

Corporate Information Disclosure and Asset Mispricing

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Abstract. Based on data from Chinese A-share listed companies from 2012 to 2023, this study empirically analyzes the impact of corporate information disclosure on asset mispricing. The findings are as follows: First, high-quality information disclosure helps reduce the level of corporate asset mispricing, and this conclusion remains valid after a series of robustness tests. Second, the level of marketization and new quality productive forces help further moderate the relationship between the two. Third, for enterprises without material weaknesses and non-ST or non-PT enterprises, the impact of corporate information disclosure on asset mispricing is significantly negative; however, for enterprises with material weaknesses and ST or PT enterprises, this effect does not exist.

Keywords: information disclosure, asset mispricing, level of marketization, new quality productive forces

1. Introduction

At present, the construction of the information disclosure system in China's capital market has become increasingly improved after years of development. However, problems in information disclosure practice remain prominent. At the same time, new types of disclosure content, such as ESG information and data asset information, are continuously emerging, and how the quality of their information disclosure affects corporate asset mispricing has become a new focus of attention. Based on this, this study will systematically analyze the relationship between the characteristics of corporate information disclosure and the degree of asset mispricing, and explore its internal mechanism of action and boundary conditions. From the perspective of theoretical significance, it helps to deepen the understanding of the economic consequences of information disclosure and enrich the research perspective of asset pricing theory; from the perspective of practical significance, first, it helps to provide decision-making references for regulatory authorities to optimize information disclosure regulations and improve the pricing efficiency of the capital market; second, it guides investors to reasonably evaluate corporate disclosure information and reduce the risk of irrational decision-making.

The marginal contributions of this study are mainly reflected in the following aspects: From the perspective of research perspective, this study examines the moderating effects of the level of marketization in the external environment of enterprises and the new quality productive forces within enterprises themselves on the relationship between corporate information disclosure and asset mispricing; from the dimension of practical guidance, the research conclusions provide specific and

feasible operational guidance for regulatory authorities to formulate differentiated information disclosure rules, for investors to optimize investment strategies, and for enterprises to improve information disclosure practices.

2. Literature review

2.1. Information disclosure and asset mispricing

The quality and content of information disclosure have a significant impact on asset mispricing. Studies have found that enterprises' disclosure of data resources can alleviate asset mispricing, especially by improving the quality of information disclosure and reducing analysts' forecast bias [1]. Good ESG ratings and corporate ESG performance can significantly reduce asset mispricing; the former does so by improving the quality of information disclosure and reducing analysts' forecast divergence, while the latter does so by improving stock liquidity and attracting analysts' attention [2, 3]. Environmental information disclosure can alleviate asset mispricing, especially by improving corporate information transparency and reducing the degree of investor irrationality [4]. The tone of Management Discussion and Analysis (MD&A) and the disclosure of social responsibility information have a significant impact on asset mispricing; the former operates by affecting investor sentiment and information asymmetry, while the latter operates through the mediating effect of analysts' earnings forecasts [5, 6].

2.2. Corporate governance and asset mispricing

The impact of corporate governance structure on asset mispricing also cannot be ignored. Studies have found that the net positive tone of social responsibility reports can reduce asset mispricing, especially among companies subject to mandatory disclosure and those complying with sustainability reporting guidelines [7]. Mandatory disclosure of corporate social responsibility reports significantly alleviates asset mispricing, especially when audit quality is relatively high [8]. The improvement of the internal control quality of listed companies can significantly reduce asset mispricing by improving the quality of information disclosure and reducing agency costs [9]. In addition, asset mispricing is more severe when media sentiment is high or low [10].

3. Research design

3.1. Model specification

To further examine the internal relationship between information disclosure and asset mispricing, this study specifies the following model:

$$Mispricing_{it} = \alpha_0 + \beta_0 Disclosure_{it} + \sum \gamma_k Control_{it} + Firm_i + Year_t + \varepsilon_{it} \quad (1)$$

Mispricing, *Disclosure*, *Control*, *Firm*, *Year*, ε respectively represent the degree of corporate asset mispricing, the degree of environmental information disclosure, a series of control variables, individual fixed effects, time fixed effects, and the error term. α_0 represents the constant term, β_0 and γ_k respectively represent the coefficients of the variables.

3.2. Variable definitions

Regarding the explained variable—corporate asset mispricing, this study measures the level of asset mispricing by comparing the company's market value with its fundamental value.

Regarding the core explanatory variable—corporate information disclosure, this study obtains data on corporate information disclosure evaluation results from the "Information Disclosure" columns on the websites of the Shanghai Stock Exchange and the Shenzhen Stock Exchange. The evaluation results are divided into four grades, which, from high to low, are "Excellent," "Good," "Pass," and "Fail," assigned values of 4, 3, 2, and 1, respectively.

Regarding the control variables, this study selects a series of control variables from the enterprise level and the macro level, respectively. Specifically, they include enterprise size, enterprise profitability, enterprise solvency, enterprise liquidity level, board size, executive compensation, enterprise age, price-earnings ratio, equity concentration, regional economic development level, industrial structure condition, and regional financial development level.

3.3. Data sources

This study selects data from Chinese A-share listed companies from 2012 to 2023, excludes enterprises with a large amount of missing data, and matches the data of each variable. In terms of data sources, corporate information disclosure data are obtained from the Shanghai Stock Exchange and the Shenzhen Stock Exchange, while other enterprise-level and macro-level data are respectively derived from the China Stock Market & Accounting Research Database (CSMAR) and the Wind database. The descriptive statistics of each variable are as follows:

Table 1. Descriptive statistics table

VarName	Obs	Mean	SD	Min	Max
Misprcing	40443	0.027	0.385	-1.104	2.748
Disclosure	35120	1.979	0.629	1.000	4.000
Size	41628	3.097	0.060	2.704	3.357
ROA	41627	0.036	0.060	-0.163	0.171
Leverage	36173	1.288	0.738	0.630	4.947
Liquidity	41591	0.693	2.010	-5.723	8.204
Board	30545	8.408	1.662	0.000	18.000
Salary	30483	0.288	0.350	0.005	1.689
Age	41625	9.735	8.012	0.000	27.000
PE	34853	72.049	100.902	6.843	550.452
Top5	41383	0.488	0.190	0.200	0.994
Industry	41831	54.922	11.224	34.500	84.800
GDP	41831	10.700	0.764	6.565	11.818
Finance	41831	1.666	0.458	0.701	2.998

4. Research design

4.1. Benchmark regression analysis

The benchmark regression results are shown in Table 2. It can be seen that, with the inclusion of control variables, the coefficient of information disclosure (Disclosure) is always significantly negative, indicating that corporate information disclosure reduces the level of corporate asset mispricing.

Table 2. Benchmark regression results

Variable	(1)	(2)	(3)	(4)
	Mispricing	Mispricing	Mispricing	Mispricing
Disclosure	-0.0284*** (-9.60)	-0.0171*** (-4.96)	-0.0247*** (-6.74)	-0.0243*** (-6.66)
Size		0.6239*** (11.48)	0.8441*** (11.60)	0.5582*** (7.39)
ROA		0.7490*** (12.80)	2.6683*** (39.87)	2.7022*** (40.51)
Leverage		0.0474*** (16.30)	-0.0245*** (-7.03)	-0.0213*** (-6.10)
Liquidity		0.0007 (0.80)	0.0004 (0.39)	-0.0001 (-0.13)
Board			-0.0091*** (-5.14)	-0.0051*** (-2.84)
Salary			0.0473*** (4.76)	0.0264*** (2.64)
Age			0.0098*** (19.51)	0.0081*** (15.72)
PE			0.0015*** (59.69)	0.0015*** (59.90)
Top5			-0.0489*** (-2.92)	-0.0306* (-1.83)
Industry				0.0023*** (5.28)
GDP				0.0332*** (6.44)
Finance				0.0396*** (4.34)
Constant term	0.0703*** (9.54)	-1.9831*** (-11.71)	-2.7450*** (-12.16)	-2.4429*** (-10.63)
Observations	34,659	29,814	22,000	21,993
Number of enterprises	5,120	4,991	3,353	3,348

Note: Z-values are shown in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

4.2. Robustness analysis

To further ensure the robustness of the results, this study conducts the following robustness tests: First, a fixed effects model is used, and the regression results are shown in Column (1) of Table 3; second, the lagged term of the explanatory variable is used, and the regression results are shown in Column (2) of Table 3; third, extreme data are excluded, and all data are winsorized at the 2% level, with the regression results shown in Column (3) of Table 3. It can be seen that the coefficient of information disclosure (Disclosure) is always significantly negative, indicating that corporate information disclosure reduces the level of corporate asset mispricing.

Table 3. Robustness test

Variable	(1)	(2)	(3)
	Mispricing	Mispricing	Mispricing
Disclosure	-0.0162*** (-4.29)		-0.0221*** (-6.41)
lag_Disclosure		-0.0146*** (-3.87)	
Size	0.1865* (1.66)	0.3807*** (4.67)	0.5563*** (7.56)
ROA	2.1321*** (29.98)	3.0133*** (43.03)	2.4733*** (39.12)
Leverage	-0.0140*** (-3.86)	-0.0187*** (-5.23)	-0.0194*** (-5.72)
Liquidity	-0.0003 (-0.28)	-0.0005 (-0.47)	-0.0002 (-0.25)
Board	-0.0032 (-1.51)	-0.0038** (-1.97)	-0.0049*** (-2.74)
Salary	-0.0662*** (-5.41)	0.0572*** (5.16)	0.0299*** (3.17)
Age	0.0121*** (5.37)	0.0051*** (9.16)	0.0075*** (15.45)
PE	0.0013*** (50.64)	0.0014*** (55.77)	0.0014*** (59.76)
Top5	0.0477** (2.26)	-0.0656*** (-3.69)	-0.0228 (-1.44)
Industry	-0.0002 (-0.24)	0.0033*** (6.92)	0.0022*** (5.38)
GDP	0.0851*** (3.70)	0.0321*** (5.74)	0.0346*** (6.85)
Finance	0.0119	0.0305***	0.0381***

Table 3. (continued)

	(0.86)	(3.20)	(4.41)
Constant term	-1.7027***	-1.9019***	-2.4395***
	(-4.22)	(-7.61)	(-10.91)
Observations	21,993	18,707	21,993
Number of enterprises	3,348	3,227	3,348

Note: Z-values are shown in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

4.3. Moderating mechanism analysis

First, the moderating effect of the level of marketization is examined. This study obtains the marketization level index (Market) by referring to the practice of existing studies [11]. As shown in Column (1) of Table 4, the interaction term between corporate information disclosure (Disclosure) and the marketization level index (Market) is significantly negative, indicating that the level of marketization can further moderate the negative relationship between corporate information disclosure and asset mispricing.

Second, the moderating effect of new quality productive forces is examined. This study obtains new quality productive forces (NQPF) by referring to the practice of existing studies [12]. As shown in Column (1) of Table 4, the interaction term between corporate information disclosure (Disclosure) and new quality productive forces (NQPF) is significantly negative, indicating that new quality productive forces can further moderate the negative relationship between corporate information disclosure and asset mispricing.

Table 4. Mechanism test

Variable	(1)	(2)
	Mispricing	Mispricing
Disclosure*Market	-0.0105*** (-4.05)	
Disclosure	0.0679** (2.52)	-0.0003 (-0.03)
Market	0.0260*** (3.77)	
Size	0.5620*** (5.64)	0.4206*** (4.11)
ROA	2.9525*** (33.14)	2.9987*** (33.47)
Leverage	-0.0323*** (-5.30)	-0.0320*** (-5.17)

Table 4. (continued)

Liquidity	0.0004 (0.33)	0.0008 (0.59)
Board	-0.0097*** (-3.92)	-0.0096*** (-3.84)
Salary	0.0285** (2.13)	0.0350** (2.57)
Age	0.0086*** (13.27)	0.0085*** (12.87)
PE	0.0018*** (43.12)	0.0018*** (42.50)
Top5	-0.0875*** (-3.80)	-0.0889*** (-3.83)
Industry	0.0027*** (4.60)	0.0022*** (3.82)
GDP	0.0171 (1.49)	0.0213*** (3.15)
Finance	0.0371*** (2.61)	0.0500*** (4.20)
Disclosure*NQPF		-0.0027*** (-4.27)
NQPF		0.0080*** (6.38)
Constant term	-2.4978*** (-7.98)	-1.9506*** (-6.19)
Observations	13,381	12,987
Number of enterprises	3,007	2,928

Note: Z-values are shown in parentheses; *** p<0.01, ** p<0.05, * p<0.1

4.4. Heterogeneity analysis

As shown in Table 5, for enterprises without material weaknesses and non-ST or non-PT enterprises, the impact of corporate information disclosure (Disclosure) on asset mispricing is significantly

negative; however, for enterprises with material weaknesses and ST or PT enterprises, this effect does not exist.

Table 5. Heterogeneity test

Variable	(1)	(2)	(3)	(4)
	significant defects	No significant defects	ST or PT	Not ST or PT
Disclosure	-0.0219 (-0.55)	-0.0396*** (-7.84)	0.0127 (0.60)	-0.0409*** (-7.99)
Size	-2.3117** (-2.34)	0.5938*** (5.95)	0.0787 (0.18)	0.5835*** (5.74)
ROA	4.1761*** (4.99)	2.9592*** (33.08)	0.7373 (1.40)	3.0041*** (33.20)
Leverage	-0.0026 (-0.04)	-0.0333*** (-5.44)	-0.0578*** (-3.03)	-0.0294*** (-4.64)
Liquidity	-0.0099 (-0.84)	0.0004 (0.34)	0.0004 (0.06)	0.0003 (0.22)
Board	0.0243 (1.23)	-0.0103*** (-4.12)	-0.0002 (-0.02)	-0.0105*** (-4.12)
Salary	0.0256 (0.16)	0.0270** (2.01)	0.2399*** (3.48)	0.0221 (1.63)
Age	0.0098* (1.93)	0.0086*** (13.21)	0.0084** (2.47)	0.0087*** (13.13)
PE	0.0009*** (4.46)	0.0018*** (43.20)	0.0012*** (8.44)	0.0018*** (42.46)
Top5	-0.0210 (-0.13)	-0.0871*** (-3.77)	0.3168*** (3.26)	-0.1005*** (-4.28)
Industry	0.0108* (1.77)	0.0025*** (4.37)	0.0095*** (2.68)	0.0025*** (4.22)
GDP	-0.0166 (-0.35)	0.0284*** (4.26)	0.0052 (0.19)	0.0282*** (4.14)
Finance	-0.0841 (-0.55)	0.0499*** (4.22)	-0.1509** (-2.10)	0.0517*** (4.32)
Constant term	6.4702** (2.10)	-2.4618*** (-8.01)	-0.9350 (-0.71)	-2.4232*** (-7.74)
Observations	83	13,298	341	13,040
Number of enterprises	67	3,002	67	2,940

Note: Z-values are shown in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

5. Conclusion

Based on data from Chinese A-share listed companies from 2012 to 2023, this study empirically analyzes the impact of corporate information disclosure on asset mispricing. The findings are as follows: First, high-quality information disclosure helps reduce the level of corporate asset mispricing, and this conclusion has passed a series of robustness tests. Second, the level of marketization and new quality productive forces help further moderate the relationship between the two. Third, for enterprises without material weaknesses and non-ST or non-PT enterprises, the impact of corporate information disclosure (Disclosure) on asset mispricing is significantly negative; however, for enterprises with material weaknesses and ST or PT enterprises, this effect does not exist.

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