

Making the Case for Diversified Real Estate – Risk, Return & Correlations

The Conclusions

- 1) Diversified real estate funds have historically been effective tools to help lower the overall risk of an equity portfolio.
- 2) Over the past 29 years, diversified real estate, as represented by the DJ Wilshire REIT Index, has had a similar risk/return profile¹ as that of the S&P 500 (index of large company domestic equities); a 13% annualized return with a 15% annualized standard deviation (a measure of variability and risk).
- 3) Diversified real estate funds have historically had *low correlations to other asset classes*; for example, over the past 29 years the DJ Wilshire REIT Index has had a correlation of 0.5 with the S&P 500 (correlation of 1.0 means that two investments go up and down in perfect tandem).
- 4) We do not need to predict the future movements of the real estate asset class in order to effectively use it to improve a portfolio.

A Review of Historical Data: Facts Are Stubborn Things

Given the current economic environment and related media coverage, it is appropriate to explain why the real estate asset class is an important portfolio-management tool and why it should be considered for every equity portfolio. For the purpose of this discussion, the real estate asset class will be represented by investment vehicles that are well diversified with respect to geography and property type, liquid, and valued by a well-functioning market. While a house or a commercial building is certainly real estate, they do not enjoy daily liquidity and are not valued by the capital markets on a regular basis.

Over the past 29 years, the real estate asset class has generated annualized returns that are comparable to those of the S&P 500 with a similar level of volatility. The data listed below is from June 1979 to June 2008:

Asset Class or Index	Annualized <u>Return(%)</u>	Standard Deviation(%)	Real Estate Correlation
Real Estate DJ Wilshire REIT Index	13.4	15.3	1.0
Large Company Equities S&P 500	12.8	16.2	0.5
Blended Allocation 50% REIT, 50% S&P 500	13.4	13.5	0.8
International Equities MSCI EAFE Index	11.8	21.7	0.4
Fixed Income Five-Year Treasury Notes	8.4	7.3	0.0

While it is true that history may not necessarily repeat itself, we believe that *capitalism works and that, over time,* capital markets will provide a return on capital commensurate with the systematic risk taken. Please review the risk and return data labeled "Real Estate" in the top row. You will notice that this asset class generated slightly higher

¹ Historical data from Standard & Poor's, MSCI, and Dimensional Fund Advisors. Returns do not include any fees or expenses.

returns than the S&P 500 and the EAFE Index while enjoying a lower standard deviation of returns. Just as important, please notice that real estate had relatively low correlations with both the S&P 500 (0.5) and EAFE Index (0.4). Simply stated, over the past 29 years the real estate asset class has zigged and zagged at different times than domestic and international equities. This is why real estate can be an effective tool for portfolio diversification. After all, if real estate went up and down at exactly the same time as domestic and international equities, and generated the same returns, then nothing would be accomplished by adding it to an equity portfolio. Correlations can and do change over time; for example, over the past 15 years the Wilshire REIT Index has had a correlation of only 0.31 with the S&P 500.

Next, please review the data labeled "Blended Allocation" in the third row. You will notice that this allocation between the Wilshire REIT Index and the S&P 500 generated comparable returns (13.4%) with a lower standard deviation (13.5%) than either of the individual components. This is precisely what we are trying to accomplish (enhanced risk-adjusted returns) by utilizing additional asset class funds and broadening the diversification of a portfolio. *Diversification, if properly implemented, can provide a "free lunch" to investors.*

Recent Performance: The Media vs. The Market

There has been no shortage of media coverage telling us about the awful domestic residential real estate market. Data has been "plunging" and "hitting 30 year lows" for over a year now and some segments of the market have certainly suffered meaningful price declines and illiquidity. Nonetheless, it is important to remove emotion from the investment process so that prudent, long-term, disciplined decisions can be made. While all of the analysts and pundits have been telling us how bad things are in 2008, diversified domestic real estate funds have only fallen by approximately 3.4% in the first half of the year while the S&P 500 is down approximately 11.9%. Does the market know something that analysts and journalists aren't yet highlighting for investors? Time will tell.

While analyzing historical asset class data does not necessarily give us insights into near-term market movements, we believe that structuring portfolios based upon historical relationships between asset classes is a better approach than listening to someone's (constantly changing) guesses, hunches and predictions about the future. The next time someone tells you that you should reduce your exposure to real estate, review the data listed above. Better yet, forget that the data highlighted above is called "Real Estate" and think of it as "Asset Class in Row 1" – perhaps this will help detach the emotion from the investment rationale.

It is also important that we put the recent performance of domestic real estate into proper historical perspective. The DJ Wilshire REIT Index was down 17.6% in 2007 and significantly underperformed other asset classes. Regardless of how this was portrayed and perceived, we should not forget that the same index was down 23.4% in 1990 and was down 17.0% in 1998. In each case, the index enjoyed tremendous returns in the subsequent seven year periods. We cannot control how capital markets or individual asset classes perform in any given year, but we can make prudent decisions based upon an unemotional review of historical data and we can remain disciplined throughout all phases of the market cycle.

What Does This Mean for Clients of Passive Capital Management, LLC?

An allocation to the real estate asset class can be accomplished with a variety of tools. Some investors might attain this exposure through a traditional, diversified index fund while other investors might own an explicit real estate asset class fund. The ultimate tool that you use to structure the portfolio is not as important as the underlying asset class.

New investment vehicles have been developed over the past couple of years that give investors exposure to the international real estate market. While the securitization of real estate in some international markets is a relatively new trend, it will be important to track the risk, return and correlation data as this asset class continues to develop. It is likely that the international real estate asset class will provide additional diversification benefits as long as the costs (fees and taxes) of attaining this exposure are not overly burdensome.

In conclusion, do not let your emotions get in the way of maximizing risk-adjusted returns. It is important to remember that asset classes are simply tools that enable you to accomplish your investment goals and objectives.

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