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The Anchoring Effect in the Private Placement Pricing: Evidence from China

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Abstract: Private placement has become the most important way of Chinese listed companies refinance after the non-tradable share reform in 2006 in terms of the number or size of additional financing. An interesting phenomenon has been found in that there is only a tiny difference of 2.49% between the discount rate mean of the initial 5 listed companies and that of all others. In this paper, the anchoring phenomenon of behavioral psychology was examined and used to explain this interesting phenomenon. The results show that the discount rate pricing of private placements is mainly affected by an anchoring effect. The managers determine the issue price and do not fully adjust on the basis of the average discount rate of private placement of the initial 5 listed companies and all the preceding listed companies.

Key words: Private placement, discount, pricing, anchoring effect

INTRODUCTION

Private placement of common stock has played an important role in the developed capital markets. The number of private placements in the United States increased from 119 to 1,506 and annual funding rose from 1.834 billion dollars to 130.925 billion dollars between 1995 and 2007. The European private placement market is second only to that of North America (U.S. and Canada). On May 8, 2006, The Chinese government proposed "Administrative Measures for the Issuance of Securities of the Listed Companies" and for the first time took the newly-born private placement under the guidance of national regulations. Private placement has many advantages such as simplicity, low cost and a shorter release cycle which appeal to many listed companies. It is, therefore, widely accepted by the market. According to the WIND database, Chinese listed companies have actually accumulated about 1,122.93 billion RMB through private placement from the year 2006 to 2010 which accounts an average of 74.30% of all refinancing shares. Hence private placement has become a major method for the listed companies to raise capital after the regulatory reform in China.

According to statistics in China, the average discount rate mean of the first 5 listed companies is 28.95% which is followed by another 433 listed companies whose discount rate mean is 28.23%. Why is the disparity in the discount rate mean only 2.49%? Is it just a coincidence or is there any corresponding theoretical support? In order to interpret this "abnormal phenomenon," this manuscript attempts to use the anchoring effect (also the anchoring-and-adjustment heuristic) theory from behavioral psychology to analyze and explain the "heteromorphy" of the pricing of private placement in the Chinese listed companies.

DATA SOURCES AND RESEARCH DESIGN

Design sample selection and data sources: Samples in this research were taken from the listed companies with private placement on the Shanghai and Shenzhen Stock Exchange, China, from May 8, 2006 to September 30, 2010. There are 513 private placements during this period. Seventy-five companies were then excluded from the sample: (1) 3 listed companies without private placement price; (2) 26 companies that had long-term suspension (over 30 days) in private placement around issue date (or the board announcement date) and lack of transaction data; (3) 30 companies that had undertaken different price principles for shareholders and institutional investors in one distribution; (4) 16 financial and insurance listed companies. After the exclusion, 438 eligible sample companies were gathered. The private placement and financial data come from the Wind database and CSMAR database in China.

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Definition of private placement discount and measure of anchoring value

Definition of private placement discount: Referring to Barclay *et al*. (2007), Xu and Yu (2010), we define Discount = $(P_1-P_0)/P_0$, where P_1 stands for the previous closing exchange price and P_0 stands for price per share of the placement.

Measure of anchor value: In May and June 2006, only 5 listed companies issued a private placement with discount rates of 30.12, 24.01, 28.74, 10.90 and 50.98%, with a mean and median of 28.95% and 28.74%. Because the disparity between the mean and median is rather small, only the mean number (28.95%) is taken as "Static anchor 1". The specific definitions and domains of the anchor value are shown in Table 1. "Static anchor 1" and "Static anchor 2" are fixed. All the discount rates are divided into groups by sample period, so "Dynamic anchor 1" and "Dynamic anchor 2" are changing over time. For example, in 2009, "Dynamic anchor 1" only represents the discount rate mean of all private placement of the year 2008, and "Dynamic anchor 2" represents the discount rate mean of all private placement of May and June 2006 and that of the second half year 2006, the year 2007 and 2008.

Research and modeling program: First, the data was analyzed to determine if the private placement pricing of the listed companies had an anchoring effect. If an anchoring effect does exist, the discount rate of other listed companies following the five initial companies is around the ($\overline{D_1}$, $\overline{D_2}$, $\overline{D_3}$) and does not fully adjust upwards or downwards. The analysis will indicate that there is no significant difference between the discount rates of the private placement and the corresponding anchors, namely:

$$\left(D-\overline{D_1}\right), \left(D-\overline{D_2}\right), \left(D-\overline{D_3}\right)$$

Second, the strength of the anchoring effect and other factors in the private placement of listed companies in different sample periods was tested. According to the anchoring hypothesis, if the anchoring effect becomes stronger, the influence of the extra factors affecting the pricing become weaker, namely, the initial value has more effect on the following listed companies' managers in judgment and decision-making. On the other hand, if the anchoring effect is weaker, the influence of the extra factors affecting the pricing becomes stronger and then the initial value has less effect on the following listed companies' managers in judgment and decision-making. In order to investigate other possible factors that affect the pricing in the process of private placement, we put forward the following models which include the ownership structure, the issue features, the performance of companies and the corporate identity based on Xu and Yu(2010).

Table 1: Definitions of the different anchors

Name	Symbol	Definitions
Static anchor 1	$\overline{D_1}$	The discount rate mean of private placement of the initial 5 listed companies
Dynamic anchor 1	$\overline{D_2}$	The discount rate mean of private placement of the former group of listed companies
Dynamic anchor 2	$\overline{D_3}$	The discount rate mean of private placement of all the preceding listed companies
Static anchor 2	$\overline{D_4}$	The first discount rate mean of the listed companies which once have two private placements

$$\begin{aligned} D\text{-}\overline{D_i} = {} & \alpha + b_1 Top1 + b_2 Top1dum + b_3 Identity + \\ & b_4 Fraction + b_5 Offertype + b_6 ROA + b_7 Lev + \\ & b_8 Cash + b_9 TobinQ + b_{10} DDR + b_{11} Industry + \varepsilon_i \end{aligned} \quad (1)$$

Here, $\overline{D_i}$ (I = 1, 2, 3) represents respectively $\overline{D_1}$, $\overline{D_2}$, $\overline{D_3}$.

The meaning of the variables were explained. Proportion of the largest shareholder (Top1): The number of the largest shareholder share divided by the total share capital which represents ownership concentration. Controller nature (Top1dum): If the company is actually controlled by government, it will be defined as 1, otherwise 0.Release object (Identity): Dummy variable, When the controlling shareholder and the associated shareholder are purchasers of the private placement, it defined as 1, otherwise 0.Issue scale (Fraction): The Number of private placement issuance divided by the total stock one after the issuance. Subscription type (Offer type): Dummy variable, When controlling shareholders subscribe by physical assets, it defined as 1, otherwise 0. Financial performance (ROA): The corresponding rate of return on total assets at the end of the private placement year. Financial leverage (Lev): The company asset-liability ratio at the end of the preceding year to control the target leverage. Cash holding (Cash): Currency funds divided by total assets in the quarter-end of issuance. Future investment opportunities (Tobin Q): (non-tradable shares*net assets per share+tradable shares *Quarterly average transaction price range in issuance+total liabilities)/book value of assets. Proportion of independent directors (DDR): The number of independent directors divided by the total number of board of directors. Industry control(Industry): In accordance with CSRC industry classification standard.

Third, the strength of anchoring effect and other factors of "low discount rate group" and "high discount rate group" based on the "low static or dynamic anchor value" and "high static or dynamic anchor value" was analyzed. At first, the discount rates in each sample

period are divided into high, medium and low groups by tri-sectional quantiles after the initial five listed companies are removed. Next, "low static or dynamic anchor value" and "high static or dynamic anchor value" are determined. "Low static anchor value" is the minimum of private placement discount rate of the five initial listed companies (i.e., $\overline{D_{L1}}$, 10.90%). "Low dynamic anchor value" is the mean of the private placement discount rate of former and all preceding low discount group (i.e., $\overline{D_{L2}}$ and $\overline{D_{L3}}$). "High static anchor value" is the maximum of private placement discount rate of the five initial listed companies (i.e., $\overline{D_{L1}}$, 50.98%). "High dynamic anchor value" is the mean of the private placement discount rate of former and all preceding high discount group (i.e., $\overline{D_{H2}}$ and $\overline{D_{H3}}$). Finally, the strength of anchoring effect of "low discount rate group" and "high discount rate group" was tested by "low static or dynamic anchor value" and "high static or dynamic anchor value" respectively. The test model is as follows:

$$D-\overline{D_{Li}} = \alpha+b_1Top1+b_2Top1dum+b_3Identity+ b_4Fraction+b_5Offertype+b_6ROA+b_7Lev+ b_8Cash+b_9TobinQ+b_{10}DDR+b_{11}Industry+\varepsilon_i \quad (2)$$

Here, $\overline{D_{Li}}$ (i = 1, 2, 3) represents respectively $\overline{D_{L1}}$, $\overline{D_{L2}}$, $\overline{D_{L3}}$.

$$D-\overline{D_{Hi}} = \alpha+b_1Top1+b_2Top1dum+b_3Identity+ b_4Fraction+b_5Offertype+b_6ROA+b_7Lev+ b_8Cash+ b_9TobinQ+b_{10}DDR+b_{11}Industry+\varepsilon_i \quad (3)$$

Here, $\overline{D_{Hi}}$ (i = 1, 2, 3) represents respectively, $\overline{D_{H1}}$, $\overline{D_{H2}}$, $\overline{D_{H3}}$.

EMPIRICAL STUDIES

The forming process of discount rate anchor: Table 2 shows statistical data about the private placement discount rate of the listed companies. On May 8, 2006, Chinese government proposed "Administrative Measures for the Issuance of Securities of the Listed Companies" for the first time. Statistics show that the average discount rate of private placement in the five initial listed companies is 28.95% in May and June of 2006 and is 25.47% in the second half year of 2006 and 40.08, 20.21%, 27.93 and 22.91%, respectively in the years 2007, 2008, 2009 and the first three quarters of 2010. The average discount rate of 438 sample companies remains at 28.23% which is only a disparity of 2.49% from that of the five initial listed companies. Is this only a numerical coincidence or is there a theoretical connection? It may be possible that most of the managers of listed companies lack their own pricing information, thus they cannot find a directly available reference value. So the anchor value of the discount rate may only be provided by an external source. It is very likely for the managers to note the external anchor value of 28.95% which forms "Static anchor 1". Managers will then give full attention to the Experimenter-provided Anchors (the discount rate mean of private placement of the five initial listed companies) and can quickly locate this point as an insufficient adjustment to make their issue price.

Table 2: Descriptive statistic of discount rates of each group

Statistics	Minimum	Maximum	Mean	Stdev	Number
Initial value	0.109	0.5098	0.2895	0.1447	5
2006	-0.1511	0.7254	0.2547	0.1652	42
2007	-0.0599	0.8308	0.4008	0.2129	109
2008	-0.5625	0.896	0.2021	0.2892	86
2009	-0.5211	0.7981	0.2793	0.2192	110
2010	-0.3634	0.7647	0.2291	0.1775	86
Total	-0.5625	0.896	0.2823	0.2318	438

Initial value represents statistic of five sample companies in May and June 2006; 2006 represents that of the second half year of the year; 2007, 2008, 2009 and 2010 represent respectively that of the year 2007, 2008, 2009 and the first three quarters of 2010

With the growing number and scale of private placement of listed companies, Managers in the following listed companies with private placement may not only take the initial value of 28.95% as a reference, but also may take "Dynamic anchor 1 ($\overline{D_2}$)" and "Dynamic anchor 2 ($\overline{D_3}$)".

According to Fig. 1, "Static anchor 1" has never changed from 28.95%. "Dynamic anchor 1" has larger amplitude. Its value reaches the highest point and lowest point respectively in the second quarter of the year 2007 and the fourth quarter of 2008, then the following amplitude changes not so much. As to "Dynamic anchor 2", there is an upward trend from the first quarter of 2006 until it reaches a peak in the first quarter of 2008. Then a downward trend comes until the end of 2008 which is followed by a stable tendency that almost coincides with "Static anchor 1" till the end of the third quarter of the year 2010.

According to Fig. 2, the following listed companies after the five initial ones keep their discount rate of private placement around the anchor (28.95%) and make incomplete adjustments which indicates the phenomenon of "clustering". It proves that the function of the anchor value is objective. There are 254 listed companies whose discount rate is less than the anchor value 28.95%, among which 182 listed companies are higher than "the low static anchor value 10.90%", occupying the proportion of 71.65%. They have a clear upward trend; 184 listed companies' discount rate is higher than the anchor value 28.95%, among which 118 listed companies are lower than the "high static anchor 50.98%", occupying the proportion of 64.13%. They have a clear downward trend.

Empirical test and analysis of anchoring effect in the discount rate: Through Table 3, it can be determined that the significance value of the disparity between the discount rate and "Static anchor 1" $(D-\overline{D_1})$ and the

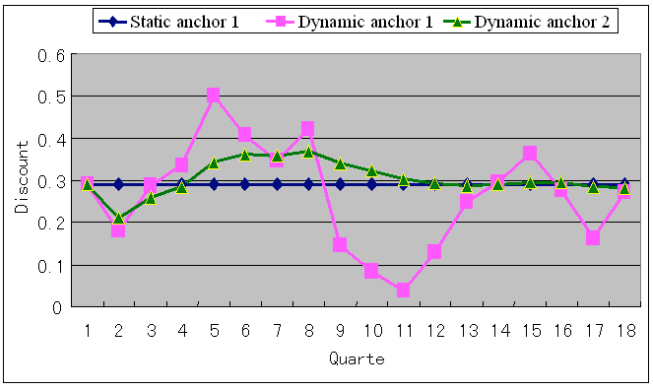

Fig. 1: Trend of the different anchor

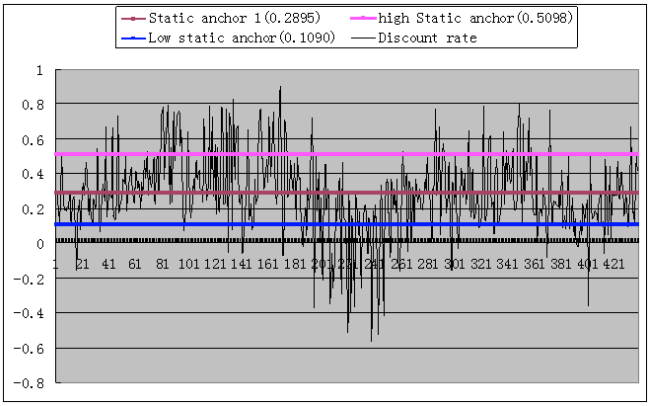

Fig. 2: Distribution of private placement discount rate

Table 3: Test results of anchoring effect

Means testing is a significant 0

Year	$\overline{D_1}$	$(D-\overline{D_1})$ T value	$\overline{D_2}$	$(D-\overline{D_2})$ T value	$\overline{D_3}$	$(D-\overline{D_3})$ T value
2006	0.2895	-1.365	0.2895	-1.365	0.2895	-1.365
2007	0.2895	5.457***	0.2547	7.163***	0.2584	6.149***
2008	0.2895	-2.802***	0.4008	-6.372***	0.3579	-3.483***
2009	0.2895	-0.486	0.2021	3.696***	0.3025	-0.570
2010	0.2895	-2.156*	0.2793	-2.623***	0.2953	-1.180
Summary	0.2895	-0.652	0.3329	-6.750***	0.2823	0.001

***, *simply statistically significant at 1%, 10% levels respectively

disparity between the discount rate and "Dynamic anchor 2" $(D-\overline{D_3})$ are 0, while the significance value of the disparity between the discount rate and "Dynamic anchor 1" $(D-\overline{D_2})$ is not 0 which shows that the anchoring effect works in the process of the pricing of private placement in the listed companies. "Static anchor 1"and "Dynamic anchor 2" are used in the pricing of private placement and "Dynamic anchor 1" has little effect on the pricing of private placement. That is because the primacy effect in psychology plays a dominant role in the judgment and decision-making. The first information one receives has a great influence on one's actions and evaluation afterwards (Asch, 1946). At the start, private placement is a new thing for managers of listed companies and they have neither local theory nor practice experience as support. They therefore take "the discount rate mean of private placement of the five initial listed companies" as a new anchor. There is further evidence to support the view that the formation of an impression is a function of interactions which produce an organized, total impression

(Mensh, 1947). With the growing number and the deeper understanding of private placement of listed companies, the discount rate mean of private placement of all the preceding listed companies is further considered as a another reference point. At the moment, private placement pricing is influenced both by "Static anchor 1" and "Dynamic anchor 2".

It can also be found that $(D-\overline{D_1})$ and $(D-\overline{D_3})$ is not 0 in the year 2007 and 2008, while it is 0 in 2006, 2009 and 2010. This phenomenon may be partly influenced by the investors' sentiment. The pricing of private placement of non-public shares must be based on the average prices in the previous 20 trading days in China. However, the Shanghai Composite Index was booming from 2715.72 in January to 6124.04 in October 2007, thus investors were generally over optimistic in this bull market and the price of each share continues to hit new heights. As a result, the closing price the day before the issue by the private placement of shares was relatively high, while the prices based on the average prices in the previous 20 trading days was relatively low, making the discount rate of private placement higher than the normal level. That is to say, investors' common optimism pushed up stock prices in the secondary market and tremendously enhanced the discount rate of the private placement in the bull market and vice versa. In October 2008, the Shanghai Composite Index slumped to 1664.92. So investors were generally over pessimistic in this bear market and the price of each newly-issuing non-public share fell lower and lower which tremendously reduced the discount rate of the private placement. It is in accordance with the conclusion of Xu and Yu (2010). The anchoring effect has been affected, to a certain extent, in the process of adjustment up and down.

From the above discussion, it can be concluded that the managers often take "Static anchor 1 "and "Dynamic anchor 2 " into consideration when they determine the price of a private placement. Which factors will affect the price volatility besides the anchor value? In addition to the strength of the anchoring effect on the discount rate, other factors should be considered in the analysis.

Analysis and test about the strength of anchoring effect in discount rate: Analysis of Relationship between Variables Referring to Xu and Yu (2010) study and Characteristics of listed companies in China, we take the ownership structure, the issue features, the performance of companies and the corporate identity into consideration which may affect the pricing in the process of private placement besides the anchor value. A table(omitted) shows Pearson and Spearman correlation coefficient test results of all variables. In the correlation coefficient matrix, the Pearson and the Spearman test results are shown in the upper right diagonal and lower left diagonal respectively. The correlation coefficients between all explanatory variables are below 0.4640 which indicate that there is no significant correlation between them. The maximum of "Variance Inflation Factor (VIF)" is 4.6285 which means that the model contains nonlinearity. Analysis of the Strength of Anchoring Effect in Different sample periods

From Table 4, it can be found that the managers do not take "Dynamic anchor 1 $\overline{D_2}$ " into account when they determine the price of private placement. Therefore, tests regarding the strength of the anchor effect in "Dynamic anchor 1" can be excluded. By applying Model 1, we can figure out the estimated results based on overall "Static anchor 1" and overall "Dynamic anchor 2".

From Table 4, it can be observed that the discount rate of private placement is mainly influenced by "Static anchor 1" and "Dynamic anchor 2" and the other three factors including identity and fraction of private placement and Tobin's Q whether in the every or whole sample period. While it is not associated with the other eight factors including return ratio of total assets, debt ratio, the share proportion of the largest shareholder, nature of the director, subscription type, cash holdings ratio, proportion of independent directors and the basic nature of the industry:

- $(D-\overline{D_1})(D-\overline{D_3})$ are both significantly and positively correlated with the identity of private placement in the corresponding sample periods or from the whole of the investigation. When the identity of private placement is from related investors, such as the controlling shareholders and the actual controllers, the discount rate is relatively higher. This may be because of the China Securities Regulatory Commission (CSRC) regulations regarding a restricted period. That is, the placement stocks obtained by the controlling shareholders and actual controllers shall not be transferred within 36 months. Different identities of private placement are matched with different limited time periods. Compared with the institutional investors, the largest shareholders of listed companies, as well as the related investors, obtain the placement stocks with a longer restricted period. Yet the longer restricted period requires appropriate compensation for the risks they have taken. In order to make compensation for the stock liquidity, managers of the listed companies issue shares in a relatively low price range for the related investors. This practice is consistent with the basic principles in the field of liquidity value of assets.

Table 4: estimated result based on the "static anchor 1 "and "dynamic anchor 2"

	Top1	Top1_dum	Identity	Fraction	Offertype	ROA	Lev	Cash	TobinQ	DDR	Industry
2006	-0.0028	-0.1539***	0.1849*	-0.0053	0.1050	0.0020	0.0036**	-0.1364	0.2122***	-0.4887	0.0061
	-1.4800	-3.2623	1.8943	-0.0267	1.8309	0.5130	2.4689	-0.6338	3.0463	-1.0987	0.6645
2007	-0.0004	-0.0023	0.2487***	0.3247***	-0.0263	-0.0002	-0.0009	-0.2134	-0.0050	-0.1927	0.0050
	-0.2585	-0.0587	4.9301	3.8139	-0.6597	-0.1329	-0.6869	-1.3019	-0.1043	-0.7702	0.7174
2008	0.0049	-0.0736	0.0286	-0.1538	0.0085	-0.0140***	-0.0022	0.1750	0.0599**	0.2250	-0.0096
	2.0533	-1.1409	0.3694	-0.7169	0.1192	-2.8012	-1.0414	0.6103	2.0570	0.9283	-0.9322
2009	-0.0003	0.0097	0.0997*	0.5662***	0.0041	0.0110**	-0.0001	0.3253	-0.0113	-0.7199	0.0049
	-0.1871	0.2092	1.6852	3.4739	0.0896	2.5680	-0.1003	1.7313	-0.2096	-2.1498	0.6812
2010	0.0008	0.0074	0.1207**	-0.0456	-0.0768	0.0056	-0.0023*	-0.2137	-0.0136	0.1946	-0.0005
	0.6454	0.1657	2.0515	-0.3279	-1.5777	0.8134	-1.8000	-1.0375	-0.4812	0.6835	-0.0672
overall	0.0003	-0.0207	0.0886***	0.2137***	0.013	-0.0008	-0.0001	0.0549	0.0393***	-0.06	-0.0026
"static anchor1 "	0.4008	-0.8733	2.8997	3.0748	0.5092	-0.6797	-0.1138	0.5376	2.4367	-0.448	-0.6355
Overall "dynamic	0.0001	-0.0194	0.0819***	0.229***	0.0118	-0.0006	0.0001	0.0535	0.0371**	-0.0857	-0.0029
anchor2"	0.1364	-0.7769	2.5433	3.1289	0.4401	-0.4679	0.0878	0.4965	2.1848	-0.6078	-0.6866

***, **, * imply statistically significant at 1%, 5% and 10% levels respectively; (2) The values of second line including each sample period, overall "Static anchor 1" and overall "Dynamic anchor 2" are t value after White heteroscedasticity adjustment; (3) "Dynamic anchor 2 " and "Static anchor 1 "show little difference in estimated results each sample period, so there are no repeated lists

Table 5: Results of High and Low Discount Rate Groups Based on "High and Low Static Anchor Values" by Model (2)

	Top1	Top1_dum	Identity	Fraction	Offertype	ROA	Lev	Cash	TobinQ	DDR	Industry
Low discoun	-0.0001	-0.0072	0.0791**	-0.0304	-0.0264	-0.0008	0.0001	0.2174	0.0142	0.0633	-0.0014
t rate group	-0.1584	-0.2423	2.1546	-0.4025	-0.8846	-0.3269	0.1354	1.7983	0.9397	0.4948	-0.2915
High discount	0.0003	-0.0233	0.1038***	0.2002***	0.0023	0.0051***	0.0005	0.0148	0.0212	0.0742	0.0028
rate group	0.3538	-1.0322	3.8568	3.6382	0.0904	2.6984	0.7548	0.1635	1.2228	0.4396	0.6753

Table 6: Results of High and Low Discount Rate Groups Based on "High and Low Dynamic Anchor Value" by Model (3)

	Top1	Top1_dum	Identity	Fraction	Offertype	ROA	Lev	Cash	TobinQ	DDR	Industry
Low discount	-0.0007	-0.0007	0.1087**	-0.0184	-0.0157	-0.0002	0.0001	0.221	0.0136	0.0496	-0.0029
rate group	-0.694	-0.1428	2.5609	-0.2078	-0.4602	-0.1358	0.1245	1.5235	0.519	0.2058	-0.5651
High discount	0.0004	-0.0107	0.1047***	0.2199***	0.0045	0.0043	0.0006	-0.1309	0.0159	-0.0007	0.0045
rate group	0.5083	-0.3875	3.1867	3.214	0.1434	1.8673	0.7427	-1.1977	0.7672	-0.0033	0.8702

(1) ***, **, * imply statistically significant at 1%,

- $(D-\overline{D_1})(D-\overline{D_3})$ are significantly and positively correlated with the fraction of private placement in the corresponding sample period and from the whole of the private placements. When the number of private placements divided by the total stock number after the issuance becomes greater, the discount rate becomes higher. The reason may be that the larger fraction the investors obtain, the more responsibility they will pay to supervise the managers and the raised funds. So they require a bigger discount rate in the private placement pricing as a compensation for the higher monitoring costs.

Analysis of the strength of anchoring effect of "high and low discount rate group ": From Table 5 and 6, it can be seen that: (1) The estimated results of model show that $(D-\overline{D_1})(D-\overline{D_3})$ are still significantly and positively correlated with the identity of private placement in high and low discount rate groups and positively correlated with fraction of private placement only in the high discount rate group. The economic implications are described above. (2) In addition, the estimated results of model show that 5% and 10% levels respectively; (2)The value of second line for overall "Static anchor 1" and "Dynamic anchor 2" is t value after White heteroskedasticity adjustment. that $(D-\overline{D_1})$ is significantly and positively correlated with ROA based on "high and low static anchor values". When ROA is higher, the discount rate is higher. No matter how the groups are divided, few other factors have influence on the private placement.

From the former analysis it can be concluded that the pricing decision on the private placement of Chinese listed companies is largely influenced by the anchoring effect from the perspective of high and low discount rate group.

CONCLUSION

At present, many scholars (Barclay *et al*., 2007; Hertzel and Smith, 1993; Wruck, 1989; etc.) hold that the controlling shareholders have taken private placement as a tool to prop or tunnel a listed company wealth which is an important factor affecting the discount rate. There are strong economic consequences in the decision-making process of the discount rate in private placement. The main contribution of this study is that it provides a new perspective in the research of the private placement pricing. That is, the anchoring effect theory is applied for the first time to test and explain the discount rate

decision-making process of the private placement of Chinese listed companies. The results show that managers of the Chinese listed companies may have made some irrational decisions and have obvious behavioral deviation influenced by "Anchoring and Adjustments" when they determine the discount rate of private placement. Based on the discount rate mean of private placement of the five initial listed companies and all the preceding listed companies, the managers set the issue price and do not fully adjust. This is evidence of an anchoring effect. So it is believed that the discount rate decision-making process has somewhat unrelated with the wealth transferring behavior of controlling shareholders. The implication of this research is that the regulators must be particularly careful about rulemaking for other pricing decisions of initial listed companies. Because the pricing information of initial listed companies will have a significant effect on the following similar companies. In the long run, this may even affect the efficiency of the entire stock market asset pricing.

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