**WEALTH MANAGEMENT** 



Global Investment Committee | March 08, 2021

# The GIC Weekly

## Change in Rates or Rates of Change?

Better-than-expected news on the pandemic and vaccinations triggered a rise in real interest rates, causing equity risk premiums to shrink and stocks to sell off—as did bonds. Based on the MS & Co. year-end forecast of 1.70% for the 10-year US Treasury yield, much of the repricing disruption may be behind us. However, markets will soon recalibrate to a 12-month forward outlook that includes a sequential downshift in the drivers of the equity run-up. Specifically, earnings revision breadth is peaking; economic news will soon lap the easiest comparisons of the recession; and policy accommodation is also at its most extreme, with another \$1 trillion package due by midmonth. In 2022, the rate of change for many metrics will be negative. The comparisons may prove especially daunting because of the severity of the crisis and the unprecedented level of stimulus. Postrecession booms can sometimes lead to busts which are not necessarily bear markets but rather a sideways grind. Consider reviewing portfolios to make sure they are well diversified and balanced, neutralizing outsized positions on any one style, sector or region.

After racing to all-time highs in January, equities have pulled back. The tech-heavy Nasdaq Composite Index is barely positive for the year to date and the S&P 500 Index is up only a little more than 2%. The consensus explanation for the retracement is the swift upward move in US Treasury yields. The benchmark 10-year bond recently hit 1.60% intraday, up nearly 65 basis points on the year. The two-year/10-year yield curve steepened to 141 basis points, the highest since December 2016. Not only did the nominal rate reach its highest point in a year, but the adjustment came almost entirely from the real rate component. The real 10-year yield had been stuck around -1% since August, a historical extreme; it's still negative, but has climbed 35 basis points to -0.65% (see *The GIC Weekly*, March 1). Rather than reacting to inflation expectations, real rates tend to reflect shifting expectations about growth and, in turn, monetary policy responses to that growth.

On one hand, a steepening yield curve and rising GDP forecasts are excellent news for both jobs and corporate profits. However, the repricing in rates can also be seen as a double-edged sword, turning good news into bad news as only Wall Street can

#### Lisa Shalett

Chief Investment Officer
Head of the Global Investment Office
Morgan Stanley Wealth Management
Lisa.Shalett@morganstanley.com
+1 212 296-0335

## **Upcoming Catalysts**

#### March 08

US Wholesale Trade report

#### March 09

NFIB Small Business Optimism Index China Consumer Price Index China Producer Price Index

#### March 10

US Consumer Price Index US Treasury budget report Japan Producer Price Index

## March 11

US JOLTS Survey European Central Bank rate decision US initial jobless claims US continuing claims

### March 12

US Producer Price Index U. of M. Consumer Sentiment Index

do. First, the increase in rates caused equity risk premiums to collapse, challenging valuations for the longest-duration secular growth stocks. Second, the volatility in bonds surpassed that of equities, which can be a sign of regime change. As interest rates jumped, both stocks and bonds fell in price, rendering portfolio diversification ineffective. Third, the shifting dynamics in the Treasury market began to press up against Fed rhetoric and guidance that has continued to pin the first fed funds rate hike in late 2023/early 2024. The market is now at odds with the Fed, placing the first rate hike in early 2023 and the start of tapering of bond purchases next year. The benchmark 10-year yield is within 15 basis points of Morgan Stanley & Co's. target of 1.70% in 2021's second half, and the 10-year inflation breakeven rate is near 2.2%, 30 basis points higher than the average of the last 25 years. Thus, in our view, the near-term risks associated with changing rates may be close to resolution.

Even if rates are close to a near-term peak and volatility recedes, market worries may not be over. Despite an outstanding outlook for economic improvement, we believe that investors may soon need to contend with another market nemesis—negative rates of change as the easy yearover-year comparisons roll off. Like the risks around rising rates coming out of a recession, this is right out of the playbook. However, given the extremes of this cycle, comparisons may deteriorate swiftly and starkly. Of course, some of that is obvious and to be expected. Still, the markets may soon start to discount 2022 results, especially if they follow the grinding sideways postrecession pattern as in the 1982-1984 and 2001-2004 periods (see *Charts in Focus*).

First, consider how we are modeling the evolution of economic growth metrics. First and second quarter 2021 GDP forecasts have had upward revisions. MS & Co. has a first quarter tracking estimate at a seasonally adjusted annualized rate of 8.1%. Two other tracking estimates are even higher the New York Fed Nowcast is 8.7% and the Atlanta Fed Nowcast is 10%. The second quarter should be even better as we lap last year's March-May trough and inflation peaking at close to 2.6% on the core Personal Consumption Expenditures Index. The latest round of fiscal stimulus seems likely to pass by March 15, and should further sustain household purchasing power against a backdrop of pent-up demand and a more complete economic reopening in the second half enabled by herd immunity. In all, the 2021 economy should grow at an inflation-adjusted 6.5% as nearly \$1 trillion in excess household savings is released. But then we hit the proverbial wall as comparisons get tougher, with 2022 GDP growth rates falling to 2.5% by the year's fourth quarter. Again this is not about levels, but the constant drumbeat of negative comparisons.

Macro indicators may not be the only variables with decelerating rates of improvements. According to Mike Wilson, MS & Co.'s chief investment officer and US equity strategist, 2021 earnings revision breadth appears to have already peaked (see *Chart of the Week*). The consensus now discounts 27% year-over-year profit gains, a forecast in line with ours and one that would put 2021 profits 7% above prior peaks. While economic growth should remain robust next year, profits are apt to decline materially because of higher input costs, wages and cost of capital. They could fall even more if possible corporate tax hikes kick in.

The last hurdle will be the roll-off from peak policy accommodation. Fed tapering, if it starts next year, could be a market-roiling event. When it happened in 2013, the markets staged a "taper tantrum," leading to a swift jump of 130 basis points in the real interest rate and a 6% fall for the S&P 500. Importantly, in 2013 the equity risk premium was an aboveaverage 550 basis points and now it's just 320 basis points. Also next year, the economy will face a fiscal cliff as it transitions from receiving what is likely to be nearly \$6 trillion in direct payments for unemployment benefits, small businesses, state aid and lower income households to receiving nothing.

**Bottom Line:** Business-cycle transitions are especially tricky for investors as the economic outlook evolves and the policy responses to it are unclear. That drama has played out in the US Treasury market through an upward repricing of real yields, reflecting an improved growth outlook, combined with higher inflation expectations. This forced investors to rethink the cost of capital in the new business cycle. While that dynamic around changing rates is in the recession playbook, a complicating factor is the shape and pace of the recovery. Fast and forceful recoveries, often fueled by strong stimulus, set up the potential for booms, and immediately beg the question of negative year-over-year comparisons. In a world in which rate of change and direction of travel often matter as much as level, the issue of negative comparisons bears watching as earnings revisions peak, economic indicator comparisons become tougher and policy retracts from crisis-level accommodation. Such activity doesn't typically mark the end of the cycle, but the stock market response is usually a sideways grind until the outlook becomes clearer. Watch for inflection points in leading economic indicators in the next nine to 12 months. Consider reviewing portfolios to make sure they are well diversified and balanced, neutralizing outsized positions on any one style, sector or region.

## Chart of the Week: Earnings Revision Breadth Appears to Be Peaking

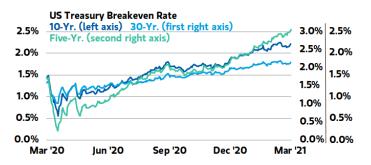
With price/earnings multiples threatened by higher interest rates, stock-price appreciation must come from unanticipated—and not discounted—earnings growth. The current consensus forecast for 2021 S&P 500 profits already embeds our estimates of 27% year-over-year growth. Further gains should be evident in rising earnings revisions. Unfortunately, earnings revisions breadth looks like it's rolling over (see chart). This complicates the path for further gains at the index level. Active stock-picking is preferred.



Source: FactSet, Morgan Stanley Research as of Feb. 26, 2021

## Fixed Income Insight: Near-Term Inflation Expectations Rising the Fastest

Most of the market's attention for the last few weeks has been on real interest rates, which have finally become unmoored. However, inflation expectations are shifting as well. In a rare occurrence, inflation breakeven curves have inverted, which means inflation estimates on a five-year horizon are rising much faster than they are on the 30-year horizon (see chart). For now, that supports the Fed's guidance that higher inflation will prove temporary. We expect this debate to figure prominently in interest rate volatility for the remainder of the year.



Source: Bloomberg as of March 3, 2021

### Market Factor Data Points (for the week ending March 5, 2021)

Report	Period	Consensus	Actual	Prior	Trend
US nonfarm payrolls	Feb '21	200,000	379,000	166,000	<b>†</b>
US unemployment	Feb '21	6.3%	6.2%	6.3%	+
ISM Manufacturing Survey	Feb '21	58.9	60.0	58.7	<b>†</b>
ISM Services Survey	Feb '21	58.7	55.3	58.7	+
ADP National Employment Report	Feb '21	205,000	117,000	195,000	+
Challenger Job Cuts	Feb '21	-	-39.1%	17.4%	+
US initial Jobless claims	Wk. of Feb. 27	750,000	745,000	736,000	<b>↑</b>
US continuing claims	Wk. of Feb. 20	4,300,000	4,295,000	4,419,000	+
US factory orders	Jan '21	2.1%	2.6%	1.6%	<b>†</b>
US construction spending	Jan '21	0.8%	1.7%	1.1%	<b>†</b>
Euro Zone retail sales	Jan '21	-1.4%	-5.9%	1.8%	+

Color coding shows how actual data compares with consensus estimates. Green implies better than expected, red implies worse than expected. Trend shows the one period change between actual and prior reports. Source: Morgan Stanley Wealth Management GIC

## Macro Factor Heat Map (as of March 5, 2021)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment And Risk	Valuation	Earnings	GIC Conclusion
Europe	A Retracting GDP	<b>↑</b>	Ψ.	Ψ	<b>1</b>	<b>1</b>	Declining Earnings Surprises	Should Benefit from Recent Fiscal Stimulus
China	<b>1</b>	<b>4</b>	Ψ	<b>1</b>	Ψ	<b>1</b>	1mproved Earnings Surprises	Could Benefit from Post Coronavirus Stimulus and V-Shaped Recovery
Japan	↑ Improving GDP	<b>↑</b>	Ψ	<b>↑</b>	Ψ.	<b>1</b>	<b>1</b>	Valuations Still Discounting Recession, Fundamentals Improving on Margins
Brazil	<b>1</b>	Ψ	<b>1</b>	<b>1</b>	Ψ	<b>+</b>	Declining Earnings Estimate Revisions	Could Benefit When Currency Markets Stabilize
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color; In Europe, Economic Growth went from neutral to risk off due to declining GDP numbers; Earnings went from neutral to risk off due to declining earnings surprises; In China, Earnings went from risk off to neutral due to improved earnings surprises; In Japan, Economic Growth went from neutral to risk on due to improving GDP numbers; in Brazil, Earnings went from neutral to risk off due to declining earnings estimate revisions; for further explanation of the chart, see page 10. Source: Morgan Stanley Wealth Management GIC

## Charts in Focus: The Market Cycle May Have Peaked, So Look Beyond the S&P 500

## Markets May Now Trade Sideways



Note: All time series are indexed to 100. Source: Strategas as of Feb. 25, 2021

## Value Stocks Are Inexpensive Relative to Growth



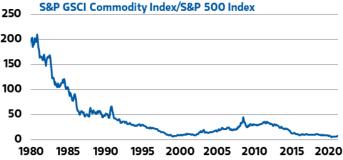
Source: Bloomberg as of March 3, 2021

## **Emerging Markets Look Cheap Versus Rest of World**



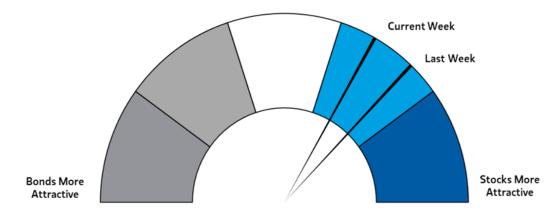
Source: Bloomberg as of March 3, 2021

## Commodities Are Undervalued to Equities



Source: Absolute Strategy Research, Refinitiv Datastream as of March 2, 2021

### **Short-Term Stock and Bond Indicator**



	MA	CRO	POI	LICY	FUNDAMEN	ITALS	SENTIMENT & TECHNICALS				
	Growth	Inflation	Rates	Liquidity	Valuation & Market	Earnings	Sentiment	Technicals			
Current	Very Positive	Very Positive	Neutral	Neutral	Neutral	Very Negative	Neutral	Neutral			
Last Week	Very Positive	Very Positive	Neutral	Very Positive	Neutral	Very Negative	Neutral	Neutral			
CATEGORY			INDICATOR				READING				
			PMI (+)				Neutral				
ı			Durable Goods	; (+)		Neutral					
Growth			Retail Sales (+)	)		Risk On					
			Manufacturing	Hours Worked (-		Neutral					
Inflation			Commodity Pri				Risk On				
			Yield Curve: 10	-Yr./Three-Mo.(-)			Neutral				
Rates				vo-Yr./Three-Mo.0	(-)		Neutral				
Rates			Pace of Interes			Neutral					
			Term Premium				Risk Off				
			High Yield Spre				Neutral				
Liquidity			Investment Gra				Risk On				
			Financial Cond				Neutral				
				ngs/Baa Yield (+)		_	Risk Off				
			_	l Performance (-)		Risk Off					
Valuation &	Market Behavio	or	•	Quality Performa		Risk On					
				Beta Performance		Risk On					
				ard Price/Earning		Neutral					
Earnings				ions Breadth (-)			Risk Off				
<b>-</b>			Global Risk De				Risk Off				
Sentiment			Implied Curren	, , , , ,			Neutral				
			Five-Yr. Macro	e 200-Day Movir	ng Avg (1)		Risk On Neutral				
				vance/Decline (+)			Neutral Neutral				
Technicals			S&P 500 Put/0		,		Risk On				
reconnicats				.all Rallo (-) cet Fund Flows (+		Risk On Neutral					
			Smart Money F			Neutral					
Notor Linde	+ +b-+! !-	. +			e for wole parter	Positive	e for Stocks Relat	tive to Bonds			
				favorable outlool e outlook for risk	Neutral.						
		nce with the imp			Nametic	Negative for Stocks Relative to Bonds					
Cotor county	is set iii accordal	ice with the impo	act off fish assets	•		Negativ	e for Stocks Rela	tive 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. Earnings revisions breadth is defined as the number of positive analyst revisions minus the number of negative analyst revisions divided by the total number of revisions.

Source: Morgan Stanley Wealth Management GIC, Morgan Stanley & Co., Haver Analytics, Bloomberg, FactSet as of March 5, 2021

## Asset Class Performance (as of March 5, 2021)

													CORRELA	TION TO
ASSET CLASS		AN	INUALI	ZED RE	TURNS	(%)		YIELD	VALU	ATION	VOLATI	LITY (%)	GLOBAL	EQUITIES
								Current	Current	Avg				
CASH	YTD		2020	3-Yr¹	5-Yr'	10-Yr <sup>1</sup>	20-Yr¹	YTM	YTM	YTM <sup>3</sup>	30 Days	20 Yrs. <sup>1</sup>	30 Days	20 Yrs. <sup>1</sup>
90-Day US Treasury Bills	0.0	0.3	-	-	-	-	-	0.04	0.04	1.35	0.0	0.00	-0.10	-
								Current	Current	Avg.				
GLOBAL EQUITIES								Div. Yld.	P/E <sup>2</sup>	P/E <sup>3</sup>				
US Large-Cap Growth	-2.1	41.7	43.3	22.7	23.7	17.6	8.8	0.48	32.6	19.3	22.5	16.7	0.77	0.90
US Large-Cap Value	5.4	17.7	0.6	7.1	11.2	9.9	6.5	2.56	16.9	13.5	15.0	13.9	0.82	0.91
US Mid-Cap Growth	-2.3	45.2	42.0	21.2	20.6	14.5	9.2	0.24	37.9	21.6	30.1	20.7	0.73	0.86
US Mid-Cap Value	9.7	25.0	1.0	7.3	12.5	10.7	9.7	1.86	17.9	14.5	19.8	16.1	0.82	0.89
US Small-Cap Growth	6.5	54.4	33.9	21.4	22.6	14.7	11.5	0.29	44.2	24.1	30.6	20.4	0.78	0.87
US Small-Cap Value	14.7	39.1	3.8	8.7	12.9	10.2	10.1	1.87	19.7	17.7	23.2	17.5	0.77	0.86
Europe Equity	0.3	16.1	5.9	4.8	9.5	5.3	5.4	2.38	16.5	13.3	14.9	17.9	0.46	0.95
Japan Equity	0.2	26.5	14.9	5.6	11.7	6.4	4.3	1.96	17.7	16.8	22.5	16.0	0.56	0.72
Asia Pacific ex Japan Equity	4.0	20.0	6.6	5.4	11.9	5.3	9.0	2.80	17.9	14.4	22.8	19.3	0.44	0.88
Emerging Markets	3.9	32.1	18.7	6.7	15.7	4.8	9.9	1.82	15.4	11.3	20.8	21.5	0.64	0.88
								Current	Current	Avg.				
GLOBAL FIXED INCOME								YTM	Spread	Spread <sup>3</sup>				
Short-Term Fixed Income	-0.1	1.4	3.3	3.1	2.1	1.6	2.8	0.32	10.0	31.0	0.6	1.4	0.11	-0.17
US Fixed Income	-2.9	-0.3	7.5	5.3	3.6	3.6	4.6	1.53	33.0	52.0	5.0	3.4	-0.08	-0.06
International Fixed Income	-3.9	2.9	9.8	2.9	3.6	1.9	4.7	0.91	34.0	48.0	4.7	7.8	0.14	0.33
Inflation-Protected Securities	-3.8	3.4	9.8	3.6	5.0	2.9	5.8	-	-	-	4.8	7.7	-0.04	0.45
High Yield	-0.7	6.8	7.0	5.0	8.0	6.1	7.9	5.02	386.0	485.5	2.8	9.5	0.48	0.76
Emerging Markets Fixed Income	-5.4	-0.3	2.7	0.6	5.5	1.1	6.3	4.81	264.0	318.0	9.0	11.5	0.42	0.66
								Current						
ALTERNATIVE INVESTMENTS								Div. Yld.						
Real Estate/REITs	2.6	-3.6	-9.2	5.0	6.6	6.0	8.1	3.83	-	-	11.2	17.7	0.56	0.80
Master Limited Partnerships <sup>4</sup>	26.4	14.6	-28.7	-7.4	-1.0	-1.6	-	9.90	-	-	31.3	17.6	0.65	0.50
Commodities ex Prec. Metals	14.6	20.0	-9.2	-1.8	2.6	-7.2	-1.2	-	-	-	14.1	16.7	0.28	0.49
Precious Metals	-9.2	7.0	25.6	9.5	6.8	-0.1	8.9	-	-	-	18.5	18.9	0.43	0.20
Hedged Strategies <sup>5</sup>	0.9	8.4	6.8	3.1	4.2	1.3	-	-	-	-	4.0	5.2	0.91	0.70
Managed Futures <sup>6</sup>	0.0	3.5	4.3	2.6	0.9	0.0	-	-	-	-	5.8	7.1	0.79	0.13
S&P 500	2.6	29.3	18.4	14.1	16.8	13.4	7.9	1.48	21.5	15.4	17.40	14.6	0.85	0.96
Russell 2000	11.1	50.1	20.0	14.9	17.9	11.9	9.4	1.02	30.0	21.3	29.67	19.2	0.78	0.84
MSCIEAFE	0.7	19.1	8.3	5.1	10.3	5.5	5.4	2.31	16.9	13.9	15.90	16.3	0.54	0.97
MSCI AC World	2.0	27.7	16.8	10.9	14.8	9.4	7.1	1.78	19.2	14.7	13.31	15.3	1.00	1.00

Note: Performance values calculated using USD. 1. As of Jan. 29, 2021. 2. Forward P/E using Next 12-month earnings 3. 20-year average as of Jan. 29, 2021. 4. Volatility and Correlation: June 30, 2006 – Present. 5. Volatility and Correlation: Jan 31, 1998 – Present Hedged strategies consist of hedge funds and managed futures 6. Volatility and Correlation: February 28, 1998 – Present. 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

## **S&P 500 Earnings Estimates**



Source: Refinitiv, S&P, MS & Co. Research as of March 5, 2021

## MS & Co. S&P 500 Price Target: Year-End 2021

		PRICE/EARNINGS	PRICE	UPSIDE/
LANDSCAPE	EARNINGS	MULTIPLE	TARGET	DOWNSIDE
Bull Case	\$202	20.75	4,175	9.5%
Base Case	\$193	20.25	3,900	2.3%
Bear Case	\$176	19.25	3,375	-11.4%
Current S&P	500 Price		3.842	

Note: Price targets are based on estimated 2022 earnings. Source: MS & Co. Research as of March 5, 2021

## S&P 500 Sector Performance and Valuation (as of March 5, 2021)

		TOTAL RETURN	l				
INDEX NAME	WTD (%)	YTD (%)	1-YEAR (%)	TOUVIDEND YIELD (%)	BETA	20-YEAR AVG. FORWARD 12-MO. PE	FORWARD 12-MO. P/E*
S&P 500	0.84	2.57	29.30	1.48		15.4	21.5
Energy	10.10	40.16	24.46	4.14	1.34	14.0	29.5
Materials	2.47	3.89	40.03	1.74	1.03	14.6	20.1
Industrials	3.10	5.47	30.68	1.49	1.06	16.1	24.7
Consumer Discretionary	-2.82	-3.33	37.63	0.66	0.93	18.7	33.8
Consumer Staples	1.96	-4.67	6.83	2.69	0.70	16.9	19.5
Health Care	0.30	-0.42	17.92	1.60	0.80	15.5	15.8
Financials	4.38	14.43	30.98	1.82	1.21	12.4	15.2
Information Technology	-1.35	-1.07	43.85	0.94	1.12	18.8	25.4
Telecommunication Services	2.45	7.37	40.56	0.92	0.89	15.5	23.1
Utilities	2.26	-4.88	-8.60	3.46	0.93	14.7	17.6
Real Estate	-1.34	0.71	-2.69	2.88	1.05	15.9	20.3

Source: Morgan Stanley & Co. Research

## Equity Market Relative Valuation (as of March 5, 2021)

	Forward 12 Months									
_	Price/E	arnings	Price/C	ash Flow	Price	/Sales	Price/Bo	ok Value	Equity Ris	k Premium
	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile
US Equities										
Large Cap Growth	28.2	95%	21.7	96%	4.1	97%	9.5	96%	198	13%
Large-Cap Value	18.3	98%	11.4	99%	1.9	100%	2.4	100%	389	26%
Mid-Cap Growth	36.0	95%	25.2	95%	2.9	98%	8.8	96%	121	11%
Mid-Cap Value	19.7	98%	10.3	95%	1.6	100%	2.3	100%	350	43%
Small-Cap Growth	80.8	94%	3.6	17%	2.4	99%	0.0	4%	-33	9%
Small-Cap Value	20.3	82%	0.4	14%	1.0	85%	0.0	3%	335	60%
International Equities										
Europe	16.5	95%	8.7	76%	1.4	99%	1.8	76%	637	50%
Japan	17.1	80%	11.2	99%	1.0	99%	1.4	87%	576	29%
Asia Pacific ex Japan	17.7	96%	11.8	88%	2.7	99%	1.7	66%	388	58%
<b>Emerging &amp; Frontier Markets</b>	15.2	99%	9.3	100%	1.6	96%	1.8	85%	591	21%
Total Equities										
US	22.6	95%	8.3	15%	2.5	99%	0.1	0%	286	16%
International	16.5	95%	9.4	94%	1.4	99%	1.7	80%	539	27%
Emerging Markets	15.2	99%	9.3	100%	1.6	96%	1.8	85%	591	21%

Note: Dark blue, light blue and gray fill denotes whether the group is relatively attractive, neutral or unattractive to other groups under the same metric. Source: Bloomberg

## Government Debt Monitor & Fixed Income Spread Dashboard

	US	5					DURATION	YIELD-TO-	OAS		OAS RANGE**	
	١	/IELD (%)	)	<b>FOTAL RETURN (%)</b>			(YRS.)	WORST	(BP)	RICH		CHEAP
Treasury Benchmark	Current	$\Delta WTD$	$\Delta YTD$	YTD	ADE	MBS*	4.05	1.62	21	11	•	<b>-</b> 132
3-Month	0.03	-0.01	-0.03	0.01	₩	AAA	5.62	1.15	10	6	•	<b>-</b> 54
2-Year	0.14	0.01	0.02	-0.04		AA	8.08	1.60	54	49		200
5-Year	0.80	0.07	0.44	-1.84	EST	Α	8.25	1.82	70	69		304
10-Year	1.57	0.16	0.65	-5.53	Ź	BBB	8.48	2.35	116	113		<b>4</b> 73
30-Year	2.30	0.15	0.65	-13.77	ELD	ВВ	4.43	3.38	244	163-		858
2-Yr/10-Yr. Spread (bp)	143	15.13	63.71	-	표	В	2.89	4.60	354	292		1,147
10-Yr. TIPS Breakeven (bp)	224	8.61	24.82	-	탈	ccc	2.59	6.43	535	527	•	<b>-</b> 1,815
Interest Rate Volatility† (bp)	69	-6.29	2.79	-				,		♠ Curren	t Two-Year Av	verage

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. © 2021 FTSE Index LLC. All rights reserved. Data as of March 5, 2021

## **Government Debt Monitor & Benchmark Returns**

		Global						
		YIELD (%)		TOTAL RETURN (%)*		TOTA	L RETUR	N (%)
10-Year Govt. Bond	Current	$\Delta$ WTD	$\Delta YTD$	YTD	Index	YTD	MTD	2020
France	-0.05	-0.04	0.00	-2.08	Bloomberg Barclays US Aggregate	-2.93	-0.80	7.51
Germany	-0.30	-0.04	0.00	-1.72	Bloomberg Barclays US MBS	-0.67	-0.08	3.87
Japan	0.09	-0.07	0.07	-0.36	Bloomberg Barclays US IG Corporate	-4.49	-1.55	9.89
Spain	0.39	-0.03	0.00	-1.94	Bloomberg Barclays Municipal	-0.66	0.31	5.21
UK	0.75	-0.06	0.56	-4.30	Bloomberg Barclays US High Yield	0.54	-0.16	7.11
3-Month LIBOR	0.19	0.00	-2.62	-	Bloomberg Barclays Global Aggregate	-3.58	-1.01	9.20
	US	Tax Exemp	pt		JPMorgan Emerging Market	-4.57	-0.85	5.88
10-Year AAA Muni	1.08	-1.08	-1.24	-0.66				
10-Yr. Muni/UST Ratio	68.90	-13.15	-17.42	-				

<sup>\*</sup>Global total returns reflect Citigroup 7- to 10-year bond indexes and Muni total returns reflect Bloomberg Barclays Municipal Bond Index Total Return Source: Bloomberg, Thomson Reuters Municipal Market Data (MMD) as of March 5, 2021

## Morgan Stanley & Co. Forecasts (as of March 5, 2021)

	REAL GDP GROWTH (%)				. BOND YIELD %)	HEADLINE INFLATION (%)		
	2020E	2021E	2022E	Q2 '21E	Q4 '21E	2020E	2021E	2022E
Global	-3.2	6.5	4.7			2.2	2.5	2.4
US	-3.5	6.5	5.0	1.50	1.70	1.2	2.5	2.1
Euro Zone	-6.8	3.9	4.5			0.3	1.5	1.1
UK	-9.9	4.4	7.4	0.80	0.90	0.9	1.6	1.6
Japan	-4.8	2.7	2.4	0.15	0.20	0.0	0.0	0.2
Emerging Markets	-1.8	7.6	4.8			3.3	3.1	3.1
China	2.3	9.0	5.4			2.5	1.4	2.0

Source: Morgan Stanley & Co. Research

# Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Overweight	A V-shaped recovery is central to our thesis that a new business cycle and bull market have begun. Risks remain around policy changes, fiscal stimulus and the COVID-19 vaccine, but we expect 2021 GDP growth in the 5%-to-6% range, which should improve profits among cyclical and small-/mid-cap companies. We prefer active stock-picking rather than holding the S&P 500 Index, which is overly concentrated in large tech stocks. Those leaders are likely fully priced, facing tough year-over-year comparisons and decelerating sequential momentum.
International Equities (Developed Markets)	Market Weight	In Europe, prospects for fiscal stimulus and concrete moves toward pan-Europe fiscal integration are game-changers. In Japan, economic recovery is gaining momentum, and we expect shareholder-friendly and positive return-on-equity policies to persist. The weakening of the US dollar is a tailwind.
Emerging Markets	Overweight	China was the first country to enter the COVID-19 crisis and appears poised to be the first out. Resumption of economic activity during the second quarter should jump-start global growth, especially given huge government stimulus programs. Ample liquidity from the Fed and a weakening dollar should catalyze investor interest. China stands to gain the most from US tariff rollbacks and global trade dynamics should improve. Valuations are attractive and local central banks should be able to maintain accommodation and stimulus.
Global Fixed Income	Relative Weight Within Fixed Income	
US Investment Grade	Market Weight	We have recommended shorter-duration* (maturities) since March 2018, given the extremely low yields and potential capital losses associated with rising interest rates from such low levels, and had been pairing that position with a large exposure to long-term US Treasuries to hedge what we expected would be a modest correction in stocks. With long-term Treasury yields troughing for the cycle, we recently removed that position and resumed a benchmark exposure to duration. Recent dislocation of investment grade credit spreads and market illiquidity have created opportunities. Fed programs aimed at backstopping this market give reason to be an active bond selector.
International Investment Grade	Underweight	Negative interest rates suggest that this is not a preferred asset class for US-dollar clients at this time. Actively managed funds may provide very patient, risk-tolerant clients with income opportunities in select corporate credits.
Inflation-Protection Securities	Underweight	The "sudden stop" recession has caused a severe pricing of real interest rates, pushing them negative and near all-time lows. In the near term, upside appears limited.
High Yield	Overweight	High yield bonds remain at the epicenter of the dual risks from COVID-19 and the collapse in oil prices from the failure of OPEC negotiations. In our view, some of the most extreme risks have been discounted, especially in light of unprecedented monetary and fiscal policy intervention aimed not only at market liquidity but in bridging cash flow requirements. It's time to ease in opportunistically, using active managers.
Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Market Weight	Real estate investment trusts (REITs) were laggards in 2020 as the pandemic's impact on retail and urban office space weighed heavily on the sector. With real interest rates still negative and inflation expectations rising, we expect to be selective opportunistic investors in the sector this year.
Commodities	Overweight	The "sudden stop" global recession has driven commodities such as oil to multidecade lows. The rush to the "safe haven" US dollar, which is near its multiyear high, has exacerbated these dynamics. While we recognize the complexity of the geopolitical issues that surround oil, we believe that on a six-to-12-month basis the outlook for the global economy and overall demand will improve materially. Thus, we suggest risk-oriented clients establish exposure to the broad diversified asset class through the use of active managers. Pure passive exposure is not advised at this time.
Hedged Strategies (Hedge Funds and Managed Futures)	Overweight	The bear market associated with COVID-19 has driven volatility to historic extremes and led to wide dispersion in price performance and stock-level idiosyncratic risk. These factors tend to create a constructive environment for hedge fund managers who are good stock-pickers and can use leverage and risk management techniques to amplify returns. We prefer very active and fundamental strategies, especially equity long/short.

<sup>\*</sup>For more about the risks to Duration, please see the Risk Considerations section beginning on page 11 of this report. Source: Morgan Stanley Wealth Management GlC as of March 5, 2021

## Macro Factor Heat Map Key

	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 optionadjusted spread	Earnings revisions breadth     Earnings surprise     Return on equity	Weighted average z- score of all factors

### **Disclosure Section**

The Global Investment Committee (GIC) is a group of seasoned investment professionals from Morgan Stanley & Co. and Morgan Stanley Wealth Management who meet regularly to discuss the global economy and markets. The committee determines the investment outlook that guides our advice to clients. They continually monitor developing economic and market conditions, review tactical outlooks and recommend asset allocation model weightings, as well as produce a suite of strategy, analysis, commentary, portfolio positioning suggestions and other reports and broadcasts.

#### Index Definitions

For index, indicator and survey definitions referenced in this report please visit the following: https://www.morganstanley.com/wealthinvestmentsolutions/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 appropriate 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 transferring interests in a fund; Potential lack of diversification 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 appropriate 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.

Hedge funds may involve a high degree of risk, often engage in leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

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 appropriate 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 portfólio.

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.

Certain securities referred to in this material may not have been registered under the U.S. Securities Act of 1933, as amended, and, if not, may not be offered or sold absent an exemption therefrom. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, and sale, exercise of rights or performance of obligations under any securities/instruments transaction.

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.

#### Disclosures

Morgan Stanley Wealth Management is the trade name of Morgan Stanley Smith Barney LLC, a registered broker-dealer in the United States. This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Past performance is not necessarily a guide to future performance.

The author(s) (if any authors are noted) principally responsible for the preparation of this material receive compensation based upon various factors, including quality and accuracy of their work, firm revenues (including trading and capital markets revenues), client feedback and

competitive factors. Morgan Stanley Wealth Management is involved in many businesses that may relate to companies, securities or instruments mentioned in this material.

This material has been prepared for informational purposes only and is not an offer to buy or sell or a solicitation of any offer to buy or sell any security/instrument, or to participate in any trading strategy. Any such offer would be made only after a prospective investor had completed its own independent investigation of the securities, instruments or transactions, and received all information it required to make its own investment decision, including, where applicable, a review of any offering circular or memorandum describing such security or instrument. That information would contain material information not contained herein and to which prospective participants are referred. This material is based on public information as of the specified date, and may be stale thereafter. We have no obligation to tell you when information herein may change. We make no representation or warranty with respect to the accuracy or completeness of this material. Morgan Stanley Wealth Management has no obligation to provide updated information on the securities/instruments mentioned herein.

The securities/instruments discussed in this material may not be appropriate for all investors. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. Morgan Stanley Wealth Management recommends that investors independently evaluate specific investments and strategies, and encourages investors to seek the advice of a financial advisor. The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies and other issuers or other factors. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley Wealth Management does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein.

This material should not be viewed as advice or recommendations with respect to asset allocation or any particular investment. This information is not intended to, and should not, form a primary basis for any investment decisions that you may make. Morgan Stanley Wealth Management is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended or under section 4975 of the Internal Revenue Code of 1986 as amended in providing this material except as otherwise provided in writing by Morgan Stanley and/or as described at www.morganstanley.com/disclosures/dol.

Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors do not provide legal or tax advice. Each client should always consult his/her personal tax and/or legal advisor for information concerning his/her individual situation and to learn about any potential tax or other implications that may result from acting on a particular recommendation.

This material is disseminated in Australia to "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813).

Morgan Stanley Wealth Management is not incorporated under the People's Republic of China ("PRC") law and the material in relation to this report is conducted outside the PRC. This report will be distributed only upon request of a specific recipient. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors must have the relevant qualifications to invest in such securities and must be responsible for obtaining all relevant approvals, licenses, verifications and or registrations from PRC's relevant governmental authorities.

If your financial adviser is based in Australia, Switzerland or the United Kingdom, then please be aware that this report is being distributed by the Morgan Stanley entity where your financial adviser is located, as follows: Australia: Morgan Stanley Wealth Management Australia Pty Ltd (ABN 19 009 145 555, AFSL No. 240813); Switzerland: Morgan Stanley (Switzerland) AG regulated by the Swiss Financial Market Supervisory Authority; or United Kingdom: Morgan Stanley Private Wealth Management Ltd, authorized and regulated by the Financial Conduct Authority, approves for the purposes of section 21 of the Financial Services and Markets Act 2000 this material for distribution in the United Kingdom.

Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

This material is disseminated in the United States of America by Morgan Stanley Smith Barney LLC.

Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material, or any portion thereof, may not be reprinted, sold or redistributed without the written consent of Morgan Stanley Smith Barney LLC.

© 2021 Morgan Stanley Smith Barney LLC. Member SIPC.

RSI1615132125253 03/2021