

探討違約風險與系統風險之關聯性

Studying the Relationship Between Default Risk and Systematic Risk

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摘要

由於現今金融體系環環相扣，公司違約極可能引發大規模的經濟動盪。本研究以 2005-2012 年台灣上市公司為研究對象，探討違約風險與系統風險之關聯性。我們採用 KMV 違約距離和 TCRI 評分為違約風險之代理變數，並將樣本區分為兩類：電子產業和非電子產業、傳統產業和非傳統產業。實證結果顯示 KMV 違約距離對系統風險具有負向影響，亦即其值越大該產業所面對之系統風險較低。然而 TCRI 對於系統風險估計結果卻也顯著為負，亦即並非評等等級越差則面對之系統風險越高，推論原因為 TCRI 評等分數將業績動態、產業前景、人為主觀判斷等資訊納入考量，導致不符合預期結果。此外，總體經濟因子，如國民生產毛額，亦會影響產業面對之系統風險。

關鍵字：信用風險、KMV模型、TCRI、系統風險

ABSTRACT

Because financial systems are closely related, the default or bankruptcy of a company is extremely likely to induce economic turmoil to a great degree. This study uses the listed companies in Taiwan to investigate the relation between default risk and systematic risk. The sample period covers 2005 to 2012. We adopted the distance-to-default of KMV model, and the reduced-form model of Taiwan Corporate Credit Risk Index (TCRI) as the proxy variables for credit risk. We divided samples into electronics or non-electronics industries, and traditional or non-traditional industries, respectively, to investigate the influence of corporate default risk on systematic risk. The empirical results indicated that when the default risk is measured from KMV model, it had negative influence on the systematic risk. However, the TCRI-based default risk also had significant negative effects on the systematic risk. The reason behind the result may come from the compositions of TCRI, which include firms' operating trends, industry prospects, and human subjective judgments, etc. Furthermore, macroeconomic factors, such as gross national product (GNP), also have effects on the systematic risk.

Keyword: Credit risk, KMV model, TCRI, Systematic risk