



The Outlook for Real Estate, Venture Capital, and Hedge Funds

A WELL-DIVERSIFIED U.S. endowment portfolio should not be limited to just domestic stocks and bonds. In this section of the *Asset Allocation Advisor*, we consider the market outlook for two alternatives, real estate and venture capital. We will also comment on hedge funds before closing. We look at international alternatives in the following section.

Real estate and venture capital are two alternative investment categories that should be considered in an endowment asset mix. In years past, the availability of these alternatives was limited to investors who had specialized knowledge of the markets, access to specialists, and could meet minimum investment requirements. Frequently, the investments didn't meet investment policy liquidity requirements due to the nature of the investment vehicles, which were often closed-end private funds with redemption restrictions. Fortunately, the market has changed for real estate. The availability of publicly traded funds that invest in real estate has made this market accessible to even small investors. The venture capital market, however, still remains accessible only to those who can meet the investment requirements of individual venture capital funds.

One word of caution at the start: historical market data regarding alternative investments is not generally as robust as the data about stocks and bonds. As a consequence, our judgments regarding prospective market returns have a higher information risk and a higher degree of uncertainty.

REAL ESTATE

Investors have the option of investing in real estate through any one of a number of real estate investment trusts (REITs) that own and manage real estate for the benefit of trust shareholders. Such REITs are classified as equity REITs to distinguish them from mortgage REITs that provide ownership shares in a pool of mortgages. Equity REITs are available that specialize in office and industrial buildings, residential apartment buildings, or shopping centers, as well as those that have a diversified portfolio.

Equity REITs have generated strong returns in excess of inflation over the past twenty years. Equity REITs have produced a 13.4% compound annual total return over the past thirty-four years, compared to 11.2% for the S&P 500. And, equity REIT returns have been less volatile with a 16.7 standard deviation compared to 17.5 for the S&P 500.

Current valuations for equity REITs, however, are well above historical medians on both a price/earnings and a price/cash flow basis. The table in figure RE0.1 shows how valuations as of early October compare for each category to median valuations for the time periods indicated.

In each case, current valuations are not only above the median but are at levels not often seen in the past twenty years. Figure RE0.2 shows the market valuations for the diversified REIT equity category since October 1986. This chart is typical of the market valuations for the other equity REIT groups. Current valuations are at levels rarely exceeded in the past fifteen to twenty years, and typically not since the early 1990s.

EQUITY REIT CURRENT VS. HISTORICAL MEDIAN VALUATIONS

Equity REIT Category	Price/Year-forward earnings		Price/Cash flow		Time Period
	Current	Median	Current	Median	
Office & industrial	14.8	11.1	11.1	8.5	1990 to date
Residential	20.5	11.9	13.0	8.2	1990 to date
Shopping centers	15.9	11.9	10.8	8.0	1987 to date
Diversified	15.8	12.2	10.9	8.6	1986 to date

Figure RE0.1: Equity REIT Current vs. Historical Median Valuations
Source: Reuters Stock Val

Current valuation levels, therefore, do not bode well for endowment managers and fiduciaries hoping to generate strong excess returns from this asset category. If valuation multiples hold constant, equity REITs should generate total returns between 7.3% and 9.5% per year. Should valuations decrease, which would be likely in the event of an increase in longer-term rates, returns may fall to the range of 2.0% to 4.0%. In both cases, we assume valuations based on cash flow growth of between 3.0% and 4.0% per year (in line with recent history) or earnings growth of 6.0% per year (in line with forecasters' long-term expectations). For the purpose of calculating our optimal portfolio, we set near-term expectations at 7.5% and long-term expectations at 5.0%, assuming an increase in interest rates and a reversion to the mean in valuation multiples.

MARKET VALUATIONS OF DIVERSIFIED EQUITY REITs



Figure REO.2: Market Valuations of Diversified Equity REITs
Source: Reuters Stock Val

VENTURE CAPITAL

The venture capital market, broadly speaking, provides funding to enterprises in their early stages before they have the track record or the need to issue stock publicly. Since the funding is provided when the possibilities of failure and bankruptcy are much greater, the risks are much larger than investing in well established public companies. Accordingly, venture capitalists require a high rate of return on each deal to compensate for the risk, usually in the range of 35% to 50% per year. Overall average returns, however, are lower due to the fact that some enterprises fail. According to the best index of venture capital performance we have been able to find – that produced by Sand Hill Econometrics in Palo Alto, California – venture capital returns averaged 16.8% and 18.0% per year for the ten and fifteen years ending 31 December 2005, respectively, on a compound basis, compared to 9.1% and 11.5% for the S&P 500. Average returns were significantly reduced by the large number of dot.com failures in 2001 and 2002. Returns prior to the tech stock bubble reflect this. The average annual return from 1988 to 2000 was 33.6%, although the median return was only 15.1%, which shows the impact of very large returns in selected years. The average compound (geometric) return for this period was 28.2%.

Given the robust rates of return, it is understandable why endowment managers have been attracted to this asset category, and venture capital has been an important component of the asset mix of endowments that have enjoyed superior performance. Unfortunately, this is not an asset category available to smaller institutional investors or investors who are unable to commit capital for extended periods of time. Furthermore, unless you are investing for the largest endowments, it is difficult, if not impossible, to “buy the market” – to invest in a diversified portfolio that reduces the risk of sub-par performance due to investing in individual venture capital funds that may under-perform the category. Endowment managers and fiduciaries looking to invest in this asset class are well advised to pick established venture capital fund managers with a track record of finding economically viable new enterprises. Beware of managers just selling the promise of current opportunities.

Since not all institutions are in a position to invest in this asset class, we will calculate optimally risky portfolios with and without a venture capital component. For the purposes of those calculations, we use a conservative 16% expected return on venture capital (compare the arithmetic average of 20.5% and the median of 11.5% for the period 1989 through 2005). Organizations may well have to adjust this expected rate of return based on the prospective returns from their venture capital fund manager(s).

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HEDGE FUNDS

Contrary to popular belief, hedge funds are not an asset class like stocks, bonds, and real estate; they are a rather heterogeneous group of funds that employs a range of trading and investment strategies to generate returns. Many, but not all, of the strategies are intended to generate positive returns even in a bear market – hence the designation “hedge.” Funds vary so widely in strategies, however, that it is no longer accurate to say that all hedge funds actually hedge against market downturns. Citigroup counts twelve different styles of hedge funds. Van Hedge Fund Advisors counts fourteen different styles.

The trading strategies used by hedge funds are many and varied. Hedge funds may sell short, use leverage (borrowed funds), simultaneously buy and sell the same or similar securities in different markets, and/or use options, futures, and other derivatives. In some cases, the position a hedge fund takes is intended to capitalize on differentials in market pricing; for example, when the fund buys a security in one market and simultaneously sells it in another market. The markets may be two different cash markets or they may be a spot market and a forward market. In a case like this, the position of the fund is hedged, at least theoretically, and the two transactions essentially offset each other, leaving the fund with just the price differential.

Opportunities to profit from such hedged transactions are becoming more limited, however. The growing global integration of capital markets, the rapid and widespread dissemination of information, and the growth of the hedge fund industry itself have significantly reduced hedging opportunities. Many hedge funds, therefore, out of necessity utilize strategies that require the assumption of market risk through positions that are not hedged at all or that utilize imperfect hedges. These positions may involve, for example, the short sale of a stock

(selling a stock one does not own), betting that the price of the stock will decline. Or they may involve the arbitrage of the securities of companies being acquired or merging. Or they may involve the purchase of the deeply discounted securities of troubled companies facing bankruptcy or liquidation. Market neutral equity hedge funds buy stocks they judge to have price appreciation potential while at the same time selling short stocks, generally in the same sector, that they judge are likely to fall in price. Overall market risk is sometimes hedged with market index derivatives. Although the fund itself is meant to have a neutral position, the effectiveness of this position is entirely dependent on the skill of the fund in picking the right stocks to buy and short sell, and the effectiveness of the fund in neutralizing systematic risk with the derivative position.

Descriptions of all of the varieties of hedge funds and their trading strategies would take up too much space here. Suffice it to say that many hedge funds involve strategies that were not allowed under traditional endowment investment policies because they involved the assumption of trading risk or excessive investment risk. Traditional policy restrictions have been eased, however, as approximately 60% of endowments and foundations now have a hedge fund component.



"Did I hear someone say fourteen per cent?"

The attraction of hedge funds has been their purportedly high, historical, risk-adjusted rates of return. One hedge fund index provider reports a compound annual return of 17.3% for hedge funds from 1988 to 2004, compared to 12.4% for the S&P 500 with considerably less variability. Returns for the hedge fund industry as provided by the several hedge fund index providers, however, are not what they appear to be. Performance reporting by hedge funds has been entirely voluntary, making aggregate reported data subject to distortion. Burton Malkiel and Atanu Saha, in a paper published in the November/December 2005 issue of the *Financial Analysts Journal*, found several sources of upward bias to the numbers reported by three different index providers. The most serious source of bias is that hedge funds often stop reporting performance data prior to closing. The voluntarily reported data, therefore, has a significant upward survivor bias because dead funds are not included. Malkiel (of Princeton University and the author of *A Random Walk down Wall Street*) and Saha (of the Analysis Group) recalculated hedge fund returns over the period 1995-2003 to include dead funds, and found the compound rate of return on hedge funds at 12.1% to be just below the compound annual return of 12.3% on the S&P 500 for the same period.

Hedge funds also provided investors with small but positive returns during the long 2000-2002 bear market. Since then, many investors have sought the promise of strong returns with little down-side risk apparently provided by hedge funds. As a consequence, hedge fund assets and the number of hedge funds increased substantially through 2005, with the number of hedge funds doubling to more than 8,000, and assets more than quadrupling to more than \$900 billion. Lackluster performance by the sector recently has led to deceleration in its growth.

It is difficult to foresee how hedge fund returns will do in the future since the composition of the industry itself is likely to change as demand changes market conditions for certain hedge fund styles or strategies, and funds look for new strategies. Recent reported returns have been substantially lower than long-term averages. Managers and fiduciaries would be well advised to understand the dynamics affecting the particular style or styles of hedge funds they utilize or intend to utilize. Now might be the time to avoid a fund of funds approach to hedge fund investing, unless one has a clear understanding of the components of the fund of funds and is comfortable with the market dynamics affecting each component.

Ultimately, the decision to invest in a hedge fund is more of a commitment to a particular investment strategy than to an asset category. Although the various hedge fund strategies may have an important role to play in endowment management, their role is best considered in the context of the overall investment policy, particularly regarding risk management, and not in the context of asset allocation decision making. Accordingly, no hedge fund component will be included in our later calculation of the optimally risky portfolio.

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