)	(−0.778)
Stkret	0.066***	0.055***	0.072***	0.060***
	(3.609)	(3.281)	(3.579)	(3.222)
Loss	0.051	0.059	0.046	0.061
	(0.823)	(0.891)	(0.728)	(0.847)
Leverage	−0.212***	−0.183***	−0.221***	−0.204***
	(−3.205)	(−2.620)	(−3.313)	(−2.825)
Local	0.281***	0.335***		
	(6.130)	(6.218)		
Constant	1.079***		1.117***	
	(3.114)		(3.237)	
Adj R^2	0.110	0.089	0.106	0.087

Baseline Results and Empirical Model

We use a panel regression model to estimate the effect of company visits on forecast accuracy:

$$Accuracy_{ijt} = \alpha + \beta_1 Visit_{ijt} + \gamma Controls + FixedEffects + \varepsilon_{ijt}, \quad (2)$$

- Dependent variable: **Forecast Accuracy**
- Independent variable of interest: $Visit_{ijt}$
- Control variables include: Brokerage size, analyst ability, number of companies covered, forecast horizon, company analyst coverage, profitability, market capitalization, stock performance, leverage ratios, and local analyst indicator
- Results:
  - Visits are positively associated with forecast accuracy (coefficient of 0.425, significant at 1% level)
  - Adding control variables improves model fit (R^2 increases from 9.9% to 19.7%)

TABLE 4
Effect of company visits on earnings forecast accuracy

Variable	Predicted sign	D.V.: *Accuracy*	
		A	B
Visit	(+)	0.425***	0.134***
		(13.400)	(4.889)
BrokerSize	(+)		−0.037
			(−0.516)
GEXP	(+)		−0.006
			(−0.068)
FEXP	(+)		0.069**
			(2.448)
LagAccuracy	(+)		0.064***
			(6.467)
CoverCompanies	(−)		−0.013
			(−0.224)
FCFreq	(+)		−0.047***
			(−2.811)
Horizon	(−)		−0.617***
			(−32.126)
Follow	(+)		0.135***
			(5.727)
Size	(?)		−0.051***
			(−3.139)
Stkret	(?)		−0.101***
			(−3.028)
Loss	(−)		−0.331***
			(−2.837)
Leverage	(−)		−1.039***
			(−16.229)
Local	(+)		0.085**
			(2.169)
Constant		−0.858***	3.738***
		(−6.361)	(8.436)
Adj R^2		0.099	0.197

Addressing Endogeneity and Selection Bias

Endogeneity Concerns

- Potential endogeneity issue: Analysts' decisions to visit may be influenced by factors related to forecast accuracy
- **Instrumental Variable (IV) Approach**
  - Use **Extreme Weather** as an instrument for company visits
  - Weather affects the probability of visits but is unlikely to directly impact forecast accuracy
  - First-stage regression: Weather significantly decreases the probability of visits (F-statistic > 10)
  - Second-stage regression: Instrumented **Visit** is significantly positive, suggesting causality

Selection Bias Concerns

- **Propensity Score Matching (PSM) and Difference-in-Differences (DID)**
  - PSM: Match visited companies with non-visited companies based on observable characteristics
  - DID: Compare changes in forecast accuracy for visited vs. matched non-visited companies
  - Results confirm positive effect of visits on forecast accuracy, even after controlling for selection bias

TABLE 5
Controlling for endogeneity

	IV estimation		PSM	
Variable	First stage D.V.: *Visit* A	Second stage D.V.: *Accuracy* B	Validity of PSM D.V.: *Visit* C	DID D.V.: Δ*Accuracy* D
Visit		3.133***		0.156***
		(4.974)		(3.359)
Instrument (*Weather*)	−0.159***			
	(−4.168)			
BrokerSize	0.029*	−0.128**	−0.005	0.201*
	(1.756)	(−2.192)	(−0.037)	(1.901)
GEXP	−0.116***	0.342***	−0.186	0.069
	(−6.804)	(3.174)	(−1.208)	(0.474)
FEXP	−0.001	0.071**	−0.004	0.003
	(−0.196)	(2.771)	(−0.085)	(0.057)
LagAccuracy	−0.001	0.066***	−0.002	−0.959***
	(−0.502)	(5.044)	(−0.264)	(−67.543)
CoverCompanies	−0.036***	0.096*	0.113	−0.101
	(−2.797)	(1.964)	(0.993)	(−1.010)
FCFreq	−0.006	−0.031**	−0.007	−0.037
	(−1.095)	(−2.582)	(−0.192)	(−1.391)
Horizon	−0.122***	−0.252***	−0.012	−0.479***
	(−34.431)	(−3.343)	(−0.596)	(−19.246)
Follow	−0.006	0.151***	−0.003	0.095***
	(−1.018)	(4.637)	(−0.101)	(2.798)
Size	−0.011***	−0.015	0.024	−0.044
	(−3.069)	(−0.695)	(1.010)	(−1.219)
Stkret	0.020***	−0.161***	−0.029	−0.009
	(3.557)	(−7.585)	(−1.011)	(−0.188)
Loss	0.012	−0.368**	0.009	−0.265
	(0.500)	(−2.386)	(0.078)	(−1.386)
Leverage	−0.073***	−0.822***	0.024	−0.883***
	(−3.853)	(−10.723)	(0.201)	(−5.832)
Local	0.091***	−0.192***	−0.031	0.053
	(8.060)	(−3.710)	(−0.463)	(0.957)
Constant	0.894***	1.033	−0.982*	0.429
	(8.842)	(1.402)	(−1.750)	(0.416)
Cragg-Donald Wald *F*-stat	16.28			
Kleibergen-Paap *F*-stat	17.37			
Obs.	23,971		8,504	8,504
Adj R^2 (Or Pseudo-R^2)	0.196		0.006	0.623

Cross-Sectional Analysis and Heterogeneity

Cross-Sectional Differences in Forecast Accuracy Improvement

- Analysts benefit more from visiting companies that are:
  - **Hard to Visit**: Measured by the number of direct flights between company headquarters and brokerage headquarters
    - Interaction term (Flight × Visit) is significantly negative, indicating greater benefit from visiting less accessible companies
  - **Neglected**: Measured by media coverage and analyst following
    - Interaction term (Attention × Visit) is significantly negative, indicating greater benefit from visiting companies with less market attention

TABLE 6
Do analysts benefit more from visiting hard-to-visit companies?

	D.V.: *Accuracy*		
	Flight1	*Flight2*	*Flight3*
Variable	A	B	C
Visit	0.167***	0.174***	0.174***
	(4.533)	(5.091)	(4.917)
Flight	0.022**	0.038***	0.029***
	(2.502)	(3.051)	(3.096)
Visit×Flight	−0.024**	−0.036**	−0.024*
	(−2.136)	(−2.332)	(−2.008)
BrokerSize	−0.044	−0.045	−0.045
	(−0.731)	(−0.739)	(−0.739)
GEXP	−0.012	−0.011	−0.011
	(−0.099)	(−0.094)	(−0.093)
FEXP	0.069**	0.069**	0.069**
	(2.681)	(2.687)	(2.678)
LagAccuracy	0.063***	0.063***	0.063***
	(4.604)	(4.577)	(4.587)
CoverCompanies	0.009	0.009	0.009
	(0.165)	(0.160)	(0.164)
FCFreq	−0.046***	−0.046***	−0.046***
	(−3.587)	(−3.576)	(−3.578)
Horizon	−0.620***	−0.620***	−0.620***
	(−42.930)	(−42.823)	(−42.888)
Follow	0.135***	0.134***	0.134***
	(4.195)	(4.178)	(4.174)
Size	−0.050***	−0.049***	−0.049***
	(−2.915)	(−2.885)	(−2.898)
Stkret	−0.106***	−0.106***	−0.106***
	(−3.840)	(−3.842)	(−3.838)
Loss	−0.396***	−0.398***	−0.398***
	(−2.798)	(−2.812)	(−2.805)
Leverage	−1.034***	−1.033***	−1.032***
	(−11.133)	(−10.869)	(−10.913)
Adj R^2	0.200	0.200	0.200

TABLE 6
Do analysts benefit more from visiting hard-to-visit companies?

	D.V.: *Accuracy*		
	Flight1	*Flight2*	*Flight3*
Variable	A	B	C
Visit	0.167***	0.174***	0.174***
	(4.533)	(5.091)	(4.917)
Flight	0.022**	0.038***	0.029***
	(2.502)	(3.051)	(3.096)
Visit×Flight	−0.024**	−0.036**	−0.024*
	(−2.136)	(−2.332)	(−2.008)
BrokerSize	−0.044	−0.045	−0.045
	(−0.731)	(−0.739)	(−0.739)
GEXP	−0.012	−0.011	−0.011
	(−0.099)	(−0.094)	(−0.093)
FEXP	0.069**	0.069**	0.069**
	(2.681)	(2.687)	(2.678)
LagAccuracy	0.063***	0.063***	0.063***
	(4.604)	(4.577)	(4.587)
CoverCompanies	0.009	0.009	0.009
	(0.165)	(0.160)	(0.164)
FCFreq	−0.046***	−0.046***	−0.046***
	(−3.587)	(−3.576)	(−3.578)
Horizon	−0.620***	−0.620***	−0.620***
	(−42.930)	(−42.823)	(−42.888)
Follow	0.135***	0.134***	0.134***
	(4.195)	(4.178)	(4.174)
Size	−0.050***	−0.049***	−0.049***
	(−2.915)	(−2.885)	(−2.898)
Stkret	−0.106***	−0.106***	−0.106***
	(−3.840)	(−3.842)	(−3.838)
Loss	−0.396***	−0.398***	−0.398***
	(−2.798)	(−2.812)	(−2.805)
Leverage	−1.034***	−1.033***	−1.032***
	(−11.133)	(−10.869)	(−10.913)
Adj R^2	0.200	0.200	0.200

TABLE 7
Do analysts benefit more from visiting neglected companies?

Variable	D.V.: *Accuracy*	
	A	B
Visit	0.155***	0.579***
	(4.869)	(4.708)
Media Coverage	0.027***	
	(3.083)	
Visit×Media Coverage	−0.020*	
	(−2.019)	
Visit×Follow		−0.177***
		(−4.257)
Follow	0.146***	0.568***
	(7.438)	(15.042)
BrokerSize	0.067	−0.050
	(1.153)	(−0.678)
GEXP	−0.022	−0.031
	(−0.601)	(−0.297)
FEXP	0.079***	0.078***
	(5.126)	(2.661)
LagAccuracy	0.016**	0.054***
	(2.361)	(5.240)
CoverCompanies	−0.107***	0.007
	(−3.046)	(0.111)
FCFreq	−0.020	−0.050***
	(−1.046)	(−2.823)
Horizon	−0.532***	−0.600***
	(−44.177)	(−30.334)
Size	−0.105***	−0.150***
	(−10.429)	(−9.024)
Stkret	−0.001	−0.133***
	(−0.054)	(−4.006)
Loss	−0.246***	−0.314***
	(−3.643)	(−2.943)
Leverage	−0.597***	−0.878***
	(−9.950)	(−13.868)
Constant	4.105***	4.431***
	(17.210)	(9.890)
Adj R^2	0.224	0.217

Buy-Side Business Pressures

- Conflicts of interest due to buy-side pressure may reduce the benefit of company visits
- **Regression Model**: Interaction between **Visit** and **Buy-Side Pressure**
  - Results show that buy-side pressures weaken the positive effect of company visits on forecast accuracy
  - Analysts still benefit from visits, but the effect is reduced by approximately 40% when buy-side pressures are high

TABLE 8
Does buy-side pressure matter?

	D.V.: *Accuracy*			
Variable	*BuySide1* A	*BuySide2* B	*BuySide3* C	*BuySide4* D
Visit	0.102***	0.103***	0.109***	0.097***
	(5.084)	(5.685)	(6.251)	(5.501)
BuySide	−0.122***	−0.107***	−0.038***	−2.662***
	(−6.144)	(−7.966)	(−11.471)	(−4.796)
Visit×BuySide	−0.043*	−0.047**	−0.019***	−0.941**
	(−1.891)	(−2.224)	(−2.931)	(−2.192)
BrokerSize	−0.046	−0.032	−0.033	−0.051
	(−1.257)	(−0.954)	(−1.003)	(−1.405)
GEXP	0.022	−0.054	−0.048	0.021
	(1.390)	(−1.245)	(−1.107)	(1.326)
FEXP	0.038***	0.027***	0.026***	0.037***
	(3.769)	(3.057)	(3.003)	(3.670)
LagAccuracy	0.008	0.004	0.004	0.009
	(0.763)	(0.376)	(0.368)	(0.777)
CoverCompanies	0.036	−0.047	−0.046	0.035
	(1.124)	(−1.437)	(−1.416)	(1.088)
FCFreq	0.027**	0.025**	0.025**	0.027**
	(2.385)	(2.402)	(2.399)	(2.419)
Horizon	−0.379***	−0.371***	−0.371***	−0.379***
	(−38.047)	(−38.556)	(−38.717)	(−37.634)
Follow	0.033*	0.026	0.029*	0.029
	(1.831)	(1.698)	(1.816)	(1.642)
Size	0.016*	0.014	0.016*	0.013
	(1.884)	(1.600)	(1.854)	(1.568)
Stkret	0.012	0.012	0.014	0.013
	(1.369)	(1.309)	(1.545)	(1.363)
Loss	−0.018	−0.018	−0.019	−0.018
	(−0.285)	(−0.288)	(−0.296)	(−0.276)
Leverage	0.067**	0.060*	0.058*	0.067**
	(2.193)	(2.018)	(1.967)	(2.216)
Local	−0.005	−0.003	−0.003	−0.006
	(−0.258)	(−0.125)	(−0.135)	(−0.339)
Constant	1.258***	1.569***	1.529***	1.353***
	(6.034)	(7.522)	(7.232)	(6.954)
Adj R^2	0.111	0.119	0.120	0.111

Robustness Checks

Analyst Preparation and Selective Disclosure

- **Analyst Preparation**: Hand-collected data on analyst questions during visits show that analysts who ask deeper or a wider variety of questions have higher forecast accuracy
- **Selective Disclosure**: Dropping visits within one month of earnings announcements still yields positive results, suggesting that selective disclosure is not the sole driver of improved forecast accuracy

Team vs. Individual Analyst Coverage

- Company visits improve forecast accuracy for both individual analysts and teams of analysts
- Visits enhance forecasting performance regardless of the number of analysts covering the company

Alternative Measures of Forecast Accuracy

- Robust positive effect of company visits on forecast accuracy across different accuracy measures

Implications and Conclusions

Implications for Analysts

- Visiting companies provides a clear informational advantage, particularly for those with less public information

Implications for Companies

- Facilitating analyst visits may lead to better-informed forecasts, potentially improving investor confidence

Broader Impact

- Highlights the importance of private information channels in financial markets

Key References

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Thank You !