The GIC Weekly

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What We Are Talking About

- **Playing the Late Cycle.** Improved economic growth, multiyear highs in global purchasing managers' surveys, positive earnings revisions, tightening credit spreads and rising interest rates support the markets' procyclical rotation; momentum is strong and should persist for at least the next six to 12 months; labor market dynamics and accelerating wage gains signal the economy is moving into the later stages of the business cycle; market momentum should moderate as economic surprises and positive earnings revisions peak and inflation readings trough; evidence of a market top elusive since exuberance is missing; this last phase of the cycle will likely be characterized by a pick-up in capital spending, M&A activity and initial public offerings as corporate capital deployment becomes strategic; active management and small/mid-caps essential to portfolio construction. **Consider** staying invested in equities, with a preference for energy, industrials, tech hardware and financials.

Playing the Late Cycle

With markets at an all-time high, up some 14% for the year to date and 288% since the March 2009 low, it is natural for investors to ask "where are we in the cycle?" Answering that question is not straightforward, as this cycle has been notably different from its predecessors. Financial repression strategies pursued by major central banks during the past nine years have left investors without the use of the typical tools to navigate the cycle. Manipulation of risk-free rates, shifting banking regulations, a backdrop of fiscal austerity and global deflation have rendered standard gauges like the level and shape of the yield curve less useful; capacity utilization metrics have been distorted by technology obsolescence, and labor market dynamics obscured by seismic demographic shifts. What also clouds the picture is the phased implementation of monetary policy across geographies that created rolling regional recessions culminating in the 2015-2016 minirecession. As a result of that slowdown, China's economy experienced a soft landing, the US dollar soared and oil prices cratered.

Upcoming Catalysts

Oct. 16 Empire State Manufacturing Survey
Oct. 17 US import/export prices
Oct. 17 NAHB/Wells Fargo Housing Market Index
Oct. 17 US industrial production
Oct. 17 Euro Zone CPI
Oct. 18 US housing starts, building permits
Oct. 18 Beige Book
Oct. 18 China third-quarter GDP
Oct. 19 Philadelphia Fed Survey
Oct. 19 US Leading Economic Index
Oct. 20 US existing home sales

All told, it's not surprising that investors wonder whether the US economy is at the later stages of a nine-year cycle or, like international markets, in the early stages of a globally synchronous reflationary recovery. While the Global Investment Committee is sanguine about the US's near-term participation in the global rebound, we are looking for signs that the US cycle is normalizing. Through that lens, we can diagnose its late-cycle characteristics.

To start with, we acknowledge that current economic activity gauges are downright buoyant; in fact, the US PMI Composite for September made a 12-year high. While sustaining those readings and thus momentum in economic surprises is unlikely, that data alone is insufficient to identify a cycle peak. As survey-driven data points, these metrics can be subject to sentiment, potentially obscuring important pockets of weakness in commercial real estate, housing, trade or capital spending.

Instead our preferred current indicator is the labor market, where the data are reaching extremes. Specifically, even though the September jobs report was distorted by the hurricanes in Texas and Florida, we observed a number of bests: The U-3 unemployment rate fell to 4.2%, the best report since February 2001; the U-6 rate, which includes part-timers, dropped to 8.3%, the best since 2007; the 63.1% labor-force participation rate is the best of the cycle; and a jobs-to-population ratio of 60.9% is the best in nearly nine years. Even more important, average hourly earnings growth is finally accelerating, with the year-over-year gain now 2.9% from 2.7% in August; the three-month run-rate was an annualized 4.3%.

Many market observers and critics of the Federal Reserve's policy statements have suggested that the traditional inverse relationship between unemployment rates and wages—known as the "Phillips curve"—is no longer valid because of technological and demographic trends. We have always been skeptical of that argument and believe we are just now at the beginning of the wage acceleration that occurs when labor markets tighten. As we illustrate in the *Chart of the Week* (see page 3), annualized average hourly wage growth bottomed in 2013 and while progress has been frustratingly slow, the trend is rising. As we have also noted, when wage growth is examined by age cohort, those 55 and younger are compounding wage gains in excess of 4% a year, which is more typical of prior cycle peaks. With the younger cohort destined to become a larger portion of the workforce, we think upward pressure on wages will continue. Furthermore, *Fixed Income Insight* (see page 7) shows the downward pressure on nonwage components of inflation is abating, meaning wage gains may start to bite. This potential for an inflation surprise could come about if deficit-financed tax cuts, now under consideration in Congress, are enacted. Tax cuts have rarely been implemented when unemployment is this low.

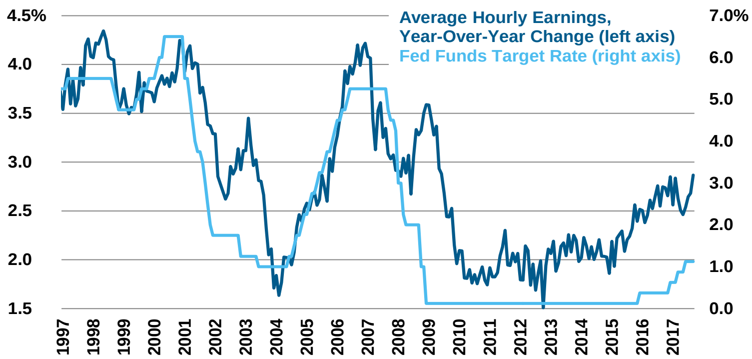
The importance of accelerating wage gains to late-cycle dynamics cannot be underestimated. When wage gains start outpacing consumer prices, individuals experience real income gains which go toward consumption, debt reduction and savings, further driving economic growth. Perhaps more importantly, real income growth has been correlated with a pick-up in the capital spending and productivity cycles. The reason is two-fold: Real wage acceleration tends to pressure corporate profit margins and cause a rise in interest rates through inflation expectations. Critically, this combination of increasing capital costs and labor costs usually prompts corporations to invest in new equipment, substituting machines for additional employees, or to take on strategic mergers and acquisitions (M&A) that can add scale, provide synergies or deliver cost savings. In fact, recent data validate this dynamic, with durable goods orders improving and fixed asset investment up at an annual pace of 8.8% as of the third quarter. M&A volume relative to market capitalization, while running at half the rate of prior peaks, has also picked up meaningfully in the past quarter. Many other critical data—a flattening of the two-year/10-year US Treasury yield curve, investment grade and high yield spreads nearing cycle tights and extremely accommodative financials conditions—also support the late-cycle diagnosis.

However, we emphasize that none of our timing indicators suggest a top for the stock market. Cash balances for mutual fund managers and households are above average, hedge fund positioning remains net short the market and options hedging appears skewed defensively. Market breadth is healthy and momentum is solid, yet stocks are not in overbought territory. Fund flows still massively favor fixed income, suggesting little euphoria around equities. In fact, margin debt in New York Stock Exchange trading accounts is no higher than it was in March, when the S&P 500 was about 200 points lower.

Bottom Line: Economic growth and earnings, not liquidity or multiple expansion, have fueled this latest reflationary market surge. While we believe that current market momentum can continue, accelerating wages tell us it is getting late in the game, a time when inflation, credit spreads, financial conditions and policy normalization become more important. Rising real rates signal more vigorous capital deployment approaches in this phase, with capital spending and M&A picking up. **Watch** positioning indicators for signs of exuberance. **Consider** staying invested in equities, with a preference for energy, industrials, tech hardware and financials. ■

Chart of the Week: Wages Gain Some Momentum

The Federal Reserve has a dual mandate of price stability (controlled inflation) and full employment. Because wage gains sit at the nexus of employment and inflation, average hourly earnings have typically been a bellwether for economic activity and the federal funds rate has usually followed. In this cycle, progress on wage gains has been slow despite improved job creation, a phenomenon largely explained by technology substitution and the drag from the over-55 cohort. At the same time, Fed policy has decoupled because of concerns about goods-based deflation. The September jobs report shows a 2.9% year-over-year growth in average hourly earnings, up from 2.7% in August and 2.5% in July. This late-cycle reading suggests that Fed tightening will likely continue apace.



Source: Haver Analytics as of Sept. 30, 2017

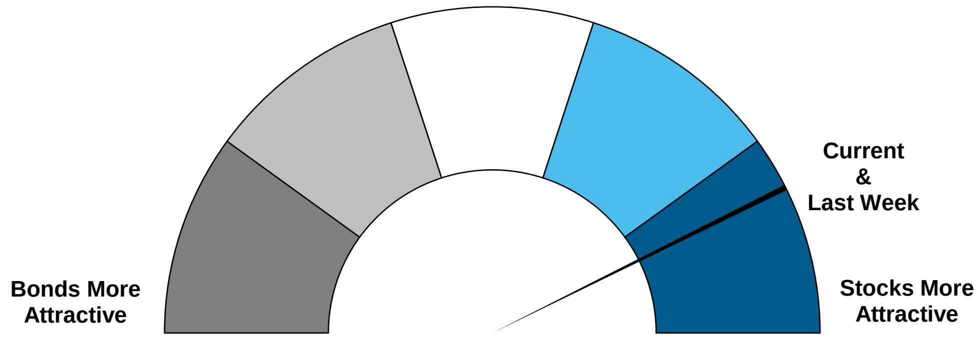
Asset Class Performance and Heat Map (as of Oct. 13, 2017)

Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
Cash	**YTD**	**1-Yr.**	**2016**	**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	0.6	0.7	0.3	0.3	0.2	0.4	2.0	1.08	1.08	1.99	0.03	0.60	-0.13	-0.04
Global Equities								**Current Div. Yld.**	**Current P/E**	**Avg. P/E[2]**				
US Large-Cap Growth	23.2	26.3	6.5	13.1	15.2	9.3	6.5	1.19	21.4	21.4	5.0	17.5	0.68	0.89
US Large-Cap Value	10.2	18.7	16.3	8.8	13.1	5.6	6.7	2.89	15.6	13.9	3.8	14.2	0.54	0.88
US Mid-Cap Growth	15.3	19.0	6.4	8.6	13.3	7.4	7.0	0.82	22.1	26.7	4.7	23.4	0.63	0.81
US Mid-Cap Value	11.5	21.8	20.9	10.7	15.4	8.0	9.2	2.47	15.8	14.4	3.3	16.4	0.28	0.87
US Small-Cap Growth	17.5	25.3	14.0	11.4	14.7	9.2	9.0	0.59	28.5	24.0	6.7	22.1	0.46	0.84
US Small-Cap Value	8.9	23.1	25.8	11.4	14.4	9.1	9.3	2.35	20.6	17.1	6.0	17.3	0.32	0.84
Europe Equity	24.7	29.1	0.2	5.0	9.0	1.7	5.8	3.24	15.2	14.3	6.4	18.2	0.80	0.94
Japan Equity	17.7	18.4	2.7	8.1	10.9	1.9	2.5	2.02	14.4	20.7	9.3	17.3	0.40	0.69
Asia Pacific ex Japan Equity	20.7	19.3	8.0	4.7	5.4	2.9	7.0	3.89	15.6	14.3	9.1	21.4	0.59	0.85
Emerging Markets	33.4	29.7	11.6	5.3	4.4	1.7	6.7	2.31	12.9	11.4	9.8	23.6	0.75	0.86
Global Fixed Income								**Current YTM**	**Current Spread**	**Avg. Spread[2]**				
Short-Term Fixed Income	1.1	0.8	1.3	1.1	0.9	2.1	3.5	1.66	14.0	31.0	0.5	1.4	-0.08	-0.15
US Fixed Income	3.5	0.8	2.6	2.7	2.1	4.3	5.1	2.53	37.0	55.0	2.0	3.4	-0.11	-0.06
International Fixed Income	8.6	1.2	1.8	0.5	-0.4	2.8	4.2	1.04	40.0	50.0	5.2	8.1	0.59	0.29
Inflation-Protected Securities	7.5	4.9	6.5	1.6	1.2	3.6	6.3	-	-	-	5.1	7.6	0.41	0.43
High Yield	9.9	10.0	14.3	5.9	6.4	7.9	7.7	5.48	347.0	514.0	1.5	10.2	0.64	0.76
Emerging Markets Fixed. Inc.	14.2	8.8	9.9	0.3	-0.9	3.8	7.1	6.05	232.0	354.5	7.5	13.1	0.59	0.68
Alternative Investments								**Current Div. Yld.**						
REITs	12.8	11.5	4.6	7.3	7.6	2.4	7.2	3.71	-	-	5.8	18.4	0.47	0.79
MLP/Energy Infrastructure[3]	-5.9	-2.4	18.3	-12.9	-0.6	6.5	-	7.41	-	-	10.5	18.3	-0.15	0.55
Commodities ex Prec. Metals	-3.3	-0.1	11.6	-12.5	-11.1	-8.5	-0.8	-	-	-	9.1	17.0	0.34	0.43
Precious Metals	11.2	1.6	9.5	0.4	-8.8	4.0	6.5	-	-	-	11.5	19.4	0.08	0.21
Hedged Strategies[4]	4.8	6.3	2.5	0.4	2.0	-0.6	-	-	-	-	1.3	6.0	0.66	0.64
Managed Futures[5]	0.1	-0.9	-2.9	-0.8	-0.4	-0.7	-	-	-	-	3.7	7.9	0.50	0.16
S&P 500	15.9	22.2	12.0	10.8	14.2	7.4	7.0	1.83	17.9	16.0	3.42	14.9	0.77	0.95
Russell 2000	11.9	25.3	21.3	12.2	13.8	7.8	7.5	1.51	24.9	20.3	8.11	19.9	0.29	0.82
MSCI EAFE	22.4	25.0	1.5	5.5	8.9	1.8	5.0	3.03	15.0	15.2	5.99	16.7	0.81	0.96
MSCI AC World	19.8	23.8	8.5	8.0	10.8	4.4	6.1	2.39	16.1	15.6	3.93	15.6	1.00	1.00

Valuation	Volatility	Correlation
Cheap	**Low**	**Low**
Moderate	**High**	**High**
Expensive		

Note: Performance values calculated using USD. 1. As of Sept. 30, 2017. 2. 20-year average as of Sept. 30, 2017. 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.

Short-Term Stock and Bond Indicator



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

Indicator	Category	Absolute Level and Change	Impact on Risk Assets: Z-Score of Level	Impact on Risk Assets: Z-Score of Change
PMI (+)	Growth	High and Rising	2.09	0.51
Durable Goods (+)		Neutral and Rising	0.57	1.12
Retail Sales (+)		High and Rising	2.68	2.65
Manufacturing Hours Worked (+)		Neutral	0.58	-0.11
Commodity Prices (+)	Inflation	Neutral and Rising	0.46	0.63
Yield Curve: 10-Yr./Three-Mo.(-)	Rates	Low and Falling	1.97	0.53
Yield Curve: Two-Yr./Three-Mo.(-)		Neutral	-0.35	0.09
Pace of Interest Rate Hikes (-)		Low	1.60	0.22
Term Premium Model (-)		Short Duration	-	-
High Yield Spreads (-)	Liquidity	Neutral and Rising	0.45	-1.16
Investment Grade Spreads (-)		Low and Rising	1.19	-0.93
Financial Conditions (-)		Neutral	0.26	0.03
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Low	-1.35	0.13
Large vs. Small Performance (-)		Neutral and Rising	0.19	-0.80
High- vs. Low-Quality Performance (-)		Neutral	0.15	0.08
High- vs. Low-Beta Performance (+)		High and Falling	1.28	-1.26
S&P 500 Forward Price/Earnings Ratio (+)		Neutral	0.34	-0.48
Earnings Revisions Breadth (-)	Earnings	Neutral	-	-
Global Risk Demand (+)	Sentiment	Neutral and Rising	0.86	0.76
Implied Currency Volatility (-)		Low and Falling	1.25	0.55
Five-Yr. Macro Sensitivity (-)		High	-1.35	0.02
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Neutral	0.55	-0.30
Cumulative Advance/Decline (+)		High	1.36	-0.05
S&P 500 Put/Call Ratio (-)		High and Falling	-2.05	0.59
Emerging Market Fund Flows (+)		Neutral	0.00	0.00
Smart Money Flow Index (+)		Neutral	0.58	-0.07

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. Z-Scores and color coding are set in accordance with the impact on risk assets. A z-score is a statistical measurement of a score's relationship to the mean in a group of scores. A z-score of 0 means the score is the same as the mean.	Positive for Stocks Relative to Bonds Neutral Negative for Stocks Relative to Bonds

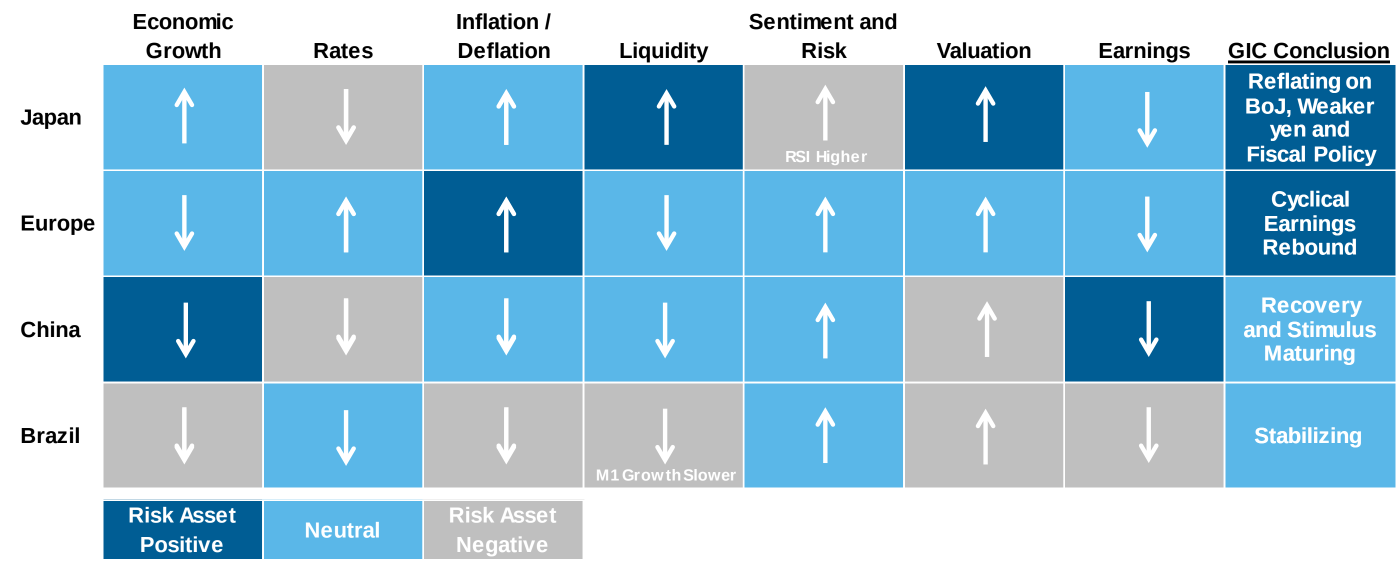
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial 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 Oct. 13, 2017

Morgan Stanley & Co. Forecasts (as of Oct. 13, 2017)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2016	2017E	2018E	Q4 '17E	Q2 '18E	2016	2017E	2018E	Q4 '17E	Q2 '18E	Q4 '18E
Global	3.1	3.5	3.7			2.6	2.5	2.7			
US	1.5	2.2	2.2	2.45	2.40	1.3	1.9	1.6			
Euro Zone	1.8	2.1	1.8			0.2	1.5	1.4	1.22	1.21	1.16
UK	1.8	1.6	1.1	1.00	0.95	0.7	2.7	3.1	1.24	1.23	1.27
Japan	1.0	1.7	1.1	0.08	0.20	-0.1	0.6	1.2	114	112	105
Emerging Markets	4.2	4.6	4.9			3.9	3.2	3.5			
China	6.7	6.6	6.4	3.89	3.85	2.0	1.7	2.3	6.60	6.70	6.80

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of Oct. 13, 2017)



Note: Text in a factor box denotes a color change; In Japan, Sentiment and Risk transitioned from risk asset neutral to negative as the Relative Strength Index moved higher; In Brazil, Liquidity transitioned from risk asset neutral to negative as M1 money growth slowed; for further explanation of the chart, see page 9.

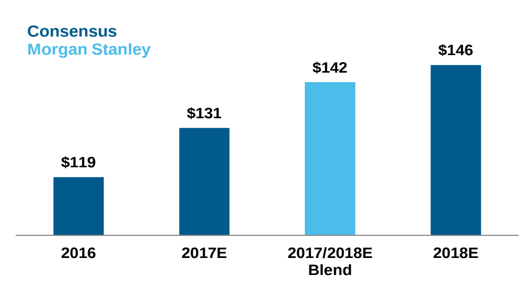
Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending Oct. 13, 2017)

	Positives	Negatives
Global Growth	• US JOLTS survey near all-time high • September US retail sales as expected, but upward revision for August • October U. of M. Consumer Sentiment Index highest since 2000 • Euro Zone industrial production better than expected in August • China's import and export growth improved in September	• September NFIB Small Business Optimism Index slightly below forecast, but still elevated
Inflation	• US PPI for September reported in line with expectations at 2.6% year over year • Japan PPI for September up 3.0% year over year, consistent with expectations	• FOMC minutes showed officials debated whether weak inflation was temporary or something more persistent • US headline CPI up at 2.2% year over year versus 2.3% forecast
Sentiment	• Oil rallied back over the $50 per barrel mark	

Source: Morgan Stanley Wealth Management GIC

S&P 500 Earnings Estimates



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of Oct. 13, 2017

MS & Co. S&P 500 12-Month Price Target

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	142.00	21.1	3,000	17.5%
Base Case	142.00	19.0	2,700	5.8%
Bear Case	126.50	16.6	2,100	-17.7%
	Current S&P 500 Price		2,553	

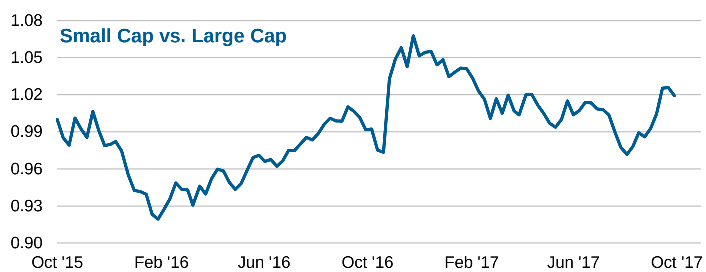
Source: Thomson Reuters, Morgan Stanley & Co. Research as of Oct. 13, 2017

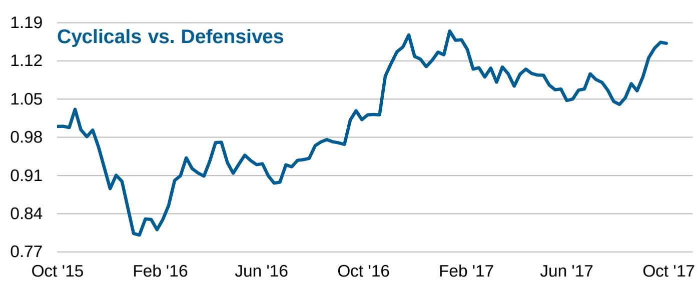
S&P 500 Sector Performance and Valuation (as of Oct. 13, 2017)

Index Name	Total Return WTD (%)	Total Return YTD (%)	Total Return 1-Year (%)	Dividend Yield (%)	Beta	20-Year Avg. Forward 12-Mo. PE	Forward 12-Mo. P/E*
S&P 500	***0.17***	***15.86***	***22.21***	***1.83***		***16.0***	***17.9***
Energy	0.17	-7.02	0.48	2.78	0.91	17.5	**28.9**
Materials	0.73	18.97	28.85	1.66	1.12	13.9	**18.6**
Industrials	-0.05	15.60	26.72	1.91	1.07	16.3	**18.5**
Consumer Discretionary	-0.62	13.30	17.46	1.34	0.98	18.0	**19.6**
Consumer Staples	1.51	7.89	7.60	2.66	0.54	17.1	**19.3**
Health Care	-0.63	21.26	19.74	1.54	0.86	17.5	**16.7**
Financials	-0.86	13.73	37.59	1.54	1.38	12.9	**14.5**
Information Technology	1.33	31.04	34.10	1.22	1.23	20.8	**18.9**
Telecommunication Services	-4.64	-9.07	-2.81	5.41	0.64	16.6	**12.1**
Utilities	1.33	14.17	16.64	3.31	0.24	14.1	**18.1**
Real Estate	1.81	9.90	9.21	3.07	0.54	15.3	**18.1**

*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.

Performance of Style and Cap Pairs (as of Oct. 13, 2017)

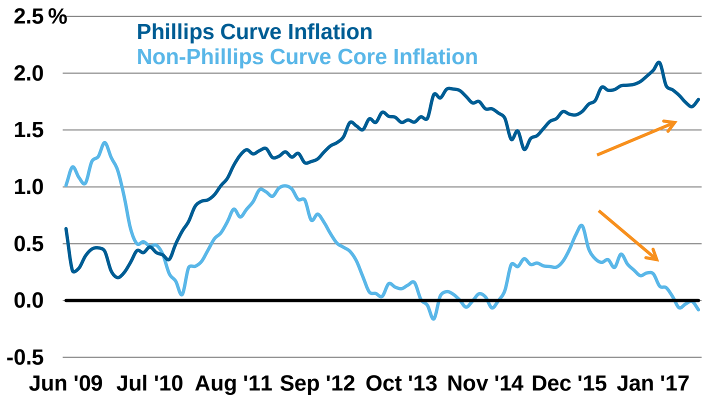




Source: Morgan Stanley & Co. Small Cap is represented by the Russell 2000 Index; Large Cap represented by the Russell 1000 Index; Growth represented by the Russell 1000 Growth Index; Value represented by the Russell 1000 Value Index.Cyclicals and Defensives, and Quality and Junk are based on Morgan Stanley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

Fixed Income Insight: Key to Inflation Is Goods and Services, Not Labor Costs

One of the debates around the interest rate outlook is whether the "Phillips curve" is dead. The Phillips curve describes the inverse relationship between wages and unemployment but, for much of the past year, falling unemployment has failed to produce much wage pressure. However, in the past three months, the trend seems to be improving (see chart). Breaking down core inflation into its Phillips curve (labor related) or non-Phillips curve components suggests that the relationship is alive and well. While wage gains and other job-related costs should ultimately lead to a higher core CPI, the pass-through may have to wait for one-time offsets from price distortions in consumer goods and services to moderate. In the past nine months, those have included discounting in cell phone plans, hotel rates, air fares and apartment rents.



Source: Bloomberg, Morgan Stanley & Co., Morgan Stanley Wealth Management GIC as of Sept. 29, 2017

Government Debt Monitor

US				
	Yield (%)			Total Return (%)
Treasury Benchmark	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
3-Month	1.07	0.01	0.57	0.56
2-Year	1.49	-0.01	0.30	0.54
5-Year	1.90	-0.06	-0.03	1.59
10-Year	2.27	-0.09	-0.17	2.89
30-Year	2.81	-0.09	-0.26	6.97
2-Yr./10-Yr. Spread (bp)	78	-7.48	-47.59	-
10-Yr. TIPS Breakeven (bp)	186	-1.73	-11.47	-
Interest Rate Volatility† (bp)	51	-4.13	-20.78	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range** Rich	Cheap
Investment Grade	MBS*	4.06	2.70	21	9	35
	AAA	4.43	2.05	26	20	44
	AA	5.36	2.25	11	8	18
	A	7.60	2.87	78	78	158
	BBB	7.40	3.44	132	131	295
High Yield	BB	4.08	4.24	243	236	662
	B	3.47	5.74	397	386	1,009
	CCC	3.02	11.15	1,035	851	1,972

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. © 2017 Citigroup Index LLC. All rights reserved. Data as of Oct. 13, 2017

Government Debt Monitor

Global				
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
France	0.82	0.08	0.13	2.59
Germany	0.40	-0.06	0.20	0.95
Japan	0.06	0.01	0.02	1.31
Spain	1.60	-0.10	0.22	3.23
UK	1.37	0.00	0.13	1.03
3-Month LIBOR	1.36	0.01	0.36	-
US Tax Exempt				
10-Year AAA Muni	1.96	-0.06	-0.35	5.10
10-Yr. Muni/UST Ratio	85.96	0.58	-8.67	-

Benchmark Returns

	Total Returns (%)		
Index	**YTD**	**MTD**	**2016**
Bloomberg Barclays US Aggregate	3.48	0.33	2.65
Bloomberg Barclays US MBS	2.55	0.22	1.67
Bloomberg Barclays US IG Corporate	5.78	0.57	6.11
Bloomberg Barclays Municipal	5.10	0.41	0.25
Bloomberg Barclays US High Yield	7.20	0.19	17.13
Bloomberg Barclays Global Aggregate	6.66	0.38	2.09
JPMorgan Emerging Market	9.06	0.31	10.19

*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 Oct. 13, 2017

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Overweight	While US equities have done exceptionally well since the global financial crisis, they are now in the latter stages of a cyclical bull market. This bull market was challenged during the past year by fears of political events and instability. While the Trump/Republican progrowth agenda has been slower to develop than hoped, it has also left us in a bit of a Goldilocks environment in which growth and interest rates are neither too hot nor too cold. This is supportive of our call for higher valuations and 2700 on the S&P 500.
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 needed to make the extraordinary monetary policy offered more effective. Both are still at record levels of cheapness but we prefer Japan at the moment given the over-exuberance on Europe. We recommend hedging currency risk for 50% of Japanese positions but not Europe.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 12 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, there is more near-term upward pressure US economic data to reverse and begin surprising to the upside and the European Central Banks tapers its bond purchases. Within investment grade, we prefer BBB-rated corporates and A-rated municipals to US Treasuries.
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 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 but has not yet run its course.
High Yield	Equal weight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently downgraded high yield to equal weight from overweight on the back of this performance, record low credit spreads and interest rates and early signs of credit deterioration in commercial real estate and auto financing.
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, have performed poorly in 2017. As long as oil remains above $40 per barrel, they should provide a reliable and attractive yield and they look exceptionally cheap relative to high yield. A 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 2017, 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 Oct. 13, 2017

Macro Factor Heat Map Key (see page 5)

	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

Index Definitions

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. 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. 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

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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.

Credit ratings are subject to change.

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.

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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