

This thesis studies bubbles in the U.S. stock market and how they are influenced by monetary policy pursued by the FED. Using Kalman filtering, the log-real price of S&P 500 is decomposed into a market-fundamentals component and a bubble component. The market-fundamentals component depends on the expected future dividends and the required rate of return, while the bubble component is treated as an unobserved state vector in the state-space model. The results suggest that, mainly in recent decades, the bubble has accounted for a substantial portion of S&P 500 price dynamics and might have played a significant role during major bull and bear markets. The innovation of this thesis is that it goes one step further and investigates the effects of monetary policy on both estimated components of S&P 500. For this purpose, the block-restriction VAR model is employed. The findings indicate that the decreasing interest rates have a significant short-term positive effect on the market-fundamentals component but not on the bubble. On the other hand, quantitative easing seems to have a positive effect on the bubble but not on the market-fundamentals component. Finally, the results suggest that the FED has not been successful at distinguishing between stock price movements due to fundamentals or the price misalignment.