與時變動市場系統風險之估計-台灣股票市場電子產業之實證

李愷莉,林鈺珊
財務管理學系
管理學院
jasmine@chu.edu.tw

摘要

In past, the risk level of the stock was worked under stationary assumption in the study. But financial market and managers decisions were changed with time. The managers will adjust their portfolios weights depending on the market conditions in order to improve performance. So, the systematic risk of the stock should be a decision variable. Many financial literatures have showed that stock and risks are not constant, actually. In this study, we focus on the two commonly used approach : multivariate GARCH with constant correlation and Kalman filter algorithm. The purpose of this study is to estimate the time-varying behavior of beta and compare the result of the modeling techniques that estimate time-varying bate in Taiwan stock market. Using daily data for a sample of electronics industry of Taiwan over the period January 2004 to September 2008. In this paper, we used models to estimate beta to found out the beta of electronics industry and supplied the information about systematic risk of stock to investor. The result indicate two models capture movements in beta adequately, and M-GARCH model were more efficient than the Kalman filter approach.

關鍵字：Time-varying Beta, MGARCH, Kalman filter approach