NEUBERGER | BERMAN

Equity Index Option Writing: S&P 500 Index PutWrite

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Executive Summary

Neuberger Berman is pleased to present our S&P 500 Index PutWrite Strategy to the Employee Retirement System of Rhode Island

- Excess premium in index options markets are structural, behavioral and persistent across time and market regime
- Observations and research indicate that collateralized put writing is the most effective way to capture this premium
- Put writing indices demonstrate long-term return profile and relevance in portfolio construction
- Public pension plans have adopted similar put write strategies due to their income-generating, defensive, and risk managed equity exposure with high liquidity and transparency profiles
- NB has refined its strategy to provide both higher total returns and improved risk-adjusted returns relative to put writing indexes.
    - Diversification of options exposure
    - Systematic options selling
    - Active risk management

Employee-Owned Investment Manager

Partnering with clients to achieve their unique objectives

Alignment of Interests

Portfolio managers invest alongside clients

Breadth of Independent Perspectives

600 investment professionals connected across public and private markets, equity, fixed income and alternatives

Experienced and Stable Teams

25+ year average industry experience for lead PMs; 96% annualized retention rate of senior investment professionals at MD and SVP level since becoming an independent company in 2009

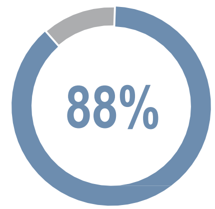
Deep Resources

Extensive fundamental research, access to management, innovative ESG research, and sophisticated risk management

Innovative Investment Solutions

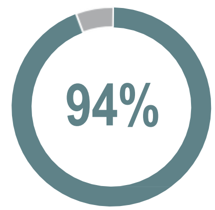
A track record of client partnerships and long-term performance

Long-term Outperformance[1]



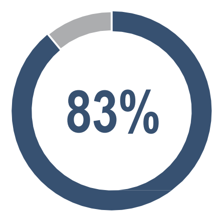
Institutional-oriented equity

Percentage of institutional-oriented AUM outperforming benchmark since inception ended June 30, 2019



Institutional-oriented fixed income

Percentage of institutional-oriented AUM outperforming benchmark since inception ended June 30, 2019



Private equity

Percentage of NB Private Equity funds raised between 2007 – 2016 (since inception performance) outperforming benchmark Net IRR

1. Institutional-oriented equity and fixed income assets under management ("AUM") includes the firm's equity and fixed income institutional separate account ("ISA"), registered fund, and managed account/wrap ("MAG") offerings and are based on the overall performance of each individual investment offering against its respective benchmark. High net worth/private asset management ("HNW") AUM is excluded. If HNW AUM were included, the percentage of AUM outperforming the benchmark since inception period would have been 86% for equities and 94% for fixed income. Equity and Fixed Income AUM outperformance results are asset-weighted so individual offerings with the largest amount of assets under management have the largest impact on the results. Please see additional disclosures for important information regarding Private Equity methodology. All performance data for NB Private Equity funds, private equity indices data is as of December 31, 2018. Results are shown gross of fees. Individual offerings may have experienced negative performance during certain periods of time. See Additional Disclosures for additional information regarding the outperformance statistics shown (including 3-, 5- and 10-yr statistics for institutional-oriented equity and fixed income). Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

Investment Platform

Breadth of independent perspectives across asset classes

	EQUITY	FIXED INCOME	ALTERNATIVES
AUM $356bn[1]	$106bn	$160bn	$98bn AUM and Committed Capital
Investment Professionals	226	173	176
Fundamental	Global, EAFE, Japan U.S. Value, Core, Growth Emerging Markets, China Global Thematic, Disruptive Themes Sustainable Equity Income Strategies – MLPs – REITs	Global Investment Grade Global Non-Investment Grade Emerging Markets, Regional EM, China Multi-Sector, Opportunistic Municipals Specialty Strategies – CLO Mezzanine – Currency – Corporate Hybrids	Private Equity: – Primaries – Co-Investments – Secondaries – Specialty Strategies – Minority stakes in alternative firms – Dyal Insurance-Linked Strategies Alternative Credit: – Private Credit – Residential Loans – Special Situations – Specialty Finance Hedge Funds: – Multi-Manager – Equity Long/Short – Event Driven – Co-Investments
Quantitative	Global U.S. Emerging Markets Custom Beta		Risk Premia Options Global Macro Commodities

Integration of Environmental, Social and Governance Factors

MULTI-ASSET CLASS SOLUTIONS AND STRATEGIC PARTNERSHIPS

Fundamental
- Global Relative & Absolute Return
- Income Focused
- Inflation Management

Quantitative
- Risk Parity
- Global Tactical Asset Allocation

1. As of December 31, 2019. Firm assets under management (AUM) includes $106.1 billion in Equity AUM, $160.4 billion in Fixed Income AUM and $89.2 billion in Alternatives AUM. Alternatives "AUM and Committed Capital" reflects Alternatives AUM as well as all committed capital since inception for private equity strategies. Committed Capital since inception reflects all contractual commitments, including those still in documentation, to fund investments, including those which have since been realized, advised by NB Alternatives Advisers LLC and its affiliates or predecessors (the oldest mandate of which was founded in 1981).

Investment Team and Clients

Option Group

Derek Devens, CFA
Senior Portfolio Manager
22 Years of Industry Experience
Princeton University, BSE
New York University, MBA

Rory Ewing
Associate Portfolio Manager
16 Years of Industry Experience
Colgate University, BA
New York University, MBA

Eric Zhou
Associate Portfolio Manager
7 Years of Industry Experience
Boston College, BA
Columbia University, MA

Beryl Lou
Research Analyst
9 Years of Industry Experience
University of California, LA, BS

Quantitative & Multi-Asset Class Investments

Erik Knutzen, CFA, CAIA
CIO Multi-Asset Class, Co-Head of Quantitative & Multi-Asset Class Investments

Doug Kramer
Co-Head of Quantitative & Multi-Asset Class Investments

Dedicated Team

- **8-Year GIPS® composite track record** in collateralized put writing.
- **Manages over $4.0 billion** in index option mandates.[1]
- Emphasize liquidity, transparency and cost-effectiveness.
- Helps institutional investors address a variety of defined allocation needs and risk/return profiles.

Sample Client Summary

Client	Strategy	Defined Allocation[2]
State Pension	Global PutWrite (ATM)	Stabilized Growth Equity
Private Pension	Global PutWrite (ATM)	Diversifying Equity
Healthcare Foundation I	S&P PutWrite (OTM)	Liquid Alternative
Foundation	Global PutWrite (ATM)	Diversifying Equity
Healthcare Foundation II	S&P Strangle	Hedge Fund Replacement
City Pension I	S&P 500	Defensive Equity
City Pension II	S&P 500	Defensive Equity

[1]As of 11/30/2019
[2] Client defined allocations and risk/return profiles are for illustrative purposes only. Options strategies may be classified in a variety of manners and client defined allocations and risk/return profiles may not be reflective of the risk and return factors of the Neuberger Berman options strategies as more fully described in this presentation. Investing entails risks, including possible loss of principal.

Option Group Assets Under Management (AUM)

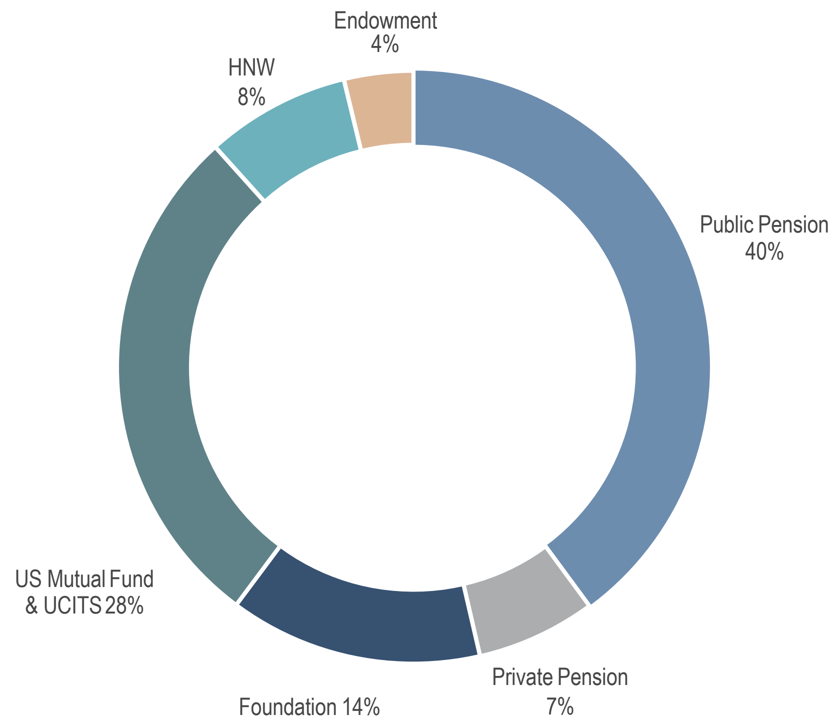
As of November 30, 2019

AUM by Strategy ($MM)

		($mm)
Index PutWrite		**3,440**
	Global Equity	973
	U.S. Equity	2,467
	Emerging Mkt. Equity	0.4
Index Strangle		**515**
	Global Equity	301
	U.S. Equity	214
Spread		**99**
	U.S. Equity	99
Total *		**4,054**

*Does not include assets managed as part of multi-asset class mandates($131mm)

AUM by Client Type (%)



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Collateralized Index Option Writing

Strategy Overview

Goal	**Provide investors additional sources of returns that are capital efficient and complementary to existing portfolio allocations.**
Investment Opportunity	**Behavioral Biases:** • Investors have persistent demands for risk control and tend to 'overpay' for control, i.e. insurance, implied volatility. • Capitalize on investors 'animal spirits', e.g., fear and greed. **Market Structure:** • Traditionally, banks and trading firms 'price in' high profit margins in option markets, i.e. implied volatility premium. • Short-term option premiums decay at a rapid rate which makes underwriting equity risk profitable. **Increased Portfolio Efficiency:**[1] • Ability to utilize existing portfolio as collateral to generate additional returns with structured payoffs.
Investment Principles	**Long-Term Focus:** Strategy seeks to earn returns by collecting option premiums over time rather than by capital appreciation. **Invest for Profits:** Don't 'reach' for higher premiums when market volatility is low and don't forgo high premiums during volatile times. **Avoid Expensive Hedges:** Paying up for expensive options is counterproductive to our investment philosophy. **Balance Risks:** Balance the likelihoods of small losses vs. risk of complete loss; investors are paid to assume risk not avoid risk. **Diversify Exposures:** Path dependence can materially effect investor outcomes.
Implementation	Systematic, structured, bespoke, cost effective, liquid, tax-advantaged[1]
Avoid	Complexity, tactical market timing and less liquid options

[1] Index options may be eligible for tax treatment as 1256 contracts at 60% long-term and 40% short-term. Overlay strategies involve the use of leverage. See leverage risk disclosures at the end of this material.
This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The use of tools cannot guarantee performance and there is no guarantee that any investment program will be successful. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results**. See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Option Sellers Can Benefit from Investor Behavioral Biases

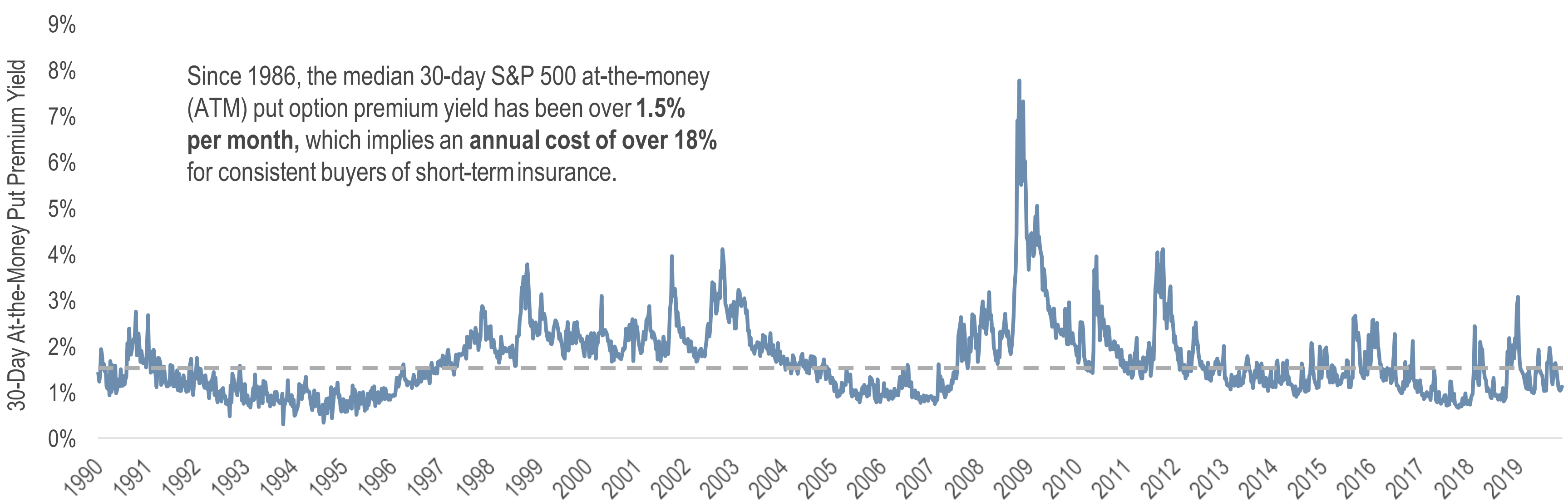
Underwriting equity market risk

Option markets charge investors substantial premiums to help portfolios mitigate risk. **Long-term investors can earn attractive rates of return by underwriting equity market risk.**

- **Who pays these premiums?**
  Hedgers, Speculators, Arbitrageurs
- **Who earns these premiums?**
  Sellers: Wall Street Derivatives Desks, Independent Brokers Dealers, Individuals

We believe investor **fear and greed contribute to behavioral biases in financial markets** and they ultimately 'overpay' for protection.

S&P 500 30-Day At-The-Money Put Option Premiums (June 1986 – November 2019)



Source: CBOE and Bloomberg

This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. Put option premiums are based on the underlying option data used in the calculation of the CBOE S&P 500 PutWrite ("PUT") Index, which incepted in June 2007 with historical back-tested data available from CBOE since 6/30/1986. Premium yields are calculated as the option premium divided by the option strike price. See Additional Disclosures at the end of this piece, which are an important part of this presentation.

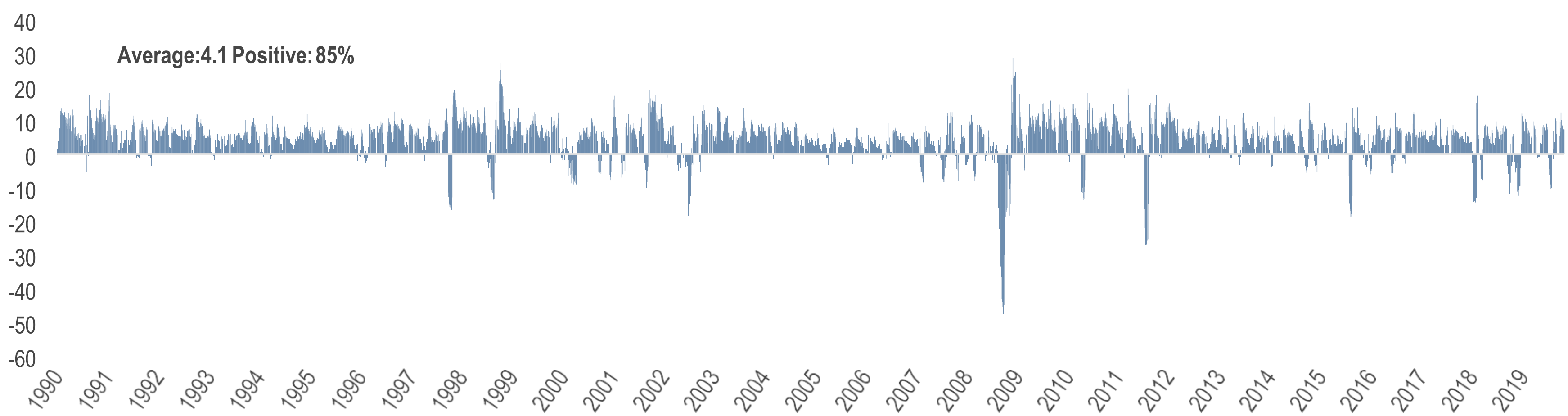
Index Option Markets Demand a Profit Margin

Implied volatility premium

Option market participants must be economically motivated. Thus, they price in a persistent, long-term profit margin known as the implied volatility premium. Said simply, their revenue must be higher than the cost-of-goods-sold over the long run.

Implied Volatility Premium (Profit Margin)	=	**Implied Volatility** (Revenue)	–	**Realized Volatility** (Cost-of-Goods-Sold)	–	**Operating Expenses**

S&P 500 30-Day Implied Volatility Premium (January 1990 – November 2019)



Source: CBOE and Bloomberg

Implied volatility premium is derived from the CBOE S&P 500 Volatility Index ("VIX") Index and the S&P 500 Index. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Index PutWrite Investment Objectives

Capturing equity volatility premiums: June 1986 – November 2019

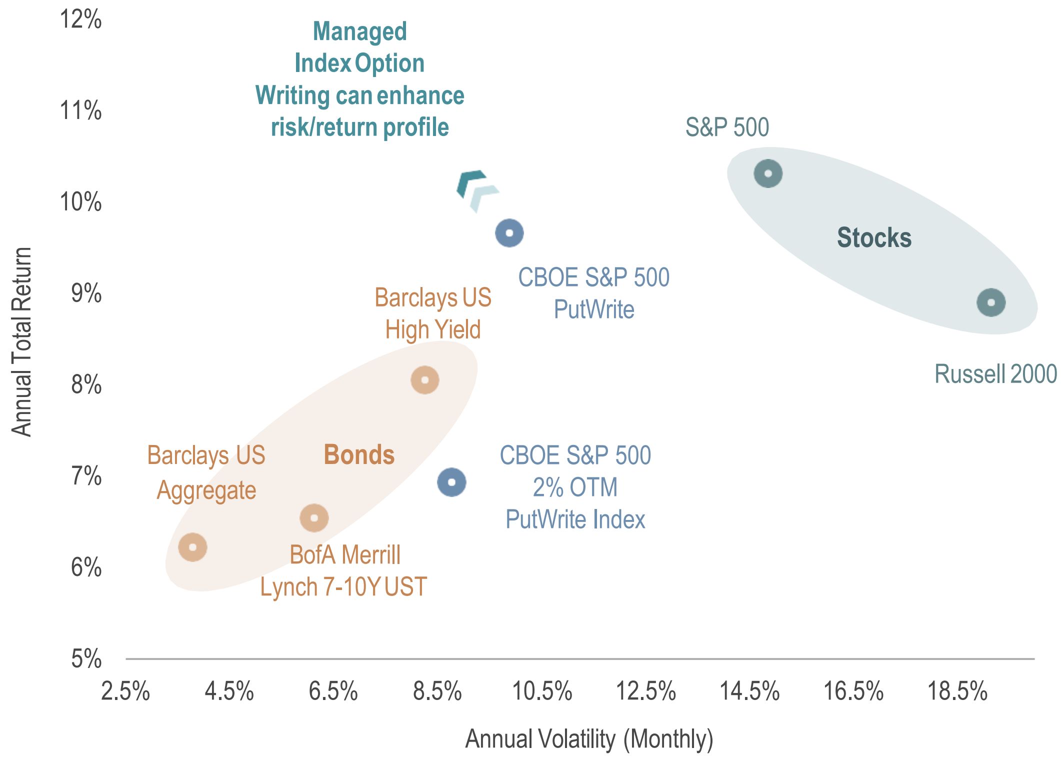
Our Objectives:

- Earn index option volatility premiums
- Experience lower return volatility than equity indexes
- Exhibit reduced market risk (lower beta)
- Mitigate drawdowns

Why investors are adopting index put writing:

- Institutional quality
- Index based exposures
- Structural diversification
- Standardized benchmarks
- Implementation:
  - – Transparent, liquid, unlevered, cost-effective

Index Annual Return vs. Risk



* Index data sourced from Bloomberg LP and is gross of fees unless stated otherwise. Selected time period reflects longest common history of indexes.
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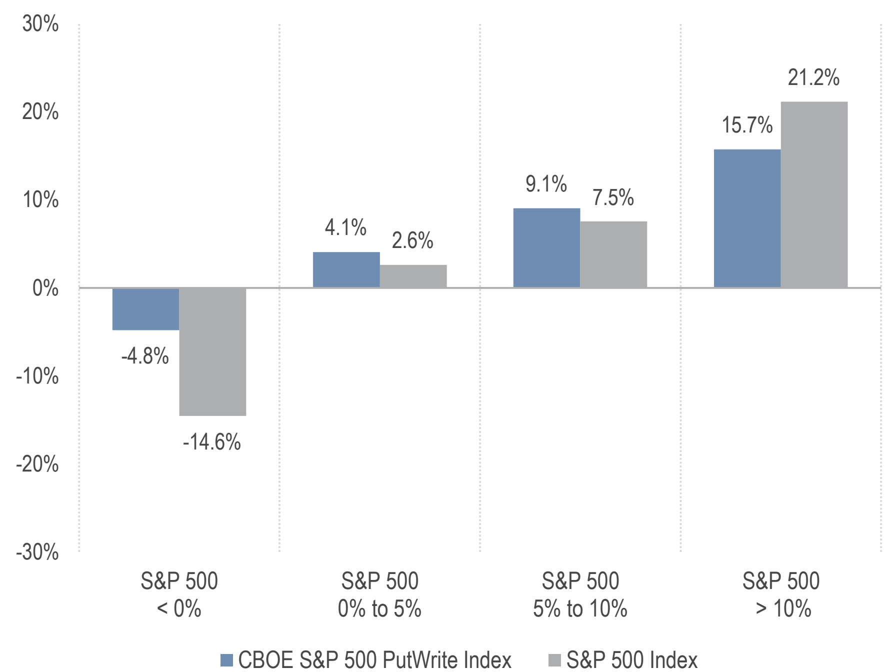
Lower Volatility and Improved Drawdowns

U.S. PutWrite Indexes vs. U.S. Indexes: November 2019

Summary Statistics

	CBOE S&P 500 PutWrite (PUT)[1]	S&P 500 Index (SPX)[1]
Annual Return (%)	**9.7**	10.3
Volatility (%)	**9.9**	14.9
Risk-Adj. Ret.	**0.98**	0.69
Beta (S&P 500)	**0.56**	1.00
Max DrawDown (%)	**-32.7**	-50.9
Up-Mkt. Cap. (%)	**62**	100
Down-Mkt. Cap (%)	**41**	100

Average 1-Year Rolling Returns by Index Return Scenario



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NB S&P 500 Index PutWrite

Neuberger Berman vs. CBOE S&P 500 Index PutWrite Strategy

	CBOE S&P 500 PutWrite Index	NB S&P 500 PutWrite Strategy
Strike Price	ATM	Near-to or At-the-Money
Puts Written	SPX Index, only	SPX Index and/or S&P 500 ETFs
Short Notional Exposure	100%	Less than or equal to collateral
Number of Option Positions	Single	Diversified
Option Tenor Range	Monthly (3rd Friday of every month)	Systematically laddered, LT 60 calendar days
Collateral	1-3 month T-bills	US Treasuries, average duration ~1.5 years
Position Level Rebalancing	None	Systematic rebalancing to manage equity exposure and reduce path dependency risk
Tracking Error Range (vs. CBOE PUT Index)	-	3.00 - 5.00%

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Building Blocks for a More Efficient Portfolio

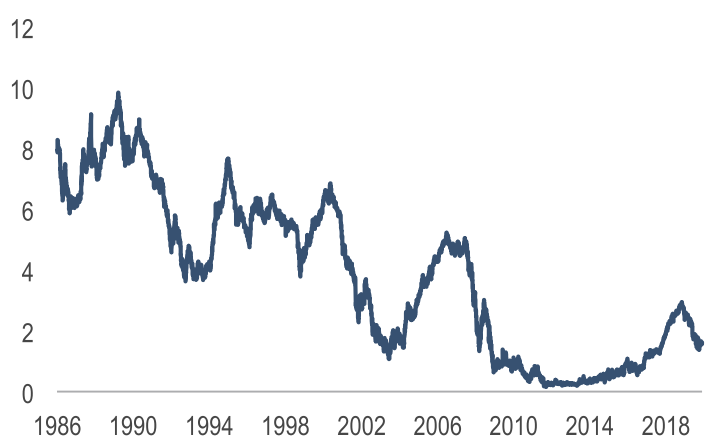
Seeks to enhance income through…

Improved Collateral Management

Our collateral is held in U.S. treasuries that are laddered quarterly, not actively traded, and targets a short duration of approximately 1.5. The collateral **benefits from a rising rate environment**, as bonds are held to maturity and reinvested at higher yields.

US 2 Year Treasury Yields (%)

(Jan 1990 – Nov 2019)



Seeks to lower volatility through…

Diversification

Our process promotes diversification across multiple dimensions, i.e. **strike**, **expiration dates** and **implied volatility levels** (investor sentiment) to seek a stable risk exposure to underlying indexes.

Option Portfolio Exposures

(Illustration)

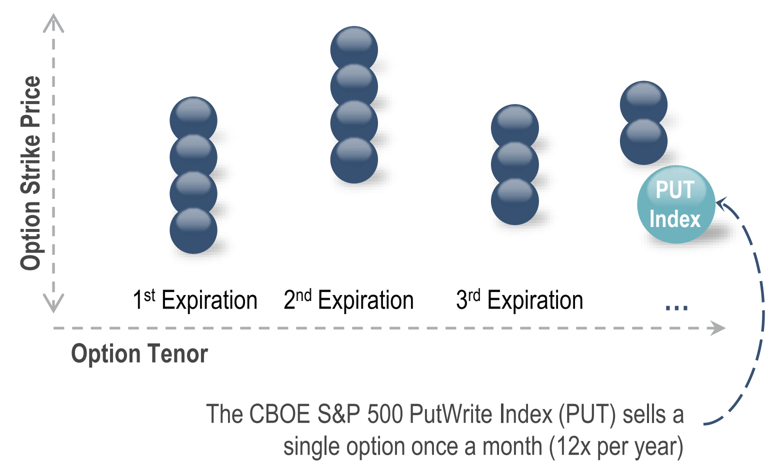


Diagram for illustrative purposes only. This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The use of tools cannot guarantee performance. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Options involve leverage which can result in losses that exceed underlying portfolio exposures. **Past performance is not a reliable indicator of current or future results. See Additional Disclosures at the end of this piece, which are an important part of this presentation.**

Definition: Tenor: Refers to the period of time until option expiration.

Building Blocks for a More Efficient Portfolio

Seeks to increase return potential through…

A. Systematic Risk Management

Seek to mitigate losses during declining markets

B. Increased Capital Efficiency

Seek to maintain desirable levels of time value decay (“theta”) during rising markets

Option Pay-Off Diagram (Illustration)

Our systematic risk management process seeks to ‘rebalance’ option exposures based on their sensitivity to the underlying equity index (delta) to limit the potential for extreme equity exposures (delta), either to high (A) or to low (B) with the intention of increasing the total return and risk-efficiency of the overall portfolio over longer time periods.

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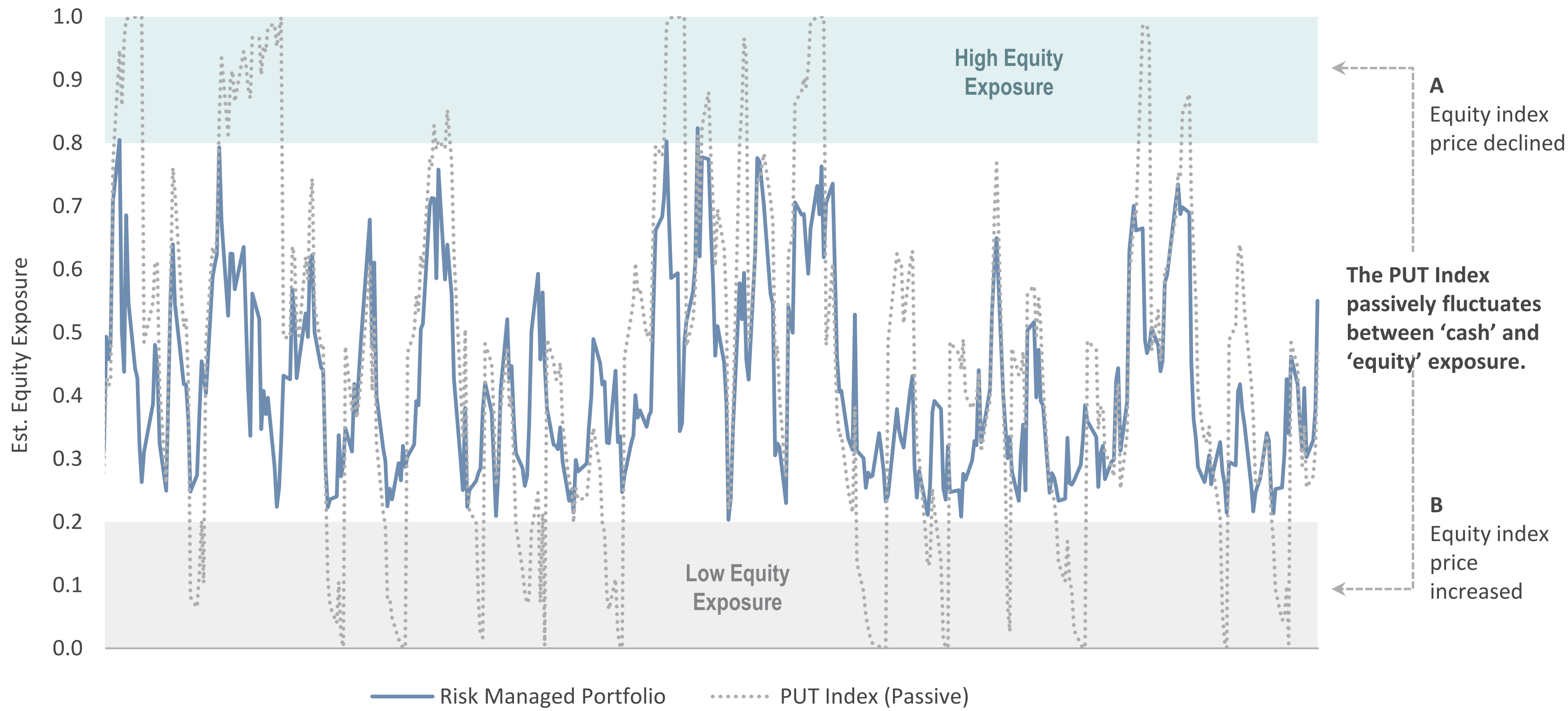
Dynamic Rebalancing

Risk Managed Portfolio Exposure

Guides portfolio away from extreme fluctuations of option exposures



- Risk limits are dynamic and depend on the market's forecast for equity volatility.
- Strategy seeks to maximize premium capture and risk-efficiency while seeking to limit market timing, i.e. path dependence.

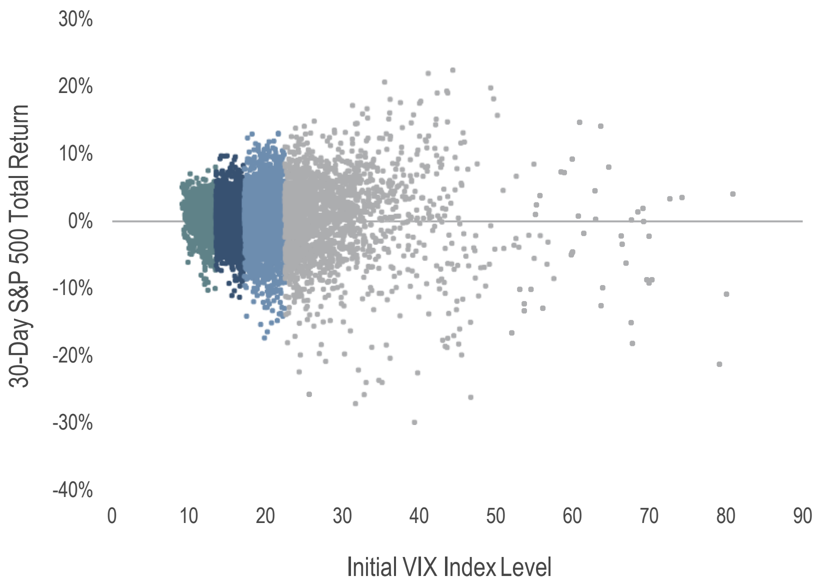
- Unmanaged option exposure can erode performance and increase path-dependency risk.
- Bottom up risk management leads to a more consistent portfolio level equity exposure, i.e. 'smoother' equity exposure.

Investment Philosophy

Option implied volatility ‘prices’ risk: January 1990 – November 2019

Implied volatility levels do not forecast the direction of underlying indexes. Rather, they are a forecast of index price risk, i.e., return dispersion.

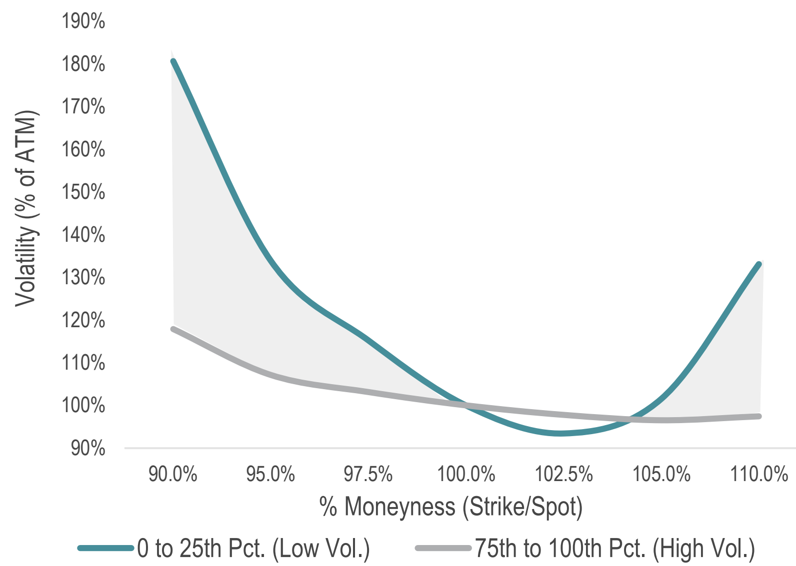
30D S&P 500 TR by Starting CBOE S&P 500 Volatility Index (“VIX”) Index Level



We don’t time equity exposures based on implied volatility levels

At low implied volatility levels, out-of-the-money options become comparatively expensive relative to periods of high volatility levels.

S&P 500 30D Option Implied Volatility (IV) as a % of ATM Implied Volatility



We want to harness skew and avoid chasing rising markets

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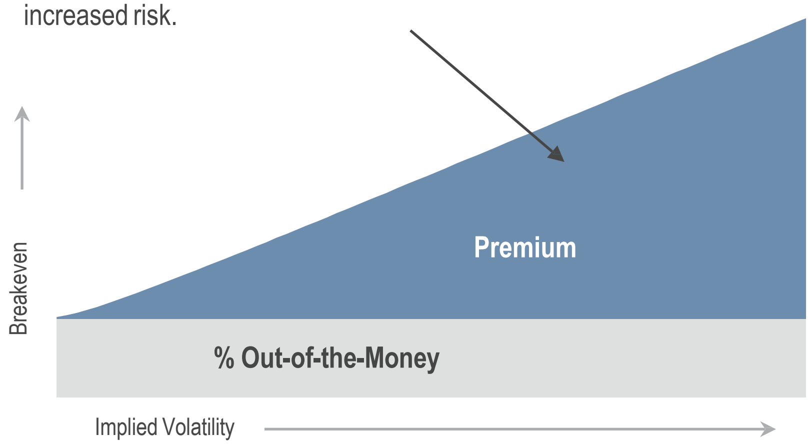
Investment Philosophy

Strike price selection: Fixed strike vs. fixed delta

Fixed Moneyness

Dynamic Delta (Illustration)

Similar to an insurance company, we seek to increase premium collection, i.e. raise prices, in response to losses and the perception of increased risk.

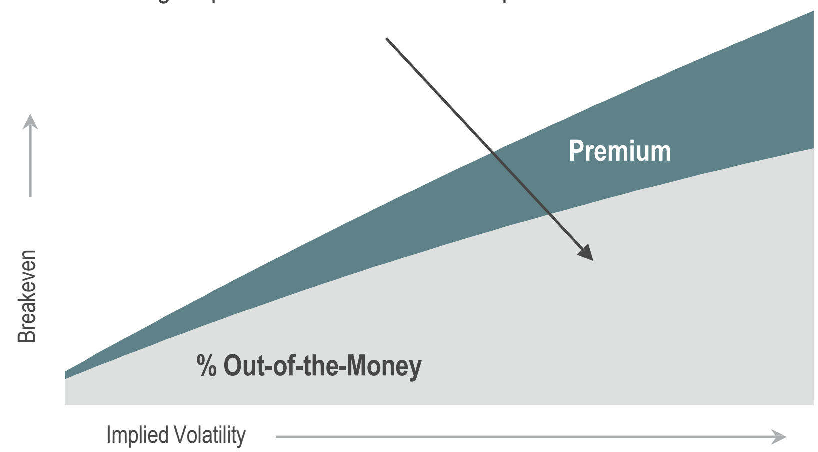


- Benefits from the mean-reverting nature of equity market volatility
- Recognizes current levels of implied volatility do not predict market direction
- Assumes **less risk** when volatility is low and gains **more upside** potential when premiums are high

Fixed Delta

Dynamic Strike (Illustration)

We believe raising the 'deductible' omits the potential for higher premium collection to recoup losses.



- Lets market dictate strike selection, focusing on equity market momentum
- Overly dependent on the perceived predictive power of implied volatility
- Forfeits return potential for downside protection
- Assumes **more risk** when premiums are low and **limits return** potential when volatility is high.

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Neuberger Berman S&P 500 Index PutWrite Strategy

Supplemental Representative Account Performance[1] (gross of fees): July 2011 – November 2019

Performance Results (% returns)

U.S. Equity

	NB S&P 500 PutWrite[1]	CBOE S&P 500 PutWrite	S&P 500 Index
Ann. Total Return	**8.5**	7.1	13.2
Ann. Volatility	**5.9**	8.1	11.8
Risk-Adjusted	**1.43**	0.88	1.11
Beta to Underlier	**0.46**	0.59	1.00
1-Year	**9.7**	3.9	16.1
3-Year	**7.0**	5.6	14.9
5-Year	**7.3**	6.3	11.0
Max DrawDown	**-8.1**	-11.3	-13.9
Up-Mkt. Capture	**53**	55	100
Dwn-Mkt. Capture	**40**	54	100

Calendar Year (% returns)

U.S. Equity

	NB S&P 500 PutWrite[1]	CBOE S&P 500 PutWrite	S&P 500 Index
2011*	**0.1**	2.7	-3.7
2012	**14.2**	8.1	16.0
2013	**12.7**	12.3	32.4
2014	**8.2**	6.4	13.7
2015	**7.3**	6.4	1.4
2016	**9.1**	7.8	12.0
2017	**10.9**	10.8	21.8
2018	**-5.5**	-5.9	-4.4
2019 YTD	**15.8**	12.5	27.6

[1] NB PutWrite (S&P 500 ATM) returns are based on representative composite account(s) monthly gains/losses for fully collateralized put options for indicated index exposure. Representative account data weighted by account notional exposure and is modified to reflect collateral assumed to be held in 1-3 Year U.S. Treasuries. Actual collateral of representative account differs and if such actual collateral was reflected returns shown would have been higher. Return estimates include transaction costs. NB PutWrite (S&P 500 ATM) returns are presented on a supplemental basis and are based upon the S&P 500 Index component of representative fully collateralized NB Global PutWrite Equal Weight (ATM) composite account(s).

* July 2011 is the first full month of NB PutWrite (S&P 500 ATM) performance available.

Past performance is no guarantee of future results. Please refer to the attached GIPS® compliant composite presentation for complete performance information. All returns are gross of fees except HFRI Indices. Gross of fee returns do not reflect the deduction of investment advisory fees, trading cost or any other expenses. If such fees and expenses were reflected, returns referenced would be lower. Indexes are unmanaged and are not available for direct investment. Unless otherwise indicated, returns reflect reinvestment of dividends and distributions. Investing entails risks, including possible loss of principal. See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Neuberger Berman S&P 500 Index PutWrite Strategy

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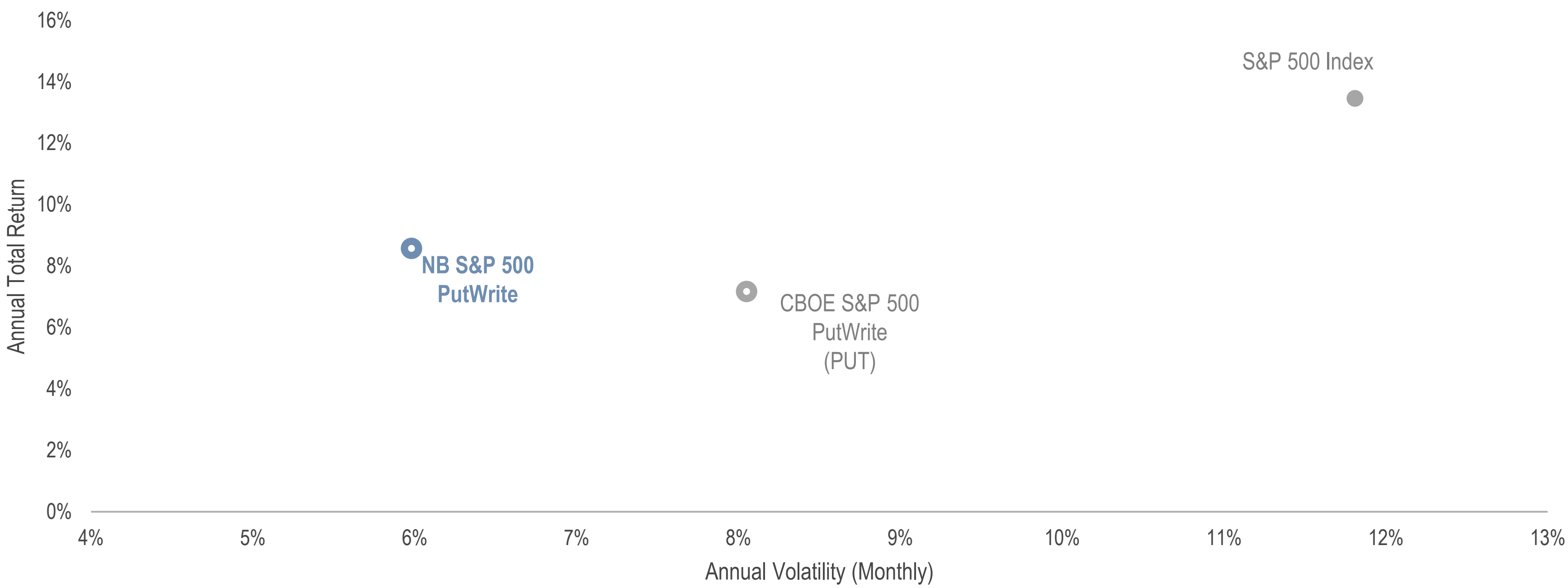
Index Annual Return vs. Risk



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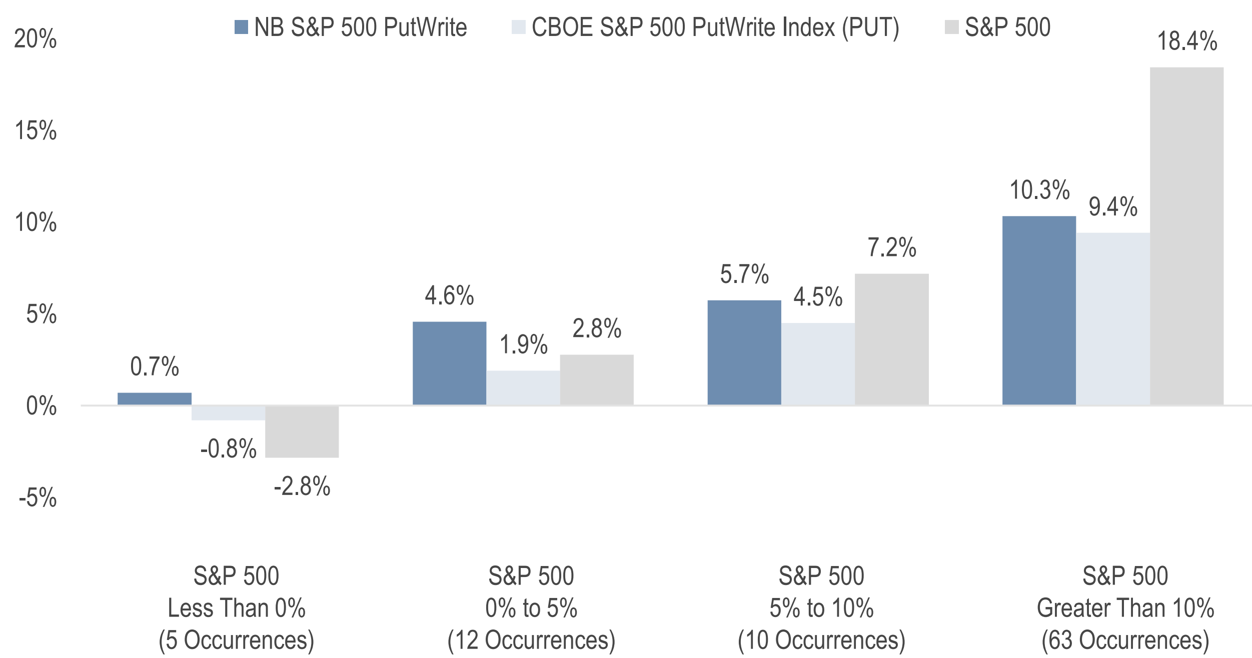
Supplemental Representative Account Performance[1] (gross of fees): July 2011 – November 2019

Average 1-Year Rolling Returns by Index Return Scenario



[1] NB PutWrite (S&P 500 ATM) returns are based on representative composite account(s) monthly gains/losses for fully collateralized put options for indicated index exposure. Representative account data weighted by account notional exposure and is modified to reflect collateral assumed to be held in 1-3 Year U.S. Treasuries. Actual collateral of representative account differs and if such actual collateral was reflected returns shown would have been higher. Return estimates include transaction costs. NB PutWrite (S&P 500 ATM) returns are presented on a supplemental basis and are based upon the S&P 500 Index component of representative fully collateralized NB Global PutWrite Equal Weight (ATM) composite account(s).

* July 2011 is the first full month of NB PutWrite (S&P 500 ATM) performance available.

Past performance is no guarantee of future results. Please refer to the attached GIPS® compliant composite presentation for complete performance information. All returns are gross of fees except HFRI Indices. Gross of fee returns do not reflect the deduction of investment advisory fees, trading cost or any other expenses. If such fees and expenses were reflected, returns referenced would be lower. Indexes are unmanaged and are not available for direct investment. Unless otherwise indicated, returns reflect reinvestment of dividends and distributions. Investing entails risks, including possible loss of principal. See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Summary

Neuberger Berman Differentiators

Neuberger Berman would be privileged to partner with the Employee Retirement System of Rhode Island

- Competitive long-term returns with lower volatility
- Transparent, liquid, cost-effective
- 9+ year global track record that exceeds benchmarks
- Research intensive investment team
- U.S. Equity Index PutWrite Available Through Commingled Vehicle
  - Standard Management Fee = 35 bps
- U.S. Equity Index PutWrite Available Through SMA
  - Negotiable

This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The use of tools cannot guarantee performance. Unless otherwise indicated, returns shown reflect reinvestment of dividends and distributions. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Appendix: Supplemental Strategy Information

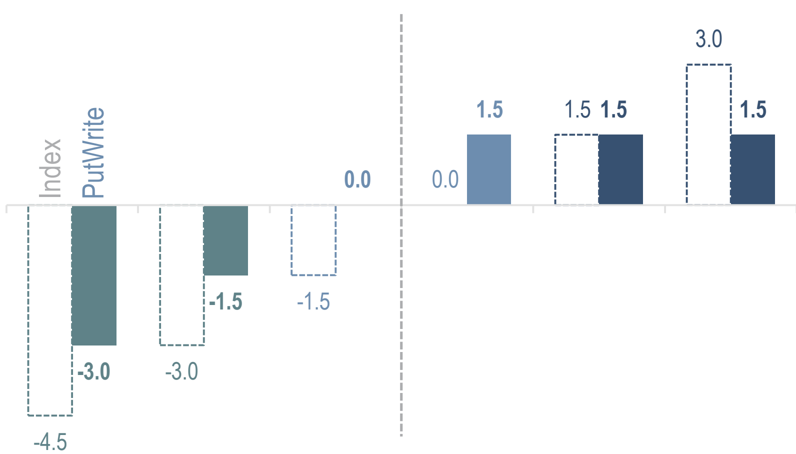
PutWrite Strategy Payoff & Return Distribution

Defensive Equity Exposure

Selling Fully Collateralized Index Put Options

- **Down Markets:** Put option seller risks a decline in value similar to the underlying index, but those declines may be partially offset by the premium collected.
- **Flat Markets:** Put option seller keeps premium.
- **Up Markets:** Put option seller keeps premium, but does not participate in full gain of underlying index above premium collected.

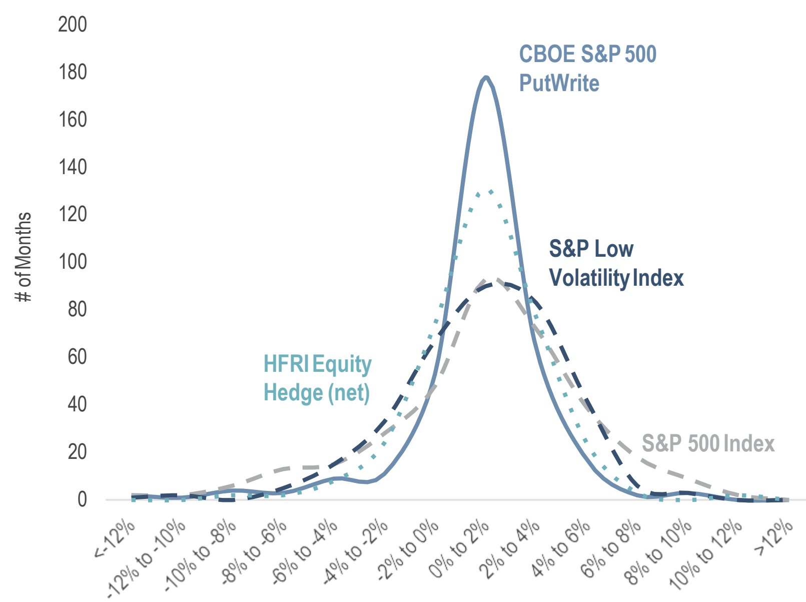
PutWrite Option Pay-Off Diagram (Illustration)



Reshaping a Return Distribution

- Put writing makes an explicit trade-off between up-market participation and down-market participation, while still seeking reasonable returns in flat markets

Monthly Return Distributions (Dec 1990 – November 2019)[1]



[1] Index data sourced from Bloomberg LP and is gross of fees unless stated otherwise. Selected time period reflects longest common history of indexes. This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. Analysis limited to inception of HFRI indexes of 12/31/1989. The CBOE S&P 500 PutWrite ("PUT") Index incepted in June 2007 with historical back-tested data available since 6/30/1986. Please refer to disclosures and definitions for additional information regarding indexes. The use of tools cannot guarantee performance and there is no guarantee that any investment program will be successful. Unless otherwise indicated, returns shown reflect reinvestment of dividends and distributions. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

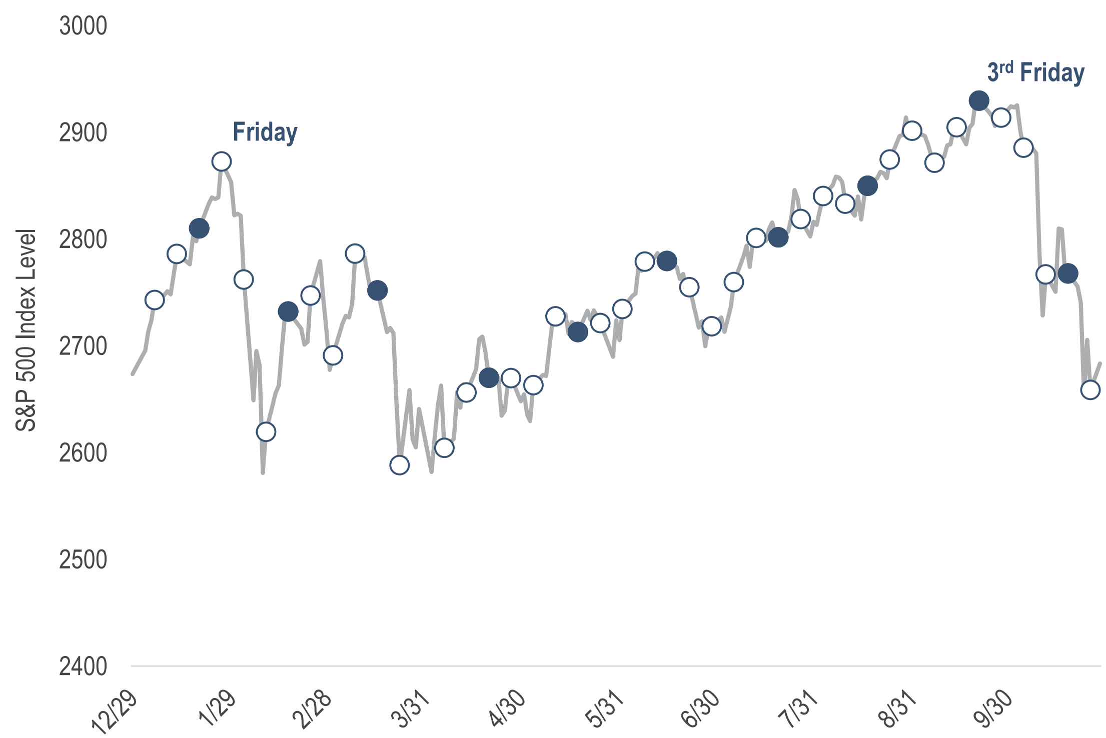
Why Option Tenor Selection Matters

2018: An Illustration of Short-Term Path Dependence: January 2018 – December 2018

The Effects of Tenor Selection

	Monthly Option Writing (PUT)	One-Week Option Writing (WPUT)
Return	-5.93%	-14.21%
Volatility	13.38%	12.61%
Beta	0.75	0.67
Drawdown	-15.52%	-19.76%
Up-Mkt Cap	64%	51%
Down-Mkt Cap	66%	63%

The PUT Index sold 12 put options in 2018 and the timing of its rolling in the first half was historically lucky. **Over longer periods, the distribution tends to be more even, as evidenced by the recent drawdown.**

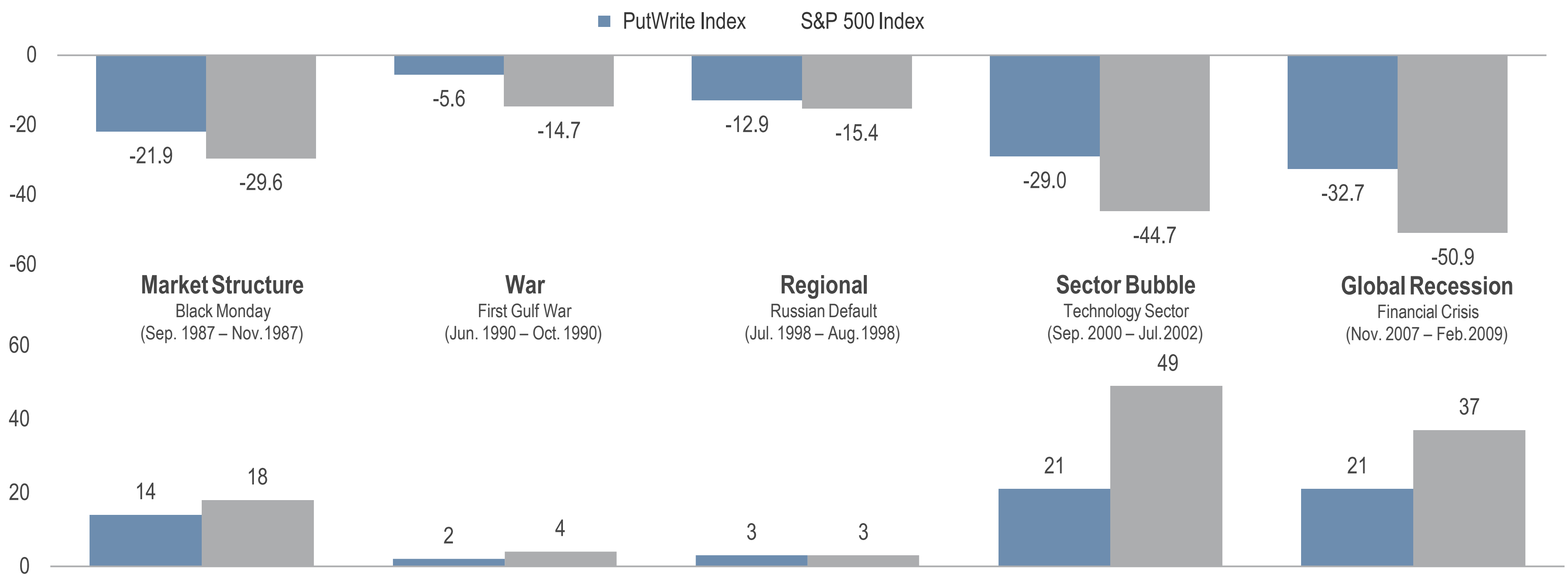


Source: CBOE and Bloomberg. Index data sourced from Bloomberg LP and is gross of fees unless stated otherwise. This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The use of tools cannot guarantee performance. Unless otherwise indicated, returns shown reflect reinvestment of dividends and distributions. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Performance During Major Market Drawdowns

CBOE S&P 500 PutWrite Index Comparison with S&P 500 Index: June 1986 – November 2019[1]

Index Drawdowns (%)



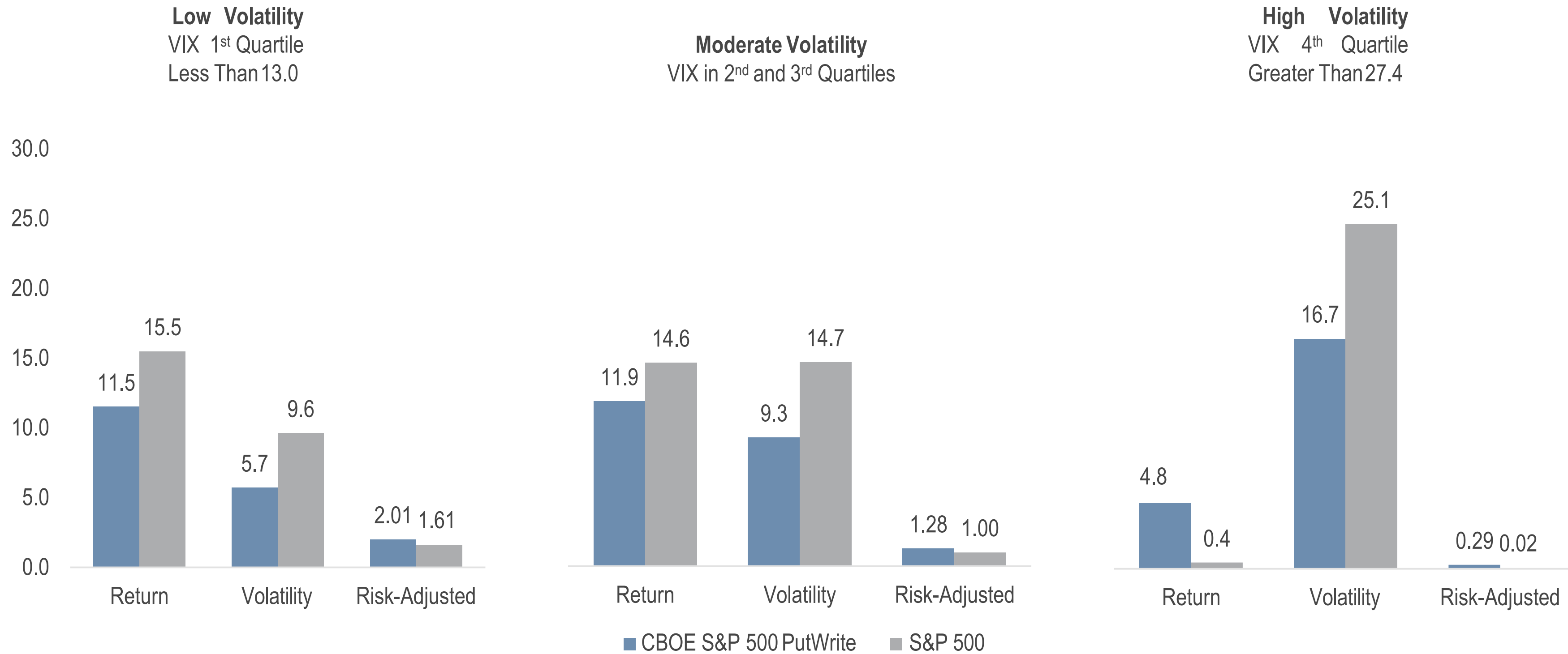
Full Recovery (Months)

[1] Index data sourced from Bloomberg LP and is gross of fees unless stated otherwise. Selected time period reflects longest common history of indexes. This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The CBOE S&P 500 PutWrite (PUT) Index incepted in June 2007 with historical back-tested data available since 6/30/1986. The use of tools cannot guarantee performance. Unless otherwise indicated, returns shown reflect reinvestment of dividends and distributions. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

PutWriting Can Be Successful Across Volatility Regimes

CBOE S&P 500 PutWrite Index average 1-year rolling statistics: January 1990 – November 2019[1]

CBOE S&P 500 Volatility Index (VIX) Regimes



[1] Index data sourced from Bloomberg LP and is gross of fees unless stated otherwise. Selected time period reflects longest common history of indexes. This material is intended as a broad overview of the Portfolio Managers' style, philosophy and process and is subject to change without notice. The CBOE S&P 500 PutWrite (PUT) Index incepted in June 2007 with historical back-tested data available since 6/30/1986. The use of tools cannot guarantee performance. Unless otherwise indicated, returns shown reflect reinvestment of dividends and distributions. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.** See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Performance History

NB Neuberger Berman PutWrite Strategy (S&P 500 ATM)

Supplemental Representative Account(s) Performance[1] (gross of fees)

YEAR		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL/YTD
2019	**NB PutWrite (S&P 500 ATM)**	**3.64%**	**1.74%**	**1.73%**	**1.78%**	**-2.87%**	**3.77%**	**0.76%**	**-0.24%**	**1.38%**	**1.91%**	**1.36%**		**15.83%**
	CBOE S&P 500 PutWrite	2.77%	1.40%	1.21%	1.58%	-3.75%	4.77%	1.43%	-1.74%	0.90%	2.33%	1.12%		12.45%
	S&P 500 Index	8.01%	3.21%	1.94%	4.05%	-6.35%	7.05%	1.44%	-1.58%	1.87%	2.17%	3.63%		27.63%
2018	**NB PutWrite (S&P 500 ATM)**	**0.69%**	**-3.41%**	**-1.33%**	**0.47%**	**1.88%**	**0.33%**	**1.97%**	**1.59%**	**0.67%**	**-4.46%**	**1.60%**	**-5.31%**	**-5.54%**
	CBOE S&P 500 PutWrite	0.90%	-2.16%	-1.34%	2.05%	1.99%	0.16%	2.60%	1.54%	0.21%	-5.59%	1.68%	-7.56%	-5.93%
	S&P 500 Index	5.73%	-3.69%	-2.54%	0.38%	2.41%	0.62%	3.72%	3.26%	0.57%	-6.84%	2.04%	-9.03%	-4.38%
2017	**NB PutWrite (S&P 500 ATM)**	**1.40%**	**1.47%**	**0.29%**	**1.03%**	**1.03%**	**0.36%**	**1.44%**	**0.32%**	**0.86%**	**0.72%**	**0.82%**	**0.62%**	**10.90%**
	CBOE S&P 500 PutWrite	1.96%	1.18%	0.50%	0.76%	1.12%	0.56%	1.02%	-0.02%	0.76%	0.58%	1.32%	0.42%	10.85%
	S&P 500 Index	1.90%	3.97%	0.12%	1.03%	1.41%	0.62%	2.00%	0.31%	2.06%	2.33%	3.07%	1.11%	21.83%
2016	**NB PutWrite (S&P 500 ATM)**	**-2.83%**	**0.98%**	**2.87%**	**0.66%**	**1.42%**	**0.50%**	**1.49%**	**0.59%**	**0.69%**	**-0.28%**	**1.86%**	**0.87%**	**9.09%**
	CBOE S&P 500 PutWrite	-4.64%	1.52%	2.01%	0.49%	1.15%	1.74%	1.28%	0.78%	0.30%	0.21%	2.38%	0.45%	7.77%
	S&P 500 Index	-4.96%	-0.13%	6.78%	0.39%	1.80%	0.26%	3.69%	0.14%	0.02%	-1.82%	3.70%	1.98%	11.96%
2015	**NB PutWrite (S&P 500 ATM)**	**-0.30%**	**3.14%**	**0.25%**	**1.20%**	**1.28%**	**-0.32%**	**2.42%**	**-4.81%**	**0.32%**	**3.90%**	**0.44%**	**-0.22%**	**7.27%**
	CBOE S&P 500 PutWrite	-1.93%	2.64%	-0.22%	1.84%	1.09%	-0.31%	2.85%	-4.03%	-0.18%	4.58%	0.60%	-0.42%	6.40%
	S&P 500 Index	-3.00%	5.75%	-1.58%	0.96%	1.29%	-1.94%	2.10%	-6.03%	-2.47%	8.44%	0.30%	-1.58%	1.38%
2014	**NB PutWrite (S&P 500 ATM)**	**-0.93%**	**2.17%**	**0.66%**	**0.86%**	**1.32%**	**0.80%**	**-0.77%**	**2.59%**	**-0.54%**	**0.50%**	**1.07%**	**0.23%**	**8.17%**
	CBOE S&P 500 PutWrite	-1.91%	4.14%	0.76%	0.79%	1.71%	0.30%	-0.55%	3.55%	-1.00%	-2.52%	0.33%	0.80%	6.38%
	S&P 500 Index	-3.46%	4.57%	0.84%	0.74%	2.35%	2.07%	-1.38%	4.00%	-1.40%	2.44%	2.69%	-0.25%	13.69%
2013	**NB PutWrite (S&P 500 ATM)**	**1.86%**	**0.43%**	**1.20%**	**0.92%**	**0.10%**	**-0.13%**	**2.47%**	**-1.13%**	**2.08%**	**2.11%**	**1.14%**	**1.00%**	**12.66%**
	CBOE S&P 500 PutWrite	2.18%	0.44%	1.61%	1.16%	-0.56%	0.06%	1.42%	-1.41%	1.11%	3.28%	1.07%	1.34%	12.28%
	S&P 500 Index	5.18%	1.36%	3.75%	1.93%	2.34%	-1.34%	5.09%	-2.90%	3.14%	4.60%	3.05%	2.53%	32.39%
2012	**NB PutWrite (S&P 500 ATM)**	**3.69%**	**1.29%**	**0.94%**	**0.78%**	**-1.49%**	**2.59%**	**1.53%**	**1.30%**	**1.37%**	**-0.11%**	**0.65%**	**0.88%**	**14.18%**
	CBOE S&P 500 PutWrite	1.64%	2.09%	1.51%	0.49%	-3.55%	3.42%	1.26%	1.07%	0.93%	0.33%	-1.92%	0.77%	8.14%
	S&P 500 Index	4.48%	4.32%	3.29%	-0.63%	-6.01%	4.12%	1.39%	2.25%	2.58%	-1.85%	0.58%	0.91%	16.00%
2011*	**NB PutWrite (S&P 500 ATM)**							**-0.15%**	**-2.95%**	**-2.86%**	**4.67%**	**0.12%**	**1.50%**	**0.13%**
	CBOE S&P 500 PutWrite							-0.47%	-8.02%	-3.06%	8.98%	2.85%	3.28%	2.74%
	S&P 500 Index							-2.03%	-5.43%	-7.03%	10.93%	-0.22%	1.02%	-3.69%

[1] NB PutWrite (S&P 500 ATM) returns are based on representative composite account(s) monthly gains/losses for fully collateralized put options for indicated index exposure. Representative account data weighted by account notional exposure and is modified to reflect collateral assumed to be held in 1-3 Year U.S. Treasuries. Actual collateral of representative account differs and if such actual collateral was reflected returns shown would have been higher. Return estimates include transaction costs. NB PutWrite (S&P 500 ATM) returns are presented on a supplemental basis and are based upon the S&P 500 Index component of representative fully collateralized NB Global PutWrite Equal Weight (ATM) composite account(s).

* July 2011 is the first full month of NB PutWrite (S&P 500 ATM) performance available.

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NB Global Index PutWrite (ATM) (“Global Composite”)

Monthly composite return summary (gross of fees)

YEAR		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL/YTD
2019	**Global Composite**	**3.51%**	**1.28%**	**1.40%**	**1.79%**	**-3.04%**	**3.06%**	**0.18%**	**-0.82%**	**1.32%**	**1.78%**	**0.94%**		**11.86%**
	Global PutWrite Benchmark[1]	2.41%	1.15%	0.68%	1.41%	-4.14%	3.37%	0.64%	-2.26%	0.76%	2.42%	0.79%		7.59%
	MSCI ACWI Index	7.90%	2.67%	1.26%	3.38%	-5.93%	6.55%	0.29%	-2.37%	2.10%	2.74%	2.44%		22.29%
2018	**Global Composite**	**0.91%**	**-3.74%**	**-0.41%**	**0.91%**	**0.52%**	**-0.46%**	**1.99%**	**-0.06%**	**0.40%**	**-4.69%**	**2.07%**	**-3.36%**	**-6.02%**
	Global PutWrite Benchmark[1]	0.66%	-2.35%	-0.19%	1.48%	0.74%	-0.77%	2.47%	0.02%	0.19%	-5.50%	1.24%	-4.81%	-6.93%
	MSCI ACWI Index	5.66%	-4.16%	-2.08%	1.01%	0.21%	-0.50%	3.05%	0.83%	0.48%	-7.47%	1.51%	-7.00%	-8.93%
2017	**Global Composite**	**2.05%**	**0.93%**	**1.33%**	**1.50%**	**1.11%**	**0.78%**	**1.58%**	**0.85%**	**0.71%**	**1.00%**	**0.77%**	**0.83%**	**14.28%**
	Global PutWrite Benchmark[1]	1.93%	0.74%	0.87%	1.34%	0.89%	0.65%	1.37%	0.68%	0.57%	0.78%	0.88%	0.71%	12.03%
	MSCI ACWI Index	2.76%	2.85%	1.29%	1.60%	2.30%	0.50%	2.83%	0.43%	1.97%	2.10%	1.98%	1.65%	24.62%
2016	**Global Composite**	**-3.79%**	**0.72%**	**3.13%**	**0.65%**	**0.03%**	**-0.17%**	**1.94%**	**0.64%**	**1.27%**	**0.06%**	**-0.33%**	**1.14%**	**5.27%**
	Global PutWrite Benchmark[1]	-5.61%	1.24%	1.97%	0.98%	0.37%	1.85%	1.83%	0.40%	0.86%	0.19%	0.08%	0.86%	4.89%
	MSCI ACWI Index	-6.01%	-0.63%	7.48%	1.54%	0.21%	-0.55%	4.34%	0.39%	0.66%	-1.67%	0.81%	2.20%	8.48%
2015	**Global Composite**	**0.38%**	**2.53%**	**0.03%**	**1.45%**	**0.10%**	**-1.03%**	**0.28%**	**-5.83%**	**-0.38%**	**3.59%**	**-0.05%**	**-1.03%**	**-0.27%**
	Global PutWrite Benchmark[1]	-0.26%	2.13%	-0.10%	2.06%	0.05%	-1.35%	2.17%	-6.47%	0.06%	3.70%	0.64%	-0.87%	1.40%
	MSCI ACWI Index	-1.54%	5.61%	-1.49%	2.95%	-0.05%	-2.31%	0.90%	-6.81%	-3.58%	7.87%	-0.78%	-1.76%	-1.84%
2014	**Global Composite**	**-2.06%**	**2.47%**	**1.03%**	**1.05%**	**1.30%**	**0.84%**	**-0.59%**	**1.92%**	**-2.13%**	**-0.05%**	**0.83%**	**-1.55%**	**2.96%**
	Global PutWrite Benchmark[1]	-2.24%	4.27%	0.58%	0.76%	1.63%	0.25%	-0.56%	2.51%	-1.37%	-2.43%	0.20%	-0.80%	2.62%
	MSCI ACWI Index	-3.98%	4.88%	0.50%	1.00%	2.21%	1.93%	-1.18%	2.25%	-3.20%	0.73%	1.72%	-1.89%	4.71%
2013	**Global Composite**	**3.06%**	**-0.71%**	**-0.38%**	**1.96%**	**-1.65%**	**-1.39%**	**2.75%**	**-0.85%**	**2.72%**	**1.93%**	**0.65%**	**0.88%**	**9.18%**
	Global PutWrite Benchmark[1]	1.69%	0.33%	1.08%	1.60%	-1.79%	-1.80%	1.54%	-1.05%	1.99%	2.79%	1.18%	0.80%	8.55%
	MSCI ACWI Index	4.64%	0.03%	1.88%	2.92%	-0.19%	-2.88%	4.82%	-2.04%	5.20%	4.04%	1.46%	1.76%	23.44%
2012	**Global Composite**	**6.56%**	**1.67%**	**-0.10%**	**1.04%**	**-2.86%**	**5.01%**	**2.36%**	**1.55%**	**3.61%**	**-0.09%**	**3.10%**	**-1.74%**	**21.61%**
	Global PutWrite Benchmark[1]	1.99%	2.08%	1.29%	0.20%	-5.51%	4.11%	1.77%	0.91%	1.23%	1.41%	-0.38%	0.94%	10.21%
	MSCI ACWI Index	5.84%	5.08%	0.71%	-1.08%	-8.88%	4.99%	1.40%	2.22%	3.19%	-0.64%	1.33%	2.31%	16.80%
2011*	**Global Composite**			**1.23%**	**1.58%**	**0.62%**	**0.13%**	**-1.36%**	**-2.66%**	**-7.15%**	**9.10%**	**0.57%**	**1.88%**	**3.24%**
	Global PutWrite Benchmark[1]			-0.35%	1.69%	0.89%	-0.17%	0.24%	-8.30%	-3.43%	9.36%	2.08%	2.80%	6.76%
	MSCI ACWI Index			-0.06%	4.15%	-2.06%	-1.54%	-1.60%	-7.26%	-9.40%	10.74%	-2.94%	-0.17%	-10.95%

[1] The Global PutWrite benchmark is made up of 50% CBOE S&P 500 PutWrite Index, 35% CBOE MSCI EAFE PutWrite Index and 15% CBOE MSCI EM PutWrite Index.
* March 2011 is the first full month of Global Index ATM put writing account performance available. **Past performance is no guarantee of future results. Please refer to the attached GIPS® compliant composite presentation for complete performance information.** Indexes are unmanaged and are not available for direct investment. Unless otherwise indicated, returns reflect reinvestment of dividends and distributions. Investing entails risks, including possible loss of principal. See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Neuberger Berman Composite Performance Summary

Index PutWrite Composites (gross of fees)

Performance Results (% returns) (as of Nov 2019)

	YTD	1-YEAR			3-YEAR				SINCE INCEPTION*					CALENDAR YEARS							
Composite / Benchmark Indexes	Total Return	Annual Return	Annual Volatility	Risk-Adj. Return	Annual Return	Annual Volatility	Risk-Adj. Return	Beta to EQ Index	Annual Return	Annual Volatility	Risk-Adj. Return	Beta to EQ Index	Worst DrwDwn	2018	2017	2016	2015*	2014*	2013	2012	2011*
NB Global PutWrite (ATM)	**11.86%**	**8.10%**	**7.39%**	**1.10**	**6.71%**	**6.12%**	**1.10**	**0.51**	**6.81%**	**7.64%**	**0.89**	**0.55**	**-10.85%**	**-6.0%**	**14.3%**	**5.3%**	**-0.3%**	**3.0%**	**9.2%**	**21.6%**	**3.2%**
Global PutWrite Benchmark[1]	7.59%	2.42%	9.09%	0.27	4.20%	6.74%	0.62	0.55	4.92%	8.02%	0.61	0.55	-11.44%	-6.9%	12.0%	4.9%	1.4%	2.6%	8.5%	10.2%	4.0%
MSCI ACWI	22.29%	13.68%	15.40%	0.89	11.95%	11.31%	1.06	1.00	7.64%	12.36%	0.62	1.00	-20.47%	-8.9%	24.6%	8.5%	-1.8%	4.7%	23.4%	16.8%	-11.0%
HFRI Equity Hedge (Net)	11.43%	7.16%	8.80%	0.81	5.73%	6.41%	0.89	0.54	3.73%	6.88%	0.54	0.53	-13.17%	-7.0%	13.3%	5.5%	-1.0%	1.8%	14.3%	7.4%	-9.9%
NB Global PutWrite (OTM)	**8.62%**	**6.99%**	**3.85%**	**1.82**	**4.75%**	**3.36%**	**1.41**	**0.26**	**5.34%**	**4.02%**	**1.33**	**0.30**	**-4.20%**	**-1.3%**	**6.7%**	**4.8%**	**1.5%**	**4.2%**	**7.5%**	**9.4%**	**2.3%**
Global PutWrite Benchmark[1]	7.59%	2.42%	9.09%	0.27	4.20%	6.74%	0.62	0.55	5.46%	6.93%	0.79	0.52	-8.93%	-6.9%	12.0%	4.9%	1.4%	2.6%	8.5%	10.2%	4.9%
MSCI ACWI	22.29%	13.68%	15.40%	0.89	11.95%	11.31%	1.06	1.00	9.48%	11.32%	0.84	1.00	-14.25%	-8.9%	24.6%	8.5%	-1.8%	4.7%	23.4%	16.8%	-3.1%
HFRI Equity Hedge (Net)	11.43%	7.16%	8.80%	0.81	5.73%	6.41%	0.89	0.54	5.02%	6.26%	0.80	0.52	-10.26%	-7.0%	13.3%	5.5%	-1.0%	1.8%	14.3%	7.4%	-2.9%
NB EM PutWrite	**7.02%**	**7.66%**	**7.58%**	**1.01**	**6.71%**	**7.18%**	**0.93**	**0.45**	**2.69%**	**8.42%**	**0.32**	**0.46**	**-16.26%**	**-5.1%**	**18.7%**	**5.9%**	**-5.9%**	**-3.9%**	**-**	**-**	**-**
CBOE EM PutWrite	-0.34%	0.17%	9.62%	0.02	5.39%	6.98%	0.77	0.39	-1.42%	9.59%	-0.15	0.49	-27.49%	-1.6%	17.6%	-2.4%	-13.1%	-5.4%			
MSCI Emerging Markets	10.20%	7.28%	15.55%	0.47	9.01%	13.85%	0.65	1.00	2.23%	15.44%	0.14	1.00	-29.77%	-14.2%	37.8%	11.6%	-14.6%	-7.6%	-	-	-
HFRI Emerging Markets (Net)	8.04%	6.46%	7.33%	0.88	4.79%	6.84%	0.70	0.47	2.25%	7.81%	0.29	0.47	-14.59%	-10.9%	19.4%	7.0%	-3.3%	-5.1%	-	-	-
NB S&P 500 PutWrite (OTM)	**13.20%**	**8.43%**	**6.76%**	**1.25**	**6.06%**	**4.91%**	**1.24**	**0.36**	**7.40%**	**4.91%**	**1.51**	**0.34**	**-4.67%**	**-2.7%**	**7.7%**	**9.7%**	**9.1%**	**-**	**-**	**-**	**-**
CBOE S&P 500 2% OTM PutWrite	9.94%	1.95%	9.18%	0.21	7.00%	7.07%	0.99	0.47	7.03%	6.26%	1.12	0.40	-10.89%	-1.4%	12.8%	6.4%	7.4%	-	-	-	-
HFRI Equity Hedge (Net)	11.43%	7.16%	8.80%	0.81	5.73%	6.41%	0.89	0.49	4.20%	6.53%	0.64	0.52	-10.26%	-7.0%	13.3%	5.5%	-1.0%	-	-	-	-
S&P 500	27.63%	16.10%	17.16%	0.94	14.87%	12.07%	1.23	1.00	11.22%	12.05%	0.93	0.98	-13.52%	-4.4%	21.8%	12.0%	1.4%	-	-	-	-

[1] The Global PutWrite benchmark is made up of 50% CBOE S&P 500 PutWrite Index, 35% CBOE MSCI EAFE PutWrite Index and 15% CBOE MSCI EM PutWrite Index.

* Global Index PutWrite (ATM) Composite incepted on February 28, 2011. Global Index PutWrite (OTM) Strategy Composite incepted October 31, 2011. Emerging Market Composite incepted June 30, 2014. S&P 500 OTM Composite incepted December 31, 2014. **Past performance is no guarantee of future results. Please refer to the attached GIPS® compliant composite presentation for complete performance information.** All returns are gross of fees except HFRI Equity Hedge Index returns. Gross of fee returns do not reflect the deduction of investment advisory fees, trading cost or any other expenses. If such fees and expenses were reflected, returns referenced would be lower. Indexes are unmanaged and are not available for direct investment. Unless otherwise indicated, returns reflect reinvestment of dividends and distributions. Investing entails risks, including possible loss of principal.

See Additional Disclosures at the end of this piece, which are an important part of this presentation.

Global Index PutWrite (ATM) Composite (Inception 3/1/2011)

Investment Performance Results – As of September 30, 2019

	Composite		Benchmark		Composite					3 Year Standard Deviation		
	Total Return (%, Gross of Fees)	Total Return (%, Net of Fees)	Primary Custom Blend (%)	Secondary Custom Blend (%)	No. of Accounts	Market Value ($, m)	Total Firm Assets ($, bn)	% of Firm Assets	Internal Dispersion	Composite (%)	Primary Custom Blend (%)	Secondary Custom Blend (%)
YTD Sep-2019	8.87	8.34	7.43	12.97	≤ 5	785.3	--	--	--	6.01	5.66	11.35
2018	-6.02	-6.63	-4.52	-10.88	6	963.9	304.1	0.32	0.22	5.85	5.51	11.07
2017	14.28	13.54	13.67	27.97	6	1,038.5	295.2	0.35	--	5.70	5.61	11.18
2016	5.27	4.59	4.31	8.16	≤ 5	258.4	255.2	0.10	--	6.19	5.92	11.83
2015	-0.27	-0.92	-2.22	-4.87	≤ 5	--	240.4	--	--	6.31	5.59	11.19
2014	2.96	2.30	1.13	2.02	≤ 5	--	250.0	--	--	7.09	5.67	11.33
2013	9.18	8.47	8.22	16.76	≤ 5	--	241.7	--	--	--	--	--
2012	21.61	20.83	8.69	17.38	≤ 5	--	205.0	--	--	--	--	--
10 Months 2011	3.24	2.68	-5.75	-11.96	≤ 5	--	193.1	--	--	--	--	--

Past performance is no guarantee of future results.
Please see attached important disclosures which contain complete performance information and definitions.

Global Index PutWrite (ATM) Composite

Investment Performance Disclosure Statement

Compliance Statement

- Neuberger Berman Group LLC ("NB", "Neuberger Berman" or the "Firm") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. Neuberger Berman has been independently verified for the period January 1, 2011 to December 31, 2018. 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. The NB Global Index PutWrite (ATM) composite has been examined for the periods January 1, 2016 to December 31, 2017. The verification and performance examination reports are available upon request.
- The GIPS® firm definition was redefined effective January 1, 2011. For prior periods there were two separate firms for GIPS® firm definition purposes and such firms were independently verified for the periods January 1, 1997 to December 31, 2010 and January 1, 1996 to December 31, 2010, respectively.

Definition of the Firm

- The firm is currently defined for GIPS® purposes as Neuberger Berman Group LLC, ("NB", "Neuberger Berman" or the "Firm"), and includes the following subsidiaries: Neuberger Berman Investment Advisers LLC, Neuberger Berman Europe Ltd., Neuberger Berman Asia Ltd., Neuberger Berman East Asia Ltd., Neuberger Berman Singapore Pte. Ltd., Neuberger Berman Taiwan Ltd, Neuberger Berman Australia Pty. Ltd., Neuberger Berman Trust Company N.A., Neuberger Berman Trust Company of Delaware N.A., NB Alternatives Advisers LLC and Neuberger Berman Breton Hill ULC.

Policies

- Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

Composite Description

- The Global Index PutWrite (ATM) Composite (the "Composite") includes the performance of all fee-paying Global Index PutWrite (ATM) portfolios, with no minimum investment, managed on a fully discretionary basis by the Option Group. The Global Index PutWrite (ATM) strategy sells at-the-money puts across U.S., Developed and Emerging markets. Options are fully collateralized by a fixed income portfolio predominantly consisting of short duration Treasuries. The strategy seeks to both increase long term return potential and reduce investment volatility. Underlying index exposures are selected consistent with client asset allocations, and risk parameters are set with client's risk/return objectives. Collateral investments reflect investor preferences and are managed with an emphasis on capital preservation. Option exposure is managed to increase diversification across tenors and strike prices and reduce downside risk from high delta option positions during down markets. Option positions with little remaining time values can be rolled to collect additional premiums and increase capital efficiency. The Composite was created in September 2017 and the performance inception date is March 2011. From March 2011 to September 2017, the performance track record is the performance of the Global PutWrite Equal Weight (ATM) composite. The Global PutWrite Equal Weight (ATM) composite represented the performance of all fee-paying Global PutWrite Equal Weight (ATM) strategy accounts managed by the Option Group on a fully discretionary basis regardless of market value. The Global PutWrite Equal Weight (ATM) strategy sold at-the-money puts with notional exposure equally weighted across U.S., EAFE, and EM markets. The composite was created in January 2016. The performance history of the composite prior to January 1, 2016 was comprised of the performance history of the accounts managed by the portfolio management team while at a predecessor firm. A complete list of Neuberger Berman's composites is available upon request.

Primary Benchmark Description

- The benchmark is a Custom Blend. The blend consists of 50% ICE BofAML 0-3 Month U.S. Treasury Bill Index, 16.67% S&P 500 Index, 16.67% MSCI EAFE (Net) Index (Europe, Australasia and Far East) and 16.66% MSCI Emerging Markets (Net) Index. The blend is rebalanced monthly and is calculated on a total return basis. The ICE BofAML 0-3 Month U.S. Treasury Bill Index tracks the performance of the direct sovereign debt of the U.S. government. It tracks U.S. dollar-denominated U.S. Treasury Bills with a remaining term to maturity of less than three months. The S&P 500 Index is a capitalization weighted index comprised of 500 stocks chosen for market size, liquidity, and industry group representation. The S&P 500 Index is constructed to represent a broad range of industry segments in the U.S. economy. The S&P 500 focuses on the large-cap segment of the market with over 80% coverage of US equities. The MSCI EAFE (Net) Index is a free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The MSCI Emerging Markets (Net) Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. Net total return indexes reinvest dividends after the deduction of withholding taxes, using (for international indexes) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

Secondary Benchmark Description

- The benchmark is a Custom Blend. The blend consists of 33.34% S&P 500 Index, 33.33% MSCI EAFE (Net) Index (Europe, Australasia and Far East) and 33.33% MSCI Emerging Markets (Net) Index. The blend is rebalanced monthly and is calculated on a total return basis. The S&P 500 Index is a capitalization weighted index comprised of 500 stocks chosen for market size, liquidity, and industry group representation. The S&P 500 Index is constructed to represent a broad range of industry segments in the U.S. economy. The S&P 500 focuses on the large-cap segment of the market with over 80% coverage of US equities. The MSCI EAFE (Net) Index is a free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The MSCI Emerging Markets (Net) Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. Net total return indexes reinvest dividends after the deduction of withholding taxes, using (for international indexes) a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

Reporting Currency

- Valuations are computed and performance is reported in U.S. Dollars. Performance includes reinvestment of dividends and other earnings.

Fees

- Composite Gross of Fee returns are the return on investments reduced by any trading expenses incurred during the period. Composite Net of Fee returns are the Gross of Fee returns reduced by investment advisory fees.

Fee Schedule

- The annual investment advisory fee, generally payable quarterly, is as follows: 0.65% on the first $50mn; 0.55% on the next $50mn; 0.45% thereafter.

Internal Dispersion

- Internal dispersion is calculated using the asset-weighted standard deviation of annual gross returns of those portfolios that were in the Composite for the entire year. Internal dispersion is not calculated if the Composite does not contain at least 6 portfolios for the entire year.

Annualized Standard Deviation

- The three-year annualized standard deviation measures the variability of the Composite and the benchmark returns over the preceding 36-month period. The standard deviation is not required for periods prior to 2011.

Hypothetical Backtested Performance Disclosures

The hypothetical performance results included in this material are of various backtested model portfolios that are shown for illustrative purposes only. The hypothetical results we calculated by running the model portfolios on a back-tested basis using the stated methodologies and assumptions below. The results are shown on a supplemental basis and do not represent the performance of any Neuberger Berman managed account or product and do not reflect the fees and expenses associated with managing a portfolio. The results assume no withdrawals and reinvestment of any dividends and distributions.

This following is a summary of the back-tested methodology and assumptions:

> The option strategy back-testing platform is designed to estimate historical performance of portfolios that implement systematic option writing strategies. Models support a multitude of variables including option strategy, e.g., put writing or call writing, underlying exposure (index or stock), tenor, moneyness, risk management parameters and collateral investments. While models incorporate different parameter sets, they adhere to a consistent structure across all back-tested model scenarios and our model architecture is such that returns are estimated independent of account size.
>
> All models rely on a Black-Scholes pricing to estimate option prices based on historical implied volatility surfaces. We compile daily implied volatility surfaces from exchange listed option price and/or option implied volatility data available from external data providers including the Chicago Board of Options Exchange ("CBOE") and Bloomberg LP. Additional inputs for option pricing (dividends, risk-free rate, etc.) are sourced from Bloomberg LP. Daily implied volatility surfaces allow models to price weekly expiration dates even though weekly option expirations may not have been actively traded on an exchange over the full history of a model back-test. Models methodically allocate options across weekly expirations to promote diversification across expiration dates and are assumed to settle on each Friday consistent with current option market practices.
>
> Exposures are rebalanced on a daily basis at the close of each trading day. Daily model rebalancing adjusts portfolio exposures and rolls (covers and writes) option positions consistent with specified risk management targets. Options are rolled in a manner that seeks to preserve exposures across multiple expiration dates, and risk management targets, e.g., option delta and or moneyness, are set at the inception of a back-test and applied over its full history. All trading is assumed to be transacted at market closing prices derived from closing implied volatility levels and includes estimates for transaction costs. Option strike prices follow standard option market conventions unique to the underlying index/security. Models may round up, down or to the nearest strike price when selecting option to write.
>
> Hypothetical option models are fully collateralized such that model portfolios are assumed to hold fixed income securities whose aggregate market values are greater than or equal to the aggregate notional exposure of the options. Collateral is assumed to be invested in a widely followed index(s) that approximates the performance of short-term U.S. Treasuries. Models may vary from actual strategy performance due to assignment risk for American style options, exchanged traded option contract availability, intra-day trading and differences in transaction costs (implicit and explicit).

There may be material differences between the hypothetical back-tested performance results and actual results achieved by actual accounts. Back-tested model performance is hypothetical and does not represent the performance of actual accounts. Hypothetical performance has certain inherent limitations. Unlike actual investment performance, hypothetical results do not represent actual trading and accordingly the performance results may have under- or over-compensated for the impact, if any, that certain economic or other market factors, such as lack of liquidity or price fluctuations, might have had on the investment decision-making process or results if assets were actually being managed. Hypothetical performance may also not accurately reflect the impact, if any, of other material economic and market factors, or the impact of financial risk and the ability to withstand losses. Hypothetical performance results are also subject to the fact that they are generally designed with the benefit of hindsight. As a result, the back-tested models theoretically may be changed from time to time to obtain more favorable performance results. In addition, the results are based, in part, on hypothetical assumptions. Certain of the assumptions have been made for modeling purposes and may not have been realized in the actual management of accounts. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the hypothetical results have been stated or fully considered. Changes in the model assumptions may have a material impact on the hypothetical returns presented. There are frequently material differences between hypothetical performance results and actual results achieved by any investment strategy. Neuberger Berman does not manage accounts in this manner reflected in the models.

Unless otherwise indicated, results shown reflect reinvestment of any dividends and distributions. The hypothetical performance figures are shown gross of fees, which do not reflect the deduction of investment advisory fees and other expense. If such fees and expense were reflected, returns referenced would be lower. Advisory fees are described in Part 2 of Neuberger Berman's Form ADV. A client's return will be reduced by the advisory fees and any other expenses it may incur in the management of its account. The deduction of fees has a compounding effect on performance results. For example, assume Neuberger Berman achieves a 10% annual return prior to the deduction of fees each year for a period of ten years. If a fee of 1% of assets under management were charged and deducted from the returns, the resulting compounded annual return would be reduced to 8.91%. Please note that there is no comparable reduction from the indices for the fees.

Additional Disclosures

Index Definitions

The **Global 0.5 Beta Index** is a risk matched index that is comprised of a 16.667% allocation to each of the S&P 500, MSCI EAFE and MSCI EM Indexes and 50% allocation to the ICE BofAML 0-3 month U.S. T-Bill Index rebalanced monthly.

The **Global 1.0 Beta Index** is comprised of 33.33% allocation to each of the S&P 500, MSCI EAFE and MSCI EM indices rebalanced monthly.

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 (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value. The "500" is one of the most widely used benchmarks of U.S. equity performance. As of September 16, 2005, S&P switched to a float-adjusted format, which weights only those shares that are available to investors, not all of a company's outstanding shares. The value of the index now reflects the value available in the public markets.

The **S&P 500® Low Volatility Index** measures performance of the 100 least volatile stocks in the S&P 500. The index benchmarks low volatility or low variance strategies for the U.S. stock market. Constituents are weighted relative to the inverse of their corresponding volatility, with the least volatile stocks receiving the highest weights.

The **CBOE S&P 500 PutWrite Index (PUT)** is designed to track the performance of an index option put writing strategy that sells a sequence of one-month, at-the-money, S&P 500 Index puts and invest cash at one- and three-month Treasury Bill rates. The number of puts sold varies from month to month, but is limited so that the amount held in Treasury Bills can finance the maximum possible loss from final settlement of the SPX puts, i.e., put options are fully collateralized.

The **CBOE S&P 500 BuyWrite (BXM)** is a benchmark index designed to track the performance of a hypothetical buy-write strategy on the S&P 500 Index. The BXM is a passive total return index based on (1) buying an S&P 500 stock index portfolio, and (2) "writing" (or selling) the near-term the S&P 500 Index (SPX) "covered" call option, generally on the third Friday of each month. The SPX call written will have about one month remaining to expiration, with an exercise price just above the prevailing index level (i.e., slightly out of the money). The SPX call is held until expiration and cash settled, at which time a new one-month, near-the-money call is written.

The **CBOE S&P 500 2% OTM BuyWrite Index (BXY)** uses the same methodology as the CBOE S&P 500 BuyWrite Index but the BXY Index is calculated using out-of-the-money SPX call options, rather than at-the-money SPX call options.

The **CBOE S&P 500 30-Delta BuyWrite Index (BXMD)** is designed to track the performance of a hypothetical covered call strategy that holds a long position indexed to the S&P 500 Index and sells a monthly out-of-the-money (OTM) S&P 500 Index (SPX) call option. The call option written is the strike nearest to the 30 Delta at 10:00 a.m. CT on the Roll Date.

The **CBOE S&P 500 Volatility Index® (VIX®)** is a key measure of market expectations of near-term volatility conveyed by S&P 500 stock index option prices. Since its introduction in 1993, VIX has been considered by many to be the world's premier barometer of investor sentiment and market volatility. Several investors expressed interest in trading instruments related to the market's expectation of future volatility, and so VIX futures were introduced in 2004, and VIX options were introduced in 2006.

The **CBOE S&P 500 One-Week PutWrite (WPUT)** Index is designed to track the performance of a hypothetical strategy that sells an at-the-money (ATM) S&P 500 Index (SPX) put option on a weekly basis. The maturity of the written SPX put option is one week to expiry. The written SPX put option is collateralized by a money market account invested in one-month Treasury bills.

The **CBOE S&P 500 Iron Condor Index (CNDR)** is a benchmark index designed to track the performance of a hypothetical option trading strategy that: (1) sells a rolling monthly Out-of-the-Money (OTM) SPX Put option and a rolling monthly Out-of-the-Money (OTM) SPX Call option, (2) buys a rolling monthly OTM SPX Put option and a rolling monthly OTM SPX Call option to reduce the risk and (3) holds a money market account invested in one-month Treasury bills, which is rebalanced on the option Roll Day and is designed to limit the downside return of the index. All SPX options involved are AM-settled and roll on a monthly basis. All option positions are one unit.

The **CBOE S&P 500 Zero-Cost Put Spread Collar Index (CLLZ)** is designed to track the performance of a hypothetical option trading strategy that 1) holds a long position indexed to the S&P 500 Index; 2) on a monthly basis buys a 2.5% - 5% S&P 500 Index (SPX) put option spread; and 3) sells a monthly out-of-the-money (OTM) SPX call option to cover the cost of the put spread.

The **Bloomberg Barclays U.S. High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

The **Bloomberg Barclays U.S. Aggregate Index** represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

Additional Disclosures

Index Definitions

The **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% 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.

The **MSCI EAFE Index** is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. As of March 31, 2018, the MSCI EAFE Index consists of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the UK.

The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. As of March 31, 2018, the MSCI Emerging Markets Index consists of the following 24 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The **MSCI ACWI (All Country World Index) Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of March 31, 2018, the MSCI ACWI consists of 47 country indices comprising 23 developed and 24 emerging market country indices. The developed market country indices included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UK and the US. The emerging market country indices included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The **ICE BofAML U.S. T-Bill 0-3 Month Index** tracks the performance of the U.S. dollar denominated U.S. Treasury Bills publicly issued in the U.S. domestic market with a remaining term to final maturity of less than 3 months.

The **ICE BofAML 7-10 Year U.S. Treasury Index** is a subset of the ICE BofAML U.S. Treasury Index including all securities with a remaining term to final maturity greater than or equal to 7 years and less than 10 years.

The **HFRI Equity Hedge Index** is comprised of managers typically maintaining at least 50%, and in some cases be substantially entirely invested in equities and equity derivatives, both long and short. Strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. The HFRI Emerging Markets Index is comprised of strategies according to their regional investment focus only. There is no investment strategy criteria for inclusion in these indices.

The **HFRI EH Equity Market Neutral Index** consists of hedge funds that employ Equity Market Neutral strategies which typically employ sophisticated quantitative techniques analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Additional Disclosures

Institutional-Oriented Equity and Fixed Income AUM Benchmark Outperformance Note: Institutional-oriented equity and fixed income assets under management ("AUM") includes the firm's equity and fixed income institutional separate account ("ISA"), registered fund, and managed account/wrap ("MAG") offerings and are based on the overall performance of each individual investment offering against its respective benchmark offerings and are based on the overall performance of each individual investment offering against its respective benchmark. High net worth/private asset management ("HNW") AUM is excluded. For the period ending June 30, 2019, the percentage of total institutional-oriented equity AUM outperforming the benchmark was as follows: Since Inception: 88%; 10-year: 73%; 5-year: 75%; and 3-year: 83%; and total institutional-oriented fixed income AUM outperforming was as follows: Since Inception: 94%, 10-year: 52%; 5-year: 77%; and 3-year: 67%. If HNW AUM were included, total equity AUM outperforming the benchmark was as follows: Since Inception: 86%; 10-year: 47%; 5-year: 52%; and 3-year: 58%; and total fixed income AUM outperforming was as follows: Since Inception: 94%; 10-year: 53%; 5-year: 76%; and 3-year: 66%. Equity and Fixed Income AUM outperformance results are asset weighted so individual offerings with the largest amount of assets under management have the largest impact on the results. As of 6/30/2019, six equity teams/strategies accounted for approximately 52% of the total firm equity (ISA, MAG and mutual fund combined) assets reflected, and nine strategies accounted for approximately 52% of the total firm fixed income (ISA, MAG and mutual fund combined) assets reflected. Performance for the individual offerings reflected are available upon request. AUM for multi-asset class, balanced and alternative (including long-short equity or fixed income) offerings, as well as AUM for hedge fund, private equity and other private investment vehicle offerings are not reflected in the AUM outperformance results shown. AUM outperformance is based on gross of fee returns. Gross of fee returns do not reflect the deduction of investment advisory fees and other expenses. If such fees and expenses were reflected, AUM outperformance results would be lower. Investing entails risk, including possible loss of principal. **Past performance is no guarantee of future results.**

Private Equity Outperformance Note: The performance information includes all funds, both commingled and custom, managed by NB Alternatives Advisers LLC with vintage years of 2007 – 2016, with the exception of a closed-end, public investment company registered under the laws of Guernsey (the "Funds"). Accounts that are only monitored are excluded. Vintage years post 2016 are excluded as benchmark information is not yet available. Please note that funds without a comparable benchmark are excluded (this includes certain commingled funds with unique investment objectives, specialty strategies, and private debt funds).

Percentages are based on the number of funds, calculated as the total number of funds whose performance exceeds their respective benchmarks divided by the total number of all funds with vintage years of 2007 through 2016. Performance is measured by net IRR, MOIC, and DPI and is compared to the respective index's median net IRR, MOIC and DPI, respectively. The Cambridge Secondary Index was used for secondary-focused funds; the Cambridge Buyout and Growth Equity for US and Developed Europe was used for co-investment-focused funds; The Cambridge European PE Index was used for direct Italian Investment Strategies; the Cambridge Fund of Funds Index was used for commingled funds and custom portfolios comprised of primaries, secondaries and co-investments.

The Cambridge Associates LLC indices data is as of December 31, 2018, which is the most recent data available. The Cambridge Associates Fund of Funds Index is the benchmark recommended by the CFA Institute for benchmarking overall private equity fund of funds performance. The benchmark relies on private equity funds self-reporting data for compilation and as such is subject to the quality of the data provided. The median net multiple of Cambridge Associates Fund of Funds Index is presented for each vintage year as of December 31, 2018, the most recent available. Cambridge Associates data provided at no charge.

While one of the secondary funds closed in 2008, Cambridge Associates classifies that particular fund as a 2007 vintage year fund (the year of its formation) and, therefore, the Cambridge Associates benchmarks used herein are for 2007 vintage year funds.

Private Offerings: Certain strategies referenced herein may only be available through a private offering of interests made pursuant to offering and subscription documents, which will be furnished solely to qualified investors on a confidential basis at their request for their consideration in connection with an offering. These documents will contain information about the investment objective, terms and conditions of an investment in such vehicle and will also contain tax information and risk disclosures that are important to an investment decision. Any decision to invest in such vehicle should be made after a careful review of these documents, the conduct of such investigations as an investor deems necessary or appropriate and after consultation with legal, accounting, tax and other advisors in order to make an independent determination of the suitability and consequences of an investment in such vehicle.

Additional Disclosures

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Options involve investment strategies and risks different from those associated with ordinary portfolio securities transactions. By writing put options, an investor assumes the risk of declines in the value of the underlying instrument and the risk that it must purchase the underlying instrument at an exercise price that may be higher than the market price of the instrument, including the possibility of a loss up to the entire strike price of each option it sells but without the corresponding opportunity to benefit from potential increases in the value of the underlying instrument. If there is a broad market decline and the investor is not able to close out its written put options, it may result in substantial losses to the investor. The investor will receive a premium from writing options, but the premium received may not be sufficient to offset any losses sustained from exercised put options. Put writing makes an explicit trade-off between up-market participation and down-market participation, while still seeking reasonable returns in flat markets. As such, in up markets, an investor typically will not participate in the full gain of the underlying index above the premium collected.

This material may include estimates, outlooks, projections and other “forward-looking statements.” Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed.

Leverage. Option overlay strategies employ the use of derivatives and leverage, which involves the risk of loss greater that the actual cost of the investment, and also involves margin and collateral requirements. Leverage magnifies both the favorable and unfavorable effects of price movements in the investments made by an account, which may subject it to substantial risk of loss. In the event of a sudden, precipitous drop in value of an account’s assets occasioned by a sudden market decline, it might not be able to liquidate assets quickly enough to meet its margin or borrowing obligations. Also, because acquiring and maintaining positions on margin allows an account to control positions worth significantly more than its investment in those positions, the amount that it stands to lose in the event of adverse price movements is higher in relation to the amount of its investment. In addition, since margin interest will be one of the account’s expenses and margin interest rates tend to fluctuate with interest rates generally, it is at risk that interest rates generally, and hence margin interest rates, will increase, thereby increasing its expenses.

Representative portfolio information (characteristics, holdings, weightings, etc.) is based upon the composite or a representative/model account. Representative accounts are selected based on such factors as size, length of time under management and amount of restrictions. Any segment level performance shown (equity only or fixed income only) is presented gross of fees and focuses exclusively on the investments in that particular segment of the portfolio being measured (equity or fixed income holdings) and excludes cash. Client accounts are individually managed and may vary significantly from composite performance and representative portfolio information. Specific securities identified and described do not represent all of the securities purchased, sold or recommended for advisory clients. It should not be assumed that any investments in securities, companies, sectors or markets identified and described were or will be profitable.

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