The Role of Commercial Real Estate in a Multi-Asset Portfolio

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The poor performance of real estate in recent years has led some people to question whether it is still appropriate to include real estate in a multi-asset portfolio with more traditional investment alternatives such as stocks and bonds. The fact that real estate values have fallen in recent years, leading to low ex-post (historical) rates of' return does not, however, suggest that less real estate should be held in a portfolio.

The traditional arguments for including real estate in a multi-asset portfolio include:

1. Real estate has a low correlation with stocks and bonds.
2. Real estate has historically had a high risk-adjusted rate of return relative to stocks and bonds.
3. Real estate has a positive correlation with both anticipated and unanticipated inflation and therefore provides an inflation hedge.

The above studies imply that including real estate in a multi-asset portfolio results in a more "efficient frontier," e.g., less variance at each level of return.

Is Real Estate Still Uncorrelated with Stocks and Bonds?

Stocks and bonds have performed well in recent years, while real estate has performed poorly. Thus, it is clear that real estate is still not positively correlated with stocks and bonds! But this is why we diversified across asset classes to begin with. We don't know ex-ante which asset class will out-perform the others. All we know is that all asset classes are not likely to perform well (or poorly) at the same time. Thus, the real question is whether we have reason to believe that real estate will continue to have low or negative correlations with stocks and bonds. This is likely to be true because these asset classes do not react the same way to unexpected changes in economic conditions that affect the market. Unexpected changes in interest rates, unexpected inflation, unexpected changes in exchange rates, etc., have historically had a differential affect on real estate versus other asset classes, and there is no reason to believe that this will change. The fundamental characteristics of real estate, stocks and bonds have not changed.

Should Real Estate Offer Adequate Risk-Adjusted Returns in the Future?

Historically, direct investment in real estate seemed to outperform stocks and bonds on a risk-adjusted basis for a long period of time. The more recent experience of real estate suggests that the higher returns may have been justified on the basis of risk factors that are not fully captured in the mean-variance framework of modern portfolio theory (MPT). These risk factors include lack of liquidity, legal complications, and potential agency problems of many of the ownership structures. Real estate may have appeared to outperform stocks and bonds on a risk-adjusted basis in the past because these other risk factors were not adequately measured.

Real estate has now gone through a period of severe capital shortage where reported returns (including those that are appraisal-based) have been affected by the lack of liquidity in real estate markets. The good news may be that we now have a more realistic picture of the risk and return for real estate relative to other assets. That is, we may have more realistic risk and return measures for asset allocation decisions. By including the more recent performance of real estate in a portfolio optimization model, recent studies show that about 10% to 20% of the portfolio should be allocated to real estate. This is more in line with conventional wisdom than the results of many of the studies done prior to this time period.

Although declining real estate values in recent years has led to lower historical rates of return, we should expect the current market value of the property to provide a competitive risk-adjusted rate of return to investors who purchase the property today. There is no theoretical reason to believe, ex-ante, that real estate should not perform as well as stocks or bonds on a risk-adjusted basis - assuming risk and the appraised value are appropriately measured. Indices like the Russell-NCREIF Index should not be expected to continue to fall unless appraised values have not been fully written down to current market values.

Although we have much to learn about measuring real estate risk, there is no reason to believe that the overall riskiness of real estate as an asset class will be greater in the future. In fact, as the real estate market becomes more liquid and more information on its performance becomes available, the real estate market may become less risky. Furthermore, with most of the favorable tax benefits of real estate removed by the 1986 Tax Reform Act, there is little risk that any future tax law change will have an unfavorable impact on real estate values.

Is Real Estate Still an Inflation Hedge?

Investments that are positively correlated with inflation provide an inflation hedge (preserve the real rate of return). Real estate has traditionally been an inflation hedge. This has not held in recent years when vacancy rates are high and markets have been overbuilt. This should not be surprising if we examine the reasons that real estate would be an inflation hedge. These are as follows:

1) Construction (building replacement) costs tend to increase with inflation.
2) Market rents can be increased as the building value increases.
3) When supply and demand are in balance (and new construction is feasible), the forces of market equilibrium tend to equate building value with building cost.
4) Lease provisions, such as gross leases with CPI adjustments and/or expense pass-through provisions, net leases, and percentage rents for retail leases, allow contract rents to move with inflation.

Thus, we should expect real estate to again be an inflation hedge when supply and demand are back in balance and new construction is feasible. In fact, if replacement cost has been rising at the inflation rate even though property value has not, real estate values may have to increase more rapidly than the rate of inflation to restore the equilibrium relationship between value and cost.

The Emerging Role of REITs

There has been an increasing interest in REITs as an alternative to direct investment in real estate. The allure of REITs comes from the increased liquidity and market pricing (versus appraised values). On the other hand, because REITs are publicly traded, they appear to behave more like other publicly traded assets, especially small cap stocks. When risk is decomposed into cash flow risk and discount rate risk, however, it appears that cash flow risk accounts for the major portion of the unexplained risk for equity REITs, whereas discount rate risk accounts for most of the variation in small cap stock returns. This suggests that real estate returns are much more dependent on factors in the space market, which affects rent levels, than factors that affect the discount rate in the capital market. Thus, REITs may be subject to different risk factors than small cap stocks and provide diversification benefits to a portfolio that already contains small cap stocks. Although REITs may not be a substitute for direct equity investment in real estate, they are likely to play an increasing role in multi-asset portfolios.

Conclusion - Why Real Estate Today?

Modern portfolio theory hasn't changed! (It is now *standard* portfolio theory.) An asset class that is significant in size and which tends to be uncorrelated with other assets still provides diversification benefits in a multi-asset portfolio. In the long run the return from real estate should be commensurate with its risk (measured properly). The fact that real estate values have fallen in recent years, leading to low ex-post (historical) rates of return does **not** suggest that less real estate should be held in a portfolio. Although we have much to learn about measuring real estate risk, there is no reason to believe that the overall riskiness of real estate as an asset class will be greater in the future. In fact, as the real estate market becomes more liquid and more information on its performance becomes available, the real estate market may become less risky.

Although declining values lead to lower historical rates to return, the lower value also implies that the expected rate of return may be higher in the future. At least, we should expect the current market value of the properly to provide a competitive risk-adjusted rate of return to investors who purchased the property today. There is no theoretical reason to believe, ex-ante, the real estate should not perform as well as stocks or bonds on a risk-adjusted basis.