

IPO System, Social Experience of Sponsor Representatives and IPO Performance

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Abstract: Based on the background of the pilot implementation of the registration system in Shanghai Stock Exchange, this paper studies the impact of the social experience of the sponsor representatives on IPO performance, to explore whether the sponsor representatives with rich social experience can better play their information production and certification intermediary functions in the securities issuance market, thereby improving IPO performance. The research finds that: the social experience of the sponsor representatives has a more effective inhibition on the earnings management level of the companies to be listed under the registration system; The social experience of the sponsor representative has a more effective inhibition on the IPO underpricing rate on the first day under the registration system; Under the registration system, the promotion of social experience of the sponsor representative on the long-term return of listed companies is more effective.

Keywords: IPO system, Social experience of sponsor representative, IPO performance.

1. Introduction

Since then, the preparation for the establishment of the Science and Technology Innovation Board and the pilot registration system has been rapidly promoted. On January 31, 2019, the Shanghai Stock Exchange has completed the draft of the supporting business rules related to the establishment of the Science and Technology Innovation Board and the pilot registration system, and solicited public opinions; On the same day, the CSRC launched the Administrative Measures for the Registration of Initial Public Offerings of Shares on the Science and Technology Innovation Board (for Trial Implementation) and the Measures for the Continuous Supervision of Listed Companies on the Science and Technology Innovation Board (for Trial Implementation) and solicited public opinions. On March 2, 2019, the CSRC and the Shanghai Stock Exchange released the official version of the above documents on the basis of the "2+6" draft rules for comments on the Science and Technology Innovation Board issued on January 30, 2019 and in combination with the comments. At the same time, the CSRC and the Shanghai Stock Exchange also issued two information disclosure format standards and four sets of supporting guidelines for the Science and Technology Innovation Board; China Securities Depository and Clearing Co., Ltd. has also formulated the detailed rules for the equity registration and clearing business of the Science and Technology Innovation Board. Since then, the reform of the registration system, which has been discussed for nearly six years, has finally ushered in a new opportunity and been able to start a real practice.

As we all know, the essence of the registration system is to take information disclosure as the center, put more emphasis on formal audit, and let the invisible hand select high-quality listed companies through the establishment of diversified audit standards with market value as the core, so as to provide more high-quality companies with an open and transparent listing opportunity, that is, the market subjects make judgments on the issuer's assets, securities quality, and investment value, and play the role of the market in resource allocation. In the pilot registration system of the Science and

Technology Innovation Board, the listing of enterprises is reviewed by the Shanghai Stock Exchange and registered by the China Securities Regulatory Commission. The enterprises are positioned in high-tech industries, strategic emerging industries or innovative enterprises of considerable scale, including artificial intelligence, cloud computing, big data, biotechnology, software, new energy and other industries facing the world's scientific and technological frontier and major national needs, which will trigger the China Securities Regulatory Commission, the Exchange A series of changes in the roles and functions of intermediaries and other parties. The comprehensive implementation of the registration system reform can not only improve the quality of listed companies, but also drive the capital market to comprehensively deepen the reform, so as to build a standardized, transparent, open, dynamic and resilient capital market, and improve the ability of financial services to the real economy.

Since 2004, the sponsor system adopted in China's A-share market has shown the characteristics of dual sponsor, that is, in addition to the sponsor, there are also sponsor representatives. According to the Decision on Amending the Measures for the Administration of Securities Issuance and Listing Recommendation Business adopted by the CSRC in April 2009 and the Opinions on Further Strengthening the Supervision of Recommendation Business issued in March 2012, the recommendation institution and the recommendation representative are mainly responsible for the recommendation work before the listing and the continuous supervision of the issuer after the listing. From the relationship between the two, the sponsor representative and the sponsor institution are interdependent and independent, playing an important role in the IPO process. Different from the foreign recommendation system, a distinctive feature of the recommendation system in China's stock market is dual recommendation, that is, a recommendation representative is set up under the recommendation institution to undertake the recommendation work and risks in the name of an individual. The recommendation representative shall be responsible for the underwriting of securities issuance, conduct substantive verification of the company's public offering documents

according to law, and issue recommendation opinions to the CSRC. The sponsor system tries to directly link the quality of the issuer with the interests of the sponsor representative through the joint and several liability mechanism. If the sponsor representative fails to supervise effectively, and serious violations such as major shareholders, directors or managers encroach on the interests of the company occur during the sponsor liability period, the sponsor representative will bear joint and several liabilities.

Under the research framework of the efficient market hypothesis, financial market participants are assumed to be rational economic people, who are close to nature and completely rational, and can objectively and correctly respond to all information in the market. However, strict assumptions also make them fall into a dilemma when facing many market anomalies. Behavioral finance, which emerged in the 1990s, restored rational economic people to ordinary people who are closer to life. They are vivid and ordinary, often expressed as limited rationality, and easily affected by emotions. However, in reality, market participants are not alone active in the information and capital of the financial system. While they enter the capital market and become investors, company executives, fund managers and securities analysts, they are also in a complex social network as fellow villagers, classmates and colleagues, and they also form part of the social network. These close or distant social relations and the information flow and capital flow hidden behind them, as well as the personal characteristics such as character, style and risk preference formed in the growth experience and social experience of the social network, will inevitably have a practical and profound impact on the investment decisions of the above market participants, thus affecting the corporate finance and asset pricing of the capital market, as well as the openness Justice and fairness. If social relations are a kind of horizontal social connection of market participants, they can be either present or historical; Then, social experience including growth experience and social experience is a vertical social connection, which is often historical. In a word, capital market participants are not only affected by their own internal cognitive and psychological factors, but also by external social relations; And his growth experience and social experience will also have a subtle or profound and significant impact on his cognition and psychology, thus affecting his decision-making and behavior in the capital market. This proposition is almost self-evident, but the empirical research of financial scholars in this field has just emerged. Cohen et al (2008). The research assumption of market participants: from rational economic man to limited rational man and then to social man, also reflects the fact that modern financial research is getting closer to the reality of the market and the real reaction of investors.

Compared with western mature market countries, China is a typical human society, and social ties have a more profound impact on the capital market than western mature markets. Social connections, such as contacts, relationships and circles, have a more comprehensive and profound impact on the operation of social economy and financial system. As the core of modern economy, finance, information and wealth, the capital market gathers and involves a large number of complex social relationships. However, in China, the research on the impact of social ties on the capital market has not attracted enough attention from domestic scholars.

Therefore, based on the background of the pilot implementation of the registration system in the Shanghai

Stock Exchange, this paper studies the impact of the social experience of the sponsor representatives on the IPO performance. The IPO performance includes the earnings management level of the company to be listed, the IPO underpricing rate and the long-term return rate after the company is listed, to explore whether the sponsor representatives with rich social experience can better play their information production and certification intermediary functions in the securities issuance market, so as to improve the IPO performance. It also analyzes the impact of the registration system on the issuance market, discusses whether the registration system being implemented on the Science and Technology Innovation Board can improve the securities issuance market in China, and answers under which issuance system, the ability of sponsor representatives can be more effectively played, the earnings management level of companies to be listed can be reduced, and a reasonable and fair price that is more conducive to listed companies and closer to the actual market can be formulated, So as to improve the financing efficiency and long-term performance of the company after listing.

2. Literature Review

In the foreign recommendation system, there is no special role of the recommendation representative. The recommendation representative is either subdivided into several different positions or integrated into the team responsibilities of the recommendation agency in the relevant foreign systems. In addition, limited by the availability of data, there is little research on sponsor representatives abroad. In the domestic capital market, special data on sponsor representatives can be obtained, so the research on sponsor representatives in domestic literature will be relatively rich. When analyzing the system design of sponsor representatives, two analysis methods are basically used: one is to analyze the sponsor representatives as a single subject; The other is to study from the perspective of intermediaries, taking the sponsor and the sponsor representative as a subject.

2.1. Research on the reputation of the sponsor representative

Some domestic scholars found that the reputation of sponsor representatives has a positive effect on IPO performance. Luo Danglun and Wang Hong (2013) measured the reputation of female sponsors from the four dimensions of their participation, age, education and the time from project registration to acceptance. The study found that the better the reputation of sponsors, the shorter the IPO meeting time. Cai Qingfeng (2014)^[14] According to the data of SME Board and GEM, the results of empirical research show that high reputation sponsor representatives in the primary market can have a positive impact on the earnings management behavior of companies to be listed, and investors in the secondary market also recognize the positive role of sponsor representatives during continuous supervision to a certain extent. Dai Yiyi (2014) took the company data of the IPO application received by the Development and Examination Commission from 2007 to 2012 as the research sample, and positively discussed the impact of the dual sponsorship of individuals and institutions on the IPO application. The research believed that the sponsor representative really played an important role in the process of enterprises applying for listing, and the role of the guarantee institution was not

obvious. In addition, in areas with low social integrity, enterprises often use reputable sponsor representatives to obtain high IPO success rate. Luo Danglun (2013) found that if the sponsor or its institution has been punished by the CSRC, the lower the IPO discount level of the proposed listed company recommended by it will be; However, some other characteristics of the sponsor, such as gender, age, education and employment background, have little impact on the IPO discount of the company they sponsor.

A few domestic scholars believe that the reputation of the sponsor representative has no significant positive impact on IPO performance. Ying Qianwei (2016) took the sponsors and sponsor institutions punished by the CSRC from 2004 to 2013 as the research object, explored the relationship between the sponsors' violations and reputation capital, and found that compared with the guarantee institutions, the negative impact of the sponsor representatives' punishment on the previous customer market reaction was weak. It shows that in the Chinese securities market, the reputation mechanism of the sponsor system is mainly reflected in the level of the sponsor institution, and the corresponding reputation correlation effect of the sponsor representative is weak.

2.2. Research on the social relationship network of sponsor representatives

Zhang Tiesheng (2016), starting from the relational contract, found that the existing cooperative relationship between the sponsor representative and the accounting firm where the IEC member acts as the issuer's auditor is helpful to the IPO process. Chen Yunsen (2014) also showed that the social relations of the IEC can be used as a rent-seeking tool for enterprises to be listed. He found that the social relations of the IEC of intermediary institutions, especially those owned by accounting firms, can improve the passing rate of private enterprises through his research on private enterprises to be listed in 2007-2012, but such social relations are timely.

2.3. Research on the causes and effects of the change of the sponsor representative

Liao Liyan (2010) first touched on the replacement of the sponsor representative during the continuous supervision period. She found that the operating performance of listed companies would deteriorate after the replacement of the sponsor representative. The author also found that the replacement of the sponsor is bad news for the market from the perspective of the wealth effect, and the wealth of shareholders would decrease. Fu Juan and Ren Ting (2012) studied the relationship between the replacement of sponsor representatives and the quality of information disclosure, and the impact of underwriter reputation and corporate governance structure on information disclosure during the continuous supervision period, taking 156 IPO companies of Shenzhen Stock Exchange that were under continuous supervision from 2005 to 2010 as the research sample. The results showed that the replacement of sponsor representatives would reduce the quality of information disclosure of listed companies during the continuous supervision period. Baiyun Xia (2014) investigated the reasons for the change of the sponsor representative and the market reaction based on the sample of the listed companies with private placement from 2006 to 2009, and found that the larger the risk of the sponsor project, the higher the earnings management level before the fixed increase, and the lower the level of the sponsor institution, would make the sponsor

representative easy to change. Further research also found that when the sponsor representative changed, the investor's reaction was mostly negative, Because the change of sponsor representative will send a signal of poor project quality to the market. Cao Shuxin (2015) found through research that the change of information disclosure of non IPO sponsors caused negative market sensitivity reaction, and the change of information disclosure of sponsors had a relationship with the risk, profitability and growth of the securities market category and listed companies, but not significant.

2.4. Research on the supervision of sponsor representatives

Li Xu (2005) made a comparative study on the legal status, behavior, behavior results and management system of the sponsor representative according to the current laws and regulations, and studied the positioning of the sponsor representative in the sponsor system, the management mode of the sponsor representative, and the criminal liability, administrative liability and civil liability of the sponsor representative. Tian Xiaoyi (2008) analyzed the legal definition of the sponsor and the sponsor representative, and studied the nature of the liability of the sponsor and the sponsor representative to the third party, the principle of liability fixation, the identification of the practice fault of the sponsor representative, and the civil liability of the sponsor and the sponsor to the third party. Hu Xin (2010) analyzed the sponsor system from both macro and micro perspectives. From a macro perspective, due to the low legislative level of the relevant provisions on sponsors in China, the development of the sponsor system is at a congenital disadvantage, so we should improve the status of the sponsor system in China's legal system, and point out that the most prudent way is to repair the relevant provisions of the Securities Law; Speed up the implementation of the registration system in China's securities issuance market. From the micro level, the human rights responsibilities of the sponsor representatives in China are unbalanced to a large extent, which are mostly manifested in the excessive responsibilities of the sponsor representatives and the smaller scope of authority of the sponsors, which limit the maximum effect of the sponsor system. Therefore, we should distinguish the relationship between the sponsor representative and other relevant subjects, and further clarify the scope of responsibility of the sponsor representative; Expand the sponsor representative's audit power in the issuer's personnel and major transactions; Extend the term of office of the recommendation representative. Zhang Bo and Wang Yuan (2010) believed that there were three main problems in China's recommendation system: first, the sponsors did not implement due diligence; The second is the virtual continuous supervision period; Third, the division of responsibilities between the sponsor representative and the sponsor is not clear. In addition, if the sponsor representative and the sponsor institution have different opinions on the qualification of the company to be listed, the sponsor institution can strip the rights of the sponsor with the letter of supervision, which has no independence for the sponsor. Yi Yang and Tian Hanyi et al. (2019), by studying the sponsor credit supervision data from 2004 to 2015, found that, compared with other sponsor representatives, the number of IPO projects received by the sponsor representatives with a history of violations was significantly reduced, the scale was significantly reduced, the cost of sponsor services was significantly reduced, and the quality of the IPO projects

undertaken was significantly improved, which was reflected in the lower level of earnings management and higher profitability of the project.

Although the sponsor system has some problems due to the imperfect system design, it can improve the market health and stock issuance efficiency under the sponsor system by optimizing the way of action of each subject. By means of theoretical modeling, we can clarify the internal relationship of the various actors in the sponsorship system, and obtain the optimal way of action of the various actors under the sponsorship system. Meng Yaohui (2011) established the "Bo Abandonment Model" based on information disclosure between CSRC and listed companies, and achieved Nash equilibrium by gradually increasing incentives. He believed that listed companies that fully disclosed information would be rewarded, and under certain incentive conditions, listed companies could still perform full information disclosure without supervision. Liu Manbi (2011) found the main factors that determine the decision-making of the parties involved in the abandonment by establishing a dynamic abandonment model with complete but imperfect information containing uncertain factors. On this basis, he studied how to reduce the probability of non compliant companies recommended by the sponsor and dereliction of duty audit conducted by the CSRC under asymmetric information. Cai Qingfeng and Liu Jin (2014) found that within the sponsor, the responsibilities of the sponsor and the sponsor representative need to be sorted out. The relevant laws and regulations of China do not clearly stipulate how to divide the responsibilities of the sponsor and the sponsor representative when they are responsible for the same project according to the proportion and how to assume the responsibilities. When problems occur, the sponsor representative often assumes too many responsibilities. Hou Dongde and Bo Pingping (2016) found through empirical sample analysis that at this stage, China's securities market intermediaries frequently violate laws and regulations. Part of the reason is the influence of external market factors, and the other part is the influence of the role dislocation of securities intermediaries, which leads to the loss of their due value. Therefore, under the new trend of comprehensively promoting the reform of the registration system, securities intermediaries need to re-establish the principal-agent relationship from both theoretical and practical dimensions, establish and improve the litigation mechanism and integrity system, and build a diversified approach for securities intermediaries to strengthen their self-restraint.

2.5. Literature review

On the whole, the research on the behavior of sponsor representatives in the domestic IPO market is still in the initial stage, and there are deficiencies.

First of all, the domestic research on the sponsor representative focuses on the reputation, change and supervision of the sponsor representative. There are very few literatures that combine the sponsor representative with the social network theory. Most of these literatures are related to the government, auditors and other horizontal social connections, but not the vertical social connection of social experience. Therefore, the research on the influence of social experience of sponsor representatives in China needs to be strengthened.

Secondly, domestic research on sponsor representatives is carried out under the background of the approval system, and China's stock issuance system is changing from the approval

system to the comprehensive registration system, and the previous research conclusions may no longer apply to the current system. Therefore, it is of practical significance to further study the behavior of the sponsor representative in combination with the background of the registration system.

Finally, the existing research literature has not deeply studied the generally implemented sponsor system, especially the lack of effective empirical tests on the implementation effect of the sponsor system, and most of the relevant research focuses on the stage of IPO and listing, with little attention paid to the stage of continuous supervision after listing.

3. Theoretical Analysis and Research Assumptions

The sponsor representative plays the role of gatekeeper in the process of IPO listing, which can reduce market friction and the financing cost of the issuer. First of all, as the facilitator and supervisor of the IPO, the more competent the sponsor representative is, the more effectively he can identify and control the issuer's financial fraud, information manipulation and other violations. The past sponsor experience, familiarity with industry practices and the accumulation of professional knowledge help the sponsor representative identify the management's earnings management motivation, thereby improving the sponsor quality of the stock issuance; Secondly, Carter & Manaster (1990) [2] and Chemmanur & Fulghieri (1994) pointed out that stock underwriting practitioners build their own brands and reputations on their own ability in the IPO market. Therefore, in order to maintain their prestige and reputation, the sponsor representatives have a stronger motivation to discover and curb the earnings management behavior of the management; Finally, when the company has IPO fraud or other violations, both the sponsor and the sponsor representative will be severely punished. In the case of IPO fraud, the sponsor representative will be more severely punished. Therefore, the sponsor representative will not completely rely on the recommendation of the sponsor with rich social experience, and their independent judgment consciousness is stronger, and their working attitude is more rigorous. In addition, in order to obtain long-term benefits, sponsor representatives with rich social experience are more inclined to abide by the contract and reduce opportunistic behavior.

The successful premise of the transformation from stock issuance to registration system proposed by the 18th National Congress of the Communist Party of China is that financial intermediaries play a key supervisory role in the earnings management of listed companies instead of the CSRC in corporate IPO. The registration system of new share issuance means that the responsibility for supervising the issuing information of the applicant company, especially the earnings information, in the new share issuance will be transferred to the sponsor institution and sponsor representative responsible for the stock issuance. Whether the sponsor institution and sponsor representative can effectively implement the supervision function of the earnings information in the new share issuance determines whether the stock market can truly realize its decisive role. Therefore, this paper proposes the following assumptions:

Hypothesis 1: Under the registration system, the social experience of the sponsor representative has a significant negative impact on the earnings management level of the

proposed listed company, that is, the level of earnings management of the proposed listed company recommended by the sponsor representative with rich social experience is lower; Under the approval system, the social experience of the sponsor representative has no significant negative impact on the earnings management level of the company to be listed.

As an important part of the dual recommendation system, the recommendation representative performs the underwriting recommendation work on behalf of the recommendation institution, and assumes responsibilities and risks in his own name. Because of the close interaction between the sponsor representative with rich social experience and other market participants, it can reduce the information asymmetry between the issuer and investors, so that the IPO price can more accurately reflect the true value of the enterprise, thus helping to reduce the IPO underpricing rate, so that the IPO price can more truly reflect the internal value of the company. To sum up, the richer the social experience of the sponsor representatives, the lower the IPO underpricing rate of the new shares they sponsor. In addition, compared with the approval system, the power and responsibility of the sponsor representative under the registration system are strengthened, making this effect more significant. Therefore, this paper proposes the following assumptions:

Hypothesis 2: Under the registration system, the social experience of the sponsor representative has a significant negative impact on the IPO underpricing rate on the first day, that is, the underpricing rate of the new shares recommended by the sponsor representative with rich social experience is low on the first day, that is, the issue price of the new shares recommended by the sponsor representative with rich social experience is closer to the internal value of the listed company; Under the approval system, the social experience of the sponsor representative has no significant negative impact on the IPO underpricing rate on the first day.

Considering the importance of their reputation, the sponsor representatives with rich social experience are more willing to use their professional knowledge and past experience to strictly supervise and review the issuer, so they are more likely to identify the different motives of earnings management behaviors of the originators during the listing process and curb opportunistic earnings management behaviors, so that the quality of the company they sponsor is better and the long-term return of the corresponding stocks will be higher, The performance will not change. On the contrary, the earnings management of the company recommended by the sponsor representative who lacks social experience reflects more about an opportunistic behavior of the management to maximize its private benefits. The reversal of manipulative accruals in the subsequent period and the adverse impact of real economic activity manipulation on normal business activities will lead to poor performance after the company goes public, and the corresponding long-term return will be low, Performance is often turned upside down. For investors, although they cannot directly understand the internal information of the enterprise as the sponsor representative, they can indirectly judge the value of the enterprise by judging the social experience of the sponsor representative, so that the sponsor representative with rich social experience can effectively reduce the information asymmetry between investors and IPO companies. In addition, compared with the approval system, the power and responsibility of the sponsor representative under the

registration system are strengthened, making this effect more significant. Therefore, this paper proposes the following assumptions:

Hypothesis 3: Under the registration system, the social experience of the sponsor representative has a significant positive impact on the long-term return of the listed company, that is, the listed company recommended by the sponsor representative with rich social experience has a high long-term return; Under the approval system, the social experience of the sponsor representative has no significant positive impact on the long-term return of listed companies.

4. Research Method Design

4.1. Samples and data sources

This paper selects the data of listed stocks from October 31, 2009 to December 31, 2020 as the research sample, with March 2019 as the dividing point. The data of listed stocks from October 31, 2009 to March 31, 2019 are mainly from the Shenzhen Stock Exchange GEM, while the data of listed stocks from March 31, 2019 to December 31, 2020 are mainly from the Shanghai Stock Exchange Science and Technology Innovation Board. The observations were screened according to the following rules: (1) The sample of IPO of listed companies in the financial industry was excluded. Because the business scope of listed companies in the financial industry is quite different from that of listed companies in other industries, they have special business characteristics and accounting procedures, and are not comparable with companies in other industries. (2) The samples with missing financial data and transaction data are eliminated. The financial data in this paper are from WIND and CSMAR databases, and the sponsor representative data are manually collected through the sponsor credit supervision system on the website of the CSRC and the website of the Securities Association of China. In order to avoid the influence of extreme values on the research results, we carried out 1% winsorize for all continuous variables.

4.2. Variable design

In order to examine the impact of social experience of sponsor representatives on IPO performance, this paper constructs the following Probit model:

$$\text{Prob}(\text{Performance}_i) = \alpha_0 + \alpha_1 \text{IGS} + \alpha_2 \text{Female} + \alpha_3 \text{Underwriter} + \alpha_4 \text{BIG4} + \alpha_5 \text{SOE} + \alpha_6 \text{SIZE} + \alpha_7 \text{AGE} + \alpha_8 \text{ROA} + \alpha_9 \text{LEV} + \alpha_{10} \text{PRO} + \alpha_{11} \text{GROWTH} + \alpha_{12} \text{MR} + \sum \text{IND} + \sum \text{YEAR} + \varepsilon$$

4.2.1. Interpreted variable

Performance_{*i*} (*i*=1, 2, 3) represents the IPO performance, wherein Performance1 represents the earnings management level of the company to be listed, Performance2 represents the underpricing rate on the first day of IPO, and Performance3 represents the long-term return rate of IPO.

4.2.2. Core explanatory variables

IGS refers to the richness of social experience of the sponsor representative. Referring to the research of Customio et al. (2013)^[7], the index of general skills of the sponsor representative has been constructed based on the information of past work experience. The omnipotent index can measure the richness of personal social experience. The higher the omnipotent index, the richer the social experience of the sponsor representative.

4.2.3. Control variables

With reference to existing literature, this paper controls other factors that may affect the company's IPO performance, including:

(1) Gender of the sponsor representative (Female), if one of the two sponsor representatives of the company to be listed is female, the value is 1; otherwise, it is 0;

(2) If the sponsor is in the top ten of the annual net income rankings of underwriting and recommendation business published by the Securities Association of China, the value of the sponsor is 1; otherwise, it is 0;

(3) Auditor reputation (BIG4), if the company's IPO employs four audit firms, the value is 1, otherwise it is 0;

(4) Nature of ownership (SOE): if the company to be listed is a state-owned enterprise, the value is 1; otherwise, it is 0;

(5) Company size (SIZE), equal to the natural logarithm of

the company's total assets;

(6) Age of the company (AGE), equal to the cumulative number of months from the establishment to the listing of the listed company;

(7) Return on assets (ROA) of the company, equal to the total profit of the company divided by the total assets;

(8) The company's asset liability ratio (LEV) is equal to the ratio of the company's total liabilities to total assets;

(9) The scale of raised funds (PRO) is equal to the logarithm of raised funds (unit: 1 million yuan) plus 1;

(10) Company growth (GORWTH), equal to the growth rate of the company's annual sales revenue;

(11) Market Return (MR) is equal to the average market return 90 days before listing.

In addition, this paper also controls the industry effect (IND) and annual effect (YEAR).

Table 1. Variable definition

Type	Symbol	Definition
Explained Variable	Performance1	The modified Jones model estimation was used
	Performance2	The intrinsic discount rate in the primary market
	Performance3	One year long-term returns for IPO companies
Explaining Variable	IGS	Based on the research of Custodio et al (2013), the universal index of sponsor representative skills is constructed according to the information of past work experience
Controlled Variable	Female	If one of the two sponsor representatives of the company to be listed is female, the value is 1, otherwise it is 0
	Underwriter	If the sponsor institution ranks the top 10 in the annual net income ranking of underwriting and sponsor business released by the Securities Association of China, the value is 1, otherwise it is 0
	BIG4	If the company IPO employs four audit, the value is 1, otherwise it is 0
	SOE	If the company to be listed is a state-owned enterprise, the value is 1, otherwise it is 0
	SIZE	Equal to the natural log value of the company's total assets
	AGE	Equal to the cumulative number of months of the listed company from its establishment to its listing
	ROA	Equal to the total company profit divided by the total assets
	LEV	Equal to the ratio of total liabilities to total assets
	PRO	Equal to raise funds (unit 1 million yuan) add 1 take a log
	GORWTH	Equal to the growth rate of the company's annual sales revenue
	MR	Equal to the average market return rate of the first 90 days of the listing
	IND	According to the annual virtual variables classified by the CSRC industry, it is used to control the impact of different industries
	YEAR	Annual dummy variables, used to control for the effect of time

5. Empirical Results and Analysis

5.1. The influence of the social experience of the sponsor representative on the earnings management level of the company to be listed

The result of grouping regression is that the coefficient of IGS is significantly negative in the sample group of the registration system, indicating that under the registration system, the richer the social experience of the sponsor representative is, the lower the earnings management level of the company to be listed Performance1 is. The coefficient of

IGS in the approved sample group was negative, but not significant. The IGS coefficients of the registered sample group and the approved sample group were significantly different. The result is consistent with Hypothesis 1, that is, the social experience of the sponsor representative is more effective in restraining the earnings management level of the companies to be listed under the registration system. In addition, the coefficient of underwriter is significantly negative, indicating that the reputation of the sponsor is helpful to restrain the earnings management level of the companies to be listed; The coefficients of SIZE and ROE are significantly negative, indicating that the larger the scale, the better the performance, the lower the degree of earnings

management.

5.2. Impact of social experience of sponsor representatives on IPO underpricing rate

The result of group regression is that the coefficient of IGS is significantly negative in the sample group of the registration system, indicating that under the registration system, the richer the social experience of the sponsor representative, the lower the underpricing rate Performance₂ on the first day of IPO. The coefficient of IGS in the approved sample group was negative, but not significant. The IGS coefficients of the registered sample group and the approved sample group were significantly different. The result is consistent with Hypothesis 2, that is, the social experience of the sponsor representative is more effective in inhibiting the IPO underpricing rate on the first day under the registration system. In addition, the coefficient of underwriter is significantly negative, indicating that the reputation of the sponsor is helpful to reduce the underpricing rate on the first day of IPO; The coefficients of SIZE and ROE are significantly negative, indicating that the larger the company is, the lower the underpricing rate on the first day of IPO is.

5.3. Impact of social experience of sponsor representatives on long-term returns

The result of grouping regression is that the coefficient of IGS is significantly positive in the sample group of the registration system, indicating that the richer the social experience of the sponsor representative is, the higher the long-term return of listed companies Performance₃ is. The coefficient of IGS in the approved sample group was positive, but not significant. The IGS coefficients of the registered sample group and the approved sample group were significantly different. The result is consistent with Hypothesis 3, that is, the social experience of the sponsor representative is more effective in promoting the long-term return of listed companies under the registration system. In addition, the coefficient of underwriter is significantly positive, indicating that the reputation of the sponsor is conducive to improving the long-term return of listed companies; The coefficients of SIZE and ROE are both significantly positive, indicating that the larger the scale, the better the performance, the better the long-term return of the company.

5.4. Robustness test results

5.4.1. Tool variable method (IV)

The two-stage regression results under the tool variable method show that the coefficient of IGS is similar to the original regression results, indicating that under the registration system, the richer the social experience of the sponsor representative is, the better the company's IPO performance is. Moreover, there is a significant difference between the IGS coefficients of the registration system sample group and the approval system sample group, indicating that the promotion of the social experience of the sponsor representative on the company's IPO performance is more effective under the registration system, which supports the research hypothesis of this paper.

5.4.2. Tendency score matching method (PSM)

The regression result after matching the propensity score is similar to the result of the average treatment effect, the coefficient of IGS is similar to the original regression result,

and there is a significant difference between the IGS coefficients of the registration system sample group and the approval system sample group, which indicates that the social experience of the sponsor representative is more effective in improving the company's IPO performance under the registration system, which supports the research hypothesis of this paper.

5.4.3. Replacement of proxy variables

The results of proxy change method show that after proxy change, the coefficient of IGS is similar to the original regression results, and there is a significant difference between the IGS coefficients of the registration system sample group and the approval system sample group, indicating that the social experience of the sponsor representative is more effective in improving the company's IPO performance under the registration system, which also supports the research hypothesis of this paper.

5.4.4. Other sensitivity tests

The regression results of other sensitivity tests have not changed substantially, which supports the hypothesis of this study.

6. Summary

Based on the institutional background of the registration system, this paper makes a systematic analysis of IPO performance from the perspective of the social experience of the sponsor representatives, which is a vertical social connection, to explore whether the sponsor representatives with rich social experience can better play their information production and certification intermediary functions in the securities issuance market, so as to improve IPO performance. It also analyzes the impact of the registration system on the issuance market, and answers under which issuance system, it can more effectively play the role of social experience of sponsor representatives. While enriching the relevant research on domestic sponsor representatives, it also enriches the domestic research on social network relationship theory, which has important practical significance for understanding the role of sponsor representatives in the process of corporate IPO, criticizing China's current stock issuance system, improving the operating efficiency of China's capital market, improving the corporate governance mechanism, and improving the regulatory system.

The innovation points of this paper mainly include the following aspects: First, this paper divides the research interval according to different issuance systems of Chinese stocks, and makes a comparative analysis. By studying and answering the issue system, we can give more effective play to the ability of the sponsor representative, formulate a reasonable and fair price that is more conducive to the listed company and close to the actual market, so as to improve the financing efficiency of the company's listing and its long-term performance after listing. Second, under the dual sponsor system in China, most of the existing literature has examined the impact of sponsor institutions on IPO performance, while ignoring the role of sponsor representatives. This paper discusses the role of sponsor representatives in IPO performance from the individual level, expanding and enriching the existing literature. Thirdly, the domestic research on social connection and capital market mostly focuses on the horizontal social connection, while this paper examines the role played by the sponsor representative in the IPO process from the unique perspective of social experience,

which not only enriches the domestic research on the sponsor representative, but also enriches the research on the social network theory.

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