

# Performance of Premiums in Equity Markets



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Disclosure: Professional Financial Strategies, Inc. is an investment adviser registered with the Securities and Exchange Commission, and an independent fee-only firm associated with Charles Schwab & Co. and Dimensional Fund Advisors LP. A printed copy of the firm's current disclosure brochure discussing advisory services and fees is available upon request by calling 585.218.9080.



# Performance of Premiums in Equity Markets

- I. Market Prices Contain Relevant Information
- II. Historical Distribution of US Market Returns
- III. Dimensions of Expected Returns
- IV. Yearly Observations of US Premium Dimensions
- V. Historical Performance of 10-Year Premium Dimensions Worldwide
- VI. 10-Year Observations of US Premium Dimensions
- VII. Dimensions of Expected Returns for Last 10 Years
- VIII. Historical Performance of Premium Dimensions Worldwide over Rolling Periods
- IX. Managing Premium Performance with a Global Equity Allocation
- X. Index Descriptions

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# Market Prices Contain Relevant Information

Prices reflect the aggregate expectations of market participants.

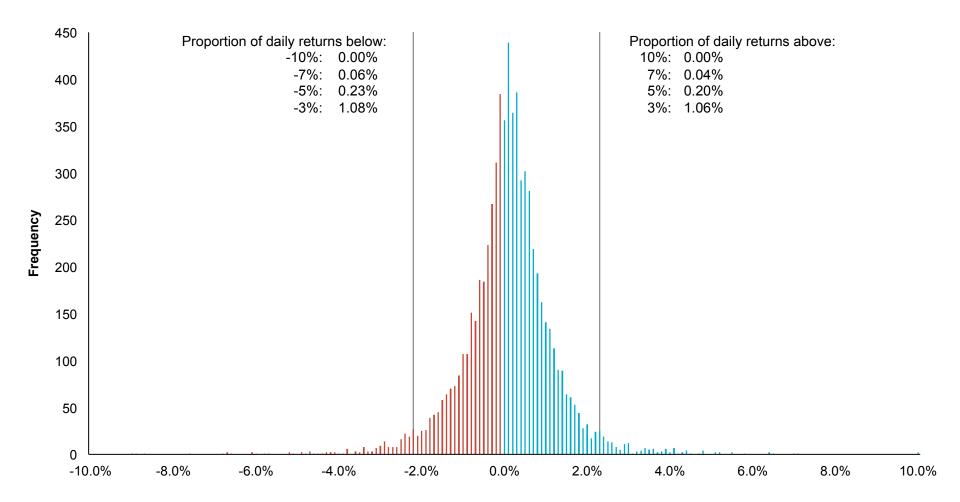
Fairly priced securities can have different expected returns.

Efficiently capturing higher expected returns requires the rational use of information contained in security prices.



# Historical Distribution of US Large Cap Market's Daily Returns

Daily Total Returns: October 1989–December 2016



Gray lines show two standard deviations from mean (-2.21%, 2.29%), which is a statistical measurement of historical volatility that represents 95% of all outcomes. A volatile stock tends to have a higher standard deviation from the mean.

In US dollars

US Large Cap is the S&P 500 Index, provided by Standard & Poor's Index Services Group. The information shown here is derived from the index.



# Distribution of US Market Returns

CRSP 1–10 Index returns by year										
20.2										
1926–2016							1951			
							20.7			
						1993	1963			
						11.1	21.0			
					1970	2014	1982			
					0.0	11.7	21.0			
Positive Y	oare:	68	<b>75%</b>		1953	2004	1996			
Tositive Tears.		00	13/0		0.7	12.0	21.4			
<b>Negative Years:</b>		23	25%		2011	1959	1944			
Negative	cui 5.	20	20 /0		0.8	12.7	21.5			
					1960	1952	1983			
					1.2	13.4	22.0	4007	ıl	
					1987	2016	1979	1997		
					1.7	13.6	22.6	31.4		
					1948	1968	1998	2003		
					2.1	14.1	24.3	31.6		
					1939 2.8	1965 14.5	1955 25.2	1985 32.2		
				1966	1947	2006	1999	1936		
				-8.7	3.6	15.5	25.2	32.3		
			1973	1932	1934	1942	1976	1980		
			-18.1	-8.6	4.1	16.1	26.8	32.8		
			1929	1940	1984	1964	1961	1927		
			-15.2	-7.1	4.5	16.1	27.0	33.5		
			2000	1946	2007	1971	1938	1991		
			-11.4	-6.2	5.8	16.2	28.2	34.7		
			2001	1990	2005	2012	1943	2013		
			-11.2	-6.0	6.2	16.2	28.4	35.2		
			1969	1977	1978	1986	1967	1995		
			-10.9	-4.3	7.5	16.2	28.7	36.8		
		1930	1962	1981	1956	1972	2009	1928	1935	
		-28.8	-10.2	-3.7	8.3	16.8	28.8	38.4	44.4	
	2008	1974	1941	2015	1926	2010	1989	1945	1958	
	-36.7	-27.0	-10.1	-0.5	8.4	17.7	28.9	38.5	45.0	
1931	1937	2002	1957	1994	1992	1988	1950	1975	1954	1933
-43.5	-34.7	-21.2	-10.1	-0.1	9.8	18.0	29.6	38.8	50.0	56.7
-50% to -40%	-40% to -30%	-30% to -20%	-20% to -10%	-10% to 0%	0% to 10%	10% to 20%	20% to 30%	30% to 40%	40% to 50%	50% to 60%
Appual Patura Panga										

Annual Return Range

In US dollars. CRSP data provided by the Center for Research in Security Prices, University of Chicago. The CRSP 1-10 Index measures the performance of the total US stock market, which it defines as the aggregate capitalization of all securities listed on the NYSE, AMEX, and NASDAQ exchanges. **Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.** 



# Dimensions of Expected Returns

Expected returns are driven by prices investors pay and cash flows they expect to receive

#### DIMENSIONS POINT TO SYSTEMATIC DIFFERENCES IN EXPECTED RETURNS



To be considered a dimension of expected return, a premium must be:

- Sensible
- Persistent
- Pervasive
- Robust
- Cost-effective



# Dimensions of Expected Returns

Historical premiums and returns (annualized): US, Developed ex US, and Emerging Markets

### Company Size

Relative performance of small cap stocks vs. large cap stocks (%)

#### **Relative Price**

Relative performance of value stocks vs. growth stocks (%)

### **Profitability**

Relative performance of high profitability stocks vs. low profitability stocks (%)



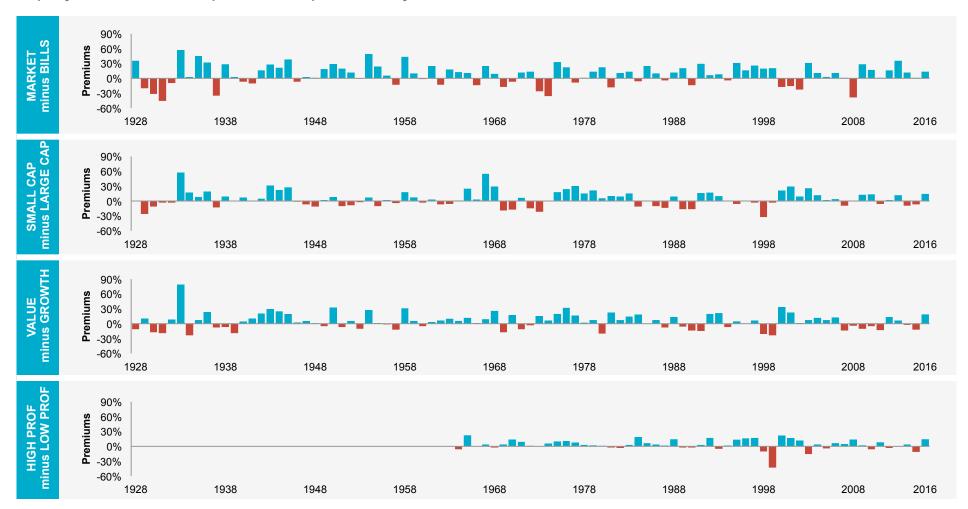
#### Information provided by Dimensional Fund Advisors LP.

In US dollars. US size premium: Dimensional US Small Cap Index minus S&P 500 Index. US relative price premium: Fama/French US Value Index minus Fama/French US Growth Index. US profitability premium: Dimensional US High Profitability Index minus Dimensional US Low Profitability Index. Dev. ex US relative price premium: Dimensional International Value Index minus Fama/French International Growth Index. Dev. ex US profitability premium: Dimensional International High Profitability Index minus Dimensional International Low Profitability Index. Emerging Markets size premium: Dimensional Emerging Markets Small Cap Index minus MSCI Emerging Markets Index (gross div.). Emerging Markets relative price premium: Fama/French Emerging Markets Value Index minus Fama/French Emerging Markets Growth Index. Emerging Markets profitability premium: Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. 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. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. See "Index Descriptions" for descriptions of Dimensional and Fama/French index data. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. The S&P data is provided by Standard & Poor's Index Services Group. MSCI data © MSCI 2017, all rights reserved.

7



Equity, size, relative price, and profitability: US Markets



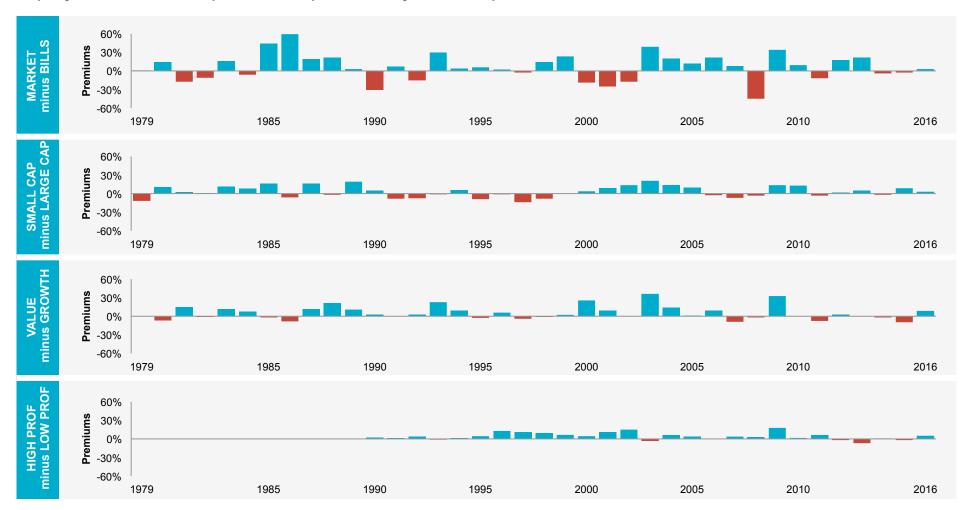
#### Information provided by Dimensional Fund Advisors LP.

In US dollars. Equity premium: Fama/French Total US Market Index minus one-month US Treasury Bills. Size premium: Dimensional US Small Cap Index minus the S&P 500 Index. Relative price premium: Fama/French US Value Index minus the Fama/French US Growth Index. Profitability premium: Dimensional US High Profitability Index minus the Dimensional US Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Dimensional indices use CRSP and Compustat data. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Fama/French indices provided by Ken French. The S&P data is provided by Standard & Poor's Index Services Group. The information shown here is derived from such indices. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP.

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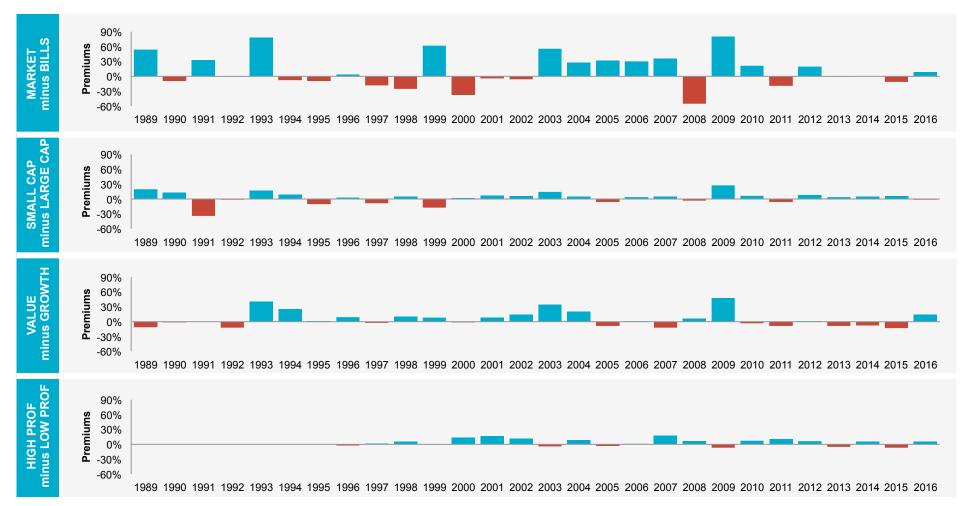
Equity, size, relative price, and profitability: Developed ex US Markets



#### Information provided by Dimensional Fund Advisors LP.

In US dollars. Equity premium: MSCI World ex USA Index (gross dividends) minus one-month US Treasury Bills. Size premium: Dimensional International Small Cap Index minus the MSCI World ex USA Index (gross dividends). Relative price premium: Fama/French International Value Index minus the Fama/French International Growth Index. Profitability premium computed by Dimensional using Bloomberg data: Dimensional International High Profitability Index minus the Dimensional International Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Dimensional indices use Bloomberg data. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Fama/French indices provided by Ken French. MSCI data copyright MSCI 2017, all rights reserved. The information shown here is derived from such indices. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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 no guarantee of future results.

Equity, size, relative price, and profitability: Emerging Markets

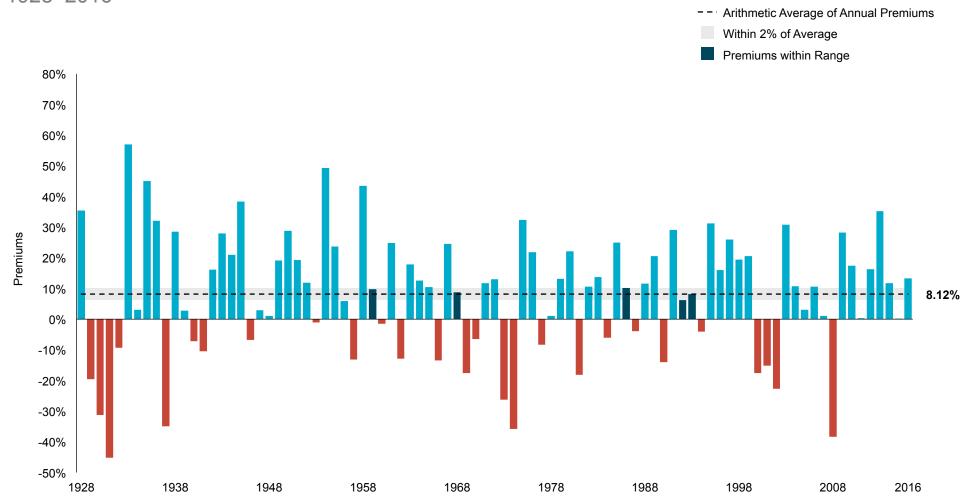


#### Information provided by Dimensional Fund Advisors LP.

In US dollars. Equity premium: Fama/French Emerging Markets Index minus one-month US Treasury Bills. Size premium: Dimensional Emerging Markets Small Cap Index minus MSCI Emerging Markets Index (gross dividends). Relative price premium: Fama/French Emerging Markets Value Index minus Fama/French Emerging Markets Growth Index. Profitability premium: Dimensional Emerging Markets High Profitability Index minus the Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Dimensional indices use Bloomberg data. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Fama/French indices provided by Ken French. MSCI data copyright MSCI 2017, all rights reserved. The information shown here is derived from such indices. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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 no guarantee of future results.



Market minus one-month Treasury bills: US Markets 1928–2016

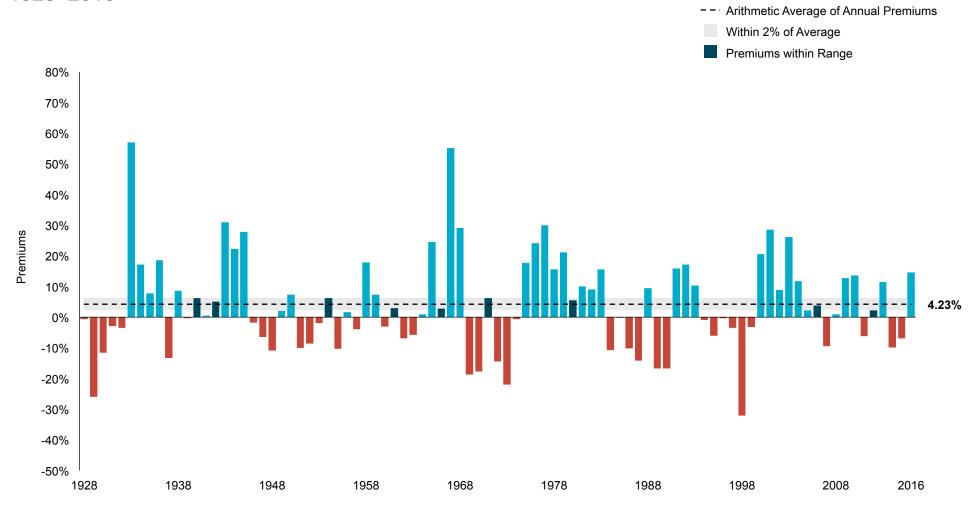


#### Information provided by Dimensional Fund Advisors LP.

In US dollars. The equity premium is the Fama/French Total US Market Index minus one-month US Treasury Bills. Fama/French indices provided by Ken French. The information shown here is derived from such indices. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP.



Small cap minus large cap: US Markets 1928–2016

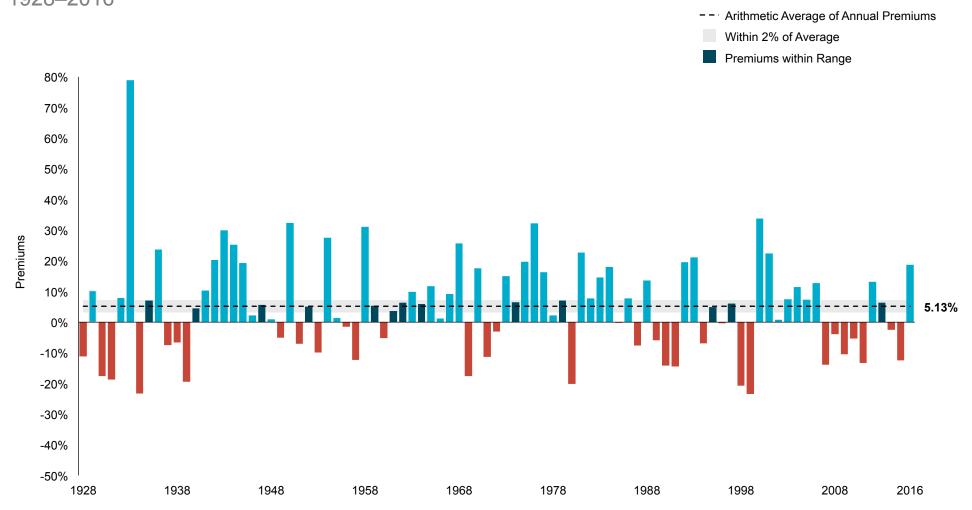


#### Information provided by Dimensional Fund Advisors LP.

In US dollars. The size premium is the Dimensional US Small Cap Index minus the S&P 500 Index. Dimensional indices use CRSP and Compustat data. The S&P data is provided by Standard & Poor's Index Services Group. The information shown here is derived from such indices. Index descriptions available upon request.

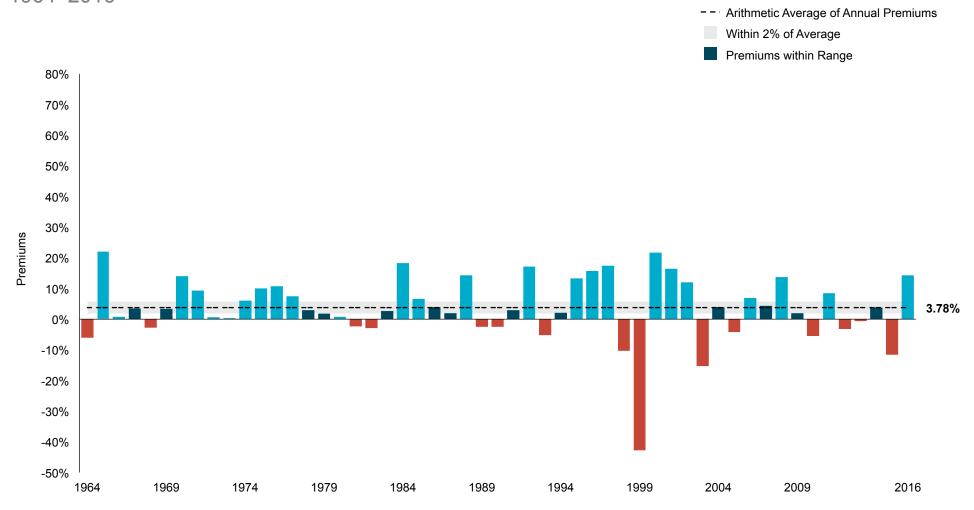


Value minus growth: US Markets 1928–2016





High profitability minus low profitability: US Markets 1964–2016



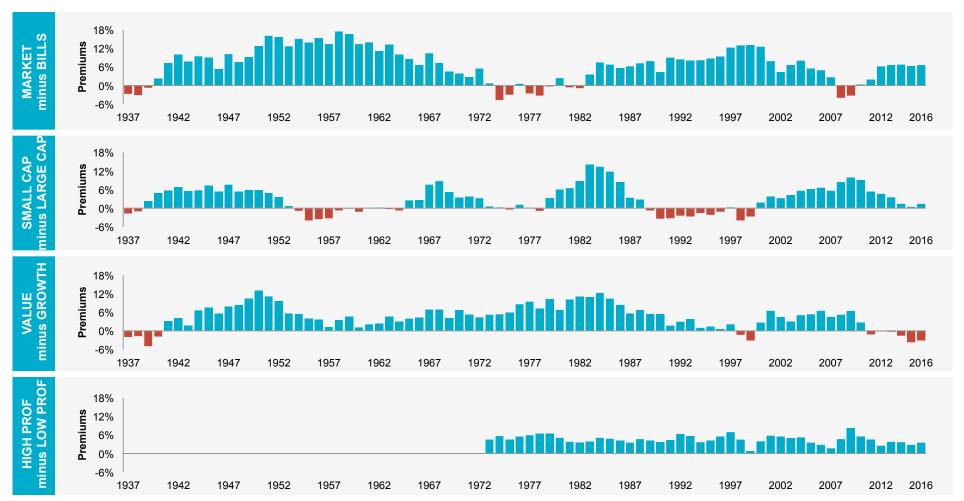
#### Information provided by Dimensional Fund Advisors LP.

In US dollars. The profitability premium is the Dimensional US High Profitability Index minus the Dimensional US Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Dimensional indices use CRSP and Compustat data. The information shown here is derived from such indices. Index descriptions available upon request.

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 no guarantee of future results.

# Historical Observations of 10-Year Premiums

Equity, size, relative price, and profitability: US Markets

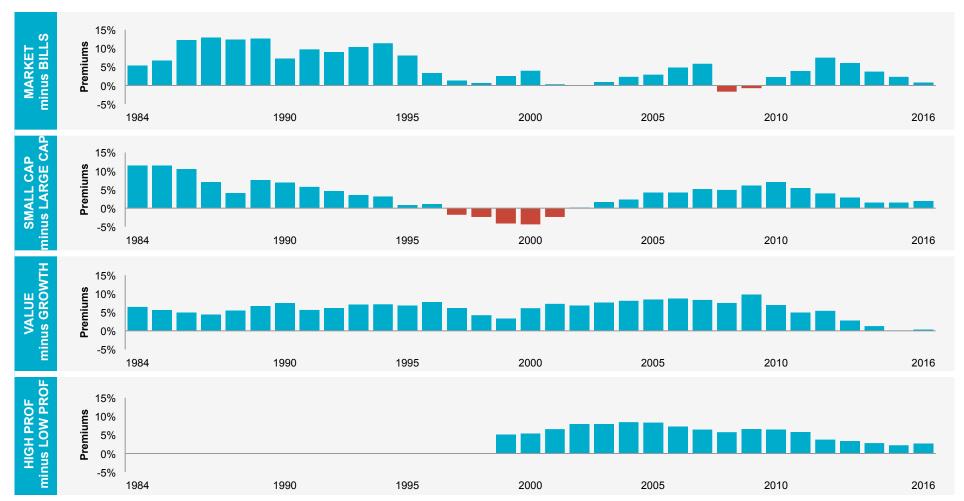


Information provided by Dimensional Fund Advisors LP.

In US dollars. 10-year rolling equity premium is computed as the 10-year annualized compound return on the Fama/French Total US Market Index minus the 10-year annualized compound return of the one-month US Treasury Bill. 10-year rolling size premium is computed as the 10-year annualized compound return on the Dimensional US Small Cap Index minus the 10-year annualized compound return on the S&P 500 Index. 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French US Growth Index. The 10-year rolling profitability premium is computed as the 10-year annualized compound return on the Dimensional US High Profitability Index minus the 10-year annualized compound return on the Dimensional US Low Profitability Index. Profitability

# Historical Observations of 10-Year Premiums

Equity, size, relative price, and profitability: Developed ex US Markets

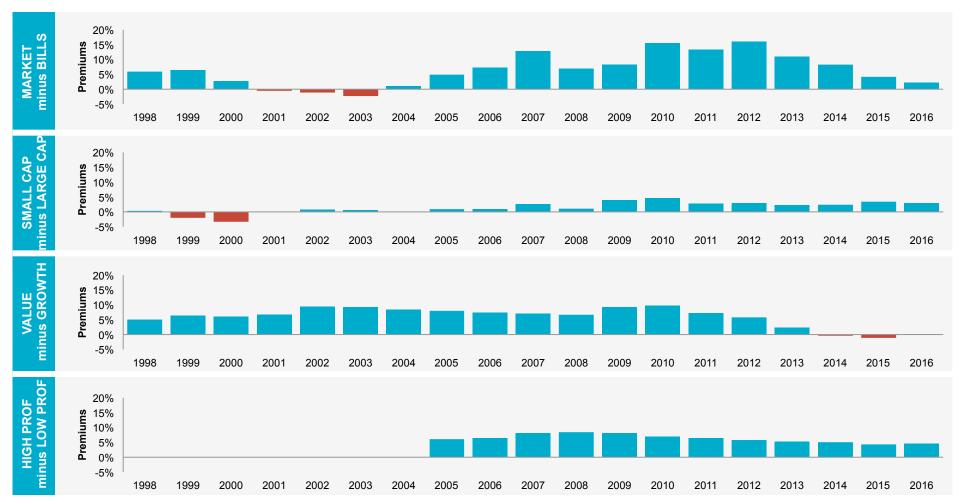


#### Information provided by Dimensional Fund Advisors LP.

In US dollars. 10-year rolling equity premium is computed as the 10-year annualized compound return on the MSCI World ex USA Index (gross dividends) minus the 10-year annualized compound return on the MSCI World ex USA Index (gross dividends). 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French International Value Index minus the 10-year annualized compound return on the Fama/French International Value Index minus the 10-year annualized compound return on the Fama/French International Growth Index. The 10-year rolling profitability premium is computed as the 10-year annualized compound return on the Dimensional International High Profitability Index minus the 10-year annualized compound return on the Dimensional International Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Dimensional indices use Bloomberg data. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Fama/French indices provided by Ken French. MSCI data copyright MSCI 2017, all rights reserved. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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 no guarantee of future results.

# Historical Observations of 10-Year Premiums

Equity, size, relative price, and profitability: Emerging Markets

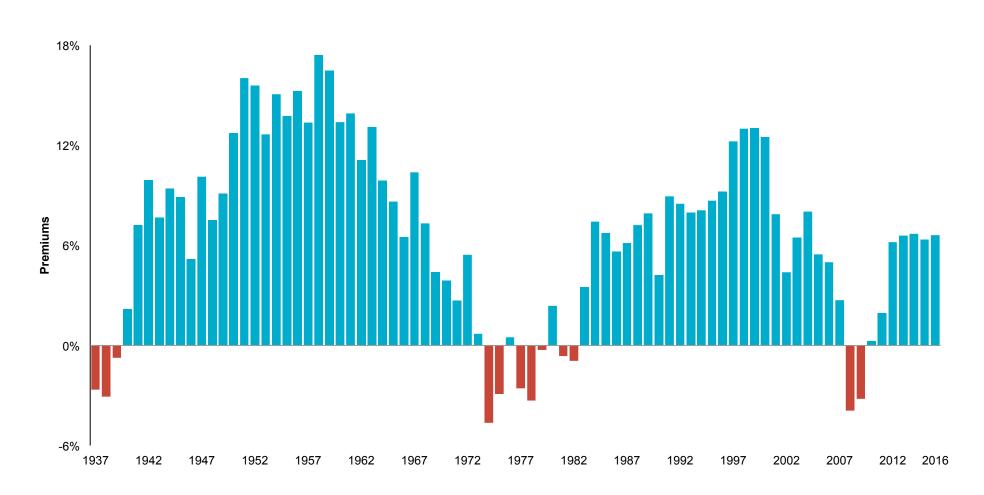


Information provided by Dimensional Fund Advisors LP.

In US dollars. 10-year rolling equity premium is computed as the 10-year annualized compound return on the Fama/French Emerging Markets Index minus the 10-year annualized compound return on the MSCI Emerging Markets Index (gross dividends). 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French Emerging Markets Value Index minus the 10-year annualized compound return on the Fama/French Emerging Markets Value Index minus the 10-year annualized compound return on the Fama/French Emerging Markets Value Index minus the 10-year annualized compound return on the Dimensional Emerging Markets High Profitability Index minus the 10-year annualized compound return on the Dimensional Emerging Markets Low Profitability Index. Profit



Market minus one-month Treasury bills: US Markets 1937–2016

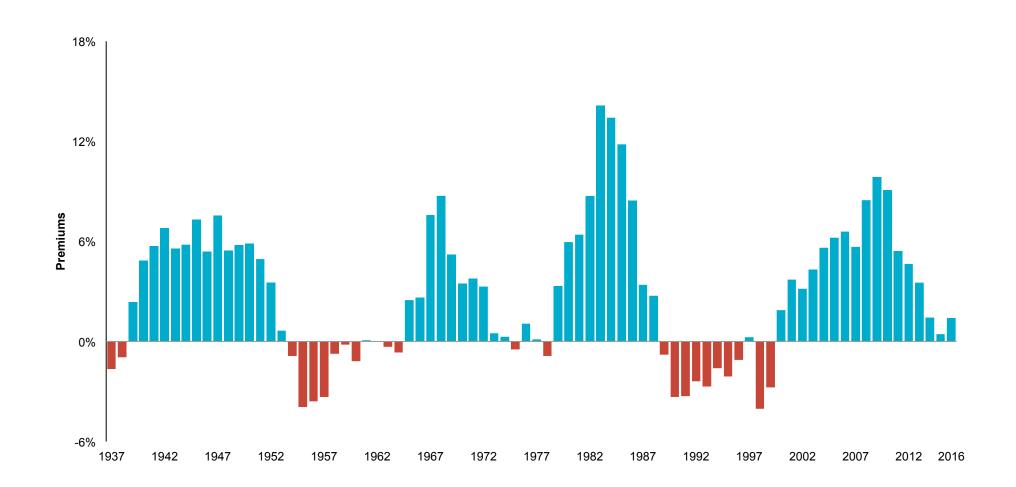


#### Information provided by Dimensional Fund Advisors LP.

In US dollars. The 10-year rolling equity premium is computed as the 10-year annualized compound return on the Fama/French Total US Market Index minus the 10-year annualized compound return of the one-month US Treasury Bill. One-Month Treasury Bills is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Fama/French indices provided by Ken French. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP.



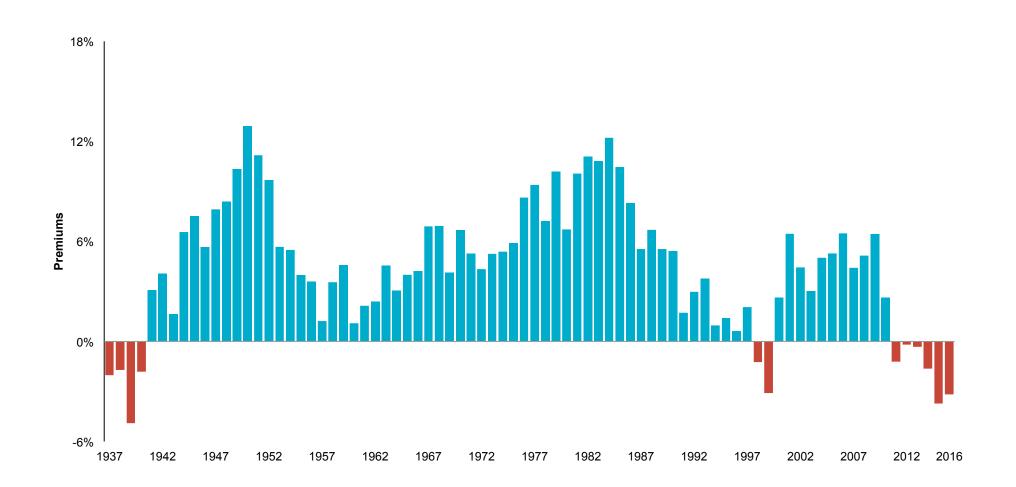
Small cap minus large cap: US Markets 1937–2016





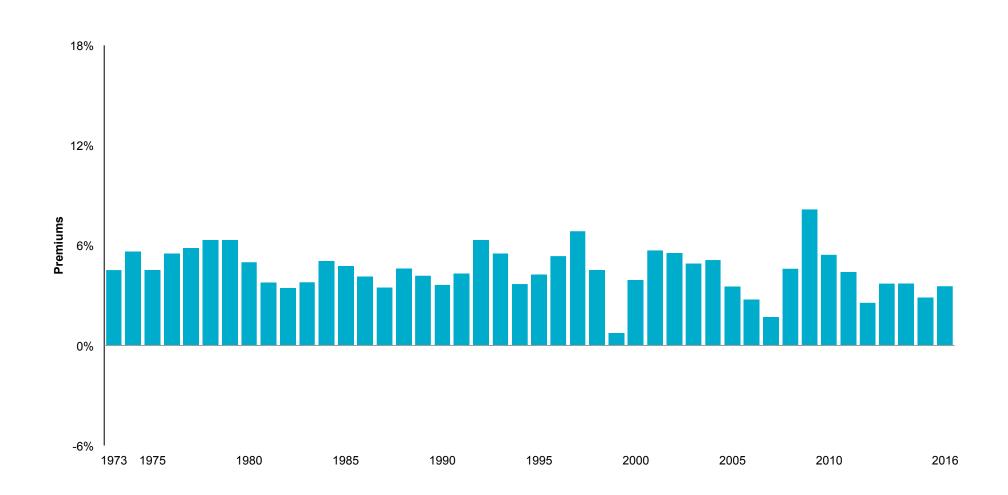
Value minus growth: US Markets

1937-2016





High profitability minus low profitability: US Markets 1973–2016

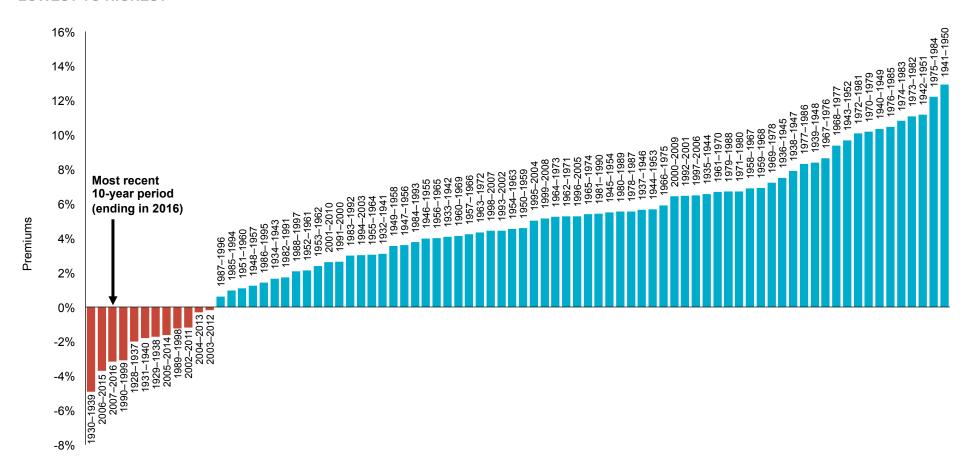




Value minus growth: US Markets

1937-2016

#### **LOWEST TO HIGHEST**





# Dimensions of Expected Returns

10-year annualized premiums (2007–2016): US Markets



#### Information provided by Dimensional Fund Advisors LP.

In US dollars. US size premium is computed as the 10-year annualized compound return on the Fama/French US Value Index minus the 10-year annualized compound return on the Fama/French US Value Index minus the 10-year annualized compound return on the Fama/French US Growth Index. US profitability premium is computed as the 10-year annualized compound return on the Dimensional US High Profitability Index minus the 10-year annualized compound return on the Dimensional US Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense, scaled by book. Index descriptions available upon request. 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. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. Dimensional indices use CRSP and Compustat data. Fama/French indices provided by Ken French. The S&P data is provided by Standard & Poor's Index Services Group.



# **Dimensions of Expected Returns**

10-year annualized premiums (2007-2016): US, Developed ex US, and Emerging Markets



#### Information provided by Dimensional Fund Advisors LP.

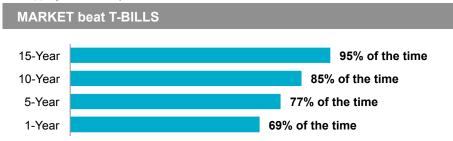
All figures represent 10-year annualized compound returns (%) in US dollars. US size premium: Dimensional US Small Cap Index minus S&P 500 Index. US relative price premium: Fama/French US Value Index minus Fama/French US Growth Index. US profitability premium: Dimensional Intl. Small Cap Index minus MSCI World ex USA Index (gross div.). Dev. ex US relative price premium: Fama/French International Value index minus Fama/French International Growth Index. Dev. ex US profitability premium: Dimensional International High Profitability Index minus Dimensional International Low Profitability Index. Emerging Markets size premium: Dimensional Emerging Markets Small Cap Index minus MSCI Emerging Markets Index (gross div.). Emerging Markets relative price premium: Fama/French Emerging Markets Value Index minus Fama/French Emerging Markets Growth Index. Emerging Markets profitability premium: Dimensional Emerging Markets High Profitability Index minus Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. 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. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. See "Index Descriptions" for descriptions of Dimensional and Fama/French index data. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. Dimensional indices use CRSP, Compustat and Bloomberg data. Fama/French indices provided by Ken French. The S&P data is provided by Standard & Poor's Index Services Group. MSCI data @ MSCI 2017, all rights reserved.



# Historical Performance of Premiums over Rolling Periods

### **US Markets**

Overlapping Periods: July 1926-December 2016

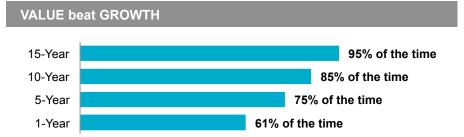


Market is Fama/French Total US Market Research Index.

T-Bills is One-Month US Treasury Bills.

There are 907 overlapping 15-year periods, 967 overlapping 10-year periods, 1,027 overlapping 5-year periods, and 1,075 overlapping 1-year periods.

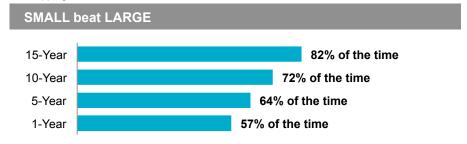
Overlapping Periods: July 1926-December 2016



Value is Fama/French US Value Research Index. Growth is Fama/French US Growth Research Index.

There are 907 overlapping 15-year periods, 967 overlapping 10-year periods, 1,027 overlapping 5-year periods, and 1,075 overlapping 1-year periods.

#### Overlapping Periods: June 1927-December 2016



Small is Dimensional US Small Cap Index.

Large is S&P 500 Index.

There are 896 overlapping 15-year periods, 956 overlapping 10-year periods, 1,016 overlapping 5-year periods, and 1,064 overlapping 1-year periods.

#### Overlapping Periods: July 1963–December 2016



High is Dimensional US High Profitability Index. Low is Dimensional US Low Profitability Index.

There are 463 overlapping 15-year periods, 523 overlapping 10-year periods, 583 overlapping 5-year periods, and 631 overlapping 1-year periods.

#### Information provided by Dimensional Fund Advisors LP.

Indices are not available for direct investment. Past performance is not a guarantee of future results.

1. Profitability is a measure of current profitability, based on information from individual companies' income statements.

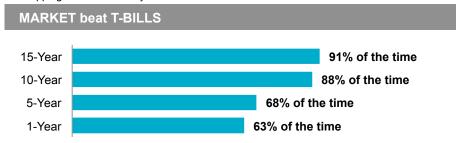
In US dollars. Based on rolling annualized returns using monthly data. Rolling multiyear periods overlap and are not independent. This statistical dependence must be considered when assessing the reliability of long-horizon return differences. "One-Month Treasury Bills" is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Dimensional Index data compiled by Dimensional. Fama/French data provided by Fama/French. The S&P data is provided by Standard & Poor's Index Services Group. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. Index descriptions available upon request.



# Historical Performance of Premiums over Rolling Periods

### Developed ex US Markets

Overlapping Periods: January 1970-December 2016

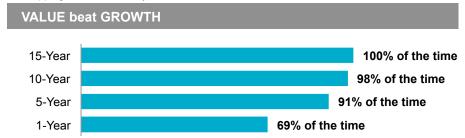


Market is MSCI World ex USA Index (gross div.).

T-Bills is One-Month US Treasury Bills.

There are 385 overlapping 15-year periods, 445 overlapping 10-year periods, 505 overlapping 5-year periods, and 553 overlapping 1-year periods.

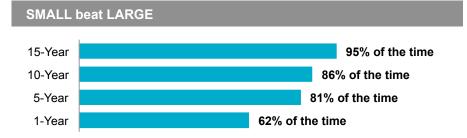
Overlapping Periods: January 1975-December 2016



Value is Fama/French International Value Index. Growth is Fama/French International Growth Index.

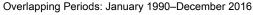
There are 325 overlapping 15-year periods, 385 overlapping 10-year periods, 445 overlapping 5-year periods, and 493 overlapping 1-year periods.

#### Overlapping Periods: January 1970-December 2016



Small is Dimensional International Small Cap Index. Large is MSCI World ex USA Index (gross div.).

There are 385 overlapping 15-year periods, 445 overlapping 10-year periods, 505 overlapping 5-year periods, and 553 overlapping 1-year periods.





High is Dimensional International High Profitability Index. Low is Dimensional International Low Profitability Index.

There are 145 overlapping 15-year periods, 205 overlapping 10-year periods, 265 overlapping 5-year periods, and 313 overlapping 1-year periods.

#### Information provided by Dimensional Fund Advisors LP.

Indices are not available for direct investment. Past performance is not a guarantee of future results.

1. Profitability is a measure of current profitability, based on information from individual companies' income statements.

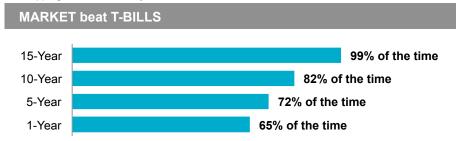
In US dollars. Based on rolling annualized returns using monthly data. Rolling multiyear periods overlap and are not independent. This statistical dependence must be considered when assessing the reliability of long-horizon return differences. "One-Month Treasury Bills" is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Dimensional Index data compiled by Dimensional. Fama/French data provided by Fama/French. MSCI data copyright MSCI 2017, all rights reserved. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. Index descriptions available upon request.



# Historical Performance of Premiums over Rolling Periods

### **Emerging Markets**

Overlapping Periods: January 1989-December 2016

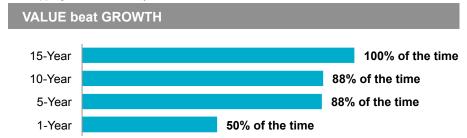


Market is Fama/French Emerging Markets Index.

T-Bills is One-Month US Treasury Bills.

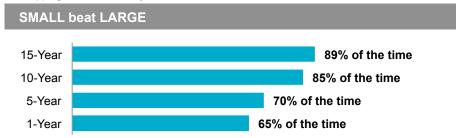
There are 157 overlapping 15-year periods, 217 overlapping 10-year periods, 277 overlapping 5-year periods, and 325 overlapping 1-year periods.

Overlapping Periods: January 1989-December 2016



Value is Fama/French Emerging Markets Value Index.
Growth is Fama/French Emerging Markets Growth Index.
There are 157 overlapping 15-year periods, 217 overlapping 10-year periods, 277 overlapping 5-year periods, and 325 overlapping 1-year periods.

#### Overlapping Periods: January 1989-December 2016



Small is Dimensional Emerging Markets Small Index. Large is MSCI Emerging Markets Index (gross div.).

There are 157 overlapping 15-year periods, 217 overlapping 10-year periods, 277 overlapping 5-year periods, and 325 overlapping 1-year periods.

Overlapping Periods: July 1995–December 2016



High is Dimensional Emerging Markets High Profitability Index. Low is Dimensional Emerging Markets Low Profitability Index. There are 79 overlapping 15-year periods, 139 overlapping 10-year periods, 199 overlapping 5-year periods, and 247 overlapping 1-year periods.

#### Information provided by Dimensional Fund Advisors LP.

Indices are not available for direct investment. Past performance is not a guarantee of future results.

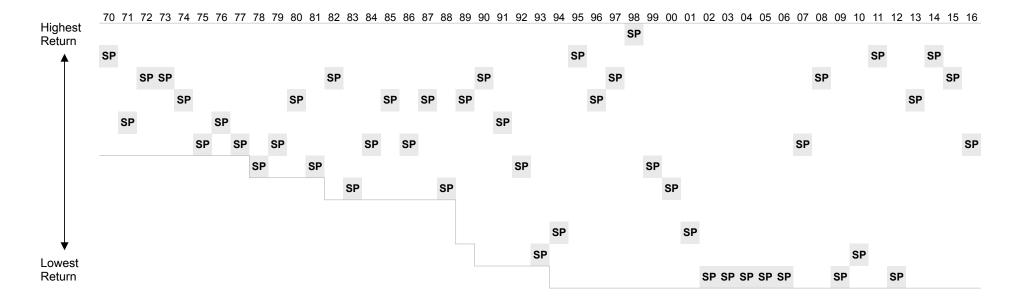
1. Profitability is a measure of current profitability, based on information from individual companies' income statements.

In US dollars. Based on rolling annualized returns using monthly data. Rolling multiyear periods overlap and are not independent. This statistical dependence must be considered when assessing the reliability of long-horizon return differences. "One-Month Treasury Bills" is the IA SBBI US 30 Day TBill TR USD, provided by Ibbotson Associates via Morningstar Direct. Dimensional Index data compiled by Dimensional. Fama/French data provided by Fama/French. MSCI data copyright MSCI 2017, all rights reserved. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. Index descriptions available upon request.



# Managing Premium Performance with a Global Equity Allocation

Annual returns rankings of the Dimensional Equity Balanced Strategy Index and its component indices, 1970–2016



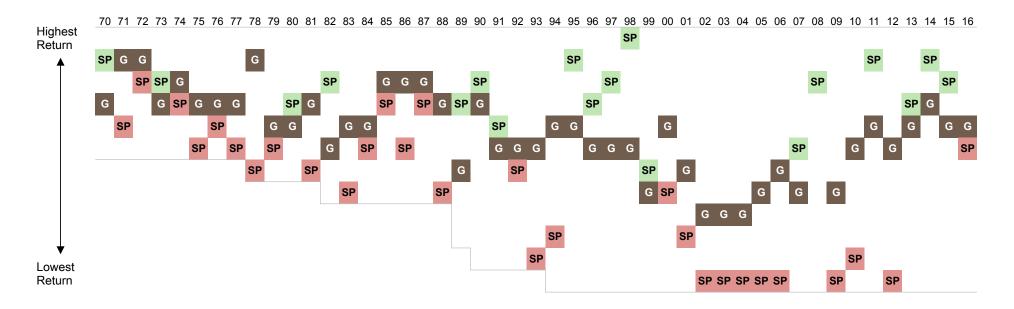
S&P 500 (SP)

In US dollars. These indices are the current components of the Dimensional Equity Balanced Strategy Index as of 1994 – present. Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio. Sources: Dimensional for Dimensional Index data. Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio. Past performance is not a guarantee of future results. The S&P data is provided by Standard & Poor's Index Services Group. See Appendix for Descriptions of Dimensional Indices.



# Managing Premium Performance with a Global Equity Allocation

Annual returns rankings of the Dimensional Equity Balanced Strategy Index and its component indices, 1970–2016





### Did diversification work?

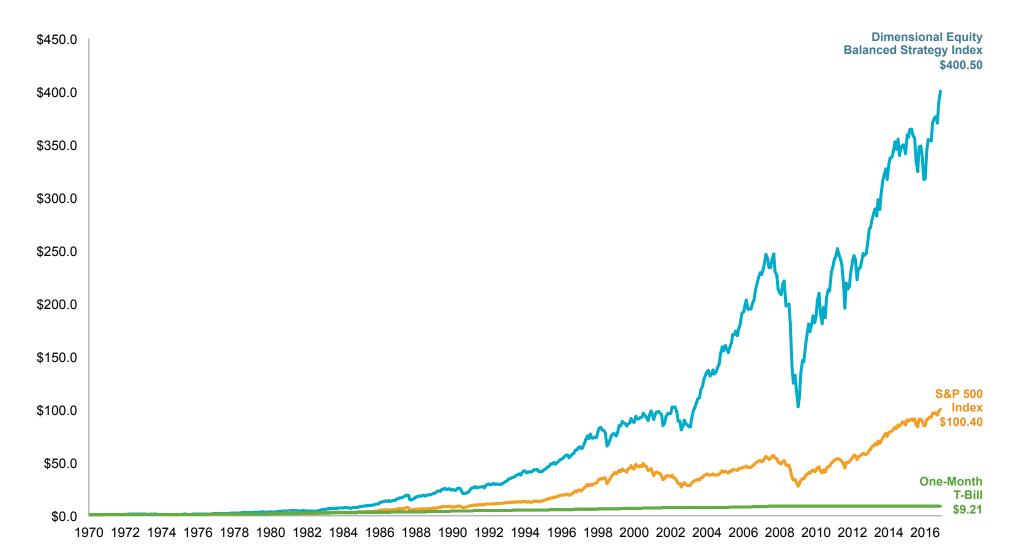
- The S&P 500 did better than the globally diversified index 18 times.
- It did worse 29 times.

In US dollars. These indices are the current components of the Dimensional Equity Balanced Strategy Index as of 1994 – present. Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio. Sources: Dimensional for Dimensional Index data. Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio. Past performance is not a guarantee of future results. The S&P data is provided by Standard & Poor's Index Services Group. See Appendix for Descriptions of Dimensional Indices.



# Global Balanced Equity Strategy Index vs. S&P 500 vs. T-Bills

Performance: January 1970–December 2016



In US dollars. Sources: Dimensional for Dimensional Index data. See "Dimensional Equity Balanced Strategy Index Description" slide in the Appendix for more information. Indices are not available for direct investment and performance does not reflect expenses of an actual portfolio. Past performance is not a guarantee of future results. The S&P data is provided by Standard & Poor's Index Services Group.



# **Index Descriptions**

Dimensional US Small Cap Index was created by Dimensional in March 2007 and is compiled by Dimensional. It represents a market-capitalization-weighted index of securities of the smallest US companies whose market capitalization falls in the lowest 8% of the total market capitalization of the Eligible Market. The Eligible Market is composed of securities of US companies traded on the NYSE, NYSE MKT (formerly AMEX), and Nasdaq Global Market. Exclusions: Non-US companies, REITs, UITs, and investment companies. From January 1975 to the present, the index also excludes companies with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat. The index monthly returns are computed as the simple average of the monthly returns of 12 sub-indices, each one reconstituted once a year at the end of a different month of the year. The calculation methodology for the Dimensional US Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

Dimensional US High Profitability Index was created by Dimensional in January 2014 and represents an index consisting of US companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. It is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat.

Dimensional US Low Profitability Index was created by Dimensional in January 2014 and represents an index consisting of US companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three low-profitability subgroups. It is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: CRSP and Compustat.

Dimensional International Small Cap Index was created by Dimensional in April 2008 and is compiled by Dimensional. July 1981–December 1993: It Includes non-US developed securities in the bottom 10% of market capitalization in each eligible country. All securities are market capitalization weighted. Each country is capped at 50%. Rebalanced semiannually. January 1994–Present: Market-capitalization-weighted index of small company securities in the eligible markets excluding those with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of a different quarter of the year. Prior to July 1981, the index is 50% UK and 50% Japan. The calculation methodology for the Dimensional International Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.



# **Index Descriptions**

Dimensional International Low Profitability Index was created by Dimensional in January 2013 and represents an index consisting of non-US developed companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three low-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

Dimensional International High Profitability Index was created by Dimensional in January 2013 and represents an index consisting of non-US developed companies. It is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

Dimensional Emerging Markets Low Profitability Index was created by Dimensional in April 2013 and represents an index consisting of emerging markets companies and is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index

represents the average return of the three low-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

Dimensional Emerging Markets High Profitability Index was created by Dimensional in April 2013 and represents an index consisting of emerging markets companies and is compiled by Dimensional. Dimensional sorts stocks into three profitability groups from high to low. Each group represents one-third of the market capitalization of each eligible country. Similarly, stocks are sorted into three relative price groups. The intersections of the three profitability groups and the three relative price groups yield nine subgroups formed on profitability and relative price. The index represents the average return of the three high-profitability subgroups. The index is rebalanced twice per year. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. Source: Bloomberg.

Dimensional Emerging Markets Small Cap Index was created by Dimensional in April 2008 and is compiled by Dimensional. January 1989–December 1993: Fama/ French Emerging Markets Small Cap Index. January 1994–Present: Dimensional Emerging Markets Small Index Composition: Market-capitalization-weighted index of small company securities in the eligible markets excluding those with the lowest profitability and highest relative price within the small cap universe. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. The index monthly returns are computed as the simple average of the monthly returns of four sub-indices, each one reconstituted once a year at the end of a different quarter of the year.

Source: Bloomberg. The calculation methodology for the Dimensional Emerging Markets Small Cap Index was amended on January 1, 2014, to include profitability as a factor in selecting securities for inclusion in the index.

#### Information provided by Dimensional Fund Advisors LP.

The Dimensional Indices have been retrospectively calculated by Dimensional Fund Advisors LP and did not exist prior to their index inceptions dates. Accordingly, results shown during the periods prior to each Index's index inception date do not represent actual returns of the Index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP.



# **Index Descriptions**

**Fama/French US Value Index** Provided by Fama/French from CRSP securities data. Includes the lower 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

**Fama/French US Growth Index** Provided by Fama/French from CRSP securities data. Includes the higher 30% in price-to-book of NYSE securities (plus NYSE Amex equivalents since July 1962 and Nasdaq equivalents since 1973).

**Fama/French International Value Index:** 2008–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the lower 30% price-to-book range. 1975–2007: Provided by Fama/French from MSCI securities data.

Fama/French International Growth Index: 2008—present: Provided by Fama/
French from Bloomberg securities data. Simulated strategy of MSCI EAFE + Canada countries in the higher 30% price-to-book range. 1975–2007: Provided by Fama/
French from MSCI securities data.

Fama/French Emerging Markets Value Index: 2009—present: Provided by Fama/ French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the lower 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.

Fama/French Emerging Markets Growth Index: 2009–present: Provided by Fama/French from Bloomberg securities data. Simulated strategy using IFC investable universe countries. Companies in the higher 30% price-to-book range; companies weighted by float-adjusted market cap; countries weighted by country float-adjusted market cap; rebalanced monthly. 1989–2008: Provided by Fama/French from IFC securities data. IFC data provided by International Finance Corporation.



# Dimensional Equity Balanced Strategy Index Description

Rebalanced monthly. The Dimensional Equity Balanced Strategy Index is comprised of commercial and Dimensional indices, 70% US equity indices, and 30% non-US indices. US: S&P 500, large cap value, small cap, small cap value, Dow Jones REIT; non-US: international value, international small cap and small cap value, emerging markets, and emerging markets value and small cap. Additional index information is available upon request.

Real Estate Strategy weighting allocated evenly between US Small Cap and US Small Cap Value prior to January 1978 data inception.

International Value weighting allocated to Fama/French International Value Index prior to January 1994 data inception, and evenly between International Small Cap and MSCI EAFE Index (net dividends) prior to January 1975 data inception. International Small Cap Value weighting allocated to International Small Cap prior to July 1981 data inception.

Emerging Markets weighting allocated to MSCI Emerging Markets Index (gross dividends) prior to January 1994 data inception, and evenly between International Small Cap and International Value prior to January 1988 data inception.

Emerging Markets Value and Small Cap weighting allocated evenly between International Small Cap and International Value prior to January 1989 data inception. Two-Year Global weighting allocated to One-Year prior to January 1985 data inception.

For illustrative purposes only. The balanced strategies are not recommendations for an actual allocation.

Indices are not available for direct investment; their performance does not reflect the expenses associated with the management of an actual portfolio.

Rebalanced monthly. All performance results of the balanced strategies are based on performance of indices with model/back-tested asset allocations; the performance was achieved with the benefit of hindsight; it does not represent actual investment strategies. The model's performance does not reflect advisory fees or other expenses associated with the management of an actual portfolio. There are limitations inherent in model allocations. In particular, model performance may not reflect the impact that economic and market factors may have had on the advisor's decision making if the advisor were actually managing client money.

Past performance is no guarantee of future results.



# Second Opinion Service

In these volatile times, you probably know a friend, family member or colleague who may have a complicated situation, or who wonders whether they have the right financial advisor, or who just needs help, but doesn't get it. That's not uncommon. Studies suggest that over 80 percent of affluent investors would value a second opinion.\*

In order to help those you care about achieve their financial goals, we have created our complimentary **Second Opinion Service**. We're pleased to offer your friends, family and colleagues the same expertise and guidance that you've come to expect as a valued client of Professional Financial.

Professional Financial works with successful professionals and retirees, acting as their personal chief financial officer-meeting financial challenges, freeing them from many serious concerns. We integrate financial planning, investment management, and relationship consulting into a personalized process for each family.

We steward wealth through a consultative process, helping families make informed decisions around preserving wealth, mitigating taxes, transferring wealth to heirs, protecting assets from unjust loss, and making a difference through charitable giving. We employ a comprehensive approach to better understand our client's deepest needs, values and goals.

Founded in 1993, Professional Financial is an independent fee-only registered investment advisor staffed with Certified Financial Planners.<sup>TM</sup> Professional memberships include: Financial Planning Association, American Institute of CPAs, Institute of Chartered Management Accountants, and National Association of Accountants.

### WEALTH MANAGEMENT CONSULTING PROCESS

Step 1 Step 3 Step 2 Step 4 Step 5 **Discovery** Mutual Organizational Regular Investment commitment meeting planning meeting progress meeting meeting meetings

\*Source: Russ Alan Prince and David A. Geracioti, Cultivating the Middle-Class Millionaire, 2005





# Working with a team that redefines wealth management

Ask ten investors to define wealth management. Rather, ask ten typical "wealth managers" to do so. You'll almost certainly get ten different answers, and most replies will primarily focus only on investing. As a client of Professional Financial, however, you benefit from a team of CFPs® with a network of specialists having a clear and comprehensive vision of true wealth management.

### **Our integrative process**

At Professional Financial we approach each new engagement with a time-tested, collaborative process. This allows us to have an open dialogue with you so we can learn about your values and goals. This proven process enables us to work with you to tailor a plan that helps you meet your essential goals. As a valued client, you'll recognize each of the five steps below. As part of our **Second Opinion Service**, we offer a portion of our consultative service, complimentary, to you friends, family and colleagues.

### What to expect from the Second Opinion Service

We will meet with your friends, family and colleagues for a discovery meeting and then invite them back for an investment planning meeting. Hopefully, we can confirm whether they are on track to achieve their goals with their existing financial providers. If appropriate, however, we'll suggest ways we can help, including recommending another qualified advisor if we're not a good fit for them. Either way, your family and friends will receive a Total Client Profile and a detailed analysis of their current investment portfolio and planning strategy—a value that may be in excess of \$5,000.

#### SECOND OPINION SERVICE

Step 1

Step 2

Discovery meeting

Investment planning meeting

#### **INTEGRATIVE WEALTH MANAGEMENT**

#### INVESTMENT MANAGEMENT

- Wealth preservation
- Goal monitoring
- Risk analysis
- Portfolio structuring
- Manager due diligence
- Performance evaluation

#### ADVANCED PLANNING

 Wealth enhancement, including cash flow, tax minimization, and liability management

- Wealth transfer
- Wealth protection
- Charitable giving

#### **RELATIONSHIP CONSULTING**

- Regularly scheduled calls, reviews and in-person meetings
- Network of specialists, including accounting, tax, actuarial, legal, insurance and financial resources





### Let us help you help those you care about. Contact us today.

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President | Top Wealth Manager

Kam-Lin "Katherine" Hill, CFP® Vice President | Wealth Consultant

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