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Is innovative activity a way to conduct tunneling behavior? Evidence from the seasoned equity offerings of Chinese firms

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ABSTRACT

Using a sample of Chinese firms, we prove that a firm's abnormal innovative activities during a seasoned equity offering (SEO) period is a way for its controlling stockholders to conduct tunneling. We find that a firm significantly improves its innovative intensity and performs more inefficient innovative activities in SEO years. These excessive innovative activities are restrained when the principal–agent problem is alleviated. Further research shows that catering to investors is a mechanism by which the controlling shareholders can implement innovative tunneling. Controlling shareholders can manipulate innovative activities before an SEO to increase a firm's stock price and reduce SEO financing costs.

1. Introduction

Tunneling refers to the behavior through which controlling shareholders transfer a firm's property and profits and damage the interests of minority shareholders for individual interests (Johnson et al., 2000; Gao et al., 2020). Innovative activities, a special investment behavior of firms, are characterized by large investments, high levels of risk, and high degree of information asymmetry. The effective supervision is difficult for minority shareholders, and they are an easy channel through which controlling shareholders may conduct tunneling behavior (Hubbard, 1998; Bates, 2005; Pawlina and Renneboog, 2005). Controlling shareholders may organize innovative activities not aimed at improving operating performance but designed to maximize the returns of their own investment portfolio. The risk of innovative activities will then be transferred to the firm (Pawlina and Renneboog, 2005; Su et al., 2008). When the innovative activity succeeds, the controlling shareholders can enjoy the benefits. However, when it fails, they do not have to bear the entire loss due to incomplete shareholding.

The seasoned equity offerings (SEO) of firms always involve an interest distribution between new and old shareholders and between large and small shareholders. Controlling shareholders are motivated to implement tunneling behavior through SEO activities (Chen et al., 2010; Zhao et al., 2015; Zhang and Jiang, 2015). Wang (2016) observed abnormal phenomena in the innovative activities of American firms during SEO periods. Firms will obviously increase their innovation investments before an SEO, but the innovation efficiency of such a period is apparently lower than that of a general period. Fig. 1 shows that similar phenomena can be found with Chinese firms; however, it is not well explained. Combining existing research conclusions, we attempt to explain the abnormal innovation phenomena of firms during an SEO period from the perspective of the controlling shareholders' tunneling and examine the existence of innovative tunneling during such periods.

Fig. 1 shows a comparison of innovation intensity between an SEO and a non-SEO sample in China. The innovation and SEO data

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shown in Fig. 1 are from Chinese listed firms between 2007 and 2017. Innovation intensity is the ratio of innovation costs to operating revenue of the last year.

According to existing studies, this paper examines a possible mechanism by which controlling shareholders conduct innovative tunneling, which is the catering to investors mechanism. Investors are not always completely rational. A firm can cater to the preferences of its investors by means of its innovative activities, thereby changing investors' expectations about the firm's future operations and achieving the goal of boosting the stock price (Baker and Wurgler, 2004; Jenter, 2005; Dong et al., 2019). Abnormal innovation phenomena during an SEO period may be that the controlling shareholders use innovative behaviors to cater to investors and increase the stock price before an SEO, and then reduce the company's equity financing costs and damage the interests of shareholders who participate in the SEO. After the completion of an SEO, the controlling shareholders will invade the interests of the firm's minority shareholders through capital occupation, related transactions, and dividend level adjustments (Zhao et al., 2015). This paper explores the specific mechanism of innovative tunneling behavior conducted by controlling shareholders during an SEO period.

The steps of our empirical testing are as follows. First, this paper's benchmark regression will directly examine whether innovative activities during an SEO period are a way for controlling shareholders to conduct tunneling. Second, since tunneling is a behavior of controlling stockholders, to confirm that the innovative activities are conducted by them, we examine the amount, efficiency, and moderating effects for abnormal innovative activities in that period. Then, to examine a possible innovative tunneling mechanism, we will check whether the firms have significant innovation and catering behaviors during SEO years. Finally, this paper will conduct some robustness checks.

The contributions of this paper are to prove that a firm's abnormal innovative activities in an SEO period are the controlling shareholders' tunneling behavior and to find that catering to investors is a controlling shareholders' mechanism for conducting innovative tunneling behavior. Therefore, this paper documents a new way of tunneling: controlling shareholders can carry out tunneling activities by manipulating the innovation behavior of firms.

The remainder of this paper is organized as follows. Section 2 describes the econometric model and data; Section 3 presents the empirical results and robustness checks; and Section 4 concludes.

2. Econometric model and data

2.1. Econometric model

We use the following multiple regression model to examine our testable hypothesis:

$$TUNNEL_{i,t} = \alpha_0 + \alpha_1 SEO_{i,t}\left(orRD_{i,t}\right) + CONTROL + FIRM + YEAR + \varepsilon_{i,t} \quad (1)$$

where $TUNNEL_{i,t}$ is the extent of tunneling by the i th firm at time t, using the ratio of other receivables to total assets (Jiang et al., 2010; Gao et al., 2020) and the ratio of related transaction profits to total profits for robustness checks (Su et al., 2014; Jiang et al., 2015). $SEO_{i,t}$ is an indicator variable that takes the value of 1 if the i th firm implements SEO activity and 0 otherwise. $RD_{i,t}$ is the research and development intensity of the i th firm at time t, calculated using the ratio of the innovation costs at time t to operating revenue at time $t-1$.

Our set of control variables includes asset size (Size), cash holdings (Cash), the debt–asset ratio (Lev), free cash flow (Freecash), shareholder ownership nature (EquityNatureID), return on assets (ROA), and the tax rate (Tax_rate). We include year and firm fixed

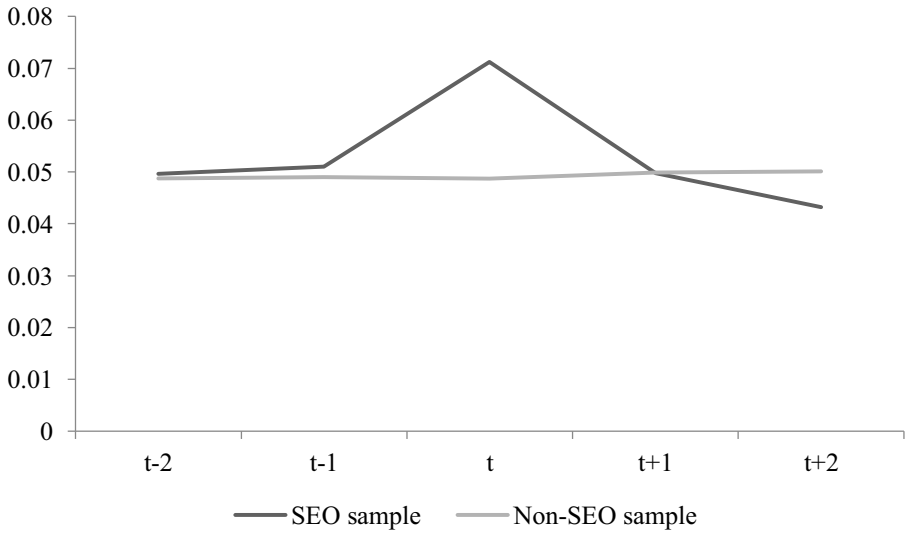

Fig. 1. Comparison of innovation intensity of an SEO and a non-SEO sample in China, 2007–2017.

effects in Eq. (1). If analysts restrain tunneling, we expect α_1 to be positive when SEO and RD are the explanatory variables.

2.2. Data

The innovation and financial data for Chinese A-share firms used in this study were drawn from the China Stock Market & Accounting Research (CSMAR) database and the Wind database. A-share firms began disclosing innovation data in financial statements in 2007, so we check the innovative tunneling period from 2007 to 2017. Considering that the control variables of firms must be lagged by one period, we exclude financial, Special Treatment, and Particular Transfer firms during 2006–2017. During this period, firms disclosed a total of 20,972 innovations, involving 2917 firms that constitute the sample of empirical research on firms' innovative tunneling. To ensure the accuracy of data, we use the innovation and financial data from the audited firms' consolidated annual reports. We also winsorize the data at the 1% and 99% levels, removing the effect of outliers.

To examine innovative tunneling activity during an SEO period, we collect A-share firms' SEO conditions from 2006 to 2017 from the Wind database. In the past 10 years, A-share firms conducted a total of 2716 additional issuances and 1717 firms conducted SEO activity. These firms will be regarded as the experimental group sample in this paper to test whether there is innovative tunneling during an SEO period. The key data about the degree of separation between the controlling shareholders' control rights and cash flow rights comes from the database of firms' controllers in the CSMAR database. Controlling shareholders' cash flow rights are also called ownership. They summarize the actual shareholding ratio of the controlling shareholders in any control chain, indicating the ratio of controlling shareholders that can receive dividends. Controlling shareholders' control rights are also called voting rights and are equal to the sum of the direct and indirect voting rights in total (La Porta et al., 1999). Table 1 presents the variable definitions and summary statistics.

3. Results and discussion

3.1. Baseline results

The controlling shareholder non-operational fund occupancy (NOFO) problem was an evident and widely used tunneling activity in China that was identified by securities market regulators (Jiang et al., 2015). The NOFO amounts were usually included in the balance sheet item "other receivables," and therefore, some papers have used an increase in "other receivables" to represent tunneling (Jiang et al., 2010; Gao et al., 2020). We present the baseline results of Eq. (1) in Table 2. Column (1) shows that the coefficient of SEO is positive and significant at the 1% level. This proves that the tunneling behavior of controlling shareholders during an SEO period is significantly higher than in other years. Column (2) uses the SEO samples to explore the relationship between the tunneling behavior of controlling shareholders and a firm's innovative activities. The results show that a firm's innovative activities during an SEO period will obviously increase the controlling shareholders' tunneling. Column (3) compares the innovation tunneling intensity between additional issuance samples and non-issuance samples. The coefficient of RD*SEO is significantly positive, showing that controlling shareholders will increase innovative tunneling during an SEO period. Table 2 proves that controlling shareholders will increase innovative tunneling behavior through innovative activities during an SEO period.

Table. 1
Variable definitions and summary statistics.

Name	Definition	N	mean	std	min	max
Dependent variables						
Otherreceivable	The ratio of other receivables to operating revenue of the last year.	19,067	0.01	0.03	−0.14	0.18
RD	The ratio of innovation costs to operating revenue of the last year.	20,972	0.05	0.06	0	0.30
D_RD	The difference between the current year's innovation intensity and the last year's.	18,037	0	0.02	−0.10	0.10
Marginal_profit	Marginal profit to operating revenue ratio.	18,492	0.27	0.16	−0.04	0.79
Patent	Natural logarithm of 1 plus the firm's number of patent applications.	19,606	1.28	1.47	0	5.83
Abreturn_1	The difference between a firm's stock returns and market returns from 1 year before.	2174	0.13	0.39	−0.56	1.34
Holdprofit_1	The difference between a firm's stock returns and market returns from 1 year after.	1802	−0.02	0.44	−0.77	1.28
RPT	The ratio of related transactions to operating revenue of the last year.	16,479	0.15	0.24	0	1.71
Independent variables						
SEO	A dummy variable with a value of 1 if a firm implements SEO and 0 otherwise.	21,068	0.12	0.33	0	1
Separation	The difference between the controlling shareholders' control rights and cash flow rights.	21,320	5.93	7.91	0	27.48
Mispricing	The degree of stock mispricing.	17,217	4.10	2.16	0.97	11.72
SEO_ratio	The ratio of the amount of funds raised from SEO to operating revenue of the last year.	21,068	0.01	0.06	0	0.58
Control variables						
Size	Logarithm of total assets.	21,320	21.42	1.54	10.84	29.35
Cash	The ratio of current cash holdings to operating revenue of the last year.	21,320	0.45	0.49	0.02	3.45
Lev	Total debt to total asset ratio.	21,320	0.45	0.21	0.05	0.93
Freecash	The ratio of current free cash flow to operating revenue of the last year.	19,700	0.03	0.57	−3.91	2.31
EquityNatureID	A dummy variable of the property rights nature with a value of 1 if a firm is state-owned and 0 otherwise.	21,320	0.43	0.50	0	1
ROA	The ratio of net profit to total assets.	21,320	0.04	0.05	−0.26	0.20
Tax_rate	Comprehensive tax rate taken by the firm.	21,237	0.04	0.04	−0.01	0.23

Table. 2
The impact of innovative activities on tunneling during an SEO period.

	(1)	(2)	(3)
Variable	Otherreceivable	Otherreceivable (SEO sample)	Otherreceivable
SEO	0.013***		0.006**
	(0.002)		(0.002)
RD		0.089*	0.012
		(0.049)	(0.036)
RD*SEO			0.064*
			(0.037)
L.Size	0.002	−0.010*	−0.002
	(0.002)	(0.005)	(0.002)
L.Cash	−0.000	−0.017**	0.004
	(0.001)	(0.008)	(0.003)
L.Lev	−0.004	−0.067***	−0.010
	(0.003)	(0.020)	(0.009)
L.Freecash	−0.001	−0.005	−0.000
	(0.001)	(0.004)	(0.001)
L.EquityNatureID	−0.012**	0.014	0.001
	(0.006)	(0.020)	(0.007)
L.ROA	0.001**	−0.093*	0.004***
	(0.000)	(0.054)	(0.000)
L.Tax_rate	0.009	0.135	−0.039
	(0.006)	(0.149)	(0.049)
Constant	−0.034	0.268**	0.046
	(0.042)	(0.110)	(0.047)
Fixed effects	Yes	Yes	Yes
Observations	17,402	1851	11,132
R-squared	0.011	0.053	0.015

Table 2 presents the impact of innovative activities on tunneling during an SEO period. Otherreceivable indicates the tunneling behavior of controlling shareholders, the ratio of other receivables to operating revenue of the last year. SEO is a dummy variable. RD is innovation intensity. The variable definitions are presented in Table 1. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

3.2. Abnormal innovative activity during an SEO period

If a firm's innovative activity during an SEO period is the tunneling behavior of controlling shareholders, innovative activities in this period should show signs of manipulation. Table 3 tests the characteristics of innovative activities during an SEO period. Columns (1) and (2) show that firms significantly improve innovation investments during an SEO period, conducting a large number of research and development activities. Columns (3) and (4) test the firm's innovation efficiency in an SEO year, finding whether, from the perspective of marginal profit or patent application, the innovation input efficiency of an SEO year is significantly lower than other years. Table 3 shows that firms exhibit abnormal innovation during an SEO period. Compared with other years, the firms carried out significantly excessive and inefficient innovation activities in years of SEO.

Table 4 empirically tests whether a firm's abnormal innovative activities during an SEO period are the tunneling behavior of

Table. 3
A firm's abnormal innovative activities during an SEO period.

	(1)	(2)	(3)	(4)
Variable	RD	D_RD	Marginal_profit	Patent
SEO	0.008***	0.011***		
	(0.001)	(0.002)		
L.RD			0.165**	0.533
			(0.080)	(0.490)
L.SEO			0.011**	−0.053
			(0.004)	(0.040)
L.RD*L.SEO			−0.180**	−1.442**
			(0.081)	(0.591)
Constant	0.196***	0.551***	0.999***	−1.306
	(0.038)	(0.134)	(0.057)	(0.827)
Firm controls	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes
Observations	11,231	10,304	11,853	12,296
R-squared	0.120	0.046	0.013	0.417

Table 3 presents the characteristics of innovative activities of firms during an SEO period. D_RD the difference between the current year's innovation intensity and the last year's. Marginal_profit is firms' marginal profit margin. Patent is the number of patent applications. The variable definitions are presented in Table 1. The regressive control variable of Table 3 is consistent with Table 2. To save space, Table 3 does not show the regression results of the control variables. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

controlling shareholders. Since the emergence of tunneling is due to the principal–agent problem between major shareholders and small shareholders, the improvement of a firm's internal governance environment will significantly inhibit the controlling shareholders' tunneling. Table 4 shows the improvement in the internal governance environment, that is, if a reduction in the degree of shareholder rights' separation will significantly inhibit abnormal innovative activities during an SEO period. This represents the abnormal innovative activities performed by firms in SEO years are innovative tunneling activities implemented by the controlling shareholders. Next, we will further explore the specific implementation mechanism of innovative tunneling during an SEO period.

3.3. Effect of the catering to investors mechanism

Innovative activities can be used as a means for a firm (Dong et al., 2019) to implement catering activities to manipulate stock prices and change SEO costs (Baker et al., 2003; Baker and Wurgler, 2004; Jenter, 2005). Table 5 tests whether firms have significant innovation and catering behaviors during an SEO year. Columns (1) and (2) show that a firm will conspicuously improve its innovation and catering behavior in an SEO year. They will use innovative activities to manipulate the stock price to reduce equity financing costs. According to the catering to investors mechanism, raising the stock price during an SEO period will harm the interests of the investors participating in the issuance activities, so the controlling shareholders will only implement this behavior in issuances in which they have not participated. Columns (3) and (4) test the two sub-samples on major shareholder participation and non-participation, showing that significant innovation and catering behavior only occurs in SEO activities which the major shareholders have not participated. This result is consistent with the conjecture of the mechanism for catering to investors. Finally, Column (5) checks the effect of shareholder rights' separation on innovation and catering behavior during an SEO period. The results show that improving firm governance significantly inhibits this behavior. Table 5 shows that manipulating a firm's innovative activities for investors is a specific mechanism through which controlling shareholders can implement innovative tunneling behavior.

Table 6 explores the impact of a firm's innovation investment in SEO years on excess stock returns before and after an SEO to verify whether the necessary conditions for firms to innovate and cater to investors are established. The regression results show that in the sample in which the major shareholders did not participate, the firm's innovative investment during an SEO period will significantly increase the excess stock returns before an SEO and reduce the excess returns rate by holding the firm's stock for 1 year after an SEO. This result does not appear in the sample in which the major shareholders participated. Table 6 shows that only when the controlling shareholders do not participate in the subscription of a firm's SEO will the firm perform innovative catering activities to improve its stock price in the short term and damage interests of the investors participating in the issuance. Thus, the controlling shareholders implement innovative tunneling behavior to cater to investors through innovative activities.

3.4. Robustness checks

For robustness, we replace the key variable in the regression, measuring whether the result will change due to the presence of different variables. First, we replace "other receivables" with the intensity of related transactions as the representative variable for the controlling shareholders' tunneling behavior (Su et al., 2014). The results of Columns (1) through (3) are consistent with Table 2, both finding that the firm's innovative activities during an SEO period will significantly increase the tunneling behavior of the controlling shareholders. Second, we replace the dummy variable with the intensity of fundraising during an SEO period to represent the firm's SEO behavior. The results of Columns (4) through (6) are consistent with the previous regression results, suggesting that our conclusion regarding the firm's abnormal activities during an SEO period and the controlling shareholders' use of innovative activities to cater to investors is robust.

Table. 4
Moderating effect on a firm's abnormal innovative activities during an SEO period.

	(1)	(2)	(3)	(4)
Variable	RD (year of SEO)	D_RD (year of SEO)	Marginal_profit (next year of SEO)	Patent (next year of SEO)
L.Separation	0.136***	0.001*	0.000	0.009
	(0.031)	(0.000)	(0.000)	(0.014)
L.RD			0.007**	−0.081
			(0.004)	(0.075)
L.Separation*L.RD			−0.0004***	−0.089*
			(0.0002)	(0.053)
Constant	1.397***	0.204***	0.869***	0.792
	(0.204)	(0.065)	(0.065)	(2.474)
Firm controls	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes
Observations	1886	1659	1342	1654
R-squared	0.078	0.033	0.017	0.067

Table 4 presents the moderatingeffect on a firm's abnormal innovative activities during an SEO period. D_RD is the difference between the current year's innovation intensity and last year's. Marginal_profit is firms' marginal profit margin. Patent is the number of patent applications. Separation is the degree of the shareholders' rights separation. The variable definitions are presented in Table 1. The regressive control variable of Table 4 is consistent with Table 2. To save space, Table 4 does not show the regression results of the control variables. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

Table. 5
The catering to investors mechanism for tunneling during an SEO period.

	(1)	(2)	(3)	(4)	(5)
Variable	RD (all sample)	RD (all sample)	RD (controlling shareholders participate SEO sample)	RD (controlling shareholders do not participate SEO sample)	RD (SEO sample)
L.Mispricing	0.001***	0.000	−0.015***	0.007***	0.005***
	(0.000)	(0.000)	(0.005)	(0.003)	(0.001)
SEO		−0.003			
		(0.005)			
L.Mispricing*SEO		0.003**			
		(0.001)			
L.Separation					−0.001*
					(0.000)
L.Mispricing*L. Separation					0.0001*
					(0.0000)
Constant	0.306***	0.191***	0.379**	0.234*	0.192***
	(0.101)	(0.059)	(0.173)	(0.125)	(0.050)
Firm controls	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	11,428	11,261	574	1020	1765
R-squared	0.053	0.067	0.107	0.192	0.169

Table 5 presents the catering to investors mechanism for tunneling during an SEO period. Mispricing is the level of stock mispricing. Separation is separation degree of the shareholders' rights. The variable definitions are presented in Table 1. The regressive control variable of Table 5 is consistent with Table 2. To save space, Table 5 does not show the regression results of the control variables. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

Table. 6
A firm's stock excess returns rate during an SEO period.

	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Abprofit_1 (SEO sample)	Abprofit_1 (controlling shareholders participate SEO sample)	Abprofit_1 (controlling shareholders do not participate SEO sample)	Holdprofit_1 (SEO sample)	Holdprofit_1 (controlling shareholders participate SEO sample)	Holdprofit_1 (controlling shareholders do not participate SEO sample)
RD	0.077**	0.282	0.072**	−0.111	−0.088	−0.739**
	(0.034)	(0.393)	(0.031)	(0.305)	(0.166)	(0.347)
Constant	2.372***	1.406***	2.769***	2.522*	1.404***	4.805***
	(0.315)	(0.429)	(0.446)	(1.416)	(0.497)	(1.576)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1660	575	1085	1223	435	788
R-squared	0.048	0.092	0.039	0.116	0.045	0.185

Table 6 presents the excess stock returns rate during an SEO period. Abprofit_1 is the excess stock returns rate 1 year before an SEO. Holdprofit_1 is the excess stock returns rate 1 year after an SEO. The variable definitions are presented in Table 1. The regressive control variable of Table 6 is consistent with Table 2. To save space, Table 6 does not show the regression results of the control variables. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

4. Conclusion

We examine the impact of innovative activities on a firm's tunneling behavior. Using Chinese firms' data, we prove that controlling shareholders can carry out tunneling by manipulating a firm's innovative activities during an SEO period. We find that firms implement excessive and inefficient innovative activities, which include the controlling shareholders' tunneling behavior. These abnormal innovative activities will decrease with a reduction in the separation of the firm's two rights. Further, we check the tunneling mechanism in SEO years to test if the controlling shareholders' innovative tunneling is an action to cater to investors to reduce equity financing costs. This provides new evidence related to firms' catered innovation activity and controlling shareholders' tunneling. The conclusions will be helpful for conducting additional future research on the role of innovative activity and tunneling in capital markets.

Our findings offer three important policy implications. First, tunneling is becoming increasingly hidden, and innovative activity can be a means for conducting tunneling behavior. Regulators in emerging finance markets should strengthen the supervision of innovation activities and the capital use of listed firms during an SEO period. Second, since the controlling shareholders can manipulate stock prices by increasing a firm's innovative input, SEO investors must improve their ability to identify a firm's innovative tunneling activities. Finally, the improvement of the internal governance environment can significantly inhibit abnormal innovative activities during SEO periods, which means that we can reduce innovative tunneling through internal checks and balances among shareholders.

Table. 7
Robustness checks.

	(1)	(2)	(3)	(4)	(5)	(6)
Variable	RPT (all sample)	RPT (SEO sample)	RPT (all sample)	RD (all sample)	Patent (all sample)	RD (all sample)
SEO	0.070*		−0.010			0.008***
	(0.040)		(0.007)			(0.002)
RD		1.584***	0.208***			
		(0.488)	(0.066)			
RD*SEO			0.262**			
			(0.102)			
SEO_ratio				0.011***		
				(0.002)		
L.SEO_ratio					0.018	
					(0.071)	
L.RD					−0.162	
					(0.285)	
L.SEO_ratio*L.RD					−1.504*	
					(0.857)	
L.Mispricing						0.002**
						(0.001)
L.Mispricing*SEO						0.004**
						(0.002)
Constant	5.246***	6.524***	1.095***	0.129***	−1.431	0.219***
	(1.612)	(1.654)	(0.263)	(0.042)	(1.104)	(0.061)
Firm controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,529	1463	8646	11,310	10,175	10,787
R-squared	0.176	0.503	0.038	0.074	0.028	0.065

Table 7 presents the results of the robustness checks conducted. RPT is the intensity of a firm's related transactions that year, representing the shareholders' tunneling behavior. SEO_ratio is the intensity of fundraising, representing a firm's SEO activity. The variable definitions are presented in Table 1. The regressive control variable of Table 7 is consistent with Table 2. To save space, Table 7 does not show the regression results of the control variables. ***, **, and * indicate a 1%, 5%, or 10% level of significance, respectively.

CRediT authorship contribution statement

Chenyang Yu: Data curation, Formal analysis, Methodology, Writing – original draft. **Hanbing Sun:** Data curation, Writing – original draft. **Changluan Fu:** Formal analysis, Writing – review & editing.

Declaration of Competing Interest

The authors declare no conflict of interest.

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