

**THE SENSITIVITY OF RETURNS
OF NON-BANK FINANCIAL
INSTITUTIONS TO THE FIXED
INCOME AND EQUITY MARKETS**

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SYNOPSIS

Researchers have over-concentrated on the relationship between bank stock returns and interest rate changes without paying much attention to the impact of interest rates on non-bank financial institutions, in particular the insurance and real estate industries. This research attempts to examine the sensitivity and importance of interest rates and stock market price behaviour on non-bank financial institutions across three countries: the United States, the United Kingdom and Australia.

The results provide a different perspective on the relationship non-bank financial institutions have with the fixed income and equity markets, and sheds new light on their long-run interaction. For the insurance market, interest rate movements seem to be just as important as the stock market in explaining the variation of insurance portfolio returns in the United States. However, there is only a weak relationship between interest rate changes and insurance portfolio returns in the United Kingdom and Australia. The liquidity problem in the United Kingdom and small sample size issues in Australia may have influenced the final results. In addition, size and profitability of the insurance companies do influence the significance of interest rate coefficients. This suggests that the financial makeup of a firm can modify or influence the sensitivity of stock returns towards interest rate changes. For the securitised property market, once structural breaks are accounted for, the results show that securitised property is driven by both interest rate and stock market changes, regardless of the type of financial institutions being examined. Evidence also points to companies with different leverage ratios and companies that are tax-exempt entities are still all influenced by both the equity and

fixed income markets over the long-run period, although the influence these factors have does vary across time.

A major contribution of this study clearly points to the relative weightings that portfolio managers may now consider to be appropriate with regard to their holdings of bonds, equities and non-bank financial institutions in their portfolios for both their tactical and strategic asset allocations. For example, it may not be a wise decision to invest significant amounts of capital in both securitised properties and fixed income securities given that both instruments are cointegrated in the long-run. Although this research was primarily conducted prior to the current economic situation, some of the major conclusions from this research are particularly relevant today. Moreover, with better understanding of the sensitivity among security prices and various financial risk factors, financial managers are able to manage and control their companies' risk exposure towards interest rate risk and stock market conditions more effectively and efficiently.

DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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