# Common Questions Regarding Alternative Investments

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*Note*: The strategies and investments discussed in this paper involve risk and investors may experience losses. Past performance does not guarantee future performance. Diversification does not guarantee higher returns or lower risk.

***What are alternative investments?***
The term "alternative investments" generally means "not stocks or bonds," entailing a wide range of different investments. Unfortunately, use of the term has inappropriately grouped together a heterogeneous basket of investment assets and strategies into a single category. In practice, investment securities that are not comparable to stocks or bonds should be classified according to their investment characteristics. Such an exercise would produce at least a few different *asset classes* in addition to stocks and bonds as opposed to the single classification "alternative investments." [We define an asset class by the behavior of its investment constituents in response to changes in fundamental economic variables, including economic growth, interest rates, inflation and risk premiums.]

***Doesn't the term "alternative investments" refer to private, illiquid, risky hedge funds?***
Hedge funds refer to an investment *structure* as opposed to in investment *asset*. While hedge funds frequently do pursue alternative investment strategies, these strategies widely vary. Further, many alternative investments are not structured as hedge funds and can offer liquidity comparable to stocks and bonds. In fact, over the past few years many alternative investment strategies have become available through regulated, publicly traded funds and securities.

***Why should investors consider allocating a portion of their portfolios to alternative investments?***
The inclusion of alternative investments can potentially increase expected portfolio returns *and* decrease expected portfolio volatility (risk) of a traditional stock/bond portfolio if two characteristics are present:

1. The alternative investments have similar expected returns to a balanced stock/bond portfolio.
2. The alternative investments exhibit low or zero correlation with the stock/bond portfolio.

The benefits of including such alternative investments in a portfolio are maximized when the portfolio is rebalanced regularly. The justification for inclusion is a variant of the time-tested saying, "Don't put all of your eggs in one basket." We typically believe that investors are over-diversified *within* some asset classes (stocks) but under-diversified *across* asset classes. If the alternative assets selected for portfolio inclusion have similar expected returns to the traditional stock/bond portfolio, the investor isn't giving up potential returns by allocating funds away from stocks and bonds and to alternative investments. By including uncorrelated assets in the portfolio, overall risk decreases because it is unlikely that a set of uncorrelated assets will all fall at the same time. In other words, some assets will go up when others go down, helping to reduce overall portfolio volatility. By rebalancing back to target portfolio allocation levels, investors take advantage of the strategy of buying low and selling high.

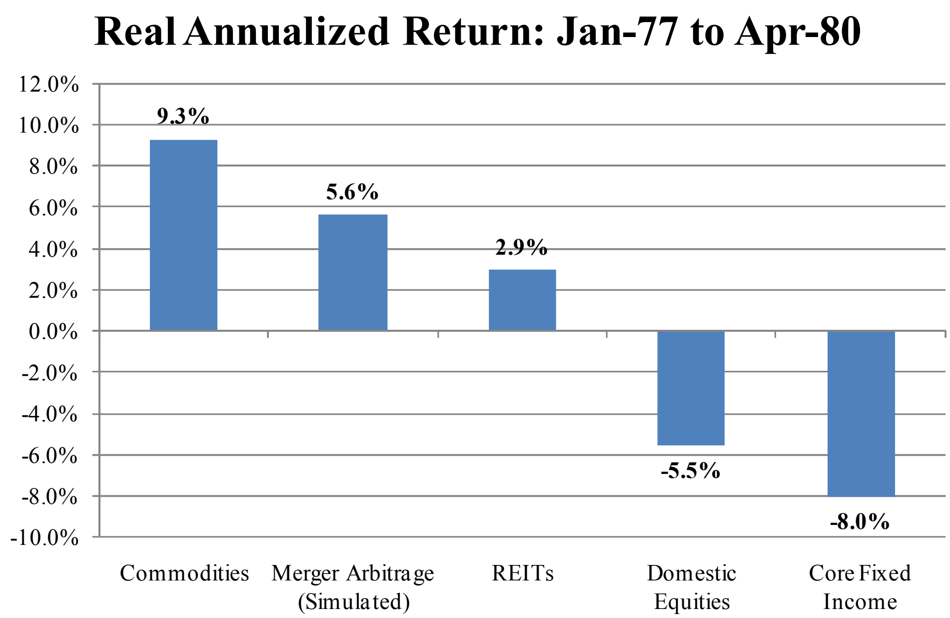
Diversifying across asset classes also helps create "robust" portfolios – portfolios that protect value in a variety of different economic environments. In order to achieve robustness, portfolios must include investment securities that respond differently to various underlying economic factors. For instance, inflation represents a serious threat to long-term wealth creation. But Michael Katz and Christopher Palazzolo write in a recent paper:

> Traditional institutional portfolios with risk characteristics similar to a 60/40 stocks/bonds allocation are not well-positioned for unexpected inflation.[1]

[1] Katz, Michael and Palazzolo, Christopher. *Inflation in 2010 and Beyond? Practical Considerations for Institutional Asset Allocation. Part II of II.* AQR Capital Management: July 2010.

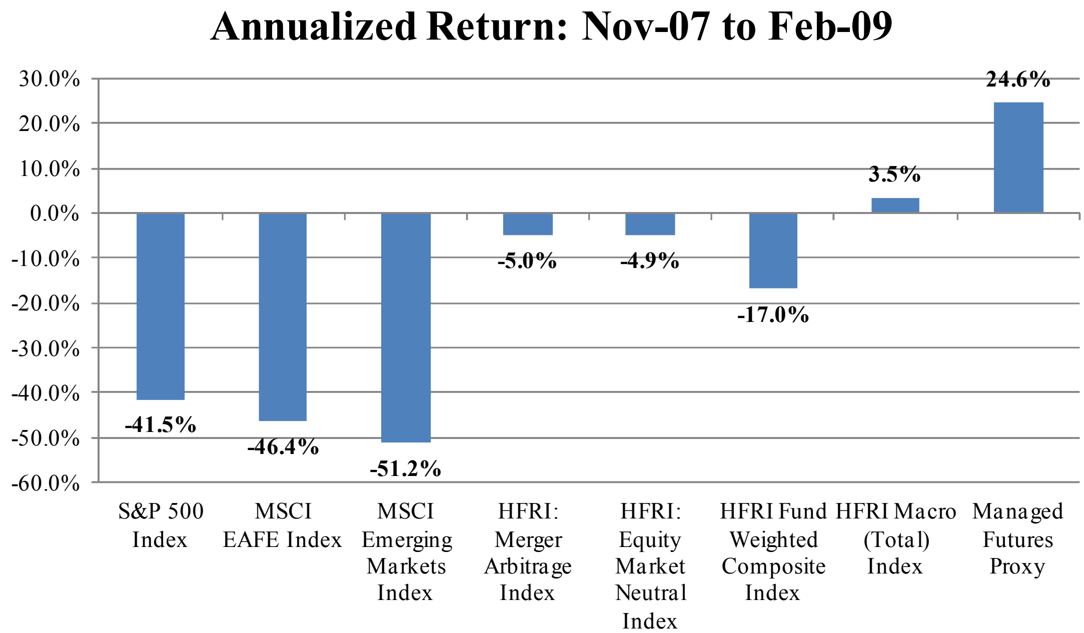
Traditional portfolios contain three primary assets: cash, nominal bonds and stocks. Unfortunately, all three have historically performed poorly during inflationary periods. Cash, by the very definition of inflation, loses value as the general price level rises. Nominal bonds promise investors future payments fixed in today's dollars. Inflation erodes the real value of those payments. Inflation also typically entails a rising interest rate environment which adversely impacts bond prices. Investors used to think that stocks could serve as an inflation hedge, but experience shows that the inability of corporations to increase their returns on equity and the typical multiple decompression that accompanies inflationary periods lead to poor stock returns, at least in the short to intermediate term.

As a result, many traditional portfolios are not robust – i.e. they are not prepared to withstand an unexpected increase in inflation. This represents a serious threat to the achievement of an institution's or individual's goals since products and services are priced in current dollars, i.e. adjusted with inflation. Alternative assets such as TIPS, commodities, managed futures and real estate have exhibited superior returns during inflationary periods compared with stocks and bonds. The inclusion of such alternative assets may help improve the portfolio robustness of traditional investment portfolios. In the late 1970's, when annualized inflation measured over 10%, stocks and bonds failed to protect portfolio value:[2]




Inflation is just one example of an area where traditional institutional portfolios may lack robustness. An increase in risk premiums is another.[3] During the financial crisis at the end of 2008/beginning of 2009, investors saw nearly every asset class with the exception of U.S. Treasuries decline as markets punished all forms of risk. Stock diversification across different geographies did little to protect portfolio value. Yet several alternative asset classes held up much better, particularly managed futures:[4]

[2] Data from Research Affiliates and Mitchell and Pulvino (2001). The merger arbitrage figures do not represent actual investment returns.
[3] Risk premiums indicate the price that market participants demand as compensation for taking risk. When risk premiums increase, prices of financial assets that entail risk typically fall.
[4] Data from Hedge Fund Research Index, Bloomberg Financial Markets and AMI Investment Management. Managed futures proxy represents a single fund of fund manager that was exposed to several large managed futures managers.




During periods of market stress, alternative assets have proven their value. Yet instead of paying for such protection in the form of sacrificed returns, investors have been rewarded over time for asset class diversification. Consider the case of merger arbitrage – from 1963 to 2010, merger arbitrage posted annualized returns of 10.2% versus 9.8% for the S&P 500, despite exhibiting only half the volatility. Yet if investors maintained a portfolio with 50% allocated to merger arbitrage and 50% allocated to stocks, returns would actually be greater than either asset class at 10.3%, while volatility would remain closer to that of merger arbitrage as opposed to stocks. While the data underlying this example may contain some biases, the conclusion is valid – because the returns of merger arbitrage were similar to those of stocks but the correlation between the two asset classes was limited (less than 0.5), a portfolio containing both asset classes performed superiorly.[5]

David Swensen, chief investment officer of Yale University, summarizes the case for alternative investments:

> By combining assets that vary in response to forces that drive markets, more efficient portfolios can be created. At a given risk level, properly diversified portfolios provide higher returns than less-well diversified portfolios. Conversely, through appropriate diversification, a given level of returns can be achieved at lower risk…
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> Alternative asset classes…contribute to the portfolio construction process by pushing back the efficient frontier, allowing the creation of portfolios with higher returns for a given level of risk or lower risk for a given level of returns. Investors treating alternative assets as legitimate tools in the portfolio allocation process reduce dependence on traditional marketable securities, facilitating the structuring of truly diversified portfolios.[6]

***How have alternative investments performed historically?***
Alternative investment results are encouraging:[7]

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[5] Data from Bloomberg, Mitchell and Pulvino (2001) and Hedge Fund Research Index. Merger arbitrage return stream reflects Mitchell and Pulvino (2001) from 1963-1989 and the Hedge Fund Research Index's Merger Arbitrage Index from 1990-2010.
[6] Swensen, David. *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*. The Free Press: New York, 2000.
[7] Results are for the 15-year period August of 1995 through July of 2010. Data from Hedge Fund Research Index, Bloomberg Financial Markets, AMI Investment Management and NAREIT.

| *1995-2010** Code | Asset Class | Annualized Return | Annualized Volatility | Correlation w/ Stocks | Correlation w/ Bonds |
|---|---|---|---|---|---|
| A | HFRI: Distressed/Restructuring Index | 10.0% | 6.5% | 0.56 | -0.08 |
| B | HFRI: Merger Arbitrage Index | 8.4% | 3.8% | 0.59 | -0.01 |
| C | HFRI: Equity Market Neutral Index | 6.1% | 3.2% | 0.22 | 0.08 |
| D | HFRI Fund of Funds Composite Index | 6.3% | 6.3% | 0.59 | 0.00 |
| E | HFRI Fund Weighted Composite Index | 9.4% | 7.5% | 0.75 | -0.03 |
| F | HFRI Macro (Total) Index | 9.6% | 6.6% | 0.31 | 0.19 |
| G | HFRI: Convertible Arbitrage Index | 8.6% | 7.6% | 0.46 | 0.16 |
| H | Managed Futures Proxy | 10.1% | 16.6% | -0.16 | 0.19 |
| I | NAREIT Index | 9.7% | 20.9% | 0.55 | 0.09 |
| J | S&P 500 Index | 6.5% | 16.1% | 1.00 | -0.02 |
| K | Citigroup Govt & Credit 1-10 Year Index | 6.1% | 3.3% | -0.02 | 1.00 |

As illustrated above, stocks exhibited one of the lowest return levels but one of the highest levels of volatility over the measured period. A portfolio weighted 60% in stocks and 40% in bonds, rebalanced monthly, would have generated annualized returns of 6.7% with annualized volatility of 9.8%. A portfolio that included a 20% allocation to alternative investments (measured by the HFRI Fund Weighted Composite Index, a proxy for alternative investments as a whole) would have generated 7.3% annualized returns with an annualized volatility of just 9.3% - higher return *and* lower risk.

We caution that such figures must be interpreted with a grain of salt. The measurement of alternative investment returns and volatility is notoriously difficult and biased. Certain alternative strategies utilize illiquid securities, post dated valuations and utilize leverage. Alternative investment indices suffer from survivorship bias and other drawbacks. We still believe that disciplined, intelligent investments in domestic stocks will generate more than adequate returns and that stocks and bonds should remain the core component of investor portfolios. But our analysis of both alternative investment theory and historical results suggest that they provide an important complement to stocks and bonds in well diversified portfolios. They not only exhibit attractive risk-adjusted returns across market cycles but they have shown the ability to protect and enhance portfolio value during periods of subpar stock and bond performance, improving portfolio risk and return characteristics.

***Why don't investors allocate funds to alternative assets?***

The term "alternative investments" typically invokes anxiety on the part of investors. It calls to mind headlines about overleveraged hedge funds, private equity funds saddled with illiquid assets or even fund managers engaging in fraudulent activity. The term makes some picture esoteric instruments that are incredibly complicated to understand and evaluate.

This reaction has both positive and negative effects. Some alternative investments can be relatively complex compared to stocks and bonds and skepticism on the part of investors keeps them from participating in something that they do not understand. In other words, an error of omission is better than an error of commission. Further, some alternative investment managers try to turn the potential attractions of the industry into an excuse to charge unjustifiably high fees. A portfolio of stocks and bonds constructed in an intelligent, disciplined and efficient manner has produced respectable results during many investment periods.

But separating the riskier, black-box, and more expensive alternative investment strategies from those with more basic and understandable underlying fundamentals yields a rich opportunity set that the investor can exploit to potentially increase portfolio return and reduce portfolio risk. Certain alternative investments are not that much different than stocks or bonds.[8] We never endorse an investment decision that lacks fundamental understanding of the investment security or strategy. But we believe that experienced, educated investment managers can find attractive opportunities outside just stocks or bonds that are understandable and efficient.

***What are the key alternative investments that investors should consider?***

We segregate asset classes primarily by their response to fundamental economic factors (e.g. inflation versus deflation). Moving beyond the generalized definitional arrangement of stocks, bonds and alternative investments, we utilize the following classifications:

- Fixed income (nominal bonds)
- Stocks (domestic and foreign, market-oriented hedge funds and private equity funds)
- Real assets (TIPS, commodities, precious metals and real estate)
- Absolute return (diversified arbitrage, managed futures, long/short and distressed securities)

[8] For example, some consider Real Estate Investment Trusts (REITs) alternative investments. Yet REITs trade just like stocks. The only significant difference between a standard publicly-traded company and a REIT relates to the handling of taxable income.

The fixed income component of an investor's portfolio is designed to protect value and insure against a deflationary economic environment. High-quality bond portfolios have generated steady income and protected portfolio value during volatile market periods. They perform poorly, however, during periods of rising interest rates and increased inflation.

Stocks form the core growth component of investor portfolios. Long-term investors have an equity bias, as the asset class possesses the greatest potential for long-term gains. We group foreign stocks, market-oriented hedge funds and private equity funds in the same category. While these investment sectors can provide attractive opportunities, they have shown an increasing correlation with domestic publicly-traded stocks over the last decade, reducing their diversification benefits. For the purpose of this paper, we do not include such sectors in our discussions of alternative investments.

Real assets and absolute return vehicles form the two core components of a useful alternative investment strategy. Real assets provide portfolio security against increases in inflation. They also guard against surging commodity prices that may result from developing supply and demand imbalances. TIPS (Treasury Inflation Protected Securities) are government bonds that are automatically adjusted for changes in inflation (as measured by the Consumer Price Index). They represent a low volatility instrument that aims to protect the real value of portfolios.[9] Real estate investments usually reside somewhere between debt and equity in form, typically generating both income and capital appreciation. The extent to which real estate moves with inflation depends upon the degree to which real estate markets are in equilibrium. But generally lease agreements adjust for changes in price levels and the residual claim on equity value held by the real estate investor rises in value along with changes in underlying replacement costs. Investors are presented with opportunities in both public and private markets, although they must be sure to fully understand the costs embedded in the chosen investment vehicle. Commodity investments typically perform well when unexpected inflation increases. Even in subdued inflation environments, commodity investments have performed satisfactorily because of inherent portfolio characteristics and supply and demand shocks.[10] Increasing interest in the space will lead disciplined investors to focus on areas with positive expected returns outside of any assumptions of commodity price increases. Precious metals, such as gold and silver, are difficult to value and in our opinion may not be useful as long-term investments, but nonetheless can act as important hedges during certain periods of market stress.

Absolute return vehicles attempt to generate positive investment returns regardless of the external economic environment; in other words, they attempt to move independently of common investment factors. During periods of market stress, certain absolute return strategies may show increased correlations to global markets; however, over time these strategies have shown low levels of correlation with both stocks and bonds. Such strategies include:

- *Diversified Arbitrage*: Arbitrage typically entails taking opposite positions between two intimately related securities, for instance a company's publicly-traded stock and that same company's convertible bonds, which can be converted into stock. Using fundamental analysis, the arbitrageur calculates the "correct" relationship between the two and takes offsetting positions in the securities to the extent that relationship is not observed in public markets. The arbitrageur profits as the market relationship moves back to equilibrium or a corporate event occurs, hopefully regardless of external market events. Merger arbitrage, another form of arbitrage, involves purchasing a stock at a price below the takeover price announced by an acquirer. Warren Buffett, who sometimes engages in arbitrage "as an alternative to holding short-term cash equivalents," notes that "In most cases, the arbitrageur expects to profit regardless of the behavior of the stock market. The major risk he usually faces instead is that the announced event won't happen."[11] Diversification in arbitrage activities significantly reduces risk. Managers that develop expertise in multiple areas of arbitrage create "the possibility of structuring higher return, lower risk portfolios."[12] Historically, arbitrage strategies have produced attractive returns at modest risk levels.

- *Managed Futures*: Managed futures strategies typically entail some form of a trend following strategy. While over the long run investment values reflect fundamentals, over the short run, because of various investor biases, markets tend to trend (to move consistently up or down over a sustained period of time). Managed futures attempt to benefit from this knowledge. Managed futures perform well when financial markets trend either up or down. During the 2008-09 financial crisis, as stocks and commodities trended down and Treasuries rallied, managed futures strategies performed well.

- *Long/Short*: Long/short funds take offsetting bets between securities they think will go up and securities they think will go down. By shorting stocks, for instance (betting that prices will go down instead of up), long/short equity funds can net out all of their systematic stock market exposure. Returns are dictated simply by the difference between the fund's long and short

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[9] Some investors may classify TIPS as a component of their fixed income portfolio. Because they respond fundamentally differently than nominal bonds to inflation, we believe that they constitute a separate kind of asset. Regardless, investors should make sure they have considered TIPS for portfolio inclusion.

[10] By inherent portfolio characteristics, we mean that because many commodities are uncorrelated with one another, a diversified investment in commodities that is rebalanced regularly may perform adequately even if the individual components do not. Because many commodities are mean-reverting, the strategy has a tendency to buy low and sell high.

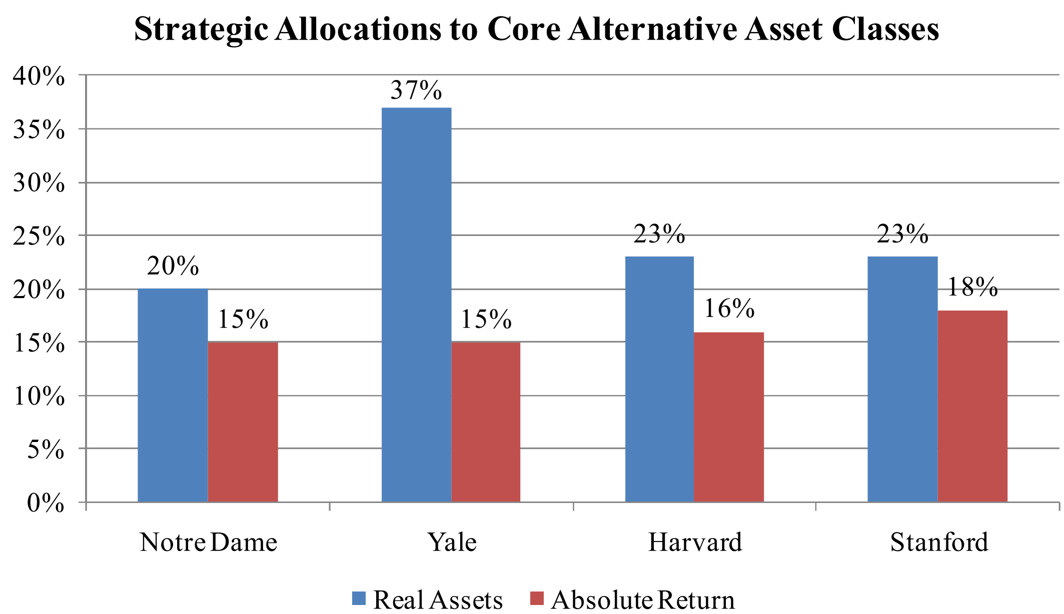
[11] Buffett, Warren, *1988 Letter to Berkshire Hathaway Shareholders*, February 28, 1989.

[12] Swensen, David. *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*. The Free Press: New York, 2009.

ideas, thus bearing little relationship to external market factors. Successful execution requires manager skill to accurately identify relative winners and losers.

- *Distressed Securities*: Distressed security investing entails purchasing securities, debt or equity, that are in some form of crisis or restructuring. While the strategy sounds inherently risky, a diversified portfolio of such issues has produced attractive risk-adjusted returns over time. Securities that fall under this umbrella, typically due to the threat or occurrence of bankruptcy, are forsaken by investors, leaving attractive opportunities for experienced practitioners of the discipline. Success requires the resources to dig into details and become involved with the reorganization process. Talented managers purchase securities in the distressed business at attractive prices, play a role in the reorganization of the corporate structure and come out on the other side with a valuable equity and/or debt stake in a much healthier company. The ultimate return from investing in such securities is usually driven by company-specific factors, not macroeconomic concerns, although the asset class will show increased correlations to equities during periods of severe market stress.

***How much should investors allocate to alternative investments?***
The optimal allocation to alternative investments depends upon the individual client's goals and objectives. If a client is particularly sensitive to inflation, for instance, then real assets may be relatively more attractive. Large institutional investors allocate meaningful amounts to alternative investment strategies:[13]




However, these institutions also have access to superior alternative investment managers because of their size and sophistication. Determining the ideal allocation to such assets and strategies hinges upon the investor's ability to gain access to efficient and attractive alternative investment vehicles. Investment decisions must rest on their own merit. But at the risk of oversimplifying things, we believe that an allocation of 10-20% of portfolio assets to a mixture of real assets and absolute return strategies represents a good starting point. It is sufficient enough to provide real portfolio diversification and protection but not too great to overwhelm the core components of traditional portfolios. We feel that the opportunity set of alternative investments available to disciplined, educated investors makes this target achievable.

***Conclusion***
The tendency for investors to avoid investments that they do not understand is wise. Decisions made without a basic understanding of investment fundamentals are inherently risky and speculative. But by grouping together all alternative investments that do not fall under the classification of stocks and bonds, investors are potentially isolating themselves from investments that could add material value to their portfolio. Alternative investments exist that (a) are understandable, (b) are accessible through efficient, regulated, public vehicles, (c) are backed with encouraging historical return data and offer potential for attractive future returns and (d) could help investors construct more robust portfolios. By working with experienced, educated investment managers, investors should consider whether such alternative strategies are appropriate given their goals and objectives.

[13] Figures shown are a percentage of total endowment funds. See institutions' respective endowment websites. Figures represent strategic targets for the fiscal year 2009.