

Nuveen Managed-Volatility Strategies



June 30, 2017

Portfolio Managers:

James A. Colon, CFA

Senior Vice President,
Head of Managed Volatility Strategies

Nazar Suschko, Ph.D., FRM

Vice President,
Quantitative Research Analyst

Strategy Overview

Team & Strategy Overview

Institutional Solutions

- Nuveen Asset Management (“NAM”) employs 61 portfolio managers and 76 analysts across equities, taxable and municipal fixed income, real assets, and institutional solutions.
- The Institutional Solutions Group is a leader in managed-volatility and risk-focused strategies and consists of a six-member team of experts in derivatives, volatility/risk forecasting, pension risk management, and asset allocation.
- Nuveen Asset Management launched its first managed volatility strategy in 2009 and has an extensive history with strategies that deploy options, futures, and OTC derivatives. NAM continues to innovate with unique strategies that seek to meet investor needs.

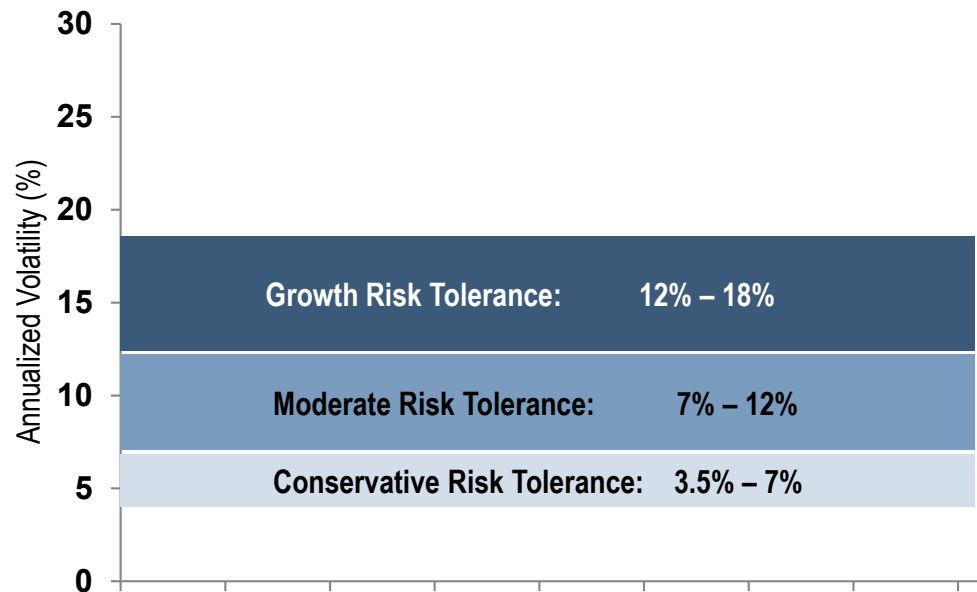
Strategy Overview

- The Nuveen Intelligent Risk strategies seek to tactically manage risk across a diversified range of asset classes.
- During high-volatility environments, risk assets, such as equities and commodities, tend to perform poorly and experience large drawdowns. During low-volatility environments, risk assets tend to perform well and experience minimal drawdowns.
- The Intelligent Risk strategies tactically overweight fixed income and other risk-hedging assets during periods of high volatility to protect the investor’s capital. During low-volatility environments, the Intelligent Risk strategies tactically overweight equities and other risk assets to capitalize on supportive markets.
- The strategy’s portfolio managers have extensive backgrounds in quantitative risk management and volatility forecasting. James Colon has been the lead portfolio manager on Nuveen’s multi-asset class, managed-volatility strategies since their inception.

Investments and Target Volatility

The Intelligent Risk strategies attempt to keep short- and long-term volatility inside a target range. The strategy uses exchange-traded funds and exchange-traded notes to distribute risk across equities, fixed income, and real assets.

Target Volatility Ranges



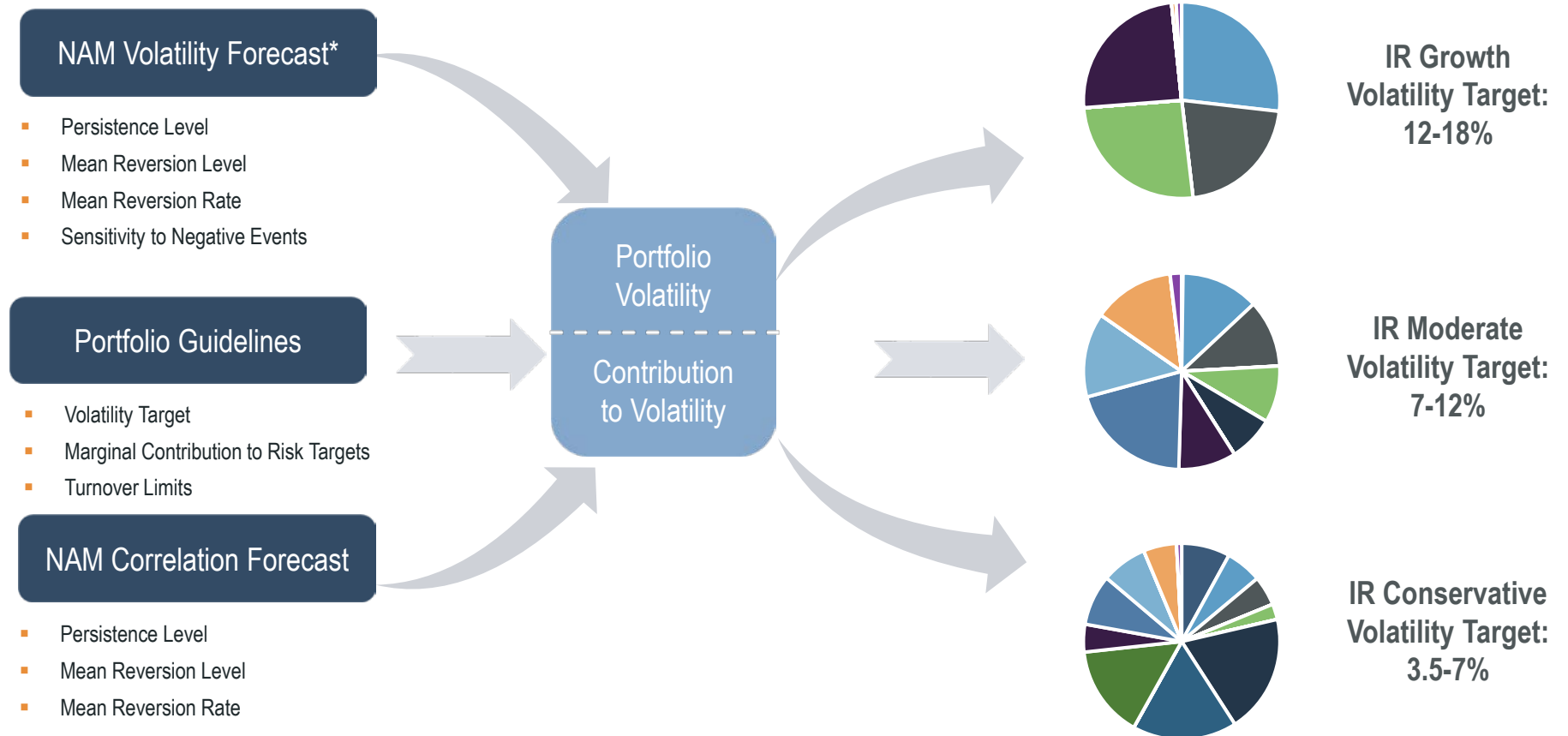
Historical Volatility Levels

- Equities: 19% (since 1926)
- Fixed Income: 5% (since 1926)
- Commodities: 20% (since 1969)

Source: Bloomberg, Nuveen Asset Management. Equities are represented by the S&P 500 Index. Fixed Income is represented by the Barclays Aggregate Bond Index. Commodities are represented by the S&P GSCI Total Return Index. Past performance is no guarantee of future results. Different benchmarks, economic periods, and other methods and market conditions may result in significantly different outcomes. Indices are unmanaged and unavailable for direct investment. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

Investment Process Overview

The Intelligent Risk strategies are centered around risk control. At least monthly, the investment team forecasts short-term volatility and correlation movements and repositions the portfolio for future changes in the risk environment.

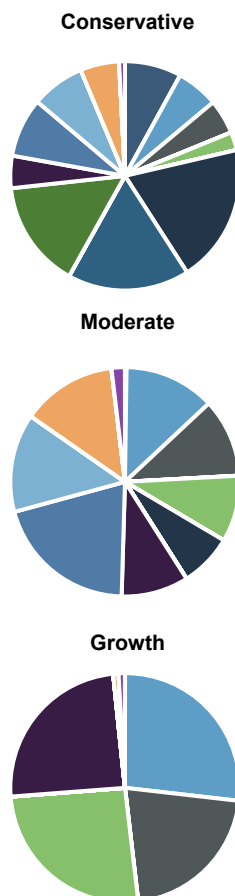


*Nuveen Asset Management's volatility forecast models are proprietary, econometric models developed by the portfolio management team and have been used for active management since 2009. The models were validated by an independent 3rd party in 2016, and a copy of the validation report is available upon request.

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Intelligent Risk – Holdings (as of 6/30/2017)

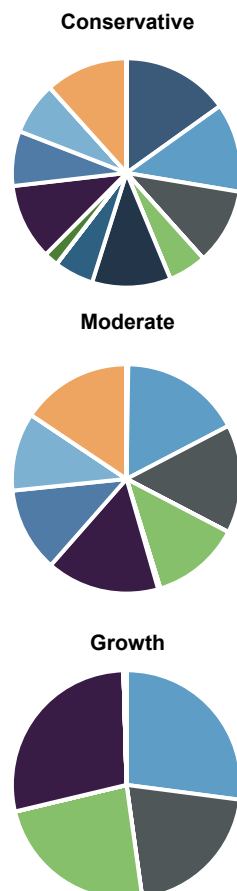


	Symbol	Holdings Percentage		
		Conservative	Moderate	Growth
Equities		21.4%	33.5%	73.8%
iShares R1000 Index Fund	IWB	8.0	0.2	0.0
iShares R2000 Index Fund	IWM	5.9	12.8	26.8
Vanguard FTSE Developed Markets	VEA	4.9	11.1	21.3
iShares MSCI Emerging Markets Index	EEM	0.0	0.0	0.0
Vanguard Emerging Markets	VWO	2.5	9.4	25.6
Fixed Income		51.9%	7.5%	0.0%
iShares Barclays 1-3Yr Treasury Bond Fund	SHY	0.0	0.0	0.0
iShares Barclays 20Yr+ Treasury Bond Fund	TLT	19.5	7.5	0.0
SPDR Barclays High Yield Bond Fund	JNK	17.2	0.0	0.0
iShares Barclays Credit Bond Fund	CRED	0.0	0.0	0.0
iShares Barclays Aggregate Bond Fund	AGG	0.0	0.0	0.0
iShares S&P National Municipal Bond Fund	MUB	15.2	0.0	0.0
Real Assets		25.9%	57.1%	25.3%
iShares S&P North American Natural Resources Sector Index	IGE	4.5	9.5	24.6
SPDR Gold Trust	GLD	8.3	20.3	0.0
iPath DJ-UBS Commodity Index Total Return ETN	DJP	7.5	13.9	0.0
iShares DJ US Real Estate Index	IYR	0.0	0.0	0.0
Vanguard REIT	VNQ	5.5	13.4	0.8
iShares Barclays US TIPS Bond Fund	TIP	0.0	0.0	0.0
Cash		0.8%	1.9%	0.9%
		100.0%	100.0%	100.0%

For illustrative purposes as of the date referenced and subject to change without further notice. Specific ETF/ETN, percentage, and asset class information, as of the date indicated, is provided for informational purposes only and should not be viewed as investment advice, recommendation, offer, solicitation, or promotion. The reader should not assume that investments and/or strategies listed above were or will be profitable. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

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Intelligent Risk – Risk Decomposition (as of 6/30/2017)

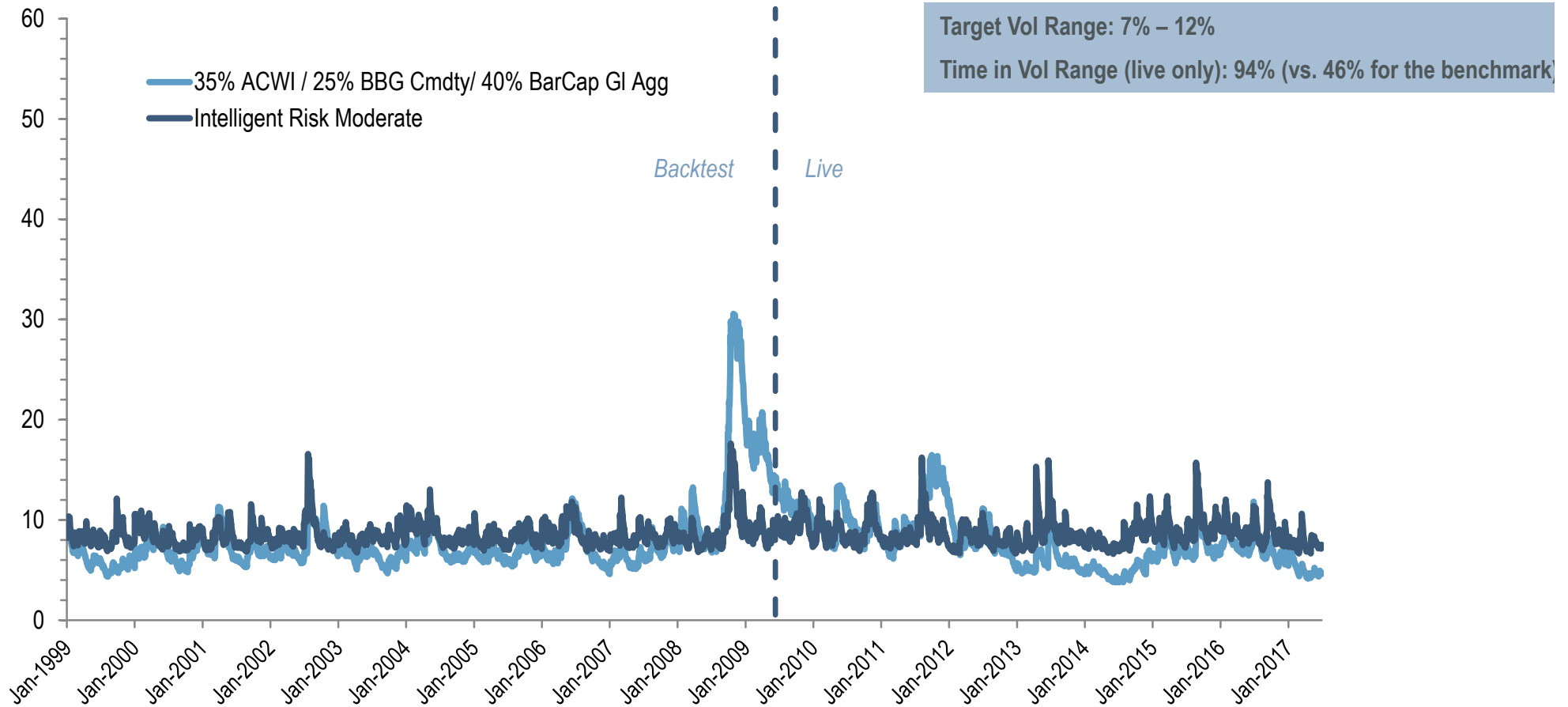


	Symbol	Contribution to Risk (%)		
		Conservative	Moderate	Growth
Equities		43.7%	45.5%	71.3%
iShares R1000 Index Fund	IWB	15.1	0.3	0.0
iShares R2000 Index Fund	IWM	12.5	17.2	27.1
Vanguard FTSE Developed Markets	VEA	10.7	15.4	20.7
iShares MSCI Emerging Markets Index	EEM	0.0	0.0	0.0
Vanguard Emerging Markets	VWO	5.4	12.7	23.5
Fixed Income		18.7%	-0.3%	0.0%
iShares Barclays 1-3Yr Treasury Bond Fund	SHY	0.0	0.0	0.0
iShares Barclays 20Yr+ Treasury Bond Fund	TLT	11.1	-0.3	0.0
SPDR Barclays High Yield Bond Fund	JNK	5.6	0.0	0.0
iShares Barclays Credit Bond Fund	CRED	0.0	0.0	0.0
iShares Barclays Aggregate Bond Fund	AGG	0.0	0.0	0.0
iShares S&P National Municipal Bond Fund	MUB	2.0	0.0	0.0
Real Assets		37.6%	54.8%	28.7%
iShares S&P North American Natural Resources Sector Index	IGE	10.7	16.0	28.3
SPDR Gold Trust	GLD	7.8	12.0	0.0
iPath DJ-UBS Commodity Index Total Return ETN	DJP	7.4	11.1	0.0
iShares DJ US Real Estate Index	IYR	0.0	0.0	0.0
Vanguard REIT	VNQ	11.7	15.7	0.4
iShares Barclays US TIPS Bond Fund	TIP	0.0	0.0	0.0
Cash		0.0%	0.0%	0.0%
		100.0%	100.0%	100.0%

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IR Moderate – Volatility Profile



Please refer to the Appendix for data detail, presented as of March 31, 2017. Backtested data is supplemental to the Composite of the Intelligent Risk Moderate Accounts and based on a model. Data reflects hypothetical, or simulated, performance results of a fictional account managed by a proprietary quantitative model according to the strategy indicated. It does not reflect the results of an actual client account. Hypothetical results are no guarantee of future results. Please see the Disclosures on Back Tested Models-Supplemental Information in the Appendix. This information is an integral part of this performance presentation. Intelligent Risk Portfolios® (IRF) performance, characteristics, statistical and holdings information for the Moderate strategy is comprised of a non-fee paying proprietary seed capital account funded by Nuveen Investments, Inc. and a non-managed account. The seed account represents 49% of the composite assets at the end of 2015. The accounts in the composite have been managed according to the Intelligent Risk Portfolio® Moderate strategy on a discretionary basis outside of a managed accounts program. Different examples and market conditions will result in different outcomes. The information provided herein is for illustrative purposes only and has been obtained from sources believed to be reliable, but is not guaranteed for accuracy or completeness. The reader should not assume that an investments and/or strategies identified above were or will be profitable. Past performance is no guarantee of future results. Neither the information nor any opinion expressed constitutes a solicitation or an offer to buy or sell any security, product, or service. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

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Composite Performance vs. Benchmark

As of 6/30/2017	2Q 2017 Return	YTD Return	1Y Return	3Y Return	5Y Return	Incept Return	Incept SD	Incept Sharpe	Up-Market Capture	Down- Market Capture
IR Conservative (Gross)	1.56	4.17	3.16	1.28	2.81	5.79	5.47	1.03	87%	55%
25% ACWI / 15% Bloomberg Cmdty / 60% BarCap GI Agg	2.17	4.63	2.11	-1.22	1.70	3.66	6.98	0.50	100%	100%
40% ACWI / 60% BarCap GI Agg	3.27	7.19	5.79	1.82	4.70	5.95	7.23	0.80	111%	87%
IR Moderate (Gross)	0.23	3.28	1.39	-0.38	2.71	6.81	7.95	0.84	102%	72%
35% ACWI / 25% Bloomberg Cmdty / 40% BarCap GI Agg	1.76	4.31	3.69	-2.20	1.63	3.66	8.64	0.41	100%	100%
60% ACWI / 40% BarCap GI Agg	3.60	8.61	9.98	2.86	6.65	7.50	9.14	0.80	117%	86%
IR Growth (Gross)	1.18	5.31	12.84	-1.03	4.67	6.79	11.39	0.58	113%	99%
50% ACWI / 30% Bloomberg Cmdty / 20% BarCap GI Agg	1.73	4.84	6.53	-2.21	2.53	4.38	10.51	0.40	100%	100%
80% ACWI / 20% BarCap GI Agg	3.94	10.03	14.31	3.86	8.60	8.99	11.27	0.78	117%	86%

¹This index/composite is provided for informational purposes only and should not be considered a benchmark for the strategy.

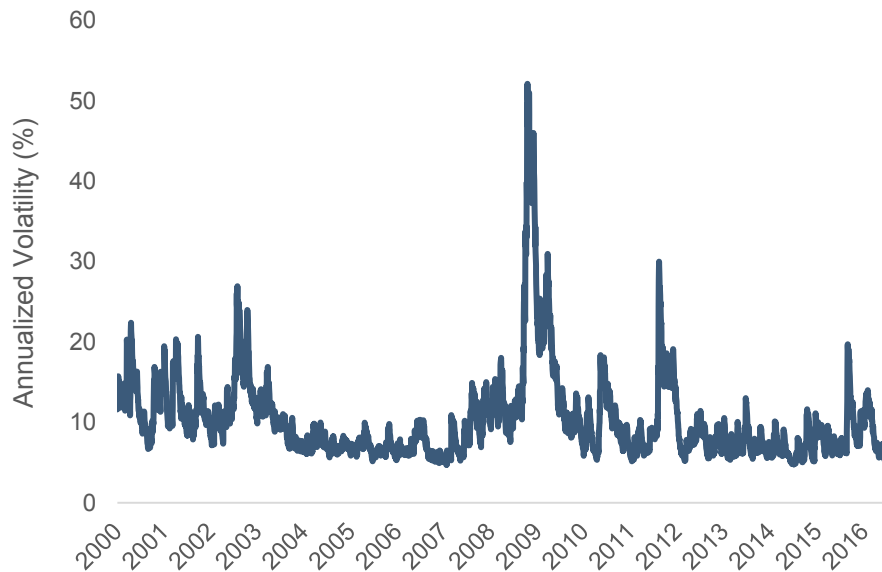
Intelligent Risk Portfolios® (IRP) performance, characteristics, statistical and holdings information for each strategy is comprised of a non-fee paying proprietary seed capital account funded by Nuveen Investments, Inc. in the composite have been managed according to the Intelligent Risk Portfolio® strategies on a discretionary basis outside of a managed accounts program. At the end of 2015, the seed account represents 84% of the Composite of Intelligent Risk Conservative Accounts' assets, 49% of the Composite of Intelligent Risk Moderate Accounts' assets, and 70% of the Composite of Intelligent Risk Growth Accounts' assets. Returns are gross of fees and include the reinvestment of dividends/interest and other earnings, and are calculated and stated in U.S. Dollars. Gross of fee performance does not reflect the deduction of fees and expenses, which would reduce performance in an actual client account. This performance information should only be provided on a one-on-one basis. The inception date is 6/01/09. Periods greater than one year are annualized. As of January 1, 2017 the benchmarks for each of the Intelligent Risk Portfolio strategies were changed to customized blends of the MSCI ACWI, Bloomberg Commodity, and Barclays Global Aggregate indexes. Prior to December 31, 2016 the benchmarks for each of the Intelligent Risk Portfolio strategies were changed to customized blends of the MSCI ACWI and Barclays Global Aggregate indexes. Prior to June 30, 2012, the benchmarks consisted of blends of the S&P 500 and Barclays Aggregate Bond indexes. The blended benchmark performance is calculated by Nuveen Asset Management with data received from Bloomberg. The blended benchmarks assume monthly rebalancing to the static benchmark weights. Indexes are unmanaged and unavailable for direct investment. Benchmark returns include reinvestment of income, but do not reflect taxes, investment advisory and other fees that would reduce performance in an actual account. All numbers are preliminary. Final numbers are available upon request by contacting Nuveen Asset Management. Please see the next slide for returns presented net of fees and the Appendix for the Disclosures of the Composite of Intelligent Risk Conservative Accounts, Composite of Intelligent Risk Moderate Accounts, and Composite of Intelligent Risk Growth Accounts, which are an integral part of this performance presentation. Past performance is no guarantee of future returns.

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Investment Philosophy & Process

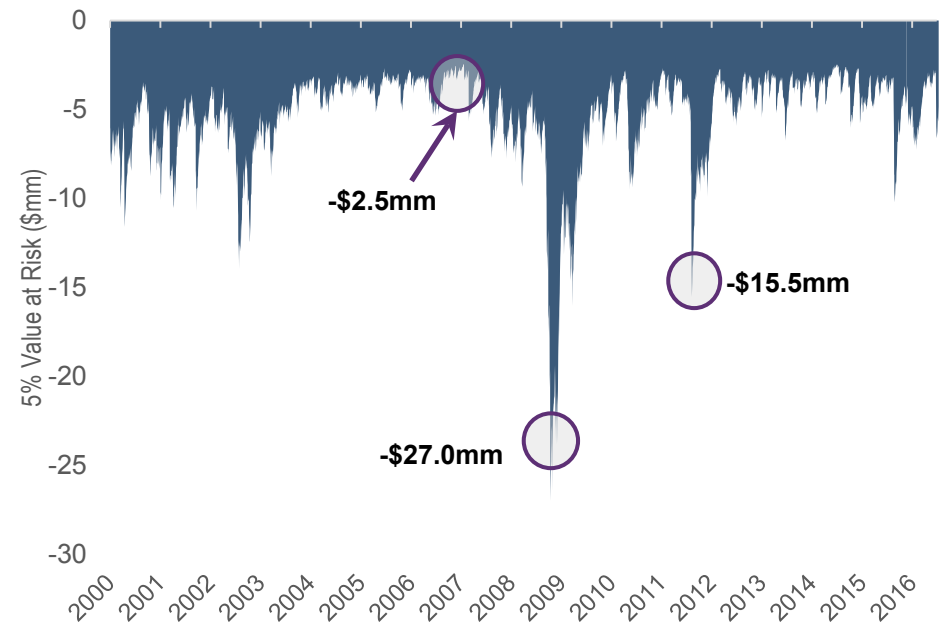
Unstable Volatility Leads to Variable Capital at Risk

Unstable Volatility Profile



While the 60/40 portfolio's weights stay the same, the risk profile of the strategy changes with market conditions. In 2007, the annualized volatility of a 60/40 portfolio was 5%. In 2008, the annualized volatility of the same portfolio was 50%.

Unstable Volatility => Changing VaR

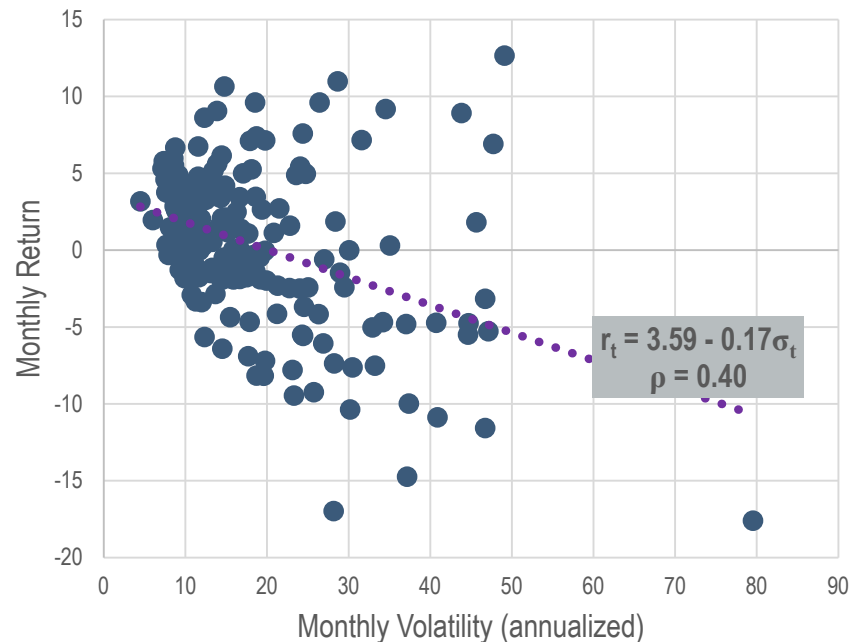


Assume that an institution has \$500 million in assets invested in a 60/40 asset allocation. In 2008, the Value at Risk of a 60/40 portfolio is over 10 times the Value at Risk of the same portfolio in 2007.

Source: Bloomberg, Nuveen Asset Management. In the above chart, Value at Risk ("VaR") represents a loss threshold that is expected to be exceeded in 5% of the trading days. For example, a \$27mm VaR indicates that there is a 5% probability of a loss greater than \$27mm on that particular day. The data shown is for illustrative purposes only and does not represent the past performance nor predict the future performance of any Nuveen Investments product. Neither the information nor any opinion expressed constitutes a solicitation or an offer to buy or sell any security, product, or services. Index returns include reinvestment of income and do not reflect investment advisory and other fees that would reduce performance in an actual client account. The 60/40 portfolio consists of 60% S&P 500 Index and 40% Barclays Aggregate Index. Indexes are unmanaged and unavailable for direct investment. Past performance is no guarantee of future results. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

Returns vs. Volatility

Monthly Returns vs. Volatility¹



Over the long run, we see evidence of a positive relationship between systematic risk and return (CAPM). However, over the short run, the relationship inverts. High short-term volatility often coincides with negative returns.

High vs. Low Volatility Environments

	Volatility < 16	Volatility > 16
Number of Months	108	90
Annualized Return	22.65	-17.48
Annualized Volatility	10.40	21.32
Worst Month	-6.41	-17.61
Negative Months	30%	66%

For months in which volatility was less than 16%, U.S. equities realized an annualized return of 23%. However, during months in which volatility was greater than 16%, U.S. equity returns dropped to -17% (annualized). Over half of the months in which volatility was over 16, U.S. equities had a negative return versus 30% of the months when volatility was less than 16.

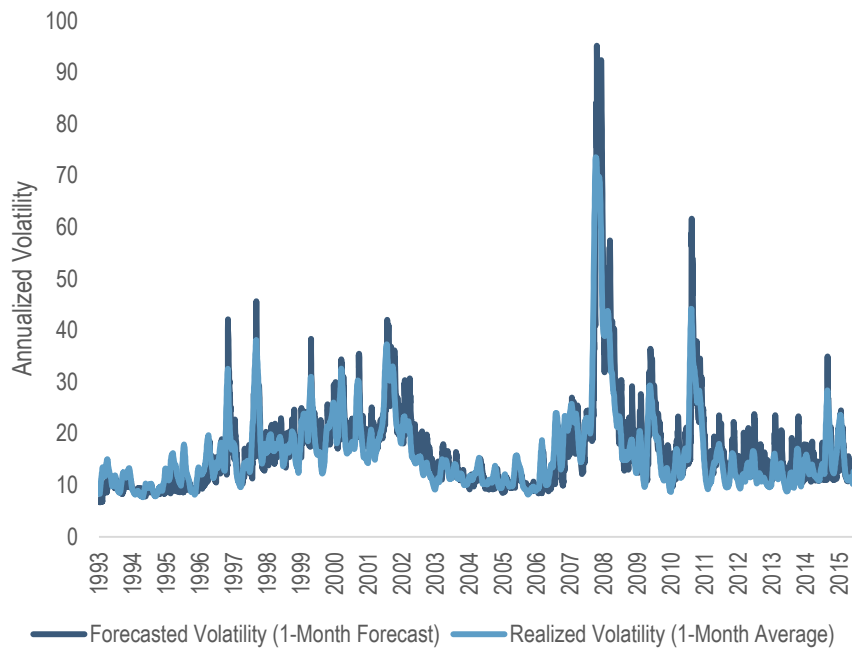
¹ The returns presented here are based on the historical performance of the Russell 1000 Growth Index, from 12/31/1999 to 6/30/2016. Indices are unmanaged and unavailable for direct investment. Past performance is no guarantee of future results.

Source: Bloomberg, Nuveen Asset Management. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

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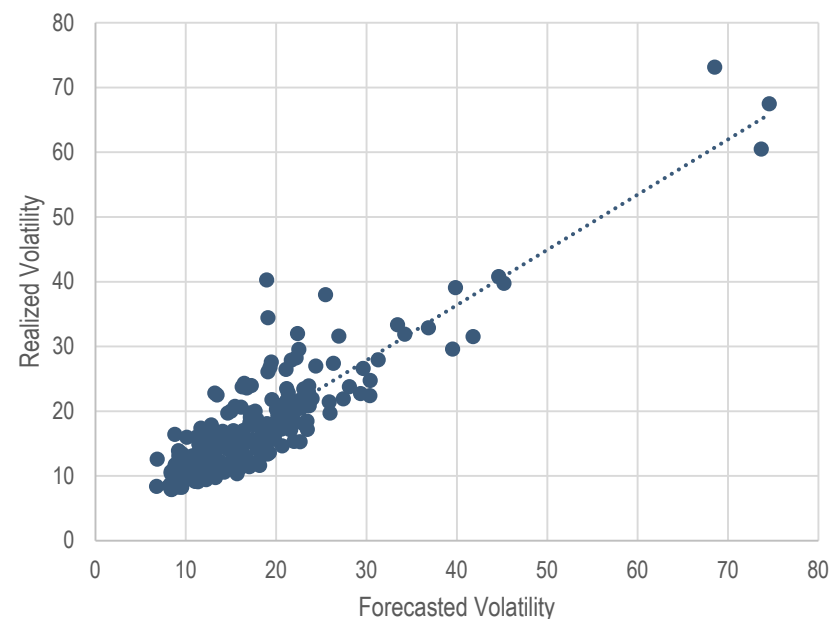
Returns vs. Volatility

U.S. Equity Volatility Forecasts vs. Realized



Volatility modelling has evolved significantly over the past two decades. Newer methods can capture the persistence in short-term volatility, while older methods implicitly assume that volatility is stable.

U.S. Equity Volatility Forecasts vs. Realized



1) Sample Statistic:

$$\sigma^2 = \frac{\sum_1^n (r_i - \bar{r})^2}{n - 1}$$

2) GARCH Model:

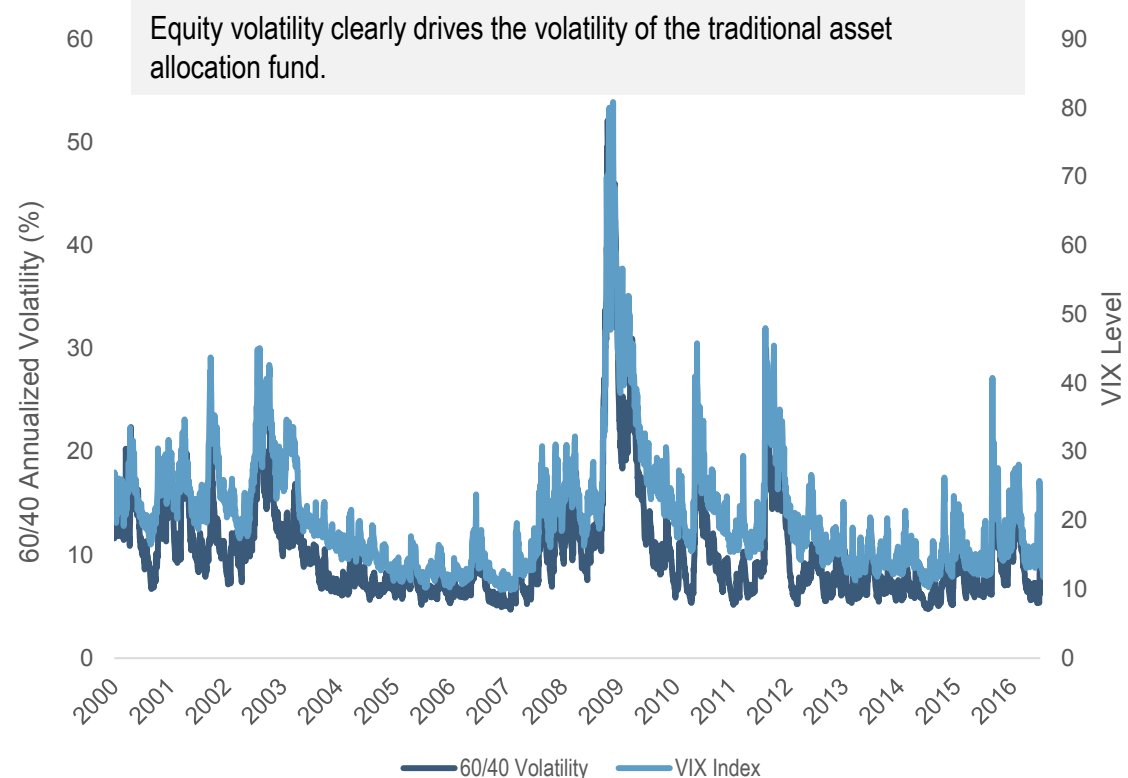
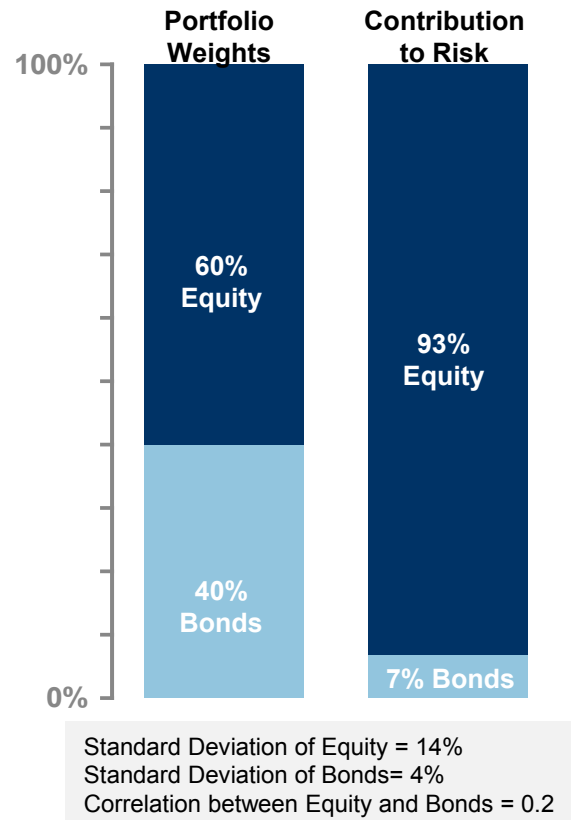
$$\sigma_t^2 = \omega + \alpha \varepsilon_{t-1}^2 + \beta \sigma_{t-1}^2$$

3) GJR GARCH Model:

$$\sigma_t^2 = \omega + \alpha \varepsilon_{t-1}^2 + \gamma \mathbb{I}_{\varepsilon_{t-1} < 0} \varepsilon_{t-1}^2 + \beta \sigma_{t-1}^2$$

Sources: Nuveen Asset Management, Bloomberg. Forecasts were created based on backtested data to illustrate daily volatility from 1/3/1994 through 6/30/16. Each data point represents the forecasted average daily volatility over the upcoming 22 trading days. The realized volatility represents the average volatility of the index over the 22-day period in the analysis. The forecasts provided above are based on information that would have been known at the time of the forecast and lagged by one day. Past performance is not a guarantee of actual results.

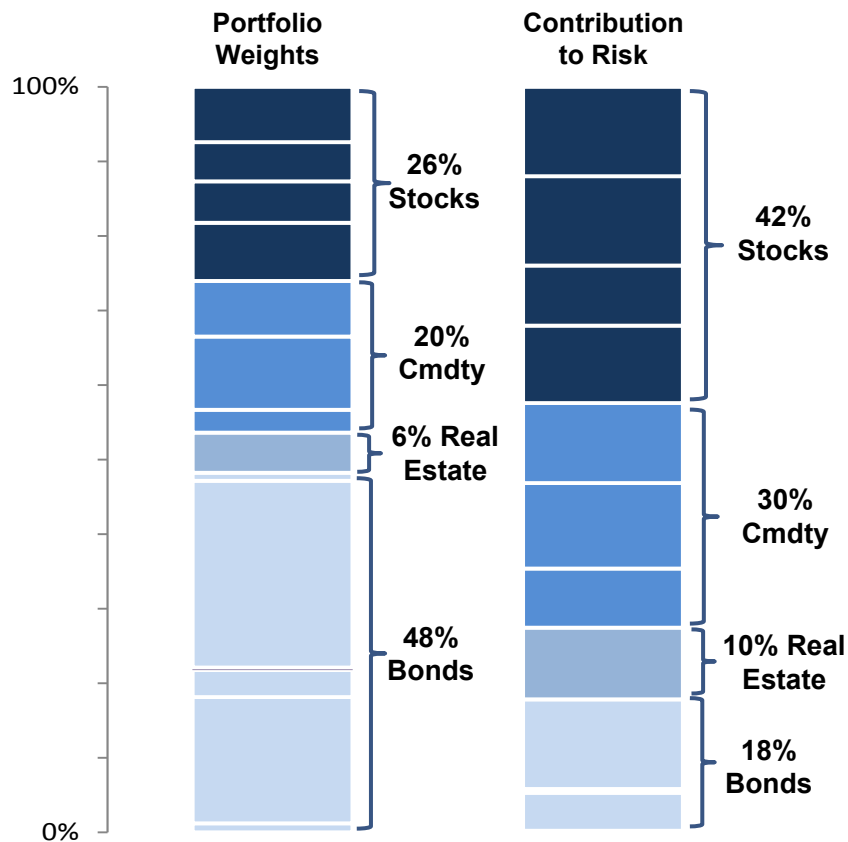
Portfolio Construction (1): Equity Risk in a Portfolio



Source: Nuveen Asset Management, Bloomberg. The data shown is for illustrative purposes only and does not represent the past performance nor predict the future performance of any Nuveen Investments product. The 60/40 portfolio consists of 60% S&P 500 Index and 40% Barclays Aggregate Index. Neither the information nor any opinion expressed constitutes a solicitation or an offer to buy or sell any security product, or services. Index returns include reinvestment of income and do not reflect investment advisory and other fees that would reduce performance in an actual client account. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

Portfolio Construction (2): Volatility Benefit of Risk Distribution

60/40 Portfolio Stress Test – what happens when equity volatility spikes?



Standard 60% Stocks / 40% Bonds

When Stock Volatility = 14%

Portfolio Volatility = 8.9%

If Stock Volatility jumps to 30%

Portfolio Volatility jumps to 18.4%

+9.5

Diversified Risk Profile

When Stock Volatility = 17%

Portfolio Volatility = 8.0%

If Stock Volatility jumps to 33%

Portfolio Volatility jumps to 11.8%

+3.8

Source: Nuveen Asset Management, Bloomberg. The data shown is for illustrative purposes only and does not represent the past performance nor predict the future performance of any Nuveen Investments product. Neither the information nor any opinion expressed constitutes a solicitation or an offer to buy or sell any security product, or services. Index returns include reinvestment of income and do not reflect investment advisory and other fees that would reduce performance in an actual client account. There is no guarantee that such risk control measures will be successful in controlling portfolio risk.

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Investment Team

Strategy Portfolio Managers

James A. Colon, CFA

**Senior Vice President, Portfolio Manager
Head of Managed Volatility Strategies**

Professional Experience:

- Nuveen Investment Solutions, Vice President, Portfolio Management
- Richards & Tierney, Senior Analyst

Education:

- University of Chicago, MS Financial Mathematics
- Michigan State University, BA International Relations & Economics

Year Joined Firm: 2009

Investment Experience: 16

Nazar Suschko, Ph.D, FRM

**Vice President, Portfolio Manager
Quantitative Research Analyst**

Professional Experience:

- AEGON USA Investment Management, Vice President, Portfolio Manager
- AEGON Asset Management, European Head of Portfolio Risk Management GA
- ING IM, Senior Market and Credit Risk Manager

Education:

- Eindhoven University, PhD Theoretical Physics
- Ivan Franko Lviv State University, MS Theoretical Physics

Year Joined Firm: 2016

Investment Experience: 12

Strategy Analysts & Traders

Michael N. Lindh, CFA, CPA

**Vice President, Portfolio Manager,
Head of Options Trading**

Professional Experience:

- Richards & Tierney, Director, Investment Analysis, Research
- Harris Bank, Sr. Quant. Analyst

Education:

- University of Chicago, MBA
- Northwestern University, MA Economics
- Augustana College, BA Accounting & Economics

Year Joined Firm: 2001

Investment Experience: 35

Amy E. Luberto, CFA

Vice President, Senior Analyst

Professional Experience:

- Nuveen Investment Solutions, Assistant Vice President, Quantitative Analyst
- Towers Watson, Actuarial Analyst

Education:

- University of Chicago, MBA Analytic Finance, Econometrics & Statistics
- University of Massachusetts, BS Mathematics

Year Joined Firm: 2008

Investment Experience: 10

Duggan Everage

Quantitative Analyst

Professional Experience:

- Aon Hewitt Investment Consulting, Senior Research Analyst

Education:

- University of Notre Dame, BS Applied & Computational Mathematics
- University of Notre Dame, BBA Finance
- CFA Level III Candidate

Year Joined Firm: 2016

Investment Experience: 3

Composite Performance

Intelligent Risk – Conservative Performance Disclosure

Year	Calendar Year Total Return (Gross of Fees)	Calendar Year Total Return (Net of Fees)	Primary Blended Benchmark [†] Return	Secondary Blended Benchmark ^{††} Return	Composite 3-Year Standard Deviation	Primary Blended Benchmark [†] 3-Year Standard Deviation	Secondary Blended Benchmark ^{††} 3-Year Standard Deviation	Number of Accounts	Composite Dispersion	Percent of Non Fee-Paying Portfolios	Composite Assets at Period End (in Millions)	Firm Assets at Period End (in Billions)
2016	8.30%	7.75%	5.23%	4.61%	5.86%	5.80%	5.87%	≤ 5	N/A	100.0%	\$0.9	\$155.4
2015	-4.86%	-5.43%	-6.25%	-2.63%	5.66%	5.28%	5.61%	≤ 5	N/A	84.2%	\$1.4	\$140.7
2014	3.93%	3.37%	-1.29%	2.06%	5.64%	5.72%	5.79%	≤ 5	N/A	84.0%	\$1.5	\$134.6
2013	-1.48%	-2.02%	2.23%	6.98%	5.36%	6.98%	7.19%	≤ 5	N/A	94.0%	\$5.0	\$117.0
2012	8.22%	7.63%	6.53%	9.09%	4.78%	8.63%	8.74%	≤ 5	N/A	100.0%	\$1.5	\$119.6
2011	10.73%	10.13%	-0.41%	0.54%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	\$104.2
2010	9.56%	8.96%	9.33%	8.73%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A
2009*	9.25%	8.91%	10.74%	12.33%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A

Notes:

[†] Effective December 31, 2016, the benchmark is a custom blend of 25% MSCI ACWI (ND) and 15% Bloomberg Commodity and 60% Bloomberg Barclays Global Aggregate Bond Index. Prior to December 31, 2016, the benchmark was a custom blend of 60% Bloomberg Barclays Global Aggregate Bond Index and 40% MSCI ACWI (ND).

^{††} The secondary benchmark is comprised of 60% Bloomberg Barclays Global Aggregate Bond Index and 40% MSCI ACWI (ND).

* Results shown for 2009 represent partial period performance from June 1, 2009, through December 31, 2009.

- 1 Nuveen Asset Management, LLC ("NAM") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Nuveen Asset Management has been independently verified for the periods January 1, 1993 through December 31, 2015. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.
- 2 Nuveen Asset Management, LLC ("NAM") is a registered investment advisor under the Investment Advisors Act of 1940, as amended, and a subsidiary of Nuveen, LLC. Registration does not imply a certain level of skill or training. For the purposes of compliance with the Global Investment Performance Standards (GIPS®), the firm is defined as Nuveen Asset Management, LLC. NAM provides investment management services to a broad range of clients on a discretionary basis or non-discretionary basis. NAM offers its services either directly to clients (fee-based "direct-advisory" accounts, fee-based "institutional" accounts and "commission-based" accounts) or through broker-dealer and other financial intermediary programs (fee-based "advisor-sponsored" accounts).
- 3 Prior to January 1, 2011, the firm was defined as Nuveen Asset Management for GIPS purposes. The firm was redefined to encompass the investment management activities of a new investment advisor, NAM. NAM is the successor firm to (1) the portfolio management business of Nuveen Asset Management and (2) the long-term asset management of FAF Advisors, Inc. following an internal reorganization of Nuveen Asset Management and Nuveen Investments, Inc.'s acquisition of the long-term asset management of FAF Advisors, Inc. from U.S. Bank effective on December 31, 2010. NAM has complied with the portability requirements of GIPS.
- 4 To receive a complete list and description of the firm's composites, please call Ronald Stutes, Director of Performance Analysis at 612-303-3244.
- 5 Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
- 6 Gross-of-fees performance results include the cost of brokerage commissions, but exclude management and custodial fees and the impact of income taxes. When shown, net-of-fees results are calculated by taking the highest fee an account would be charged based on the current and, if applicable, historical fee schedule, and deducting one-twelfth of this annual fee from each monthly gross return.
- 7 All returns represent the reinvestment of income.
- 8 The composite dispersion is the asset-weighted standard deviation of annual returns for portfolios in the composite the entire year. The number of accounts represents the number in the composite at year end. Composite dispersion is reported as N/A when information is not statistically meaningful due to an insufficient number of portfolios in the composite for the entire year.
- 9 The composite consists of fully discretionary fee-paying and non-fee paying accounts managed according to the Intelligent Risk Portfolio® strategies. The Intelligent Risk – Conservative Strategy follows the Nuveen Intelligent Risk Process, which seeks to deliver a stable level of portfolio risk, defined as standard deviation of returns, by periodically rebalancing a portfolio, which consists primarily of ETF and ETN securities.
- 10 The composite inception date is June 1, 2009; the composite creation date is June 1, 2012.

Intelligent Risk – Conservative Performance Disclosure

- 11 This composite has not been redefined since its inception.
- 12 This composite has not had a name change since its inception.
- 13 As of December 31, 2016, the composite is comprised of 100% of seed capital funded by Nuveen, LLC.
- 14 As part of an internal reorganization taking place on November 22, 2011, the assets managed by Nuveen HydePark Group, LLC were transitioned to its affiliate Nuveen Asset Management, LLC. The portfolio managers and investment process remain unchanged.
- 15 Effective December 31 2016, the benchmark is a custom blend of 25% MSCI ACWI (ND) and 15% Bloomberg Commodity and 60% Bloomberg Barclays Global Aggregate Bond Index. The blend is reweighted daily. Prior to December 31 2016, the Composite was benchmarked against an unmanaged blend of the MSCI ACWI (ND) and the Bloomberg Barclays Global Aggregate Bond Index. The blend is re-weighted monthly and is composed of 40% MSCI ACWI (ND) and 60% Bloomberg Barclays Global Aggregate Bond Index. The MSCI ACWI is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The Bloomberg Barclays Global Aggregate Bond Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. Nuveen Asset Management's accounts differ significantly from the benchmark because they include a broad array of asset class exposure obtained through the investment in ETFs and ETNs whereas the MSCI ACWI and Bloomberg Barclays Global Aggregate Bond Index represent only two asset classes, global stocks and global investment grade bonds. Bloomberg Commodity Indices (BCOM) are a family of financial benchmarks designed to provide liquid and diversified exposure to physical commodities via futures contracts. The index is made up of 22 exchange-traded futures on physical commodities. The index currently represents 20 commodities, which are weighted to account for economic significance and market liquidity. Benchmark returns are not covered by the report of independent verifiers.
- 16 Prior to December 31 2016, the benchmark was a custom blend of 40% MSCI ACWI (ND) and 60% Bloomberg Barclays Global Aggregate Bond Index. This change was made for all historical time periods. Intelligent Risk Strategies have always and will continue to materially allocate to commodities. The old benchmark does not have any commodities exposure, so this change better aligns the benchmark with the strategy.
- 17 As of December 31, 2014, there are no derivatives, leveraged investments or short positions used in the management of this investment strategy.
- 18 There are no sub-advisors used in the management of this investment strategy.
- 19 The minimum asset size for this composite is \$40,000.
- 20 The current annual Intelligent Risk – Conservative investment management fee schedule is as follows: 0.35% on the first \$25 million, 0.25% on the next \$75 million, 0.20% on the next \$400 million, 0.15% on the next \$1.5 billion, and negotiated over \$2 billion.
- 21 Results are calculated in U.S. dollars.
- 22 The composite performance is presented net of foreign taxes withheld on dividends, interest income, and capital gains. The indices include net dividends, which approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.
- 23 No carve-outs are included in the management of this composite.
- 24 There has been no significant cash flow policy associated with this composite.
- 25 The 3-year annualized ex-post standard deviation is not required to be presented for periods prior to 2011 or when 36 monthly composite returns are not available.
- 26 Past performance does not guarantee future results.

Intelligent Risk – Moderate Performance Disclosure

Year	Calendar Year Total Return (Gross of Fees)	Calendar Year Total Return (Net of Fees)	Primary Blended Benchmark [†] Return	Secondary Blended Benchmark ^{††} Return	Composite 3-Year Standard Deviation	Primary Blended Benchmark [†] 3-Year Standard Deviation	Secondary Blended Benchmark ^{††} 3-Year Standard Deviation	Number of Accounts	Composite Dispersion	Percent of Non Fee-Paying Portfolios	Composite Assets at Period End (in Millions)	Firm Assets at Period End (in Billions)
2016	10.08%	9.52%	6.83%	5.76%	8.79%	7.04%	7.34%	≤ 5	N/A	100.0%	\$0.4	\$155.4
2015	-9.16%	-9.71%	-8.41%	-2.47%	8.13%	6.57%	7.19%	≤ 5	N/A	49.0%	\$2.6	\$140.7
2014	4.33%	3.76%	-2.79%	2.78%	7.57%	7.11%	7.24%	≤ 5	N/A	60.0%	\$2.3	\$134.6
2013	-0.01%	-0.56%	3.91%	12.05%	7.15%	8.89%	9.31%	≤ 5	N/A	78.0%	\$6.0	\$117.0
2012	8.37%	7.78%	7.14%	11.45%	7.16%	11.12%	11.41%	≤ 5	N/A	100.0%	\$1.7	\$119.6
2011	9.01%	8.42%	-3.59%	-2.07%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.4	\$104.2
2010	17.45%	16.82%	11.20%	10.16%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A
2009*	13.95%	13.59%	13.01%	15.71%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A

Notes:

[†] Effective December 31, 2016, the primary benchmark is a custom blend of 35% MSCI ACWI (ND) and 25% Bloomberg Commodity and 40% Bloomberg Barclays Global Aggregate Bond Index and rebalanced daily. This change has been made retroactively to better represent the strategy. Prior to December 31, 2016, the benchmark was a custom blend of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index and rebalanced monthly.

^{††} The secondary benchmark is comprised of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index.

* Results shown for 2009 represent partial period performance from June 1, 2009, through December 31, 2009.

- 1 Nuveen Asset Management, LLC ("NAM") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Nuveen Asset Management has been independently verified for the periods January 1, 1993 through December 31, 2015. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.
- 2 Nuveen Asset Management, LLC ("NAM") is a registered investment advisor under the Investment Advisors Act of 1940, as amended, and a subsidiary of Nuveen, LLC. Registration does not imply a certain level of skill or training. For the purposes of compliance with the Global Investment Performance Standards (GIPS®), the firm is defined as Nuveen Asset Management, LLC. NAM provides investment management services to a broad range of clients on a discretionary basis or non-discretionary basis. NAM offers its services either directly to clients (fee-based "direct-advisory" accounts, fee-based "institutional" accounts and "commission-based" accounts) or through broker-dealer and other financial intermediary programs (fee-based "advisor-sponsored" accounts).
- 3 Prior to January 1, 2011, the firm was defined as Nuveen Asset Management for GIPS purposes. The firm was redefined to encompass the investment management activities of a new investment advisor, NAM. NAM is the successor firm to (1) the portfolio management business of Nuveen Asset Management and (2) the long-term asset management of FAF Advisors, Inc. following an internal reorganization of Nuveen Asset Management and Nuveen Investments, Inc.'s acquisition of the long-term asset management of FAF Advisors, Inc. from U.S. Bank effective on December 31, 2010. NAM has complied with the portability requirements of GIPS.
- 4 To receive a complete list and description of the firm's composites, please call Ronald Stutes, Director of Performance Analysis at 612-303-3244.
- 5 Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
- 6 Gross-of-fees performance results include the cost of brokerage commissions, but exclude management and custodial fees and the impact of income taxes. When shown, net-of-fees results are calculated by taking the highest fee an account would be charged based on the current and, if applicable, historical fee schedule, and deducting one-twelfth of this annual fee from each monthly gross return.
- 7 All returns represent the reinvestment of income.
- 8 The composite dispersion is the asset-weighted standard deviation of annual returns for portfolios in the composite the entire year. The number of accounts represents the number in the composite at year end. Composite dispersion is reported as N/A when information is not statistically meaningful due to an insufficient number of portfolios in the composite for the entire year.
- 9 The composite consists of fully discretionary fee-paying and non-fee paying accounts managed according to the Intelligent Risk Portfolio® strategies. The Intelligent Risk – Moderate Strategy follows the Nuveen Intelligent Risk Process, which seeks to deliver a stable level of portfolio risk, defined as standard deviation of returns, by periodically rebalancing a portfolio, which consists primarily of ETF and ETN securities.
- 10 The composite inception date is June 1, 2009; the composite creation date is June 1, 2012.

Intelligent Risk – Moderate Performance Disclosure

- 11 This composite has not been redefined since its inception.
- 12 This composite has not had a name change since its inception.
- 13 As of December 31, 2016, the composite is comprised of 100% of seed capital funded by Nuveen, LLC.
- 14 As part of an internal reorganization taking place on November 22, 2011, the assets managed by Nuveen HydePark Group, LLC were transitioned to its affiliate Nuveen Asset Management, LLC. The portfolio managers and investment process remain unchanged.
- 15 Effective December 31, 2016, the benchmark is a custom blend of 35% MSCI ACWI (ND) and 25% Bloomberg Commodity and 40% Bloomberg Barclays Global Aggregate Bond Index. The blend is reweighted daily. Prior to December 31, 2016, the Composite was benchmarked against an unmanaged blend of the MSCI ACWI (ND) and the Bloomberg Barclays Global Aggregate Bond Index. The blend is re-weighted monthly and is composed of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index. The MSCI ACWI is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The Bloomberg Barclays Global Aggregate Bond Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. Nuveen Asset Management's accounts differ significantly from the benchmark because they include a broad array of asset class exposure obtained through the investment in ETFs and ETNs whereas the MSCI ACWI and Bloomberg Barclays Global Aggregate Bond Index represent only two asset classes, global stocks and global investment grade bonds. Bloomberg Commodity Indices (BCOM) are a family of financial benchmarks designed to provide liquid and diversified exposure to physical commodities via futures contracts. The index is made up of 22 exchange-traded futures on physical commodities. The index currently represents 20 commodities, which are weighted to account for economic significance and market liquidity. Benchmark returns are not covered by the report of independent verifiers.
- 16 Prior to December 31, 2016, the benchmark was a custom blend of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index. This change was made for all historical time periods. Intelligent Risk Strategies have always and will continue to materially allocate to commodities. The old benchmark does not have any commodities exposure, so this change better aligns the benchmark with the strategy.
- 17 As of December 31, 2014, there are no derivatives, leveraged investments or short positions used in the management of this investment strategy.
- 18 There are no sub-advisors used in the management of this investment strategy.
- 19 The minimum asset size for this composite is \$40,000.
- 20 The current annual Intelligent Risk – Moderate investment management fee schedule is as follows: 0.30% on the first \$25 million, 0.25% on the next \$75 million, 0.20% on the next \$400 million, 0.15% on the next \$1.5 billion and negotiated over \$2 billion.
- 21 Results are calculated in U.S. dollars.
- 22 The composite performance is presented net of foreign taxes withheld on dividends, interest income, and capital gains. The indices include net dividends, which approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.
- 23 No carve-outs are included in the management of this composite.
- 24 There has been no significant cash flow policy associated with this composite.
- 25 The 3-year annualized ex-post standard deviation is not required to be presented for periods prior to 2011 or when 36 monthly composite returns are not available.
- 26 Past performance does not guarantee future results.

Intelligent Risk – Growth Performance Disclosure

Year	Calendar Year Total Return (Gross of Fees)	Calendar Year Total Return (Net of Fees)	Primary Blended Benchmark [†] Return	Secondary Blended Benchmark ^{††} Return	Composite 3-Year Standard Deviation	Primary Blended Benchmark [†] 3-Year Standard Deviation	Secondary Blended Benchmark ^{††} 3-Year Standard Deviation	Number of Accounts	Composite Dispersion	Percent of Non Fee-Paying Portfolios	Composite Assets at Period End (in Millions)	Firm Assets at Period End (in Billions)
2016	15.77%	15.19%	8.18%	6.85%	12.01%	8.43%	9.12%	≤ 5	N/A	100.0%	\$0.4	\$155.4
2015	-13.27%	-13.80%	-9.43%	-2.38%	11.07%	8.01%	8.94%	≤ 5	N/A	70.0%	\$1.7	\$140.7
2014	-1.04%	-1.59%	-3.20%	3.48%	9.87%	8.56%	8.83%	≤ 5	N/A	67.9%	\$2.1	\$134.6
2013	11.38%	10.78%	7.21%	17.32%	11.17%	10.93%	11.59%	≤ 5	N/A	80.0%	\$6.1	\$117.0
2012	7.63%	7.05%	8.55%	13.80%	12.25%	13.74%	14.23%	≤ 5	N/A	100.0%	\$1.4	\$119.6
2011	-0.57%	-1.12%	-6.44%	-4.70%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	\$104.2
2010	19.31%	18.66%	12.78%	11.47%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A
2009*	14.29%	13.93%	15.84%	19.14%	N/A	N/A	N/A	≤ 5	N/A	100.0%	\$0.3	N/A

Notes:

[†] Effective December 31, 2016, the benchmark is a custom blend of 50% MSCI ACWI (ND) and 30% Bloomberg Commodity and 20% Bloomberg Barclays Global Aggregate Bond Index. Prior to December 31, 2016, the benchmark was a custom blend of 20% Bloomberg Barclays Global Aggregate Bond Index and 80% MSCI ACWI (ND).

^{††} The secondary benchmark is comprised of 20% Bloomberg Barclays Global Aggregate Bond Index and 80% MSCI ACWI (ND).

* Results shown for 2009 represent partial period performance from June 1, 2009, through December 31, 2009.

- 1 Nuveen Asset Management, LLC ("NAM") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Nuveen Asset Management has been independently verified for the periods January 1, 1993 through December 31, 2015. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.
- 2 Nuveen Asset Management, LLC ("NAM") is a registered investment advisor under the Investment Advisors Act of 1940, as amended, and a subsidiary of Nuveen, LLC. Registration does not imply a certain level of skill or training. For the purposes of compliance with the Global Investment Performance Standards (GIPS®), the firm is defined as Nuveen Asset Management, LLC. NAM provides investment management services to a broad range of clients on a discretionary basis or non-discretionary basis. NAM offers its services either directly to clients (fee-based "direct-advisory" accounts, fee-based "institutional" accounts and "commission-based" accounts) or through broker-dealer and other financial intermediary programs (fee-based "advisor-sponsored" accounts).
- 3 Prior to January 1, 2011, the firm was defined as Nuveen Asset Management for GIPS purposes. The firm was redefined to encompass the investment management activities of a new investment advisor, NAM. NAM is the successor firm to (1) the portfolio management business of Nuveen Asset Management and (2) the long-term asset management of FAF Advisors, Inc. following an internal reorganization of Nuveen Asset Management and Nuveen Investments, Inc.'s acquisition of the long-term asset management of FAF Advisors, Inc. from U.S. Bank effective on December 31, 2010. NAM has complied with the portability requirements of GIPS.
- 4 To receive a complete list and description of the firm's composites, please call Ronald Stutes, Director of Performance Analysis at 612-303-3244.
- 5 Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.
- 6 Gross-of-fees performance results include the cost of brokerage commissions, but exclude management and custodial fees and the impact of income taxes. When shown, net-of-fees results are calculated by taking the highest fee an account would be charged based on the current and, if applicable, historical fee schedule, and deducting one-twelfth of this annual fee from each monthly gross return.
- 7 All returns represent the reinvestment of income.
- 8 The composite dispersion is the asset-weighted standard deviation of annual returns for portfolios in the composite the entire year. The number of accounts represents the number in the composite at year end. Composite dispersion is reported as N/A when information is not statistically meaningful due to an insufficient number of portfolios in the composite for the entire year.
- 9 The composite consists of fully discretionary fee-paying and non-fee paying accounts managed according to the Intelligent Risk Portfolio® strategies. The Intelligent Risk – Growth Strategy follows the Nuveen Intelligent Risk Process, which seeks to deliver a stable level of portfolio risk, defined as standard deviation of returns, by periodically rebalancing a portfolio, which consists primarily of ETF and ETN securities.
- 10 The composite inception date is June 1, 2009; the composite creation date is June 1, 2012.

Intelligent Risk – Growth Performance Disclosure

- 11 This composite has not been redefined since its inception.
- 12 Effective July 1, 2012, the name of this composite changed from Intelligent Risk – Aggressive to Intelligent Risk – Growth.
- 13 As of December 31, 2016, the composite is comprised of 100% of seed capital funded by Nuveen, LLC.
- 14 As part of an internal reorganization taking place on November 22, 2011, the assets managed by Nuveen HydePark Group, LLC were transitioned to its affiliate Nuveen Asset Management, LLC. The portfolio managers and investment process remain unchanged.
- 15 Effective December 31 2016, the benchmark is a custom blend of 50% MSCI ACWI (ND) and 30% Bloomberg Commodity and 20% Bloomberg Barclays Global Aggregate Bond Index. The blend is reweighted daily. Prior to December 31 2016, the Composite was benchmarked against an unmanaged blend of the MSCI ACWI (ND) and the Bloomberg Barclays Global Aggregate Bond Index. The blend is re-weighted monthly and is composed of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index. The MSCI ACWI is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The Bloomberg Barclays Global Aggregate Bond Index provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities. Nuveen Asset Management's accounts differ significantly from the benchmark because they include a broad array of asset class exposure obtained through the investment in ETFs and ETNs whereas the MSCI ACWI and Bloomberg Barclays Global Aggregate Bond Index represent only two asset classes, global stocks and global investment grade bonds. Bloomberg Commodity Indices (BCOM) are a family of financial benchmarks designed to provide liquid and diversified exposure to physical commodities via futures contracts. The index is made up of 22 exchange-traded futures on physical commodities. The index currently represents 20 commodities, which are weighted to account for economic significance and market liquidity. Benchmark returns are not covered by the report of independent verifiers.
- 16 Prior to December 31 2016, the benchmark was a custom blend of 60% MSCI ACWI (ND) and 40% Bloomberg Barclays Global Aggregate Bond Index. This change was made for all historical time periods. Intelligent Risk Strategies have always and will continue to materially allocate to commodities. The old benchmark does not have any commodities exposure, so this change better aligns the benchmark with the strategy.
- 17 As of December 31, 2014, there are no derivatives, leveraged investments or short positions used in the management of this investment strategy.
- 18 There are no sub-advisors used in the management of this investment strategy.
- 19 The minimum asset size for this composite is \$40,000.
- 20 The current annual Intelligent Risk – Growth investment management fee schedule is as follows: 0.30% on the first \$25 million, 0.25% on the next \$75 million, 0.20% on the next \$400 million, 0.15% on the next \$1.5 billion and negotiated over \$2 billion.
- 21 Results are calculated in U.S. dollars.
- 22 The composite performance is presented net of foreign taxes withheld on dividends, interest income, and capital gains. The indices include net dividends, which approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.
- 23 No carve-outs are included in the management of this composite.
- 24 There has been no significant cash flow policy associated with this composite.
- 25 The 3-year annualized ex-post standard deviation is not required to be presented for periods prior to 2011 or when 36 monthly composite returns are not available.
- 26 Past performance does not guarantee future results.

Disclosure on Backtested Models – Supplemental Information



The model performance shown in this presentation is supplemental to the Composite of Intelligent Risk Moderate Accounts presented herein. A complete list and description of all firm composites is available upon request. This presentation contains Model Portfolio information reflecting simulated performance results of fictional accounts managed in accordance with the Intelligent Risk Portfolios® Moderate strategy 12/31/1998 to 5/31/2009. Model Portfolio results reflect back-tested hypothetical results derived from the retroactive application of such strategies. Model Portfolio performance does not reflect the results of an actual client account; the actual results of proprietary assets and a non-managed account under these strategies since 6/1/2009 through 9/30/2016 are provided on the prior slides. The performance presented in this presentation reflects model performance an investor may have obtained had it invested in the manner shown and does not represent performance that any investor actually attained. The model performance presented is based upon the assumptions contained herein. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions may have a material impact on the model returns presented. Other periods selected may have different results, including losses. Model returns have many inherent limitations and may not reflect the impact that material economic and market factors may have had on the decision-making process if client funds were actually managed in the manner shown. Moreover, Model results do not reflect actual trading and such results may not reflect the impact that material economic and market factors might have had on the adviser's decision-making if the adviser were actually managing client assets. Some results may have taken place during periods of unusual market or economic conditions, which may or may not be representative of future periods. There may be differences between the Model Portfolio and actual client accounts based on client size, type, portfolio restrictions, and other factors. Circumstances such as market fluctuations may exist that prevent a client from investing in one or more of the specific securities invested by the Model Portfolio. Since the Model Portfolio is fictional, there is no assurance that a client would have achieved similar rates of return over the same time frame. Since the time period used is historical, there can be no assurance that future results achieved by an actual client will resemble those represented by the Model Portfolio. Model Portfolio results are constructed and presented with the benefit of hindsight; and no assurances are provided regarding future results. Results are also affected by the performance calculation methodology. Model returns are calculated and stated in U.S. Dollars. Total return (or "return") is defined as the percentage change in market value (including dividend income); dividend income is based on the accrual method and is recorded on the ex-dividend date. Model performance is presented gross of fees and adjusted to reflect the reinvestment of dividends and other income and includes the deduction of the best estimate of trading commissions and other transaction costs. The Model monthly gross-of-fees returns have been geometrically-linked to quarter and annual returns. Other formulas may produce different returns. Individual account returns may vary based on factors such as the account type, market value, cash flows and fees. Additional information regarding policies for calculating and reporting returns is available upon request. Actual performance does and will differ substantially from the Model performance presented. There can be no assurance that the manager will achieve profits or avoid incurring substantial losses. Actual fees may vary depending on, among other things, the applicable strategy and portfolio size. The manager's fees are negotiable and available upon request and also may be found in Part 2A of its Form ADV, which is attached as Nuveen Asset Management's ADV Part 2A. The structure of the models, proprietary and client accounts may and most likely will vary from the blended benchmarks presented because sectors and security selections and weightings are based on discretion at the time of strategy implementation. The benchmark data presented herein was obtained from third party sources deemed reliable but not guaranteed for accuracy or completeness. **Back tested model results is no guarantee of future results.**

Disclosure on Backtested Models (continued)

This presentation contains Model Portfolio information reflecting simulated performance results of fictional accounts. Model Portfolio results reflect back-tested hypothetical results derived from the retroactive application of such strategies. Model Portfolio performance does not reflect the results of an actual client account.

The performance presented in this presentation reflects model performance an investor may have obtained had it invested in the manner shown and does not represent performance that any investor actually attained. The model performance presented is based upon the assumptions contained herein. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions may have a material impact on the model returns presented. Other periods selected may have different results, including losses.

Model returns have many inherent limitations and may not reflect the impact that material economic and market factors may have had on the decision-making process if client funds were actually managed in the manner shown. Moreover, Model results do not reflect actual trading and such results may not reflect the impact that material economic and market factors might have had on the adviser's decision-making if the adviser were actually managing client assets. Some results may have taken place during periods of unusual market or economic conditions, which may or may not be representative of future periods. There may be differences between the Model Portfolio and actual client accounts based on client size, type, portfolio restrictions, and other factors. Circumstances such as market fluctuations may exist that prevent a client from investing in one or more of the specific securities invested by the Model Portfolio. Since the Model Portfolio is fictional, there is no assurance that a client would have achieved similar rates of return over the same time frame. Since the time period used is historical, there can be no assurance that future results achieved by an actual client will resemble those represented by the Model Portfolio. Model Portfolio results are constructed and presented with the benefit of hindsight; and no assurances are provided regarding future results.

Results are also affected by the performance calculation methodology. Model returns are calculated and stated in U.S. Dollars. Total return (or "return") is defined as the percentage change in market value (including dividend income); dividend income is based on the accrual method and is recorded on the ex-dividend date. Model performance is presented gross of fees and adjusted to reflect the reinvestment of dividends and other income and includes the deduction of the best estimate of trading commissions and other transaction costs. The Model monthly gross-of-fees returns have been geometrically-linked to quarter and annual returns. Other formulas may produce different returns. Individual account returns may vary based on factors such as the account type, market value, cash flows and fees. Additional information regarding policies for calculating and reporting returns is available upon request.

Actual performance does and will differ substantially from the Model performance presented. There can be no assurance that the manager will achieve profits or avoid incurring substantial losses. Actual fees may vary depending on, among other things, the applicable strategy and portfolio size. The manager's fees are negotiable and available upon request and also may be found in Part 2A of its Form ADV, which is attached as Nuveen Asset Management's ADV Part 2A. The structure of the models, proprietary and client accounts may and most likely will vary from the benchmarks presented because sectors and security selections and weightings are based on discretion at the time of strategy implementation. The benchmark data presented herein was obtained from third party sources deemed reliable but not guaranteed for accuracy or completeness. Indexes are unmanaged and unavailable for direct investment. Benchmark returns include reinvestment of income, but do not reflect taxes, investment advisory and other fees that would reduce performance in an actual account.

Important Disclosures & Endnotes

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