What Drives Building-Level Investment Returns?

by

Serguei Chervachidze[1]
CBRE Econometric Advisors

Jeffery Fisher[2],
National Council of Real Estate Investment Fiduciaries

William Wheaton[3]
CBRE Econometric Advisors,
Department of Economics
Massachusetts Institute of Technology

Abstract

*[**Draft:***
This paper is an early work-in-progress, and the findings are preliminary and subject to updating, given further research by the authors]

In this paper we examine the drivers of office building-level returns utilizing a large proprietary database of building-level investment returns for office properties from NCREIF. We utilize two stages: first, we start by utilizing panel data regression-based attribution analysis to apportion the relative contribution of building-level investment performance between fixed unique building characteristics, fixed submarket characteristics, dynamically changing local characteristics, market-level rental trends, and national property market as well as economic trends.

We find that fixed property characteristics explain only 20% of variation in building-level NCREIF total returns, market level rental trends account for 13% of variation, while national economic and property market trends explain over 32% of variation. Most significantly, dynamic property and neighborhood effects account for 53% of variation in total property performance. Results are similar for appreciation and income returns. In the second stage, we attempt to explain the variation in property-specific fixed effects from the first stage by modeling these coefficients as a function of a set of set of market, submarket, and property variables. We find that these variables explain a very small share of variation in investment performance due to fixed effects, suggesting that fixed effects capture much more information than our set of characteristics.

Our findings add further insight to the drivers of investment performance in CRE and have a number of implications for devising investment strategies in the sector. One key implication is the inefficiency of a simplistic "theme" investment strategy, as it relies on fixed unique market of building characteristics that account for a small share of performance differences and, hence, provide little utility in identifying above-market return opportunities.

[1] CBRE Econometric Advisors, 260 Franklin Street., Suite 400, Boston, MA 02110, Phone: (617) 912-5218, Fax: (617) 912-5240, serguei.chervachidze@cbre.com

[2] National Council of Real Estate Investment Fiduciaries, fisher@indiana.edu

[3] Department of Economics, MIT, E52-252B, 50 Memorial Drive, Cambridge, MA 02142-1347, Phone: (617) 253-1723, Fax: (617) 253-6915
wheaton@mit.edu