

<b>題目</b>	網路泡沫化前後台灣半導體產業關聯性探討－資本市場報酬與波動外溢效果分析
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<b>摘要</b>	本研究從資本市場將台灣半導體產業 IC 設計、IC 製造與晶圓代工、IC 封裝與 IC 測試編製上、中、下游股價指數，利用三變量 EGARCH 模型分別探討網路泡沫化前後，上、中、下游產業關聯性，實證報酬外溢效果、波動外溢效果與波動不對稱槓桿效果發現，事件前期報酬外溢與波動外溢效果皆較事件後期顯著，表示網路泡沫化事件確實影響台灣半導體產業發展。網路泡沫化前產業關聯性較緊密，資本市場焦點集中至中游廠商的經營績效，中游所釋出的景氣訊息與股價變動具領先指標意義，證明台灣半導體產業從代工起家，以中游領導上、下游的發展模式；網路泡沫化後上游與中、下游的產業關聯性下降，偏離景氣好壞皆由中游廠商釋出訊息所決定的現象，資本市場投資人將焦點分散至上、中、下游個別產業的經營績效，給予不同的景氣評價。前後期比較亦反映出上游產業獨立的發展，以及中游與下游產業長期關聯性較緊密的現象。
<b>關鍵字</b>	半導體產業、外溢效果、不對稱效果、EGARCH 模型、網路泡沫化
<b>Title</b>	A Study on Relations between Taiwan Semiconductor Industries in Each Pre- and Post- Period of the Internet Bubble Crash: Stock Price and Volatility Transmissions
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<b>Abstract</b>	The long run relationships between Taiwan semiconductor industries in each pre- and post- period of the internet bubble crash are investigated by stock return spillover, price volatility spillover and volatility asymmetry leverage effects of capital market in this paper. Those effects are examined by the multivariate EGARCH model. The empirical sample includes 37 traded stock prices of the integrated circuit (IC) design, semiconductor foundry, IC probe and packaging companies which have been indexed into upper, middle and lower stream index, respectively. The empirical results reveal that the event of the internet bubble crash indeed became an important turning point. The stock return and price volatility spillovers in pre-crash period are more relative than which in post-crash period. In pre-crash period, the middle stream is more significant than the upper and the lower streams for leading signal change of business cycle. Previous findings also confirm that the Taiwan semiconductor industries initialed from the pattern of original equipment manufacturer (OEM). In the post-crash period, the upper stream has deviated from the middle and the lower streams, and the relationship between the middle and the lower streams still keep on stable and close, indicating that the investors concentrate their focus on released information of each stream when the output value enhanced after the internet bubble crash.
<b>Key Words</b>	Semiconductor, Spillover, Asymmetry, Multivariate EGARCH, Internet Bubble