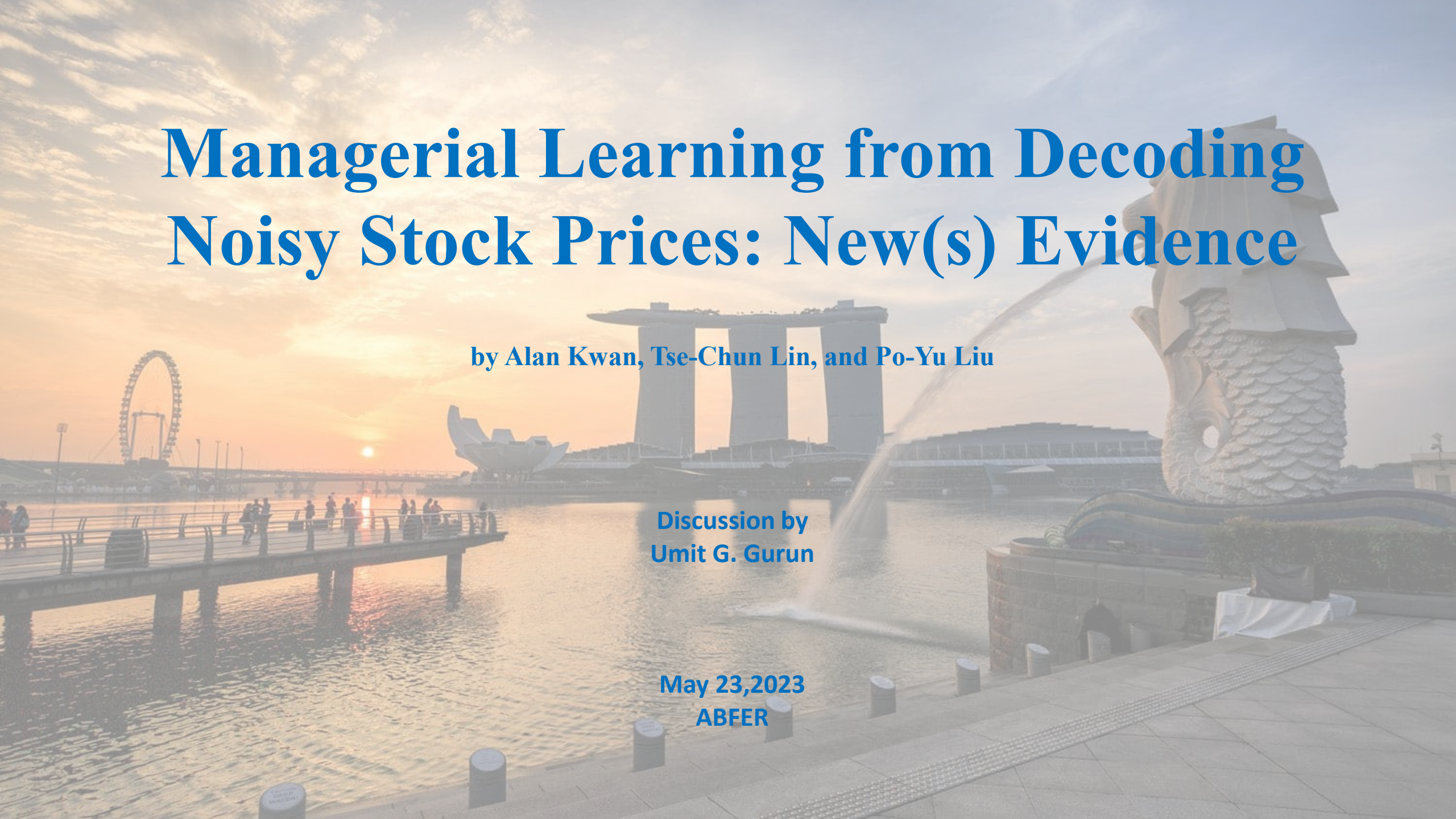


Managerial Learning from Decoding Noisy Stock Prices: New(s) Evidence

by Alan Kwan, Tse-Chun Lin, and Po-Yu Liu

Discussion by
Umit G. Gurun

May 23, 2023
ABFER



- **What do managers want to learn about?**

- Market size
- Products (new introductions, R&D)
- Competitors
- Regulation
- Litigation
- Cost structure
- Labor market factors
- Capital market factors
- Technology changes

- **What do managers want to learn about?**

- Market size
- Products (new introductions, R&D)
- Competitors
- Regulation
- Litigation
- Cost structure
- Labor market factors
- Capital market factors
- Technology changes
- ...

- **What sources do they use?**

- Price (own, competitor)

Goldstein, Liu, and Yang (2021): Survey of 3,626 Chinese public firms

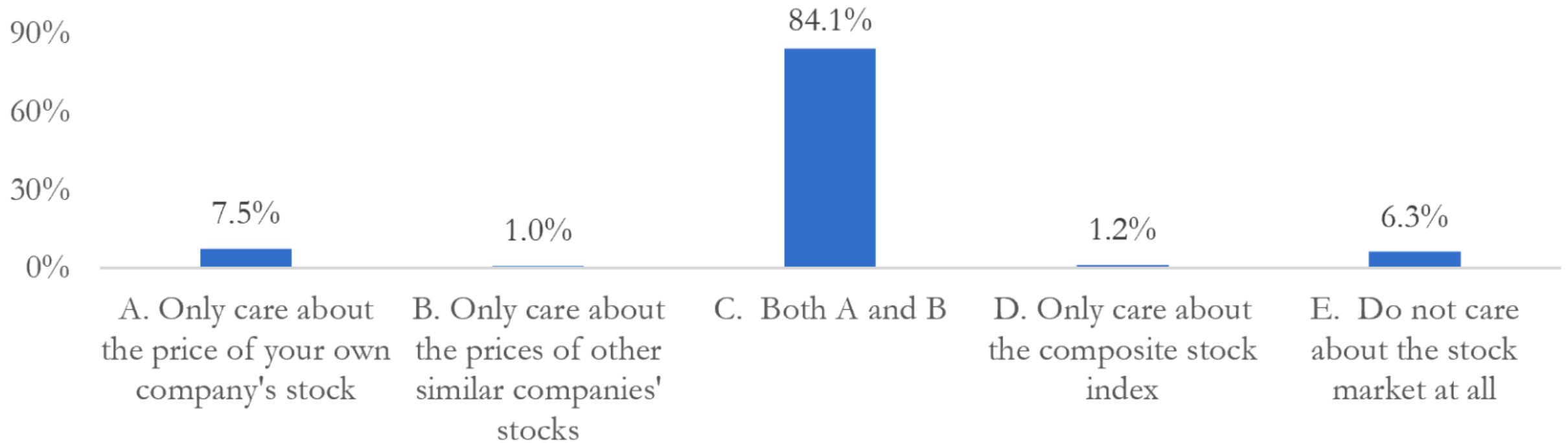


Figure 2: Responses to survey question I

This figure plots the frequencies by which each choice is chosen by the 3,626 responding firms survey question I (“*How does your company pay attention to the stock market?*”).

Goldstein, Liu, and Yang (2021): Survey of 3,626 Chinese public firms

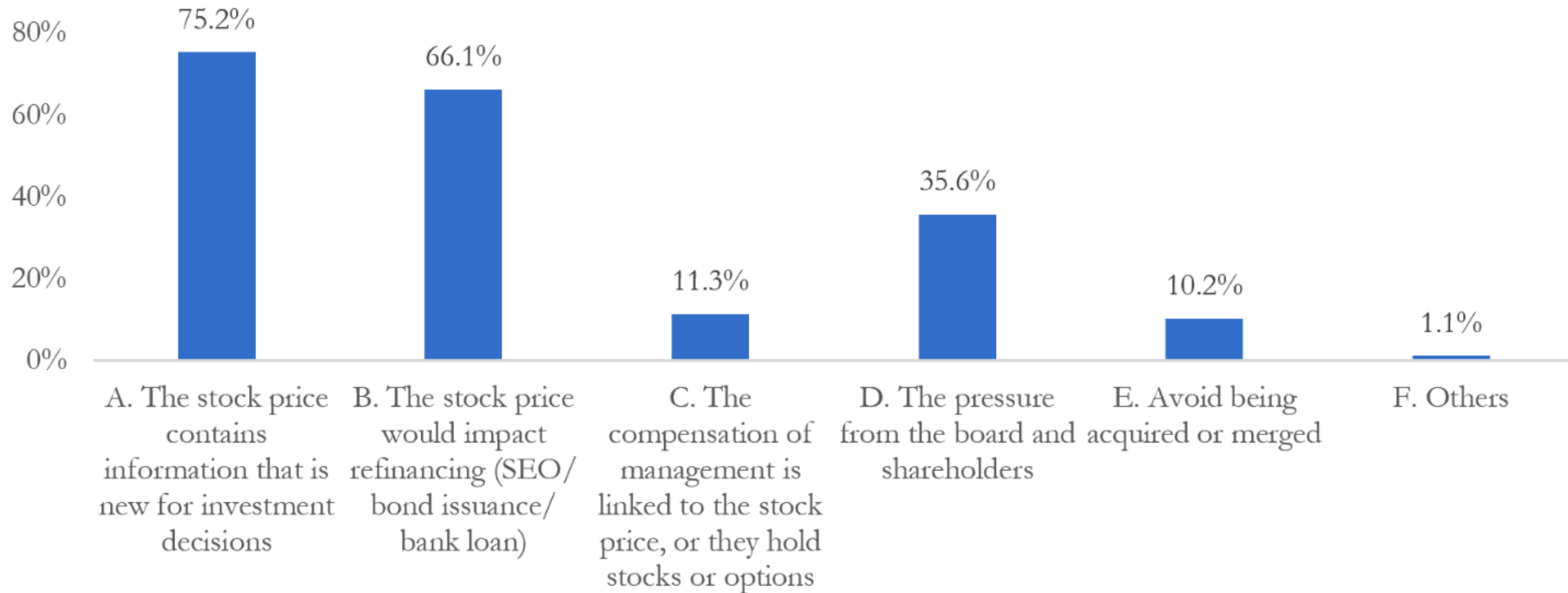


Figure 3: Responses to survey question II

This figure plots the frequencies by which each choice is chosen by the 3,320 responding firms choosing A or C in survey question II (“If you choose A or C in I: Which of the following is the reason that your company CAREs about the stock price of your OWN company?”).

Price movements are noisy, and managers need to interpret those movements to extract useful information outside their information set.

- **What do managers want to learn about?**
 - Market size
 - Products (new introductions, R&D)
 - Competitors
 - Regulation
 - Litigation
 - Cost structure
 - Labor market factors
 - Capital market factors
 - Technology changes
- **What sources do they use?**
 - Price (own, competitor)
 - Personal connections (networks)
 - Consultants (McKinsey)
 - Analyst reports
 - Employee transfers
 - Peer disclosures
 - Media (Social, Newspapers)
 - Firm generates the news and disseminates to media (no learning)
 - **Journalist writes the article**

Comment #1:

Provide more details on the types of the news in the full-length articles.

- **What do managers want to learn about?**
 - Market size
 - Products (new introductions, R&D)
 - Competitors
 - Regulation
 - Litigation
 - Cost structure
 - Labor market factors
 - Capital market factors
 - Technology changes
- **What sources do they use?**
 - Price (own, competitor)
 - Personal connections (networks)
 - Consultants (McKinsey)
 - Analyst reports
 - Employee transfers
 - Peer disclosures
 - Media (Social, Newspapers)
 - Firm generates the news and disseminates to media (no learning)
 - **Journalist writes the article (learning)**

Comment #1:

Provide more details on the types of the news in the full-length articles.

Are journalists likely to have a competitive advantage in covering these types of news?

• What do managers want to learn about?

- Market size
- Products (**new introductions**, R&D)
- Competitors
- **Regulation**
- **Litigation**
- Cost structure
- Labor market factors
- Capital market factors
- Technology changes
- **Fraud**

• What sources do they use?

- Price (own, competitor)
 - Personal connections (networks)
 - Consultants (McKinsey)
 - Analyst reports
 - Employee transfers
 - Peer disclosures
 - Media (Social, Newspapers)
 - Firm generates the news and disseminates to media (no learning)

• **Journalist writes the article
(unexpected news ; learning)**

Comment #1:

Provide more details on the types of the news in the full-length articles.
Are journalists likely to have competitive advantage in covering these types of news?

Corr (Media Coverage, Other Sources)=?

Investment= f(Q , Newspaper, **Q x Newspaper**) + Cash Flow + 1/AT + FE

vs.

Investment= f(Q , Newspaper, **Q x Newspaper**, Other Sources, **Q x Other Sources**) + Cash Flow + 1/AT + FE



Omitted
Var'l ?

Comment #2: Theoretical foundation:

Firm information acquisition vs. Newspaper information acquisition

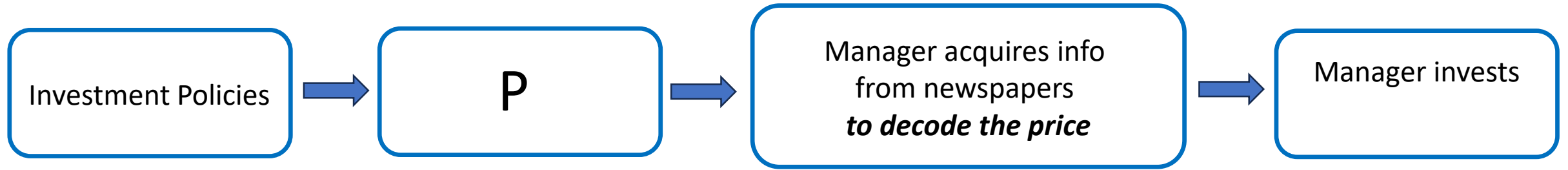
Goldstein, Schneemeier, and Yang (2021) Joint information acquisition problem in a setting with multiple sources of uncertainty

- Both market (newspaper or traders) and firms try to acquire information simultaneously.
- Information acquisition decision of one type generates spill-overs for the other type.
- On the one hand, newspapers' acquisition of private information renders the equilibrium stock price more informative and allows the firm to extract valuable information about its investment opportunities.
- On the other hand, the firm's acquisition of private information is reflected in a more efficient investment decision, which affects the firm's future value and thus the newspapers' payoffs (e.g., decision to cover original news).

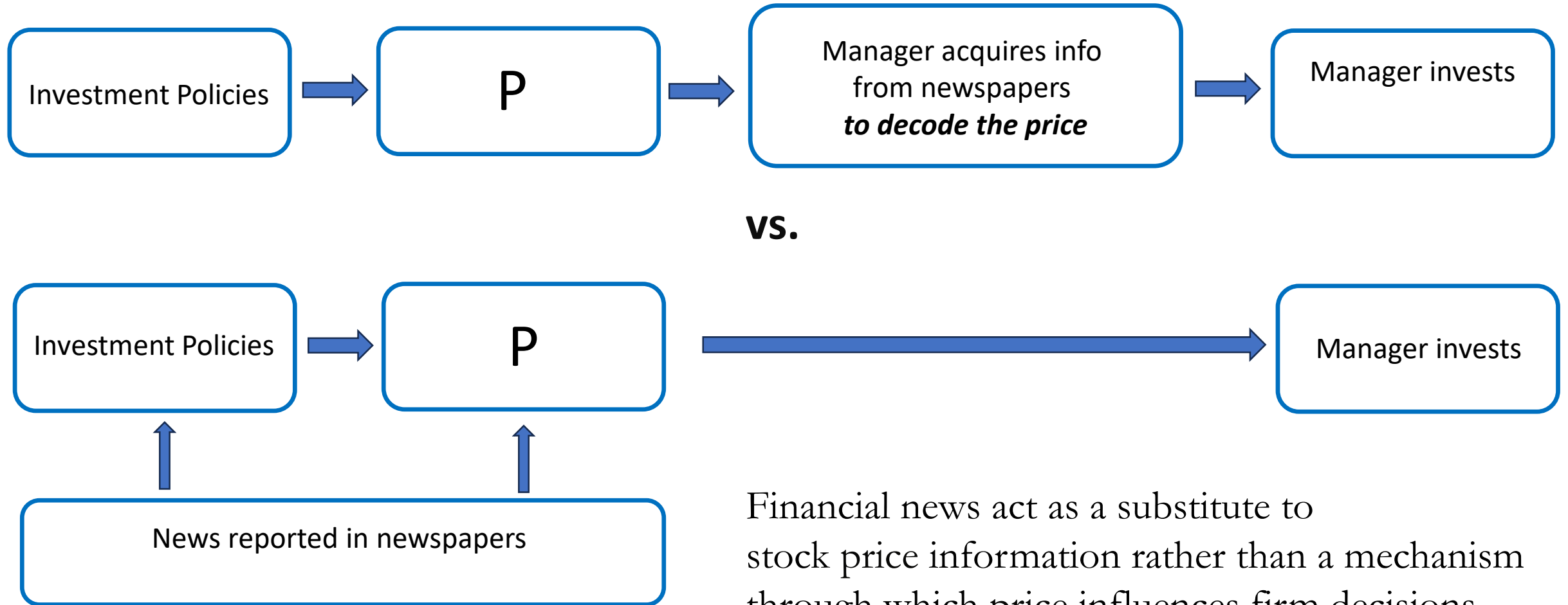
If the NPV is **negative**, and the project is less likely to be implemented, newspaper want to acquire information that differs from the information collected by the firm.

If the NPV is positive, the incentive is reversed, and newspaper want to acquire the same information as the firm.

Comment #3: Learning vs. Sideshow



Comment #3: Learning vs. Sideshow

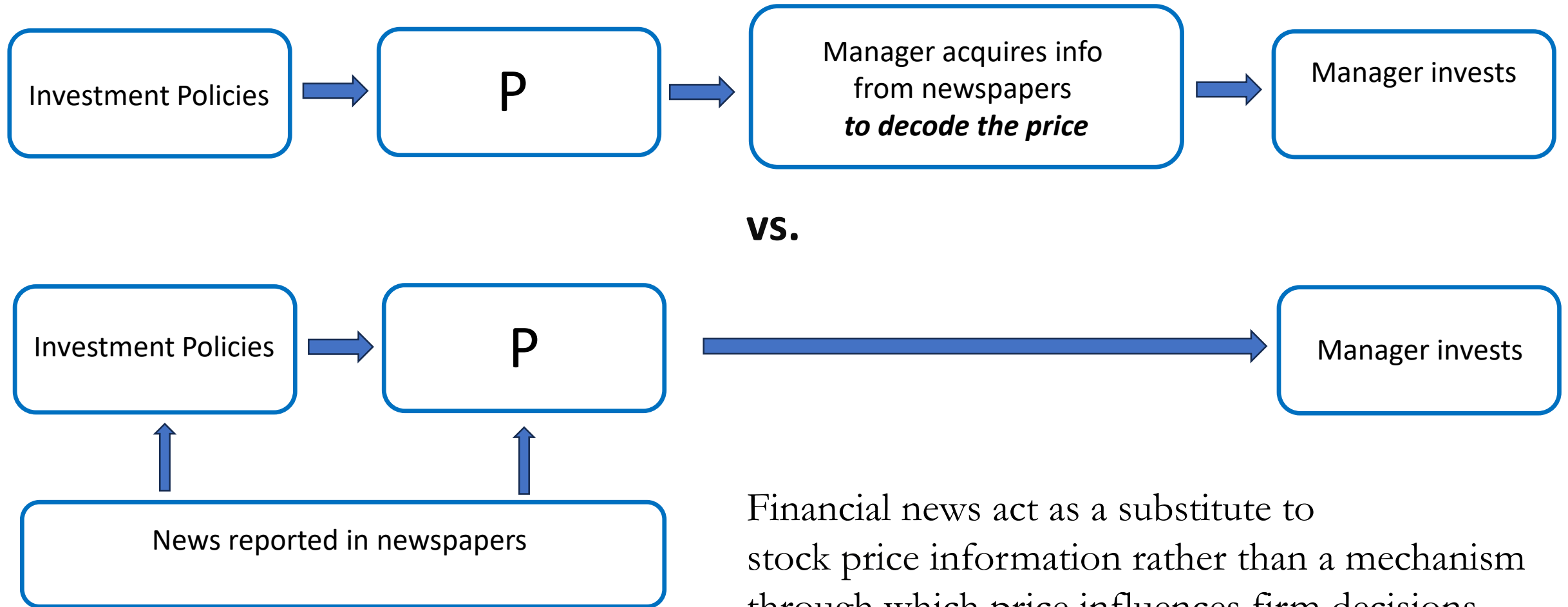


VS.

Financial news act as a substitute to stock price information rather than a mechanism through which price influences firm decisions.

Comment #3: Learning vs. Sideshow

Test whether exogenous variation in stock prices (i.e., nonfundamental shocks like fund flow-driven trades) triggers more news reading.



Financial news act as a substitute to stock price information rather than a mechanism through which price influences firm decisions.

Comment #4:

Chen, Goldstein, Jiang (2007) vs. Kwan, Lin, Liu (2023)

Chen, Goldstein, Jiang (2007)

Dependent variable	CAPXRND		
	1	2	3
<i>Q</i>	3.52*	2.18*	1.95*
	0.08	0.10	0.12
$(1-R2)*Q$	3.13*	–	1.80*
	0.28	–	0.42
<i>PIN*Q</i>	–	4.21*	3.37*
	–	1.04	1.11
<i>CF</i>	–	–	17.68*
	–	–	1.33
$(1-R2)*CF$	–	–	-29.09*
	–	–	6.33
<i>PIN*CF</i>	–	–	14.89
	–	–	14.37
<i>RET</i>	–	–	-0.21***
	–	–	0.11
<i>INV_AST</i>	–	–	-0.05
	–	–	0.03
$1-R2$	-7.20*	–	2.78*
	0.56	–	1.04
<i>PIN</i>	–	-3.31***	-5.31**
	–	1.98	2.21
Adjusted R^2	0.54	0.54	0.57
Within R^2	0.10	0.08	0.14

Kwan, Lin, Liu (2023)

	R&D		R&D+CAPX	
	(1)	(2)	(3)	(4)
$Q \times \text{ReadNews}^{\text{Own}}$	0.0170*** (0.0042)	0.0162*** (0.0043)	0.0202*** (0.0052)	0.0191*** (0.0052)
<i>Q</i>	0.1144*** (0.0193)	0.0941*** (0.0187)	0.2228*** (0.0226)	0.1994*** (0.0226)
$\text{ReadNews}^{\text{Own}}$	0.0104* (0.0063)	0.0108* (0.0061)	0.0037 (0.0096)	0.0042 (0.0097)
<i>CF</i>		-0.0217*** (0.0035)		-0.0088* (0.0049)
$1/AT$		0.0244*** (0.0069)		0.0259*** (0.0084)
Firm FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	26,998	26,703	26,949	26,661
Adjusted R^2	0.8857	0.8904	0.7819	0.7843

Comment #4:

Chen, Goldstein, Jiang (2007) vs. Kwan, Lin, Liu (2023)

Include future return to control for managers' market timing.

Dependent variable	CAPXRND		
	1	2	3
<i>Q</i>	3.52*	2.18*	1.95*
	0.08	0.10	0.12
$(1-R2)*Q$	3.13*	–	1.80*
	0.28	–	0.42
<i>PIN*Q</i>	–	4.21*	3.37*
	–	1.04	1.11
<i>CF</i>	–	–	17.68*
	–	–	1.33
$(1-R2)*CF$	–	–	-29.09*
	–	–	6.33
<i>PIN*CF</i>	–	–	14.89
	–	–	14.37
<i>RET</i>	–	–	-0.21***
	–	–	0.11
<i>INV_AST</i>	–	–	-0.05
	–	–	0.03
$1-R2$	-7.20*	–	2.78*
	0.56	–	1.04
<i>PIN</i>	–	-3.31***	-5.31**
	–	1.98	2.21
Adjusted R^2	0.54	0.54	0.57
Within R^2	0.10	0.08	0.14

(Item 18), depreciation and amortization expenses (Item 14), and R&D expenses (Item 46), scaled by beginning-of-year book assets.⁶ We include future returns ($RET_{i,t+3}$) because Loughran and Ritter (1995), Baker and Wurgler (2002), and Baker, Stein, and Wurgler (2003) argued that firms invest more when their stocks are overvalued (i.e., when expected future returns are lower). Thus, we include firms' future returns ($RET_{i,t+3}$) to control for managers' market timing of investment. $RET_{i,t+3}$ is measured as the value-weighted market adjusted three-year cumulative return, starting from the end of the investment year.⁷ Finally, $INFO_{it-1}$ is included separately to control for its direct effect on investment and to make sure that this direct effect does not drive the result on β_2 .

Except for *PIN* Table 1 summarizes the summary statistics for all

Comment #5: News type

- Whose internet browsing history are you capturing, **management or rank and file**?
- Negative news => managers might be able to learn more when they receive => **higher or lower** (?) investment
- **Exclude** news around advertising events ; exclude news around own disclosure news

