

The Determinants of REIT Institutional Ownership:
Tests of the CAPM vs. Individual Stock Attributes

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Executive Summary

The purpose of this study is to examine the determinants of institutional investment demand for equity REIT common stocks. The overriding objective is to determine whether institutional investment decisions are influenced by traditional CAPM model attributes such as beta; by individual stock attributes such as standard deviation; or by an analysis of financial ratios. We first estimate the financial institution demand function for REITs using the mean return and CAPM risk measures (beta and standard error of the estimate) for REIT returns. We then estimate the demand function for the same set of REITs using the first four moments of the returns distribution (mean return, standard deviation, skewness and kurtosis) calculated in the conventional fashion. Finally, we estimate the demand function using a common set of REIT financial ratios on the same set of REIT common stocks.

Our results indicate that the demand function for REITs varies widely across institutional investor types and time period. However, we find a strong preference for larger REITs (as measured by market capitalization) across all time periods and institutional investor types studied. The findings of the study clearly indicate that size is the primary factor in the determination of ownership by institutions.

The prevailing justification for real estate investment within a portfolio theory context is that real estate adds value due to its relatively low correlation with various stock market indices. Hence, one would expect institutional investors to exhibit a preference for REITs with low beta coefficients. Surprisingly, we find that beta makes only a marginal contribution to the institutional demand function for REITs, and that institutions actually prefer REITs with high betas rather than low betas. This leads to the conclusion that diversification benefits are not a primary consideration for REIT institutional investors.

Since we find only weak evidence for the utilization of CAPM risk measures, an appropriate next step is to investigate the role of firm-specific risk measures in the institutional demand for REITs. Once again, however, our findings are sporadic and generally weak. In contrast to the CAPM risk measures, however, the varying signs obtained from the model coefficients indicate that institutions hold varied opinions on stand-alone risk. For example, the combined sample results for 1994-1996 indicate that standard deviation is significant only for insurance companies and investment advisors, but the signs are positive and negative respectively. This indicates a preference for firm-specific risk on the part of insurance companies, an aversion to firm-specific risk on the part of investment advisors, and a general indifference on the part of all other institution types.

Finally, the analysis of financial ratios finds sporadic significance for the various measures across time periods and institutional types, with firm size continuing to be the dominant variable in the equations. The combined sample results indicate that banks prefer high return on equity (ROE) and low debt-to-equity ratios, while insurance companies prefer high ROE and high dividend yields. Surprisingly, we also find that both banks and insurance companies tend to avoid REITs with high average stock returns. This suggests that they are

willing to sacrifice total investment return in order to achieve other investment objectives such as an equity heavy capital structure or a high dividend payout. In addition, the financial ratios results indicate that investment companies use only two variables in the selection process, preferring large REITs with high average stock returns. Investment advisors exhibit a similar behavior, but add an aversion to the standard error of the estimate and REITs listed on the AMEX exchange. Since both investment companies and investment advisors are heavily focused on stock returns, this implies a short-term, return-driven focus. Hence, investment companies and investment advisors would appear to be more transient in their ownership of REITs than are institutions such as banks and insurance companies.

Overall, the findings of this research indicate that equity REITs seeking increased institutional ownership should be predominantly concerned with market capitalization. We find no evidence that diversification benefits matter to institutions. In fact, we find a counterintuitive, albeit weak, affinity for REITs with the highest correlation to the S&P 500. Similarly, firm specific risk measures appear to have little impact on institutional investment decisions. Analysis of financial ratios indicates widely varied preferences on the part of institutional investor types. We conclude that institutions which are primarily focused on stock returns (i.e. investment companies and investment advisors) will tend to be more transient than institutions which focus on attributes such as capital structure and dividend yield (i.e. banks and insurance companies). However, the overriding factor in the institutional ownership of REITs is clearly **size**.