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Detecting Financial Bubbles Using Gap between Common Stocks and Preferred Stocks

Authors : Changju Lee, Seungmo Ku, Sondo Kim, Woojin Chang

Abstract : How to detecting financial bubble? Addressing this simple question has been the focus of a vast amount of empirical research spanning almost half a century. However, financial bubble is hard to observe and varying over the time; there needs to be more research on this area. In this paper, we used abnormal difference between common stocks price and those preferred stocks price to explain financial bubble. First, we proposed the ‘W-index’ which indicates spread between common stocks and those preferred stocks in stock market. Second, to prove that this ‘W-index’ is valid for measuring financial bubble, we showed that there is an inverse relationship between this ‘W-index’ and S&P500 rate of return. Specifically, our hypothesis is that when ‘W-index’ is comparably higher than other periods, financial bubbles are added up in stock market and vice versa; according to our hypothesis, if investors made long term investments when ‘W-index’ is high, they would have negative rate of return; however, if investors made long term investments when ‘W-index’ is low, they would have positive rate of return. By comparing correlation values and adjusted R-squared values of between W-index and S&P500 return, VIX index and S&P500 return, and TED index and S&P500 return, we showed only W-index has significant relationship between S&P500 rate of return. In addition, we figured out how long investors should hold their investment position regard the effect of financial bubble. Using this W-index, investors could measure financial bubble in the market and invest with low risk.

Keywords : financial bubble detection, future return, forecasting, pairs trading, preferred stocks
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