Talks More, Errs More? New Perspective for Corporate Governance based on Empirical Research from China

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ABSTRACT
This paper investigates the relationship between ESG information disclosure and stock price synchronicity as well as the moderation effect of ownership structures on this relationship. Our research extends the corporate governance and provides other insight of the important role of information disclosure in corporate governance. We use the data from CSMAR with time span from 2015 – 2019 to examine our hypothesis. We show that the higher degree of ESG information disclosure, the lower stock price synchronicity, which means more firm-specific information has been incorporated into the stock price. Further, we testify the extant difference between same-level information disclosure caused by ownership structure.

Keywords: *Corporate governance, ESG information disclosure, Stock price synchronicity, Ownership structure.*

1. INTRODUCTION

Recent years, scholars have achieved a lot in corporate governance topic, which includes capital structure, asymmetric information and corporate finance and ownership structure (Shleifer & Vishny, 1997). However, fewer research has focused on the correlation of these microscopic fields. Therefore, our research mainly examines the correlation between latent variables that may have influence on the corporate governance: ESG information disclosure, ownership structure. Among them, ESG prevails these years as an external evaluation standard made by third party for investors and institutions, which has been taken into account seriously and transmitted more valuable information in market. Further, the ownership structure has been focused all the time, in which the difference of the nature of equity has been testified that it did cause the distinct behavior and ideology of management within company. All we mentioned above has already influenced the corporate governance and there is a need for accurate and scrupulous verification related to these topics and the correlation between them. Therefore, our research will investigate this inherent relationship and provide novel insight for further corporate governance.

2. LITERATURE REVIEW

Prior research (Morck et al., 2000) has shown that the information disclosure mechanism in emerging market is not as efficient as it in the developed country, which leads to the phenomenon of stock price synchronicity. Chinese stock market has developed many years with improvement in financial and non-financial information disclosure mechanism, which alleviates the "go with flow" for firm-specific with market overall trends, namely, the variation of individual stock from market is higher. Previous scholars reckoned that this means more information related to firm-specific has been incorporated into its stock price. Ubiquitously, this kind of phenomenon is beneficial for firms because they can deliver their characteristic to external investors to distinguish them from market trend, which can defend crash risk and is in favor of the long-term development.

As for ESG, Environmental, Social, and Corporate Governance (ESG) is an evaluation of a firm's collective conscientiousness for social and environmental factors. It is a principle and standard that is based on three key elements to evaluate the overall performance of a company, which are environmental(E), social(S), and governance(G) respectively. Prior research (Dai et al., 2018) has identified that the CSR (corporate social responsibility) evaluation is a useful tool to disclose information related of non-financial information, and it is also method to measure the validity and degree of related information disclosure form social responsibility. Similarly, ESG is a good way to measure the extension of information disclosure related to non-financial information (environmental protection, social responsibility and internal governance), which is even more comprehensive than CSR evaluation. The practitioners have emphasized the ESG information disclosure due to its abundant return. de Francesco & Levy (2008) and Kiron et al. (2013) have found that this kind of investment philosophy and information can create a tremendous return that is the same as before or even better than traditional investment. Simultaneously, it causes a slightly negative impact and achieves the goals of environmental protection and social responsibility delivery as well as the scrupulous corporate governance.

Furthermore, scholars have also investigated the effect of ownership structures, where the problem of ownership concentration has been emphasized. On the one hand, under incentive alignment perspective (Mitton, 2002; Lins, 2003), ownership concentration can enhance the alignment of interests between both external and internal shareholders, even the interest of minority shareholders. On the other hand, under the entrenchment effect (Claessens et al., 2002), with the entrenching controlling of few shareholders, they tend to conceal the internal information to prevent their benefit. All these two perspectives above have made a sense for explanation for stock price variation. However, due to the special shareholder in state-owned companies – nation, which mitigates the existence of bounded alignment of interest between natural individuals. Thus, the entrenchment has dominated important role for difference of stock price synchronicity between private companies and state-owned companies.

However, few literatures pay attention to the relationship between ESG information disclosure and stock price synchronicity, and extant paper explaining relationship between stock price synchronicity and ownership mainly concentrated on whether foreign or not.

3. HYPOTHESIS DEVELOPMENT

Stock price synchronicity essentially reflects the content of firm-specific information incorporated into stock prices (Dai et al., 2018). A growing focus on sustainability has led to companies being more concerned about environmental and social issues. Thus, the firm-specific information has no longer limited to financial information, but also non-financial, such as ESG-related information. For a long time, corporate financial irregularities have been a thorny issue in China (Yuan et al., 2022). As one important strategy to improve the integrity of Chinese corporate governance, it is crucial for companies, both private and state-owned, to disclose non-financial information to better reduce the irregularities and information asymmetric as well as enhancing pricing efficiency. In truth, a close relationship exists between stock price synchronicity and non-financial information disclosure. In this study, we examine the impact of ESG information disclosure on stock price synchronicity, and how this relationship is influenced by the ownership structure.

3.1. ESG AND STOCK PRICE SYNCHRONICITY

Through non-financial information disclosure, ESG affects the firm-specific information integrated into stock prices, which influences pricing efficiency. In view of stakeholder theory (Choi & Wang, 2009), firms can benefit from establishing reputational capital, which in turn is the foretell of potential for long-term growth and more efficient stock pricing. The stakeholder theory can be seen from three aspects. For trust building, a proactive approach to social responsibility will result in firms providing investors with more accurate and timely information about their business so that investors can better understand the company's relevant strategies and company performance, which establishes a stronger relationship and trust bond between companies and investors and reduces the information asymmetry. From the perspective of information transparency, ESG-related information, as a significant source of non-financial information, can improve the transparency of information and help monitor the management and reduce insider trading. Gao et al. (2014) have proved that disclosing more social responsibility information contributes to the transparency of company performance. From the perspective of corporate performance, since disclosing more ESG information will get a good relationship with investors, Engelberg et al. (2012) found that a good relationship with investors will lead to a better corporate performance. It is derived from the “information efficiency view” (Durnev et al., 2004) that when stakeholders have more ESG information to get strategic level information to make a decision, a stock price is more likely to contain firm-specific information. Therefore, stock price has less synchronicity. We thus propose our first hypothesis:

H1: ***Stock price synchronicity is negatively associated with firms' ESG information disclosure.***

3.2. MODERATION EFFECT OF OWNERSHIP STRUCTURE OF COMPANY

Shleifer (1998) has testified that the sever phenomenon of ownership concentration is an important element that dominates the stock price synchronicity, where the relationship is mediated by information asymmetry. In China, the concentration of ownership can mainly be divided into private companies and state-owned companies. Prior research (Morck et al., 2000; Fan & Wong, 2002) has examined the ownership in state-owned companies is more concentrated compared to the private companies. According to the entrenchment theory, managers in state-owned companies have incentive to allocate organizational resources to somewhere that are beneficially consistent with themselves, where it provides the engagement in self-dealing transactions. The expected consequence thus is that they incline to prevent the information within organization even small interest group being exposed to third party arbitration. The shareholders within state-owned companies impede fundamental information disclosure even conceal crucial information. The inherently bounded correlation impairs the trust and confidence of external investors, which induces the lack of trust of the information that has been disclosed even by other third party. Therefore, the same-level information disclosure seems more reliable for private companies than state-owned companies perceived by external investors so that the diminution of stock price synchronicity leading by information disclosure is relatively lower for state-owned companies, vice versa.

On the other hand, according to the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, the semi-mandatory nonfinancial information disclosure is required for state-owned companies. Nevertheless, the disclosure of nonfinancial information of private companies is voluntary and flexible. Under the mandatory regulation from upper hierarchy, state-owned companies have to submit perfunctory nonfinancial information disclosure (Dai et al., 2018). Simultaneously, the tremendous similar duplication between years makes the information uncredible, namely, the low-quality information disclosure. Contrary to the state-owned companies, most private companies expect to capture the external investors so that they tend to disclose nonfinancial information seriously and passionately, and finally the high-quality information will be transmitted to market. Therefore, the reduction of stock price synchronicity induced by information is still lower for state-owned companies due to the low-quality information, ceteris paribus.

Based on the inference above, we give the hypothesis as below:

H2: The ownership structure of companies moderates the relationship between ESG information disclosure and stock price synchronicity, where the state-owned companies will mitigate the negative relationship.

4. REGRESSION DESIGN

4.1. DATA COLLECTION

We collect data from China Stock Market and Accounting Research (CSMAR) database for basic financial data. Simultaneously, we use SynTao Green Finance ESG assessment as the evaluation of ESG performance for relevant listed companies. After data cleansing, we finally reserve 1396 observations as our empirical sample where we keep the A-share from Shenzhen exchanges and Shanghai exchanges that can be matched to ESG evaluation, which includes 439 Chinese listed companies with time span from 2015 to 2019.

4.2. VARIABLE DIFINITION

4.2.1. STOCK PRICE SYNCHRONICITY

Following prior research (Gul et al., 2010), we will then measure the stock price synchronicity from two components, which is decomposed into market level and industry level respectively. We firstly regress the weekly return on A-share to A-share's market level return and individual-dropping industry level return as well as the lagged value of market-level and industry-level above. The regression is shown as below:

$$R_{i,w,t} = \beta_0 + \beta_1 RM_{w,t} + \beta_2 RM_{w,t-1} + \beta_3 RI_{w,t} + \beta_4 RI_{w,t-1} + \epsilon_{i,t}$$

Where, i is for firm i, w is for week w and t is for year t. The detail about definition is compiled in Table 1.

To circumvent the natural domain of R^2 in [0, 1], we use logistic transformation of each R^2 for firm i. and calculate the proxy measuring stock price synchronicity as below:

$$Synch_i = \ln[({R^2}_i/(1 - {R^2}_i)]$$

4.2.2. INDEPENDENT VARIABLES

According to Xu et al. (2013), we control other factors that may have influence on the stock price synchronicity from individual-level in different years. Simultaneously, we use the professional and official third-party ESG evaluation reports from SynTao Green Finance as proxy of the degree of non-financial information disclosure, which measure the degree of information disclosure and the validity of elimination of information asymmetry. Furthermore, we also calculate the interaction that the $ESG\_n_{i,t}$ score times type of company (a dummy variable equals to 1 if the company is state-owned, otherwise, it is private) to generate a new variable indicating whether the nature of equity is state-owned or not.

4.3. EMPIRICAL MODEL

To control the individual-specific effect and time-effect, we adopt Two-way Fixed-effect Model to estimate the parameters. Specifically, we cluster the different companies and different years to control the individual-specific effect and time effect for robustness. For investigating the relationship between ESG information disclosure and stock synchronicity as well as difference of previous relationship between private companies and state-owned companies, we design a regression model as below:

$$
\begin{aligned}
Synch_{i,t} = \beta_0 &+ \beta_1 Volume_{i,t} + \beta_2 Size_{i,t} + \beta_3 Level_{i,t} \\
&+ \beta_4 MB_{i,t} + \beta_5 Foreign_{i,t} \\
&+ \beta_6 Indnum_{i,t} + \beta_7 Indsize_{i,t} \\
&+ \beta_8 Big4_{i,t} + \beta_9 ESG\_n_{i,t} \\
&+ \beta_{10} State\_n_{i,t} + \sum_k \pi_k Year \\
&+ \sum_l \delta_l Firm + \epsilon_{i,t}
\end{aligned}
$$

5. EMPIRICAL RESULT

For control variables, only Level and MB are significant enough, which is consistent with prior views. The higher the debt ratio is, the more incentives the company tends to conceal the details of company, which leads to the lack of information disclosure, and ultimately the company will "go with the flow" in stock markets with high stock price synchronicity. For MB, the higher market-to-book ratio implies the latent overestimation of company. Simultaneously, the extreme condition that potential manipulation will also lead to the variation of individual stock price from market condition, which all alleviate the stock price synchronicity. For main explanatory variables, Table 2. shows the result of regression using Synch as independent variable. Thereinto, the coefficient of different regressions grouped by different ESG ass-essment variables (ESG_E, ESG_S, ESG_G, ESG) is qualitatively identical, which testifies our Hypothesis 1 that the information disclosure related to ESG can mitigate the stock price synchronicity of relevant firm accordingly (almost all estimates are significant under at least 95% confidence level except the proxy of governance). Furthermore, the moderation effect of ownership structure in different regression groups demonstrates qualitatively uniform coefficient as well. The overall trend indicates that the negative relationship between ESG information disclosure and stock price synchronicity is stronger for private companies compared to the state-owned companies, which is consistent with the Hypothesis 2 above.

Table 1. Variable Definition

Symbol	Definition	Expected
$R_{i,w,t}$	Weekly return for firm i on week w year t	N/A
$RM_{w,t}$	Value-weighted A-share market return on week w year t	N/A
$RM_{w,t-1}$	Lagged $RM_{w,t}$	N/A
$RI_{w,t}$	Value-weighted A-share industry return on week w year t	N/A
$RI_{w,t-1}$	Lagged $RI_{w,t}$	N/A
Independent Variable		
$Synch_{i,t}$	The degree of stock price variation from stock market trend of firm i in year t	N/A
Control Variables		
$Volume_{i,t}$	The trading volume of firm i in year t, where we use the natural log of volume	+
$Size_{i,t}$	Natural log of total asset of firm i in year t	-
$Level_{i,t}$	Market debt ratio of firm i in year t	+
$MB_{i,t}$	Market-to-book ratio of firm i in year t	-
$Foreign_{i,t}$	The proportion of total shares that shares held by foreign investors	-
$Indnum_{i,t}$	The number of firms in industry in year t	+

	where the firm i belongs to	
$Indsize_{i,t}$	Natural log of total assets in industry in year t where firm i belongs to	+
$Big4_{i,t}$	Dummy variable, which is equals to 1 if firm i in year t is audited by Big 4	-
Main Explanatory Variables		
$ESG\_n_{i,t}$	Natural log of n (n: E, S, G) evaluation score of firms i in year t, where ESG without n is comprehensive evaluation	-
$State\_n_{i,t}$	Dummy variables, which equals to 1 if $ESG_n_{i,t}$evaluation of firm i in year t is state-owned	+

Table 2. Regression results by two-way fixed-effect model

VARIABLES	(1) Control	(2) ESG_E	(3) ESG_S	(4) ESG_G	(5) ESG
Volume	0.004	0.002	-0.001	0.002	0.001
	(0.08)	(0.04)	(-0.03)	(0.04)	(0.03)
Size	-0.104	-0.075	-0.073	-0.059	-0.068
	(-0.65)	(-0.46)	(-0.45)	(-0.36)	(-0.42)
Level	1.126***	1.034***	1.051***	1.049***	1.030***
	(2.98)	(2.73)	(2.78)	(2.78)	(2.72)
MB	-0.059*	-0.057*	-0.057*	-0.060*	-0.057*
	(-1.83)	(-1.81)	(-1.78)	(-1.84)	(-1.80)
Foreign	-0.653	-0.882	-0.752	-0.735	-0.868
	(-0.86)	(-1.14)	(-0.98)	(-0.97)	(-1.13)
Indnum	0.001	0.001	0.001	0.001	0.001
	(0.68)	(0.73)	(0.73)	(0.57)	(0.62)
Indsize	0.197*	0.162	0.176	0.185*	0.168
	(1.85)	(1.46)	(1.59)	(1.67)	(1.50)
Big4	-0.142	-0.141	-0.144	-0.138	-0.147
	(-0.84)	(-0.84)	(-0.85)	(-0.82)	(-0.88)
ESG_E		-0.561**			
		(-2.03)			
State_E		0.323***			
		(2.74)			
ESG_S			-0.360		
			(-1.34)		
State_S			0.264**		
			(2.21)		
ESG_G				-0.453**	
				(-2.33)	
State_G				0.315**	
				(2.51)	
ESG					-0.750**

					(-2.13)
State_ESG					0.221**
					(2.52)
Constant	-2.985	-1.652	-2.480	-3.029	-0.625
	(-0.74)	(-0.39)	(-0.60)	(-0.74)	(-0.15)
Observations	1,396	1,396	1,396	1,396	1,396
R-squared	0.433	0.438	0.436	0.438	0.438
Number of firms	439	439	439	439	439
Firm FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

6. CONCLUSION

Our research investigates whether the ESG information disclosure and the ownership structure have an impact on stock price synchronicity or not based on Chinese stock market, emphasizing the important role of relevant information disclosure in corporate governance of different types of companies.

Firstly, we use the ESG score evaluated by third party as measurement for the degree of ESG information disclosure, and we find that the transparent ESG information disclosure can deliver the characteristic of company to external investors, which can protest the adverse market intervention from some extensions.

Secondly, we examine the relationship between the moderation effect of ownership structure on the impact of information disclosure, where the empirical results are consistent with our hypothesis and extant theory. Due to the concentrated ownership in state-owned company, to consolidate the control of company and conceal the potential illegal benefit, managers in state-owned company incline to conceal the information disclosure compared to private companies, which induces the diminution of trust and confidence of external investors. As a result, the investors are suspicious of information that has been disclosed, and the moderation effect of information disclosure is mitigated.

Overall, our research contributes to the novel perspective for corporate governance, where we emphasize the vital role of information disclosure related to ESG aspects and analyze the mechanism of weak effect of state-owned company compared to private company.

7. LIMITATION AND FURTHER DIRECTION

Limited by the length of paper, we relax the other latent impact of moderator (e.g., media coverage); Meanwhile, there is a lack of scrupulous investigation of three different elements in ESG aspects and the relevant mechanism of the impact.

For the later research, we reckon there is some investigation direction: firstly, the detailed exploration of three ESG aspects is apparently needed. Secondly, there is a need to test the relationship between different synchronicity-level and information disclosure (test by quantile regression), even the endogeneity between these two factors.

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