The GIC Weekly

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What We Are Talking About

- **Context for the Correction.** The S&P 500's swift 10% fall from its all-time high qualifies as a full-blown correction; history shows odds are good that equities will be higher in the next six to 12 months; sell-off catalyzed by the realization that global markets no longer enjoy the tailwinds from aggressive monetary policy; instead they face rising interest rates and higher price volatility; the mix of rising real rates and inflation expectations produces higher yields, threatening bond prices and creating headwinds for P/E multiples; still, corporate earnings estimates are rising rapidly, meaning the correction drove the P/E on forward earnings to 16 from 18; in the near term, we expect markets to remain choppy; intermediate term risk is a boom/bust scenario as fiscal policy keeps the economy running hot and Fed policy becomes more variable. **Consider** managing risk through asset class diversification, emphasizing non-US markets and hiring active managers.

Upcoming Catalysts

Feb. 12 US Treasury budget report
Feb. 12 Japan Producer Price Index
Feb. 13 NFIB Small Business Optimism Index
Feb. 13 Japan fourth-quarter GDP
Feb. 14 US Consumer Price Index
Feb. 14 US retail sales
Feb. 14 Euro Zone fourth-quarter GDP
Feb. 15 Empire State Manufacturing Survey
Feb. 15 Philadelphia Fed Survey
Feb. 15 NAHB/Wells Fargo Housing Market Idx.
Feb. 15 US Producer Price Index
Feb. 16 US import/export prices
Feb. 16 U. of M. Consumer Sentiment Index
Feb. 16 US housing starts

Context for the Correction

The GIC Weekly's readers know that the Global Investment Committee has been increasingly concerned about the potential for a stock market correction—a peak-to-trough move of at least 10%. We feared that January's near 6% return on the S&P 500, coming on the heels of 2017's robust 21.5% total return, indicated investors were becoming euphoric at the same time that economic surprise metrics were at multiyear highs and some consumer confidence data were at multidecade peaks. Not only had the markets gone an uncharacteristic 16 months with little more than a 3% pullback, but volatility readings for stocks, bonds and currency were all near or at historic lows. Positioning was at a bullish extreme, with private client cash balances below 10% while hedge funds were at historically maximum levels of gross and net exposure. Technicals like the put/call spread for options were extremely bullish, indicating the fear of missing the market's gains was swamping the fear of losing money. Most important, financial conditions indexes, which measure the availability of credit and overnight liquidity, remained among the most accommodative on record. Against this backdrop, stock valuations had become rich: The equity risk premium, which had been in the 320-to-380-basis-point range for most of 2017, moved toward 240 basis points, its 90-year average.

What finally catalyzed the correction? In our view, it was the rapid move to 2.85% on the benchmark 10-year US Treasury from 2.40% at the beginning of January. We can attribute that jump in rates to rising inflation expectations, a weaker dollar, a swelling US budget deficit and fear of trade wars. In addition, there was the unmooring of German and Japanese yields in anticipation of a shift in central bank policies. Then, on Feb. 2, the January US employment report showed long-awaited and heretofore elusive wage inflation; the growth in year-over-year average hourly earnings jumped to 2.9% in January from 2.7% in December and 2.5% in November. That seemed to flip the switch on investor sentiment. Suddenly, the narrative of 2017, where good news is good news, reversed to good news is bad news. Investors finally realized that perhaps the Federal Reserve would need to become more aggressive, pushing up rates and thus creating headwinds for both stocks and bonds.

Although such an inflection point is expected in market cycles and tends to cause major portfolio reallocation, what was different this time was its speed. It took only nine days to push the S&P 500 10% off its all-time peak, thus achieving the technical definition of a correction. The VIX, a common measure of implied market volatility, jumped to 50 on Feb. 5, nearly five times the level it was during most of January. In our view, the downturn was exacerbated by three factors that have come to characterize this market cycle: the dominance of algorithmic trading, which accounts for nearly two-thirds of all daily trading volume; the presence of low-volatility products or "risk parity" strategies, which use leverage to improve returns in in extremely low volatility environments and were pressured to sell when volatility spiked; and the growing dominance of exchange-traded funds, which are used by hedge funds as a source of fast, cheap liquidity in stressed markets, thus adding to the stress.

So where are we now? We are increasingly constructive and still see decent odds of our bullish case that the S&P 500 will reach 3,000 at some point in the next 12 months. To start with, we are pleased that this appears to be a garden-variety correction as it was not prompted by economic growth fears, a collapse in corporate earnings prospects or an external or geopolitical event. Historically, annual median drawdowns in the stock market have been 10% and the average has been 14%, putting the current sell-off in the normal range. Importantly, during the past 50 years, there have been roughly 35 corrections of at least 10%; more than 75% of the time, markets were higher within six to 12 months. Next, the stock market correction did not carry over to the credit markets. Spreads in both investment grade and high yield remained well behaved, supporting the constructive view of global economic growth, the stimulative and cushioning power of tax reform and the likelihood that recent earnings estimates are unimpaired. Perhaps most important, earnings estimates are being revised up quickly—improving from $133 per share in S&P 500 earnings for 2017 to $158 in 2018 and to $173 in 2019. That means the entire market move came at the expense of price/earnings (P/E) multiples which, on a forward basis. fell to 16 from more than 18 in January (see *Chart of the Week*, page 3). In short, stock valuations look attractive again.

What will remain from this episode are both higher interest rates and higher volatility. Rising inflation and inflation expectations, especially against the backdrop of potentially more fiscal spending funded by ever-expanding deficits, pose a challenge for the Fed, raising the odds of a policy mistake or a boom/bust scenario. Equally important, especially for longer-term investing, is recognizing that the correction likely marks a regime shift in which policy normalization signals the end of secular stagnation. As policy normalizes so do other market factors, a dynamic that will show the relevance of tried-and-true portfolio risk management techniques like diversification and active security selection. We see passive vehicles as vulnerable in this transition period.

Bottom Line: We view recent market events as a garden-variety market correction. We expect to see higher volatility and likely higher prices in the next six to 12 months. That said, markets are coming to terms with a global economy that no longer needs central bank accommodation. The implication is the beginning of a regime shift and a normalization of both rates and volatility—the two most powerful hallmarks of the past decade. With the global economy strong and earnings estimates enjoying upward revisions, the 10% peak-to-trough decline lowered P/Es, renewing stocks' valuation support. The double whammy of rising real rates and inflation expectations means bond prices will remain under pressure. **Watch** the shape of the yield curve and earnings estimate revisions to gauge where we are in the cycle**. Consider** managing risk through asset class diversification, emphasizing non-US markets and hiring of active managers. ■

Chart of the Week: Correction Produces Material Compression in Earnings Multiple

This current stock market correction is different than prior ones in that it has not been accompanied by a "growth scare." That's when corporate earnings come into question and investors take cover in perceived safe assets such as US Treasuries and the US dollar. Indeed, the earnings outlook has rarely been stronger due to tax cuts, fiscal stimulus and better-than-expected global growth. Since December, the S&P 500 12-month forward earnings estimate has powered ahead to $158 from $148 (see chart)—and the 2019 estimate is $173. The implication is that the price/earnings multiple has absorbed the entire move in prices, falling from a peak of 18.3 in 2017's fourth quarter to roughly 16 today, back in line with where it was in 2016. When stocks calm down, which we expect within the next three months, this valuation support will be important.

Source: Bloomberg as of Feb. 9, 2018

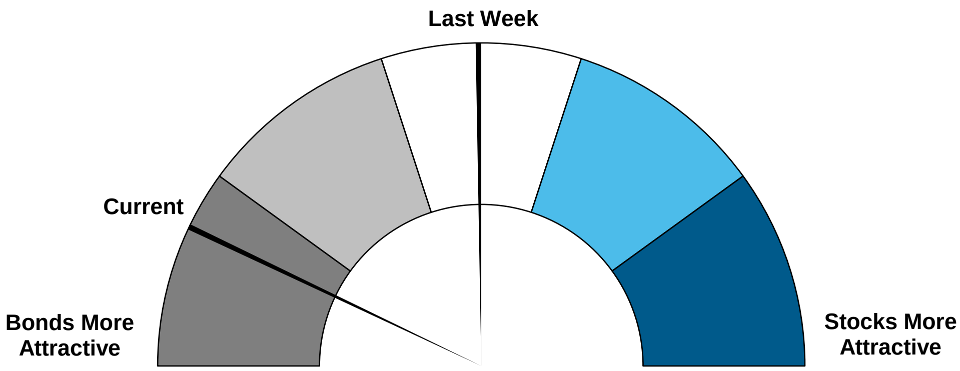
Asset Class Performance and Heat Map (as of Feb. 9, 2018)

Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
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]	30 Days	20 Yrs.[1]
90-Day US Treasury Bills	0.1	0.9	0.3	0.4	0.3	0.3	2.0	1.49	1.49	1.92	0.05	0.59	-0.22	-0.04
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E[2]				
US Large-Cap Growth	0.3	23.5	6.5	17.1	18.3	11.9	7.0	1.03	23.0	21.3	24.2	17.6	0.86	0.89
US Large-Cap Value	-3.6	9.7	16.3	12.7	13.8	7.7	7.0	2.64	15.8	13.9	22.4	14.2	0.91	0.89
US Mid-Cap Growth	-1.6	14.2	6.4	12.1	14.3	9.9	8.2	0.64	22.3	26.7	21.2	23.3	0.91	0.81
US Mid-Cap Value	-3.4	9.1	20.9	12.5	14.8	10.4	9.5	2.52	16.7	14.4	19.9	16.4	0.89	0.88
US Small-Cap Growth	-3.0	15.7	14.0	13.5	15.1	11.5	10.0	0.55	28.1	24.0	20.4	22.1	0.89	0.84
US Small-Cap Value	-5.2	3.6	25.8	11.4	13.1	10.8	9.6	2.36	18.8	17.1	19.3	17.3	0.86	0.84
Europe Equity	-3.4	18.8	0.2	9.2	7.9	3.6	5.9	3.16	13.9	14.3	17.0	18.2	0.68	0.94
Japan Equity	-0.7	20.4	2.7	12.8	11.7	4.3	3.8	1.88	13.8	20.4	20.1	17.0	0.31	0.70
Asia Pacific ex Japan Equity	-3.6	14.1	8.0	9.0	5.4	5.3	9.3	3.60	15.0	14.4	14.8	20.8	0.39	0.86
Emerging Markets	-1.3	26.6	11.6	12.2	6.1	4.2	9.0	2.12	12.0	11.3	16.4	23.3	0.66	0.86
Global Fixed Income								Current YTM	Current Spread	Avg. Spread[2]				
Short-Term Fixed Income	-0.1	0.4	1.3	0.7	0.8	1.7	3.3	2.25	15.0	31.0	0.8	1.4	-0.48	-0.16
US Fixed Income	-1.9	1.0	2.6	1.1	2.0	3.7	4.9	3.06	36.0	55.0	3.0	3.4	-0.06	-0.06
International Fixed Income	1.2	9.6	1.8	3.3	0.8	2.5	4.4	1.16	34.0	49.0	5.9	8.1	0.42	0.30
Inflation-Protected Securities	-0.7	6.1	6.5	2.9	1.1	3.3	6.3	-	-	-	5.9	7.6	0.48	0.44
High Yield	-0.9	7.0	14.3	7.8	5.6	8.3	7.8	5.95	359.0	514.0	4.0	10.1	0.54	0.75
Emerging Markets Fixed. Inc.	2.1	13.8	9.9	3.9	-0.8	3.9	7.6	6.12	223.0	350.0	8.4	13.0	0.55	0.68
Alternative Investments								Current Div. Yld.						
REITs	-6.5	4.8	4.6	5.1	6.6	4.5	8.7	4.09	-	-	14.6	18.1	0.77	0.80
MLP/Energy Infrastructure[3]	-1.0	-13.8	18.3	-6.7	-1.3	6.7	-	7.43	-	-	22.9	18.2	0.70	0.55
Commodities ex Prec. Metals	-3.0	-2.9	11.6	-4.1	-9.1	-8.5	-0.1	-	-	-	10.7	17.0	0.39	0.43
Precious Metals	-1.1	1.3	9.5	0.4	-6.7	2.3	6.8	-	-	-	12.0	19.3	0.19	0.20
Hedged Strategies[4]	0.2	5.2	2.5	2.5	2.2	0.0	-	-	-	-	5.2	6.0	0.90	0.64
Managed Futures[5]	0.1	2.9	-2.9	-0.2	0.9	-1.1	-	-	-	-	9.2	7.9	0.78	0.17
S&P 500	-1.8	15.8	12.0	14.7	15.9	9.8	7.4	1.85	16.5	16.0	22.96	14.9	0.89	0.95
Russell 2000	-3.7	8.6	21.3	12.1	13.3	9.8	8.1	1.51	21.7	20.4	20.56	19.8	0.85	0.82
MSCI EAFE	-2.8	18.5	1.5	9.9	8.3	3.9	5.7	2.90	14.0	15.1	15.74	16.6	0.61	0.96
MSCI AC World	-2.2	17.4	8.5	12.5	11.6	6.7	6.7	2.22	15.0	15.6	15.44	15.6	1.00	1.00

Note: Performance values calculated using USD. 1. As of Jan. 31, 2018. 2. 20-year average as of Jan. 31, 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. Source: Factset, Bloomberg, Morgan Stanley Wealth Management GIC.

Valuation	Volatility	Correlation
Cheap	Low	Low
Moderate	High	High
Expensive		

Short-Term Stock and Bond Indicator



	Macro		Policy		Fundamentals		Sentiment and Technicals	
	Growth	Inflation	Rates	Liquidity	Valuation & Market	Earnings	Sentiment	Technicals
Current	Neutral	Neutral	Very Positive	Neutral	Very Negative	Very Negative	Very Negative	Very Negative
Last Week	Neutral	Neutral	Very Positive	Very Positive	Very Negative	Neutral	Very Negative	Neutral

Indicator	Category	Reading
PMI (+)	Growth	Neutral
Durable Goods (+)	Growth	Risk On
Retail Sales (+)	Growth	Neutral
Manufacturing Hours Worked (+)	Growth	Neutral
Commodity Prices (+)	Inflation	Risk Off
Yield Curve: 10-Yr./Three-Mo.(-)	Rates	Risk On
Yield Curve: Two-Yr./Three-Mo.(-)	Rates	Risk Off
Pace of Interest Rate Hikes (-)	Rates	Neutral
Term Premium Model (-)	Rates	Risk On
High Yield Spreads (-)	Liquidity	Risk Off
Investment Grade Spreads (-)	Liquidity	Risk On
Financial Conditions (-)	Liquidity	Risk Off
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Risk Off
Large vs. Small Performance (-)	Valuation & Market Behavior	Neutral
High- vs. Low-Quality Performance (-)	Valuation & Market Behavior	Neutral
High- vs. Low-Beta Performance (+)	Valuation & Market Behavior	Neutral
S&P 500 Forward Price/Earnings Ratio (+)	Valuation & Market Behavior	Risk Off
Earnings Revisions Breadth (-)	Earnings	Risk Off
Global Risk Demand (+)	Sentiment	Risk Off
Implied Currency Volatility (-)	Sentiment	Risk Off
Five-Yr. Macro Sensitivity (-)	Sentiment	Neutral
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Risk Off
Cumulative Advance/Decline (+)	Technicals	Risk Off
S&P 500 Put/Call Ratio (-)	Technicals	Risk Off
Emerging Market Fund Flows (+)	Technicals	Risk Off
Smart Money Flow Index (+)	Technicals	Risk Off

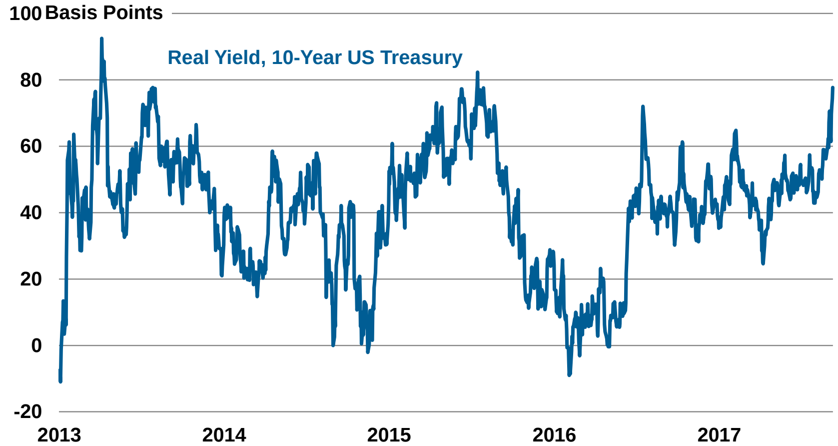
Note: + Indicates that a rise in the indicator is linked to a more favorable outlook for risk assets;- indicates that a rise in the indicator is linked to a less favorable outlook for risk assets. Color coding is set in accordance with the impact on risk assets.

Positive for Stocks Relative to Bonds
Neutral
Negative for Stocks Relative to Bonds

Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial conditions by the Morgan Stanley Financial Conditions Index; global risk demand and implied currency volatility by the Morgan Stanley Standardized Global Risk Demand Index. For more information on our Term Premium Model, please refer to our special report, *Using the Term Premium to Manage Portfolio Duration*, March 2016.
Source: Morgan Stanley Wealth Management GIC, Morgan Stanley & Co., Haver Analytics, Bloomberg, FactSet as of Feb. 9, 2018

Fixed Income Insight: The Move in US Treasuries Is Real

One of the initial catalysts for the stock market correction was the jump in nominal interest rates following an upside surprise in US average hourly earnings. But in recent days, commodity prices have cooled and Congress has approved a budget that adds another $300 billion to the fiscal deficit this year; real rates are rising, too (see chart). This is important to watch. Higher real rates affect earnings multiples, the cost of capital, credit spreads and overall financial conditions. We are not forecasting a major move in real rates from this point, but should credit spreads widen significantly or financial conditions deteriorate, the correction could become more serious.



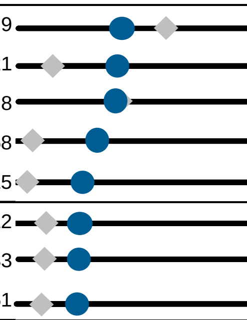
Source: Bloomberg as of Feb. 9, 2018

Government Debt Monitor

US				
	Yield (%)			Total Return (%)
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	1.55	0.08	0.18	0.11
2-Year	2.07	-0.07	0.19	-0.06
5-Year	2.54	-0.05	0.34	-1.18
10-Year	2.85	0.01	0.45	-3.43
30-Year	3.16	0.07	0.42	-7.34
2-Yr./10-Yr. Spread (bp)	78	7.82	25.56	-
10-Yr. TIPS Breakeven (bp)	207	-7.15	8.34	-
Interest Rate Volatility† (bp)	68	7.52	21.25	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range** Rich		Cheap
Investment Grade	MBS*	5.13	3.32	26	9		35
	AAA	4.33	2.61	25	21		44
	AA	5.62	2.83	12	8		18
	A	7.44	3.38	74	68		155
	BBB	7.26	3.89	123	115		292
High Yield	BB	4.70	5.18	265	212		622
	B	3.85	6.58	407	333		971
	CCC	3.32	11.35	969	851		1,933



Unless stated, indexes utilized are Citi Broad Investment Grade, Citi High Yield, and Citi Global Indexes
†Interest Rate Volatility measured by Merrill Lynch Option Volatility Estimate (MOVE) Index
*MBS distills high grade agency-rated mortgage-backed securities, a substantial subsector of investment grade indexes.
**OAS stands for Option-Adjusted Spread or spread over the Treasury. Grey diamond denotes current OAS; blue circle denotes two-year average.
Source: Bloomberg, The Yield Book® Software and Services. Data as of Feb. 9, 2018

Government Debt Monitor

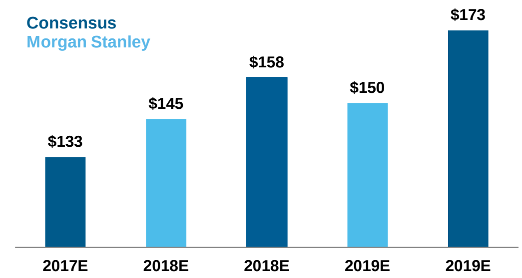
Global				
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.98	-0.03	0.20	-1.67
Germany	0.74	-0.02	0.32	-2.07
Japan	0.06	-0.02	0.02	-0.03
Spain	1.47	0.01	-0.09	0.67
UK	1.57	-0.01	0.38	-2.79
3-Month LIBOR	1.81	0.02	0.12	-
US Tax Exempt				
10-Year AAA Muni	2.44	-0.02	0.46	-1.40
10-Yr. Muni/UST Ratio	85.47	-1.00	3.21	-

Benchmark Returns

	Total Returns (%)		
Index	YTD	MTD	2017
Bloomberg Barclays US Aggregate	-1.92	-0.77	3.54
Bloomberg Barclays US MBS	-1.75	-0.59	2.47
Bloomberg Barclays US IG Corporate	-2.28	-1.34	6.42
Bloomberg Barclays Municipal	-1.40	-0.22	5.45
Bloomberg Barclays US High Yield	-1.27	-1.86	7.50
Bloomberg Barclays Global Aggregate	0.00	-1.17	7.39
JPMorgan Emerging Market	-2.68	-2.48	9.32

*Global total returns reflect Citigroup 7- to 10-year bond indexes and Muni total returns reflect Bloomberg Barclays Municipal Bond Index Total Return
Source: Bloomberg, Thomson Reuters Municipal Market Data (MMD) as of Feb. 9, 2018

S&P 500 Earnings Estimates



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of Feb. 9, 2018

MS & Co. 2018 Price Target for the S&P 500

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	$150	20.0	3,000	14.5%
Base Case	$150	18.3	2,750	5.0%
Bear Case	$135	17.0	2,300	-12.2%
	Current S&P 500 Price		2,620	

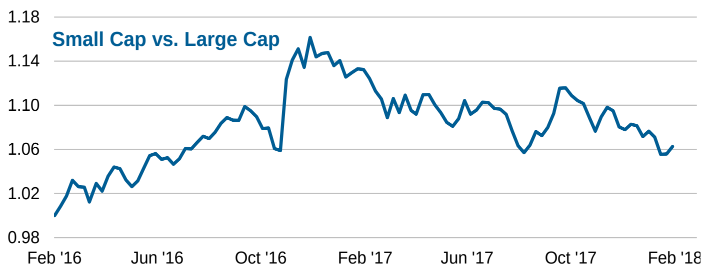
Note: Price targets use 2019 earnings estimate.
Source: Thomson Reuters, Morgan Stanley & Co. Research as of Feb. 9, 2018

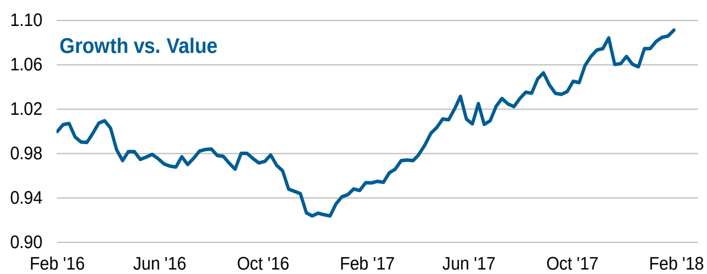
S&P 500 Sector Performance and Valuation (as of Feb. 9, 2018)

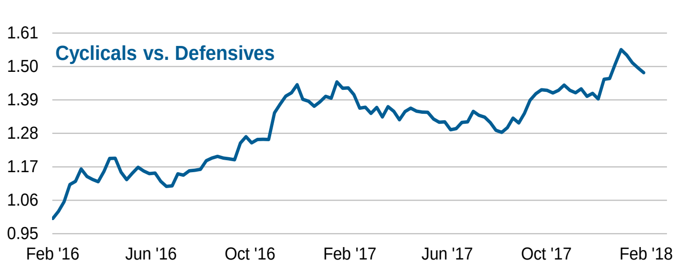
Index Name	Total Return			Dividend Yield (%)	Beta	20-Year Avg. Forward 12-Mo. PE	Forward 12-Mo. P/E*
	WTD (%)	YTD (%)	1-Year (%)				
S&P 500	***-5.10***	***-1.84***	***15.78***	***1.85***		***16.0***	***16.5***
Energy	-8.15	-7.57	-4.62	2.89	0.94	17.6	**19.7**
Materials	-3.41	-3.38	15.08	1.96	1.06	13.9	**16.8**
Industrials	-5.38	-2.55	14.85	1.96	1.05	16.3	**17.3**
Consumer Discretionary	-4.57	2.30	20.06	1.26	0.93	18.0	**19.9**
Consumer Staples	-5.09	-5.72	3.24	2.75	0.61	17.1	**17.9**
Health Care	-5.63	-0.62	16.50	1.61	0.93	17.4	**15.5**
Financials	-5.78	-0.85	18.80	1.57	1.20	12.8	**13.2**
Information Technology	-4.33	-0.11	29.43	1.21	1.24	20.8	**17.7**
Telecommunication Services	-5.73	-5.36	-2.67	5.13	0.85	16.4	**10.6**
Utilities	-2.65	-7.79	2.54	3.76	0.22	14.2	**15.8**
Real Estate	-4.11	-8.62	0.21	3.45	0.57	15.3	**16.3**

*Dark blue/light blue/gray fill denotes whether current relative forward 12-month P/E is low/neutral/high relative to history.
Source: Morgan Stanley & Co. Research

Performance of Style and Cap Pairs (as of Feb. 9, 2018)







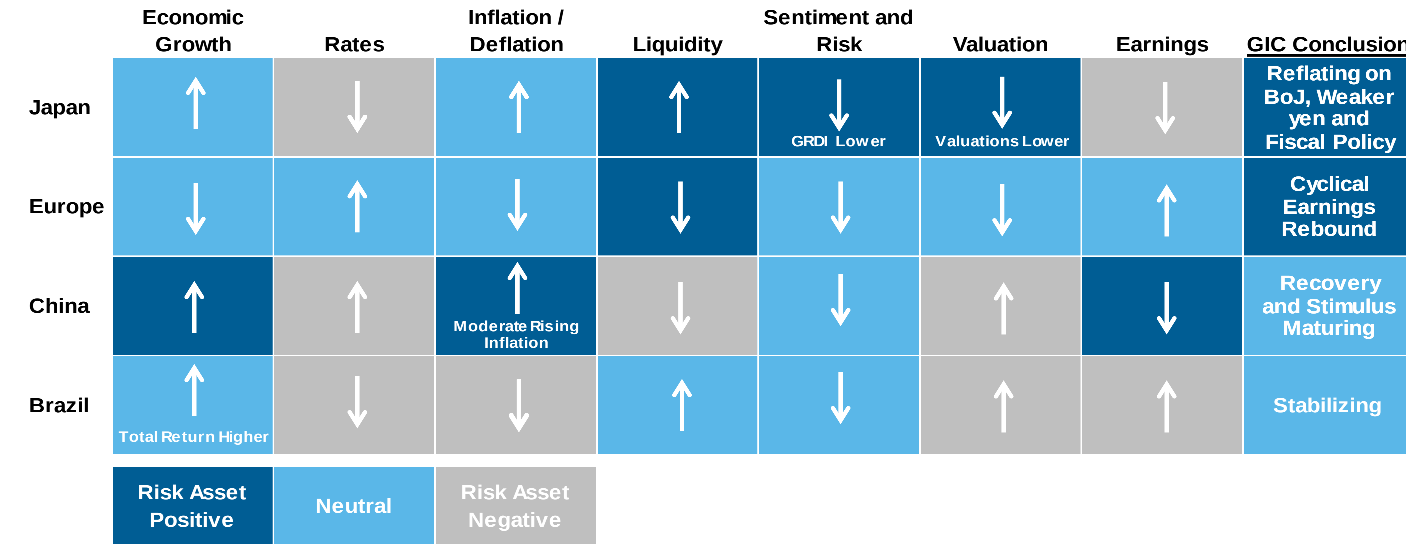
Source: Morgan Stanley & Co. Small Cap is represented by the Russell 2000 Index; Large Cap represented by the Russell 1000 Index; Growth represented by the Russell 1000 Growth Index; Value represented by the Russell 1000 Value Index.Cyclicals and Defensives, and Quality and Junk are based on Morgan Stanley & Co. Research analysis.

Morgan Stanley & Co. Forecasts (as of Feb. 9, 2018)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2017E	2018E	2019E	Q1 '18E	Q3 '18E	2017E	2018E	2019E	Q1 '18E	Q3 '18E	Q1 '19E
Global	3.7	3.9	3.8			2.6	3.0	2.8			
US	2.3	2.6	2.1	2.25	2.05	2.1	2.3	1.7			
Euro Zone	2.5	2.1	1.9			1.5	2.0	1.7	1.20	1.18	1.20
UK	1.8	1.1	0.8	1.45	1.55	2.7	2.8	2.1	1.25	1.27	1.27
Japan	1.7	1.3	1.5	0.05	0.20	0.5	1.3	0.9	114	108	102
Emerging Markets	4.7	5.0	5.0			3.1	3.7	3.6			
China	6.9	6.5	6.3	4.20	4.30	1.6	2.7	2.8	6.63	6.68	6.65

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of Feb. 9, 2018)



Note: Text in a factor box denotes a color change; In Japan, Sentiment moved from risk asset neutral to positive as the Global Risk Demand Index declined. Valuations also moved from risk asset neutral to positive as valuations moved lower; In China, Inflation moved from risk asset neutral to positive as inflation has been rising gradually from low to moderate levels; In Brazil, Economic Growth moved from risk asset negative to neutral as total returns for the region improved in January; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending Feb. 9, 2018)

	Positives	Negatives
Global Growth	• ISM nonmanufacturing survey outperformed expectations in January, 59.9 versus 56.7 • December Euro Zone retail sales up 1.9% in line with expectations • China's imports surged a year-over-year 36.9% in January; exports also beat expectations at 11.1%	• US JOLTS Survey fell short of expectations in December • Japan Leading Index declined in December
Rates		• Ten-year US Treasury yield hit 2.85%, a four-year high
Inflation	• China CPI up 1.5% in January, PPI up 4.3, both in line with expectations	
Sentiment and Flows		• VIX spiked above 50, highest since August 2015

Source: Morgan Stanley Wealth Management GIC

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Equal Weight	US equities have done exceptionally well since the global financial crisis, but they are now in the latter stages of a cyclical bull market. While the acceleration of the Trump/Republican progrowth agenda has helped us achieve our 2,700 price target for the S&P 500 earlier than expected, it ironically brings the end of the cycle closer. In addition, sentiment is much more bullish than it was a year ago, leaving much less upside to our 2018 year-end target of 2,750.
International Equities (Developed Markets)	Overweight	We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are likely to drive more fiscal policy action in both regions, which is necessary for the central banks to exit their extraordinary monetary policies.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 24 months and for the year to date. With the US dollar appearing to have made a cyclical top, global growth and earnings accelerating, and financial conditions remaining loose, we think EM equities will continue to keep up with global equity markets but are unlikely to lead as strongly.
Global Fixed Income	**Relative Weight Within Fixed Income**	
US Investment Grade	Underweight	We have recommended shorter-duration* (maturities) since March 2013 given the extremely low yields and potential capital losses associated with rising interest rates from such low levels. While interest rates have remained exceptionally low, recent US economic data have been very strong recently and the Fed is now raising rates at an accelerating pace. Combined with our expectation for the European Central Bank to taper its bond purchases later in 2018 and the Bank of Japan likely to raise its yield target, higher interest rates are likely this year.
International Investment Grade	Underweight	Yields are even lower outside the US, leaving very little value in international fixed income, particularly as the global economy begins to recover more broadly. While interest rates are likely to stay low, the offsetting diversification benefits do not warrant much, if any, position, in our view.
Inflation-Protected Securities	Overweight	With deflationary fears having become extreme in 2015 and early 2016, these securities still offer relative value in the context of our forecasted acceleration in global growth and our expectations for oil prices and the US dollar's year-over-year rate of change to revert back toward 0%. That view played out in 2016 and 2017 but has not yet run its course.
High Yield	Underweight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently took our remaining high yield positions to zero as we prepare for deterioration in lower-quality earnings in the US led by lower operating margins. Credit spreads have likely bottomed for this cycle.
Alternative Investments	**Relative Weight Within Alternative Investments**	
REITs	Underweight	Real estate investment trusts (REITs) have underperformed global equities since mid 2016 when interest rates bottomed. We think it is still too early to reconsider our underweight zero allocation given the further rise in rates we expect and deteriorating fundamentals for the industry. Non-US REITs should be favored relative to domestic REITs.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded sharply from a devastating 2015 but, with oil's slide, performed poorly in 2017. With oil prices recovering again and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. The Trump presidency should also be supportive for fracking activity and pipeline construction, both of which should lead to an acceleration in dividend growth.
Hedged Strategies (Hedge Funds and Managed Futures)	Equal Weight	This asset category can provide uncorrelated exposure to traditional risk-asset markets. It tends to outperform when traditional asset categories are challenged by growth scares and/or interest rate volatility spikes. As volatility becomes more persistent in 2018, these strategies should do better than in recent years.

For more about the risks to Master Limited Partnerships (MLPs) and Duration, please see the Risk Considerations section beginning on page 10 of this report.
Source: Morgan Stanley Wealth Management GIC as of Feb. 9, 2018

Macro Factor Heat Map Key (see page 7)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	Conclusion
Dark Blue	Economic growth robust	Steep yield curve	Low-moderate and rising inflation	Liquidity robust in economy / banking system	Shorter-term sentiment and technicals bearish	Risk assets attractively valued	Earnings outlook robust	Confluence of factors supports a risk-on investment approach
Light Blue	Economic growth neutral	Normal yield curve	Low-moderate and declining inflation; moderate inflation; higher and falling inflation	Liquidity neutral in the economy / banking system	Shorter-term sentiment and technicals neutral	Risk assets neutral	Earnings outlook neutral	Confluence of factors supports a neutral investment approach
Gray	Economic growth anemic	Flat/inverted yield curve	Very high/low inflation/deflation; high and rising inflation	Liquidity low in economy / banking system	Shorter-term sentiment and technicals bullish	Risk assets are richly valued	Earnings outlook anemic	Confluence of factors supports a risk-off investment approach
Up	Growth accelerating	Yield curve steepening	Inflation rising	Liquidity increasing	Sentiment becoming more bullish	Valuations rising	Earnings outlook improving	
Down	Growth declining	Yield curve flattening	Inflation falling	Liquidity decreasing	Sentiment becoming more bearish	Valuations falling	Earnings outlook worsening	
Signal Horizon	One to three years	One to three years	One to three years	One to three years	One to three months	Six months to two years	Six months to two years	
Inputs	• Industrial production • Unemployment • Total return • Earnings revisions • Home prices • OECD LEI (China and Brazil) • MS & Co. ARIA (US)	• 10-year vs. 2-year government bond yield spread	• Consumer Price Index	• M1 growth • Private credit growth • Libor-OIS spread	• MS US Equity Risk Indicator (US) • MS Combined Market Timing Indicator (Europe) • MS Global Risk Demand Index • Relative strength index • Members above / below moving average. • Index above / below moving average • Consumer confidence	• Forward price/earnings ratio • Price/book ratio • Equity risk premium • High yield option-adjusted spread	• Earnings revisions breadth • Earnings surprise • Return on equity	• Weighted average z-score of all factors

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

Hedged Strategy Definitions

Credit Long/Short: This strategy consists of a core holding of long credits hedged at all times with varying degrees of short sales of bonds and/or index options. Some managers maintain a substantial portion of assets within a hedge structure and commonly employ leverage.

Equity Long/Short: This strategy consists of a core holding of long equities hedged at all times with varying degrees of short sales of stock and/or index options. Some managers maintain a substantial portion of assets within a hedge structure and commonly employ leverage.

Market-neutral: A type of investment strategy undertaken by an investor or an investment manager that seeks to profit from both increasing and decreasing prices in one or more markets, while attempting to completely avoid some specific form of market risk.

Risk Considerations

MLPs

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.

Duration

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. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are suitable only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may be highly illiquid and can engage in leverage and other speculative practices that may increase the volatility and risk of loss. Alternative Investments typically have higher fees than traditional investments. Investors should carefully review and consider potential risks before investing. Certain of these risks may include but are not limited to: Loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices; Lack of liquidity in that there may be no secondary market for a fund; Volatility of returns; Restrictions on transferring interests in a fund; Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by FINRA Rule 2241 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal. Morgan Stanley Smith Barney LLC is a registered broker-dealer, not a bank. In Consulting Group's advisory programs, alternative investments are limited to US-registered mutual funds, separate account strategies and exchange-traded funds (ETFs) that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Alternative investments are not suitable for all investors. As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund. Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually suitable only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

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. If sold in a declining market, the price you receive may be less than your original investment. 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. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Ultrashort bond funds Ultra-short bond funds are mutual funds and exchange-traded funds that generally invest in fixed income securities with very short maturities, typically less than one year. They are not money market funds. While money market funds attempt to maintain a stable net asset value, an ultra-short bond fund's net asset value will fluctuate, which may result in the loss of the principal amount invested. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

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

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 securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, 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 eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

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. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

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.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

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

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Stocks of medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

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.

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.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

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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.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

Technology stocks may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Investing in foreign emerging markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks.

Investing in foreign markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. **Investing in currency** involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

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