

Systematic Risk and Diversification in the Equity REIT Market

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Most analyses of real estate investment risk and return behavior use appraisal-based data. Prior to the recent extraordinary increase in the size of the equity REIT market, there was very little investor interest in examining the stock market-based data. Burgeoning interest in the REIT market now calls for a reexamination of key risk and return issues using real estate stock market data. This paper discusses the relations between the distributions of REIT holdings by property type and location with market-based measures of systematic risk and diversification.

A unique data sample is created by combining information provided by the National Association of Real Estate Investment Trusts (NAREIT) on individual REIT property type holdings and the location of their investments with standard stock return data used in financial economics research. Four important findings about systematic risk and diversification in the equity REIT market arise from this work.

- (1) The systematic risk of equity REITs varies by the type of property in which they invest. Specifically, the greater the percentage of investment in retail properties, the higher the firm's beta. Our findings indicate that equity REITs owning only retail properties tend to have betas well over 50% larger than those of REITs specializing exclusively in industrial properties. Consequently, investors should interpret with care the relatively high long-term returns achieved by retail-oriented REITs in the public (and private) markets because part of the higher return appears to be compensation for greater systematic risk. It may be that percentage lease clauses causing landlords to share directly in their tenants' cash flows are associated with the higher betas
- (2) The stock market data provide no evidence that REIT diversification across property types or broad geographic regions actually results in meaningful diversification. Our results can be taken to support critics' views that so-called 'naive' diversification strategies along such lines are just that--naive. More interesting is the fact that we also find no stock market impact of more sophisticated diversification strategies across economic regions. Unfortunately, insufficient data prevent us from determining whether these strategies are themselves naive.
- (3) An even simpler measure of diversification, the number of properties owned by the REIT, is the only one that has any significant relation to REIT return behavior. It is positively correlated with a standard market-based measure of diversification--the R^2 from a simple market model regression. The variance of total return also is systematically lower the greater the number of properties owned by the REIT.
- (4) The liquidity of REITs, as measured by their bid-ask spreads, is much more related to general stock market liquidity than it is to real estate market liquidity. That is, the bid-ask spreads on REITs are determined primarily by firm size and their exchange listing, with smaller issues and NASDAQ-listed firms having larger bid-ask spreads (relative to firm share price). This relation holds in good and bad real estate markets. This is important for real estate investors because it implies that investors will be able to partially restructure their real estate stock portfolios at bid-ask spreads determined by normal stock market factors regardless of the health of the underlying property markets.