
5. THE CROSS SECTION OF GLOBAL PROPERTY SHARE RETURNS

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1. INTRODUCTION

International real estate investment is on the rise. Pension funds and other institutional real estate investors, who have traditionally looked only at their own real estate markets for investment opportunities, are increasingly looking across national borders. For investors based in countries like the Netherlands and the United Kingdom, this is just another step in a rather old tradition, but for United States investors, international property investment is really a rather new phenomenon.

This new international interest is helped considerably by the development of the global property share market, since this market allows investors to build up exposure to foreign property markets in a relatively liquid and cost-efficient way.

The increased investor interest in the international property share markets is accompanied by a growing academic literature in this area. This literature has devoted a lot of attention to the portfolio effects of international diversification through property shares. Early examples are Giliberto (1990) and Giliberto and Testa

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(1990), who both use the stock returns of publicly traded property companies to demonstrate the risk-reduction potential of international diversification. They also calculate efficient international portfolios. Eichholtz (1996) compares the diversification benefits of international property share investments with international investments in stocks and bonds, and concludes that these benefits can be substantial. The nature of the risk premiums in international real estate returns has had less attention in the literature. Except for Eichholtz, Huisman, Koedijk and Schuin (1998), who show that continental factors are important drivers of international property share returns, this is still largely uncharted terrain.

This contrasts sharply with the availability of literature regarding the risk premia of United States Real Estate Investment Trusts (REITs). The first papers to study REIT returns using a multi index approach were Titman and Warga (1986) and Chan, Hendershott and Sanders (1990). The former paper uses a CAPM specification and a five-factor APT model to explain REIT returns and investigates whether the choice of either model has implications for REIT performance measurement. Since both models are unable to find significant risk adjusted abnormal returns, hard conclusions cannot be drawn regarding this issue. The paper does show, however, that a multi-index model has better explanatory power than the single index CAPM for US REITs. Chan, Hendershott and Sanders (1990) have found that REIT betas derived from a market model are 0.55 on average for the period 1980–1987, and that the explanatory power of the market returns depends to a large extent on the specification of the market index.

Taking a longer sample period, 1978–1996, Sanders (1997) confirms these results. To determine REIT betas, he uses the S&P 500 stock index and some small stock indices as independent variables in a single index model. He finds REIT betas of approximately 0.56, independent of the market index used. The R^2 of the market model varies from 0.39 when the S&P 500 is used to 0.52 for one of the Wilshire small stock indices. However, the explanatory power of the model is highly dependent on the time period chosen. Sanders also uses the Fama and French (1992) model, which is a multifactor model like the one used by Chan, Hendershott and Sanders (1990) but which also includes the book-to-market ratio for each company in the dataset. He found that the Fama French (1992) model generates an R^2 of 0.58 for the NAREIT Equity Index, while the standard CAPM specification generates an R^2 of 0.39. The better performance of the Fama French model in explaining REIT returns also holds relative to a CAPM specification using a small firm index. These findings are confirmed by Peterson and Hsieh (1997) and Eichholtz, Schweitzer and Op 't Veld (1999), who conclude that the risk factors in the returns of REITs are similar to those found for stocks by Fama and French (1992).

Ling and Naranjo (1997, 1998) also examine the determinants of United States commercial real estate returns. They use a multifactor model to investigate which systematic risk factors are priced in real estate markets, and they do that for real estate stocks as well as for directly held property. Their sample of real estate stocks includes not just REITs, but also stocks of other real estate related companies.