The GIC Weekly

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What We Are Talking About

- **Navigating No Man's Land.** It's only mid-March, yet many markets have surpassed our annual return forecasts; growth is uncertain as the economy produces mixed and contradictory signals; markets are priced for Goldilocks scenario in which growth is decent, inflation absent, trade uncertainties resolved and global central banks on indefinite hold; stocks and bonds have little valuation support; the 10-year real US Treasury rate, the cornerstone of market valuation, is at its year-ago level, having retraced nearly 50 basis points from the peak; S&P 500 price multiple has climbed to almost 17 times 2019 earnings estimates, which are falling; narrow credit spreads and a flat yield curve limit fixed income options; what happens to inflation, the US dollar and global capital spending are critical for further gains. **Consider** taking profits in year-to-date outperformers and rebalancing portfolios to strategic asset allocations.

Navigating No Man's Land

As we approach the end of the first quarter, investors have much to digest but probably not much to do. The Federal Reserve's early January announcement that it would pause rate hikes and scale back its balance sheet run-off has allowed the real 10-year US Treasury to fall nearly 50 basis points from a November high of 1.17%, bringing it to where it was a year ago. The falling real rate allowed an expansion in the S&P 500's price/earnings (P/E) ratio back to 17, in line with the two-year average (see *Chart of the Week,* page 3). In fact, since the beginning of the year, stocks have mostly surged, gaining more than 12% even as 2019 S&P 500 earnings estimates deteriorated.

Other asset classes are no more attractive. Nominal Treasury yields have fallen to year-to-date lows, with the 10-year bond paying 2.6%, well off its November high of 3.25%. Investment grade and high yield spreads have also narrowed, leaving limited room for excess returns. Adding Treasury duration is uninspiring given that the yield curve remains flat, with only 15 basis points separating the two-year and 10-year yields.

Upcoming Catalysts

March 19 Japan industrial production
March 19 US factory orders
March 20 FOMC meeting
March 21 Philadelphia Fed Survey
March 21 US initial jobless claims
March 21 US Leading Economic Index
March 21 Japan CPI
March 21 Euro Zone consumer confidence
March 22 US Markit Manufacturing PMI
March 22 US business inventories
March 22 Euro Zone Markit Composite PMI
March 22 Euro Zone Markit Manufacturing PMI

Please refer to important information, disclosures and qualifications at the end of this material.

Across all major asset classes, currencies and commodities included, volatility has collapsed back to the low end of cycle ranges. While high cash levels and modest investor positioning create potential for markets to go higher, this scenario discounts a Goldilocks outcome of decent growth, limited inflation, positive resolution of policy disputes (trade, debt ceiling, fiscal budgets and border walls) and global central banks that are on hold indefinitely. With limited room for incrementally dovish surprises from the Fed, extending portfolio exposures requires conviction on an end to the earnings contraction and, in turn, a strong economic rebound in the second half.

Handicapping the direction and timing of the business and market cycles is vexing given the mixed high-frequency economic reports. The data appears to rule out an imminent recession as the US composite PMI, while down from the 2018 high, remains comfortably above 50, paced largely by resilience in services. Lower mortgage rates are stabilizing housing. The February payrolls report, while disappointing on job creation, showed that the unemployment rate dropped to 3.8%, and underemployment fell to a cyclical low. The employment-to-population ratio moved to a cycle high above 60%, breaking through the 30-year average. All that suggests a solid consumer, yet retail sales remain lackluster and auto sales are at the lowest annual rate since October 2014. The savings rate is up, consumer credit defaults are climbing and the NFIB Small Business Optimism Index has failed to rebound from its fourth-quarter malaise. Equally confusing, the market itself seems schizophrenic: Reflationary proxies like copper are up solidly, but banks and financials are down nearly 30% from a year ago. Ultimately, through this muddle, the Global Investment Committee believes three variables likely hold the key to further gains: inflation, the US dollar and global capital spending.

If there is one consensus chorus out there, it is that inflation poses no threat. This view is clearly expressed in the Treasury markets where the yield on 10-year US TIPS has plummeted to 0.65% currently from 1.17% in November (see *Fixed Income Insight,* page 5). February inflation statistics also support the consensus: the Consumer Price Index was 1.5% year over year, the lowest since August 2016, and Producer Price Index was 1.9%, down from more than 3.5% last summer. Even so, core inflation measures continue to hover around 2%. The labor market remains tight, with average hourly wages at a cycle-high 3.4% annual rate. Both import and export prices are rising, up 0.6% month over month in February, reflecting the impact of tariffs. Equally compelling is that inflation appears to have been buffeted by weak oil prices last year; this year, the stronger dollar, up 8% versus a year ago, is cooling inflation. A reversal of both oil and the dollar factors could easily rattle the bond market, which is not priced either for an inflation rebound or a Fed response to it. Note that Ellen Zentner, Morgan Stanley & Co.'s chief US economist, expects an inflation-related Fed rate hike by December.

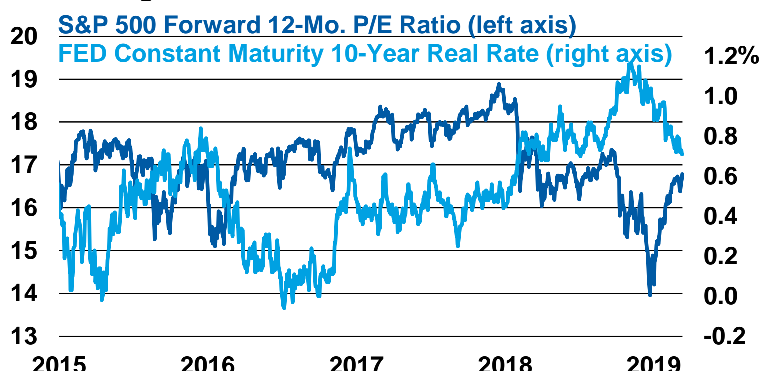
The dollar is also sitting in a precarious position that could roil markets and swing the cycle. The greenback has hovered near cycle highs yet has been unable to break through its current range even though growth differentials with the rest of the world were at 10-year wides last year, interest rate differentials were also at extremes and trade tensions accelerated the flow to dollars. On one hand, a strong dollar is a threat to easing financial conditions, to emerging market borrowers with dollar-denominated debt and to US exporters, whose sales and profits are constrained. But on the other hand, the US dollar strength has been a defensive outcome of economic and currency weakness elsewhere like sterling, which suffers from Brexit woes, or the euro, weighed down by political concerns in Italy and France. As the Fed moves to end Quantitative Tightening, we expect dollar scarcity to ease and the currency to weaken. This could become a tailwind for non-US risk assets.

Capital spending is the last swing factor. The latest durable goods report suggested a rebound in investment in January. However, uncertainty around policy, inventories and global trade alongside a murky outlook has caused business leaders to pull back. To wit, core capital goods orders are down an annualized 5.6% on a rolling three-month basis. The point is that after growing at 7% to 8% since 2017's second quarter and contributing nearly a full percentage point to US GDP, real business investment is now poised to become a headwind to growth.

Bottom Line: Markets sometimes enter phases where economic crosscurrents are so strong that direction is not discernible, most asset class valuations look fairly valued, immediate controversies are few and fully priced, and catalysts are difficult to identify. We believe we are in one such frustrating period. With both stocks and bonds discounting the Goldilocks narrative, it is hard to have strong convictions that support big overweights or underweights versus our core strategic benchmarks. This is a time to be patient and allow the market-cycle and business-cycle directions reveal themselves. **Watch** three variables that are critical for gains in the second half: a rebound in inflation, a weaker US dollar and an acceleration in global capital spending. **Consider** taking profits in year-to-date outperformers and rebalancing portfolios to strategic asset allocations. ■

Chart of the Week: Real Rates and Price/Earnings Ratios Return to 2018 Levels

The stock market's forward price/earnings (P/E) is inversely correlated with real interest rates. Last year, stock market value collapsed as interest rate hikes and Quantitative Tightening pushed the 10-year real US Treasury yield to 1.15% (see chart). Reflecting on December's technical bear market, this year's robust returns and the 180-degree reversal in monetary policy, we can see that the damage done by higher rates and lower multiples has now been reversed. The real 10-year rate is back around 70 basis points, in line with where it was in March 2018 and the P/E ratio, at close to 17, is in line with the 2018 average. The implication is that neither stocks nor bonds look mispriced and further gains in each asset class, respectively, will depend on a decisive turn in the economic outlook where the current readings are murky.



Source: Bloomberg as of March 14, 2019

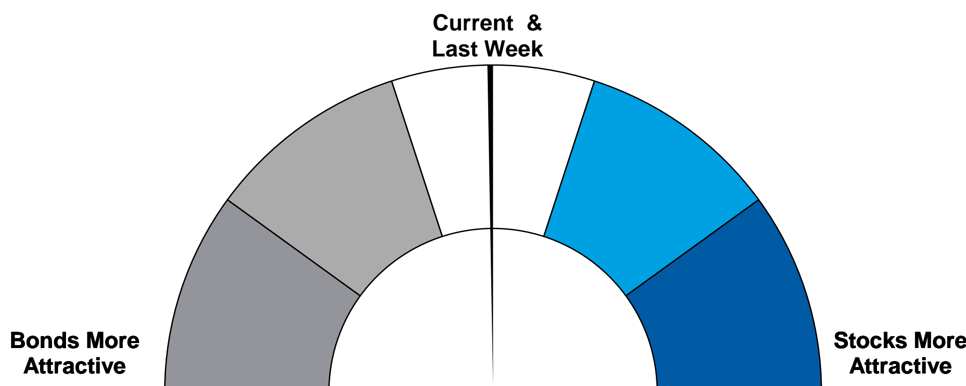
Asset Class Performance and Heat Map (as of March 15, 2019)

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	0.5	2.1	1.9	1.1	0.7	0.4	1.8	2.44	2.44	1.78	0.10	0.55	0.29	-0.05
Global Equities								**Current Div. Yld.**	**Current P/E**	**Avg. P/E[2]**				
US Large-Cap Growth	14.7	5.7	-0.9	16.7	13.5	16.8	4.6	1.04	21.6	20.8	10.0	17.0	0.90	0.89
US Large-Cap Value	11.4	4.8	-6.5	11.7	8.9	12.9	5.9	3.09	13.6	13.8	8.7	13.9	0.90	0.88
US Mid-Cap Growth	17.7	2.9	-7.9	13.3	8.8	16.2	6.8	0.63	21.3	26.5	10.7	22.6	0.84	0.81
US Mid-Cap Value	13.6	0.7	-11.4	13.6	9.1	15.7	9.4	2.86	14.1	14.4	8.1	16.0	0.87	0.88
US Small-Cap Growth	18.0	5.5	-6.6	17.2	9.0	17.2	9.6	0.59	27.5	24.0	13.6	21.3	0.79	0.84
US Small-Cap Value	14.6	-0.2	-13.3	13.3	7.7	15.5	9.5	2.72	15.9	17.2	11.5	17.2	0.83	0.85
Europe Equity	12.3	-3.4	-14.3	7.3	2.1	8.7	4.1	3.73	13.5	13.9	9.3	17.9	0.83	0.94
Japan Equity	5.7	-9.5	-12.6	8.9	5.5	7.0	3.3	2.41	12.5	19.2	13.1	16.4	0.49	0.70
Asia Pacific ex Japan Equity	11.2	-0.4	-10.2	12.8	4.8	11.9	8.9	3.88	15.1	14.5	8.5	19.7	0.41	0.88
Emerging Markets	9.8	-10.6	-14.2	15.3	5.2	10.0	9.4	2.75	12.0	11.2	11.9	21.9	0.68	0.87
Global Fixed Income								**Current YTM**	**Current Spread**	**Avg. Spread[2]**				
Short-Term Fixed Income	0.8	2.8	1.6	1.2	1.1	1.5	3.1	2.61	15.0	31.0	0.7	1.4	-0.23	-0.14
US Fixed Income	1.7	3.7	0.0	2.0	2.4	3.7	4.6	3.11	45.0	54.0	2.5	3.4	-0.12	-0.04
International Fixed Income	1.2	-3.4	-1.9	3.6	0.5	2.7	3.5	1.15	50.0	49.0	2.9	7.9	0.28	0.32
Inflation-Protected Securities	3.7	-1.6	-4.2	4.3	1.9	4.4	5.5	-	-	-	4.4	7.7	0.38	0.45
High Yield	6.1	2.0	-4.1	8.7	4.3	11.0	8.1	6.62	425.0	499.0	2.5	9.5	0.73	0.75
Emerging Markets Fixed. Inc.	3.9	-5.7	-6.2	7.7	1.1	4.6	8.1	6.22	274.0	331.5	5.5	11.6	0.73	0.66
Alternative Investments								**Current Div. Yld.**						
Real Estate/REITs	12.7	9.8	-5.5	9.9	7.7	13.0	9.3	3.92	-	-	5.7	17.9	0.53	0.80
MLP/Energy Infrastructure[3]	14.7	9.0	-12.4	7.1	-5.2	9.3	-	7.41	-	-	14.2	18.7	0.31	0.58
Commodities ex Prec. Metals	8.1	-4.8	-12.5	2.2	-9.3	-3.8	1.1	-	-	-	9.2	16.8	0.35	0.47
Precious Metals	0.9	-3.2	-4.6	4.5	-0.6	2.8	7.0	-	-	-	14.4	19.1	0.20	0.19
Hedged Strategies[4]	2.9	-4.1	-6.7	2.1	-0.1	1.7	-	-	-	-	1.5	6.0	0.80	0.65
Managed Futures[5]	-0.1	-2.0	-3.2	-2.2	-0.5	-2.3	-	-	-	-	3.9	7.8	-0.10	0.18
S&P 500	13.1	4.8	-4.4	14.0	11.0	15.0	5.8	1.88	16.4	15.8	9.04	14.5	0.92	0.95
Russell 2000	15.5	-0.1	-11.0	14.7	7.3	14.5	7.9	1.32	25.9	20.3	13.88	19.5	0.80	0.82
MSCI EAFE	10.5	-4.5	-13.4	8.3	3.1	8.6	4.3	3.42	13.4	14.7	8.02	16.3	0.85	0.96
MSCI AC World	12.2	-0.1	-8.9	12.2	7.3	11.9	5.3	2.56	14.8	15.2	7.85	15.3	1.00	1.00

Note: Performance values calculated using USD. 1. As of Feb. 28, 2019. 2. 20-year average as of Feb. 28, 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.

Valuation	Volatility	Correlation
Cheap	Low	Low
Moderate	High	High
Expensive		

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

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

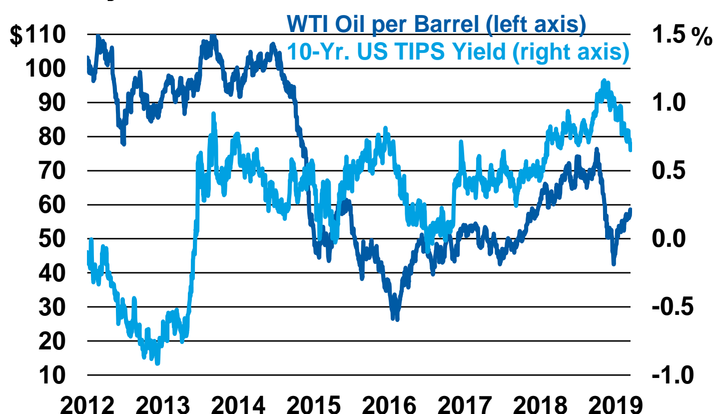
Note: + Indicates that a rise in the indicator is linked to a more favorable outlook for risk assets; - indicates that a rise in the indicator is linked to a less favorable outlook for risk assets. Color coding is set in accordance with the impact on risk assets.

Legend: 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 March 15, 2019

Fixed Income Insight: Inflation Expectations May Follow Oil Prices

The Federal Reserve's about-face in January on further rate hikes and balance sheet normalization was premised on a severe tightening in financial conditions. With markets having rebounded and financial conditions easing, future Fed decisions will have to hinge on employment and inflation data. Recent inflation data, which shows deceleration in price gains, was cheered by bond bulls, who have crushed inflation expectations during the past six months. While some may contend that weak inflation readings are a function of slower global growth and thus will keep the Fed on hold, we are concerned that the decline in inflation may be nothing more than a lagged response to other factors like oil prices (see chart). With oil prices now heading back toward $60 per barrel, wages still accelerating and the potential for the US dollar to weaken, inflation could rebound in the second half and force the Fed's hand.



Source: Bloomberg as of March 15, 2019

Government Debt Monitor

	US			
	Yield (%)			Total Return (%)
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	2.44	0.00	0.08	0.49
2-Year	2.46	0.00	-0.03	0.57
5-Year	2.43	0.00	-0.08	1.00
10-Year	2.63	0.00	-0.05	1.38
30-Year	3.05	0.03	0.03	0.84
2-Yr./10-Yr. Spread (bp)	17	0.21	-2.68	-
10-Yr. TIPS Breakeven (bp)	194	3.70	22.58	-
Interest Rate Volatility† (bp)	45	-0.59	-21.34	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range** Rich	Cheap
Investment Grade	MBS*	5.42	3.26	36	19	39
	AAA	5.78	2.84	17	11	18
	AA	6.19	3.14	57	46	76
	A	7.39	3.51	91	68	122
	BBB	7.56	4.21	160	111	201
High Yield	BB	4.13	4.92	226	187	365
	B	3.62	6.53	385	299	542
	CCC	3.51	10.69	806	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 March 15, 2019

Government Debt Monitor

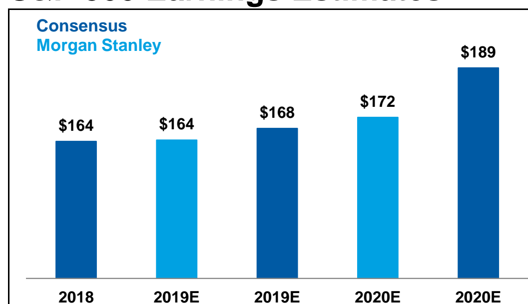
	Global			
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.47	0.06	-0.24	3.07
Germany	0.08	0.02	-0.16	2.08
Japan	-0.05	-0.01	-0.04	0.98
Spain	1.19	0.14	-0.23	3.30
UK	1.22	0.04	-0.05	1.11
3-Month LIBOR	2.61	0.02	-0.19	-
	US Tax Exempt			
10-Year AAA Muni	2.08	-0.08	-0.24	1.80
10-Yr. Muni/UST Ratio	80.28	-1.76	-6.04	-

Benchmark Returns

	Total Returns (%)		
Index	YTD	MTD	2018
Bloomberg Barclays US Aggregate	1.72	0.71	0.01
Bloomberg Barclays US MBS	1.35	0.65	0.99
Bloomberg Barclays US IG Corporate	3.46	0.86	-2.51
Bloomberg Barclays Municipal	1.80	0.50	1.28
Bloomberg Barclays US High Yield	6.59	0.31	-2.08
Bloomberg Barclays Global Aggregate	1.37	0.43	-1.20
JPMorgan Emerging Market	5.66	0.56	-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 March 15, 2019

S&P 500 Earnings Estimates



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of March 15, 2019

MS & Co. S&P 500 Price Target: Year-End 2019

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	$180	16.5	3,000	6.3%
Base Case	$172	16.0	2,750	-2.6%
Bear Case	$158	15.0	2,400	-15.0%
	Current S&P 500 Price		2,822	

Note: 2019 price targets are based on estimated 2020 earnings.
Source: Thomson Reuters, Morgan Stanley & Co. Research as of March 15, 2019

S&P 500 Sector Performance and Valuation (as of March 15, 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	***2.95***	***13.11***	***4.80***	***1.88***		***15.7***	***16.4***
Energy	3.23	15.32	1.45	3.22	0.98	17.3	**18.0**
Materials	1.72	10.21	-4.25	1.99	0.97	13.9	**15.6**
Industrials	0.31	15.67	-0.65	1.94	1.02	16.1	**15.4**
Consumer Discretionary	2.65	12.30	5.71	1.25	1.15	17.9	**20.2**
Consumer Staples	2.38	9.27	6.55	2.92	0.52	16.8	**18.4**
Health Care	3.29	6.86	9.57	1.64	0.93	16.6	**15.8**
Financials	3.01	12.40	-5.76	1.93	0.93	12.6	**11.7**
Information Technology	4.89	18.20	6.63	1.45	1.36	20.2	**18.2**
Telecommunication Services	2.31	14.60	5.65	1.41	0.88	15.9	**17.7**
Utilities	1.90	10.87	21.09	3.13	0.19	14.3	**18.6**
Real Estate	2.41	15.10	18.46	3.05	0.47	15.4	**18.9**

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

Performance of Style and Cap Pairs (as of March 15, 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 March 15, 2019)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2018E	2019E	2020E	Q2 '19E	Q4 '19E	2018E	2019E	2020E	Q1 '19E	Q3 '19E	Q1 '20E
Global	3.7	3.4	3.5			2.8	2.7	2.9			
US	2.9	2.1	2.2	2.40	2.35	2.4	1.8	2.6			
Euro Zone	1.9	1.0	1.3			1.8	1.3	1.5	1.14	1.22	1.27
UK	1.4	1.2	1.5	1.55	1.65	2.5	2.0	2.0	1.32	1.47	1.54
Japan	0.7	0.8	0.6	0.20	0.18	1.0	0.4	0.6	109	104	100
Emerging Markets	4.8	4.7	4.8			3.4	3.5	3.5			
China	6.6	6.3	6.1			2.1	2.4	2.2	6.71	6.57	6.50

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of March 15, 2019)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
Japan	↓	↓	↓	↓	↑	↑	↓	Improving Profits and Weaker Yen
Europe	↓	↓	↓	↓	↑	↑	↑	Cyclical Headwinds from China Trade Links Abating
China	↓	↑	↓	↑	↑	↑	↑	Soft Landing Better than Expected
Brazil	↑	↓	↑	↑	↓	↑	↓	Political Stability Supports Recovery

Risk Asset Positive	Neutral	Risk Asset Negative

Note: Text in a factor box denotes a color change; for further explanation of the chart, see page 9.
Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending March 15, 2019)

	Positives	Negatives
Global Growth	• NFIB Small Business Optimism Index beat estimates in March at 102.5 vs. 101.7 projected • US import and export prices both up 0.6% in February vs. projections of 0.3% and 0.1%, respectively • January US retail sales grew 0.2% month over month vs. 0.0% expected • US durable goods orders rose 0.4% for January vs. an expected decline of 0.4%	• Empire State Manufacturing Survey disappointed in March at 3.7 vs. 10.0 forecast • February US industrial production declined 0.4% month over month, missing forecast for expected increase of 0.1% • US new home sales missed forecast in January at 607,000 units vs. 622,000 expected
Inflation	• February US Consumer Price Index came in 1.5% year over year vs. 1.6% forecast • February US Producer Price Index at 1.9% year over year down from 2.0% in January • Japan Producer Price Index rose 0.8% year over year in February vs. 0.7% forecast	
Sentiment and Flows	• U. of M. Consumer Sentiment Index exceeded expectations in March at 97.8 vs. 95.6 projected	

Source: Morgan Stanley Wealth Management GIC

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Underweight	After the worst December since 1931, the S&P 500 had its best January since 1987. 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 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 the US dollar appearing to have made a cyclical top, global nominal GDP growth could trough in the first quarter as China's fiscal stimulus takes hold. This should disproportionately benefit 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. With the Quantitative Easing era now over, long-duration bonds are unlikely to provide the same level of portfolio diversification benefits as they have in the past. Therefore, we remain underweight long-duration bonds.
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 oil prices weighing on inflation expectations, these securities still offer relative value in the context of our expectations for global growth to accelerate, oil prices to trough and the US dollar to top. In short, inflation risk is underpriced.
High Yield	Underweight	High yield bonds have recently fallen victim to the rolling bear market we predicted for global asset markets in 2018. They now offer better risk/reward, but equities still look more attractive given their recent correction. With a zero weighting in high yield since January 2018, we will revisit our allocation to high yield bonds during 2019 if spreads continue to widen.
Alternative Investments	**Relative Weight Within Alternative Investments**	
REITs	Underweight	Real estate investment trusts (REITs) have rebounded in the second half of 2018 as global growth fears returned 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 sharply in the first half of 2018 only to give it all back as oil prices collapsed in the fourth quarter. With oil prices recovering again and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. The supply shortages from Iranian sanctions should also be supportive for fracking activity and pipeline construction, both of which could 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 March 15, 2019

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	• 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 index, indicator and survey definitions referenced in this report please visit the following:
http://www.morganstanleyfa.com/public/projectfiles/id.pdf

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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