

The GIC Weekly



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Upcoming Catalysts

May 21 Chicago Fed National Activity Index
May 22 Richmond Fed Manufacturing Survey
May 22 Japan Manufacturing PMI
May 23 Markit US Manufacturing PMI
May 23 Markit US Composite PMI
May 23 US new home sales
May 23 FOMC May meeting minutes
May 23 Euro Zone Markit Composite PMI
May 23 Euro Zone Markit Manufacturing PMI
May 23 Euro Zone consumer confidence
May 24 US initial jobless claims
May 24 FHFA House Price Index
May 24 US existing home sales
May 24 Kansas City Fed Manufacturing Survey
May 25 US durable goods orders
May 25 U. of M. Consumer Sentiment Index

What We Are Talking About

- The Latest Lurch Higher in Interest Rates.** Rapid rise in US Treasury rates, with 10-year yield near 3.1%, is not yet a headwind for equities; volatility remains well-behaved and inversion of yield curve not imminent; even then, industrial production can hold up for nine to 18 months; unlike the upward move in yields in the first quarter, real rates are driving the latest changes, a trend that extends to the 30-year bond, steepening the yield curve; this is positive for the economic outlook and the reflation trade toward cyclicals and the value style, but increases risk of tighter financial conditions; soaring US fiscal deficit requires Treasury issuance at a time when foreign investors are reducing their US dollar reserves; simultaneous upward moves in the dollar and oil prices could cause a liquidity squeeze. **Consider** adding cash and short-duration bonds. Yields on long-dated Treasuries are not high enough to pay investors for their time and future uncertainty.

The Latest Lurch Higher in Interest Rates

The recent surge in the 10-year US Treasury yield to 3.1% puts the benchmark risk-free rate at its highest since 2011, prompting many questions. What has caused the sudden move? Is this going to be a headwind for stocks? How close are we to an interest rate peak? When will the yield curve invert and what does that say about a recession?

To answer these questions, we start with three observations that give us comfort that the bull market in stocks is not in peril. First, this episode of bond market repricing, unlike the February-March jump, has not been accompanied by acceleration in stock market volatility. In fact, as the 10-year Treasury yield rose 12 basis points in one week, the VIX declined to 13 from 15 and the S&P 500 stock index advanced 2%. This move is more indicative of a reflationary impulse in which bond yields are positively correlated to stock moves. A second factor supporting the reflationary theme is that rates in other government bond markets are also on the upswing: the yield on the 10-year German Bund advanced eight basis points in the past 10 days to 64 basis points; the UK 10 year gilt, up 16 basis



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points to 1.56%; and the 10-year Japanese government bond, up 4.5 basis points to 6.3 basis points. Finally, this repricing in Treasuries seems unrelated to any change in guidance from the Federal Reserve. Recent speeches from Fed policymakers indicated no change in policy.

What has changed is the market's assessment of the Fed's intentions to hike the federal funds rate three more times this year; it's nearly 60%, up from 33% in the past week. Almost all of the change in views about the Fed's intentions has played out in the two-year note, which is now 2.55%. This has caused a "bear flattening" that has reduced the spread between two-year and 10-year bonds and raised questions about yield curve inversion, often an early warning sign of recession. However, yield curve inversion is not to be feared. Industrial production—a strong harbinger of S&P 500 earnings and recession—tends not to turn down for nine to 18 months after the inversion (*Chart of the Week*, see page 3). So what is driving the 10-year yield? The Global Investment Committee takes a systematic approach to analyzing the drivers of rates: forecasts of real growth, or real rates; inflation expectations; and technical flow factors. On each, we see the justification for the recent move higher.

One of this year's debates has been about the durability of the global synchronous recovery that began in mid-2017. Is it petering out or just pausing? April and preliminary May data point to an acceleration in second-quarter growth, which would show that the fiscal stimulus still has legs. It also indicates that growth normalization may extend to the future, lifting rates on longer-dated bonds. In the US, manufacturing and production are strengthening. April industrial production was a better-than-expected 0.7% month over month and the rolling three-month annualized growth rate for manufacturing is 4.6%, a four-month high. Both the Empire State Manufacturing Survey and the Philadelphia Fed Survey also rebounded strongly, especially in new orders. Capital spending is also on solid ground as the surge in oil prices stimulated spending in the shale/hydraulic fracking ecosystem. Retail sales, too, are showing signs of rebound, beating expectations and annualizing at close to a 4% rate.

All told, the Atlanta Fed's GDPNow Forecast Model now registers a 4.1% real growth rate for the second quarter. This means that better growth prospects are what drove real interest rates higher. While two-year real rates have tracked growth and Fed rate hike expectations, the 10-year has moved up in stairstep fashion, adding another nine basis points to arrive at 91 basis points (see *Fixed Income Insight*, page 5). Gold, which is

typically inversely correlated to real rates, is down 5.3% for the month to date.

On the flip side, while oil prices have grabbed the headlines, the Empire and Philly surveys suggest accelerating prices in the supply chain; longer-dated inflation expectations remain anchored. Today, 10-year inflation breakevens of 2.17% compare nicely to current readings of 2.2% on core CPI and 1.9% on core PCE, but are nearly identical to levels registered in mid-April. That says the rise in the 10-year yield is not about overheating prices or a Fed that is behind the curve.

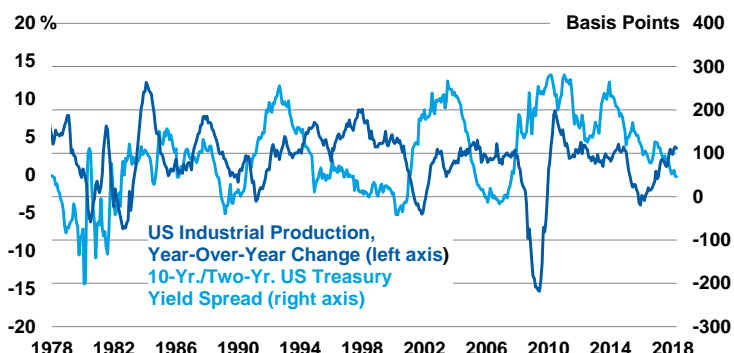
Technical factors also drive Treasury yields, and here we have concerns. Yields increase when investors are selling bonds outright, causing negative supply/demand imbalances, or when buyers demand higher yields to compensate for higher perceived risks. Here we are watching developments that may be contributing to weaker Treasury prices. First is foreign investor appetite. One theory is that China, the single-largest owner of US Treasuries, could be selling as a poker chip in trade negotiations and/or to manage its own currency. The reality is that foreign holdings of Treasuries, roughly a third of all outstanding, have declined for four consecutive weeks, a reduction of about \$23 billion. While US debt maintains positive interest rate differentials with the rest of the world, foreign currency managers also see the US' higher inflation, growing current account and fiscal deficits, and Treasury issuance that is likely to be \$1 trillion in the next year. A second factor for market weakness could be a dollar liquidity squeeze in which foreigners sell bonds to get dollars for higher-priced oil purchases and meet higher interest payments on floating-rate debt. This dynamic could be at play, creating a dollar rally within the context of a secular decline of the greenback.

Bottom Line: The market's normalization to a more balanced monetary/fiscal policy mix, higher growth, higher inflation and higher interest rates that has been at the center of our 2018 narrative continues on script. The move higher in rates is not yet a threat to the bull market. As this past decade's monetary policy was unconventional, the unwinding is likely to have unique twists and turns. Still, we believe the historical framework for navigating the late cycle still applies. This playbook favors stocks to Treasuries and credit, with preferences for cyclicals like energy, financials, industrials and technology. **Watch** for inversion in the two-year/10-year and two-year/30-year yield curves, with an eye for better entry points for long-term bonds. **Consider** adding cash and short-duration bonds. Yields on long-dated Treasuries are not high enough to pay investors for their time and future uncertainty. ■

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Chart of the Week: Yield Curve Inversion Is Not to Be Feared

Interest rate volatility has again focused investors on the potential for the yield curve—the difference between two-year and 10-year US Treasury yields—to fall to zero, what's known as yield curve inversion. Concern about inversion is well-founded, as a completely flat curve suggests limited incentives for either investment or lending. In our analysis, however, this inversion doesn't affect the real economy immediately. In fact, it typically precedes a decline in economic output as measured by industrial production by nine to 18 months. Currently, the slope of the two-year/10-year curve is around 50 basis points, where it has been since November. This also suggests that we may be at least two Fed hikes away from inversion. Using this metric as a forecaster, a recession would not be in the cards until at least the fourth quarter of 2019.



Source: Bloomberg as of April 30, 2018

Asset Class Performance and Heat Map (as of May 18, 2018)

Asset Class	Annualized Returns (%)							Yield	Valuation		Volatility (%)		Correlation to Global Equities	
	YTD	1-Yr.	2017	3-Yr. ¹	5-Yr. ¹	10-Yr. ¹	20-Yr. ¹		Current YTM	Avg. YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
Cash								1.85	1.88					
90-Day US Treasury Bills	0.6	1.2	0.8	0.5	0.3	0.3	1.9	1.85	1.88	0.06	0.58	0.03	-0.05	
Global Equities								Current Div. Yld.	Avg. P/E²					
US Large-Cap Growth	7.0	23.7	30.2	13.3	15.9	11.0	5.9	1.13	21.2	13.1	17.5	0.86	0.89	
US Large-Cap Value	-2.2	10.6	15.1	8.1	10.3	7.0	6.0	2.95	13.9	9.5	14.2	0.83	0.89	
US Mid-Cap Growth	5.3	19.7	22.0	7.9	11.9	9.0	7.1	0.71	26.7	10.2	23.3	0.81	0.81	
US Mid-Cap Value	-0.8	13.0	17.0	9.6	11.9	10.0	8.7	2.69	14.4	7.9	16.3	0.74	0.87	
US Small-Cap Growth	7.6	25.7	23.4	10.2	13.5	10.9	9.1	0.59	24.0	9.9	22.0	0.73	0.83	
US Small-Cap Value	2.3	15.0	11.5	8.8	11.0	10.4	8.8	2.52	17.1	7.9	17.3	0.70	0.84	
Europe Equity	1.5	10.9	26.2	4.9	6.6	2.5	4.9	3.37	14.2	8.9	18.1	0.68	0.94	
Japan Equity	2.7	18.8	24.4	7.7	7.6	3.7	4.0	2.03	20.1	8.7	16.9	0.27	0.71	
Asia Pacific ex Japan Equity	0.3	14.4	26.0	4.9	3.2	4.3	8.8	3.73	14.4	9.9	20.5	0.38	0.87	
Emerging Markets	-1.2	18.1	37.8	6.4	5.1	2.5	7.9	2.33	11.3	13.3	23.2	0.69	0.86	
Global Fixed Income								Current YTM	Avg. Spread²					
Short-Term Fixed Income	-0.3	-0.1	0.8	0.6	0.7	1.6	3.3	2.74	31.0	0.5	1.4	0.04	-0.15	
US Fixed Income	-2.7	-1.3	3.5	1.1	1.5	3.6	4.8	3.40	55.0	2.8	3.4	0.42	-0.05	
International Fixed Income	-1.3	3.3	9.8	2.9	0.6	2.1	4.2	1.27	49.0	4.9	8.1	0.59	0.31	
Inflation-Protected Securities	-3.2	1.3	9.0	2.4	0.5	2.8	6.0	-	-	5.4	7.7	0.66	0.44	
High Yield	-1.8	2.9	10.4	5.8	4.7	7.9	7.5	6.27	514.0	2.8	10.1	0.71	0.76	
Emerging Markets Fixed. Inc.	-4.1	2.7	15.2	3.4	-1.9	3.3	7.2	6.50	345.0	10.6	13.0	0.78	0.68	
Alternative Investments								Current Div. Yld.						
REITs	-2.3	7.5	15.0	4.2	4.1	3.7	8.3	3.97	-	9.7	18.1	0.64	0.80	
MLP/Energy Infrastructure ³	1.1	-5.1	-6.5	-10.7	-4.5	5.7	-	7.71	-	15.4	18.5	0.41	0.56	
Commodities ex Prec. Metals	4.2	11.5	0.2	-5.5	-8.1	-9.4	0.2	-	-	8.0	17.0	0.33	0.44	
Precious Metals	-2.3	1.1	10.9	2.1	-4.2	2.6	6.5	-	-	11.6	19.3	0.45	0.20	
Hedged Strategies ⁴	0.1	4.2	6.0	0.5	1.2	-0.3	-	-	-	2.6	6.0	0.57	0.64	
Managed Futures ⁵	1.3	5.3	2.5	-1.6	-0.3	-2.0	-	-	-	6.6	7.9	0.26	0.18	
S&P 500	2.2	16.9	21.8	10.6	13.0	9.0	6.4	1.83	16.0	10.54	14.9	0.89	0.95	
Russell 2000	6.4	21.1	14.6	9.6	11.7	9.5	7.4	1.51	20.4	9.06	19.8	0.64	0.82	
MSCI EAFE	1.6	13.0	25.6	5.4	6.4	2.9	5.0	3.08	15.0	7.31	16.6	0.67	0.96	
MSCI AC World	1.6	15.8	24.6	8.0	9.4	5.7	5.8	2.40	15.5	7.81	15.5	1.00	1.00	

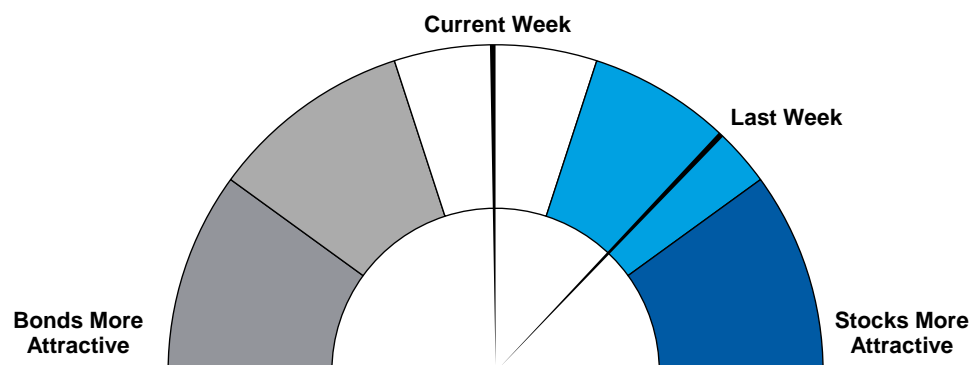
Note: Performance values calculated using USD. 1. As of April 30, 2018. 2. 20-year average as of April 30, 2018. 3. Volatility and Correlation: June 30, 2006 – Present. 4. Volatility and Correlation: Jan 31, 1998 – Present Hedged strategies consist of hedge funds and managed futures 5. Volatility and Correlation: February 28, 1998 – Present. Cheap = Below -0.5 standard deviation; Moderate = Between +0.5 standard deviation and -0.5 standard deviation; Expensive = Above +0.5 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.

Cheap	Low	Low
Moderate	High	High
Expensive		

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Short-Term Stock and Bond Indicator



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

Indicator	Category	Reading
PMI (+)	Growth	Risk Off
Durable Goods (+)		Neutral
Retail Sales (+)		Neutral
Manufacturing Hours Worked (+)		Risk On
Commodity Prices (+)	Inflation	Neutral
Yield Curve: 10-Yr./Three-Mo.(-)	Rates	Risk On
Yield Curve: Two-Yr./Three-Mo.(-)		Risk Off
Pace of Interest Rate Hikes (-)		Neutral
Term Premium Model (-)		Risk On
High Yield Spreads (-)	Liquidity	Neutral
Investment Grade Spreads (-)		Neutral
Financial Conditions (-)		Neutral
S&P 500 Earnings/Baa Yield (+)	Valuation & Market Behavior	Risk Off
Large vs. Small Performance (-)		Risk On
High- vs. Low-Quality Performance (-)		Neutral
High- vs. Low-Beta Performance (+)		Risk On
S&P 500 Forward Price/Earnings Ratio (+)		Neutral
Earnings Revisions Breadth (-)	Earnings	Risk Off
Global Risk Demand (+)	Sentiment	Risk On
Implied Currency Volatility (-)		Neutral
Five-Yr. Macro Sensitivity (-)		Risk On
% Stocks Above 200-Day Moving Avg. (+)	Technicals	Neutral
Cumulative Advance/Decline (+)		Neutral
S&P 500 Put/Call Ratio (-)		Risk On
Emerging Market Fund Flows (+)		Neutral
Smart Money Flow Index (+)		Neutral
Note: + Indicates that a rise in the indicator is linked to a more favorable outlook for risk assets; - indicates that a rise in the indicator is linked to a less favorable outlook for risk assets. Color coding is set in accordance with the impact on risk assets.		Positive for Stocks Relative to Bonds
		Neutral
		Negative for Stocks Relative to Bonds

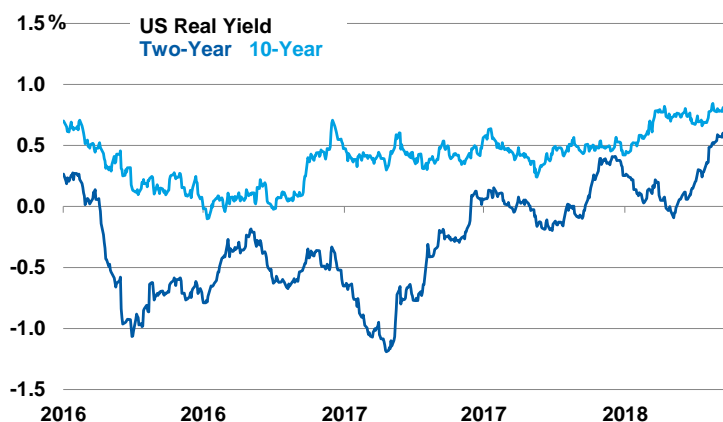
Note: Commodity prices are represented by the Bloomberg Commodity Index; pace of interest rate hikes by the Morgan Stanley Pace of Rate Hikes Index; high yield spreads by the Bloomberg Barclays Aggregate US High Yield Index; investment grade spreads by the Bloomberg Barclays US Aggregate Index; financial conditions by the Morgan Stanley Financial Conditions Index; global risk demand and implied currency volatility by the Morgan Stanley Standardized Global Risk Demand Index. For more information on our Term Premium Model, please refer to our special report, *Using the Term Premium to Manage Portfolio Duration*, March 2016.

Source: Morgan Stanley Wealth Management GIC, Morgan Stanley & Co., Haver Analytics, Bloomberg, FactSet as of May 18, 2018

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Fixed Income Insight: Real Treasury Yields Diverge, Steepening the Yield Curve

While the real two-year US Treasury yield has been on a volatile path that has mirrored expectations of Federal Reserve rate hikes, the real 10-year yield has been largely anchored by long-run expectations for stagnant real growth (see chart). In fact, for most of the past two years, the real 10-year yield has been around 0.5%. However, since January, real 10-year yield climbed to 0.9%, the highest rate in more than seven years. This suggests that long-run growth prospects have improved. At the same time, the real two-year yield increased only 0.30%. So while the nominal yield curve has flattened, the real yield curve is steepening. This is bullish for equities, especially cyclical and value-oriented stocks.



Source: Bloomberg as of May 17, 2018

Government Debt Monitor

	US			Total Return (%)
	Yield (%)			
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD
3-Month	1.88	-0.02	0.51	0.57
2-Year	2.55	0.01	0.66	-0.31
5-Year	2.89	0.05	0.68	-2.14
10-Year	3.06	0.09	0.65	-4.78
30-Year	3.20	0.09	0.46	-7.89
2-Yr./10-Yr. Spread (bp)	51	7.46	-1.32	-
10-Yr. TIPS Breakeven (bp)	217	0.10	18.65	-
Interest Rate Volatility† (bp)	53	6.20	6.66	-

Fixed Income Spread Dashboard

Investment Grade	Duration (Yrs.)	Yield-to-Worst (%)	OAS (bp)	OAS Range**	
				Rich	Cheap
MBS*	5.41	3.58	29	9	35
AAA	4.32	3.00	25	18	42
AA	5.71	3.14	14	8	18
A	7.28	3.82	89	68	125
BBB	7.17	4.40	145	115	214
High Yield					
BB	4.58	5.40	252	212	476
B	3.77	6.64	368	333	710
CCC	3.35	10.24	746	741	1,395

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. © 2018 FTSE Index LLC. All rights reserved. Data as of May 18, 2018

Government Debt Monitor

	Global			Total Return (%)*
	Yield (%)			
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD
France	0.83	0.04	0.05	0.36
Germany	0.58	0.02	0.15	0.27
Japan	0.06	0.02	0.01	0.79
Spain	1.43	0.17	-0.13	2.50
UK	1.50	0.06	0.31	-1.50
3-Month LIBOR	2.33	-0.01	0.64	-
US Tax Exempt				
10-Year AAA Muni	2.55	0.11	0.57	-1.17
10-Yr. Muni/UST Ratio	83.11	1.11	0.85	-

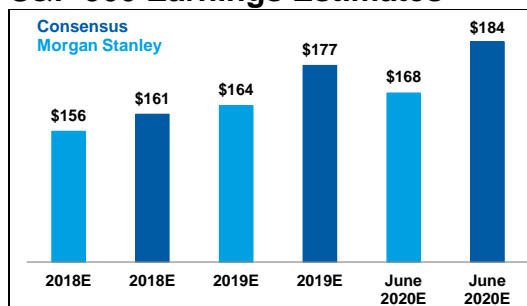
Benchmark Returns

Index	Total Returns (%)		
	YTD	MTD	2017
Bloomberg Barclays US Aggregate	-2.73	-0.55	3.54
Bloomberg Barclays US MBS	-2.14	-0.46	2.47
Bloomberg Barclays US IG Corporate	-3.92	-0.72	6.42
Bloomberg Barclays Municipal	-1.17	0.30	5.45
Bloomberg Barclays US High Yield	-0.21	0.01	7.50
Bloomberg Barclays Global Aggregate	-1.83	-1.57	7.39
JPMorgan Emerging Market	-5.04	-1.88	9.32

*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 18, 2018

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S&P 500 Earnings Estimates



MS & Co. 2018 Price Target for the S&P 500

Landscape	Earnings	Price/Earnings Multiple	Price Target	Upside / Downside
Bull Case	-	-	3,000	10.6%
Base Case	\$164	16.5	2,750	1.4%
Bear Case	-	-	2,400	-11.5%
Current S&P 500 Price			2,713	

Source: FactSet, Thomson Reuters, Morgan Stanley & Co. Research as of May 18, 2018

Note: Price targets use forward 12-month earnings estimate
Source: Thomson Reuters, Morgan Stanley & Co. Research as of May 18, 2018

S&P 500 Sector Performance and Valuation (as of May 18, 2018)

Index Name	Total Return			Dividend Yield (%)	Beta	20-Year Avg. Forward 12-Mo. PE	Forward 12-Mo. P/E*
	WTD (%)	YTD (%)	1-Year (%)				
S&P 500	-0.47	2.24	17.38	1.83		15.9	16.3
Energy	1.73	8.98	19.95	2.54	0.87	17.6	20.0
Materials	1.62	-0.59	17.27	1.91	1.03	13.9	16.3
Industrials	0.79	-0.18	15.62	1.89	1.01	16.3	16.7
Consumer Discretionary	-0.03	6.73	20.68	1.23	0.97	18.0	19.7
Consumer Staples	0.02	-12.74	-7.57	3.25	0.64	17.0	16.5
Health Care	0.22	1.21	13.75	1.65	0.95	17.2	15.1
Financials	-1.10	0.49	23.36	1.61	1.10	12.8	12.9
Information Technology	-1.48	9.69	30.78	1.14	1.29	20.7	18.2
Telecommunication Services	-1.29	-10.55	-0.50	5.78	0.73	16.3	10.0
Utilities	-2.88	-6.27	-2.05	3.77	0.29	14.2	15.5
Real Estate	-3.08	-6.59	0.26	3.49	0.52	15.3	16.3

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

Performance of Style and Cap Pairs (as of May 18, 2018)



Source: Morgan Stanley & Co. Small Cap is represented by the Russell 2000 Index; Large Cap represented by the Russell 1000 Index; Growth represented by the Russell 1000 Growth Index; Value represented by the Russell 1000 Value Index. Cyclical and Defensive, and Quality and Junk are based on Morgan Stanley & Co. Research analysis.

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Morgan Stanley & Co. Forecasts (as of May 18, 2018)

	Real GDP Growth (%)			10-Yr. Govt. Bond Yield (%)		Headline Inflation (%)			Currency Versus US Dollar		
	2017	2018E	2019E	Q4 '18E	Q2 '19E	2017	2018E	2019E	Q3 '18E	Q1 '19E	Q3 '19E
Global	3.7	3.9	3.8			2.5	2.9	2.9			
US	2.3	2.7	2.2	2.85	2.70	2.1	2.6	1.9			
Euro Zone	2.5	2.1	1.9			1.5	1.7	1.6	1.21	1.30	1.36
UK	1.8	1.2	1.0	1.60	1.85	2.7	2.5	2.1	1.32	1.42	1.50
Japan	1.7	1.3	1.5	0.08	0.10	0.5	1.1	1.0	104	98	95
Emerging Markets	4.8	5.0	5.0			3.1	3.4	3.5			
China	6.9	6.6	6.4	3.50	3.60	1.6	2.4	2.5	6.32	6.20	6.12

Source: Morgan Stanley & Co. Research

Macro Factor Heat Map (as of May 18, 2018)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	GIC Conclusion
China	↓	↑	↑	↑	↑	↓	↓	Recovery and Stimulus Maturing
Europe	↓	↑	↓	↓	↓ CMTI Lower	↓	↓	Cyclical Earnings Rebound
Japan	↓	↓	↑	↓	↑	↑	↓	Corporate Profit Growth Offset Stronger Yen
Brazil	↑	↓	↓	↑	↓	↓	↓	Stabilizing
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color change; In Europe, Sentiment and Risk moved from risk asset neutral to risk asset positive as CMTI moved lower; for further explanation of the chart, see page 9.

Source: Morgan Stanley Wealth Management GIC

Market Factor Data Points (for the week ending May 18, 2018)

	Positives	Negatives
Global Growth	<ul style="list-style-type: none"> Empire State Manufacturing Survey hit 20.1 in May versus 15.0 expected May NAHB/Wells Fargo Housing Market Index up Philadelphia Fed Survey rose in May April US retail sales up in line with forecast April US industrial production up 0.7%, beats forecast US building permits fell less than expected in April, -1.8% versus -2.1% China industrial production exceeded expectations in April, 7.0% year over year Euro Zone first-quarter GDP at 2.5% in line with forecast Japan industrial production increased 2.4% year over year in March 	<ul style="list-style-type: none"> Weekly initial jobless claims increased by 11,000 to 222,000 Housing starts fell more than expected in April April China retail sales below forecast at 9.4% year over year Euro Zone industrial production missed expectations in March, up 0.5% versus 0.7% forecast Japan's first-quarter GDP fell 0.6% quarter over quarter versus -0.1% expected
Rates	<ul style="list-style-type: none"> Mexico's central bank kept benchmark rate unchanged at 7.5%, as expected 	<ul style="list-style-type: none"> Brazil's central bank kept benchmark rate unchanged at 6.5%
Inflation	<ul style="list-style-type: none"> April Euro Zone core CPI at 0.7% year over year in line with forecast; headline CPI at 1.2% year over year April Japan core CPI rose 0.7% year over year versus 0.8% estimate 	

Source: Morgan Stanley Wealth Management GIC

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Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Equal Weight	US equities have done exceptionally well since the global financial crisis, but they are now in the latter stages of a cyclical bull market. While the acceleration of the Trump/Republican progrowth agenda has helped us achieve our 2,700 price target for the S&P 500 earlier than expected, it ironically brings the end of the cycle closer. In addition, sentiment is much more bullish than it was a year ago.
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, which is necessary for the central banks to exit their extraordinary monetary policies.
Emerging Markets	Overweight	Emerging market (EM) equities have been the best region over the past 24 months and for the year to date. With the US dollar appearing to have made a cyclical top, global growth and earnings accelerating, and financial conditions remaining loose, we think EM equities will continue to keep up with global equity markets but are unlikely to lead as strongly.
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. While interest rates have remained exceptionally low, US economic data have been very strong recently and the Fed is now raising rates at an accelerating pace. Combined with our expectation for the European Central Bank to taper its bond purchases later in 2018 and with the Bank of Japan looking like it will raise its yield target, higher interest rates are likely this year.
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 deflationary fears having become extreme in 2015 and early 2016, these securities still offer relative value in the context of our forecasted acceleration in global growth and our expectations for oil prices and the US dollar's year-over-year rate of change to revert toward 0%. That view played out in 2016 and 2017 but has not yet run its course.
High Yield	Underweight	High yield has performed exceptionally well since early 2016 with the stabilization in oil prices and retrenchment by the weaker players. We recently took our remaining high yield positions to zero as we prepare for deterioration in quality of earnings in the US led by lower operating margins. Credit spreads have likely reached a low for this cycle.
Alternative Investments		Relative Weight Within Alternative Investments
REITs	Underweight	Real estate investment trusts (REITs) have underperformed global equities since mid-2016 when interest rates bottomed. We think it is still too early to reconsider our underweight zero allocation given the further rise in rates we expect and deteriorating fundamentals for the industry. Non-US REITs should be favored relative to domestic REITs.
Master Limited Partnerships/Energy Infrastructure*	Overweight	Master limited partnerships (MLPs) rebounded sharply from a devastating 2015 but, with oil's slide, performed poorly in 2017. With oil prices recovering again and a more favorable regulatory environment, MLPs should provide a reliable and attractive yield relative to high yield. The Trump presidency 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. As volatility becomes more persistent in 2018, these strategies should do better than in recent years.

***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 18, 2018

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Macro Factor Heat Map Key (see page 7)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment and Risk	Valuation	Earnings	Conclusion
Dark Blue	Economic growth robust	Steep yield curve	Low-moderate and rising inflation	Liquidity robust in economy / banking system	Shorter-term sentiment and technicals bearish	Risk assets attractively valued	Earnings outlook robust	Confluence of factors supports a risk-on investment approach
Light Blue	Economic growth neutral	Normal yield curve	Low-moderate and declining inflation; moderate inflation; higher and falling inflation	Liquidity neutral in the economy / banking system	Shorter-term sentiment and technicals neutral	Risk assets neutral	Earnings outlook neutral	Confluence of factors supports a neutral investment approach
Gray	Economic growth anemic	Flat/inverted yield curve	Very high/low inflation/deflation; high and rising inflation	Liquidity low in economy / banking system	Shorter-term sentiment and technicals bullish	Risk assets are richly valued	Earnings outlook anemic	Confluence of factors supports a risk-off investment approach
Up	Growth accelerating	Yield curve steepening	Inflation rising	Liquidity increasing	Sentiment becoming more bullish	Valuations rising	Earnings outlook improving	
Down	Growth declining	Yield curve flattening	Inflation falling	Liquidity decreasing	Sentiment becoming more bearish	Valuations falling	Earnings outlook worsening	
Signal Horizon	One to three years	One to three years	One to three years	One to three years	One to three months	Six months to two years	Six months to two years	
Inputs	<ul style="list-style-type: none"> • Industrial production • Unemployment • Total return • Earnings revisions • Home prices • OECD LEI (China and Brazil) • MS & Co. ARIA (US) 	<ul style="list-style-type: none"> • 10-year vs. 2-year government bond yield spread 	<ul style="list-style-type: none"> • Consumer Price Index 	<ul style="list-style-type: none"> • M1 growth • Private credit growth • Libor-OIS spread 	<ul style="list-style-type: none"> • MS US Equity Risk Indicator (US) • MS Combined Market Timing Indicator (Europe) • MS Global Risk Demand Index • Relative strength index • Members above / below moving average. • Index above / below moving average • Consumer confidence 	<ul style="list-style-type: none"> • Forward price/earnings ratio • Price/book ratio • Equity risk premium • High yield option-adjusted spread 	<ul style="list-style-type: none"> • Earnings revisions breadth • Earnings surprise • Return on equity 	<ul style="list-style-type: none"> • Weighted average z-score of all factors

Index Definitions

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

Hedged Strategy Definitions

Credit Long/Short: This strategy consists of a core holding of long credits hedged at all times with varying degrees of short sales of bonds and/or index options. Some managers maintain a substantial portion of assets within a hedge structure and commonly employ leverage.

Equity Long/Short: This strategy consists of a core holding of long equities hedged at all times with varying degrees of short sales of stock and/or index options. Some managers maintain a substantial portion of assets within a hedge structure and commonly employ leverage.

Market-neutral: A type of investment strategy undertaken by an investor or an investment manager that seeks to profit from both increasing and decreasing prices in one or more markets, while attempting to completely avoid some specific form of market risk.

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.

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. All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. 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. This is not a "research report" as defined by FINRA Rule 2241 and was not prepared by the Research Departments of Morgan Stanley Smith Barney LLC or Morgan Stanley & Co. LLC or its affiliates. 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. Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by

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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.

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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.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Smith Barney LLC retains the right to change representative indices at any time.

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.

Investing in foreign emerging markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks.

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.

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