

The GIC Weekly



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Upcoming Catalysts

May 20 Chicago Fed National Activity Index
May 21 US existing home sales
May 21 Euro Zone consumer confidence
May 22 Japan Manufacturing PMI
May 22 FOMC May meeting minutes
May 23 US initial jobless claims
May 23 Markit US Manufacturing PMI
May 23 US new home sales
May 23 Kansas City Fed Manufacturing Survey
May 23 Markit US Manufacturing PMI
May 23 Japan CPI
May 24 US durable goods orders

What We Are Talking About

- **Markets Finding Footing?** Recent market stability appears anchored on self-referential thinking in which market action itself is presumed to goad the US and China into a quick trade deal and to coax the Fed into pre-emptive rate cuts; we see this thesis as risky because it shrugs off the complexities of the trade situation and deteriorating economic fundamentals; in April, US industrial production missed expectations and US retail sales disappointed despite peak consumer confidence; second quarter GDP estimates are plummeting, raising the odds of a material quarter-over-quarter slowdown; we think second quarter earnings estimates are too high, and the S&P 500 could have an earnings recession; valuations are high considering the risks. **Consider** defensive quality stocks with strong valuation support and letting stock-pickers manage risk.

Markets Finding Footing?

About a decade ago, famed investor George Soros posited a theory about the stock market based on the concept of reflexivity. He suggested that market routs were in part self-referential and thus self-curing as policymakers increasingly responded to market signals more than to economic ones. When policymakers overweight the belief that markets and “the wisdom of crowds” are exclusively and purely rational, they overreact to the noise, creating price distortions in the markets from which they seek guidance.

Soros’ theory was on full display last week as investors dove back into risk-taking following 5% market declines that punctuated the first two weeks of May and centered on the rupture in US/China trade talks and resultant tariff escalation. Rather than dwell on the economic implications of sustained tariffs, investors were quick to assume that the market swoon itself would be sufficient to both goad US and Chinese negotiators back to the table and coax the Federal Reserve toward pre-emptive “insurance rate cuts.” Characteristically, the US Treasury futures market moved to discounting 50 basis points worth of cuts in the next 12 months, as they had in March, supporting stock multiples and stabilizing credit spreads. In fact, so far this month, chances of a Fed rate cut before year-end have doubled to 78% from 39%.

Admittedly, this reflexivity playbook has been effective this cycle as policymakers quickly addressed nearly every market decline. Furthermore, decision-makers in the White House have made clear their focus on the stock market as the ultimate scorekeeper and their willingness to react, calibrating their strategies to it. But, as we noted last week, the complexities around this as an investment strategy are mounting (see *The GIC Weekly*, May 13). Not only are corporate profit margins vulnerable, business confidence fragile and capital investment threatened, but geopolitical tensions seem to be multiplying and inflationary pressures are building, which inhibit the efficacy of policy changes. The US dollar, which gained last year from trade tensions and completely offset the inflationary impact of tariffs, this time appears stuck, anchored by falling Treasury rates, which we believe is noteworthy. As we have suggested, without capital spending to improve productivity and offset higher compensation costs from the tight labor market, inflationary pressures could intensify. This week, our concerns are further heightened as April economic fundamentals suggest widespread weakness in growth in both the business and consumer sectors.

To begin with, we were concerned with April industrial production, which came in at -0.5%, missing expectations for no change and decelerating markedly from March's 0.2%. On the one hand, weak manufacturing output data validates the view that inventories swelled in the first quarter and might be viewed by some as temporary, but we read the underlying details as foreboding for industries linked to capital spending. David Rosenberg, chief economist of Gluskin Sheff, says the 2.1% decline in business equipment investment was the largest monthly pullback since January 2013, and matches the collapse we saw during the recession in March 2009. While one month's report does not make a trend, the data point is important because it supports the slowdown theme seen in April's disappointing ISM report, the lowest in 2½ years, which showed inventories building and new orders to be weak (see *Chart of the Week*, page 3). Also noteworthy is that general measures of commerce are slowing, with the Cass Freight Index down 3.2% year over year in April. The index, a monthly measure of North American freight activity, has been declining steadily since November. Overall, industrial output is growing less than 1% year over year and has declined in a pattern similar to that in the 2015-2016 minirecession. While the April data may prove inconclusive given more recent indications of improvement in the Empire State Manufacturing and the Philadelphia Fed surveys, we remain focused on the industrial linkages to capital spending, and here the variables tied to orders remained weak.

While business confidence is flagging, consumer confidence has remained steady, anchored near cycle-peaks as unemployment, at 3.6%, is near a 50-year low. The job market's strength makes April's retail sales report all the more disappointing. Although consensus was looking for 0.2% month-over-month growth and 0.3% ex auto and gas, both contracted 0.2%. Net of core CPI, which is running at 1.7%, real retail sales fell nearly 0.5%, the slowest pace since 2015. Tellingly, economically sensitive sectors fell the most, with weakness noticeable in autos, electronics, home appliances, and building and construction materials. As Rosenberg points out, real retail sales have not made a new high in five months and have actually contracted at a 1.2% annualized pace since November. Here too, it may be that consumers are not pulling back but are in temporary savings mode for major expenditures.

Then there's valuation. During periods when markets are cheap, expectations low and positioning risk-off, we can withstand a bullish view with mixed economic data. However, with the 10-year US Treasury yield at less than 2.4% and US equities priced at near 16.8 times earnings, disappointments can come with a high price. Right now, growth in economic data is so important because the consumer and business activity will be needed to deliver second quarter GDP gains; in the first quarter, inventories, government spending and net trade contributions collectively added two full percentage points to growth and are factors that are unlikely to be repeated. These variables helped the S&P 500 skirt an earnings recession, delivering year-over-year profit growth of about 1.5%. But the backdrop for upside surprises may not be applicable for the second quarter. Expectations for the second quarter are coming down: the Atlanta Fed's GDPNow Forecast shows 1.1%, and Ellen Zentner, chief US economist for Morgan Stanley & Co., recently cut the estimate to 1.2%. This makes an earnings recession more likely.

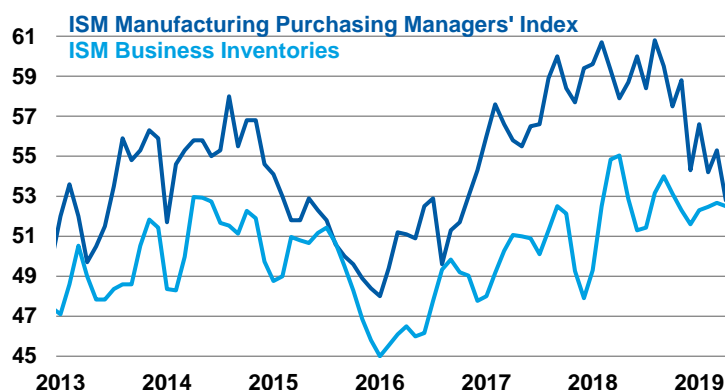
Bottom Line: Last week's market rebound seems wishful to us because investors are looking through poor macroeconomic data and hoping that market volatility itself triggers resolution of the trade impasse with China and prompts the Fed to cut rates. Against a backdrop of deteriorating business activity, we think caution is warranted. Second quarter earnings could be in jeopardy. We are not prepared to chase the current bounce.

Watch upcoming economic reports, especially the ISM and job data, for signs of a slowdown. **Consider** defensive quality stocks with strong valuation support and letting stock-pickers manage risk. ■

THE GIC WEEKLY

Chart of the Week: Investors May Underestimate Weakness in ISM Data

After first quarter GDP surprised on the upside at 3.2% and S&P 500 profits dodged a feared earnings recession, many investors are dismissing the recent rollover in ISM manufacturing data as transitory (see chart). We are less certain of that. The recent readings are the lowest since late 2016 and come as inventories have remained stubbornly high. Much of the inventory buildup is linked to supply chains disrupted by the trade dispute with China. The last time the manufacturing ISM was at these levels, inventories were 10% to 15% lower. With an escalation of the trade dispute now at our doorstep, the inventory clearing many are expecting may be delayed.



Source: Bloomberg as of May 16, 2019

Asset Class Performance and Heat Map (as of May 17, 2019)

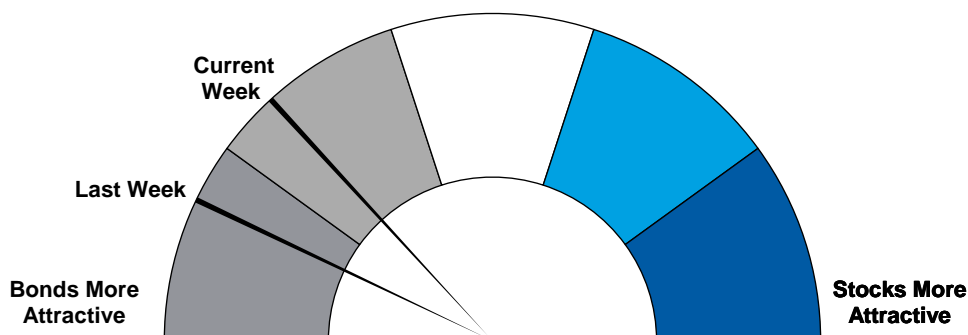
Asset Class	Annualized Returns (%)							Yield	Valuation			Volatility (%)		Correlation to Global Equities	
	YTD	1-Yr.	2018	3-Yr. ¹	5-Yr. ¹	10-Yr. ¹	20-Yr. ¹		Current YTM	Current YTM	Avg. YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
Cash								2.45	2.45	1.76	0.10	0.55	-0.29	-0.06	
90-Day US Treasury Bills	0.9	2.2	1.9	1.3	0.8	0.4	0.8	2.45	2.45	1.76	0.10	0.55	-0.29	-0.06	
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E²					
US Large-Cap Growth	18.3	9.4	-0.9	18.9	15.1	17.1	5.1	0.97	22.0	20.7	15.6	17.0	0.94	0.89	
US Large-Cap Value	11.6	6.1	-6.5	11.7	8.7	13.4	5.8	3.02	13.4	13.7	11.1	13.8	0.94	0.88	
US Mid-Cap Growth	20.5	5.6	-7.9	13.9	10.5	15.9	7.2	0.62	21.6	26.4	16.5	22.6	0.88	0.81	
US Mid-Cap Value	14.0	1.5	-11.4	11.7	8.9	15.4	9.2	2.72	14.0	14.4	13.1	15.9	0.89	0.88	
US Small-Cap Growth	18.2	2.8	-6.6	17.0	11.2	16.6	10.1	0.57	27.3	24.0	18.7	21.3	0.87	0.83	
US Small-Cap Value	13.8	-3.7	-13.3	10.8	7.8	14.7	9.7	2.67	16.0	17.2	15.9	17.1	0.87	0.85	
Europe Equity	12.5	-5.4	-14.3	7.6	1.9	8.6	4.4	3.64	13.5	13.8	10.8	17.9	0.86	0.95	
Japan Equity	5.6	-9.6	-12.6	7.3	6.8	7.4	2.7	2.39	12.3	18.9	9.6	16.1	0.05	0.70	
Asia Pacific ex Japan Equity	11.1	-0.4	-10.2	10.3	3.9	10.4	8.1	3.84	15.0	14.5	9.7	19.3	0.35	0.88	
Emerging Markets	3.8	-10.4	-14.2	11.7	4.4	7.9	8.2	2.66	11.7	11.2	11.8	21.6	0.68	0.87	
Global Fixed Income								Current YTM	Current Spread	Avg. Spread²					
Short-Term Fixed Income	1.7	3.6	1.6	1.3	1.2	1.6	3.2	2.39	15.0	31.0	0.8	1.4	-0.31	-0.15	
US Fixed Income	3.6	6.7	0.0	1.9	2.6	3.7	4.7	2.89	46.0	54.0	2.2	3.4	-0.24	-0.04	
International Fixed Income	1.5	0.9	-1.9	0.4	-0.2	2.5	3.7	1.07	50.0	49.0	3.2	7.9	-0.25	0.32	
Inflation-Protected Securities	3.3	2.0	-4.2	2.5	1.0	4.1	5.5	-	-	-	4.1	7.7	-0.03	0.45	
High Yield	6.6	4.0	-4.1	6.4	4.0	10.1	7.9	6.61	444.0	499.0	2.2	9.5	0.73	0.75	
Emerging Markets Fixed. Inc.	1.9	-1.4	-6.2	2.3	-1.0	3.5	7.3	6.23	289.0	330.5	6.5	11.5	0.53	0.65	
Alternative Investments								Current Div. Yld.							
Real Estate/REITs	14.1	10.5	-5.5	7.1	6.7	12.3	8.8	3.91	-	-	8.0	17.8	0.45	0.80	
MLP/Energy Infrastructure ³	18.4	2.2	-12.4	1.6	-5.8	8.8	-	7.83	-	-	18.9	17.3	0.47	0.46	
Commodities ex Prec. Metals	6.3	-10.6	-12.5	-0.4	-10.9	-3.7	0.6	-	-	-	9.8	16.7	0.59	0.47	
Precious Metals	-2.3	-4.5	-4.6	-2.4	-2.1	2.8	6.7	-	-	-	9.2	19.0	-0.14	0.19	
Hedged Strategies ⁴	2.7	-4.3	-6.7	2.0	0.0	1.6	-	-	-	-	2.0	5.6	0.84	0.66	
Managed Futures ⁵	-0.3	-4.7	-3.2	-1.3	0.2	-1.7	-	-	-	-	4.0	7.5	0.62	0.14	
S&P 500	15.0	7.3	-4.4	14.9	11.6	15.3	6.0	1.91	16.4	15.7	12.88	14.5	0.97	0.95	
Russell 2000	14.4	-4.2	-11.0	13.6	8.6	14.1	8.2	1.41	25.9	20.3	18.65	19.4	0.86	0.82	
MSCI EAFE	10.6	-5.8	-13.4	7.8	3.1	8.5	4.3	3.35	13.3	14.6	7.56	16.3	0.85	0.96	
MSCI AC World	12.5	0.6	-8.9	12.0	7.5	11.7	5.4	2.47	14.7	15.2	10.13	15.2	1.00	1.00	

Note: Performance values calculated using USD. 1. As of April 30, 2019. 2. 20-year average as of April 30, 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	Very Negative	Very Negative	Very Positive	Very Negative	Very Negative	Neutral	Very Negative	Neutral

Indicator	Category	Reading
PMI (+)		Risk Off
Durable Goods (+)	Growth	Neutral
Retail Sales (+)		Neutral
Manufacturing Hours Worked (+)		Risk On
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 (-)		Neutral
Financial Conditions (-)		Risk Off
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Neutral
Large vs. Small Performance (-)		Risk Off
High- vs. Low-Quality Performance (-)		Neutral
High- vs. Low-Beta Performance (+)		Risk Off
S&P 500 Forward Price/Earnings Ratio (+)		Neutral
Earnings Revisions Breadth (-)		Earnings
Global Risk Demand (+)	Sentiment	Risk Off
Implied Currency Volatility (-)		Risk Off
Five-Yr. Macro Sensitivity (-)		Risk Off
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Neutral
Cumulative Advance/Decline (+)		Neutral
S&P 500 Put/Call Ratio (-)		Risk On
Emerging Market Fund Flows (+)		Risk Off
Smart Money Flow Index (+)		Risk On
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.		Neutral
		Negative for Stocks Relative to Bonds

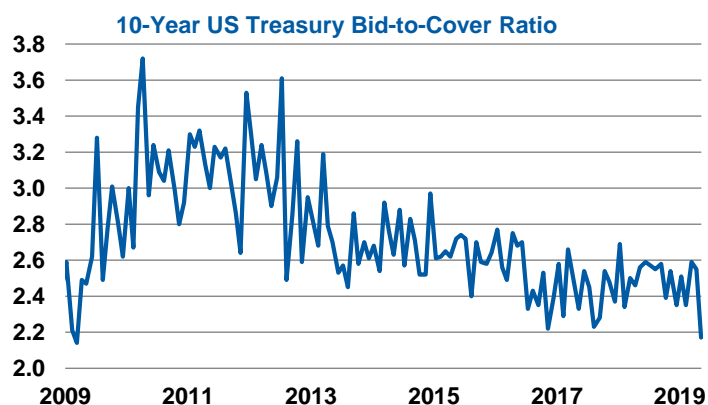
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial 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 May 17, 2019

THE GIC WEEKLY

Fixed Income Insight: Demand for US Treasuries Continues to Decline

For the past decade, Federal Reserve policy has been the defining driver of the US Treasury market. While debates center on the business cycle as the driver of yields, we have been cautioning that in addition to policy normalization and a likely rebound in inflation, Treasury investors will soon need to deal with at least two additional headwinds: exploding US deficits and debt, and foreign investors' waning appetite for US debt. In fact, last week's 10-year US Treasury auction drove home the point. The bid-to-cover ratio, at 2.17, was the lowest in a decade (see chart). While foreign ownership of US Treasuries has been in secular decline since 2008, Chinese ownership, the largest slice, started dropping in 2016. Recent escalation of the US-China trade dispute risks a further decline in foreign investors' appetite for Treasuries and dollars.



Source: Bloomberg as of May 16, 2019

Government Debt Monitor

	US			
	Yield (%)			Total Return (%)
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	2.42	0.00	0.06	0.91
2-Year	2.27	0.00	-0.22	1.38
5-Year	2.26	0.00	-0.25	2.49
10-Year	2.47	0.00	-0.22	3.58
30-Year	2.89	0.00	-0.13	5.33
2-Yr./10-Yr. Spread (bp)	20	0.00	0.47	-
10-Yr. TIPS Breakeven (bp)	189	0.00	17.20	-
Interest Rate Volatility† (bp)	53	0.00	-13.09	-

Fixed Income Spread Dashboard

	Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range**	
				Rich	Cheap
Investment Grade	MBS*	4.77	3.06	43	20-43
	AAA	5.60	2.63	19	11-19
	AA	6.33	2.94	58	46-76
	A	7.42	3.30	91	68-122
	BBB	7.65	3.94	153	111-201
High Yield	BB	4.08	4.95	250	187-365
	B	3.58	6.43	395	299-542
	CCC	3.53	9.83	740	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 May 17, 2019

Government Debt Monitor

	Global			
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.35	0.00	-0.36	4.95
Germany	-0.05	0.00	-0.28	4.20
Japan	-0.06	0.00	-0.05	1.57
Spain	0.98	0.00	-0.44	6.49
UK	1.13	0.00	-0.14	2.83
3-Month LIBOR	2.53	0.00	-0.28	-
US Tax Exempt				
10-Year AAA Muni	1.73	-0.43	-0.59	4.24
10-Yr. Muni/UST Ratio	72.32	-9.73	-14.00	-

Benchmark Returns

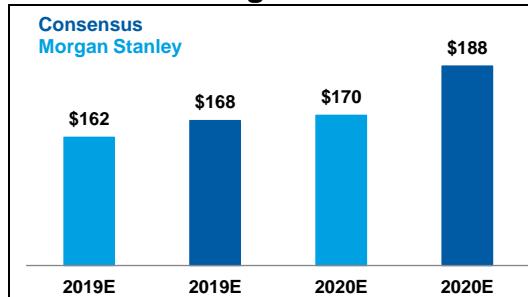
Index	Total Returns (%)		
	YTD	MTD	2018
Bloomberg Barclays US Aggregate	3.57	0.58	0.01
Bloomberg Barclays US MBS	2.66	0.54	0.99
Bloomberg Barclays US IG Corporate	6.09	0.35	-2.51
Bloomberg Barclays Municipal	4.24	0.92	1.28
Bloomberg Barclays US High Yield	8.17	-0.56	-2.08
Bloomberg Barclays Global Aggregate	2.27	0.37	-1.20
JPMorgan Emerging Market	6.80	0.07	-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 May 17, 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	4.9%
Base Case	\$175	15.8	2,750	-3.8%
Bear Case	\$160	15.0	2,400	-16.1%
Current S&P 500 Price			2,860	

Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of May 17, 2019

Note: Price targets are based on estimated June 2021 earnings. Source: Thomson Reuters, Morgan Stanley & Co. Research as of May 17, 2019

S&P 500 Sector Performance and Valuation (as of May 17, 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	-0.69	14.98	7.25	1.91		15.7	16.4
Energy	-0.44	12.17	-16.36	3.45	1.01	17.2	16.0
Materials	-0.77	8.77	-6.53	2.30	0.97	13.9	15.8
Industrials	-1.85	16.92	2.15	1.93	1.06	16.1	15.5
Consumer Discretionary	-1.11	18.22	11.55	1.23	1.17	17.9	20.8
Consumer Staples	0.94	14.93	19.91	2.83	0.50	16.8	19.2
Health Care	-0.45	2.76	8.40	1.74	0.91	16.5	14.8
Financials	-2.07	13.56	-2.61	2.03	0.93	12.6	11.6
Information Technology	-0.97	22.16	10.54	1.44	1.36	20.1	18.6
Telecommunication Services	0.27	19.44	16.89	1.38	0.97	15.8	17.9
Utilities	1.45	12.01	24.37	3.22	0.17	14.3	18.5
Real Estate	1.52	18.98	24.66	3.00	0.48	15.4	19.3

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

Performance of Style and Cap Pairs (as of May 17, 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 May 17, 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	Q2 '19E	Q4 '19E	Q2 '20E
Global	3.7	3.4	3.5			2.8	2.7	2.9			
US	2.9	2.4	2.1	2.25	2.20	2.4	2.1	2.6			
Euro Zone	1.8	1.2	1.4			1.8	1.4	1.5	1.10	1.16	1.20
UK	1.4	1.2	1.5	1.30	1.40	2.5	2.0	1.9	1.29	1.38	1.45
Japan	0.8	0.3	0.3	-0.08	-0.08	1.0	0.4	0.6	110	108	104
Emerging Markets	4.8	4.5	4.8			3.4	3.4	3.5			
China	6.6	6.5	6.3			2.1	2.6	2.4	6.82	6.60	6.50

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of May 17, 2019)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
China	↑	↑ Yield Curve Flattening	↓	↓	↓	↑	↑	Soft Landing Better than Expected
Japan	↓	↓	↓	↑	↓ Falling GRDI and RSI	↑	↑	Improving Profits and Weaker Yen
Brazil	↑	↓ Yield Curve Steepening	↑	↑	↓	↓	↑	Political Stability Supports Recovery
Europe	↑	↓	↓	↑	↑	↑	↑	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 moved from risk asset neutral to risk asset negative as the yield curve flattened; In **Brazil**, rates moved from risk asset neutral to risk asset positive as the yield curve steepened; In **Japan**, sentiment and risk moved from risk asset neutral to risk asset positive amid falling GRDI and RSI; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending May 17, 2019)

	Positives	Negatives
Global Growth	<ul style="list-style-type: none"> US weekly initial jobless claims fell to 212,000 vs. 220,000 projected Empire State Manufacturing Survey rose to 17.8 for May, beating forecast of 8.0 US housing starts increased more than expected in April to 1.235 million vs. forecast of 1.209 million April US building permits at 1.296 million vs. an expected 1.289 million March Euro Zone industrial production beat estimates at -0.6% year over year vs. -0.8% forecast 	<ul style="list-style-type: none"> US retail sales declined 0.2% month over month in April, missing forecast for expected increase of 0.2% April US industrial production fell 0.5% month over month, missing market expectations for no change US capacity utilization decreased to 77.9% in April vs. 78.7% forecast
Inflation	<ul style="list-style-type: none"> Japan PPI came in at 1.2% year over year for April, slightly higher than forecast of 1.1% 	
Sentiment and Flows	<ul style="list-style-type: none"> U. of M. Consumer Sentiment Index exceeded estimates in May at 102.4 vs. 97.2 projected NFIB Small Business Optimism Index rose to 103.5 for April, higher than the expected 102.0 	

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 May 17, 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 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.

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

THE GIC WEEKLY

investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

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

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

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

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

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

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

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

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

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

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

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

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

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

THE GIC WEEKLY

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.

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THE GIC WEEKLY

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