

Dynamic Asset Allocation with Narrow Framing / Loss Aversion*

Ching-Fan Chung

Department of Quantitative Finance, National Tsing-Hua University

Chung-Ying Yeh

Department of Finance, National Chung Hsing University

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We study a dynamic asset allocation problem based on a generalized intertemporal preference that allows narrow framing/loss aversion to enter the utility function directly and a generalized specification for the investment opportunity set with stochastic volatility. The optimal dynamic allocation problem is solved in an analytically tractable way. We find that introducing narrow framing/loss aversion for the myopic investor will reduce stock demand when the odds of earning excess returns are smaller than the degree of loss aversion. However, the narrow framing/loss aversion may increase stock demand for the non-myopic investor if he/she is vigilant enough to exploit changing investment opportunities reflected in the volatility feedback effect.

Key Words: Dynamic Asset Allocation, Narrow Framing/Loss Aversion, Volatility Feedback, Hamilton-Jacobi-Bellman Equation, Ito-Tanaka Formula, Brownian Local Time, Continuous-Record Asymptotics.

JEL No.: D81, D83, G11, E21

「政策與管理意涵」

- 1.當投資人的投資決策行為受到行為心理因素如框架效果/損失趨 影響時，對市場可能會產生過度交易及股價波動過鉅等現象。投資人也因此可能不願進入市場。
- 2.就政策與管理面來看，政府須降低市場波動風險，以減少投資人受到行為心理因素影響，方能多鼓勵投資人進場投資。

* Corresponding author: Chung-Ying Yeh: Department of Finance, National Chung Hsing University, 250, Kuo-Kuang Road, Taichung, Taiwan. Tel:886-4-22855308. email: ccyeh1@dragon.nchu.edu.tw. Ching-Fan Chung: Department of Quantitative Finance, National Tsing-Hua University, Taiwan. Fax: 886-3-562-1823, email: cfchung@mx.nthu.edu.tw. We would like to thank the comments by Jin-Chuan Duan, San-Lin Chung, Hong Zhang, Robert Anderson, and seminar participants at National Taiwan University, and the participants at the 7th NTU International Conference on Economics, Finance and Accounting, the 3th Annual Conference of Risk Management Institute, National University of Singapore, and the 2010 International Symposium on Financial Engineering and Risk Management at Taipei. The usual disclaimer applies.

框架效果 / 損失趨避下的動態 資產配置

鍾經樊* 葉宗穎

我們研究一個動態資產配置模型，其中模型納入了一個包括 loss aversion 及 narrow framing 的一般化效用函數。投資機會集合則考慮了隨機波動模型。這個一般化的動態模型可以計算出一解析解。我們發現對一位 myopic 投資人時，導入 loss aversion 及 narrow framing 會降低股票的需求，條件是當心中主觀的 odd ratio 低於 loss aversion 的程度。然而，narrow framing 及 loss aversion 可以增加 non-myopic 投資人的股票需求當波動反饋效果能顯著的影響投資人的投資機會集合。

關鍵詞：動態資產配置、框架效果 / 損失趨避、波動反饋。

* 鍾經樊，清華大學計量財務金融系教授；葉宗穎，中興大學財務金融系副教授。