

# 從風險觀點探討確定提撥與確定給付 計畫之制度轉換選擇權\*

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在近來許多國家的公、民營退休體系由過去以確定給付制改為確定提撥制，爲了降低在確定提撥制下的退休金投資風險，在美國的佛羅里達州之公務人員退休體系中，存在著可供個人選擇是否轉換到確定給付制的機制。在本文的模擬中發現，當風險趨避程度越高則轉換至確定給付制的機率越高，轉換到確定給付制的高峰期會出現在開始工作的初期與屆臨退休之際等兩段期間。隨著工作期間的延長，個人轉換到確定給付制的機率越低，但仍可有效地提升退休金的所得替代率與達到降低退休金下方風險的效果，在加入退休制度初期不得轉換的限制之後，則會降低轉換到確定給付制的機率。

關鍵字：退休基金、制度轉換選擇權、蒙地卡羅模擬、資產配置

# The Switch Option between Defined Contribution and Defined Benefit

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## ABSTRACT

Around the world, defined contribution (DC) plans have been the primary trend in pension reform in both the public and private sectors. In an attempt to decrease the investment risk associated with DC plans, public employees are provided with an option to buy back the DB plan in the State of Florida in the U.S.A. From the simulation results, we find that the higher the level of risk aversion, the higher the probability to buy back the DB plan. During the employee's early years of service and as the employees near retirement, the probability of exercising the option is the highest. The probability of exercising the option decreases as the years of service increase; the option also increases the pension replacement rate and decreases the downside risk of the pension. The probability of exercising the option is lower when the option to buy back the DB plan is prohibited during the employee's early years of service.

**Key Words:** pension fund, switching option, Monte-Carlo simulation, asset allocation