## INVESTMENT INSTITUTE

## Executive Summary

# Asset Allocation Strategy

## Investing for increased volatility

Over the past year, market volatility has increased from the unusually low levels in 2016 and 2017, as equity markets corrected and most asset classes had negative 2018 returns. We expect volatility to remain elevated—and more aligned with historical averages—as investors price in global economic growth concerns, trade issues, and political uncertainties in the U.S. and overseas.

Although global equity markets corrected last year, we do not anticipate the end of the bull market just yet. It is not uncommon for equity markets to take time to recover fully after a correction, but corrections—even those as deep as the most recent one—are not typically accompanied by recessions.

Our view is that the global economy is strong and fundamentals remain positive. We believe that investors should keep a longer-term perspective and remain fully invested in a diversified portfolio that aligns with their risk appetite and time horizon. We suggest that investors consider the following actions in response to market volatility:

Maintain a modest cash position, but look for opportunities to become fully invested: Cash and cash alternatives have a place in an investment portfolio for rebalancing, tactical opportunities, and transaction costs. However, we believe that the amount should be kept at a minimum—as returns for this asset class historically have barely outpaced inflation and recently have lost ground to inflation. For investors that are overweight in cash, we recommend dollar-cost averaging into a diversified mix of assets\*.

**Maintain exposure to fixed income:** Even in this low-rate environment, bonds should be included in a diversified portfolio. They can provide income, stability of principal, and low correlation to equities. Additionally, short-term interest rates have risen since the Federal Reserve (Fed) began tightening monetary policy. Investing in short-term securities can offer a lower volatility profile than longer-term issues.

**Globalize your equities:** U.S. equity markets have outperformed their international counterparts for much of this recovery, but international economies and earnings generally are improving. International equities do not always move in lockstep with U.S. equities, and these assets can add attractive diversification benefits to a portfolio.

**Consider alternative investments:** For accredited or qualified investors, hedge funds may provide some downside protection when equity markets decline. We expect hedge funds to generate positive returns in 2019 as correlations fall and the environment for active management improves.

**Stick to your plan by rebalancing:** Regularly rebalancing portfolio holdings is important. Letting investments move with the markets without rebalancing can lead to portfolio risk that does not match the investor's risk profile. Keeping a portfolio aligned with its strategic allocation targets can reduce potential overexposure to risky assets when a correction or bear market arrives.

## February 15, 2019

**Economic summary.** Due to the federal government shutdown, the advance look at fourth-quarter gross domestic product will not be released until the end of February.

**Fixed income.** Fixed income had a solid 2019 start, with January gains for all major bond classes. Preferred stock (+5.1%) outperformed other fixed-income classes as a "risk-on" environment returned. Improved risk sentiment fueled strong U.S. high-yield and investment-grade corporate bond returns (+4.5% and +2.4%, respectively). It also contributed to the rebound in emerging market (EM) debt returns last month (+4.4% and +5.8% in U.S. dollar-denominated and local currency markets, respectively).

Equities. All major equity classes gained in January—as markets reclaimed December and 2018 losses, and valuation multiples rebounded from depressed December levels. U.S. small caps led January performance as the Russell 2000 Index returned 11.2%. To help reduce future volatility, we downgraded our U.S. small cap equity view from neutral to unfavorable on January 31, following the rally from the Christmas Eve low. We remain favorable on U.S. large caps and mid caps; they returned 8.0% and 10.8%, respectively, last month. We are most favorable on EM equities (+8.8% last month), while we hold a neutral developed market equity view (+6.6%).

Real assets. January was a strong month for real assets as a bounce from pessimistic extremes supported this asset group as well as others. Commodities had the lowest real assets return, but still gained 5.4% last month. Public real estate and master limited partnerships returned 10.9% and 12.6%, respectively.

Alternative investments\*\*. Early estimates from Hedge Fund Research, Inc. (HFR) indicate strong January returns. More directional, long-biased hedge fund strategies—such as Equity Hedge, Distressed, and Activist—performed well, fueled by the risk-asset recovery. Relative Value strategies gained, but trailed broader credit markets, due to short corporate and Structured Credit market exposure. The Macro strategy's negative January return erased much of its December gains as trends in equity and fixed income markets reversed.

Investment and Insurance Products: • NOT FDIC Insured • NO Bank Guarantee • MAY Lose Value

<sup>\*</sup>A periodic investment plan such as dollar cost averaging does not assure a profit or protect against a loss in declining markets. Since such a strategy involves continuous investment, the investor should consider their ability to continue purchases through periods of low price levels.

<sup>\*\*</sup>Alternative investments are not suitable for all investors. They are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see the end of the report for important definitions and disclosures.

Wells Fargo Investment Institute Forecasts		
	2019 YE targets	Current
Global economy (%)	-	
Oomestic GDP growth	2.5	3.0 <sup>1</sup>
omestic inflation	2.2	1.9 <sup>3</sup>
Oomestic unemployment rate	3.4	4.0
ilobal GDP growth	3.6	3.7 <sup>3</sup>
Developed-market GDP growth	2.0	2.1 <sup>1</sup>
Developed-market inflation	1.9	2.2 <sup>2</sup>
merging-market GDP growth	4.8	5.0 <sup>1</sup>
Emerging-market inflation	4.3	5.4 <sup>2</sup>
Eurozone GDP growth	1.6	1.2 <sup>3</sup>
Eurozone inflation	1.7	1.4
Global equities		
S&P 500 Index	2750 - 2850	2704
S&P 500 earnings per share (\$)	173	161
Russell Midcap® Index	2045 - 2145	2056
Russell Midcap earnings per share (\$)	124	115
ussell 2000 Index	1500 - 1600	1499
Russell 2000 earnings per share (\$)	81	58
ASCI EAFE Index	1850 - 1950	1831
MSCI EAFE earnings per share (\$)	155	133
MSCI Emerging Markets (EM) Index	1080 - 1180	1050
MSCI EM earnings per share (\$)	104	81
Global fixed income (%)		
10-year U.S. Treasury yield	3.00 - 3.50	2.63
0-year U.S. Treasury yield	3.00 - 3.50	3.00
ed funds rate	2.75 - 3.00	2.50
Global real assets (%)		
West Texas Intermediate crude oil price (\$ per barrel)	60 - 70	54
Brent crude oil price (\$ per barrel)	65 - 75	62
Gold price (\$ per troy ounce)	1,250 - 1,350	1,320
Currencies		
Dollar/euro exchange rate	\$1.17 - \$1.25	\$1.14
Yen/dollar exchange rate	¥102 - ¥112	¥108.89

Sources: FactSet, Bloomberg, International Monetary Fund, as of January 31, 2019. The 2019 targets are Wells Fargo Investment Institute forecasts, as of February 15, 2019. Forecasts are based on certain assumptions and on our views of market and economic conditions, which are subject to change. See end of report for important definitions and disclosures.

## Past performance is no guarantee of future results.

Total Returns (%)						
Index	MTD	QTD	YTD	1 year	3 year	5 year
Fixed income						
U.S. Taxable Inv Grade Fixed Income	1.1	1.1	1.1	2.3	2.0	2.4
High Yield Taxable Fixed Income	4.5	4.5	4.5	1.7	9.4	4.6
DM ExU.S. Fixed Income (Unhedged)	1.9	1.9	1.9	-2.8	2.9	0.1
EM Fixed Income (U.S. dollar)	4.4	4.4	4.4	-0.2	6.3	5.3
Equities						
U.S. Large Cap Equities	8.0	8.0	8.0	-2.3	14.0	11.0
U.S. Mid Cap Equities	10.8	10.8	10.8	-2.9	13.3	8.9
U.S. Small Cap Equities	11.2	11.2	11.2	-3.5	14.7	7.3
DM Equities Ex-U.S. (U.S. dollar)	6.6	6.6	6.6	-12.1	8.3	3.1
EM Equities (U.S. dollar)	8.8	8.8	8.8	-13.9	15.3	5.2
Real assets						
Public Real Estate	10.9	10.9	10.9	5.6	8.9	7.5
Master Limited Partnerships	12.6	12.6	12.6	-6.7	7.1	-5.2
Commodities (BCOM)	5.4	5.4	5.4	-8.2	2.7	-7.9
Alternative investments						
Global Hedge Funds	3.5	3.5	3.5	-3.5	5.1	3.0

Sources: Bloomberg Barclays, J.P. Morgan, Standard & Poor's, Russell Indices, MSCI Inc., FTSE, Alerian, Bloomberg, Hedge Fund Research, Inc.; as of January 31, 2019.

DM indicates Developed Market; EM indicates Emerging Market. Returns over one year are annualized. An index is unmanaged and not available for direct investment. Past performance is no quarantee of future results. See end of report for important definitions and disclosures.

	Benchmark	Most		Region	al guic	dance	Most
Region	weight*		orable	N	eutral	fa	vorable
Developed Market Ex-U.S. Equities							
Europe	60						
Pacific	40						
Emerging Market Equities							
Emerging Asia	74						
Emerging Europe, Middle East and Africa	13						
Latin America	13						

Source: Wells Fargo Investment Institute; as of January 31, 2019.

<sup>&</sup>lt;sup>1</sup>As of September 30, 2018. <sup>2</sup>As of October 31, 2018. <sup>3</sup>As of December 31, 2018.

<sup>\*</sup> Benchmarks are MSCI EAFE Index for DM and MSCI Emerging Markets Index for EM.

#### Strategic and Tactical Asset Allocation Three asset groups: INCOME **GROWTH AND INCOME GROWTH** fixed income, equities, Conservative Moderate Moderate Conservative Moderate Aggressive Conservative Aggressive Aggressive and real assets **STRATEGIC** Strategic Tactical Cash Alternatives (%) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 **Total Fixed Income (%)** 85.0 85.0 72.0 74.0 64.0 66.0 51.0 51.0 41.0 40.0 33.0 32.0 23.0 23.0 16.0 16.0 7.0 6.0 19.0 25.0 U.S. Short Term Taxable 28.0 31.0 8.0 13.0 7.0 12.0 4.0 11.0 2.0 7.0 4.0 10.0 2.0 7.0 0.0 4.0 30.0 30.0 U.S. Intermediate Term Taxable 38.0 40.0 25.0 25.0 20.0 20.0 16.0 14.0 11.0 11.0 6.0 4.0 3.0 3.0 0.0 0.0 3.0 U.S. Long Term Taxable 5.0 2.0 7.0 3.0 10.0 7.0 7.0 7.0 3.0 4.0 0.0 4.0 3.0 0.0 0.0 10.0 0.0 High Yield Taxable Fixed Income 5.0 4.0 6.0 3.0 4.0 2.0 0.0 3.0 6.0 4.0 8.0 6.0 6.0 7.0 3.0 2.0 3.0 0.0 Developed Market Ex-U.S. Fixed Income 6.0 3.0 5.0 2.0 5.0 2.0 3.0 0.0 3.0 0.0 3.0 0.0 2.0 0.0 2.0 0.0 0.0 0.0 **Emerging Market Fixed Income** 3.0 6.0 5.0 10.0 8.0 13.0 5.0 8.0 5.0 9.0 6.0 11.0 3.0 7.0 3.0 6.0 2.0 2.0 **Total Equities (%)** 8.0 10.0 20.0 21.0 28.0 29.0 39.0 42.0 49.0 53.0 57.0 61.0 68.0 71.0 75.0 78.0 84.0 88.0 U.S. Large Cap Equities 4.0 12.0 15.0 15.0 18.0 17.0 20.0 21.0 24.0 25.0 28.0 29.0 32.0 29.0 32.0 27.0 30.0 6.0 **U.S. Mid Cap Equities** 2.0 2.0 2.0 2.0 4.0 4.0 7.0 7.0 9.0 9.0 11.0 11.0 12.0 12.0 13.0 13.0 15.0 15.0 **U.S. Small Cap Equities** 0.0 0.0 2.0 0.0 4.0 2.0 6.0 3.0 8.0 5.0 8.0 5.0 10.0 6.0 13.0 9.0 14.0 10.0 Developed Market Ex-U.S. Equities 5.0 5.0 5.0 6.0 6.0 7.0 10.0 14.0 14.0 2.0 2.0 4.0 4.0 5.0 7.0 9.0 9.0 10.0 **Emerging Market Equities** 0.0 0.0 4.0 7.0 5.0 9.0 10.0 12.0 10.0 14.0 14.0 19.0 0.0 0.0 0.0 0.0 6.0 8.0 **Total Real Assets (%)** 4.0 7.0 4.0 4.0 2.0 5.0 2.0 5.0 2.0 7.0 7.0 4.0 7.0 4.0 7.0 4.0 7.0 4.0 **Public Real Estate** 4.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 5.0 2.0 Commodities 0.0 0.0 0.0 0.0 0.0 0.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0

Strategic allocations are updated annually; last update was July 17, 2018. Tactical allocations are updated periodically; last update was January 31, 2019.

## Strategic and Tactical Asset Allocation

Four asset groups: fixed income, equities, real assets, and alternative investments (without private capital)

## STRATEGIC

INCOME	GF	ROWTH AND INCO	OME		GROWTH	
Conservative Moderate Aggressive	Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive

	Strategi	c Tactical																
Cash Alternatives (%)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Total Fixed Income (%)	77.0	77.0	64.0	64.0	56.0	59.0	41.0	41.0	31.0	31.0	23.0	23.0	17.0	17.0	8.0	7.0	6.0	7.0
U.S. Short Term Taxable	21.0	24.0	14.0	18.0	4.0	9.0	4.0	9.0	0.0	6.0	0.0	3.0	0.0	4.0	0.0	4.0	0.0	4.0
U.S. Intermediate Term Taxable	35.0	38.0	25.0	26.0	21.0	21.0	16.0	16.0	11.0	10.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0
U.S. Long Term Taxable	5.0	2.0	7.0	3.0	10.0	8.0	9.0	6.0	6.0	3.0	5.0	3.0	3.0	0.0	2.0	0.0	0.0	0.0
High Yield Taxable Fixed Income	5.0	3.0	7.0	5.0	8.0	6.0	5.0	3.0	6.0	3.0	6.0	2.0	5.0	0.0	3.0	0.0	3.0	0.0
Developed Market Ex-U.S. Fixed Income	8.0	4.0	6.0	2.0	5.0	2.0	3.0	0.0	3.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Emerging Market Fixed Income	3.0	6.0	5.0	10.0	8.0	13.0	4.0	7.0	5.0	9.0	6.0	11.0	5.0	9.0	3.0	3.0	3.0	3.0
Total Equities (%)	9.0	11.0	16.0	19.0	24.0	24.0	35.0	38.0	44.0	47.0	52.0	55.0	62.0	65.0	71.0	75.0	82.0	86.0
U.S. Large Cap Equities	5.0	7.0	10.0	13.0	11.0	14.0	13.0	16.0	20.0	23.0	22.0	25.0	24.0	27.0	25.0	28.0	25.0	28.0
U.S. Mid Cap Equities	2.0	2.0	2.0	2.0	6.0	6.0	7.0	7.0	8.0	8.0	9.0	9.0	11.0	11.0	13.0	13.0	16.0	16.0
U.S. Small Cap Equities	0.0	0.0	0.0	0.0	3.0	0.0	6.0	3.0	6.0	3.0	8.0	5.0	10.0	6.0	12.0	8.0	15.0	11.0
Developed Market Ex-U.S. Equities	2.0	2.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	7.0	7.0	9.0	9.0	11.0	11.0	13.0	13.0
Emerging Market Equities	0.0	0.0	0.0	0.0	0.0	0.0	4.0	7.0	5.0	8.0	6.0	9.0	8.0	12.0	10.0	15.0	13.0	18.0
 Total Real Assets (%)	2.0	0.0	5.0	2.0	5.0	2.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0	5.0	0.0
Public Real Estate	2.0	0.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0	2.0	5.0	0.0
Commodities	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0
 Total Alternative Investments (%)*	9.0	9.0	12.0	12.0	12.0	12.0	14.0	14.0	15.0	15.0	15.0	15.0	12.0	12.0	12.0	12.0	5.0	5.0
Hedge Funds—Relative Value	6.0	6.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	0.0	0.0
Hedge Funds—Macro	3.0	3.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	3.0	3.0
Hedge Funds—Event Driven	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0
Hedge Funds—Equity Hedge	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Strategic allocations are updated annually; last update was July 17, 2018. Tactical allocations are updated periodically; last update was January 31, 2019.

<sup>\*</sup>Alternative investments are not suitable for all investors. They are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see the end of the report for important definitions and disclosures

## Strategic and Tactical Asset Allocation

Four asset groups: fixed income, equities, real assets, and alternative investments

## STRATEGIC

	INCOME		GF	ROWTH AND INCO	ME		GROWTH	
Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive
Ctuatagic Tactical	Ctuatania Tastical	Ctuatania Tactical	Ctuatania Tactical	Ctuatania Tactical	Ctuatania Tastical	Ctuatonic Tactical	Ctuatania Tactical	Ctuatania Tastical

	Strategi	c Tactical	Strategi	Tactical	Strategi	c Tactical												
Cash Alternatives (%)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
 Total Fixed Income (%)	73.0	70.0	60.0	59.0	51.0	53.0	39.0	38.0	29.0	28.0	21.0	21.0	14.0	15.0	9.0	8.0	4.0	6.0
U.S. Short Term Taxable	20.0	25.0	12.0	18.0	2.0	7.0	4.0	11.0	0.0	6.0	0.0	6.0	0.0	6.0	0.0	4.0	0.0	4.0
U.S. Intermediate Term Taxable	31.0	30.0	23.0	22.0	19.0	21.0	14.0	14.0	10.0	10.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
U.S. Long Term Taxable	5.0	2.0	7.0	3.0	9.0	6.0	7.0	3.0	5.0	2.0	5.0	2.0	2.0	0.0	2.0	0.0	0.0	0.0
High Yield Taxable Fixed Income	6.0	4.0	7.0	5.0	8.0	6.0	6.0	2.0	6.0	0.0	6.0	0.0	5.0	0.0	4.0	0.0	2.0	0.0
Developed Market Ex-U.S. Fixed Income	8.0	4.0	6.0	2.0	5.0	0.0	3.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Emerging Market Fixed Income	3.0	5.0	5.0	9.0	8.0	13.0	5.0	8.0	6.0	10.0	6.0	11.0	5.0	9.0	3.0	4.0	2.0	2.0
 Total Equities (%)	8.0	11.0	20.0	21.0	25.0	26.0	32.0	36.0	40.0	44.0	48.0	51.0	56.0	58.0	63.0	67.0	70.0	71.0
U.S. Large Cap Equities	4.0	7.0	10.0	13.0	11.0	14.0	14.0	17.0	18.0	21.0	22.0	25.0	24.0	27.0	24.0	27.0	24.0	24.0
U.S. Mid Cap Equities	2.0	2.0	4.0	4.0	6.0	6.0	6.0	6.0	7.0	7.0	8.0	8.0	9.0	9.0	10.0	10.0	12.0	12.0
U.S. Small Cap Equities	0.0	0.0	2.0	0.0	4.0	2.0	4.0	2.0	5.0	2.0	6.0	3.0	7.0	3.0	8.0	4.0	9.0	5.0
Developed Market Ex-U.S. Equities	2.0	2.0	4.0	4.0	4.0	4.0	5.0	5.0	6.0	6.0	7.0	7.0	9.0	9.0	11.0	11.0	12.0	12.0
Emerging Market Equities	0.0	0.0	0.0	0.0	0.0	0.0	3.0	6.0	4.0	8.0	5.0	8.0	7.0	10.0	10.0	15.0	13.0	18.0
Total Real Assets (%)	5.0	5.0	6.0	6.0	10.0	7.0	10.0	7.0	11.0	8.0	11.0	8.0	12.0	9.0	12.0	9.0	11.0	8.0
Public Real Estate	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Private Real Estate*	5.0	5.0	6.0	6.0	7.0	7.0	5.0	5.0	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	8.0	8.0
Commodities	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0
 Total Alternative Investments (%)*	11.0	11.0	11.0	11.0	11.0	11.0	16.0	16.0	17.0	17.0	17.0	17.0	16.0	16.0	14.0	14.0	13.0	13.0
Hedge Funds—Relative Value	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Hedge Funds—Macro	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	0.0	0.0
Hedge Funds—Event Driven	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
Hedge Funds—Equity Hedge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Private Equity	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	7.0	7.0	8.0	8.0	9.0	9.0	10.0	10.0	11.0	11.0

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Current Tact	ical Guidance			
Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
Cash alternati	ves and fixed income			
	U.S. Taxable Investment Grade Fixed Income	Cash Alternatives	Emerging Market Fixed	U.S. Short Term Taxable Fixed
	U.S. Intermediate Term Taxable Fixed Income		Income	Income**
	U.S. Long Term Taxable Fixed Income			
	High Yield Taxable Fixed Income			
	Developed Market ExU.S. Fixed Income			
Equities				
	U.S. Small Cap Equities**	Developed Market Ex U.S. Equities	U.S. Large Cap Equities U.S. Mid Cap Equities	Emerging Market Equities
Real assets				
	Public Real Estate		Commodities	
	Private Real Estate			
Alternative in	vestments*			
		Hedge Funds— Macro	Hedge Funds— Relative Value	
		Hedge Funds— Event Driven Private Equity	Hedge Funds— Equity Hedge	
		· • •		

Source: Wells Fargo Investment Institute, February 15, 2019.

Fixed Income Sector Strategy: Domestic Investment-Grade Securities
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	Most	Guidance	Most
Sector	unfavorable	Neutral	favorable
Duration			
U.S. Government			
Treasury Securities			
Agencies			
Inflation-Linked Fixed Income			
Credit			
Corporate Securities			
Preferred Securities			
Securitized			
Residential MBS			
Commercial MBS			
Asset Backed Securities			
U.S. Municipal Bonds			
Taxable Municipal			
State and Local General Obligation			
Essential Service Revenue			
Pre-Refunded			

## Total Sector Returns (%)

Sector	1 month	YTD	12 month
U.S. Government	0.5	0.5	2.7
Credit	2.2	2.2	0.9
Securitized	0.8	0.8	3.0
U.S. Municipal Bonds	0.8	8.0	3.3

Source: FactSet, January 31, 2019.

## II S Equity Sector Strategy

Source: Wells Fargo Investment Institute, February 15, 2019.

legy						
S&P 500	WFII		G		M4	
(%)*	(%)		rable	Neutral		Most rable
10.3	7.3					
10.1	12.2					
7.2	6.7					
5.5	3.5					
13.5	16.0					
15.1	16.6					
9.5	12.7					
19.9	22.5					
2.7	2.5					
3.0	0.0					
3.2	0.0					
100.0	100.0					
	S&P 500 Index weight (%)* 10.3 10.1 7.2 5.5 13.5 15.1 9.5 19.9 2.7 3.0 3.2	S&P 500 Index weight (%)*  WFII guidance (%)    10.3  7.3    10.1  12.2    7.2  6.7    5.5  3.5    13.5  16.0    15.1  16.6    9.5  12.7    19.9  22.5    2.7  2.5    3.0  0.0    3.2  0.0	S&P 500 Index weight (%)*  WFII guidance (%)  Most unfavor unfa	S&P 500 Index weight (%)*  WFII guidance (%)  Most unfavorable unfavorable unfavorable    10.3  7.3	S&P 500 Index weight (%)*  WFII guidance (%)  Guidance unfavorable (%)  Guidance Most unfavorable (%)    10.3  7.3  Image: Transport of the control of the	S&P 500 Index weight (%)*  WFII guidance (%)*  Guidance (mfavorable Neutral favorable Neutral favorab

Sources: Bloomberg, Wells Fargo Investment Institute. Weightings are as of January 31, 2019. WFII guidance is as of February 15, 2019.

## Total Returns (%): S&P 500 Index Groups

Sector	1 month	YTD	12 months
S&P 500 Index	8.0	8.0	-2.3
<b>Communication Services</b>	10.4	10.4	-4.0
<b>Consumer Discretionary</b>	10.3	10.3	1.7
Consumer Staples	5.2	5.2	-5.1
Energy	11.1	11.1	-12.3
Financials	8.8	8.8	-11.1
Health Care	4.8	4.8	4.7
Industrials	11.4	11.4	-8.3
Information Technology	7.0	7.0	-0.9
Materials	5.5	5.5	-13.6
Real Estate	10.8	10.8	10.4
Utilities	3.4	3.4	11.1
WFII weighted guidance	8.1	8.1	-3.5

Source: FactSet, January 31, 2019.

<sup>\*</sup>Alternative investments are not suitable for all investors. They are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see the end of the report for important definitions and disclosures.

<sup>\*\*</sup>Changed January 31, 2019.

Forecasts, targets, and estimates are based on certain assumptions and on our views of market and economic conditions which are subject to change.

#### Asset class risks

Asset allocation and diversification are investment methods used to manage risk. They do not assure or quarantee better performance and cannot eliminate the risk of investment losses. Your individual allocation may be different than the strategic long-term allocation above due to your unique individual circumstances, but is targeted to be in the allocation ranges detailed. The asset allocation reflected above may fluctuate based on asset values, portfolio decisions, and account needs.

### Equity sector risks:

Communication services companies are vulnerable to their products and services becoming outdated because of technological advancement and the innovation of competitors. Companies in the communication services sector may also be affected by rapid technology changes; pricing competition, large equipment upgrades, substantial capital requirements and government regulation and approval of products and services. In addition, companies within the industry may invest heavily in research and development which is not guaranteed to lead to successful implementation of the proposed product.

Risks associated with the Consumer Discretionary sector include, among others, apparel price deflation due to low-cost entries, high inventory levels and pressure from e-commerce players; reduction in traditional advertising dollars; increasing household debt levels that could limit consumer appetite for discretionary purchases.

Consumer Staples industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, government regulation, the performance of overall economy, interest rates, and consumer confidence.

The Energy sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources and risks that arise from extreme weather conditions.

Investing in *Financial Services companies* will subject a portfolio to adverse economic or regulatory occurrences affecting the sector.

Some of the risks associated with investment in the Health Care sector include competition on branded products, sales erosion due to cheaper alternatives, research & development risk, government regulations and government approval of products anticipated to enter the market.

Risks associated with investing in the *Industrial sector* include the possibility of a worsening in the global economy, acquisition integration risk, operational issues, failure to introduce to market new and innovative products, further weakening in the oil market, potential price wars due to any excesses industry capacity, and a sustained rise in the dollar relative to other currencies.

Materials industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement and manufacturing and cost containment issues.

Technology and Internet-related stocks, especially of smaller, less-seasoned companies, tend to be more volatile than the overall market.

Real estate has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations and the impact of varied economic condition.

*Utilities* are sensitive to changes in interest rates and the securities within the sector can be volatile and may underperform in a slow economy.

Alternative investments, such as hedge funds, private capital funds, and private real estate funds, carry specific investor qualifications and involve the risk of investment loss, including the loss of the entire amount invested. While investors may potentially benefit from the ability of alternative investments to potentially improve the risk-reward profiles of their portfolios the investments themselves can carry significant risks. Government regulation and monitoring of these types of investments may be minimal or nonexistent. There may be no secondary market for alternative investment interests and transferability may be limited or even prohibited.

The use of alternative investment strategies, such as Equity Hedge, Event Driven, Macro and Relative Value, are speculative and involve a high degree of risk. These strategies may expose investors to risks such as short selling. leverage risk, counterparty risk, liquidity risk, volatility risk, the use of derivatives and other significant risks. The use of alternative investment strategies may require a manager's skill in assessing corporate events, the anticipation of future movements in securities prices, interest rates, or other economic factors. No assurance can be given that a manager's view of the economy will be correct which may result in lower investment returns or higher return volatility.

Private capital funds use complex trading strategies, including hedging and leveraging through derivatives and short selling. These funds often demand long holding periods to allow for a turnaround and exit strategy. Hedge fund and private equity/private capital fund investing involves other material risks including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Privately offered real estate funds carry significant risks. They are unlisted making them hard to value and trade. They are generally only available to accredited investors within the meaning of the U.S. securities laws. There can be no assurance a secondary market will exist for these funds and there may be restrictions on transferring interests.

Cash alternatives including bank certificates of deposits, Treasury bills, and ultra-short bond mutual funds have advantages and disadvantages depending on the type of instrument. They typically offer lower rates of return than longer-term equity or fixed-income securities and may not keep pace with inflation over extended periods of time. While government securities are backed by the full faith and credit of the federal government as to payment of principal and interest if held to maturity and are considered free from credit risk, they are subject to interest rate risk.

Investing in commodities is not suitable for all investors. Exposure to the commodities markets may subject an investment to greater share price volatility than an investment in traditional equity or debt securities. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. Products that invest in commodities may employ more complex strategies which may expose investors to additional

Inflation-Indexed Bonds, including Treasury Inflation-Protected Securities (TIPS), are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond in the portfolio to fluctuate moré than other fixed income securities.

Investing in foreign securities presents certain risks that may not be present in domestic securities. For example, investments in foreign, emerging and frontier markets present special risks, including currency fluctuation, the potential for diplomatic and potential instability, regulatory and liquidity risks, foreign taxation and differences in auditing and other financial standards.

Investments in fixed-income securities are subject to market, interest rate, credit/default, liquidity, inflation and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. High yield fixed income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment grade fixed income securities. Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes. Municipal bonds are subject to credit risk and potentially the Alternative Minimum Tax (AMT). Municipal securities are also subject to legislative and regulatory risk which is the risk that a change in the tax code could affect the value of taxable or tax-exempt interest income. Quality varies widely depending on the specific issuer. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities.

Mortgage-related and asset-backed securities are subject to the risks associated with investment in debt securities. In addition, they are subject to prepayment and call risks. Changes in prepayments may significantly affect yield, yielding investments may not be available for the Fund to purchase. These risks may be heightened for longer maturity and duration securities. Commercial Mortgage Backed Securities (CMBS) are a type of mortgage-backed security backed by commercial mortgages rather than residential real estate. CMBS tend to be more complex and volatile than residential mortgage-backed securities due to the unique nature of the underlying property assets.

Master Limited Partnerships (MLPs) involves certain risks which differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc., regulatory risk, and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes which would reduce the amount of cash flows distributed by the MLP. Other risks include the volatility associated with the use of leverage; volatility of the commodities markets; market risks; supply and demand; natural and man-made catastrophes; competition; liquidity; market price discount from Net Asset Value and other material risks.

Preferred stocks are subject to issuer-specific and market risks. They are generally subordinated to bonds or other debt instruments in an issuer's capital structure, subjecting them to a greater risk of non-payment than more senior securities.

There are special risks associated with an investment in real estate, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations and the impact of varied economic conditions.

The prices of small and mid-cap company stocks are generally more volatile than large company stocks. They often involve higher risks because smaller companies may lack the management expertise, financial resources, product diversification and competitive strengths to endure adverse economic conditions.

#### Index definitions

An index is unmanaged and not available for direct investment.

#### Fixed income representative indices

Cash Alternatives/Treasury Bills. Bloomberg Barclays US Treasury Bills (1-3M) Index is representative of money markets.

U.S. Short Term Fixed Income. Bloomberg Barclays US Aggregate 1-3 Year Bond Index is the one to three year component of the Barclays US Aggregate Index, which represents fixed-income securities that are SEC-registered, taxable, dollar-denominated, and investment-grade.

U.S. Intermediate Term Fixed Income. Bloomberg Barclays US Aggregate 5-7 Year Bond Index is unmanaged and is composed of the Bloomberg Barclays US Government/Credit Index and the Bloomberg Barclays US Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 5-7 years.

U.S. Long Term Fixed Income. Bloomberg Barclays US Aggregate 10+ Year Bond Index is unmanaged and is composed of the Bloomberg Barclays US Government/Credit Index and the Bloomberg Barclays US Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 10 years or

U.S. Taxable Investment Grade Fixed Income. Bloomberg Barclays US Aggregate Bond Index is a broad-based measure of the investment grade. U.S. dollar-denominated, fixed-rate taxable bond market.

High Yield Taxable Fixed Income. Bloomberg Barclays US Corporate High-Yield Index covers the universe of fixed rate, non-investment grade

Developed Market Ex-U.S. Fixed Income (Unhedged). J.P. Morgan GBI Global ex-US Index (Unhedged) in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

Developed Market Ex-U.S. Fixed Income (Hedged). J.P. Morgan GBI ex U.S. Hedged is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

Emerging Market Fixed Income (U.S. dollar). J.P. Morgan Emerging Markets Bond Index (EMBI Global) currently covers more than 60 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

#### **Equity representative indices**

U.S. Large Cap Equities. S&P 500 Index is a capitalization-weighted index calculated on a total return basis with dividends reinvested. The index includes 500 widely held U.S. market industrial, utility, transportation and financial companies.

U.S. Mid Cap Equities. Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap Index is a subset of the Russell 1000° Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap Index represents approximately 27% of the total market capitalization of the Russell 1000 companies.

U.S. Small Cap Equities. Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. Developed Market Ex-U.S. Equities (U.S. dollar)/(Local), MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of 21 developed markets, excluding the U.S. and Canada.

Emerging Market Equities (U.S. dollar)/(Local). MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of 23 emerging markets.

#### Real assets representative indices

Public Real Estate. FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real-estate companies and REITs in developed countries worldwide.

MLPs. Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships (MLPs) that provides investors with an unbiased, comprehensive benchmark for this emerging asset class. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated real-time on a price-return basis and on a total-return basis.

Commodities (BCOM). Bloomberg Commodity Index is a broadly diversified index comprised of 22 exchange-traded futures on physical commodities and represents 20 commodities weighted to account for economic significance and market liquidity.

#### Alternative strategies representative indices

Global Hedge Funds. HFRI Fund Weighted Composite Index. A global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net-of-all-fees performance in U.S. dollars and have a minimum of \$50 Million under management or a 12-month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

Relative Value. HFRI Relative Value (Total) Index. Strategy is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

Macro. HFRI Macro (Total) Index. Encompass a broad range of strategies predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard-currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches and long- and short-term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments rather than on realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

Event Driven, HFRI Event Driven (Total) Index, Maintains positions in companies currently or prospectively involved in corporate transactions of a wide variety including mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated and frequently involve additional derivative securities. Exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company-specific developments. Investment theses are typically predicated on fundamental (as opposed to quantitative) characteristics, with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

Equity Hedge. HFRI Equity Hedge (Total) Index. Equity Hedge: Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.

#### **Disclosures**

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