

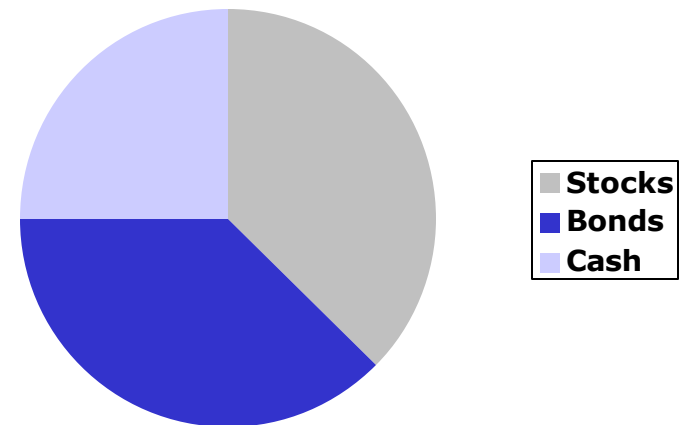
The Case for Diversification

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February 2002

What is Asset Allocation?

Asset allocation is the process of dividing investments among different kinds of assets, such as stocks, bonds, real estate and cash, to optimize the risk/reward trade-off based on an individual's or institution's specific situation and goals.

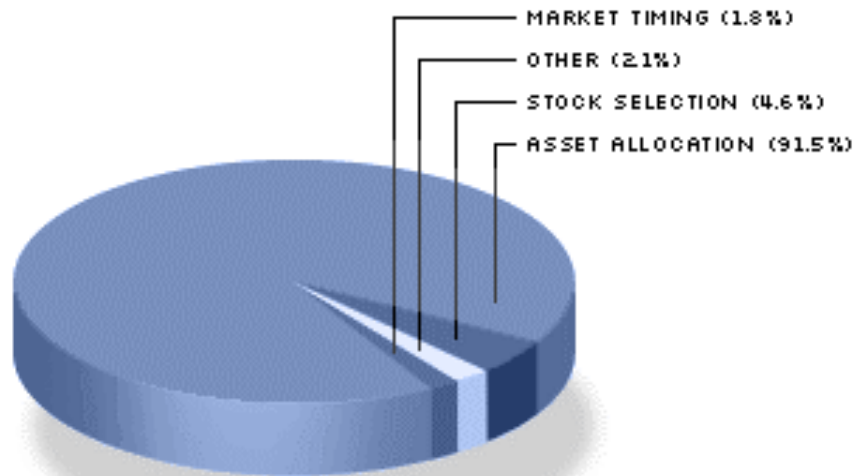


Asset Allocation Basics

The principles behind asset allocation

1. Not all asset classes move up and down at the same time
2. No one can accurately and consistently predict when shifts in market leadership will occur or how long they will last
3. Some asset classes are far more volatile than others and may go from big gains one year to big losses the next, while the performance of less volatile counterparts remains in a much narrower range
4. Allocation across investments styles helps provide less volatility and more consistent growth toward achieving investment goals

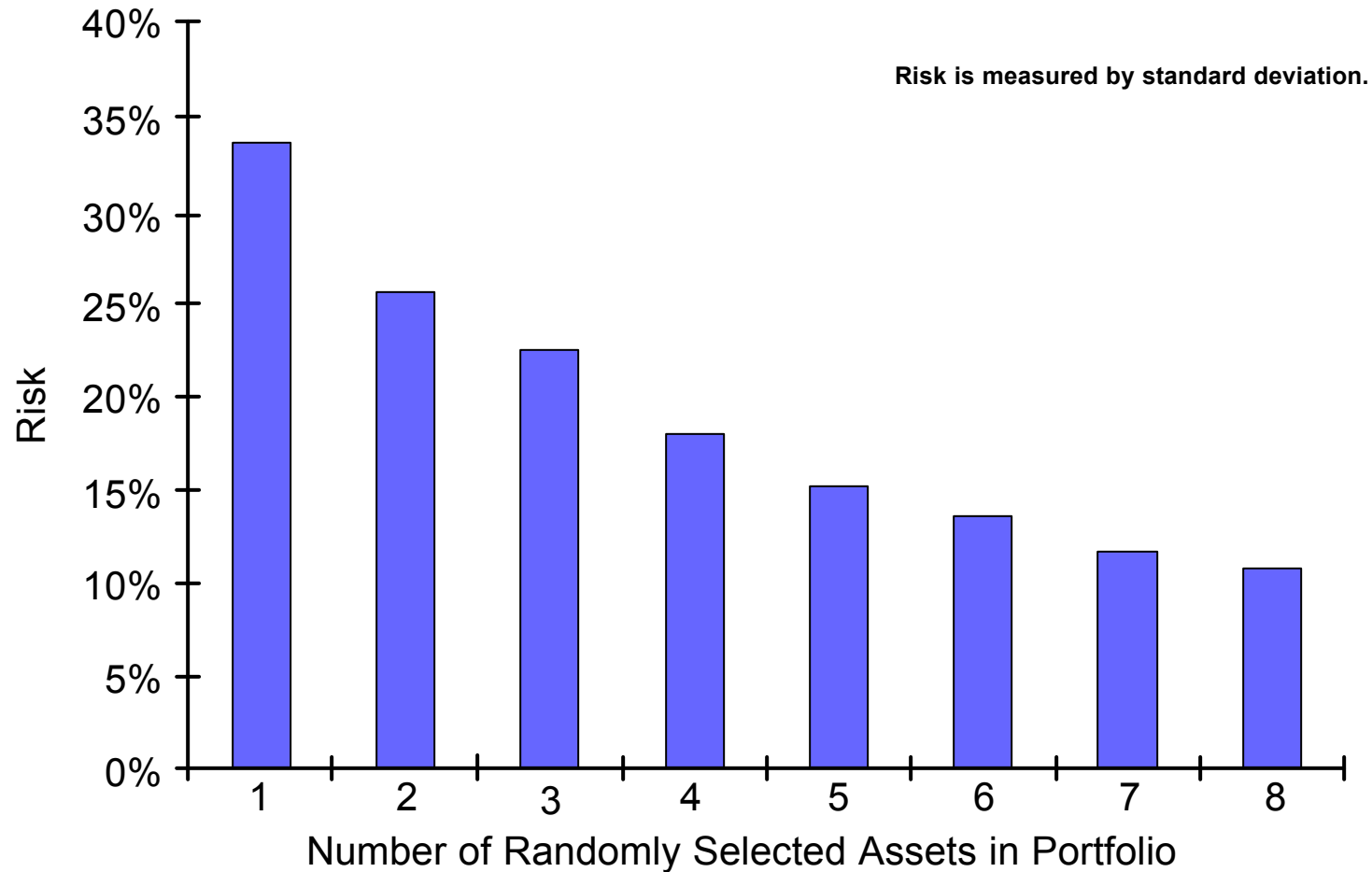
Why is Asset Allocation Important?



SOURCE: BRINSON, SINGER AND BEEBOWER (1991)

A landmark study published by Brinson, Singer and Beebower in 1991 (and expanded in 1993) determined that portfolio asset allocation is the most important long-term determinant of investment results. Past performance, stock selection and timing investments in and out of the market were far less influential in achieving long-term results.

Reduction of Portfolio Risk



As the number of asset classes in a portfolio increases, the total risk or volatility of the portfolio decreases.

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Past performance is no guarantee of future results. 3/1/2000. Copyright © 2000 Ibbotson Associates, Inc.

Changing Market Leadership

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Best	Small-Cap 18.41%	International 32.94%	International 8.06%	Large-Cap Value 38.35%	Large-Cap Growth 23.12%	Large-Cap Value 35.18%	Large-Cap Growth 38.71%	Large-Cap Growth 33.16%	Fixed Income 10.10%	Fixed Income 8.96%
	Mid-Cap 16.34%	Small-Cap 18.91%	Large-Cap Growth 2.66%	S&P 500 37.59%	S&P 500 22.97%	S&P 500 33.36%	S&P 500 28.58%	International 27.30%	Mid-Cap 8.25%	Small-Cap 2.49%
	Large-Cap Value 13.81%	Large-Cap Value 18.12%	S&P 500 1.32%	Large-Cap Growth 37.18%	Large-Cap Value 21.64%	Large-Cap Growth 30.50%	International 20.33%	Small-Cap 21.26%	Large-Cap Value 7.01%	Large-Cap Value -5.59%
	S&P 500 7.61%	Mid-Cap 14.30%	Small-Cap -1.82%	Mid-Cap 34.45%	Mid-Cap 19.0%	Mid-Cap 29.01%	Large-Cap Value 15.63%	S&P 500 21.03%	Small-Cap -3.02%	Mid-Cap -5.62%
	Fixed Income 7.20%	S&P 500 10.09%	Fixed Income -1.90%	Small-Cap 28.44%	Small-Cap 16.49%	Small-Cap 22.36%	Mid-Cap 10.10%	Mid-Cap 18.23%	S&P 500 -9.11%	S&P 500 -11.89%
	Large-Cap Growth 5.0%	Fixed Income 8.80%	Large-Cap Value -1.99%	Fixed Income 15.30%	International 6.36%	Fixed Income 7.90%	Fixed Income 8.40%	Large-Cap Value 7.35%	International -13.96%	Large-Cap Growth -20.42%
Worst	International -11.85%	Large-Cap Growth 2.90%	Mid-Cap -2.09%	International 11.55%	Fixed Income 4.00%	International 2.06%	Small-Cap -2.55%	Fixed Income 0.40%	Large-Cap Growth -22.43%	International -21.21%

Russell 2000 Index (Small-Cap) measures the performance of the 2,000 smallest companies in the Russell 3000 Index. As of the latest reconstitution, the ave market cap was approx. \$530 million.

Russell Mid-Cap Index (Mid-Cap) measures the performance of the 800 smallest companies in the Russell 1000 Index. As of the latest reconstitution, the ave market cap was approx. \$12 billion.

Russell 1000 Growth Index (Large-Cap Growth) measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value Index (Large-Cap Value) measures the performance of those Russell 1000 companies with lower price-to-book and lower forecasted growth values.

MSCI EAFE (International) is a Morgan Stanley Capital International index that measures the performance of the developed stock markets of Europe, Australasia, and the Far East.

S&P 500 Index measures the performance of large capitalization U.S. stocks. The S&P 500 is a market-weighted index of 500 stocks that are traded on the NYSE, AMEX, and NASDAQ

Lehman Brothers Intermediate Gov't/Credit Bond Index (Fixed Income) includes U.S. Government and corporate securities with maturities between one and ten years.

Source: Bloomberg Financial Markets, Frank Russell Company

Performance of all cited indices is calculated on a total return basis and includes dividend reimbursement. Indices are not available for direct investment. Past performance is not indicative of future results. It is important to remember that there are risks inherent in any investment and there is no assurance that any asset class or index will provide positive performance over time.

Chart is courtesy of Rittenhouse Nuveen Investments

Changing Market Leadership

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Best	Financials	Technology	Technology	Health Care	Technology	Financials	Technology	Technology	Utilities	Consumer Cyclicals
	Consumer Cyclicals	Basic Materials	Health Care	Financials	Financials	Health Care	Telecom	Capital Goods	Health Care	Basic Materials
	Telecom	Transport	Basic Materials	Technology	Capital Goods	Telecom	Health Care	Basic Materials	Financials	Transport
	Basic Materials	Consumer Cyclicals	Consumer Staples	Telecom	Energy	Consumer Cyclicals	Consumer Cyclicals	Consumer Cyclicals	Transport	Consumer Staples
	Consumer Staples	Capital Goods	Capital Goods	Transport	Health Care	Consumer Staples	Consumer Staples	Telecom	Energy	Financials
	Transport	Energy	Energy	Consumer Staples	Consumer Staples	Transport	Capital Goods	Energy	Consumer Staples	Capital Goods
	Utilities	Telecom	Financials	Utilities	Consumer Cyclicals	Technology	Utilities	Financials	Capital Goods	Energy
	Technology	Utilities	Telecom	Capital Goods	Basic Materials	Capital Goods	Financials	Consumer Staples	Basic Materials	Health Care
	Capital Goods	Financials	Consumer Cyclicals	Energy	Transport	Energy	Energy	Health Care	Consumer Cyclicals	Telecom
	Energy	Consumer Staples	Utilities	Basic Materials	Utilities	Utilities	Transport	Transport	Telecom	Technology
Worst	Health Care	Health Care	Transport	Consumer Cyclicals	Telecom	Basic Materials	Basic Materials	Utilities	Technology	Utilities

Shifts in market leadership are not restricted to asset classes. Sectors and industries also will rotate given the economic outlook. A portfolio of companies diversified by economic sector can help dampen the ill effects of market downturns and may provide more consistent returns over time.

Source: S&P 500 Composite Index Sector Performance. Courtesy of Rittenhouse Nuveen Investments
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Market Downturns and Recovery

1926 - 2001

Downturn

Recovery

34 months	-83.4%	Sept. 1929 - June 1932	July 1932 - Jan. 1945	151 months
6 months	-21.8%	June 1946 - Nov. 1946	Dec. 1946 - Oct. 1949	35 months
7 months	-10.2%	Aug. 1956 - Feb. 1957	March 1957 - July 1957	5 months
5 months	-15.0%	Aug. 1957 - Dec. 1957	Jan. 1958 - July 1958	7 months
6 months	-22.3%	Jan. 1962 - June 1962	July 1962 - April 1963	10 months
8 months	-15.6%	Feb. 1966 - Sept. 1966	Oct. 1966 - March 1967	6 months
19 months	-29.3%	Dec. 1968 - June 1970	July 1970 - March 1971	9 months
21 months	-42.6%	Jan. 1973 - Sept. 1974	Oct. 1974 - June 1976	21 months
14 months	-14.1%	Jan. 1977 - Feb. 1978	March 1978 - July 1978	5 months
20 months	-16.9%	Dec. 1980 - July 1982	Aug. 1982 - Oct. 1982	3 months
3 months	-29.5%	Sept. 1987 - Nov. 1987	Dec. 1987 - May 1989	18 months
5 months	-14.7%	June 1990 - Oct. 1990	Nov. 1990 - Feb. 1991	4 months
2 months	-15.4%	July 1998 - Aug. 1998	Sept. 1998 - Nov. 1998	3 months
13 months	-30.5%	Sept. 2000 - Sep. 2001		

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Nortel Networks: A Case Study in Diversification

- ▶ **A 52 year-old farmer from Ontario invested two-thirds of his retirement fund in Nortel in July 2000. Total investment: \$210,000**
- ▶ **Total value of his investment one year later: \$45,000**
- ▶ **Nortel share price as of 2/19/02: \$5.59 per share**



Enron: A Case Study in Diversification



“Why would I put my money in investments earning 5% when I was getting 15 to 20% growth in Enron stock?”

-- Former Enron employee

In just six weeks, \$22 billion of shareholder value was wiped out and Enron filed for bankruptcy

Lucent: A Case Study in Diversification

- ▶ **A Lucent employee had 90% of his retirement in company stock, totaling: \$180,000**
 - ▶ **Total value of his investment two years later: \$60,000**
 - ▶ Lucent's stock price began falling two years ago, but despite signals it may be time to diversify . . .
- “ Many of us didn't listen because Lucent had such a good outlook. We really didn't know what to do.”

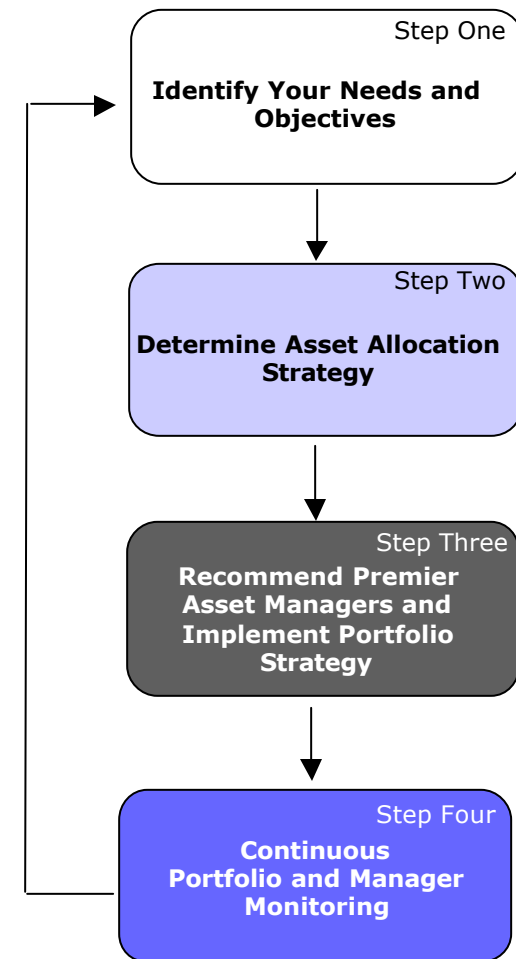
-- Lucent employee



Building a Well-Diversified Portfolio with Managed Accounts

The Managed Account Investment Process

The managed account investment process is designed to meet the highly disciplined approach that institutional money managers have used to oversee large endowment and pension funds for decades. Beginning with a detailed outline of your current financial situation, and a thorough understanding of your goals, we construct a blueprint of the investment strategy and define an asset allocation plan. We implement the plan by selecting and orchestrating portfolio components managed by selected premier asset managers who specialize in specific asset classes and styles. The result is an individual portfolio created to achieve your investment objectives.



Understanding Your Goals and Objectives



- ▶ Perform detailed analysis of current portfolio
- ▶ Ascertain a complete understanding of objectives and investment horizon
- ▶ Determine return objectives
- ▶ Develop understanding of tax status
- ▶ Analyze liquidity/portfolio concentration
- ▶ Determine asset class/security preferences
- ▶ Analyze investment attitude and aversion to risk

Determining Your Asset Allocation Strategy



Part 1: **Establish a Strategic Asset Allocation :**

- ▶ Understanding and factoring your financial objectives and attitudes toward investing, we match your parameters to the appropriate asset class allocation

Part 2: **Create a Tactical Asset Allocation:**

- ▶ After we establish the asset class parameters, we drill into the strategy to create an optimized combination of sub-asset classes and investment styles to maximize the potential for return while seeking to limit the degree of risk

Your Asset Allocation Solution

Dividing, then optimizing



After identifying your **investment objectives and time horizon, level of return needed to achieve your goals and risk tolerance**, we will assign your portfolio to a reference asset allocation. This reference allocation takes into consideration two asset classes, equity and fixed income, and appropriates the level of each in the portfolio.

Recommendation and Implementation

Step Three

**Recommend Managers and
Implement Strategy**

Once we target the appropriate reference portfolio, we use our proprietary methodology to develop a multi-asset class portfolio using selected premier asset managers. Your portfolio is constructed to optimize the potential for greater returns while maintaining the level of risk accepted by the two asset class portfolio.

Ongoing Portfolio Management

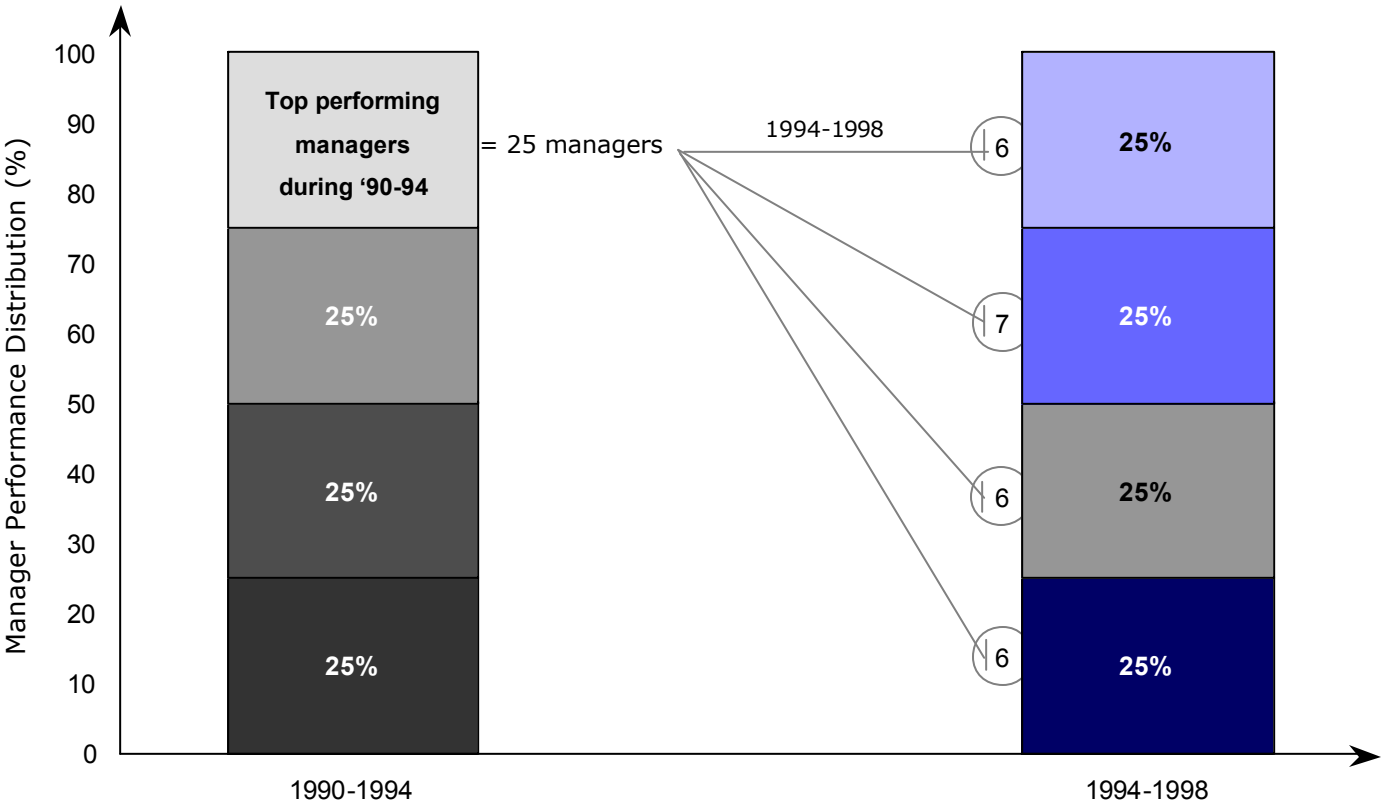
Investment plans will shift and move naturally as the market moves. We constantly monitor movements and offer continuous portfolio management.

Step Four

**Continuous
Portfolio and Manager
Monitoring**

- ▶ Rebalancing to ensure portfolio continues to adhere to asset allocation plan and targets your objectives
- ▶ Rigorous analysis of asset managers to ensure consistency and relevance. Ongoing due diligence of manager provides consistency and assurance
- ▶ Mid-year and year-end review to check investor goals and examine portfolio progress

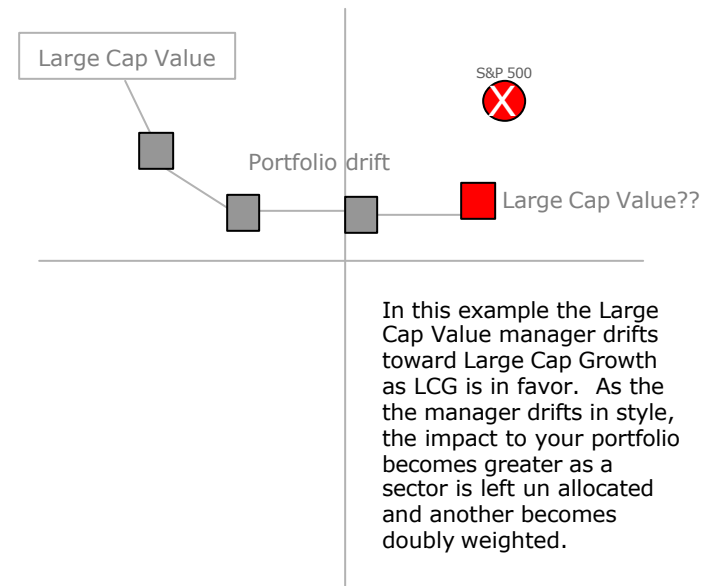
The Importance of Ongoing Due Diligence



Source: Wilshire Associates Compass Database.
 Past performance is not indicative of future results, which will vary.

Monitoring the Asset Managers

The premier asset managers who are managing your assets are continually monitored to ensure that their investment style and performance remain consistent with the objectives of the market segment of your portfolio. We rigorously analyze the asset managers' philosophy, process, people and performance on an ongoing basis--incorporating analysis of the trades they are executing and their holdings to make certain that they match your investment guidelines. If a manager drifts to far in style or underperforms over time, we will recommend replacement.

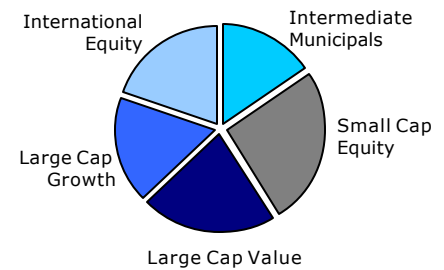


Rebalancing Your Portfolio

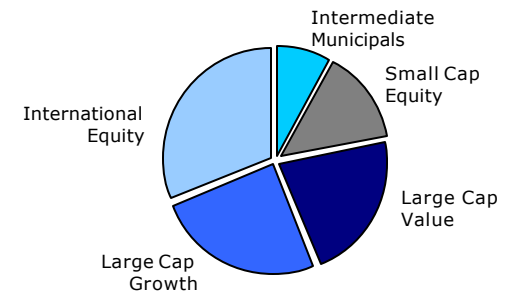
Ensuring your asset allocation strategy is being executed

Natural shifts in the market may effect the risk/return balance originally established in your asset allocation strategy--overexposing you to one market sector and underexposing you to another. In the illustration to the right, the international component of the portfolio has grown swiftly, creating a portfolio out-of-balance with original goals and objectives. By continuously monitoring your portfolio, we can ensure that your portfolio is being managed in a way that is consistent with your asset allocation strategy.

Original Portfolio



Portfolio Growth Overexposes International



Rebalanced Portfolio

