Weekly idiosyncratic momentum and contrarian effects in the Chinese stock market

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Market anomalies provide the direct evidence against the Efficient Markets Hypothesis (EMH; Fama, 1991). Among the anomalies, there are two renowned phenomena, namely, the momentum and contrarian effects, which are wildly investigated. The original momentum and contrarian effects are based on cross-sectional prices or returns of assets, also called "price momentum" (Shi *et al.,* 2015; Shi & Zhou, 2017). And more and more kinds of momentum or contrarian effects were explored in a body of further studies about market anomalies, which in turn partially explained the presence of momentum and contrarian effects. On the basis of price momentum, various factors containing firm-specific information are taken into consideration. Investors can construct zero-cost arbitrage portfolios in terms of more information and get higher profits. In this vein, this paper focuses on the idiosyncratic momentum and contrarian patterns in weekly returns in the Chinese stock market, to which less attention has been paid. We first re-examine the existence of momentum (contrarian) effect based on the weekly raw return; then we conduct the study on idiosyncratic momentum (contrarian) patterns with several popular pricing models, including Fama-French 3/5-factor models (Fama & French, 1993; Fama & French, 2015). Further, together with idiosyncratic return, some topological properties of stock networks, such as diameter and centrality, are retrieved to describe the overall idiosyncratic risk. Our findings indicate: (1) the existence of the weekly momentum and contrarian effects in the Chinese stock market; (2) idiosyncratic return would strengthen the momentum (contrarian) effect; (3) furthermore, diameter or centrality that can be proxied as risk diffusion channel(s) (Eng-Uthaiwat, 2018), would enhance the performance of idiosyncratic momentum (contrarian) effects. In summary, these findings provide the further evidence against the EMH and also have obvious practical implications for financial practitioners.

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