Research Report for Preparing Graduate Dissertation

1. Introduction, Purpose and the Implication of the Research

1.1 Review of Research

IPO (Initial public Offering) has always been the hotspot in the financial economics field. IPO underpricing, a large positive gain of a new issue immediately after flotation, is a recurring phenomenon in many markets. Stoll and Curley(1970),Reilly(1973),Logue(1973), and Ibbotson(1975) first documented a systematic increase from the offer price to the first day closing price. Academics use the term first-day returns and underpricing interchangeably. A common perception is that the underpricing of IPOs is a challenge to market efficiency. And the return sometimes is called abnormal initial return (AIR). A number of theories of IPO underpricing have been put forward and tested against the data of various stock markets. Our research on this topic in China began about in the late 1990s. It has been found that this phenomenon does not only exist, but also has a quite high degree. As an emerging stock market, Chinese stock market has a unique environment other than other countries. Hence, the possible explanations for underpricing in China appear more complex, and the findings from studies in other countries can not be automatically extrapolated to China.

As Professor $\times \times \times$ has made some research in this field, and I am interested in the IPO underpricing problem, I decide to find some evidence that lead to the abnormal initial return through examining the A-share of Chinese IPO market. This program will be regarded as my dissertation to get Bachelor degree under the instruction of Professor $\times \times \times$.

1.2 Research Purpose

Research on the IPO short-run performance usually focuses on the abnormal initial return. The explanations for the underpricing puzzle mainly lie in two aspects.

One is focusing on the setting of price, where the normal interplay of supply and demand is suppressed by the underwriter and issuer. The other is based on the inefficient market hypothesis, which considers that the secondary market is overreacted. The new shares are overvalued.

The first view is more popular till now. When analyzing the relationship among investors, issuers and underwriters, they get different conclusions due to the different emphasis. Rock (1986) gives "a winner's curse" theory, which is based on the asymmetric information among investors. A realistic assumption is that investors are differentially informed. In his model, the informed investors will buy the new shares only when it is undervalued. The uninformed investors will receive full allocations if they happen to be among the most optimistic investors. And when everyone desires the offering, they get rationed. To break even, investors need to be underpriced. Baron (1982) offers a different, agency-based explanation for under pricing. His theory focuses on the asymmetric information between issuer and underwriter. The issuer is less informed. To induce the underwriter to put in the requisite effort to market shares, it is optimal for the issuer to permit some underpricing. This explanation is especially convincible for the less-experienced issuers. Benveniste and Spindt(1989) argue that the common practice of "bookbulding" allows underwriters to obtain information from informed investors through road show. This helps underwriters to gauge demand as they record "indications of interest" from informed investors. To induce investors to truthfully reveal that they want to purchase shares at a high price, underwriters must offer them some combination of more IPO allocations and underpricing when they indicate a willingness to purchase shares at a high price. The signaling hypothesis is based on information asymmetry between issuers and investors. If the issuer is more informed, rational investors fear a lemons problem: only issuers with worse-than-average quality are willing to sell their shares at the average price. To distinguish themselves from the low quality firms, high quality firms may attempt to signal their quality by underpricing. The underpricing may also be resulted by the rigid issuing mechanism. What we should pay attention to is that all the above theories are based on the efficient market hypothesis. That is, the new share's price in the secondary market is effective, which reflects the intrinsic value of this stock. However, if there exists noise transaction in the secondary market, market price will deviate from the intrinsic value. Tinic(1988) and Ritter(1991)finds that the IPO market exist bubble. In other words, it is the reason that the investors misestimate the value resulting in that they are willing to buy the stock at a much higher price compared to offering price. Overreaction phenomenon appears in secondary market. It is so-called The Speculative Bubble Hypothesis.

The purpose of this study is to combine the leading theories and test them against a given sample of initial public offerings of A shares to see what main factors will influence AIR and find out whether the low offering price in primary market or the overreaction in secondary market contribute more to the high AIR. Moreover, we hope we can get some policy implications to the regulators.

1.3 The Implication of the Reserch

From 1980s on, economists have conducted many theoretical and empirical studies on different aspects of IPO systematically. It has become an important branch in finance. There are three main areas in this field: underpricing, long-run underperformance and hot market.

IPO pricing, as a puzzle, is quite a complex process. It relates to IPO pricing methodology, issuing mechanism, policy environment, firm's operation performance, industry feature, stock market volatility and supply and demand, etc.

Chinese IPO market owns the highest initial return in the world. Exploring the IPO underpricing problem will give an important significance to improve the development of Chinese stock market. We have a transition from quota system to authorization system. The pricing rule and P/E ratio changes during the transition, and they have their own features. Because of the distinct institutional defects of our stock market, the issuing process must have been intervened by administration department more or less. Moreover, our investors are lack of investment knowledge. They are always group-oriented. Therefore, investigate and evaluate the characters of our IPO market, find out the problem and subsequently reveal the influential factors are of

great importance. Furthermore, provides some policy implications on our IPO pricing system.

2. Findings and Interpretations

This study is supposed to achieve tasks as follows:

- Explore the importance of IPO pricing, which involves issuer, underwriter and investor and maybe government sometimes.
- (2) Give a current situation about the abnormal initial return in Chinese IPO market. Find a proxy for intrinsic value of the new share, test the underpricing degree arose by the low offering price in primary market and the overvalue degree in secondary market by overreaction.
- (3) Make an empirical research on what causing the abnormal return. Offer the possible explanations.

3. Method and Procedures

3.1 Research Design

Section 1: Introduction about Chinese IPO market and the importance of this study.

Section 2: Theory and Literature review home and abroad about IPO underpricing

Section 3: Empirical studies of abnormal initial return on A-share IPO market: data and methodology

Section 4: Empirical studies : Results on the short-run return and a comparison with other studies

Section 5: Empirical Studies: explain the two components of AIR Section 6: Conclusions

3.2 Analysis of Data

This study will rely on empirical analysis, in addition with theoretical research. With the special feature of Chinese stock market, establish an econometric model to discover the key factors influencing the AIR and how influence it, test it and get the conclusions.

4. Innovative Solutions

The previous studies mostly focus on the offering price. Little research is done concerning the secondary market as for the AIR. The traditional AIR((first-day closing price-offering price)/offering price) is divided into two parts. Part 1: return from primary market: proxy price to offering price; part 2: return from the secondary market: first day closing price to proxy price. Find out which part works for AIR or both in A-share market. Note: proxy price represents for intrinsic value.

5. Schedule

2005.02-2005.03	Pay close attention to relevant IPO studies and decides the
	content; gather the literature home and abroad; write the
	Thesis Research proposal
2005.04-2005.04	Data collecting, processing and analyzing
2005.05-2005.05	Complete the first draft of the thesis
2005.05-2005.06	Revise the thesis and give the final report