Business Strategy and Intra-Industry Information Transfers

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Abstract

This study examines whether business strategy affects information transfers from one firm to its industry peers. I use Miles and Snow's (1978, 2003) organizational typology to classify firms along a continuum with innovative 'prospector' firms at one end and stable low-growth 'defender' firms at the other. When a firm announces its earnings, the information transfer to other peer firms in the same industry is weaker (stronger) when the announcing firm is a prospector (defender). In addition, information transfers from the announcing firm to industry peers are weaker (stronger) when the industry peer is a prospector (defender). Taken together, the evidence in this paper suggests that firms' business strategies affect the strength of information transfers.

Keywords: Information Transfers, Business Strategy

JEL Codes: G14; L22; M41.

1. Introduction

An information transfer occurs when information about one firm affects the value of another firm (Foster 1981) (Note 1). Since firms are interrelated, earnings information about one firm can help investors forecast the future cash flows of related firms. Research has identified information transfers between firms in the same supply-chain (Olsen and Dietrich 1985; Pandit, Wasley, and Zach 2011; Cheng and Eshleman 2014; Eshleman and Guo 2014) and information transfers between firms in the same industry (Firth 1976, 1996; Foster 1981; Baginski 1987; Pyo and Lustgarten 1990; Freeman and Tse 1992; Kim, Lacina, and Park 2008; Koo, Wu, and Yeung 2017). The general finding in this literature is that information transfers between both supply-chain partners and industry peers are positive. i.e., good news for a firm usually translates into good news for both its supply chain partners and industry peers (Note 2).

Despite the vast literature on intra-industry information transfers, little attention has been paid to how the strategies of the firms affect the information transfers. In examining business strategies, I use the framework of Miles and Snow (1978, 2003), who classify firms into three categories: prospectors, analyzers, and defenders. The strategies exist along a continuum. At one extreme there are prospector firms, who spend heavily on R&D and advertising. These firms are innovative, constantly looking to enter new markets. At the other extreme are defender firms, who tend to have one line of business and focus on increasing efficiency.

In this paper, I extend this intra-industry information transfer literature by examining whether information transfers between industry peers are affected by these firms' business strategies. There is reason to believe that firms' business strategies will affect the strength of information transfers. Because prospectors spend heavily on R&D and advertising, good news for a prospector firm may involve the creation of a new product or taking market share from competitors by entering a new market. Either of these events would be bad news for industry peer firms, resulting in a negative information transfer.

My findings are summarized as follows. First, I replicate prior literature by establishing a positive relationship between the announcing firm's stock return and the industry peer firm's stock return during the announcement window. I find that when the industry peer firm is a prospector, the magnitude of the information transfer is attenuated. This is consistent with prospectors' market value being less correlated with industry trends compared to other firms, as a result of prospectors' willingness to enter new markets quickly. Information transfers are stronger when the announcing firm is a prospector.

This study contributes to the information transfer literature by demonstrating that the magnitude of intra-industry information transfers varies with business strategy of the firm and its announcing peer firm. This study also adds to the accounting literature on business strategy. While prior literature has linked business strategy to financial misstatements, audit fees, tax avoidance, and going concern reporting (Bentley, Omer, and Sharp 2013; Higgins, Omer, and Phillips 2015; Chen, Eshleman, and Soileau 2017), this is the first study to find that business strategy is a significant determinant of the magnitude of information transfers.

The remainder of this paper is organized as follows. Section 2 reviews relevant literature and contains the hypothesis development. Section 3 outlines the research design, section 4 describes the sample selection criterion and reports descriptive statistics. Section 5 reports the main empirical results, section 6 contains sensitivity analyses, and section 7 concludes.

2. Literature Review and Hypothesis Development

2.1 Information Transfers

Information transfers are defined as events in which information about one firm affects the valuation of other firms (Foster 1981). The literature has found that earnings news released by one firm affects the valuation of related firms. Earnings and sales news affects the stock prices of firms' suppliers (Olsen and Dietrich 1985; Pandit et al. 2011; Cheng and Eshleman 2014) as well as its customers (Eshleman and Guo 2014). In addition, bankruptcy announcements by one firm negatively affect the stock price of its suppliers (Hertzel, Li, Officer, and Rodgers 2008).

There is also a considerable body of research which shows that earnings news about one firm affects the valuation of other firms in the same industry (e.g., Firth 1976; Foster 1981; Clinch and Sinclair 1987; Freeman and Tse 1992). These are often referred to as intra-industry information transfers. This literature also examines management forecasts and finds that management forecasts issued by one firm affect the value of other firms in the same industry (Baginski 1987; Han, Wild, and Ramesh 1989; Pyo and Lustgarten 1990; Kim et al. 2008). The general conclusion from this literature is that earnings news' of industry peers is positively correlated. i.e., good (bad) news for a firm translates to good (bad) news for its industry peers. However, there is cross-sectional heterogeneity in the effect of these intra-industry information transfers. Freeman and Tse (1992) show that intra-industry rival. Koo et al. (2017) find that earnings news attributable to industry-wide trends or firm structural changes is associated with positive information transfers, whereas earnings news attributable to firm competitive moves leads to negative information transfers. There is also evidence that the order of earnings announcements in a quarter affects the strength of information transfers. Han and Wild (1997) show that the first announcing firm creates the largest information transfers, with the effect diminishing for each announcing firm thereafter.

In addition to the research on earnings releases, there are a few studies on the effects of other news releases on industry peers. Lang and Stulz (1992) find that bankruptcy announcements by one firm negatively affect the stock prices of other firms in the same industry. Gleason, Jenkins, and Johnson (2008) find that accounting restatements result in negative stock price reactions by industry peers. Relatedly, Kedia, Koh, and Rajgopal (2015) find that firms are more likely to begin managing earnings when there is an accounting restatement announcement by an industry peer firm. There is also research showing that audit offices have information transfers or 'contagion', such that a misstatement at one firm is associated with misstatements at other firms who have the same auditor (Francis and Michas 2013; Swanquist and Whited 2015).

2.2 Business Strategy

The management literature has many business strategy typologies which describe how firms compete in their respective markets. Porter (1980) describes how some firms compete on quality (product differentiation) while others compete on price (cost leadership). March (1991) classifies businesses as either being exploitative or explorative. Treacy and Wiersema (1995) distinguish between operational excellence, product leadership, and customer intimacy. However, the typology used in this study is the one introduced by Miles and Snow (1978, 2003), which describes three viable strategies which can all exist within the same industry: (1) prospectors, (2) analyzers, and (3) defenders. The three strategies exist on a continuum, with prospectors at one end, analyzers in the middle, and defenders on the other end. Prospectors seek to innovate, via new products or new markets. These firms are not tied to a specific market, rather, they have a broad product domain and are willing to rapidly change their product mix in order to be a leader in an attractive market. As such, prospectors devote a large portion of their operating budget to research and development (R&D) expenditures and marketing expenditures. Because prospectors are willing to enter new markets

quickly, they tend to avoid heavy capital investments, such as machinery which can be used to make a specific product they are currently selling. This means that they are often inefficient in their production and distribution activities. Prospectors' focus on entering new markets as they come up, rather than slowly growing in their current market means that their growth tends to be sporadic (Miles and Snow 1978, 2003).

In contrast, defenders focus on efficiently producing and distributing their products. They maintain a narrow mix of products or services, but focus on gaining a competitive advantage in their narrow market. This means that, unlike prospectors, defenders tend to make large capital investments which lead to more efficient production and distribution. Their R&D and marketing budgets tend to be small. Because of their reluctance to enter new markets and their focus on penetrating their current market, defenders typically have slow but steady growth. Defenders firms tend to have long employee tenure and like to promote within the firm (Bentley et al. 2013) (Note 3).

Analyzers are those firms which exhibit characteristics of both prospectors and defenders. No strategy is superior to another. The management literature generally concludes that each of the three strategies is equally likely to occur in a given industry (Conant, Mokwa, and Varadarajan 1990; Miles and Snow 1978, 2003; Snow and Hrebiniak 1980).

I choose to use the Miles and Snow (1978, 2003) typology for several reasons. First, unlike other methodologies which use survey data, the methodology of Miles and Snow (1978, 2003) can be operationalized using financial statement data, which is publicly available. This makes the present study replicable. Second, many accounting researchers use the Miles and Snow (1978, 2003) typology (e.g., Ittner et al. 1997; Bentley et al. 2013; Higgins et al. 2015; Chen et al. 2017), which makes this study comparable to these other papers (Note 4). Finally, all strategy typologies exhibit considerable overlap with one another. This means that any inferences based on one organizational typology are likely going to be applicable to other typologies (Dent 1990; Langfield-Smith 1997). More specifically, one can consider Miles and Snow's (1978, 2003) prospectors to be Treacy and Wiersema's (1995) product leaders, March's (1991) explorers, or Porter's (1980) product differentators. Similarly, defenders are essentially Treacy and Wiersema's (1995) operational excellence leaders, March's (1991) exploiters, or Porter's (1980) cost leaders (Note 5).

The accounting literature has shown that prospectors are more prone to financial misreporting and higher audit fees (Bentley et al. 2013), avoid more taxes (Higgins et al. 2015), and are more likely to receive both going concern and material weakness opinions from their auditor (Chen et al. 2017).

2.3 Hypothesis Development

Much of prospector firms' success depends on the success of their research and development (R&D) efforts. Therefore, bad earnings news for a prospector firm may not reflect an industry downtrend. Rather, the news is likely idiosyncratic to the prospector firms' innovation efforts. In contrast, since defenders are focused on their narrow industry, bad news for a defender firm is more likely to be indicative of an industry downtrend. A notable exception would be idiosyncratic news about the defender firm, such as CEO turnover or a product recall. It follows that intra-industry information transfers will be attenuated when the announcing firm is a prospector. A second reason intra-industry information transfers may be attenuated when the announcing firm is a prospector is that prospectors' earnings exhibit high volatility. Furthermore, prospectors' earnings may be less reliable, as prospectors are more prone to restate their earnings (Bentley et al. 2013) and tend to have more weaknesses in internal controls (Chen et al. 2017). Therefore, the market may not react as strongly to an earnings surprise from a prospector.

There is also the question of whether an intra-industry information transfer will be affected by the business strategy of the receiving (non-announcing) firm. There is reason to believe that information transfers will be attenuated when the receiving firm is a prospector. Because prospectors are willing to jump into new markets when their existing markets are weak, prospector firms' stock prices should be less affected by industry shocks. Also, prospector firms' success is largely a function of their ability to develop new products or services. This makes their firm value less sensitive to systematic swings and more idiosyncratic.

To conclude, there is reason to believe that intra-industry information transfers will be weaker when either the announcing firm or the receiving firm follows a prospector strategy. However, the arguments given are not built upon any rigorous model. Therefore, the hypothesis is stated in null form:

H1: The strength of information transfers will be affected by the business strategy of both the announcing firm and the peer firm.

3. Research Design

In order to examine the hypothesis, I estimate the following linear regression:

$$CAR^{PEER} = \alpha_0 + \alpha_1 CAR + \alpha_2 STRATEGY + \alpha_3 CAR \times STRATEGY + \alpha_4 STRATEGY^{PEER} + \alpha_5 CAR \times STRATEGY^{PEER} + \varepsilon$$
(1)

Firm and time subscripts are omitted for ease of exposition. The dependent variable, CAR^{PEER} is the peer firm's cumulative abnormal return during the 3-day window centered on the announcing firm's earnings announcement date. Abnormal returns are calculated as the firm's raw stock return less the value-weighted market return.

CAR is the announcing firm's cumulative abnormal return during the 3-day window centered on its earnings announcement date. Therefore, *CAR* measures the news of the announcing firm (Note 6). We expect the coefficient on *CAR* to be positive, indicating positive information transfers between industry peers, on average (Foster 1981; Kim et al. 2008). The model then interacts *CAR* with different firm characteristics to see whether information transfers vary with firms' strategies and market positions.

In estimating Eq. (1), it is important to define which firms are considered peer firms. I consider any firm in the same 6-digit Global Industry Classification Standard (GICS) code to be an industry peer. Defining industries at the 6-digit level ensures that industry peers are more similar to each other, which should increase the power of my tests (Note 7). In section 5 I test the robustness of the main results to using an alternative industry classification system.

Business strategy is measured using the organizational typology of Miles and Snow (1978, 2003). This measure has been used extensively in the accounting literature (e.g., Bentley et al. 2013; Higgins et al. 2015; Chen et al. 2017). Higher (lower) values of *STRATEGY* indicate that the firm operates more like a prospector (defender). I follow recent literature (Bentley et al. 2013; Higgins et al. 2015; Chen et al. 2017) and use the following six firm characteristics to construct the composite measure *STRATEGY*: (i.) the ratio of R&D expense to total sales, (ii.) the ratio of employees to sales, (iii.) sales growth, (iv.) the ratio of selling, general, and administrative expenses to total sales (Note 8), (v.) the standard deviation of the number of employees, and (vi.) net property, plant, and equipment divided by total assets. The last two measures capture the fact that prospectors have higher employee turnover and defenders have higher capital intensity (Hambrick 1983). As such, the last measure is reverse scored. I follow prior research (Ittner, Larcker, and Rajan 1997; Bentley et al. 2013; Higgins et al. 2015) and calculate all variables using a rolling 5-year average of the previous four years and the current year. I then rank each variable within each 6-digit GICS industry-year. Firms with the highest value are assigned a value of 5, while those in the lowest quintile are given a value of 1. For each firm-year, I then add up the total to get a composite measure of business strategy. As such, scores range from 6 (extreme defender) to 30 (extreme prospector).

I also include the peer firm's strategy ($STRATEGY^{PEER}$) in the model to assess whether the strength of the information transfer is affected by the peer's strategy. Standard errors are clustered by firm (Note 9). Refer to the appendix for detailed variable definitions.

4. Sample Selection and Descriptive Statistics

Table 1 outlines the sample selection process. I begin with all firm-quarter observations on the Compustat Fundamentals Quarterly file from 1971-2015. I then delete observations in which more than two firms in the same industry are announcing earnings on the same day. I do this to mitigate the possibility that the stock return of the firm is a reaction to the announcing firm's earnings announcement and is not, in fact, a reaction to a separate firm's earnings announcement. This leaves a sample of 260,229 firm-quarters. Each firm-quarter is linked to each of its industry-peers with available data for that quarter. This creates a sample of 6,640,632 firm-peer-quarter observations. We then delete observations in which the firm makes its own earnings announcement within 3 days of the peer firm's announcement. This ensures that the firm's stock return is not a reaction to its own earnings news. Finally, we delete observations with insufficient data to estimate Eq. (1). This leaves us with 4,099,718 firm-peer-quarter observations.

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Table 1. Sample Selection

	Firm-Quarters	Firm-Peer-Quarters
Firm-Quarter Observations on Compustat Quarterly file (1971 - 2015) with non-missing GICS code	1,086,137	
Less: Observations in which there are more than 2 firms announcing earnings on the same day in the same industry	(825,914)	
Number of firm-quarter observations	260,223	
Firm-Quarter-Peer Observations (Peers are firms with same 6-digit GICS code)		6,636,609
Less: Observations in which the peer firm announces earnings within 3 days of the other firm		(616,688)
Less: Firms without necessary data to estimate Eq. (1)		(1,992,039)
Final Sample of Firm-Peer-Quarter Observations:		4,097,882

Table 2 reports descriptive statistics for the sample. The mean announcement-window abnormal return (*CAR*) is close to zero, as is the mean abnormal return for peer firms during this same window (*CAR*^{PEER}). The mean value for *STRATEGY* is 17.349, which is consistent with prior research (e.g., Bentley et al. 2013; Chen et al. 2017). The last two rows of Table 2 report descriptive statistics for the number of firms announcing earnings each day on each of the 12,196 days in our sample involving an earnings announcement. While the average day involves 96.186 earnings announcements, there is only an average of 1.383 earnings announcements by industry peers occurring on the same day. Finally, the last row of Table 2 shows that there are an average of about 31 firms per industry-year.

Table 2. Descriptive Statistics

Variable	Ν	Mean	Q1	Median	Q3
CAR ^{PEER}	4,097,882	0.001	-0.025	-0.002	0.021
CAR	4,097,882	0.003	-0.035	-0.001	0.036
STRATEGY	4,097,882	17.349	15.000	17.000	20.000
Number of E-A on same day as announcing firm	12,196	96.186	35.000	70.000	127.000
Number of industry peer E-A on same day as announcing firm	12,196	1.383	1.000	1.000	2.000
Number of firms per industry-year	3,111	31.094	12.000	27.000	47.000

This table reports the mean, first quartile (Q1), median, and third quartile (Q3) for all variables used in the main analyses. Also reported are descriptive statistics for the number of earnings announcements on each distinct date included in the sample. See appendix for variable definitions.

Table 3 reports Spearman correlation coefficients for the variables used in the analyses. The cumulative abnormal return of the announcing firm (*CAR*) and the peer firm (*CAR*^{PEER}) are positively correlated (0.044), consistent with prior information transfer studies (Pandit et al. 2011; Eshleman and Guo 2014). None of the correlations among the independent variables are high enough to cause concerns of multicollinearity.

Variable	CAR ^{PEER}	CAR	STRATEGY	<i>STRATEGY</i> ^{PEER}
CAR ^{PEER}	1.000			
CAR	0.043	1.000		
STRATEGY	-0.001	-0.007	1.000	
<i>STRATEGY</i> ^{PEER}	-0.004	-0.001	0.037	1.000

Table 3. Spearman Correlations

Spearman correlation coefficients are reported below the diagonal. See appendix for variable definitions.

5. Empirical Results

Table 4 presents the main results. Column (1) is the baseline result, which shows a coefficient of 0.026 on *CAR* (T-stat. = 37.713), indicating that information transfers between industry peers are generally positive. Column (2) introduces the business strategy variable for the peer firm and the announcing firm and its interactions with *CAR*. The coefficient on *CAR* × *STRATEGY* is significantly negative at the 5 percent level, suggesting that prospector firms' stock prices are less sensitive to earnings news of announcing firms. This is not surprising, since prospectors often change their line of business quickly. Therefore, industry trends do not affect prospectors' stock prices as much as other firms. The coefficient on the interaction term *CAR* × *STRATEGY*^{PEER} is significantly negative at the 10 percent level. This suggests that, although intra-industry information transfers are generally positive, they are less positive when the peer firm follows the prospector strategy. I therefore reject H1 and conclude that business strategy affects the strength of information transfers.

	(1)	(2)
Variable	Coefficient [T-stat.]	Coefficient [T-stat.]
CAR	0.026***	0.038***
	[37.713]	[8.719]
STRATEGY		0.000
		[0.727]
$CAR \times STRATEGY$		-0.001**
		[-2.074]
STRATEGY ^{PEER}		-0.000
		[-1.516]
$CAR \times STRATEGY^{PEER}$		-0.001*
		[-1.925]
CONSTANT	0.001***	0.001**
	[12.272]	[2.380]
Ν	4,097,882	4,097,882
Adjusted R ²	0.001	0.001

Table 4. Regression Analysis Results

This table reports estimated coefficients from estimating Eq. (1). T-statistics are adjusted for standard errors clustered by firm. See appendix for variable definitions.

*, **, and *** denote statistical significance at the 10, 5, and 1 percent levels, respectively, using a two-tailed test.

6. Sensitivity Analyses

In this section I investigate whether the main results reported in this paper are sensitive to alternative research design choices. This is important, given that some of the research design choices are arbitrary. The largest concern is the industry classification scheme chosen. While there are theoretical reasons why the GICS codes are superior for identifying firms' peers (e.g., Bhoraj et al. 2003), it is the researcher's choice. Therefore, I test whether the results are sensitive to defining industries using 4-digit North American Industry Classification System (NAICS) codes. I re-estimate Eq. (1) after re-defining industry peers as those firms in the same 4-digit NAICS code industry.

Table 5 reports the main results using 4-digit NAICS codes to classify firms into industries (Note 10). The magnitude and statistical significance of the coefficients on $CAR \times STRATEGY$, $CAR \times STRATEGY^{PEER}$, $CAR \times LEADER$, and $CAR \times LEADER^{PEER}$ are all similar to those reported earlier. This indicates that, even when defining firms' peers as those in the same NAICS code industry, the main results reported earlier are unchanged. To conclude, the results do not appear to be sensitive to alternate industry classification systems (Note 11).

Variable	Coefficient [T-stat.]	Coefficient [T-stat.]
CAR	0.029***	0.046***
	[38.782]	[10.291]
STRATEGY		0.000
		[1.141]
$CAR \times STRATEGY$		-0.001***
		[-3.020]
<i>STRATEGY</i> ^{PEER}		-0.001*
		[-1.952]
$CAR \times STRATEGY^{PEER}$		-0.001**
		[-2.218]
CONSTANT	0.000***	0.000**
	[8.966]	[2.025]
Ν	3,782,722	3,782,722
Adjusted R ²	0.001	0.001

Table 5. Robustness Tests

This table reports the main results when classifying firms into 4-digit NAICS (North American Industry Classification System) industries. T-statistics are adjusted for standard errors clustered by firm. See appendix for variable definitions.

*, **, and *** denote statistical significance at the 10, 5, and 1 percent levels, respectively, using a two-tailed test.

7. Conclusion

This paper explores whether firms' business strategies are an important factor in explaining information transfers. I find that the stock prices of firms following a prospector strategy react less to earnings announcements by industry peers. I also find that information transfers are weaker when the announcing firm is a prospector. Taken together, the findings suggest that the business strategies of both the announcing firm and its peers affect the magnitude of intra-industry information transfers.

This research is subject to some limitations. Most importantly, business strategy is a difficult construct to measure (Miles and Snow 1978, 2003). However, I have done my best by following an accepted measure in the accounting literature. As well, grouping firms into industries for analysis can be difficult, as a firm's competitors may not always be in the same industry. Furthermore, those competitors may change over time. I have tested the robustness of the results to various industry classification schemes and find that they are unchanged.

The findings in this paper contribute to the rich literature on intra-industry information transfers (Firth 1976, 1996; Baginski 1987; Pyo and Lustgarten 1990; Freeman and Tse 1992; Han and Wild 1997; Kim et al. 2008; Koo et al. 2017). While this literature has shown that firms' stock prices react to earnings news of industry peers, the effect of each firms' business strategy on this reaction was largely unexplored. This paper fills this gap in the literature. The findings also contribute to the growing literature on the consequences of business strategy. While business strategy has been linked to executive compensation (Ittner et al. 1997), audit fees, accounting misstatements (Bentley et al. 2013), tax avoidance (Higgins et al. 2015), and auditor reporting (Chen et al. 2017), this is the first study to link it to information transfers.

References

Baginski, S.P. (1987). Information Transfers Associated with Management Forecasts of Earnings. *Journal of Accounting Research*, 25, 196-216. https:///doi.org/10.2307/2491015

- Bentley, K.A., Omer, T.C., & Sharp, N.Y. (2013). Business Strategy, financial reporting irregularities, and audit effort. *Contemporary Accounting Research*, *30*, 780-817. https://doi.org/10.1111/j.1911-3846.2012.01174.x
- Bhojraj, S., Lee, C.M.C., & Oler, D. (2003). What's my line? A comparison of industry classification schemes for capital market research. *Journal of Accounting Research, 41*, 745-774.

https://doi.org/10.1046/j.1475-679X.2003.00122.x

- Bonsall, S.B., Bozanic, Z., & Fischer, P.E. (2013). What do Management Forecasts Convey About the Macroeconomy? *Journal of Accounting Research*, *51*, 225-266. https://doi.org/10.1111/1475-679X.12007
- Chen, Y., Eshleman, J.D., & Soileau, J. (2017). Business Strategy and Auditor Reporting. Auditing: A Journal of Practice & Theory, 36, 63-86. https://doi.org/10.2308/ajpt-51574
- Cheng, C.S.A., & Eshleman, J.D. (2014). Does the market overweight imprecise information?: evidence from customer earnings announcements. *Review of Accounting Studies, 19*, 1125-1151. https://doi.org/10.1007/s11142-014-9293-8
- Clinch, G.J., & Sinclair, N.A. (1987). Intra-Industry Information Releases. *Journal of Accounting & Economics*, 9, 89-106. https://doi.org/10.1016/0165-4101(87)90018-8
- Eshleman, J.D., & Guo, P. (2014). The market's use of supplier information to value customers. *Review of Quantitative Finance & Accounting*, 43, 405-422. https://doi.org/10.1007/s11156-013-0379-3
- Firth, M. (1976). The Impact of Earnings Announcements on the Share Price Behaviour of Similar Type Firms. *The Economic Journal*, 86, 296-306. https://doi.org/10.2307/2230748
- Firth, M. (1996). The Transmission of corporate financial information across national borders and equity market linkages. *Review of Accounting Studies*, *1*, 309-337. https://doi.org/10.1007/BF00570835
- Foster, G. (1981). Intra-Industry Information Transfers Associated with Earnings Releases. *Journal of Accounting & Economics*, *3*, 201-232. https://doi.org/10.1016/0165-4101(81)90003-3
- Francis, J.R., & Michas, P. (2013). The Contagion Effect of Low-Quality Audits. *The Accounting Review*, 88, 521-552. http://dx.doi.org/10.2308/accr-50322
- Freeman, R., & Tse, S. (1992). An earnings prediction approach to examining intercompany information transfers. *Journal of Accounting & Economics*, 15, 509-523. https://doi.org/10.1016/0165-4101(92)90004-L
- Gleason, C., Jenkins, N., & Johnson, W.B. (2008). The contagion effects of accounting restatements. *The Accounting Review*, 83, 83-110. https://doi.org/10.2308/accr.2008.83.1.83
- Hambrick, D.C. (1983). Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. *Academy of Management Journal, 16*, 5-26. https://doi.org/10.2307/256132
- Han, J.C.Y., & Wild, J.J. (1997). Timeliness of Reporting and Earnings Information Transfers. *Journal of Business, Finance, & Accounting, 24*, 527-540. https://doi.org/10.1111/1468-5957.00119
- Han, J.C.Y., Wild, J.J., & Ramesh, K. (1989). Managers' Earnings Forecasts and Intra-Industry Information Transfers. *Journal of Accounting & Economics*, 11, 3-33. https://doi.org/10.1016/0165-4101(89)90012-8
- Herzel, M.G., Li, Z., Officer, M.S., & Rodgers, K.J. (2008). Inter-firm linkages and the wealth effects of financial distress along the supply chain. *Journal of Financial Economics*, 87, 374-387. https://doi.org/10.1016/j.fineco.2007.01.005
- Higgins, D., Omer, T.C., & Phillips, J.D. (2015). The influence of a firm's business strategy on its tax aggressiveness. *Contemporary Accounting Research*, 32, 674-702. https://doi.org/10.1111/1911-3846.12087
- Ittner, C., Larcker, D., & Rajan, M. (1997). The choice of performance measures in annual bonus contracts. *The Accounting Review*, 72, 231-255.
- Kedia, S., Koh, K., & Rajgopal, S. (2015). Evidence on Contagion in Earnings Management. *The Accounting Review*, 90, 2337-2373. http://dx.doi.org/10.2308/accr-51062
- Kim, Y., Lacina, M., & Park, M.S. (2008). Positive and Negative Information Transfers from Management Forecasts. *Journal of Accounting Research*, 46, 885-908. https://doi.org/10.1111/j.1475-679X.2008.00297.x
- Koo, D.S., Wu, J.J., & Yeung, E.P. (2017). Earnings Attribution and Information Transfers. *Contemporary* Accounting Research. https://doi.org/10.1111/1911-3846.12308
- Lang, L., & Stulz, R. (1992). Contagion and competitive intra-industry effects of bankruptcy announcements. *Journal of Financial Economics*, 32, 45-60. https://doi.org/10.1016/0304-405X(92)90024-R
- Miles, R.E., & Snow, C.C. (1978). Organizational Strategy, Structure, and Process. New York, NY: McGraw-Hill. ISBN: 978-0804748407.

- Miles, R.E., & Snow, C.C. (2003). Organizational Strategy, Structure, and Process. Stanford, CA: Stanford University Press. ISBN: 978-0804748407.
- Olson, C., & Dietrich, J.R. (1985). Vertical information transfers: the association between retailers' sales announcements and suppliers' security returns. *Journal of Accounting Research*, 23, 144-166. https://doi.org/10.2307/2490695
- Pandit, S., Wasley, C.E., & Zach, T. (2011). Information externalities along the supply chain: the economic determinants of supplier's stock price reaction to their customers' earnings announcements. *Contemporary* Accounting Research, 28, 1304-1343. https://doi.org/10.1111/j.1911-3846.2011.01092.x
- Pyo, Y., & Lustgarten, S. (1990). Differential intra-industry information transfer associated with management earnings forecasts. *Journal of Accounting & Economics*, 13, 365-379. https://doi.org/10.1016/0165-4101(90)90010-2
- Swanquist, Q., & Whited, R.L. (2015). Do Clients Avoid "Contaminated" Offices? The Economic Consequences of Low-Quality Audits. *The Accounting Review*, 90, 2537-2570. http://dx.doi.org/10.2308/accr-51113

Notes

Note 1. The literature sometimes refers to such events as information spillovers or information externalities. I use the term information transfers throughout the paper.

Note 2. I note exceptions to this rule in our literature review in section 2.

Note 3. Examples of prospector and defender firms can be found in the appendix to Bentley et al. (2013).

Note 4. Higgins et al. (2015, 676) note "The Miles and Snow (1978, 2003) typology is one of the most popular and well-cited theories of strategic types."

Note 5. For a more in-depth discussion on this issue, refer to Langfield-Smith (1997, 211-213).

Note 6. This follows prior literature which uses the announcing firm's stock return as a measure of the news contained in the earnings announcement (Foster 1981; Thomas and Zhang 2008; Pandit et al. 2011; Cheng and Eshleman 2014; Eshleman and Guo 2014).

Note 7. Bhojraj, Lee, and Oler (2003) find that, compared with SIC codes and NAIC codes, the GICS classifications are significantly better at explaining stock return comovements, among other things. Given that the focus of this study is on how firms' stock returns commove with one another, the evidence in Bhojraj et al. (2003) would suggest that GICS codes would be best.

Note 8. Hambrick (1983) shows that prospectors have higher marketing expenditures relative to defenders.

Note 9. Results are similar if standard errors are clustered by the announcing firm or by year (untabulated).

Note 10. The construction of the *STRATEGY* variable is similarly changed to rank firms within each 4-digit NAICS industry.

Note 11. The results are also robust to using 4-digit GICS codes to define industries (untabulated).