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Investigating the Relationship between Information Risk with Bubble Price Probability in Companies Listed in Tehran Stock Exchange

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EXTENDED ABSTRACT

INTRODUCTION

The main purpose of this study is to investigate the relationship between information risk in the form of two indicators of volatility risk and arbitrage risk with the probability of price bubble of companies' stocks. For this purpose, data related to 109 companies active in the stock exchange during the period 2011-2017 were selected as a sample by systematic removal sampling method. Lack of transparency regarding companies' financial information as well as price manipulation leads to stock price bubble; finally, this false information causes the price bubble to burst and the price of financial assets to fall sharply, leading to a financial crisis in the capital market. If the stock price in the market is not reasonable and suffers from severe fluctuations and the formation of price bubbles, securities will not be valued properly based on their actual performance, and ultimately prices as an indicator cannot show their correct and real performance. In fact, financial information about each company is very important when estimating the value of stock prices. Investors use this public financial information to assess the future prospects of each company.

METHODOLOGY

The research hypotheses were designed in line with the objectives of the research by examining the relationship between information risk (which includes arbitrage risk and stock volatility risk) and stock price bubbles measured by a new method. This method of measuring the price bubble takes into account the probability of the bubble occurring. The price bubble probability variable was calculated on the weekly stock data through SADF test, which is a set of right-sequence tests used to predict the periods of the

price bubble occurrence. Then, through two regression models of panel data, the effect of information risk indicators along with the most important variables affecting the price bubble on the research dependent variable was investigated.

FINDINGS

The results of estimating the first model of the research indicate the existence of a positive and significant relationship between stock volatility risk and the possibility of price bubbles in the company's stocks. This suggests that increased volatility risk as an indicator of information risk can be an important factor in the formation of a price bubble in corporate stocks; therefore, the first hypothesis of the research is confirmed. Also, in confirming the estimation results of the previous model, arbitrage risk, like volatility risk, has a positive and significant relationship with the probability of price bubbles. This means that by increasing the arbitrage risk per share, one can expect more price bubbles to occur, indicating that the second hypothesis of the research is confirmed.

The results also showed that the share of institutional shareholders has a positive and significant effect on the probability of price bubble. These results indicate inactive institutional owners in companies. In fact, if institutional owners directly manage the company's stock in the market, they will not allow a price bubbleto be formed in the stock. In more floating stocks, the price bubble is less likely to occur. The value of book value to market value has a negative and significant relationship with the probability of price bubbles. That company is more registered, and this shows that the company is in a good financial position and growth.Also,the price of such companies shares will grow without occurring any bubble with the reason of intrinsic value. As the size of the company grows, so does the likelihood of a price bubble. It seems that in small companies, despite more asymmetric information, the potential for price manipulation can be good candidates to create a price bubble.

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CONCLUSION

considering that the results of experimental testing of research hypotheses in line with theoretical expectations showed that there is a positive and significant relationship between information risk and the possibility of price bubbles.Therefore, it is necessary for managers, observers and capital market policymakers to stabilize or Limit market fluctuations to reduce the information risk of companies' stocks.

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