

The GIC Weekly



LISA SHALETT

*Chief Investment Officer
Morgan Stanley Wealth Management*

*Head of Wealth Management
Investment Resources*

*Lisa.Shalett@morganstanley.com
+1 212 296-0335*

Upcoming Catalysts

June 11 NFIB Small Business Optimism Index
June 11 US Producer Price Index
June 11 Japan Producer Price Index
June 12 US Consumer Price Index
June 13 US initial jobless claims
June 14 US retail sales
June 14 US industrial production
June 14 US capacity utilization
June 14 U. of M. Consumer Sentiment Index

What We Are Talking About

- **Fed Rate Cuts Can't Cure What Ails the Economy.** In less than six months, investors have gone from discounting three Fed rate hikes to three cuts; many factors support the shift, but we question whether easing alone can change the outcome; while looser policy may support market liquidity and valuations in the short run, we are not confident that rate cuts can cure what ails the economy; all-time high consumer confidence, 50-year low unemployment and mortgage rates near 4% have not lifted consumption and residential investment; rather, policy uncertainty from Washington and geopolitical instability is weighing on the aging business cycle; trade uncertainty appears to be distorting supply chains, quashing capital spending and contributing to a manufacturing slowdown; if the Fed gets drawn into prophylactic rate cuts to offset policy chaos, there may be little conventional ammo left for when it is really needed. **Consider** expanding buy watch lists to include sectors and regions that are already fully discounting a recession in addition to financials, energy, materials and select industrial and health care stocks.

Fed Rate Cuts Can't Cure What Ails the Economy

We empathize with Jerome Powell, the chair of the Federal Reserve. Since he took the reins in 2017, he has been trying to withdraw the central bank from the unconventional policies of Quantitative Easing and negative real interest rates that rescued the economy from the financial crisis. He wants to normalize US monetary policy in line with economic recovery and resilience. While few Fed chairs have escaped their share of exogenous shocks, challenges and criticism from the White House and the market itself, Powell has had to deal with some bewildering dynamics. The first was the surprise corporate tax cut and fiscal spending bill in late 2017 that set up a one-time acceleration in US GDP to a decade high in excess of 3%. What's more, inflation as measured by

THE GIC WEEKLY

the Personal Consumption Expenditure Index surged over 2% by July 2018. At the same time the unemployment rate fell to a 50-year low. Against this backdrop, it was logical that the Fed would signal its commitment to both rate hikes and the unwinding of the balance sheet, or Quantitative Tightening. To wit, with an implied real growth of the economy at about 1%, investors could accept a 10-year US Treasury at 3.23%, which it hit on Nov. 8. Also late last year, the MS POKE Index—which registers the implied pace of rate hikes discounted by markets—forecast three hikes in 2019 (see *Fixed Income Insight*, page 5).

But the impact of trade tensions and the damage to supply chains atop an already slowing global economy changed the dynamic. This was first signaled by the 20% fourth quarter collapse in the US equity market and the simultaneous tightening in financial conditions that caused the Fed to make its policy pivot from tightening to an on-hold bias. As this move was accompanied by hostile rhetoric from the White House, markets quickly shifted to a view that escalating trade tensions would lead to rate cuts and the MS POKE Index was discounting at least one rate cut by March. All the while, equity markets surged, recovering fourth quarter losses. In fact, the S&P 500 Index hit an all-time high on April 30. What's more, even though earnings were barely showing any year-over-year growth, investors bid up price/earnings ratios in anticipation of the perceived "Fed put"—the idea that if the markets or the economy got into trouble, the central bank would lower interest rates to bail them out.

Now, recent events confirm heightened trade tensions with China, Mexico and, perhaps, EU auto makers. In addition, macroeconomic data has been deteriorating rapidly, with the 10-year US Treasury yield returning to 2017 levels and inverting the yield curve (see *The GIC Weekly*, June 3). While equities pulled back as much as 7% from all-time highs, reactions to recent Powell comments that Fed policy would be responsive to further negative economic pressure from trade suggest that equity investors are still counting on the "Fed put." In contrast, the bond market has fully priced a recession, with the MS POKE Index registering 3.6 quarter-point cuts in the next 12 months. Although any cuts would support market liquidity conditions, we are not sure that this time, rates are the cure to the problem, because the problem is not rates—it's policy uncertainty!

To start with, monetary policy is not actually tight nor does it appear to be crimping growth. Specifically, the Fed's tracking of financial conditions shows while stocks have fallen and credit spreads have widened, market liquidity is better than it was in December. That's in large part because interest rates on Treasuries have fallen more than 100 basis points and an easing

bias has been baked into futures prices. Oil prices are also nearly 20% lower than at year-end, which contributes to effective easing. All of this suggests that market liquidity is the equivalent of 30 to 40 basis points in rate cuts relative to this past December. Beyond the measures of financial conditions is the empirical evidence of the sensitivity of marginal demand to rates. Consumer demand in particular has been muted by overall balance sheet deleveraging and an aging of the population. All-time high consumer confidence, a 50-year low in unemployment and mortgage rates that have fallen to near 4% are not lifting consumption, residential investment or retail sales. While current confidence is high, expectations of the future are eroding, potentially reflecting that something else is holding back animal spirits (see *Chart of the Week*, page 3).

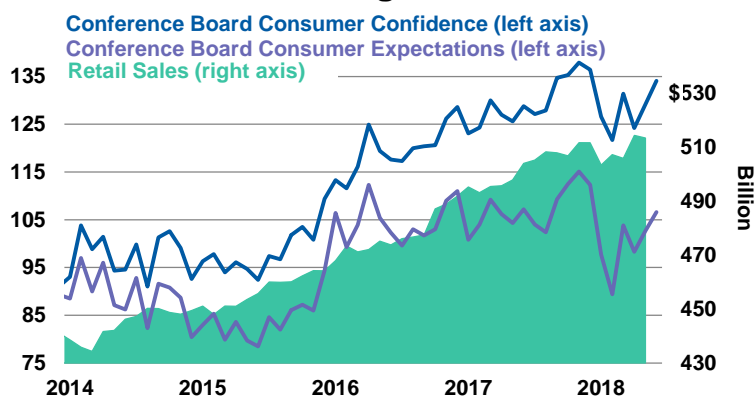
If tight monetary policy is not causing weakening global demand, what is? The real problem seems to be the escalating trade conflict and a growing number of factors driving uncertainty. Not only does it appear that the US-China trade situation has become more contentious, with near-daily tit-for-tat announcements such as bans on Chinese telecomm equipment and fines on a US automaker's Shanghai plant. Now, the Trump administration's threat of tariffs on Mexico throws a new wrench in the works. As we noted last week, if tariffs are a new weapon of choice for geopolitical conflict and solving problems like immigration, the scope for economic uncertainty takes on a multifold expansion. Trade uncertainty appears to be disrupting supply chains, quashing capital spending and contributing to a slowdown in manufacturing. Indeed, economists from the World Bank to Morgan Stanley & Co. Research are cutting global GDP estimates for the full year. Throw in the growing likelihood of a hard Brexit, an EU and European Central Bank stymied by fractious elections and a US Justice Department that is targeting US tech giants, and you have a prescription for higher equity risk premiums.

Bottom Line: Investors seem to be embracing the potential of Fed cuts to put a floor under markets that are being pressured by slowing growth and policy uncertainty. The real risk is that rate cuts will not address the root causes of the slowing, a maturing business cycle, limited marginal demand, peaking corporate profits and what may be the beginning of a major shift in trade globalization. **Watch** the MS POKE Index to gauge the extent to which the market is ahead of the Fed. Excessive expectations of Fed policy could set up a no-win situation. **Consider** expanding buy watch lists to include sectors and regions that are already fully discounting a recession in addition to financials, energy, materials, and select industrial and health care stocks. ■

THE GIC WEEKLY

Chart of the Week: Expectations and Retail Sales Not Following Confidence

A pillar in the bullish case for stocks is that consumer confidence remains near all-time highs and the labor market is robust. Yet, with macroeconomic weakness mounting, we doubt that consumer confidence alone can buttress the equity market. Unlike consumer confidence, consumer expectations for the future have been pretty flat for the past 18 months, which coincided with lackluster retail sales (see chart). This becomes even more confounding when you consider that US households have experienced solid wealth effects year to date, with both stock and bond markets up and US gasoline prices down. Our reading is that 11 years into the expansion, pent-up demand may be exhausted; thus animal spirits may not be released by rate cuts.



Source: Bloomberg as of June 7, 2019

Asset Class Performance and Heat Map (as of June 7, 2019)

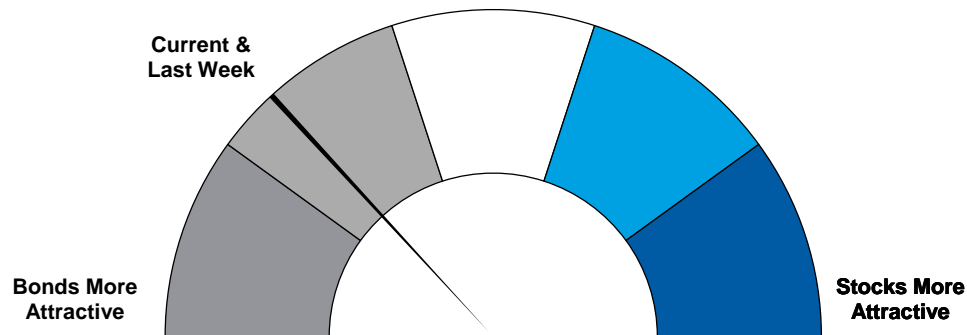
Asset Class	Annualized Returns (%)							Yield	Valuation			Volatility (%)		Correlation to Global Equities	
	YTD	1-Yr.	2018	3-Yr. ¹	5-Yr. ¹	10-Yr. ¹	20-Yr. ¹		Current YTM	Current YTM	Avg. YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
Cash								2.48	2.48	1.75	0.10	0.55	-0.36	-0.06	
90-Day US Treasury Bills	1.1	2.3	1.9	1.3	0.8	0.4	0.8								
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E²					
US Large-Cap Growth	18.9	6.8	-0.9	18.9	15.1	17.1	5.1	1.05	22.0	20.6	16.2	17.0	0.95	0.89	
US Large-Cap Value	12.1	5.6	-6.5	11.7	8.7	13.4	5.8	3.18	13.5	13.7	12.5	13.8	0.91	0.88	
US Mid-Cap Growth	22.9	4.7	-7.9	13.9	10.5	15.9	7.2	0.60	23.6	26.3	16.7	22.6	0.93	0.81	
US Mid-Cap Value	14.6	1.3	-11.4	11.7	8.9	15.4	9.2	2.89	14.1	14.4	13.2	15.9	0.92	0.88	
US Small-Cap Growth	18.6	0.5	-6.6	17.0	11.2	16.6	10.1	0.59	27.3	24.0	19.1	21.3	0.92	0.83	
US Small-Cap Value	11.5	-8.3	-13.3	10.8	7.8	14.7	9.7	2.93	15.5	17.2	16.1	17.1	0.88	0.85	
Europe Equity	13.5	-2.7	-14.3	7.6	1.9	8.6	4.4	3.81	13.4	13.8	13.4	17.9	0.89	0.95	
Japan Equity	5.9	-9.2	-12.6	7.3	6.8	7.4	2.7	2.58	12.4	18.8	9.7	16.1	-0.05	0.70	
Asia Pacific ex Japan Equity	13.1	0.3	-10.2	10.3	3.9	10.4	8.1	3.91	15.0	14.5	11.6	19.3	0.18	0.88	
Emerging Markets	5.3	-9.8	-14.2	11.7	4.4	7.9	8.2	2.84	11.9	11.2	12.9	21.6	0.60	0.87	
Global Fixed Income								Current YTM	Current Spread	Avg. Spread²					
Short-Term Fixed Income	2.4	4.1	1.6	1.3	1.2	1.6	3.2	2.08	17.0	31.0	1.2	1.4	-0.56	-0.15	
US Fixed Income	5.2	7.4	0.0	1.9	2.6	3.7	4.7	2.62	49.0	54.0	2.8	3.4	-0.47	-0.04	
International Fixed Income	4.1	3.2	-1.9	0.4	-0.2	2.5	3.7	0.94	50.0	49.0	3.7	7.9	-0.29	0.32	
Inflation-Protected Securities	6.9	5.9	-4.2	2.5	1.0	4.1	5.5	-	-	-	4.0	7.7	-0.07	0.45	
High Yield	7.4	4.8	-4.1	6.4	4.0	10.1	7.9	6.54	459.0	499.0	2.5	9.5	0.83	0.75	
Emerging Markets Fixed. Inc.	4.7	2.4	-6.2	2.3	-1.0	3.5	7.3	5.96	300.0	330.0	6.0	11.5	0.59	0.65	
Alternative Investments								Current Div. Yld.							
Real Estate/REITs	15.0	7.6	-5.5	7.1	6.7	12.3	8.8	3.90	-	-	7.6	17.8	0.62	0.80	
MLP/Energy Infrastructure ³	15.1	-2.0	-12.4	1.6	-5.8	8.8	-	8.05	-	-	19.7	17.3	0.59	0.46	
Commodities ex Prec. Metals	1.4	-14.3	-12.5	-0.4	-10.9	-3.7	0.6	-	-	-	14.8	16.7	0.58	0.47	
Precious Metals	2.7	-0.7	-4.6	-2.4	-2.1	2.8	6.7	-	-	-	10.1	19.0	-0.29	0.19	
Hedged Strategies ⁴	3.0	-3.8	-6.7	2.0	0.0	1.6	-	-	-	-	1.9	5.6	0.76	0.66	
Managed Futures ⁵	0.5	-0.4	-3.2	-1.3	0.2	-1.7	-	-	-	-	3.7	7.5	0.51	0.14	
S&P 500	15.7	5.8	-4.4	14.9	11.6	15.3	6.0	1.91	16.4	15.7	13.78	14.5	0.96	0.95	
Russell 2000	12.9	-7.9	-11.0	13.6	8.6	14.1	8.2	1.38	25.9	20.3	19.02	19.4	0.90	0.82	
MSCI EAFE	11.5	-3.9	-13.4	7.8	3.1	8.5	4.3	3.51	13.3	14.6	9.20	16.3	0.84	0.96	
MSCI AC World	13.4	0.6	-8.9	12.0	7.5	11.7	5.4	2.62	14.8	15.1	10.98	15.2	1.00	1.00	

Note: Performance values calculated using USD. 1. As of May 31, 2019. 2. 20-year average as of May 31, 2019. 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	Neutral	Neutral	Very Positive	Very Negative	Very Negative	Neutral	Very Negative	Neutral
Last Week	Neutral	Neutral	Very Positive	Very Negative	Very Negative	Neutral	Very Negative	Neutral

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

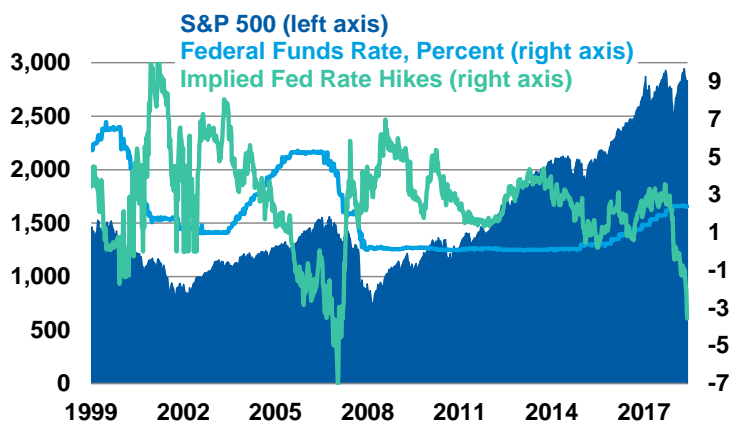
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial 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 June 7, 2019

THE GIC WEEKLY

Fixed Income Insight: Aggressive Discounting of Fed Rate Cuts Sets a High Bar

Following the rapid decline in the 10-year US Treasury yield in the past two weeks, Fed handicappers last week looked for signals in the financial futures market. The MS POKE Index, which is based on the financial futures, now implies 3.6 quarter-point rate cuts in the next 12 months (see chart). This is staggering given that only last December, the index showed investors were bracing for three rate hikes. Bullish investors argue that the pre-emptive actions by the Fed will be necessary to offset the drag from tariffs and uncertainty around trade talks. The last two times Fed expectations shifted this radically in a six-month span, in 2001-02 and 2006-07, Fed policy alone did not prevent a recession. Furthermore, with the bar for aggressive Fed easing policy now priced in, the scope for disappointment has widened.



Source: Bloomberg as of June 7, 2019

Government Debt Monitor

	US			Total Return (%)
	Yield (%)			
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	2.27	-0.07	-0.09	1.06
2-Year	1.85	-0.07	-0.64	2.13
5-Year	1.85	-0.06	-0.66	4.12
10-Year	2.08	-0.04	-0.60	6.49
30-Year	2.57	0.00	-0.44	10.87
2-Yr./10-Yr. Spread (bp)	23	2.90	3.51	-
10-Yr. TIPS Breakeven (bp)	175	0.74	3.55	-
Interest Rate Volatility† (bp)	69	-3.99	2.11	-

Fixed Income Spread Dashboard

Investment Grade	Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range**		
				Rich	Cheap	
MBS*	4.32	2.80	45	20	47	
AAA	5.48	2.33	20	11	21	
AA	6.36	2.69	63	46	76	
A	7.53	3.06	98	68	122	
BBB	7.72	3.76	165	111	201	
High Yield	BB	4.04	4.75	257	187	365
B	3.49	6.36	416	299	542	
CCC	3.52	10.39	828	512	997	

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. © 2019 FTSE Index LLC. All rights reserved. Data as of June 7, 2019

Government Debt Monitor

	Global			Total Return (%)*
	Yield (%)			
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.08	-0.12	-0.62	6.80
Germany	-0.26	-0.05	-0.50	5.49
Japan	-0.13	-0.03	-0.12	2.26
Spain	0.55	-0.16	-0.86	9.13
UK	0.81	-0.07	-0.46	4.82
3-Month LIBOR	2.45	-0.05	-0.35	-
US Tax Exempt				
10-Year AAA Muni	1.63	-0.54	-0.69	4.92
10-Yr. Muni/UST Ratio	78.09	-3.95	-8.23	-

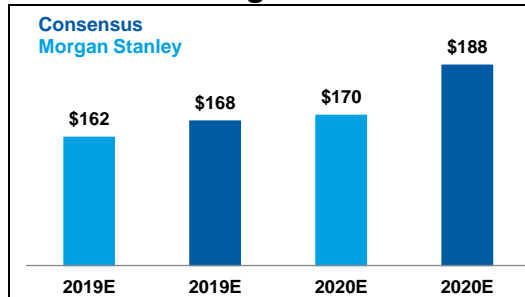
Benchmark Returns

Index	Total Returns (%)		
	YTD	MTD	2018
Bloomberg Barclays US Aggregate	5.17	0.36	0.01
Bloomberg Barclays US MBS	3.70	0.26	0.99
Bloomberg Barclays US IG Corporate	7.81	0.54	-2.51
Bloomberg Barclays Municipal	4.92	0.20	1.28
Bloomberg Barclays US High Yield	8.47	0.91	-2.08
Bloomberg Barclays Global Aggregate	4.52	1.20	-1.20
JPMorgan Emerging Market	8.70	1.27	-4.61

*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 June 7, 2019

THE GIC WEEKLY

S&P 500 Earnings Estimates



MS & Co. S&P 500 Price Target: Midyear 2020

	Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case		\$182	16.7	3,000	5.9%
Base Case		\$175	15.8	2,750	-2.9%
Bear Case		\$160	15.0	2,400	-15.3%
Current S&P 500 Price				2,832	

Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of May 31, 2019

Note: Price targets are based on estimated June 2021 earnings.

Source: Thomson Reuters, Morgan Stanley & Co. Research as of May 31, 2019

S&P 500 Sector Performance and Valuation (as of June 7, 2019)

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	-0.08	15.68	5.83	1.91		15.7	16.4
Energy	-4.22	7.92	-17.88	3.60	1.00	17.2	15.2
Materials	4.54	14.58	-2.98	2.26	0.97	13.9	16.8
Industrials	-0.67	18.33	1.71	1.91	1.05	16.1	15.6
Consumer Discretionary	-1.55	17.68	6.31	1.24	1.18	17.9	20.6
Consumer Staples	2.08	16.23	20.36	2.81	0.50	16.8	19.3
Health Care	2.44	5.74	9.56	1.69	0.90	16.5	15.2
Financials	-1.23	14.52	-1.20	2.02	0.91	12.6	11.6
Information Technology	0.09	23.46	7.79	1.43	1.38	20.1	18.7
Telecommunication Services	-3.23	15.28	8.77	1.43	0.97	15.8	17.2
Utilities	3.62	14.40	27.76	3.16	0.18	14.3	18.8
Real Estate	3.65	21.48	21.69	2.98	0.46	15.4	19.6

*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 June 7, 2019)



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 June 7, 2019)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2018	2019E	2020E	Q4 '19E	Q2 '20E	2018	2019E	2020E	Q3 '19E	Q1 '20E	Q3 '20E
Global	3.7	3.2	3.4			2.8	2.7	2.9			
US	2.9	2.4	2.0	2.25	2.20	2.4	2.1	2.6			
Euro Zone	1.8	1.2	1.4			1.8	1.3	1.4	1.13	1.18	1.23
UK	1.4	1.3	1.4	1.30	1.40	2.5	2.0	1.9	1.24	1.30	1.40
Japan	0.8	0.5	0.3	-0.08	-0.08	1.0	0.4	0.6	109	106	101
Emerging Markets	4.8	4.3	4.7			3.4	3.4	3.5			
China	6.6	6.4	6.2			2.1	2.6	2.4	6.92	6.81	6.73

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of June 7, 2019)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
China	↑	↑ Yield Curve Steepening	↓	↓	↓ Normalizing Market Levels	↓	↑	Soft Landing Better than Expected
Japan	↑	↓	↓	↓	↑	↓	↑	Improving Profits and Weaker Yen
Brazil	↓	↓ Yield Curve Steepening	↑	↓	↑	↓	↑	Political Stability Supports Recovery
Europe	↑	↓	↓	↑	↑	↓	↑ Higher Earnings Revisions	Cyclical Headwinds from China Trade Links Abating
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color change; In **China**, rates increased from risk asset negative to neutral as the 2y10y spread widened to 48bps; In **Brazil**, rates increased from neutral to risk asset positive as the 3y10y spread widened to 111bps; In **China**, sentiment and risk increased from neutral to risk asset positive as the percentage of stocks above their 200-day moving average returned to average levels; In **Europe**, earnings increased from risk asset negative to neutral as revisions on average turned from negative to positive; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending June 7, 2019)

	Positives	Negatives
Global Growth	<ul style="list-style-type: none"> US factory orders decreased less than expected in April, -0.8% month over month vs. -1.0% forecast Japan capital spending increased 6.1% year over year for the first quarter, beating estimate of 2.6% 	<ul style="list-style-type: none"> US initial jobless claims were 218,000 for the week of June 1 vs. 215,000 forecast US nonfarm payrolls increased 75,000 in May, below 175,000 expected May ADP National Employment Report showed increase of 27,000 jobs vs. estimate of 185,000 ISM Manufacturing Survey came in at 52.1 for May, missing forecast of 53.0 April US construction spending unchanged from prior month vs. estimate of 0.4% growth April US trade deficit at \$50.8 billion in April vs. \$50.7 billion forecast
Rates	<ul style="list-style-type: none"> European Central Bank held rates steady and delivered an overall dovish message Reserve Bank of India lowered rates by 25 basis points to 5.75% 	
Inflation		<ul style="list-style-type: none"> Euro Zone CPI disappointed in May at 0.8% year over year vs. 0.9% projected April Euro Zone PPI at 2.6% year over year missed estimate of 3.1%

Source: Morgan Stanley Wealth Management GIC

THE GIC WEEKLY

Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Underweight	After the worst fourth quarter since 2008, the S&P 500 had its best first quarter since 1998. This kind of volatility is unusual and was precipitated by a Federal Reserve that appeared too hawkish in December, only to reverse course on its policy perhaps faster than we've ever witnessed. Meanwhile, economic and earnings fundamentals continue to deteriorate, leaving us with an unexciting target of just 2,750 for the S&P 500 this year. As a result, we remain underweight the US.
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, especially in Europe, which will allow the central banks to exit their extraordinary monetary policies and help valuations to rise.
Emerging Markets	Overweight	After a difficult first 10 months of 2018, emerging market (EM) equities have performed relatively well, a positive sign for future leadership. With our view for the US dollar to make a secular top this year, global nominal GDP growth should accelerate faster than the US GDP, particularly as China's fiscal stimulus takes hold. This should disproportionately benefit international equities, led by EM equities.
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. We are also increasingly concerned that credit spreads do not reflect the current earnings recession in the US nor the significant leverage now present on corporate balance sheet. Therefore, we are underweight US investment grade credit.
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 the recent collapse in real yields from the Fed's pivot, these securities offer little relative value in the context of our expectations for global growth to eventually accelerate, oil prices to trough and the US dollar to top. In short, inflation risk is underpriced.
High Yield	Underweight	High yield bonds have rebounded with equity markets this year as the Fed pivoted to a more dovish policy. Since February, high yield has underperformed investment grade as it starts to reflect earnings recession risk in the US. With a zero weighting in high yield since January 2018, we will revisit our allocation to high yield bonds during 2019 if spreads widen appropriately.
Alternative Investments		Relative Weight Within Alternative Investments
REITs	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded this year. With oil prices recovering and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. Global supply shortages from Iranian sanctions 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. With the recent surge in volatility, these strategies could perform better on a relative basis.

***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 June 7, 2019

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 other index, indicator and survey definitions referenced in this report please visit the following:
<https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

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.

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.

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. 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.

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.

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.

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.

THE GIC WEEKLY

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

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

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

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

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

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

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

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

Ultrashort-term fixed income asset class is comprised of fixed income securities with high quality, very short maturities. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk

The majority of \$25 and \$1000 par **preferred securities** are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. Interest/dividend payments on certain preferred issues may be deferred by the issuer for periods of up to 5 to 10 years, depending on the particular issue. The investor would still have income tax liability even though payments would not have been received. Price quoted is per \$25 or \$1,000 share, unless otherwise specified. Current yield is calculated by multiplying the coupon by par value divided by the market price.

The initial interest rate on a **floating-rate security** may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

Some \$25 or \$1000 par **preferred securities** are QDI (Qualified Dividend Income) eligible. Information on QDI eligibility is obtained from third party sources. The dividend income on QDI eligible preferreds qualifies for a reduced tax rate. Many traditional 'dividend paying' perpetual preferred securities (traditional preferreds with no maturity date) are QDI eligible. In order to qualify for the preferential tax treatment all qualifying preferred securities must be held by investors for a minimum period – 91 days during a 180 day window period, beginning 90 days before the ex-dividend date.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is

THE GIC WEEKLY

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.

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.

Certain securities referred to in this material may not have been registered under the U.S. Securities Act of 1933, as amended, and, if not, may not be offered or sold absent an exemption therefrom. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, and sale, exercise of rights or performance of obligations under any securities/instruments transaction.

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.

Disclosures

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States. This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Past performance is not necessarily a guide to future performance.

The author(s) (if any authors are noted) principally responsible for the preparation of this material receive compensation based upon various factors, including quality and accuracy of their work, firm revenues (including trading and capital markets revenues), client feedback and competitive factors. Morgan Stanley Wealth Management is involved in many businesses that may relate to companies, securities or instruments mentioned in this material.

This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security/instrument, or to participate in any trading strategy. Any such offer would be made only after a prospective investor had completed its own independent investigation of the securities, instruments or transactions, and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the accuracy or completeness of this material. Morgan Stanley Wealth Management has no obligation to provide updated information on the securities/instruments mentioned herein.

The securities/instruments discussed in this material may not be suitable for all investors. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. Morgan Stanley Wealth Management recommends that investors independently evaluate specific investments and strategies, and encourages investors to seek the advice of a financial advisor. The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies and other issuers or other factors. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions

THE GIC WEEKLY

may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley Wealth Management does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein.

This material should not be viewed as advice or recommendations with respect to asset allocation or any particular investment. This information is not intended to, and should not, form a primary basis for any investment decisions that you may make. Morgan Stanley Wealth Management is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended or under section 4975 of the Internal Revenue Code of 1986 as amended in providing this material except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol.

Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors do not provide legal or tax advice. Each client should always consult his/her personal tax and/or legal advisor for information concerning his/her individual situation and to learn about any potential tax or other implications that may result from acting on a particular recommendation.

This material is disseminated in Australia to "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813).

Morgan Stanley Wealth Management is not incorporated under the People's Republic of China ("PRC") law and the material in relation to this report is conducted outside the PRC. This report will be distributed only upon request of a specific recipient. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors must have the relevant qualifications to invest in such securities and must be responsible for obtaining all relevant approvals, licenses, verifications and or registrations from PRC's relevant governmental authorities.

If your financial adviser is based in Australia, Switzerland or the United Kingdom, then please be aware that this report is being distributed by the Morgan Stanley entity where your financial adviser is located, as follows: Australia: Morgan Stanley Wealth Management Australia Pty Ltd (ABN 19 009 145 555, AFSL No. 240813); Switzerland: Morgan Stanley (Switzerland) AG regulated by the Swiss Financial Market Supervisory Authority; or United Kingdom: Morgan Stanley Private Wealth Management Ltd, authorized and regulated by the Financial Conduct Authority, approves for the purposes of section 21 of the Financial Services and Markets Act 2000 this material for distribution in the United Kingdom.

Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

This material is disseminated in the United States of America by Morgan Stanley Smith Barney LLC.

Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC.

© 2019 Morgan Stanley Smith Barney LLC. Member SIPC.