Asset Pricing with Idiosyncratic Risk Premium as a Systematic Risk Factor

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Abstract
We examine the relationship between the idiosyncratic risk and the stock market returns in the Chinese stock markets by incorporating the idiosyncratic risk premium as a source of systematic risk un-captured by beta coefficients. We identify a common risk factor IVF, which is the difference between the returns on the stocks with low idiosyncratic volatility and high idiosyncratic volatility. We find that IVF is a good candidate state variable for cross-sectional pricing, which can forecast the future market returns and volatility. Further, the FF3 model with the systematic idiosyncratic risk factor IVF (FF3_IVF) outperforms the traditional CAPM and Fama-French model without the idiosyncratic risk factor in terms of goodness of fit.

Key Words: Asset Pricing, Idiosyncratic Risk, Systematic Risk Factor