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博士学位论文

公允价值、投资者行为与中国股市泡沫研究

Study on Fair Value, Investor Behavior and Chinese Stock Market Bubble

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公允价值、投资者行为与中国股市泡沫研究
Study on Fair Value、Investor Behavior and Chinese Stock
Market Bubble

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摘要

资产价格泡沫是当代金融学的研究前沿领域，由于其对社会经济影响重大，在实务上也是广受社会各界关注的争议热点。本文从理论和实证两个角度对股票市场的价格泡沫进行研究。在借鉴国内外相关研究成果的基础上，梳理形成较为完整的关于泡沫研究的学科逻辑框架体系，提出以复杂系统科学理论为背景的关于泡沫发展规律设想，同时对投资者行为和公允价值计量方式与股市泡沫的关系进行深入论证。

理论分析与实证检验表明：

1、理论上以公允价值作为计量属性在公司交叉持股股权结构下将导致其生成的资产价格信息传递自动出现正反馈效应，该信息在投资者的正反馈交易策略下将放大效应。这一过程显示了公允价值、投资者行为和股市泡沫之间存在的传导机制：当投资者不理性、市场非有效时，公允价值正反馈信息增量将被投资者行为进一步放大，该问题将对价格泡沫产生较大影响；特别地，当投资者盲目乐观、市场严重非理性时，该信息有可能被理解成“好消息”而对价格泡沫产生较大推动作用。

对中国上市公司现有的几组案例分析数据发现，交叉持股形成循环的公司之间价格变动存在较强的关联性，即使只是形成部分交叉持股的公司，在采用公允价值计量后，公司之间的股价产生持续性的因果关联，显示公允价值的计量对这些公司股价存在较大影响。

2、投资者的反馈交易行为对股市泡沫有着重大影响，其中投资者的正反馈交易行为既是非理性泡沫产生的根本原因之一，也是非理性泡沫严重膨胀恶化的动力之一，而投资者的负反馈交易行为对泡沫起抑制作用；市场对负面信息的反应淡漠、对好消息反应效应放大则是识别非理性泡沫性质恶化的重要标志。

3、总体上中国股市投资者行为存在明显的正反馈效应，股市泡沫显示非理性。但不同时期投资者行为与股市泡沫呈现不同特点，既有无反馈行为的理性泡沫，也有先出现正反馈行为后经负反馈行为抑制的非理性泡沫，更有仅在正反馈效应影响下快速膨胀直至崩溃的非理性泡沫。股市泡沫的发展是理性泡沫与非理性泡沫交替出现、互相转化的过程，从而体现出股价非线性的运动规律，而有效市场的随机游走线性关系只是其中的一个特例，并据此初步断定中国股市泡沫发

展的平均周期大约为 900-1000 多天。

4、股票市场是个复杂的非线性动力混沌系统，信息的冲击、市场微观结构的作用与投资者行为相互影响、相互作用，构成股票市场价格运动的主要动力。公允价值计量方式的采用将对以上三者产生影响，特别地，在市场盲目乐观、投资者严重非理性时，其产生的正反馈效应将有可能对系统注入新的价格偏离动力，使得泡沫问题更加复杂，性质更加严重。

本文的主要贡献和创新如下：

1、设计建立模型从理论上证明公允价值计量在公司交叉持股股权结构下形成的正反馈效应，该效应在投资者正反馈交易策略下对价格泡沫产生更大的正向影响，并据此对公允价值、投资者行为与股市泡沫之间的传导机制进行深入分析。该研究为理论界与实务界在该问题的争论提供一定的证据，作为资本市场产生的泡沫新问题，本文的研究补充了这方面的内容。

2、在研究视野上，借鉴资产价格研究的前沿理论，拓展构建泡沫研究的逻辑框架，将研究该问题的各学派理论纳入统一的架构中，形成较为完整的知识理论体系，为泡沫研究开拓全新的视野，并可视其为一门学科进行整体的评判和俯瞰，具有一定的学术创新意义。

3、在研究方法上结合 R/S 分析与 GARCH 模型对投资者的反馈行为进行较为详细系统的分析检验，诠释了投资者的正反馈和负反馈两种非理性行为对股市泡沫的影响，发现两种反馈行为发生转换的重要标志是对负面消息的反应，该标志也是股市泡沫性质是否恶化的重要信号。此项研究从实证角度对投资者非理性行为与股市泡沫的学术研究进行补充，同时也为实务界对泡沫的管理控制提供一定的指导依据。

4、借助数据的分形分析，初步发现中国股市泡沫发展的周期规律，认为中国股市泡沫的发展可能存在一定的周期，同时也证实本文提出的关于泡沫研究的逻辑框架和泡沫发展的一般规律，在补充相关方面学术内容的同时，对实务工作也具有现实指导意义。

关键词：公允价值；投资者行为；正反馈效应；复杂系统；股市泡沫

Abstract

Asset price bubbles are a forefront field in contemporary finance. Due to their tremendous socio-economic impact, asset price bubbles are a hotly contended practical topic among all segments of society. This paper aims to study price bubbles in the stock market from two perspectives – theoretical and empirical. By drawing upon the findings of related research in China and abroad, a complete disciplinary and logical framework system is built for the study of bubbles, and the patterns of the formation of bubbles are explored against the background of complex systematic science; moreover, an in-depth analysis is conducted on the relationship between investor behaviors and the methods of fair value measurement and price bubbles, with the following research conclusions drawn:

I In theory, with the structure of a company's cross-shareholding equity structure, using fair value as the measuring attribute may cause the resulting transmission of information on asset prices a positive feedback effect, and such information will have an amplifying effect under the investor's positive feedback trading strategy. This process shows that there exists a transmission mechanism between fair value and investor behavior and a stock market bubble: when the investor is rational and the market is effective, the investor is able to identify the increment of positive feedback information on fair value, thus exerting no significant impact on the formation of a price bubble. In comparison, when the investor is irrational and the market is ineffective, the increment of positive feedback information on fair value will be further amplified, thus exerting a significant impact on the formation of a price bubble. In particular, when the investor is blindly optimistic and the market is seriously irrational, it is likely that the information will be construed as "good news", thus fueling the swelling of the price bubble.

Analysis of data monitored Chinese listed companies in the observation group which have partial cross-shareholding shows that, following the adoption of fair value measurement, the share prices of companies in the observation group exhibited a continuous cause-and-effect correlation, indicating that fair value measurement has an

impact on the share prices of these companies.

II Investors' feedback trading behaviors have a significant influence on a stock market bubble, and their positive feedback trading behaviors are not only one of the primary reasons for the formation of irrational bubble, but also one of the main causes of the exacerbation of the irrational bubble. Yet, investors' negative feedback trading behaviors have an inhibiting effect on the bubble. The market's indifference to negative information and its amplified reaction to good news are a major mark of the exacerbation of the irrational bubble.

III Overall, investor behavior in the Chinese stock market exhibits significant positive feedback effects, and the stock market bubble shows irrationality. In different periods of time, however, investor behavior and the stock market bubble demonstrate different characteristics; there are rational bubbles free of feedback behaviors and irrational bubbles which reveal positive feedback behaviors first and then are inhibited by negative feedback behaviors, and there are even irrational bubbles which rapidly swell until they burst under the only influence of positive feedback effects.

Preliminary research finds that a bubble in the Chinese stock market typically lasts 900 to 1,000 days. The formation of a bubble in the stock market is a process in which a rational bubble and an irrational one interact with and exchange into each other, with stock prices showing nonlinear movement patterns, and the random walk linear relationship is merely an exception in an effective market.

IV The stock market is a nonlinear dynamic chaotic system, where the impact of information, the functions of the micro structure of the market, and investor behavior affect and interact with one another, thus driving the movements of prices in the stock market. The adoption of fair value measurement will have an impact on the above three factors, and in particular, when the market is overconfident and investors are seriously irrational, the resulting positive feedback effects may inject fresh dynamism into price deviation, thus compounding the bubble issue and exacerbating the problem.

The main contributions and innovations of this paper are as follows:

Firstly, A model has been designed and built to prove in theory the positive

feedback effect of fair value measurement within a company's cross-shareholding equity structure. This effect will be further amplified under the investor's irrational strategy for positive feedback trading, thereby exerting a positive impact on the formation of a price bubble. On the basis of this finding, an in-depth analysis is conducted to examine the transmission mechanism between fair value, investor behavior and a stock market bubble. The analysis suggests that investor behavior is of paramount importance. When the investor is rational, the positive feedback problem of fair value measurement can be identified and resolved by an effective market, thus exerting no significant impact on the formation of a stock market bubble. In contrast, when the investor is irrational, the positive feedback problem of fair value measurement will be further amplified, thus exerting a significant impact on the formation of a stock market bubble. This finding provides new evidence for the debate on this issue between theoreticians and practitioners. This paper supplements research on the new issue of bubbles forming in the capital market.

Secondly, in terms of research perspective, this paper draws upon the theories at the forefront of the research of asset prices, expands the logic framework for bubble research, and incorporates all schools of theories in bubble research into the unified framework, thereby forming a complete system of knowledge and theories. In this paper, bubble research is comprehensively assessed and reviewed as a separate discipline, thus opening up a fresh perspective on bubble research, which constitutes a significant academic innovation.

Thirdly, This paper conducts an exhaustive empirical analysis and examination of investors' feedback behaviors, identifies the influence of investors' positive and negative behaviors on a stock market bubble, and finds that the switch between the two types of feedback behaviors is primarily marked by reaction to negative news. This mark is also an important sign of whether the stock market bubble has deteriorated. This study supplements academic research on irrational investor behaviors and stock market bubbles from an empirical perspective; it also provides guidance for practitioners to manage and control bubbles.

Fourthly, Using fractal analysis of data, this paper obtains some preliminary

findings regarding the cyclic patterns of the development of Chinese stock market bubbles, and argues that the development of such bubbles is a cyclic phenomenon. This also confirms the paper's findings about the logic framework of bubble research and the general patterns of bubble development. This not only supplements related academic research, but also provides guidance for the work of practitioners.

Keywords: Fair Value; Investor Behavior; Positive Feedback Effects; Complex System;
Stock Price Bubble

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