關鍵詞：定期定額法、單筆總額法、年化報酬率、淨資產價值、開放式股票型基金

Abstract: This paper empirically compares the performance between Dollar-Cost Averaging (DCA) and Lump-Sum (LS) strategies in mutual fund investment. Most previous empirical studies find LS's performance surpass DCA's; however, the DCA strategy is advocated by many practitioners and long recommended by investment textbooks. This paper conjectures that only short-term investments (short than one year) examined by precedent articles and the simulating horizons containing the early time of stock market development might be the critical factors impacting their empirical results. In this paper, taking open-end equity funds traded in Taiwan from January 2000 to May 2006 as a sample, both the original and risk-adjusted annualized returns, where simple and compounded returns are calculated for each, across short- and long-term (1 - 5 year horizons) investments by DCA and LS are separately compared using paired-sample t- and nonparametric tests. Also, various beginning times for investing into Taiwan stock index are employed to perform the robustness check. The findings are that DCA possesses higher mean-variance efficiency than LS strategy in the long run. Adopting a DCA policy, the longer the averaging time, the greater the risk declines and terminal wealth increases; the reason may be that the funds' net asset values exhibit relatively higher volatility. Moreover, using the early-era stock prices enhances the LS's performance, revealing the price sequence may be a critical factor. Though the lower risk-free return, where the total amount is initially invested in this return and then gradually shifted to mutual funds in equal monthly installments by DCA, probably decreases DCA's performance and leads to LS slightly beating DCA, as that return boosts, DCA will outperform LS even if in the short term.

***Keywords*:** Dollar-Cost Averaging, Lump-Sum Investing, Annualized Return, Net Asset Value, Open-End Equity Funds

1. Introduction

Mutual funds are relatively popular financial instruments for individual investors now. They enable investors to pool their money and place it under professional investment management. The collective funds are invested systematically into other financial instruments to generate a portfolio. The portfolio manager or management team trades the funds' underlying securities, realizing a gain or loss, and collects the dividend or interest income. The investment proceeds are then passed along to