WELLS FARGO Advisors

Risk Analysis & Portfolio Testing Review

Prepared for Joe Client
July 9, 2020

Financial Advisor

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SECTION I

Introduction

Introduction and Overview

Thank you for taking the time to review this portfolio analysis. This analysis was conducted on the holdings in your account(s) as of the date indicated on the report and based on information you have provided to Wells Fargo Advisors (WFA) about your financial profile, including your investment objectives and risk tolerance. It identifies potential opportunities, based on your specific investment objectives and risk tolerance, to better align your portfolio with Wells Fargo Investment Institute's (WFII) guidance on portfolio construction. The analysis is designed to assist you with your investment planning and is for informational purposes only. Our analysis represents investment advice but does not consider cost basis, tax lots, length of holding or transaction costs.

We encourage you to regularly review your account activity and holdings with your Financial Advisor (FA) to help ensure you are positioned to meet your goals and to consider new fundamental or market developments. Our analysis is specific to this portfolio, as of the date the review was performed and may not reflect our current opinion. The investments presented in this report may not be available in all types of accounts. Please consult with your FA before making any investment decisions.

IMPORTANT: The projections or other information generated by Risk Analysis & Portfolio Testing Review regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results may vary with each use and over time.

Asset Allocation

How your investments are divided among the major asset classes – stocks, bonds, real assets and cash– is called your asset allocation. Investment returns from various asset classes can vary dramatically from year to year and from asset class to asset class. We believe that over the long term, an appropriately diversified portfolio has the potential to optimize the risk and return expectations relative to a portfolio that holds only a small number of asset classes.

Diversifying your investment portfolio across asset classes, while taking into consideration your goals, time horizon and risk tolerance, can be an important tool in managing your portfolio's investment risk. While diversification can help reduce investment risks, it does not guarantee profits nor protect against losses.

About our Risk Analysis and Stress Tests

We utilize WFII's Strategic Asset Allocation Model and the underlying Capital Market Assumptions with respect to the investment objective identified for your account(s). The purpose of the risk analysis and stress testing scenarios is to help identify potential gaps in portfolio construction that may not be revealed by other forms of analyses. Our risk analysis uses statistical methods to evaluate the proportionate risk that an asset class, sector or security represents in the portfolio. The historical performance, stress tests and other metrics shown are based on historical price data and correlations and may not represent actual portfolio performance. Historical values are taken from an event over a specific time period and then use the returns of the risk factors over that period to calculate the single hypothetical stress event. In cases where a security has a limited trading history or historical pricing information is unavailable, we may employ a proxy based on the security’s sector or asset class. In some scenarios, the historical performance and security correlations may have changed significantly due to structural changes in the economy and financial markets. There is no guarantee that historical patterns will recur and past performance does not predict future results.

When applicable, all theoretical values of the options contracts currently held in the portfolio are based upon current but not real-time theoretical values calculated using the Black Sholes option pricing model in the stress test. Using these derived option values they are incorporated and represented in the single hypothetical stress event; which is based upon a simulated drawdown of the portfolio.

Introduction and Overview

Markets Move and Our Advice Will Change

You should also consider that WFII's investment strategy guidance can change without notice. A portfolio should be reviewed regularly, as changes occur in economic and market conditions as well as your investment needs. We do not assume any responsibility to update this report when market conditions or our opinions change.

Consult with your Financial Advisor Before You Act

Prior to acting, discuss this analysis with your FA and be aware that asset allocation focused reviews may not take into account your unique financial goals and circumstances.

The omission or exclusion of any internal or external assets in this review could have a significant impact on the resulting asset allocation recommendations. For a more comprehensive view, please consider informing your FA of any other securities or investment products held outside of your Wells Fargo account(s) that are not included in this review.

If you decide to alter your portfolio based on this analysis, you may incur fees, expenses and tax liabilities. Please work with your FA to determine if the changes warrant the potential implementation costs and if the recommendations (individually and in aggregate) are consistent with your investment objective and risk tolerance. Certain investments warrant close attention since some may offer discounts on larger purchases made over time in the same household regardless of where the assets are held. You may incur higher fees if your FA is not aware of these investments and your agreements or obligations.

External Accounts Included in Your Report

As a service, we may have included your assets held at other financial institutions. We assume no responsibility for the accuracy or completeness of the information you provided either to your FA or through any third party aggregation service regarding your assets held at other firms. We may update the pricing of these securities; however, there may be cases when updating prices is not possible. In addition, any transactions, values or changes in your external accounts will not be reflected unless you provide updated information to your FA. In instances where you use a third party aggregation service, we rely on you to take action when notified by the third party service that updates are needed. The accuracy and completeness of the information you provide may materially affect the analysis contained in this report.

If this report includes assets that you currently hold away from our firm; these assets may not be covered by Securities Investor Protection Corporation (SIPC). Information on assets held away from Wells Fargo Advisors was provided by you or a third party; while we believe this information to be reliable, its accuracy and completeness are not guaranteed. The actual value and/or performance of assets held away from Wells Fargo Advisors may differ from that shown in this report.

If we have included or if you have provided us with information on accounts managed by an affiliate of Wells Fargo Advisors, including fiduciary accounts at Wells Fargo Bank, N.A., you should understand that Wells Fargo Advisors has no authority to manage, direct or influence the accounts.

Why do my funds appear under more than one asset class?

The reason for the appearance of funds under various asset classes is because our review process performs a “look-through” analysis (sometimes referred to as a fund “x-ray”). Many funds often spread their allocations across many asset classes or sometimes market action drives changes such as a mid-cap stock moving into large cap, which can impact the fund allocation. Typically, a fund will invest a majority of its assets in the asset class(es) that the name of the fund references, but the fund may also invest in other asset classes. While the view is more complex, we believe that the look-through data provides a more precise analysis of a portfolio. Suppose a fund represents 4% of the portfolio total value and 5% of the fund is invested in domestic large- cap. The “Fund weight in asset class” column will show the product of the two percentages (0.20% domestic large cap) representing the weight of that specific funds investments in that asset class as a percent of the total portfolio value.

By providing you this report, neither the firm nor your Financial Advisor is acting as a fiduciary for purposes of ERISA or section 4975 of the Code with respect to

Introduction and Overview

any external ERISA-covered employee benefit plan or any external individual retirement account in either the planning, execution or provision of this analysis, unless separately contracted to act as a fiduciary with respect to such an account. Any asset allocation information presented in this report for external 401(k), 403(b), Government 457(b), Defined Benefit Plan, Trustee Defined Profit Sharing Plan or individual retirement accounts is for general asset allocation education and informational.

Confirm the information presented with your statements

This report is not an official record of your account. However, it has been prepared to assist you with your investment planning and is for informational purposes only.

Your Wells Fargo Advisors or Wells Fargo Advisors Financial Network Client Statement is the official record of your account.

Therefore, if there are any discrepancies between this report and your Client Statement, you should rely on the Client Statement and call your FA with any questions. Transactions requiring tax consideration should be reviewed carefully with your accountant or tax advisor. Unless otherwise indicated, market prices/values are the most recent closing prices available at the time of this report, and are subject to change. Prices may not reflect the value at which securities could be sold.

Past performance does not guarantee future results.

SECTION II

Account Overview and Asset Allocation

Account Overview

Account Name	Tax Status	Market Value (USD)	Portfolio Weight
Brokerage Account-xxxx	Taxable	1,638,868.13	100.0%
TOTAL		**1,638,868.13**	**100.0%**

Asset Allocation

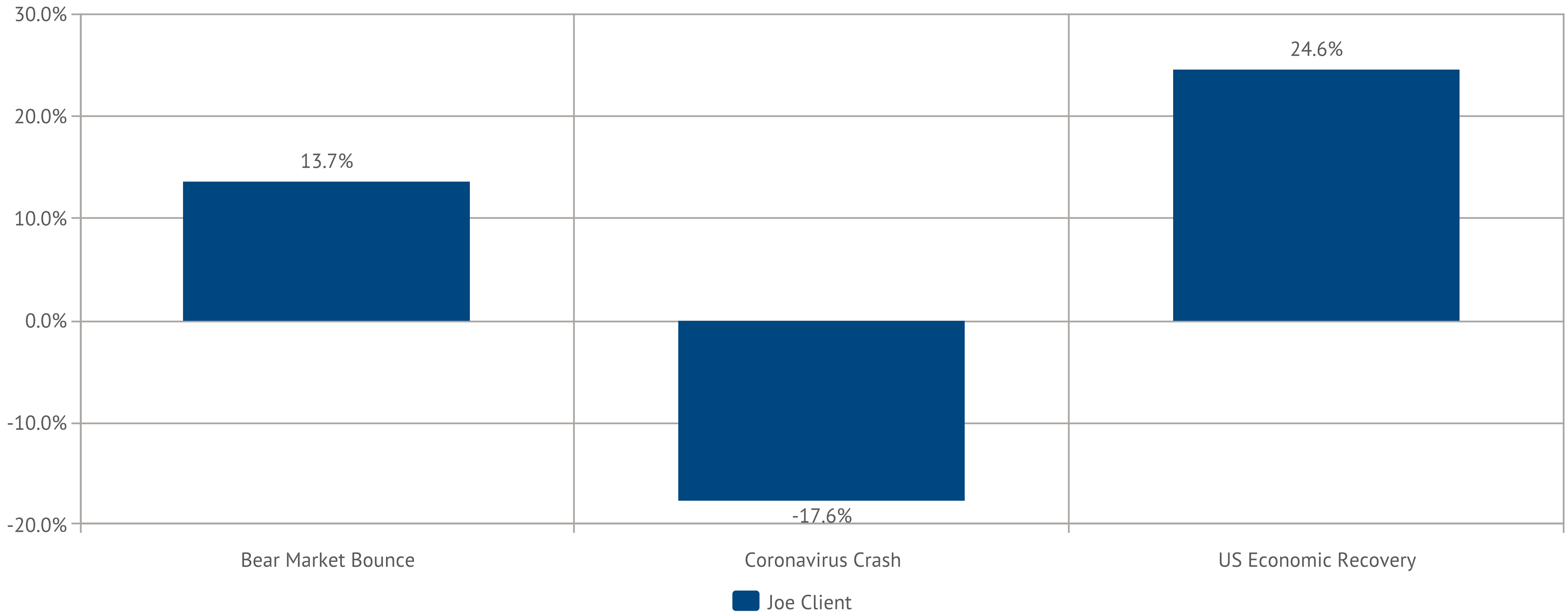
Asset Class	Taxable		Total Allocation	
	Market Value ($)	Percent (%)	Market Value ($)	Percent (%)
Fixed Income	**938,581.88**	**57.3%**	**938,581.88**	**57.3%**
U.S. Short Term Taxable Fixed Income	869,175.17	53.0%	869,175.17	53.0%
U.S. Long Term Taxable Fixed Income	69,406.71	4.2%	69,406.71	4.2%
Equities	**700,286.25**	**42.7%**	**700,286.25**	**42.7%**
U.S. Large Cap Equities	618,865.25	37.8%	618,865.25	37.8%
U.S. Mid Cap Equities	28,774.61	1.8%	28,774.61	1.8%
Developed Market Ex-U.S. Equities	52,646.40	3.2%	52,646.40	3.2%
Total	**1,638,868.13**	**100.0%**	**1,638,868.13**	**100.0%**

SECTION III

Risk Analytics and Stress Testing

Stress Test Comparison

Stress testing is a simulation technique used on investment portfolios to predict the portfolios reaction to different financial situations. Stress testing is a method of determining how a portfolio may fare during a period of financial crisis but may not reflect the actual performance of the portfolio. The chart below compares the difference of your current portfolio's Market Value ($) before and after a theoretical individual stress event. The parameters used in the stress test are provided on subsequent pages.

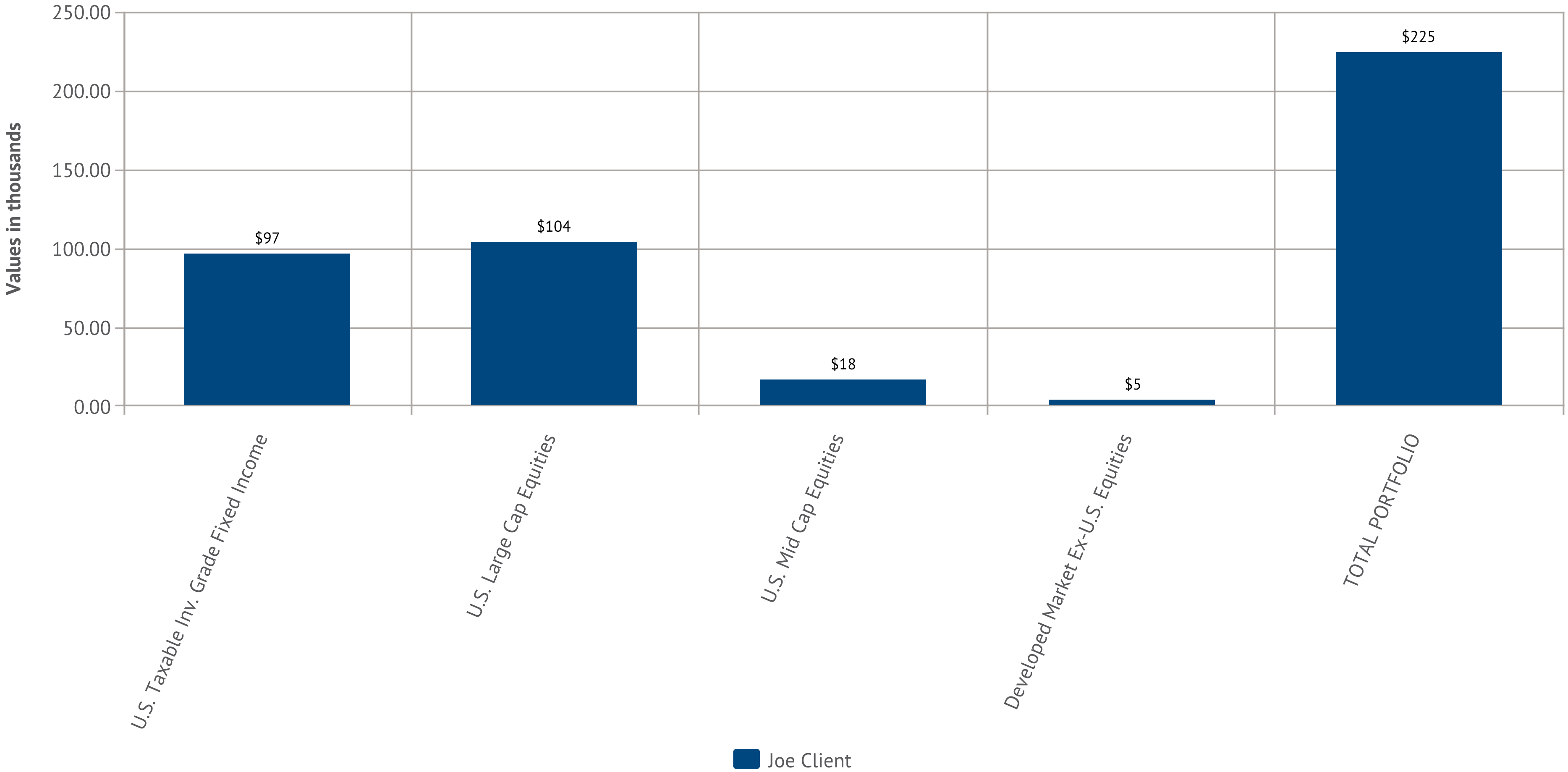


	Joe Client		S&P 500	WFII Moderate Growth & Income
Stress Event	**MV Change**	**Percent Change**	**Percent Change**	**Percent Change**
Bear Market Bounce	224,582.90	13.7%	21.1%	15.4%
Coronavirus Crash	(288,562.32)	-17.6%	-33.9%	-22.0%
US Economic Recovery	402,977.08	24.6%	42.4%	29.4%

Past performance does not indicate future performance.

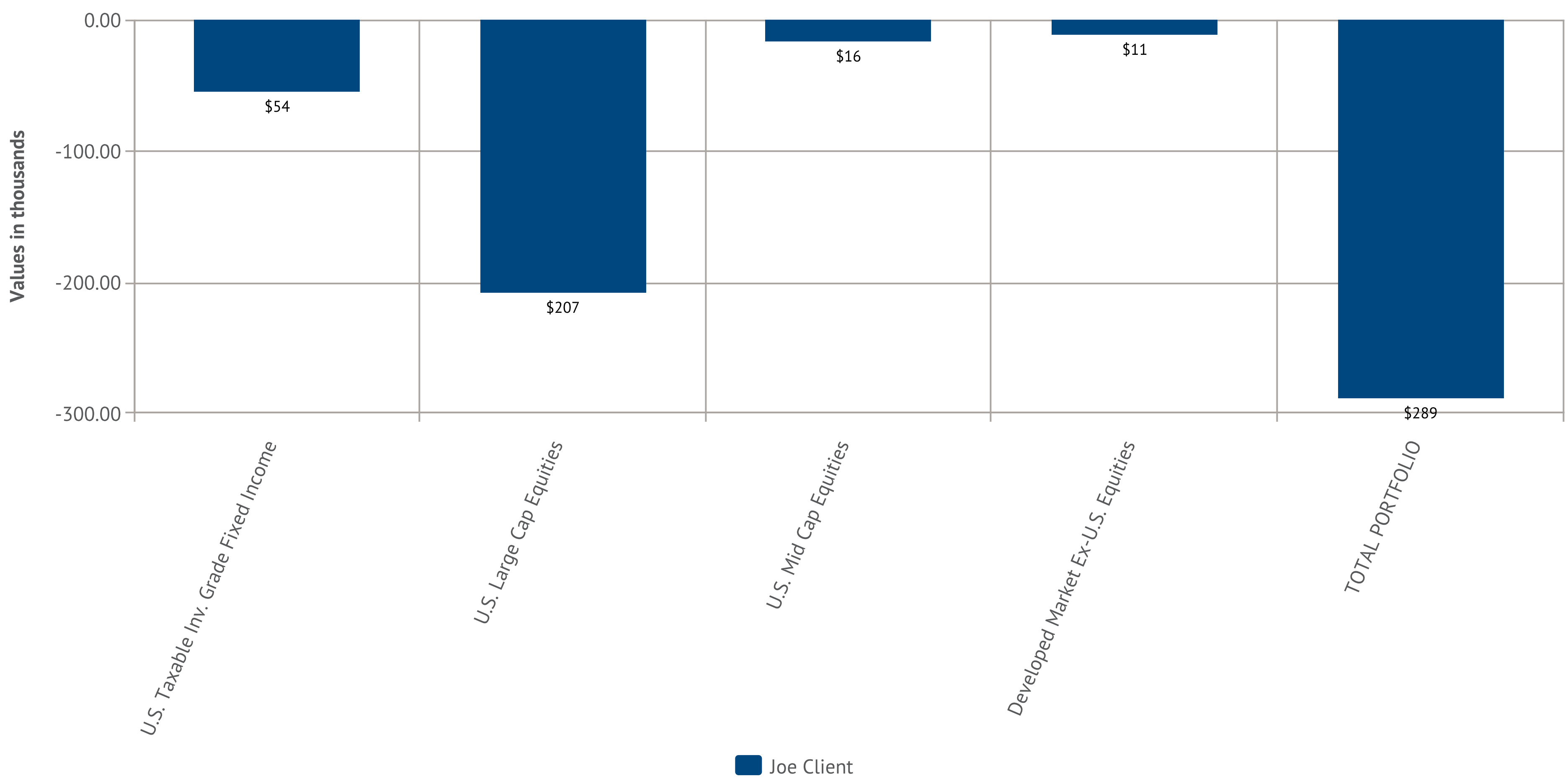
Stress Test - Bear Market Bounce

Change in Market Value



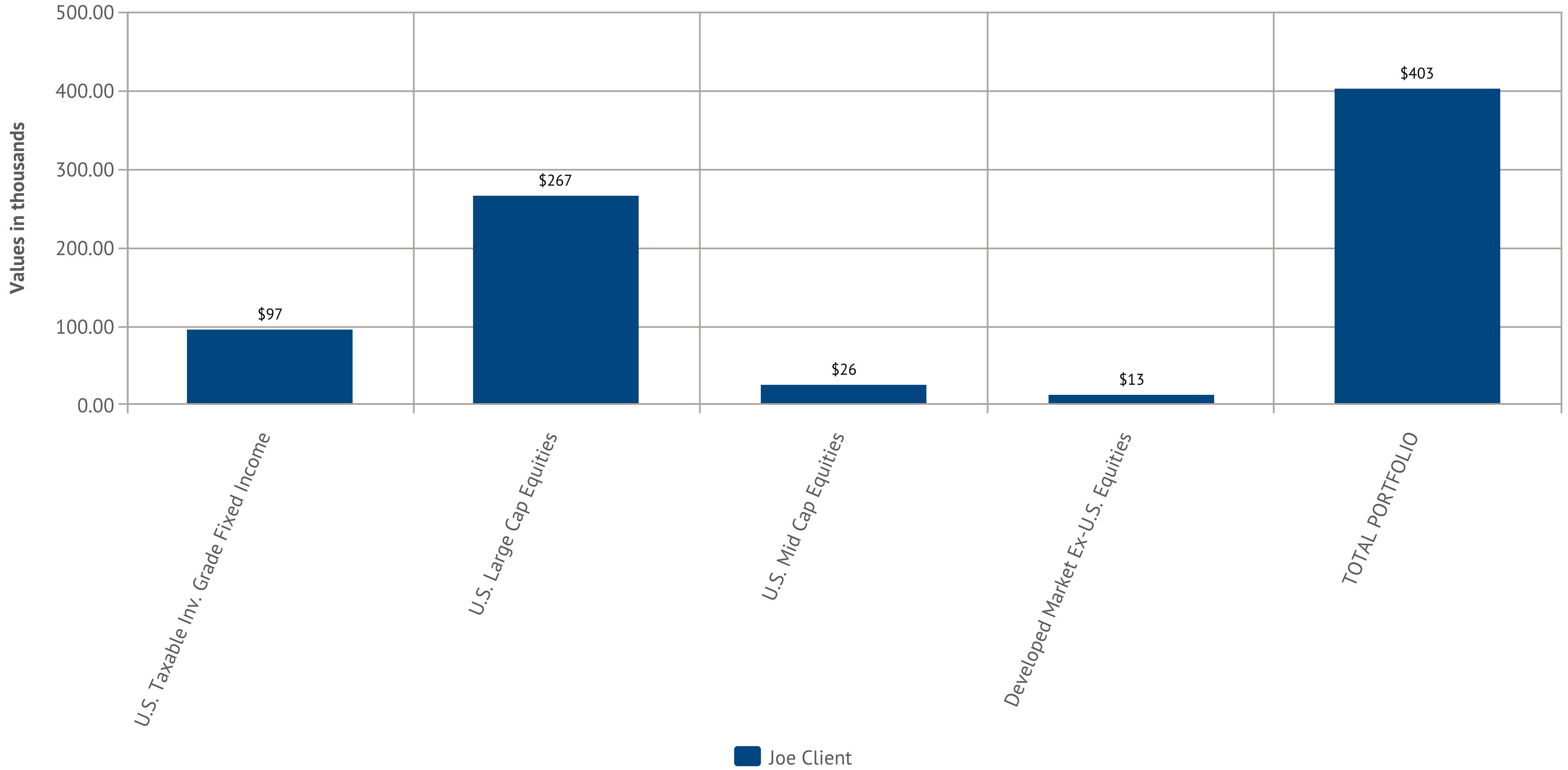
Stress Test - Coronavirus Crash

Change in Market Value



Stress Test - US Economic Recovery

Change in Market Value



Stress Test Description - Bear Market Bounce

Assumptions	
Barclays US Aggregate	9.4%
Barclays Capital U.S. Corporate High Yield	2.7%
Barclays US Aggregate 10+ Yr Index	1.3%
MSCI ACWI ex-US NR	16.6%
S&P 500	21.1%
VIX	-33.8%

Event Description

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1970: McDonald's, IBM and Disney helped carry the American stock market to new heights in 1970. Investors piled into the Nifty Fifty, a group of the country's largest and fastest-growing companies.

October, 1974: Analyst commenting the worst of the recession may be over, siting growth in earnings and investments taken place in the past decade along with seeing the worst of the inflation increase in September. The press reports that corporate executives don't believe there will be more than a token cutoff of oil to the U.S. because of its support of Israel. Government spokesmen try to dispel rumors of an imminent fuel crisis as a result of Arab attempts to form a joint oil policy.

March – July, 1980: Amid double-digit inflation, Federal Reserve Chairman Paul Volcker quickly ratcheted up interest rates to as high as 20% in the early 1980s. The strategy, known as the Volcker Shock, succeeded in taming price increases.

October, 1990: Oil prices peaked at $46 per barrel in mid-October, followed by a steady decline in price until the end of the recession. Signs of Gross domestic product (GDP) growth began in February 1991.

March, 2009: Banks announce they were profitable in the first 2 month of 2009 and enjoying its best quarter since 2007. The U.S. Government rolled out numerous plans to tackle various elements of the economy. Mortgage rates for homeowners dropped, limits on executive compensation were enacted, regulatory changes were proposed, and the Treasury announced its intention to purchase $1 trillion of troubled bank assets and enticing private investors to make similar investments. The S&P 500's trough to bull market (20% gain from its low point) took 11 trading days.

March – April, 2020: Stocks traded at record highs in February, then tumbled into a bear market at breakneck speed as the COVID-19 pandemic resulted in the lockdown of the U.S. and economies around the world. At the end of March, growth rates of new cases of the virus and related fatalities have slowed in recent days in many of the outbreak's hot spots around the world. The S&P 500's most recent trough to bull market took 12 trading days.

In Assumptions, currency changes are versus USD.

Stress Test Description - Coronavirus Crash

Assumptions	
Barclays US Aggregate	-0.9%
Barclays Capital U.S. Corporate High Yield	-20.8%
MSCI ACWI ex-US NR	-33.1%
NYMEX Light Sweet Crude Oil	-61.8%
S&P 500	-33.9%
Stoxx Europe 600	-35.4%
VIX	328.0%
EUR	-0.7%

Event Description

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February 2020:

16: The reduction in travel demand and the lack of factory activity due to the COVID-19 pandemic significantly impacted demand for oil, causing prices to fall. Oil prices had decreased by more than 30% since the start of the year.
27: Due to mounting worries about the coronavirus outbreak, stock markets in Asia-Pacific and Europe saw 3–5% declines. The NASDAQ-100, the S&P 500 Index, and the Dow Jones Industrial Average (DJIA) posting their sharpest drops in one single session since 2008, each fell more than 4%.
28: Stock markets worldwide reported their largest single-week declines since the Financial Crisis, while oil futures saw their largest single week decline since 2009. Treasury securities fell to new record lows. The negative moves took the market into correction territory in a mere six days—the fastest market correction ever.

March 2020:

3: Federal Reserve Chairman Jerome Powell announces a 50 basis point cut in the federal funds rate target in light of "evolving risks to economic activity" from the coronavirus.
6: After OPEC and Russia failed to agree on oil production cuts, and Saudi Arabia and Russia both announced increases in oil production, oil prices fell by 25%. Fears of the Russian–Saudi Arabian oil price war caused a plunge in U.S. stocks.
9 (Black Monday I): Prior to opening, the DJIA futures market experienced a 4.95% drop based on the coronavirus and fall in the oil price, triggering a circuit breaker. It ultimately lost more than 7.62%, described as "the biggest ever fall in intraday trading." Oil firms Chevron and ExxonMobil fell 15%. In a number of Asian markets, shares declined over 20% from their most recent peaks, entering bear market territory.
12 (Black Thursday): After President Trump announced a temporary 30-day travel ban against Europe and European Central Bank decided against the anticipated interest rate cut, the S&P 500 futures dropped more than 7.6% in less than an hour. DJIA, S&P 500 Index, and UK's FTSE 100 suffered from the greatest single-day percentage fall since the 1987 stock market crash.
16 (Black Monday II): The Federal Reserve announced that it would cut the federal funds rate target to 0%–0.25%, lower reserve requirements to zero, and begin a $700 billion quantitative easing program. Major US indices all fell by 12–13%

In Assumptions, currency changes are versus USD.

Stress Test Description - US Economic Recovery

Assumptions	
Barclays US Aggregate	8.4%
Barclays Capital U.S. Corporate High Yield	32.2%
Barclays US Aggregate 10+ Yr Index	18.5%
MSCI ACWI ex-US NR	31.8%
S&P 500	42.4%

Event Description

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1970 – 1971: Known as the "Nixon Shock", President Richard Nixon unveiled a drastic reordering of the global financial system. Measures included imposing a 90-day freeze on wages and prices in order to counter inflation. The Dow rose 33 points the next day, its biggest daily gain ever at that point.

1974 – 1975: The economy began to emerge from its recession in the late spring of 1975. An upturn in the gross national product and inflation began to fall. President Ford's tax cuts and price-control legislation on oil was passed.

1990 – 1991: Gross domestic product grew at a slow but steady pace with the economy fueled by the desktop computer productivity boom, low interest rates, low energy prices, and a resurgent housing market.

2001: The Bush Administration gave income tax relief to families. The Federal Reserve's expansionary monetary policy also contributed to the end of the recession.

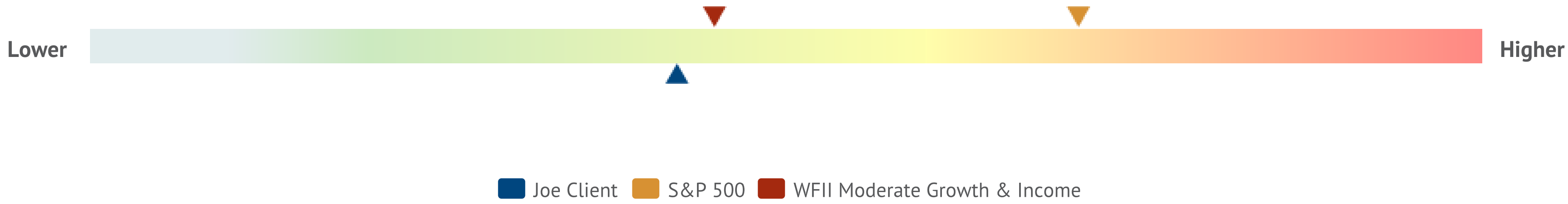
2009: The Obama Administration rolled numerous plans to tackle various elements of the economy. Regulatory changes were installed and the Treasury announced its intention to purchase $1 trillion of troubled bank assets.

In Assumptions, currency changes are versus USD.

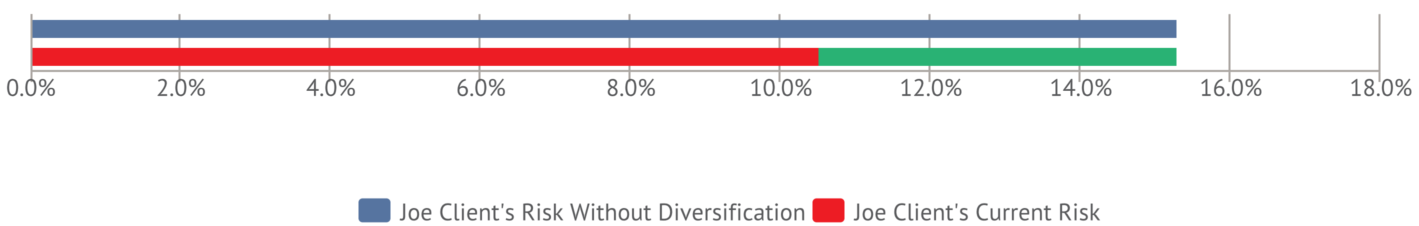
Risk Summary

Top Contributors to Risk					
Description	**Ticker**	**Market Value ($)**	**Portfolio Weight**	**Std Dev**	**Risk Impact**
NVIDIA CORP	NVDA	227,597.47	13.9%	45.4%	42.0%
Total		**1,638,868.13**	**100.0%**	**10.5%**	**-**

Risk Spectrum



Diversification Benefit



The Diversification Benefit in the **current portfolio (red bar)** shows a **31.1% reduction of risk** (as measured by Standard Deviation) by holding different types of investments. The **blue bar shows the portfolio's potential risk** without diversification.

Top 5 Contributors to Risk are positions with Risk Impact greater than 10%. Please see the final pages of this report for definitions.

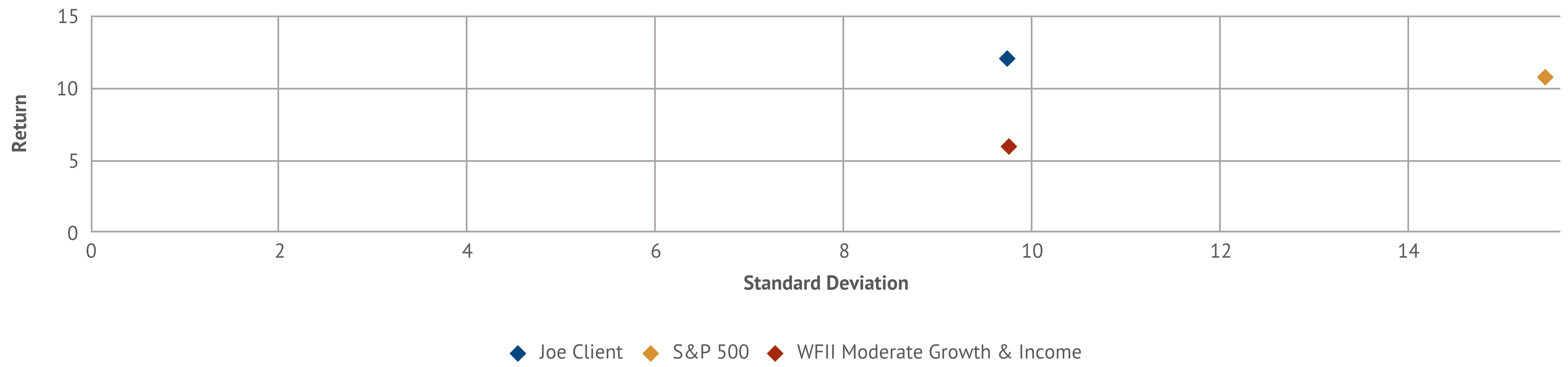
SECTION IV

Hypothetical Performance Review

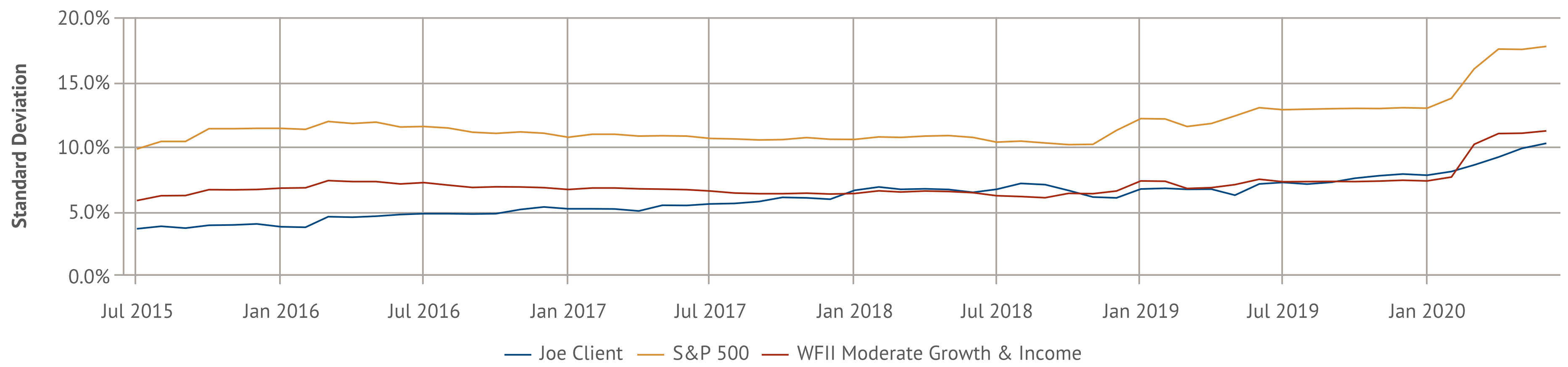
HPR: Risk/Return & Standard Deviation

Please see the Glossary and Disclosure section for important information including chart explanation.

Risk/Return (5 Year)



Standard Deviation

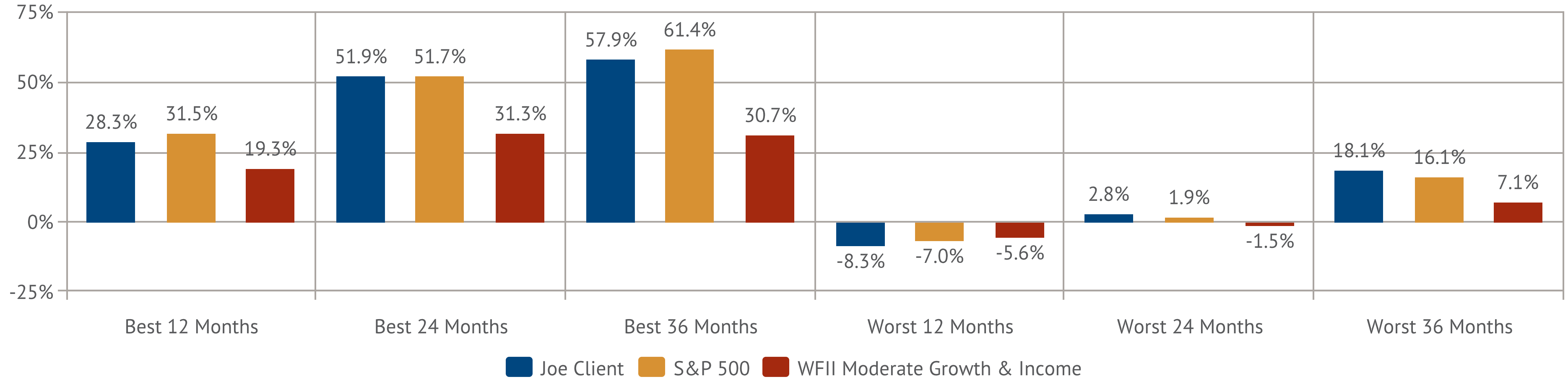


Annuities, certain types of direct investments, mutual funds held outside the firm, precious metals, coins, bullion or any assets held in tax-withholding status are amount the assets not included in values or performance calculations. The information provided herein is obtained from sources believed to be reliable, but no representation or warranty is made as to its accuracy or completeness. Past performance does not indicate future performance.

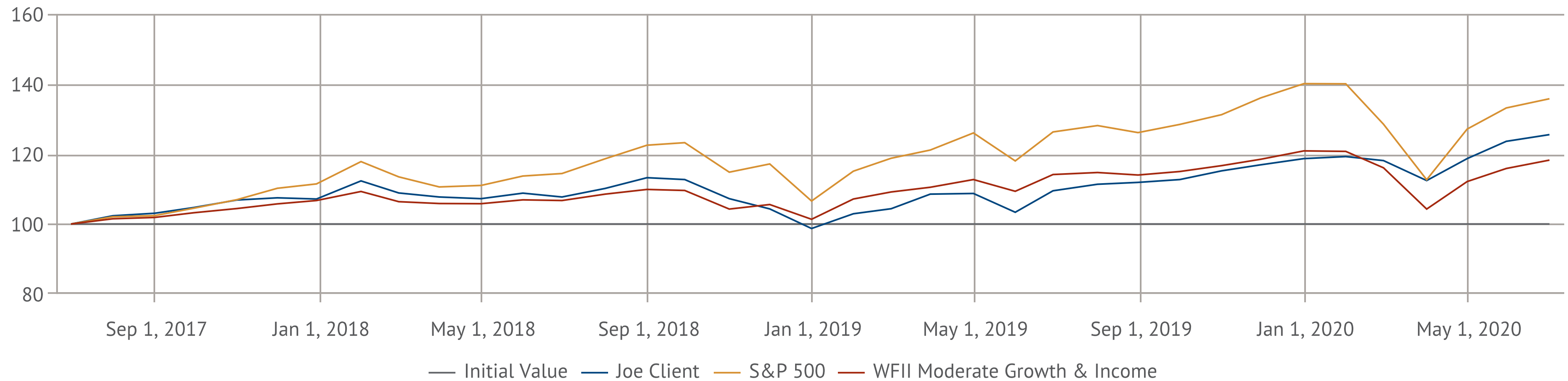
HPR: Best and Worst Performance & Growth Chart

Please see the Glossary and Disclosure section for important information including chart explanation.

Best/Worst Performance



Cumulative Growth

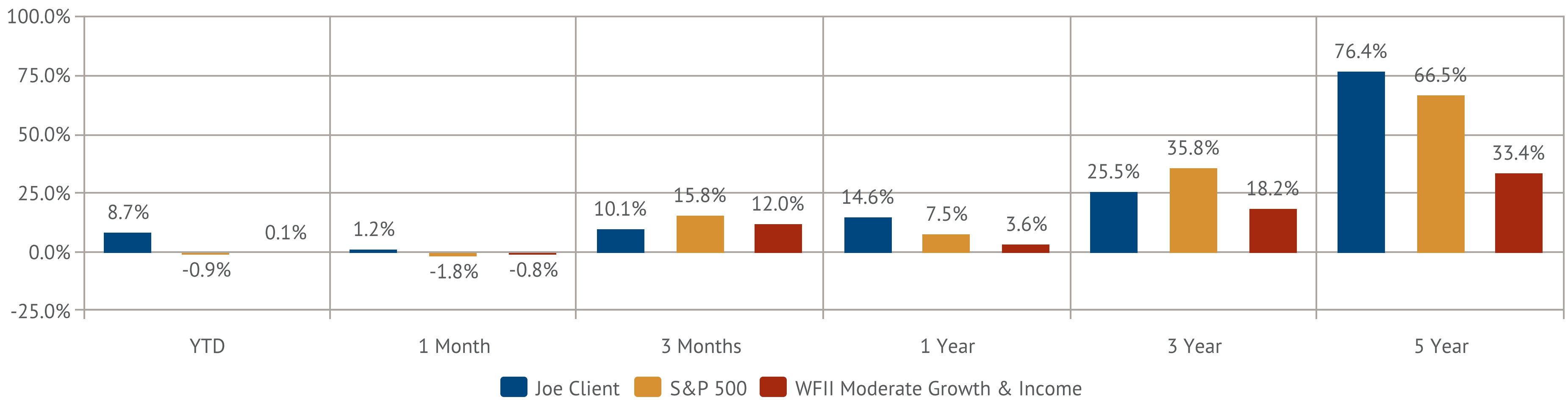


Past performance does not indicate future performance.

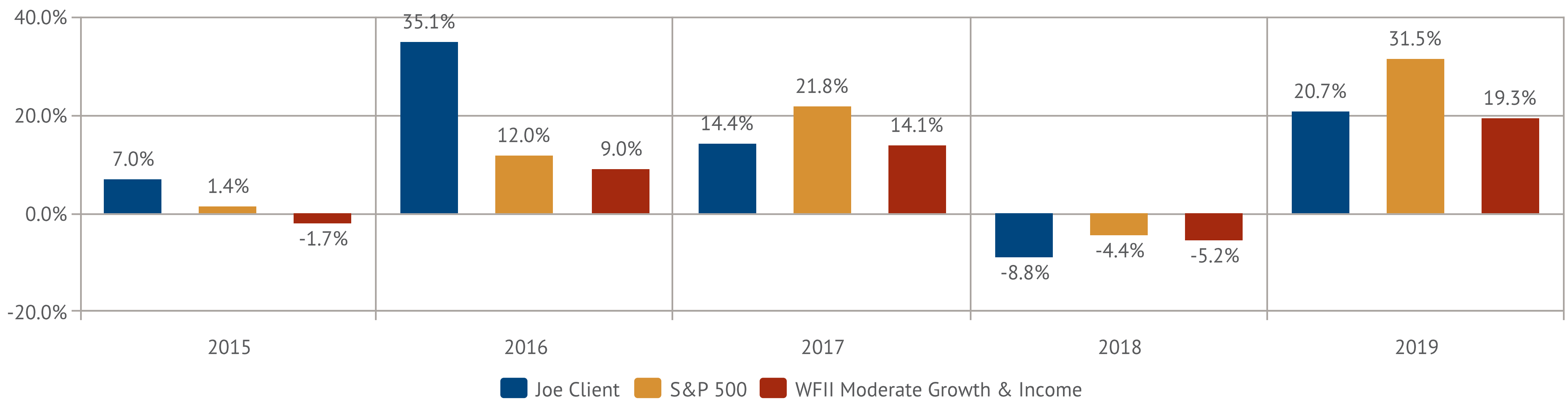
HPR: Rolling & Calendar Year Returns

Please see the Glossary and Disclosure section for important information including chart explanation.

Rolling Returns



Calendar Year Returns



Past performance does not indicate future performance.

HPR: Benchmark Comparative Analysis

Please see the Glossary and Disclosure section for important information including chart explanation.

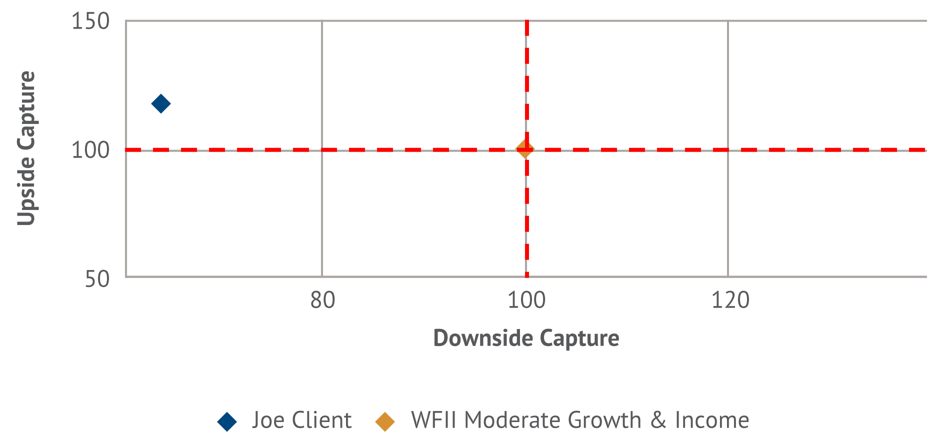
WFII Moderate Growth & Income

Index	Weight
Barclays Capital U.S. Corporate High Yield	6.0%
Barclays U.S. Treasury Bills (1-3M) Index	3.0%
Barclays US Aggregate 1-3 Yr Index	4.0%
Barclays US Aggregate 10+ Yr Index	7.0%
Barclays US Aggregate Intermediate	21.0%
Bloomberg Commodity Index	-
JP Morgan GBI Global ex-US	-
JPMorgan EMBI Global Diversified Index	5.0%
MSCI EAFE NR USD	6.0%
MSCI Emerging Markets	7.0%
NAREIT	-
Russell 2000	8.0%
Russell Midcap	12.0%
S&P 500	21.0%

Regression Statistics (5 Year)

	Joe Client
Portfolio Return	12.0%
Alpha	7.4%
Beta	0.77
R Squared	61.6%
Historical Tracking Error	6.2%
Sharpe Ratio	1.13
Information Ratio	0.98
Upside Capture %	117.5%
Upside Periods	42
Downside Capture %	64.2%
Downside Periods	18

Upside/Downside Capture



Please refer to the final pages of this report for definitions.

SECTION V

Detailed Portfolio Analysis

Risk Analysis View

Asset Class	Market Value (USD)	Portfolio Weight	Standard Deviation	Risk Impact
Fixed Income	**938,581.88**	**57.3%**	**3.2%**	**8.0%**
U.S. Short Term Taxable Fixed Income	**869,175.17**	**53.0%**	**2.9%**	**6.9%**
ISHRS IBDS DEC20TERM ETF	173,594.43	10.6%	0.9%	0.4%
ISHRS IBDS DEC21TERM ETF	173,394.76	10.6%	1.8%	0.9%
ISHRS IBDS DEC22TERM ETF	173,826.97	10.6%	3.0%	1.6%
ISHRS IBDS DEC23TERM ETF	173,712.75	10.6%	3.8%	2.0%
ISHRS IBDS DEC24TERM ETF	174,646.27	10.7%	5.1%	2.7%
U.S. Long Term Taxable Fixed Income	**69,406.71**	**4.2%**	**7.4%**	**1.4%**
ALABAMA PWR CO 5% PERPTL	2,402.52	0.1%	7.8%	0.1%
DTE ENERGY 5.25% PFD	67,004.19	4.1%	7.4%	1.3%
Equities	**700,286.25**	**42.7%**	**22.7%**	**82.7%**
U.S. Large Cap Equities	**618,865.25**	**37.8%**	**23.6%**	**75.0%**
CITIGROUP INC NEW	10,494.13	0.6%	39.2%	1.7%
COCA COLA COMPANY	50,203.54	3.1%	18.0%	2.1%
COSTCO WHSL CORP NEW	87,996.92	5.4%	18.7%	5.4%
GOLDMAN SACHS GROUP INC	58,708.70	3.6%	31.7%	7.7%
INTL BUSINESS MACH CORP	44,411.03	2.7%	28.8%	5.0%
NVIDIA CORP	227,597.47	13.9%	45.4%	42.0%
UNITED PARCEL SERVICE-B	68,520.41	4.2%	29.3%	6.3%
VERIZON COMMUNICATIONS	70,933.03	4.3%	16.4%	2.0%
U.S. Mid Cap Equities	**28,774.61**	**1.8%**	**50.4%**	**5.9%**
HALLIBURTON COMPANY	10,215.58	0.6%	73.1%	2.6%
WEYERHAEUSER CO	18,559.03	1.1%	41.2%	3.3%
Developed Market Ex-U.S. Equities	**52,646.40**	**3.2%**	**16.1%**	**1.9%**
NOVARTIS AG	52,646.40	3.2%	16.1%	1.9%
Total	**1,638,868.13**	**100.0%**	**10.5%**	**-**

Risk Analysis View

Risk Analysis By Equity Sector

Sector	Market Value (USD)	Portfolio Weight	Standard Deviation	Risk Impact
Communication Services	70,933.03	10.1%	16.4%	2.2%
Consumer Staples	138,200.47	19.7%	15.4%	7.8%
Energy	10,215.58	1.5%	73.1%	2.6%
Financials	69,202.83	9.8%	32.1%	9.5%
Health Care	52,646.40	7.5%	16.1%	2.1%
Industrials	68,520.41	9.8%	29.3%	7.3%
Information Technology	272,008.50	38.7%	40.3%	53.1%
Real Estate	18,559.03	2.6%	41.2%	3.3%
Utilities	2,402.52	0.3%	7.8%	-

SECTION VI

Glossary and Disclosures

Glossary

B	An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitments on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments on the obligation.
Standard Deviation	Standard deviation is a measure of a security's volatility, or variability in expected return. As such, it is a measure of risk since risk can be defined as the uncertainty of the expected return. Higher numbers indicate higher historical volatility. Standard deviation is most often used as a measure of risk relative to other securities or indexes. Standard Deviation does not measure all aspects of investment risks.
Risk Impact	Risk Impact shows how much risk a given holding is contributing to a specific portfolio. Risk Impact is useful because it can reveal that a relatively small position can represent a disproportionate percentage of the total portfolio risk. The Risk Impact of a security is a function of its weight within the portfolio, its individual volatility and its correlation to the other portfolio holdings.
Value at Risk (VaR)	Value at Risk is a measure of the risk of investments that estimates how much a set of investments might lose, given normal market conditions, in a given time period.
XLoss	Expected Loss (xLoss) calculates the average loss a set of investments might experience once the Value at Risk has been exceeded.
XGain	Expected Gain (xGain) calculates the average gain a set of investments might experience once the Value at Risk has been exceeded.
Risk Grade	The RiskGrade statistic is a measure of volatility that is designed to help investors better understand their market risk. RiskGrade is roughly standard deviation multplied by five. RiskGrades are calibrated for easier interpretation than standard deviation. A RiskGrade of 100 is scaled to reflect 20% annualized standard deviation.
Diversification Benefit	A method of determining how much risk is diversified away by holding securities that aren't perfectly correlated with one another. The measurement compares the portfolio's actual standard deviation to that of the weighted average standard deviation and computes how much risk is being diversified away.
Predictive Stress Testing	Predictive Stress testing is a measure of how sensitive a portfolio is to changes in one or more “risk factors”. These could be indexes, interest rates, exchange rates, etc. The returns of the portfolio are regressed against those of the various risk factors. Because the sensitivity and thus the stress impact is dependent on when the regression is calculated, changing the same stress factors by the same amounts at a different time (for example, 6 months later) will yield different stress results since correlations and, thus, betas, will change over time.
Alpha	Alpha is generally used to evaluate the amount of return a portfolio has achieved in excess of that of the benchmark index, adjusted for risk. Since alpha is an average over time, it is sensitive to a positive or negative spike; tracking error can be used to evaluate the consistency of alpha over a given time period.
Beta	Beta represents a portfolio's sensitivity to movements of its associated benchmark, which, by definition, has beta equal to one. A beta greater than one means that the changes in the portfolio's returns (positive or negative) have been greater than those of the benchmark. A beta less than one means that the changes in the portfolio's returns have been less than those of the benchmark.

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R-squared	R-squared is used to evaluate how closely the returns of a portfolio (have tracked) those of an index. A low r-squared indicates that there is a weak statistical relationship between the portfolio and the benchmark--as a result, other relative statistics are generally considered less indicative of the portfolio's relative performance. A higher r-squared can be interpreted to mean that there is a sufficient statistical relationship between portfolio and benchmark to suggest that the other relative statistics are more valid. An r-squared of 100% means that the behavior of the portfolio is identical to that of the index.
Historical Tracking Error	Tracking Error is a measure of the consistency with which the portfolio has outperformed (or underperformed) the benchmark. In the same way that standard deviation measures the volatility of returns, tracking error measures the volatility of excess return.
Information Ratio	The Information Ratio is the ratio of Excess Return to Tracking Error. It represents the average of portfolio returns in excess of those of the benchmark.
Maximum Drawdown	Maximum Drawdown measures the largest relative decline in value of a security or portfolio over a given historical time period and data frequency.
Upside/Downside Performance	The Upside/Downside Performance analysis compares the performance of a portfolio with that of its benchmark during periods when the benchmark had positive or negative returns. This comparison gives some perspective on the extent to which a portfolio has had better returns during up or during down markets. For purposes of this explanation, an “up market” refers to periods when the benchmark has positive returns and a “down market” refers to periods when the benchmark has negative returns. (The benchmark might or might not be representative of “the market” as a whole).
Capture Ratio	The Capture Ratio serves to summarize the information displayed in the Upside/Downside Performance analyses on a single graph. It displays the ratio of positive or negative portfolio returns to positive or negative benchmark returns. It is the ratio of average annualized positive/negative portfolio returns.
Sharpe Ratio	A measure of risk adjusted return. The difference between the return of the portfolio and the risk free rate, scaled by standard deviation.
Upside Capture (%)	The upside analysis compares the historical behavior of a portfolio with that of the benchmark. This comparison gives some perspective on the extent to which a portfolio has had better returns during up markets.
Upside Period	Periods in which the benchmark had positive returns.
Downside Capture (%)	The downside analysis compares the historical behavior of a portfolio with that of the benchmark. This comparison gives some perspective on the extent to which a portfolio has had better returns during down markets.
Downside Period	Periods in which the benchmark had negative returns.
Maturity Buckets	Short (Less than 3 years); Intermediate (3 to 10 years); Long (Greater than 10 years)
Duration	Duration is a measure of interest rate sensitivity. The effective duration is used for all bonds, whether or not they are callable.
JPY	Japanese Yen
GBP	British Pound

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Accrued Interest	Accrued interest is the interest on a bond or loan that has accumulated since the principal investment, or since the previous coupon payment if there has been one already. For a financial instrument such as a bond, interest is calculated and paid in set intervals (for instance annually or semi-annually)."
Type	Type is the yield type. Yield to Maturity will be displayed unless the bond is callable, in which case Yield to Call will be displayed for the bond.
Rating	The bond credit rating. The rating is assigned by Standard and Poor's.
AAA	An obligation rated 'AAA' has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitments on the obligation is extremely strong.
AA	An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitments on the obligation is very strong.
A	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitments on the obligation is still strong.
BBB	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to weaken the obligor's capacity to meet its financial commitments on the obligation.
BB, B, CCC, CC, and C	Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposure to adverse conditions.
BB	An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions that could lead to the obligor's inadequate capacity to meet its financial commitments on the obligation.
B	An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitments on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments on the obligation.
CCC	An obligation rated 'CCC' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitments on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitments on the obligation.
CC	An obligation rated 'CC' is currently highly vulnerable to nonpayment. The 'CC' rating is used when a default has not yet occurred but S&P Global Ratings expects default to be a virtual certainty, regardless of the anticipated time to default.
C	An obligation rated 'C' is currently highly vulnerable to nonpayment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared with obligations that are rated higher.

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D	An obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless S&P Global Ratings believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to 'D' if it is subject to a distressed exchange offer.
NR	This indicates that no rating has been requested, or that there is insufficient information on which to base a rating, or that S&P Global Ratings does not rate a particular obligation as a matter of policy.
Hypothetical Performance Review: Risk/Return & Standard Deviation	This method of performance measurement enables you to assess how a hypothetical portfolio may have performed over a defined historical period. Hypothetical performance review may not be indicative of actual portfolio performance and is based on the securities outlined in this report. It would not take into consideration any additions of new securities or removal of existing. In some cases where pricing information is unavailable, we use sector, industry group or asset class proxies to estimate performance. For fixed income securities we may use model-based pricing that may not reflect actual fixed income market conditions. Performance for annuities, certain types of direct investments, metals, bullion, coins or any assets not included in these accounts is not calculated. Account fees, taxes and other expenses are not included and returns will be reduced with the inclusion of these factors.
Hypothetical Performance Review: Best and Worst Performance & Growth Chart	Another useful way to view trailing returns is to isolate the best and worst historical performance periods for your portfolio. The graphic shows portfolio performance over the best and worst 12, 24 and 36 consecutive month periods, within a 5 year lookback window. Cumulative growth illustrates theoretical portfolio performance over a five year period. It assumes that all securities were invested at the beginning of the period and not rebalanced or changed. It may not be indicative of actual portfolio performance. Account fees, taxes and other expenses are not included and returns will be reduced with the inclusion of these factors.
Hypothetical Performance Review: Rolling & Calendar Year Returns	The returns shown below illustrate theoretical portfolio performance over several periods. It may not be indicative of actual portfolio performance. Account fees, taxes and other expenses are not included and returns will be reduced with the inclusion of these factors.
Hypothetical Performance Review: Benchmark Comparative Analysis	This page illustrates hypothetical portfolio performance over a five year period. Performance may not be indicative of actual portfolio performance. Account fees, taxes and other expenses are not included and returns will be reduced with the inclusion of these factors.

Benchmark Definitions

MSCI Emerging Markets Index	The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The Index consists of the following 23 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey. Source: MSCI. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products.
Bloomberg Barclays U.S. Treasury Bills (1-3M) Index	Bloomberg Barclays 1-3 Month Treasury-Bill Index includes all publicly issued zero-coupon US Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in US dollars and must be fixed rate and non convertible. An investment cannot be made directly in an index.
Bloomberg Barclays Municipal Index	Represents municipal bonds with a minimum credit rating of at least Baa, an outstanding par value of at least $3 million and a remaining maturity of at least one year.
Bloomberg Barclays Municipal 3 Yr 2-4 Index	A rules-based, market-value weighted index engineered for the long-term tax-exempt bond market. This index is the 3 year (2-4) component of the Municipal Bond Index.
Bloomberg Barclays Municipal 7 Yr 6-8 Index	A rules-based, market-value weighted index engineered for the long-term tax-exempt bond market. This index is the 7 year (6-8) component of the Municipal Bond Index.
Bloomberg Barclays US Aggregate 10+ Yr Index	A rules-based, market-value weighted index engineered for the long-term tax-exempt bond market. This index is the 10 year (8-12) component of the Municipal Bond Index.
Bloomberg Barclays U.S. Corporate High Yield Unhedged in USD	The Bloomberg Barclays US Corporate High Yield Bond Index measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded.
MSCI EAFE® Index (Europe, Australasia, Far East)	The Morgan Stanley Capital International Europe, Australasia and Far East ("MSCI EAFE") Stock Index is an unmanaged group of securities widely regarded by investors to be representations of the stock markets of Europe, Australasia and the Far East. Source: MSCI. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products.
Russell 1000® Growth Index	The Russell 1000® Growth Index measures the performance of those Russell 1000® companies with higher price-to-book ratios and higher forecasted growth values.
Russell 1000® Value Index	The Russell 1000® Value Index measures the performance of those Russell 1000® companies with lower price-to-book ratios and lower forecasted growth values.

Benchmark Definitions

Russell 2000 Index	Measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index representing approximately 8 percent of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership.
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 percent of the total market capitalization of the Russell 1000 companies.
S&P 500 Index	The S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. It is a market value weighted index with each stock's weight in the Index proportionate to its market value.
Bloomberg Commodity Index	A broadly diversified index that allows investors to track commodity futures through a single, simple measure. The index is composed of futures contracts on physical commodities and is designed to minimize concentration in any one commodity or sector. It currently has 22 commodity futures in seven sectors. No one commodity can compose less than 2% or more than 15% of the index and no sector can represent more than 33% of the index.
Bloomberg Barclay US Aggregate Bond Index	Bloomberg Barclay US Aggregate Bond Index is a broad-based measure of the Investment grade, US dollar-denominated, fixed-rate taxable bond market.

Disclaimers

The portfolio analysis does not consider tax lots or tax advantaged selling when making asset allocation recommendations. Consult your tax advisor to understand tax implications of the recommendations.

There are times when current pricing data are not available for certain securities. In the event this happens, the market value shown on this report will reflect the most recently available data.

Different investments offer different levels of potential return and market risk. All investing involves risk including the possible loss of principal. There is no assurance any investment strategy will be successful. An investment in a mutual fund or exchange–traded fund will fluctuate and shares, when sold, may be worth more or less than their original cost. Exchange-Traded Funds are subject to risks similar to those of stocks and may yield investment results that, before expenses, generally correspond to the price and yield of a particular index. There is no assurance that the price and yield performance of the index can be fully matched.

Each fund, portfolio or security is subject to its own specific risks which are detailed in the prospectus, offering document or other information material. You should always consult the prospectus, offering document or other information material for a more complete description of the risks, expenses, and fees associated with a particular investment product. Your investment may be subject to some of the following risks:

Asset Class Risks:

Alternative Strategies: Funds that invest using alternative strategies are more complex investment vehicles which generally have higher costs and substantial risks. They tend to be more volatile than other types of funds and present an increased risk of investment loss. Relative to broad, long-only traditional asset class funds, alternative funds may employ more complex strategies, investments, and portfolio structures. In doing so, some of these strategies may expose investors to additional risks, including but not limited to the following: short selling, leverage risk, counterparty risk, liquidity risk, commodity price volatility risk, and/or managed futures roll yield risk.

Commodities: 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 risks.

Currency: Investments in currencies involve certain risks, including credit risk, interest rate fluctuations, fluctuations in currency exchange rates, derivative investment risk and the effect of political and economic conditions. The use of currency transactions to seek to achieve gains in the portfolio could result in significant losses to the portfolio which exceeds the amount invested in the currency instruments.

Equity: Equity investments are subject to market risk which means that their value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors.

Disclaimers

Fixed Income: Investments in fixed-income securities are subject to credit and interest rate 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. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. All fixed income investments may be worth less than their original cost upon redemption or maturity. Income from municipal securities is generally free from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-free, capital gains, if any, will be subject to taxes.

Income for some investors may be subject to the federal Alternative Minimum Tax(AMT).

Foreign: Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

Gold: Investing in gold, silver or other precious metals involves special risk considerations such as severe price fluctuations and adverse economic and regulatory developments affecting the sector or industry.

MLP/Energy: A fund that concentrates its investment in energy related MLPs is subject to the risks of investing in MLPs and the energy sector. Investments in securities of MLPs are subject to numerous significant risks such as 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 NAV and other material risks. A downturn in the energy sector of the economy, adverse political, legislative or regulatory developments or other events could have a larger impact on a portfolio that concentrates in the sector.

Preferred Securities: Preferred securities 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. In addition, the issue may be callable which may negatively impact the return of the security. Preferred dividends are not guaranteed and are subject to deferral or elimination.

Real Estate: Real Estate investments have special risks, including possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Sector-Specific: Investments that are concentrated in a specific sector, industry or companies may be subject to a higher degree of market risk than investments that are more diversified.

Small-Mid-Cap: The prices of small and mid-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.

Other Investment Companies: Mutual funds and exchange-traded funds are sold by prospectus. Please consider the investment objectives, risks, charges and expenses carefully before investing. The prospectus, which contains this and other information, can be obtained by calling your financial advisor for any mutual fund or the ETF

Disclaimers

sponsor for any ETF. Read the prospectus carefully before you invest.

Closed-End Funds (CEFs): Closed-End Funds (CEFs) are actively managed and can employ a number of investment strategies in pursuit of the fund's objectives. Some strategies may increase the overall risk of the fund and there is no assurance that any investment strategy will be successful or that the fund will achieve its intended objective. A CEF has both a market price and net asset value (NAV), and these two values and their respective performances may differ. Changes in investor demand for a particular fund may cause the fund to trade at a price that is greater (lower) than it's NAV, creating a share price premium (discount) to its NAV. CEFs are subject to different risks, volatility, fees and expenses. Many CEFs can leverage their assets to enhance yields. Leverage is a speculative technique that exposes a portfolio to increased risk of loss, may cause fluctuations in the market value of the fund's portfolio which could have a disproportionately large effect on the fund's NAV or cause the NAV of the fund generally to decline faster than it would otherwise. The use of leverage and other risk factors are more fully described in each closed- end fund's prospectus under the heading “Risks.”

Non-Registered Exchange-Traded Products: Certain Exchange-Traded Products(ETPs) that invest in commodities are not registered as investment companies under the Investment Company Act of 1940, and are not subject to the same regulatory requirements as mutual funds, closed-end funds, or ETFs that are registered. These products can be structured as Grantor Trusts, Limited Partnerships, or exchange-traded notes. Commodity ETPs attempt to track the price of a single commodity, such as gold or oil, or a basket of commodities by holding the actual commodity in storage, or by purchasing futures contracts. The performance of an ETP that tracks a futures index may not necessarily correspond to the spot price performance (Spot price: the price of goods, currencies, or securities that are offered for immediate delivery and payment.). In fact, when there are significant differences between the spot price and the futures price, the performance of the ETP may be very dissimilar to the spot price performance. Commodity ETPs may use different instruments to gain their exposure such as money market funds, currency forward contracts, futures, etc., and are subject to the same risks as the underlying instruments. Futures are speculative. The use of futures contracts exposes the fund to additional risks and could produce disproportionate gains or losses and may increase volatility and costs which could hurt the fund’s performance.

Derivatives: Derivatives can give rise to a form of leverage. The use of leverage creates special risks including potential interest rate risks and the likelihood of greater volatility of net asset value and market price of, and distributions on, common shares. The use of derivatives may not be successful, resulting in losses to the Fund, and the cost of such strategies may reduce the Fund’s returns. Investing in derivatives carries the risk of the underlying instrument as well as the derivative itself.

Non-Diversification: Non-diversified funds generally may invest a larger percentage of their assets in the securities of a smaller number of issuers. As a result, the funds may be more susceptible to the risks associated with these particular companies, or to a single economic, political or regulatory occurrence affecting these companies.

Option Strategies: Some funds employ option strategies in pursuit of the Fund’s investment objective. The Fund’s investments in option strategies may result in loss. Purchasing and writing options are highly specialized activities and entail greater than ordinary investment risks. The successful use of options depends in part on the ability of the Investment Adviser to manage future price fluctuations and the degree of correlation between the options and securities markets. No assurance can be given that the Investment Adviser’s judgments will be correct.

Short Sales: Short sales by a Fund theoretically involve unlimited loss potential since the market price of securities sold short may continuously increase. Short selling

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involves leverage. Leverage may increase the risk of loss, cause fluctuations in the market value of the Fund's portfolio to have disproportionately large effects or cause the NAV of the Fund generally to decline faster than it would have otherwise.WFA/WFII uses research opinions provided from various correspondent research providers, as well as WFA/WFII's own research opinions when determining asset allocation recommendations for your account. WFA/WFII routinely maintains different investment opinions on these securities than those maintained by our correspondent providers. In some instances, WFA/WFII may also maintain multiple, differing opinions for the same security such as where WFA/WFII believes a company/issuer's business prospects and security price may vary over different time horizons, or where it believes investment in the security may be more appropriate for clients with certain investment objectives and/or risk tolerances. You should consult with your Financial Advisor to determine whether each asset allocation recommendation is suitable for your particular financial goals and objectives.

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