RERI*Summary*

Title:	**A New Method to Estimate Risk and Return of Commercial Real Estate Assets from Cash Flows: The Case of Open-End (Diversified) Core Private Equity Real Estate Funds**
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This paper "builds on existing methods to estimate abnormal performance of real estate assets from cash flows to strengthen the position that open-end core real estate funds earn higher (albeit levered) returns". Specifically, this paper attempts to use property specific cash flow history as well as acquisition and disposition information to calculate risk-adjusted performance measures (Jensen's alpha) for individual investments in open-end core property funds. These measures should be of great interest to institutional investors and the consultants that advise them on manager/fund selection as they would provide a way to quantify the degree to which managers add value to the investment beyond the decision to use financial leverage.

The paper provides an overview of U.S. open-end core property funds and discusses the reasons why these funds are of interest to investors. These reasons include: diversification by property type and geography, greater liquidity than closed-end funds, and more aggressive exposure to commercial property performance through the use of financial leverage. This discussion also highlights the rapid growth of the core fund universe over the period 1978 to 2015.

The paper next describes the methodology and data used for the calculation of deal specific performance measures. In this discussion, the authors observe that it would be a simple exercise to evaluate core property fund managers using a conventional capital asset pricing model framework if the managers reported individual property level cash flow and valuation information; the resulting alpha and beta coefficients from such an analysis would reveal the value-added by the manager and the risk taken by that manager relative to a market benchmark.

The data used in this paper comes from the NCREIF property database and represents the subset of NCREIF properties held by open-end core funds. To avoid any potential appraisal bias in the return calculation for individual properties, the data are further limited to properties in core open-end funds that were sold thereby providing a market based terminal value to the individual investment. In all, the paper evaluates 810 individual investments.

The results from this study show that "the Jensen's alpha for the U.S. open-end core funds are, on average 1.11 percentage points greater than the true deal-level alphas over the entire period 1978-2015". The authors also decompose the Jensen's alpha into the component pieces including the deal-level alpha, the return from sector average leverage, the return from incremental leverage above the sector level and the return from excess risk taking. The authors find that "not more than one-third of Jensen's alpha is accounted for by the true deal-level alpha", "12.6% of Jensen's alpha comes from financial leverage" and 54.3% of Jensen's alpha comes from the return from excess risk. In their conclusions, the authors offer the observation that "institutional investors prefer diversification over concentration of ownership because of their concern with minimizing portfolio risk" and that "positive use of leverage will cause an overstatement in Jensen's alpha relative to deal-level alpha, but it also will allow the fund manager to diversify the investment portfolio".