



Investing in Public and Private Commercial Real Estate Equity

Executive Summary

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For many years, large plan sponsors have included commercial real estate as a regular part of their investment portfolios of domestic stocks and bonds, international securities and other alternative investments.

These commercial real estate investments most often have been made using a variety of separate account or commingled investment vehicles that acquire private equity interests in income producing commercial properties. More recently, some plan sponsors have allocated their real estate investments among both private equity investments and the equity securities of publicly traded real estate companies, including real estate investment trusts (REITs). Given the alternative choices available today for implementing a real estate allocation, it has become more important that investment managers fully understand the unique attributes of the returns to each of these choices, as well as their appropriate roles in a diversified investment portfolio.

Ibbotson Associates, a leading authority on asset allocation, assessed the effect on overall portfolio performance of adding public and private commercial real estate investments to portfolios comprising typical core assets such as large- and small-cap stocks, international stocks, long-term bonds and cash.

To measure total returns to public real estate securities, Ibbotson used the NAREIT Equity REIT Index. However, to measure the performance of private real estate investments, Ibbotson estimated two different series of total returns based on two transactions-based price indexes developed by a team of well-known academics in the field of real estate research.¹ The first price index uses only transactions-based property reports from the well-known National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI) but makes no adjustment for the effect of variations in transactions volume that typically occur in strong and weak markets. The second price index uses the same NPI transactions information but also estimates what transaction prices would have been had the volume of transactions (or liquidity) been constant in both strong and weak markets.

To assess the relative roles and contributions to performance of public and private commercial real estate investments in mixed asset portfolios, Ibbotson

¹J. Fisher, D. Gatzlaff, D. Geltner and D. Haurin (2002), "Demand and Supply Indices for Asset Markets: An Application to Develop a Constant-Liquidity Index for Commercial Real Estate," forthcoming, *Journal of Financial Economics*.



used traditional mean-variance portfolio optimization procedures that are used widely today in the development of efficient investment strategies. The Ibbotson analysis addressed a number of important questions. For example, how should assets be allocated to real estate as a core asset in a diversified investment portfolio? How do REIT and private real estate returns interact when combined in diversified portfolios? And, how is overall portfolio performance affected when REIT stocks and private real estate investments are brought together in the investment portfolio?

The analysis revealed a number of interesting and important conclusions. Among them:

- REIT stocks and private real estate investments have similar, though not identical, long-term investment characteristics. Their similarities imply that each may be viewed as a close substitute for the other, while their differences suggest that each brings unique value to the portfolio.
- Optimal investment portfolios include a significant allocation to commercial real estate at most levels of risk, reinforcing the view of commercial real estate investment as a core asset.
- The most common allocation to commercial real estate includes a combination of both REIT stocks and private real estate equity investments.
- REIT stocks and private real estate investments are best viewed as complementary investments because mixed asset portfolios are more efficient when REIT stocks and private real estate investments are combined.
 - In general, allocations to both REIT stocks and private real estate investments range from about 5 percent at low risk levels to around 15 percent at moderate risk levels before diminishing sharply at the highest levels of risk.
 - Total allocations to public and private real estate investments in optimal portfolios are higher when REIT stocks and private real estate investments are used in combination than when either is used separately. When used separately, allocations to either REIT stocks or private real estate investments across most levels of risk range from zero percent to 15 percent. When used together, the combined allocation to both REIT stocks and private real estate investments range from 5 percent to 25 percent.
 - At most levels of risk, overall investment returns are increased 8-27 basis points when both REIT stocks and private real estate investments are used together in the portfolio compared with increases of 5-20 basis points when either public or private real estate investments are used separately.

Data for REITs used in this study are based only on publicly traded REITs.



