

An Equilibrium Analysis of the IPO Risk Information Supply and Demand

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Abstract

The efficiency of the securities market depends on the degree of the completeness of information. The efficiency is affected by the supply as well as the demand of the information. But there are few studies on the risk information demand of investors, and much fewer studies on the equilibrium of the IPO risk information supply and demand. Because of the frequent occurrences of information fraud behavior in the IPO market of China, Chinese investors pay a lot of attention to the risk information disclosure. This paper discussed the development of the Chinese IPO system and the current situation of the risk information disclosure. And then according to the problems, this paper gave a theoretical analysis of the equilibrium and disequilibrium conditions of the risk information supply and demand in the IPO market by examining the dynamic process between information supply and demand. Through the analysis, this paper found that there exist many information supply and demand deficiencies in the Chinese IPO market. The “make-up” phenomenon in IPO information disclosure has been very serious. The investors’ demand for valuable risk information disclosure is largely ignored. More attention needs urgently to be paid to the information demands of Chinese IPO investors.

Keywords: IPO, risk factors, information disclosure, supply and demand

1. Introduction

Similar to the ordinary commodity market, there are both supply and demand in the IPO market, too. The main channel or media for transmitting information supply and demand in the primary market is the IPO prospectus. The issuers provide the information that related to all aspects of the enterprise for investors through the prospectus. Investors obtain the information that they need in their investment through the prospectus. As an important reference and basis in decision-making for investment behavior, the prospectus, whose quality directly determines the effectiveness of the securities market and the income distribution of the investors, is a key factor in the stable and rational development of the capital market. Therefore, continuously meeting the demand of investors for the information disclosure of the prospectus should be the direction of Chinese capital market reform.

In the securities market, in order to reduce the investment risks and uncertainties and to increase the investment income, investors not only make full use of the information that they have already obtained, but also try to seek more information. In this sense, it can be said that the securities market can be called an “information market”.

The definition of the efficient market proposed by Fama (1970) showed that the securities market in which prices can fully reflect all the available information is called an efficient market. There are two ways to judging whether the securities market has external efficiency. One way is to judge whether the price can change freely caused by the relevant information. The other is whether the relevant information of securities can be made public absolutely and distributed evenly so as to assure every investor to get the same information whether in quality or quantity at the same time. However, from the implementation of the information disclosure system in the IPO market and the expression of relevant issues at the present stage of China, we can see that Chinese securities market has not achieved external efficiency. In other words, the Chinese new issue market is an

inefficient market. Many IPO cases that constantly exposed a variety of problems have shown that the key risk factors disclosed by some issuers are gravely insufficient and that there even exists such behavior as intentional concealment or fraudulency in the Chinese IPO prospectuses.

Most of the previous literature studied the information disclosure, that is, the information supply side of the IPO market while few studied the information demand side. Even fewer have done the equilibrium analysis of the risk information supply and demand in the IPO market. Based on the current situation of information transfer in Chinese IPO market, we will make an equilibrium analysis of the risk information supply and demand in the IPO market.

2. Literature Review

Here we made a major review of researches on the Chinese IPO information disclosure mechanisms and the examination of the quality of IPO information disclosure.

2.1 Review of the Researches on the Information Disclosure Mechanisms in Chinese IPO Market

Information disclosure in the IPO market of China has attracted great attention of securities market regulators, investors and scholars. Fama (1970) proposed creatively that information affects the effectiveness of capital markets. The capital structure signal model and the dividend signal model are the representatives of the early information disclosure researches. From the late 1990s, more and more scholars associated information disclosure with capital market efficiency evaluation through researches on the market transparency. For example, Bushman, Piotroski and Smith (2004) explained information disclosure by “transparency”. They defined transparency as the availability that outsiders can get the specific information from public companies. Because the IPO prospectus is an important carrier of information disclosure, more and more scholars began to conduct researches on information disclosure through prospectus. By contrasting prospectuses with annual reports of some listed companies in England, Deumes and Knechel (2008) found that compared with the limited risk information in annual report, the range of risk information in prospectus is wider. Krippendorf (2004) believed that the information in prospectus mainly reflects the intention of issuers and that the study of the information disclosed by issuers can help investors to grasp the intention of issuers, and finally affect the behavior of investors. However, because information quality affects the decision of investors directly, the interest brought about by “good” information makes issuers change behavior. Through a comparative analysis, Theo, Wong and Rae (1998) pointed out that in order to attract more investors, the issuing company would choose the information “make-up”, and investors would give a higher price because of the “good” information. In addition, the phenomenon of prospectus formalization is obvious. Through the statistical research, Hanley and Hoberg (2008) found that over 50% of the content of the prospectus was integrated by the prospectus format of the companies that have already been listed successfully, and most of the information among that did not have the accurate pricing function. They also proposed that the evaluation on the management of the issuing company needed to be improved. Through the empirical study, Rogers (2004) discovered that management would choose to use the quality level of information disclosure to affect the distribution of information among investors driven by the private transaction motivation, so as to achieve the purpose of its earnings manipulation.

The Chinese securities market has a short history. In the 20 years time from its inception in 1990s to today, Chinese scholars also have made a lot of exploration on the information disclosure in the Chinese IPO market, and have made valuable achievements. But overall speaking, compared with the level of the study abroad, the domestic researches of the information disclosure in the IPO market remains to be improved in many aspects.

Yan and Li (2002) analyzed the mechanism of stock price's reactions to information through the analysis of the relationship between accounting information disclosure, stock price changes and capital market efficiency, and discussed the influence of information disclosure on capital market efficiency. Wang and Jiang (2012) chose 516 A-share listed companies that had already been listed on the Shanghai Stock Exchange before December 31st, 2001 as the samples, tested the relationship between the cost of equity capital of listed companies and their level of voluntary disclosure, and concluded that the increase of the information disclosure level of listed companies can help to reduce the cost of equity capital. Ping and Lee (2013) pointed out that there was a serious information asymmetry between listed companies and investors on the quality of company, and through the research of the functional relationship between the eligibility determination of refinancing of listed companies and the false information disclosure, they pointed out the conditions, mechanisms and consequences of the faking behavior of the financial intermediaries that might happen during the process of the information disclosure. By studying the mean-variance model of the behavior of IPO market players, Huang (2008) indicated that investors who coasted too much on information searching may exit the market when information transfer was inadequate in the market, which would lead to the shrinking market, so it was necessary to improve the

quality of market players themselves and strengthen the market supervision. By studying the relationship between the information disclosure of some listed companies and the stock volatility conditions, Liu and Sun (2010) discovered the quality of information disclosure of listed companies in China was low. In order to improve the quality of information disclosure of listed companies, they came up with several counter measures, such as the improvement of related systems of Chinese securities market, the strengthening of external supervision system, and the establishment of the appraisal system of information disclosure and violation accountability system.

2.2 Review of the Researches on the Quality of IPO Information Disclosure

With more and more attention paid to the quality of the IPO information disclosure, the number of researches on information quality is also increasing. Verrecchio (1983) proposed a classical model of proprietary cost and disclosure strategy of companies. With the goal of maximizing corporate value, he analyzed how the fixed proprietary cost or the existence of uncertainties made a disclosure (non-disclosure) economy to achieve equilibrium, and discussed the information disclosure decisions of the company based on the information disclosure threshold given by the model. The study of Truman (1990) showed that the management of listed companies would choose to consider the quality of information disclosure, and affected the market reaction by earnings management. Through an empirical study, Rogers (2004) discovered that, in order to achieve the purpose of its earnings manipulation, management would choose to use the quality level of information disclosure to affect the distribution of information among investors driven by the private transaction motivation.

The measure of the quality of information disclosure has become a hot topic in the research field of IPO information disclosure in recent years. Botosan (1997) proposed information disclosure index method to measure quality of information disclosure. Since then, this measure method has been used very frequently. Tang and Cheng (2005), and Wang (2003) used the information disclosure index method to measure the quality of information disclosure in their studies. However, this method has many restrictions, among which one is that the scholars used different indicators and another is that the results are easily influenced by subjective factors. So another method has begun to be used to measure quality of information disclosure by Chinese scholars in recent years, which is information disclosure rating method. Zeng and Lu (2006), and Wu, Wu and Rui (2007) used this rating result as an alternative variable of the quality of information disclosure for their analysis.

These researches mainly analyzed the IPO information disclosure from the perspective of the information suppliers. As to the demand conditions of information, there are some studies which examined the accounting information demanded. But there lack studies on the demand of IPO risk factors information. This paper made an analysis of both sides, that is, IPO risk information supply and demand.

3. The Current Situation of the IPO Risk Information Disclosure in China

To study the current situation of the risk information disclosure in the Chinese IPO market, firstly we should analyze the information disclosure policies of the Chinese IPO market that includes the development and the characteristics of the information disclosure system, and get hold of the policy environment of the information disclosure. Then we should analyze the condition of the risk information disclosure under the existing regime, examine the characteristics of the risk information disclosure in the IPO market, and analyze the shortcomings existing in the process of the information disclosure.

3.1 The Information Disclosure Policies of the IPO Market

Information disclosure is the channel that connects issuers and investors, and it is the cornerstone that makes sure the stock market operates effectively. It was said that the information disclosure as a good medicine to heal the disease of the society and the enterprises. It is as if the sun is the best disinfectant, and the light is the most effective policeman.

The information disclosure policies include the legal norms that formulate the items such as the content, time, modes, procedures and other matters (Gu, 2009) (Note 1). The stock issue market in China came into being in 1984 (Note 2). Basically there is no formal information disclosure because the stock market has just started. In 1987, the State Council published The Notice on Strengthening the Management of the Stocks And Bonds, which is the first time that the central government makes unified regulations for the IPO activities. Until 1990, with the establishment of Shanghai Stock Exchange (1990, December) and Shenzhen Stock Exchange (1991, July), listed companies began to disclose information as officially required, but the mode executed is the approval system mode under "Issuance control" at that time (Note 3). The system that authorities completely made plans for all the issuances led to such problems as the low transparency of the whole process, the suppression of the market's

self-regulation, and the poor quality of the information disclosure in IPO prospectuses. Until 1993, the national unified norms of information disclosure have appeared with the publish of Provisional Regulations on Issuance and Trading (issued on April 22nd, 1993), Implementing Rules of Public Offerings Companies' Information Disclosure (issued on June 10th, 1993) and Corporation Law.

The outbreak of the Asian financial crisis in 1998 promoted the issue of The Securities Act. This act was issued on October 27th, 2005 and came into effect on January 1st, 2006. Risk prevention became the dominant legislation consideration of this act. Thereafter, in order to improve the information disclosure system, the China Securities Regulatory Commission(CSRC) revised The Content And Format Guidelines of Listed Company's Information Disclosure No. 1—Prospectus (issued on March 24th, 2003) and The Content And Format Guidelines of Listed Company's Information Disclosure No. 9—IPO Application Documents (issued on March 6th, 2001), and published The Content And Format Guidelines of Listed Company's Information Disclosure No. 1—Prospectus (revised in 2006, issued on May 18th, 2006) and The Content And Format Guidelines of Listed Company's Information Disclosure No. 9—IPO Application Documents (revised in 2006, issued on June 20th, 2006). The documents above made strict norms on the information disclosure of IPO application documents and prospectus respectively. Administrative Measures on Information Disclosure of Listed Companies (issued on January 30th, 2007) was published on January 30th, 2007, and the CSRC published The Notice of Regulate the Information Disclosure of Listed Companies and the Behavior of Related Parties (issued on August 15th, 2007). The Content And Format Guidelines of Listed Company's Information Disclosure No. 29—The Application Documents of IPO and Listed on Growth Enterprise Market (issued on July 20th, 2009) was published in 2009. The information disclosure system improved by these laws and regulations put forward higher requirements for information disclosure and promoted the steady development of the Chinese IPO market.

In April 2012, the CSRC solicited opinions from the public on The Guidance of Further Deepening the Reform of the IPO System. The CSRC emphasized again that we should further promote the issuing system construction that centered on information disclosure, dilute the regulator's judgment to the profitability of the companies planning to be listed step by step, revise and improve the relevant rules, improve the conditions of issuance and the information disclosure requirements, implement the responsibilities of the issuers and the intermediaries, and improve the quality of information disclosure in multi-angle aspects.

In the present IPO system of China, the legislation (mainly reflected in the Securities Act) not only proposed behavioral constraints to various market players like issuers, underwriters and self-regulatory organizations, but also proposed strict requirements for issuers' profitability and legitimate operating history.

The Securities Act mainly makes the following requirements against the information disclosed in the IPO.

1) Principle of authenticity. This principle requires that the information disclosed by issuers and listed companies according to law must be true, accurate and complete, and shouldn't have fake records, misleading statements and significant omissions(the provisions of Article 63 in Securities Act). The principle of authenticity is fundamental to ensure the quality of information disclosure, the most basic requirement of the information disclosure and the premise of other disclosure principles.

2) Principle of accuracy. This is the basic premise to ensure the effectiveness of information disclosure. The principle of accuracy requires the prospectus and other information to have a specific expression approach and not to include misleading statements in the process of IPOs in order to make the understanding of the information providers and the information receivers consistent.

3) Principle of completeness. It is also known as the principle of adequate disclosure, means that in order to enable investors to make the right investment decisions, the information that may be valuable to the decision making of investors should be disclosed completely. This principle requires that the information disclosure of listed companies should be comprehensive. The issuers should not only disclose the information beneficial to the company's stock prices, but also should disclose various potential and actual risk factors that might be harmful to the company's stock prices.

4) Principle of timeliness. Information is the blood of the securities market, and timely disclosure of information determines the validity of the securities market. The principle of timeliness requires listed companies to ensure the information to be disclosed without delay. Timely disclosure of information can effectively prevent insider trading and protect the interests of the investors.

3.2 The Shortcomings of the Information Disclosure in the IPO Market

In spite of the continuous development of Chinese securities market, there are still many problems that are

needed to be solved in China's IPO risk information disclosing.

In order to gain the supervisors' approval for going public, some companies did not disclose important risk information, or made tricks in the wording of the disclosed risks. Many issuers did not really want to meet the investors' information demands in their information disclosure.

By analyzing a number of IPO cases, we present the following shortcomings in the IPO risk information disclosing.

1) The Problem of Risk Information Disclosure "Make-up" Is Serious.

Under the issuers' application and government approval system, the issuers are not sure whether the aim of going public can gain supervisors' approval successfully. So some issuers make up their financial statements, and present better-looking assets and profits and less risks to the supervisors to avoid being rejected. This excessive make-up can easily lead to the seemingly low risks of issuers and harm the investors' interests. This has been the most serious and harmful problem in the IPO information disclosure in China for years. It is obviously against the principle of authenticity and the principle of accuracy of the information disclosure.

There is sometimes very serious fraud information disclosure cases emerged. For example, as the first private enterprise of Yunnan Province landing in Shenzhen Small and Medium-size Enterprise Board, Lvdadi Company Ltd. publicly issued 21 million shares and raised RMB 329 million Yuan on December 21st, 2007. According to its prospectus, the operating income was RMB 148 million Yuan, RMB 158 million Yuan and RMB 191 million Yuan respectively, and the net profit was RMB 33.42 million Yuan, RMB 37.24 million Yuan and RMB 47.07 million Yuan respectively from 2004 to 2006. The actual controller and the chairman of the board He Xuekui made a reckless move to make up the company's financial information. He concealed some liabilities and enlarged the assets, and pushed the profits to an extremely false high level. In fact, the company was facing the situation of operating difficulties and capital chain rupture. It changed its earnings forecast in 2009 five times, which caused the market uproar and eventually attracted the attention and involvement of the CSRC. This behavior was ultimately characterized as fraud listing. The company's revenue from October 2009 to April 2010 had been forecasted to increase over one billion Yuan, but lost over one billion instead.

2) The Actual Risks Disclosed Are too Simplified.

Only if the enterprises' information is fully disclosed that investors can make good, rational judgment of their securities investment under the premise of enough information available. In fact, Chinese listed companies are not doing well in the aspect of adequate information insurances. Like some companies intentionally blur the boundary of business secrets and financial information, deliberately concealed some major events, avoid the important facts and dwell on the trivial, report mainly what are good for themselves, disclose large amounts of simplified information.

Many companies' information disclosure becomes a mere formality and is too simple especially in the aspect of non-production related transactions and asset restructuring transactions. Because the statements of contingencies and major events are inadequate or missing, investors usually cannot obtain sufficient and valuable information.

3) The Potential Risks Disclosed Is Insufficient.

The potential risks of the issuers can often affect their future operation. The sufficient disclosure of the issuers' potential risks can help investors to minimize their potential losses. The company management shall analyze, predict and calculate the potential risks and the related potential losses thereby caused during one or several accounting periods in the future based on the company's production plans and business environment, under the premise of reasonable prediction assumptions. Potential risks might come from the situation of the industry which the enterprises belong to, such as the threat of substitute products or services, the changes in the bargaining power of customers, suppliers and employees, and the changes in competitive conditions.

It is hard for government supervisors to tell whether the issuers have sufficiently disclosed their potential risks. So any related mandatory information disclosure rules seem to be hardly effective. The quantity of potential risks disclosed by IPO companies is also very low.

4) The Investors' Demand for Risk Information Is Seriously Neglected.

Investors' demand for risk information disclosure should be the fundamental driving force of risk information disclosure. Companies applying for listing in China must follow the expression form of prospectus set in The Content And Format Guidelines of Listed Company's Information Disclosure No. 1—Prospectus. After years of practice and improvement, the writing of prospectuses has followed a

relatively fixed format. This standardization has its merits, but it also has weakened the issuers' concerns over the investors' demand to some extent. For example, there lacks some information that the investors may concern about like risks of deterioration of payment capacity and loss contingency that related to enterprises' equities and obligations.

4. An Equilibrium Analysis of the Risk Information Supply And Demand in the IPO Market

In the information market, the combined actions of the information suppliers and demanders form the dynamic balancing process from the contradiction of the two sides to the equilibrium. Based on the actual situation of the Chinese IPO market analyzed in the previous section, this section will theoretically analyze the supply and demand of the risk information respectively, and then discuss the equilibrium of the risk information supply and demand through examining the dynamic process of information supply and demand.

4.1 The Problems in the Risk Information Supply and Demand

4.1.1 The Issue of the Issuers' Risk Information Supply

The information supply can be examined from the willingness and ability of the issuers. In other words, it is a question of whether the information suppliers are willing to provide information, and whether the information suppliers are able to provide company's information.

We know that commodity supply curve's slope is positive. The quantity of information supplied is gradually increasing with the rise of prices, too. The price of information can be understood as the gains obtained by information suppliers through information disclosure. Such factors as the promotion of the company's popularity and the increase of proceeds can be considered to form the price of information disclosed. In a rational sense, with the increase of the gains from information disclosure, the quantity of information supplied will increase.

Under the current IPO system in China, the risk information disclosure in the IPO market has superficially met the requirements of the relevant laws and rules. In fact, the information disclosed is far from being complete. The investors, especially the individual investors, lack ways to acquiring valuable information for their investment decisions. So there is not an actual equilibrium of risk information supply and demand in the IPO market.

4.1.2 The Issue of Investors' Risk Information Demand

The demand of investors is determined by endogenous and exogenous factors. The exogenous factors include the IPO policy environment and some other constraints in the IPO market. The endogenous factors include investors' comprehension of the risk information and investors' risk preference. Both the internal and external factors form the risk information demand of investors in the IPO market.

The information demand can be divided into two aspects. One is the investors' willingness to obtain the supplied information. It is affected by whether the obtainment of the information is beneficial to the investors' decision making. The other is investor's ability to make full use of the supplied information.

There are a large number of individual and institutional investors in China, which means that the investors' investment knowledge and attitudes are greatly diversified. Therefore, investors' demand of risk information also has the characteristics of diversification and differentiation. But the information demand generally shows the following two features. One is that there is an urgent demand for a higher quality of risk information disclosed. More true and valuable information is needed. The other is that there is an increasing demand for future predictive information of the issuers. Most issuers in China disclose only disclose information of the past. The future information disclosure is not compulsory. The risk information should include not only historical information, but also future information.

4.2 The Equilibrium Condition of the Risk Information Supply and Demand

The "invisible hand" theory that the market achieves the goal of optimal allocation of resources also works in the IPO risk information market. In a perfectly competitive market, market forces will motivate information suppliers disclose information by the principle of marginal cost being equal to marginal benefit. With no opportunistic behavior in existence, suppliers and demanders are willing to choose the cooperative game strategy.

4.2.1 The Equilibrium of the Risk Information Supply and Demand

If the IPO risk information is regarded as having its commodities' value and the IPO risk information supply and demand market is in a perfectly competitive condition, the dynamic process of supply and demand and the final equilibrium can be shown in Figure 1.

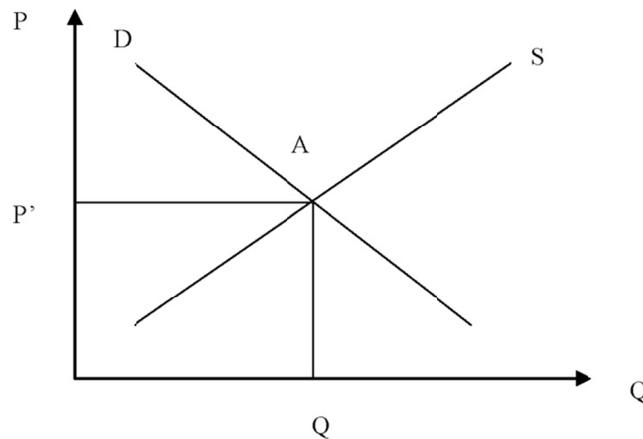


Figure 1. The IPO risk information supply and demand under the condition of perfect competition

In Figure 1, P denotes the price of risk information; Q, the quantity of risk information; D, the demand line of risk information; S, the supply line of risk information.

In a perfectly competitive market, in order to achieve the maximization of their own interests, risk information suppliers and demanders can ultimately reach their deals. In other words, the market can be in equilibrium finally. However, in reality, the market condition can hardly be perfectly competitive. Therefore, the market can hardly achieve the market clearing condition. The contradiction of risk information supply and demand often appears.

4.2. 2 The Disequilibrium of the Risk Information Supply and Demand

Assuming that the IPO risk information market cannot achieve a perfectly competitive condition, the risk information supply and demand will not reach a complete equilibrium (As shown in Figure 2).

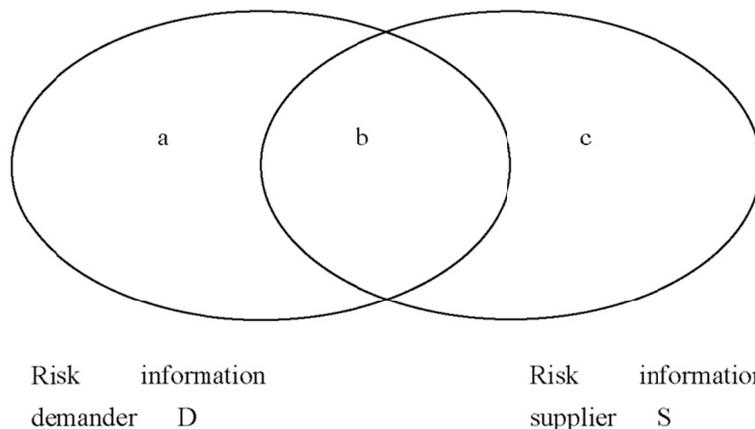


Figure 2. IPO risk information supply and demand in an imperfect competitive market

Figure 2 shows the information supply and demand in an imperfect market condition. “Part a” means the information set that risk information demanders want to get but risk information suppliers didn't provide. Similarly, “part c” means the information set that risk information suppliers have already provided but investors do not want to use. Two ellipses represent the information sets that risk information demanders and suppliers can receive and provide respectively. The intersection of the two information sets, i.e. “part b” in Figure 2, means the IPO risk information that suppliers are willing to provide and demanders consider to be useful. In other words, in the range of this part, the risk information suppliers and demanders can reach a partial equilibrium. This figure shows that the information sets of “part a” and “part c” are all inefficient parts that can not affect the behavior of

investors.

In an imperfect competitive market, the game of risk information suppliers and demanders cannot be interpreted as Figure 1. In the case that information is not perfectly symmetrical, information supply and demand curves will change. The dynamic process of change is shown in Figure 3.

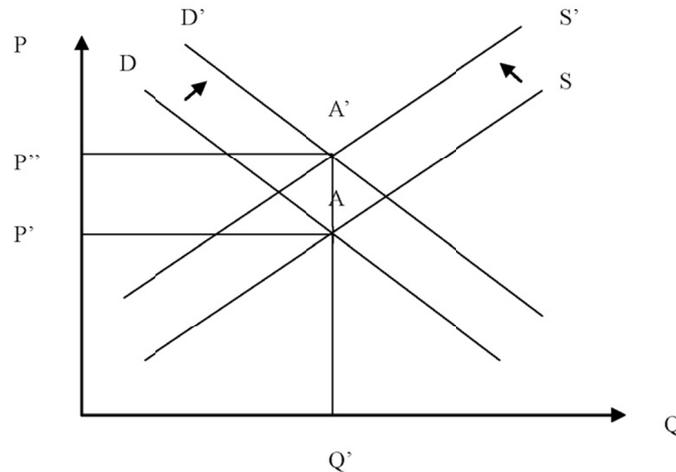


Figure 3. The dynamic process of risk information supply and demand under the condition of imperfect competition

As shown in Figure 2, only the IPO risk information of “part b” is used by investors under the condition of imperfect competition. That is to say, in the balanced price P’ under the original condition of perfect competition, the amount of effective information reduces below the balanced amount of information Q’. Therefore, the information supply curve S moves upper left to S’. Similarly, the “short supply” phenomenon emerges because of the existence of “part a”, the part that investors demand but information suppliers don’t provide. Therefore, in the original balanced price P’, investors’ demand of information increases. The demand curve D moves upper right to D’ in Figure 3. The result of combined action of supply and demand curves is reaching a new equilibrium, point A’. In Figure 2, new equilibrium generated in the information set of “part b”, the equilibrium price is P’’ which is significantly larger than the original equilibrium price P’. That is to say, the imbalance of information suppliers and demanders causes the increase of information price compared with the price under the condition of perfect competition, which causes the increase of costs for investors’ searching more valuable information and the lower efficiency of the IPO market.

4.3 Investors’ Demand for High-quality Information Supply in the IPO Market

In an imperfect competitive IPO market, there lack useful information for investors. So the investors have to search for valuable information. Based on the assumptions of traditional Capital Asset Pricing Model, Gu and Liu (2004) added assumptions that the arrival of information will change investors’ assets expected returns and the acquirement of information is asymmetrical. Thereby they established the asset returns model in the case of asymmetric information and analyzed the mechanism of transmission from information to asset price by using the derivation of the model. According to their theory, we can make an analysis of the investors’ demand for high-quality information supply in the IPO market.

Let E(R) represent the asset returns, the investment income can be expressed as follows:

$$E(R) = s_1 - P = \frac{(1 - \phi)v_0 + v^A}{v_0 + v^A} \Delta + \frac{A}{v_0 + v^A} \xi \tag{1}$$

Combined with the purpose of this study, we mainly use the first term on the right of formula (1), that is $\frac{(1 - \phi)v_0 + v^A}{v_0 + v^A} \Delta$. It represents the changes of original investment earnings expectations after the arrival of new information, where $\frac{\phi \bullet v_0}{v_0 + v^A} \Delta$ means investors’ correction for the original expectations, ϕ represents the proportion of the investors who have obtained the information. The larger ϕ becomes, the higher the proportion of the investors who have obtained the information in the securities market becomes. It can be seen

from the expression that ϕ and investment income are negatively correlated.

With the improvement of the modern securities market system, ϕ is also rising. It makes the securities investment income continuously wider and also further increases the adverse effects of negative information for investors' income at the same time. In other words, the penetration of negative information will lead to greater losses for investors. Therefore, there is an urgent demand for the accuracy of information disclosure and the quality of information supply.

Under actual conditions, the information disclosure environment is much more complex than that in the theoretical assumptions, and it is more difficult to examine the quality of information supply. Nevertheless, more attention should be paid to the information demands of investors, through which the efficiency of the IPO market can be improved.

5. Conclusion

Through the analysis of the development of Chinese IPO system and the current situation of IPO risk information disclosure, we found that there exist many deficiencies in the Chinese IPO market. The "make-up" phenomenon in IPO information disclosure is still serious. The risk information disclosed is inadequate. The investors' demand for valuable risk information disclosure is largely ignored.

So, one major contribution of this paper is that we point out that the IPO information market in China is far from being perfectly competitive. According to our dynamic analysis of the equilibrium of the IPO information market, it is hard for the market to reach an equilibrium state, which may cause the increase of costs of investors' information seeking, and the low efficiency of the market.

The analysis of risk information's influence mechanism shows that the information quality will eventually affect the investment returns. More attention needs urgently to be paid to the information demands of Chinese IPO investors. The IPO information actually demanded shall be the information supplied, through which the market equilibrium can be reached and the efficiency can be improved.

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Notes

Note 1. In 1720, the South Sea Bubble event in England impelled the information disclosure to come into being ever since. The rules of how to write prospectuses in The Joint Stock Companies Act (1844, England) established the principle of mandatory information disclosure for the first time. The information disclosure policies appeared systematically in the United States. The financial information disclosure system first carried out by the United States in The Securities Act (1933) is considered to be a significant information disclosure policy in the world.

Note 2. Shanghai Feile Audio Supplies Company became the country's first pilot joint-stock enterprise that issued shares to public on November 18th, 1984 after it got the permission of the financial administrative management of the Shanghai branch of the People's Bank of China. The company's shares began to be publicly traded in Shanghai Jing'an Trust Business of the Industrial and Commercial Bank of China on September 26th, 1986. The listing of the share was transferred to Shanghai Stock Exchange on December 19th, 1990, just after the exchange was established.

Note 3. The “issuance control” conduct is that the securities issuance authorities formulate the total number of issuance and distribute the issuance amount to the local governments or other relevant government departments,

and then the local government or other relevant government departments distribute the issuance amount to the companies that intend to apply for the IPOs.

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