The GIC Weekly

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The GIC Weekly's tables and charts start on page 2.
Lisa Shalett's commentary returns in the July 1 issue.

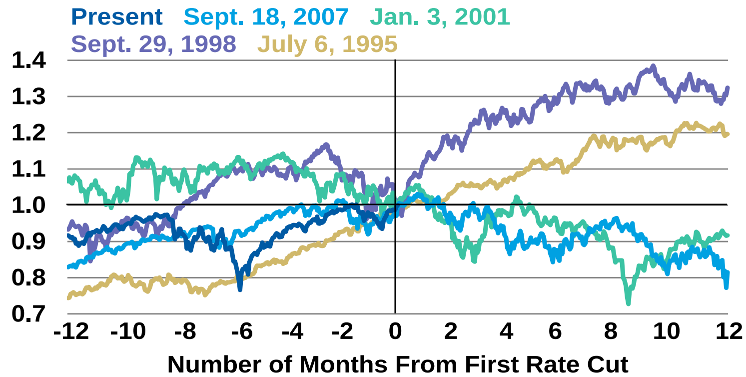
Upcoming Catalysts

June 24 Chicago Fed National Activity Index
June 24 Dallas Fed Manufacturing Activity Index
June 25 Conf. Board Consumer Confidence Index
June 25 FHFA House Price Index
June 25 Richmond Fed Manufacturing Index
June 25 US new home sales
June 26 Japan retail sales
June 26 US durable goods orders
June 26 US wholesale inventories
June 27 Japan CPI
June 27 Japan industrial production
June 27 Kansas City Fed Manufacturing Survey
June 27 US pending home sales
June 28 Euro Zone Core CPI
June 28 U. of M. Consumer Sentiment Index
June 28 US personal income and spending

Chart of the Week: Stock Market Performance Before and After Fed Rate Cuts

Following last week's Federal Reserve meeting and commentary, both stock and bond markets have been buoyed by hopes for an interest rate cut. The S&P 500 hit an all-time high while the 10-year US Treasury yield fell below 2% for the first time since 2016. While the Global Investment Committee is skeptical that rate cuts are the right medicine for a business cycle imperiled by trade uncertainty, the historical record may provide additional perspective (see chart). Of the last four episodes of Fed easing, stocks continued to gain after cuts in 1995 and 1998. However, both episodes were mid-cycle reflations as opposed to a late-cycle slowing ahead of a recession, which is what we believe is happening now. We remain cautious.

S&P 500 Return Relative to First Fed Rate Cut



Source: Bloomberg as of June 19, 2019

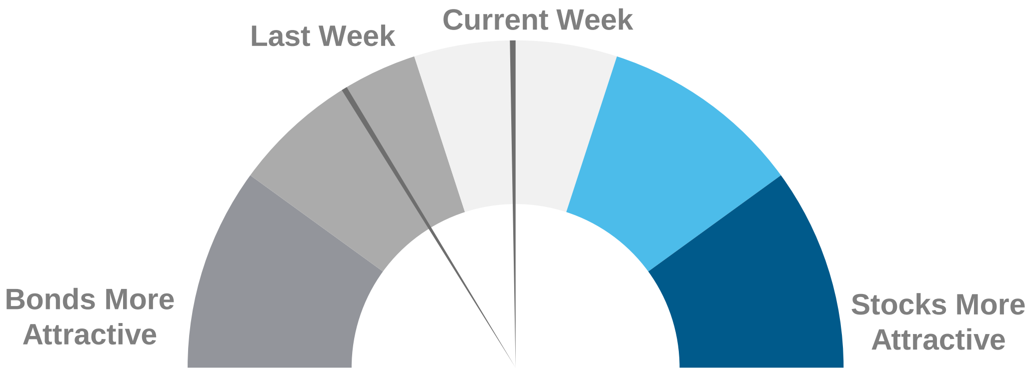
Asset Class Performance and Heat Map (as of June 21, 2019)

Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
Cash	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]
90-Day US Treasury Bills	1.2	2.3	1.9	1.3	0.8	0.5	1.8	2.48	2.48	1.75	0.10	0.55	-0.13	-0.06
Global Equities								Current Div. Yld.	Current P/E	Avg. P/E[2]				
US Large-Cap Growth	22.9	10.5	-0.9	15.6	12.9	15.8	5.0	1.05	22.8	20.6	16.0	17.0	0.86	0.89
US Large-Cap Value	14.7	9.6	-6.5	8.6	7.0	11.9	5.5	3.18	13.8	13.7	11.8	13.8	0.86	0.88
US Mid-Cap Growth	25.9	6.8	-7.9	11.0	8.6	14.8	6.8	0.60	24.1	26.3	14.9	22.6	0.90	0.81
US Mid-Cap Value	16.8	3.1	-11.4	8.8	7.1	14.2	8.9	2.89	14.4	14.4	11.4	15.9	0.81	0.88
US Small-Cap Growth	21.8	1.9	-6.6	13.4	9.5	15.3	9.7	0.59	28.1	24.0	16.2	21.3	0.86	0.83
US Small-Cap Value	13.1	-7.1	-13.3	7.1	5.7	13.3	9.1	2.93	15.7	17.2	14.2	17.1	0.80	0.85
Europe Equity	15.7	2.3	-14.3	5.8	0.5	6.7	4.2	3.81	13.6	13.8	13.0	17.9	0.88	0.95
Japan Equity	7.4	-6.0	-12.6	6.2	5.1	5.9	2.5	2.58	12.7	18.8	13.6	16.1	0.35	0.70
Asia Pacific ex Japan Equity	17.0	6.8	-10.2	10.1	2.9	8.7	7.9	3.91	15.5	14.5	11.6	19.3	0.63	0.88
Emerging Markets	10.3	0.5	-14.2	10.3	2.2	5.4	7.8	2.84	12.3	11.2	12.2	21.6	0.55	0.87
Global Fixed Income								Current YTM	Current Spread	Avg. Spread[2]				
Short-Term Fixed Income	2.6	4.3	1.6	1.6	1.3	1.6	3.2	1.99	16.0	31.0	1.4	1.4	-0.36	-0.15
US Fixed Income	5.7	7.8	0.0	2.5	2.7	3.8	4.9	2.55	46.0	54.0	3.2	3.4	-0.33	-0.04
International Fixed Income	4.8	4.4	-1.9	1.5	-0.1	2.1	3.9	0.88	47.0	49.0	5.0	7.9	0.27	0.32
Inflation-Protected Securities	7.0	5.7	-4.2	3.4	1.0	3.6	5.6	-	-	-	5.9	7.7	0.34	0.45
High Yield	9.2	7.0	-4.1	6.0	3.6	9.1	7.9	6.23	415.0	499.0	3.9	9.5	0.92	0.75
Emerging Markets Fixed. Inc.	8.0	8.7	-6.2	4.4	-1.3	3.0	7.5	5.69	281.0	330.0	6.3	11.5	0.62	0.65
Alternative Investments								Current Div. Yld.						
Real Estate/REITs	16.7	10.3	-5.5	6.9	5.8	10.8	8.8	3.88	-	-	8.3	17.8	0.54	0.80
MLP/Energy Infrastructure[3]	16.0	1.9	-12.4	0.4	-6.6	7.7	-	7.79	-	-	13.5	17.3	0.55	0.46
Commodities ex Prec. Metals	3.5	-8.8	-12.5	-2.1	-11.1	-5.3	0.8	-	-	-	15.8	16.7	0.40	0.47
Precious Metals	6.4	5.5	-4.6	0.2	-1.2	1.5	7.1	-	-	-	14.8	19.0	0.08	0.19
Hedged Strategies[4]	4.2	-2.0	-6.7	1.6	-0.2	1.3	-	-	-	-	1.6	5.6	0.58	0.66
Managed Futures[5]	3.2	2.4	-3.2	-0.8	0.0	-1.7	-	-	-	-	2.8	7.5	0.32	0.14
S&P 500	18.9	9.5	-4.4	11.7	9.7	13.9	5.8	1.87	16.8	15.7	12.56	14.5	0.94	0.95
Russell 2000	15.6	-7.0	-11.0	9.8	6.7	12.8	7.6	1.35	25.9	20.3	16.26	19.4	0.82	0.82
MSCI EAFE	13.7	0.7	-13.4	6.3	1.8	6.7	4.1	3.51	13.6	14.6	10.64	16.3	0.87	0.96
MSCI AC World	16.5	5.4	-8.9	9.7	5.8	10.0	5.1	2.62	15.1	15.1	10.46	15.2	1.00	1.00

Valuation	Volatility	Correlation
Cheap	Low	Low
Moderate	High	High
Expensive		

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.

Short-Term Stock and Bond Indicator



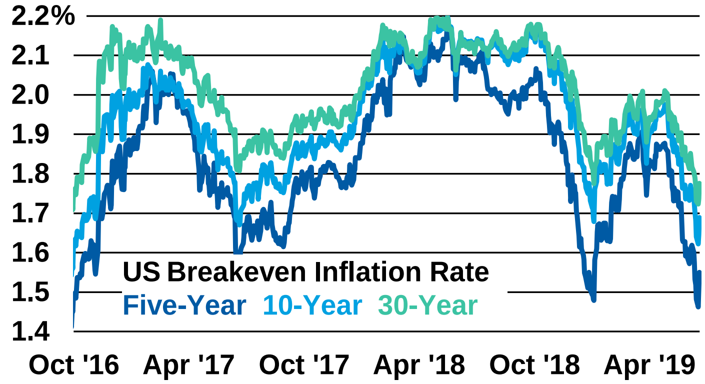
	Macro		Policy		Fundamentals		Sentiment and Technicals	
	Growth	Inflation	Rates	Liquidity	Valuation & Market	Earnings	Sentiment	Technicals
Current	Very Negative	Neutral	Very Positive	Neutral	Neutral	Neutral	Very Negative	Very Positive
Last Week	Very Negative	Neutral	Very Positive	Neutral	Neutral	Neutral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

Indicator	Category	Reading
PMI (+)	Growth	Risk Off
Durable Goods (+)		Risk Off
Retail Sales (+)		Neutral
Manufacturing Hours Worked (+)		Risk Off
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 On
Investment Grade Spreads (-)		Neutral
Financial Conditions (-)		Risk Off
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Neutral
Large vs. Small Performance (-)		Risk On
High- vs. Low-Quality Performance (-)		Neutral
High- vs. Low-Beta Performance (+)		Neutral
S&P 500 Forward Price/Earnings Ratio (+)		Risk On
Earnings Revisions Breadth (-)	Earnings	Neutral
Global Risk Demand (+)	Sentiment	Neutral
Implied Currency Volatility (-)		Neutral
Five-Yr. Macro Sensitivity (-)		Risk Off
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Risk On
Cumulative Advance/Decline (+)		Neutral
S&P 500 Put/Call Ratio (-)		Risk On
Emerging Market Fund Flows (+)		Risk On
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 21, 2019

Fixed Income Insight: Falling Inflation Expectations the *Raison d'Etre* for Rate Cuts?

The increasing likelihood of interest rate cuts by the Federal Reserve begs the question of the rationale for them. One of the more popular arguments favoring a cut is that while reported inflation has been below but near the Fed's 2% target, plummeting inflation expectations justify taking action. While expectations as measured by the breakeven rates in inflation-adjusted Treasuries are back near cycle lows last seen in 2016, this is a relatively volatile metric that has rebounded in the past without the Fed lowering rates (see chart).



Source: Bloomberg as of June 19, 2019

Government Debt Monitor

US				
	Yield (%)			Total Return (%)
Treasury Benchmark	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
3-Month	2.10	-0.07	-0.26	1.15
2-Year	1.77	-0.07	-0.72	2.34
5-Year	1.79	-0.04	-0.72	4.42
10-Year	2.05	-0.03	-0.63	6.74
30-Year	2.58	0.00	-0.43	10.53
2-Yr./10-Yr. Spread (bp)	29	4.63	8.98	-
10-Yr. TIPS Breakeven (bp)	174	9.51	2.11	-
Interest Rate Volatility† (bp)	75	-6.19	8.04	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range** Rich	Cheap
Investment Grade	MBS*	4.21	2.76	45	20	49
	AAA	5.43	2.29	19	11	21
	AA	6.38	2.60	59	46	76
	A	7.57	2.95	90	68	122
	BBB	7.77	3.61	153	111	201
High Yield	BB	3.71	4.24	212	187	365
	B	3.17	5.89	371	299	542
	CCC	3.35	9.97	787	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 21, 2019

Government Debt Monitor

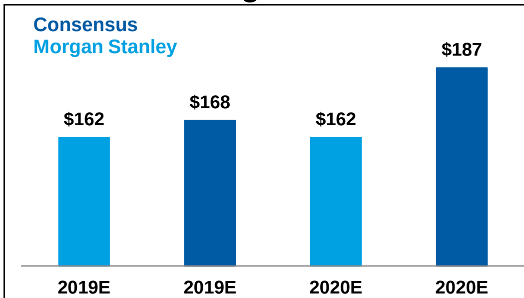
Global				
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
France	0.05	-0.05	-0.66	7.11
Germany	-0.29	-0.03	-0.53	5.75
Japan	-0.16	-0.03	-0.16	2.75
Spain	0.43	-0.07	-0.98	9.88
UK	0.84	0.00	-0.43	4.60
3-Month LIBOR	2.34	-0.06	-0.46	-
US Tax Exempt				
10-Year AAA Muni	1.62	-0.54	-0.70	5.01
10-Yr. Muni/UST Ratio	78.92	-3.13	-7.40	-

Benchmark Returns

	Total Returns (%)		
Index	**YTD**	**MTD**	**2018**
Bloomberg Barclays US Aggregate	5.66	0.82	0.01
Bloomberg Barclays US MBS	3.94	0.50	0.99
Bloomberg Barclays US IG Corporate	9.06	1.71	-2.51
Bloomberg Barclays Municipal	5.01	0.29	1.28
Bloomberg Barclays US High Yield	9.97	2.30	-2.08
Bloomberg Barclays Global Aggregate	5.07	1.74	-1.20
JPMorgan Emerging Market	10.52	2.97	-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 21, 2019

S&P 500 Earnings Estimates



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of June 21, 2019

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	1.7%
Base Case	$166	16.5	2,750	-6.8%
Bear Case	$149	16.1	2,400	-18.7%
	Current S&P 500 Price		2,950	

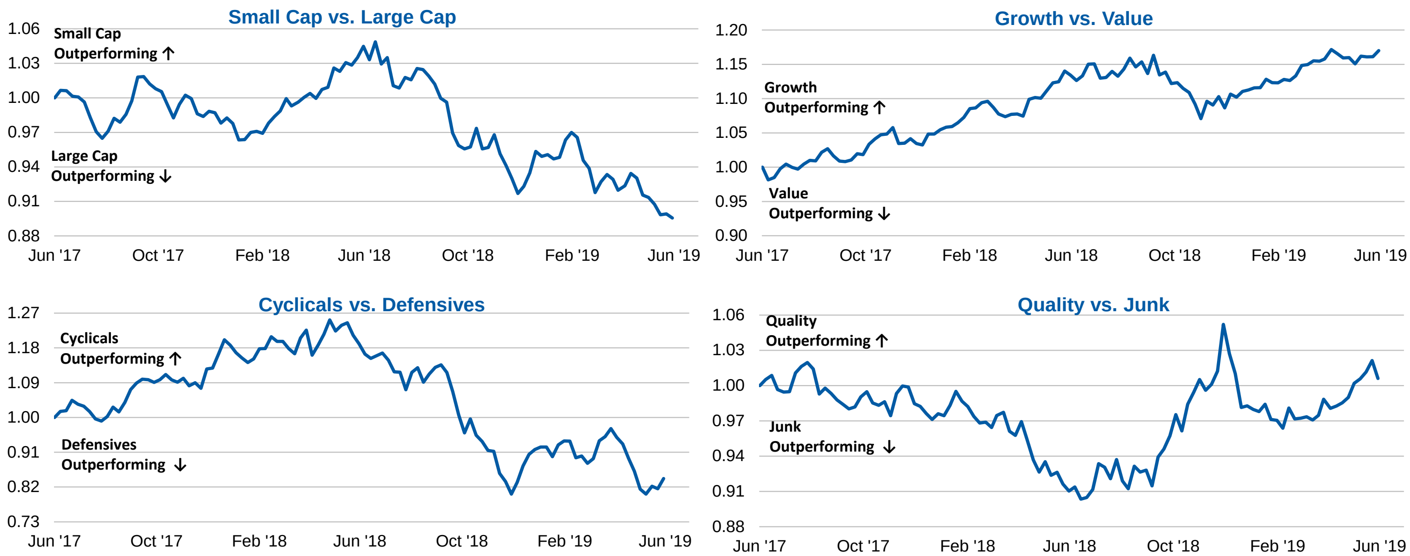
Note: Price targets are based on estimated June 2021 earnings.
Source: Thomson Reuters, Morgan Stanley & Co. Research as of June 21, 2019

S&P 500 Sector Performance and Valuation (as of June 21, 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	***2.22***	***18.87***	***9.48***	***1.87***		***15.6***	***16.8***
Energy	5.16	12.95	-10.56	3.45	1.02	17.2	**16.1**
Materials	0.26	15.48	2.28	2.18	0.96	13.9	**17.1**
Industrials	2.68	20.98	8.92	1.87	1.05	16.0	**15.9**
Consumer Discretionary	1.39	22.26	8.33	1.20	1.18	17.9	**21.3**
Consumer Staples	0.20	17.35	18.29	2.79	0.50	16.7	**19.4**
Health Care	3.13	9.33	12.75	1.65	0.89	16.4	**15.6**
Financials	0.40	15.51	2.20	2.03	0.92	12.6	**11.7**
Information Technology	3.34	27.37	11.62	1.40	1.38	20.0	**19.2**
Telecommunication Services	2.72	20.07	17.36	1.38	0.97	15.8	**17.8**
Utilities	1.17	17.18	25.33	3.09	0.18	14.3	**19.2**
Real Estate	0.95	23.57	22.32	2.95	0.46	15.4	**19.8**

*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 21, 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.Cyclicals and Defensives, and Quality and Junk are based on Morgan Stanley & Co. Research analysis.

Morgan Stanley & Co. Forecasts (as of June 21, 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	2.0	2.0	2.4	1.8	2.6			
Euro Zone	1.9	1.2	1.4			1.8	1.3	1.4	1.13	1.18	1.23
UK	1.4	1.3	1.4	1.10	1.20	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 21, 2019)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment And Risk	Valuation	Earnings	GIC Conclusion
China	↑	↓	↑	↑	↑	↓	↓	Soft Landing Better than Expected
Japan	↑	↓	↓	↓	↑	↓	↑	Improving Profits and Weaker Yen
Brazil	↓ Growth Slowing	↓	↑	↑	↑	↑	↑	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 **Brazil**, economic growth moved from risk asset neutral to risk asset negative as growth slowed; for further explanation of the chart, see page 8.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending June 21, 2019)

	Positives	Negatives
Global Growth	• US weekly initial jobless claims fell to 216,000 vs. 220,000 expected • May US building permits increased 0.3% month over month, beating forecast of 0.1% • US existing home sales grew 2.5% month over month in May • Euro Zone Markit Composite PMI came in at 52.1 in June, above estimate of 52.0	• June Philadelphia Fed Survey fell to 0.3 vs. 10.4 expected; Empire State Manufacturing Survey disappointed at -8.6 vs. expected increase of 11.0 • NAHB/Wells Fargo Housing Market Index came in at 64 in June, missing estimate of 67 • June Markit US Manufacturing PMI below expectations at 50.1 vs. 50.5 forecast; US Services PMI decreased to 50.7, below estimate of 51.0 • May US housing starts fell 0.9% month over month, missing market expectation of 0.3% gain • Markit Japan Manufacturing PMI declined to 49.5 in June
Rates	• The Fed, the Bank of Japan and the Central Bank of Brazil kept their policy rates steady	
Inflation	• Japan core CPI rose 0.8% year over year in May, beating forecast of 0.7%	• Euro Zone CPI climbed 0.1% month over month in May vs. 0.2% forecast
Sentiment and Flows	• S&P 500 Index closed at an all-time high	

Source: Morgan Stanley Wealth Management GIC

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 9 of this report.

Source: Morgan Stanley Wealth Management GIC as of June 21, 2019

Macro Factor Heat Map Key (see page 6)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	Conclusion
Dark Blue	Economic growth robust	Steep yield curve	Low-moderate and rising inflation	Liquidity robust in economy / banking system	Shorter-term sentiment and technicals bearish	Risk assets attractively valued	Earnings outlook robust	Confluence of factors supports a risk-on investment approach
Light Blue	Economic growth neutral	Normal yield curve	Low-moderate and declining inflation; moderate inflation; higher and falling inflation	Liquidity neutral in the economy / banking system	Shorter-term sentiment and technicals neutral	Risk assets neutral	Earnings outlook neutral	Confluence of factors supports a neutral investment approach
Gray	Economic growth anemic	Flat/inverted yield curve	Very high/low inflation/deflation; high and rising inflation	Liquidity low in economy / banking system	Shorter-term sentiment and technicals bullish	Risk assets are richly valued	Earnings outlook anemic	Confluence of factors supports a risk-off investment approach
Up	Growth accelerating	Yield curve steepening	Inflation rising	Liquidity increasing	Sentiment becoming more bullish	Valuations rising	Earnings outlook improving	
Down	Growth declining	Yield curve flattening	Inflation falling	Liquidity decreasing	Sentiment becoming more bearish	Valuations falling	Earnings outlook worsening	
Signal Horizon	One to three years	One to three years	One to three years	One to three years	One to three months	Six months to two years	Six months to two years	
Inputs	• Industrial production • Unemployment • Total return • Earnings revisions • Home prices • OECD LEI (China and Brazil) • MS & Co. ARIA (US)	• 10-year vs. 2-year government bond yield spread	• Consumer Price Index	• M1 growth • Private credit growth • Libor-OIS spread	• MS US Equity Risk Indicator (US) • MS Combined Market Timing Indicator (Europe) • MS Global Risk Demand Index • Relative strength index • Members above / below moving average. • Index above / below moving average • Consumer confidence	• Forward price/earnings ratio • Price/book ratio • Equity risk premium • High yield option-adjusted spread	• Earnings revisions breadth • Earnings surprise • Return on equity	• Weighted average z-score of all factors

Index Definitions

For 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Companies paying **dividends** can reduce or cut payouts at any time.

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Stocks of medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

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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