Heterogeneity of sentiment risk in Malaysian stock market

Abstract

Behavioral risks including investor sentiment play an important role in Asia's stock market behaviors, but they are theoretically and empirically not well understood in traditional conditional means statistics, partly due to the heterogeneity roles. In contrast to the existing studies, this paper examines the heterogeneity roles of investor sentiment proxies (i.e. CSI, BCS, and FKLI) in influencing various aggregate stock market indices in Malaysia. The proposed sentiment proxies in relation to stock returns are statistically analyzed using mean-based (OLS) and quantile regression (QR) methods to uncover the relationships accross full range of stock market returns conditional distributions. In the analysis, weexamine the possible multidimensional association of various conditional sentiments (i.e. average, sentiment states, market states, and interaction between sentiment and market states) on size (i.e. big firms vs. small firms) and industry (i.e. defensive vs. speculative) segmented data. The OLS analysis does not provide conclusive significant association of sentiment to returns but the QR analysis reveal emerging patterns of sentiment heterogeneity roles. Specifically, the QR analysis reveal an asymmetric association between sentiment to returns with U-curve pattern from negative magnitude in the lower quantiles and positive magnitude in the upper quantiles. The findings are not only consistent with the current hypothesis that sentiment risk strongly affects the small firms and speculative industry but also the big firms. The sentiment-return associations are statistically significant in extreme lower quantiles and in extreme upper quantiles of return distributions. These patterns are consistent with theoretical postulates of prospect theory and evidence of assymetric overreaction of Asian investors to sentiment. Overall, the findings from this paper provide new insights for theoretical understanding and practical application of sentiment risk in the stock market.