

The GIC Weekly



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Upcoming Catalysts

July 16 US retail sales
July 16 Empire State Manufacturing Survey
July 17 US industrial production
July 17 NAHB/Wells Fargo Housing Market Index
July 17 US capacity utilization
July 18 US housing starts
July 18 US building permits
July 18 Euro Zone CPI
July 18 Japan trade balance
July 18 Beige Book
July 19 US initial jobless claims
July 19 Philadelphia Fed Survey
July 19 US Leading Economic Index
July 19 Japan core CPI
July 20 Japan All Industry Activity Index

What We Are Talking About

- **Inflation Risks Are Not Dead.** Ten-year US Treasury yields peaked at 3.1% in May at the same time that forward inflation expectations crested; since then, key metrics such as producer prices, personal consumption expenditures, consumer prices and indexes related to pricing pressures have posted solid gains, approaching the Fed's 2% inflation target; rates markets have shrugged these readings off as trailing indicators that are likely to climax soon, focusing instead on range-bound energy prices and wage gains that have yet to breach a 3% year-over-year pace despite indications of a tight job market; long-bond investors, betting on the absence of inflation, have flattened the yield curve, in the belief that a Fed-induced recession or a pause in Fed hikes is in the offing; we view such positioning as complacent, as stronger-for-longer oil prices, a breakout in wage gains, pressures from fiscal stimulus and trade war rhetoric are not fully discounted and pose a risk. **Consider** avoiding the temptation to add long bonds to portfolios, sticking to short-duration bonds, cash and long/short hedge funds.

Inflation Risks Are Not Dead

One of our key investment themes for 2018 has been the recognition of a regime shift from the secular stagnation of the past decade that featured low growth, low rates, low inflation, low volatility and monetary policy driven by quantitative easing. The resumption of an aggressive fiscal policy in the US, alongside Fed tightening, would, we argued, usher in a period of normalization for the business cycle and capital markets, characterized by higher growth, higher rates and lower price/earnings multiples. While the stock market has thus far mostly hewed to forecast, still hovering close to the Global Investment Committee's (GIC) 2750 target for the S&P 500, the reflationary impulse in US Treasury yields has proven fleeting. After peaking in May at 3.11%, the benchmark 10-year Treasury yield has fallen back to 2.83%, with real yields as measured by 10-year TIPs having fallen roughly 20 basis points to 0.71% and declining inflation expectations

THE GIC WEEKLY

accounting for the remainder of the correction. With the 10-year inflation breakeven rate at about 2.12%, investors are looking past the current data, on the assumption that it will prove to be fleeting.

The Treasury market's consensus view seems to be that global growth is slowing and that the Fed will slow the pace of hikes, making recent inflation irrelevant. Weaker commodity prices would appear to carry weight in this regard, but fresh data suggest price increases are accelerating. This week, June PPI rose faster than expected, at 0.3%, with an overall year-over-year reading of 2.8%, in excess of the Fed's inflation target of 2%. Importantly, the index is being paced by manufactured goods, which have seen prices rising for six straight months, defying the logic of the past decade that claimed systemic deflationary forces from global supply chains would contain goods inflation. Consumer prices showed similar strength, with the year-over-year headline reading at 2.9% and the core rate at 2.3%. The Fed's preferred inflation gauge (the personal consumption expenditure measure) is hovering at 2%, with forecasts suggesting it too may breach the key threshold. More importantly, the New York Federal Reserve's Underlying Inflation gauge is running at 3.33%. The data paint a picture of pricing pressures even before the impact of trade tariffs and sanctions, meaning the upward trend of inflation could get worse. Why then is the bond market complacent? One reason may be consensus thinking, which suggests inflation will peak in the third quarter. But are there things markets are missing?

The first factor that bond investors may be misjudging is the chance of oil prices remaining high, spilling into supply chain pressures and keeping the PPI on a higher trend. As shown in the *Chart of the Week* (see page 3), year-over-year changes in crude prices tend to lead annual changes in the core PPI by three months. While current prices at around \$70/bbl have retreated from their recent highs of about \$75, oil stands almost 45% higher than a year ago. Morgan Stanley & Co. Global Oil Strategist Martijn Rats sees upward momentum, forecasting Brent to end 2018 at \$85 and West Texas Intermediate at \$79. His thesis is premised on "an unusually large number of supply risks, including those coming from Venezuela, Iran and Libya." The agreement by OPEC members to increase production only eliminated some of the world's spare capacity, leaving all supply pressure on the US Permian. The problem, Rats points out, is that US shale growth, which has been impressive, faces severe constraints due to infrastructure bottlenecks, which are unlikely to be cured until 2020. With 98% of current pipeline capacity utilized, additional shale production will require higher-cost truck and rail shipment. With inventories already

low, Rats believes the oil market will remain undersupplied through 2019.

In addition to downplaying the risk of higher oil prices, the Treasury market has cheered the benign growth in wages as evidence of slack in the economy and lack of inflationary pressure. While we admit to being surprised at the sluggish pace of wage gains and have heard the arguments as to why the classic Phillips Curve, which describes the inverse relationship between the level of unemployment and inflation, is broken (such as Baby Boomers trading off wage gains for longevity in the workplace), our data points to a tightening labor market. Furthermore, there is growing analytic evidence that we are reaching key inflection points. Hedgeye Risk Management, an independent researcher, noted that the difference between U-3 and U-6 unemployment is at a critical juncture, projecting a jump in wages. In the past two cycles when this metric narrowed below 3.7%, wage growth accelerated strongly, rising above 3% annually. We are just about there.

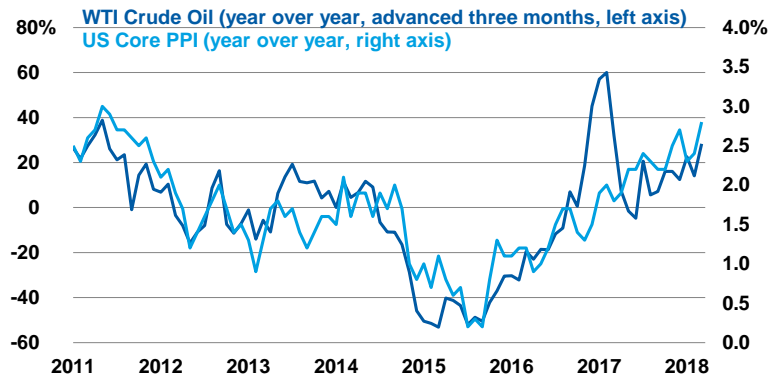
The last element is the impact of Washington policy. Clearly, the bond market is focused on the potential of tariffs eating into growth: the yield curve has flattened by nearly 25 basis points in the past six weeks since trade war rhetoric intensified. Much has already been written about the pricing impact of a trade conflict, and we are beginning to hear mention of it in the soft survey data coming out of the regional Fed offices. This week's latest salvo of another \$200 billion of Chinese goods being targeted only adds to the anxiety for products with globally integrated supply chains. And then there is the jump in deficit-financed government spending, which is beginning to raise the cost of corporate credit. Equally important are the implications of the administration's effort to roll back the Affordable Care Act: After near-zero health care inflation in 2017, the medical care, hospital services and physicians services components of CPI have accelerated from monthly growth rates of 0.17% in April to 0.48% in June and an annual pace of 2.5%.

Bottom Line: We believe that inflation remains a risk at this point in the cycle and think that long-duration Treasury markets are being complacent. Slowing growth alone does not rule out a stagflation scenario, one where the Fed would have to respond. The risks of rising oil prices, of wages moving higher with the tighten labor market and of inflationary Washington policies, do not appear discounted. **Watch** the 10-year inflation breakeven rate for evidence that nominal Treasury rates are heading higher. **Consider** avoiding the temptation to add long bonds to portfolios, sticking to short-duration bonds, cash and long/short hedge funds. ■

THE GIC WEEKLY

Chart of the Week: Inflation Pressures Likely to Follow Oil Prices

Many market observers like to focus only on core CPI, a metric that removes the volatility associated with food and oil/gasoline prices when gauging inflationary pressures. While we understand the place for such trend-smoothing effects, the reality is that our analysis has always acknowledged the systemic importance of oil price changes to overall inflationary pressures. Since we believe that Brent prices may approach \$85 and West Texas Intermediate could hit \$79, we think annual changes in prices will remain high, pulling the PPI with them. Since oil tends to lead by three months, we think inflationary pressures have yet to peak.



Source: Bloomberg, Haver Analytics as of June 29, 2018

Asset Class Performance and Heat Map (as of July 13, 2018)

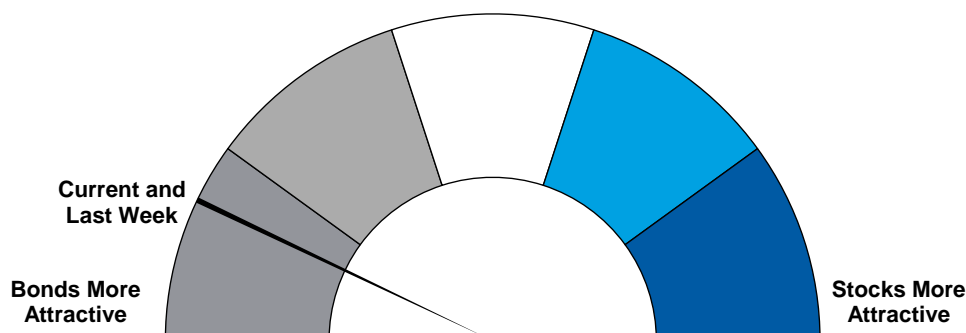
Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
Cash	YTD	1-Yr.	2017	3-Yr. ¹	5-Yr. ¹	10-Yr. ¹	20-Yr. ¹	Current YTM	Current YTM	Avg. YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
90-Day US Treasury Bills	0.9	1.4	0.8	0.6	0.4	0.3	1.9	1.96	1.96	1.85	0.06	0.57	-0.04	-0.05
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E ²				
US Large-Cap Growth	12.9	26.1	30.2	15.0	17.2	12.0	5.9	1.08	21.6	21.2	12.7	17.4	0.81	0.89
US Large-Cap Value	-0.4	8.5	15.1	9.1	10.2	8.3	6.0	2.93	13.8	13.9	8.4	14.2	0.85	0.89
US Mid-Cap Growth	9.5	20.1	22.0	9.7	12.5	9.7	7.5	0.63	20.8	26.6	12.4	23.2	0.84	0.81
US Mid-Cap Value	1.1	9.6	17.0	10.4	12.1	11.0	8.9	2.67	15.0	14.4	7.3	16.3	0.77	0.88
US Small-Cap Growth	12.8	25.6	23.4	11.6	14.1	11.6	9.8	0.55	27.0	24.0	13.1	21.9	0.74	0.83
US Small-Cap Value	5.7	14.3	11.5	10.8	11.9	11.9	9.4	2.44	17.8	17.2	9.8	17.3	0.72	0.84
Europe Equity	-1.4	5.5	26.2	4.9	6.8	3.0	4.5	3.46	13.8	14.1	15.2	18.1	0.79	0.94
Japan Equity	-2.8	10.3	24.4	6.6	7.7	3.8	4.0	2.11	12.8	20.0	11.7	16.9	0.47	0.71
Asia Pacific ex Japan Equity	-1.1	8.7	26.0	6.7	6.2	4.8	9.7	3.75	15.1	14.4	11.6	20.3	0.77	0.88
Emerging Markets	-5.6	6.1	37.8	6.0	5.4	2.6	8.9	2.58	11.4	11.3	16.2	22.9	0.87	0.87
Global Fixed Income								Current YTM	Current Spread	Avg. Spread ²				
Short-Term Fixed Income	0.1	0.1	0.8	0.7	0.8	1.7	3.3	2.76	17.0	31.0	0.6	1.4	-0.46	-0.15
US Fixed Income	-1.2	0.1	3.5	1.7	2.3	3.7	4.7	3.28	43.0	55.0	1.8	3.4	-0.37	-0.05
International Fixed Income	-1.5	2.6	9.8	3.1	1.1	2.0	4.1	1.23	48.0	49.0	3.8	8.1	0.17	0.31
Inflation-Protected Securities	-2.3	2.9	9.0	2.2	2.0	2.3	5.8	-	-	-	3.6	7.7	0.28	0.44
High Yield	-1.7	1.9	10.4	5.5	5.2	7.9	7.5	6.48	398.0	514.0	3.3	10.1	0.68	0.76
Emerging Markets Fixed. Inc.	-5.4	-1.5	15.2	2.0	-1.4	2.6	7.0	6.58	277.0	342.5	8.2	13.1	0.68	0.68
Alternative Investments								Current Div. Yld.						
Real Estate/REITs	0.5	8.5	15.0	6.9	6.8	5.5	8.8	3.96	-	-	8.5	18.0	0.73	0.80
MLP/Energy Infrastructure ³	0.5	-3.7	-6.5	-5.9	-4.1	6.5	-	7.48	-	-	18.0	18.5	0.68	0.55
Commodities ex Prec. Metals	-3.6	4.4	0.2	-5.8	-7.5	-10.6	0.5	-	-	-	16.9	17.0	0.62	0.44
Precious Metals	-6.2	0.9	10.9	1.2	-1.3	1.5	6.6	-	-	-	12.8	19.2	0.38	0.20
Hedged Strategies ⁴	-0.1	2.7	6.0	0.8	1.3	-0.4	-	-	-	-	3.1	6.0	0.81	0.64
Managed Futures ⁵	-1.0	1.7	2.5	-1.0	0.0	-2.5	-	-	-	-	7.3	7.9	0.17	0.18
S&P 500	5.9	16.7	21.8	11.9	13.4	10.2	6.5	1.78	16.6	15.9	9.84	14.8	0.87	0.95
Russell 2000	10.6	19.8	14.6	11.0	12.5	10.6	8.0	1.22	25.9	20.5	12.33	19.8	0.65	0.82
MSCI EAFE	-1.7	6.9	25.6	5.4	6.9	3.3	4.8	3.17	13.7	14.9	12.06	16.6	0.83	0.96
MSCI AC World	1.9	12.1	24.6	8.8	10.0	6.4	5.8	2.43	14.8	15.4	9.77	15.5	1.00	1.00

Note: Performance values calculated using USD. 1. As of June 29, 2018. 2. 20-year average as of June 29, 2018. 3. Volatility and Correlation: June 30, 2006 – Present. 4. Volatility and Correlation: Jan 31, 1998 – Present Hedged strategies consist of hedge funds and managed futures 5. Volatility and Correlation: February 28, 1998 – Present. Cheap = Below -0.5 standard deviation; Moderate = Between +0.5 standard deviation and -0.5 standard deviation; Expensive = Above +.5 std dev. Standard deviation (volatility) is a measure of the dispersion of a set of data from its mean.

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

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	Very Positive	Very Negative	Neutral	Very Negative	Very Negative	Very Negative	Neutral	Neutral
Last Week	Neutral	Very Negative	Neutral	Very Negative	Neutral	Very Negative	Neutral	Neutral

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

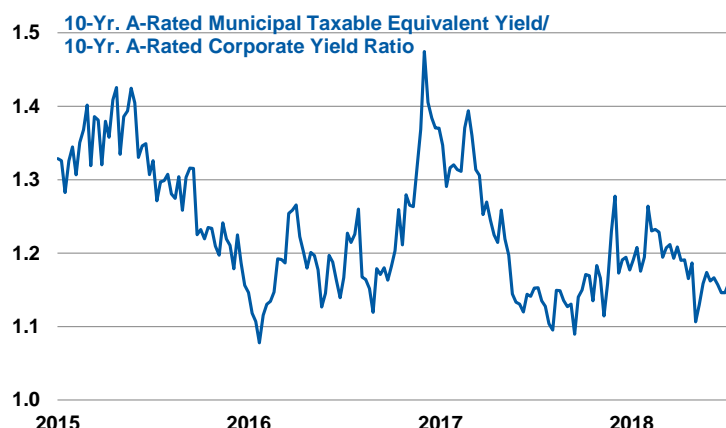
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial 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 July 13, 2018

THE GIC WEEKLY

Fixed Income Insight: Munis in Fixed Income Is Tougher Call

In addition to favoring short-duration credit in our fixed income portfolios, we continue to prefer municipal debt on a quality/duration match basis because of the yield advantage and its tax-advantaged status. Here, we show the comparison in yield between 10-year A-rated munis and similarly rated investment grade debt. That said, the relative attractiveness of municipal bonds versus history is deteriorating, as munis have stayed bid while investment grade corporate spreads have widened recently. This bears watching. Should the ratio break further toward parity, we would consider select investment grade bonds.



Note: Municipal yield used is a taxable equivalent yield based on the 37% top marginal federal income tax rate.

Source: Bloomberg as of July 13, 2018

Government Debt Monitor

	US			
	Yield (%)	Total Return (%)		
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	1.97	0.03	0.59	0.85
2-Year	2.58	0.04	0.70	0.02
5-Year	2.72	0.01	0.52	-0.98
10-Year	2.83	0.01	0.42	-2.41
30-Year	2.93	0.00	0.19	-2.39
2-Yr./10-Yr. Spread (bp)	25	-3.61	-27.33	-
10-Yr. TIPS Breakeven (bp)	212	-1.87	13.62	-
Interest Rate Volatility† (bp)	48	-1.85	1.69	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range**	
					Rich	Cheap
Investment Grade	MBS*	4.96	3.43	31	9	35
	AAA	4.35	2.93	27	18	42
	AA	5.64	3.01	15	8	18
	A	7.36	3.70	94	68	114
	BBB	7.27	4.30	152	115	193
High Yield	BB	4.45	5.47	273	212	404
	B	3.74	6.74	392	333	617
	CCC	3.36	10.31	781	728	1,243

Unless stated, indexes utilized are FTSE Broad Investment Grade, FTSE High Yield, and FTSE 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. © 2018 FTSE Index LLC. All rights reserved. Data as of July 13, 2018

Government Debt Monitor

	Global			
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.62	-0.02	-0.16	2.91
Germany	0.34	0.05	-0.09	3.05
Japan	0.04	0.01	-0.01	1.44
Spain	1.26	-0.05	-0.30	4.36
UK	1.27	0.00	0.08	0.50
3-Month LIBOR	2.34	0.01	0.64	-
US Tax Exempt				
10-Year AAA Muni	2.43	-0.01	0.45	0.10
10-Yr. Muni/UST Ratio	85.86	-0.61	3.60	-

Benchmark Returns

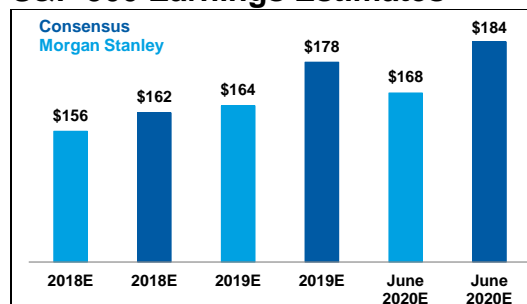
Index	Total Returns (%)		
	YTD	MTD	2017
Bloomberg Barclays US Aggregate	-1.20	0.42	3.54
Bloomberg Barclays US MBS	-0.73	0.23	2.47
Bloomberg Barclays US IG Corporate	-2.37	0.93	6.42
Bloomberg Barclays Municipal	0.10	0.35	5.45
Bloomberg Barclays US High Yield	0.67	0.51	7.50
Bloomberg Barclays Global Aggregate	-1.41	0.05	7.39
JPMorgan Emerging Market	-3.35	1.98	9.32

*Global total returns reflect Citigroup 7- to 10-year bond indexes and Muni total returns reflect Bloomberg Barclays Municipal Bond Index Total Return

Source: Bloomberg, Thomson Reuters Municipal Market Data (MMD) as of July 13, 2018

THE GIC WEEKLY

S&P 500 Earnings Estimates



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

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	\$176	17.5	3,000	7.1%
Base Case	\$168	16.5	2,750	-1.8%
Bear Case	\$160	15.5	2,400	-14.3%
Current S&P 500 Price			2,801	

Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of July 13, 2018

Note: Price targets use forward 12-month earnings estimate
Source: Thomson Reuters, Morgan Stanley & Co. Research as of July 13, 2018

S&P 500 Sector Performance and Valuation (as of July 13, 2018)

Index Name	Total Return			Dividend Yield (%)	Beta	20-Year Avg. Forward 12-Mo. PE	Forward 12-Mo. P/E*
	WTD (%)	YTD (%)	1-Year (%)				
S&P 500	1.55	5.86	16.91	1.78		15.9	16.6
Energy	0.79	7.29	21.74	2.59	0.91	17.6	17.7
Materials	0.30	-2.17	8.49	1.98	1.04	13.9	15.5
Industrials	2.25	-1.84	6.99	1.92	1.02	16.2	16.2
Consumer Discretionary	2.11	14.97	27.12	1.14	0.96	18.0	21.3
Consumer Staples	0.98	-6.33	-0.41	3.08	0.62	16.9	17.5
Health Care	1.66	6.77	11.92	1.57	0.96	17.1	15.8
Financials	1.15	-2.60	10.47	1.67	1.11	12.7	12.3
Information Technology	2.32	16.10	33.34	1.07	1.27	20.7	18.9
Telecommunication Services	-0.29	-6.63	5.04	5.17	0.73	16.2	10.2
Utilities	-1.18	1.55	4.94	3.40	0.21	14.2	16.5
Real Estate	-0.79	1.79	7.35	3.24	0.52	15.2	17.6

*Dark blue/light blue/gray fill denotes whether current relative forward 12-month P/E is low/neutral/high relative to history.

Source: Morgan Stanley & Co. Research

Performance of Style and Cap Pairs (as of July 13, 2018)



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

THE GIC WEEKLY

Morgan Stanley & Co. Forecasts (as of July 13, 2018)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2017	2018E	2019E	Q4 '18E	Q2 '19E	2017	2018E	2019E	Q3 '18E	Q1 '19E	Q3 '19E
Global	3.7	3.9	3.8			2.5	2.9	2.8			
US	2.3	2.7	2.2	2.85	2.70	2.1	2.6	1.9			
Euro Zone	2.5	2.1	1.9			1.5	1.7	1.6	1.13	1.19	1.28
UK	1.8	1.2	1.0	1.60	1.85	2.7	2.5	2.1	1.28	1.34	1.44
Japan	1.7	1.3	1.5	0.08	0.10	0.5	1.1	1.0	104	98	95
Emerging Markets	4.8	5.0	5.0			3.1	3.4	3.5			
China	6.9	6.6	6.4	3.50	3.60	1.6	2.4	2.5	6.65	6.47	6.32

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of July 13, 2018)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
China	↓	↑	↓	↑	↑ Positive Mrkt. Breadth	↓	↓	Soft Landing Better than Expected
Japan	↑ Growth Slowing	↓	↑	↓	↑ High GRDI, Positive Mrkt. Breadth	↓	↓	Corporate Profit Growth Offset Stronger Yen
Europe	↓	↓	↑	↓	↓	↓	↓	Preparing for ECB taper
Brazil	↓ Growth Accelerating	↓	↑	↑	↑ High GRDI	↓	↓	Political Chaos Driving Currency Weakness
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color change; In Japan, Economic Growth moved from risk asset neutral to risk asset negative amid slowing growth; In Japan, Sentiment and Risk moved from risk asset positive to risk asset neutral amid improving market breadth and high GRDI; In China, Sentiment and Risk moved from risk asset positive to risk asset neutral as market breadth improved; In Brazil, Economic Growth moved from risk asset negative to risk asset neutral as growth accelerated; In Brazil, Sentiment and Risk moved from risk asset positive to risk asset neutral as GRDI increased; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending July 13, 2018)

	Positives	Negatives
Global Growth	<ul style="list-style-type: none"> US weekly initial jobless claims fell to 214,000 March US JOLTS hiring rate rose to 3.9% from 3.8%, its highest level since 2007 US consumer credit jumped in May to \$24.6 billion versus \$12.0 billion forecast US wholesale inventories rose 0.6% in May May Euro Zone industrial production at 1.3% year over year May Japan industrial production at 4.2% year over year 	<ul style="list-style-type: none"> NFIB Small Business Optimism Index fell to 107.2 from 107.8 in June US import prices declined by 0.4% in June versus an expected increase of 0.1%
Rates	<ul style="list-style-type: none"> Bank of Canada raised its benchmark rate to 1.50% 	
Inflation	<ul style="list-style-type: none"> June US core CPI year over year in line with forecasts US core PPI at 3.4% year over year in June China PPI accelerated 4.7% year over year in June China CPI at 1.9% year over year in June Japan PPI met expectations at 2.8% year over year 	
Sentiment and Flows		<ul style="list-style-type: none"> July Univ. of Mich. Consumer Sentiment Index weaker than expected at 97.1 vs. 98 forecasted

Source: Morgan Stanley Wealth Management GIC

THE GIC WEEKLY

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Equal Weight	US equities have done exceptionally well since the global financial crisis, but they are now in the latter stages of a cyclical bull market. While the acceleration of the Trump/Republican progrowth agenda has created a booming economy and earnings outlook, it may also be sowing the seeds for the end of the cycle as the Fed is forced to raise rates and tighten policy in a more deliberate manner.
International Equities (Developed Markets)	Overweight	We maintain a positive bias for Japanese and European equity markets. The populist movements around the world are now spreading to Italy which may spur further fiscal support from Germany and France. This would be a potential positive catalyst but not likely to develop until September.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 24 months but are underperforming so far in 2018. Some of this is simply the result of a market that needs to consolidate spectacular gains the past few years. However, it is also directly related to the Fed's tightening campaign. We expect EM to find support not far from current levels and have a strong finish to the year.
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, US economic data have been very strong recently and the Fed is now raising rates at an accelerating pace. Adding some longer duration when 10-year US Treasury yields are above 3% percent makes sense.
International Investment Grade	Underweight	Yields are even lower outside the US, leaving very little value in international fixed income, particularly as the global economy begins to recover more broadly. While interest rates are likely to stay low, the offsetting diversification benefits do not warrant much, if any, position, in our view.
Inflation-Protected Securities	Overweight	With deflationary fears having become extreme in 2015 and early 2016, these securities still offer relative value in the context of our forecasted acceleration in global growth and our expectations for oil prices and the US dollar's year-over-year rate of change to revert toward 0%. That view played out in 2016 and 2017 but has not yet run its course.
High Yield	Underweight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently took our remaining high yield positions to zero as we prepare for deterioration in quality of earnings in the US led by lower operating margins. Credit spreads have likely reached a low for this cycle.
Alternative Investments	Relative Weight Within Alternative Investments	
Real Estate/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) have traded better since their capitulation in March around the FERC regulatory announcement. With oil prices much more stable and on an upward path, MLPs have garnered more interest given their 8%-to-10% yields.
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 July 13, 2018

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

THE GIC WEEKLY

Index Definitions

New York Federal Reserve Underlying Inflation Gauge

This gauge captures sustained movements in inflation from information contained in a broad set of price, real activity, and financial data.

US General Obligation A+ A- Muni BVAL Yield Curve New 10 Year

The BVAL curve is populated with pricing from uninsured A+, A, and A- rated General Obligation bonds.

USD US Corporate A+ A- BVAL Yield Curve 10 Year

This yield curve is constructed daily with bonds that have BVAL prices at the market close. The BVAL curve is populated with USD denominated senior unsecured fixed rate bonds issued by US companies with a BBG composite rating of A+, A or A-.

For more 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

THE GIC WEEKLY

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

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

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

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

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

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

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

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

THE GIC WEEKLY

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.

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

THE GIC WEEKLY

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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THE GIC WEEKLY

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