

MCFS Academic Research Grants Program

The Characteristics and Performance of Listed Managed Investment Companies in Australia

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1. Introduction

This project will examine Listed Managed Investment Companies in Australia. These managed investment companies differ from traditional managed funds in that they are listed on the ASX and they are closed-end funds, that is, their capitalization is fixed. Investors invest in these companies by purchasing their shares, either in an IPO or through the secondary market. Currently, these companies have a market capitalization of around \$207 Billion. Despite representing a non-trivial segment of the Australian investment management industry, there has been no published academic research on these companies. This project will identify stylized facts and investigate the performance of these companies.

2. Background and Aims of Project

In Australia, investment companies are one of the oldest forms of managed investments, having first been listed on ASX in 1928. As at 30 June 2007, there were 177 Listed Managed Investment (LMI) companies with assets totaling approximately \$207 billion listed on the ASX, offering investors access to portfolios of Australian shares, international shares, real estate, fixed interest, infrastructure, private equity, and alternative investments.

An important characteristic of LMIs is the closed-end structure of the funds: unlike traditional managed funds, most LMIs are not open for applications or redemptions by investors, and therefore have a fixed or "closed" capitalization. Liquidity is provided through secondary trading of the shares on the ASX. LMIs are therefore not subject to cash inflows and outflows and consequent changes to the size of the investment pool¹.

As the supply of LMI company shares is effectively inelastic, the share price will be a function of the supply and demand for the shares in the market, and may or may not reflect the value of the underlying investment assets.

¹ The investment pool can however be increased through fund raisings such as rights issues, placements, the issue of debt securities or the use of some type of leverage facility.

LMI companies therefore have characteristics similar to the closed-end funds available in the USA and the UK and which have been subject to much academic research. Dimson and Minio-Paluello (1999) document over 100 empirical and theoretical studies of closed-end funds, with most of the studies focusing on possible explanations for the observed “closed-end fund discount”. This discount arises where the shares of the investment company trade for less than the Net Tangible Asset backing (NTA) of the underlying asset portfolios.

Despite the number of funds in existence in Australia and the amount of funds under management, there appears to be no academic research into this segment of the Australian investment market. This is surprising given the volume of research into closed-end funds undertaken in the US and UK markets. Moreover, in Australia the mismatch between the companies' share prices and the value of the underlying investments frequently takes the form of a premium, rather than the discount that is prevalent overseas.

The aims of this project therefore are to:

- provide stylized facts on Australian Listed Managed Investment companies to provide a base for future theoretical and empirical work;
- investigate whether there is evidence of performance persistence among LMI companies, both at the individual fund level and at the asset class level
- examine the time-series properties of LMI share price premiums/discounts to NTA;
- examine the cross-sectional distribution of LMI share price premiums/discounts to NTA; and
- investigate the impact of governance characteristics on fund performance.

3. Significance and Innovation

The nature of this research is consistent with research program areas of the Melbourne Centre for Financial Studies. This project is significant and innovative in that it investigates a hitherto unresearched segment of the Australian investment market; studies to date of managed fund performance in Australia have used data on unlisted funds, both superannuation funds and non-superannuation funds. The characteristics of LMI, in particular their listed company status and closed-end structure, means they operate under different constraints and different incentives to traditional managed funds.

While the LMI sector has received little academic attention, investor interest has been increasing notably over the last decade: market capitalization of the LMI sector has grown from around \$20 billion in 1997 to around \$207 billion in 2007, and thus represents a non-trivial share of the managed investment industry.

The outcome of this analysis will be significant and innovative because:

1. It will strengthen our understanding of the managed investment industry;
2. It will investigate an area of the managed investment industry that has not been subject to rigorous academic analysis. The findings will be important to investors and investment advisors in determining their investment strategies;
3. It will develop and use a new data set, and thereby avoid data mining problems;

4. It will result in international conference presentations and extend the existing literature with publications in quality international refereed journals.

4. Description of Approach

LMI company data is available from Datastream and Huntley. We will examine the returns of Australian Listed Managed Investment companies with a view to identifying whether there is evidence of performance persistence among LMI companies, both at the individual fund level and at the asset class level. We will employ time-series and panel data techniques in analysis of this question. While time-series analysis is well documented in the literature (for example, Brown and Goetzman, 1995; Carhart, 1997; Fletcher and Forbes, 2002) our use of panel data analysis will allow us to focus on the fundamental differences that exist between asset classes.

We will also examine the time-series properties of LIC share price premiums/discounts to NTA; we will use simple time series models, including GARCH models to deal with time-varying volatility. We envisage detailed analysis of the premium/discount, taking account of company specific information such as management compensation, governance characteristics and auditor quality.

$$\begin{aligned}
 NTA_t &= X_t' \beta + \varepsilon_t \\
 h_t &= \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 h_{t-1} \\
 &(1)
 \end{aligned}$$

Where X_t is a vector of LMI company descriptive variables, β is a vector of estimated parameters and ε_t the residual term from the estimated model. The GARCH model focuses on predicting the volatility for time t, h_t , on the basis of ARCH terms, ε_t^2 , and GARCH terms from time t-1, h_{t-1} . The estimated parameters consist of the vector $(\beta, \alpha_0, \alpha_1, \alpha_2)$.

While the base case GARCH model will be used in analysis we will also include other models in the GARCH family including the exponential and the asymmetric forms.

Finally, we examine the time-series cross-sectional distribution of LIC share price premiums/discounts to NTA using panel data techniques. We are particularly interested in explaining the cross-sectional variation that is attributable to management characteristics of the companies.

$$\begin{aligned}
 NTA_t &= Y_t' \delta + x\lambda + y\kappa + \eta_t \\
 &(2)
 \end{aligned}$$

Where Y_t is a vector of company specific management variables, x is a variable to capture cross-sectional heterogeneity and y is a variable that capture variation over time. The later two variables consist of dummies in the case of fixed effects panel data analysis and variables in the case of random effects analysis. The variable η_t is the residual term for the model. The estimated parameter matrix is $(\delta, \lambda, \kappa)$.

References

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