

The GIC Weekly

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What We Are Talking About

- **Diversify Beta, Concentrate Alpha.** In 2017, it seemed easy for investors to generate returns, but 2018 is apt to be more challenging and demand a more active approach; tighter financial conditions, higher inflation and policy normalization are likely to put upward pressure on interest rates and cause historically low volatility to revert to the mean; while economic and policy surprises were unequivocally positive in 2017, they are now poised to show a negative skew; the synchronous global business cycle could give way to more divergent regional outcomes; and finally, profit growth is likely to become more widely dispersed as the implications of tax reform and late-cycle dynamics become more idiosyncratic. **Consider** diversifying across asset classes, opportunistically raising cash. Add non-US stocks, US small- and mid-cap stocks, real assets and alternatives. Within asset classes, focus on active managers concentrating on value and quality.

Diversify Beta, Concentrate Alpha

During every market/business cycle there tends to be one or two years when everything seems to go right, or more importantly, better than originally expected. It's when a broad spectrum of asset classes and portfolio construction strategies benefit in outsized ways. Last year was one of those years. US stocks climbed over 20%, and the gains were broadly shared across the market: Of the 10 S&P 500 industry sectors, only energy finished down for the year; and just 12% of the stocks in the Wilshire 5000 Total Stock Market Index declined. Outside the US, stocks generated strong double-digit gains in every major region.

This was more than a stock market rally. In the fixed income markets, corporate credit returned more than 6% and even US Treasury returns remain positive. Cash yields rose as the Federal Reserve hiked the federal funds rate more than 75 basis points to 1.25% and the two-year US Treasury yield climbed above 1.9%. Noncore asset classes such as

Upcoming Catalysts

Jan. 2 Markit US Manufacturing PMI
Jan. 2 Euro Zone Markit Manufacturing PMI
Jan. 3 FOMC December meeting minutes
Jan. 3 ISM Manufacturing Survey
Jan. 3 Japan Manufacturing PMI
Jan. 4 Markit US Composite PMI
Jan. 5 US employment report
Jan. 5 US trade balance
Jan. 5 Euro Zone PPI
Jan. 5 Euro Zone CPI



THE GIC WEEKLY

commodities and real estate also fared well. Master limited partnerships (MLPs) were the only major asset class in the red, down 12.9% as measured by the Alerian MLP Index.

As we have noted many times, markets racked up these extraordinary results because of a “Goldilocks” scenario—a perfect storm of historically low interest rates, benign inflation and importantly, strong and synchronous global growth. This powerful procyclical impulse drove economic indicators aloft and helped sustain momentum in corporate earnings revisions, a dynamic that powered much of the stock market’s gains.

Returns were also enhanced by surprisingly benign financial conditions in which the Fed’s actions were offset by a weaker US dollar, tighter credit spreads, falling inflation and rising global liquidity. Anchored by record-low 10-year German Bund yields of less than 35 basis points, the 10-year US Treasury yield ended 2017 little changed from its 2016 close. Further turbocharging results was falling volatility for both stocks and bonds. In addition, investor sentiment and positioning were always playing catch-up and market technicals strengthened through the year. The icing on the cake was tax reform. By our estimates, corporate tax cuts are likely to add 6% to 7% to S&P 500 profits this year.

With most asset classes ‘priced for perfection’, the challenge for investors is to identify where 2018’s upside surprises can come from and position for them. The Global Investment Committee (GIC) believes that three major themes will dominate the market this year and that they require asset allocation and portfolio response. This means investors should diversify beta, which gets them exposure to more markets and asset classes; and concentrate alpha, using active managers to cherry-pick the best in each asset class.

The first theme: Interest rates are poised to rise. We believe that the next three or four expected Fed rate hikes will be harder for the market to absorb, especially with the added pressures of growing global sovereign bond issuance, higher US fiscal deficits and the Fed’s balance sheet normalization. And keep in mind, inflationary pressures are building. New multiyear highs in copper prices suggest reflation remains real and the recently retreating US dollar will only add fuel to import prices. Maintaining dovish Fed rhetoric against ever-richer valuations and rising risks to financial stability will be hard with a new, inexperienced and likely hawkish set of central bank governors. With European Central Bank policy likely to hit another inflection point in September, when tapering of Quantitative Easing could take another step forward or cease entirely, it’s not hard to see US interest rates moving higher. In turn, rising rates put pressure on price/earnings multiples for stocks and credit

spreads for corporate debt. Also, as rates go up, market volatility is likely to follow and revert to the mean. Given the current low starting point, it could easily mean corrections of 10% to 15% as the VIX moves from 10 to near 18, its historical average.

The second theme: An increasing probability of economic and business cycle disappointment. When things are as good as they get, they can only get worse. The Citi US Economic Surprise Index, an important measure of economic vibrancy, has hit historically high levels (see *Chart of the Week*, page 3). So have the global leading economic indicators and global PMIs. The Philadelphia Fed Survey, long an early warning sign of an economic slowdown strongly beat expectations in December, while holiday-powered retail sales are expected to top even the most cheery forecasts. Economists are revising their first-quarter GDP growth estimates to more than 3% on an annualized basis.

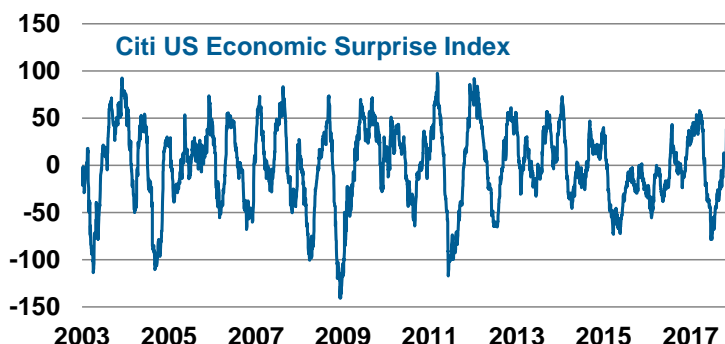
The third theme: Corporate earnings growth is likely to become more dispersed this year as the effects of late-cycle profit margin dynamics play out against the backdrop of tax reform. As we have noted before, winners from tax reform are likely to be those companies that were previously paying high statutory rates—small- and mid-cap companies, financials and capital-intensive telecoms, utilities and industrial companies. Technology and consumer discretionary companies are likely to be only modest beneficiaries as they already had low effective rates. Similarly, the pressures on peak profit margins are likely to be divergent as some companies choose to substitute capital investment for labor, some lose research-and-development tax credits and others will have to acknowledge the tightening job market and pay higher wages.

Bottom Line: Investors had a relatively easy time in 2017 as most portfolio construction strategies paid off due to a unique backdrop in which risk-taking was enhanced by historically low volatility. Global synchronous growth surprised on the upside while financial conditions eased, interest rates fell and inflation remained benign. Political stresses resolved without consequence and US tax cuts came in faster than expected and with even bigger benefits to shareholders and bond owners than anticipated. While big market returns are driven by upside surprise, this year surprises are more likely to be to the downside. Already extreme valuations suggest there will be little tolerance for disappointment. **Watch** volatility, economic surprises and earnings estimate dispersion for signs of strengthening headwinds. **Consider** diversifying across asset classes, adding non-US and US small- and mid-cap stocks, opportunistically raising cash and adding real assets and alternatives. Focus on active managers who concentrate positioning on value and quality. ■

THE GIC WEEKLY

Chart of the Week: Are US Economic Surprises Peaking?

When 2017 began, expectations for economic growth were modest and troughing. That set up a very constructive backdrop for equity markets to move higher on positive revisions. One of the bigger challenges as we enter 2018 is that the economy is booming and expectations following tax reform are now high, with many gauges at extremes. Rarely over the last 15 years have economic surprises pierced the current level. With valuations of both stocks and bonds 'priced for perfection', vigilance is warranted.



Source: Bloomberg as of Dec. 27, 2017

Asset Class Performance and Heat Map (as of Dec. 29, 2017)

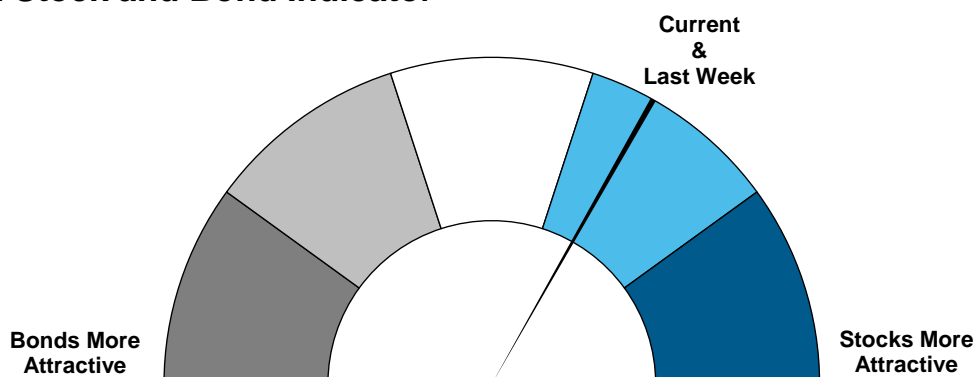
Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
Cash	YTD	1-Yr.	2016	3-Yr. ¹	5-Yr. ¹	10-Yr. ¹	20-Yr. ¹	Current YTM	Current YTM	Avg. YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
90-Day US Treasury Bills	0.8	0.8	0.3	0.4	0.2	0.3	2.0	1.30	1.30	1.94	0.05	0.59	0.25	-0.04
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E ²				
US Large-Cap Growth	30.2	29.2	6.5	13.6	17.4	10.1	6.7	1.14	21.9	21.3	7.7	17.5	0.61	0.89
US Large-Cap Value	15.1	14.8	16.3	9.6	14.2	6.8	6.7	2.80	16.0	13.9	6.3	14.2	0.64	0.88
US Mid-Cap Growth	22.0	21.5	6.4	9.1	14.4	8.3	7.8	0.78	23.0	26.7	8.1	23.3	0.76	0.81
US Mid-Cap Value	17.0	16.8	20.9	10.7	15.8	9.6	9.2	2.39	16.4	14.4	8.0	16.4	0.68	0.87
US Small-Cap Growth	23.4	22.8	14.0	11.2	15.7	10.2	9.8	0.58	28.5	24.0	9.5	22.0	0.72	0.84
US Small-Cap Value	11.5	11.2	25.8	10.0	14.3	10.2	9.4	2.31	20.6	17.1	9.7	17.3	0.73	0.84
Europe Equity	26.2	27.4	0.2	7.3	8.0	2.0	5.9	3.26	14.9	14.3	8.4	18.2	0.78	0.94
Japan Equity	24.4	24.2	2.7	12.0	11.5	3.4	4.0	1.94	14.8	20.5	9.3	17.0	0.64	0.69
Asia Pacific ex Japan Equity	26.0	26.1	8.0	7.7	5.6	3.8	8.8	3.72	15.9	14.4	7.5	20.9	0.42	0.86
Emerging Markets	37.8	38.4	11.6	9.5	4.7	2.0	8.1	2.25	12.5	11.4	11.7	23.3	0.48	0.86
Global Fixed Income								Current YTM	Current Spread	Avg. Spread ²				
Short-Term Fixed Income	0.8	0.9	1.3	0.9	0.8	1.9	3.4	2.03	14.0	31.0	0.6	1.4	-0.02	-0.15
US Fixed Income	3.5	3.8	2.6	2.2	2.1	4.0	5.0	2.72	36.0	55.0	2.8	3.4	-0.22	-0.05
International Fixed Income	9.8	10.1	1.8	1.9	0.1	2.6	4.3	1.04	37.0	49.0	4.2	8.1	0.25	0.30
Inflation-Protected Securities	9.0	9.5	6.5	2.5	0.9	3.4	6.2	-	-	-	5.5	7.6	0.08	0.44
High Yield	10.4	10.6	14.3	7.1	5.7	8.1	7.8	5.54	339.0	514.0	1.2	10.1	0.47	0.76
Emerging Markets Fixed. Inc.	15.2	15.3	9.9	2.5	-1.5	3.6	7.4	6.14	215.0	353.0	6.1	13.0	0.53	0.68
Alternative Investments								Current Div. Yld.						
REITs	15.0	16.3	4.6	6.2	7.0	3.8	8.4	3.79	-	-	7.7	18.1	0.60	0.80
MLP/Energy Infrastructure ³	-6.5	-6.1	18.3	-9.3	-0.1	6.0	-	7.46	-	-	19.6	18.2	0.38	0.55
Commodities ex Prec. Metals	0.2	0.1	11.6	-6.6	-9.0	-8.4	-0.2	-	-	-	10.8	17.0	0.16	0.43
Precious Metals	10.9	10.1	9.5	2.5	-7.0	3.2	6.9	-	-	-	10.7	19.3	0.11	0.20
Hedged Strategies ⁴	6.0	6.0	2.5	1.5	2.1	-0.4	-	-	-	-	3.1	6.0	0.81	0.64
Managed Futures ⁵	2.5	2.6	-2.9	-0.8	0.2	-1.1	-	-	-	-	6.6	7.8	0.44	0.17
S&P 500	21.8	21.3	12.0	11.4	15.8	8.5	7.2	1.78	18.3	16.0	6.02	14.9	0.75	0.95
Russell 2000	14.6	14.1	21.3	10.0	14.1	8.7	7.9	1.51	24.5	20.4	10.82	19.8	0.72	0.82
MSCI EAFE	25.6	26.3	1.5	8.3	8.4	2.4	5.7	2.99	15.0	15.1	7.33	16.6	0.82	0.96
MSCI AC World	24.6	24.6	8.5	9.9	11.4	5.2	6.6	2.32	16.3	15.6	5.10	15.5	1.00	1.00

Note: Performance values calculated using USD. 1. As of Dec. 29, 2017. 2. 20-year average as of Dec. 29, 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.

Cheap	Low	Low
Moderate	High	High
Expensive		

THE GIC WEEKLY

Short-Term Stock and Bond Indicator



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

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

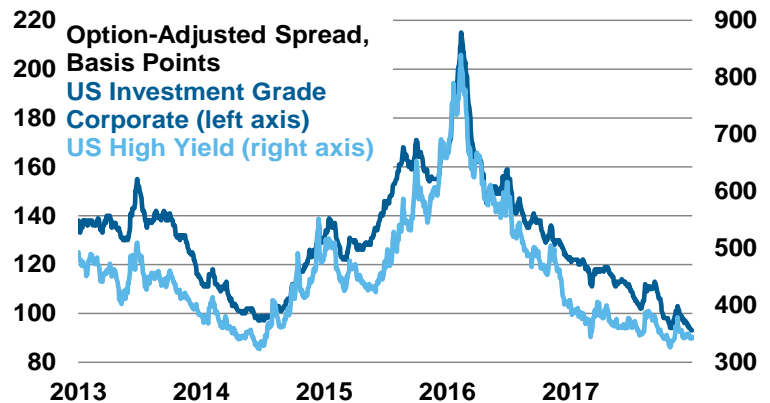
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial 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 Dec. 29, 2017

THE GIC WEEKLY

Fixed Income Insight: Corporate Credit Spreads Now at Cycle Tights

Enthusiasm about the positive impact of corporate tax reform on company cash flows has pushed investment grade spreads to their best level for the entire business cycle. In our view, investors need not fear a big a pick-up in defaults. However, as with economic surprises, investors need to ask, how much more is possible from here? With interest rates likely to rise in 2018 and the business cycle continuing to mature, our approach has been to reduce exposure to high yield and focus investment grade portfolios on higher-quality issues.



Source: Bloomberg as of Dec. 29, 2017

Government Debt Monitor

	US			
	Yield (%)			Total Return (%)
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	1.38	0.05	0.88	0.74
2-Year	1.88	-0.01	0.69	0.21
5-Year	2.21	-0.04	0.28	0.76
10-Year	2.41	-0.08	-0.04	2.13
30-Year	2.74	-0.09	-0.33	9.13
2-Yr./10-Yr. Spread (bp)	52	-6.80	-73.36	-
10-Yr. TIPS Breakeven (bp)	198	3.20	1.20	-
Interest Rate Volatility† (bp)	47	-3.78	-25.03	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range**	
					Rich	Cheap
Investment Grade	MBS*	4.15	2.88	25	9	35
	AAA	4.43	2.34	26	21	44
	AA	5.38	2.48	13	8	18
	A	7.55	3.02	73	72	158
	BBB	7.40	3.57	127	126	295
High Yield	BB	4.09	4.46	236	223	662
	B	3.50	5.97	375	370	1,009
	CCC	3.14	11.43	1,030	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 Dec. 29, 2017

Government Debt Monitor

	Global			
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.78	0.05	0.10	3.39
Germany	0.42	0.01	0.22	1.07
Japan	0.04	0.00	0.00	1.91
Spain	1.56	0.10	0.18	4.31
UK	1.19	-0.05	-0.05	2.76
3-Month LIBOR	1.69	0.01	0.70	-
US Tax Exempt				
10-Year AAA Muni	2.01	-0.10	-0.30	5.45
10-Yr. Muni/UST Ratio	83.67	-1.26	-10.96	-

Benchmark Returns

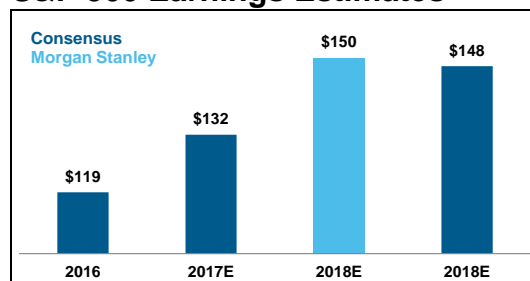
Index	Total Returns (%)		
	YTD	MTD	2016
Bloomberg Barclays US Aggregate	3.54	0.46	2.65
Bloomberg Barclays US MBS	2.47	0.33	1.67
Bloomberg Barclays US IG Corporate	6.42	0.91	6.11
Bloomberg Barclays Municipal	5.45	1.05	0.25
Bloomberg Barclays US High Yield	7.50	0.30	17.13
Bloomberg Barclays Global Aggregate	7.39	0.35	2.09
JPMorgan Emerging Market	9.32	0.63	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 Dec. 29, 2017

THE GIC WEEKLY

S&P 500 Earnings Estimates



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

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	\$150	20.0	3,000	12.2
Base Case	\$150	18.3	2,750	2.8%
Bear Case	\$135	17.0	2,300	-14.0%
Current S&P 500 Price			2,674	

Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of Dec. 29, 2017

Source: Thomson Reuters, Morgan Stanley & Co. Research as of Dec. 29, 2017

S&P 500 Sector Performance and Valuation (as of Dec. 29, 2017)

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	-0.33	21.83	21.27	1.78		16.0	18.3
Energy	0.20	-1.01	-1.28	2.62	0.85	17.6	25.8
Materials	0.19	23.84	22.93	1.91	1.17	13.9	18.4
Industrials	0.24	21.03	20.55	1.87	1.11	16.3	19.7
Consumer Discretionary	-0.38	22.98	21.87	1.25	0.93	18.0	21.4
Consumer Staples	0.04	13.49	12.96	2.57	0.50	17.1	19.9
Health Care	-0.36	22.08	21.63	1.56	0.82	17.5	16.8
Financials	-0.49	22.18	22.47	1.50	1.37	12.9	15.0
Information Technology	-1.04	38.83	37.47	1.18	1.29	20.8	18.8
Telecommunication Services	-0.42	-1.25	-1.73	4.75	0.71	16.5	13.4
Utilities	0.38	12.11	11.56	3.44	0.13	14.2	17.4
Real Estate	1.53	10.85	11.83	3.13	0.46	15.3	17.9

*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 Dec. 29, 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. Cyclical and Defensive, and Quality and Junk are based on Morgan Stanley & Co. Research analysis.

THE GIC WEEKLY

Morgan Stanley & Co. Forecasts (as of Dec. 29, 2017)

	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	3.6	3.8	3.7			2.5	2.9	2.8			
US	2.3	2.7	2.1	2.25	2.05	2.1	2.1	1.8			
Euro Zone	2.3	2.1	1.9			1.5	1.7	1.6	1.20	1.18	1.20
UK	1.5	1.1	0.8	1.45	1.55	2.7	2.6	2.2	1.25	1.27	1.27
Japan	1.5	1.3	1.5	0.05	0.20	0.5	1.2	0.9	114	108	102
Emerging Markets	4.7	5.0	5.0			3.1	3.6	3.5			
China	6.8	6.5	6.3	4.20	4.30	1.6	2.5	2.6	6.63	6.68	6.65

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of Dec. 29, 2017)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
Japan	↓	↓	↑	↓	↓	↑	↓	Reinflating on BoJ, Weaker yen and Fiscal Policy
Europe	↓	↓	↑	↑	↓	↓	↓	Cyclical Earnings Rebound
China	↓	↓	↑	↓	↑	↓	↓	Recovery and Stimulus Maturing
Brazil	↑	↓	↓	↑ M1 Money Supply Increased	↑	↓	↓	Stabilizing
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color change; In Brazil, Liquidity moved from risk asset negative to neutral as M1 Money Supply increased; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending Dec. 29, 2017)

	Positives	Negatives
Global Growth	<ul style="list-style-type: none"> Texas Manufacturing Outlook Survey surged past expectations in December Chicago Purchasing Managers Index up in December at 67.6 vs. 62.0 forecast US pending home sales up in November, 0.2% versus -0.4% expectation Year over year Japan retail sales growth climbed to 2.2% in November versus October's -0.2% 	<ul style="list-style-type: none"> Conference Board Consumer Confidence Index dipped to 122.1 in December from November's 129.5
Inflation	<ul style="list-style-type: none"> Japan CPI increased in November, reaching 0.6% year over year from 0.2% in October 	
Sentiment and Flows	<ul style="list-style-type: none"> Investment grade and high yield spreads close the year at cycle tight VIX closes the year down near single digits 	

Source: Morgan Stanley Wealth Management GIC

THE GIC WEEKLY

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. While the Trump/Republican progrowth agenda has been slower to develop than hoped, it has recently picked up, with progress on tax reform driving equity prices higher. Sentiment is now much more bullish than it was a year ago, leaving much less upside to our 2,750 target on the S&P 500 for the first half of 2018.
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 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 Dec. 29, 2017

THE GIC WEEKLY

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	<ul style="list-style-type: none"> Industrial production Unemployment Total return Earnings revisions Home prices OECD LEI (China and Brazil) MS & Co. ARIA (US) 	<ul style="list-style-type: none"> 10-year vs. 2-year government bond yield spread 	<ul style="list-style-type: none"> Consumer Price Index 	<ul style="list-style-type: none"> M1 growth Private credit growth Libor-OIS spread 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Forward price/earnings ratio Price/book ratio Equity risk premium High yield option-adjusted spread 	<ul style="list-style-type: none"> Earnings revisions breadth Earnings surprise Return on equity 	<ul style="list-style-type: none"> 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 Management and/or other businesses/affiliates of Morgan Stanley Wealth Management. This is not a "research report" as defined by NASD Conduct

THE GIC WEEKLY

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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

THE GIC WEEKLY

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.

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.

THE GIC WEEKLY

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