



# ADVANTAGE COMPENDIUM

FIA Volatility Control Index Overview

Spring 2021

## Fixed Index Annuity Volatility Controlled Indices

Five years ago when the first overview was published there were a little over two dozen active volatility controlled indices (VCIs) in the fixed index annuity (FIA) space. Today over seventy VCIs have been or are currently used. Several new volatility controlled indices have come to the FIA market since the last report. The new indexes and offering carriers are:

Barclays Atlas 5  
Barclays Focus 50  
BofAML Destinations Daily Risk Control 5% ER Index  
Fidelity Multifactor Yield Index 5% ER  
First Trust Capital Strength Barclays 5% Index  
HSBC AI Powered US Equity Index  
Janus Smart Passage SG Index  
Morgan Stanley Dynamic Contribution Index  
Morgan Stanley Expanded Horizons Index  
NASDAQ FC (Fast Convergence) Index  
PIMCO Global Elite Markets Index  
S&P 500 Prism Factor Index

Equitable Life & Casualty  
EquiTrust  
American Equity  
Midland National/North American  
Delaware Life  
Athene  
Nassau Financial Group  
Midland National/North American  
American General  
Athene  
American General  
Transamerica

The overview shows returns and volatility levels for 2020. The stock market was roughly twice as volatile in 2020 as it was in 2019 and this was reflected in generally low returns for VCIs. The average return for the year was 2% – before deducting any spreads – and a quarter posted losses, which would have been recorded as zero returns for their respective FIA.

### VCIs

Two indices on the surface may sound identical, but unless you dig deeply into the lines of print you would never know how different they are. One can find carriers that do use identical volatility controlled indices, where simply looking at the spreads would tell you which could post a higher return, but these are the exception. The reality is that VCIs are both complicated and complex. This overview takes the various index specifications from the VCIs and sorts them by pricing lever and strategy, along with a brief description of what the levers do. All returns reflect gross changes in the index before the application of crediting method spreads, caps or partial participation rates.

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**A VCI Is Not A Hybrid**

Adding a turbocharger to a gas engine affects the performance of the engine, but the car is still propelled by the gas engine. However, adding an electric engine creates two distinct means of propulsion and thus creates a hybrid.

Volatility controlled indices have erroneously been referred to by some as hybrids. A hybrid combines two disparate concepts to make a third – a long-term-care annuity is an example of a hybrid annuity. By contrast, VCIs are simply another way to account for the volatility cost of index-linked interest and thus are related to other volatility reactive methods such as averaging, rebalancing, monthly caps or rainbow methods.

**A VCI Has A State Volatility Target (Trigger)**

A volatility controlled index has a pre-determined numeric volatility target level; the goal is to keep the overall index volatility at or below the target number. The way this happens is when volatility in the equity index(es) begins to climb, money is moved out of the equity side and into the low volatility side and when volatility decreases, the reverse happens. This has the effect of keeping overall volatility at or below the target. To be a vol-controlled index there must be a stated trigger for the entire index. There are indices that talk about managing for volatility, but unless they have a hard number trigger that forces the reallocation they are not a volatility controlled index.

I'll conclude my introduction with the ending of the first overview: How does one explain an FIA volatility controlled index to a consumer? The same way that any fixed index annuity crediting method is explained...

"This fixed index annuity gives you the potential for hopefully earning competitive interest over time, with a worse case that you will never lose what you've already earned."

**Cash vs Bonds**

Volatility control means moving from higher to lower volatility when necessary. For many indices the low volatility component is cash or a cash equivalent, which essentially has no volatility and no or very low returns. A few vol-controlled indices use bonds as the low-vol component. These are:

Barclays U.S. Dynamic Balance II

Guggenheim BP Blended Index

PIMCO Global Optima Index

S&P 500 Daily Risk Control 2 8% Index

Transparent Value Blended Index

Using bonds as the low volatility component should result in a higher return than simply using cash, as could using a mix of bonds and low volatility equities. However, if interest rates go up, the bond element could post negative returns and impact any positive higher volatility component gains.

### Servicing Costs

Some FIA vol-controlled indices deduct a servicing or index fee that ranges from 0.25% to 1.0% per annum that is typically deducted, prorated daily; information about the servicing fee is often found in the disclaimer language.

<b>Has Stated Service Fee</b>	<b>Fee</b>
BNP Paribus High Dividend Plus	1.00%
Barclays All Caps Trailblazer Sector 5	0.85%
Barclays Atlas 5	0.20%-0.50%
Barclays Focus50	0.50%
Fidelity Multifactor Yield Index 5% ER	0.50%
Goldman Sachs Motif Aging of America Dynamic Balance	0.75%
HSBC AI Powered US Equity Index	0.50%
UBS Market Pioneers Index	0.75%
BNP Paribas Multi Asset Diversified 5 Index	0.50%
Barclays All Caps Trailblazer 5 Index	0.50%
Goldman Sachs Dynamo Strategy Index	0.50%
Goldman Sachs Momentum Builder Multi-Asset Class	0.50%
Janus Market Consensus (and II) Index	0.50%
Janus Smart Passage SG Index	0.50%
JPMorgan ETF Efficiente 5 Index	0.50%
J.P. Morgan Strategic Balanced Index	0.50%
Lenwood Volatility Control Index	0.50%
ML Strategic Balanced Index	0.50%
Morgan Stanley Diversified Select	0.50%
Morgan Stanley Dynamic Allocation	0.50%
Morgan Stanley Dynamic Balance	0.50%
Morgan Stanley Target Equity Balanced Index	0.50%
NASDAQ FC (Fast Convergence) Index	0.50%
NYSE Zebra Edge	.02% on Treasury Rebalance
PIMCO Global Elite Markets Index	0.50%

**Excess Return**

Excess returns means the yield of a predetermined benchmark is deducted from index gains.

<b>Excess Return Based</b>	<b>If Yes, benchmark</b>
Barclays All Caps Trailblazer 5 Index & Trailblazer Sector 5	Yes, 3 month LIBOR
Barclays Atlas 5	Yes, 1 month LIBOR
Barclays Focus50	Yes, 1 month LIBOR
BlackRock iBLD Ascenda Index	Yes, 3 month LIBOR
BNP Paribus High Dividend Plus	Yes, 3 month LIBOR
BNP Paribas Multi Asset Diversified 5 Index	Yes, roll return
Citi Flexible Allocation 6 ERI w/Participation	Yes, 3 month Core & Res
Credit Suisse CS Tactical Multi Asset Index	Yes, Fed Funds rate
Deutsche Bank Momentum Asset Allocator 5.5% Volatility Control Index	Yes, over money market
Fidelity Multifactor Yield Index 5% ER	Yes, Fed Funds rate
First Trust Capital Strength Barclays 5% Index	Yes, CSR Index
Franklin US Index	Yes, 3 month LIBOR
Goldman Sachs Dynamo Strategy Index	Yes, Fed Funds rate
Goldman Sachs Motif Aging of America Dynamic Balance	Yes, Fed Funds rate
HSBC AI Powered US Equity Index	3-month LIBOR rate
Janus Market Consensus (and II) Index	Yes, 3 month LIBOR
Janus Smart Passage SG Index	3-month LIBOR rate
JP Morgan Mozaic II	Yes, roll return
J.P. Morgan Strategic Balanced Index	Yes, 2 & 3 month LIBOR
JP Morgan U.S. Sector Rotator 5 Index	Yes, 3 month Core & Res
Merril Lynch RPM Index	Yes, 3 month LIBOR
Morgan Stanley Dynamic Allocation	Yes, Fed Funds rate
Morgan Stanley Dynamic Balance	Yes, Fed Funds rate
Morgan Stanley Expanded Horizons	Yes, N/A
Morgan Stanley Global Opportunities Index	Yes, 3 month LIBOR
Morgan Stanley Target Equity Balanced Index	Yes, 3 month LIBOR
NASDAQ FC (Fast Convergence) Index	Yes
PIMCO Balanced	Yes, 3 month LIBOR
PIMCO Global Elite Markets Index	Yes
S&P Multi-Asset Risk Control (MARC) 5% Index	Yes - Fed Funds rate
S&P U.S. Retiree Spending Index	Yes, overnight LIBOR
Shiller Barclays Global Index	Yes
UBS Market Pioneers Index	Yes, 3 month LIBOR
WisdomTree Siegel Strategic Value Index	Yes

### Increased Usage of Excess Return Component

The percentage of indices calculating an excess return has soared. The key point is an excess return component means the benchmark return is deducted from the gross return to determine the “excess” return.

To get a feel for the force of this, say the 3-month LIBOR return is the benchmark and the gross index return is 6%. In 2016 the 3-month LIBOR was 0.6% so the “excess” return would have been 5.4%. In March 2019 the 3-month LIBOR was 2.6% so the “excess” return to the annuity owner would have been 3.4% – before any deductions for spreads.

### **Maximum Leverage/Exposure**

Exposure to the equities side may exceed 100% (no leverage) when volatility is below target level.

	<b>Maximum Leverage/Exposure</b>
Barclays All Caps Trailblazer 5 Index / Trailblazer Sector 5	150%
Barclays Atlas 5	225%
Barclays Focus50	150%
BNP Paribas Multi Asset Diversified 5 Index	200%
Credit Suisse CS Tactical Multi Asset Index	150%
Fidelity Multifactor Yield Index 5% ER	150%
Franklin US Index	150%
HSBC AI Powered US Equity Index	150%
Lenwood Volatility Control Index	150%
Janus Market Consensus (and II) Index	400%
Janus Smart Passage SG Index	200%
JP Morgan Mozaic II	300%
JP Morgan U.S. Sector Rotator 5 Index	220%
Merril Lynch RPM Index	150%
Morningstar Dividend Yield Focus Target Volatility 5 Index	150%
Morgan Stanley Diversified Select	150%
Morgan Stanley Dynamic Balance	150%
Morgan Stanley Global Opportunities Index	300%
Morgan Stanley Target Equity Balanced Index	180%
NASDAQ FC (Fast Convergence) Index	175%
NYSE Zebra Edge	150%
PIMCO Global Elite Markets Index	150%
Shiller Barclays CAPE US Sector Risk Controlled 10% USD Tot Rtn Index	150%
S&P 500 Daily Risk Control 5% Index / Daily Risk Control 10% Index	150%
S&P 500 Low Volatility Daily Risk Control 5% Index / 8% Index	150%
UBS Market Pioneers Index	150%

### Volatility Target (Trigger)

In identical indices a 5.5% volatility target should provide a higher return potential than a 5% target, *ceteris paribus*; however, trying to use target rates to compare different indices doesn't work. As an example, the same option money spent to get you a 55% participation rate in a high tech index might get you 100% participation in a utilities index, but, the reason you got almost twice the participation is because the utilities were expected to produce half the return of the high tech stocks.

The vast majority of VCIs have a 5% trigger. A handful has a volatility target of 4% to 4.5%. Another handful uses a target of 10% or higher. Unless the index make-ups are identical, a higher trigger does not mean you are going to get a higher return.

### Major Strategies

*High Dividend* – Looks for stocks with the highest supportable dividend yield and buys them, with the belief that high dividend stocks will outperform

*Low Volatility* – Looks for stocks with the low volatility and buys them, with the belief that low volatility stocks will outperform. This may be combined with an undervalued strategy. This is, by far, the predominant strategy.

*Momentum* – Based on a belief that when certain stocks or sectors are going up that they will continue to go up, the index jumps on board the moving securities.

*Undervalued* – Finds stocks that appear to be undervalued, based on digging into the company's financial using a standardized set of criteria. The most undervalued stocks are then purchased with the belief their value will be recognized.

### Other Specifications

Index	Composition
Barclays All Caps Trailblazer 5 Index	SPDRs of S&P 500 & MidCap400; iShares of Russell 2000, 20+ Year Treasury Bond, 7-10 Year Treasury Bond and 1-3 Year Treasury Bon
Barclays Atlas 5	Atlas is comprised of 6 equity and 5 bond international components, may be rebalanced daily.
Barclays Focus 50	Low Volatility U.S. stocks and U.S. Treasuries
BofAML Destinations DRC 5% ER Index	A mix of Equity Asset, a Fixed Income Asset, an Alternative Asset and Cash.
Bloomberg (Barclays) U.S. Dynamic Balance II	Shifts between S&P 500 & Barclays U.S. Aggregate RBI Series Index.
Barclays All Caps Trailblazer Sector 5	13 exchange-traded funds ranging from industrials to tech to health care to energy plus 3 bond ETFs and an U.E. real estate ETF
BlackRock Diversa Volatility Control Index	Up to 21 BlackRock iShares ETFs with equity, fixed income & alternative exposures rebalanced monthly
BlackRock iBLD Ascenda Index	Stock, bond, real estate ETS and gold iShares

## Other Specifications - continued

Index	Composition
BlackRock iBLD Claria Index	Moves from equity basket (ishares ETF S&P 500, Russell 2000, MSCI Emerging Mkts, MSCI EAFE) to the fixed income basket (ishares ETF 7-10 Yr T-bond, 3-7 Yr T-bond, 1-3 Yr T-bond) and back
BNP Paribas High Dividend Plus	U.S. dividend paying stocks; the 40 with the highest economic yield are included
BNP Paribas Multi Asset Diversified 5 Index	3 equity futures indices, 3 bond futures indices plus 2 commodity indices from the United States, Europe and Japan.
Citi Flexible Allocation 6 ERI w/Participation	Multi-asset mix providing exposure to equities, fixed income, commodities and real estate and gold.
Credit Suisse CS Tactical Multi Asset Index	10 ETFs: equities, fixed income (credit and US treasuries), commodities & real estate
Deutsche Bank CROCI Sectors II USD 5.5% VCI	Selects from S&P 500, EuroStoxx Large Index & TOPIX 100
Deutsche Bank CROCI Sectors III USD 5.5% VCI	Selects from S&P 500, EuroStoxx Large Index & TOPIX 100
Deutsche Bank Momentum Asset Allocator 5.5% VCI	Equities, gold, interest rates
Franklin US Index	Blends large cap stocks with 5 & 10 Yr US T-Notes
Fidelity Multifactor Yield Index 5% ER	Applies fixed income overlay to 6 equity buckets
First Trust Capital Strength Barclays 5%	Selects 50 large-cap U.S. stocks and Treasury Futures
Goldman Sachs Motif Aging of America Dynamic Balance	Index invests in businesses dealing with retirees (nursing home REITs, Medicare insurers, healthcare providers) and 10 Year U.S. Treas Rolling Futures Index.
Goldman Sachs Dynamo Strategy Index	Developed Market Equities, fixed income, commodities & real estate
Goldman Sachs Momentum Builder Multi-Asset CI	US equities & bonds, International bonds, & commodities.
Guggenheim RBP Blended Index	Reallocates between the Price Return version of Guggenheim RBP Large-Cap Defensive Index and S&P 2-Year U.S. Treasury Note Futures Total Return Index.
HSBC AI Powered US Equity Index	Combines 250 U.S. Stocks
Janus Market Consensus (and II) Index	Quarterly selection of the 250 stocks exhibiting the lowest 3-month volatility among the 500 largest U.S. market capitalizations
Janus Smart Passage SG Index	Applies a variation of the Rainbow Method where the high performer is recorded as zero.
JPMorgan ETF Efficiente 5 Index	Mix of 12 ETFs: equities, fixed income, commodities and real estate and gold
JP Morgan Mozaic II	Selects 9 out of 15 bond, global, commodities index futures contracts
JP Morgan U.S. Sector Rotator 5 Index	Up to five ETFs out of 10 equity sectors & the PIMCO Total Return Active ETF

## Other Specifications - continued

Index	Composition
Lenwood Volatility Control Index	S&P 500 Total Return, Low Volatility Total Return & Equal Weight Total Return indices with 2, 5, and 10 yrs U.S. T-note Futures indices.
Merrill Lynch RPM Index	Up to seven underlying assets: S&P Low Volatility Index, MSCI EAFE i Shares, MSCI Emerging Mkts i Shares, DJ US Real Estate i Shares, SPDR Gold ETF, ML 10-Yr U.S. Treas Fut Index, ML 2-Yr Treas Fut Index
ML Strategic Balanced Index	S&P 500 Index; Fixed Income Asset is Merrill Lynch 10-yr U.S. Treas Futures Total Return Index
Morgan Stanley Diversified Select	Global equity ETFs, real estate, foreign exchange
Morgan Stanley Dynamic Allocation	Global Equities, treasuries, gold & real estate
Morgan Stanley Dynamic Balance	Global Equities, treasuries, gold & real estate
Morgan Stanley Expanded Horizons	Global Equities, treasuries, gold & real estate
Morgan Stanley Global Opportunities Index	A Broad mix of equities, short term Treasuries, bonds and alternatives.
Morgan Stanley Target Equity Balanced Index	S&P 500, DAX 30, Nikkei 225, 5-Yr T-Note, German Euro-Bond, 10-Yr Japan Bond, oil, soybeans, gold
Morningstar Dividend Yield Focus Target Volatility 5	Highest dividend paying 75 U.S. stocks
NASDAQ FC (Fast Convergence) Index	Has a 4% Monthly Cap applied to Nasdaq 100
NYSE Expanded Opportunities Index	Allocates between 13 global equities, fixed income, commodities, REITs and cash choices.
NYSE Zebra Edge Index	Each quarter removes the "hot" stocks and reallocates to "cool" stocks, but when vol is up moves to 5 or 10 yr US Treas, unless rising rates, than cash
PIMCO Balanced	Rebalances Between SPDR S&P 500 ETF, 10-Yr T-Note Futures and cash
PIMCO Global Elite Markets Index	Rebalances international Equities & bonds
PIMCO Global Optima Index	SPDR S&P 500 ETF; SPDR S&P MidCap 400 ETF; Russell 2000 Index; MSCI EAFE; MSCI Emerging Markets Index; and iShares Core U.S. Aggregate Bond ETF. All equity indices are total return, including dividends.
PIMCO Tactical Balanced Index	Allocates daily between S&P 500 Index & PIMCO Synthetic Bond Index
S&P 500 Average Daily Risk Control 10% Index	S&P 500 index & cash component accruing interest.
S&P 500 Daily Risk Control 2 8% Index	S&P 500 & bond index
S&P 500 Daily Risk Control 5% Index	S&P 500 index & cash component accruing interest.
S&P 500 Daily Risk Control 10% Index	S&P 500 index & cash component accruing interest.

## Other Specifications - continued

Index	Composition
S&P 500 Dividend Aristocrats Daily Risk Control 5%	S&P 500 stocks that have increased their dividends for the last 25 years.
S&P 500 Low Volatility Daily Risk Control 5% Index	S&P 500 Low Volatility Index & cash component accruing interest.
S&P 500 Low Volatility Daily Risk Control 8% Index	S&P 500 Low Volatility Index & cash component accruing interest.
S&P Multi-Asset Risk Control (MARC) 5% Index	Combines S&P 500 Total Return Index, S&P GSCI Gold Excess Return Index & S&P 10-Year U.S. Treasury Note Futures Excess Return Index with a cash component.
S&P 500 Prism Factor Index	S&P 500, 10 Year U.S. Treasury Futures Index (Bonds), S&P GSCI Futures (Commodities), and Cash.
S&P U.S. Retiree Spending Index	50% stocks impacted by an aging population & 25% US Treas Note Futures & 25% US Treas Note Futures
Shiller Barclays CAPE US Sector Risk Controlled 10% USD Total Return Index	Monthly ranking of the 10 US sectors based on modified CAPE ratio and price momentum, equally allocating across top 4 ranked sectors.
Shiller Barclays Global Index	The Index uses Shiller's CAPE ratio to identify undervalued equities from the world's three largest developed markets: the United States, Eurozone and Japan. It then rebalances between the undervalued equities, bonds and commodities on a monthly basis.
Transparent Value Blended Index	Transparent Value Large-Cap Defensive Index.
UBS Market Pioneers Index	Combines Zebra Edge US Equity Index, Jim Rogers Global Consumer Commodities Index, Solactive 10-Year US Treasury Future Index
WisdomTree Siegel Strategic Value Index	The index evaluates 500 largest U.S. stocks for operating earnings relative to their valuation and selects four most undervalued market sectors.

Index	Volatility Target	Stated Service Fee	Excess Return Based	No/Low Volatility Component
Barclays All Caps Trailblazer 5 Index	5.00%	0.50%	Yes	Cash
Barclays All Caps Trailblazer Sector 5	5.00%	0.85%	Yes	3-month ICE LIBOR rate
Barclays Atlas 5	5.00%	0.20%-0.50%	Yes	Cash
Barclays Focus 50	5.00%	0.50%	Yes	Cash
BofAML Destinations DRC 5% ER Index	5.00%	N/A	Yes	Cash
Bloomberg (Barclays) U.S. Dynamic Balance II	5.00%	No	No	Bond
BlackRock Diversa Volatility Control Index	7.00%	No	Yes	Cash
BlackRock iBLD Ascenda Index	6.00%	No	Yes	Cash

## Other Specifications - continued

Index	Volatility Target	Stated Service Fee	Excess Return Based	No/Low Volatility Component
BlackRock iBLD Claria Index	4.00%	No	No	Cash
BNP Paribas High Dividend Plus	6.00%	1.00%	Yes	Cash
BNP Paribas Multi Asset Diversified 5	5.00%	0.50%	Yes	Cash
Citi Flexible Allocation 6 ERI w/Participation	6.00%	No	Yes	Cash
Credit Suisse CS Tactical Multi Asset Index	6.00%	No	Yes	Cash
Deutsche Bank CROCI Sectors II USD 5.5% VCI	5.50%	No	No	Cash
Deutsche Bank CROCI Sectors III USD 5.5% VCI	5.50%	No	No	Cash
Deutsche Bank Momentum Asset Allocator 5.5% VCI	5.50%	0.25%	Yes	Cash
Fidelity Multifactor Yield Index 5% ER	5.00%	0.50%	Yes	Cash
First Trust Capital Strength Barclays 5%	5.00%			
Franklin US Index	7.00%	No	Yes	Cash
Goldman Sachs Motif Aging of America Dynamic Balance	5.00%	0.75%	Yes	Cash
Goldman Sachs Dynamo Strategy Index	5.00%	0.50%	Yes	Cash
Goldman Sachs Momentum Builder Multi-Asset Cl	4.50%	0.50%	No	Cash
Guggenheim RBP Blended Index	6.25%	No	No	Bond
HSBC AI Powered US Equity Index	6.00%	0.50%	Yes	Cash
Janus Market Consensus (and II) Index	20%. Total return uses a 4% month index cap.	0.50%	Yes	3-month LIBOR rate
Janus Smart Passage SG Index	16.5%	0.50%	Yes	3-month LIBOR rate
JPMorgan ETF Efficiente 5 Index	5.00%	0.50%	No	Cash
JP Morgan Mozaic II	4.20%	No	Yes	Cash
J.P. Morgan Strategic Balanced Index	6.00%	0.50%	Yes	2-month and 3-month USD LIBOR rates
JP Morgan U.S. Sector Rotator 5 Index	5.00%	No	Yes	Cash
Lenwood Volatility Control Index	7.00%	0.50%	No	Cash
Merril Lynch RPM Index	5.00%	No	Yes	Cash
ML Strategic Balanced Index	5.00%	0.50%	No	Cash
Morgan Stanley Diversified Select	5.00%	0.50%	Yes	Cash
Morgan Stanley Dynamic Allocation	5.00%	0.50%	Yes	Cash
Morgan Stanley Dynamic Balance	5.00%	0.50%	Yes	Cash
Morgan Stanley Dynamic Contribution	5.00%	N/A	N/A	N/A
Morgan Stanley Expanded Horizons	5.00%	N/A	Yes	N/A

## Other Specifications - continued

Index	Volatility Target	Stated Service Fee	Excess Return Based	No/Low Volatility Component
Morgan Stanley Global Opportunities Index	5.00%	No	Yes	Cash
Morgan Stanley Target Equity Balanced Index	6.50%	0.50%	Yes	Cash
Morningstar Dividend Yield Focus Target Volatility 5	5.00%	No	No	Cash
NASDAQ FC (Fast Convergence) Index	12.5%	0.50%	Yes	Cash
NYSE Expanded Opportunities Index	5.00%	No	No	Cash
NYSE Zebra Edge Index	5.00%	No	No	Cash
PIMCO Global Elite Markets Index	5.00%	0.50%	Yes	Cash
PIMCO Global Optima Index	7.50%	No	No	Bonds & Cash
PIMCO Balanced	5.00%	No	Yes	Cash
PIMCO Tactical Balanced Index	4.50%	No	No	Cash
S&P 500 Average Daily Risk Control 10% Index	10.00%	No	No	Cash
S&P 500 Daily Risk Control 2 8% Index	8.00%	No	No	Bond
S&P 500 Daily Risk Control 5% Index	5.00%	No	No	Cash
S&P 500 Daily Risk Control 10% Index	10.00%	No	No	Cash
S&P 500 Dividend Aristocrats Daily Risk Control 5%	5.00%	No	No	Cash
S&P 500 Dividend Aristocrats Daily Risk Control 8%	8.00%	No	No	Cash
S&P 500 Low Volatility Daily Risk Control 5% Index	5.00%	No	No	Cash
S&P 500 Low Volatility Daily Risk Control 8% Index	8.00%	No	No	Cash
S&P Multi-Asset Risk Control (MARC) 5% Index	5.00%		Yes	Cash
S&P 500 Prism Factor Index	5.00%	No	No	Cash
S&P U.S. Retiree Spending Index	5.00%	No	No	Cash
Shiller Barclays CAPE US Sector Risk Controlled 10% USD Total Return Index	10.00%	No	No	Cash
Shiller Barclays Global Index	6.00%	No	Yes	Cash
Transparent Value Blended Index	6.25%	No	No	2 Yr T-Notes
UBS Market Pioneers Index	5.00%	0.75%	Yes	Cash
WisdomTree Siegel Strategic Value	6.00%	No	Yes	Cash

## Other Specifications - continued

Index	Index Strategy	Maximum Leverage/Exposure	Index Live Date
Barclays All Caps Trailblazer 5 Index	Volatility	150%	9/30/2016
Barclays All Caps Trailblazer Sector 5	Volatility	150%	7/5/2016
Barclays Atlas 5	Volatility	225%	12/6/2019
Barclays Focus 50	Volatility	150%	5/31/2019
BofAML Destinations DRC 5% ER Index	Volatility	N/A	6/4/2020
Barclays U.S. Dynamic Balance II	Volatility	100%	4/15/2015
BlackRock Diversa Volatility Control	Momentum	100%	10/15/2015
BlackRock iBLD Ascenda Index	Momentum	100%	9/6/2018
BlackRock iBLD Claria Index	Volatility	100%	1/19/2018
BNP Paribus High Dividend Plus	Dividend	100%	7/28/2014
BNP Paribas Multi Asset Diversified 5	Volatility	200%	1/25/2016
Citi Flexible Allocation 6 ERI w/Particip	Volatility	100%	7/28/2014
Credit Suisse CS Tactical Multi Asset In	Volatility	150%	8/25/2014
Deutsche Bk CROCI Sect II USD 5.5%	Under Valued	100%	3/13/2015
Deutsche Bk CROCI Sect III USD 5.5%	Under Valued	100%	3/13/2015
Deutsche Bank Momentum Asset Allocator 5.5% VCI	Momentum	100%	5/1/2015
Fidelity Multifactor Yield Index 5% ER	Volatility	150%	12/11/2019
First Trust Capital Strength Barclays 5%	Volatility	150%	3/25/2020
Franklin US Index	Value	150%	11/13/2017
Goldman Sachs Motif Aging of America Dynamic Balance	Momentum	150%	8/15/2018
Goldman Sachs Dynamo Strategy Index	Momentum	100%	6/14/2015
Goldman Sachs Momentum Builder Multi-Asset CI	Momentum	100%	7/25/2014
HSBC AI Powered US Equity Index	Volatility	150%	8/19/2019
Janus Market Consensus Index	Volatility	400%	5/16/2017
Janus Smart Passage SG Index	Volatility	200%	4/2/2019
JPMorgan ETF Efficiente 5 (and II) Index	Volatility	100%	10/29/2010
JP Morgan Mozaic II	Volatility	300%	12/28/2016
J.P. Morgan Strategic Balanced Index	Dividend	100%	7/17/2017
JP Morgan U.S. Sector Rotator 5 Index	Volatility	220%	12/23/2016
Lenwood Volatility Control Index	Momentum	150%	5/28/2014
Merrill Lynch RPM Index	Volatility	150%	3/1/2016
ML Strategic Balanced Index	Risk-Parity	150%	8/12/2014
Morgan Stanley Diversified Select	Momentum	150%	3/31/2015
Morgan Stanley Dynamic Allocation	Momentum	100%	9/18/2013
Morgan Stanley Dynamic Balance	Volatility	150%	7/1/2015
Morgan Stanley Dynamic Contribution	Volatility	N/A	4/30/2019
Morgan Stanley Expanded Horizons	Volatility	N/A	12/5/2019

## Other Specifications - continued

Index	Index Strategy	Maximum Leverage/Exposure	Index Live Date
Morgan Stanley Global Opportunities	Momentum	300%	7/17/2017
Morgan Stanley Target Equity Balanced	Momentum	180%	8/24/2017
Morningstar Dividend Yield Focus Target Volatility 5	Volatility	200%	3/16/2016
NASDAQ FC (Fast Convergence) Index	Momentum	175%	2/29/2020
NYSE Expanded Opportunities Index	Volatility	100%	10/19/2018
NYSE Zebra Edge	Volatility & Popularity	150%	10/1/2016
PIMCO Balanced	Volatility	100%	11/30/2017
PIMCO Global Elite Markets Index	Volatility	150%	12/30/2019
PIMCO Global Optima Index	Momentum	100%	10/9/2017
PIMCO Tactical Balanced Index	Volatility	100%	12/7/2015
S&P 500 Average DRC 10% Index	Volatility	100%	4/13/2013
S&P 500 Daily Risk Control 2 8% Index	Volatility	100%	6/3/2011
S&P 500 Daily Risk Control 5% Index	Volatility	150%	9/10/2009
S&P 500 Daily Risk Control 10% Index	Volatility	150%	5/13/2009
S&P 500 Dividend Aristocrats DRC 5%	Dividend	100%	8/25/2010
S&P 500 Low Volatility DRC 5% Index	Volatility	150%	8/31/2011
S&P 500 Low Volatility DRC 8% Index	Volatility	150%	8/31/2011
S&P Multi-Asset Risk Control (MARC) 5% Index	Volatility	100%	3/27/2017
S&P 500 Prism Factor Index	Volatility	100%	10/31/2019
S&P U.S. Retiree Spending Index	Volatility	100%	9/26/2016
Shiller Barclays CAPE US Sector Risk Controlled 10% USD Total Return Index	Momentum	150%	2/6/2014
Shiller Barclays Global Index	Momentum	100%	1/31/2019
Transparent Value Blended Index	Under Valued	100%	3/20/2013
UBS Market Pioneers Index	Volatility & Popularity	150%	11/11/2016
WisdomTree Siegel Strategic Value	Under Valued	100%	?

Index	Crediting Method	Carrier(s) Offering
Barclays All Caps Trailblazer 5 Index	1 Yr P-rate	Securian
Barclays All Caps Trailblazer Sector 5	2 Yr w/Spread	F&G
Bloomberg (Barclays) U.S. Dynamic Balance II	1 Yr w/Spread	Allianz
BlackRock Diversa Volatility Control Index	2 Yr wSpread	Global Atlantic
BlackRock iBLD Ascenda Index	2 Yr w/Spread	Lincoln Financial
Barclays Atlas 5	1 Yr w/P-rate or Spread	Equitable Life & Casualty
Barclays Focus 50	1 Yr w/Spread, 2 Yr w/Spread	Equitrust
BofAML Destinations DRC 5% ER Index	1 Yr P-rate, 2 Yr P-rate	American Equity
BlackRock iBLD Claria Index	1 Yr w/P-rate	Allianz

## Other Specifications - continued

Index	Crediting Method	Carrier(s) Offering
BNP Paribus High Dividend Plus	1 Yr, 2 Yr w/Spread	Security Benefit
BNP Paribas Multi Asset Diversified 5	2 Yr w/Spread	Athene
Citi Flexible Allocation 6 ERI w/Participation	2Yr P-rate	Protective
Credit Suisse CS Tactical Multi Asset Index	1 Yr w/Spread, 2 Yr w/Spread	Phoenix
Deutsche Bank CROCI Sectors II USD 5.5% VCI	1 Yr w/Spread, 2 Yr w/Spread	Guggenheim
Deutsche Bank CROCI Sectors III USD 5.5% VCI	1 Yr w/Spread	Delaware
Deutsche Bank Momentum Asset Allocator 5.5% VCI	1 Yr P-rate, 2 Yr P-rate	Delaware
Fidelity Multifactor Yield Index 5% ER	1 Yr P-rate, 2 Yr P-rate	Midland National, North American
First Trust Capital Strength Barclays 5%		Delaware Life
Franklin US Index	2 Yr w/Spread	Global Atlantic
Goldman Sachs Motif Aging of America Dynamic Balance	1 or 3 Yr P-rate	Sentinel Security
Goldman Sachs Dynamo Strategy Index	1 Yr P-rate, 2 Yr P-rate	EquiTrust
Goldman Sachs Momentum Builder Multi-Asset CI	3 Yr P-rate	Integrity, Lafayette, Columbus
Guggenheim RBP Blended Index	5 Yr P-rate	Security Benefit
HSBC AI Powered US Equity Index	1 Yr P-rate, 2 Yr P-rate	Athene
Janus Market Consensus (and II) Index	2 Yr Pt-to-Pt w/ p-rate	Athene
Janus Smart Passage SG Index	2 Yr Pt-to-Pt w/ p-rate	Nassau Financial Group
JPMorgan ETF Efficiente 5 Index	1 Yr w/Spread	Symetra
JP Morgan Mozaic II	3 Yr p-rate or p-rate less spread	Nationwide
J.P. Morgan Strategic Balanced Index	1,2 or 3 yr pt-to-pt w/participation rate	Integrity
JP Morgan U.S. Sector Rotator 5 Index	1 Yr w/Spread	Standard Life
Lenwood Volatility Control Index	2 Yr w/Spread	Athene
Merril Lynch RPM Index	2 Yr P-rate w or w/o Fixed Blend	Athene
ML Strategic Balanced Index	1 Yr P-rate, 2 Yr P-rate	American General
Morgan Stanley Diversified Select	1, 2 5 Yr P-rate	Guggenheim
Morgan Stanley Dynamic Allocation	2 Yr w/Spread	Security Benefit
Morgan Stanley Dynamic Balance	1 Yr or 3 Yr w/Spread	Midland, North American
Morgan Stanley Dynamic Contribution	Annual pt-to-pt 1 & 2 Yr P-rate, 2 Yr Spread	Midland, North American
Morgan Stanley Expanded Horizons	1 Yr w/Spread	American General
Morgan Stanley Global Opportunities Index	1 Yr P-rate	Delaware
Morgan Stanley Target Equity Balanced Index	2 Yr w/Spread	Americo
Morningstar Dividend Yield Focus Target Volatility 5	2 Yr w/Spread	Athene
NASDAQ FC (Fast Convergence) Index	1 Yr P-rate, 2 Yr P-rate	Athene
NYSE Expanded Opportunities Index	1 Yr P-rate	Transamerica
NYSE Zebra Edge	3 Yr p-rate w/spread or p-rate index/ fixed	Nationwide

**Other Specifications - continued**

Index	Crediting Method	Carrier(s) Offering
PIMCO Balanced	1 Yr P-rate	Global Atlantic
PIMCO Global Elite Markets Index	2 & 2 Yr Pt-toPt w/ spread	American General
PIMCO Global Optima Index	2 Yr Pt-toPt w/ spread	American General
PIMCO Tactical Balanced Index	1 Yr w/Spread	Allianz
S&P 500 Average Daily Risk Control 10% Index	2 Yr w/Spread	Americo
S&P 500 Daily Risk Control 2 8% Index	2 Yr P-rate	Athene
S&P 500 Daily Risk Control 5% Index	1 Yr w/Spread (LFG). 5 Yr w/Spread (Symetra)	Symetra, Lincoln Financial
S&P 500 Daily Risk Control 10% Index	5 Yr w/spread	Athene
S&P 500 Dividend Aristocrats Daily Risk Control 5%	1 Yr w/Spread	American Equity
S&P 500 Low Volatility Daily Risk Control 5% Index	1 Yr w/Spread	North American
S&P 500 Low Volatility Daily Risk Control 8% Index	2 Yr P-rate	North American, Midland
S&P Multi-Asset Risk Control (MARC) 5% Index	1 & 2 Yr Pt-to-Pt less Spread	Midland National, North American, Security Benefit
S&P 500 Prism Factor Index	1, 2.5 & 5 Yr P-rate w/Spread	Transamerica
S&P U.S. Retiree Spending Index	1 Yr P-rate	Great American
Shiller Barclays CAPE US Sector Risk Controlled 10% USD TRI	Index/Fix Blend	Athene
Shiller Barclays Global Index	1 Yr w/Spread	Athene
Transparent Value Blended Index	1 Yr w/Spread	Security Benefit
UBS Market Pioneers Index	1 & 2 Yr w/Spread	Security Benefit
WisdomTree Siegel Strategic Value	1 Yr P-rate	Athene

**Returns**

The basic VCI concept uses the same logic as averaging or monthly cap methods – higher volatility should soften maximum gains – and markets tend to have regular volatile periods. Higher volatility essentially takes the VCI out of the stock market and moves it into cash. Although higher volatility is more extreme during market dips, it also increases during times of exuberance. Thus, a crediting method that backs out of the market during high volatility times should offer protection for the person selling the hedge from paying out very high gains.

2016 was a good example of how this played out. Even though the S&P 500 finished up 9.5%, the average return for VCIs, before spreads, was 3.5% with most fixed index annuity VCIs crediting 0% to 1% interest; the high for one-year periods was around 4.75%.

2017 played a different hand. First, stock market returns were higher with the S&P 500 reporting a 19.4% gain. The other big factor is volatility was largely absent. The average return for VCIs, before spreads, was 12.6%. Net credited VCI interest was generally in the 7% to 9% range, but many FIA VCIs posted double digit returns in the mid-teens. 2017 was a very nice year for volatility control index participants.

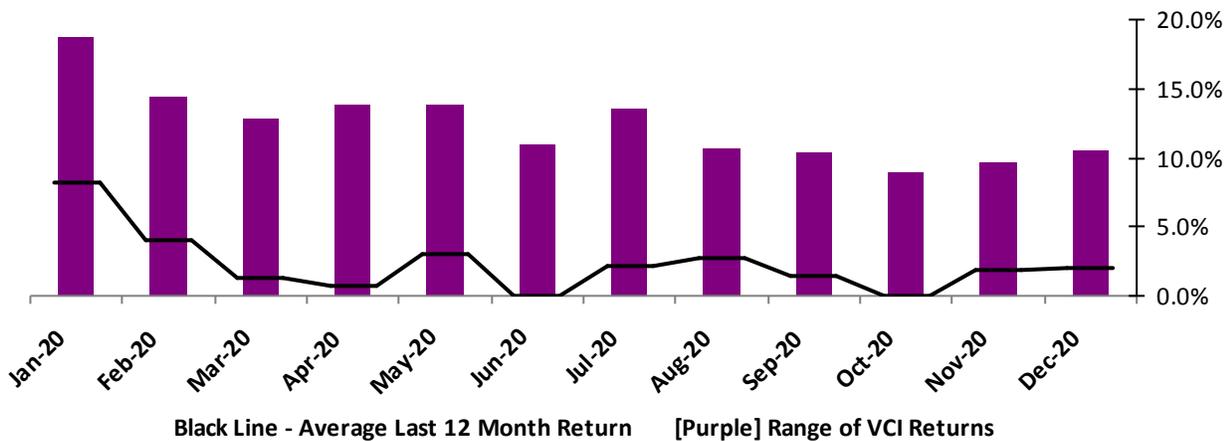
2018 was a different story. The average FIA vol-controlled index lost 3.3%, before deducting fees or spreads.

2019 was a strong year for VCIs. Half of the indices recorded double digit returns and fifteen had gains of over 15%. The average FIA vol-controlled index gained 10.3%, before deducting fees.

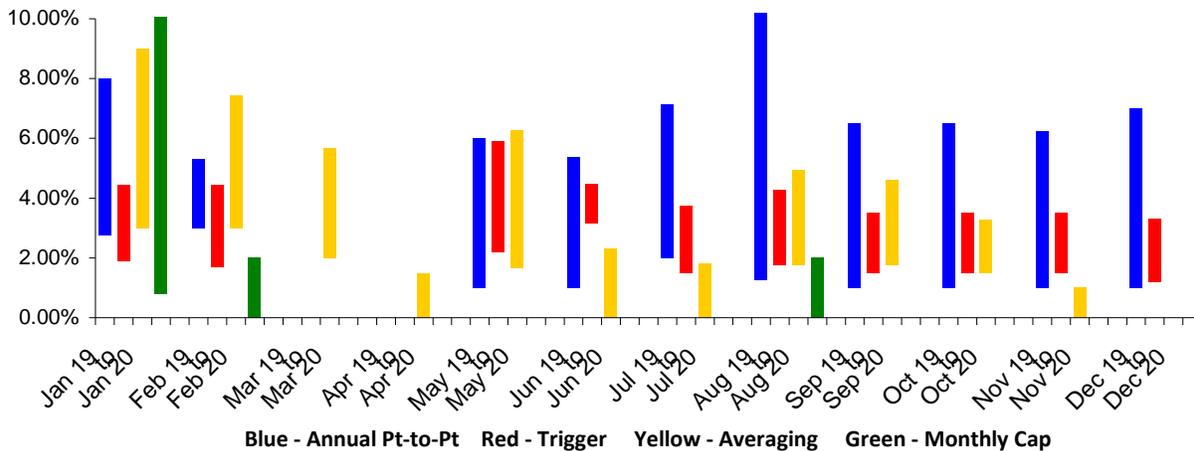
2020 ended better than it looked earlier. Although roughly a quarter of the VCIs were negative for the year, the remainder averaged a gain of 2.8%. However, fixed index annuities using traditional indices largely credited more interest with less drama.

This chart shows the average gross return (before spreads or caps) of the volatility control indices used in fixed index annuities (the black line) and the range of returns of the different indices (purple) for the last twelve month period ending at the conclusion of each month – although some indices did record losses the chart has zero as a minimum since fixed index annuities do not recognize losses.

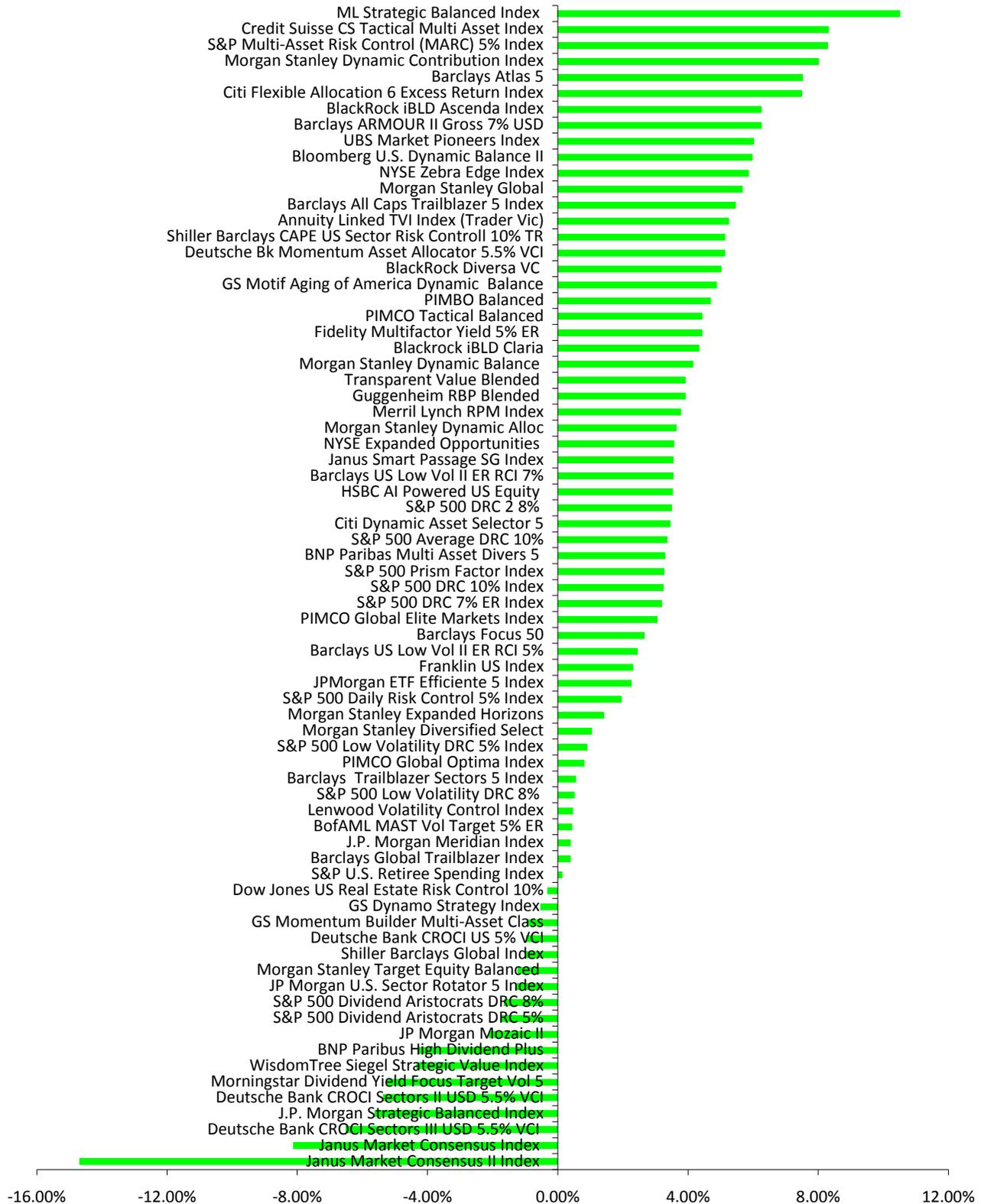
FIA Vol-Controlled Indices - Last 12 Months



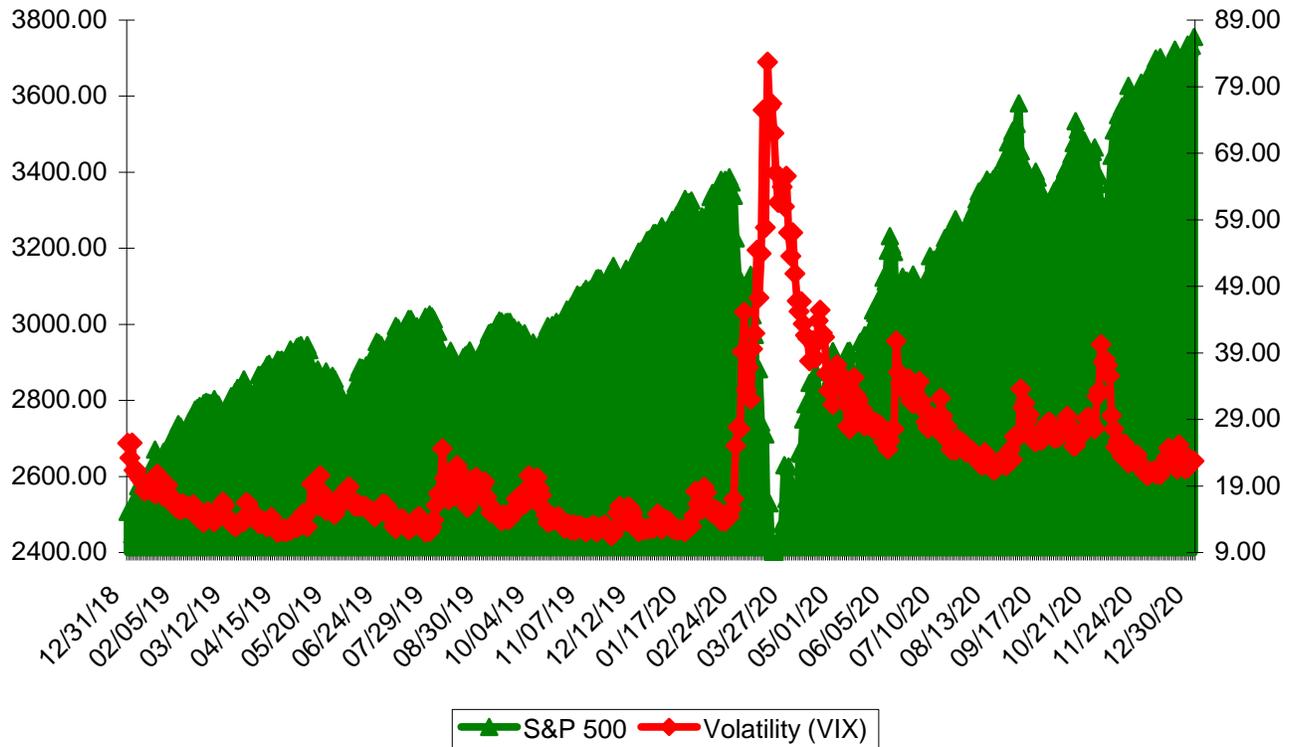
Range of FIA Returns By Traditional Crediting Method using S&P 500



2020 FIA Volatility Control Index Returns



## Volatility



As measured by the VIX, average long-term volatility is around 22. For several years in the last decade the average volatility was half that or less, essentially meaning experts had decided there would be no surprises coming from the market. They were surprised in 2020. The fallout from SARS-CoV-2 resulted in VIX numbers not seen since the Crash of '08. Volatility did drop back by summer, but remained in the twenties – looking more like the long term average.

## Concerns

An *excess return* calculation deducts the risk free rate from the gross return. The argument for this is it lets the index provider recoup what they would have made if the money had been left in the bank as it were. However, I wonder how many consumers understand that a risk-free rate of 2% means 2% is subtracted from their index gross return before participation rates, spreads or caps are applied. I'm also concerned that the new non-vol-controlled indices I have seen not only use a risk free benchmark, but often fail to disclose exactly how the benchmark is calculated.

## Future Hedging

Many of the companies offering the index also provide the carrier the hedging for the index – some require that they be the exclusive hedging source, at least initially. Although a broadly used index such as the S&P 500 has multiple potential hedging sources, a little used index may only have one bidder. This lessens the negotiating power of the carrier and could result in higher costs in future years than might be experienced when using a broader index that offers multiple potential hedging partners.

### **Backcasting/Hypotheticals**

Many of the volatility control indices have an actual track record measured in months rather than years and were designed based on how well they might have performed over the last eight to ten years. In and of itself the fact that these indices have little actual history is less of a concern than believing that past returns – whether real or hypothetical – predict future returns in any way, shape or form.

### **Comparisons**

It is extremely difficult to assess the potential interest that may be earned when comparing two or more vol-controlled indices. You can't compare the indices by looking at relative spreads, participation rates, or volatility target rates. You can't compare them by looking at their hypothetical returns because many of these indices were created to perform well over a very specific and unique period of market history. Since you can't do a quantitative comparison, you are left with a qualitative one. What this means is examining the index and the index provider and determining whether you are comfortable with the concept, the ability of the index to perform, and the integrity of the index provider.

### **Market Conduct: Realistic returns**

If a volatility controlled indices does not have a stated ceiling on the amount of interest that might be earned, this may create the impression that potential interest is unlimited. However, the reason for using volatility controlled indices is to provide a way of limiting interest to reduce hedging costs. Their very design limits interest. Due to this design it can create unrealistic expectations if the index is referred to as uncapped or unlimited, because the design effectively works as a governor on the amount of the return generated. Although it is often technically true that one gets "all of index upside less a spread" the consumer needs to understand that thus upside does have limitations.

## **Summary**

- FIAs with volatility-controlled indices are fixed annuities. Section 989J of Dodd-Frank simplified the securities exemption by saying as long as the annuity satisfies state standard nonforfeiture laws – and did not use a separate account (i.e. was not a variable annuity) – it was a fixed annuity. The vol-controlled indices of FIAs meet the interest requirements of Dodd-Frank and the intent of the original Rule 151 in that they still provide a minimum guarantee, still protect premium and credited interest from market risk, and still credit interest annually. On the basis of how they credit interest these are still fixed annuities.
- Managed volatility permits higher nominal participation. An index using managed volatility may offer a 100% participation rate without a stated cap. However, nominal may not be the same thing as effective participation. Although the index with controlled volatility may offer a 100% rate on this index methodology, it may effectively only give a portion of the total underlying index gain.
- Vol-controlled indices may, at times, produce significantly higher credited interest than existing methods and may, at times, produce lower credited interest than existing methods.
- Vol-controlled indices for FIAs are a new response applied to deal with a prolonged low interest rate environment. These indices generally have a short or no track records.