PRINCIPLES THAT ENDURE



Market Update and Investing In the New Normal

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Economic Backdrop: A Summary

Global Growth Remains Fragile

Inflation a non-issue: CB more concerned with deflation

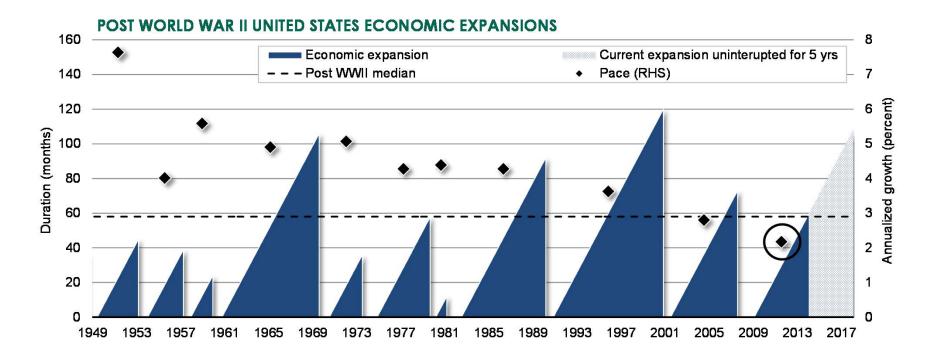
 Central Banks Remain in Various Stages of Accommodation: Implementation and Exit

Gravitational Force to Keep Global Interest Rates Low for Longer

Global Liquidity Tailwind for Risk Assets



Slower for Longer

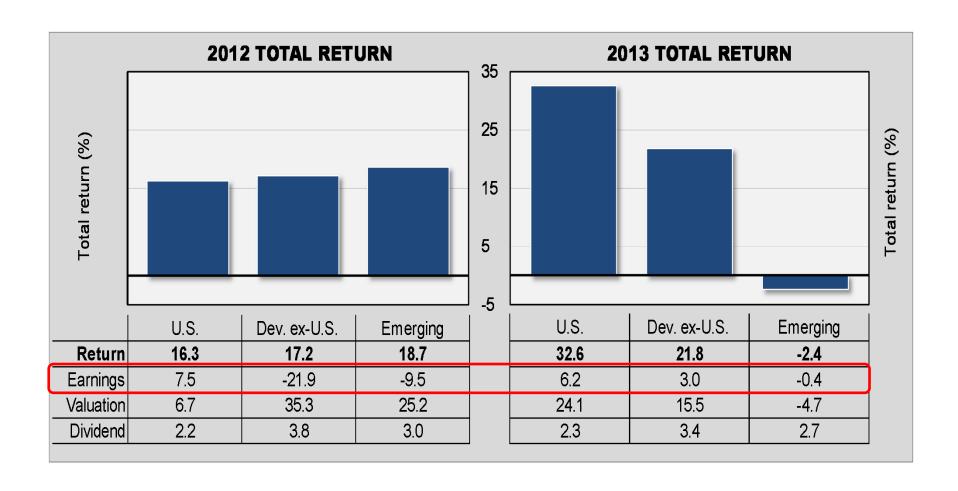


➤ Global financial sector deleveraging has been a driving force behind the slow recovery, which has progressed at a historically low 2.2% annualized pace. The expansion's slow pace is why we think that growth can continue through our 5 year horizon, despite the fact that the length of the current expansion is at the post-WWII average.





Stock Market Returns: Lets Go to the Videotape



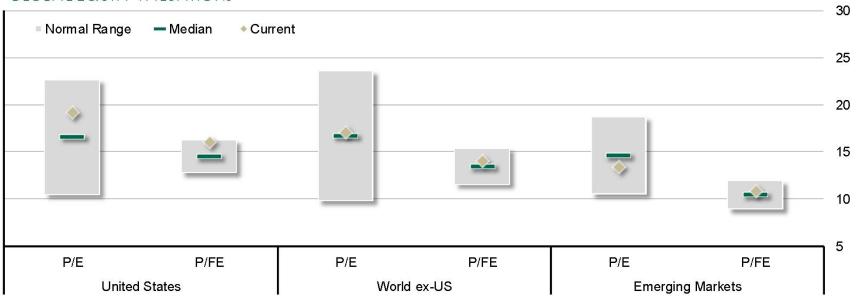
Sources: Northern Trust, Bloomberg





Global Equities Valuation Summary

GLOBAL EQUITY VALUATIONS

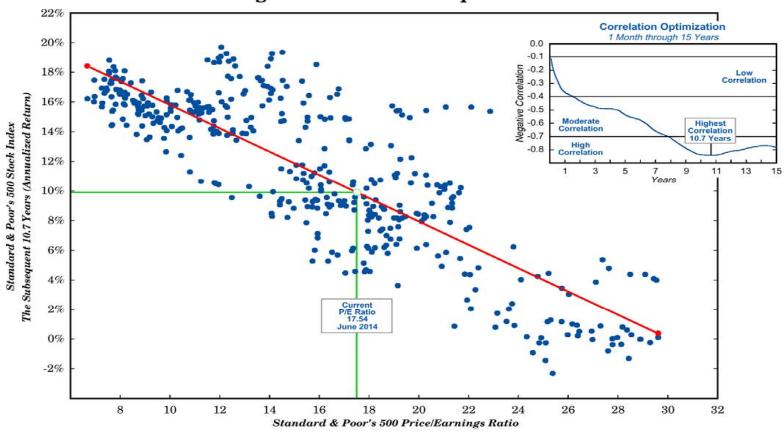


Region	P/E		P/FE		P/Book		P/Cash Flow		Dividend Yield	
	Current	LT Median	Current	LT Median	Current	LT Median	Current	LT Median	Current	LT Median
US	19.2	16.6	16.0	14.5	2.8	2.2	12.2	9.4	1.9%	2.9%
World ex-US	17.1	16.7	14.1	13.4	1.7	1.8	9.1	8.0	3.0%	2.8%
Europe	17.4	14.1	14.0	12.3	1.8	1.7	9.1	6.8	3.2%	3.6%
Japan	15.1	22.9	13.7	15.5	1.3	1.9	7.6	8.5	1.9%	1.2%
EM	13.4	14.6	10.9	10.4	1.6	1.7	8.2	8.4	2.7%	2.4%

Source: Northern Trust, MSCI. Monthly data through 8/31/2014. Indices are MSCI US, MSCI World ex-US, and MSCI Emerging Markets; US and World ex-US data begin in 1970, EM data begin in 1995. Normal Range: +/- 1 standard deviation from the median. LT: long-term.



Price/Earnings Ratios and Subsequent Stock Returns



Notes

Small Graph: All forward looking Stock Returns (1 Month through 15 Years) are tested to identify the holding period with the highest correlation (10.7 Years).

Main Graph: High Negative Correlation (-0.84); 420 Observations; X Axis; 11/68 - 10/03; Y Axis; 7/79 - 6/14; Trendline (Least-Squares Method)

Sources: Standard & Poor's Corporation • Copyright © 2014 Crandall, Pierce & Company

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Earnings: Companies Must Deliver in 2014



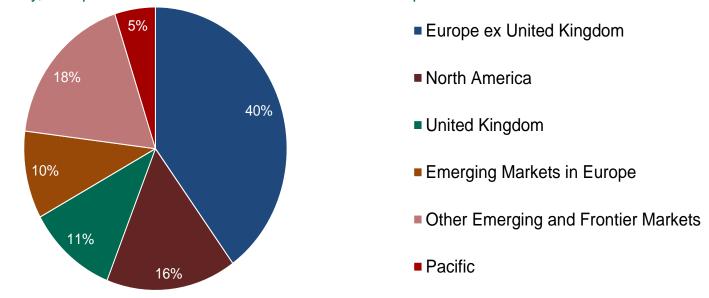
Source: Northern Trust. Forecasts as of 7/3/2014.



European Stocks: Global Exposures

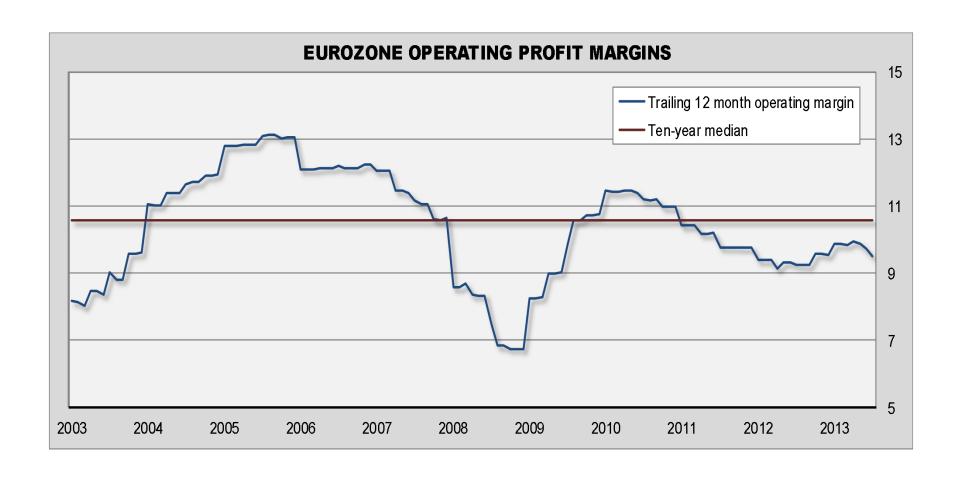
BROADLY DIVERSIFIED

Globally, European markets are the most diversified developed markets.





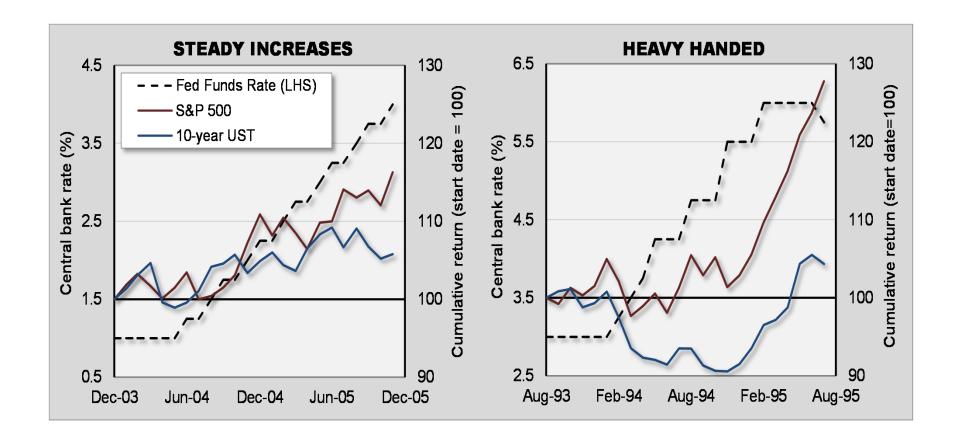
EU: Operating Margins Can Improve







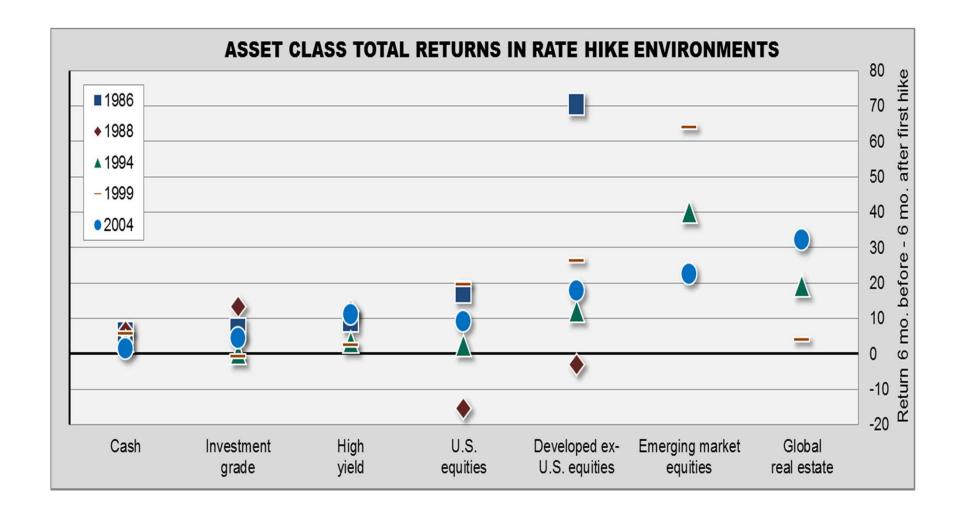
Rates: Predictable Rises Can be Taken in Stride







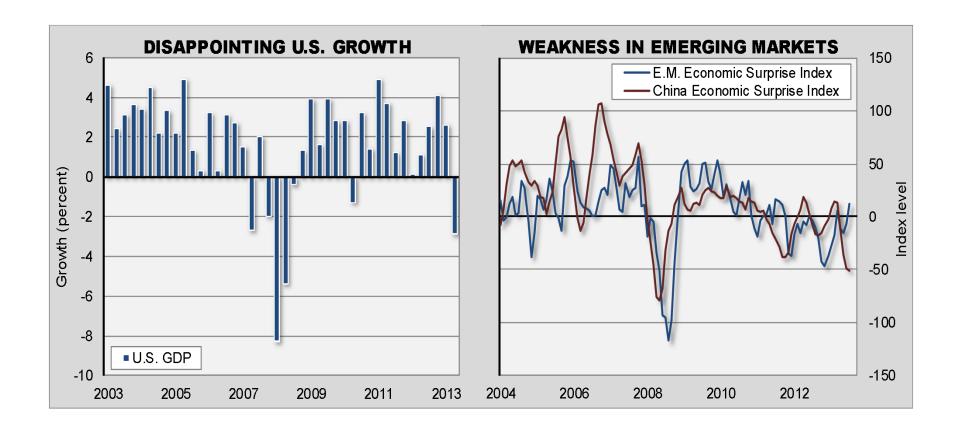
Capital Markets Can Handle Rising Rates







Risk Cases: G2 Growth Below-Expectations



Sources: Bloomberg, Northern Trust. Economic surprise indices by Citigroup through June 2014. GDP growth quarterly through March 2014 at a seasonally adjusted annual rate.

Northern Trust



Risk Cases: Geopolitical Turbulence

CRISES IN BULL MARKETS								
The Events	Year	During the initial market reaction it declined for	And lost	Market returned to pre- crisis level in	Bull market continued for	And gained		
Hunt Brothers silver crisis	1980	43 days	-16%	152 days	14 months	13%		
Asian currency crisis	1997	6 days	-11%	45 days	27 months	45%		
President Eisenhower - heart attack	1955	18 days	-10%	76 days	75 months	51%		
Iraq invades Iran - war	1980	7 days	-5%	52 days	7 months	5%		
Japan earthquake and tsunami	2011	5 days	-4%	12 days	Ongoing	-		
John F. Kennedy assassinated	1963	1 day	-3%	5 days	27 months	36%		
Watergate	1972	8 days	-3%	44 days	7 months	11%		
Average (of 21 post 1940 bull market of	crises)	8 days	-4%	37 days	27 months	45%		

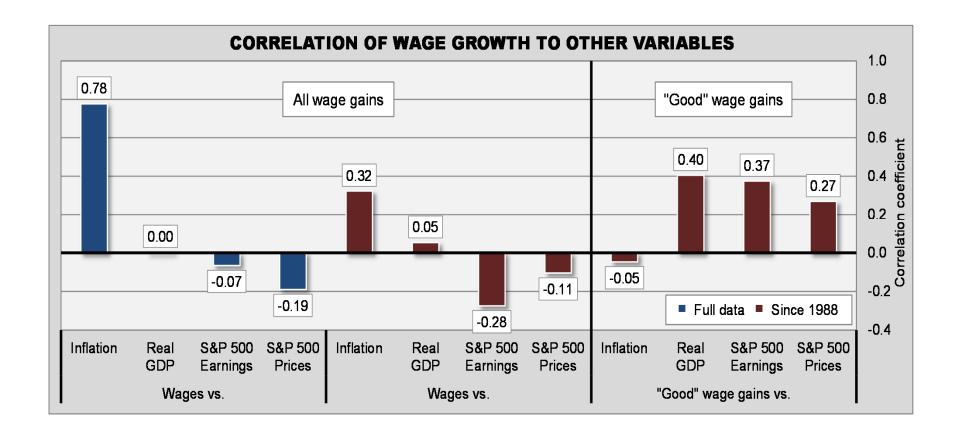
CRISES IN BEAR MARKETS									
The Events	Year	During the initial market reaction it declined for	And lost	Market Returned to Pre- Crisis Level In	Bear market continued for	And lost			
Arab oil embargo	1973	40 days	-20%	Following bull market	13 months	-42%			
Iraq invades kuwait	1990	22 days	-14%	Following bull market	2 months	-18%			
Terrorist attack on WTC & Pentagon 2001		11 days	-14%	60 days	13 months	-24%			
Six-Day War	1967	3 days	-2%	5 days	36 months	-27%			
Average (of 13 post 1940 bear market crises) 15 days -10% N/A* 14 months -25%									

Sources: Crandall, Pierce & Company, Northern Trust. Note: Data based on Dow Jones Industrial Average; market reaction period defined by Crandall, Pierce & Company. *In most crises during bear markets, the market did not return until its pre-event level until the next bull market.





Risk Cases: Inflationary Wage Gains



Sources: Bloomberg, Standard & Poor's, Northern Trust. Full data from 1965 – March 2014. "Good" wage gains are wage increases in excess of the change in unit labor costs.



Summary

 Corporate Earnings will Drive Equity Returns Going Forward: US earnings strong, EU earnings spring-loaded for economic recovery, and EM exposure to global growth a positive

Expect a reversion to the mean in terms of equity market returns

 It's all about setting expectations: well forecast interest rate increases are relatively easily digested

Expect more volatility: uncertain macro and geopolitical risk will inject more volatility into a relatively complacent global capital markets





5 Year Capital Market Return Assumptions

Returns: Slowly shrinking risk premium with slightly lower equity/slightly higher fixed income returns

Risks: Monetary "accommodation exhaustion;" emerging market growth

The mediocrity of the current expansion increases its expected longevity.

Central banks overly accommodative while regulations restrictive; creates paradox

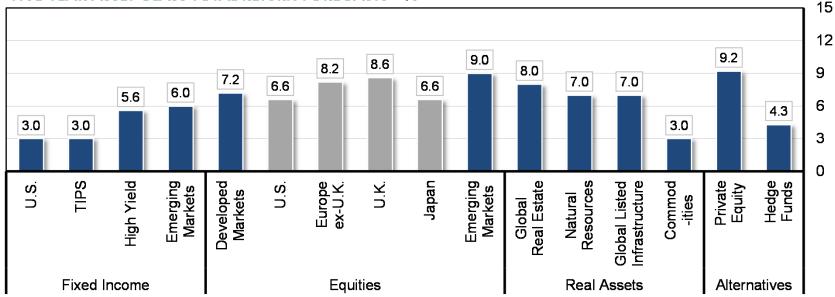
Fears over asset price bubbles overblown; financial sector better equipped to act as "circuit breaker"

Higher interest rates priced into fixed income markets (as seen through forward curves)

Developed equities dependent on revenue growth; margins/valuations to remain steady

Emerging market valuations pricing in elevated risks during economic transition

FIVE YEAR ASSET CLASS TOTAL RETURN FORECASTS - %



Sources: Northern Trust Capital Market Assumptions Working Group, Investment Policy Committee. Five year forecasts developed annually; most recent forecasts released 7/10/2014.

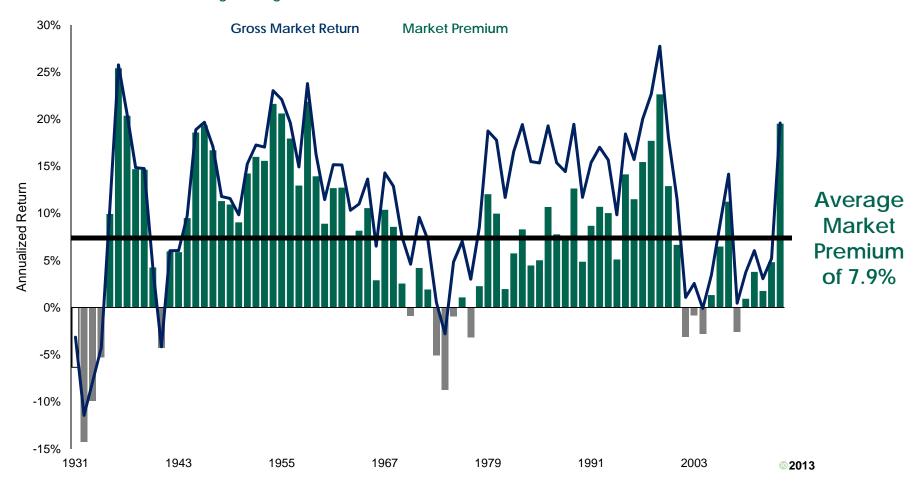




Equity for Long Time Horizons

US Market vs. Treasury Bills

Annual 5-Year Moving Average: 1927-2013



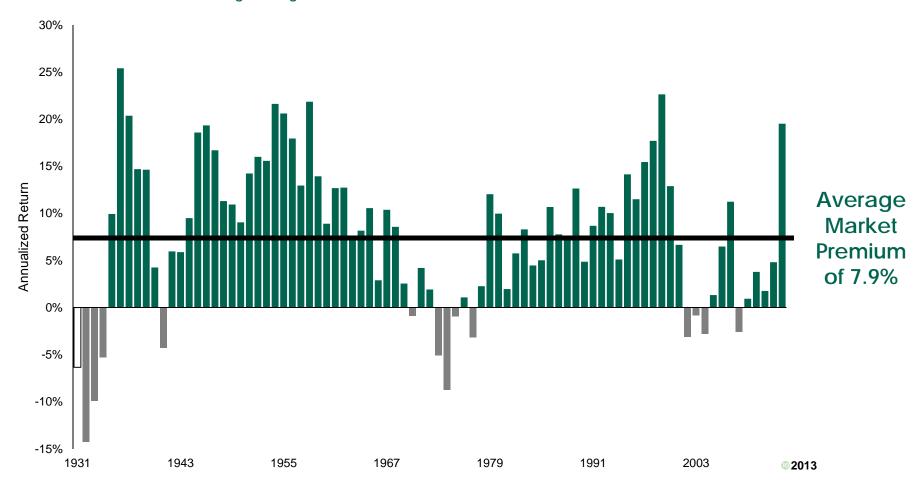
Data provided by Fama/French. Total US Market Research Factor (total market minus one-month Treasury bills).





© Equity for Long Time Horizons

- **OUS Market vs. Treasury Bills**
- Annual 5-Year Moving Average: 1927-2013



Data provided by Fama/French. Total US Market Research Factor (total market minus one-month Treasury bills).



PRINCIPLES THAT ENDURE



Earning Your Fair Share





Real Return Forecast is Challenging

Enduring and Maturing Global Growth

Based on 5-Year Capital Market Assumptions (2014)

	Investment Objective						
	Risk Assets	Growth & Mod. Income	Growth & Income	Income & Mod. Growth	Income		
Gross Return Forecast	7.6%	6.9%	6.0%	5.0%	3.7%		
- Inflation	1.8%	1.8%	1.8%	1.8%	1.8%		
- Expense	0.8%	0.8%	0.7%	0.7%	0.6%		
Net Return Forecast	5.0%	4.3%	3.5%	2.5%	1.3%		
Historic Returns (July 201	4)						
1 Year	12.8%	11.1%	9.4%	7.6%	5.7%		
3 Year	7.7%	6.6%	5.7%	4.8%	3.7%		
5 Year	10.2%	9.2%	8.2%	7.2%	6.0%		

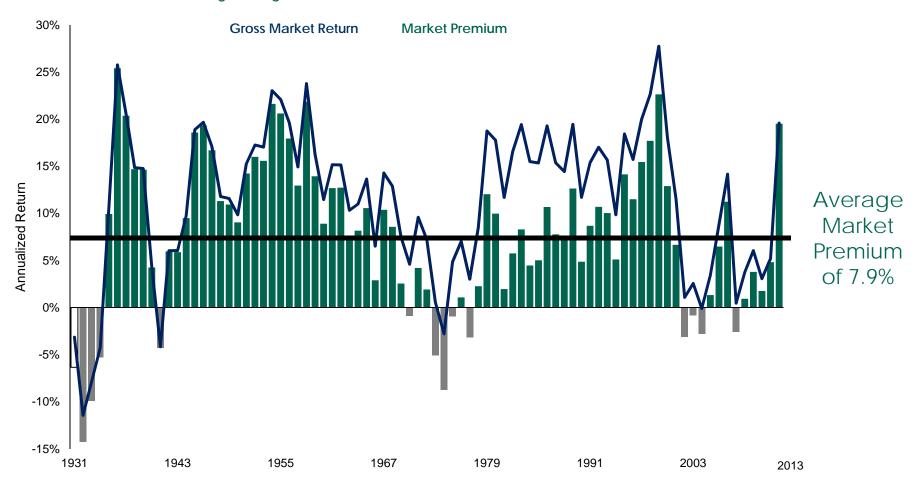


[©] Source: Capital Market Assumptions working group. Expense assumption includes 50 bps Northern Trust advisory fee. Historic returns based on respective Investment Objective's strategic benchmark for Accredited investors

Equity for Long Time Horizons

US Market vs. Treasury Bills

Annual 5-Year Moving Average: 1927-2013



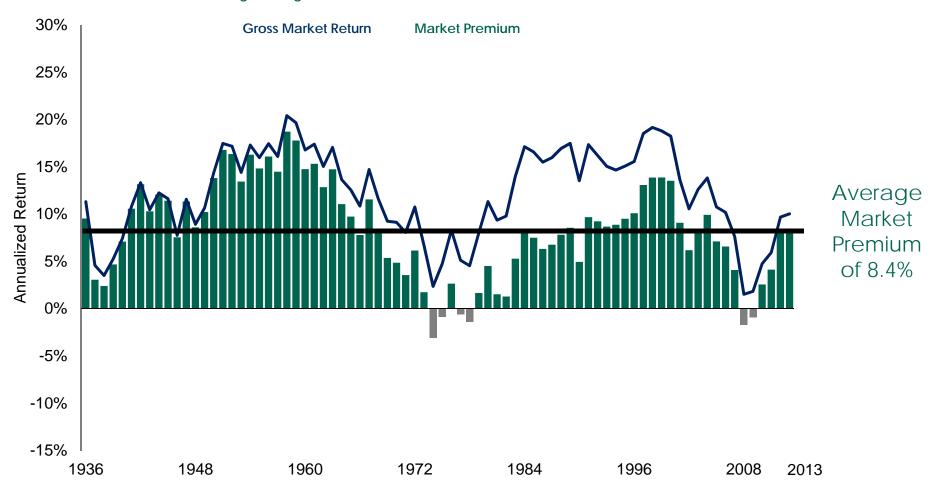
Data provided by Fama/French. Total US Market Research Factor (total market minus one-month Treasury bills).



Equity for Longer Time Horizons

US Market vs. Treasury Bills

Annual 10-Year Moving Average: 1927-2013



Data provided by Fama/French. Total US Market Research Factor (total market minus one-month Treasury bills).





It's All About Confidence

We have a deep understanding of what drives returns

Index/Passive

- · Pros:
 - Lowest cost
 - Most tax efficient
 - Transparent
- · Cons:
 - Expected return no higher than the market return

Engineered Beta

- Pros:
 - Can be low cost
 - Can be tax efficient
 - Expected return above the market return
- Cons:
 - May be riskier than the broad market
 - Requires education and a long-term view

Active

- Pros:
 - Opportunity to achieve marketbeating returns
 - Intuitive, traditional approach
- Cons:
 - Usually higher cost and less tax efficient
 - Realized active returns are below the market return on average





Drivers of Equity Returns

Three compensated risk premiums play a role in market performance.

Equity Market

(Total value-weighted universe of stocks)

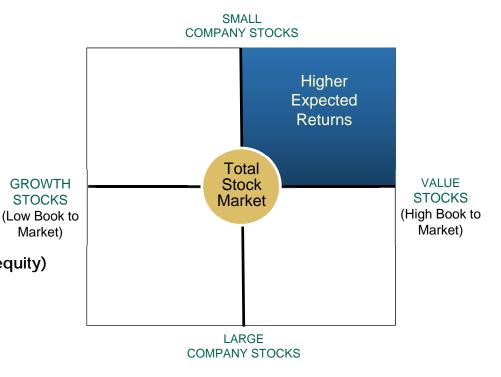
Equity has higher expected return than cash and fixed income

Company Size (Measured by market capitalization)

 Small company stocks have higher expected returns and risk than large company stocks

Company Value
 (Measured by ratio of book value to market equity)

Lower-priced "value" stocks have higher expected returns and risk than higher-priced "growth" stocks







Plus Momentum and Quality/Profitability

Time Period: 1926 - 2012*

Market Premium Size Premium

Value Premium Momentum Premium Profitability Premium

Compound Premium	5.89%	2.18%	4.17%	6.87%	3.87%
t-statistic	3.71	2.28	3.64	4.61	3.65
Standard Deviation	18.80%	11.34%	12.32%	16.57%	7.92%
Correlation to Equity	1.00	0.33	0.22	-0.34	0.09

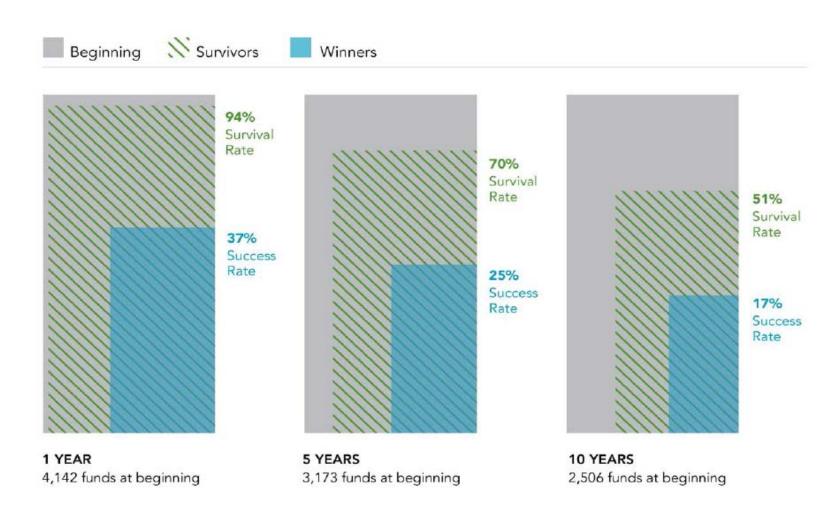
Sources: Ibbotson, Ken French Data Library, Robert Novy-Marx.



^{*} Inception for momentum is 1927. Inception for profitability is 1963.



What About Active? Market Inefficiencies Are Hard to Exploit



Beginning sample includes funds as of the beginning of the one-, five-, and 10-year periods ending in 2012. The number of funds as of the beginning of each sample time period is indicated below the period label. Survivors are funds that are still in existence as of December 2012. Winners are funds that survive and beat their respective benchmarks over the period. See Data Appendix for more information.

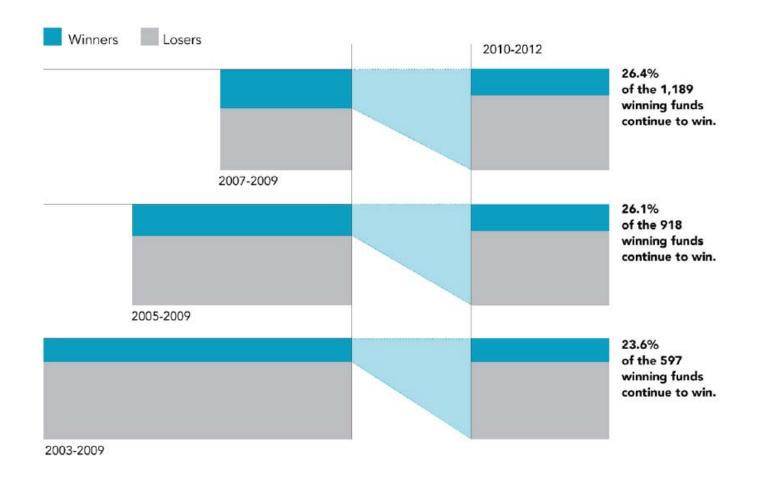
Data provided by the CRSP Mutual Fund Database. Source: CRSP data provided by the Center for Research in Security Prices, University of Chicago. Past performance is no guarantee of future results.





Do Winners Keep Winning?

Past performance vs. subsequent performance – equity funds



The sample includes funds at the beginning of the three-, five-, and seven-year periods, ending in December 2009. The graph shows the proportion of funds that outperform and underperform their respective benchmarks. Winner funds are reevaluated in the subsequent period from 2010 to 2012, with the graph showing the proportion of outperformance and underperformance among past winners. See Data Appendix for more information. Data provided by the CRSP Mutual Fund Database. Source: CRSP data provided by the Center for Research in Security Prices, University of Chicago. Past performance is no guarantee of future results.



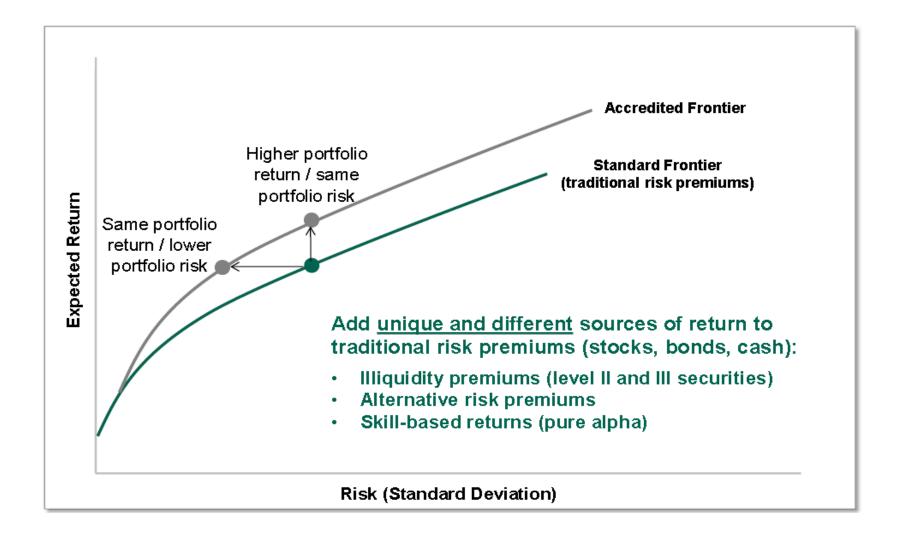


- Research supported by Wealth Management Portfolio Research, Northern Multi Manager Research and Northern Trust Asset Management
- Investment Advisory Committee (IAC) comprised of leading investment professionals within Wealth Management
- Proprietary Quantitative Models Evaluate Performance and Risk:
 - Multi factor analytics borrowed heavily from academia
 - Net return analysis
 - Luck vs. Skill /Risk vs. Skill
- Qualitative Review
 - Investment process and people
 - Portfolio construction and risk management
 - Operational due diligence
- Ongoing Monitoring
 - Proprietary IAC Scorecard
 - Deep dive reviews





Are Hedge Funds the Answer? Assets Have A Purpose







But Most Hedge Funds are Not Diversifying

Rolling 36-month hedge fund correlation to global equity



© Sources: Morningstar and Hedge Fund Research. Hedge funds are represented by the HFRI Composite. Global equity is the MSCI ACWI.





Nor are they alpha producing on average

Rolling 36 - month hedge fund alpha



[®]Hedge funds are represented by the HFRI Composite. Source: Mladina, "Illuminating Hedge Fund Returns for Manager Selection and Portfolio



[©]Construction," 2014.



The Message is Simple! It's all about Diversification

Diversification

Add unique and different sources of return to stocks, bonds and cash

Skill-based Returns

Unique Ideas & Opportunities

Illiquid Assets

Exotic Risk Premiums

Security Selection & Market Timing

Skill is diversifying and tends to persist when factor-adjusted alpha represents a large portion of total return

Alternative Risk Premiums

Long-short Value

Long-short Momentum

Carry Trades

Insurance Premiums

Capture alternative risk premiums across asset classes globally

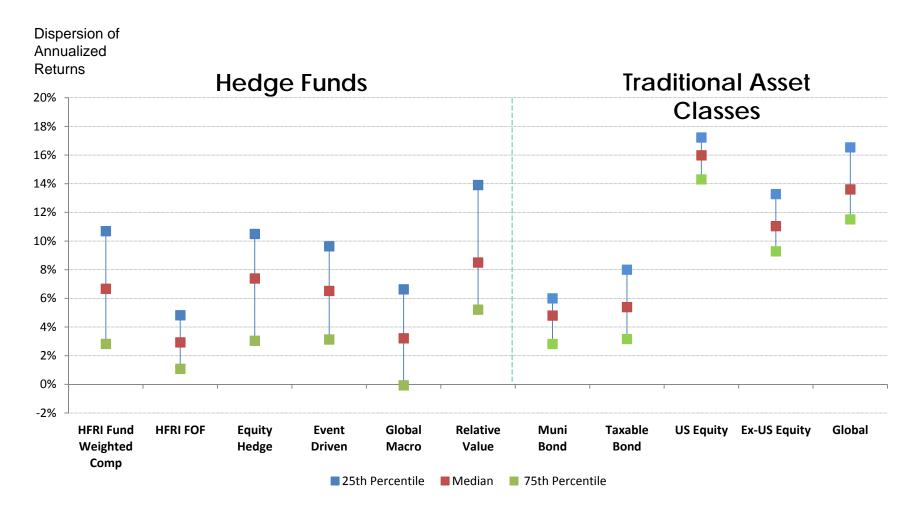




Higher Dispersion among Hedge Fund Managers

Annualized manager returns by quartile

Three Years Ending March 30, 2013

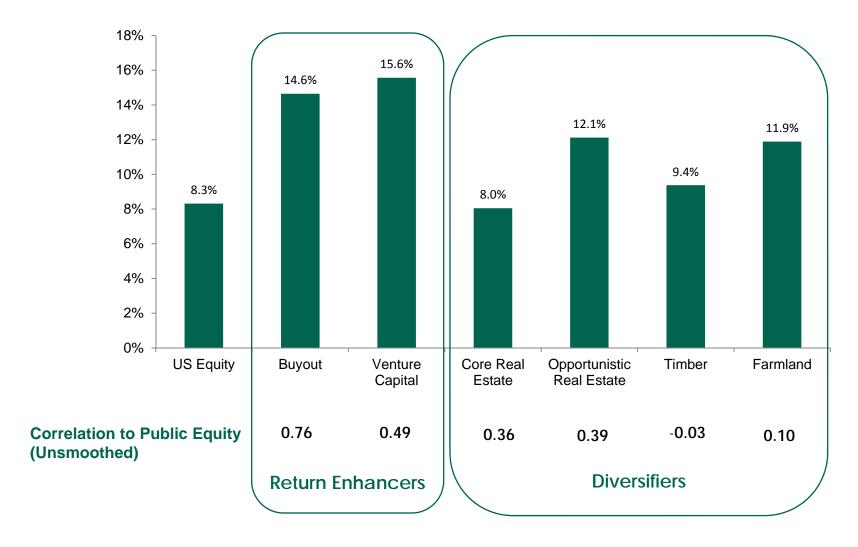


^{*} Data Source: Hedge Fund Research and Morningstar





Private Assets Are Return Enhancers and Diversifiers

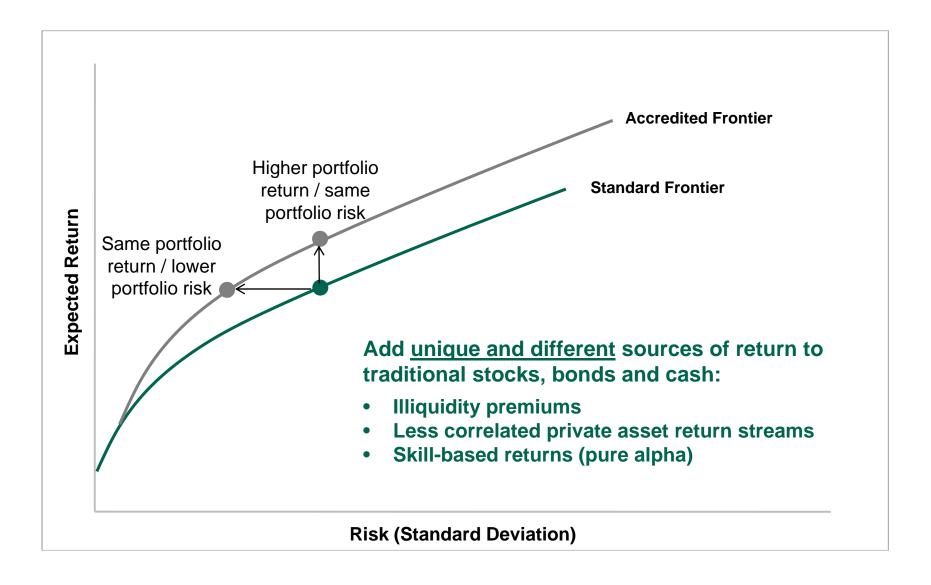


Index proxies include Russell 3000 (US Equity), Cambridge US Buyout, Cambridge US Venture Capital, NCREIF Townsend Core, NCREIF Townsend Opportunistic, NCREIF Timberland Fund and Separate Account Index, NCREIF Farmland. Data captures 20-year pooled returns from 1993 to 2012. Correlations based on unsmoothed returns.





The Contribution of Private Assets to the Total Portfolio







Private Equity Offers a Premium over Public Equity on Average

Harris, Jenkinson, Kaplan and Stucke, "Private Equity Performance: What Do We Know?" Journal of Finance (forthcoming)

		Buyout Funds		Venture Capital			
Vintage	Average	Median	Wtd. Avg.	Average	Median	Wtd. Avg.	
1984	0.87	0.87	1.09	0.70	0.63	0.69	
1985	0.91	0.91	0.91	0.71	0.70	0.73	
1986	1.00	1.11	1.11	0.75	0.73	0.80	
1987	1.25	1.21	1.20	1.18	1.09	1.29	
1988	0.98	0.80	1.13	1.18	1.31	1.44	
1989	1.26	1.28	1.22	1.34	0.95	1.52	
1990	1.57	1.57	2.34	1.50	1.18	1.66	
1991	1.23	1.23	1.32	1.37	1.26	1.35	
1992	0.79	0.87	0.89	1.27	0.94	1.34	
1993	1.35	1.11	1.24	2.79	1.54	2.74	
1994	1.48	1.34	1.75	2.40	1.43	2.86	
1995	1.34	1.00	1.20	2.16	1.48	2.09	
1996	1.13	1.01	0.90	3.79	1.75	4.17	
1997	1.23	1.16	1.30	2.43	1.45	2.65	
1998	1.35	1.32	1.21	1.43	0.93	1.48	
1999	1.19	1.06	1.27	0.76	0.65	0.90	
2000	1.42	1.39	1.47	0.79	0.77	0.85	
2001	1.31	1.43	1.38	0.80	0.71	0.84	
2002	1.42	1.47	1.53	0.82	0.79	0.88	
2003	1.75	1.56	1.58	0.88	0.90	0.99	
2004	1.40	1.35	1.51	0.90	0.85	0.96	
2005	1.20	1.19	1.23	1.27	0.95	1.23	
2006	1.03	0.97	0.99	0.93	0.85	0.97	
2007	1.03	1.03	1.02	0.97	0.96	0.99	
2008	0.91	0.88	0.90	0.84	0.81	0.84	
Average PME	1.22	1.16	1.27	1.36	1.02	1.45	
Average TVPI	1.97	1.81	2.03	2.34	1.73	2.46	
Average IRR	14.2	13.0	15.7	16.8	11.1	19.3	
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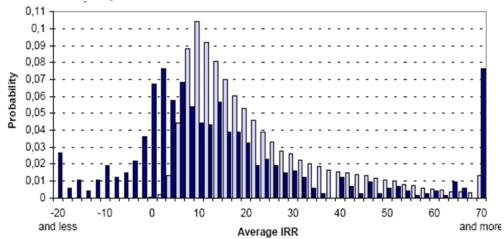




Why Fund of Funds

Diversification increases confidence in capturing the expected return

Venture Capital





Buyout 0,18 0,16 0,14 Probability 0,1 80,0 0.06 0.04 0,02 -30 -20 -10 10 20 40 Average IRR and less and more

- Private Equity funds of funds offer higher confidence in an expected return than direct funds.
- Funds of funds turn a spectrum of potential outcomes for direct funds into a more normalized distribution with a lower standard deviation.

Source: The Risk Profile of Private Equity Funds of Funds - Weidig, Kemmerer, Born 2005. Based on simulated funds-of-funds performance from Venture Economics data base 1983-2003. For illustrative purposes only. Past returns should not be considered a guarantee of future results.

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