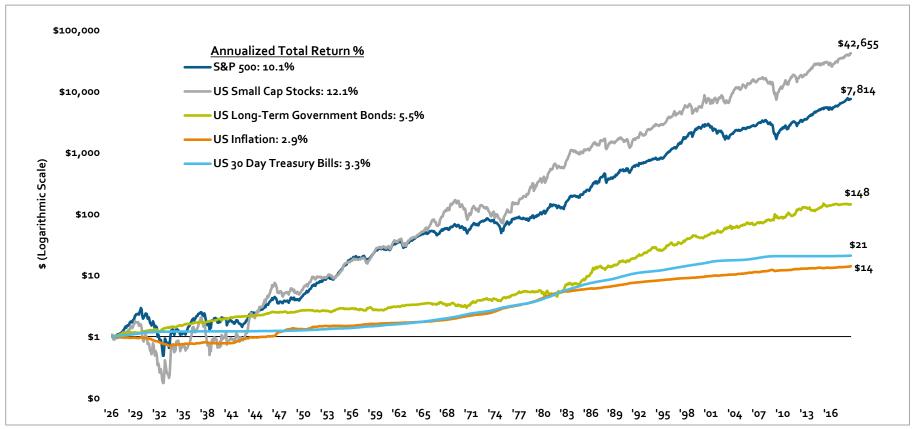
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Successful Investing Involves Patience and Fortitude

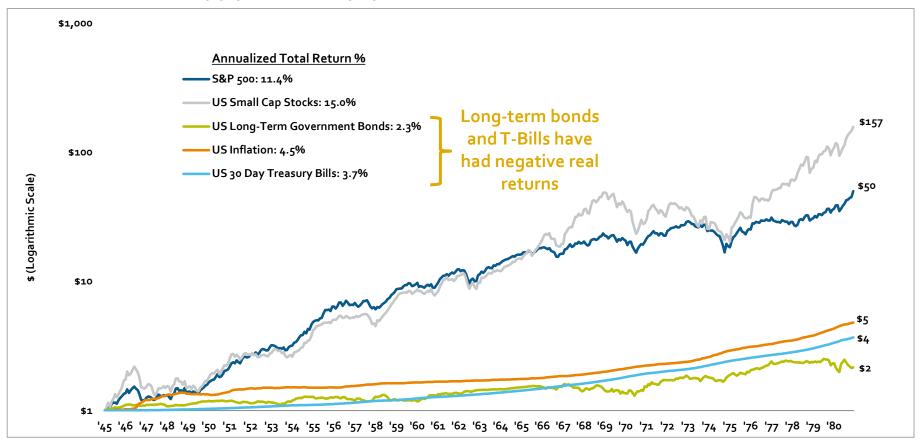
Monthly Cumulative Total Return of \$1 January 31, 1926 – July 31, 2018



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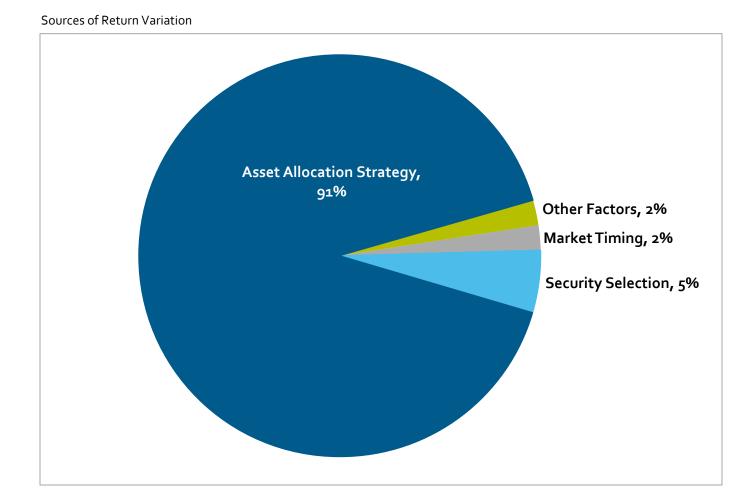
Stocks Have Been a Better Inflation Hedge Than Bonds in Periods of Rising Interest Rates (1945-'80)

Cumulative Total Return of \$1 from 1945-1980 as of December 31, 1980



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Asset Allocation – The Most Important Determinant of Return Variation

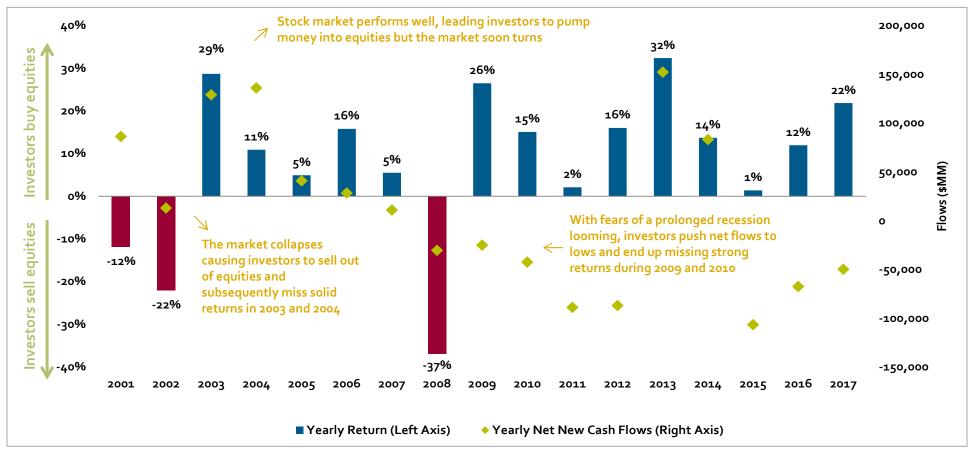


Source: Roger G. Ibbotson. *Does Asset Allocation Policy Explain 10, 90 or 100 Percent of Performance?* Financial Analyst Journal, January/February 2000; Brinson, Singer and Beebower. *Determination of Performance II: An Update*, Financial Analyst Journal, May/June 1991. Based on US pension-fund data from 1977 to 1987. The asset allocation strategy includes broad market exposure. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Investors Tend to Enter & Exit the Market at Inopportune Times

Cash Flows to Domestic Equity and Yearly Returns

Annual as of December 31, 2017



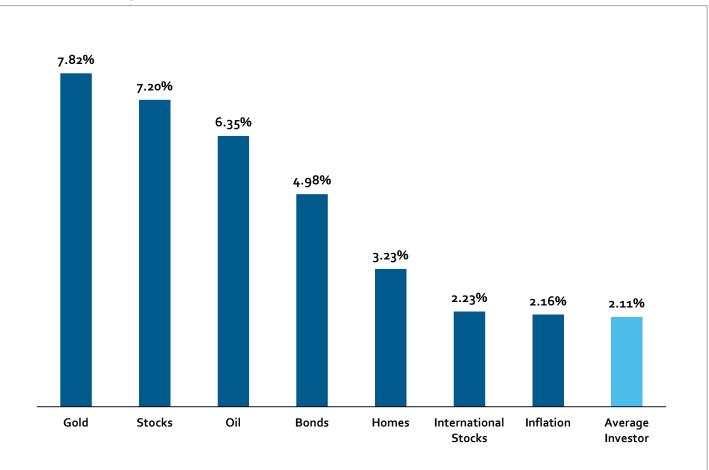
Notes: Net New Cash Flows to Domestic Equity is measured by the dollar value of new sales minus redemptions, combined with net exchanges. Yearly Returns are represented by the total returns of the S&P 500.

Source: Investment Company Institute, Haver Analytics, Bloomberg, Morgan Stanley Wealth Management GIC.

The Average Investor Underperforms

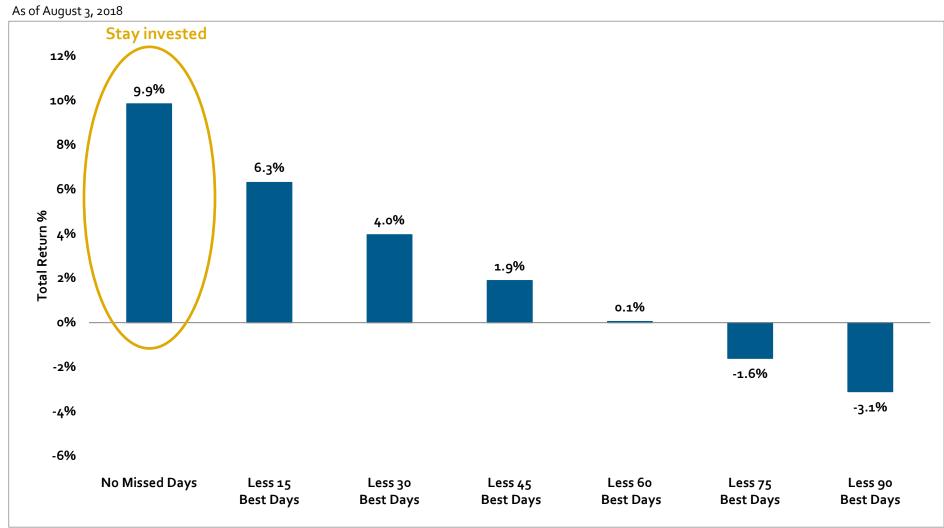
20-Year Annualized Returns by Asset Class (1997-2017)

Annual as of December 31, 2017



Source: Morgan Stanley Wealth Management GIC; Bloomberg; Dalbar. Past performance is no guarantee of future results. It is not possible to directly invest in an index. Oil is represented by the change in price of the NYMEX Light Sweet Crude Future contract. Contract size is 1,000 barrels with a contract price quoted in US Dollars and Cents per barrel. Delivery dates take place every month of the year. Gold is represented by the change in the spot price of gold in USD per ounce. Homes are represented by the National Association of Realtors' (NAR) Existing One Family Home Sales Median Price Index. Stocks are represented by the S&P 500 Index, an unmanaged index that consists of the common stocks of 500 large-capitalization companies, within various industrial sectors, most of which are listed on the New York Stock Exchange. Bonds are represented by the Bloomberg Barclays US Aggregate Bond Index, an unmanaged market-weighted index that consists of investment-grade corporate bonds (rated BBB or better), mortgages and US Treasury and government agency issues with at least 1 year to maturity. International stocks are represented by the MSCI EAFE Index, a broad-based measure of international stock performance. Inflation is represented by the Consumer Price Index. Average Investor is represented by Dalbar's average asset allocation investor return, which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/15 to match Dalbar's most recent analysis.

Market Timing Is a Flawed and Costly Strategy



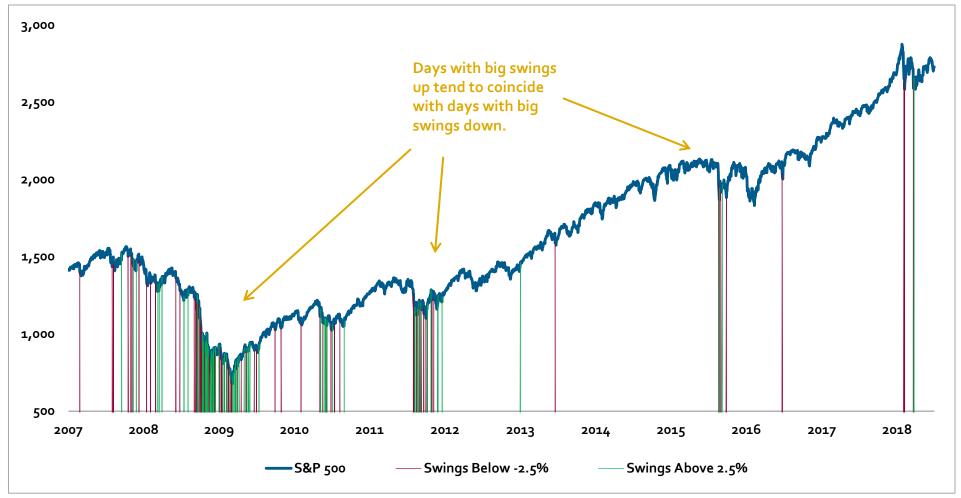
Annualized Total Returns of S&P 500 (1990-2018)

Source: FactSet, Morgan Stanley Wealth Management GIC. Note: Best days are defined as the days with the highest single-day returns in the S&P 500.

Avoiding the Worst Days Most Likely Means Missing the Best

Days with Large Price Changes Tend to Cluster Together

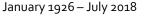
Daily Data As of July 2, 2018

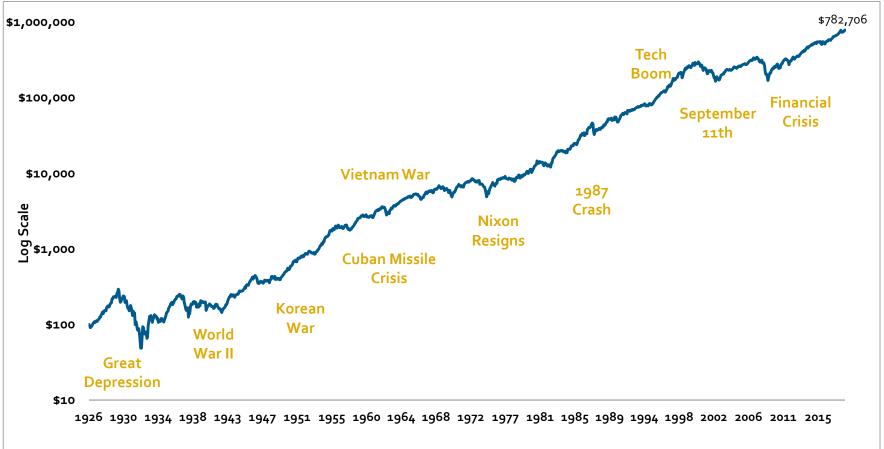


Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Over the Long Term, S&P 500 Has Grown Despite Negative Events

S&P 500: Growth of \$100



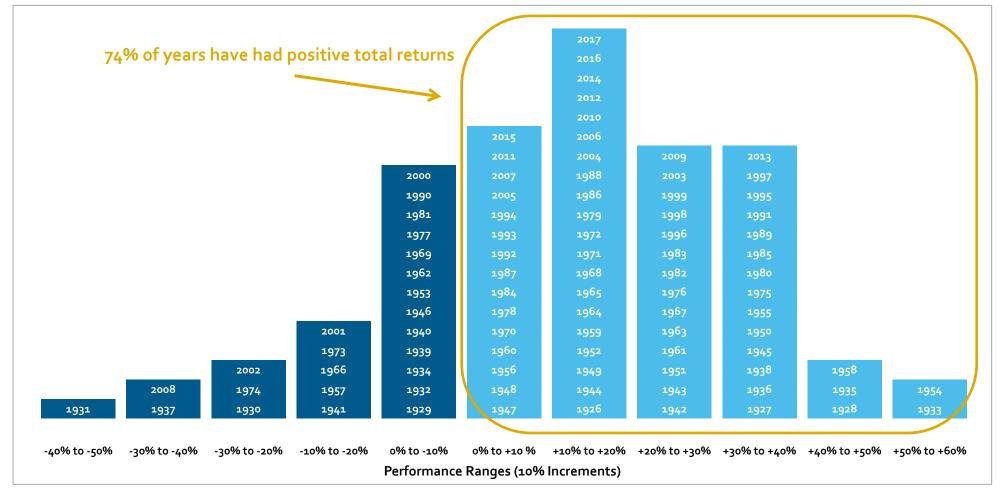


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The Odds Have Favored the Long-Term Investor

Distribution of S&P 500 Index Returns

Annual Data - December 1926 to December 2017

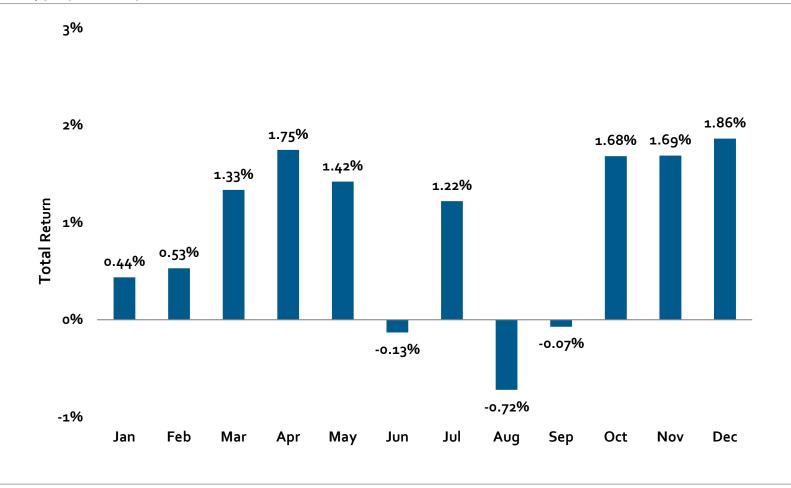


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S&P 500 Average Monthly Total Returns

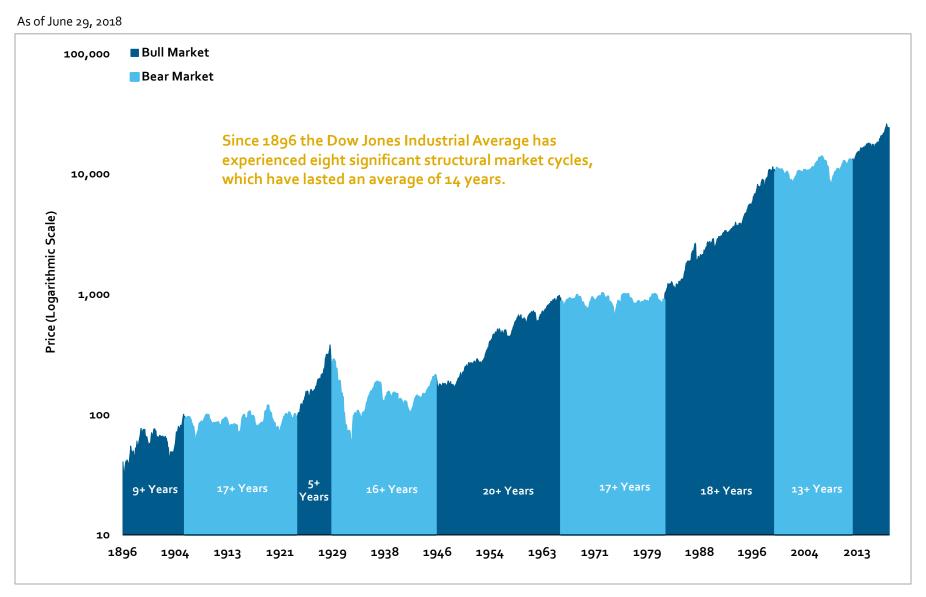
S&P 500 Historical Average Monthly Total Return

January 31, 1988 – June 29, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Structural Markets of the Dow Jones Industrial Average

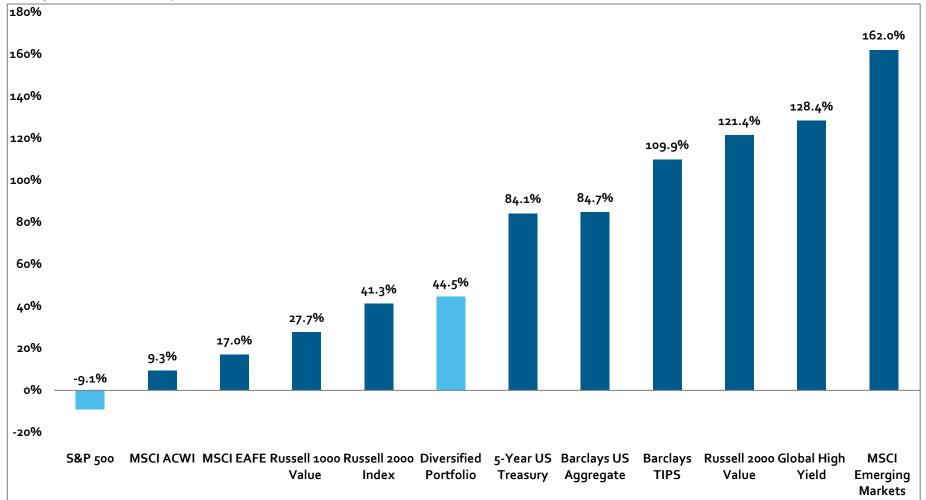


Source: Bloomberg, Morgan Stanley Wealth Management GIC.

"Lost Decade" (2000-2010) Demonstrates the Importance of Global Diversification and Asset Allocation

Total Returns

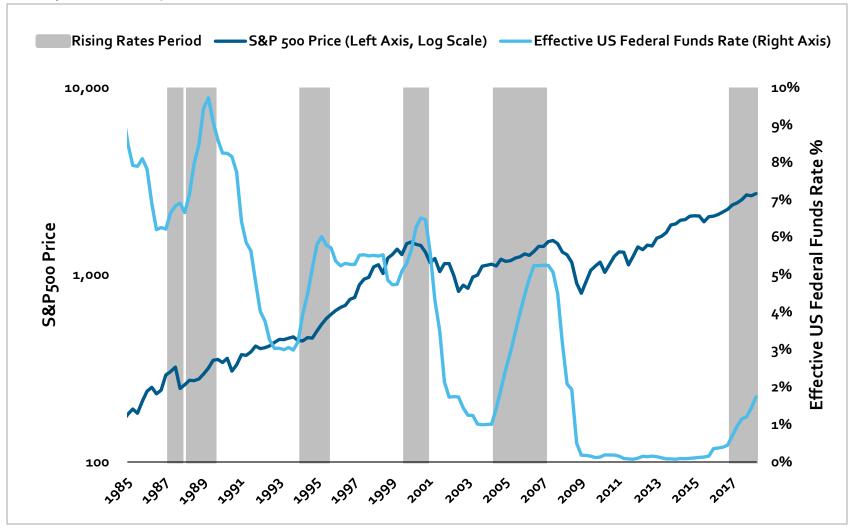
January 2000 - December 2009



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC, The Yield Book® Software and Services. © 2018 FTSE Index LLC. All rights reserved. Note: Diversified Portfolio is comprised of 50% MSCI All Country World Index/45% Bloomberg Barclays US Aggregate Bond Index/5% FTSE 3-Month T-Bill Index.

Fed Tightening and US Stock Market Performance

Quarterly Data As of June 29, 2018

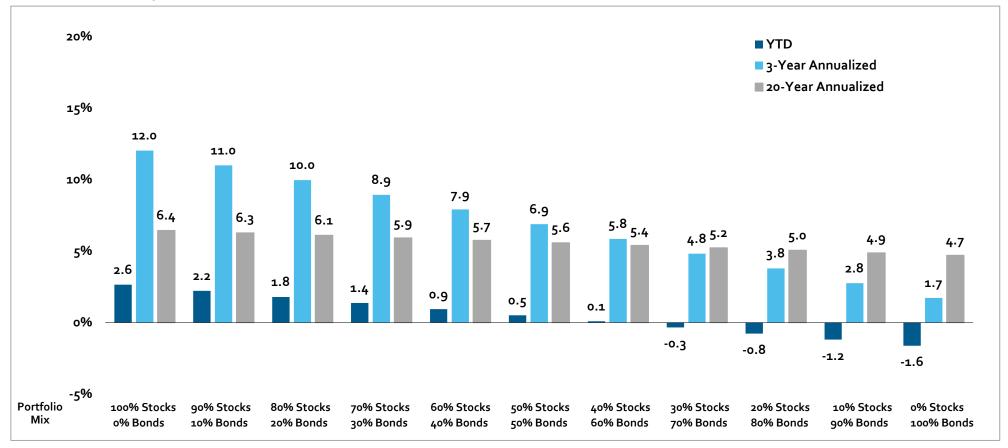


Source: FactSet, Haver Analytics, Morgan Stanley Wealth Management GIC.

Returns for Diversified Portfolios Across US Stocks and Bonds

Sample US Portfolio Benchmarks¹

Performance as of June 29, 2018

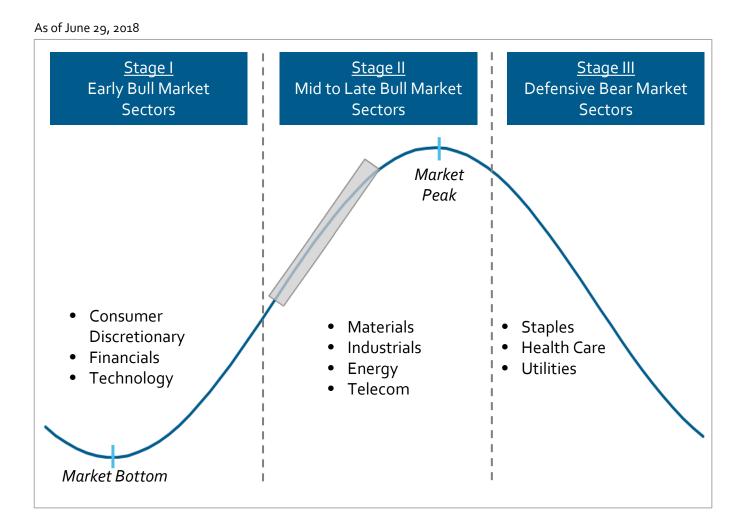


Source: FactSet, Morgan Stanley Wealth Management GIC. (1) Indices used for this analysis include: S&P 500 for stocks, and Bloomberg Barclays Capital US Aggregate for bonds.

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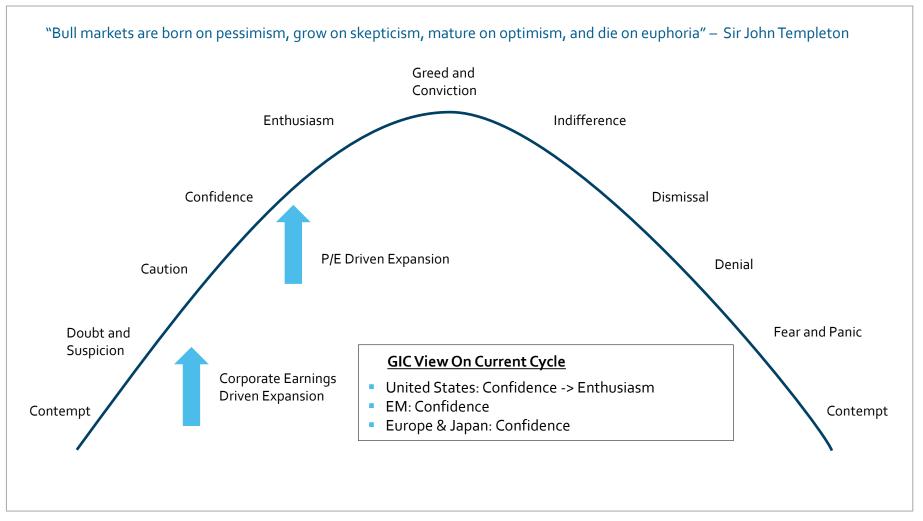
The Economic Cycle Matters to Sector Selection



Source: Morgan Stanley Wealth Management GIC.

The Investor Psychology Cycle – Herd Mentality

As of June 29, 2018

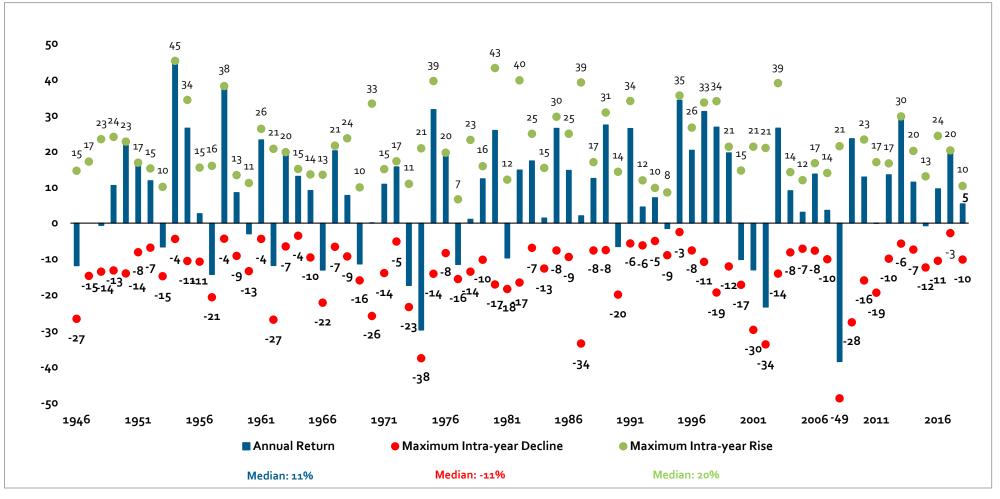


Source: Morgan Stanley. Investment Management, Morgan Stanley Wealth Management GIC.

Corrections Have Been Frequent and Have Presented Opportunities

S&P 500 Annual Returns and Intra-Year Draw Ups & Draw Downs

As of July 31, 2018

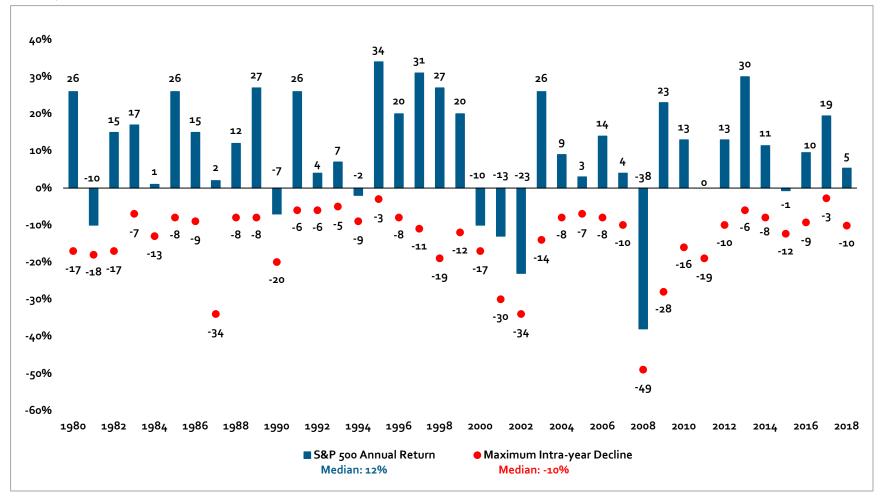


Source: Bloomberg, Morgan Stanley Wealth Management GIC. Intra-year declines are defined as the peak-to-trough decline during the year

Corrections Have Been Frequent and Have Presented Opportunities



As of July 31, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC. Intra-year declines are defined as the peak-to-trough decline during the year

Modest Corrections Are Very Common

Days to Recover from 5%+ Corrections Since 2009

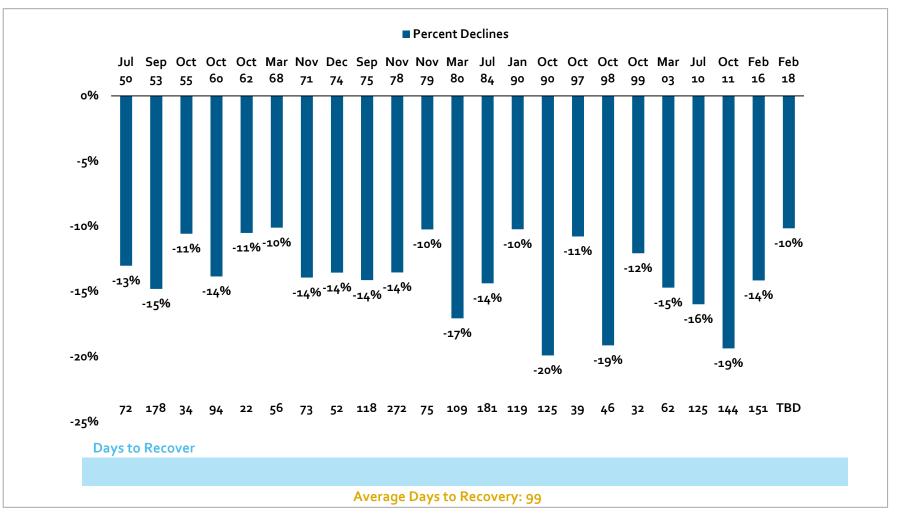
Daily Data as of July 31, 2018

Begin	# Days to Trough	% Decline	Recovery Date	# of Days from Bottom to Recover to New High
3/26/2009	4	-5.44%	4/2/2009	3
6/12/2009	28	-7.09%	7/20/2009	10
10/19/2009	11	-5.62%	11/11/2009	12
1/19/2010	20	-8.13%	3/11/2010	31
4/23/2010	70	-15.99%	11/4/2010	125
2/18/2011	26	-6.41%	4/26/2011	41
4/29/2011	157	-19.39%	2/24/2012	144
4/2/2012	60	-9.94%	9/6/2012	97
9/14/2012	62	-7.67%	1/4/2013	50
5/21/2013	34	-5.76%	7/11/2013	17
1/15/2014	19	-5.76%	2/27/2014	24
9/18/2014	27	-7.40%	10/31/2014	16
5/21/2015	266	-14.16%	7/11/2016	151
1/26/2018*	9	-10.16%	TBD	TBD
Average	57	-9.2%		55

* January 26, 2018 correction not included in averages for Recovery Date and # of Days to Recover to New High Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Days to Recovery During S&P 500 Corrections

S&P 500 Corrections: Declines Greater than 10% but less than 20% January 1950 – June 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

There Have Been 8 Recessions in the Past 86 Years

Large Drawdowns Have Been Infrequent – 73% Coincided with Recessions

S&P 500 25%+ Declines and Recoveries Since 1929

Performance as of July 31, 2018

	5 ar 500		Decline Duration					Price/Earnings Ratio		/Book tio	Duration from Trough to Prior	
	Peak to Trough	(%)	(Months)	3 Months	6 Months	12 Months	Peak	Trough	Peak	Trough	Peak (Months)	
	Sep 1929 - Jun 1932	-86.2	33	93	53	121	20.7	8.5	4.0	0.4	267	
	Jul 1933 - Mar 1935	-33.9	20	27	46	77	25.7	13.4	1.1	1.0	7	Great Depression
	Mar 1937 - Apr 1942	-60.0	62	15	25	54	16.8	7.7	2.1	0.9	45	
	May 1946 - Jun 1949	-29.6	37	16	23	42	21.3	5.9	1.7	1.0	12	
	Dec 1961 - Jun 1962	-28.0	6	7	20	33	22.7	17.4	2.1	1.7	14	Cuban Missile
\prec	Nov 1968 - May 1970	-36.1	18	17	23	44	18.2	14.6	2.2	1.6	21	Crisis
	Jan 1973 - Oct 1974	-48.2	21	14	31	38	18.2	6.9	2.0	1.0	69	
	Nov 1980 - Aug 1982	-27.1	21	36	44	58	8.7	7.7	1.3	1.0	3	
	Aug 1987 - Dec 1987	-33.5	5	21	21	26	20.2	13.1	2.2	1.6	20	1987 Crash
	Mar 2000 - Oct 2002	-47.4	31	20	13	36	25.7	17.6	5.0	2.5	56	
	Oct 2007 - Mar 2009	-55-3	17	40	55	72	17.5	10.2	3.0	1.5	37	
	Average:	-44.1	24.6	27.8	32.1	54.6	19.6	11.2	2.4	1.3	50.1	

Grey bars indicate periods of recession

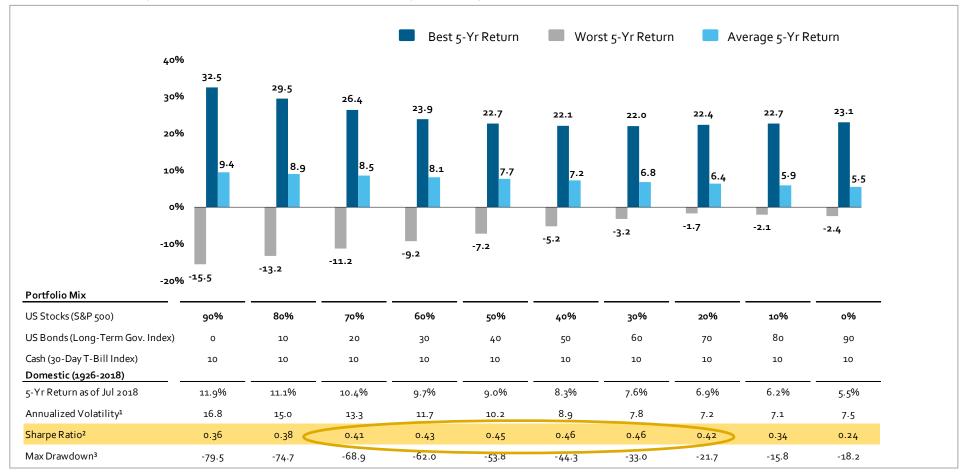
It took 37 months after the '09 trough to climb back to the pre-crisis peak.

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. Returns prior to 1988 are price only and subsequent returns are total returns. (1) Downturns defined as declines of 25% or greater. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

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Balanced Portfolios Generated Strongest "Risk-Adjusted" Returns (1926-2018)

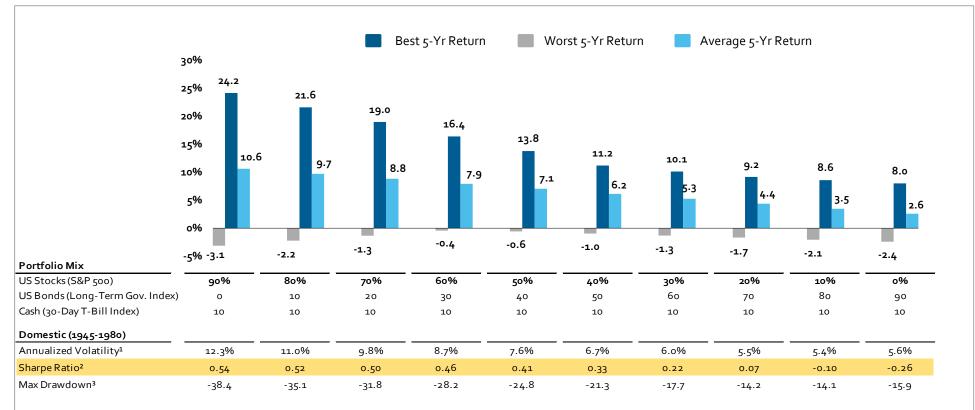
US Risk and Reward Analysis; Five-Year Annualized Total Returns; January 1926 - July 2018



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Regime Matters: Stocks Significantly Outperformed Bonds in Eras of Rising Rates (1945-1980)

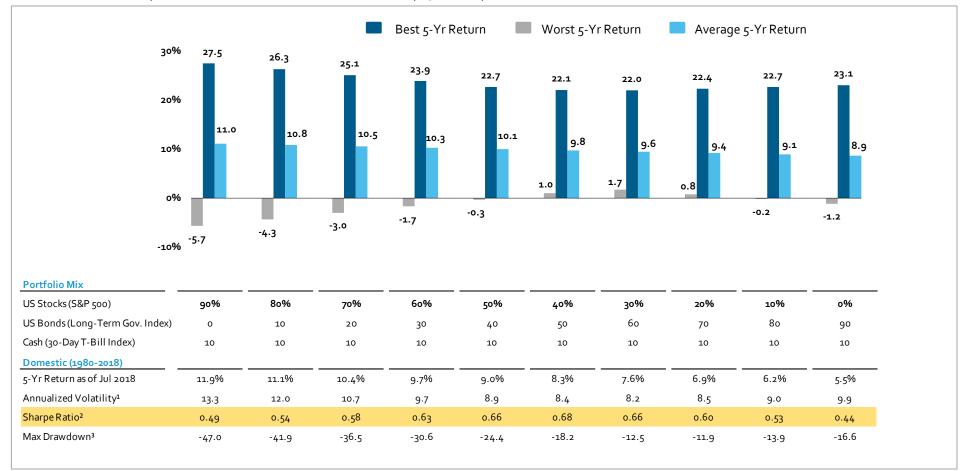
US Risk and Reward Analysis; Five-Year Annualized Total Returns; January 1945 – January 1980



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Regime Matters: Outperformance of Stocks Not as Dramatic in Eras of Falling Rates (1980-2018)

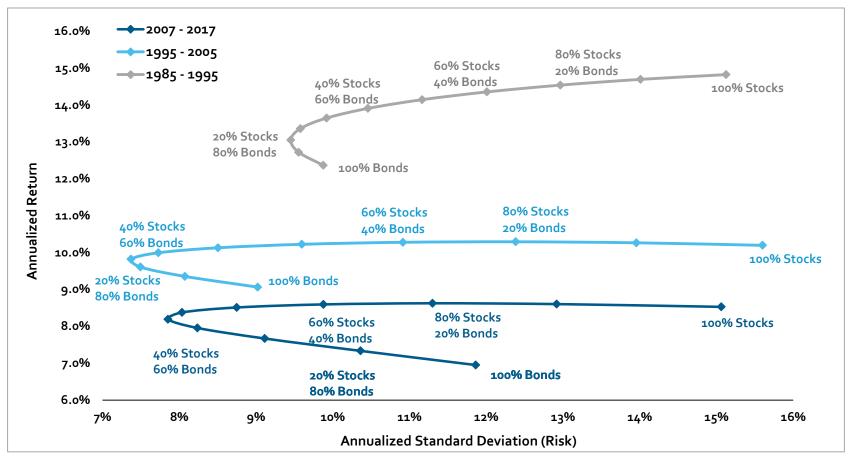
US Risk and Reward Analysis; Five-Year Annualized Total Returns; January 1980 - July 2018



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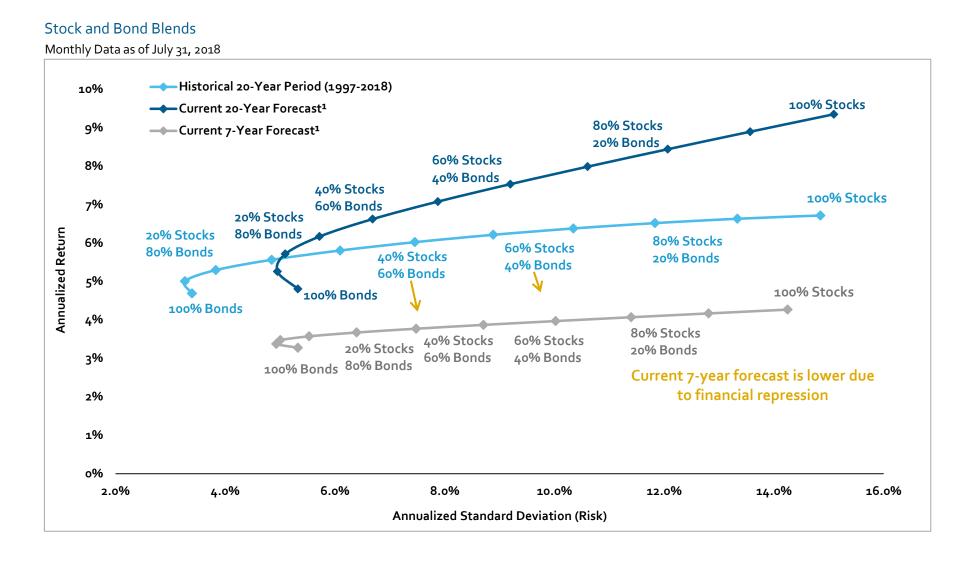
Over the Years, Diversification Benefits Have Varied: Stock and Bond Blends By Decade

Annual as of December 29, 2017



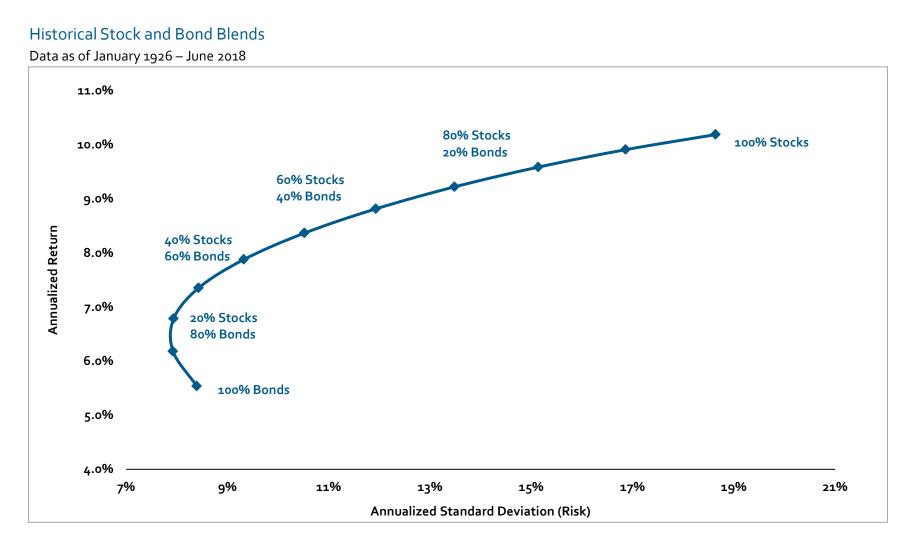
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Forecasted Efficient Frontiers



Source: FactSet, Morgan Stanley Wealth Management GIC. For illustrative purposes only. Stocks are represented by the S&P 500 and bonds are represented by the Bloomberg Barclays US Aggregate Index. (1) Forecasts are based on capital market assumptions as published in the GIC's Strategic Asset Allocation Capital Markets Update, March 31, 2018. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Added Value Through Diversification

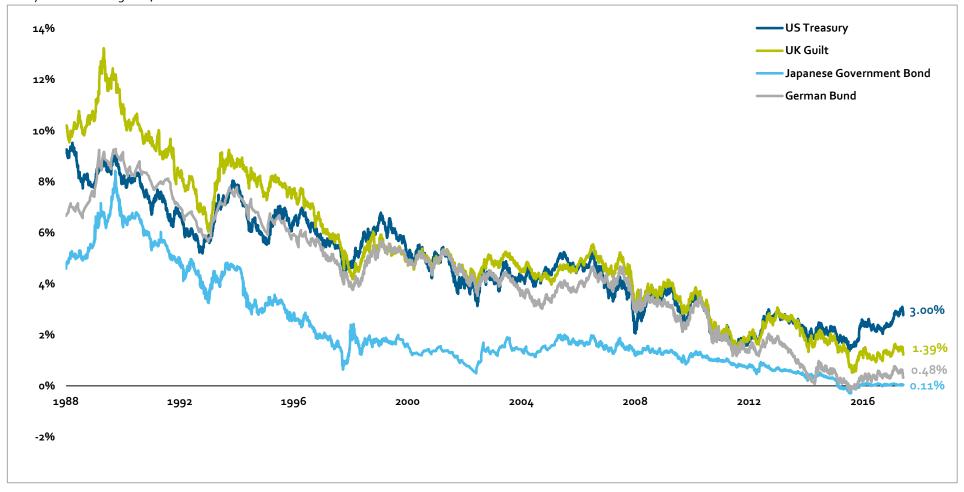


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Sovereign Bond Yields (1988-2018)

10-Year Sovereign Bond Yields

Daily Data As of August 1, 2018

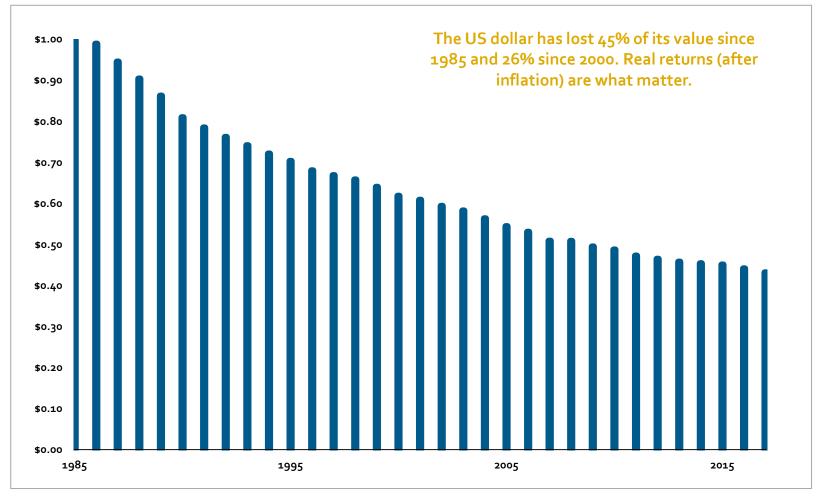


Source: FactSet, Morgan Stanley Wealth Management GIC.

Inflation Erodes Purchasing Power of Your Savings

Purchasing Power of \$1 Since 1985¹

As of December 29, 2017 (Annual Data)



Source: US Bureau of Labor Statistics (BLS), Bloomberg. (1) Data is based on the annual percent change of the Consumer Price Index (CPI).

Diversified Portfolios Built With Uncorrelated Asset Classes

Asset Class Correlations¹

Monthly Data as of July 31, 2018; Managed Futures and Hedged Strategies as of June 30, 2018

	Cash	US Investment Grade Bonds	High Yield Bonds (USD)	Int'l Investment Grade Bonds (Hedged to USD)	Large Cap Stocks	Developed Non-US Stocks	Emerging Market Stocks	Managed Futures	Hedged Strategies	Commodities		
Cash	1.00											
US Investment Grade Bonds	0.16	1.00										
High Yield Bonds (USD)	-0.04	0.25	1.00									
Int'l Investment Grade Bonds (Hedged to USD)	0.18	0.72	0.16	1.00				Investing in uncorrelated asset classes is key to risk and return management				
Large Cap Stocks	0.01	0.10	0.64	0.07	1.00		class					
Developed Non-US Stocks	-0.05	0.08	0.60	0.08	0.75	1.00						
Emerging Market Stocks	-0.04	0.02	0.71	0.01	0.68	0.73	1.00					
Managed Futures	0.10	0.26	-0.10	0.25	-0.10	-0.04	-0.06	1.00				
Hedged Strategies	0.15	0.07	0.56	0.05	0.54	0.55	o.66	0.18	1.00			
Commodities	0.04	0.04	0.35	-0.09	0.29	o.38	0.42	0.10	0.39	1.00		

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. (1) Based on monthly returns. Correlation is a statistical method of measuring the strength of a linear relationship between two variables. The correlation between two variables can assume any value from -1.00 to +1.00, inclusive. Hedged strategies consist of hedge funds and managed futures. Indices used for this analysis include: 90-Day T-bills for Cash, Bloomberg Barclays US Aggregate for US Investment Grade, Bloomberg Barclays Global High Yield for High Yield, Bloomberg Barclays Global Aggregate ex US for Intl Investment Grade, S&P 500 for US Large-Cap Equities, MSCI EAFE for International Equities, MSCI EM IMI for EM, BarclayHedge BTOP 50 for Managed Futures, HFRI Fund of Funds for Hedged Strategies, Bloomberg Commodity Index for Commodities. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other

Asset Class Map

		Cas	sh	
	Cash Alternatives		US Cash Danasita	Non USD Doposito
CDs	Money Market	US T-Bill	US Cash Deposits	Non-USD Deposits
		Fixed Ir	ncome	

Investment Grade									Non Investment Grade			
Treasuries	Agencies	Corporates	Inflation Protected	Non-Us	Mortgages	Municipals	Floating Rates	US High Yield	Emerging Markets Debt	Municipal High Yield	Convertible Bonds	

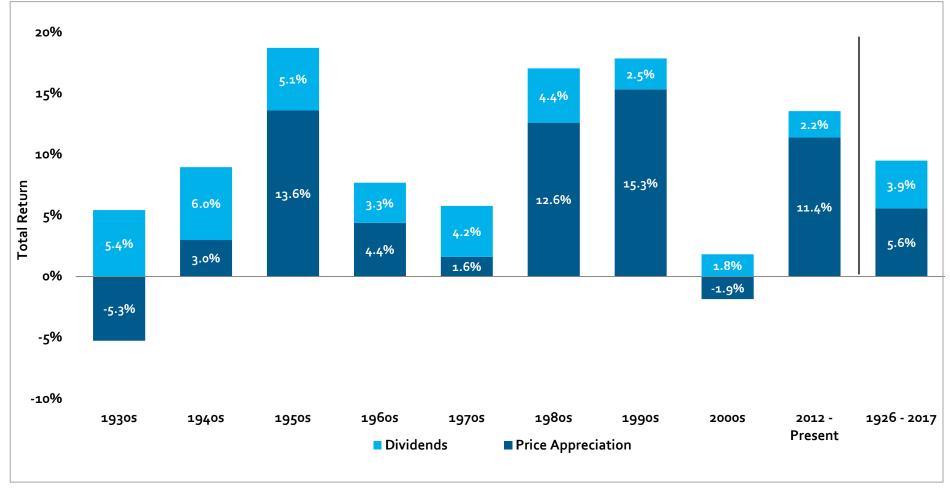
				Equitie	S			
	US		D	eveloped Market	:	Emerg	jing Markets	rred iks
Large Cap	Mid Cap	Small Cap	Large Cap	Small/Mid Cap	EAFE	BRIC Be	yond BRIC Fron	Preferred Stocks
				Alternativ	ves			
	Real	Private	Precious	MLPs/	Managed	Art/	Hedge	Funds
Commoditie	Estate	Equity	Metals	Infrastructure	Futures	Collectibles	Single Manager	Fund of Funds

Source: Morgan Stanley Wealth Management GIC.

Capital Appreciation Vs. Dividend Growth

Composition of S&P 500 Total Returns

As of June 29, 2018



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Composition of S&P 500 Returns

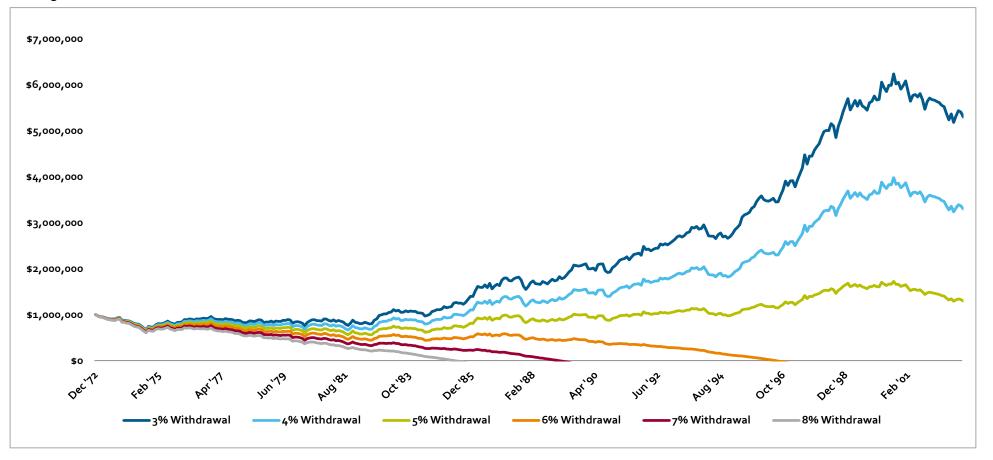
As of December 31, 2017

	S&P 500: Compos	ition of Returns			S&P 500: Composition of	Returns- Y/Y Chan	ge
Year	Price Return	%EPS	% P/E	Year	Price Return Y/Y %	EPS Y/Y %	P/E Y/Y %
1990	-6.6%	-95.7%	4.3%	 1990	-6.6%	-6.9%	0.3%
1991	26.3%	-26.5%	73.5%	1991	26.3%	-14.8%	48.2%
1992	4.5%	68.9%	-31.1%	1992	4.5%	8.1%	-3.4%
1993	7.1%	57.0%	-43.0%	1993	7.1%	28.9%	-16.9%
1994	-1.5%	48.0%	-52.0%	1994	-1.5%	18.0%	-16.6%
1995	34.1%	54.9%	45.1%	1995	34.1%	18.7%	12.9%
1996	20.3%	38.4%	61.6%	1996	20.3%	7.8%	11.6%
1997	31.0%	26.8%	73.2%	1997	31.0%	8.3%	20.9%
1998	26.7%	2.2%	97.8%	1998	26.7%	0.6%	25.9%
1999	19.5%	85.7%	14.3%	1999	19.5%	16.7%	2.4%
2000	-10.1%	31.5%	-68.5%	2000	-10.1%	8.6%	-17.3%
2001	-13.0%	-63.4%	36.6%	2001	-13.0%	-30.8%	25.6%
2002	-23.4%	30.7%	-69.3%	2002	-23.4%	18.5%	-35.3%
2003	26.4%	71.2%	28.8%	2003	26.4%	18.8%	6.4%
2004	9.0%	61.7%	-38.3%	2004	9.0%	23.8%	-11.9%
2005	3.0%	56.5%	-43.5%	2005	3.0%	13.0%	-8.8%
2006	13.6%	92.9%	-7.1%	2006	13.6%	14.7%	-1.0%
2007	3.5%	-38.5%	61.5%	2007	3.5%	-5.9%	10.0%
2008	-38.5%	-96.3%	3.7%	2008	-38.5%	-40.0%	2.6%
2009	23.5%	63.3%	36.7%	2009	23.5%	14.8%	7.5%
2010	12.8%	57.8%	-42.2%	2010	12.8%	47.3%	-23.4%
2011	0.0%	50.0%	-50.0%	2011	0.0%	15.1%	-13.1%
2012	13.4%	2.9%	97.1%	2012	13.4%	0.4%	13.0%
2013	29.6%	36.6%	63.4%	2013	29.6%	10.8%	16.9%
2014	11.4%	46.7%	53.3%	2014	11.4%	5.3%	5.8%
2015	-0.7%	-51.7%	48.3%	2015	-0.7%	-11.1%	11.7%
2016	9.5%	60.7%	39.3%	2016	9.5%	5.8%	3.5%
2017	19.4%	88.4%	11.6%	2017	19.4%	17.2%	1.9%

Source: Haver Analytics, ISI Group, Morgan Stanley Wealth Management GIC. (1) % EPS and P/E represent percent breakdown of S&P 500 price return; sign denotes whether y/y change was up or down; absolute value of sum of % EPS and % P/E equals 100%; all EPS and P/E data based on operating earnings.

Withdrawal Rates Over 30-Year Period

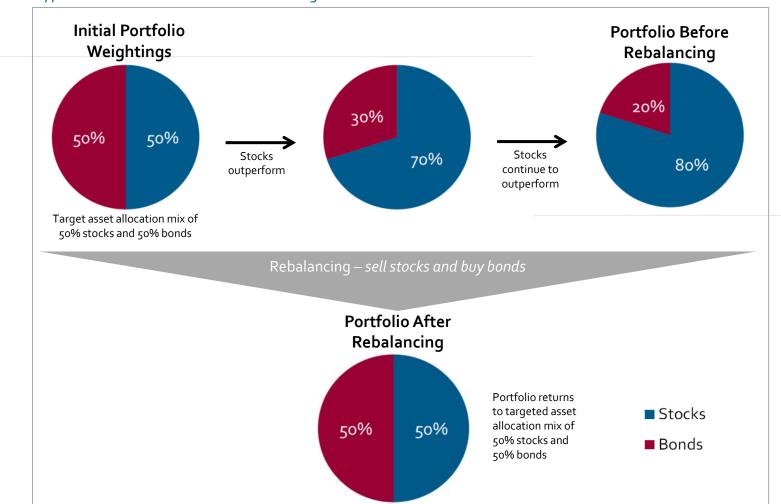
Each hypothetical portfolio shown begins with \$1 million invested in 50 % stocks and 50% bonds at the beginning of a stock market downturn at the end of December 1972, and withdraws different percentages of the initial value each year. After adjusting for a hypothetical 2% annual inflation rate (to preserve purchasing power) and return compounding, the different withdrawal rates have a major impact on long-term portfolio performance during the timeframes shown.



Source: Bloomberg Calculated by Morgan Stanley Wealth Management GIC using data provided by Morningstar. (c) 2018 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (i) is proprietary to Morningstar and/or its content providers; (ii) may not be copied or distributed; and (iii) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Stocks are represented by the S&P 500 Index, and bonds are represented by the Ibbotson Long Government Bond Index. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.

Rebalancing Portfolios

Rebalancing typically involves the periodic buying and/or selling of assets in portfolios to maintain an original desired level of asset allocation.

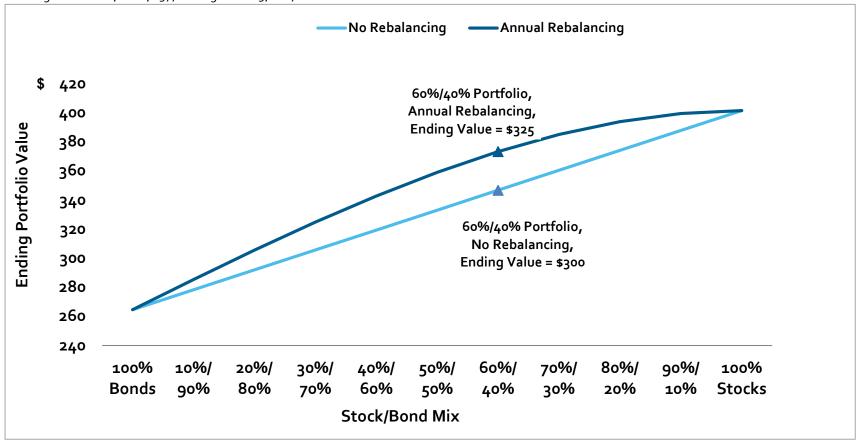


Hypothetical Illustration of the Rebalancing Process

Source: Morgan Stanley Wealth Management GIC.

Portfolio Rebalancing Enhances Returns and Reduces Risk

Ending Portfolio Value: Stock/Bond Portfolios With and Without Annual Rebalancing Starting Value \$100, Jan 1, 1977 through Dec 29, 2017



Note: Returns for stocks are based on the S&P500 Index. Returns for bonds are based on the Bloomberg Barclays Capital US Aggregate Bond Index.

Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Rebalancing Reduces Portfolio Volatility

60% Equity/40% Bond Portfolio Invested January 1, 1977 without Rebalancing As of June 29, 2018

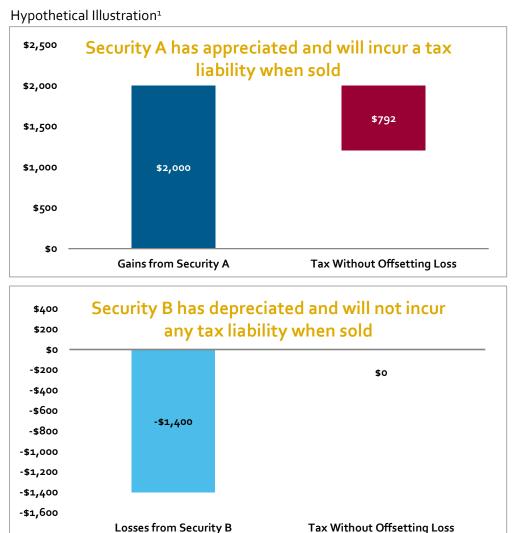
	Market Tops			ľ	Market Bottoms	
Period (Month End)	Equity Allocation	Market Valuation		Period (Month End)	Equity Allocation	Market Valuation
August 1987	63%	14.4X		November 1987	54%	10.1X
March 2000	74%	25.8x		September 2002	55%	14.5X
September 2007	65%	16.2X		February 2009	45%	11.9X
	F	Without re portfolios l overweight	nav	e been		

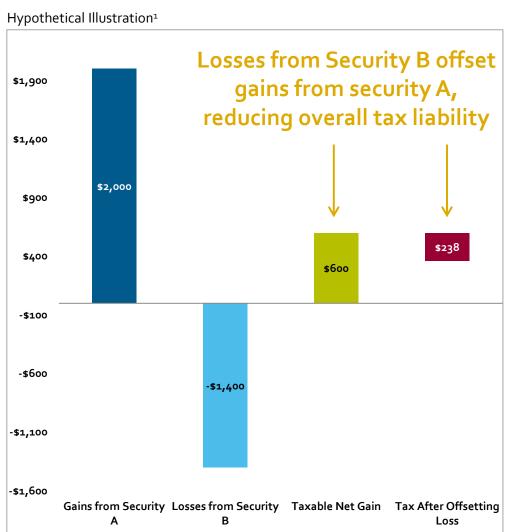
Source: Morgan Stanley Wealth Management GIC.

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

market tops

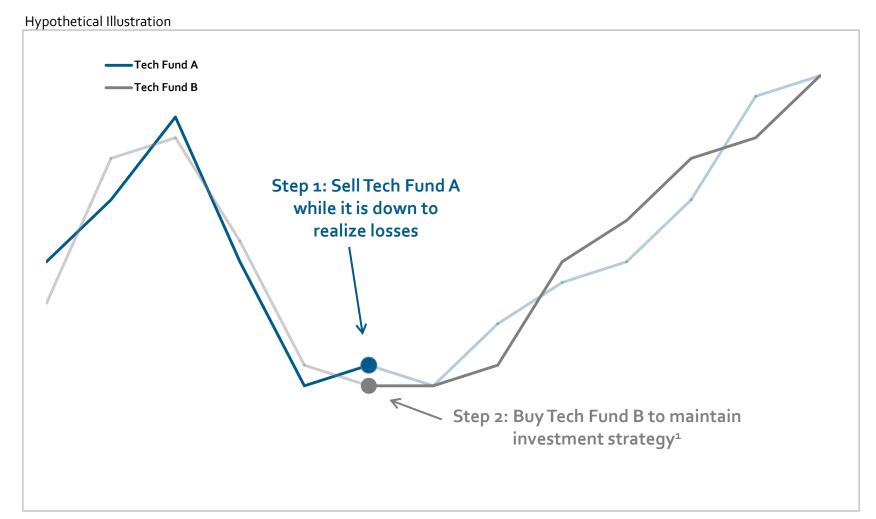
Realized Losses Can Offset Taxes on Realized Gains





Source: Morgan Stanley Wealth Management GIC (1) Assumes income tax bracket of 39.6% and short-term realized gains and losses. The hypothetical investments are for illustrative purposes only. It does not represent the performance of any specific investment. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

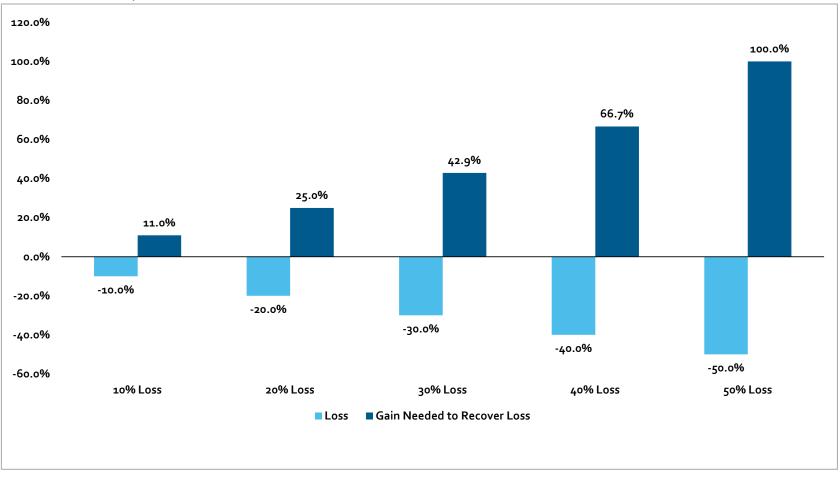
Tax Loss Harvesting: Selling Losers and Replacing With Similar¹ Securities Can Reduce Overall Tax Liability



Source: Morgan Stanley Wealth Management GIC (1) Note that in order to prevent treatment as a 'wash sale,' securities must not be 'substantially identical'. The hypothetical investments are for illustrative purposes only. It does not represent the performance of any specific investment. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Losses are a Portfolio's Worst Enemy





Source: Morgan Stanley Wealth Management GIC.

The Percentage of Positive Real Returns is Highest with Longer Time Horizons and Equity Investments

January 1926 – June 2018

		S&P 500 Index		Ibbot Intermedi		lbbot Long Co	
		NOMINAL ¹	REAL	NOMINAL	REAL	NOMINAL	REAL
	Average Return (%)	10.2%	7.1%	5.1%	2.2%	6.0%	3.0%
	Annualized Volatility ²	18.6%	18.7%	4.3%	4.7%	7.5%	7.8%
1 Month	% of Positive Returns	62.5%	60.1%	69.6%	56.3%	66.5%	57.6%
1 Year	Annualized Volatility	21.2%	21.4%	5.4%	6.5%	8.6%	9.7%
1 Year	% of Positive Returns	75.2%	70.2%	90.2%	65.9%	81.0%	67.2%
	Annualized Volatility	8.7%	8.3%	3.4%	3.9%	4.3%	5.3%
5 Year	% of Positive Returns	87.6%	76.0%	100.0%	73.4%	96.4%	64.2%
10 Year	Annualized Volatility	5.6%	5.4%	3.0%	3.0%	3.5%	4.1%
TO LEAL	% of Positive Returns	94.7%	85.9%	100.0%	74.5%	100.0%	65.2%
	Annualized Volatility	3.4%	3.4%	2.8%	2.2%	3.2%	3.0%
20 Year	% of Positive Returns	100.0%	100.0%	100.0%	76.3%	100.0%	64.4%
	investment increases cha turns (look at 20-year vs.	· · · · · · · · · · · · · · · · · · ·	ve	Vary differen		for equites v	, bonda

Source: Calculated by Morgan Stanley Wealth Management GIC using data provided by Morningstar. (c) 2018 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (i) is proprietary to Morningstar and/or its content providers, (ii) may not be copied or distributed; and (iii) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. (1) Nominal returns do not factor in the effects of inflation, whereas real returns adjust for changes in prices due to inflation. (2) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other

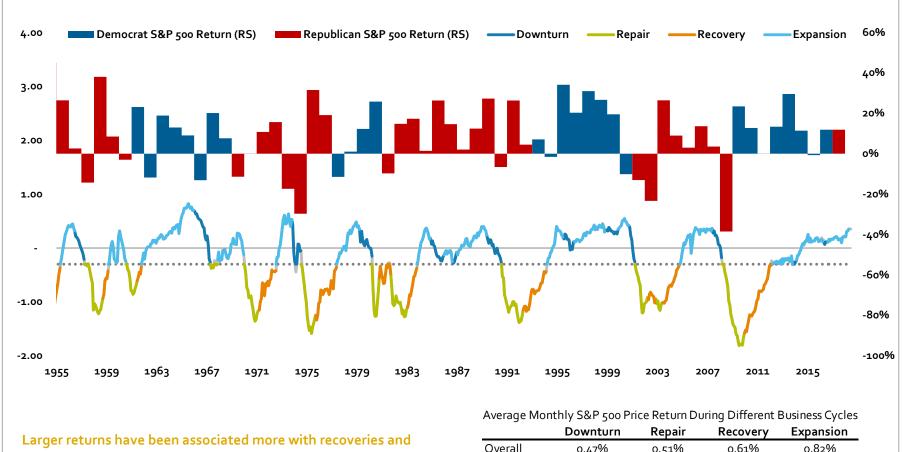
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financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Business Cycles Have Mattered More than the Party in the Oval Office

Morgan Stanley Cycle Indicator, S&P 500 Annual Price Returns

As of June 29, 2018



expansions than they have been to which party controls the presidency, while lower returns have been associated more with downturns and repairs

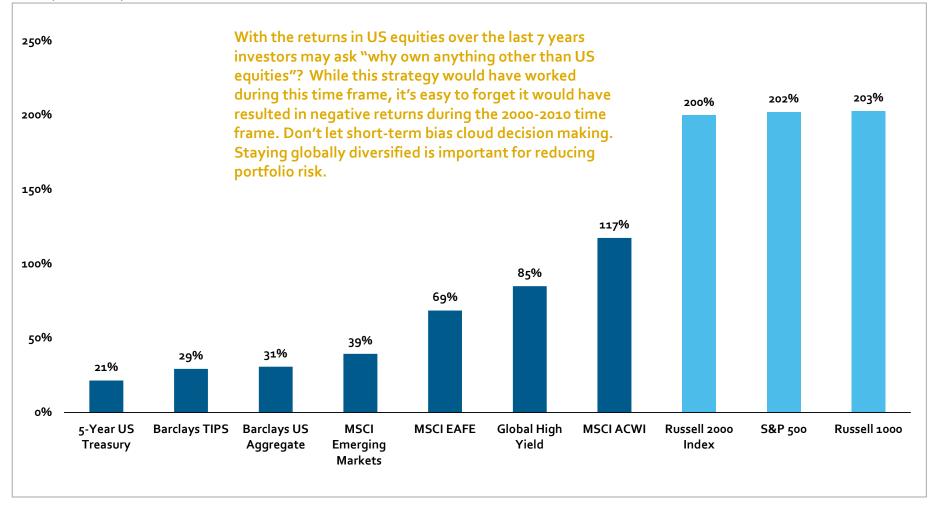
	Downturn	Repair	Recovery	Expansion
Overall	0.47%	0.51%	0.61%	0.82%
Republican	-0.16%	0.25%	0.58%	0.75%
Democrat	1.06%	1.52%	0.66%	0.87%

Source: Bloomberg, Morgan Stanley & Co. Research, NBER, Bloomberg, Haver Analytics. The Morgan Stanley Cycle Indicators measure the deviation from historical norms for macro factors including employment, credit conditions, corporate behavior and the yield curve. The repair phase occurs due to the lag time between when these factors are beginning to improve and when they turn positive.

The Lost Decade Revisited (2010-2018): US Stocks Dominating

Total Returns For Select Asset Classes

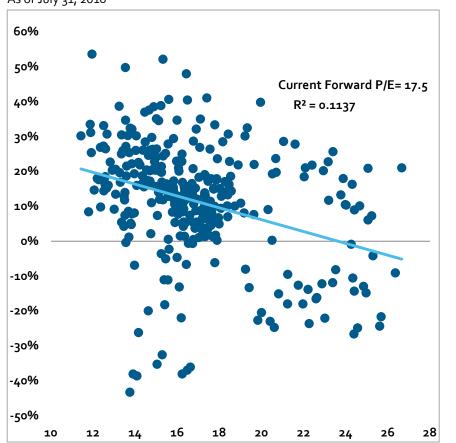
January 2010 – July 31, 2018



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management Investment Resources

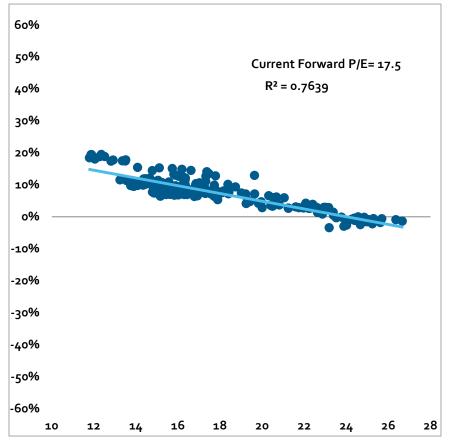
P/E Ratios Become More Helpful the Longer the Time Horizon

Forward P/E and 1 Year Forward Returns As of July 31, 2018



Forward P/E and 10 Year Forward Annualized Returns

As of July 31, 2018

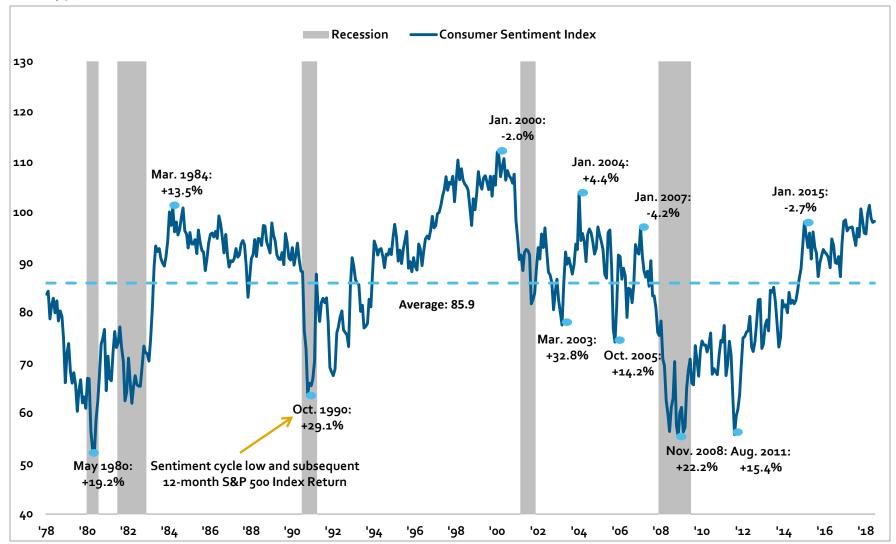


Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources. R² is a measure of how well a regression line fits the data, or how well a given model describes the variability in the data. An R² of 1.0 means the model explains the data perfectly.

Consumer Confidence and the Stock Market

Consumer Sentiment Index- University of Michigan

As of July 31, 2018

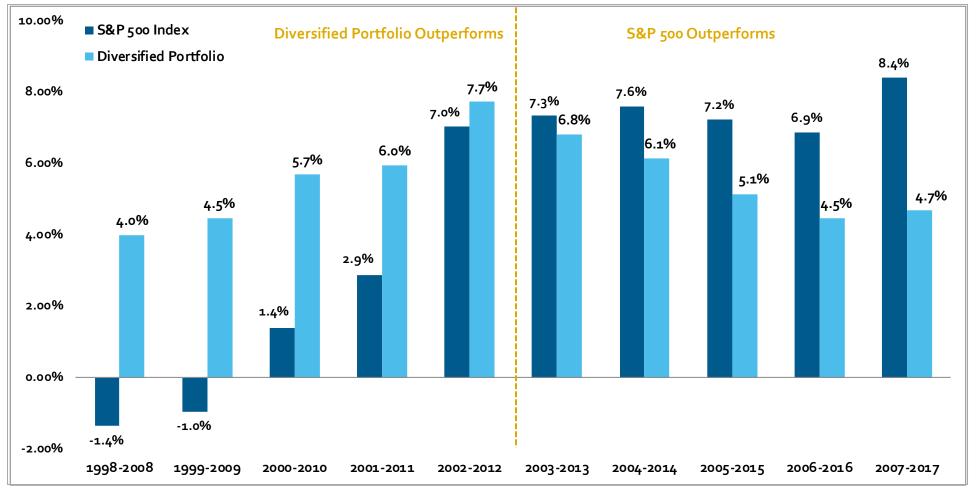


Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources.

The S&P 500 Does Not Always Beat a Diversified Portfolio

Rolling Periods of 10 Year Annualized Total Returns for the S&P 500 Index vs. a Diversified Portfolio

Annual Data as of December 30, 2017



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management Investment Resources; Diversified portfolio is comprised of 25% S&P 500, 10% Russell 2000, 15% MSCI EAFE, 5% MSCI EME, 25% Bloomberg Barclays US Aggregate, 5% BAML 3 mo. T-Bills, 5% HFRX Global Hedge Funds, 5% Bloomberg Commodity Index, and 5% FTSE NAREIT All Equity REITS Total Return Index.

Asset Class Index Performance

Capital Market Returns

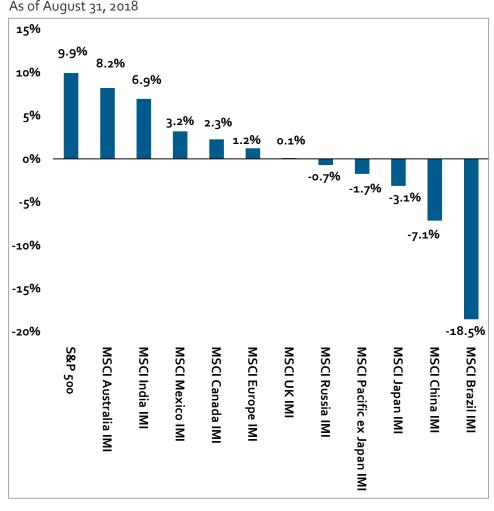
As of August 31, 2018; Private Real Estate as of July 31, 2018

ASSET CLASS	INDEX IN USD	1-MONTH	YTD	1-YR	3-YR ANN	5-YR ANN
Global Equity						
Global Equity	MSCI All Country World	0.8%	3.8%	12.0%	13.6%	9.9%
US Equity	S&P 500	3.3%	9.9%	19.7%	17.1%	14.2%
International Equity	MSCI All Country World ex US	-2.1%	-3.2%	3.7%	9.8%	5.4%
Emerging Markets Equity	MSCI Emerging Markets	-2.7%	-6.9%	-0.3%	12.9%	5.0%
Global Fixed Income	-					
Investment Grade Fixed Income	Barclays Global Aggregate (H)	0.3%	0.4%	0.7%	2.6%	3.5%
Inflation-Linked Securities	Barclays Universal Govt Inflation-Linked	0.0%	0.4%	1.2%	4.0%	4.7%
High Yield	Barclays Global High Yield (H)	-0.9%	-1.0%	0.3%	6.5%	5.7%
Emerging Markets Fixed Income	JP Morgan EM Bonds (UH in USD)	-6.1%	-10.5%	-10.0%	2.2%	-1.5%
Alternative Investments	-					
Global REITs	FTSE EPRA/NAREIT Global REITs	0.7%	1.6%	5.8%	9.8%	7.6%
Commodities	Bloomberg Commodities	-1.8%	-3.9%	0.5%	-1.1%	-8.0%
MLPs	Alerian MLP	1.6%	7.6%	7.3%	0.1%	-1.7%
Hedged Strategies	HFRX Global Hedge Fund Index	0.5%	-0.5%	1.6%	1.9%	1.3%
Managed Futures	HFRX Macro/CTA Index	2.3%	-0.6%	0.9%	-0.8%	0.5%
Private Real Estate	NCREIF Private Real Estate	-	-	6.9%	9.8%	10.3%
Global Cash	-					
Cash	Citigroup 3-month Treasury Bill	0.2%	1.1%	1.5%	0.7%	0.5%
Other Fixed Income						
Municipal Fixed Income	Barclays Municipal Bond	0.3%	0.3%	0.5%	2.7%	4.1%

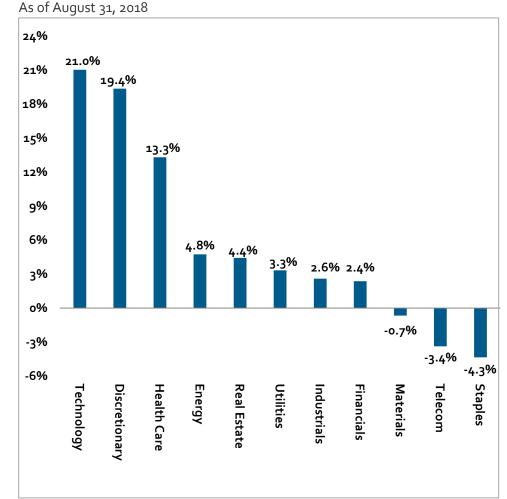
Source: FactSet, Morgan Stanley Wealth Management GIC. For more information about the risks to Master Limited Partnerships (MLPs), please refer to the Risk Considerations section at the end of this material. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Region and US Sector Year-to-Date Equity Performance

YTD Total Return



S&P 500 Sectors – YTD Total Returns



Source: Bloomberg, Morgan Stanley Wealth Management GIC

Performance

US Equities Snapshot and Sector Breakdown

S&P 500 Sector Performance and Valuation¹

As of August 31, 2018

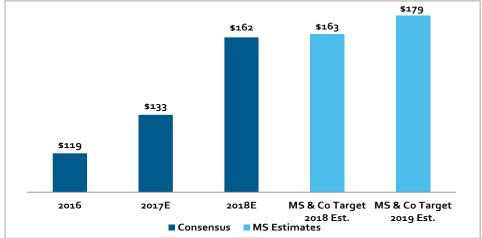
		Total Return	ı			20-Year Avq.	
Index Name	WTD (%)	YTD (%)	1-Year (%)	Div. Yield (%)	Beta	NTM P/E	NTM P/E ²
S&P 500	0.98	9.94	19.66	1.74		15.9	16.8
Energy	-0.14	4.75	22.10	2.67	0.91	17.6	17.0
Materials	o.48	-0.66	9.96	1.94	1.04	14.0	15.4
Industrials	0.50	2.59	13.16	1.85	1.03	16.2	16.4
Consumer Discretionary	1.85	19.39	32.27	1.12	0.96	18.0	21.6
Consumer Staples	-0.41	-4-33	1.00	2.89	0.62	16.9	17.8
Health Care	1.06	13.31	16.12	1.51	0.96	17.0	16.3
Financials	o.36	2.37	16.92	1.66	1.10	12.8	12.6
Information Technology	2.04	21.03	32.77	1.06	1.27	20.6	19.3
Telecommunication Services	-1.57	-3.36	3.65	5.46	0.70	16.1	10.3
Utilities	-0.49	3-33	0.71	3.42	0.22	14.2	16.7
Real Estate	0.87	4.44	6.31	3.18	0.51	15.3	17.8

Morgan Stanley & Co. 2018 S&P 500 Target³

As of August 31, 2018

EPS Landscape	EPS	Multiple	Price Target	Upside / (Downside)
Bull Case	\$176	17.5X	3,000	3.4%
Base Case	\$168	16.5x	2,750	(5.2%)
Bear Case	\$160	15.5X	2,400	(17.3%)
Current S&P 50	o Price		2902	

Morgan Stanley & Co. and Consensus S&P 500 Earnings Estimates As of August 31, 2018



Source: Morgan Stanley & Co., FactSet, Thomson Reuters, Morgan Stanley Wealth Management GIC. (1) Green/red text denotes sector total return and dividend yield higher/lower than S&P 500. (2) Dark blue/light blue/grey fill denotes whether current relative NTM P/E is low/neutral/high relative to history. Real Estate is from 10/31/2001 to present.3) The S&P 2018 target is using MS & Co.'s 2019 earnings estimate.

Performance

Asset Class Performance Heat Map

As of August 31, 2018

Asset Class			Annual	ized Retu	ırns (%)			Yield	Valu	ation	Volati	lity (%)		ation to		
Cash	YTD	1-Yr	2017	3-Yr ¹	5-Yr ¹	10-Yr ¹	20-Yr ¹	Current YTM	Current YTM	Avg YTM ²	30 Days	20 Yrs. ¹		Equities 20 Yrs. ¹		
90-Day US Treasury Bills	1.1	1.5	0.9	0.8	0.5	0.3	1.8	2.07	2.07	1.83	0.1	0.56	0.12	-0.02		
Global Equities								Current Dividend Yield	Current P/E	Avg. P/E ²						
US Large-Cap Growth	17.6	27.6	30.2	19.4	18.1	12.8	7.2	1.00	21.8	21.1	7.7	17.1	0.75	0.88		
US Large-Cap Value	3.4	12.4	15.1	13.2	11.4	8.8	7.2	2.84	13.9	13.8	7.6	13.8	0.84	0.88		
US Mid-Cap Growth	13.2	23.7	22.0	13.6	13.2	11.1	9.5	0.61	20.8	26.6	9.2	22.6	0.76	0.80		
US Mid-Cap Value	3.0	12.2	17.0	13.7	12.4	11.1	10.3	2.61	14.9	14.4	8.6	15.8	0.77	0.87		
US Small-Cap Growth	17.9	31.0	23.4	17.3	14.8	12.4	12.2	0.52	27.5	24.0	9.6	21.2	0.60	0.83		
US Small-Cap Value	8.1	17.8	11.5	14.7	12.5	11.5	10.9	2.38	17.8	17.2	8.2	16.8	0.70	0.83		
Europe Equity	-2.3	3.3	26.2	6.5	5.7	3.7	5.1	3.50	13.5	14.1	14.2	17.9	0.89	0.94		
Japan Equity	-1.2	9.4	24.4	8.8	8.2	4.6	4.8	2.17	12.7	19.8	13.9	16.6	0.49	0.70		
Asia Pacific ex Japan Equity	-1.8	4.2	26.0	11.7	5.5	5.9	10.7	3.78	15.0	14.6	10.5	20.0	0.72	0.87		Chea
Emerging Markets	-6.9	-0.3	37.8	11.8	5.4	3.8	10.5	2.62	11.4	11.3	14.8	21.9	0.85	0.87	N	Mode
Global Fixed Income								Current YTM	Current Spread	Avg. Spread ²					Ð	Expens
Short-Term Fixed Income	0.5	0.2	0.8	0.8	0.9	1.6	3.2	2.77	15.0	31.0	0.6	1.4	-0.54	-0.13	Low	w Vola
US Fixed Income	-1.0	-1.0	3.5	1.8	2.5	3.7	4.6	3.30	42.0	54.5	2.3	3.4	-0.39	-0.04		gh Vola
International Fixed Income	-1.8	-1.5	9.8	2.9	0.7	2.2	3.9	1.29	52.0	49.0	3.7	8.1	0.67	0.33	nışı	gn voi
Inflation-Protected Securities	-4.1	-2.7	9.0	2.6	1.8	2.5	5.6	-	-	-	3.8	7.7	0.70	0.45		
High Yield	-1.9	-0.4	10.4	6.3	4.9	8.1	8.4	6.71	417.0	502.0	3.8	9.5	0.82	0.74	Low	v Corre
Emerging Markets Fixed Income	-10.5	-10.0	15.2	3.2	-1.3	1.9	8.4	6.62	304.0	338.5	12.3	11.8	0.82	0.66	High	h Corr
Alternative Investments								Current Dividend Yield								
Real Estate/REITs	1.6	5.8	15.0	9.0	7.9	5.9	9.8	3.92	-	-	7.4	17.8	0.74	0.80		
Master Limited Partnerships ³	7.6	7.3	-6.5	-0.7	-2.0	7.3	-	7.43	-	-	16.9	18.4	0.27	0.56		
Commodities ex Prec. Metals	-2.7	2.9	0.2	-2.6	-8.8	-9.1	1.0	-	-	-	11.1	16.9	0.71	0.43		
Precious Metals	-10.4	-11.6	10.9	0.7	-5.2	2.4	6.8	-	-	-	11.8	19.2	0.74	0.18		
Hedged Strategies ⁴	-0.5	1.6	6.0	1.7	1.4	0.1	-	-	-	-	2.2	5.9	0.84	0.64		
Managed Futures ⁵	-0.6	0.9	2.5	-0.7	0.5	-1.5	-	-	-	-	6.6	7.9	-0.37	0.18		
S&P 500	9.9	19.7	21.8	16.1	14.5	10.9	7.7	1.74	16.8	15.9	7.0	14.5	0.88	0.95		
Russell 2000	14.3	25.4	14.6	16.1	13.0	10.5	10.0	1.16	25.9	20.3	9.3	19.2	0.60	0.81		
MSCI EAFE	-1.9	4.9	25.6	7.6	6.2	4.1	5.4	3.20	13.5	14.9	11.3	16.3	0.93	0.96		
MSCI AC World	3.8	12.0	24.6	12.5	10.3	7.3	6.8	2.38	14.9	15.4	8.3	15.2	1.00	1.00		

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. Note: Performance values calculated using USD. 1. As of April 30, 2018. 2. 20-year average as of April 30, 2018. 3. Volatility and Correlation: June 30, 2006 – Present. 4. Volatility and Correlation: Jan 31, 1998 – Present Hedged strategies consist of hedge funds and managed futures 5. Volatility and Correlation: February 28, 1998 – Present. Cheap = Below -0.5 standard deviation; Moderate = Between +0.5 standard deviation and -0.5 standard deviation; Expensive = Above +.5 std dev. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

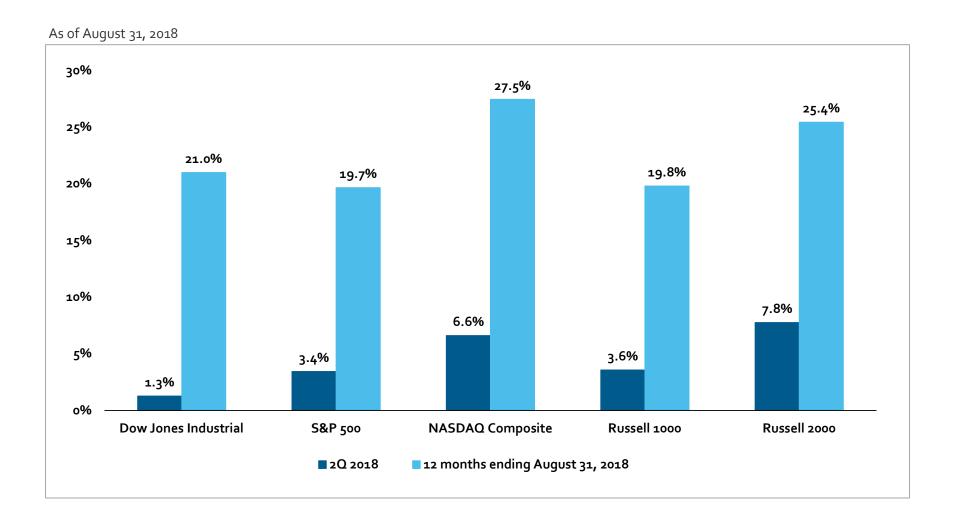
US Equity Index Performance, Volatility and Valuation

As of August 31, 2018 (performance and volatility in percent form)

		Pe	erforn	nancea	as of 7	/31/20	18	V	olatilit	y ¹	<u>ا</u>	/alua	tion
						Ann	Ann		Ann	Ann		12	N
Index in USE)	MTD	3 M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld
All Cap													
•	Russell 3000	3.5	7.6	10.4	20.2	15.9	14.3	8.6	9.4	9.6	19.7	3.3	1.6
	Russell 3000 Growth	5.5	9.6	16.6	27.5	19.1	17.2	9.8	10.2	10.3	27.4	7.6	1.0
	Russell 3000 Value	1.5	5.7	4.2	13.0	12.6	11.3	8.6	9.6	9.7	15.2	2.1	2.3
Large Cap													
	S&P 500	3.3	7.8	9.9	19.7	16.1	14.5	9.0	9.2	9.4	20.3	3.4	1.7
	Russell 1000	3.4	7.7	10.1	19.8	15.8	14.4	8.8	9.3	9.5	19.8	3.4	1.7
	Russell 1000 Growth	5.5	9.6	16.4	27.2	19.3	17.5	10.0	10.1	10.2	27.6	7.9	1.1
	Russell 1000 Value	1.5	5.8	3.7	12.5	12.3	11.2	8.7	9.5	9.5	15.3	2.1	2.3
Mid Cap													
	Russell Mid	3.1	6.4	8.2	17.9	13.4	12.8	7.6	9.8	9.9	18.8	2.9	1.5
	Russell Mid Growth	5.8	8.5	13.9	25.1	15.3	14.2	9.0	10.6	10.7	25.4	7.0	0.7
	Russell Mid Value	1.4	5.0	4.0	12.7	12.1	11.8	7.5	9.8	9.7	16.1	2.1	2.0
Small Cap													
	Russell 2000	4.3	6.9	14.3	25.4	16.1	13.0	9.4	13.2	13.5	18.1	2.4	1.2
	Russell 2000 Growth	6.2	8.9	18.5	30.7	16.4	14.2	9.2	14.1	14.4	23.8	4.8	0.5
	Russell 2000 Value	2.4	4.8	9.9	20.0	15.7	11.7	10.4	13.2	13.3	14.9	1.6	1.8

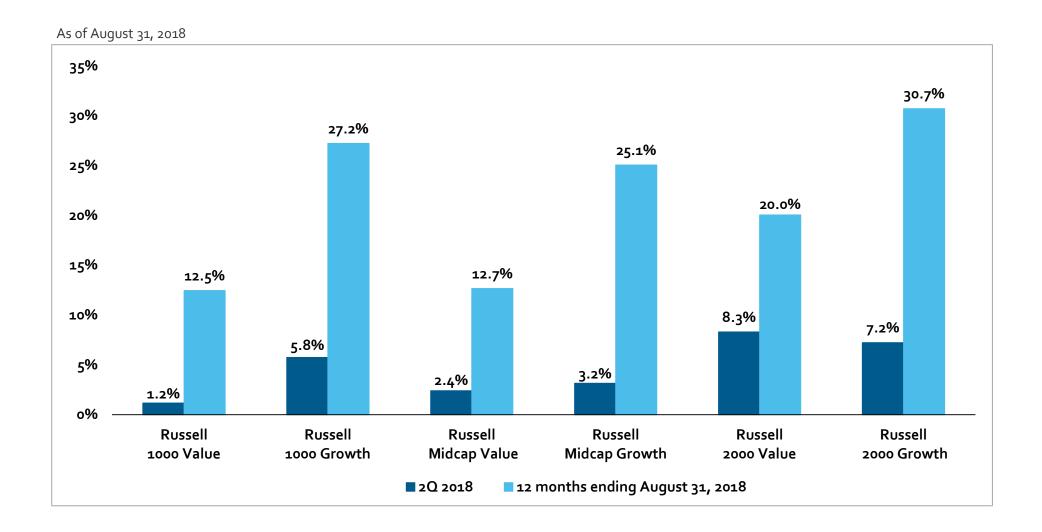
Source: Bloomberg, S&P, Russell, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Total Returns on Major US Stock Market Indices



Source: Bloomberg

Russell Style and Market Capitalization Indices

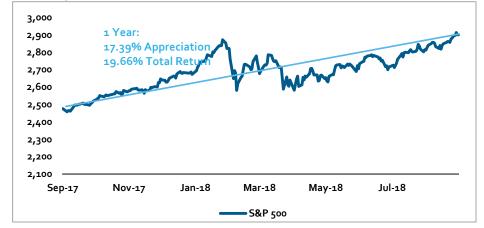


Source: Bloomberg

US Large-Cap Equity Market Performance and Fundamentals

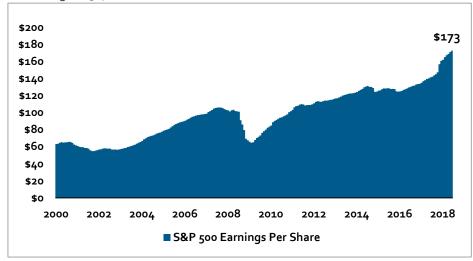
S&P 500 Last 12 Months¹

As of August 31, 2018

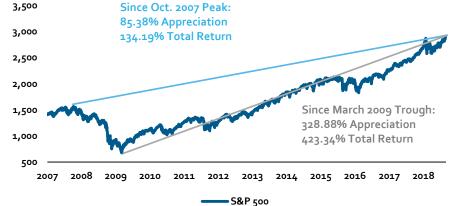


S&P 500 EPS Estimates

As of August 31, 2018







Implied S&P 500 Index Levels

As of August 31, 2018

				H	ypothe	etical P	/E		
		13	14	15	16	17	18	19	20
EPS	\$110	1430	1540	1650	1760	1870	1980	2090	2200
	\$120	1560	1680	1800	1920	2040	2160	2280	2400
Irati	\$130	1690	1820	1950	2080	2210	2340	2470	2600
Operating	\$140	1820	1960	2100	2240	2380	2520	2660	2800
-	\$150	1950	2100	2250	2400	2550	2700	2850	3000
heti	\$160	2080	2240	2400	2560	2720	2880	3040	3200
Hypothetical	\$170	2210	2380	2550	2720	2890	3060	3230	3400
H	\$180	2340	2520	2700	2880	3060	3240	3420	3600

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. (1) Represents index level change. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.

US Equity Size and Style Performance

2018 Performance

As of August 31, 2018

Large 3.4% 10.4% 17.6	
	%
Mid 3.0% 8.6% 13.2	%
Small 8.1% 13.0% 17.9	%

2017 Performance As of December 29, 2017

	Value	Blend	Growth	r
Large	15.1%	22.3%	30.2%	
Mid	17.0%	19.8%	22.0%	
Small	11.5%	17.3%	23.4%	
				ł

Performance Since Market Peak (Oct. 2007) As of August 31, 2018

	Value	Blend	Growth
Large	84.4%	135.6%	200.7%
Mid	129.4%	136.1%	140.7%
Small	157.8%	171.0%	188.8%

Performance Since Market Low (March 2009) As of August 31, 2018

	Value	Blend	Growth
Large	343.5%	412.3%	493.2%
Mid	494.8%	480.3%	467.3%
Small	522.7%	550.6%	577.1%

Current Fwd. P/E Vs. 10-year Avg. P/E As of August 31, 2018

	Value	Blend	Growth
Large	13.9	17.1	21.8
Large	Avg.: 12.9	Avg.: 14.4	Avg.: 16.6
Mid	14.9	17.6	20.8
WITC	Avg.: 14.5	Avg.: 16.6	Avg.: 18.4
Small	17.8	21.8	27.5
Sman	Avg.: 18.3	Avg.: 20.1	Avg.: 22.3
	Expens	ive: Above +1 St	d. Dev.
		Neutral	
	Chea	p: Below -1 Std.	Dev.

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: MSCI US Large Value, MSCI US Large Blend, MSCI US Large Growth, MSCI US Mid Value, MSCI Mid Blend, MSCI Mid Growth, MSCI Small Value, MSCI Small Blend, and MSCI Small Growth. "Blend" indices include both Value and Growth stocks. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

S&P 500 Sector/Industry Group Overview Part 1 of 2

As of August 31, 2018 (performance and volatility in percent form)

				Perfor	mance	as of 8/	31/2018		Ň	/olatilit	y¹	V	aluatio	'n	Contribution to Return
							Ann	Ann		Ann	Ann		12M		
S&P 500 Index in USD		Weight	MTD	3 M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	MTD
Consumer Discretionary		12.9%	5.1	10.9	19.4	32.3	17.8	17.0	11.1	10.9	11.7	24.2	5.8	1.1	0.65
	Automobiles & Components	0.5%	-5.9	-13.0	-12.7	-2.0	3.3	1.9	17.5	17.9	17.8	14.9	1.6	3.9	-0.03
	Cons. Durables & Apparel	1.2%	1.8	7.7	8.4	19.0	6.2	9.5	10.4	11.3	12.1	32.6	3.5	1.4	0.02
	Consumer Services	1.6%	3.0	0.2	-1.8	6.2	13.1	13.3	11.6	11.3	10.8	20.1	10.0	2.0	0.05
	Media	2.2%	1.1	14.9	2.8	2.6	9.4	10.8	17.4	14.6	15.8	11.5	2.7	1.0	0.03
	Retailing	7.4%	8.4	15.1	40.2	65.4	27.8	25.8	14.0	13.5	13.9	43.3	14.7	0.7	0.59
Consumer Staples		6.7%	0.5	9.3	-4.3	1.0	7.4	9.3	13.4	10.4	10.7	20.3	4.8	3.1	0.04
	Food & Staples Retailing	1.5%	7.1	16.8	8.8	20.5	7.6	11.0	20.8	13.9	13.8	20.0	3.7	2.2	0.10
	Food Beverage & Tobacco	3.7%	-2.5	5.9	-8.7	-4.4	6.9	9.9	13.1	11.4	11.6	19.4	5.4	3.4	-0.10
	Household & Personal Prod.	1.5%	2.0	11.3	-5.8	-2.9	8.7	5.8	16.0	12.4	12.5	24.0	5.5	3.0	0.03
Energy		5.9%	-3.3	-1.2	4.8	22.1	7.3	1.2	19.8	18.4	17.7	28.6	2.0	2.9	-0.21
Financials		13.8%	1.4	4.7	2.4	16.9	16.4	14.6	11.8	14.4	13.2	17.6	1.6	1.7	0.19
	Banks	6.2%	0.9	6.7	4.1	22.2	17.5	15.5	15.0	19.5	17.5	19.4	1.5	2.0	0.06
	Diversified Financials	5.2%	2.6	3.0	2.3	16.9	15.0	13.5	10.3	14.1	13.4	16.2	1.9	1.1	0.14
	Insurance	2.4%	0.0	3.2	-1.9	5.0	11.7	11.7	10.7	11.6	13.0	16.9	1.3	2.1	0.00

Source: S&P, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns.

S&P 500 Sector/Industry Group Overview Part 2 of 2

As of August 31, 2018 (performance and volatility in percent form)

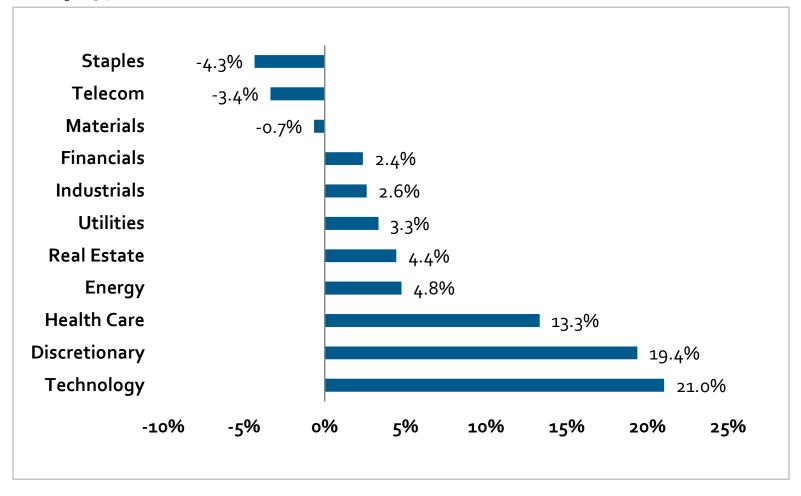
				Perfor	mance	as of 8/3	31/2018		V	olatility	/ ¹	V	aluatio	n	Contribution to Return
							Ann	Ann		Ann	Ann		12M		
&P 500 Index in USD		Weight	MTD	3 M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	MTD
Health Care		14.6%	4.4	13.1	13.3	16.1	11.5	15.4	11.7	12.4	11.7	35.8	4.5	1.5	0.63
	Health Care Equip. & Srvcs.	6.5%	5.3	11.6	18.2	26.8	17.5	19.9	13.0	12.1	11.7	31.3	3.9	0.7	0.34
	Pharmaceuticals & Biotech.	8.2%	3.6	14.3	10.0	9.4	7.9	12.8	12.7	13.6	12.8	40.0	5.0	2.1	0.29
Industrials		9.6%	0.3	4.1	2.6	13.2	16.1	13.6	12.7	11.5	11.4	22.9	4.9	1.9	0.03
	Capital Goods	6.7%	-0.9	2.3	-0.4	8.6	15.4	12.7	13.4	11.8	11.8	31.2	5.0	2.0	-0.06
	Consumer Srvs. & Supplies	0.7%	4.1	11.2	13.3	18.3	13.5	14.0	8.8	8.8	9.6	26.6	4.4	1.2	0.03
	Transportation	2.2%	2.9	7.9	9.8	27.8	19.0	16.9	15.5	15.6	14.9	12.4	4.8	1.7	0.06
Information Technology		26.5%	6.9	8.8	21.0	32.8	27.4	23.2	12.8	13.3	12.7	34.8	6.5	1.2	1.77
	Software & Services	15.9%	4.6	8.2	20.2	30.9	26.9	22.8	13.0	12.7	12.3	46.2	7.1	0.8	0.72
	Technology Hardware	6.6%	15.9	17.8	30.2	39.4	27.5	23.4	17.7	19.1	17.5	26.9	6.7	1.6	0.93
	Semis. & Semi Equipment	3.9%	3.1	-1.6	11.2	30.3	32.0	26.3	18.1	16.2	16.8	23.3	4.6	1.9	0.12
Materials		2.5%	-0.5	2.9	-0.7	10.0	13.4	10.2	10.8	15.2	14.3	23.1	2.8	2.0	-0.01
Real Estate		2.7%	2.5	8.2	4.4	6.3	10.0	11.1	10.7	11.8	12.4				0.07
Telecomm. Services		1.9%	3.0	7.9	-3.4	3.6	6.9	5.7	16.4	15.5	14.0	6.9	2.0	5.5	0.06
Utilities		2.8%	1.1	5.9	3.3	0.7	11.9	11.4	12.0	12.1	12.8	20.0	1.9	3.4	0.03
S&P 500 Index		100.0%	3.3	7.8	9.9	19.7	16.1	14.5	9.0	9.2	9.4	20.3	3.4	1.7	3.26

Source: S&P, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns.

S&P 500 Sectors

YTD 2018 Total Return

As of August 31, 2018



Source: Bloomberg

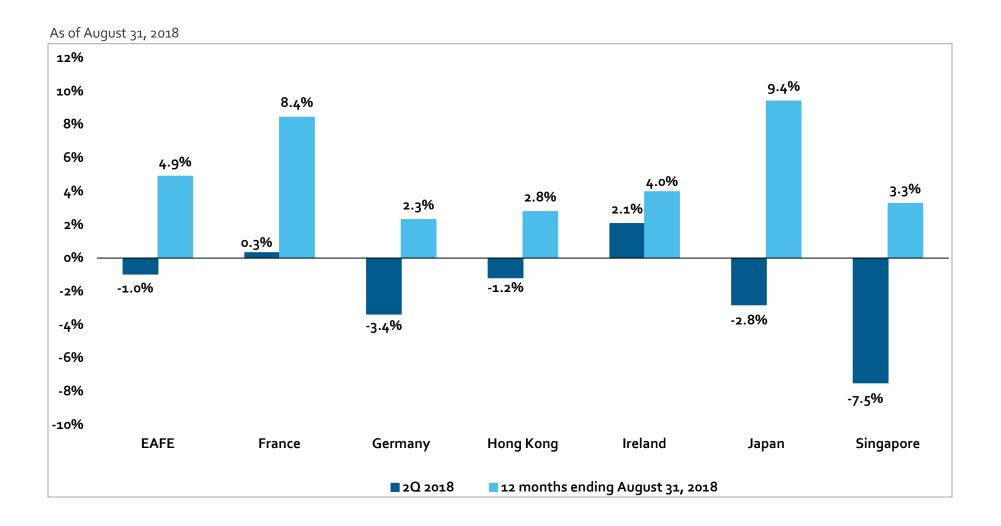
S&P 500 Sector Performance and Valuation

As of August 31, 2018

	S&P 500 Index	Financials	Tech.	Healthcare	Industrials	Energy	Consumer Disc.	Consumer Staples	Telecom	Utilities	Materials	Real Estate
S&P Weight	100.0%	13.8%	26.5%	14.6%	9.6%	5.9%	12.9%	6.7%				
YTD Return	9.9%	2.4%	21.0%	13.3%	2.6%	4.8%	19.4%	-4.3%	-3.4%	3.3%	-0.7%	4.4%
2Q 2018 Return	3.4%	-3.2%	7.1%	3.1%	-3.2%	13.5%	8.2%	-1.5%	-0.9%	3.7%	2.6%	6.1%
Ret. since Top (October 2007)	134.2	21.6	261.9	214.7	119.3	21.8	269.8	158.9	49.2	97.3	75.5	74.8
Ret. since Low (March 2009)	423.3	563.5	658.3	407.3	502.7	123.1	756.1	263.1	185.1	245.2	318.1	548.2
Beta to S&P 500	1.00	1.41	1.11	0.74	1.19	0.99	1.12	0.57	0.61	0.45	1.26	1.28
Fwd. P/E Ratio	16.8x	12.6x	19.3X	16.3x	16.3x	16.7x	21.6x	17.8x	10.3X	16.6x	15.3X	17.9X
10-Yr Average	14.4X	12.3X	14.5X	13.8x	14.8x	18.4x	16.9x	16.5x	14.0X	14.6x	14.6x	16.5x
PB Ratio	3.4	1.5	6.7	4.4	4.9	2.1	6.2	5.2	1.9	1.9	2.7	3.4
10-Yr Average	2.6	1.2	3.9	3.6	3.1	2.0	3.2	4.1	2.2	1.7	2.8	2.8
Dividend Yield	1.7%	1.7%	1.1%	1.5%	1.8%	2.7%	1.1%	2.9%	5.5%	3.4%	1.9%	3.2%
10-Yr Average	2.1%	2.1%	1.2%	1.9%	2.3%	2.4%	1.4%	2.8%	5.0%	3.9%	2.2%	N/A

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management Investment Resources

MSCI Developed Market Returns for USD Investors



Source: Bloomberg. Returns are in USD (unhedged).

MSCI All Country World Overview – Part 1 of 2

As of August 31, 2018 (performance and volatility in percent form)

				Perforr	mance a	is of 8/3	1/2018		V	olatilit	y¹	V	aluat	on	Foreig	jn Exchar	nge	Contribution to Return
Net Official		·					Ann	Ann		Ann	Ann		12M			12M		
Index in USD		Weight	MTD	зМ	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	Quote	Spot	Return	MTD
MSCI All Counti	ry World	100.00%	o.8	3-3	3.4	11.4	11.8	9.7	8.77	9.63	9.93	18.6	2.3	2.4				0.79
United States		55.26%	3.2	7.6	9.7	19.1	15.2	13.7	8.92	9.28	9.48	22.8	3.5	1.8				1.75
Canada		3.00%	-1.5	1.1	-2.2	5.8	8.6	3-3	10.74	11.94	13.25	18.1	1.9	3.0	USD/CAD	1.30	4.00	-0.05
Europe		19.43%	-2.8	-0.2	-2.8	2.6	5-9	5.1	11.67	12.13	12.51	16.7	1.8	3.5	EUR/USD	1.16	-2.14	-0.56
	Austria	0.07%	-7.4	-4.9	-11.2	-4.2	16.9	4.5	19.06	19.44	20.84	9.7	1.3	3.3	EUR/USD	1.16	-2.14	-0.01
	Belgium	0.32%	-4.7	0.2	-8.0	-7.7	3.6	6.3	12.86	14.93	14.46	19.2	2.0	3.9	EUR/USD	1.16	-2.14	-0.02
	Denmark	0.54%	0.4	3.6	-2.7	-1.0	4.5	10.7	9.55	13.52	14.23	21.1	3.9	2.2	USD/DKK	6.41	2.42	0.00
	Finland	0.33%	2.6	2.7	13.8	12.0	12.9	12.0	9.05	12.47	14.62	26.1	2.4	3.9	EUR/USD	1.16	-2.14	0.01
	France	3.42%	-2.0	0.6	1.5	7.4	10.1	7.2	12.90	12.93	13.87	15.9	1.7	3.1	EUR/USD	1.16	-2.14	-0.07
	Germany	2.95%	-3.0	-1.2	-6.3	1.6	7.5	5.9	14.42	15.73	15.45	15.4	1.7	2.9	EUR/USD	1.16	-2.14	-0.09
	Ireland	0.17%	-1.8	-5.4	-5.9	3.6	1.4	7.4	12.96	14.41	17.07	17.3	1.8	1.9	EUR/USD	1.16	-2.14	0.00
	Italy	0.69%	-9.5	-7-3	-8.8	-7.6	-0.2	2.9	23.45	21.77	19.79	12.3	1.1	4.2	EUR/USD	1.16	-2.14	-0.07
	Netherlands	1.11%	-2.0	2.1	1.1	4.4	11.2	9.5	10.97	12.74	13.15	18.4	2.2	2.7	EUR/USD	1.16	-2.14	-0.02
	Norway	0.23%	-0.9	1.4	4.6	10.8	12.6	1.8	9.06	13.50	17.42	17.6	2.0	3.9	USD/NOK	8.36	7.49	0.00
	Portugal	0.05%	-2.1	3.1	7.1	7.4	11.1	-1.9	10.06	16.47	20.12	21.5	2.0	4.4	EUR/USD	1.16	-2.14	0.00
	Spain	0.91%	-5.9	0.2	-8.2	-8.9	1.3	3.4	17.95	19.68	18.68	13.5	1.3	4.3	EUR/USD	1.16	-2.14	-0.06
	Sweden	0.82%	-1.5	3.4	-2.3	-3.2	5.1	3.2	12.38	12.55	12.45	17.3	2.2	3.7	USD/SEK	9.14	14.82	-0.01
	Switzerland	2.56%	o.6	8.2	-0.2	3.5	4.3	5.4	12.32	11.59	11.62	22.2	2.6	3.2	USD/CHF	0.97	0.63	0.02
	United Kingdom	5.27%	-4.2	-4.3	-4.4	4.5	4.0	3.0	12.64	11.97	12.85	16.4	1.7	4.3	GBP/USD	1.30	0.87	-0.23
Israel		0.17%	3.1	9.9	12.7	21.9	-5.1	5.2	14.99	18.26	17.21	14.2	1.8	2.0	USD/ILS	3.60	0.36	0.01
EM EMEA		1.54%	-7.7	-5.6	-14.0	-7.6	3.8	-1.0	17.22	17.68	17.97	12.3	1.4	3.6				-0.13
	Czech Republic	0.02%	-2.1	3.6	4.4	14.4	3-5	2.5	13.94	20.14	19.72	16.0	1.6	6.4	USD/CZK	22.12	0.67	0.00
	Egypt	0.01%	3.0	1.5	1.4	-3.6	-3.8	3.5	18.87	39.80	33.51	11.3	3.6	2.8	USD/EGP	17.83	0.96	0.00
	Greece	0.03%	-10.0	-6.6	-18.1	-20.2	-9.2	-23.0	41.32	44.43	50.40	32.4	0.6	1.7	EUR/USD	1.16	-2.14	0.00
	Hungary	0.03%	1.6	4.5	-11.8	-10.5	22.4	10.1	24.48	21.11	22.97	10.0	1.5	2.2	USD/HUF	280.25	9.04	0.00
	Poland	0.14%	0.7	9.5	-9.1	-7.6	5.4	-0.3	23.43	23.42	21.22	12.2	1.4	1.9	USD/PLN	3.68	3.00	0.00
	Russia	0.37%	-7.0	-3.0	-0.6	8.2	14.1	0.0	18.25	19.36	27.10	7.5	0.9	5.5	USD/RUB	67.35	15.98	-0.03
	South Africa	0.69%	-10.0	-9.5	-20.1	-9.3	2.3	2.1	22.50	23.08	21.55	20.4	2.3	2.8	USD/ZAR	14.65	12.72	-0.08
	Turkey	0.06%	-29.0	-37.2	-53.6	-56.2	-17.7	-14.4	44.64	35.39	33.13	6.7	1.0	5.1	USD/TRY	6.62	91.81	-0.02
	Qatar	0.10%	1.6	12.9	20.4	19.1	0.3	2.5	24.71	22.05	23.97	13.7	1.9	3.8	USD/QAR	3.64	-0.01	0.00
	United Arab Emirates	0.07%	-0.6	2.5	-1.1	-7.8	-0.7	6.1	11.38	15.72	26.67	10.1	1.4	5.2	USD/AED	3.67	0.00	0.00

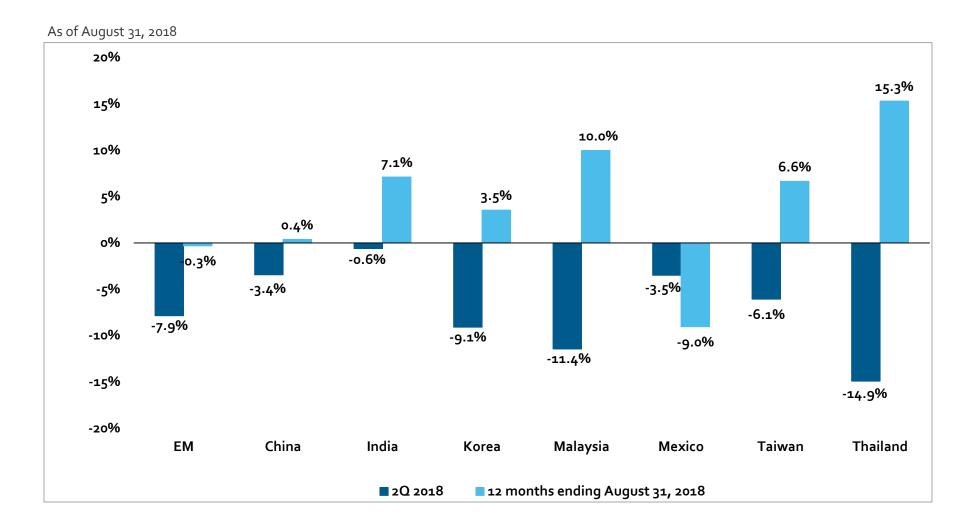
Source: MSCI, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. Countries are represented by MSCI regional indices. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

MSCI All Country World Overview – Part 2 of 2

				Perforr	nance a	ns of 8/3	31/2018		V	'olatilit	уı	v	aluatio	on	Forei	gn Exchan	ge	Contributior to Return
Net Official							Ann	Ann		Ann	Ann		12M			12M		
Index in USD		Weight	MTD	3 M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	Quote	Spot	Return	MTD
lapan		7.40%	0.2	-1.9	-1.4	9.0	8.4	7.8	8.84	12.03	11.44	13.5	1.3	2.2	USD/JPY	110.89	2.18	0.02
Pacific Ex. Japan		3.66%	-1.8	-1.5	-1.9	4.0	11.6	5.4	9.92	12.84	14.79	14.4	1.7	3.8				-0.07
	Australia	2.12%	-1.8	1.6	-0.9	4.7	11.8	4.1	11.03	13.80	16.37	15.7	2.0	4.2	AUD/USD	0.72	-8.82	-0.04
	Hong Kong	1.09%	-2.3	-5.6	-3.2	2.8	11.8	9.0	10.75	13.73	15.42	12.3	1.3	2.9	USD/HKD	7.85	0.29	-0.03
	Singapore	0.38%	-1.7	-7.4	-4.9	3.2	9.2	3.6	16.16	16.33	15.96	13.0	1.3	4.2	USD/SGD	1.37	0.89	-0.01
	New Zealand	0.07%	5.1	6.8	5.0	6.0	16.7	9.2	15.78	18.94	18.50	39.4	3.4	2.5	NZD/USD	0.66	-7.36	0.00
M Asia		8.34%	-0.8	-4.8	-5.2	2.7	13.6	8.2	12.97	13.41	13.93	13.7	1.7	2.4				-0.07
	China	3.43%	-3.8	-11.1	-7.8	0.2	13.5	9.3	17.06	17.74	19.24	14.2	1.8	2.1	USD/CNY	6.83	3.53	-0.14
	India	1.03%	1.0	6.5	-0.5	7.1	10.6	13.8	15.81	15.82	16.60	25.1	3.2	1.2	USD/INR	70.93	10.95	0.01
	Indonesia	0.22%	0.8	-4.1	-15.9	-9.7	8.6	2.7	16.00	19.66	19.82	16.6	2.7	2.6	USD/IDR	14730.00	10.40	0.00
	South Korea	1.63%	1.9	-6.4	-9.3	3.1	15.9	6.0	15.94	16.35	16.06	9.1	1.1	2.1	USD/KRW	1113.15	-1.28	0.03
	Malaysia	0.28%	0.7	2.6	1.4	10.0	8.3	-1.0	14.67	14.41	15.96	16.9	1.8	2.9	USD/MYR	4.11	-3.77	0.00
	Philippines	0.12%	2.5	3.9	-13.5	-4.9	-0.6	3.2	15.48	15.84	15.16	20.1	2.3	1.5	USD/PHP	53.47	4.49	0.00
	Taiwan	1.36%	1.0	4.4	5.2	5.7	16.1	10.5	13.07	12.17	13.03	14.5	1.9	3.9	USD/TWD	30.71	1.78	0.01
	Thailand	0.27%	2.2	-1.2	2.0	15.0	15.6	8.8	18.70	14.95	16.16	16.0	2.2	2.9	USD/THB	32.73	-1.43	0.01
EM Latin America		1.20%	-8.4	-3.0	-11.1	-11.8	9.0	-1.6	26.05	24.83	24.75	17.3	1.9	3.1				-0.11
	Brazil	0.64%	-11.3	-9.1	-18.0	-16.2	13.0	-2.0	33.12	33.35	33.96	16.0	1.7	3.8	USD/BRL	4.12	30.94	-0.08
	Chile	0.12%	-8.9	-9.6	-14.5	-6.6	9.5	-0.2	27.25	20.97	19.52	18.0	1.9	2.7	USD/CLP	678.22	7.92	-0.01
	Colombia	0.05%	-3.6	-4.2	5.9	7.6	11.0	-7.7	21.61	24.61	27.01	14.6	1.4	2.6	USD/COP	3054.75	3.73	0.00
	Mexico	0.34%	-3.2	14.9	2.4	-9.3	1.0	-1.3	25.29	21.01	18.66	21.4	2.4	2.3	USD/MXN	19.12	7.28	-0.01
	Peru	0.04%	-6.3	-5.3	2.3	9.5	25.5	11.8	14.55	19.01	19.73	15.1	2.5	2.0	USD/PEN	3.31	1.96	0.00

Source: MSCI, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. Countries are represented by MSCI regional indices. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

MSCI Emerging Markets Returns for USD Investors



Source: Bloomberg

MSCI Emerging Markets Country Overview

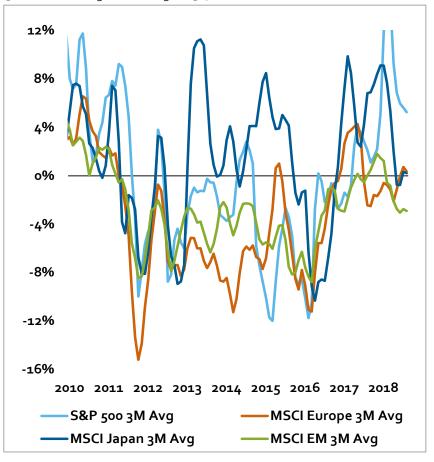
As of August 31, 2018 (performance and volatility in percent form)

				Perforr	nance a	s of 8/3	31/2018		V	olatilit	y¹	\	/aluat	ion	Forei	gn Exchar	nge	Contributio to Return
Net Official							Ann	Ann		Ann	Ann		12	1		12M		
Index in USD		Weight	MTD	зМ	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	Quote	Spot	Return	MTD
Emerging Market	ts	100.00%	-2.7	-4.7	-7.2	-0.7	11.4	5.0	13.2	13.9	14.8	13.8	1.7	2.6				-2.70
EM Asia		75.27%	-0.8	-4.8	-5.2	2.7	13.6	8.2	13.0	13.4	13.9	13.7	1.7	2.4				-0.61
	China	30.94%	-3.8	-11.1	-7.8	0.2	13.5	9.3	17.1	17.7	19.2	14.2	1.8	2.1	USD/CNY	6.83	3.53	-1.18
	India	9.32%	1.0	6.5	-0.5	7.1	10.6	13.8	15.8	15.8	16.6	25.1	3.2	1.2	USD/INR	70.93	10.95	0.09
	Indonesia	1.99%	o.8	-4.1	-15.9	-9.7	8.6	2.7	16.0	19.7	19.8	16.6	2.7	2.6	USD/IDR	14730.0	10.40	0.02
	South Korea	14.76%	1.9	-6.4	-9.3	3.1	15.9	6.0	15.9	16.4	16.1	9.1	1.1	2.1	USD/KRW	1113.2	-1.28	0.26
	Malaysia	2.48%	0.7	2.6	1.4	10.0	8.3	-1.0	14.7	14.4	16.0	16.9	1.8	2.9	USD/MYR	4.11	-3.77	0.02
	Philippines	1.05%	2.5	3.9	-13.5	-4.9	-0.6	3.2	15.5	15.8	15.2	20.1	2.3	1.5	USD/PHP	53.47	4.49	0.03
	Taiwan	12.25%	1.0	4.4	5.2	5.7	16.1	10.5	13.1	12.2	13.0	14.5	1.9	3.9	USD/TWD	30.71	1.78	0.12
	Thailand	2.41%	2.2	-1.2	2.0	15.0	15.6	8.8	18.7	14.9	16.2	16.0	2.2	2.9	USD/THB	32.73	-1.43	0.05
EM EMEA		13.90%	-7.7	-5.6	-14.0	-7.6	3.8	-1.0	17.2	17.7	18.0	12.3	1.4	3.6				-1.13
	Czech Republic	0.19%	-2.1	3.6	4.4	14.4	3.5	2.5	13.9	20.1	19.7	16.0	1.6	6.4	USD/CZK	22.12	0.67	0.00
	Egypt	0.14%	3.0	1.5	1.4	-3.6	-3.8	3.5	18.9	39.8	33.5	11.3	3.6	2.8	USD/EGP	17.83	0.96	0.00
	Hungary	0.29%	1.6	4.5	-11.8	-10.5	22.4	10.1	24.5	21.1	23.0	10.0	1.5	2.2	USD/HUF	280.3	9.04	0.00
	Greece	0.28%	-10.0	-6.6	-18.1	-20.2	-9.2	-23.0	41.3	44.4	50.4	32.4	0.6	1.7	USD/EUR	1.16	2.18	-0.03
	Poland	1.24%	0.7	9.5	-9.1	-7.6	5.4	-0.3	23.4	23.4	21.2	12.2	1.4	1.9	USD/PLN	3.68	3.00	0.01
	Russia	3.38%	-7.0	-3.0	-0.6	8.2	14.1	0.0	18.2	19.4	27.1	7.5	0.9	5.5	USD/RUB	67.35	15.98	-0.25
	South Africa	6.26%	-10.0	-9.5	-20.1	-9.3	2.3	2.1	22.5	23.1	21.6	20.4	2.3	2.8	USD/ZAR	14.65	12.72	-0.68
	Qatar	0.94%	1.6	12.9	20.4	19.1	0.3	2.5	24.7	22.0	24.0	13.7	1.9	3.8	USD/QAR	3.64	-0.01	0.01
	United Arab Emirates	0.67%	-0.6	2.5	-1.1	-7.8	-0.7	6.1	11.4	15.7	26.7	10.1	1.4	5.2	USD/AED	3.67	0.00	0.00
	Turkey	0.51%	-29.0	-37.2	-53.6	-56.2	-17.7	-14.4	44.6	35.4	33.1	6.7	1.0	5.1	USD/TRY	6.62	91.81	-0.20
EM Latin America	a	10.84%	-8.4	-3.0	-11.1	-11.8	9.0	-1.6	26.0	24.8	24.7	17.3	1.9	3.1				-0.97
	Brazil	5.79%	-11.3	-9.1	-18.0	-16.2	13.0	-2.0	33.1	33.3	34.0	16.0	1.7	3.8	USD/BRL	4.12	30.94	-0.73
	Chile	1.07%	-8.9	-9.6	-14.5	-6.6	9.5	-0.2	27.2	21.0	19.5	18.0	1.9	2.7	USD/CLP	678.22	7.92	-0.10
	Colombia	0.46%	-3.6	-4.2	5.9	7.6	11.0	-7.7	21.6	24.6	27.0	14.6	1.4	2.6	USD/COP	3054.8	3.73	-0.02
	Mexico	3.11%	-3.2	14.9	2.4	-9.3	1.0	-1.3	25.3	21.0	18.7	21.4	2.4	2.3	USD/MXN	19.12	7.28	-0.10
	Peru	0.40%	-6.3	-5.3	2.3	9.5	25.5	11.8	14.6	19.0	19.7	15.1	2.5	2.0	USD/PEN	3.31	1.96	-0.03

Source: MSCI, FactSet. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. *The weighted average PE ratio is based on an average of 75% of the constituents due to many of them having a negative EPS. Countries are represented by MSCI regional indices.

Earnings Growth and Revisions

Global Earnings Revisions Breadth¹



3-Month Average as of August 31, 2018

Expected EPS Growth

As of August 31, 2018

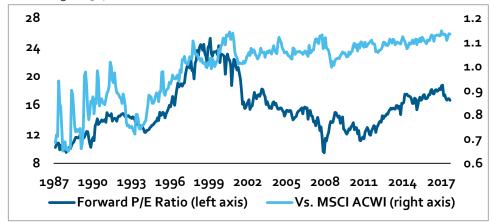
Regional Index	12-month Forward EPS Growth
MSCI USA	14.0%
	14.0%
MSCI Emerging Markets	12.8%
MSCI All Country World	11.8%
MSCI Asia ex Japan	10.2%
MSCI Europe	9.6%
MSCI Japan	6.4%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used: MSCI USA for US, MSCI Europe for Europe, MSCI Japan for Japan, MSCI Emerging Markets for Emerging Markets, MSCI Asia ex Japan for Asia ex Japan. (1) Earnings revisions breadth is defined as the number of positive analyst revisions minus the number of negative analyst revisions divided by the total number of revisions. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Valuation: 12-Month Forward P/E Ratios by Region¹

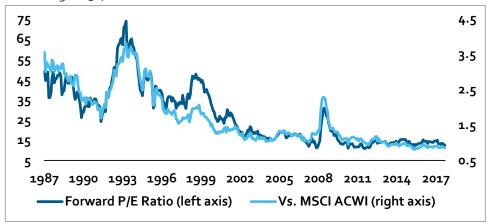
MSCI USA Forward P/E and Relative Valuation

As of August 31, 2018

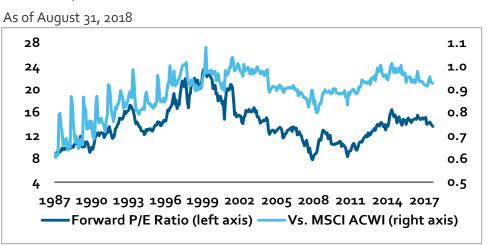


MSCI Japan Forward P/E and Relative Valuation

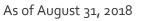
As of August 31, 2018

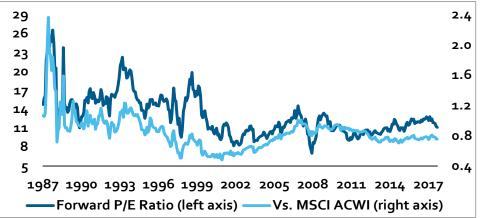


MSCI Europe Forward P/E and Relative Valuation



MSCI EM Forward P/E and Relative Valuation

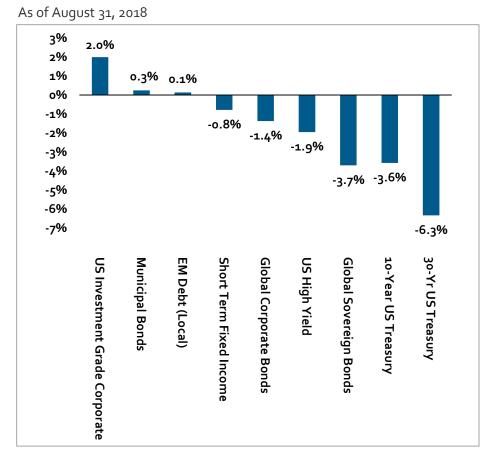




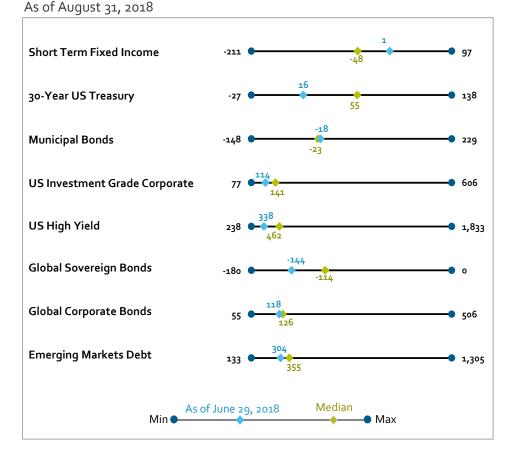
Source: FactSet, Morgan Stanley Wealth Management GIC. (1) Forward P/E = market price per share / expected earnings per share.

Fixed Income Performance and Spreads

YTD Total Return¹



Yield Spreads Vs. Past 20 Years ²



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. (1) Indices used for this analysis include: Bloomberg Barclays US High Yield, Bloomberg Barclays US Gov/Credit Float Adjusted 1-5Y Bond (short duration), Bloomberg Barclays Global Aggregate Credit-Corporate, JP Morgan GBI-EM Global Diversified (EM debt), Bloomberg Barclays US Investment Grade Corporate, Bloomberg Barclays Muni Bond, and Bloomberg Barclays Global Aggregate Government (global sovereign). (2) Yield spread ranges are based on 20 years of data.

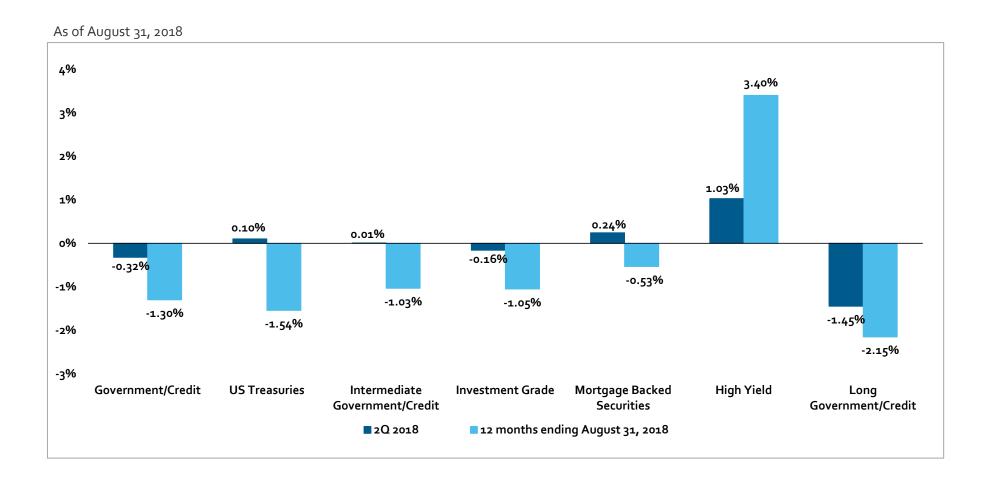
US Fixed Income Overview

As of August 31, 2018 (performance and YTW in percent form)

			Cha	aracteristic	5	Pe	rform	ance a	s of 8	31/20:	18
										Ann	Ann
Index in USD			Weight	Duration ¹	YTW ²	MTD	3 M	YTD	12M	3YR	5YR
Bloomberg Barclays U.S. Aggregate				6.0	3.3	o.6	0.5	-1.0	-1.0	1.8	2.5
	Broken down by Quality		100.00%								
		Aaa	71.95%	5.6	3.0	0.7	0.5	-0.6	-1.1	1.1	2.0
		Aa	3.80%	5.9	3.3	0.7	0.6	-0.8	-0.6	2.4	2.9
		A	10.91%	7.3	3.7	0.6	0.7	-2.1	-1.4	3.1	3.6
		Baa	13.33%	7.4	4.3	0.4	0.9	-1.9	-0.8	4.0	4.1
	Broken down by Maturity		100.00%								
		1-3 Yr.	21.72%	1.9	2.8	0.4	0.4	0.5	0.2	0.9	0.9
		3-5 Yr.	17.87%	3.7	3.0	0.6	0.5	-0.3	-1.0	1.2	1.8
		5-7 Yr.	16.15%	5.0	3.3	0.7	0.6	-0.5	-1.0	1.4	2.3
		7-10 Yr.	28.26%	6.1	3.5	0.7	0.6	-1.1	-1.5	1.7	2.9
		10+ Yr.	16.00%	14.9	3.9	0.8	0.5	-3.9	-2.1	4.2	5.3
	Broken down by Sector		100.00%								
		U.S. Treasury	37.96%	6.1	2.8	o.8	0.4	-0.7	-1.5	o.8	1.7
		1-3 Yr.	13.20%	1.9	2.6	0.3	0.3	0.4	-0.1	0.5	o.6
		Other	24.77%								
	Government-Related		6.35%	5.3	3.4	o.6	0.7	-0.7	-0.8	1.9	2.6
		Agencies	2.98%	4.2	3.2	0.6	0.5	-0.4	-0.8	1.3	1.8
		Local Authorities	0.93%	8.7	3.8	0.9	0.5	-1.1	-0.3	4.3	5.4
		Sovereign	0.93%	8.7	4.2	0.6	2.1	-2.1	-1.5	3.3	4.6
		Supranational	1.51%	3.3	2.8	0.5	0.5	0.0	-0.7	0.8	1.3
	Corporate		25.08%	7.3	4.0	0.5	0.7	-2.0	-1.0	3.5	3.8
		Industrial	15.15%	7.8	4.0	0.4	0.7	-2.1	-0.9	3.7	3.8
		Utility	1.80%	9.8	4.0	0.9	0.2	-3.0	-2.0	3.6	4.2
		Financials	8.13%	5.7	3.9	0.6	1.0	-1.6	-1.1	3.0	3.6
	Securitized		30.60%	5.0	3.4	o.6	o.6	-0.4	-0.5	1.4	2.4
Bloomberg Barclays U.S. Corp. High ነ	ïeld		100.00%	3.8	6.3	0.7	2.2	2.0	3.4	7.0	5.6
		Industrial	88.02%	3.8	6.4	0.7	2.3	2.1	3.4	7.1	5.5
		Utility	2.39%	3.4	5.7	0.9	1.7	2.4	6.2	6.7	6.8
		Financials	9.58%	4.0	5.6	0.8	, 2.1	1.0	2.3	, 6.4	6.4
Bloomberg Barclays U.S. Municipal Bo	ond		100.00%	6.1	2.7	0.3	o.6	0.3	0.5	2.7	4.1

Source: Bloomberg Barclays Indices, FactSet. (1) For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material. (2) Yield to worst is the lowest potential yield that can be received on a bond without the issuer actually defaulting.

US Bond Market Indices¹



Source: FactSet. (1) Represented by Bloomberg Barclays fixed income indices.

Fixed Income Total Returns and Spreads

Fixed Income Performance (Total Return in USD)

As of August 31, 2018

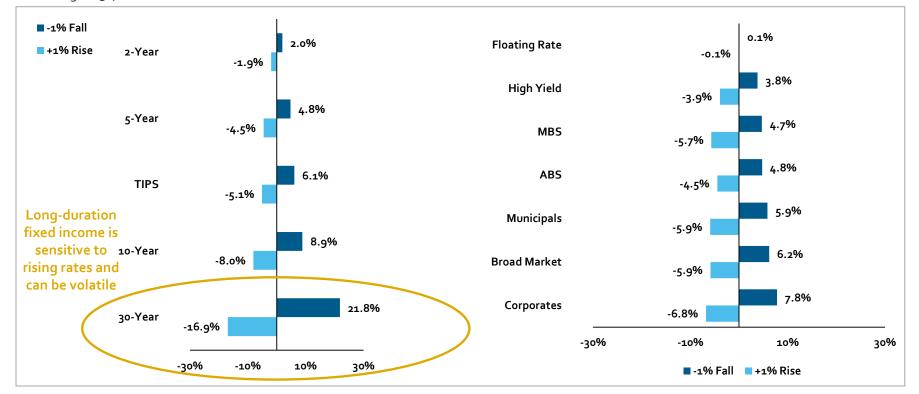
Asset Class	Benchmark Index	1-Month	3-Month	6-Month	1-Year	3-Year	5-Year	10-Year
Investment Grade Fixed Income								
Short-Term Fixed Income	Bloomberg Barclays US Gov/Credit Float Adjusted 1-5Y	0.5%	0.4%	0.9%	-0.4%	2.9%	6.2%	24.4%
US Fixed Income	Bloomberg Barclays US Aggregate	0.6%	0.5%	1.2%	-1.0%	5.4%	13.1%	43.8%
International Fixed Income	Bloomberg Barclays Global Aggregate ex US (H)	-0.2%	-1.1%	-3.5%	-1.5%	8.9%	3.7%	-
Global Inflation-Linked Securities	Bloomberg Barclays Universal Government Inflation Linked (UH)	-0.1%	0.2%	1.1%	0.9%	14.7%	27.9%	67.7%
Global High Yield	Bloomberg Barclays Global High Yield (H)	-1.0%	0.2%	-1.7%	-0.4%	20.0%	27.2%	118.7%
Emerging Markets Fixed Income	JP Morgan Emerging Market Index (UH)	-3.1%	-2.3%	-4.7%	-7.7%	10.8%	23.2%	75.9%

Source: FactSet, Bloomberg Barclays Indices, Morgan Stanley Wealth Management GIC

Long-Duration¹ Bonds Can Be Risky When Rates Rise

Total Return Impact of a 1% Rise/Fall in Interest Rates

As of August 31, 2018



Source: FactSet, Morgan Stanley Wealth Management GIC. The following Bloomberg Barclays indices were used for the sectors above: US Aggregate for Broad Market, US Aggregate Securitized – MBS Index for MBS, US Corporates for Corporates for Corporate, Muni Bond 10-year Index for Municipals, Corporate High Yield Index for High Yield, US TIPS Index for TIPS, FRN (BBB) for Floating Rate, US Convertibles Composite for Convertibles and Bloomberg Barclays ABS + CMBS for ABS. Bloomberg Barclays US Treasury benchmark indices used for US Treasury data. (1) For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material.

Global Fixed Income Overview

As of August 31, 2018 (performance and YTW in percent form)

		haracteristics			Perfo	rmance	as of 8/3:	1/2018	
								Ann	Ann
Index in USD	Weight	Duration ¹	YTW ²	MTD	3 M	YTD	12M	3YR	5YR
Bloomberg Barclays Global Aggregate	100.00%	7.0	2.0	0.1	-0.5	-1.5	-1.4	2.4	1.3
Global Treasury	53.96%	7.9	1.4	0.0	-1.1	-1.3	-1.5	2.4	o.8
G7 Countries represent 82.05% of Barclays Capital Global Treasury Index									
Canada	0.72%	6.6	2.1	0.5	-0.1	-3.3	-3.6	1.1	-1.9
France	3.60%	8.1	0.3	-0.3	-0.1	-1.8	-0.8	3.6	1.2
Germany	2.42%	7.7	0.0	0.1	-0.1	-1.5	-1.3	3.0	0.4
Italy	3.12%	6.5	2.7	-3.7	-2.3	-9.0	-7.4	0.7	1.0
Japan	15.60%	9.5	0.2	0.4	-2.7	1.4	-0.9	4.6	-0.6
United Kingdom	3.42%	12.0	1.4	-0.8	-3.1	-3.9	0.3	-1.6	1.7
United States	15.40%	6.1	2.8	o.8	0.4	-0.7	-1.5	o.8	1.7
Other	9.69%								
Government-Related	11.97%	6.1	2.0	0.1	-0.1	-1.9	-1.4	2.5	1.1
Agencies	5.48%	5.0	2.0	0.2	-0.1	-1.5	-1.2	2.3	0.9
Local Authorities	3.01%	7.6	1.9	0.1	-0.5	-2.6	-2.0	3.2	o.8
Sovereign	1.24%	7.3	3.4	0.1	1.4	-2.0	-1.1	3.5	3.6
Supranational	2.23%	6.3	1.3	0.0	-0.1	-2.2	-1.5	1.8	0.8
Corporates	18.90%	6.5	3.1	0.2	0.3	-2.4	-1.2	3-3	2.6
Industrials	10.33%	7.0	3.2	0.2	0.3	-2.3	-1.1	3.5	2.9
Utilities	1.48%	8.4	3.2	0.4	-0.1	-3.3	-1.7	3.1	2.9
Financial	7.09%	5.3	3.0	0.2	0.4	-2.3	-1.3	3.0	2.3
Securitized	15.17%	5.0	2.9	0.5	0.4	-0.9	-0.9	1.4	1.9
MBS Passthrough	11.39%	5.0	3.4	0.6	0.5	-0.5	-0.5	1.4	2.4
Asset Backed	0.27%	3.0	2.9	0.3	0.1	-0.4	0.2	o.8	1.6
CMBS	o.8o%	5.4	3.4	0.9	0.7	-0.5	-1.0	1.6	2.1
Covered	2.71%	4.8	0.4	-0.2	-0.2	-3.0	-2.5	1.7	-0.1
Bloomberg Barclays Global Inflation-Linked				-0.5	-1.0	-2.6	-0.4	2.2	2.2
Bloomberg Barclays Global High Yield	100.00%	4.1	6.5	-1.0	0.2	-1.9	-0.4	6.3	4.9
U.S. Corp. HY	53.06%	3.8	6.3	0.7	2.2	2.0	3.4	7.0	5.6
Pan-Europe HY	15.39%	3.6	3.6	-0.7	0.4	-3.3	-0.6	5.2	3.0
EMHY	29.29%	4.9	8.6	-4.0	-3.2	-7.1	-6.2	6.2	5.2
Pan-Euro EMG HY	2.26%	5.4	5.1	-5.5	-5.0	-10.1	-5.9	6.1	5.5
JP Morgan GBI-EM Global Diversified				-6.1	-7.0	-10.5	-10.0	3.2	-1.3
BBA 3-month USD LIBOR (Cash)				-1.2	0.0	37.0	76.1	91.8	55.0

Source: Bloomberg Barclays Indices, Citigroup, FactSet. (1) For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material. (2) Yield to worst is the lowest potential yield that can be received on a bond without the issuer actually defaulting.

Hedged Strategies: Performance Indicators

As of August 31, 2018

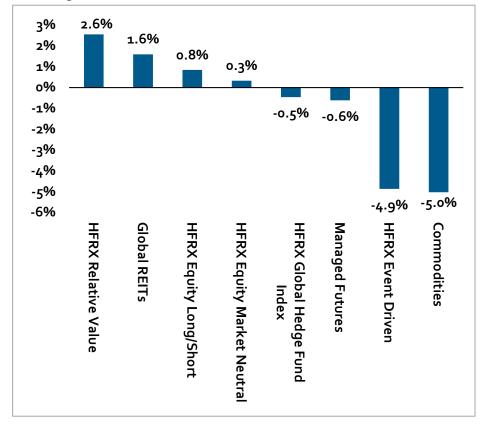
	Relative Value	Event- Driven	Equity Long/Short	Managed Futures	Global Hedge Funds
Last Twelve Months					
Total Return (%)	3.8%	-4.2%	5.5%	0.9%	1.6%
Annualized Volatility (%)1	1.4%	5.5%	4.6%	7.5%	4.0%
Correlation to S&P 500	0.44	-0.25	0.80	0.73	0.86
Sharpe Ratio ²	1.55	-1.07	0.85	-0.09	0.00
Max Drawdown (%)³	-0.7%	-1.2%	-2.5%	-7.1%	-2.0%
15-Year					
Annualized Return (%)	1.1%	2.4%	1.1%	0.4%	1.2%
Annualized Volatility (%)	6.8%	6.2%	7.0%	6.7%	5.3%
Correlation to S&P 500	0.61	0.19	0.79	0.10	0.74
Sharpe Ratio ²	-0.01	0.19	-0.02	-0.12	-0.01
Max Drawdown (%)³	-18.0%	-24.8%	-30.6%	-14.4%	-22.2%

Source: Bloomberg, Morgan Stanley Wealth Management GIC; (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. (2)The Sharpe ratio is calculated by subtracting the risk-free rate - such as that of the 3-month US Treasury bill - from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. (3) Max Drawdown: The peak-to-trough decline during a specific period. Indices used for this analysis include: HFRX Relative Value Index for relative value, HFRX Event-Driven Index for event-driven, HFRX Equity Hedge for equity long/short, HFRX Macro/CTA Index for managed futures and HFRX Global Hedge Fund Index for global hedge funds. Hedged strategies consist of hedge funds and managed futures.

Alternatives Performance Summary

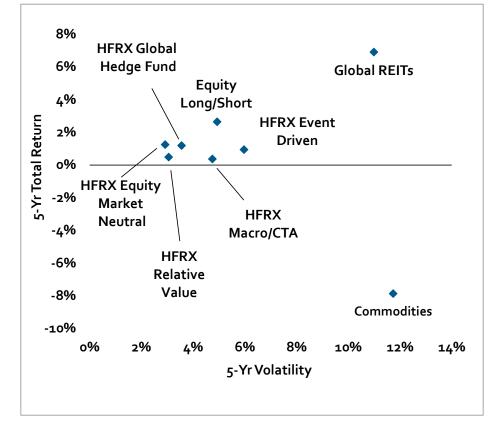
YTD Total Return¹

As of August 31, 2018



5-Year Risk and Return¹

As of August 31, 2018; Event driven as of July 31, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC. (1) Indices for Global REITs, Managed Futures and Commodities are FTSE EPRA/NAREIT Global Index, HFRX Macro/CTA Index, and Bloomberg Commodity Index, respectively. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Hedged Strategies: Performance Indicators

		Performa	ance as c	of 8/31/20	18		Vo	latility	1
					Ann	Ann		Ann	Ann
Index in USD	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR
Hedged Strategies									
HFRX Global Hedge Funds	0.54	0.20	-0.46	1.63	1.72	1.37	3.96	3.67	3.56
HFRX Equity Hedge	-0.12	-0.07	0.84	5.47	3.10	3.03	4.55	5.04	4.88
HFRX Event Driven (ED)	0.14	-0.85	-4.87	-4.21	2.67	1.05	5.45	5.79	6.01
HFRX ED: Merger Arbitrage	0.13	0.89	-0.35	0.59	3.22	3.64	2.04	1.85	1.67
HFRX ED: Distressed Securities	0.25	-1.25	-5.75	-4.93	1.84	1.01	6.62	7.65	6.57
HFRX Relative Value	0.39	0.73	2.55	3.76	0.97	0.51	1.38	3.22	3.08
HFRX Fixed Income - Corporate	0.99	0.15	1.14	2.52	4.98	4.51	2.48	2.81	2.70
Other Alternatives									
HFRX Macro/CTA Index	-1.10	-1.34	-2.90	-0.64	-2.09	-0.10	7.11	4.94	4.67
FTSE EPRA-NAREIT Global	0.75	2.22	1.60	5.75	8.96	7.86	8.08	10.45	10.76
Bloomberg Commodity Index	-1.77	-7.23	-3.87	0.51	-1.89	-8.01	7.04	9.89	11.62
Alerian MLP	1.58	6.59	7.58	7.30	-0.67	-1.97	18.84	20.31	18.15

As of August 31, 2018; HFRX Corporate Fixed Income as of July 31, 2018 (performance and volatility in percent form)

Source: Morgan Stanley & Co. Research, FactSet, HFR, NCREIF, Venture Economics, Barclay Hedge. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. (2) Represents a three-month lag in reporting. (3) Represents a five-month lag in reporting. Hedged strategies consist of hedge funds and managed futures. Private Equity is represented by the Thomson One Venture Economics Global Private Equity Survey. This survey provides a time-weighted average of internal rates of return on a sample of US private equity funds. The data are updated quarterly with a lag of several months. For more information about the risks to Master Limited Partnerships (MLPs) please see the Risk Considerations section at the end of this material.

Asset Class Returns: Diversified Portfolios Can Help Mitigate Risk

As of August 31, 2018

											10-Yrs	10-Yrs
											('08-'17)	('08-'17)
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD	Ann. Return	Volatility
Managed Futures	EM Equities	MLPs ¹	MLPs ¹	REITs	US Equities	REITs	US Equities	MLPs ¹	EM Equities	US Equities	US Equities	MLPs ¹
13.6%	82.9%	35.9%	13.9%	29.8%	32.4%	14.7%	1.4%	18.3%	37.3%	9.9%	8.5%	18.9%
DM Int'l Debt	MLPs ¹	EM Equities	Inflation-Linked	High Yield	MLPs ¹	US Equities	DM Int'l Equities	High Yield	DM Int'l Equities	MLPs ¹	High Yield	REITs
11.7%	76.4%	20.2%	13.6%	19.6%	27.6%	13.7%	0.9%	14.3%	26.7%	7.6%	8.1%	17.8%
US Debt	High Yield	REITs	US Debt	EM Equities	DM Int'l Equities	Managed Futures	US Debt	US Equities	US Equities	Diversified Portfolio	MLPs ¹	Commod.
5.2%	59.4%	20.0%	7.8%	19.1%	24.0%	12.3%	0.5%	12.0%	21.8%	3.0%	6.0%	17.6%
Inflation-Linked	REITs	Commod.	DM Int'l Debt	DM Int'l Equities	Diversified Portfolio	US Debt	REITs	Commod.	EMD	REITs	Diversified Portfolio	EM Equities
-2.4%	41.3%	16.8%	6.0%	18.2%	15.1%	6.0%	-0.4%	11.8%	15.2%	1.6%	5.2%	17.0%
EMD	DM Int'l Equities	EMD	High Yield	EMD	Hedged Strategies	MLPs ¹	Inflation-Linked	EM Equities	REITs	Inflation-Linked	US Debt	US Equities
-5.2%	33.9%	15.7%	3.1%	16.8%	8.8%	4.8%	-1.4%	10.3%	15.0%	0.2%	4.7%	15.0%
Hedged Strategies	US Equities	US Equities	US Equities	US Equities	High Yield	Diversified Portfolio	Diversified Portfolio	EMD	Diversified Portfolio	Managed Futures	REITs	DM Int'l Equities
-21.4%	26.5%	15.1%	2.1%	16.0%	7.3%	4.7%	-1.9%	9.9%	14.9%	0.0%	3.8%	14.9%
Diversified Portfolio	Diversified Portfolio	High Yield	EMD	Diversified Portfolio	REITs	Inflation-Linked	Managed Futures	Diversified Portfolio	High Yield	Hedged Strategies	EMD	High Yield
-25.7%	23.6%	14.8% Diversified	-1.8% Diversified	12.0%	2.2%	3.6%	-2.0%	7.5%	10.4%	-0.5%	3.6%	11.2% Diversified
High Yield	EMD	Portfolio	Portfolio	Inflation-Linked	Managed Futures	Hedged Strategies	High Yield	Inflation-Linked	DM Int'l Debt	US Debt	Inflation-Linked	Portfolio
-26.9%	22.0%	12.7%	-2.1%	7.0%	0.7%	3.4%	-2.7%	4.7%	8.8%	-1.0%	3.5%	9.8%
Commod.	Commod.	DM Int'l Equities	Managed Futures	MLPs ²	EM Equities	High Yield	Hedged Strategies	REITs	Hedged Strategies	DM Int'l Debt	DM Int'l Equities	DM Int'l Debt
-35.6%	18.9%	9.8%	-4.3%	4.8%	-1.9%	0.0%	-3.6%	4.6%	6.0%	-1.4%	2.9%	8.2%
MLPs ¹	Hedged Strategies	DM Int'l Debt	Hedged Strategies	Hedged Strategies	US Debt	EM Equities	DM Int'l Debt	US Debt	US Debt	DM Int'l Equities	DM Int'l Debt	Inflation-Linked
-36.9%	11.5%	7.0%	-5.7%	4.8%	-2.0%	-1.4%	-4.4%	2.6%	3.5%	-1.8%	2.5%	6.1%
US Equities	Inflation-Linked	US Debt	REITs	US Debt	DM Int'l Debt	DM Int'l Debt	EM Equities	Hedged Strategies	Inflation-Linked	High Yield	EM Equities	Managed Futures
-37.0%	11.4%	6.5%	-8.1%	4.2%	-5.6%	-3.0%	-13.5%	2.5%	3.0%	-1.9%	2.2%	5.7%
DM Int'l Equities	US Debt	Managed Futures	DM Int'l Equities	DM Int'l Debt		DM Int'l Equities	EMD	DM Int'l Debt	Managed Futures	Commod.	Hedged Strategies	Hedged Strategies
-43.4%	5.9%	6.4%	-12.2%	0.5%	-8.6%	-4.5%	-14.9%	2.1%	2.5%	-3.9%	-0.4%	5.6%
REITs	DM Int'l Debt	Inflation-Linked		Commod.	EMD	EMD	Commod.	DM Int'l Equities	Commod.	EM Equities	Managed Futures	EMD
-48.9%	3.7%	6.3%	-13.3%	-1.1%	-9.0%	-5.7%	-24.7%	1.6%	1.7%	-7.2%	-1.1%	4.8%
EM Equities	Managed Futures	Hedged Strategies	EM Equities	Managed Futures	Commod.	Commod.	MLPs ¹	Managed Futures	MLPs ¹	EMD	Commod.	US Debt
-53.6%	-4.8%	4.2%	-19.2%	-1.8%	-9.5%	-17.0%	-32.6%	-3.1%	-6.5%	-10.5%	-6.8%	3.2%

Source: FactSet, Morgan Stanley Wealth Management GIC; Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. Citi 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays Global Majors ex US for DM Int'l Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, HFRX Macro/CTA Index for Managed Futures, Alerian MLP Index for MLPs , and HFRX Global hedge Funds for hedged strategies. Diversified portfolio is comprised of 25% S&P 500, 10% Russell 2000, 15% MSCI EAFE, 5% MSCI EME, 25% Bloomberg Barclays US Aggregate, 5% 3 mo. T-Bills, 5% HFRX Global Hedge Funds, 5% Bloomberg Commodity Index, and 5% FTSE EPRA/NAREIT Global Index. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is not a solicitation of any offer to buy or sell any security or other

financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Asset Class Returns

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD
	EM Equities 40.2%											
	EMD 18.1%	Managed Futures 13.6%										
	Commod. 16.2%	DM Int'l Debt 11.7%										
	MLPs ¹ 12.7%	US Debt 5.2%										
	Inflation-Linked 11.6%	EMD -5.2%										
	DM Int'l Debt 11.2%	Inflation-Linked -2.4%	EM Equities 82.9%	MLP <i>s</i> ¹ 35.9%	MLPs ¹ 13.9%	REITs 29.8%						
	DM Int'l Equities	-2.4% Hedged Strategies -21.4%	MLPs ¹ 76.4%	EM Equities 20.2%	Inflation-Linked 13.6%	High Yield 19.6%						
REITs 43.7%	Hedged Strategies 10.3%	High Yield -26.9%	High Yield 59.4%	REITs 20.0%	US Debt 7.8%	EM Equities						
EM Equities 32.1%	Managed Futures 7.6%	Commod. -35.6%	REITs 41.3%	Commod. 16.8%	DM Int'l Debt 6.0%	DM Int'l Equities 18.2%				MLPs ¹ 18.3%	EM Equities	
DM Int'l Equities 26.7%	US Debt 7.0%	MLPs ¹ -36.9%	DM Int'l Equities 33.9%	EMD 15.7%	High Yield 3.1%	EMD 16.8%		REITs 14.7%		High Yield 14.3%	37.3% DM Int'l Equities 26.7%	
US Equities 15.8%	US Equities 5.5%	US Equities -37.0%	US Equities 26.5%	US Equities 15.1%	US Equities 2.1%	US Equities 16.0%	US Equities 32.4%	US Equities 13.7%	US Equities 1.4%	US Equities 12.0%	US Equities 21.8%	US Equities 9.9%
EMD 15.2%	High Yield	DM Int'l Equities	EMD	High Yield 14.8%	EMD -1.8%	Inflation-Linked 7.0%	MLPs ¹	Managed Futures	DM Int'l Equities 0.9%	Commod.	EMD	MLPs ¹
High Yield	3.2% REITs	-43.4% REITs	22.0% Commod.	DM Int'l Equities	Managed Futures	MLPs ²	27.6% DM Int'l Equities	12.3% US Debt	US Debt	11.8% EM Equities	15.2% REITs	7.6% REITs
13.7% Hedged Strategies	-4.7%	-48.9% EM Equities	18.9% Hedged Strategies	9.8% DM Int'l Debt	-4.3%	4.8% Hedged Strategies	24.0% Hedged Strategies	6.0% MLPs ¹	0.5% REITs	10.3% EMD	15.0% High Yield	1.6% Inflation-Linked
10.4%		-53.6%	11.5%	7.0%	Hedged Strategies -5.7%	4.8%	8.8%	4.8%	-0.4%	9.9%	10.4%	0.2%
DM Int'l Debt												
C C0/			Inflation-Linked	US Debt	REITs	US Debt	High Yield	Inflation-Linked	Inflation-Linked	Inflation-Linked	DM Int'l Debt	
6.6% Managed Futures			11.4%	6.5%	-8.1%	4.2%	7.3%	3.6%	-1.4%	4.7%	8.8%	0.0%
							High Yield <u>7-3</u> % REITs 2.2%		-1.4% Managed Futures -2.0%	Inflation-Linked <u>4.7%</u> REITs 4.6%		0.0%
Managed Futures 5.6% US Debt			11.4% US Debt 5.9% DM Int'l Debt	6.5% Managed Futures 6.4% Inflation-Linked	-8.1% DM Int'l Equities -12.2% Commod.	4.2% DM Int'l Debt 0.5% Commod.	7-3% REITs 2.2% Managed Futures	3.6% Hedged Strategies 3.4% High Yield	-1.4% Managed Futures -2.0% High Yield	4.7% REITs 4.6% US Debt	8.8% Hedged Strategies 6.o% US Debt	0.0% Hedged Strategies -0.5% US Debt
Managed Futures 5.6% US Debt 4.3%			11.4% US Debt 5.9% DM Int'l Debt 3.7%	6.5% Managed Futures 6.4% Inflation-Linked 6.3%	-8.1% DM Int'l Equities -12.2% Commod. -13.3%	4.2% DM Int'l Debt 0.5% Commod. -1.1%	7.3% REITs 2.2% Managed Futures 0.7%	3.6% Hedged Strategies <u>3.4%</u> High Yield 0.0%	-1.4% Managed Futures -2.0% High Yield -2.7%	4.7% REITs 4.6% US Debt 2.6%	8.8% Hedged Strategies 6.0% US Debt 3.5%	0.0% Hedged Strategies -0.5% US Debt -1.0%
Managed Futures 5.6% US Debt 4.3% Commod.			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7:3% REITs 2.2% Managed Futures 0.7% EM Equities	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked	0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt
Managed Futures 5.6% US Debt 4.3%			11.4% US Debt 5.9% DM Int'l Debt 3.7%	6.5% Managed Futures 6.4% Inflation-Linked 6.3%	-8.1% DM Int'l Equities -12.2% Commod. -13.3%	4.2% DM Int'l Debt 0.5% Commod. -1.1%	7.3% REITs 2.2% Managed Futures 0.7%	3.6% Hedged Strategies <u>3.4%</u> High Yield 0.0%	-1.4% Managed Futures -2.0% High Yield -2.7%	4.7% REITs 4.6% US Debt 2.6%	8.8% Hedged Strategies 6.0% US Debt 3.5%	0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4%
Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0%	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0%	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4%	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1%	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5%	0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8%
Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM int'l Debt	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.3% DM Int'l Equities	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod.	o.0% Hedged Strategies -o.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield
Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt -5.6%	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities -4.5%	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities -13.5%	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1% DM Int'l Equities 1.6%	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod. 1.7%	0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield -1.9%
Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt -5.6% Inflation-Linked -8.6%	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.3% DM Int'l Equities	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod.	Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield
Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt -5.6% Inflation-Linked -8.6% EMD	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities -4.5% EMD -5.7% Commod.	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities -3.5% EMD -31.9% Commod.	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1% DM Int'l Equities 1.6% Managed Futures	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod. 1.7% MLPs ¹	0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -2.4% DM Int'l Equities -2.8% High Yield -2.9% Commod. -3.9% EM Equities
Managed Futures 5.6% US Debt 4:3% Commod. 2.1% Inflation-Linked 0.4%			11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-8.1% DM Int'l Equities -12.2% Commod. -13.3% EM Equities	4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt -5.6% Inflation-Linked -8.6%	3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities -4.5% EMD -5.7%	-1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities -13.5% EMD -14.9%	4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1% DM Int'l Equities 1.6% Managed Futures	8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod. 1.7% MLPs ¹	0.0% Hedged Strategie -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield -1.9% Commod. -3.9%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. Citi 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, HFRX Macro/CTA Index for Managed Futures, Alerian MLP Index for MLPs , and HFRX Global hedge Funds for hedged strategies. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

MSCI World Ex US Sector/Industry Group Overview Part 1 of 2

As of August 31, 2018 (performance and volatility in percent form)

			Perfor	mance as o	of 8/31/201	8		V	olatility	1	,	Valuation		Contribution to Return
Net Official						Ann	Ann		Ann	Ann		12M		
Index in USD	Weight	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	MTD
Consumer Discretionary	11.61%	-1.5	-3.7	-2.6	7.3	6.9	6.2	10.03	12.83	12.65	12.4	1.8	2.6	-0.17
Automobiles & Components	4.27%	-3.8	-6.7	-9.5	4.0	4.4	4.1	14.75	18.12	16.26	7.9	1.1	3.3	-0.16
Cons. Durables & Apparel	3.47%	2.1	-0.4	7.4	15.6	16.6	10.7	9.44	12.71	13.81	16.4	3.1	2.0	0.07
Consumer Services	1.47%	-3.9	-6.8	-2.4	11.0	12.5	8.1	11.91	13.71	14.70	24.2	3.9	2.4	-0.06
Media	1.14%	1.6	2.5	2.6	2.9	-0.5	4.1	11.84	12.13	12.18	17.6	2.3	3.0	0.02
Retailing	1.25%	-2.7	-3.2	-5.9	-1.4	-2.6	2.1	9.51	11.20	12.19	21.2	2.9	2.3	-0.03
Consumer Staples	10.62%	-1.6	1.3	-2.4	1.7	7.4	6.5	7.52	10.50	11.30	20.4	3.0	2.7	-0.17
Food & Staples Retailing	1.77%	-1.5	0.8	3.5	11.5	5.0	1.6	8.12	8.76	9.90	22.0	2.0	2.6	-0.03
Food Beverage & Tobacco	6.09%	-2.5	1.1	-7.2	-2.9	5.6	6.1	8.78	11.41	12.08	18.6	2.9	2.9	-0.15
Household & Personal Prod.	2.76%	0.4	2.2	5.5	6.6	13.7	12.4	8.91	12.93	13.34	25.6	5.4	2.1	0.01
Energy	7.29%	-3.7	-0.3	3.9	20.1	12.2	1.4	14.71	16.05	18.05	21.5	1.4	4.5	-0.28
Financials	21.48%	-3.1	-1.5	-7.8	-1.8	5-3	4.3	12.30	14.53	13.93	12.1	1.1	4.3	-0.68
Banks	12.53%	-4.4	-2.3	-10.3	-5.3	3.4	2.0	13.30	16.07	15.54	11.2	1.0	4.7	-0.57
Diversified Financials	3.39%	-1.5	-0.4	-7.1	1.5	1.2	2.9	12.74	16.46	15.98	14.1	1.3	3.0	-0.05
Insurance	5.56%	-1.1	-0.4	-2.3	4.7	8.1	8.4	10.94	14.30	13.36	13.6	1.2	4.1	-0.06

Source: MSCI, FactSet. (1) Volatility is measured using price only returns.

MSCI World Ex US Sector/Industry Group Overview Part 2 of 2

As of August 31, 2018 (performance and volatility in percent form)

			Perfor	mance as	of 8/31/201	8		\\	/olatility	1		Valuation		Contribution to Return
Net Official						Ann	Ann		Ann	Ann		12M		
Index in USD	Weight	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR	P/E	P/B	Div Yld	MTD
Health Care	10.25%	-0.1	6.1	6.4	9.1	1.4	6.5	8.35	11.64	11.84	21.1	3.4	2.5	-0.01
Health Care Equip. & Srvcs.	2.08%	0.6	3.5	9.2	13.7	10.2	11.1	7.31	11.48	10.22	24.0	3.7	1.3	0.01
Pharmaceuticals & Biotech.	8.17%	-0.2	6.8	5.8	8.0	0.0	5.7	9.53	12.23	12.54	20.2	3.3	2.8	-0.02
Industrials	13.99%	-0.6	-0.5	-1.7	6.8	11.0	7.8	9-73	11.60	11.60	15.5	2.2	2.4	-0.09
Capital Goods	9.43%	-1.0	-1.0	-2.5	6.9	11.7	7.5	11.45	13.28	12.76	14.6	2.0	2.4	-0.09
Commercial Srvs. & Supplies	1.68%	2.4	5.6	5.3	14.1	10.2	6.6	7.73	10.81	12.18	21.1	4.3	2.2	0.04
Transportation	2.88%	-1.2	-2.1	-2.9	3.0	9.2	9.2	8.63	9.86	10.70	16.8	2.1	2.2	-0.03
Information Technology	6.77%	2.0	1.1	4.8	13.7	16.8	13.3	9.08	13.21	12.87	26.1	2.8	1.4	0.13
Software & Services	3.14%	4.5	5.4	10.7	19.7	20.3	14.6	9.34	13.84	13.94	29.0	4.2	1.1	0.13
Technology Hardware	2.28%	2.4	0.5	2.7	7.7	9.1	9.4	8.43	13.23	13.23	25.1	1.8	1.9	0.05
Semis. & Semi Equipment	1.35%	-3.9	-6.7	-3.8	12.0	28.8	18.7	15.89	18.38	18.97	23.5	3.7	1.2	-0.05
Materials	8.08%	-4-3	-5.2	-5-7	3.5	13.0	4.2	11.64	17.10	16.51	14.2	1.7	3.0	-0.35
Real Estate	3.19%	-2.6	-3.5	-3-3	2.1	6.7	5-3	9.53	11.08	11.88	10.4	0.9	3.6	-0.09
Telecomm. Services	3.55%	-2.9	0.7	-6.9	-6.7	-1.1	3.6	12.20	13.27	13.28	15.7	1.6	4.4	-0.10
Utilities	3.14%	-2.8	0.4	0.3	-2.4	4.2	4.0	10.09	12.62	12.56	14.7	1.4	4.5	-0.09
MSCI World Ex U.S.	100%	-1.9	-0.6	-2.3	4.5	7.2	5.5	8.82	10.86	11.20	15.7	1.7	3.2	-1.89

Source: MSCI, FactSet. (1) Volatility is measured using price only returns.

MSCI AC World Contributors and Detractors

Month to Date as of August 31, 2018

Top 5 Contributors	Ending	Total	Contribution
MSCI All Country World	Weight	Return	To Return
Country Name	% Value	% Value	% Value
South Korea	1.63	1.87	+0.03
Japan	7.40	0.22	+0.02
Switzerland	2.56	0.63	+0.02
Taiwan	1.36	1.03	+0.01
India	1.03	0.96	+0.01

Month to Date as of August 31, 2018

Bottom 5 Detractors	Ending	Total	Contribution
MSCI All Country World	Weight	Return	To Return
Country Name	% Value	% Value	% Value
United Kingdom	5.27	-4.19	-0.23
China	3.43	-3.80	-0.14
Germany	2.95	-3.03	-0.09
Brazil	0.64	-11.34	-0.08
South Africa	0.69	-9.98	-0.08

Month to Date as of August 31, 2018

Top 5 Contributors MSCI All Country World	Ending Weight	Total Return	Contribution To Return
Sector Name	% Value	% Value	% Value
Information Technology	20.23	5.20	+1.05
Health Care	11.68	2.97	+0.35
Consumer Discretionary	12.28	1.87	+0.23
Real Estate	2.95	0.04	+0.00
Telecommunications Serv	2.77	-0.44	-0.01

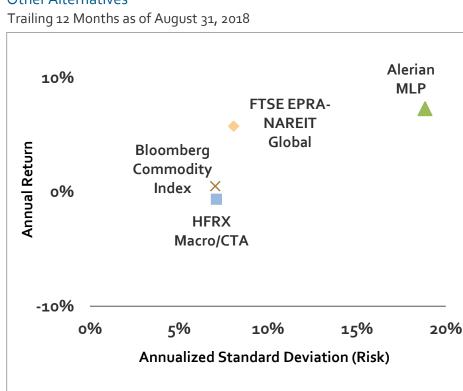
Month to Date as of August 31, 2018

Bottom 5 Detractors MSCI All Country World	Ending Weight	Total Return	Contribution To Return
Sector Name	% Value	% Value	% Value
Financials	17.26	-1.46	-0.25
Energy	6.53	-3.09	-0.20
Materials	5.01	-3.04	-0.15
Consumer Staples	7.89	-0.95	-0.08
Industrials	10.54	-0.36	-0.04

Source: MSCI, FactSet. Countries are represented by MSCI regional indices.

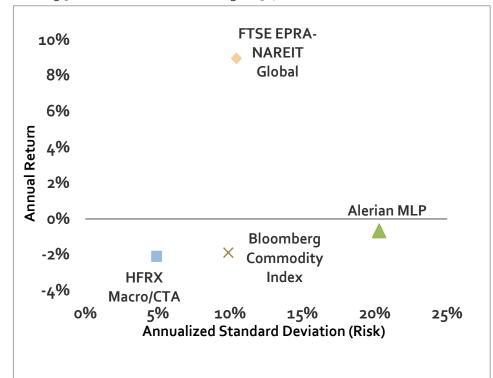
Hedged Strategies and Global Alternatives Risk/Return

Other Alternatives



Other Alternatives

Trailing 3 Years Annualized as of August 31, 2018



Source: Morgan Stanley & Co. Research, FactSet, HFR, NCREIF, Bloomberg. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. For more information about the risks to Master Limited Partnerships (MLPs) please see the Risk Considerations section at the end of this material.

Commodity Performance Overview

As of August 31, 2018 (performance and volatility in percent form)

			Perfo		Volatility ¹					
	-					Ann	Ann		Ann	Ann
_	USD	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR
Commodities Diversified										
Bloomberg Commodity Index		-1.77	-7.23	-3.87	0.51	-1.89	-8.01	8.08	10.45	10.76
Aluminum (US\$/tonne)	2,112.00	2.47	-7.59	-0.07	-0.07	10.86	3.53	24.65	17.92	18.52
Copper (US\$/tonne)	6,019.00	-3.12	-11.81	-11.38	-11.38	5.71	-3.24	19.21	17.72	17.68
Lead (US\$/tonne)	2,062.00	-4.27	-15.68	-13.11	-13.11	7.13	-0.93	23.07	23.01	22.21
Zinc (US\$/tonne)	2,504.00	-4.79	-19.23	-20.24	-20.24	11.78	5.93	24.16	20.56	20.45
Tin (US\$/tonne)	19,025.00	-5.47	-8.53	-8.88	-8.88	9.83	-2.17	15.20	15.19	18.43
Nickel (US\$/tonne)	13,010.00	-5.52	-14.41	11.96	11.96	9.77	-1.11	32.43	26.83	26.19
Gold (US\$/troy Oz)	1,202.45	-1.52	-7.88	-8.33	-8.33	1.94	-2.92	10.37	13.42	13.08
Silver (US\$/troy Oz)	14.66	-5.02	-11.45	-15.48	-15.48	0.49	-9.12	16.58	19.92	19.92
Heat Oil (¢/gallon)	218.50	3.51	0.37	32.50	32.50	12.74	-6.30	22.17	28.14	28.50
Natural Gas (US\$/mmBtu)	2.93	3.90	-0.34	0.34	0.34	3.02	-3.87	60.21	46.97	42.28
Oil (WTI, US\$/bbl)	69.80	1.51	4.12	47.79	47.79	12.36	-8.30	24.84	26.38	30.93
Oil (Brent, US\$/bbl)	77.42	4.27	-0.22	47.80	47.80	12.66	-7.45	22.21	27.27	30.94
Agriculture / Soft Commodities										
Live Cattle (US\$ per contract)	108.77	-0.48	4.64	3.20	3.20	-8.76	-3.02	22.06	21.55	18.54
Cocoa (US\$ per contract)	2,711.00	6.23	-4.27	22.78	22.78	-7.63	0.25	27.62	22.92	21.57
Cotton (US\$ per contract)	80.81	-8.98	-12.31	14.25	14.25	9.54	-0.16	20.28	20.59	22.30
Coffee (US\$ per contract)	127.01	-6.27	-9.92	-14.15	-14.15	-3.37	-1.76	16.21	17.00	24.33
Sugar (US\$ per contract)	10.60	0.47	-17.12	-26.39	-26.39	-0.28	-8.29	23.40	30.05	26.89
Soybeans (US\$ per contract)	833.00	-12.12	-20.68	-13.78	-13.78	-3.92	-11.42	18.75	20.29	27.10
Corn (¢/bushel)	351.00	-13.28	-19.85	-4.04	-4.04	-4.06	-11.48	21.08	23.39	36.07
Wheat (¢/bushel)	518.50	-5.79	3.08	55.12	55.12	7.27	-4.70	27.36	30.34	32.29

Source: FactSet, Bloomberg. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns.

Introduction

As of 2Q 2018

- After a volatile start to 2018, markets found some relief in the second quarter. However, the environment remains challenging for equities.
 While economic data continues to be constructive, a protectionist trade policy pursued by the Trump administration has weighed on sentiment as uncertainty over tariffs threatens to overshadow strong corporate earnings and consumer confidence. CIO and MS & Co.'s Chief US Equity Strategist, Mike Wilson, has maintained his price target of 2,750 for the S&P 500 and expects choppy trading in the coming months.
- US equities generated positive returns in the second quarter, as the S&P 500 rose 3.43% and 7 of the 11 sectors finished in the black. Energy led the way, jumping 13.48% as oil prices rebounded and moved over \$70 per barrel at the end of June. It was followed by Consumer Discretionary and Tech, which increased by 8.17% and 7.09%, respectively. Industrials were the greatest laggards, losing 3.18%. They were followed closely by Financials, which shed 3.16%. Other major US indices were positive on the quarter; the Dow Jones rose 1.26% and the NASDAQ returned 6.61%.
- International equities were challenged by a rising US dollar and other geopolitical pressures. For the second quarter, the MSCI Emerging Markets Index dropped 7.73% for US-currency investors as weaknesses in China, Turkey, and Argentina were amplified by the stronger greenback. The MSCI Europe Index dropped 0.87% for US-currency investors, while MSCI Japan fell 2.12%. Both European and Japanese returns were positive on a local currency basis, further reflecting the impact that the dollar had on international stocks.
- The bond market registered slightly negative returns during the second quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, fell 0.16%.
- Morgan Stanley & Co. economists expect US real GDP will be 2.7% in 2018, amid an environment of 3.9% global GDP growth.
- Commodities were up slightly in the second quarter; the Bloomberg Commodity Index gained 0.40%.

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

The US Economy

As of 2Q 2018 (with most recent data available)

The Bureau of Economic Analysis estimated that real Gross Domestic Product increased at an annual rate of 2.0% in 1Q18, in comparison to a 2.9% increase in 4Q17. Morgan Stanley & Co. economists forecast US Real GDP growth will be 2.7% in 2018 and 2.2% in 2019.

The seasonally adjusted unemployment rate for May 2018 was 3.8%. Job gains occurred in construction, professional and technical services, retail, transportation and warehousing, and manufacturing. The number of unemployed was 6.1 million in May, down from 6.7 million in February of this year. The number of long-term unemployed (those jobless for 27 weeks or more) was 1.2 million, a decrease of more than 200,000 from February. These individuals accounted for 19.4% of the unemployed vs. 20.8% at the end of last quarter.

According to the most recent data from the Federal Reserve Bank of St. Louis, corporate profits increased 8.67% quarter over quarter and are up 16.88% year over year as of Q1 2018.

Inflation increased in the US, according to the Bureau of Labor Statistics. The year-over-year Consumer Price Index was 2.2% in May, up from the 1.8% figure in February. Morgan Stanley & Co. economists forecast a 2.6% annual inflation rate for 2018 and 1.9% for 2019.

The Census Bureau reported that the number of new private-sector housing starts in May 2018 was at a seasonally adjusted annual rate of 1,301,000—8.0% above housing starts this time last year.

The Census Bureau also reported that seasonally adjusted retail and food services sales increased at 5.9% year over year in May. Consumer confidence decreased slightly in 2Q18, with Conference Board Consumer Confidence reading 126.4 in June after peaking at 130 in February—the highest level it had been since 2000.

In May, the Institute for Supply Management's Purchasing Managers Index (PMI), a manufacturing sector index, arrived at 60.2, down 1.0% from February's reading of 60.8. Generally speaking, a PMI or NMI (ISM Non-Manufacturing Index) over 50 indicates that the sector is expanding, and a PMI below 50 but over 43 indicates that the sector is shrinking but the overall economy is expanding. PMI has registered above 50 for 26 out of the last 29 months, indicating an expansion in manufacturing since March 2016. Overall, PMI has been above 43 for 105 consecutive months, indicating overall economic recovery and expansion since June 2009.

The NMI for May was 58.6—0.9 points lower than in February 2018. The index has now been above 50 for 99 consecutive months, indicating non-manufacturing expansion since February 2010.

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research, Federal Reserve Bank of St. Louis, Morgan Stanley Wealth Management GIC

US Equity Markets

As of 2Q 2018

The Dow Jones Industrial Average gained 1.26% in the second quarter, while the NASDAQ Composite Index was up 6.61%. The S&P 500 Index rose 3.43% over the same period.

7 of the 11 sectors finished in the black for 2Q18. Energy led the way, jumping 13.48% as oil prices rebounded and moved over \$70 per barrel at the end of June. It was followed by Consumer Discretionary and Tech, which increased by 8.17% and 7.09%, respectively. Industrials were the greatest laggards, losing 3.18%. They were followed closely by Financials, which shed 3.16%.

The Russell 1000, a large-cap index, increased 3.57% for the quarter, with large-cap growth (+5.75%) outperforming large-cap value (+1.17%).

The Russell Midcap gained 2.82% on the quarter, with mid-cap growth (+3.16%) outperforming mid-cap value (+2.40%).

The Russell 2000, a small-cap index, appreciated 7.75% for the quarter, with small-cap growth (+7.23%) underperforming small-cap value (+8.30%).

Key US Stock Market Index Returns (%) for the Period Ending 6/29/2018										
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized						
S&P 500	3.43%	14.56%	13.41%	13.39%						
Dow Jones	1.26%	16.65%	12.95%	13.04%						
Russell 2000	7.75%	17.50%	12.45%	11.97%						
Russell Midcap	2.82%	12.64%	12.21%	12.01%						
Russell 1000	3.57%	14.73%	13.36%	13.27%						

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

Global Equity Markets

As of 2Q 2018

The second quarter was difficult for international markets, as a strengthening US dollar challenged returns. This could especially be seen in the selloff of emerging market (EM) equities and their underperformance versus developed market stocks. The MSCI EAFE Index (a benchmark for international developed markets) fell 0.80% for US-currency investors.

In the second quarter, the MSCI Emerging Markets Index dropped 7.73% for US-currency investors as weaknesses in China, Turkey, and Argentina were amplified by the stronger greenback. The MSCI Europe Index dropped 0.87% for US-currency investors, while MSCI Japan fell 2.12%. Both European and Japanese returns were positive on a local currency basis, further reflecting the impact that the dollar had on international returns.

The S&P 500 Index gained 3.43% for the quarter.

Emerging economy equity market indices were down sharply in the second quarter. The MSCI BRIC (Brazil, Russia, India and China) Index fell 6.67% in US dollar terms, while the MSCI EM Asia Index was down 5.06%.

Key Global Equity Market Inde	Key Global Equity Market Index Returns (%) for the Period Ending 6/29/2018										
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)							
MSCI EAFE	-0.80%	6.66%	6.93%	5.61%							
MSCI EAFE Growth	0.58%	9.21%	7.82%	6.40%							
MSCI EAFE Value	-2.22%	4.10%	5.95%	4.75%							
MSCI Europe	-0.87%	5.33%	6.81%	5.18%							
MSCI Japan	-2.12%	10.25%	7.69%	7.50%							
S&P 500	3.43%	14.56%	13.41%	13.39%							
MSCI Emerging Markets	-7.73%	8.25%	5.38%	1.96%							

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC

The US Bond Market

As of 2Q 2018

The bond market registered slightly negative returns during the second quarter. The Bloomberg Barclays US Aggregate Bond Index, a general measure of the bond market, fell 0.16%.

Interest rates increased during the second quarter, as the yield on the 10-year US Treasury note increased to a quarter-end 2.86% from 2.74% at the end of March. The intra-quarter move to 3.11% in May marked a six-year high in rates.

Riskier parts of the bond market such as US high yield debt fared better in the second quarter. The Bloomberg Barclays Capital High Yield Index, a measure of lower-rated corporate bonds, gained 1.03%.

Mortgage-backed had marginal gains in the second quarter. The Bloomberg Barclays Capital Mortgage-Backed Securities Index rose 0.24%. Municipal bonds were also up; the Bloomberg Barclays Capital Muni Index saw gains of 0.87%.

Key US Bond Market Index Returns (%) fo	i the renot			
INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
Bloomberg Barclays Capital US Aggregate	-0.16%	-0.54%	2.27%	2.55%
Bloomberg Barclays Capital High Yield	1.03%	2.65%	5.51%	6.38%
Bloomberg Barclays Capital Government/Credit	-0.32%	-0.85%	2.24%	2.72%
Bloomberg Barclays Capital Government	0.10%	-0.81%	1.48%	2.04%
Bloomberg Barclays Capital Intermediate Govt/Credit	0.01%	-0.72%	1.59%	1.93%
Bloomberg Barclays Capital Long Govt/Credit	-1.45%	-1.07%	5.10%	6.18%
Bloomberg Barclays Capital Mortgage Backed Securities	0.24%	0.01%	2.25%	2.15%
Bloomberg Barclays Capital Muni	0.87%	1.55%	3.53%	3.91%

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

Hedge Funds

As of 2Q 2018

HFRX Global Hedge Fund Index: 2Q = +0.16%

- Global hedge fund performance was challenged in 2Q despite an ostensibly more conducive environment for the industry. Volatility sustained higher levels in 2Q 2018 than in 2017 due to market swings tied to trade policy tensions and US interest rate increases, setting the stage for long/short investing across multiple asset classes; however, hedge fund performance was mixed.
- Investors continued to weigh escalating trade tensions between the US and China as a superficial negotiation strategy seems to have given way to a potential multifront trade dispute; political uncertainty has gripped the markets as a series of elections throughout the quarter has solidified the power of global populist movements and the US gears up for a contentious mid-term election. As a result of uncertainty around trade-tariff negotiations, global equity markets were choppy, particularly in Emerging Markets, which experienced a broad sell-off due to the relative strength of the US dollar.
- Event-driven managers performed well as M&A activity remained strong and speculation in the Media and Telecom sectors accelerated; in addition, energy-focused strategies outperformed, benefitting from a sustained surge in oil prices.

HFRX Equity Hedge Index: 2Q = -0.92%

- Equity hedge strategies were down overall for the quarter. Some managers benefitted from an increase in sector dispersion, particularly those that were overweight information technology, consumer discretionary, and energy. Many quantitative equity long/short strategies struggled during the quarter, with long value factor exposure causing most of the losses in 2Q.
- From a regional perspective, Emerging Markets struggled, with the most substantial losses coming out of Latin America, while US and Northern European equities outperformed.

HFRX Event-Driven Index: 2Q = +0.33%

• Event-driven strategies posted a modest gain for 2Q with positive performance from activist, credit and merger arbitrage, and special situations strategies. Most notably, merger arbitrage strategies benefitted from spreads tightening after the U.S. District Court in D.C. approved the merger of one of the nation's largest telecommunications providers with a global media and entertainment conglomerate in June.

HFRX Macro/CTA Index: 2Q = +0.22%

Macro and CTA strategies delivered modest returns in 2Q as performance was mixed. CTAs struggled with losses generated by trading in currencies and agricultural commodities offsetting gains in trading energy-related commodities. Discretionary macro managers were generally positive during the quarter with FX trading, specifically long US dollar versus European currencies driving performance, as well as solid contributions from fixed income relative value positions in developed markets. Discretionary macro managers with pro-risk exposure in Emerging Markets, primarily in FX and interest rates, suffered losses.

HFRX Relative Value Arbitrage Index: 2Q = +1.20%

Relative value managers delivered comparatively strong returns in 2Q led by gains in energy infrastructure strategies. These strategies strongly recovered after a
massive sell-off in 1Q 2018 as a result of the market's overreaction to the implications of a federal regulatory ruling; in 2Q, strong earnings in MLPs overall solidified
the sector's fundamentals.

Source: HFRX Hedge Fund Indices; Morgan Stanley Wealth Management GIC

Private Equity and Real Estate As of 2Q 2018

Buyout

- Aggregate deal value totaled \$118 billion in 2Q18, which is up year over year from \$105 billion and down quarter over quarter from \$121 billion.
- 2Q18 had 471 exits accounting for \$103 billion in value, which is down from the 471 exits totaling \$82 billion in 2Q17. Total exit value increased for the first time in five quarters.

Venture Capital

- In 2Q18, there were 3,648 deals accounting for \$73 billion in value, which is up from the 2,906 deals accounting for \$49 billion in 2Q17.
- Aggregate deal value continues to increase since 2014.

Real Estate

- 47 real estate funds raised \$22 billion during 2Q18, which is a decrease from the \$37 billion raised by 95 funds in 2Q17.
- Real estate dry powder continued to set new highs with \$278 billion in 2Q18.

Private Debt

- In 2Q18, 22 private debt funds raised \$25 billion in aggregate, which is up quarter over quarter from the \$19 billion raised by 33 funds.
- Private debt funds ended 2Q18 with \$251 billion in dry powder.

Source: Preqin data as of October 2017

Modest Corrections Are Very Common

Days to Recover from 5%+ Corrections Since 2009

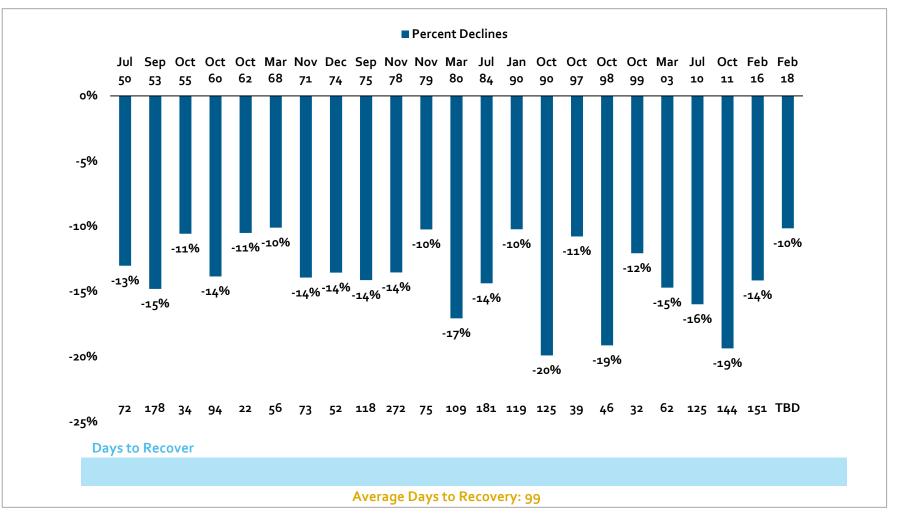
Daily Data as of July 31, 2018

Begin	# Days to Trough	% Decline	Recovery Date	# of Days from Bottom to Recover to New High
3/26/2009	4	-5.44%	4/2/2009	3
6/12/2009	28	-7.09%	7/20/2009	10
10/19/2009	11	-5.62%	11/11/2009	12
1/19/2010	20	-8.13%	3/11/2010	31
4/23/2010	70	-15.99%	11/4/2010	125
2/18/2011	26	-6.41%	4/26/2011	41
4/29/2011	157	-19.39%	2/24/2012	144
4/2/2012	60	-9.94%	9/6/2012	97
9/14/2012	62	-7.67%	1/4/2013	50
5/21/2013	34	-5.76%	7/11/2013	17
1/15/2014	19	-5.76%	2/27/2014	24
9/18/2014	27	-7.40%	10/31/2014	16
5/21/2015	266	-14.16%	7/11/2016	151
1/26/2018*	9	-10.16%	TBD	TBD
Average	57	-9.2%		55

* January 26, 2018 correction not included in averages for Recovery Date and # of Days to Recover to New High Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Days to Recovery During S&P 500 Corrections

S&P 500 Corrections: Declines Greater than 10% but less than 20% January 1950 – June 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

There Have Been 8 Recessions in the Past 86 Years

Large Drawdowns Have Been Infrequent – 73% Coincided with Recessions

S&P 500 25%+ Declines and Recoveries Since 1929

Performance as of July 31, 2018

	Downturn from Peak S&P 500	Decline	Duration	Subse	equent Retu	ırn (%)		arnings itio		/Book tio	Duration from Trough to Prior	
	Peak to Trough	(%)	(Months)	3 Months	6 Months	12 Months	Peak	Trough	Peak	Trough	Peak (Months)	
	Sep 1929 - Jun 1932	-86.2	33	93	53	121	20.7	8.5	4.0	0.4	267	
	Jul 1933 - Mar 1935	-33.9	20	27	46	77	25.7	13.4	1.1	1.0	7	Great Depression
	Mar 1937 - Apr 1942	-60.0	62	15	25	54	16.8	7.7	2.1	0.9	45	
	May 1946 - Jun 1949	-29.6	37	16	23	42	21.3	5.9	1.7	1.0	12	
	Dec 1961 - Jun 1962	-28.0	6	7	20	33	22.7	17.4	2.1	1.7	14	Cuban Missile
\prec	Nov 1968 - May 1970	-36.1	18	17	23	44	18.2	14.6	2.2	1.6	21	Crisis
	Jan 1973 - Oct 1974	-48.2	21	14	31	38	18.2	6.9	2.0	1.0	69	
	Nov 1980 - Aug 1982	-27.1	21	36	44	58	8.7	7.7	1.3	1.0	3	
	Aug 1987 - Dec 1987	-33.5	5	21	21	26	20.2	13.1	2.2	1.6	20	1987 Crash
	Mar 2000 - Oct 2002	-47.4	31	20	13	36	25.7	17.6	5.0	2.5	56	
	Oct 2007 - Mar 2009	-55-3	17	40	55	72	17.5	10.2	3.0	1.5	37	
	Average:	-44.1	24.6	27.8	32.1	54.6	19.6	11.2	2.4	1.3	50.1	

Grey bars indicate periods of recession

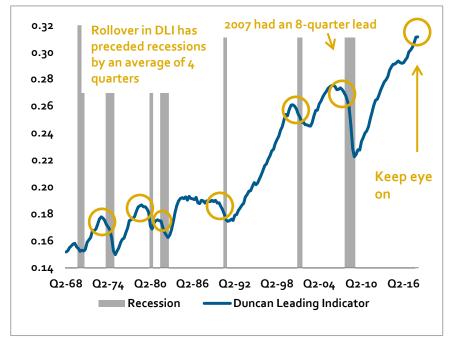
It took 37 months after the '09 trough to climb back to the pre-crisis peak.

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. Returns prior to 1988 are price only and subsequent returns are total returns. (1) Downturns defined as declines of 25% or greater. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

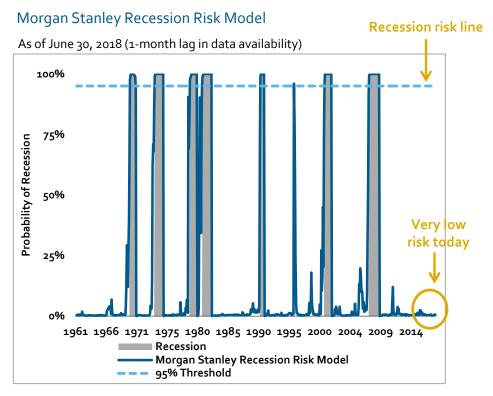
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Recession Indicators

Duncan Leading Indicator (DLI) As of 2Q 2018



DLI represents the relationship between spending and investment relative to demand; if spending and investment grow faster than demand, a rollover in the DLI should precede a recession



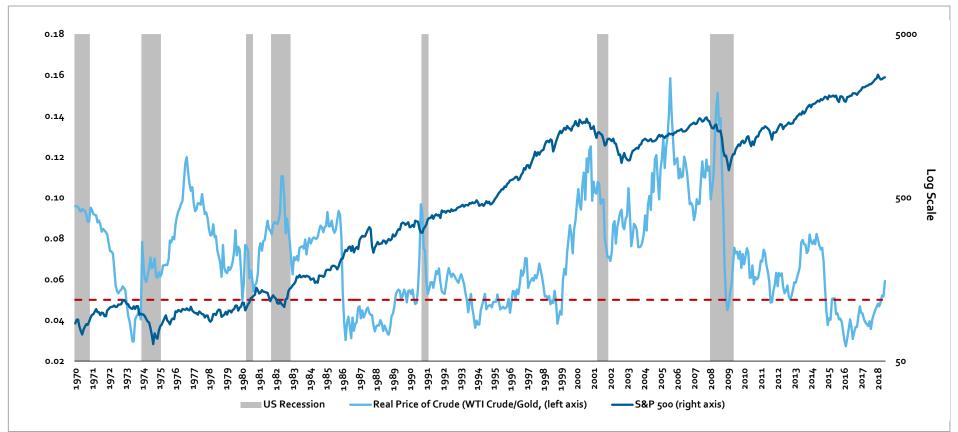
Morgan Stanley Recession Risk Model (MSRISK) provides a timely and definitive warning of a downturn in the US business cycle—has predicted 7/7 recessions with NO false positives

Source: Haver Analytics, Morgan Stanley Wealth Management GIC, Morgan Stanley & Co, Bloomberg. For more information about the risks to performance please refer to the Risk Considerations section at the end of this material.

Recessions Have Only Occurred When Oil Is Expensive in Real Terms

Real Price of Crude (WTI Crude / Gold) Vs. S&P 500

As of March 30, 2018



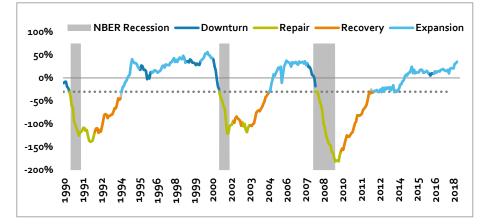
			Performa	ance Followir	ng Extreme W	/TI/Gold Dov	wnside Rea	dings						
		S&F	, 200			w	די			WTI/Gold				
	<u>6M</u>	<u>1Y</u>	<u>2Y</u>	<u>3Y</u>	<u>6M</u>	<u>1Y</u>	<u>2Y</u>	<u>3Y</u>	<u>6M</u>	<u>1Y</u>	<u>2Y</u>	<u>3Y</u>		
Median Performance	9.9%	18.2%	24.6%	39.4%	15.8%	16.9%	21.0%	25.2%	10.3%	11.4%	25.1%	29.8%		
Positive Hit Rate	100%	67%	100%	100%	67%	83%	83%	100%	67%	83%	67%	100%		

Source: Bloomberg, Morgan Stanley Wealth Management GIC. Note: Performance is based on data from 1983 and later; extreme period is denoted by a WTI/Gold reading below 0.05. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Morgan Stanley & Co. Cycle Models

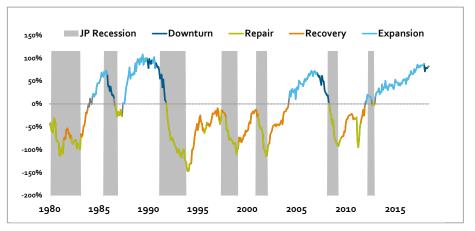
Morgan Stanley Cycle Indicator Index - US

As of June 29, 2018

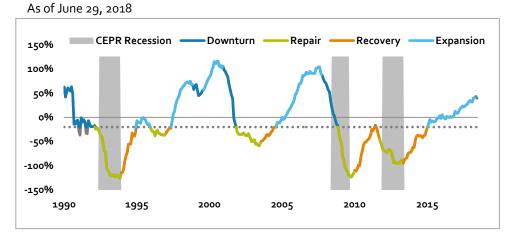


Morgan Stanley Cycle Indicator Index – Japan

As of June 29, 2018



Morgan Stanley Cycle Indicator Index - Euro Area



Source: Morgan Stanley & Co. Research, NBER, Bloomberg, Haver Analytics, FactSet. The Morgan Stanley Cycle Indicator Indices measure the deviation from historical norms for macro factors including employment, credit conditions, corporate behavior and the yield curve. The repair phase occurs due to the lag time between when these factors are beginning to improve and when they turn positive.

Bull Markets and Economic Expansions Have Continued for Close to 4 Years After the First Rate Hike

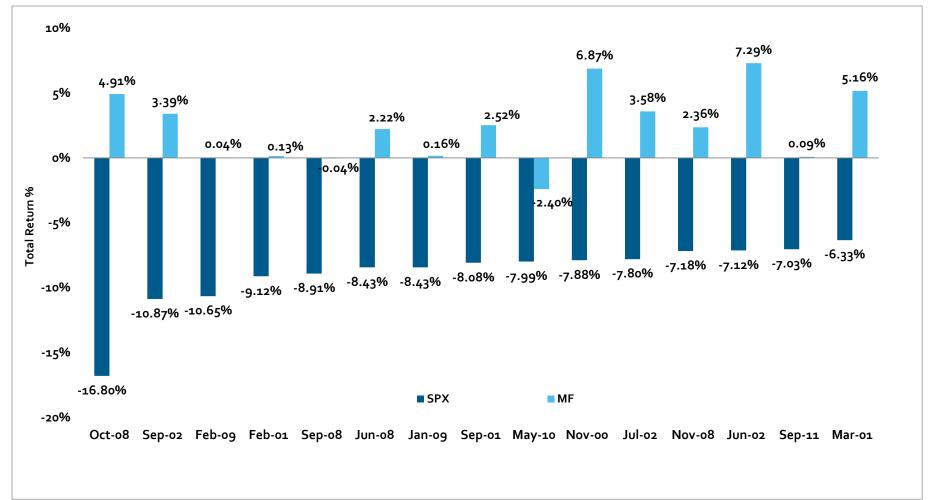
Months to Peak in S&P 500 and Recession Following Rate Hike Since November 30, 1954

	Average (Months)	Median (Months)
Peak in S&P 500		
After First Rate Hike	41	41
After Final Rate Hike	6	9
Recession		
After First Rate Hike	52	44
After Final Rate Hike	17	8

Source: Bloomberg, Federal Reserve Board, National Bureau for Economic Research, Morgan Stanley Wealth Management GIC. Current cycle is not included.

Since the Year 2000, Managed Futures Performed Positively in 13 Out of 15 of the S&P 500's Worst Performing Months

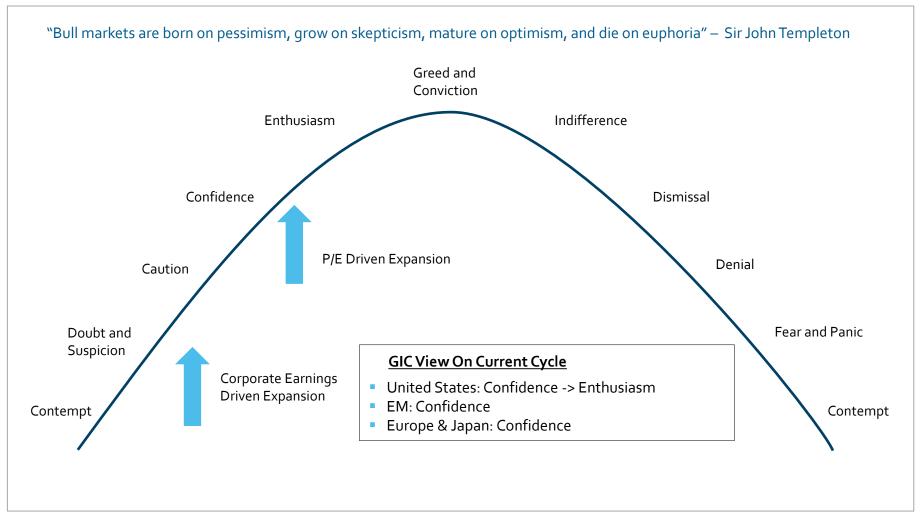
Lowest 15 Monthly Returns of S&P 500 Since 2000 Vs. Managed Futures¹ As of June 29, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC. Managed futures are represented by the BarclayHedge BTOP 50 Index. US equities are represented by the S&P 500 Index. (1) Managed Futures data subject to one-month lag.

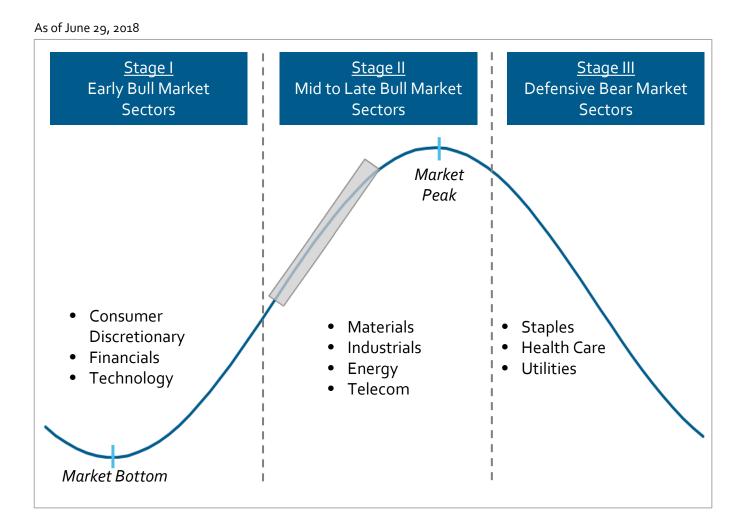
The Investor Psychology Cycle – Herd Mentality

As of June 29, 2018



Source: Morgan Stanley. Investment Management, Morgan Stanley Wealth Management GIC.

The Economic Cycle Matters to Sector Selection



Source: Morgan Stanley Wealth Management GIC.

Asset Class Returns: Diversified Portfolios Can Help Mitigate Risk

As of August 31, 2018

											10-Yrs ('08-'17)	10-Yrs ('08-'17)
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD	Ann. Return	Volatility
Managed Futures	EM Equities	MLPs ¹	MLPs ¹	REITs	US Equities	REITs	US Equities	MLPs ¹	EM Equities	US Equities	US Equities	MLPs ¹
13.6%	82.9%	35.9%	13.9%	29.8%	32.4%	14.7%	1.4%	18.3%	37.3%	9.9%	8.5%	18.9%
DM Int'l Debt	MLPs ¹	EM Equities	Inflation-Linked	High Yield	MLPs ¹	US Equities	DM Int'l Equities	High Yield	DM Int'l Equities	MLPs ¹	High Yield	REITs
11.7%	76.4%	20.2%	13.6%	19.6%	27.6%	13.7%	0.9%	14.3%	26.7%	7.6%	8.1%	17.8%
US Debt	High Yield	REITs	US Debt	EM Equities	DM Int'l Equities	Managed Futures	US Debt	US Equities	US Equities	Diversified Portfolio	MLPs ¹	Commod.
5.2%	59.4%	20.0%	7.8%	19.1%	24.0%	12.3%	0.5%	12.0%	21.8%	3.0%	6.0%	17.6%
Inflation-Linked	REITs	Commod.	DM Int'l Debt	DM Int'l Equities	Diversified Portfolio	US Debt	REITs	Commod.	EMD	REITs	Diversified Portfolio	EM Equities
-2.4%	41.3%	16.8%	6.0%	18.2%	15.1%	6.0%	-0.4%	11.8%	15.2%	1.6%	5.2%	17.0%
EMD	DM Int'l Equities	EMD	High Yield	EMD	Hedged Strategies	MLPs ¹	Inflation-Linked	EM Equities	REITs	Inflation-Linked	US Debt	US Equities
-5.2%	33.9%	15.7%	3.1%	16.8%	8.8%	4.8%	-1.4%	10.3%	15.0%	0.2%	4.7%	15.0%
Hedged Strategies	US Equities	US Equities	US Equities	US Equities	High Yield	Diversified Portfolio	Diversified Portfolio	EMD	Diversified Portfolio	Managed Futures	REITs	DM Int'l Equities
-21.4%	26.5%	15.1%	2.1%	16.0%	7.3%	4.7%	-1.9%	9.9%	14.9%	0.0%	3.8%	14.9%
Diversified Portfolio	Diversified Portfolio	High Yield	EMD	Diversified Portfolio	REITs	Inflation-Linked	Managed Futures	Diversified Portfolio	High Yield	Hedged Strategies	EMD	High Yield
-25.7%	23.6%	14.8%	-1.8%	12.0%	2.2%	3.6%	-2.0%	7.5%	10.4%	-0.5%	3.6%	11.2%
High Yield	EMD	Diversified Portfolio	Diversified Portfolio	Inflation-Linked	Managed Futures	Hedged Strategies	High Yield	Inflation-Linked	DM Int'l Debt	US Debt	Inflation-Linked	Diversified Portfolio
-26.9%	22.0%	12.7%	-2.1%	7.0%	0.7%	3.4%	-2.7%	4.7%	8.8%	-1.0%	3.5%	9.8%
Commod.	Commod.	DM Int'l Equities	Managed Futures	MLPs ²	EM Equities	High Yield	Hedged Strategies	REITs	Hedged Strategies	DM Int'l Debt	DM Int'l Equities	DM Int'l Debt
-35.6%	18.9%	9.8%	-4.3%	4.8%	-1.9%	0.0%	-3.6%	4.6%	6.0%	-1.4%	2.9%	8.2%
MLPs ¹	Hedged Strategies	DM Int'l Debt	Hedged Strategies	Hedged Strategies	US Debt	EM Equities	DM Int'l Debt	US Debt	US Debt	DM Int'l Equities	DM Int'l Debt	Inflation-Linked
-36.9%	11.5%	7.0%	-5.7%	4.8%	-2.0%	-1.4%	-4.4%	2.6%	3.5%	-1.8%	2.5%	6.1%
US Equities	Inflation-Linked	US Debt	REITs	US Debt	DM Int'l Debt	DM Int'l Debt	EM Equities	Hedged Strategies	Inflation-Linked	High Yield	EM Equities	Managed Futures
-37.0%	11.4%	6.5%	-8.1%	4.2%	-5.6%	-3.0%	-13.5%	2.5%	3.0%	-1.9%	2.2%	5.7%
DM Int'l Equities	US Debt	Managed Futures	DM Int'l Equities	DM Int'l Debt	Inflation-Linked	DM Int'l Equities	EMD	DM Int'l Debt	Managed Futures	Commod.	Hedged Strategies	Hedged Strategies
-43.4%	5.9%	6.4%	-12.2%	0.5%	-8.6%	-4.5%	-14.9%	2.1%	2.5%	-3.9%	-0.4%	5.6%
REITs	DM Int'l Debt	Inflation-Linked	Commod.	Commod.	EMD	EMD	Commod.	DM Int'l Equities	Commod.	EM Equities	Managed Futures	EMD
-48.9%	3.7%	6.3%	-13.3%	-1.1%	-9.0%	-5.7%	-24.7%	1.6%	1.7%	-7.2%	-1.1%	4.8%
EM Equities	Managed Futures	Hedged Strategies	EM Equities	Managed Futures	Commod.	Commod.	MLPs ¹	Managed Futures	MLPs ¹	EMD	Commod.	US Debt
-53.6%	-4.8%	4.2%	-19.2%	-1.8%	-9.5%	-17.0%	-32.6%	-3.1%	-6.5%	-10.5%	-6.8%	3.2%

Source: FactSet, Morgan Stanley Wealth Management GIC; Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. Citi 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays Global Majors ex US for DM Int'l Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, HFRX Macro/CTA Index for Managed Futures, Alerian MLP Index for MLPs , and HFRX Global hedge Funds for hedged strategies. Diversified portfolio is comprised of 25% S&P 500, 10% Russell 2000, 15% MSCI EAFE, 5% MSCI EME, 25% Bloomberg Barclays US Aggregate, 5% 3 mo. T-Bills, 5% HFRX Global Hedge Funds, 5% Bloomberg Commodity Index, and 5% FTSE EPRA/NAREIT Global Index. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is not quarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other

financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Asset Class Returns

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD
	EM Equities 40.2%											
	EMD 18.1%	Managed Futures 13.6%										
	Commod. 16.2%	DM Int'l Debt 11.7%										
	MLPs ¹ 12.7%	US Debt 5.2%										
	Inflation-Linked 11.6%	EMD -5.2%										
	DM Int'l Debt 11.2%	Inflation-Linked -2.4%	EM Equities 82.9%	MLPs [±] 35.9%	MLPs ¹ 13.9%	REITs 29.8%						
	DM Int'l Equities 10.8%	Hedged Strategies -21.4%	MLPs ¹ 76.4%	EM Equities 20.2%	Inflation-Linked 13.6%	High Yield 19.6%						
REITs 43.7%	Hedged Strategies 10.3%	High Yield -26.9%	High Yield 59.4%	REITs 20.0%	US Debt 7.8%	EM Equities 19.1%						
EM Equities 32.1%	Managed Futures 7.6%	Commod. -35.6%	REITs 41.3%	Commod. 16.8%	DM Int'l Debt 6.0%	DM Int'l Equities 18.2%				MLPs ¹ 18.3%	EM Equities 37.3%	
DM Int'l Equities 26.7%	US Debt 7.0%	MLPs ¹ -36.9%	DM Int'l Equities 33.9%	EMD 15.7%	High Yield 3.1%	EMD 16.8%		REITs 14.7%		High Yield 14.3%	DM Int'l Equities 26.7%	
US Equities 15.8%	US Equities 5.5%	US Equities -37.0%	US Equities 26.5%	US Equities 15.1%	US Equities 2.1%	US Equities 16.0%	US Equities 32.4%	US Equities 13.7%	US Equities 1.4%	US Equities 12.0%	US Equities 21.8%	US Equities 9.9%
EMD 15.2%	High Yield 3.2%	DM Int'l Equities -43.4%	EMD 22.0%	High Yield 14.8%	EMD -1.8%	Inflation-Linked 7.0%	MLPs ¹ 27.6%	Managed Futures 12.3%	DM Int'l Equities 0.9%	Commod. 11.8%	EMD 15.2%	MLPs ¹ 7.6%
High Yield 13.7%	REITs	REITs	Commod.	DM Int'l Equities	Managed Futures	MLPs ²	and the state of t	US Debt				REITs
	-4.7%		18.9%	9.8%		4.8%	DM Int'l Equities 24.0%	6.0%	US Debt 0.5%	EM Equities 10.3%	REITs 15.0%	1.6%
Hedged Strategies 10.4%	-4.7%	-48.9% EM Equities	18.9% Hedged Strategies 11.5%	9.8% DM Int'l Debt	-4.3% Hedged Strategies				0.5% REITs	10.3% EMD	15.0% High Yield	1.6% Inflation-Linked
		-48.9%	Hedged Strategies <u>11.5</u> % Inflation-Linked	9.8% DM Int'l Debt 7.0% US Debt	-4.3%	4.8% Hedged Strategies 4.8% US Debt	24.0% Hedged Strategies 8.8% High Yield	6.0% MLPs ^a 4.8% Inflation-Linked	o.5% REITs -o.4% Inflation-Linked	10.3% EMD 9.9% Inflation-Linked	15.0% High Yield 10.4% DM Int'l Debt	1.6% Inflation-Linked 0.2% Managed Futures
10.4% DM Int'l Debt 6.6% Managed Futures		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures	-4.3% Hedged Strategies -5.7% REITs	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt	24.0% Hedged Strategies 8.8%	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures	10.3% EMD 9.9% Inflation-Linked 4.7% REITs	15.0% High Yield 10.4% DM Int'l Debt 8.8% Hedged Strategies	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked	-4.3% Hedged Strategies -5.7% REITs -8.1% DM Int! Equities -11.2% Commod.	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod.	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures	6.0% MLPs ³ 4,8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield	10.3% EMD 9.9% Inflation-Linked 4.7% REITs 4.6% US Debt	15.0% High Yield 10.4% DM Int'l Debt 8.8% Hedged Strategies 6.0% US Debt	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies -0.5% US Debt
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt 4.3% Commod.		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-4.3% Hedged Strategies -5.7% REITs -8.1% DM Int'l Equities -11.2% Commod. -33.3% EM Equities	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures 0.7% EM Equities	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies	10.3% EMD 9.3% Inflation-Linked 4.7% REITS 4.6% US Debt 2.6% Hedged Strategies	15.0% High Yield 10.4% DMIntl Debt 8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked	1.6% Inflation-Linked 0.2% Managed Futures 0.9% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt 3.7%	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked 6.3%	-4.3% Hedged Strategies -5.7% REITS -8.1% DM Int'l Equities -12.2% Commod. -3.3%	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod. -1.1%	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt	10.3% EMD 9.3% Inflation-Linked 4.7% REITs 4.5% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt	15.0% High Yield 10.4% DM Int'l Debt 8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt 4.3% Commod. 2.1%		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-4.3% Hedged Strategies -5.7% REITs -8.1% DM Int'l Equities -11.2% Commod. -33.3% EM Equities	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9%	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities	10.3% EMD 9.9% Inflation-Linked 4.7% REITs 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.3% DM Int'l Debt	15.0% High Yield 20.4% DMInt'l Debt 8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod.	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4% MLPs ¹		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-4.3% Hedged Strategies -5.7% REITs -8.1% DM Int'l Equities -11.2% Commod. -33.3% EM Equities	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Debt -3.0% DM Int'l Equities -4.5% EMD	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Int'l Debt -4.4% EM Equities -3.5%	10.3% EMD 9.9% Inflation-Linked 4.7% REITS 4.5% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1% DM Int'l Debt 2.1% DM Int'l Equities 1.6%	15.0% High Yield 10.4% DM Int'l Debt 8.8% Hedged Strategies 6.0% US Debt 3.5% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod. 1.7% MLPs ⁺	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies -0.5% US Debt -1.0% DMInt"I Debt -1.4% DM Int"I Equities -1.8% High Yield -1.9% Commod.
10.4% DM Int'l Debt 6.6% Managed Futures 5.6% US Debt 4.3% Commod. 2.1% Inflation-Linked 0.4% MLPs*		-48.9% EM Equities	Hedged Strategies 11.5% Inflation-Linked 11.4% US Debt 5.9% DM Int'l Debt 3.7% Managed Futures	9.8% DM Int'l Debt 7.0% US Debt 6.5% Managed Futures 6.4% Inflation-Linked 6.3% Hedged Strategies	-4.3% Hedged Strategies -5.7% REITs -8.1% DM Int'l Equities -11.2% Commod. -33.3% EM Equities	4.8% Hedged Strategies 4.8% US Debt 4.2% DM Int'l Debt 0.5% Commod. -1.1% Managed Futures	24.0% Hedged Strategies 8.8% High Yield 7.3% REITs 2.2% Managed Futures 0.7% EM Equities -1.9% US Debt -2.0% DM Int'l Debt -5.6% Inflation-Linked	6.0% MLPs ¹ 4.8% Inflation-Linked 3.6% Hedged Strategies 3.4% High Yield 0.0% EM Equities -1.4% DM Int'l Debt -3.0% DM Int'l Equities -4.5%	0.5% REITs -0.4% Inflation-Linked -1.4% Managed Futures -2.0% High Yield -2.7% Hedged Strategies -3.6% DM Infl Debt -4.4% EM Equities -13.5%	10.3% EMD 9.9% Inflation-Linked 4.7% REITS 4.6% US Debt 2.6% Hedged Strategies 2.5% DM Int'l Debt 2.1% DM Int'l Equities 1.6%	15.0% High Yield 10.4% DMIntl Debt 8.8% Hedged Strategies 6.0% US Debt 3.5% Inflation-Linked 3.0% Managed Futures 2.5% Commod. 1.7%	1.6% Inflation-Linked 0.2% Managed Futures 0.0% Hedged Strategies -0.5% US Debt -1.0% DM Int'l Debt -1.4% DM Int'l Equities -1.8% High Yield -1.9%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used: Bloomberg Barclays Capital US Aggregate for US Bonds. Citi 3M Treasury Bill for cash, Bloomberg Barclays US Aggregate for US Bonds, Bloomberg Barclays US TIPS for Inflation-linked securities, Bloomberg Barclays Global High Yield for global high yield, JP Morgan EMBI for EM Bonds, S&P 500 for US Stocks, MSCI EAFE IMI for Int'l Stocks, MSCI EM IMI for Emerging Market Stocks, FTSE EPRA/NAREIT Global for REITs, Bloomberg Commodity Index for commodities, HFRX Macro/CTA Index for Managed Futures, Alerian MLP Index for MLPs , and HFRX Global hedge Funds for hedged strategies. MLP data begins on January 1, 2007. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

Outperforming

Last Decade Has Disproportionately Favored US Portfolio Bias

Monthly as of July 31, 2018

											10-Years
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD	('08-'17) Ann.
Japan	EM	US Small	US Large	Pacific ex	US Small	US Large	Japan	US Small	EM	US Small	US Small
Jupun	2.00	Cap	Cap	Japan	Cap	Сар	Jupun	Cap	2.00	Сар	Cap
-28.0%	82.9%	26.9%	2.1%	24.1%	38.8%	13.7%	10.8%	21.3%	37.3%	9.5%	8.7%
US Small Cap	Pacific ex Japan	EM	US Mid Cap	Europe	US Mid Cap	US Mid Cap	US Large Cap	US Mid Cap	Europe	US Large Cap	US Mid Cap
-33.8%	76.5%	20.2%	1.5%	20.9%	33.1%	13.2%	1.4%	12.1%	27.5%	6.5%	8.6%
US Large Cap	Europe	Pacific ex Japan	US Small Cap	EM	US Large Cap	US Small Cap	US Mid Cap	US Large Cap	Pacific ex Japan	US Mid Cap	US Large Cap
-37.0%	39.1%	18.5%	-4.2%	19.1%	32.4%	4.9%	0.9%	12.0%	26.1%	6.4%	8.5%
US Mid Cap	Global	Japan	Global	Global	Europe	Global	Europe	EM	Japan	Global	Global
-37.6%	37.2%	16.2%	-7.4%	17.0%	27.4%	4.4%	-0.8%	10.3%	25.7%	2.9%	5.5%
Global	US Mid Cap	US Mid Cap	Europe	US Mid Cap	Japan	Pacific ex Japan	Global	Global	Global	Europe	Japan
-42.0%	28.4%	16.1%	-11.5%	16.4%	27.2%	-1.2%	-1.7%	9.0%	24.6%	o.6%	4.0%
Europe	US Small Cap	US Large Cap	Japan	US Small Cap	Global	EM	US Small Cap	Pacific ex Japan	US Large Cap	Pacific ex Japan	Pacific ex Japan
-46.8%	27.2%	15.1%	-12.7%	16.3%	24.2%	-1.4%	-4.4%	8.0%	21.8%	-0.5%	3.5%
Pacific ex Japan	US Large Cap	Global	Pacific ex Japan	US Large Cap	Pacific ex Japan	Japan	Pacific ex Japan	Japan	US Mid Cap	Japan	Europe
-51.5%	26.5%	14.9%	-13.7%	16.0%	4.8%	-3.2%	-8.4%	3.6%	21.7%	-1.5%	2.5%
EM	Japan	Europe	EM	Japan	EM	Europe	EM	Europe	US Small Cap	ЕМ	EM
-53.6%	6.3%	6.2%	-19.2%	7.7%	-1.9%	-5.7%	-13.5%	0.0%	14.6%	-4.7%	2.2%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: S&P 500 for US Large Cap, Russell 1000 for US Mid Cap, Russell 2000 for US Small Cap, MSCI All Country World IMI for Global equities, MSCI Europe IMI for European equities, MSCI Japan IMI for Japanese equities, MSCI Pacific ex Japan IMI for Pacific ex Japan equities, and MSCI EM IMI for Emerging Market equities; returns in USD.

Annual Equity Returns 1997-2007

Annual Data from 1997-2007

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	10 Years ('97-'07) Ann.
US Large Cap	US Large Cap	Japan	US Small Cap	US Small Cap	Pacific ex JP	EM	Pacific ex JP	EM	Europe	ЕМ	Pacific ex JP
33.4%	28.6%	83.9%	-3.0%	2.5%	-5.2%	54.4%	30.3%	34.0%	36.1%	40.2%	15.2%
US Mid Cap	US Mid Cap	EM	US Mid Cap	EM	EM	Pacific ex JP	EM	Japan	Pacific ex JP	Pacific ex JP	ЕМ
32.9%	27.0%	62.9%	-7.8%	-1.8%	-6.3%	49.0%	27.0%	27.2%	34.6%	31.7%	12.8%
US Small Cap	Europe	Pacific ex JP	US Large Cap	Pacific ex JP	Japan	US Small Cap	Europe	Pacific ex JP	EM	Europe	Europe
22.4%	26.9%	38.9%	-9.1%	-7.9%	-8.1%	47.3%	22.3%	14.8%	32.1%	13.6%	10.2%
Europe	Global	Global	Europe	US Large Cap	Europe	Europe	US Small Cap	Global	Global	Global	Global
21.4%	18.0%	31.0%	-10.3%	-11.9%	-16.5%	40.8%	18.3%	12.1%	21.5%	11.7%	8.3%
Global	Japan	US Small Cap	Global	US Mid Cap	Global	Japan	Japan	Europe	US Small Cap	US Mid Cap	US Small Cap
11.2%	8.2%	21.3%	-15.2%	-12.4%	-17.3%	37.9%	17.6%	10.8%	18.4%	5.8%	7.1%
EM	Pacific ex JP	US Large Cap	Pacific ex JP	Global	US Small Cap	Global	Global	US Mid Cap	US Large Cap	US Large Cap	US Mid Cap
-19.6%	1.8%	21.0%	-15.6%	-15.4%	-20.5%	36.2%	16.9%	6.3%	15.8%	5.5%	6.2%
Pacific ex JP	US Small Cap	US Mid Cap	Japan	Europe	US Mid Cap	US Mid Cap	US Mid Cap	US Large Cap	US Mid Cap	US Small Cap	US Large Cap
-21.4%	-2.5%	20.9%	-34.1%	-20.4%	-21.7%	29.9%	11.4%	4.9%	15.5%	-1.6%	5.9%
Japan	EM	Europe	EM	Japan	US Large Cap	US Large Cap	US Large Cap	US Small Cap	Japan	Japan	Japan
-28.3%	-29.6%	18.6%	-35.2%	-29.4%	-22.1%	28.7%	10.9%	4.6%	3.0%	-4.8%	5.6%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: S&P 500 for US Large Cap, Russell 1000 for US Mid Cap, Russell 2000 for US Small Cap, MSCI All Country World IMI for Global equities, MSCI Europe IMI for European equities, MSCI Japan IMI for Japanese equities, MSCI Pacific ex Japan IMI for Pacific ex Japan equities, and MSCI EM IMI for Emerging Market equities; returns in USD.

S&P 500 Sector Returns

As of July 31, 2018

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD	10-Years ('08-'17) Ann.
Consumer Staples	Info Tech	Consumer Discretionary	Utilities	Financials	Consumer Discretionary	Utilities	Consumer Discretionary	Energy	Info Tech	Consumer Discretionary	Consumer Discretionary
-15.4%	61.7%	27.7%	19.9%	28.8%	43.1%	29.0%	10.1%	27.4%	38.8%	13.6%	13.5%
Health Care	Materials	Industrials	Consumer Staples	Consumer Discretionary	Health Care	Health Care	Health Care	Telecom	Materials	Info Tech	Info Tech
-22.8%	48.6%	26.7%	14.0%	23.9%	41.5%	25.3%	6.9%	23.5%	23.8%	13.2%	11.9%
Utilities	Consumer Discretionary	Materials	Health Care	Telecom	Industrials	Info Tech	Cons. Staples	Financials	Consumer Discretionary	Health Care	Health Care
-29.0%	41.3%	22.2%	12.7%	18.3%	40.7%	20.1%	6.6%	22.8%	23.0%	8.6%	11.0%
Telecom	Industrials	Energy	Telecom	Health Care	Financials	Consumer Staples	Info Tech	Industrials	Financials	Energy	Cons. Staples
-30.5%	20.9%	20.5%	6.3%	17.9%	35.6%	16.0%	5.9%	18.9%	22.2%	8.3%	10.1%
Consumer Discretionary	Health Care	Telecom	Consumer Discretionary	Industrials	Info Tech	Financials	Telecom	Materials	Health Care	Industrials	Industrials
-33.5%	19.7%	19.0%	6.1%	15.3%	28.4%	15.2%	3.4%	16.7%	22.1%	2.3%	8.6%
Energy	Financials	Consumer Staples	Energy	Materials	Consumer Staples	Industrials	Financials	Utilities	Industrials	Utilities	Utilities
-34.9%	17.2%	14.1%	4.7%	15.0%	26.1%	9.8%	-1.5%	16.3%	21.0%	2.2%	6.3%
Industrials	Consumer Staples	Financials	Info Tech	Info Tech	Materials	Consumer Discretionary	Industrials	Info Tech	Cons. Staples	Financials	Materials
-39.9%	14.9%	12.1%	2.4%	14.8%	25.6%	9.7%	-2.5%	13.8%	13.5%	1.0%	6.2%
Info Tech	Energy	Info Tech	Industrials	Consumer Staples	Energy	Materials	Utilities	Consumer Discretionary	Utilities	Materials	Telecom
-43.1%	13.8%	10.2%	-0.6%	10.8%	25.1%	6.9%	-4.8%	6.0%	12.1%	-0.2%	5.1%
Materials	Utilities	Utilities	Materials	Energy	Utilities	Telecom	Materials	Cons. Staples	Energy	Cons. Staples	Financials
-45.7%	11.9%	5.5%	-9.8%	4.6%	13.2%	3.0%	-8.4%	5.4%	-1.0%	-4.8%	3.8%
Financials	Telecom	Health Care	Financials	Utilities	Telecom	Energy	Energy	Health Care	Telecom	Telecom	Energy
-55-3%	8.9%	2.9%	-17.1%	1.3%	11.5%	-7.8%	-21.1%	-2.7%	-1.3%	-6.2%	1.2%

Source: FactSet, Morgan Stanley Wealth Management GIC. Performance based on S&P 500 sector indices; returns in USD. Not pictured: Real Estate Sector which was created as its own sector in 2016. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

US Equity Market Capitalization and Style Returns

As of July 31, 2018

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD	10-Years ('08-'17) Ann.
Small-Cap Value	Mid-Cap Growth	Small-Cap Growth	Large-Cap Growth	Mid-Cap Value	Small-Cap Growth	Mid-Cap Value	Large-Cap Growth	Small-Cap Value	Large-Cap Growth	Small-Cap Growth	Large-Cap Growth
-28.9%	46.3%	29.1%	2.6%	18.5%	43.3%	14.7%	5.7%	31.7%	30.2%	11.6%	10.0%
Large-Cap Value	Large-Cap Growth	Mid-Cap Growth	S&P 500	Small-Cap Value	Mid-Cap Growth	S&P 500	S&P 500	Mid-Cap Value	Mid-Cap Growth	Large-Cap Growth	Small-Cap Growth
-36.8%	37.2%	26.4%	2.1%	18.1%	35.7%	13.7%	1.4%	20.0%	25.3%	10.4%	9.2%
S&P 500	Small-Cap Growth	Mid-Cap Value	Large-Cap Value	Large-Cap Value	Small-Cap Value	Large-Cap Value	Mid-Cap Growth	Large-Cap Value	Small-Cap Growth	Mid-Cap Growth	Mid-Cap Growth
-37.0%	34.5%	24.8%	0.4%	17.5%	34.5%	13.5%	-0.2%	17.3%	22.2%	7.7%	9.1%
Large-Cap Growth	Mid-Cap Value	Small-Cap Value	Mid-Cap Value	S&P 500	Large-Cap Growth	Large-Cap Growth	Small-Cap Growth	S&P 500	S&P 500	Small-Cap Value	Mid-Cap Value
-38.4%	34.2%	24.5%	-1.4%	16.0%	33.5%	13.0%	-1.4%	12.0%	21.8%	7.3%	9.1%
Mid-Cap Value	S&P 500	Large-Cap Growth	Mid-Cap Growth	Mid-Cap Growth	Mid-Cap Value	Mid-Cap Growth	Large-Cap Value	Small-Cap Growth	Large-Cap Value	S&P 500	S&P 500
-38.4%	26.5%	16.7%	-1.7%	15.8%	33.5%	11.9%	-3.8%	11.3%	13.7%	6.5%	8.5%
Small-Cap Growth	Small-Cap Value	Large-Cap Value	Small-Cap Growth	Large-Cap Growth	Large-Cap Value	Small-Cap Growth	Mid-Cap Value	Mid-Cap Growth	Mid-Cap Value	Mid-Cap Value	Small-Cap Value
-38.5%	20.6%	15.5%	-2.9%	15.3%	32.5%	5.6%	-4.8%	7.3%	13.3%	2.6%	8.2%
Mid-Cap Growth	Large-Cap Value	S&P 500	Small-Cap Value	Small-Cap Growth	S&P 500	Small-Cap Value	Small-Cap Value	Large-Cap Growth	Small-Cap Value	Large-Cap Value	Large-Cap Value
-44.3%	19.7%	15.1%	-5.5%	14.6%	32.4%	4.2%	-7.5%	7.1%	7.8%	2.2%	7.1%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: Russell Midcap Value, Russell 2000 Value, Russell 1000 Value, Russell Midcap Growth, Russell 2000 Growth, Russell 1000 Growth, and S&P 500.

Alternative Investment Returns

Annual as of December 31, 20171

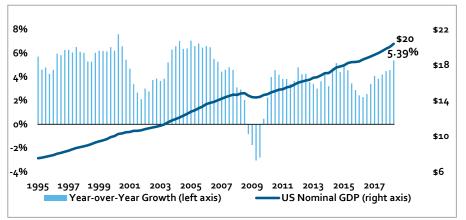
		·									10-Yrs
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	('08-'17) Ann.
Gold	Global Macro	MLPs ²	MLPs ²	Private RE	Global REITs	MLPs ²	Global REITs	Private RE	MLPs ²	Equity L/S	MLPs ²
29.9%	4.8%	76.4%	35.9%	14.3%	28.7%	27.6%	15.9%	13.3%	18.3%	13.3%	6.0%
Private Equity	Gold	Global REITs	Gold	MLPs ²	Private Equity	Private Equity	Private RE	Private Equity	Commodities	Gold	Global REITs
22.6%	3.9%	38.3%	28.7%	13.9%	13.3%	19.5%	11.8%	6.0%	0.0%	12.8%	6.0%
Commodities	Private RE	Rel. Value	Global REITs	Gold	Rel. Value	Equity L/S	Private Equity	Global REITs	Event Driven	Global REITs	Private Equity
16.2%	-6.5%	25.8%	20.4%	9.6%	10.6%	14.3%	10.3%	0.1%	10.6%	11.4%	4.8%
Private RE	Rel. Value	Event Driven	Private Equity	Private Equity	Private RE	Event Driven	Global Macro	Rel. Value	Private RE	Private Equity	Rel. Value
15.8%	-18.0%	25.0%	18.8%	7.7%	10.5%	12.5%	5.6%	-0.3%	8.0%	9.8%	4.2%
MLPs ²	FoF	Equity L/S	Commodities	Rel. Value	Event Driven	Private RE	MLPs ²	FoF	Rel. Value	FoF	Event Driven
12.7%	-21.4%	24.6%	16.8%	0.1%	8.9%	11.0%	4.8%	-0.3%	7.7%	7.7%	4.1%
Global Macro	Event Driven	Gold	Private RE	Event Driven	Equity L/S	FoF	Rel. Value	Equity L/S	Gold	Event Driven	Private RE
11.1%	-21.8%	22.9%	13.1%	-3.3%	7.4%	9.0%	4.0%	-1.0%	7.7%	7.6%	3.8%
Equity L/S	Equity L/S	Commodities	Event Driven	Global Macro	Gold	Rel. Value	FoF	Global Macro	Private Equity	Rel. Value	Equity L/S
10.5%	-26.7%	18.9%	11.9%	-4.2%	6.1%	7.1%	3.4%	-1.3%	10.8%	5.2%	3.2%
FoF	Private Equity	Private Equity	Rel. Value	FoF	MLPs ²	Global REITs	Equity L/S	Event Driven	Equity L/S	Private RE	FoF
10.3%	-27.1%	17.2%	11.4%	-5.7%	4.8%	4.4%	1.8%	-3.6%	5.5%	7.0%	1.9%
Rel. Value	Commodities	FoF	Equity L/S	Global REITs	FoF	Global Macro	Event Driven	Gold	Global REITs	Global Macro	Gold
8.9%	-35.6%	11.5%	10.5%	-5.8%	4.8%	-0.4%	1.1%	-10.9%	5.0%	2.2%	1.1%
Event Driven	MLPs ²	Global Macro	Global Macro	Equity L/S	Global Macro	Commodities	Gold	Commodities	Global Macro	Commodities	Global Macro
6.6%	-36.9%	4.3%	8.1%	-8.4%	-0.1%	-9.5%	-1.7%	-24.7%	1.0%	0.0%	1.1%
Global REITs	Global REITs	Private RE	FoF	Commodities	Commodities	Gold	Commodities	MLPs ²	FoF	MLPs ²	Commodities
-7.0%	-47.7%	-16.8%	5.7%	-13.3%	-1.1%	-28.7%	-17.0%	-32.6%	0.5%	-6.5%	-6.8%

Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: FTSE/EPRA NAREIT for Global REITs, Alerian MLP for MLPs, Bloomberg Commodity Index for Commodities, S&P GSCI Gold Official Close for Gold, HFRI Relative Value for Relative Value, HFRI Event Driven for Event Driven, HFRI Macro for Global Macro, HFRI Equity Hedge for Long/Short, HFRI FoF for Fund of Funds, NCREIF Property Index for Private Real Estate. Private Equity is represented by the Thomson One Economics Global Private Equity Survey. This survey provides a time-weighted average of internal rates of return on a sample of private equity returns are as of December 31, 2017. (2) MLP data begins on January 1, 2007.

US Economic Indicators

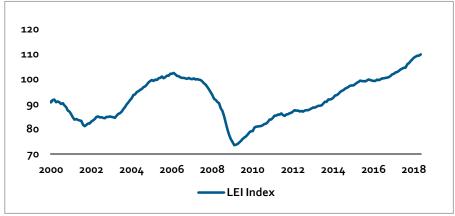
US Nominal GDP¹

Trillions of US Dollars as of 2Q 2018



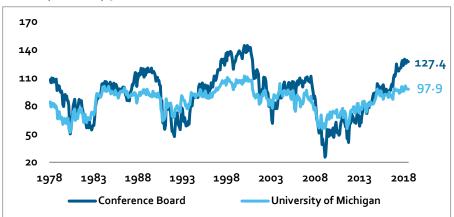
Conference Board Leading Economic Indicator Index

Monthly data as of June 30, 2018 (one-month lag)



Consumer Confidence

Monthly as of July 31, 2018



Citi US Economic Surprise Index

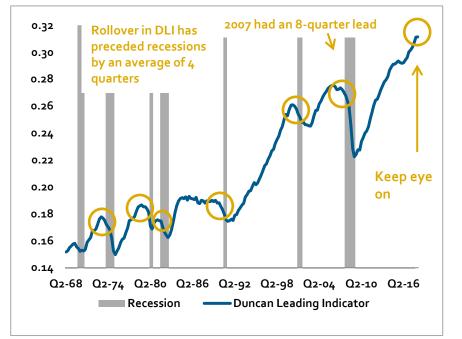




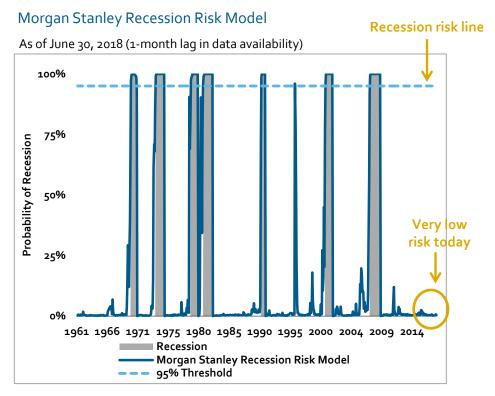
Source: Bloomberg, Citi, FactSet, University of Michigan, Conference Board. (1) Nominal GDP does not account for the effects of inflation.

Recession Indicators

Duncan Leading Indicator (DLI) As of 2Q 2018



DLI represents the relationship between spending and investment relative to demand; if spending and investment grow faster than demand, a rollover in the DLI should precede a recession

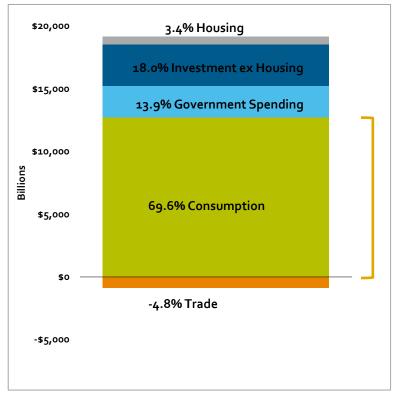


Morgan Stanley Recession Risk Model (MSRISK) provides a timely and definitive warning of a downturn in the US business cycle—has predicted 7/7 recessions with NO false positives

Source: Haver Analytics, Morgan Stanley Wealth Management GIC, Morgan Stanley & Co, Bloomberg. For more information about the risks to performance please refer to the Risk Considerations section at the end of this material.

Components of GDP

Components of Trailing Four Quarters Nominal GDP¹ Nominal GDP as of 2Q 2018



Growth of Components of Real GDP During Expansions

Year-over-Year Growth as of 2Q2018

Expansion % Ch. Annualized	Real Consumer Spending	Real Govt Spending	Real Exports	Real Imports	Real GDP	Nominal GDP
1961:1Q - 1966:2Q	5.1%	4.3%	6.0%	8.5%	5.7%	7.3%
1970:4Q - 1976:1Q	3.6%	0.6%	6.4%	3.1%	3.3%	9.8%
1975:1Q - 1980:2Q	3.1%	1.7%	6.6%	5.8%	3.5%	10.5%
1982:4Q - 1988:1Q	4.5%	3.8%	8.2%	11.1%	4.6%	7.5%
1991:1Q - 1996:2Q	3.3%	0.2%	7.3%	8.3%	3.2%	5.3%
2001:4Q - 2007:1Q	3.0%	1.7%	6.8%	6.9%	2.8%	5.4%
Avg	3.8%	2.1%	6.9%	7.3%	3.9%	7.6%
2009:2Q - 2018:1Q	2.3%	-0.5% 1	4.5%	5.1%	2.2%	3.9%

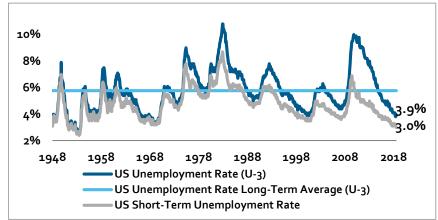
Real consumer and government spending are both well-below normal

Source: Haver Analytics, Bureau of Economic Analysis, Morgan Stanley Wealth Management GIC. (1) Does not equal 100% due to rounding. (2) Nominal GDP does not account for the effects of inflation.

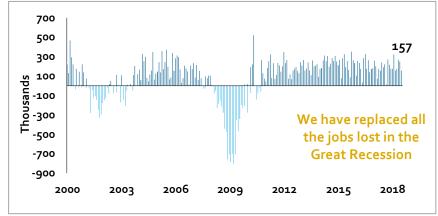
US Employment Data

US Unemployment Rate

As of July 31, 2018



Total Nonfarm Payrolls



Month-over-Month Net Change As of July 31, 2018

Source: Haver Analytics, Bloomberg, Bureau of Labor Statistics, Morgan Stanley Wealth Management GIC

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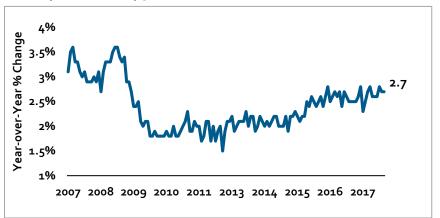
Labor Force Participation Rate and Total Employment

Monthly Data As of July 31, 2018



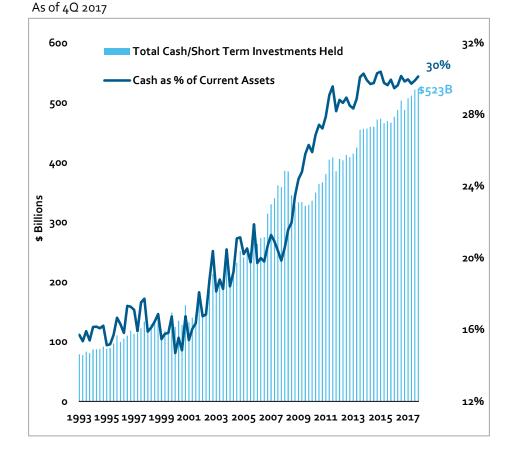
US Average Hourly Earnings

Monthly Data As of July 31, 2018



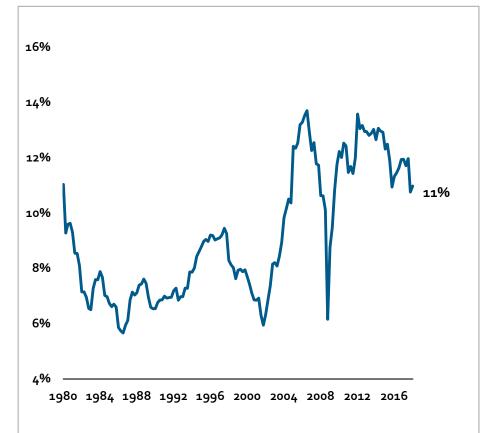
Corporate Investment Indicators

S&P 500 Total Cash Levels



US Corporate Profits as Percent of GDP

As of 1Q 2018

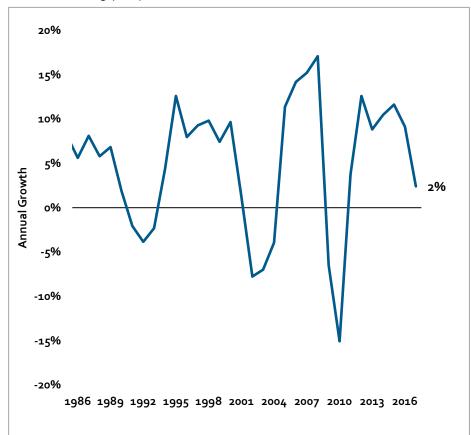


Source: FactSet, Standard & Poor's, Morgan Stanley Wealth Management GIC, Compustat, Bloomberg, Bureau of Economic Analysis (BEA).

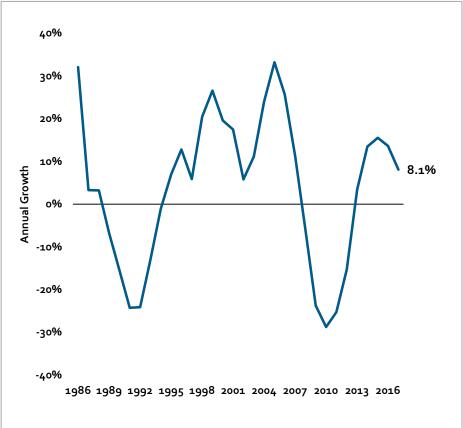
Corporate Investment Indicators

US Commercial and Industrial Loans: Annual Growth

As of December 31, 2017 (annual data)



US Construction and Development Loans: Annual Growth



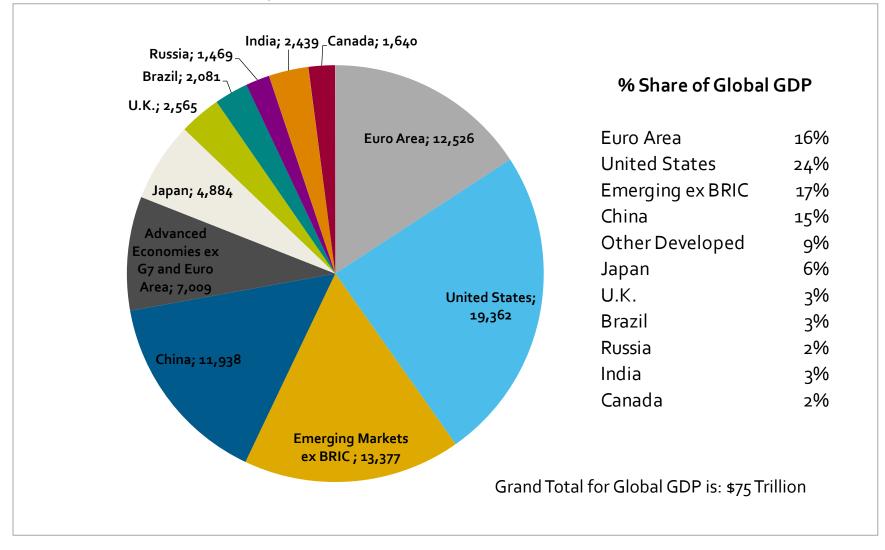
As of December 31, 2017 (annual data)

Source: Haver Analytics, Federal Deposit Insurance Corporation, National Federation of Independent Business, Federal Reserve, Bloomberg, Morgan Stanley Wealth Management GIC.

Global GDP

2017 GDP by Region¹

Billions of US Dollars, Annual as of December 31, 2017



Source: World Bank, Haver Analytics, Morgan Stanley Wealth Management GIC. (1) Advanced Economies ex G7 and Euro Area includes: Australia, Czech Republic, Denmark, Hong Kong SAR, Iceland, Israel, Korea, Latvia, New Zealand, Norway, San Marino, Singapore, Sweden, Switzerland, Taiwan Province of China. Data in chart shows nominal GDP in US dollars. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Global Growth is Recovering

Global Purchasing Managers' Index (PMI)

As of June 30, 2018

	Apr'16	May'16	9±'nul	9⊧'lul	Aug'16	Sep'16	Oct'16	91'VON	Dec'16	∫τ'nel	Feb'17	Mar'17	Apr'17	Мау'17	ζτ'nυί	۲±'luľ	Aug'17	Sep'17	Oct'17	Λον'17	Dec'17	Jan'18	Feb'18	Mar'18	8±'nul
Global	50.2	50.1	50.4	51.0	50.8	51.1	52.0	52.0	52.6	52.7	52.9	52.9	52.7	52.6	52.6	52.7	53.1	53.2	53-4	54.0	54.5	54.4	54.1	53-3	53.0
U.S.	50.8	50.7	51.3	52.9	52.0	51.5	53-4	54.1	54-3	55.0	54.2	53-3	52.8	52.7	52.0	53-3	52.8	53.1	54.6	53-9	55.1	55-5	55-3	55.6	55-4
Canada	52.2	52.1	51.8	51.9	51.1	50.3	51.1	51.5	51.8	53.5	54.7	55-5	55-9	55.1	54.7	55.5	54.6	55.0	54-3	54.4	54.7	55-9	55.6	55.7	57.1
U.K.	50.0	50.6	53-3	48.6	53.1	55.6	53.8	53.2	55.6	55.2	54.6	54.1	57.7	56.5	54-5	55-4	56.8	56.o	56.2	58.2	56.o	55.0	54.9	54.9	54.4
Euro Area	51.7	51.5	52.8	52.0	51.7	52.6	53.5	53.7	54.9	55.2	55-4	56.2	56.7	57.0	57.4	56.6	57.4	58.1	58.5	60.1	60.6	59.6	58.6	56.6	54-9
Germany	51.8	52.1	54.5	53.8	53.6	54-3	55.0	54-3	55.6	56.4	56.8	58.3	58.2	59.5	59.6	58.1	59-3	60.6	60.6	62.5	63.3	61.1	60.6	58.2	55-9
France	48.0	48.4	48.3	48.6	48.3	49.7	51.8	51.7	53-5	53.6	52.2	53-3	55.1	53.8	54.8	54.9	55.8	56.1	56.1	57.7	58.8	58.4	55-9	53.7	52.5
Italy	53-9	52.4	53-5	51.2	49.8	51.0	50.9	52.2	53.2	53.0	55.0	55-7	56.2	55.1	55.2	55.1	56.3	56.3	57.8	58.3	57.4	59.0	56.8	55.1	53-3
Spain	53-5	51.8	52.2	51.0	51.0	52.3	53-3	54-5	55-3	55.6	54.8	53-9	54.5	55-4	54.7	54.0	52.4	54-3	55.8	56.1	55.8	55.2	56.0	54.8	53-4
Greece	49.7	48.4	50.4	48.7	50.4	49.2	48.6	48.3	49.3	46.6	47.7	46.7	48.2	49.6	50.5	50.5	52.2	52.8	52.1	52.2	53.1	55.2	56.1	55.0	53-5
Ireland	52.6	51.5	53.0	50.2	51.7	51.3	52.1	53.7	55.7	55-5	53.8	53.6	55.0		56.o	54.6	56.1	55-4	54.4	58.1	59.1	57.6	56.2	54.1	56.6
Australia	48.0	52.3	44.2	50.4	51.7	52.1	50.2	52.5	51.9	51.5	53-5	58.1	53.4	51.0	51.8	56.4	46.9	49.8	50.9	54.2	55.4	51.2	59.3	57.5	55.0
Japan	48.2	47.7	48.1	49.3	49.5	50.4	51.4	51.3	52.4	52.7	53-3	52.4	52.7	53.1	52.4	52.1	52.2	52.9	52.8	53.6	54.0	54.8	54.1	53.1	53.0
China	49.4	49.2	48.6	50.6	50.0	50.1	51.2	50.9	51.9	51.0	51.7	51.2	50.3	49.6	50.4	51.1	51.6	51.0	51.0	50.8	51.5	51.5	51.6	51.0	51.0
Indonesia	50.9	50.6	51.9	48.4	50.4	50.9	48.7	49.7	49.0	50.4	49.3	50.5	51.2	50.6	49.5	48.6	50.7	50.4	50.1	50.4	49.3	49.9	51.4	50.7	50.3
Korea	50.0	50.1	50.5	50.1	48.6	47.6	48.0	48.0	49.4	49.0	49.2	48.4	49.4	49.2	50.1	49.1	49.9	50.6	50.2	51.2	49.9	50.7	50.3	49.1	49.8
Taiwan	49.7	48.5	50.5	51.0	51.8	52.2	52.7	54.7	56.2	55.6	54.5	56.2	54.4	53.1	53.3	53.6	54.3	54.2	53.6	56.3	56.6	56.9	56.0	55-3	54.5
India	50.5	50.7	51.7	51.8	52.6	52.1	54.4	52.3	49.6	50.4	50.7	52.5	52.5	51.6	50.9	47.9	51.2	51.2	50.3	52.6	54.7	52.4	52.1	51.0	53.1
Brazil	42.6	41.6	43.2	46.0	45.7	46.0	46.3	46.2		44.0		49.6	50.1	52.0	50.5	50.0	50.9	50.9	51.2	53.5	52.4	51.2	53.2	53.4	49.8
Mexico	52.4	53.6	51.1	50.6	50.9	51.9	51.8	51.1	50.2	50.8	50.6	51.5	50.7	51.2	52.3	51.2	52.2	52.8	49.2	52.4	51.7	52.6	51.6	52.4	52.1
Russia	48.0		51.5	49.5	50.8	51.1	52.4	53.6	53.7		52.5	52.4	5,	5 52.4	5 5	52.7	5 51.6	51.9	51.1	51.5	52.0	2	50.2		49.5

Severe Contraction

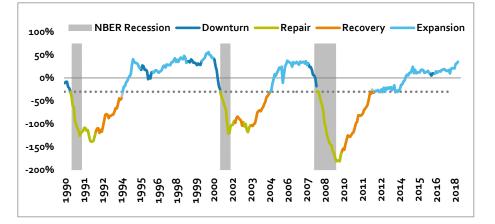
Strong Expansion

Source: JP Morgan Asset Management, Markit, FactSet, Bloomberg, Haver Analytics, Bloomberg, Morgan Stanley Wealth Management GIC. Colors are based on PMI relative to index level of 50. A PMI over 50 indicates that the sector is expanding, while a PMI under 50 indicates that the sector is contracting.

Morgan Stanley & Co. Cycle Models

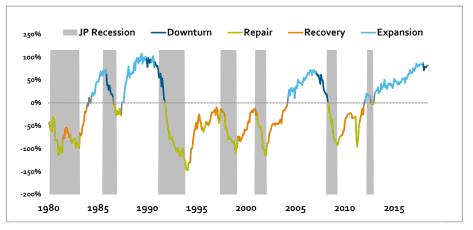
Morgan Stanley Cycle Indicator Index - US

As of June 29, 2018

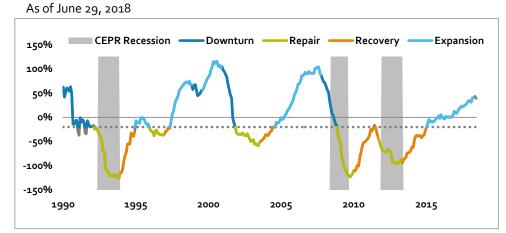


Morgan Stanley Cycle Indicator Index – Japan

As of June 29, 2018



Morgan Stanley Cycle Indicator Index - Euro Area

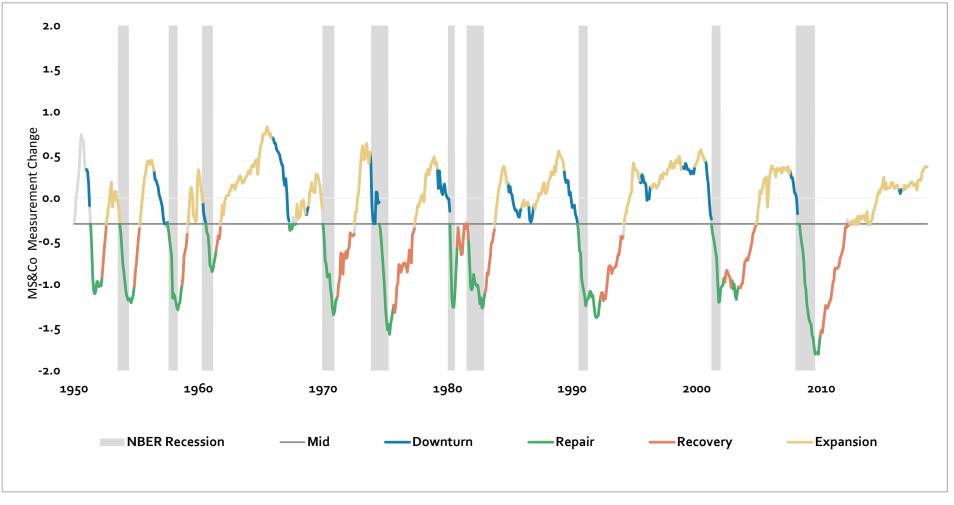


Source: Morgan Stanley & Co. Research, NBER, Bloomberg, Haver Analytics, FactSet. The Morgan Stanley Cycle Indicator Indices measure the deviation from historical norms for macro factors including employment, credit conditions, corporate behavior and the yield curve. The repair phase occurs due to the lag time between when these factors are beginning to improve and when they turn positive.

Economic Cycle Indicator

Morgan Stanley Cycle Indicator for US Economy

As of July 31, 2018



Source: Morgan Stanley & Co., Bloomberg, Haver Analytics, NBER. Grey bars indicate periods of recession. (1) The Morgan Stanley US Cycle Indicator measures the deviation from historical norms for macro factors including employment, credit conditions, corporate behavior and the yield curve. The repair phase occurs due to the time lag between when these factors are beginning to improve and when they turn positive. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

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1.5

1.0

0.5

0.0

-0.5

-1.0

-1.5

-2.0

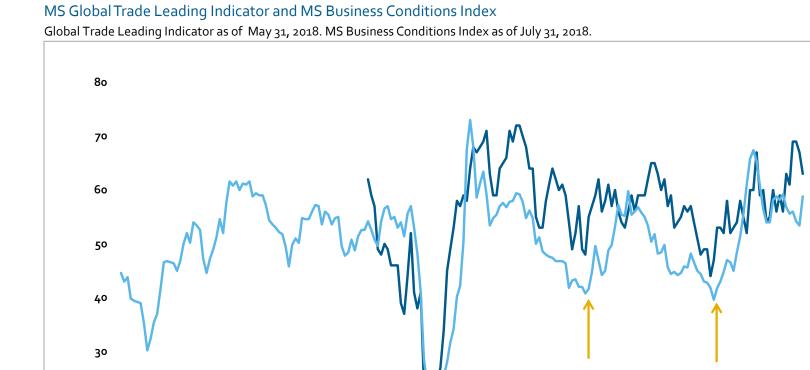
Feb. 2016

2015

Morgan Stanley Global Trade Leading Indicator (right axis)

2017

Global Trade and Business Conditions Indicators



Source: Bloomberg, Morgan Stanley Wealth Management GIC. The Morgan Stanley Global Trade Leading Indicator is designed to forecast global trade dynamics with a one-month lead. It is based on oil and other commodity prices, shipping rates, the US dollar, purchasing manager and business sentiment surveys.

2009

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

2011

Nov. 2012

2013

2003

2005

Morgan Stanley Business Conditions Composite Index (left axis)

2007

20

10

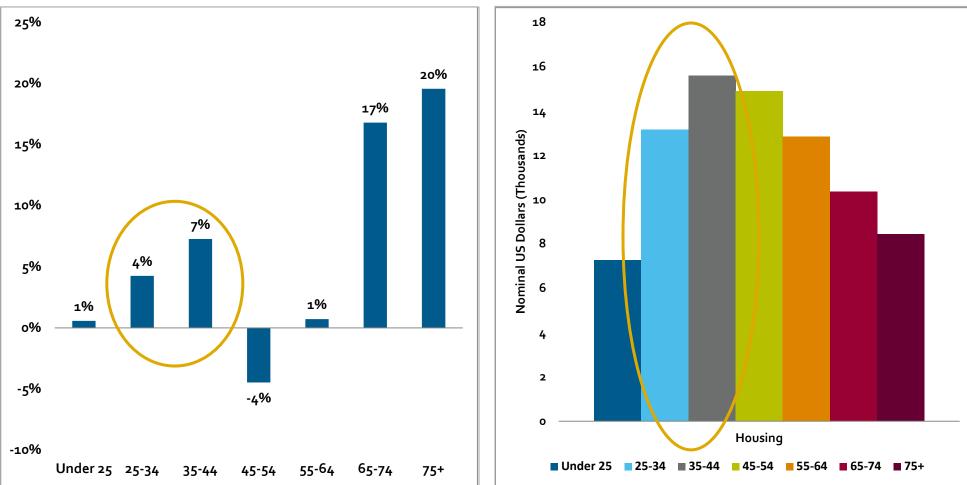
2001

Demand Drivers: Projected Growth in First-Time Home Buyers

US Population Projected Change Over the Next 5 Years by Age Cohort As of December 31, 2017

Portfolio Spend on Housing by Age Cohort

As of December 31, 2016

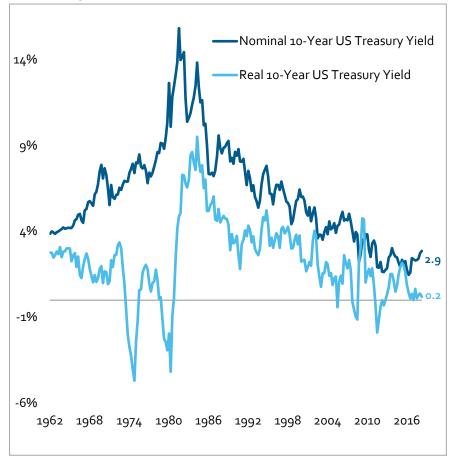


Source: Bloomberg, Morgan Stanley Wealth Management GIC

US Rates

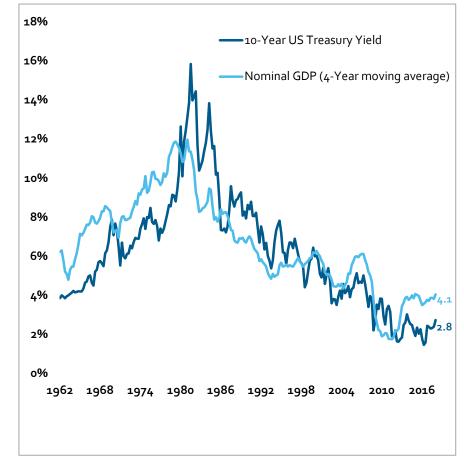
US 10-Year Treasury Nominal and Real Yields¹

As of June 29, 2018



US 10-Year Treasury Yield Vs. Nominal GDP

As of March 31, 2018



Source: Bloomberg, Robert Shiller, FactSet, US Department of the Treasury, Morgan Stanley Wealth Management GIC. (1) Nominal yields and nominal GDP do not factor in the effects of inflation, whereas real yields and real GDP adjust for changes due to inflation.

Prior Hiking Cycles have had Solid Equity Returns

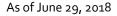
As of June 29,2018

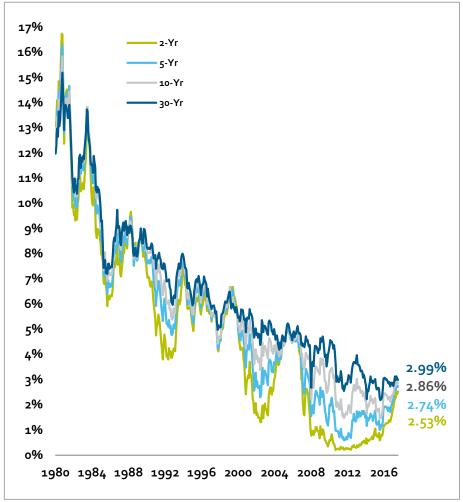
	1954-1957	1958-1959	1961-1969	1972-1974	1976-1981	1983-1984	1986-1989	1994-1995	1999-2000	2004-2006
Starting Fed Funds Rate	0.8%	0.6%	1.2%	3.3%	4.8%	8.8%	6.0%	3.1%	4.7%	1.0%
Fed Funds Rate at End of Cycle	3.5%	4.0%	8.6%	12.9%	19.0%	11.2%	9.9%	6.1%	6.5%	5.0%
Length of Hiking Cycle (Years)	2.9	1.5	8.1	2.4	5.3	1.3	2.3	1.2	1.1	2.1
Increase in Rates (bps)	267	337	744	963	1420	243	381	300	179	399
Percent Increase in Rates	322%	535%	636%	293%	293%	28%	63%	98%	38%	399%
Annualized Nominal GDP Growth	7.0%	7.9%	7.7%	10.5%	11.0%	12.1%	7.4%	5.8%	6.9%	6.4%
Annualized Inflation	1.9%	1.1%	2.6%	7.7%	9.7%	4.1%	4.5%	3.1%	3.4%	3.4%
Annualized S&P Returns	6.4%	20.4%	4.5%	-11.5%	4.6%	1.0%	8.3%	8.5%	12.1%	8.2%

Source: Bloomberg, Haver Analytics, Morgan Stanley Wealth Management GIC

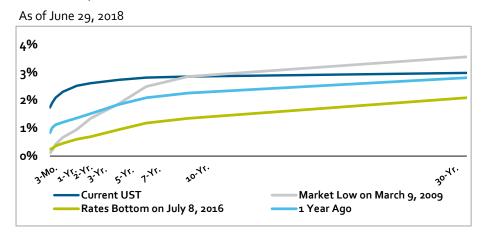
USYields

Historical US Treasury Yields by Maturity



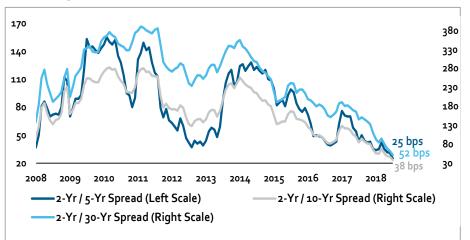


US Treasury Yield Curves



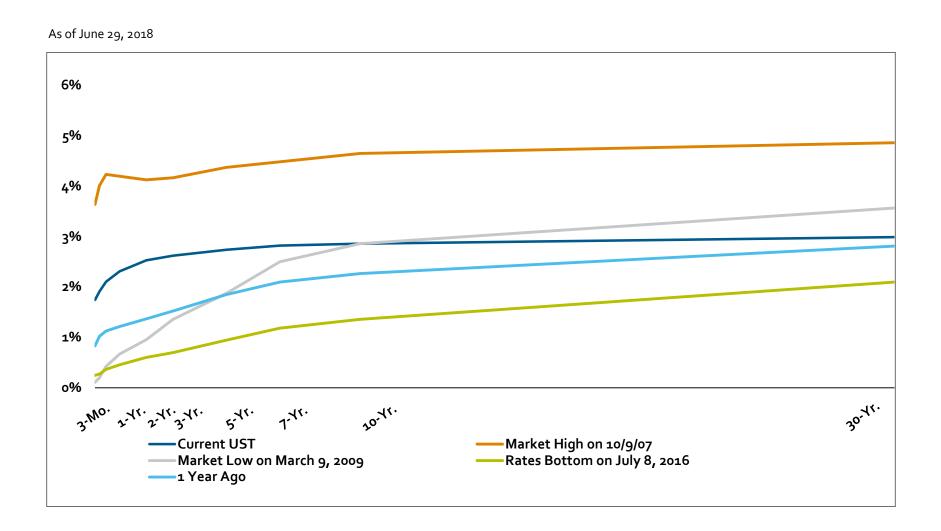
US Treasury Yield Spreads

As of June 30, 2018



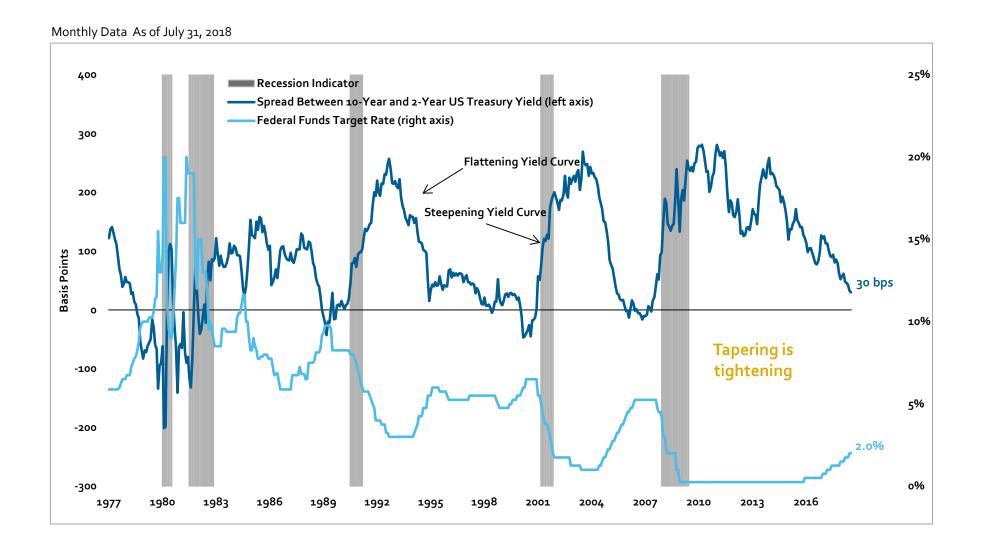
Source: FactSet, Bloomberg, US Department of the Treasury, Morgan Stanley Wealth Management GIC.

US Treasury Yield Curve



Source: Bloomberg, US Department of the Treasury.

US Yield Curve and Federal Funds Target Rate

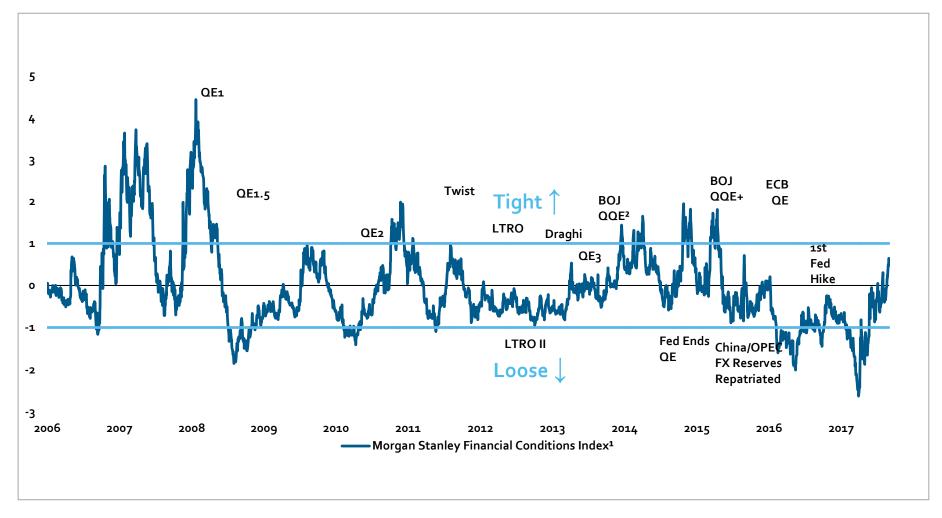


Source: FactSet, Morgan Stanley Wealth Management GIC.

Future Rate Hikes Will Likely Depend on Financial Conditions

Morgan Stanley Financial Conditions Index¹

Monthly Data as of June 29, 2018

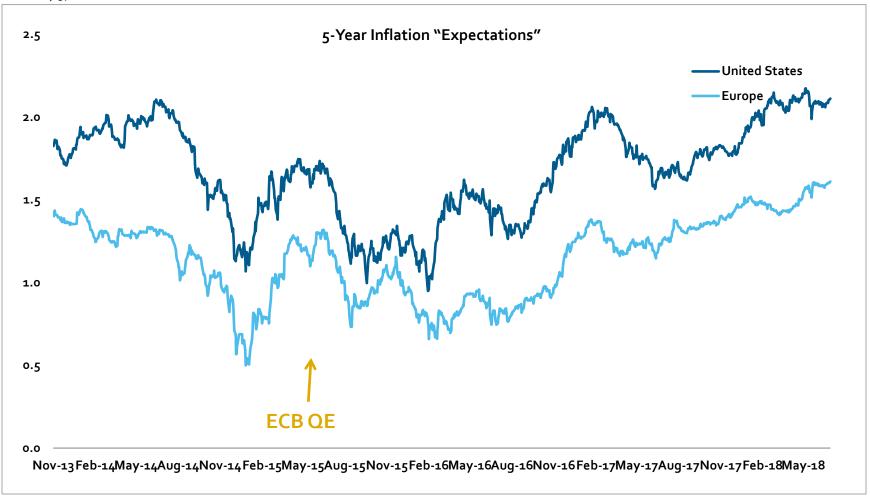


Source: Bloomberg, Morgan Stanley Wealth Management GIC. (1) The y-axis measures the Morgan Stanley Financial Conditions Index, a weighted index comprised of changes in equities (S&P 500), short-term interest rates (3-month Treasury), long-term interest rates (10-year Treasury) and USD currency (Morgan Stanley Dollar Index). (2) Bank of Japan Quantitative and Qualitative Easing (QQE).

US and European Inflation Expectations

5-Year Breakevens for Europe and US

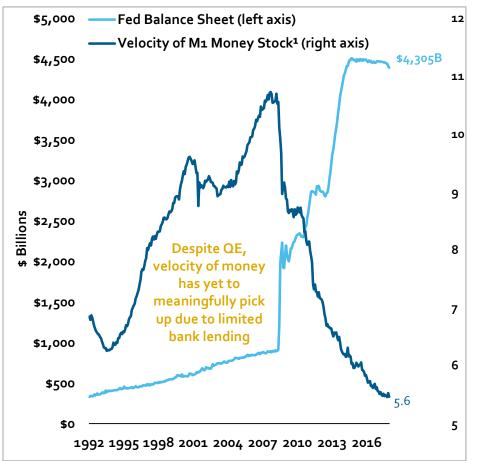
As of July 9, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Fed "Money Printing" Has Not Caused Inflation Because Money Velocity Has Plummeted

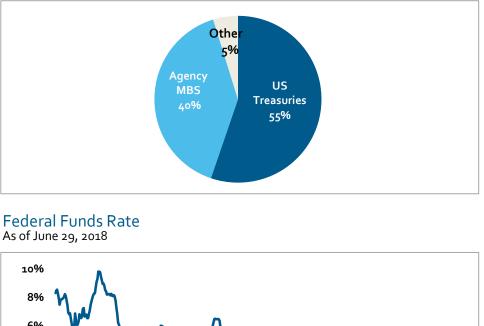
Federal Reserve Balance Sheet Size



Fed Balance as of June 29, 2018; Velocity of M1 as of May 31, 2018

Federal Reserve Balance Sheet Overview

As of June 29, 2018



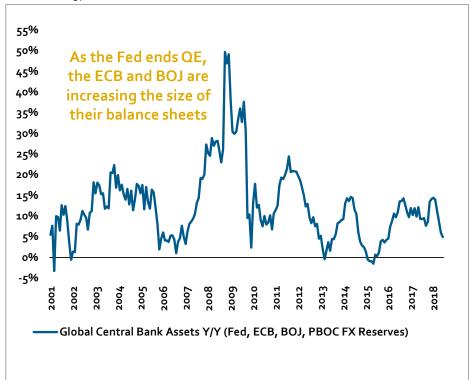
8% 4% 6% 4% 2% 1.91% 1.91% 1.91% 1.985 1990 1995 2000 2005 2010 2015

Source: Federal Reserve Bank of New York, US Department of the Treasury, Haver Analytics, Bloomberg, Morgan Stanley Wealth Management GIC. (1) The velocity of money is the frequency at which one unit of currency is used to purchase domestically produced goods and services within a given time period. (2) M1 = cash and assets that can quickly be converted into currency. (3) M2 = a measure of money supply that includes cash and checking deposits (M1) as well as near money.

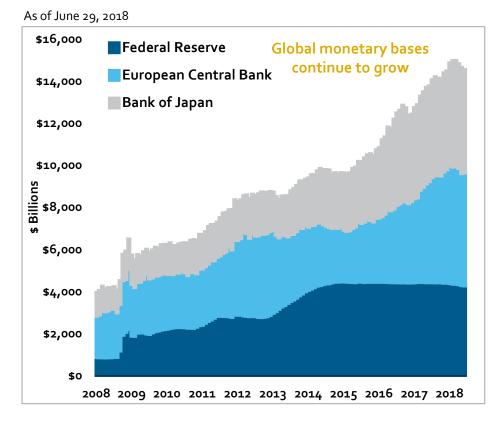
Central Bank Liquidity Remains Expansive

Global Central Bank Assets Y/Y Percent Change

As of June 29, 2018

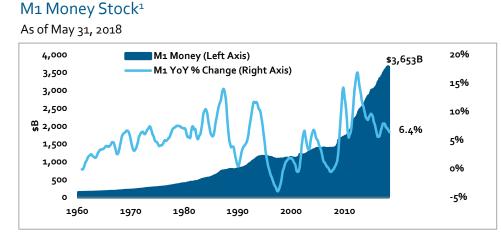


Size of Global Monetary Bases



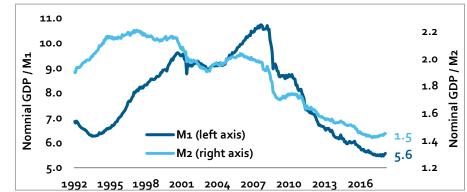
Source: Federal Reserve, European Central Bank, Bank of Japan, Bank of England, Haver Analytics.

Money Supply and Velocity



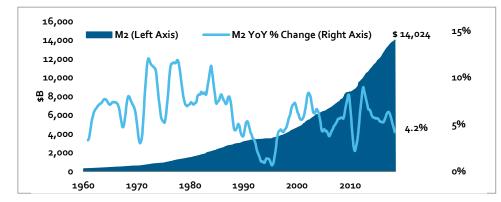
Velocity of M1 and M2 Money Stock²

As of May 31, 2018

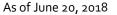


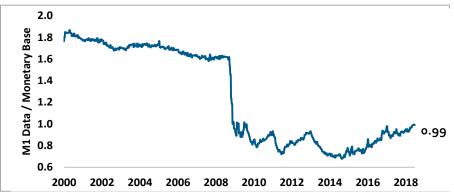
M₂ Money Stock³

As of May 31, 2018



M1 Money Multiplier⁴

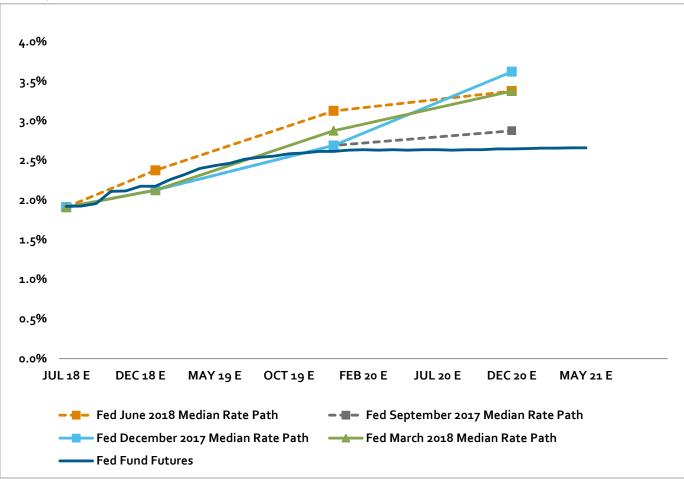




Source: Federal Reserve, HSBC Bank, FactSet, Haver, Morgan Stanley Wealth Management GIC. (1) M1 = cash and assets that can quickly be converted into currency. (2) The velocity of money is the frequency at which one unit of currency is used to purchase domestically produced goods and services within a given time period. (3) M2 = a measure of money supply that includes cash and checking deposits (M1) as well as near money. (4) The M1 Money Multiplier is the ratio of M1 to Monetary Base.

Market Expects a Slow Pace of Rate Hikes vs. Fed's Projections

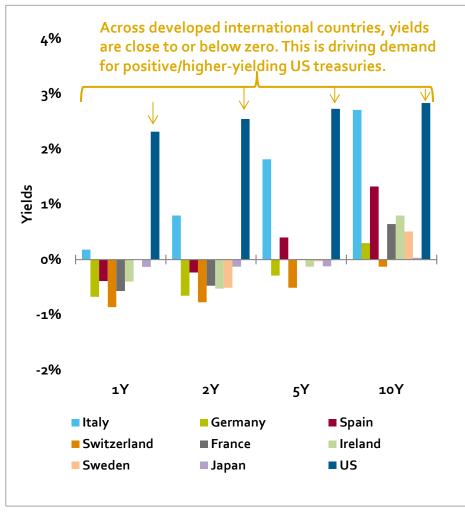
Fed Funds Futures Curve and Fed Median Rate Path As of July 31, 2018



Source: Federal Reserve, Bloomberg, Morgan Stanley Wealth Management GIC. Squares indicate Fed members' median projection for interest rates.

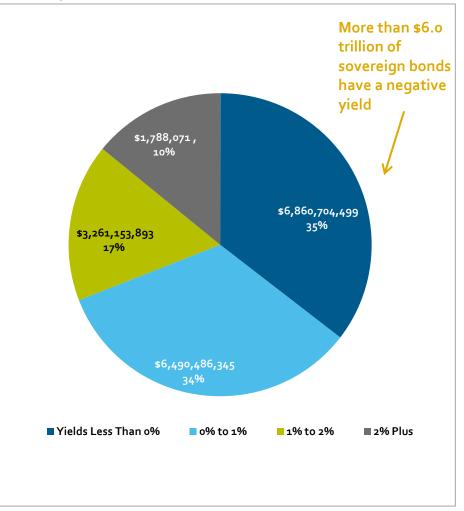
Negative Yields Abroad Have Driven Demand for US Treasuries

Select Global Government Yields Monthly Data as of June 29, 2018



% of Sovereigns Trading at Negative Yields¹

As of June 29, 2018

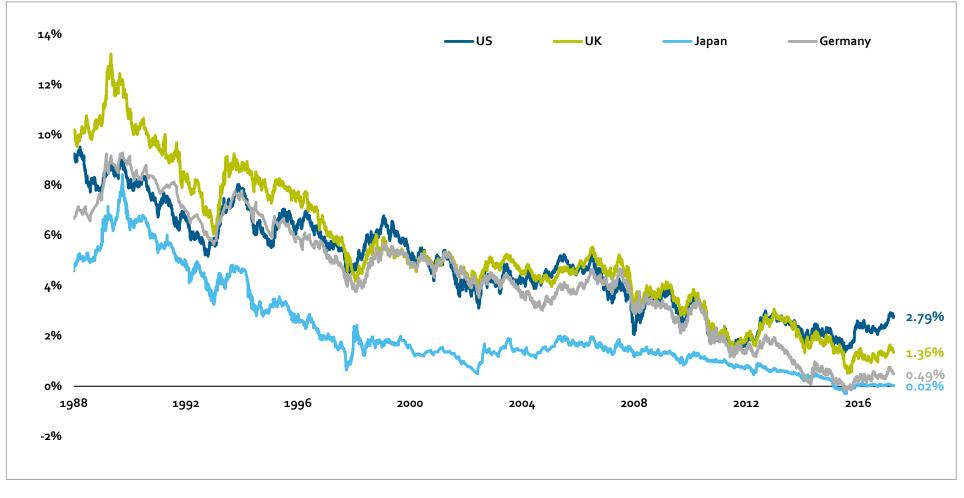


Source: Bloomberg, Morgan Stanley Wealth Management GIC. (1) Percentage of Sovereigns trading at negative yields uses Bloomberg Global Treasury ex US Index as a proxy for the global developed bond market.

Global Rates Have Fallen Over Last 30 Years, Leaving Limited Opportunities in Fixed Income

10-Year Sovereign Bond Yields





Source: FactSet, Morgan Stanley Wealth Management GIC

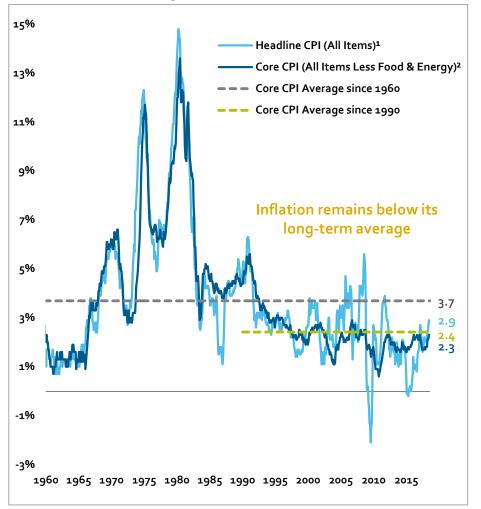
2.1%

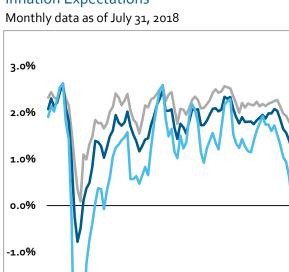
٥%

US Inflation Metrics

Consumer Price Indices¹

Year-over-Year Percent Change as of June 30, 2018





10-Yr Inflation Expectations

5-Yr Inflation Expectations

2-Yr Inflation Expectations

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Inflation Expectations²

Source: Bureau of Labor Statistics, Haver, FactSet, Morgan Stanley Wealth Management GIC. (1) Headline CPI measures inflation that is not adjusted for food and energy prices; core CPI excludes food and energy prices. (2) Defined as Breakeven rate, which is the difference in yield between inflation-protected and nominal debt of the same maturity.

-2.0%

-3.0%

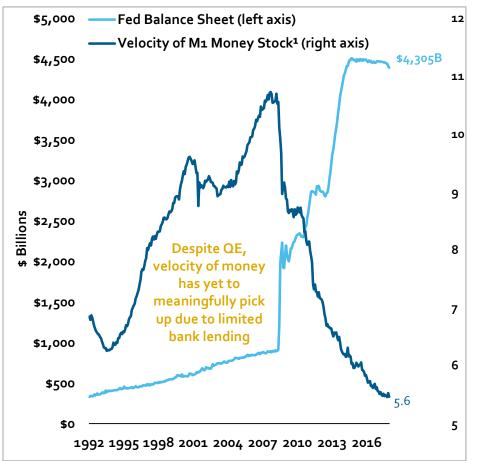
-4.0%

-5.0%

-6.0%

Fed "Money Printing" Has Not Caused Inflation Because Money Velocity Has Plummeted

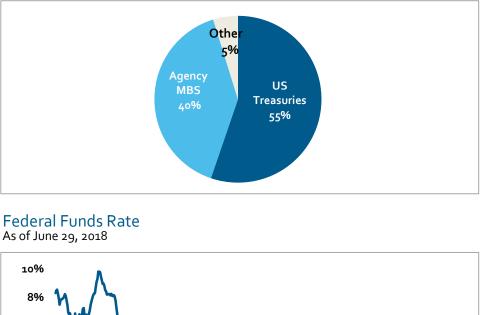
Federal Reserve Balance Sheet Size

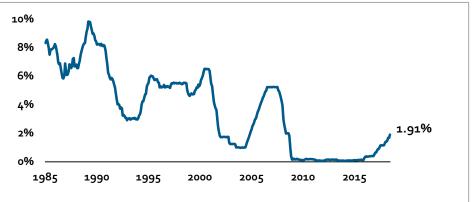


Fed Balance as of June 29, 2018; Velocity of M1 as of May 31, 2018

Federal Reserve Balance Sheet Overview

As of June 29, 2018



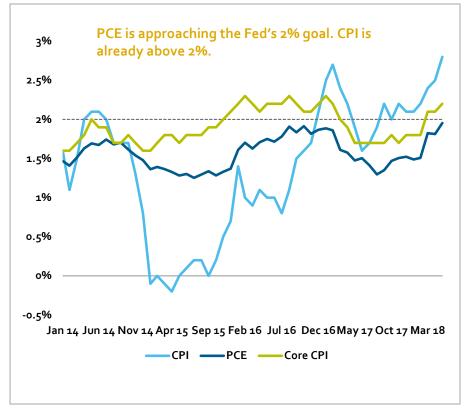


Source: Federal Reserve Bank of New York, US Department of the Treasury, Haver Analytics, Bloomberg, Morgan Stanley Wealth Management GIC. (1) The velocity of money is the frequency at which one unit of currency is used to purchase domestically produced goods and services within a given time period. (2) M1 = cash and assets that can quickly be converted into currency. (3) M2 = a measure of money supply that includes cash and checking deposits (M1) as well as near money.

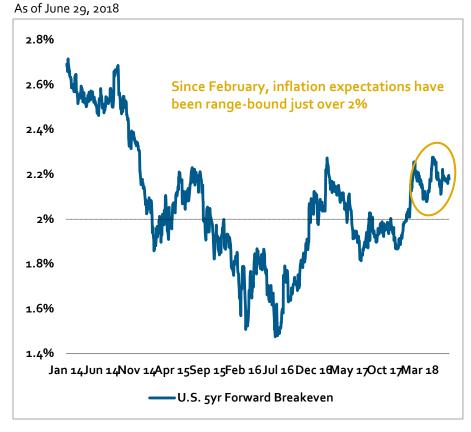
Inflation has Rebounded and Hovering Near the Fed's 2% Goal

CPI and PCE Inflation Measures

As of May 31, 2018



Inflation Expectations Are Rising

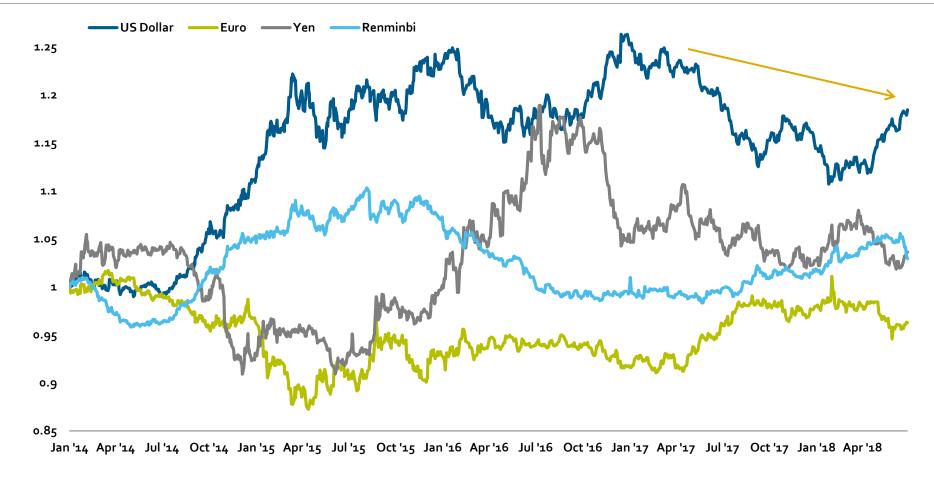


Source: Bloomberg, Morgan Stanley Wealth Management GIC

US Dollar Fell 11% from Post-Election Peak but has Recovered Slightly

Trade-Weighted Currency Indices

As of June 29, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC

President Trump: Sector Implications

As of June 2018

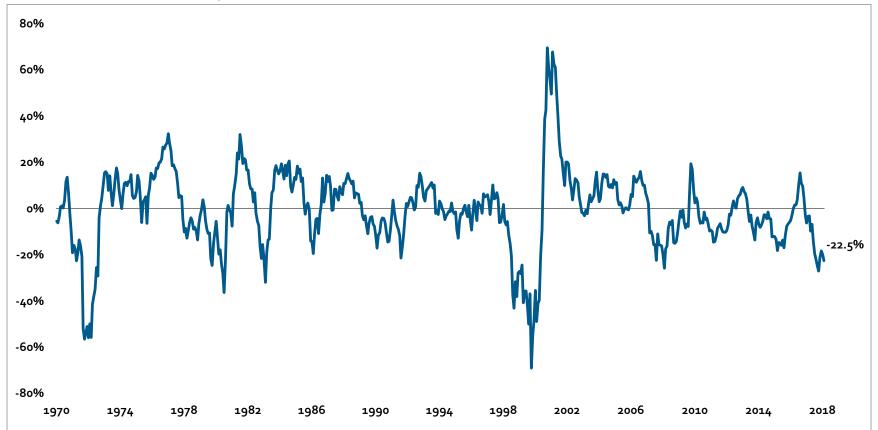
	Tru	mp
	Policy Theme	Implications (+/-)
Гechnology	 Repatriation of overseas corporate cash at 15.5% tax rate Protectionist trade policies 	+ Companies with large foreign cash balances - Companies with foreign exposures in supply chains
Financials	 Less financial regulation Corporate tax reform 	+ Banks, asset managers
Healthcare	 Deal with drug pricing Pass own reforms to broaden healthcare 	- Pharmaceuticals / Biotech - Affordable Care Act beneficiaries
Consumer Discretionary	 Middle-class tax relief Lower corporate tax rate to 21% Protectionist trade policies 	+ Consumer goods exporters - Importers, autos
Consumer Staples	Continued support for increased tariffs	- Consumer goods importers +/- Consumer goods exporters + Volatility and uncertainty
ndustrials	 Committed to massive increase in infrastructure spending Protectionist trade policies 	+ Defense, infrastructure, energy related - Renewable energy
Energy	Supports US energy independence	+ Oil & gas, fossil fuels, nuclear - Clean energy
Jtilities	Traditional power generation	+ Coal, nuclear - Wind, solar, renewable
Materials	Committed to massive increase in infrastructure spending	+ Defense, infrastructure, energy related
Геlecom	Infrastructure spending	+ Internet/telecom infrastructure

Source: DonaldJTrump.com, Strategas Research Partners, Morgan Stanley Wealth Management Investment Resources

US Equities: Value Vs. Growth

Value/Growth Performance

12-Month Relative Return as of June 29, 2018



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research.

US Equity Valuation Metrics

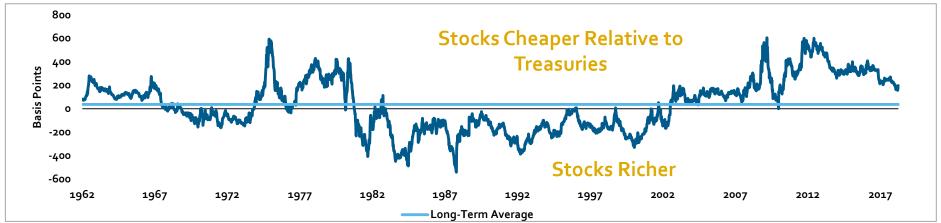
Valuation Measures

As of June 29, 2018, Market Cap as a Percent of GDP Data as of March 31, 2018; 1 Year ago data as of June 30, 2017

Valuation Measure	As of Jun 29, 2018	1 Year Ago	Three-Yr. Average	Five-Yr. Average	10-Yr. Average	15-Yr. Average
Forward P/E ¹	16.1	17.4	16.8	16.2	14.4	14.5
Trailing P/E	18.6	19.1	18.3	17.5	15.8	16.0
Price-to-Book	3.2	3.0	2.9	2.8	2.4	2.6
ROE	17.3%	15.8%	15.9%	15.8%	15.2%	15.7%
Dividend Yield	1.8%	1.9%	2.0%	1.9%	2.1%	1.9%
Shiller P/E ²	32.1	29.8	28.2	27.1	23.7	24.4
NTM Equity Risk Premium (Bps)	314.0	332.5	367.2	382.7	449.1	373.0
Market Cap as a % of GDP	137.29%	129.23%	124.60%	120.21%	101.36%	98.68%

Equity Risk Premium: S&P 500 Trailing Earnings Yield Vs. 10-Yr. Treasury Yield

Monthly Data as of July 06, 2018



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC. (1) Forward P/E = market price per share / estimated earnings per share (2) The Shiller P/E ratio, also known as the cyclically adjusted P/E ratio, uses a 10-year average of inflation-adjusted earnings to value the stock market. This Shiller P/E Ratio was calculated using the after-tax earnings in the National Income and Product Accounts (NIPA) report published by the Bureau of Economic Analysis. Equity risk premium is the excess return that an individual stock or the overall stock market provides over a risk-free rate. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time.

US Stocks Valuation Metrics

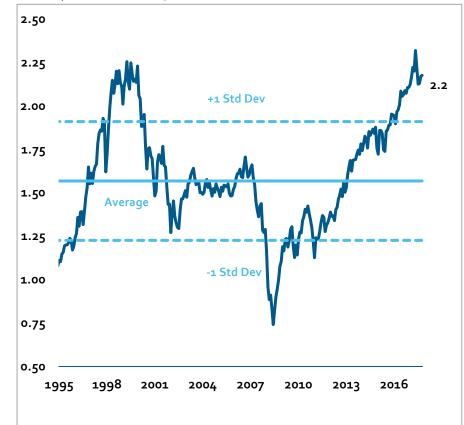
S&P 500 Forward P/E Ratio

Next 12 Months as of June 30, 2018



Price-to-Sales of S&P 500

Monthly Data as of June 29, 2018

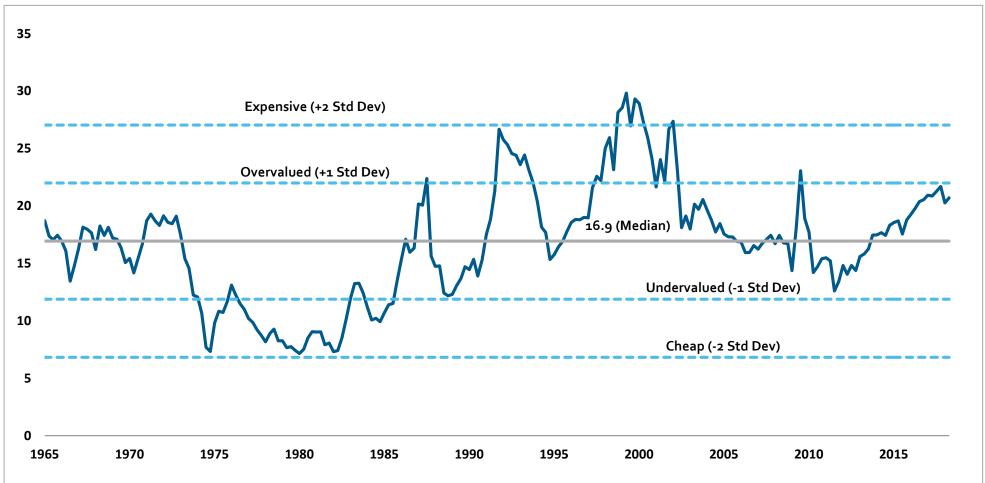


Source: Bloomberg, FactSet, Morgan Stanley Wealth Management. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

S&P 500 Historical P/E Ratio

S&P 500 Trailing Price/Earnings Ratio with Historical Median

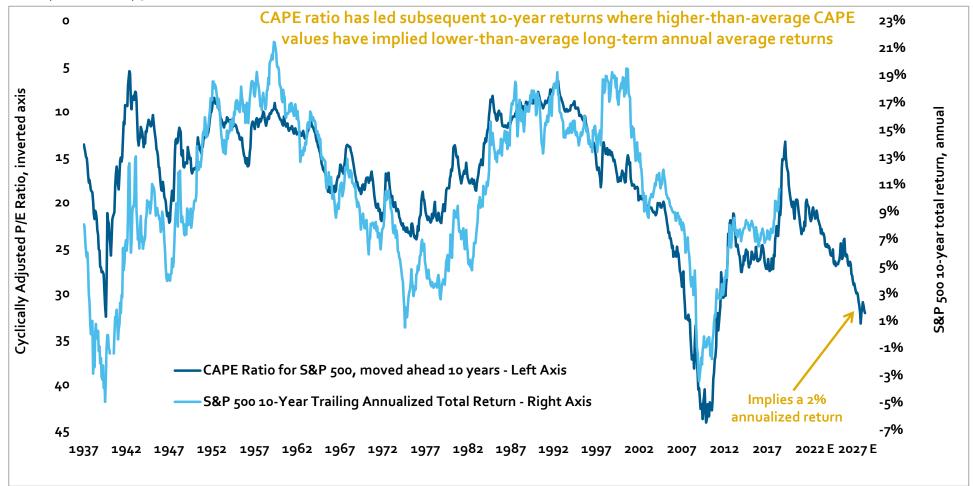
January 31, 1965 to June 29, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Cyclically Adjusted P/E Ratio (CAPE)¹ vs. S&P 500 10-Year Trailing Annualized Total Return

Monthly Data as of July 31, 2018

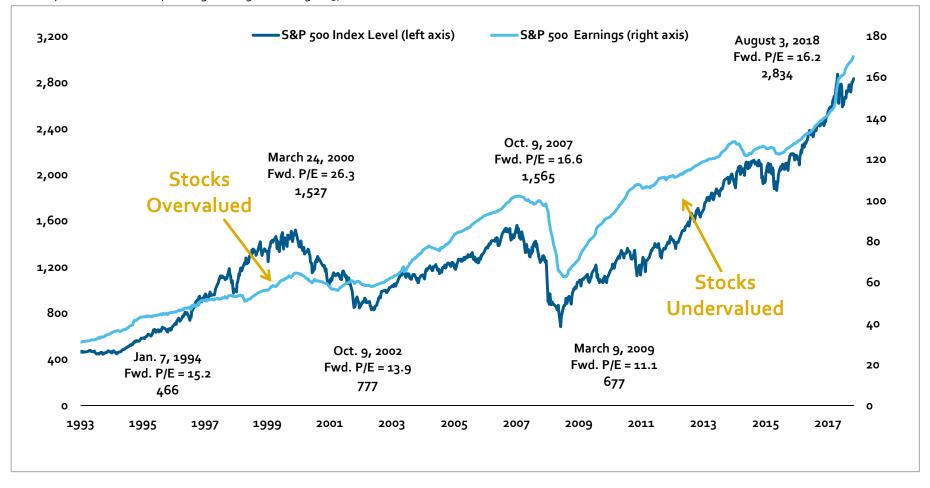


Source: FactSet, Morgan Stanley Wealth Management GIC. (1) The cyclically adjusted P/E ratio (CAPE), also known as the Shiller P/E ratio, uses a 10-year average of inflation-adjusted earnings to value the stock market. Historically, cyclically adjusted price-earnings ratios have led subsequent returns with a 10-year lag.

US Equity Performance vs. Earnings Performance

S&P 500 Index Level Vs. S&P 500 Operating Earnings

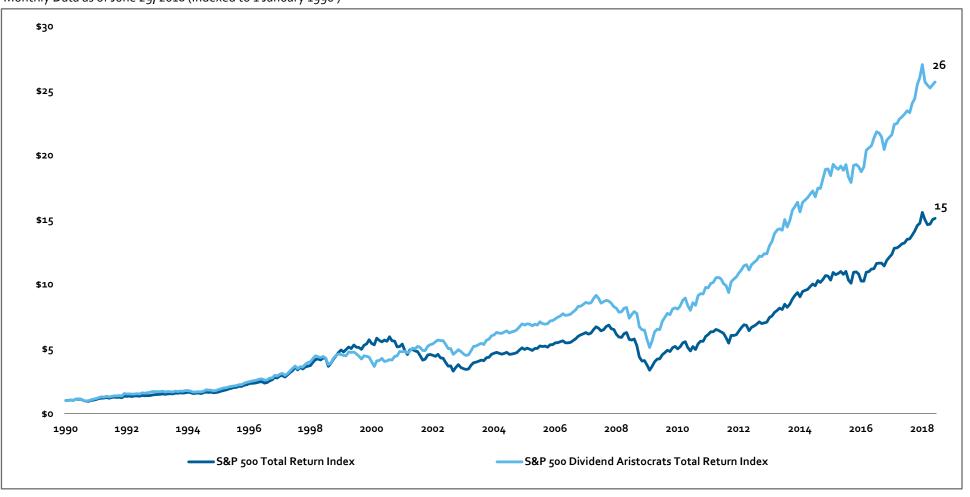
Monthly Index Level and Operating Earnings as of August 3, 2018



Source: Bloomberg. Stocks Overvalued = equity performance outpaces earnings performance. Stocks Undervalued = earnings performance outpaces equity performance. Fairly Valued = stock performance and earnings performance are in line with one another.

Dividend Aristocrats Vs. The S&P 500

Value of a \$1 Invested in the Dividend Aristocrats Vs. the S&P 500 Monthly Data as of June 29, 2018 (Indexed to 1 January 1990)

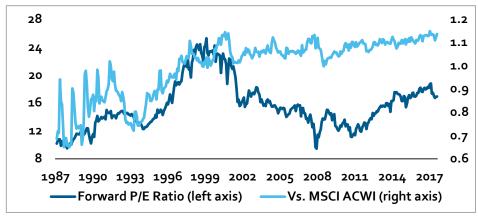


Source: Morgan Stanley Wealth Management GIC, Bloomberg.

Global Relative Valuations

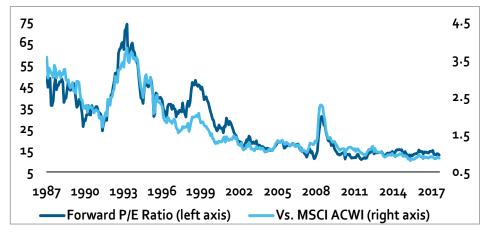
MSCI USA Forward P/E and Relative Valuation

As of July 31, 2018



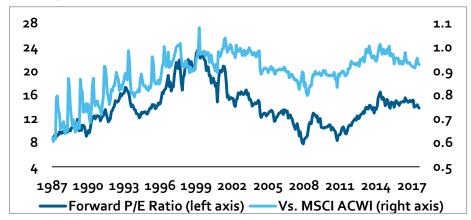
MSCI Japan Forward P/E and Relative Valuation

As of July 31, 2018



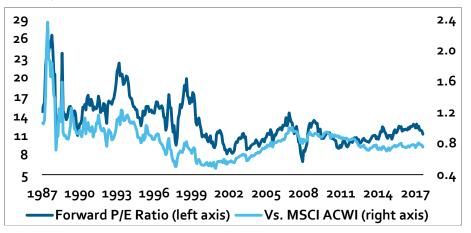
MSCI Europe Forward P/E and Relative Valuation

As of July 31, 2018



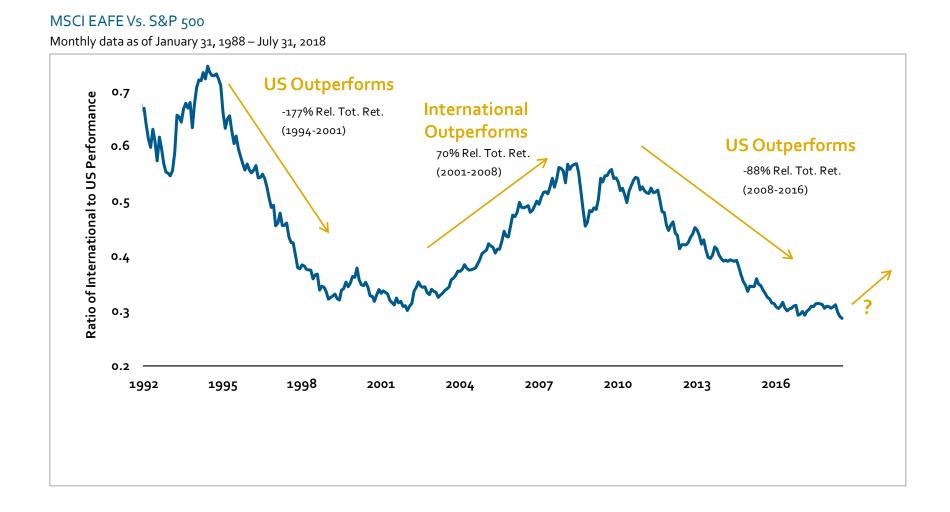
MSCI EM Forward P/E and Relative Valuation

As of July 31, 2018



Source: FactSet, Morgan Stanley Wealth Management GIC. (1) Forward P/E = market price per share / expected earnings per share.

Relative Performance of International vs. US Stocks Could Be Turning



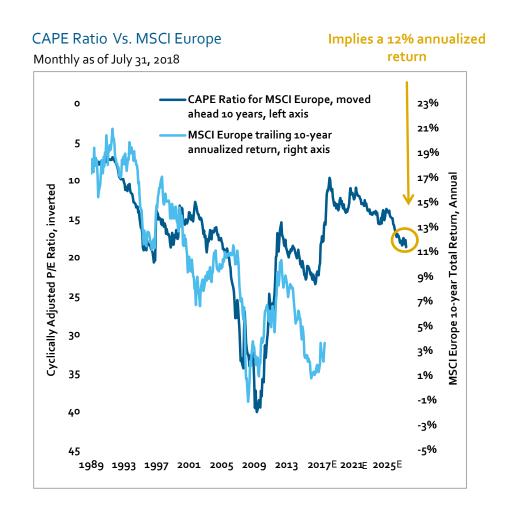
Source: FactSet, Morgan Stanley Wealth Management GIC

European Equities Appear Cheap

CAPE Ratio¹: MSCI Europe Relative to S&P 500

Monthly as of July 31, 2018

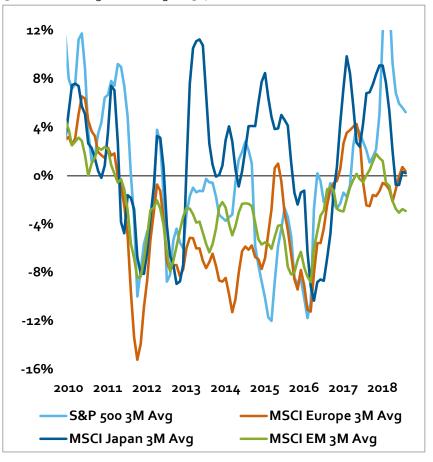




Source: FactSet, Morgan Stanley Wealth Management GIC. (1) The cyclically adjusted P/E ratio (CAPE), also known as Shiller P/E ratio, uses a 10-year average of inflation-adjusted earnings to value the stock market. Historically, cyclically adjusted price-earnings ratios have led subsequent returns with a 10-year lag. Recent price earnings levels suggest equity returns could be better going forward than they have been over the recent past, assuming the statistical relationship holds. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Earnings Growth and Revisions

Global Earnings Revisions Breadth¹



3-Month Average as of August 31, 2018

Expected EPS Growth

As of August 31, 2018

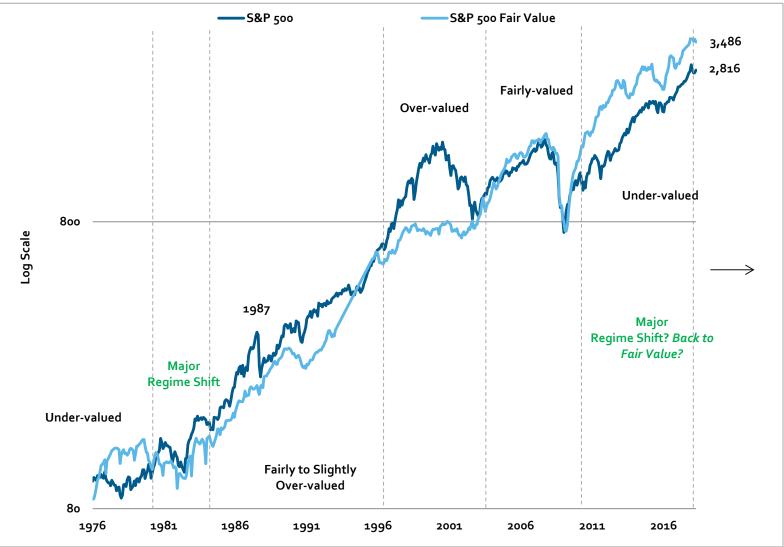
Regional Index MSCI USA	12-month Forward EPS Growth
	14.0%
MSCI Emerging Markets	12.8%
MSCI All Country World	11.8%
MSCI Asia ex Japan	10.2%
MSCI Europe	9.6%
MSCI Japan	6.4%

Source: FactSet, Morgan Stanley Wealth Management GIC. Indices used: MSCI USA for US, MSCI Europe for Europe, MSCI Japan for Japan, MSCI Emerging Markets for Emerging Markets, MSCI Asia ex Japan for Asia ex Japan. (1) Earnings revisions breadth is defined as the number of positive analyst revisions minus the number of negative analyst revisions divided by the total number of revisions. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material. This slide sourced from Market Performance section.

S&P500 Fair-Value Metric

S&P 500 "Fair Value" (NTM or next 12 month EPS divided by BAA yield) Vs. S&P 500

As of July 31, 2018

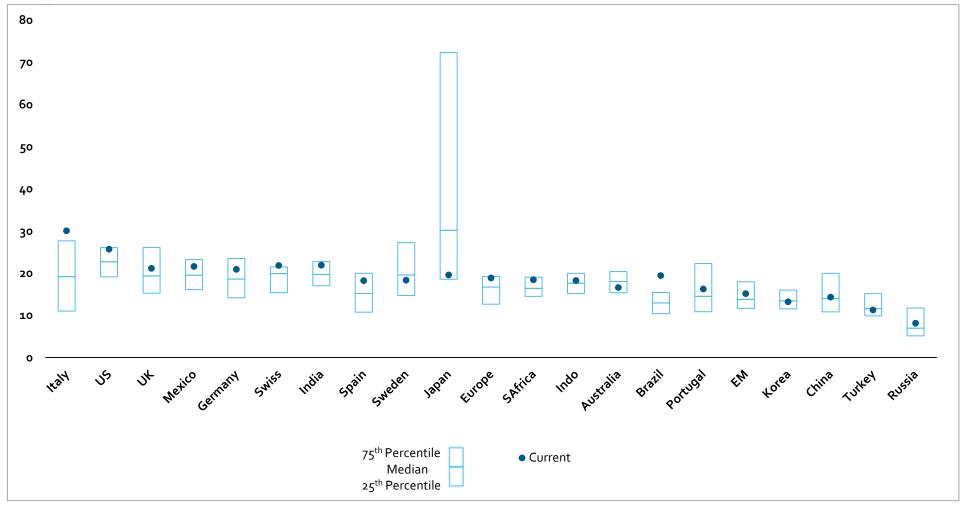


Source: Bloomberg, Morgan Stanley Wealth Management GIC. Fair value is 12-month forward consensus earnings estimate divided by the Moody's Baa corporate bond interest rate. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Shiller P/E Ratios Across the World

Shiller P/E Ratios of Select Countries

Monthly data as of March 31, 2018

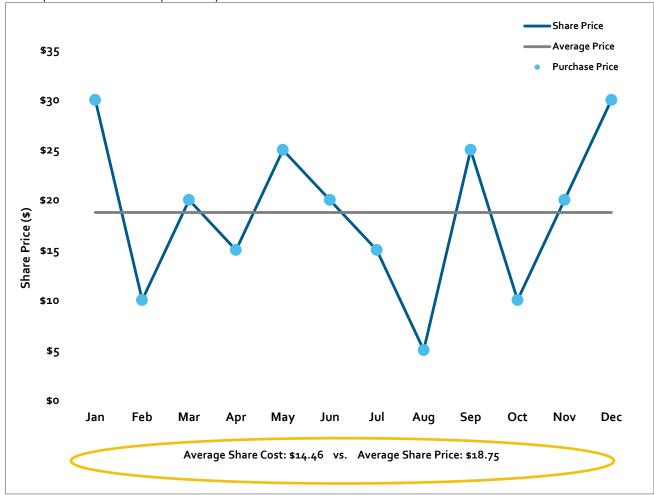


Source: Shiller P/E ratios are calculated by MS&Co. Research. The Shiller P/E ratio is a valuation measure usually applied to the US S&P 500 equity market. It is defined as price divided by the average of 10 years of earnings (moving average), adjusted for inflation.

Dollar Cost Averaging in a Fluctuating Market

Investments of \$300 in a Fluctuating Market

Example for Illustrative Purposes Only



		Number of Shares	
Month	Share Price	Purchased	
Jan	\$30	10	
Feb	\$10	30	
Mar	\$20	15	
Apr	\$15	20	
May	\$25	12	
Jun	\$20	15	
Jul	\$15	20	
Aug	\$5	60	
Sep	\$25	12	
Oct	\$10	30	
Nov	\$20	15	
Dec	\$30	10	
Total Shares Purchased		249	
Average Price Per Share		\$18.75	
Average Cost Per Share		\$14.46	

Source: Morgan Stanley Wealth Management GIC.

Dollar Cost Averaging Lowers Average Cost Per Share

An Example of Dollar Cost Averaging In Rising Markets Example for Illustrative Purposes Only

Amount Invested	Price Per Share	Number of Shares	Average Cost Per Share
\$200	\$10.00	20.0	\$12.63
\$200	\$12.00	16.7	_
\$200	\$13.00	15.4	_
\$200	\$14.50	13.8	_
\$200	\$15.00	13.3	-
\$1,000	\$12.90	79.2	

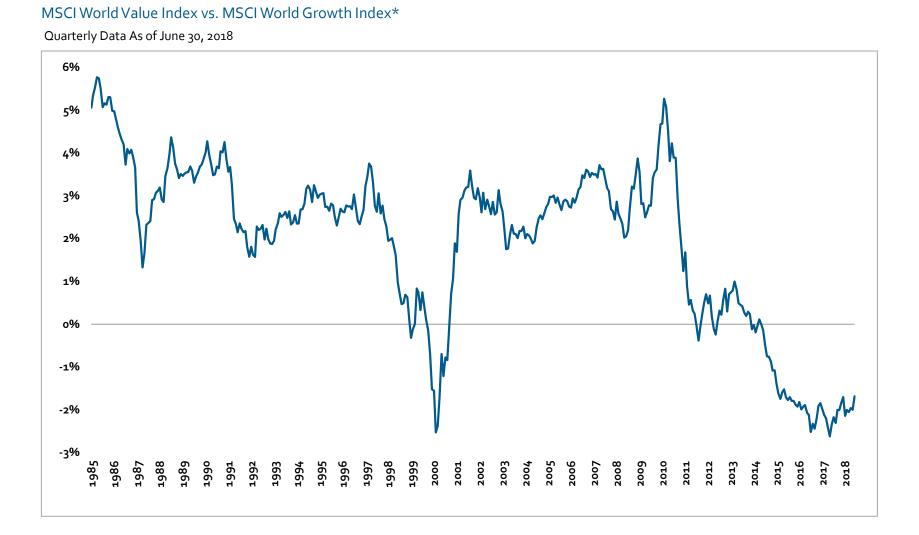
Average Cost per Share is lower than Average Price per Share An Example of Dollar Cost Averaging In Falling Markets Example for Illustrative Purposes Only

Amount Invested	Price Per Share	Number of Shares	Average Cost Per Share
\$200	\$15.00	13.3	\$12.16
\$200	\$13.50	14.8	_
\$200	\$12.00	16.7	_
\$200	\$11.50	17.4	_
\$200	\$10.00	20.0	_
\$1,000	\$12.40	82.2	

Average Cost per Share is lower than Average Price per Share

Source: Morgan Stanley Wealth Management GIC.

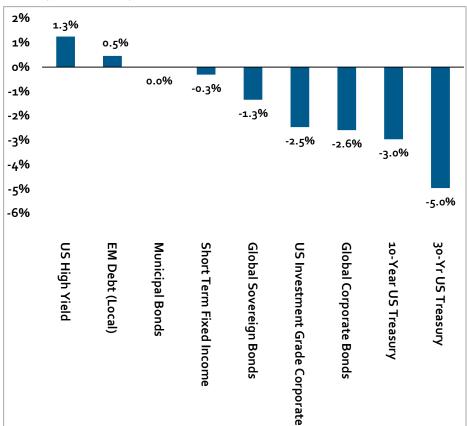
Value Underperformance Nears TMT Bubble Years' Low



Source: FactSet, Morgan Stanley Wealth Management GIC. *Relative total return, 10-year compound annual growth rate.

Fixed Income Performance and Spreads

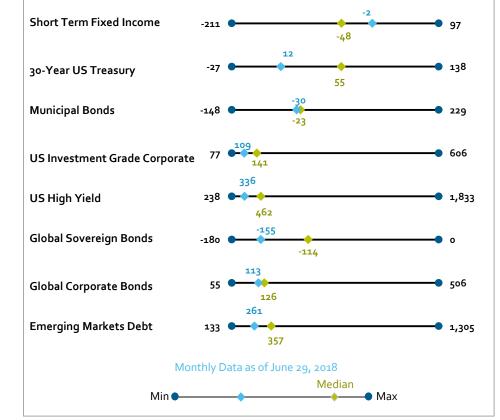




Monthly Data as of July 31, 2018

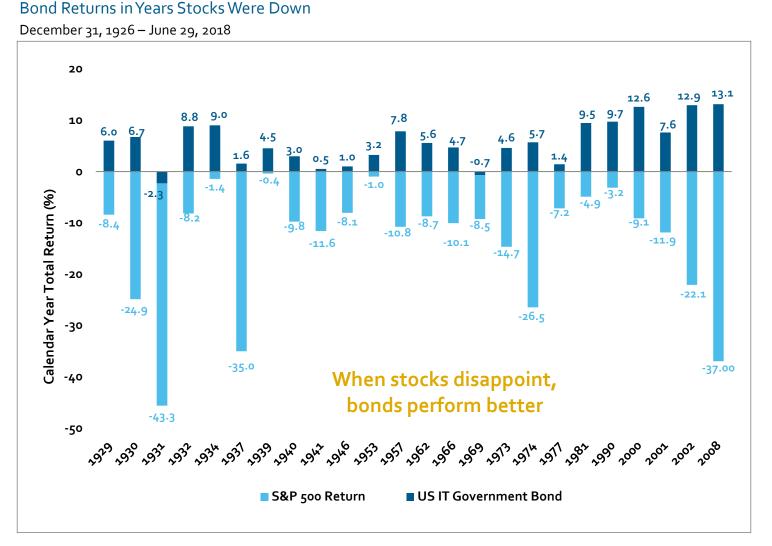
Yield Spreads Vs. Past 20 Years ²

Monthly Data as of July 31, 2018



Source: FactSet, Bloomberg, Morgan Stanley Wealth Management GIC. (1) Indices used for this analysis include: Bloomberg Barclays US High Yield, Bloomberg Barclays US Gov/Credit Float Adjusted 1-5Y Bond (short duration), Bloomberg Barclays Global Aggregate Credit-Corporate, JP Morgan GBI-EM Global Diversified (EM debt), Bloomberg Barclays US Investment Grade Corporate, Bloomberg Barclays Muni Bond, and Bloomberg Barclays Global Aggregate Government (global sovereign). (2) Yield spread ranges are based on 20 years of data. Short Term Fixed Income, 30-Year US Treasury, Municipal Bonds, and Global Sovereign Bonds are benchmarked off the 10-Year US Treasury. All others are option-adjusted spread.

Bonds Provide Diversification When Stocks Disappoint

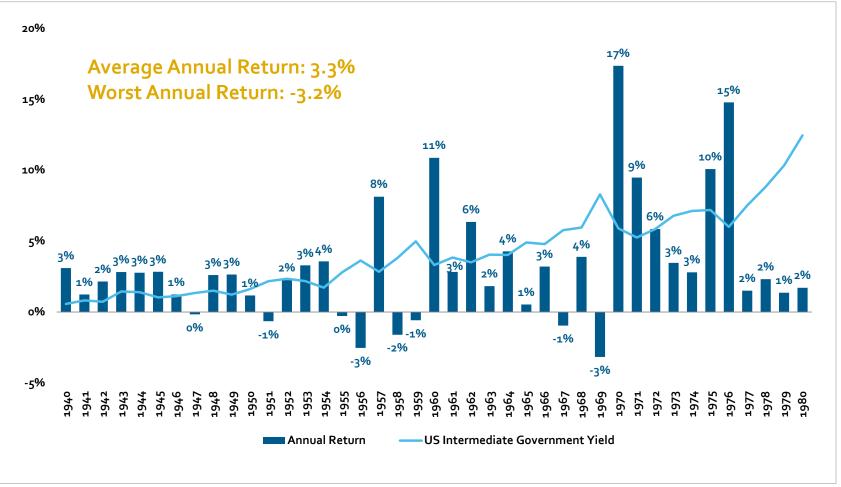


Source: Calculated by Morgan Stanley Wealth Management GIC using data provided by Morningstar. (c) 2018 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (i) is proprietary to Morningstar and/or its content providers; (ii) may not be copied or distributed; and (iii) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Aside from the S&P 500, all indices shown above are Ibbotson indices.. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.

Bonds Matter Even in Rising Rate Environments

Bond Returns During Periods of Rising Rates

December 1940 – December 1980

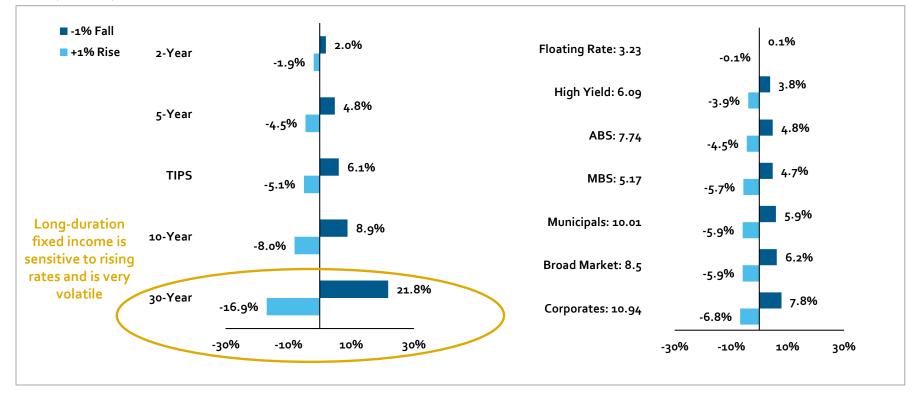


Source: Calculated by Morgan Stanley Wealth Management GIC using data provided by Morningstar. (c) 2018 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (i) is proprietary to Morningstar and/or its content providers; (ii) may not be copied or distributed; and (iii) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Aside from the S&P 500, all indices shown above are Ibbotson indices. For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material. Bond returns are based on FMR "Synthetic Agg" = 67% Intermediate Govt Bonds, 33% LT Corp.

Long-Duration¹ Bonds Can Be Risky When Rates Rise

Total Return Impact of a 1% Rise/Fall in Interest Rates

Monthly As of July 31, 2018

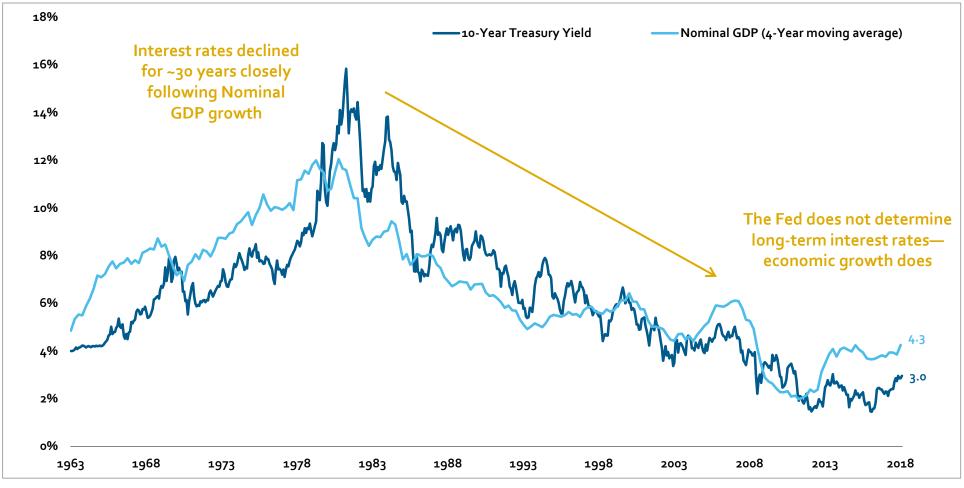


Source: FactSet, Morgan Stanley Wealth Management GIC. The following Bloomberg Barclays indices were used for the sectors above : US Aggregate for Broad Market, US Aggregate Securitized – MBS Index for MBS, US Corporates for Corporates for Corporate, Muni Bond 10-year Index for Municipals, Corporate High Yield Index for High Yield, US TIPS Index for TIPS, FRN (BBB) for Floating Rate, US Convertibles Composite for Convertibles and Bloomberg Barclays ABS + CMBS for ABS. Barclays US Treasury benchmark indices used for US Treasury data. (1) For more information about the risks to Duration please refer to the Risk Considerations section at the end of this material.

US Interest Rates vs. Nominal GDP Growth

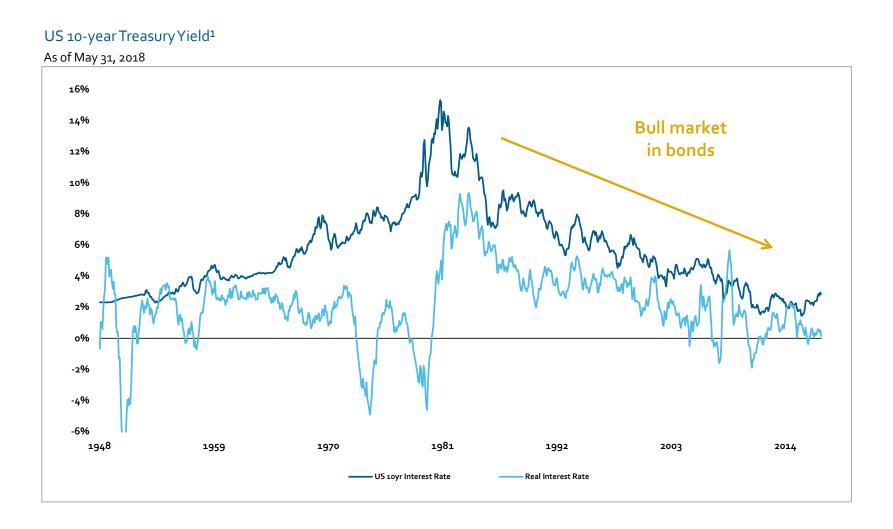
US 10-year Treasury Yield Vs. Nominal GDP

Treasury yield as of July 31, 2018; GDP as of June 30, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

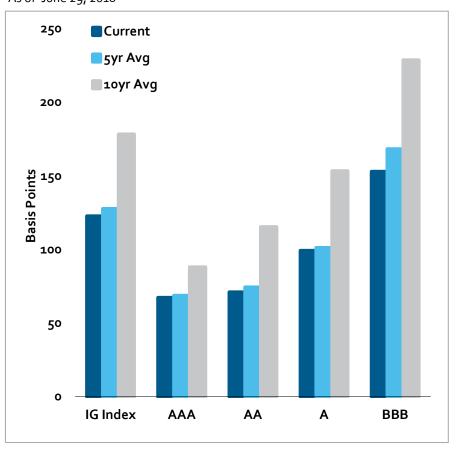
Long-Term Interest Rates: Real Vs. Nominal



Source: Robert J. Shiller, Morgan Stanley Wealth Management GIC. (1) Real yields prior to 1948 not included due to extreme inflation volatility.

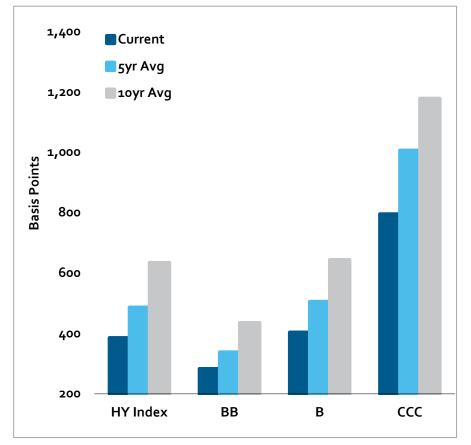
US Investment Grade and High Yield Spreads by Rating

Investment Grade Option Adjusted Spreads¹ by Rating As of June 29, 2018



High Yield Spreads by Rating (Spread to Worst)

As of June 29, 2018

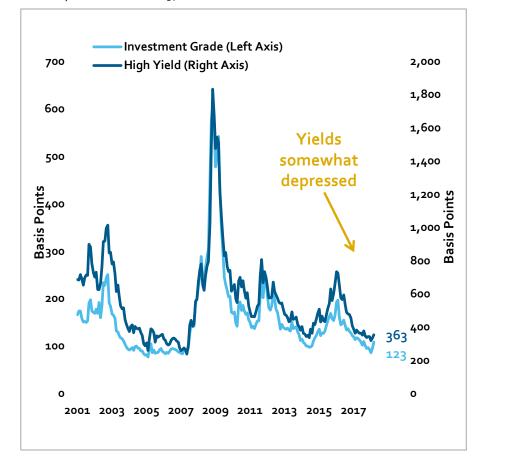


Source: The Yield Book[®] Software and Services. © 2017 Citigroup Index LLC All rights reserved., Morgan Stanley Wealth Management GIC. (1) Option Adjusted Spread (OAS) is a measurement of the spread of a fixed income security rate and the risk-free rate of return, which is adjusted to take into account an embedded option. Investment Grade indices are represented by the Citi BIG US Corporate Index, and High Yield indices are represented by Citi High Yield Market Index.

With Lower Overall Credit Spreads, Opportunities in Fixed Income are Limited

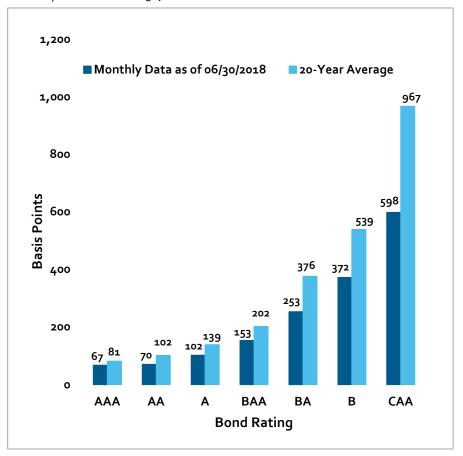
Investment Grade and High Yield Credit OAS¹

Monthly Data as of June 29, 2018



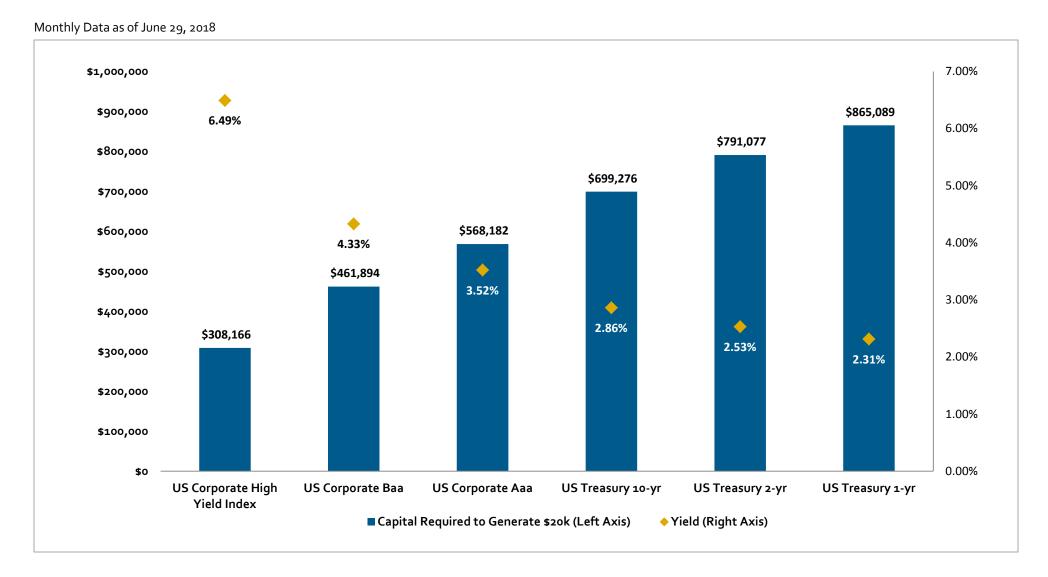
Corporate OAS Vs. Average

Monthly Data as of June 30, 2018



Source: FactSet, Morgan Stanley & Co. Research. (1) Option Adjusted Spread (OAS) is a measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is adjusted to take into account an embedded option. Investment Grade and High Yield are Bloomberg Barclays indices.

Capital Required To Generate \$20k A Year In Fixed Income

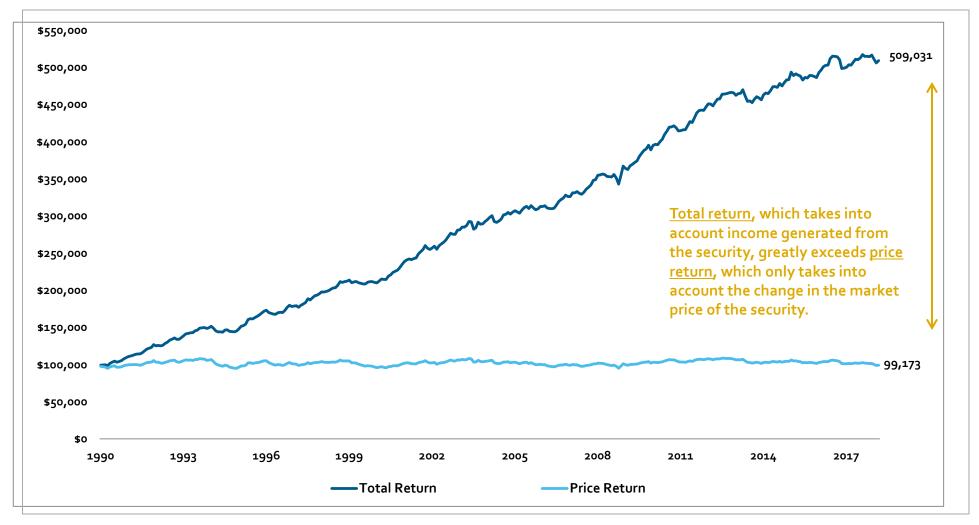


Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC. Yields for US Corporate High Yield, US Corporate Baa, and US Corporate Aaa are option-adjusted spreads.

Fixed Income Returns Come From the Coupon

\$100,000 Investment in Bloomberg Barclays US Aggregate Index

December 1989 – March 31, 2018

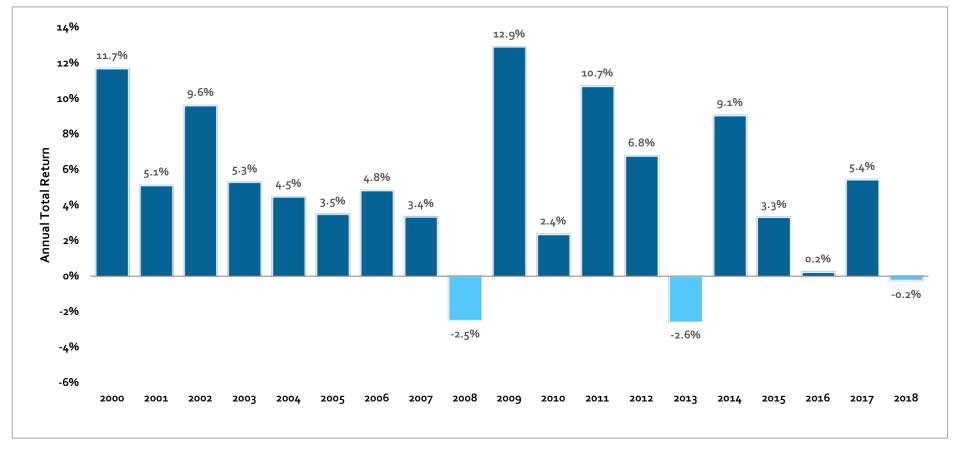


Source: FactSet, Morgan Stanley Wealth Management GIC.

Municipal Bonds Have Had a Pretty Solid 15-yr Run

Bloomberg Barclays Municipal Bond Index Annual Total Return

As of June 30, 2018

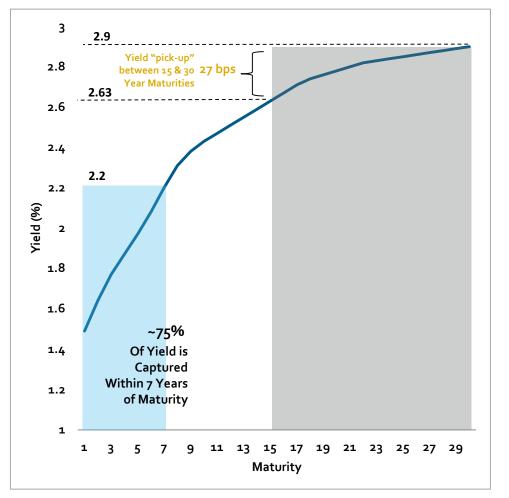


Source: FactSet, Morgan Stanley Wealth Management GIC. 2018 data is total return year-to-date.

Municipal Bond Yield Curve

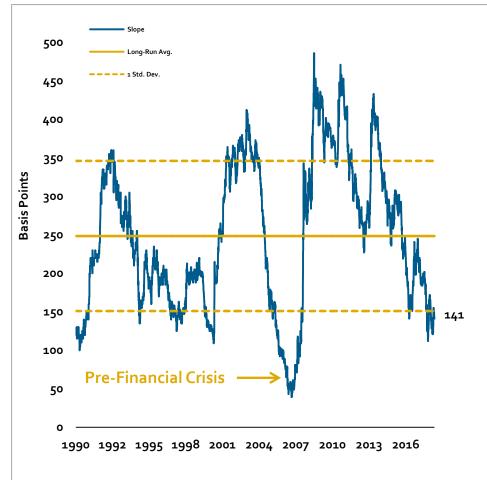
Municipal Bond Yield Curve

Daily Data as of July 9, 2018



Muni Bond Yield Curve Slope (30-Yr. yield – One-Yr. yield)



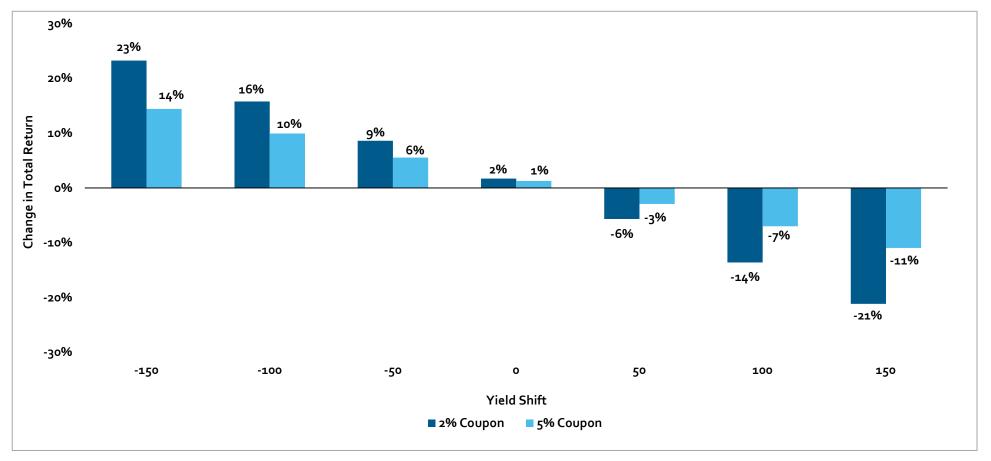


Source: Thomson Reuters Municipal Market Data, Morgan Stanley Wealth Management GIC.

Premium Priced Municipal Bonds

A premium-priced municipal bond is a state or local government security that typically has (1) an above-market coupon; and (2) trades at a dollar price above par value. Bonds that pay above-market coupons are also generally less volatile and more defensive against rising interest rates in comparison to comparable, lower-coupon securities.

Bonds With Above-Market Coupons Are Generally Less Volatile



Note: Charts above are for hypothetical purposes only and do not represent the performance of a specific investment. Both bond samples have a maturity of 10 years, are callable in 5 years, and each bonds' price and volatility is impacted by the call option.

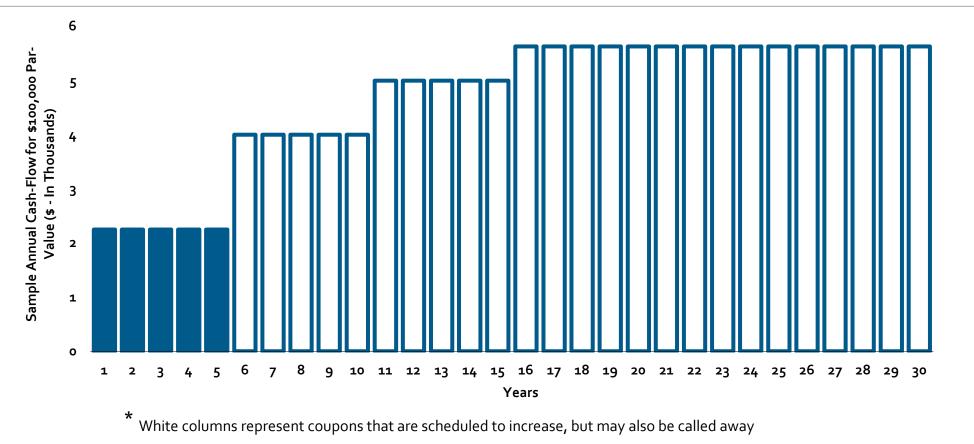
Source: Bloomberg, Morgan Stanley Wealth Management Municipal Research.

Municipal "Step Up" Bond

A municipal step-up bond is a state or local government security that has a coupon that will increase, or "step up," to predetermined payments in the future, after being purchased at a lower dollar price due to the bond's low original coupon.

Sample Muni Step-Up Coupon Payments





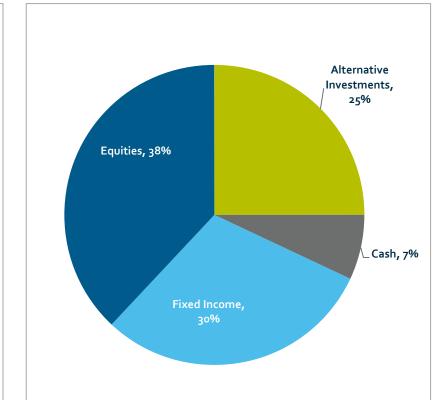
Source: Thomson Reuters Municipal Market Data , The Bond Buyer, Morgan Stanley Wealth Management Investment Resources

Global Investment Committee Strategic Asset Allocation

As of June 29, 2018 Alternative Investments, 18% Cash, 6% Equities, 44% Fixed Income, 32%

Over \$25 M Investable Assets

As of June 29, 2018



Source: Morgan Stanley Wealth Management GIC. Asset allocation models reflected above are based on Model 3 portfolios which have a "Balanced Growth" risk/return profile. The asset allocation models are subject to change from time to time. Please ask your Financial Advisor or Private Wealth Advisor for the most current allocation models. Please note there are 5 asset allocation models ranging from Wealth Conservation to Opportunistic Growth. For illustrative purposes only. This does not represent individually tailored investment advice. Actual client portfolio will vary based on individual circumstances.

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

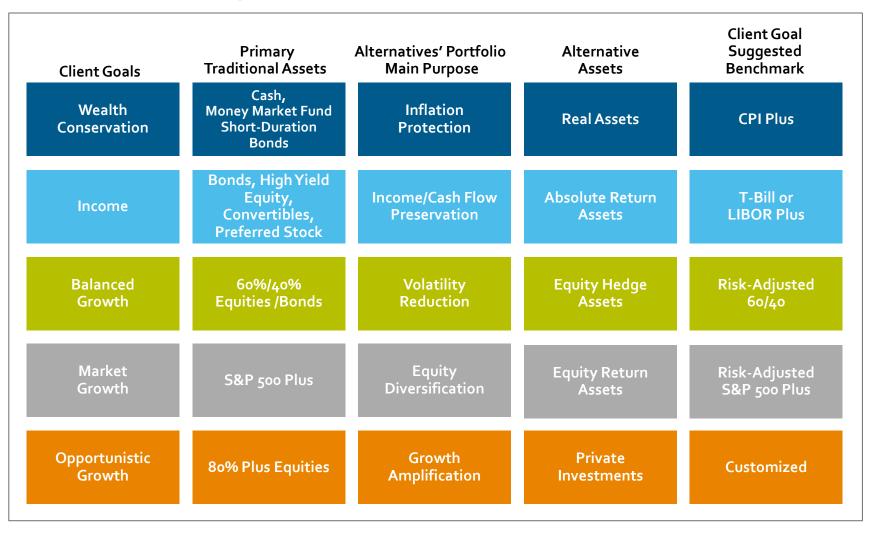
Under \$25 M Investable Assets

The GIC's Alternative Assets / Categories



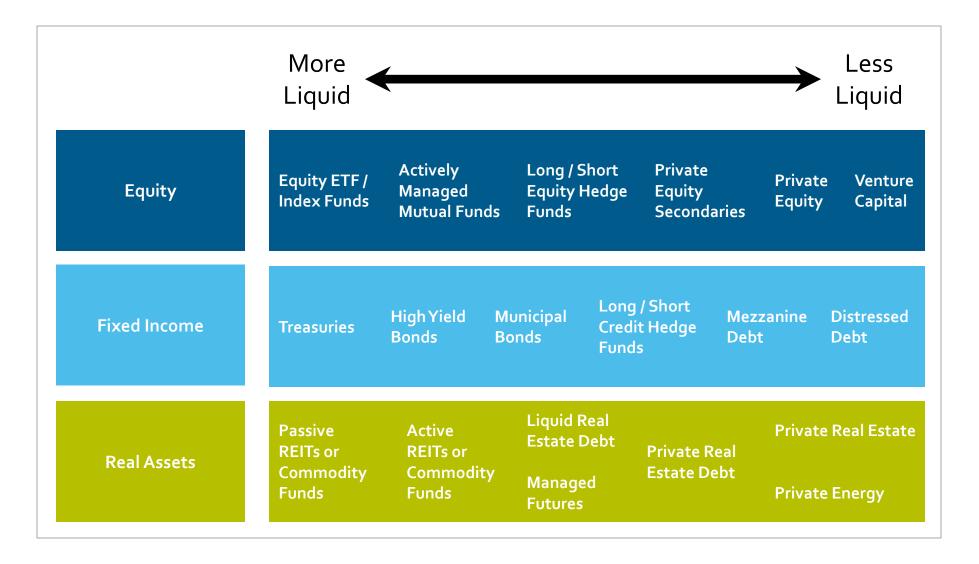
Source: Morgan Stanley Wealth Management GIC

The GIC's Framework Employs an Outcomes-Oriented Approach to Using Alternative Investments



Source: Morgan Stanley Wealth Management GIC

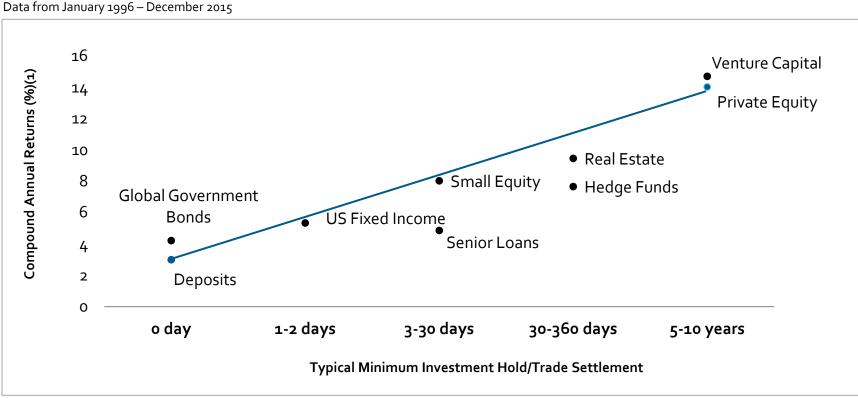
Investors Should Consider Allocating Across the Liquidity Spectrum



Source: Patient Capital, Private Opportunity - The Benefits and Challenges of Illiquid Alternatives, Blackstone Private Wealth Management

Investment Returns Have Typically Increased With the Degree of Illiquidity

The "illiquidity premium" associated with private investments is expected to compensate investors for giving up access to their capital. It is defined as the extra yield investors expect to earn for giving up control to liquidate their capital for a certain period of time. The illiquidity premium can be a potential benefit to investors in private equity.



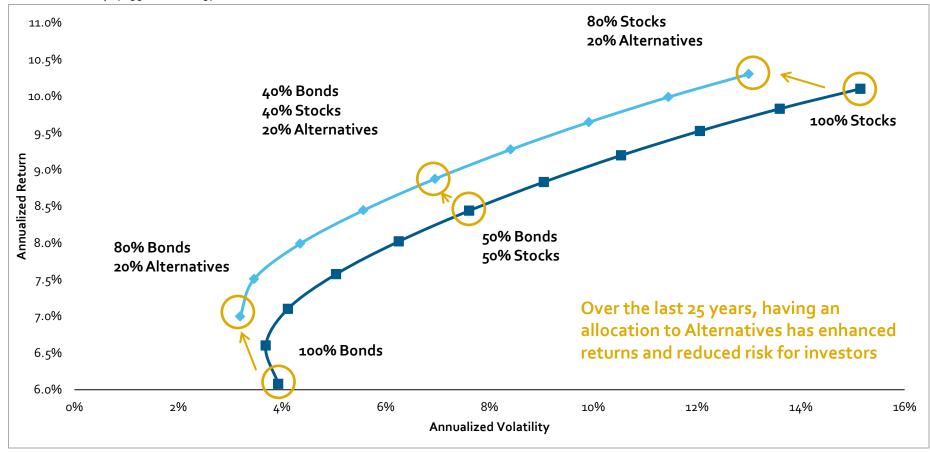
Compound Annual Returns¹ Across the Hold/Trade Settlement Spectrum

Source: Morgan Stanley Wealth Management GIMA, Bloomberg, MSCI Barra, Citigroup, Barclays Capital, JP Morgan, Bank of America Merrill Lynch, S&P GSCI, MIT-CRE, FTSE, Global Property Research, UBS, NCREIF, Hedge Fund Research, Cambridge Associates, Blackstone. From: "Expected Returns," by Antti Illmanen, 2011. Scatterplotting average asset returns 1990-2009 on (subjective) illiquidity estimates. (1) These returns are not returns by any Blackstone Fund, but instead represent the returns of the asset classes presented. The returns are based on the following indices from January 1996-December 2015: Private Equity: Cambridge Assoc. US Private Equity; Real Estate: NCREIF Fund ODCE; Global Government Bonds: Citi WBGI; Venture Capital: Cambridge Assoc. US Venture Capital; Senior Loans: Credit Suisse Leveraged Loan; Hedge Funds: HFRI Fund-Weighted Composite; Small Equity: Russell 2000 TR; U.S. Fixed Income: Barclays U.S. Agg. Bond TR; Deposits: Citi Certificate of Deposit 6 Month.

Adding Alternatives Exposure to a Portfolio May Reduce Volatility and Potentially Increase Returns

Risk and Return Trade-Off With and Without Alternatives

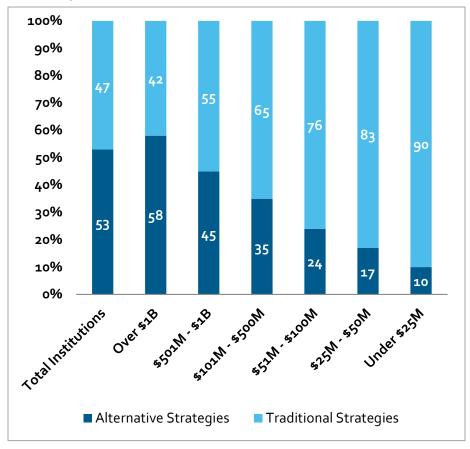
Data as of January 1, 1990 to June 29, 2018



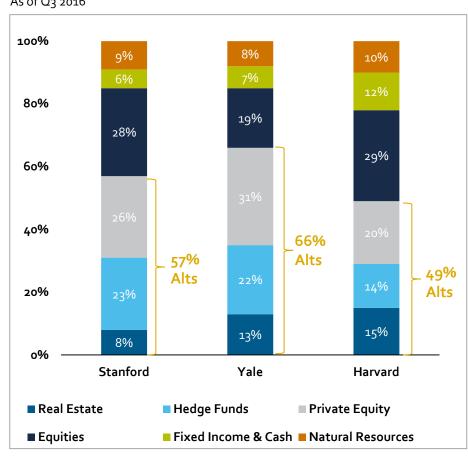
Source: Bloomberg, Morgan Stanley Wealth Management GIC, Thomson ONE. Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by Buyout, Distressed, Growth Equity, Mezzanine, Private Equity Energy, Upstream Energy & Royalties and Venture Capital. Private Equity data subject to 5-month lag; therefore, all asset classes are depicted as of 4Q 2016 for consistency. Private equity returns are net to limited partners. Stocks are represented by the S&P 500 Total Return Index. Bonds are represented by Barclays US Aggregate. Alternatives Investment are composed of 16.6% Equity Hedge (HFRI Equity Hedge Index), 16.6% Equity Neutral (HFRI Equity Market Neutral Index), 33% Private Equity, and 33% Real Estate (National Council of Real Estate Investment Fiduciaries Property Index –NCREIF). Alternatives investments are not suitable for all investors.

Institutions & College Endowments Are Heavily Invested in Alternatives

Institutional Portfolio Allocations December 31, 2016



Strategic Endowment Asset Allocations



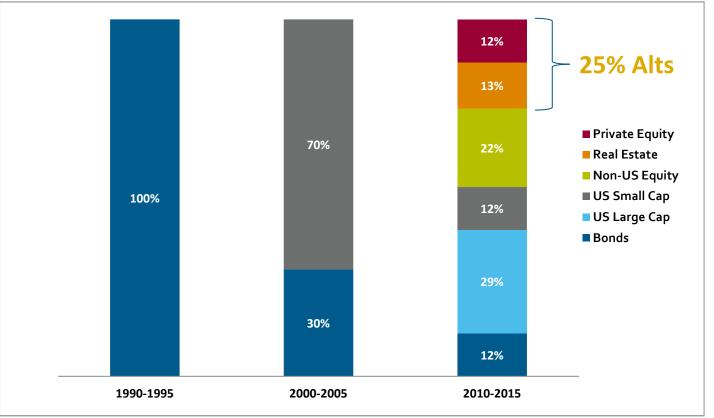
As of Q3 2016

Source: Morgan Stanley Wealth Management GIC. Left Chart: National Association of College and University Business Officers (NACUBO) 2015 study of 812 institutions published January. Note: The larger the endowment, the better the ability to diversify. Traditional Strategies include equity, fixed income and cash. Alternatives Strategies include real estate, hedge funds, private equity, venture capital, natural resources and other. Right Chart: Stanford University 2015 Annual Financial Report, Yale Endowment 2015 Annual Report, Harvard Management Company Annual Endowment Report 2016. Note: The allocations represented here are for illustrative purposes only. Alternatives investments are not suitable for all investors.

Alternatives Have Become an Important Component in Reaching Return Goals

Hypothetical Portfolio Required to Generate at Least 6.5% Annualized Returns Over Each Period For Illustrative Purposes Only

As of December 30, 2016

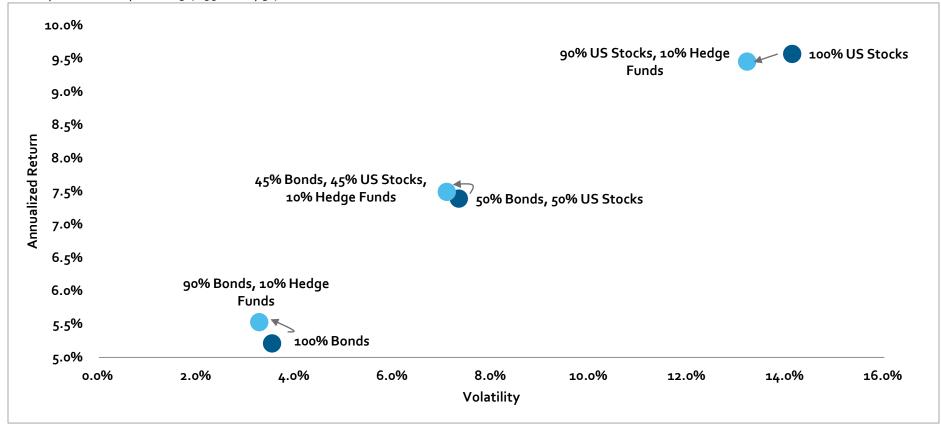


Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources. Bonds are represented by the Barclays Global Aggregate Total Return Index hedged to USD, US Large Cap by the Russell 1000 Total Return Index, US Small Cap by the Russell 2000 Total Return Index, Non-US Equity by MSCI All Country World ex US Index, Real Estate by FTSE EPRA NAREIT Global Total Return Index, and Private Equity by Cambridge Associates pooled returns for Buyout, Growth Equity, Private Equity Energy, Upstream Royalties, and Venture Capital. The hypothetical portfolio shown does not reflect the investment or performance of any actual portfolio. From 1990-1995 a 100% bond portfolio generated a 9% gross annualized return. *Had the results reflected brokerage commissions, the performance would have been lower.* The 1990-1995 annualized portfolio return is a hypothetical calculation based on the annualized returns of the indices for the time periods specified. Not all indices are investable. For more information about the risks to hypothetical performance, please see the Risk Considerations at the end of this material.

Traditional Portfolios May Benefit from Hedge Fund Allocations

Hypothetical Portfolio Performance Last 25 Years

Monthly Data as of September 30, 1991 – May 31, 2018

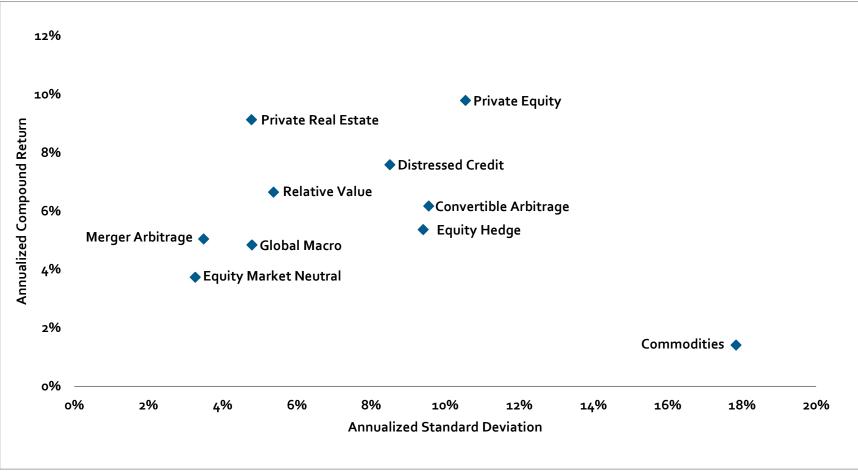


Source: Morgan Stanley Wealth Management Investment Resources, Bloomberg. Hedge funds represented by the HFRI Fund Weighted Composite Index, net of all fees; U.S. stocks represented by the S&P 500 Total Return Index, gross of dividends; bonds represented by the Barclays U.S. Aggregate Bond Index. Index results are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns reflect reinvestment of any dividends and capital gains. Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. *For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.*

Alternatives Risk Return Comparison

Risk Return Comparison

January 2000 to June 2018*

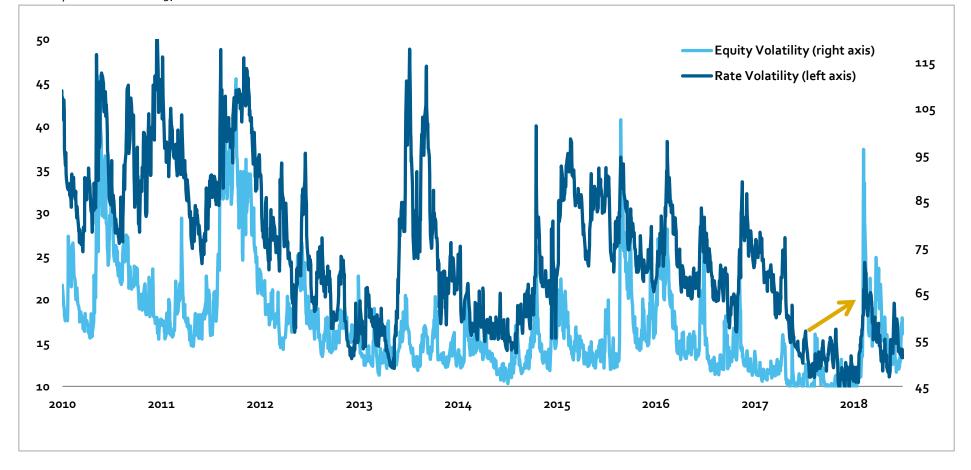


Source: Bloomberg, Morgan Stanley Wealth Management GIC. *All data from January 1, 2000 through June 29, 2018, except for private equity, which is from March 31, 2000 through March 31, 2018, due to data availability. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Indices used for this analysis include: S&P 500 for US Equity, MSCI EAFE (net) for Global Equity, Barclays Aggregate Bond Index for US Bonds, National Council of Real Estate Investment Fiduciaries Property Index (NCREIF) for Real Estate, BCOM Index for Commodities, HFRI Equity Market Neutral Index for Equity Market Neutral, HFRI Event Driven (Total) Index for Event Driven, HFRI Distressed Index for Distressed, HFRI Merger Arbitrage Index for Merger Arbitrage, HFRI Macro (total) Index for Relative Value, HFRI Equity Hedge (Total) Index for Equity Hedge, HFRI Relative Value Fixed Income-Corporate Index for Fixed Income, HFRI Fixed Income Convertible Arbitrage Index for Convertible Arbitrage. Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by Buyout, Distressed, Growth Equity, Mezzanine, Private Equity Energy Upstream Energy & Royalties and Venture Capital For illustrative purposes only. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Increased Volatility Should Improve Outlook for Alternatives

Equity Volatility¹ Vs. Rate Volatility²

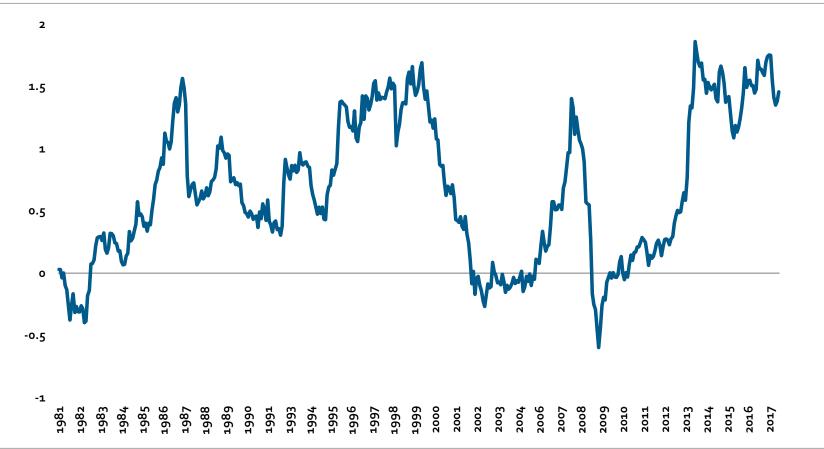
Monthly Data as of June 29, 2018



Source: FactSet, Bloomberg, BofA, Federal Reserve, Morgan Stanley Wealth Management GIC. (1) Equity volatility represented by the VIX Index. (2) Rate volatility represented by the Merrill Lynch Option Volatility Estimate (MOVE) Index.

Quantitative Easing Reduced Volatility and Led to Extraordinary Risk-Adjusted Returns for Stocks and Bonds

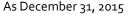
Sharpe Ratio of a 60% S&P 500 / 40% Bloomberg Barclays US Aggregate Portfolio Rolling 60 Month Sharpe Ratio, Monthly Data as of June 30, 2018

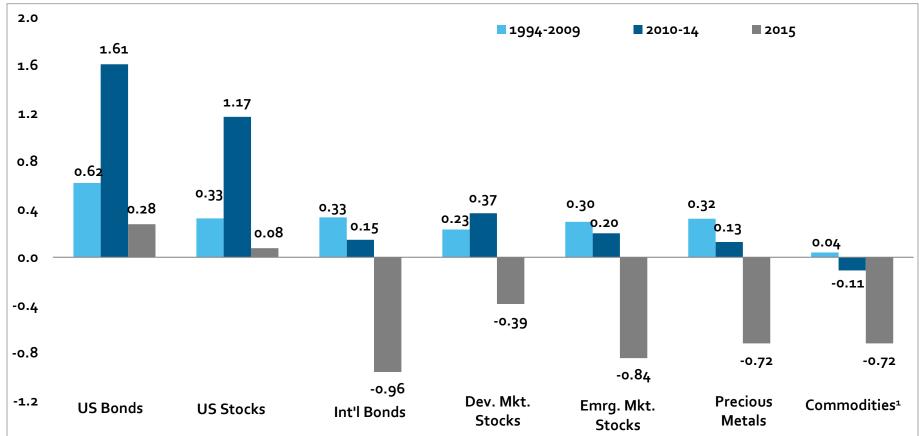


Source: Bloomberg, Ibbotson Associates Morgan Stanley Wealth Management GIC. Calculated by Morgan Stanley Wealth Management using data provided by Morningstar. © 2018 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Sharpe ratio is calculated by subtracting the risk-free rate—such as that of the 3-month US Treasury bill—from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. For illustrative purposes only.

The Beginning of Fed Tightening Ended the Period of Historically High Risk-Adjusted Returns

Sharpe Ratios

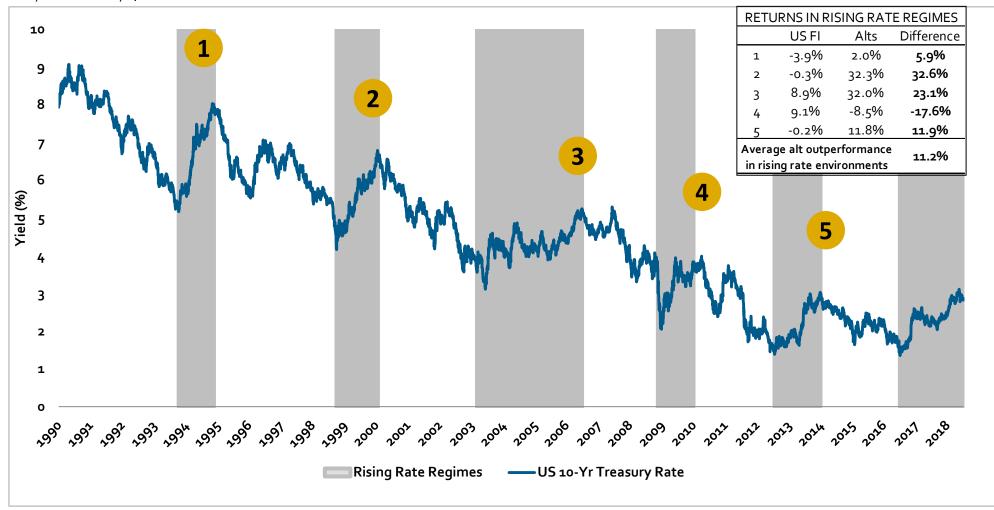




Source: FactSet, Morgan Stanley Wealth Management GIC. (1) Ex precious metals. Sharpe ratio is calculated by subtracting the risk-free rate—such as that of the 3-month US Treasury bill—from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. US stocks represented by the S&P 500, US bonds represented by the Barclays US Aggregate, International bonds represented by the Barclays Global Aggregate ex US (hedged), Developed market stocks represented by the MSCI AC World ex US Index, Emerging market stocks represented by the MSCI Emerging Markets IMI, Precious metals represented by the DJ/UBS Precious Metals Index, and Commodities represented by the DJ/UBS Commodity Index ex Precious Metals.

Alternative Investments May Outperform in Challenging Fixed Income Environments

Rising Rate Regimes Since 1990 Daily Data As of July 6, 2018

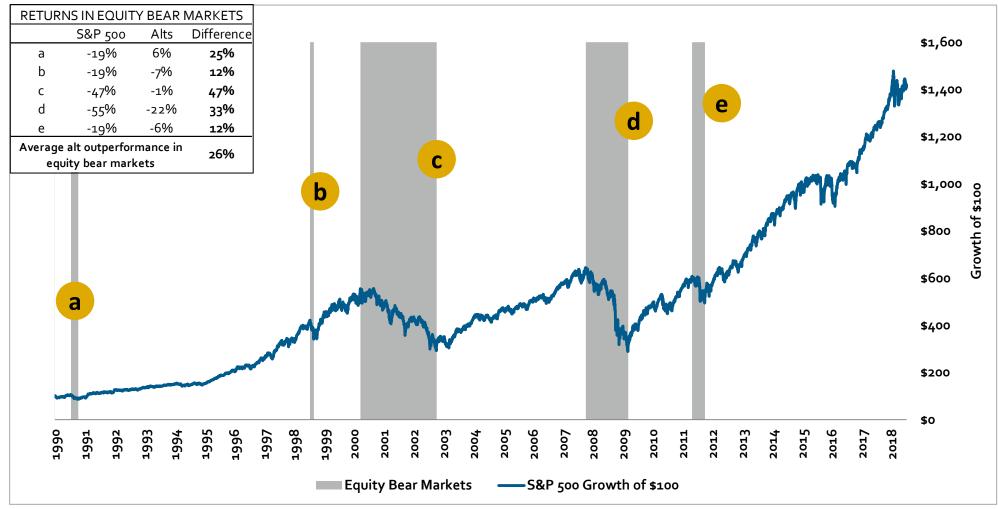


Source: Bloomberg, Goldman Sachs Asset Management, Morgan Stanley Wealth Management GIMA. Alternatives are represented by the HFRI FOF Index.

Alternative Investments May Outperform in Challenging Equity Environments

Equity Bear Markets Since 1990

Daily Data As of July 6, 2018

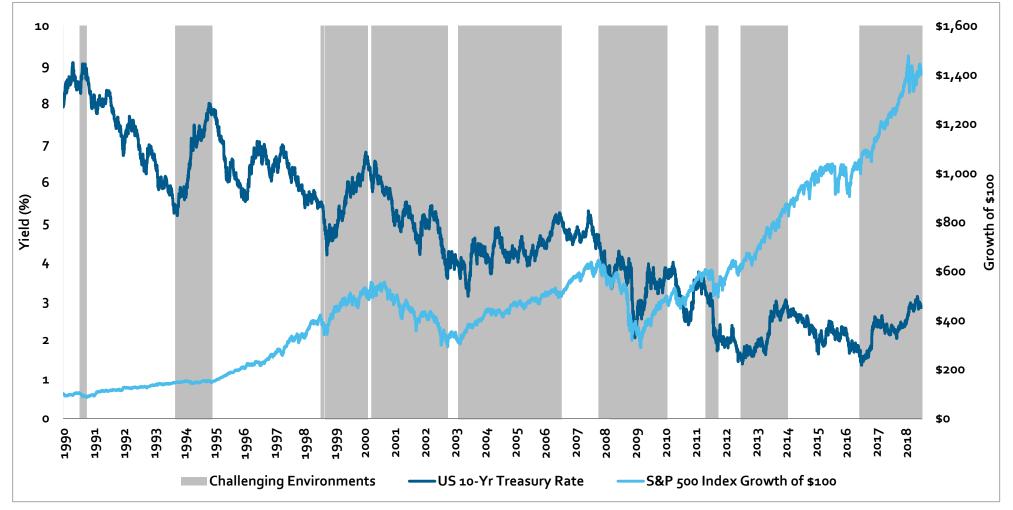


Source: Bloomberg, Goldman Sachs Asset Management, Morgan Stanley Wealth Management GIMA. Alternatives are represented by the HFRI FOF Index.

Challenging Rate and Equity Environments Are Frequent

Since 1990 the US has been in a challenging fixed income or equity environment 36% of the time

Rising Rate Regimes and Equity Bear Markets Since 1990 Daily Data As of July 6, 2018



Source: Bloomberg, Goldman Sachs Asset Management, Morgan Stanley Wealth Management Investment Resources

Commodity Performance Overview

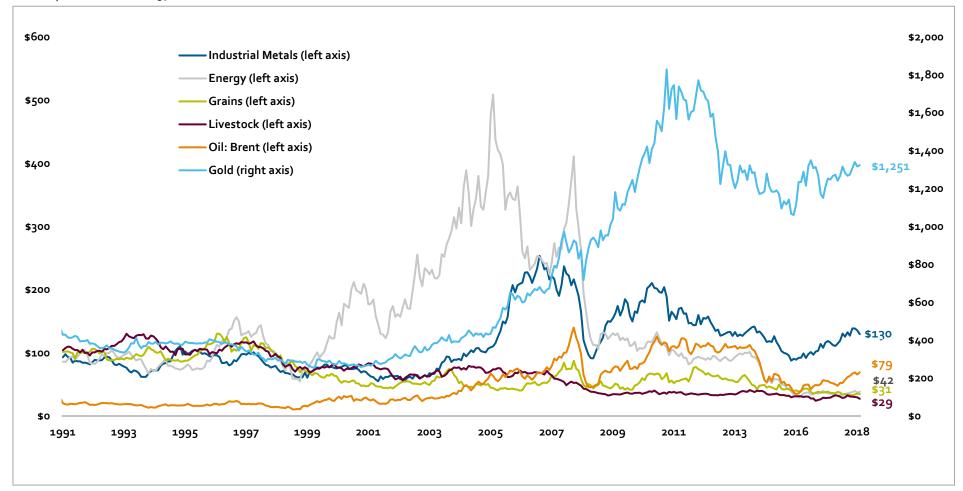
As of August 31, 2018 (performance and volatility in percent form)

		Performance as of 8/31/2018							Volatility ¹		
	-					Ann	Ann	_	Ann	Ann	
_	USD	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR	
Commodities Diversified											
Bloomberg Commodity Index		-1.77	-7.23	-3.87	0.51	-1.89	-8.01	8.08	10.45	10.76	
Aluminum (US\$/tonne)	2,112.00	2.47	-7.59	-0.07	-0.07	10.86	3.53	24.65	17.92	18.52	
Copper (US\$/tonne)	6,019.00	-3.12	-11.81	-11.38	-11.38	5.71	-3.24	19.21	17.72	17.68	
Lead (US\$/tonne)	2,062.00	-4.27	-15.68	-13.11	-13.11	7.13	-0.93	23.07	23.01	22.21	
Zinc (US\$/tonne)	2,504.00	-4.79	-19.23	-20.24	-20.24	11.78	5.93	24.16	20.56	20.45	
Tin (US\$/tonne)	19,025.00	-5.47	-8.53	-8.88	-8.88	9.83	-2.17	15.20	15.19	18.43	
Nickel (US\$/tonne)	13,010.00	-5.52	-14.41	11.96	11.96	9.77	-1.11	32.43	26.83	26.19	
Gold (US\$/troy Oz)	1,202.45	-1.52	-7.88	-8.33	-8.33	1.94	-2.92	10.37	13.42	13.08	
Silver (US\$/troy Oz)	14.66	-5.02	-11.45	-15.48	-15.48	0.49	-9.12	16.58	19.92	19.92	
Heat Oil (¢/gallon)	218.50	3.51	0.37	32.50	32.50	12.74	-6.30	22.17	28.14	28.50	
Natural Gas (US\$/mmBtu)	2.93	3.90	-0.34	0.34	0.34	3.02	-3.87	60.21	46.97	42.28	
Oil (WTI, US\$/bbl)	69.80	1.51	4.12	47.79	47.79	12.36	-8.30	24.84	26.38	30.93	
Oil (Brent, US\$/bbl)	77.42	4.27	-0.22	47.80	47.80	12.66	-7.45	22.21	27.27	30.94	
Agriculture / Soft Commodities											
Live Cattle (US\$ per contract)	108.77	-0.48	4.64	3.20	3.20	-8.76	-3.02	22.06	21.55	18.54	
Cocoa (US\$ per contract)	2,711.00	6.23	-4.27	22.78	22.78	-7.63	0.25	27.62	22.92	21.57	
Cotton (US\$ per contract)	80.81	-8.98	-12.31	14.25	14.25	9.54	-0.16	20.28	20.59	22.30	
Coffee (US\$ per contract)	127.01	-6.27	-9.92	-14.15	-14.15	-3.37	-1.76	16.21	17.00	24.33	
Sugar (US\$ per contract)	10.60	0.47	-17.12	-26.39	-26.39	-0.28	-8.29	23.40	30.05	26.89	
Soybeans (US\$ per contract)	833.00	-12.12	-20.68	-13.78	-13.78	-3.92	-11.42	18.75	20.29	27.10	
Corn (¢/bushel)	351.00	-13.28	-19.85	-4.04	-4.04	-4.06	-11.48	21.08	23.39	36.07	
Wheat (¢/bushel)	518.50	-5.79	3.08	55.12	55.12	7.27	-4.70	27.36	30.34	32.29	

Source: FactSet, Bloomberg. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns.

Commodity Prices

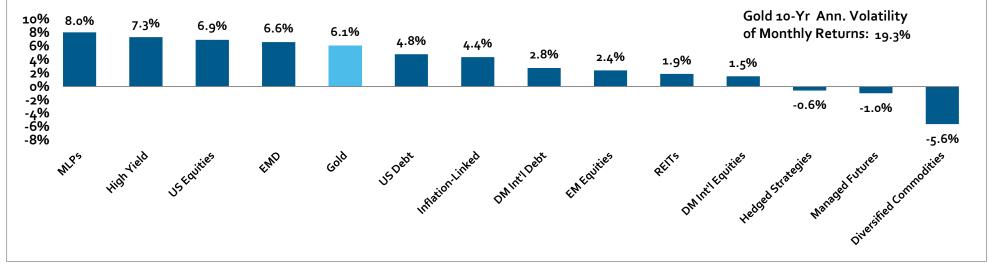
Monthly Data as of June 29, 2018



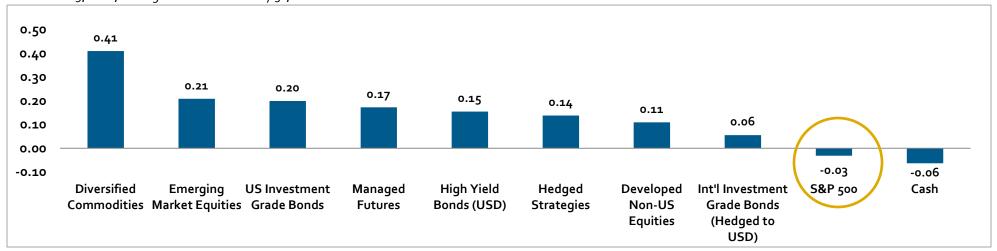
Source: Bureau of Labor Statistics, Morgan Stanley & Co. Research.

Gold Can Provide Returns Uncorrelated with Other Asset Classes





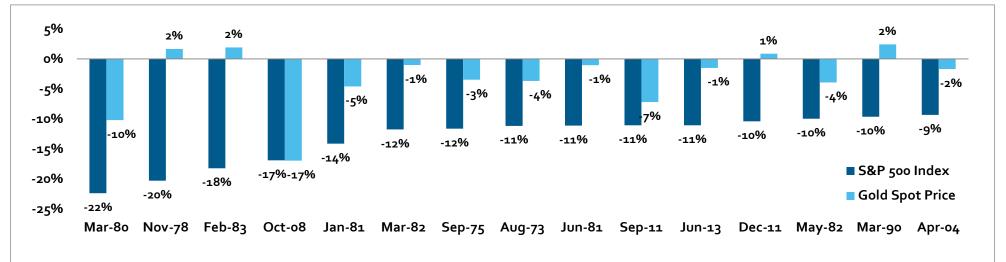
Monthly Correlation of Gold Returns with Select Asset Classes Since 1990 As of June 29, 2018; Managed Futures as of May 31, 2018



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC.

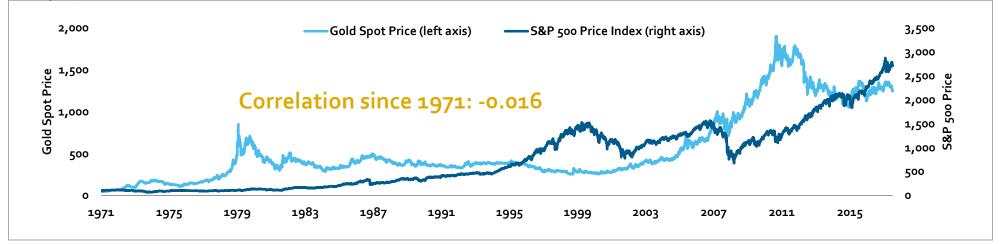
Gold Can Provide a Hedge Against Financial Crisis

Gold Returns During the Worst 15 Months of the S&P 500 Since 1971 Daily Data As of July 2, 2018



Gold Spot Price and the S&P 500

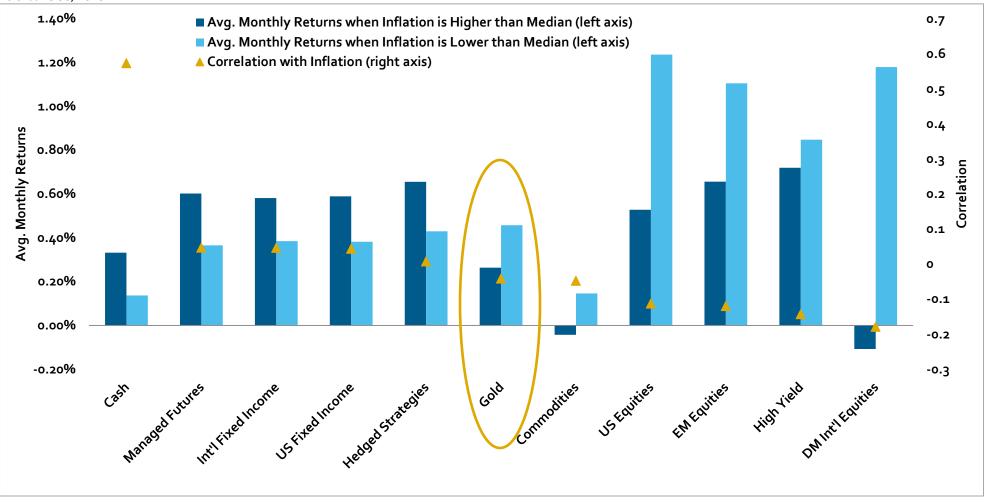
As of April 4, 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC. 1971 is the year the United States abandoned the gold standard.

Gold Is a Relatively Poor Hedge Against Inflation

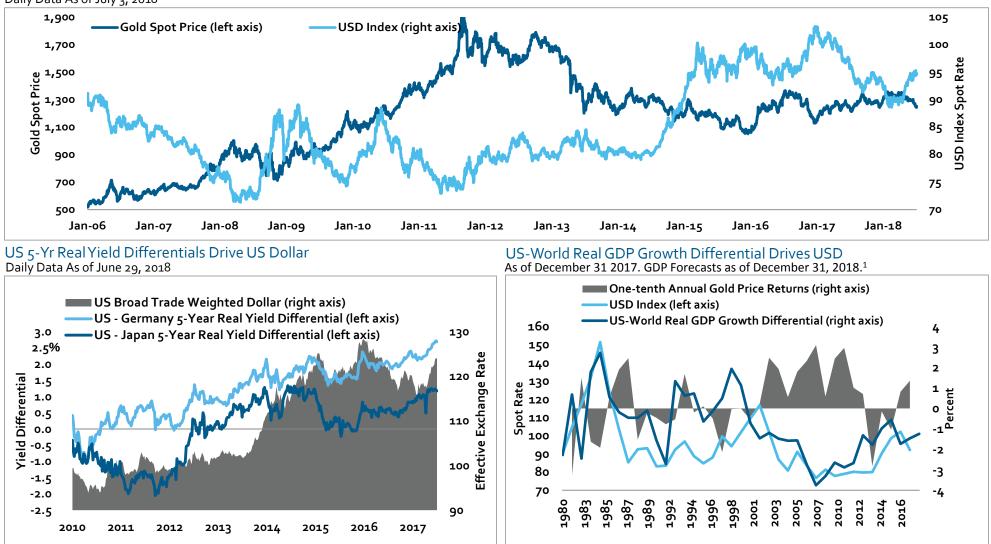
Average Monthly Returns when Inflation Is Above or Below the Median Since 1990 As of June 30, 2018



Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC. Antti Ilmanen, Expected Returns, 2011.

Gold Price Has Varied Inversely with Dollar Strength

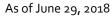
Gold Price and the US Dollar Index Daily Data As of July 3, 2018

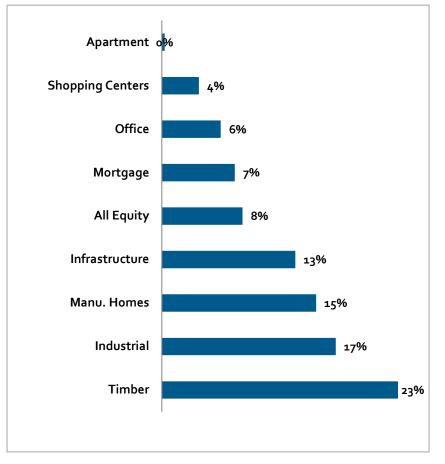


Source: Bloomberg, Morgan Stanley Wealth Management GIC.¹ Forecasts are from MS&Co Research, historical data is IMF world real GDP annual percentage change.

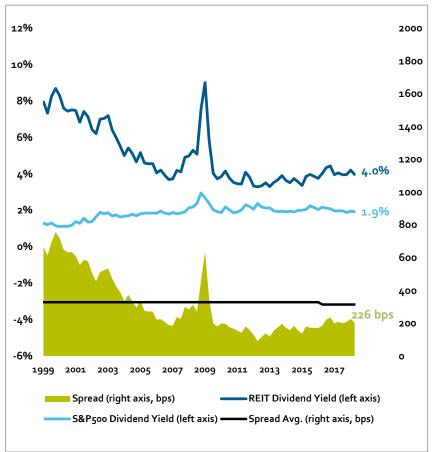
REITs Subsector Returns and Spreads

1 Year Subsector Total Return Performance¹





Dividend Yields – REITs Vs. S&P 500



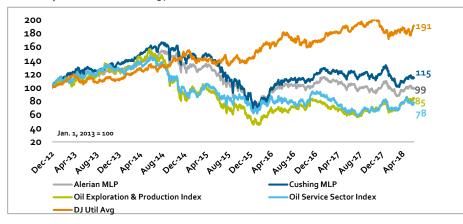
As of June 29, 2018

Source: Bloomberg, Morgan Stanley & Co. Research. (1) All categories are represented by the FTSE EPRA/NAREIT sector indices.

MLPs¹ Performance and Valuation Metrics

MLP Indexes Relative Performance

Monthly Data as of June 29, 2018



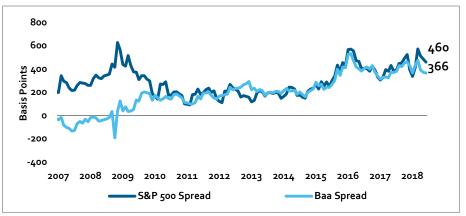
Alerian MLP Index



Year/Year Percent Growth in Dividends per Share as of June 29, 2018

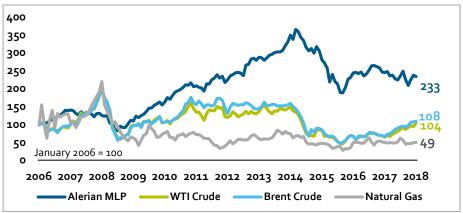
Alerian MLP Index

Distribution Yield Vs. S&P 500 Div. Yield/Baa Bond Yield as of June 29, 2018



Alerian MLP Index

Vs. WTI Crude, Brent Crude & Natural Gas as of June 29, 2018

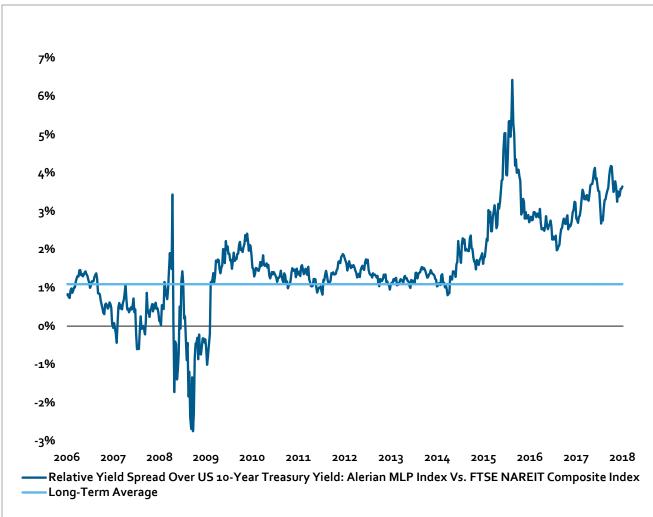


Source: Bloomberg, Standard & Poor's, Dow Jones, Morgan Stanley Wealth Management GIC. (1) For more information about the risks to Master Limited Partnerships (MLPs), please refer to the Risk Considerations section at the end of this material. Data for the Alerian MLP index begins as of June 30, 2006.

MLP Yield Spreads Relative to REITs Suggest MLPs More Attractive

Relative Yield Spreads: MLPs Vs. REITs

Weekly Data As of June 29, 2018



Relative Total Return: MLPs Vs. REITs ¹									
<u>Date</u>	<u>3-Month</u>	<u>6-Month</u>	<u>12-Month</u>						
10/6/2006	4.7%	18.0%	17.8%						
2/9/2007	20.2%	21.9%	32.8%						
9/19/2008	16.5%	42.9%	41.2%						
9/18/2009	9.7%	11.3%	16.0%						
5/13/2011	7.6%	9.1%	1.6%						
7/22/2011	11.4%	12.2%	5.0%						
5/11/2012	1.5%	4.1%	5.3%						
11/9/2012	0.7%	-0.2%	14.4%						
2/28/2014	3.1%	9.6%	-17.4%						
Average	8.37%	14.33%	12.97%						

(1) Periods when the Alerian MLP Index Vs. FTSE NAREIT Composite Index relative yield spread over US 10-Year Treasury yield have exceeded 1.5%

Source: Bloomberg, FactSet, Morgan Stanley Wealth Management GIC. Alerian MLP Index and FTSE NAREIT Composite Index yields are shown beginning June 30, 2006.

Selective MLP Investing May Reduce Overall Portfolio Risk

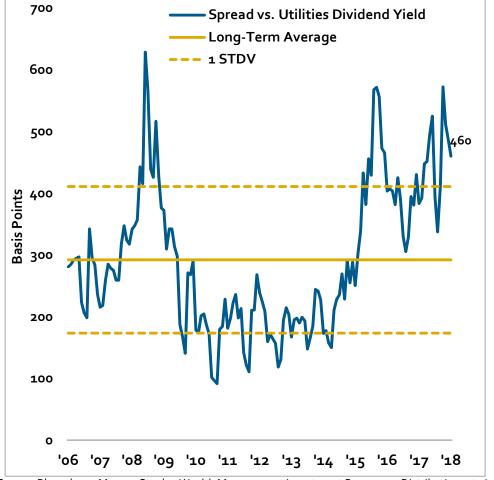
Cash Flov Stability	/1	Contract Length	RevenueType	Exposure to Commodity Prices	Types of Customers
	Natural Gas Pipelines	10+Years	Rental fee / "Ship-or- pay"	Little	Gas distributors, Utilities, Producers, Marketers, and other
Very High 🕇	Crude Oil Pipelines	5-10+ Years	Rental fee / Volume	Little	Refiners, Producers, Financials
-	Storage	3-5 years	Rental fee / Volume	Little (forward curve, contango)	Utilities, Marketers, Financials
	Refined Prod. Pipelines	1-5 Years	Rental fee / Volume	Little	Refiners, Marketers
	NGL Pipelines	1-5 Years	Rental fee / Volume	Little	Petrochemical plants, Producers
	Gathering	Ranging from month-to-month to life of lease dedications	Rental fee / Volume	Little	Producers
	Fractionation	Typically short-term contracts but trending more long-term	Fee-based / "Frac-or- pay"	Little	Producers
	Rail	1-5 Years	Fee-based / Distance	Little	Refiners, Producers
	Terminals	1-3 Years	Volume / Ancillary services	Little (contango)	Refiners, Financials
	Processing	Month-to-month to life of lease dedications	Fee-per-car / Distance	More (NGL prices, contract mix)	Producers
Very	Marine Shipping	1-3 years	Fee-based / Indexed charter rates	Little	Refiners, Petrochemical companies, Integrateds, Marketers
Low \downarrow	E&P Research		Market rates / Hedging	Significant	Midstream operators

Source: Morgan Stanley & Co. Research.

MLPs Have Offered Higher Distribution Rates Than Both Dividends and Investment Grade Bonds...

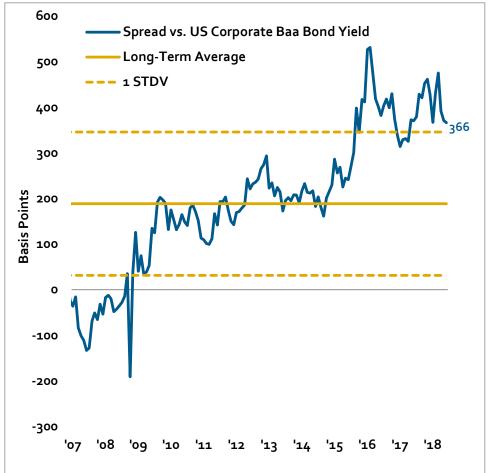
MLP Distribution Rate vs. S&P 500 Utilities Dividend Yield

As of June 29, 2018



MLP Distribution Rate vs. Baa Bond Yield

As of June 29, 2018

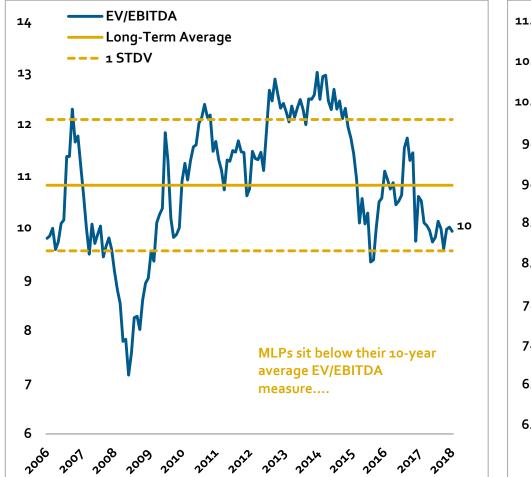


Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources. Distribution rate is the most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

...And MLPs Are Undervalued Compared to Dividend Equity

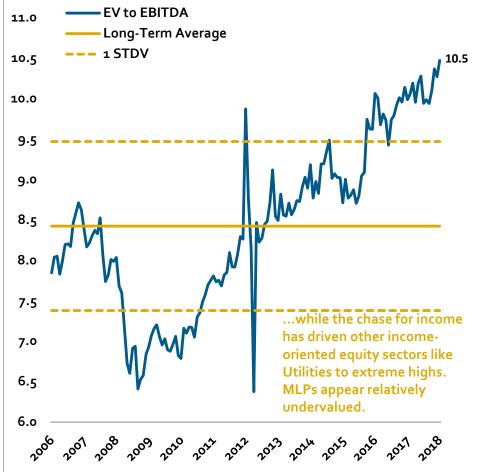
Alerian MLP Infrastructure Index

As of June 29, 2018



S&P 500 Utilities Sector

As of June 29, 2018

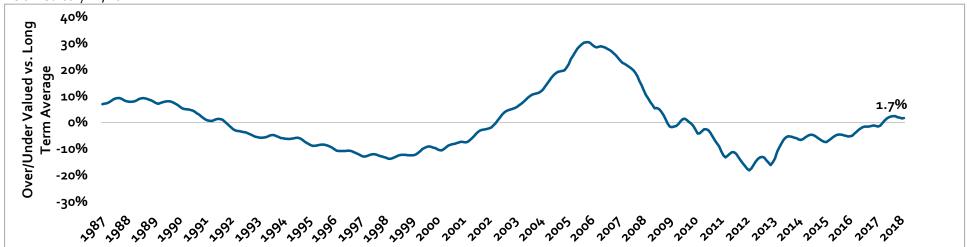


Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources. Distribution rate is the most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Demand Drivers: Home Affordability Has Improved Measurably

Valuation arguments for higher home prices are strong, driving our forecast for home price appreciation.

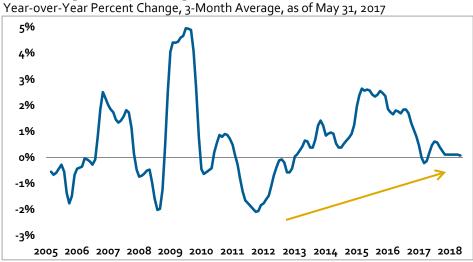
Home Valuation: Home Price-to-Income As of February 28, 2018



US Household Debt to Net Worth As of March 31, 2018





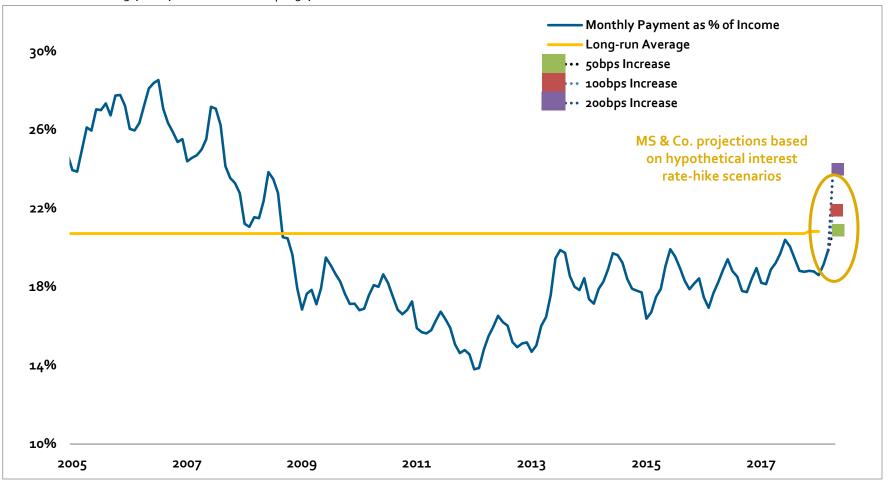


Source: Case-Shiller, Bureau of Economic Analysis, Bureau of Labor Statistics, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

Higher Rates Will Impact Home Affordability

Mortgages are currently very affordable. An increase in interest rates would increase monthly payments and render the affordability closer to the long-run average.

Monthly Payments as % of Income for All Home Buyers Historical as of March 31, 2018; forecasts are for April 30, 2018



Source: Case-Shiller, National Association of Realtors, Freddie Mac, Morgan Stanley & Co. Research, Morgan Stanley Wealth Management GIC

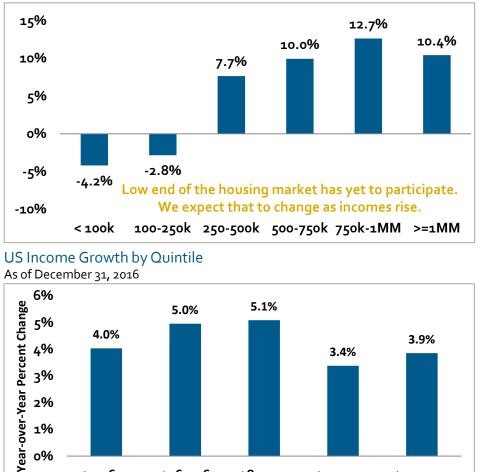
Home Prices Have Rebounded and Morgan Stanley & Co. Expects ~4% Home Price Appreciation

US Home Prices



US Mortgage Transactions by Home Prices

Year-Over-Year Percent Change, as of December 29, 2017



\$87,401

Upper Income Limit

\$135,212

Source: National Association of Realtors, Haver Analytics, Standard and Poor's, Census Bureau, Morgan Stanley & Co., Morgan Stanley Wealth Management GIC. (1) CoreLogic is a home price index.

0%

\$30,694

\$56,076

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

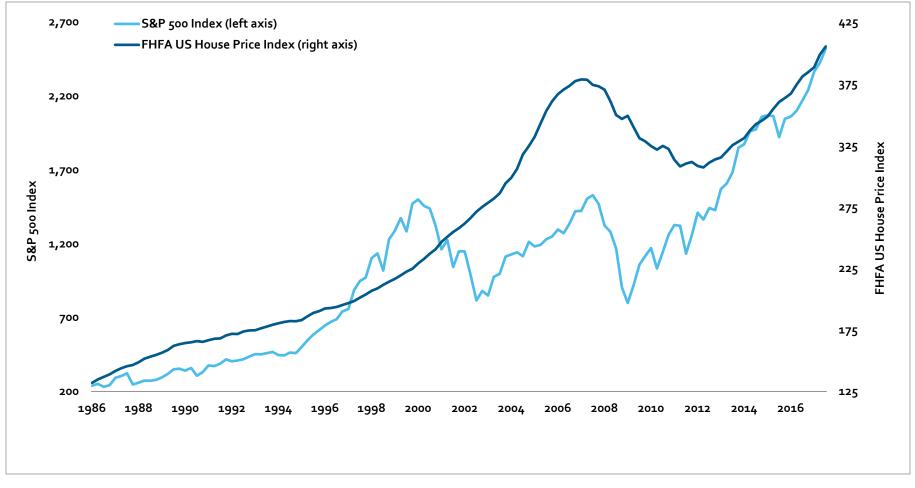
\$242,210

Home Ownership Has Proven to Be a Stable Investment Over Time

With the exception of 2007-2009, home prices have tended to rise even in periods of recession/economic drawback.

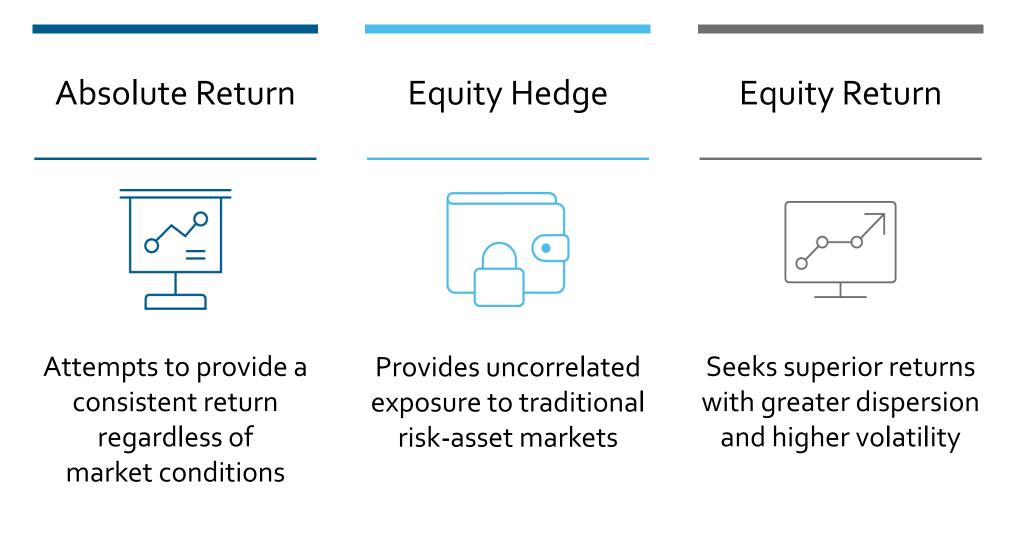
Home Price Appreciation Vs. S&P 500





Source: Bloomberg, Morgan Stanley Wealth Management GIC

There Are Three Categories of Hedge Funds

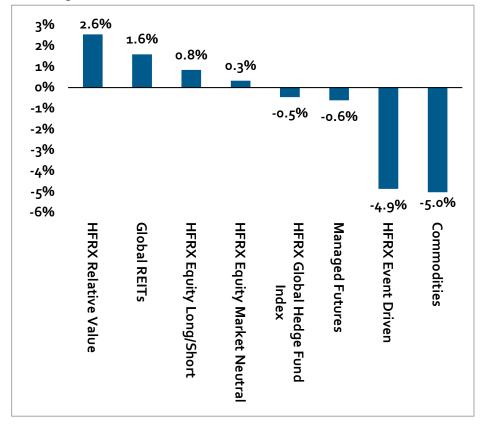


Source: Morgan Stanley Wealth Management GIC

Alternatives Performance Summary

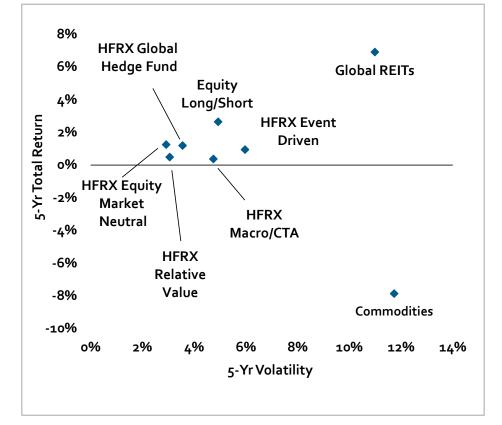
YTD Total Return¹

As of August 31, 2018



5-Year Risk and Return¹

As of August 31, 2018; Event driven as of July 31, 2018

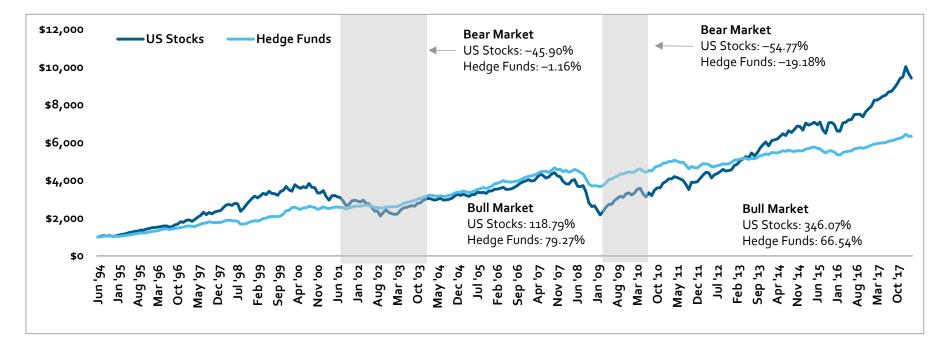


Source: Bloomberg, Morgan Stanley Wealth Management GIC. (1) Indices for Global REITs, Managed Futures and Commodities are FTSE EPRA/NAREIT Global Index, HFRX Macro/CTA Index, and Bloomberg Commodity Index, respectively. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

Hedge Fund Performance in Bear and Bull Markets

The case study below shows an example of what would have happened to a hypothetical \$1,000 investment in hedge funds and traditional US stocks, respectively, over a 25-year period. Hedge funds can help reduce portfolio volatility and add important diversification that can enhance performance while reducing risk.

Hypothetical Investment in Hedge Funds and US Stocks Over 25 Years



Source: Morgan Stanley Wealth Management Investment Resources, Bloomberg. Hedge funds represented by the HFRI Fund Weighted Composite Index, which is reported net of all fees; US stocks represented by the S&P 500 Index gross dividends. The hypothetical \$1,000 investment is shown for illustrative purposes only. Cumulative index returns specified. Index results are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns reflect reinvestment of any dividends and capital gains. Hypothetical performance should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. *For more information about the risks to hypothetical performance please refer to the Risk Considerations section at the end of this material.*

Hedge Fund Returns

As of December 31, 2017

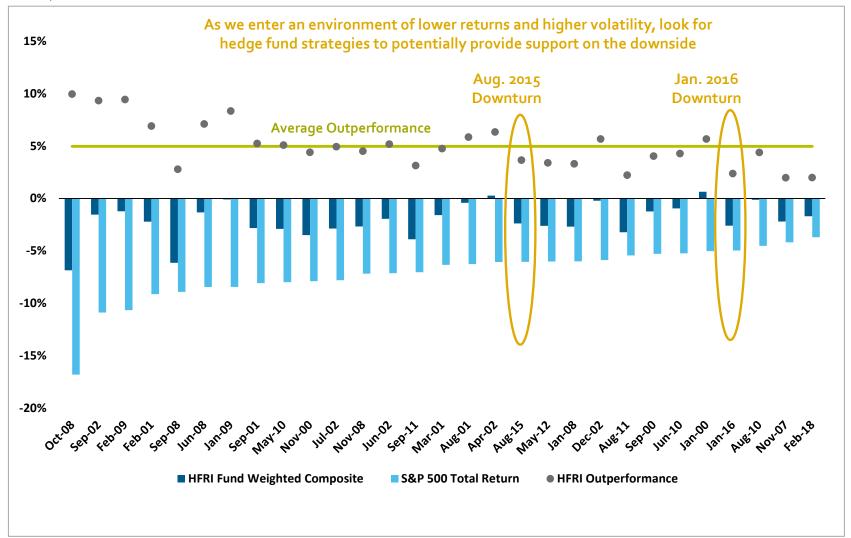
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10-Yrs ('08-'17) Ann.
HFRI Emerging Markets	Barclays Agg	HFRI Emerging Markets	S&P 500	Barclays Agg	S&P 500	S&P 500	S&P 500	HFRI Equity Market Neutral	HFRI ED Distressed	S&P 500	S&P 500
24.9%	5.2%	40.3%	15.1%	7.8%	16.0%	32.4%	13.7%	4.3%	15.1%	21.8%	6.9%
HFR I Macro	HFRIMacro	HFRI ED Distressed	HFRI ED Distressed	S&P 500	HFRI Relative Value	HFRI ED Distressed	Barclays Agg	HFRI ED Merger Arb	S&P 500	HFRI Emerging Markets	HFRI Relative Value
11.1%	4.8%	28.1%	12.1%	2.1%	10.6%	14.0%	6.0%	3.3%	12.0%	20.1%	5.2%
HFRI FOF Composite	HFRI ED Merger Arb	S&P 500	HFRI Event Driven	HFRI ED Merger Arb	HFRI Emerging Markets	HFRI Event Driven	HFRI Macro	S&P 500	HFRI Event Driven	HFRI Fund Wghted Comp	Barclays Agg
10.3%	-5.4%	26.5%	11.9%	1.5%	10.4%	12.5%	5.6%	1.4%	10.6%	8.5%	4.3%
HFRI Fund Wghted Comp	HFRI Equity Market Neutral	HFRI Relative Value	HFRI Emerging Markets	HFRI Relative Value	HFRI ED Distressed	HFRI Fund Wghted Comp	HFRI Relative Value	Barclays Agg	HFRI Relative Value	HFRI FOF Composite	HFRI Event Drive
10.0%	-5.9%	25.8%	11.4%	0.1%	10.1%	9.1%	4.0%	0.5%	7.7%	7.7%	4.1%
HFRI Relative Value	HFRI Relative Value	HFRI Event Driven	HFRI Relative Value	HFRI ED Distressed	HFRI Event Driven	HFRI FOF Composite	HFRI FOF Composite	HFRI FOF Composite	HFRI Emerging Markets	HFRI Event Driven	HFRI ED Distress
8.9%	-18.0%	25.0%	11.4%	-1.8%	8.9%	9.0%	3.4%	-0.3%	7.0%	7.3%	3.8%
HFRIED Merger Arb	HFRI Fund Wghted Comp	HFRI Fund Wghted Comp	HFRI Fund Wghted Comp	HFRI Equity Market Neutral	HFRI Fund Wghted Comp	HFRI Relative Value	HFRI Equity Market Neutral	HFRI Relative Value	HFRI Fund Wghted Comp	HFRI ED Distressed	HFRI ED Merge Arb
7.1%	-19.0%	20.0%	10.2%	-2.1%	6.4%	7.1%	3.1%	-0.3%	5.4%	7.0%	3-5%
Barclays Agg	HFRI FOF Composite	HFRI ED Merger Arb	HFRI Macro	HFRI Event Driven	HFRI FOF Composite	HFRI Equity Market Neutral	HFRI Fund Wghted Comp	HFRI Fund Wghted Comp	HFRI ED Merger Arb	HFRI Relative Value	HFRI Fund Wghted Comp
	-21.4%	11.6%	8.1%	-3-3%	4.8%	6.5%	3.0%	-1.1%	3.6%	5.3%	3.4%
HFRI Event Driven	HFRI Event Driven	HFRI FOF Composite	Barclays Agg	HFRI Macro	Barclays Agg	HFRI Emerging Markets	HFRI ED Merger Arb	HFRI Macro	Barclays Agg	HFRI Equity Market Neutral	HFRI Macro
6.6%	-21.8%	11.5%	6.5%	-4.2%	4.2%	5.5%	1.7%	-1.3%	2.6%	4.8%	2.8%
S&P 500	HFRI ED Distressed	Barclays Agg	HFRI FOF Composite	HFRI Fund Wghted Comp	HFRI Equity Market Neutral	HFRI ED Merger Arb	HFRI Event Driven	HFRI Emerging Markets	HFRI Equity Market Neutral	HFRIED Merger Arb	HFRI Emerging Markets
5.5%	-25.2%	5-9%	5.7%	-5-3%	3.0%	4.7%	1.1%	-3.3%	2.2%	4.1%	2.2%
HFRI Equity Market Neutral	S&P 500	HFRI Macro	HFRI ED Merger Arb	HFRI FOF Composite	HFRI ED Merger Arb	HFRI Macro	HFRI ED Distressed	HFRI Event Driven	HFRI Macro	Barclays Agg	HFRI Equity Market Neutra
5.3%	-37.0%	4.3%	4.6%	-5.7%	2.8%	-0.4%	-1.4%	-3.6%	1.0%	3-5%	2.0%
HFRI ED Distressed	HFRI Emerging Markets	HFRI Equity Market Neutral	HFRI Equity Market Neutral	HFRI Emerging Markets	HFRI Macro	Barclays Agg	HFRI Emerging Markets	HFRI ED Distressed	HFRI FOF Composite	HFR I Macro	HFRI FOF Composite
	-37-3%	1.4%	2.9%	-14.0%	-0.1%	-2.0%	-2.6%	-8.1%	0.5%	2.3%	1.3%

Source: Bloomberg, Morgan Stanley Wealth Management Investment Resources

Utilize Hedged Strategies to Navigate Market Volatility

HFRI Fund Weighted Composite Performance During Worst 30 Months for S&P 500

January 2000 – June 2018



Source: Bloomberg, Morgan Stanley Wealth Management GIC.

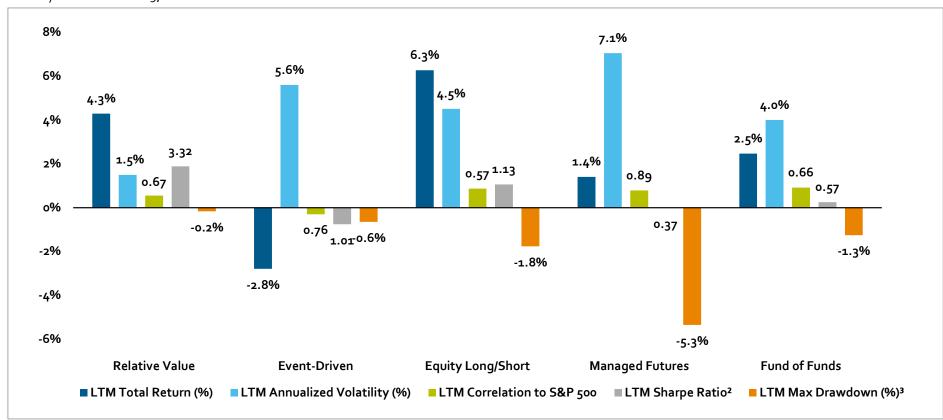
Hedged Strategies: Performance Indicators

As of August 31, 2018

	Relative Value	Event- Driven	Equity Long/Short	Managed Futures	Global Hedge Funds
Last Twelve Months					
Total Return (%)	3.8%	-4.2%	5.5%	0.9%	1.6%
Annualized Volatility (%) ¹	1.4%	5.5%	4.6%	7.5%	4.0%
Correlation to S&P 500	0.44	-0.25	0.80	0.73	0.86
Sharpe Ratio ²	1.55	-1.07	0.85	-0.09	0.00
Max Drawdown (%)³	-0.7%	-1.2%	-2.5%	-7.1%	-2.0%
15-Year					
Annualized Return (%)	1.1%	2.4%	1.1%	0.4%	1.2%
Annualized Volatility (%)	6.8%	6.2%	7.0%	6.7%	5.3%
Correlation to S&P 500	0.61	0.19	0.79	0.10	0.74
Sharpe Ratio ²	-0.01	0.19	-0.02	-0.12	-0.01
Max Drawdown (%) ³	-18.0%	-24.8%	-30.6%	-14.4%	-22.2%

Source: Bloomberg, Morgan Stanley Wealth Management GIC; (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. (2)The Sharpe ratio is calculated by subtracting the risk-free rate - such as that of the 3-month US Treasury bill - from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. (3) Max Drawdown: The peak-to-trough decline during a specific period. Indices used for this analysis include: HFRX Relative Value Index for relative value, HFRX Event-Driven Index for event-driven, HFRX Equity Hedge for equity long/short, HFRX Macro/CTA Index for managed futures and HFRX Global Hedge Fund Index for global hedge funds. Hedged strategies consist of hedge funds and managed futures.

Hedged Strategies: Performance Indicators¹



Monthly Data as of June 29, 2018

Source: Bloomberg, Morgan Stanley Wealth Management GIC. (1) Indices used for this analysis include: HFRI Relative Value Index for relative value, HFRI Event-Driven Index for event-driven, HFRI Macro for global macro, HFRI Equity Hedge for equity long/short, BarclayHedge BTOP50 Index for managed futures and HFRI Fund of Fund Composite Index for fund of funds. Hedged strategies consist of hedge funds and managed futures. (2)The Sharpe ratio is calculated by subtracting the risk-free rate —such as that of the 3-month US Treasury bill—from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. (3) Max Drawdown: The peak-to-trough decline during a specific period.

Hedged Strategies: Performance Indicators

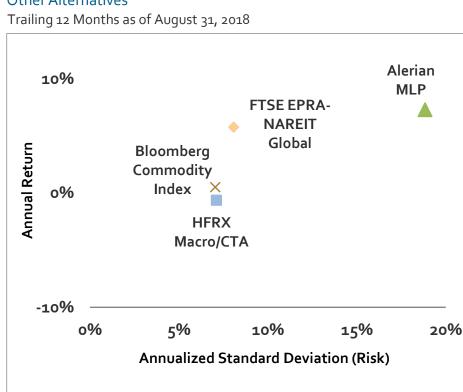
	Porformance as of 8/21/2018									
	Performance as of 8/31/2018						Volatility ¹			
					Ann	Ann		Ann	Ann	
Index in USD	MTD	3M	YTD	12M	3YR	5YR	12M	3YR	5YR	
Hedged Strategies										
HFRX Global Hedge Funds	0.54	0.20	-0.46	1.63	1.72	1.37	3.96	3.67	3.56	
HFRX Equity Hedge	-0.12	-0.07	0.84	5.47	3.10	3.03	4.55	5.04	4.88	
HFRX Event Driven (ED)	0.14	-0.85	-4.87	-4.21	2.67	1.05	5.45	5.79	6.01	
HFRX ED: Merger Arbitrage	0.13	0.89	-0.35	0.59	3.22	3.64	2.04	1.85	1.67	
HFRX ED: Distressed Securities	0.25	-1.25	-5.75	-4.93	1.84	1.01	6.62	7.65	6.57	
HFRX Relative Value	0.39	0.73	2.55	3.76	0.97	0.51	1.38	3.22	3.08	
HFRX Fixed Income - Corporate	0.99	0.15	1.14	2.52	4.98	4.51	2.48	2.81	2.70	
Other Alternatives										
HFRX Macro/CTA Index	-1.10	-1.34	-2.90	-0.64	-2.09	-0.10	7.11	4.94	4.67	
FTSE EPRA-NAREIT Global	0.75	2.22	1.60	5.75	8.96	7.86	8.08	10.45	10.76	
Bloomberg Commodity Index	-1.77	-7.23	-3.87	0.51	-1.89	-8.01	7.04	9.89	11.62	
Alerian MLP	1.58	6.59	7.58	7.30	-0.67	-1.97	18.84	20.31	18.1 <u>y</u>	

As of August 31, 2018; HFRX Corporate Fixed Income as of July 31, 2018 (performance and volatility in percent form)

Source: Morgan Stanley & Co. Research, FactSet, HFR, NCREIF, Venture Economics, Barclay Hedge. (1) Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Volatility is measured using price only returns. (2) Represents a three-month lag in reporting. (3) Represents a five-month lag in reporting. Hedged strategies consist of hedge funds and managed futures. Private Equity is represented by the Thomson One Venture Economics Global Private Equity Survey. This survey provides a time-weighted average of internal rates of return on a sample of US private equity funds. The data are updated quarterly with a lag of several months. For more information about the risks to Master Limited Partnerships (MLPs) please see the Risk Considerations section at the end of this material.

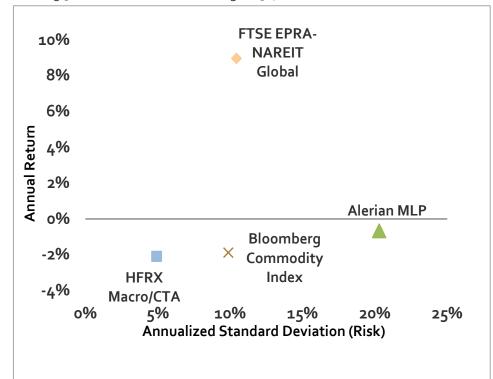
Hedged Strategies and Global Alternatives Risk/Return

Other Alternatives



Other Alternatives

Trailing 3 Years Annualized as of August 31, 2018



Source: Morgan Stanley & Co. Research, FactSet, HFR, NCREIF, Bloomberg. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. For more information about the risks to Master Limited Partnerships (MLPs) please see the Risk Considerations section at the end of this material.

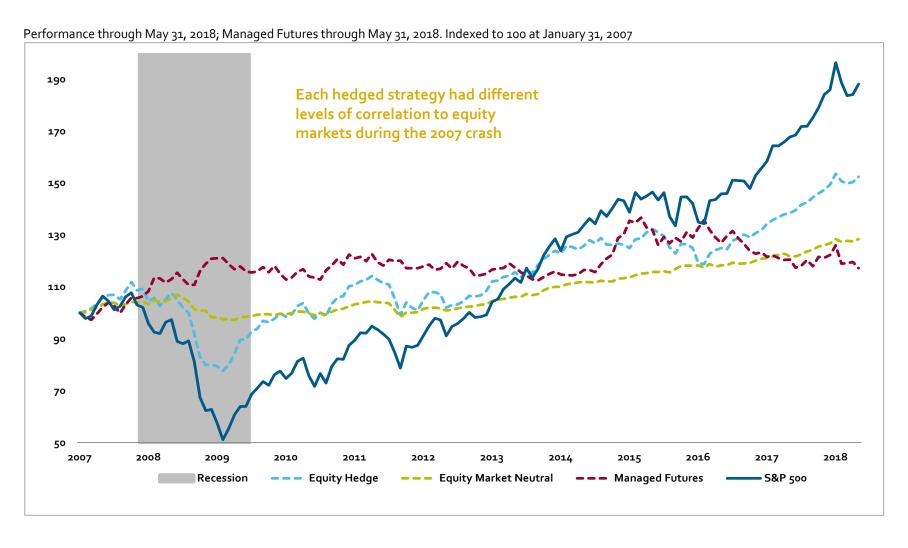
Many Hedged Strategies Have Low Correlations to Stocks & Bonds

Monthly Data As of May 31, 2018

			Long Rur	n Correlations	ł	
	Annualized	Annual Volatility, 25	Correlation	Correlation to	25-Year	Maximum
Alternative Strategies	Performance since 1990	Year Average	to S&P	Global Bonds	Sharpe Ratio	Drawdown
Equity Long/Short	11.5%	7.6%	0.73	0.03	0.98	(30.6%)
Event Driven	10.5%	5.5%	0.70	0.10	1.18	(24.8%)
Hedge Fund of Funds Composite	6.6%	4.6%	0.54	0.05	o.66	(22.2%)
Relative Value	9.1%	3.1%	0.51	0.18	1.46	(18.0%)
Equity Market Neutral	6.2%	2.5%	0.28	0.02	1.05	(9.2%)
Convertible Arbitrage	8.0%	3.9%	0.47	0.21	0.82	(35.3%)
Global Macro	10.0%	6.1%	0.32	0.07	0.98	(10.7%)
Distressed Credit	10.5%	5.1%	0.52	0.13	1.18	(27.4%)
Managed Futures ¹	8.8%	7.6%	0.38	0.01	0.78	(11.8%)
S&P 500	10.0%	12.8%			0.50	-50.9%
Barclays Capital Global Aggregate Bond Index	5.7%	5.1%			0.51	-10.1%

Source: Bloomberg. Morgan Stanley Wealth Management GIC. Calculated by Morgan Stanley Wealth Management. For illustrative purposes only. Sharpe ratio is calculated by subtracting the risk-free rate—such as that of the 3-month US Treasury bill—from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. Max Drawdown: The peak-to-trough decline during a specific period. Indices used for this analysis include: HFRI Equity Hedge (Total) Index for equity long/short, HFRI Event-Driven (Total) Index for event-driven, HFRI Fund of Funds Composite Index for fund of funds, HFRI Relative Value (Total) Index for relative value, HFRI Equity Market Neutral Index for equity market neutral, HFRI RV: Fixed Income-Convertible Arbitrage Index for convertible arbitrage, HFRI Macro (Total) Index for global macro, HFRI ED: Distressed/Restructuring Index for distressed credit, and HFRI Macro: Systematic Diversified Index for managed futures. Hedged strategies consist of hedge funds and managed futures. Note: (1) Managed futures data incepted in April 30, 2007. All hedge fund indices have a one month lag in data.

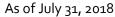
Hedged Strategy Diversification Properties Aren't Homogeneous

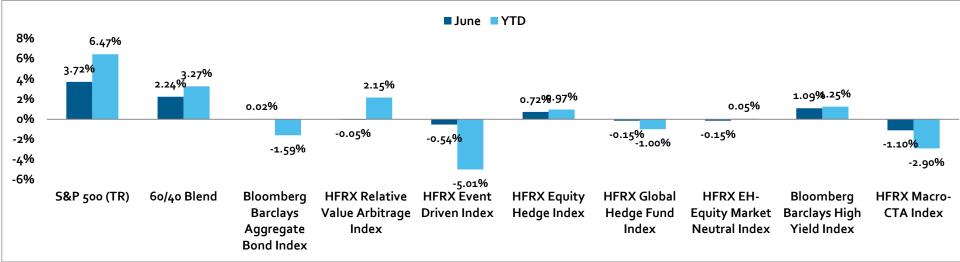


Source: HFRI Indices from Bloomberg, Morgan Stanley Wealth Management GIC. Indices used for this analysis include: BarclayHedge BTOP50 Index for managed futures; HFRI Equity Market Neutral Index for equity market neutral, and HFRI Equity Hedge Index for Equity Hedge. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean. For illustrative purposes only.

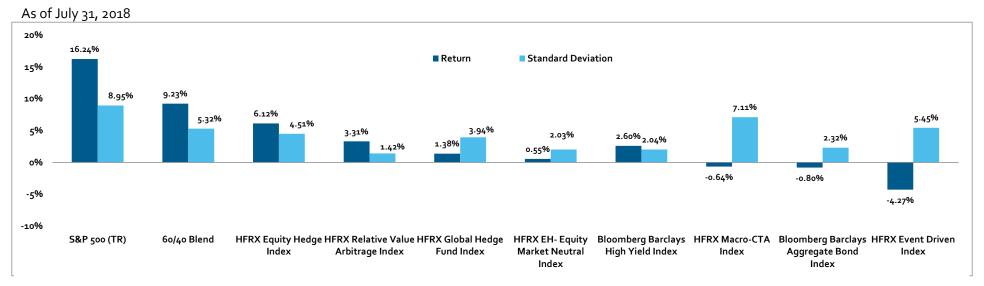
Hedge Funds Risk and Return

Monthly & YTD 2018 Returns





Last Twelve Months Return & Standard Deviations

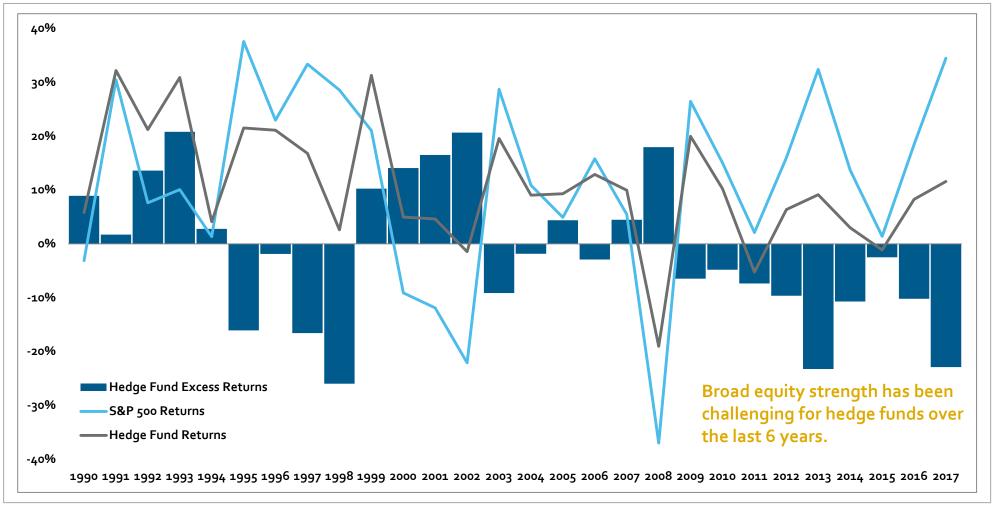


Source: Bloomberg, Morgan Stanley Wealth Management GIC.

Alpha Cycles: Hedge Funds Have Outperformed in Bear Markets and Underperformed in Bull Markets

Hedge Fund Excess Return vs. S&P 500 Since 1990

As of December 29, 2017

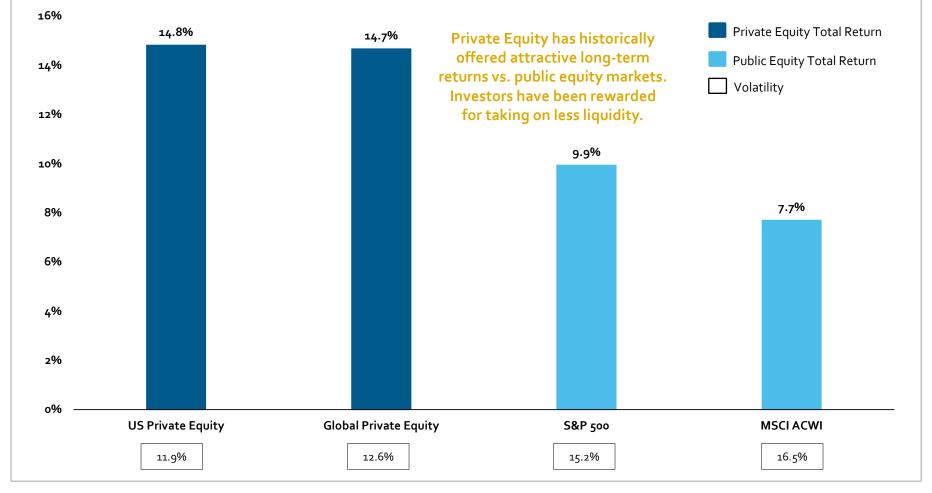


Source: Bloomberg, Goldman Sachs Asset Management, Morgan Stanley Wealth Management Investment Resources. Hedge Funds are represented by the HFRI Fund Weighted Composite Index. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Private Market Performance Has Historically Been Better Than the Public Market

Private Equity¹Vs. Public Equity: (1990 - 2018)

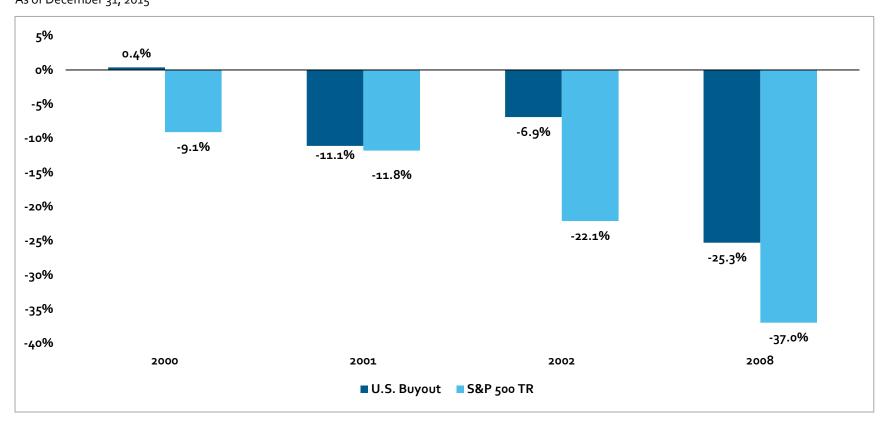
Annualized Total Returns June 29, 2018, P/E data as of 4Q 2017²



Source: FactSet, Thomson ONE. (1) Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by Buyout, Distressed, Growth Equity, Mezzanine, Private Equity Energy, Upstream Energy & Royalties and Venture Capital. (2) US and Global Private Equity data subject to 5-month lag; therefore, all asset classes are depicted as of displayed date for consistency. Private equity returns are net to limited partners.

Private Equity Has Outperformed During Declining Markets

During years when the public equity markets declined, private equity outperformed the S&P 500 Total Return by 69-1522 bps. Over these four years, private equity outperformed the S&P 500 Total Return Index 10 of the 16 quarters by an average of 639 bps.

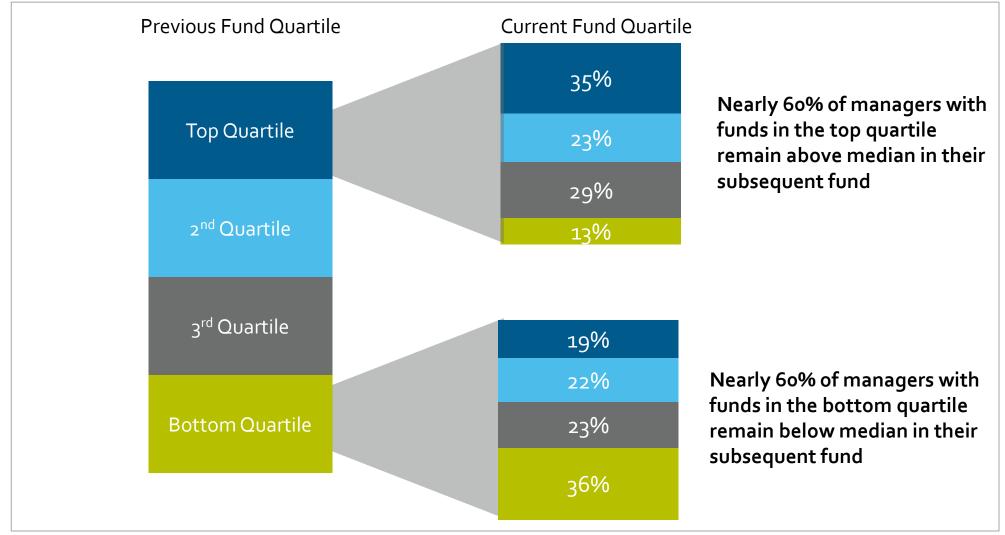


Private Equity (Buyout) and S&P 500 Total Return During Years of Market Declines As of December 31, 2015

Source: Thomson ONE: Private equity index data sourced from Thomson ONE's Cambridge Associates benchmarking database and is represented by U.S. Buyout. Returns are net to limited partners; Bloomberg. TR = Total return.

Private Market Performance Has Persisted Across Vintages

Private Equity Buyout Fund Persistence by Quartile Performance Performance for Vintages from 1984 through 2008



Source: Morgan Stanley Wealth Management GIMA, Blackstone; Steven N. Kaplan, Robert S. Harris, Tim Jenkinson, Rudiger Stucker, "Has Persistence Persisted in Private Equity? Evidence from Buyout and Venture Capital Funds," February 2014. Darden Business School Paper: 2304808. Vintages are only through 2008 since more recent vintages may still be investing and have few realizations.

Private Equity Strategies

Stages of a Company Life Cycle

Early Stage Venture Capital

 Seed or start-up equity in private companies that may not be generating revenue or profits

Growth Equity

 Equity investments in more mature companies to provide funding for growth and expansion

Buyouts

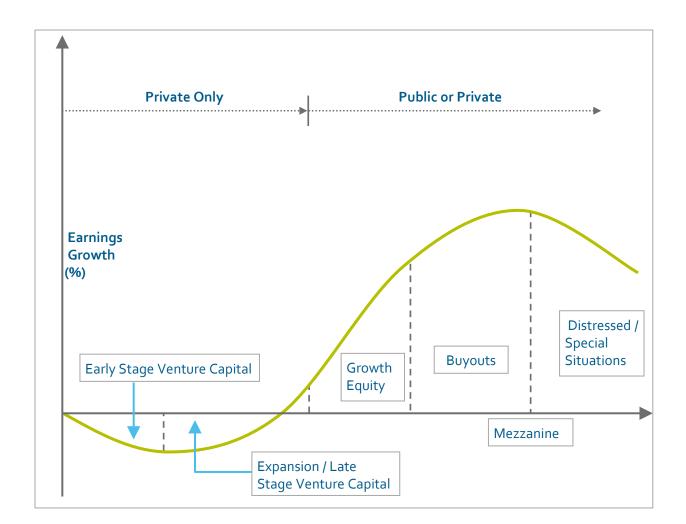
 Equity investments to acquire a controlling interest in a company

Mezzanine

 Subordinated debt or preferred stock that earns a coupon and may have warrants or conversion features

Distressed / Special Situations

 Investments in unconventional strategies such as energy, royalty, and distressed funds



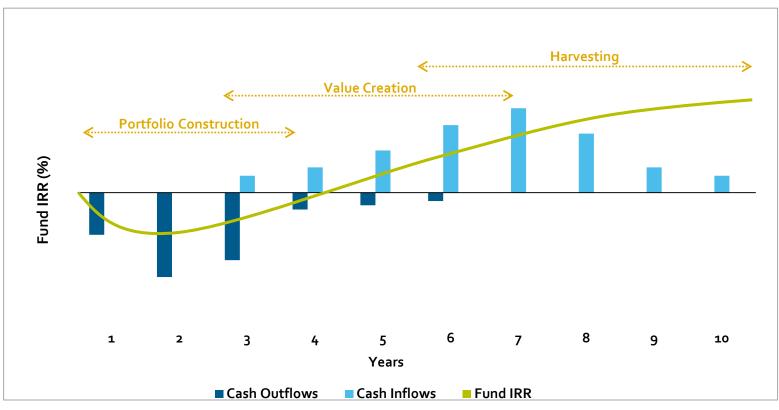
Source: Morgan Stanley Wealth Management GIMA

The J-Curve

For Private Equity funds, performance (measured by the internal rate of return "IRR") typically follows a J-Curve pattern. This is caused by 3 main drivers:

- Management fees drawn on committed capital during the portfolio construction phase
- Investments held at cost for at least first few years
- Interim mark-ups are generally based on conservative approach

Hypothetical Illustration of the J-Curve

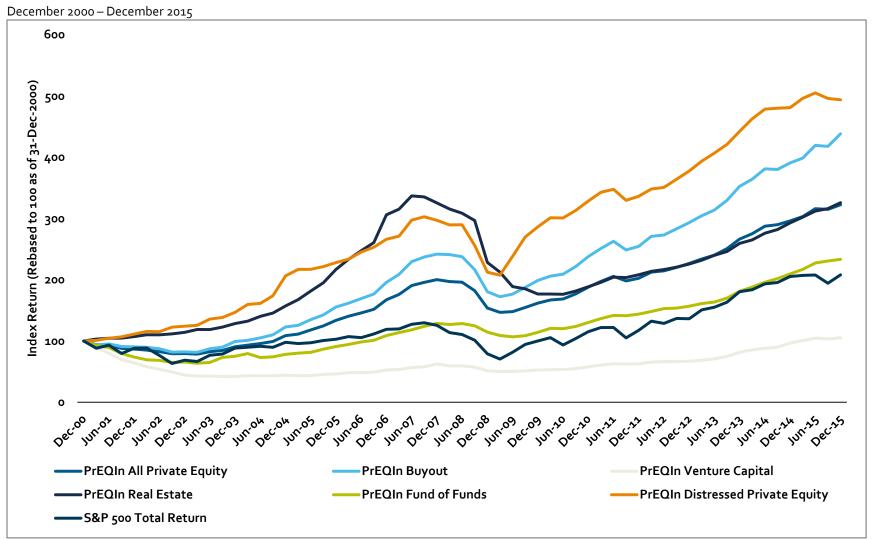


Source: Morgan Stanley Wealth Management GIMA. For illustrative purposes only. Internal rate of return (IRR) is a metric used in capital budgeting measuring the profitability of potential investments. IRR is a discount rate that makes the net present value (NPV) of all cash flows from a particular project equal to zero. The J-curve effect refers to a "J" shaped section of a time-series graph in which the curve falls into negative territory and then gradually rises to a higher level than before the decline.

Morgan Stanley

Private Equity Returns Compared to the S&P 500

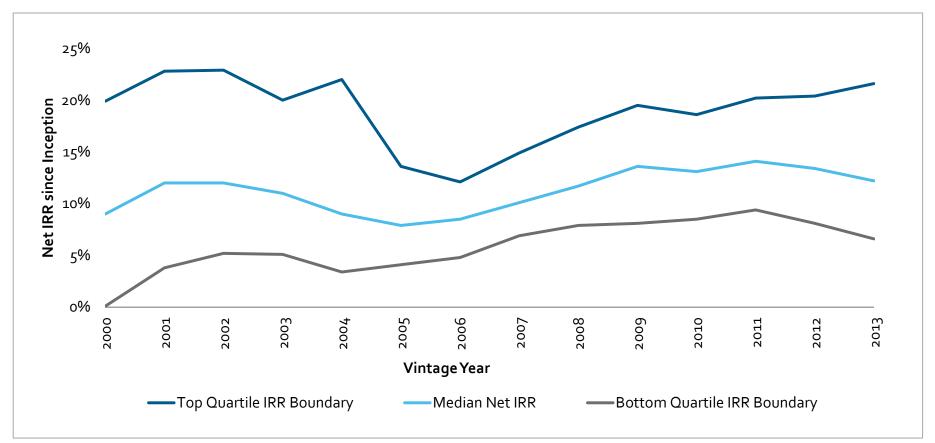
Preqin Quarterly Index: All Private Equity¹ vs. S&P 500 Total Return Index



Source: Morgan Stanley Wealth Management GIMA, Preqin, "Preqin Private Equity Spotlight" Datapack – August 2016; (1) All Private Equity comprises buyout, venture capital, growth, turnaround, secondaries, fund of funds, distressed debt, mezzanine, special situations, real estate, infrastructure, balanced, direct secondaries, co-investment, multi-manager.

Importance of Manager Selection

Private Equity Median Net Internal Rates of Return (IRR) and Quartile Boundaries by Vintage Year As of October 31, 2017

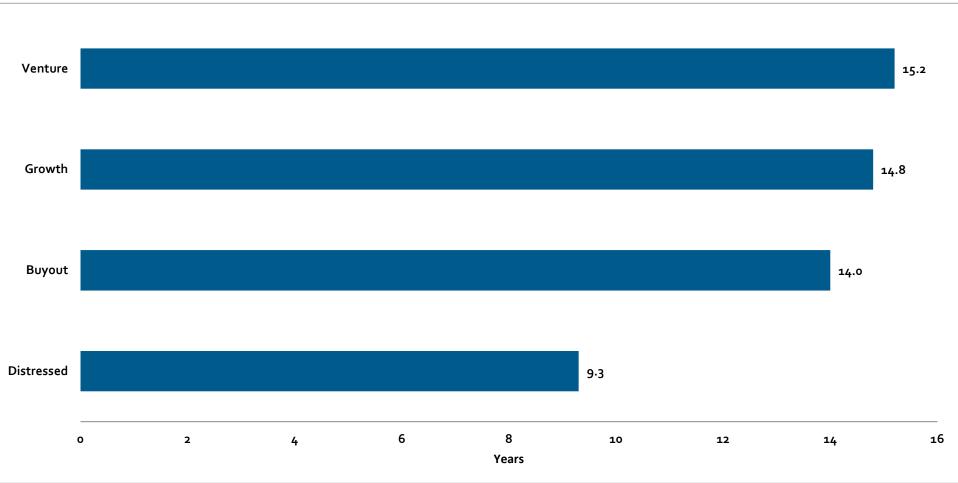


Source: Morgan Stanley Wealth Management GIMA, Preqin, "Preqin Private Equity Spotlight" September 2016. Internal rate of return (IRR) is a metric used in capital budgeting measuring the profitability of potential investments. IRR is a discount rate that makes the net present value (NPV) of all cash flows from a particular project equal to zero.

Average Fund Life Varies Greatly by Strategy

Average Fund Life by Strategy

As of December 31, 2014

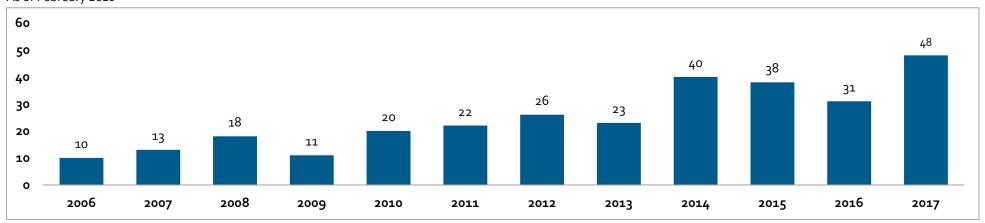


Source: Morgan Stanley Wealth Management Investment Resources, Goldman Sachs Asset Management, Preqin, AIMS. Analysis includes 2,246 funds that were raised from 1978 to 2011 and that have been liquidated.

Private Equity Secondary Market

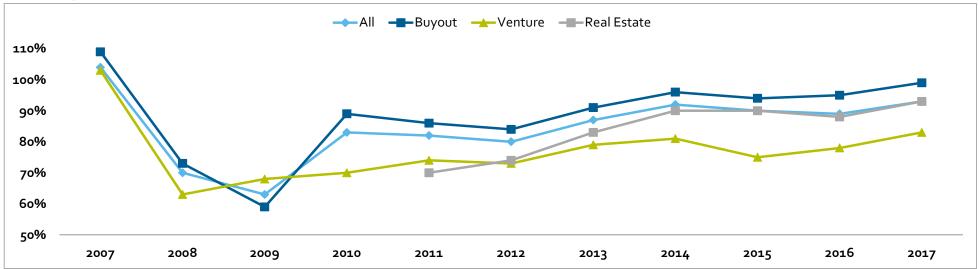
Decrease in 2016 is largely attributed to fewer mega-portfolio deals

Amount of Secondary Transactions Per Year As of February 2018



Secondary Pricing Over Time

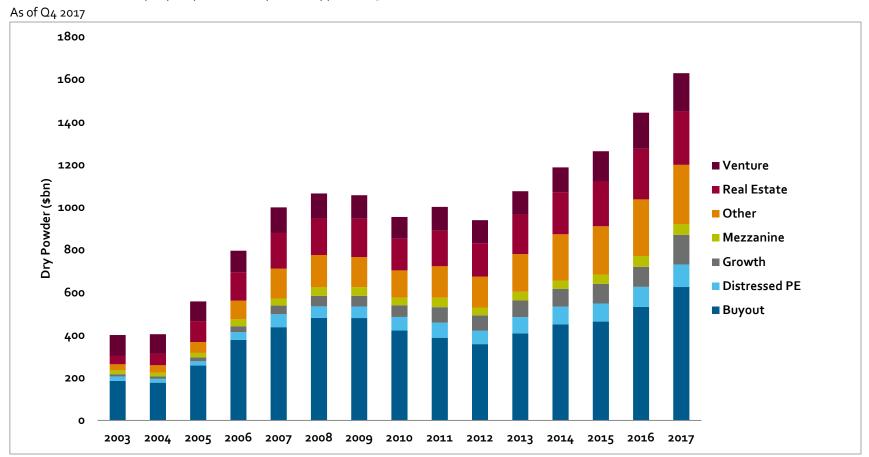
As of January 2018



Source: Morgan Stanley Alternative Investment Partners, Greenhill Secondary Pricing Trends & Analysis as of February 2018 (upper). Credit Suisse as of February 2018 (upper and lower).

Private Equity and Real Estate Dry Powder

As of December, dry powder reached a high of about \$1.62 trillion. While a large amount of dry powder creates a more competitive market, the illiquid nature of private equity and real estate allows managers to be patient and invest selectively.



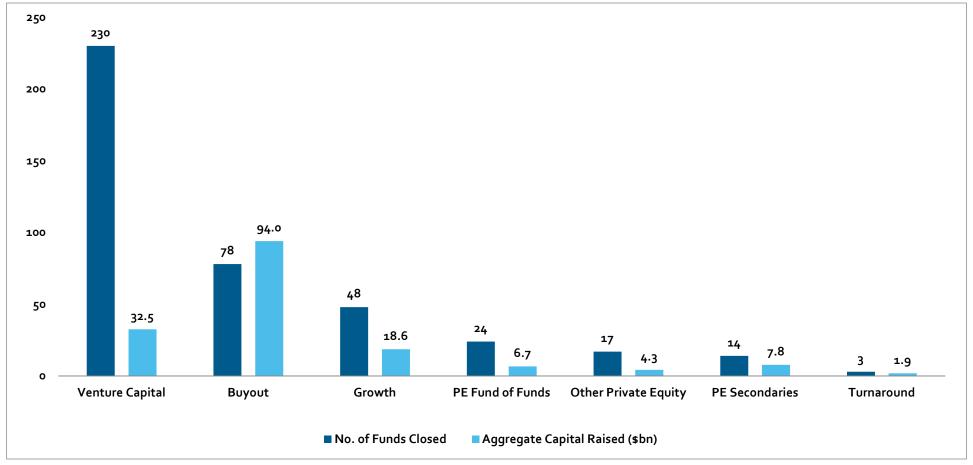
Estimated Private Equity Dry Powder by Fund Type, 2003- December 2017

Source: Preqin: December 31th, 2017

Private Equity Fundraising Focuses on Buyouts and Venture Capital

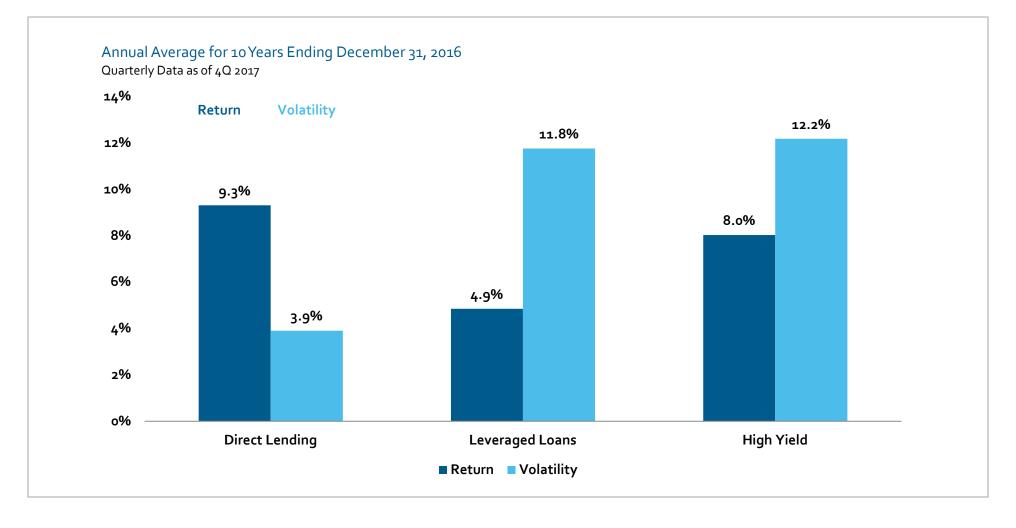
Global Private Equity Fundraising in 2018 by Fund Type

As of Q2 2018



Source: Morgan Stanley Wealth Management GIMA, Preqin Private Equity Update Q2 2018.

Direct Lending Has Had Higher Returns and Lower Volatility Compared With Leveraged Loans and High Yield



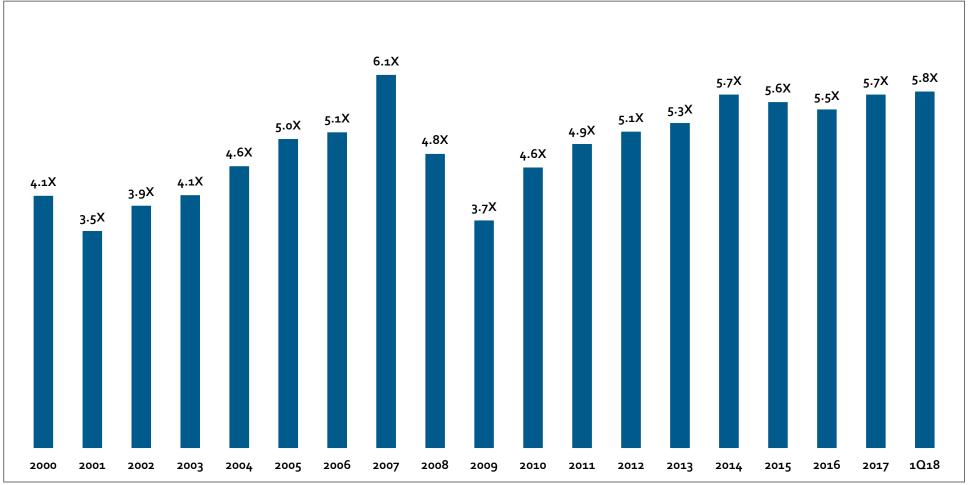
Source: Cliffwater Research, Bloomberg, Morgan Stanley Wealth Management Investment Resources

US Leverage: Debt Financing for Buyouts

Lending for US buyouts continues to be robust, and we have seen a continued rise in leverage since 2008

Average LBO Pro Forma Credit Statistics: Total Debt/EBITDA (US Only)

As of December 31, 2017

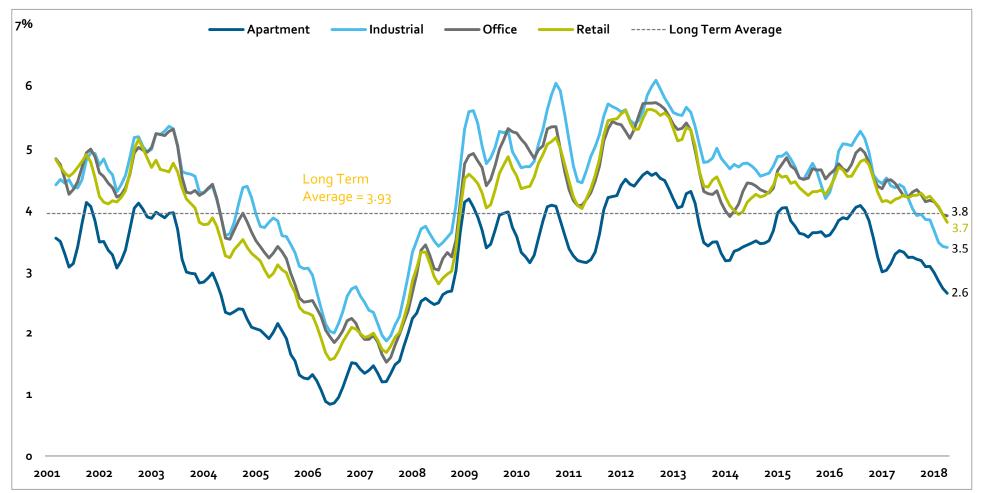


Source: Morgan Stanley Wealth Management Investment Resources, Neuberger Berman; S&P Leveraged Buyout Quarterly Review

Real Estate Cap Rate Spreads Have Rebounded Since 2008

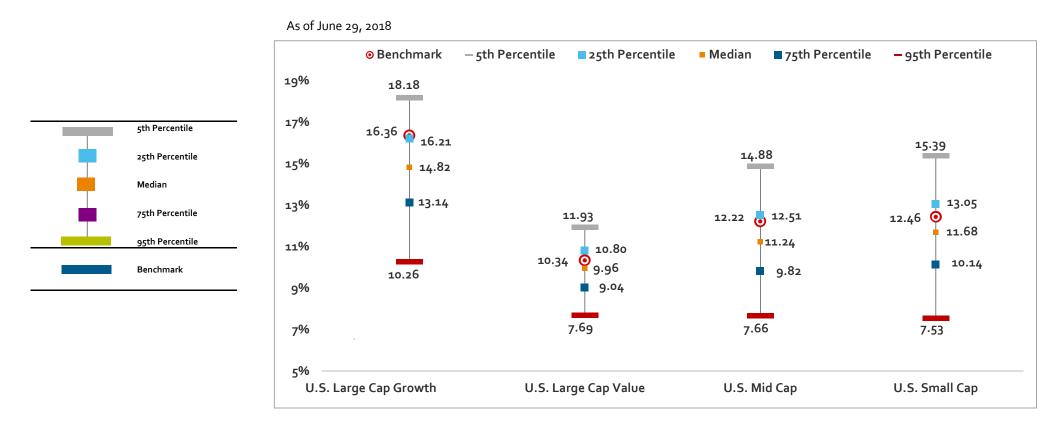
Real Estate Cap Rate Spreads to US 10-Yr Treasury by Sector (3-month moving average)

Data as of May 31, 2018 (two month lag)



Source: Morgan Stanley Wealth Management Investment Resources, Bloomberg, Real Capital Analytics, Goldman Sachs Asset Management. Long Term Average is the simple average of the average historic cap rate for each sector.

US Equity Mutual Funds: Five-Year Annualized Returns



Source: Morningstar. Mutual fund peer groups are the result of Morningstar Category classifications and are intended to help investors make meaningful comparisons between mutual funds. The chart displays the percentile range of returns for each peer group with the 5th Percentile having the best returns and the 95th Percentile having the worst returns. For a description of the peer group categories, please see the end of Section 2. Fund performance data includes reinvestment of dividends and capital gains. Returns include the fees and expenses of the funds in each peer group, but do not reflect any applicable sales charges. If sales charges had been included, returns would have been lower. Index performance data includes reinvestment of dividends and capital gains, but does not include the payment of any sales charges or fees that an investor would pay to purchase the securities it represents. Such costs would lower performance.

5th Percentile

25th Percentile

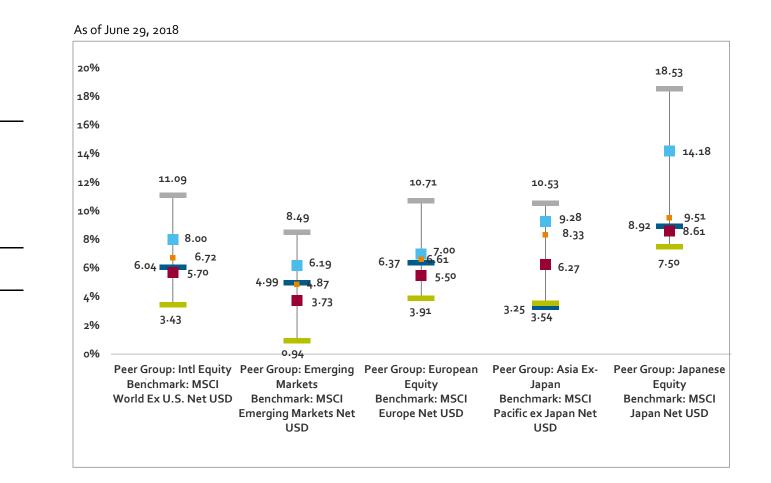
75th Percentile

95th Percentile

Benchmark

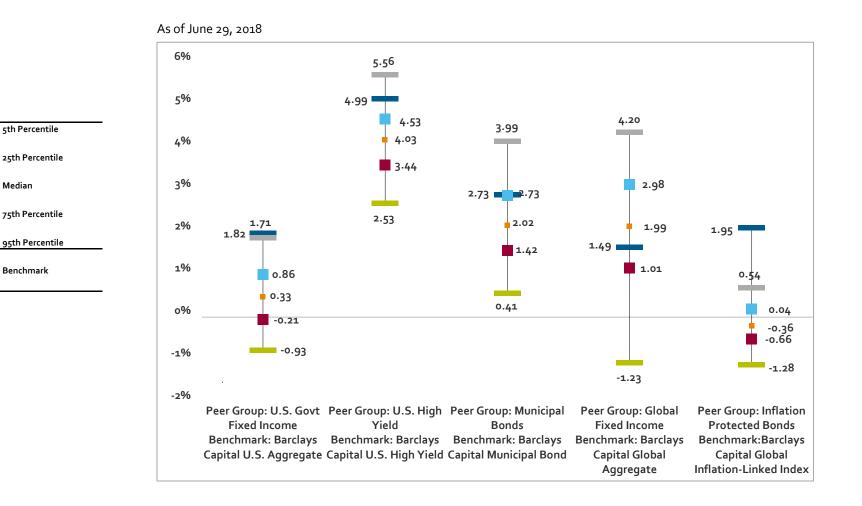
Median

International Equity Mutual Funds: Five-Year Annualized Returns



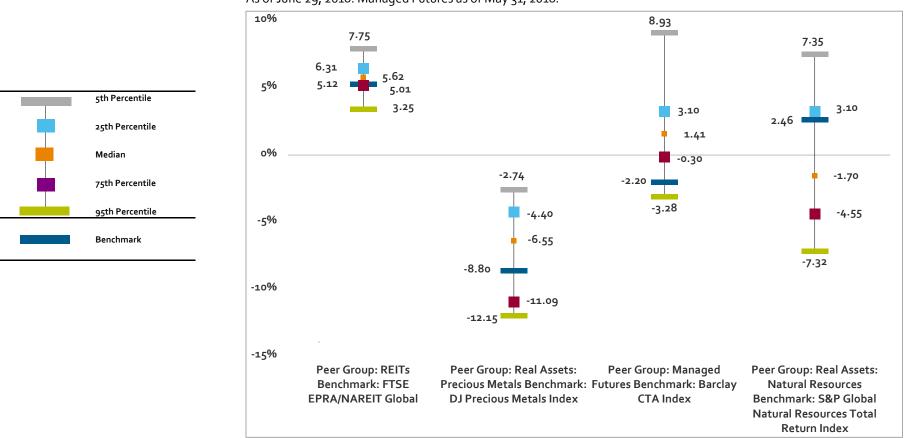
Source: Morningstar. Mutual fund peer groups are the result of Morningstar Category classifications and are intended to help investors make meaningful comparisons between mutual funds. The chart displays the percentile range of returns for each peer group with the 5th Percentile having the best returns and the 95th Percentile having the worst returns. Fund performance data includes reinvestment of dividends and capital gains. Returns include the fees and expenses of the funds in each peer group, but do not reflect any applicable sales charges. If sales charges had been included, returns would have been lower. Index performance data includes reinvestment of dividends and capital gains, but does not include the payment of any sales charges or fees that an investor would pay to purchase the securities it represents. Such costs would lower performance.

Fixed Income Mutual Funds: Five-Year Annualized Returns



Source: Morningstar. Mutual fund peer groups are the result of Morningstar Category classifications and are intended to help investors make meaningful comparisons between mutual funds. The chart displays the percentile range of returns for each peer group with the 5th Percentile having the best returns and the 95th Percentile having the worst returns. Fund performance data includes reinvestment of dividends and capital gains. Returns include the fees and expenses of the funds in each peer group, but do not reflect any applicable sales charges. If sales charges had been included, returns would have been lower. Index performance data includes reinvestment of dividends and capital gains, but does not include the payment of any sales charges or fees that an investor would pay to purchase the securities it represents. Such costs would lower performance.

Alternatives: Five-Year Annualized Returns

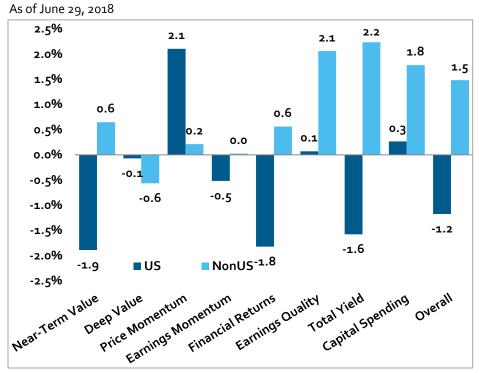


As of June 29, 2018. Managed Futures as of May 31, 2018.

Source: Morningstar. Alternatives peer groups are the result of Morningstar classifications and are intended to help investors make meaningful comparisons between alternatives. The chart displays the percentile range of returns for each peer group with the 5th Percentile having the best returns and the 95th Percentile having the worst returns. Hedge fund performance data includes reinvestment of dividends and capital gains. Returns include the fees and expenses of the funds in each peer group, but do not reflect any applicable sales charges. If sales charges had been included, returns would have been lower. Index performance data includes reinvestment of dividends and capital gains, but does not include the payment of any sales charges or fees that an investor would pay to purchase the securities it represents. Such costs would lower performance. Bloomberg Barclays CTA Index, the Managed Futures benchmark, is on a 1-month lag from peer group data.

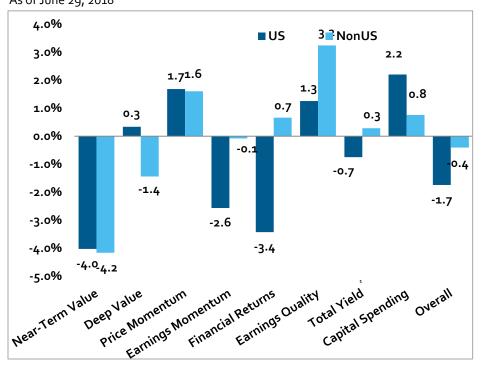
Tactical Equity Framework: Last One- and Three-Month Factor Performance

As factor performance varies by market regime, we track which factors have delivered outperformance over the last one and three months. Returns indicate the performance of companies, both domestically and internationally, with attractive exposures to factor groups relative to market performance. The Overall score combines the eight factor groups into one comprehensive signal.



Previous One-Month Market-Relative Performance by Factor Type

Previous Three-Month Market-Relative Performance by Factor Type As of June 29, 2018



Source: FactSet, Morgan Stanley Wealth Management GIC. For definitions of factors and universes, please reference our special report, *Tactical Equity Allocation: Introducing a Systematic Framework* for Short-Term Investment Views, December 2015. Note: (1) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Tactical Equity Framework: Last 12-Month Factor Performance

The tables below observe which factors, both within and outside the US, have delivered outperformance over the 12-month horizon of the Tactical Equity Framework. Returns indicate the performance of companies with attractive exposures to factor groups, relative to performance of that sector. The Overall score combines the other eight factors into one comprehensive signal. Positive returns indicate factors have added value over the previous 12 months.

Performance by Factor Group

US Stocks, March 2017 – June 2018

Factors	All Stocks	Consumer Discr.	Consumer Staples	Energy	Financials	Health Care	Industrials	Info. Tech.	Materials	Telecom. Services ¹	Utilities
Near-Term Value	-5.1%	2.6%	-4.1%	12.6%	-0.7%	-11.3%	-6.2%	-17.2%	2.3%	2.7%	1.6%
Deep Value	0.6%	12.4%	-3.5%	30.8%	-2.6%	-3.7%	1.8%	-15.9%	10.0%	8.3%	-14.9%
Price Momentum	2.5%	4.6%	-1.2%	-1.8%	-0.3%	8.3%	1.6%	7.7%	-1.6%	4.0%	-10.9%
Earnings Momentum	2.1%	-2.0%	1.9%	-0.5%	1.7%	0.3%	-4.8%	8.2%	6.0%	3.7%	28.7%
Financial Returns	1.3%	-5.4%	0.2%	8.2%	2.9%	-4.4%	6.3%	2.8%	-5.8%	8.9%	16.7%
Earnings Quality	5.2%	4.2%	-0.2%	3.3%	0.0%	9.0%	-1.1%	o.6%	7.2%	-1.1%	-25.2%
Total Yield ²	-2.4%	-2.0%	11.6%	15.6%	-6.2%	-18.5%	-1.3%	-4.1%	-0.3%	1.6%	-17.5%
Capital Spending	-2.5%	4.1%	-7.8%	3.7%	0.0%	-13.1%	-4.8%	-12.7%	1.1%	2.5%	-39.1%
Overall Factor	0.8%	6.1%	7.2%	10.3%	-1.3%	-8.3%	3.0%	-6.0%	-3.4%	8.8%	-3.6%

Performance by Factor Group

International Stocks, March 2017 – June 2018

Factors	All Stocks	Consumer Discr.	Consumer Staples	Energy	Financials	Health Care	Industrials	Info. Tech.	Materials	Telecom. Services	Utilities
Near-Term Value	2.4%	5.0%	-8.8%	9.5%	1.4%	-7.0%	2.1%	-1.7%	11.7%	0.2%	3.0%
Deep Value	0.8%	-1.6%	-1.6%	14.2%	-1.9%	-4.0%	2.1%	-4.4%	9.0%	3.1%	-1.6%
Price Momentum	7.0%	14.6%	18.1%	-9.2%	0.3%	5.1%	4.5%	8.4%	1.4%	25.9%	7.5%
Earnings Momentum	2.4%	5.5%	o.8%	-13.9%	-0.5%	-1.7%	3.7%	-0.2%	-0.9%	3.4%	7.0%
Financial Returns	1.9%	3.0%	1.1%	-8.3%	3.0%	7.4%	5.9%	1.1%	-2.0%	-1.8%	7.5%
Earnings Quality	0.9%	5.1%	5.3%	3.6%	0.0%	-1.1%	2.7%	8.3%	2.5%	-3.1%	5.0%
Total Yield ²	-0.1%	5.6%	-3.2%	7.4%	3.0%	-7.2%	3.9%	-2.3%	5.9%	0.6%	-2.6%
Capital Spending	1.8%	6.1%	6.5%	0.5%	0.0%	-0.1%	5.1%	9.5%	2.6%	4.6%	3.3%
Overall Factor	4.4%	7.8%	3.8%	5.8%	4.1%	-9.9%	4.5%	3.9%	9.2%	7.5%	5.2%

Source: FactSet, Morgan Stanley Wealth Management GIC. (1) Telecommunication Services has only 13 companies in the US, which may result in extreme factor performance. (2) Total Yield is the sum of cash distributions paid and net share repurchases divided by current market price. For definitions of factors and universes, please reference our special report, *Tactical Equity Allocation: Introducing a Systematic Framework for Short-Term Investment Views*, December 2015.

Tactical Equity Framework – Factor Views for Manager Selection

Composite Valuation Scores and Recent Market-Relative Factor Performance As of July 31, 2018

Percentile **Current Valuation Factor Trailing Relative Return** Current (1 = Attractive, (>o = Attractive, **Factor View** Last 3 Months Last 6 Months Last 12 Months 100 = Unattractive) <o = Unattractive) United States High Beta 57 -0.14 -0.5% -0.4% 3.0% High Book/Price -1.3% -1.1% -1.7% 42 0.27 2.9% High Price Momentum 0.3% 5.0% 70 -0.50 **High Dividend Yield** 48 3.0% 2.1% -1.6% 0.14 Low Volatility 55 -0.15 -1.4% 0.2% -3.5% **High Quality** 0.3% -0.6% 4.8% 40 0.14 Developed Markets (ex US) High Beta -0.20 -1.4% -3.6% 1.0% 52 High Book/Price -2.4% -2.5% -3.7% 32 0.53 78 **High Price Momentum** Unattractive 0.2% -1.7% 1.2% -0.84 **High Dividend Yield** -0.5% 0.1% -4.7% 30 0.58 Low Volatility Attractive 2 2.02 0.3% 1.3% -1.8% **High Quality** 61 4.1% 3.3% 2.0% -0.41 **Emerging Markets** High Beta 69 -5.4% -10.3% -2.3% -0.52 High Book/Price 4.0% 0.3% -13.0% 29 0.50 **High Price Momentum** Unattractive 80 -0.66 0.5% 4.4% 5.9% **High Dividend Yield** 42 0.29 3.1% -7.8% 8.8% Low Volatility 0.86 5.2% -4.4% Attractive 7.2% 25 **High Quality** 80 Unattractive -0.70 2.7% 7.7% 15.1%

Source: FactSet, Morgan Stanley Wealth Management GIC. For definitions of factors and universes, please reference our special report, *Tactical Equity Allocation: Introducing a Systematic Framework* for Short-Term Investment Views, dated December 2015.

United States Sector & Factor Profiles

US Factor Scores and Fundamentals

As of July 9, 2018

Quan	t Factors	Factor			
		Scores		Sectors	Ma
Dee	p Value	-		Telecommunication Services	
Near-Term Value		_		Consumer Discretionary	
Мог	mentum	+		Industrials	
	is Revisions	++		Information Technology	
-				Consumer Staples	
	itability	+		Financials	
Earnin	gs Quality	0		Health Care	
Tot	al Yield	+		Real Estate –	
Cap	ital Use	+		Energy	
	verall	+		Materials Utilities	
				Otilities	
Valuation	Price-to-Book	3.10		Top 10 Industries	В
valuation	Price-to-Earnings	16.79			
hareholder	Dividend Yield ¹	1.74%		Specialty Retail	Н
Payout	Total Yield ²	3.12%		Aerospace & Defense	C
Earnings &	Return on Equity	12.99%		Conglomerates IT Services	
Growth	LT Growth			Diversified Telecom	
		15.01%		Comm. Equipment	٦
	L1m	-3.55%		Hotels & Restaurants	
Recent	L3m	-2.74%		Staples Retailing	
Performance	L12m	13.22%		Consumer Finance	
	L6om	73.29%		Technology Hardware	
		-	0	+ ++	

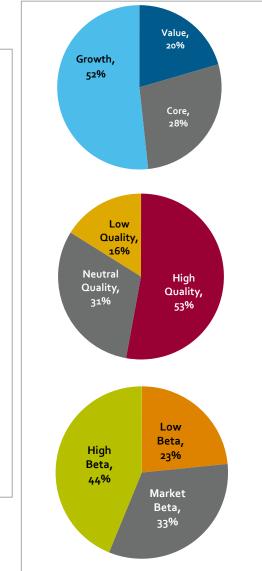
US Sector and Industry Scores

As of July 9, 2018

Sectors	Market Cap	Overall Score
Telecommunication Services	1.8%	++
Consumer Discretionary	13.3%	+
Industrials	9.7%	+
Information Technology	24.9%	+
Consumer Staples	7.1%	0
Financials	14.0%	0
Health Care	12.4%	0
Real Estate	3.7%	0
Energy	7.2%	-
Materials	3.0%	-
	3.0% 2.9%	-
Materials	5	- ndustries
Materials Utilities	2.9%	
Materials Utilities Top 10 Industries	2.9% Bottom 10 lr	quipment
Materials Utilities Top 10 Industries Specialty Retail	2.9% Bottom 10 Ir Healthcare Ed	quipment Material
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense	2.9% Bottom 10 Ir Healthcare Ed Construction	quipment Material ie
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense Conglomerates	2.9% Bottom 10 Ir Healthcare Eo Construction Marin	quipment Material Ie ilities
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense Conglomerates IT Services	2.9% Bottom 10 Ir Healthcare Ed Construction Marin Water Ut	quipment Material Ie ilities ilities
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense Conglomerates IT Services Diversified Telecom	2.9% Bottom 10 Ir Healthcare Ed Construction Marin Water Ut Multi-Ut	quipment Material le ilities ilities tructure
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense Conglomerates IT Services Diversified Telecom Comm. Equipment	2.9% Bottom 10 Ir Healthcare Ed Construction Marin Water Ut Multi-Ut Trans. Infras	quipment Material le ilities ilities tructure es Tools
Materials Utilities Top 10 Industries Specialty Retail Aerospace & Defense Conglomerates IT Services Diversified Telecom Comm. Equipment Hotels & Restaurants	2.9% Bottom 10 Ir Healthcare Ed Construction Marir Water Ut Multi-Ut Trans. Infras Life Science	quipment Material le ilities ilities tructure es Tools ipment

US Market Cap by Factors





Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

United Kingdom Sector & Factor Profiles

UK Factor Scores and Fundamentals

As of July 9, 2018

Qua	int Factors	Factor Scores		Sectors
De	ep Value	0		Materials
Near	-Term Value	+		Telecommunication Service
M	omentum	0		Consumer Discretionary
Earnir	ngs Revisions	-		Energy Industrials
	ofitability	_		Information Technology
	ings Quality			Utilities
	otal Yield			Consumer Staples
		++		Financials
	pital Use	0		Health Care
	Overall	-		Real Estate
	Price-to-Book	2.09		
Valuation	Price-to-Earnings	13.26		Top 10 Industries
nareholder	Dividend Yield ¹	3.36%		Household Durables
Payout	Total Yield ²	3.96%		Electric Utilities
, Earnings &	Return on Equity	12.40%		Chemicals
Growth	LT Growth			Distributors
		10.24%		Automobiles
	L1m	-0.12%		Multiline Retail Air Freight & Logistics
Recent	L3m	-1.36%		Mir Freight & Logistics Media
Performance	L12m	14.91%		Apparel & Luxury
	L6om	19.69%		Airlines
			0	+ ++
	Least Attractive		Neutral	─────────────────────────────────────

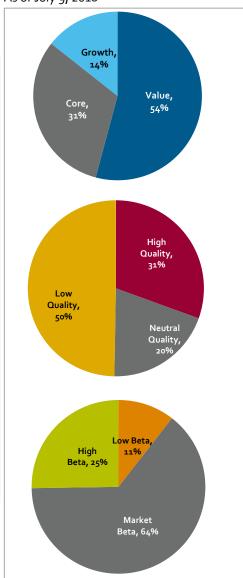
UK Sector and Industry Scores

As of July 9, 2018

Sectors	Market Cap	Overall Score
Materials	12.3%	++
Telecommunication Services	3.1%	++
Consumer Discretionary	12.7%	+
Energy	6.0%	+
Industrials	9.6%	+
Information Technology	2.4%	0
Utilities	2.8%	0
Consumer Staples	18.2%	-
Financials	22.6%	-
Health Care	8.7%	
Health Care Real Estate	8.7% 1.7%	-
		- ndustries
Real Estate	1.7% Bottom 10 lr	
Real Estate Top 10 Industries Household Durables	1.7% Bottom 10 Ir Bevera	ges
Real Estate Top 10 Industries	1.7% Bottom 10 Ir Bevera Real Estate	ges Mgmt
Real Estate Top 10 Industries Household Durables Electric Utilities Chemicals	1.7% Bottom 10 Ir Bevera	ges Mgmt quipment
Real Estate Top 10 Industries Household Durables Electric Utilities	1.7% Bottom 10 Ir Bevera Real Estate Healthcare E Household F	ges Mgmt quipment Products
Real Estate Top 10 Industries Household Durables Electric Utilities Chemicals Distributors	1.7% Bottom 10 Ir Bevera Real Estate Healthcare E	ges Mgmt quipment Products uipment
Real Estate Top 10 Industries Household Durables Electric Utilities Chemicals Distributors Automobiles Multiline Retail	1.7% Bottom 10 Ir Bevera Real Estate Healthcare E Household F Electrical Eq Hotels & Res	ges Mgmt quipment Products uipment staurants
Real Estate Top 10 Industries Household Durables Electric Utilities Chemicals Distributors Automobiles	1.7% Bottom 10 Ir Bevera Real Estate Healthcare Er Household F Electrical Eq	ges Mgmt quipment Products uipment staurants arkets
Real Estate Top 10 Industries Household Durables Electric Utilities Chemicals Distributors Automobiles Multiline Retail Air Freight & Logistics	1.7% Bottom 10 Ir Bevera Real Estate Healthcare Er Household F Electrical Eq Hotels & Res Capital M	ges Mgmt quipment Products uipment staurants arkets inancials

UK Market Cap by Factors

As of July 9, 2018



Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

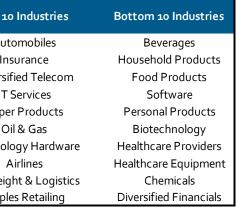
European Union Sector & Factor Profiles

Europe Factor Scores and Fundamentals As of July 9, 2018

/ 10 01 001 / 5/ 2020				, e., j, _e_e	
Qu	uant Factors	Factor Scores			Sectors
C	eep Value	0		Energy	
Nea	r-Term Value	0		Financials	
Ν	lomentum	0		Materials	· .·
Earn	ings Revisions			Utilities	unication Services
	rofitability	0			Discretionary
	nings Quality	Ŭ		Consumer	
	5 ,	+		Health Care	•
	Total Yield	+		Industrials	
(Capital Use	0		Informatio	n Technology
	Overall	-		Real Estate	-
			1		
Valuation	Price-to-Book	2.02		Тор	10 Industries
	Price-to-Earnings	14.87			
Shareholde	r Dividend Yield ¹	2.80%			utomobiles
Payout	Total Yield ²	2.84%		Insurance Diversified Tele	
Earnings &	Return on Equity	10.94%			T Services
Growth	LT Growth	11.50%			per Products
	L1m	-1.03%			Oil & Gas
Recent	L3m	-0.58%		Techn	ology Hardware
Performanc	-	16.88%			Airlines
i chomune					ight & Logistics
	L6om	46.00%		Sta	ples Retailing
		-	0	+	++
	Least Attractive	9	Neutral	ſ	Most Attractive

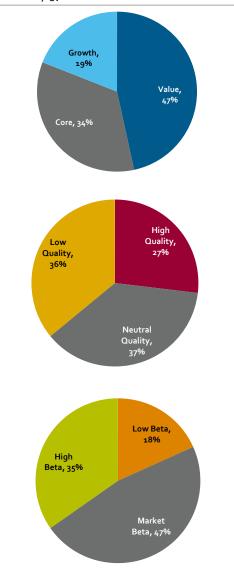
Europe Sector and Industry Scores As of July 9, 2018

Sectors	Market Cap	Overal Score
Energy	7.4%	++
inancials	16.3%	+
Materials	6.9%	0
Telecommunication Services	3.3%	0
Utilities	4.7%	0
Consumer Discretionary	12.9%	-
Consumer Staples	11.0%	-
Health Care	13.2%	-
Industrials	15.0%	-
Information Technology	7.6%	-
Real Estate	1.6%	



EU Market Cap by Factors

As of July 9, 2018



Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Japan Sector & Factor Profiles

Japan Factor Scores and Fundamentals As of July 9, 2018

		Factor			
Qua	nt Factors	Scores			Sectors
De	ep Value	+		Consumer	Discretionary
Near-	Near-Term Value			Energy	
Мо	mentum	_			Unication Services
Famin	qs Revisions	++		Utilities	
	fitability	++		Financials Health Care	
	,	++		Industrials	2
	ngs Quality	-		Materials	
	tal Yield	0		Real Estate	
Ca	pital Use	+		Consumer	
C	Overall	++			n Technology
Valuation	Price-to-Book	1.57		Тор	10 Industries
	Price-to-Earnings	13.68			Airlines
Shareholder	Dividend Yield ¹	1.94%			utomobiles
Payout	Total Yield ²	2.44%			ctric Utilities
Earnings &	Return on Equity	9.93%			ncare Providers
Growth	LT Growth	11.97%			ng Companies
	L1m	-2.50%			ruction Material
Recent	L3m	0.39%		Pap	per Products
Performance	L12m	16.88%			Components
				_	sified Telecom
	L6om	51.36%		Techno	ology Hardware
	, 	-	0	+	++
	Ceast Attractiv	/e	Neutral	Ν	Iost Attractive

Japan Sector and Industry Scores As of July 9, 2018

Sectors	Market Cap	Overall Score
Consumer Discretionary	20.3%	++
Energy	1.2%	++
Telecommunication Services	7.0%	++
Utilities	1.6%	++
Financials	11.4%	+
Health Care	7.7%	+
Industrials	19.7%	+
Materials	5.5%	+
Real Estate	3.7%	+
Consumer Staples	9.7%	0
Information Technology	12.2%	0
Top 10 Industries	Bottom 10 Ir	ndustries
Airlines Automobiles	Consumer Finance Biotechnology	

Air Freight & Logistics

Tobacco

Specialty Retail

Pharmaceuticals

Internet Software

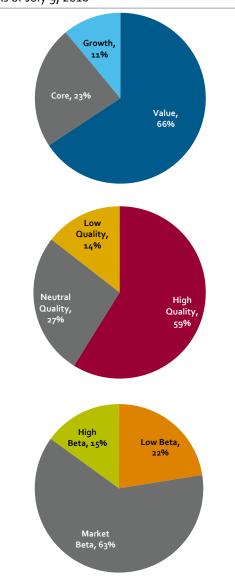
Household Products

Healthcare Tech

Software

Japan Market Cap by Factors

As of July 9, 2018



Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Other Developed Markets Sector & Factor Profiles

As of July 9, 2018

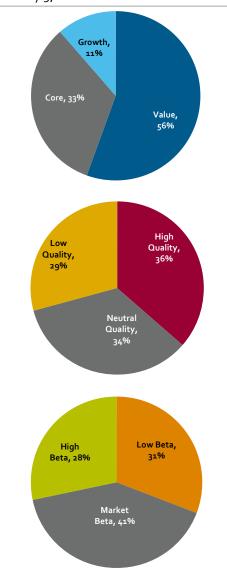
DM Market Cap by Factors

Other DM Factor Scores and Fundamentals

As of July 9, 2018

Quan	Quant Factors			Sectors	Market Cap	Overall Score
Dee	p Value	0		Consumer Staples	5.6%	+
e	rm Value	0		Information Technology	2.7%	+
٦r	mentum	+		Materials	10.1%	+
		- T		Consumer Discretionary	7.0%	0
-	ls Revisions	+		Energy	10.3%	0
Prof	itability	-		Telecommunication Services	7.4%	0
Earnin	gs Quality	+		Financials	29.8%	-
Tot	al Yield	+		Health Care	3.6%	-
	ital Use			Industrials	9.6%	-
· ·		0		Real Estate	9.1%	-
0	verall	+		Utilities	4.8%	-
luation	Price-to-Book Price-to-Earnings	1.80 14.38		Top 10 Industries	Bottom 10 Ir	
areholder	Dividend Yield ¹	2.80%		Multiline Retail	Electric U	
out				IT Services	Diversified F	inancials
-	Total Yield ²	2.85%		Auto Components	Road &	
rnings &	Return on Equity	11.43%		Thrifts & Mortgage	Trading Cor	•
rowth	LT Growth	12.98%		Electronic Equipment	Commercial Service	
	L1m	-3.02%		Banks	Aerospace &	
Recent	L3m	-3.52%		Staples Retailing	Biotechn	
mance	L12m	12.33%		Paper Products	Healthcare	
				Leisure Products	Healthcare P	
	L6om	20.97%		Personal Products	Gas Util	ities
		-	0	+ ++		
	Least Attractiv		Neutral	Most Attractive		

As of July 9, 2018



Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Other DM Sector and Industry Scores

Emerging Markets Sector & Factor Profiles

EM Factor Scores and Fundamentals

As of July 9 2018

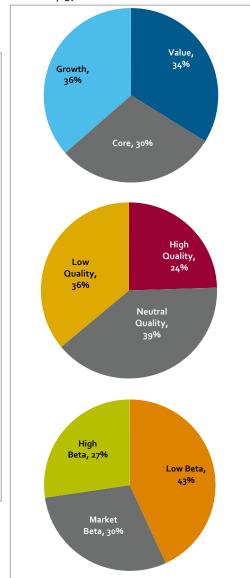
Quai	nt Factors	Factor Scores		S	ectors
Dee	ep Value	+	Energy		
Near-	Ferm Value	+		Real Estate	
Мо	mentum	0		Materials	
Earnin	gs Revisions	_		Consumer Di Financials	scretionary
	fitability	+		Industrials	
	ngs Quality			Information ⁻	Technology
	tal Yield	0		Telecommun	ication Service
_	bital Use	<u> </u>		Utilities	
		+		Consumer St	aples
	overall	-		Health Care	
Valuation	Price-to-Book	1.98		Top 10	Industries
	Price-to-Earnings	13.32		Elect	ric Utilities
Shareholder Payout	Dividend Yield ¹	2.08%		-	il & Gas
	Total Yield ²	2.00%			ogy Hardware
Earnings &	Return on Equity	12.53%			emicals
Growth	LT Growth	17.50%			er Utilities
	L1m	-2.28%			mer Finance Banks
Recent	L3m	1.16%			ed Consumer
Performance	L12m	21.48%		Diversified Financia	
	L6om	47.90%		Capit	al Markets
		-	0	+	++
	Least Attractiv	/e	Neutral	N	−−−−> Iost Attracti

EM Sector and Industry Scores As of July 9, 2018

Sectors	Market Cap	Overall Score	
Energy	7.3%	++	
Real Estate	3.5%	+	
Materials	9.3%	0	
Consumer Discretionary	8.9%	-	
Financials	25.8%	-	
Industrials	8.0%	-	
Information Technology	17.3%	-	
Telecommunication Services	3.7%	-	
Utilities	3.3%	-	
Consumer Staples	8.6%		
Health Care	4.2%		
	4.270		
Top 10 Industries	Bottom 10 Ir	ndustries	
Top 10 Industries	Bottom 10 Ir	Providers	
Top 10 Industries Electric Utilities	Bottom 10 Ir Healthcare P	Providers ges	
Top 10 Industries Electric Utilities Oil & Gas	Bottom 10 Ir Healthcare F Bevera	Providers ges iipment	
Top 10 Industries Electric Utilities Oil & Gas Technology Hardware	Bottom 10 Ir Healthcare P Bevera Energy Equ	Providers ges lipment oftware	
Top 10 Industries Electric Utilities Oil & Gas Technology Hardware Chemicals	Bottom 10 Ir Healthcare P Bevera Energy Equ Internet Sc	Providers ges lipment oftware roducts	
Top 10 Industries Electric Utilities Oil & Gas Technology Hardware Chemicals Water Utilities	Bottom 10 Ir Healthcare F Bevera Energy Equ Internet So Personal P	Providers ges lipment oftware roducts Retail	
Top 10 Industries Electric Utilities Oil & Gas Technology Hardware Chemicals Water Utilities Consumer Finance	Bottom 10 Ir Healthcare P Bevera Energy Equ Internet So Personal Pr Multiline	Providers ges iipment oftware roducts Retail ities	
Top 10 Industries Electric Utilities Oil & Gas Technology Hardware Chemicals Water Utilities Consumer Finance Banks	Bottom 10 Ir Healthcare P Bevera Energy Equ Internet Sc Personal P Multiline Gas Util	Providers ges lipment oftware roducts Retail ities Services	

EM Market Cap by Factors

As of July 9, 2018



Source: Morgan Stanley Wealth Management GIC, FactSet. Note: (1) Dividend yield is dividends paid divided by market cap. (2) Total yield is dividends paid plus net shares repurchased divided by market cap. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and gualifications at the end of this material.

Global Growth Forecasts

Current Forecasts as of August 6, 2018

	Quarterly							Annua			
		2018E				20:	19E		2017	2018E	2019E
Real GDP	2 QE	3QE	4QE		ıQE	2 QE	3QE	4QE			
Global	3.9	3.8	3.7		3.9	3.7	3.8	3.7	3.7	3.9	3.8
G10	2.3	2.1	2.1		2.2	2.0	2.0	1.8	2.2	2.2	2.0
US	2.9	3.0	3.0		3.0	2.5	2.1	2.0	2.3	2.7	2.2
Euro Area	1.8	1.9	1.7		1.8	1.9	1.9	2.0	2.5	2.1	1.9
Japan	1.5	1.0	1.2		1.9	1.6	1.7	0.8	1.7	1.3	1.5
UK	1.8	1.2	0.8		0.9	0.9	1.0	1.3	1.8	1.2	1.0
EM	5.0	5.0	4.9		5.0	4.9	5.0	5.1	4.8	5.0	5.0
China	6.6	6.5	6.5		6.4	6.4	6.5	6.4	6.9	6.6	6.4
India	7.6	7.4	7.4		7.7	7.6	7.7	7.8	6.4	7.5	7.7
Brazil	2.2	1.8	2.2		2.1	2.2	2.6	2.6	1.0	2.7	3.4
Russia	0.9	2.2	3.0		2.5	1.8	1.4	1.2	1.5	1.8	1.7

Source: Morgan Stanley & Co. Research. (1) Quarterly percentage change, seasonally adjusted annual rate. Global and regional aggregates for GDP growth are GDP-weighted averages.

Sovereign Rate Forecasts

Yield (percent); July 11, 2018, Rates as of August 2, 2018

		C	22 2019 Foreca	st
	As of Aug 3, 2018	Bear	Base ¹	Bull
US Treasury 10-Year	2.96	3.30	2.50	2.00
German Bund 10-Year	0.42	2.40	0.95	0.45
UK Gilt 10-Year	1.34	2.40	1.85	1.15
Japanese Govt. Bond 10-Year	0.11	0.25	0.10	0.03

Source: Morgan Stanley & Co. Research. (1) Base represents Morgan Stanley & Co. Research's estimate between the bear and bull estimates. The probability of occurrence is 20% bear case, 60% base case, and 20% bull case. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Global Inflation Forecasts

Current Forecasts as of August 6, 2018

	Quarterly								Annua	
		2018E			20:	19E		2017	2018E	2019E
Headline CPI ¹	2 QE	3QE	4QE	1 QE	2 QE	3QE	4QE			
Global*	2.9	3.1	3.0	2.9	2.9	2.8	2.8	2.5	2.9	2.8
G10	2.2	2.3	2.1	1.9	1.9	1.8	1.8	1.8	2.1	1.7
US	2.8	2.8	2.3	2.1	2.1	2.0	2.0	2.1	2.6	1.9
Euro Area	1.6	2.2	2.2	2.1	1.9	1.6	1.6	1.5	1.7	1.6
Japan	1.2	1.0	1.0	0.7	1.2	1.1	0.8	0.5	1.1	1.0
UK	2.5	2.4	2.3	2.2	2.2	2.1	2.1	2.7	2.5	2.1
EM*	3.4	3.6	3.6	3.6	3.6	3.6	3.5	3.1	3.4	3.5
China	2.2	2.5	2.5	2.4	2.6	2.6	2.5	1.6	2.4	2.5
India	5.1	4.5	4.0	4.4	4.2	4.5	4.4	3.3	4.6	4.4
Brazil	3.0	4.3	4.2	4.5	4.5	3.9	4.1	3.5	3.1	3.9
Russia	2.4	3.2	4.0	4.8	4.8	4.5	4.3	3.7	3.0	4.2

Source: Morgan Stanley & Co. Research. (1) Seasonally adjusted annual rate. Headline CPI measures inflation that is not adjusted for food and energy prices. CPI numbers are period averages. *Global and EM Consumer Price Inflation Aggregates exclude Venezuela and Argentina. The global core inflation aggregate consist of G4+BRICS. ^The US core inflation number is core PCE

Currency Forecasts

		2018E 2019E							
	Aug 3, 2018	2 QE	3QE	4QE	1 QE	2 QE	3QE	4QE	
EUR/USD	1.16	1.16	1.13	1.24	1.19	1.24	1.28	1.32	
USD/JPY	111.21	110.00	104.00	96.00	98.00	96.00	95.00	93.00	
GBP/USD	1.30	1.33	1.28	1.39	1.34	1.39	1.44	1.50	
USD/CAD	1.30	1.31	1.36	1.37	1.34	1.33	1.32	1.31	
AUD/USD	0.74	0.74	0.70	0.71	0.69	0.71	0.73	0.73	
USD/BRL	3.73	3.45	4.00	3.75	3.75	3.75	3.75	3.40	
USD/RUB	63.22	66.00	66.00	64.00	62.00	61.00	61.00	60.00	
USD/INR	68.61	67.50	70.30	68.50	69.10	68.50	68.00	67.50	
USD/CNY	6.85	6.40	6.65	6.60	6.47	6.40	6.32	6.25	

Forecasts as of July 18, 2018; Spot rates as of August 3, 2018

Source: FactSet, Morgan Stanley & Co. Research. Note: EUR – euro; USD – US dollar; JPY – Japanese yen; GBP – British pound; CHF – Swiss franc; AUD – Australian dollar; BRL – Brazilian real; RUB – Russian ruble; INR – Indian rupee; CNY – Chinese yuan.

Performance

US Equities Snapshot and Sector Breakdown

S&P 500 Sector Performance and Valuation¹

As of August 31, 2018

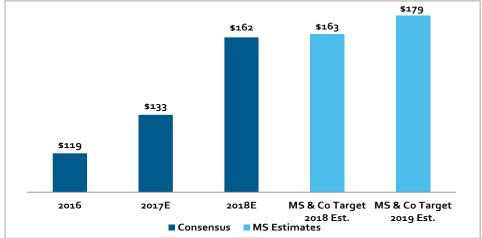
	Total Return					20-Year Avq.		
Index Name	WTD (%)	YTD (%)	1-Year (%)	Div. Yield (%)	Beta	NTM P/E	NTM P/E ²	
S&P 500	0.98	9.94	19.66	1.74		15.9	16.8	
Energy	-0.14	4.75	22.10	2.67	0.91	17.6	17.0	
Materials	o.48	-o.66	9.96	1.94	1.04	14.0	15.4	
Industrials	0.50	2.59	13.16	1.85	1.03	16.2	16.4	
Consumer Discretionary	1.85	19.39	32.27	1.12	0.96	18.0	21.6	
Consumer Staples	-0.41	-4-33	1.00	2.89	0.62	16.9	17.8	
Health Care	1.06	13.31	16.12	1.51	0.96	17.0	16.3	
Financials	o.36	2.37	16.92	1.66	1.10	12.8	12.6	
Information Technology	2.04	21.03	32.77	1.06	1.27	20.6	19.3	
Telecommunication Services	-1.57	-3.36	3.65	5.46	0.70	16.1	10.3	
Utilities	-0.49	3-33	0.71	3.42	0.22	14.2	16.7	
Real Estate	0.87	4.44	6.31	3.18	0.51	15.3	17.8	

Morgan Stanley & Co. 2018 S&P 500 Target³

As of August 31, 2018

EPS Landscape	EPS	Multiple	Price Target	Upside / (Downside)
Bull Case	\$176	17.5X	3,000	3.4%
Base Case	\$168	16.5x	2,750	(5.2%)
Bear Case	\$160	15.5X	2,400	(17.3%)
Current S&P 50	o Price		2902	

Morgan Stanley & Co. and Consensus S&P 500 Earnings Estimates As of August 31, 2018



Source: Morgan Stanley & Co., FactSet, Thomson Reuters, Morgan Stanley Wealth Management GIC. (1) Green/red text denotes sector total return and dividend yield higher/lower than S&P 500. (2) Dark blue/light blue/grey fill denotes whether current relative NTM P/E is low/neutral/high relative to history. Real Estate is from 10/31/2001 to present.3) The S&P 2018 target is using MS & Co.'s 2019 earnings estimate.

Global Equity Price Targets

Equity Index	August 3, 2018	Bear	Downside	Base ¹	Upside/Downside	Bull	Upside	Risk/Reward Ratio ²
S&P 500	2,834	2,400	-15%	2,750	-3%	3,000	6%	0.38
MSCI Europe	1,605	1,150	-28%	1,540	-4%	1,860	16%	0.56
Торіх	1,743	1,340	-23%	1,650	-5%	2,140	23%	0.99
MSCI EM	1,067	830	-22%	1,000	-6%	1,350	26%	1.19
	Red indicates a down	nward revision i	n forecasts since la	st forecast, lig	ght blue an upward rev	ision, and bla	ick no change.	

12 Month Forecasts as of June 28, 2018; Performance data as of August 3, 2018

Source: Morgan Stanley & Co. Research. (1) Base represents Morgan Stanley & Co. Research's estimate between the bear and bull estimates. (2) Risk/reward ratio is the bull estimate divided by the bear estimate. Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

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Nontraditional investment options and strategies are often employed by a portfolio manager to further a fund's investment objective and to help offset market risks. However, these features may be complex, making it more difficult to understand the fund's essential characteristics and risks, and how it will perform in different market environments and over various periods of time. They may also expose the fund to increased volatility and unanticipated risks particularly when used in complex combinations and /or accompanied by the use of borrowing or "leverage."

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It should be noted that the majority of hedge fund indexes are comprised of hedge fund manager returns. This is in contrast to traditional indexes, which are comprised of individual securities in the various market segments they represent and offer complete transparency as to membership and construction methodology. As such, some believe that hedge fund index returns have certain biases that are not present in traditional indexes. Some of these biases inflate index performance, while others may skew performance negatively. However, many studies indicate that overall hedge fund index performance has been biased to the upside. Some studies suggest performance has been inflated by up to 260 basis points or more annually depending on the types of biases included and the time period studied. Although there are numerous potential biases that could affect hedge fund returns, we identify some of the more common ones throughout this paper.

Self-selection bias results when certain manager returns are not included in the index returns and may result in performance being skewed up or down. Because hedge funds are private placements, hedge fund managers are able to decide which fund returns they want to report and are able to opt out of reporting to the various databases. Certain hedge fund managers may choose only to report

returns for funds with strong returns and opt out of reporting returns for weak performers. Other hedge funds that close may decide to stop reporting in order to retain secrecy, which may cause a downward bias in returns.

Survivorship bias results when certain constituents are removed from an index. This often results from the closure of funds due to poor performance, "blow ups," or other such events. As such, this bias typically results in performance being skewed higher. As noted, hedge fund index performance biases can result in positive or negative skew. However, it would appear that the skew is more often positive. While it is difficult to quantify the effects precisely, investors should be aware that idiosyncratic factors may be giving hedge fund index returns an artificial "lift" or upwards bias.

Hedge Funds of Funds and many funds of funds are private investment vehicles restricted to certain qualified private and institutional investors. They are often speculative and include a high degree of risk. Investors can lose all or a substantial amount of their investment. They may be highly illiquid, can engage in leverage and other speculative practices that may increase volatility and the risk of loss, and may be subject to large investment minimums and initial lockups. They involve complex tax structures, tax-inefficient investing and delays in distributing important tax information. Categorically, hedge funds of funds have higher fees and expenses than traditional investments, and such fees and expenses can lower the returns achieved by investors. Funds of funds have an additional layer of fees over and above hedge fund fees that will offset returns. An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices. An investment in a **target date portfolio** is subject to the risks attendant to the underlying funds in which it invests, in these portfolios the funds are the Consulting Group Capital Market funds. A target date portfolio will transition its invested assets from a more aggressive portfolio to a more conservative portfolio as the target date draws closer. An investment in the target date portfolio is not guaranteed at any time, including, before or after the target date is reached. **Managed futures** investments are speculative, involve a high degree of risk, use significant leverage, are generally illiquid, have substantial charges, subject investors to conflicts of interest, and are suitable only for the risk capital portfolio of an investors. **Rebalancing** does not protect against a loss in declining fin

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For index, indicator and survey definitions referenced in this report please visit the following: http://www.morganstanleyfa.com/public/projectfiles/id.pdf

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FEES REDUCE THE PERFORMANCE OF ACTUAL ACCOUNTS: None of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, fees) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models. The GIC Asset Allocation Models and any model performance included in this presentation are intended as educational materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley's standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio's annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients' returns. The impact of fees and/or expenses can be material.

Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract. If you are investing in a **variable annuity** through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection. Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment. Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal

income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV, and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions. Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage. Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. **Asset-backed securities** generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision. **Credit ratings** are subject to change. **Duration**, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price. The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate security, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield. Some \$25 or \$1000 par preferred securities are QDI (Qualified Dividend Income) eligible. Information on QDI eligible preferred securities for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, be

Companies paying dividends can reduce or cut payouts at any time.

Nondiversification: For a portfolio that holds a concentrated or limited number of securities, a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. The indices selected by Morgan Stanley Wealth Management to measure performance are representative of broad asset classes. Morgan Stanley Wealth Management retains the right to change representative indices at any time. Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Any type of **continuous or periodic investment plan** does not assure a profit and does not protect against loss in declining markets. Since such a plan involves continuous investment in securities regardless of fluctuating price levels of such securities, the investor should consider his financial ability to continue his purchases through periods of low price levels.

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