摘要

本研究著重於分析發行大量長年期利率敏感型契約、高財務槓桿比例的人壽保險業中公司經理人之投資決策，發現台灣壽險業亦存在 Canner et al.(1997)提出之資產配置迷思，亦即風險性資產中債券與股票之比率於不同壽險公司間有差異，與共同基金分離理論中陳述之風險態度不同之投資人所持有之債券與股票比率應相同不相符。本文嘗試以 Sorensen(1999)提出之擬似動態規劃法(Quasi-dynamic Programming)最適化到期之效用函數，試算經理人於股票及不同到期固定收益債券之最適持有比例。且詳細探討不同風險偏好及投資期限對於壽險公司投資組合之影響。將業主權益之最適投資策略加上負債之複製投資組合成爲策略性資產配置結果，並將其與目前台灣壽險公司之資產配置做比較。研究結果顯示：

1. 以擬似動態規畫法求得之最適投資組合於不同風險態度下皆爲長期債券以及股票。當經理人之風險趨避程度增加時，投資於股票之比例會減少、投資於債券之比例會增加。
2. 比較台灣壽險公司之債券與股票配置比例與本研究之結果發現，本資公司之風險態度較外資公司積極，本資公司應提高其債券之持有比例。

本研究最後以 Bajeux-Besnainou et al. (2001)提出之資產配置迷思解釋說明本資公司與外資公司持有之債券與股票比率之所以不同非因資產配置迷思之存在，本資公司與外資公司於風險性資產中持有之債券與股票比率是相同的，但因風險態度較爲趨避之公司，投資於風險性資產比率下降、提高避險部位之配置，導致整體之股票與債券比率增加。

關鍵字：資產負債管理、策略性資產配置、擬似動態規劃法。

Abstract

The focus on this research is analyzing the investment decision of the manager of the life insurance industry, which is with high leverage ratio and large amounts of long-term and interest rate sensitive policies. We find that there is an asset allocation puzzle which was observed by Canner et al. (1997) in Taiwan life insurance industry. An asset allocation puzzle is that popular investment advices which recommend a bond/stock ratio that varies directly with risk aversion are inconsistent with the separation theorem.

In this research, we try to use quasi-dynamic programming which was put forward by Sorensen (1999) to optimize the utility function, and we compute the proportions of stock and bonds with different maturities in the optimal portfolio. And we analyze the effect of the investment portfolio when we change the risk preference and the investment horizon. We compare the asset allocation of life insurance companies in Taiwan and the result of strategic asset allocation which is combined the optimal investment strategy of stockholder's equity and replicated portfolio of liability. The results of this research are:

1. The optimal investment portfolio is long-term bond and stock at different risk attitude. When the level of risk aversion is increasing, the proportion of stock decreases and the proportion of bond increases.

2. After comparing the result of this research with the asset allocation of life insurance companies in Taiwan, we can find the risk attitude of local companies is more active than foreign companies. We suggest that local companies should raise the proportion of bond they investment in.

In the final part of this research, we quote Bajeux-Besnainou et al. (2001) to explain the asset allocation puzzle. We illustrate that the difference of the bond/stock ratio between local companies and foreign companies doesn’t result from the existence of the asset allocation puzzle. The bond/stock ratio in risky assets of local companies and that of foreign companies are the same, but risk-aversion companies will decrease the proportion of risky assets and increase the proportion of hedging portfolio. This results that the whole bond/stock ratio of risk-aversion companies is higher than any others.

Key words: asset liability management, strategic asset allocation, quasi-dynamic programming