The GIC Weekly

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What We Are Talking About

- **A Wake-Up Call for Risk.** In April, markets discounted the near certainty of a China/US trade pact by midyear, which now looks at risk; failure to reach a deal could lead to escalating tariffs, which threaten growth and inflation; recent Washington events may reawaken investors to rising geopolitical uncertainty; any wavering in corporate confidence could imperil capital spending, while an investor flight to safety would strengthen the US dollar; any Fed actions to cushion a trade fight could accelerate recession fears; China's hand is stronger now than in 2018; its economic stimulus seems to be working and its trade relationships with the rest of the world are strengthening, while the US is in an election cycle. **Consider** using market volatility to buy victims of escalating trade tensions. China A-shares and emerging markets could be the biggest beneficiaries of a deal.

A Wake-Up Call for Risk

Through April, this year was shaping up to be one for the record books, with the S&P 500 up almost 17.5%. Investors easily found evidence of a Goldilocks scenario (see *The GIC Weekly,* May 6). The Federal Reserve had completely shifted its policy stance to dovish from hawkish, inflation was benign, economic growth was slowing but much better than expected and prospects were good for a swift resolution of the US/China trade dispute. Policy uncertainty, which skyrocketed during 2018's fourth quarter sell-off, subsided and market volatility measures such the VIX returned to near- cycle lows.

In May, however, investors have had to contend with several somewhat unexpected developments. First, in an almost orchestrated act of independence and defiance of White House pressure, Fed Chair Jerome Powell made it clear that he did not support the so-called "insurance cuts" already discounted by the Treasury futures markets. Rather, he reiterated the policy of data dependency and proclaimed that the Fed has no bias at present toward either hiking or cutting rates. Then, on May 5, President Trump suddenly announced his intention to go ahead with raising tariffs to 25% from the current rate of 10% on $200 billion worth of imports because of what he perceived as China's backtracking on commitments made during negotiations. The announcement raised

Upcoming Catalysts

May 14 NFIB Small Business Optimism Index
May 14 Euro Zone industrial production
May 14 Euro Zone ZEW Economic Sentiment
May 15 Empire State Manufacturing Survey
May 15 US industrial production
May 15 US housing starts
May 15 Euro Zone first quarter GDP
May 15 Japan PPI
May 16 US building permits
May 16 Philadelphia Fed Survey
May 16 US initial jobless claims
May 17 US leading indicators
May 17 U. of M. Consumer Sentiment Index
May 17 Euro Zone CPI

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

fears of a further escalation in trade tensions. Those higher tariffs kicked in on Friday.

Although most investor anxiety has centered on Fed independence and trade talks, those are not the only concerns. The Global Investment Committee (GIC) believes that Fed/China and geopolitics are inexorably intertwined. Consider that during the past two weeks, Secretary of State Mike Pompeo said the US would not extend waivers of Iran sanctions, which allow China and several other countries to purchase Iranian oil. That roiled energy markets, as did the news that the US dispatched an aircraft carrier to the Middle East in order to, in the words of John Bolton, the president's national security advisor, "send a message to Iran." The failed attempt at a coup in Venezuela once again raises questions about global leadership and alliances, and North Korea's missile launches seemed to punctuate the turnabout in the US/China talks. We doubt these developments are coincidences. Stability in the Sino/American relationship, which is critical for capital markets, has become evermore multi-dimensional. While it remains our base case that a trade deal will ultimately be reached, the GIC believes the potential for a much wider range of outcomes needs to be discounted, as we believe that the dynamics at work now are markedly different than they were in 2018.

For starters, the economic trajectories of both China and the US are different. Last year, when President Trump made the initial volley, it was on the heels of historic tax reform and fiscal stimulus that was fueling the best GDP growth of the cycle. On the other hand, China was attempting to recalibrate the structural reforms that had slowed growth, setting up the need to fine-tune policy and engineer a soft landing. For the global economy, the US trade dispute was a gut punch that had implications of higher costs, damaged supply chains, swelling inventories and an 8% rise in the US dollar. This year, evidence is mounting that China is in a stronger economic position, making President Xi's ability to weather an extensive fight much greater. In contrast, US growth is structurally decelerating, Congress is approaching another debt-ceiling battle and the 2020 presidential race is taking shape.

As we are writing this, China is reportedly preparing retaliatory measures, and we surmise they will be of a size and strength to sustain their own domestic recovery. Specifically, investors should consider that China may pursue some combination of currency depreciation, fiscal stimulus, and/or interest rate cuts to wait out a deal. As it now stands, Morgan Stanley & Co. economists estimate the impact of a prolonged disagreement could be an annualized 0.3% hit to Chinese GDP, and a 0.1%-to-0.2% hit tor US GDP. Furthermore, US consumer and investor appetite for a bruising stand-off may be limited now as the politically convenient but completely unsubstantiated link between trade deficits and unemployment and job loss flies in the face of a 50-year low in the US unemployment rate (*Chart of the Week,* see page 3). At the same time, US manufacturing is already facing bloated inventories and an ISM report that was at its lowest since late 2016.

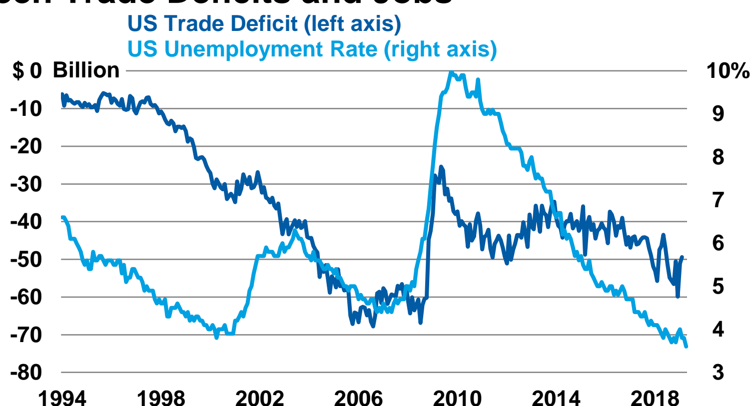
Second, US corporate profit margins are already fragile and rolling off their peaks. In fact, the GIC expects an earnings recession during the next several quarters. While the additional headwinds to input costs, disruption to supply chains and the drag on exports are obvious, a more important implication is what the trade dispute does for capital spending. Last year's surge in capital spending and in mergers and acquisitions made an impact on productivity. In the first quarter, productivity scored a 2.6% year-over-year gain—the best in four years. But with uncertainty rising, capital spending plans, which had already been deteriorating, could collapse. If so, that would further dampen economic growth.

A final point centers on the Fed. It is no secret that Washington wants lower interest rates to fuel market liquidity and to help fund the US debt, which has been accruing at the rate of $1.3 trillion per year as foreign investors are losing their appetite for it. While a long stand-off could potentially be buffered in the short term by rate cuts, the wisdom of that move is questionable considering tariffs and deglobalization are unequivocally inflationary. In 2018, the inflationary impulse was offset by a stronger US dollar; this year, the US Dollar Index is unchanged, which raises questions about whether foreign investors support Washington's moves. Not only would a pre-emptive rate cut reopen questions of Fed independence, it would leave the central bank with less ammunition to fight a recessionary downturn later in the cycle.

Bottom Line: Threats of re-escalation in the US/China trade battle are important as they are indicative of a broader narrative of rising geopolitical tensions that have policy and market implications. Reawakening volatility should be welcomed by investors as new risk premiums are set to account for the fragility of global growth, trade and inflation against a backdrop of expanding valuation multiples. China may have more wherewithal to withstand a prolonged dispute than in 2018. A lingering battle could be a headwind to corporate profit margins and investment. **Watch** capital spending intentions and the strength of the dollar as signposts of progress in trade negotiations. **Consider** using market volatility to buy victims of escalating trade tensions. China A-shares and the emerging markets could be the biggest beneficiaries of a deal. ■

Chart of the Week: No Correlation Between Trade Deficits and Jobs

For decades it has been politically convenient for elected officials of all stripes to claim that there are linkages between the US trade deficit and US jobs. Our examination says otherwise. Between 1994 and 2009 the US trade deficit steadily expanded to $70 billion per month from $10 billion per month while unemployment cycled three times between 4.0% and 6.5% (see chart). During the past decade, monthly trade deficits have ranged between $40 billion and $50 billion, yet unemployment declined dramatically to a 50-year low last month. Unfair trade practices by China may be worth fighting, but not trade deficits. More important is that for growth, inflation and capital investment, trade disputes are negative.



Source: Bloomberg as of May 9, 2019

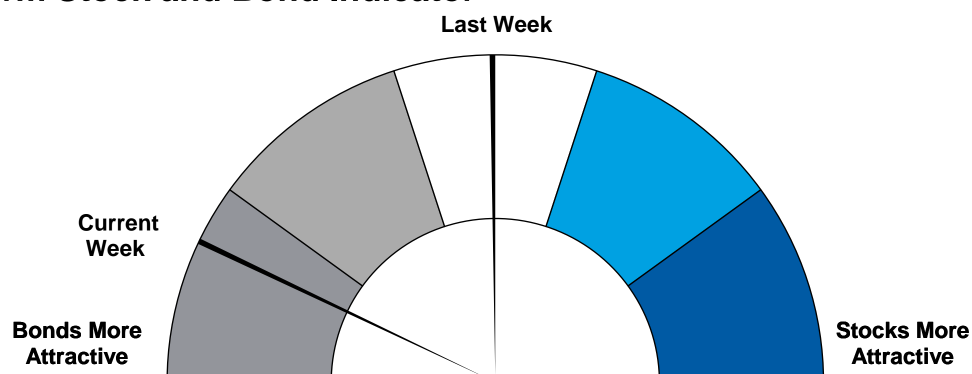
Asset Class Performance and Heat Map (as of May 10, 2019)

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	0.9	2.2	1.3	0.7	0.5	0.3	1.9	2.45	2.45	1.76	0.10	0.55	-0.05	-0.05
Global Equities								**Current Div. Yld.**	**Current P/E**	**Avg. P/E[2]**				
US Large-Cap Growth	19.0	9.7	21.0	14.7	16.5	12.4	6.1	0.97	22.1	20.7	10.2	17.0	0.87	0.89
US Large-Cap Value	12.2	7.1	8.1	10.5	10.2	8.8	6.3	3.02	13.5	13.7	8.4	13.9	0.91	0.88
US Mid-Cap Growth	21.9	6.9	17.5	10.1	11.8	10.6	7.9	0.62	21.8	26.4	11.8	22.6	0.75	0.81
US Mid-Cap Value	15.6	3.0	9.6	11.3	11.4	11.3	9.3	2.72	14.2	14.4	10.6	16.0	0.81	0.88
US Small-Cap Growth	20.5	6.0	24.4	12.2	13.0	11.9	10.4	0.57	27.9	24.0	13.7	21.3	0.74	0.84
US Small-Cap Value	16.2	-0.8	15.1	11.9	11.0	11.7	9.9	2.67	16.3	17.2	12.9	17.2	0.77	0.85
Europe Equity	11.8	-5.6	5.5	4.9	6.0	3.6	4.6	3.64	13.3	13.8	9.0	17.9	0.83	0.94
Japan Equity	5.6	-9.1	15.0	6.6	7.7	4.2	4.1	2.39	12.2	18.9	9.2	16.1	0.26	0.70
Asia Pacific ex Japan Equity	12.3	1.1	12.9	7.8	5.9	5.6	10.0	3.84	15.0	14.5	9.5	19.6	0.43	0.88
Emerging Markets	7.6	-8.1	14.4	9.3	5.6	3.2	8.8	2.66	11.9	11.2	11.1	21.7	0.65	0.87
Global Fixed Income								**Current YTM**	**Current Spread**	**Avg. Spread[2]**				
Short-Term Fixed Income	1.5	3.5	0.2	0.7	0.8	1.6	3.2	2.43	15.0	31.0	0.8	1.4	-0.10	-0.15
US Fixed Income	3.2	5.7	-0.4	1.5	2.2	3.7	4.7	2.94	46.0	54.0	2.3	3.4	-0.15	-0.03
International Fixed Income	1.9	0.2	3.0	3.1	0.7	1.9	4.0	1.09	49.0	49.0	3.1	7.9	-0.22	0.32
Inflation-Protected Securities	3.9	1.1	1.6	2.4	1.8	2.4	5.7	-	-	-	4.8	7.7	-0.05	0.45
High Yield	6.9	4.0	1.7	6.2	5.0	8.2	7.6	6.56	435.0	499.0	1.9	9.5	0.60	0.75
Emerging Markets Fixed. Inc.	2.5	-2.8	1.0	3.5	-0.9	2.2	7.1	6.23	283.0	330.5	6.3	11.6	0.51	0.66
Alternative Investments								**Current Div. Yld.**						
Real Estate/REITs	13.6	7.7	7.6	6.3	6.8	5.5	9.2	3.93	-	-	9.3	17.9	0.39	0.80
MLP/Energy Infrastructure[3]	17.7	4.7	-3.7	-2.8	-2.8	7.3	-	7.48	-	-	18.6	18.7	0.35	0.58
Commodities ex Prec. Metals	4.3	-12.1	13.3	-2.6	-8.0	-9.5	0.7	-	-	-	7.0	16.7	0.49	0.47
Precious Metals	-1.0	-5.5	-0.6	2.5	-2.9	1.3	6.6	-	-	-	10.0	19.1	0.18	0.19
Hedged Strategies[4]	2.7	-3.8	2.9	0.8	1.1	-0.1	-	-	-	-	1.5	5.9	0.79	0.65
Managed Futures[5]	-1.0	-4.1	0.9	-2.1	-0.1	-2.1	-	-	-	-	3.0	7.8	0.49	0.18
S&P 500	15.8	8.0	14.4	12.5	13.1	10.7	6.7	1.90	16.5	15.7	8.82	14.5	0.94	0.95
Russell 2000	17.2	-0.6	20.8	12.0	11.3	10.4	8.6	1.31	25.9	20.3	14.45	19.5	0.75	0.82
MSCI EAFE	10.3	-5.6	8.5	5.5	6.4	3.9	4.8	3.35	13.2	14.6	6.84	16.3	0.85	0.96
MSCI AC World	13.3	1.4	12.4	9.5	9.6	7.0	6.0	2.47	14.7	15.2	7.38	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.

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	Very Negative	Very Positive	Very Negative	Very Negative	Neutral	Very Negative	Neutral
Last Week	Neutral	Neutral	Very Positive	Neutral	Very Negative	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	Risk Off
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	Risk Off
Investment Grade Spreads (-)	Liquidity	Neutral
Financial Conditions (-)	Liquidity	Risk Off
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Neutral
Large vs. Small Performance (-)	Valuation & Market Behavior	Risk Off
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 Off
Implied Currency Volatility (-)	Sentiment	Risk Off
Five-Yr. Macro Sensitivity (-)	Sentiment	Risk Off
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Neutral
Cumulative Advance/Decline (+)	Technicals	Risk Off
S&P 500 Put/Call Ratio (-)	Technicals	Neutral
Emerging Market Fund Flows (+)	Technicals	Risk Off
Smart Money Flow Index (+)	Technicals	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.

- 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 May 10, 2019

Fixed Income Insight: In Credit, Low Quality Still Leads

The US' decision to raise tariffs on $200 billion of Chinese imports to 25% from 10% cost US stock markets about 3% and Chinese markets more than 12%. In the fixed income market, investors seem to be replaying the 2018 playbook, with credit default swap spreads mirroring the action of last spring when the cost to insure emerging market (EM) debt expanded by about 40 basis points in the first month following US trade escalation (see chart). However, things may be different this time. Not only are EM economies stronger, but the US dollar, unlike a year ago, has not rallied. In fact, the US Dollar Index is 1% lower. A weaker dollar could help EM issuers of dollar-denominated debt. That prospect has actually helped contain the damage to EM bond spreads, which have decoupled from credit default swap spreads and are at roughly the same levels as a month ago.

Source: Bloomberg as of May 10, 2019

Government Debt Monitor

	US			
	Yield (%)			Total Return (%)
Treasury Benchmark	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
3-Month	2.42	0.00	0.06	0.87
2-Year	2.27	-0.07	-0.22	1.25
5-Year	2.26	-0.06	-0.25	2.11
10-Year	2.47	-0.06	-0.22	2.99
30-Year	2.89	-0.03	-0.13	4.29
2-Yr./10-Yr. Spread (bp)	20	0.91	0.47	-
10-Yr. TIPS Breakeven (bp)	189	-2.49	17.20	-
Interest Rate Volatility† (bp)	53	7.71	-13.09	-

Fixed Income Spread Dashboard

		Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range** Rich	Cheap
Investment Grade	**MBS***	4.84	3.11	43	20	43
	AAA	5.61	2.68	19	11	19
	AA	6.33	2.99	58	46	76
	A	7.41	3.34	90	68	122
	BBB	7.63	3.98	152	111	201
High Yield	**BB**	4.08	4.93	242	187	365
	B	3.56	6.37	384	299	542
	CCC	3.51	9.97	749	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 10, 2019

Government Debt Monitor

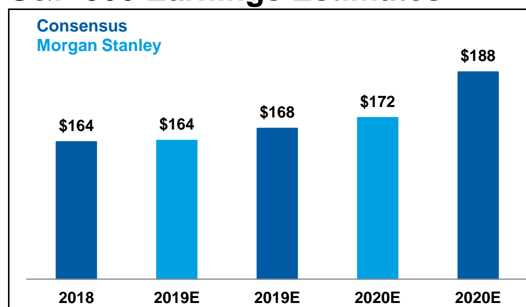
	Global			
	Yield (%)			Total Return (%)*
10-Year Govt. Bond	**Current**	**ΔWTD**	**ΔYTD**	**YTD**
France	0.35	-0.03	-0.36	4.40
Germany	-0.05	-0.07	-0.28	3.63
Japan	-0.06	-0.01	-0.05	1.45
Spain	0.98	-0.01	-0.44	5.63
UK	1.13	-0.08	-0.14	2.18
3-Month LIBOR	2.53	-0.03	-0.28	-
US Tax Exempt				
10-Year AAA Muni	1.78	-0.38	-0.54	3.92
10-Yr. Muni/UST Ratio	72.07	-9.98	-14.25	-

Benchmark Returns

	Total Returns (%)		
Index	**YTD**	**MTD**	**2018**
Bloomberg Barclays US Aggregate	3.22	0.25	0.01
Bloomberg Barclays US MBS	2.44	0.33	0.99
Bloomberg Barclays US IG Corporate	5.69	-0.02	-2.51
Bloomberg Barclays Municipal	3.92	0.61	1.28
Bloomberg Barclays US High Yield	8.25	-0.49	-2.08
Bloomberg Barclays Global Aggregate	2.39	0.48	-1.20
JPMorgan Emerging Market	6.69	-0.03	-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 10, 2019

S&P 500 Earnings Estimates



Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of May 10, 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	4.1%
Base Case	$172	16.0	2,750	-4.6%
Bear Case	$158	15.0	2,400	-16..7%
	Current S&P 500 Price		2,881	

Note: 2019 price targets are based on estimated 2020 earnings.
Source: Thomson Reuters, Morgan Stanley & Co. Research as of May 10, 2019

S&P 500 Sector Performance and Valuation (as of May 10, 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	***-2.10***	***15.77***	***7.99***	***1.89***		***15.7***	***16.5***
Energy	-0.27	12.67	-13.72	3.38	1.02	17.2	**16.2**
Materials	-2.80	9.61	-4.45	2.28	0.97	13.9	**15.9**
Industrials	-2.74	19.12	4.52	1.93	1.05	16.1	**15.9**
Consumer Discretionary	-2.50	19.54	13.15	1.19	1.17	17.9	**21.1**
Consumer Staples	-0.31	13.86	19.45	2.85	0.50	16.8	**19.1**
Health Care	-1.47	3.22	10.43	1.73	0.92	16.5	**14.9**
Financials	-2.17	15.95	-0.82	1.98	0.93	12.6	**11.9**
Information Technology	-3.45	23.35	10.18	1.43	1.35	20.1	**18.8**
Telecommunication Services	-1.86	19.13	17.39	1.37	0.97	15.8	**17.9**
Utilities	-0.62	10.41	19.38	3.18	0.20	14.3	**18.3**
Real Estate	-0.70	17.20	18.33	3.05	0.50	15.4	**19.0**

*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 10, 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 May 10, 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	Q2 ’19E	Q4 ’19E	Q2 ’20E
Global	3.7	3.4	3.5			2.8	2.6	2.9			
US	2.9	2.1	2.2	2.40	2.25	2.4	1.8	2.6			
Euro Zone	1.8	1.0	1.3			1.8	1.3	1.5	1.17	1.25	1.30
UK	1.4	1.2	1.5	1.55	1.65	2.5	2.0	2.1	1.38	1.52	1.56
Japan	0.8	0.8	0.6	0.00	-0.05	1.0	0.4	0.6	106	102	98
Emerging Markets	4.8	4.7	4.8			3.4	3.3	3.5			
China	6.6	6.3	6.1			2.1	2.4	2.2	6.63	6.55	6.45

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of May 10, 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	↑	↓	↑	↓	↓	↓	↑	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; for further explanation of the chart, see page 9.
Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending May 10, 2019)

	Positives	Negatives
Global Growth	• March US trade balance beat estimates at -$50.0 billion vs. -$50.1 billion forecast • Euro Zone retail sales came in at 1.9% year over year in April vs. 1.8% expected	• US weekly initial jobless claims at 228,000 vs. 220,000 projected • China trade balance plunged to $13.8 billion in April, vs. $34.6 billion forecast • For April, China exports fell 2.7% year over year vs. an expected gain of 3.0%; imports rose 4.0% year over year vs. 2.1% expected decline • France industrial production missed forecast in March at -0.9% year over vs. -0.1% projected • Germany factory orders came in at -6.0% year over year in March vs. -5.4% estimate
Inflation	• April US CPI at 2.0% year over year vs. 2.1% forecast; PPI at 2.2% year over year vs. 2.3% forecast • China PPI rose 0.9% year over year in April, beating estimate of 0.6%	

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 10 of this report.

Source: Morgan Stanley Wealth Management GIC as of May 10, 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:
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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