

Global Investment Committee | September 08, 2020

The GIC Weekly

Unappreciated Significance of the Fed's Policy Shift

With stocks at or near all-time highs, investors seem to accept the Fed's new "average inflation targeting" as a continuation of its "lower for longer" stance on interest rates. That view rationalizes extended valuations, crowding in megacap tech stocks and complacency toward economic risks. Granted, since the Fed's announcement late last month, both 10-year US Treasury nominal and real rates have fallen, taking the US dollar down with them, easing financial conditions. While the GIC recognizes the power of Fed liquidity, especially in a V-shaped economic recovery, the intermediate outlook is more complex. The new inflation stance could be seen as a reversal of the inflation-taming policy that fueled a bull market in bonds nearly four decades long. Should the Fed succeed, investors need to be prepared for higher inflation, higher long-term interest rates, lower price/earnings ratios, a weaker dollar and the potential failure of portfolio diversification. **Consider** revisiting strategic asset allocations to ensure inflation protection through real assets, exposure to nontraditional sources of income and returns, and less reliance on historical sources of portfolio diversification such as long-duration Treasuries.

Owing to COVID-19, this year's annual central bank confab known popularly by the place where it's held, Jackson Hole, was virtual and came off with little fanfare. While the agenda for the Aug. 28-29 meeting, a new Federal Reserve framework for measuring and managing inflation, was long known, we were surprised nonetheless at the limited market reaction to the Fed's embrace of "average inflation targeting."

This is a big deal. We see this as the Fed officially exiting the era of inflation management that was first adopted by then Fed Chair Paul Volcker 40 years ago, and has underpinned the multidecade bull market in US Treasuries. Still, global capital markets barely blinked. On Sept. 2, nearly a week after Fed Chair Jerome Powell's announcement, the S&P 500 Index stood at 3,588, up nearly 10% for the year to date and more than 200 points above the prepandemic high. At the same time, the benchmark 10-year US Treasury yield, which had once again moved toward 0.75% at the end of August, slipped back toward 0.60%, the bottom of its six-month range. The bond market continued to discount the fact that inflation expectations could run "hotter;" thus, the 10-year real rate plumbed new lows below -1%, while 10-year inflation breakeven rates topped 1.8%, their

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Upcoming Catalysts

September 07

China imports/exports

September 08

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

September 09

US JOLTS Survey

September 10

US Producer Price Index
US initial jobless claims
US continuing claims
European Central Bank policy meeting
US Producer Price Index

September 11

US Consumer Price Index

highest in a year. In short, it appeared that investors cheered Powell's words as nothing more than an extension of "lower for longer," a mantra that seemed to turbocharge existing market momentum around already expensive long-duration assets such as megacap tech stocks. We worry that such an oversimplified interpretation could expose investors to risk.

So what exactly is average inflation targeting, and what did Powell say that may be more nuanced than the market's initial reading? As defined in his comments, average inflation targeting takes an open-ended view of the zero lower bound for the fed funds rate, and holds that it is critical to anchor inflation expectations well above the long-run inflation target of 2.0%. Accordingly, that suggests that if inflation averages below 2% for long periods as it has since the financial crisis, then it must run well above 2% for long periods to achieve the 2% goal. To us, this policy unequivocally welcomes inflationary flare-ups, and even stokes them.

Equally historic, it appears that the Fed has now officially dispensed with the Phillips curve—a long-held economic theory that says lower levels of unemployment drive wages higher and, in turn, lead to higher inflation. This means that not only will the Fed not react to price stability signals, but it will not react to fundamental labor market signals. This is historic from where we sit, suggesting monetary policy is on perpetual hold, and that there is a new relationship between policy and economic fundamentals.

Now, it appears more likely that we will get actual inflation which, in turn, fuels inflation expectations. Chetan Ahya, Morgan Stanley & Co.'s chief economist, argues that inflation prospects in this cycle were already poised to accelerate given highly accommodative fiscal policy and intensifying political pressures for government spending. Ahya's analysis suggests that the federal government's priorities were already approaching a point of inflection prior to the recession as the forces of free trade, technology-driven deflation and unchecked monopolies came to a political and populist head. The Global Investment Committee has already laid out the "4D's" that are likely to drive inflation in the new business cycle: demographics, deglobalization, debt monetarization and dollar debasement (see *The GIC Weekly*, June 22).

So far, the only major asset that seems to have begun to discount this secular shift is the trade-weighted dollar, which is rolling over from a multiyear peak as it did in the 1980s and the 2000s (see *Chart of the Week*, page 3). A weaker dollar exacerbates inflation because it drives up the cost of imports, especially commodities and consumer goods that are major inputs to US consumption. Higher overall inflation has two major implications for investment portfolios. For bond

investors dependent on fixed income payments, it means a loss of purchasing power, negative real returns and price risk. For stock investors, inflation is not always friendly. If a company's costs are going up faster than it can raise prices, profit margins could narrow.

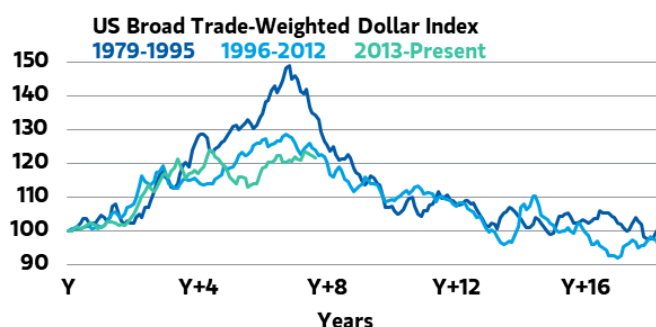
Another outgrowth of this new Fed policy is a steepening of the yield curve that will likely be driven by a sell-off and repricing of long-term bonds. Yield curve steepening has not usually been something to fear, but this time the risks are enormous given the extent to which growth stock valuations are premised on artificially low rates, negative term premiums and depressed inflationary expectations. The sustainability of unprecedented price/earnings (P/E) multiples becomes ever more fragile especially as the Fed moves into uncharted territory.

A final point worth making is that should inflation and inflation expectations pick up, they will likely hit stocks and long-term bonds simultaneously. Traditionally, stocks and bonds are negatively correlated, which is what makes them work in a diversified portfolio. Because of the Fed's heavy hand in keeping interest rates depressed, correlations have turned positive. To preserve capital during this shift, investors will not be able to rely on bonds. Preservation will likely require exposure to traditional real assets like commodities, especially gold, inflation-protected securities and real estate, and nontraditional ones, such as infrastructure, green energy projects, pipelines and equipment leasing.

Bottom Line: Awash in liquidity and anticipating further fiscal stimulus, investors seem to view the Fed's new average inflation targeting framework as nothing more than a slight tweak of the "lower for longer" market narrative. While this may be true in the short term, for the intermediate term, investors should contemplate the implications of the Fed driving inflation "hotter for longer." This is a philosophical reversal of Volcker's inflation-fighting mantra that has underpinned the 38-year bull market in Treasuries. Higher inflationary expectations ultimately lead to higher interest rates, a weaker dollar, higher bond term premiums, lower profit margins and lower P/E multiples. **Watch** for 10-year real rates to bottom, signifying the point at which nominal rates will begin to reflect rising inflation expectations. **Consider** revisiting strategic asset allocations to ensure inflation protection through real assets, exposure to nontraditional sources of income and returns, and less reliance on historical sources of diversification such as long-duration Treasuries.

Chart of the Week: A New Secular Bear Market for the US Dollar?

For the past 40 years, the US dollar has moved in broad multiyear cycles; higher in periods of strong growth and improvement in the current account and fiscal deficits, and lower under the opposite conditions (see chart). We have long opined that the dollar looked to be peaking as the past business cycle matured, US growth slowed and rate differentials narrowed. Now, the aggressive US policy response to the pandemic is likely to accelerate the dollar's debasement as deficits and US debt have ballooned while the Fed's new average inflation targeting framework aims to keep real rates negative for years to come. A weaker dollar itself feeds sought-after inflationary conditions.



Source: Alpine Macro, Bloomberg as of Sept. 3, 2020

Fixed Income Insight: China's Growing Yield Advantage Helps the Renminbi

As Federal Reserve policy targets “lower for longer” interest rates, China has been more balanced in its reflationary stance. A key reason is that its policy rate is not near the “zero bound,” so the central bank has more room to maneuver. Thus, relative to the US, China has higher bond yields and steeper yield curves. With the dollar weakening and renminbi strengthening on the back of widening yield differentials, global trading partners and central banks may accelerate the shift of foreign currency reserves toward the renminbi and away from the greenback (see chart). Such a development could be dangerous for the debt-laden US government given its dependence on foreign capital to absorb 40% to 45% of Treasury issuance.



Source: Bloomberg as of Sept. 3, 2020

Market Factor Data Points (for the week ending Sept. 4, 2020)

Report	Period	Consensus	Actual	Prior	Trend
ISM Manufacturing PMI	Aug '20	54.8	56	54.2	↑
ISM Services PMI	Aug '20	57.0	56.9	58.1	↓
US unemployment rate	Aug '20	9.8%	8.4%	10.2%	↓
US nonfarm payrolls	Aug '20	1,350,000	1,371,000	1,734,000	↓
Dallas Fed Manufacturing Activity Index	Aug '20	0	8	-3	↑
ADP National Employment Report	Aug '20	1,000,000	428,000	212,000	↑
US initial jobless claims	Wk. of Aug. 29	950,000	881,000	1,011,000	↓
US continuing claims	Wk. of Aug. 22	14,000,000	13,254,000	14,492,000	↓
Challenger Job Cuts, year over year	Aug '20	-	116.50%	576.10%	↓
Euro Zone unemployment rate	Jul '20	8.0%	7.9%	7.7%	↑
China Caixin Manufacturing PMI	Aug '20	52.5	53.1	52.8	↑

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

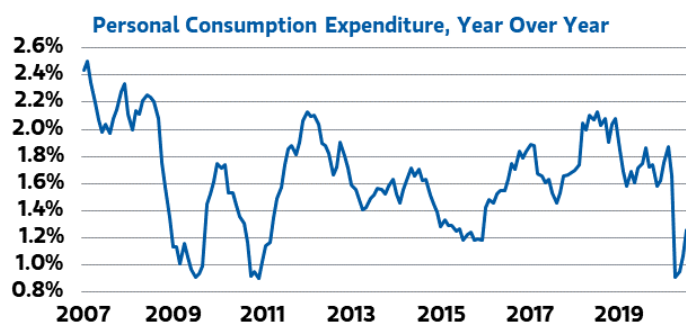
Macro Factor Heat Map (as of Sept. 4, 2020)

	Economic Growth	Rates	Inflation / Deflation	Liquidity	Sentiment And Risk	Valuation	Earnings	GIC Conclusion
Europe	↑	↓	↓ Falling CPI	↑	↓	↑	↓	Awaiting Fiscal Stimulus
China	↑	↓	↓	↓	↓	↑	↑	Could Benefit from Post Coronavirus Stimulus and V-Shaped Recovery
Japan	↑	↑	↓	↑	↑	↑	↑	Valuations Still Discounting Recession, Fundamentals Improving on Margins
Brazil	↑	↑	↓	↑	↓	↑	↓	Could Benefit When Currency Markets Stabilize
	Risk Asset Positive	Neutral	Risk Asset Negative					

Note: Text in a factor box denotes a color; In Europe, inflation fell from neutral to risk asset negative on falling CPI numbers; for further explanation of the chart, see page 10.

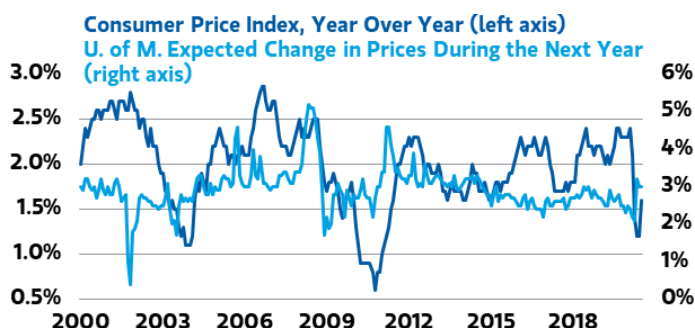
Source: Morgan Stanley Wealth Management GIC

Charts in Focus: Federal Reserve Targets Fed's 2% Inflation Target Remains Elusive



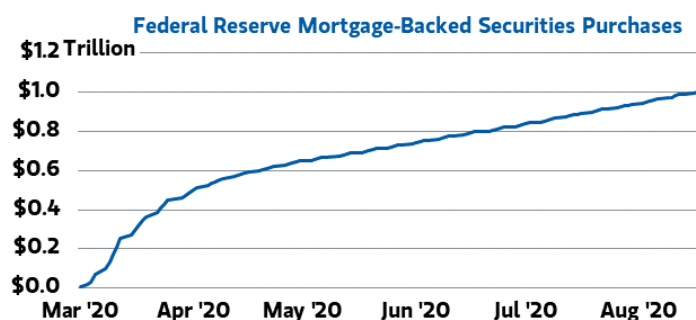
Source: Bloomberg as of Sept. 3, 2020

Consumer Expectations for Inflation Rise



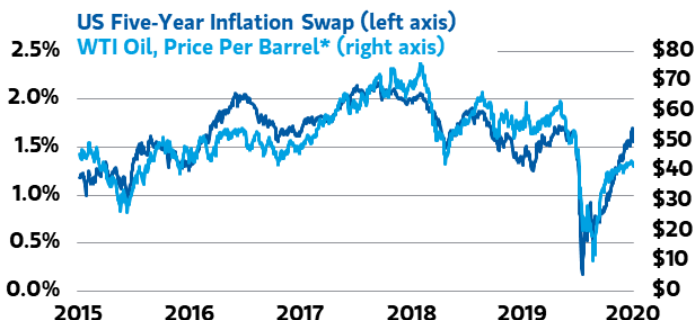
Source: Bloomberg as of Sept. 3, 2020

Fed Buys \$1 Trillion in Mortgages Since March



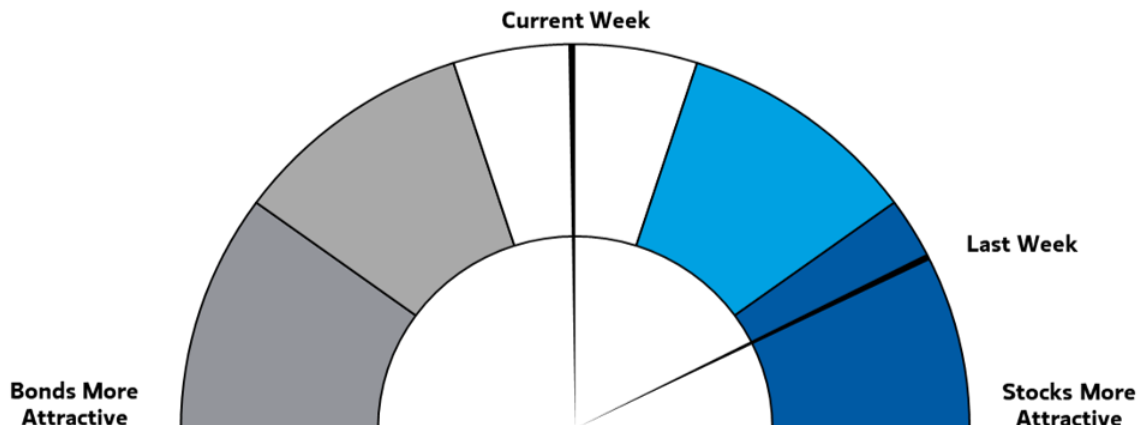
Source: Bloomberg as of Sept. 3, 2020

Inflation Expectations Correlate With Oil Prices



*Excludes April 20 negative price of -\$37.63 price per barrel.
Source: Bloomberg as of Sept. 3, 2020

Short-Term Stock and Bond Indicator



	MACRO		POLICY		FUNDAMENTALS		SENTIMENT & TECHNICALS	
	Growth	Inflation	Rates	Liquidity	Valuation & Market	Earnings	Sentiment	Technicals
Current	Very Positive	Very Positive	Very Positive	Neutral	Very Negative	Very Negative	Neutral	Neutral
Last Week	Very Positive	Very Positive	Very Positive	Very Positive	Neutral	Neutral	Very Negative	Very Positive

CATEGORY	INDICATOR	READING
Growth	PMI (+)	Risk Off
	Durable Goods (+)	Risk On
	Retail Sales (+)	Risk On
	Manufacturing Hours Worked (+)	Risk On
Inflation	Commodity Prices (+)	Risk On
Rates	Yield Curve: 10-Yr./Three-Mo.(-)	Risk On
	Yield Curve: Two-Yr./Three-Mo.(-)	Risk On
	Pace of Interest Rate Hikes (-)	Risk On
	Term Premium Model (-)	Risk Off
Liquidity	High Yield Spreads (-)	Risk On
	Investment Grade Spreads (-)	Neutral
	Financial Conditions (-)	Risk On
Valuation & Market Behavior	S&P 500 Earnings/Baa Yield (+)	Neutral
	Large vs. Small Performance (-)	Risk Off
	High- vs. Low-Quality Performance (-)	Risk On
	High- vs. Low-Beta Performance (+)	Neutral
	S&P 500 Forward Price/Earnings Ratio (+)	Neutral
Earnings	Earnings Revisions Breadth (-)	Risk Off
Sentiment	Global Risk Demand (+)	Risk On
	Implied Currency Volatility (-)	Risk Off
	Five-Yr. Macro Sensitivity (-)	Risk Off
Technicals	% Stocks Above 200-Day Moving Avg. (+)	Risk On
	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;		Positive for Stocks Relative to Bonds
- indicates that a rise in the indicator is linked to a less favorable outlook for risk assets.		Neutral
Color coding is set in accordance with the impact on risk assets.		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. 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 Sept. 4, 2020

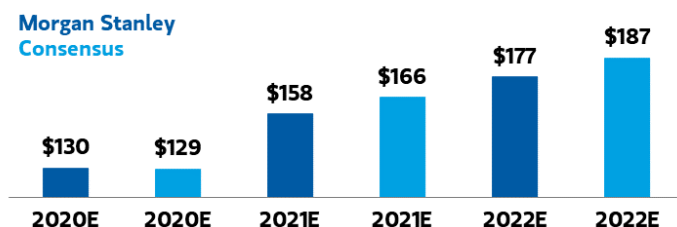
Asset Class Performance (as of Sept. 4, 2020)

ASSET CLASS	ANNUALIZED RETURNS (%)							YIELD	VALUATION		VOLATILITY (%)		CORRELATION TO GLOBAL EQUITIES	
	YTD	1-Yr	2019	3-Yr ¹	5-Yr ¹	10-Yr ¹	20-Yr ¹	Current YTM	Current YTM	Avg YTM ²	30 Days	20 Yrs. ¹	30 Days	20 Yrs. ¹
CASH								Current Div. Yld.	Current P/E	Avg. P/E ²				
90-Day US Treasury Bills	0.6	1.2	2.3	1.7	1.2	0.6	1.5	0.11	0.11	1.49	0.0	0.52	0.15	-0.08
GLOBAL EQUITIES														
US Large-Cap Growth	30.8	43.0	38.2	26.4	21.9	20.0	6.0	0.59	33.6	19.5	23.6	16.7	0.85	0.90
US Large-Cap Value	-8.9	-0.8	25.6	5.2	8.5	11.1	5.9	2.88	16.5	13.5	12.6	13.9	0.69	0.91
US Mid-Cap Growth	14.5	21.6	34.8	17.1	13.8	15.6	5.3	0.36	37.2	22.2	20.6	20.7	0.87	0.86
US Mid-Cap Value	-13.3	-6.4	26.7	1.7	6.6	11.1	8.7	2.34	17.8	14.4	14.2	16.1	0.60	0.89
US Small-Cap Growth	4.5	12.2	31.8	14.0	12.7	15.3	8.1	0.45	39.9	23.8	17.9	20.4	0.87	0.87
US Small-Cap Value	-17.7	-9.0	22.9	-1.7	4.0	9.5	8.3	2.20	23.7	17.5	17.8	17.5	0.46	0.86
Europe Equity	-7.5	1.2	24.6	2.2	4.6	6.3	4.1	2.65	17.5	13.4	16.1	17.9	0.68	0.95
Japan Equity	-1.5	9.4	20.1	4.7	6.2	6.9	2.0	2.27	18.1	17.1	12.4	16.0	0.24	0.72
Asia Pacific ex Japan Equity	-9.3	-3.8	18.5	2.2	7.4	5.8	7.7	3.40	18.1	14.4	17.0	19.3	0.38	0.88
Emerging Markets	0.2	12.5	18.9	3.2	9.1	4.1	7.8	2.28	15.3	11.2	15.1	21.5	0.63	0.88
GLOBAL FIXED INCOME														
Short-Term Fixed Income	3.1	3.7	4.0	2.8	2.2	1.6	3.1	0.34	15.0	31.0	0.4	1.4	0.21	-0.17
US Fixed Income	6.7	6.7	8.7	5.1	4.3	3.7	5.0	1.18	56.0	52.5	3.3	3.4	0.19	-0.06
International Fixed Income	5.2	4.6	5.8	3.1	3.9	2.1	4.8	0.78	44.0	49.0	5.1	7.8	0.32	0.33
Inflation-Protected Securities	5.1	5.9	9.2	3.8	4.4	3.4	6.1	-	-	-	7.1	7.7	0.28	0.45
High Yield	1.3	4.7	12.6	3.6	6.0	6.6	7.7	6.02	537.0	494.5	2.7	9.5	0.57	0.76
Emerging Markets Fixed Income	-4.2	0.3	13.5	0.7	4.6	1.3	6.4	4.43	331.0	322.5	7.5	11.5	0.08	0.66
ALTERNATIVE INVESTMENTS														
Real Estate/REITs	-16.8	-13.1	23.6	0.3	4.3	6.5	7.8	4.38	-	-	10.7	17.7	0.44	0.80
Master Limited Partnerships ³	-39.0	-41.5	6.6	-16.6	-11.9	-2.2	-	16.68	-	-	23.7	17.6	0.22	0.50
Commodities ex Prec. Metals	-18.6	-13.5	5.9	-6.8	-6.2	-7.0	-2.0	-	-	-	8.9	16.7	0.38	0.49
Precious Metals	28.6	26.7	17.0	13.5	11.1	3.7	9.2	-	-	-	35.1	18.9	0.26	0.20
Hedged Strategies ⁴	1.8	4.5	8.6	1.7	1.8	1.3	-	-	-	-	2.2	5.2	0.80	0.70
Managed Futures ⁵	0.0	0.8	4.8	1.5	0.3	-0.3	-	-	-	-	3.7	7.1	0.52	0.13
S&P 500	7.8	17.4	31.5	14.5	14.5	15.2	6.3	1.72	22.3	15.4	15.56	14.6	0.93	0.96
Russell 2000	-6.9	3.1	25.5	5.0	7.7	11.5	6.9	1.66	38.2	21.0	16.52	19.2	0.69	0.84
MSCI EAFE	-6.2	2.6	22.7	2.8	5.2	6.4	3.9	2.63	17.7	14.0	13.18	16.3	0.64	0.97
MSCI AC World	3.2	12.8	27.3	9.6	10.8	10.5	5.4	1.98	19.9	14.7	12.43	15.3	1.00	1.00

Note: Performance values calculated using USD. 1. As of Aug. 31, 2020. 2. 20-year average as of Aug. 31, 2020. 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. 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



Note: 2022 consensus is as of June 14, 2020
Source: Refinitiv, S&P, MS & Co. Research as of Sept. 4, 2020

MS & Co. S&P 500 Price Target: Midyear 2021

LANDSCAPE	EARNINGS	PRICE/EARNINGS MULTIPLE	PRICE TARGET	UPSIDE/DOWNSIDE
Bull Case	\$176	21.0	3,700	8.0%
Base Case	\$168	20.0	3,350	-2.2%
Bear Case	\$152	19.0	2,900	-15.4%
Current S&P 500 Price			3,427	

Note: Price targets are based on estimated June 2021 earnings.
Source: MS & Co. Research as of Sept. 4, 2020

S&P 500 Sector Performance and Valuation (as of Sept. 4, 2020)

INDEX NAME	TOTAL RETURN			DIVIDEND YIELD (%)	BETA	20-YEAR AVG. FORWARD 12-MO. PE	FORWARD 12-MO. P/E*
	WTD (%)	YTD (%)	1-YEAR (%)				
S&P 500	-2.27	7.80	17.39	1.72		15.4	22.3
Energy	-4.43	-40.27	-36.45	6.69	1.34	14.0	-86.7
Materials	0.91	7.43	16.44	1.99	1.03	14.3	22.4
Industrials	-1.19	-3.26	3.43	1.95	1.08	16.0	26.0
Consumer Discretionary	-2.45	24.81	28.13	1.01	0.90	18.2	39.1
Consumer Staples	-0.37	5.69	10.32	2.61	0.72	16.9	21.2
Health Care	-2.08	5.06	19.18	1.65	0.83	15.9	16.3
Financials	-0.25	-16.29	-5.36	2.46	1.24	12.5	14.5
Information Technology	-4.14	30.38	47.07	1.00	1.11	18.9	26.7
Telecommunication Services	-2.52	13.88	21.75	1.11	0.87	15.5	23.4
Utilities	0.53	-6.05	-2.58	3.43	0.94	14.6	18.1
Real Estate	-0.89	-4.17	-5.67	3.12	1.04	15.8	20.4









Source: Morgan Stanley & Co. Research



Equity Market Relative Valuation (as of Sept. 4, 2020)

	Forward 12 Months									
	Price/Earnings		Price/Cash Flow		Price/Sales		Price/Book Value		Equity Risk Premium	
	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile	Level	%-ile
US Equities										
Large Cap Growth	30.6	100%	22.5	98%	4.2	100%	9.9	98%	256	29%
Large-Cap Value	18.2	99%	11.3	98%	1.7	99%	2.0	96%	477	66%
Mid-Cap Growth	37.7	99%	26.4	97%	2.7	99%	8.7	97%	195	21%
Mid-Cap Value	19.8	98%	10.8	97%	1.3	90%	1.9	96%	435	75%
Small-Cap Growth	90.9	98%	9.0	27%	2.0	99%	4.4	92%	39	27%
Small-Cap Value	21.9	94%	5.2	12%	0.4	2%	1.1	17%	386	77%
International Equities										
Europe	17.2	98%	8.4	64%	1.3	92%	1.6	47%	621	45%
Japan	17.7	84%	10.2	100%	0.9	97%	1.2	55%	561	28%
Asia Pacific ex Japan	18.0	99%	10.1	24%	2.4	82%	1.4	18%	457	80%
Emerging & Frontier Markets										
	12.0	59%	7.9	85%	1.4	85%	1.1	6%	784	66%
Total Equities										
US	23.6	99%	14.8	98%	2.2	99%	3.3	99%	353	48%
International	17.3	98%	9.0	87%	1.2	94%	1.5	42%	527	25%
Emerging Markets	12.0	59%	7.9	85%	1.4	85%	1.1	6%	784	66%

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							DURATION (YRS.)	YIELD-TO- WORST (%)	OAS (BP)	OAS RANGE**		
YIELD (%)		TOTAL RETURN (%)								RICH	CHEAP	
Treasury Benchmark	Current	ΔWTD	ΔYTD	YTD	INVESTMENT GRADE	MBS*	3.26	1.20	52	25		132
3-Month	0.10	0.00	-1.44	0.55		AAA	5.48	0.81	24	12		54
2-Year	0.14	0.02	-1.43	2.94		AA	8.39	1.43	77	49		200
5-Year	0.30	0.03	-1.39	7.15		A	8.51	1.65	98	70		304
10-Year	0.72	0.00	-1.20	11.98		BBB	8.56	2.38	169	123		473
30-Year	1.47	-0.03	-0.92	23.36	HIGH YIELD	BB	4.28	4.06	346	163		858
2-Yr/10-Yr. Spread (bp)	58	-1.89	22.68	-		B	3.14	5.71	502	292		1,147
10-Yr. TIPS Breakeven (bp)	170	-7.52	-8.36	-		CCC	2.89	10.21	975	546		1,815
Interest Rate Volatility† (bp)	47	-1.15	-19.54	-								

 Current  Two-Year Average

◆ Current ● Two-Year Average

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. © 2020 FTSE Index LLC. All rights reserved. Data as of Sept. 4, 2020

Government Debt Monitor & Benchmark Returns

Global					TOTAL RETURN (%)			
YIELD (%)		TOTAL RETURN (%)*						
10-Year Govt. Bond	Current	ΔWTD	ΔYTD	YTD	Index	YTD	MTD	2019
France	-0.18	-0.07	0.00	3.73	Bloomberg Barclays US Aggregate	6.76	-0.08	8.72
Germany	-0.47	-0.06	0.00	3.18	Bloomberg Barclays US MBS	3.70	-0.03	6.35
Japan	0.04	-0.02	0.06	0.58	Bloomberg Barclays US IG Corporate	6.90	-0.04	14.54
Spain	0.35	-0.03	0.00	3.08	Bloomberg Barclays Municipal	3.23	-0.07	7.54
UK	0.26	-0.05	-0.56	5.49	Bloomberg Barclays US High Yield	1.57	-0.10	14.32
3-Month LIBOR	0.25	0.01	-2.56	-	Bloomberg Barclays Global Aggregate	5.72	-0.36	6.84
US Tax Exempt					JPMorgan Emerging Market	2.90	0.82	14.42
10-Year AAA Muni	0.81	-1.35	-1.50	3.23				
10-Yr. Muni/UST Ratio	113.23	31.19	26.91	-				

*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 Sept. 4, 2020

Morgan Stanley & Co. Forecasts (as of Sept. 4, 2020)

	REAL GDP GROWTH (%)			10-YR. GOVT. BOND YIELD (%)		HEADLINE INFLATION (%)		
	2019	2020E	2021E	Q4 '20E	Q2 '21E	2019	2020E	2021E
Global	3.1	-3.8	5.9			2.7	2.3	2.6
US	2.3	-5.3	3.4	1.15	1.30	1.8	1.0	2.1
Euro Zone	1.3	-8.7	5.5			1.2	0.4	1.0
UK	1.4	-9.6	6.6	0.25	0.45	1.8	0.8	1.6
Japan	0.7	-5.9	1.7	0.00	0.00	0.5	0.0	-0.3
Emerging Markets	4.1	-1.9	7.2			3.6	3.4	3.3
China	6.1	2.3	8.9			2.9	2.9	3.1

Source: Morgan Stanley & Co. Research

Tactical Asset Allocation Reasoning

Global Equities		Relative Weight Within Equities
US	Overweight	Global stock markets have entered a bear market on concerns about the negative growth impact of the coronavirus. Although we expect US and global recessions in the second quarter of 2020, our base case is that recent extraordinary policy actions from both central banks and national governments will help cushion the economic impact. Markets are already pricing the most likely scenarios. We recently upgraded our exposure to large-cap growth and small- and mid-cap equities, believing that active stock pickers have a good entry point over the next several months.
International Equities (Developed Markets)	Market Weight	We recently reduced exposure to both Europe and Japan believing that, while policy responses were meaningful, their impact may ultimately be lumpy and diluted by additional headwinds—in the case of Europe, the lack of fiscal integration, and in Japan, the strength of yen.
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. For most countries, especially China, the collapse in oil prices is a material tailwind for consumer purchasing power.
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	Underweight	Real estate investment trusts (REITs) have performed very well as global growth slowed and interest rates fell. However, REITs remain expensive and are vulnerable to credit risks. We will revisit our position as nominal GDP troughs and/or valuations become more attractive.
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.

*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 Sept. 4, 2020

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	<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

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/wealth-investmentsolutions/wmir-definitions>

Risk Considerations

MLPs

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk.

The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

Duration

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

Investing in foreign markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. **Investing in currency** involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with **emerging markets**, since these countries may have relatively unstable governments and less established markets and economies.

Alternative investments often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. Alternative investments are 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 trading authority when a single advisor is utilized; Absence of information regarding valuations and pricing; Complex tax structures and delays in tax reporting; Less regulation and higher fees than mutual funds; and Risks associated with the operations, personnel, and processes of the manager. Further, opinions regarding Alternative Investments expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are

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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 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 portfolio.

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

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

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

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

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

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

The market value of **convertible bonds** and the underlying common stock(s) will fluctuate and after purchase may be worth more or less

THE GIC WEEKLY

than original cost. If sold prior to maturity, investors may receive more or less than their original purchase price or maturity value, depending on market conditions. Callable bonds may be redeemed by the issuer prior to maturity. Additional call features may exist that could affect yield.

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

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

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

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

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

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

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

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

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

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

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

Credit ratings are subject to change.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies. **Technology stocks** may be especially volatile. Risks applicable to companies in the **energy and natural resources** sectors include commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

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