

Asset Class Investing: A better way...

The returns and other characteristics of the allocation mixes contained in this presentation are based on model/back-tested simulations to demonstrate broad economic principles. They were achieved with the benefit of hindsight and do not represent actual investment performance. There are limitations inherent in model performance; it does not reflect trading in actual accounts and may not reflect the impact that economic and market factors may have had on an advisor's decision making if the advisor were managing actual client money. Model performance is hypothetical and is for illustrative purposes only. Model performance shown includes reinvestment of dividends and other earnings but does not reflect the deduction of investment advisory fees or other expenses. Clients' investment returns would be reduced by the advisory fees and other expenses they would incur in the management of their accounts.

Past performance is not a guarantee of future results, and there is always the risk that an investor may lose money. Indexes are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

Elements of Success in Investing

- **Client Behavior.** Research has shown that without question, investor behavior is the most important element of investor's reaching financial goals.
- **Accurate and appropriate Asset Allocation.** An allocation must reflect the circumstances and sophistication of an investor. Comprehensive, global asset allocation can neutralize the risks specific to individual securities.
- **Collaboration among/between financial professionals.** Optimal results are achieved when wealth manager directs efforts with estate attorney, accountant, insurance professional, etc...
- **Right Advisor, Right Platform, Right Tools.** Advisor must be incentivized to do what is in your best interest (fee-only), on a platform which provides lowest cost - highest quality investments.

Asset Class Investing: My Job as the Advisor

1. **Know client.** (Financial circumstances, family situation, goals and tolerance for risk).
2. **Design an optimal plan and asset allocation.**
3. **Collaborate with other financial pros.** (work with estate attorney, accountant, insurance professionals for comprehensive solution)
4. **Maintain discipline/diversification.** (constantly provide education and information to clients)

Asset Class Investing: Platform and Tools

Fee-only, Independent RIA. Fiduciary obligation is *best interest* of client.
Must place client interests above own.

Advisor Expertise/Integrity. A must...

Custodian: Independence and low costs. NOT investment banks with high fees and risky proprietary trading.

Network: Works collaboratively with others who are experts in their financial fields.

Tools/Available Investments: Access to all – *choice* to use primarily DFA mutual funds and asset class ETF's to accomplish client goals.

Value Added: Asset Class Investing compared to Active or Indexing

Pillar Employs: Asset Class Investing

- Grounded in the efficiency of capital markets.
- Captures specific dimensions of risk identified by academic research.
- Minimizes transaction costs and enhances returns through trading and engineering.

Versus

Active Management (Mutual Funds/Separate Accts)

- Attempts to beat the market through security selection and market timing.
- Undermines asset class exposure to keep up with the most “promising” securities.
- Generates higher fees, trading costs, and tax consequences due to increased turnover.

Traditional Indexes (Vanguard/Index ETF's)

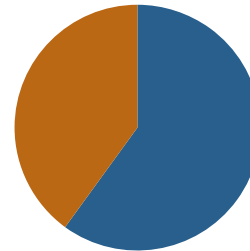
- Accepts asset class returns.
- Allows commercial benchmarks to define strategy.
- Sacrifices transaction costs and turnover in favor of tracking.

The Basic Institutional Portfolio

Quarterly: 1973–2010

Model Portfolio 1

	Annualized Compound Return	Annualized Standard Deviation
Model Portfolio 1	9.47%	11.16%



- S&P 500 Index
- Barclays US Government/Credit Bond Index

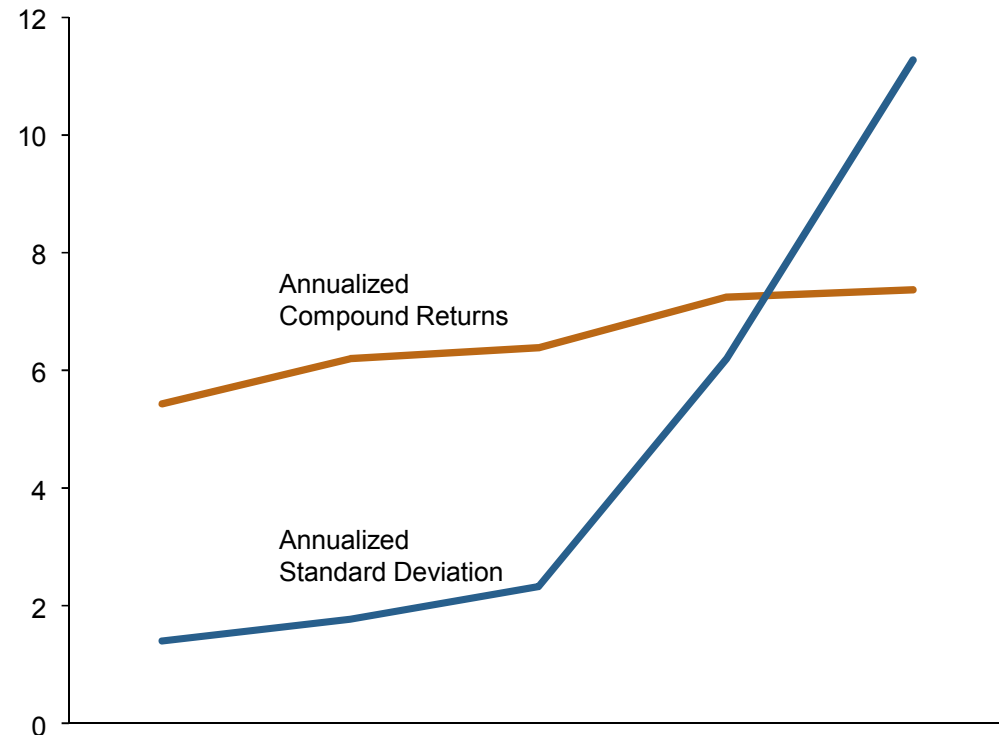
	Barclays US Govt./Credit Bond Index	S&P 500 Index
Model Portfolio 1	40%	60%

Barclays Capital data, formerly Lehman Brothers, provided by Barclays Bank PLC. The S&P data are provided by Standard & Poor's Index Services Group. Indexes are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Not to be construed as investment advice. Returns of model portfolios are based on back-tested model allocation mixes designed with the benefit of hindsight and do not represent actual investment performance. See cover page for additional information.

Evaluating the Maturity Risk/Return Tradeoff

Quarterly: 1964–2010

- Not all investors define risk as standard deviation. Some investors may seek to hedge long-term liabilities using long-term bonds.
- Historically, longer-maturity instruments have higher standard deviations than shorter-maturity instruments.



Maturity	One-Month US Treasury Bills	Six-Month US Treasury Bills	One-Year US Treasury Notes	Five-Year US Treasury Notes	Twenty-Year US Govt. Bonds
Annualized Compound Return (%)	5.45	6.20	6.41	7.27	7.37
Annualized Standard Deviation (%)	1.42	1.77	2.34	6.21	11.29

Source: One-Month US Treasury Bills, Five-Year US Treasury Notes, and Twenty-Year (Long-Term) US Government Bonds provided by Ibbotson Associates. Six-Month US Treasury Bills provided by CRSP (1964-1977) and B of A Merrill Lynch (1978-present). One-Year US Treasury Notes provided by CRSP (1964-May 1991) and B of A Merrill Lynch (June 1991-present). Ibbotson data © Stocks, Bonds, Bills, and Inflation Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). CRSP data provided by the Center for Research in Security Prices, University of Chicago. The Merrill Lynch Indices are used with permission; copyright 2011 B of A Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved.

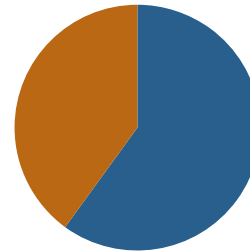
Indexes are not available for direct investment. Index performance does not reflect expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Values change frequently and past performance may not be repeated. There is always the risk that an investor may lose money. Fixed income securities are subject to interest rate risk because the prices of fixed income securities tend to move in the opposite direction of interest rates. In general, fixed income securities with longer maturities are more sensitive to these price changes and may experience greater fluctuation in returns.

Substituting Short-Term for Long-Term Fixed Income

Quarterly: 1973–2010

Model Portfolio 2

	Annualized Compound Return	Annualized Standard Deviation
Model Portfolio 1	9.47%	11.16%
Model Portfolio 2	8.83%	10.23%



- S&P 500 Index
- Merrill Lynch One-Year US Treasury Note Index

	Barclays US Govt./Credit Bond Index	S&P 500 Index	BofA Merrill Lynch One-Year US Treasury Note Index
Model Portfolio 1	40%	60%	
Model Portfolio 2		60%	40%

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Risk and Return Are Related

Multi-Factor Model Explains Risks Worth Taking

- **Equity Market vs. Fixed Income**

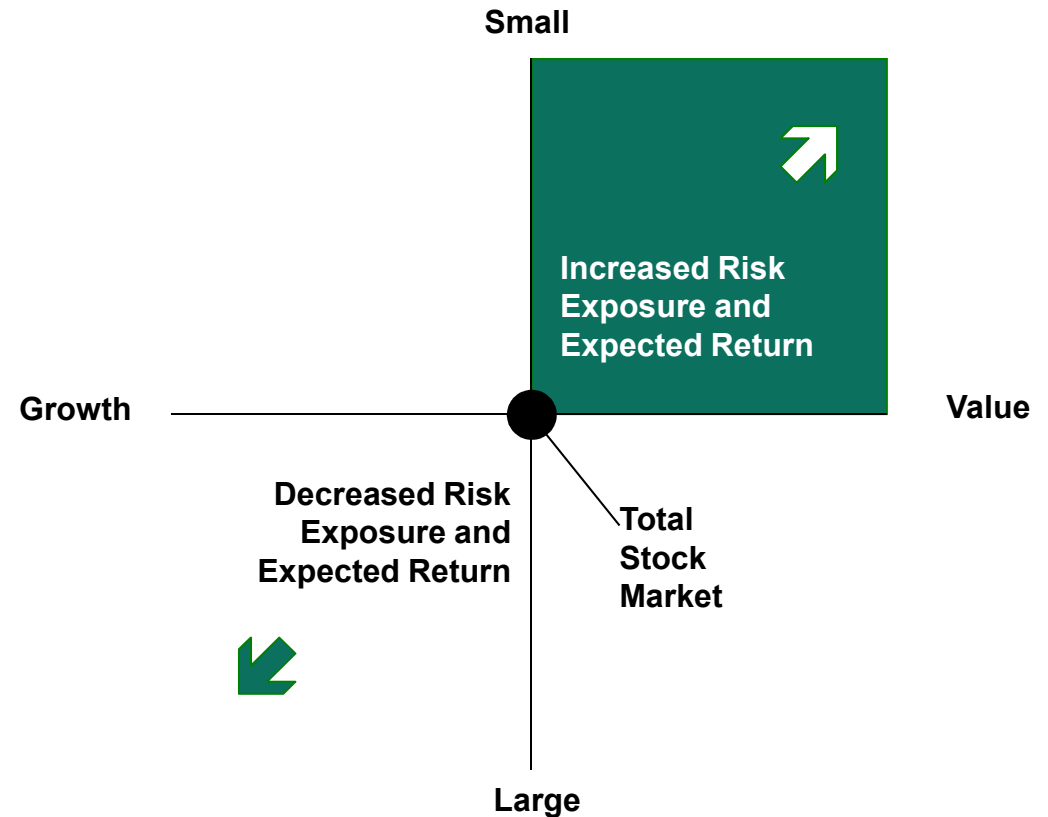
Stocks tend to have higher expected returns than fixed income.

- **Company Size**

Small company stocks have higher expected returns than large company stocks.

- **Company Price Relative to Fundamentals**

Lower-priced “value” stocks have higher expected returns than higher-priced “growth” stocks.

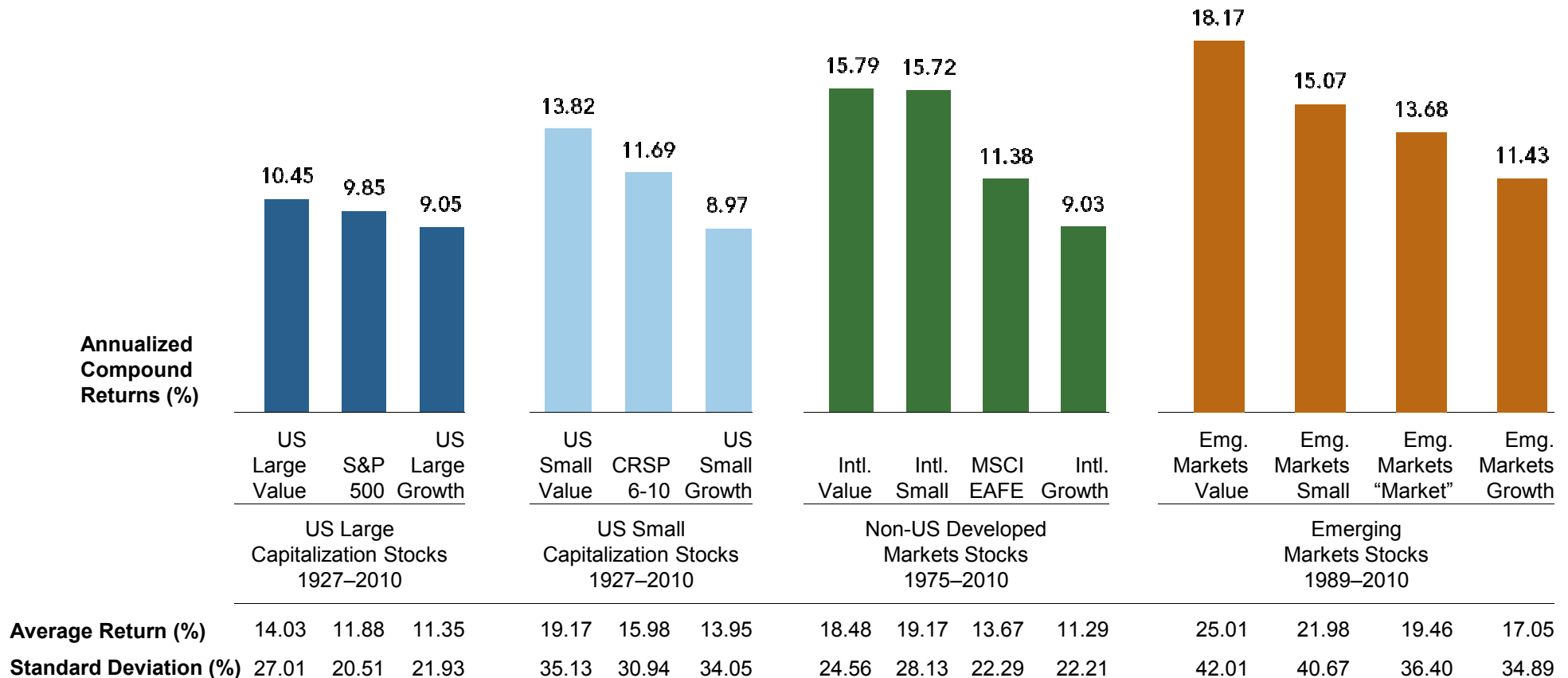


Eugene F. Fama and Kenneth R. French, “The Cross-Section of Expected Stock Returns,” *Journal of Finance* 47, no. 2 (June 1992): 427-65.

Eugene F. Fama and Kenneth R. French are consultants for Dimensional Fund Advisors. This page contains the opinions of Eugene F. Fama and Kenneth R. French but not necessarily of Dimensional Fund Advisors or DFA Securities LLC, and does not represent a recommendation of any particular security, strategy, or investment product. The opinions expressed are subject to change without notice. This material is distributed for educational purposes only and should not be considered investment advice or an offer of any security for sale. Dimensional Fund Advisors (“Dimensional”) is an investment advisor registered with the Securities and Exchange Commission. All materials presented are compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. This article is distributed for educational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products or services described. ©2009 by Dimensional Fund Advisors. All rights reserved.

Size and Value Effects Are Strong around the World

Annual Index Data



In US dollars. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. US value and growth index data (ex utilities) provided by Fama/French. The S&P data are provided by Standard & Poor's Index Services Group. CRSP data provided by the Center for Research in Security Prices, University of Chicago. International Value data provided by Fama/French from Bloomberg and MSCI securities data. International Small data compiled by Dimensional from Bloomberg, StyleResearch, London Business School, and Nomura Securities data. MSCI EAFE Index is net of foreign withholding taxes on dividends; copyright MSCI 2011, all rights reserved. Emerging markets index data simulated by Fama/French from countries in the IFC Investable Universe; simulations are free-float weighted both within each country and across all countries.

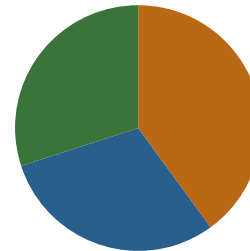
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Diversifying a Portfolio into US Small Cap Stocks

Quarterly: 1973–2010

Model Portfolio 3

	Annualized Compound Return	Annualized Standard Deviation
Model Portfolio 1	9.47%	11.16%
Model Portfolio 2	8.83%	10.23%
Model Portfolio 3	9.74%	11.88%



- Merrill Lynch One-Year US Treasury Note Index
- S&P 500 Index
- US Small Cap Index

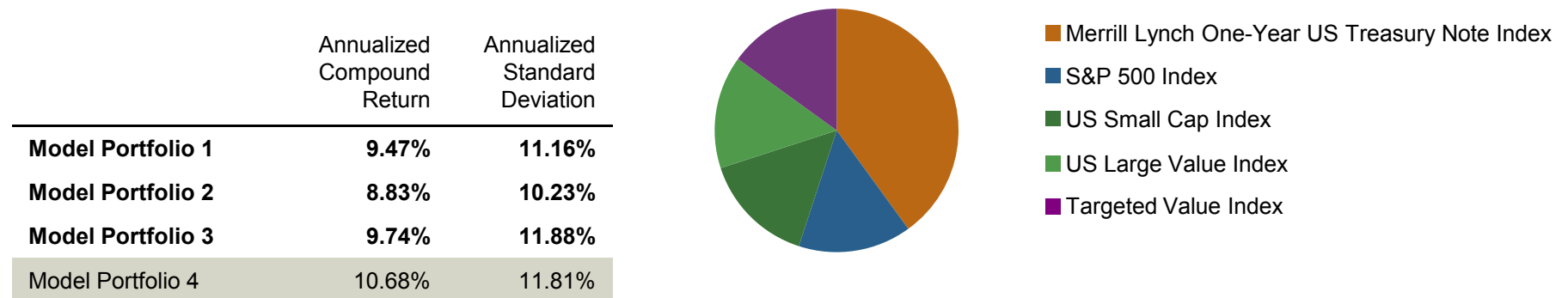
	Barclays US Govt./Credit Bond Index	S&P 500 Index	BofA Merrill Lynch One-Year US Treasury Note Index	US Small Cap Index
Model Portfolio 1	40%	60%		
Model Portfolio 2		60%	40%	
Model Portfolio 3		30%	40%	30%

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Diversifying a Portfolio into US Value Stocks

Quarterly: 1973–2010

Model Portfolio 4



	Barclays US Govt./Credit Bond Index	S&P 500 Index	BofA Merrill Lynch One-Year US Treasury Note Index	US Small Cap Index	US Large Value Index	Targeted Value Index
Model Portfolio 1	40%	60%				
Model Portfolio 2		60%	40%			
Model Portfolio 3		30%	40%	30%		
Model Portfolio 4		15%	40%	15%	15%	15%

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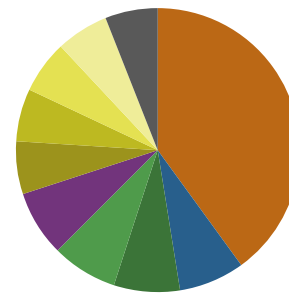
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A Fully Diversified Portfolio

Quarterly: 1973–2010

Model Portfolio 5

	Annualized Compound Return	Annualized Standard Deviation
Model Portfolio 1	9.47%	11.16%
Model Portfolio 2	8.83%	10.23%
Model Portfolio 3	9.74%	11.88%
Model Portfolio 4	10.68%	11.81%
Model Portfolio 5	11.65%	11.26%



- Merrill Lynch One-Year US Treasury Note Index
- S&P 500 Index
- US Small Cap Index
- US Large Value Index
- Targeted Value Index
- International Large Index
- International Small Index
- International Large Value Index
- International Small Value Index
- Emerging Markets Blended Index

	Barclays US Govt./Credit Bond Index	S&P 500 Index	BofA Merrill Lynch One-Year US Treasury Note Index	US Small Cap Index	US Large Value Index	Targeted Value Index	Intl. Large Index	Intl. Small Index	Intl. Large Value Index	Intl. Small Value Index	Emerging Markets Blended Index
Model Portfolio 1	40%	60%									
Model Portfolio 2		60%	40%								
Model Portfolio 3		30%	40%	30%							
Model Portfolio 4		15%	40%	15%	15%	15%					
Model Portfolio 5		7.5%	40%	7.5%	7.5%	7.5%	6%	6%	6%	6%	6%

Rebalanced annually. Barclays Capital data, formerly Lehman Brothers, provided by Barclays Bank PLC. The S&P data are provided by Standard & Poor's Index Services Group. The Merrill Lynch Indices are used with permission; copyright 2011 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Dimensional Index data compiled by Dimensional. Emerging Markets Blended Index consists of 50% Fama/French Emerging Markets Index, 25% Fama/French Emerging Markets Small Cap Index, and 25% Fama/French Emerging Markets Value Index. Fama/French Emerging Markets, Fama/French Emerging Markets Value and Fama/French Emerging Markets Small Cap Index weightings allocated evenly between Dimensional International Small Cap Index and Fama/French International Value Index prior to January 1989 data inception. Dimensional International Small Cap Value Index weighting allocated to International Small Cap Index prior to July 1981 data inception. International Value weighting allocated evenly between International Small Cap and MSCI World ex USA Index prior to January 1975 data inception. Indexes are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Not to be construed as investment advice. Returns of model portfolios are based on back-tested model allocation mixes designed with the benefit of hindsight and do not represent actual investment performance. See cover page for additional information.

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