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Wayne is the co-founder of Alpha DNA Investment management. Alpha DNA is an active equity manager that deploys a systematic, quantitative and repeatable approach to its equity selection and hedge construction.

Alpha DNA is changing the investing landscape using alternative data and machine learning to construct unique equity portfolios.

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White Paper

Rebuffed Redux: Revisiting the Hedged Equity Landscape Aka Why Cliff Asness Was Right

Executive Summary:

In March and May of this year, AQR published a compelling two-part critique of the Hedged Equity mutual fund & ETF space, authored by Cliff Asness and Dan Villalon. Their analysis resonated across the industry, particularly among managers in the Hedged Equity segment. As a manager of a Hedged Equity SMA strategy, one might expect me to take issue with AQR's findings. On the contrary—I agree with much of their assessment.

Still, we saw room to add perspective. Using Morningstar data, we conducted a parallel analysis that includes both open-ended mutual funds/ETFs and SMA strategies. Our intent is to refine the lens through which investors evaluate this category—and help separate the **large number of underperformers** from the very few with **genuine risk-managed merit**.

Abstract:

- Our analysis defined the Hedged Equity space with more granularity than the AQR analysis. We ran a similar AQR filter but also examined the fund prospectuses to ensure proper inclusion and added SMA managers. (page 2)
- AQR's analysis of the Hedged Equity space was spot on – the majority of strategies materially under-perform the S&P 500 but do manage to serve their stated goal of reducing drawdowns. (page 2)
- Our version of the analysis affirms the AQR view: even when you adjust to analyze using the metrics that are more industry relevant (Capture Ratio, Sharpe Ratio, & Sortino Ratio), the publicly available Hedged Equity category is very weak overall. (pages 2-3)
- Only a handful of strategies deliver better risk adjusted returns than the S&P 500 while delivering the highest Capture Ratio in the space – including two strategies managed by Alpha DNA. (page 3)
- These top performing strategies had some generally common traits: active equity and options management, opportunistic hedging / profit reinvestment, & disciplined downside design. (page 4)
- The fees in this category are a material drag on the net returns in the space – which is disappointing given the underwhelming performance. (page 4)
- Check out the Appendix for the graphs that parallel the AQR analysis starting on Page 6.

Methodology Summary

Like AQR, we focused on the U.S. Morningstar categories of:
- **Defined Outcome**
- **Equity Hedged**
- **Derivative Income**

However, we expanded the scope to include separately managed accounts (SMAs) reported to Morningstar in these same categories. This allowed for the inclusion of our own firm, Alpha DNA Investment Management, and other SMA strategies.

Key Filters Applied:
- Majority equity exposure to **U.S. Large Cap Equity** in every rebalance
- No **leveraged equity exposure** above 100% notional
- Inception **prior to Jan 1, 2020**
- One fund class selected per strategy: **largest AUM class**
- **Prospectus reviews** to ensure true downside hedge protection
- SMAs were evaluated using marketing materials and, in several cases, direct manager conversations

Funds relying solely on covered calls, risk-on/risk-off tilts, or index option premium harvesting without consistent equity exposure were excluded. Only strategies with structural downside hedges—those that materially offset losses during market selloffs—were retained.

After filtering, our universe comprised **75 qualified Hedged Equity strategies**: 60 mutual funds/ETFs and 15 SMAs. Due to SMA inclusion, we used **monthly return data**, impacting drawdown granularity but enabling broader comparison. (See Appendix Exhibit 7 for full list of strategies)

Results Overview: How the Category Fares

AQR's Core Findings Hold

None of the 75 strategies outperformed the S&P 500 over the full period (Jan 1, 2020 to Apr 30, 2025). However, 89% beat the market in both major drawdowns (Q1 2020 and the 2022 downturn), validating their hedging value in stress events. (Appendix Exhibit 1 & 2)

Capture vs. Outcome: A Deeper Dive

We focused our evaluation on:

1. **Return Capture Ratio** vs. the S&P 500
2. **Sharpe Ratio** (risk-adjusted return)
3. **Sortino Ratio** (downside-risk-adjusted return)

Findings:

- Only **4%** exceeded a **70% capture ratio**. (Appendix Exhibit 3)
- Only **12%** outperformed the S&P 500's **Sharpe Ratio** of 0.60. (Appendix Exhibit 4)
- Lowering the capture bar to **60%** yielded only modest improvement: 23% exceeded this level which is still woefully low. (Appendix Exhibit 4)

- Even using **Sortino Ratio** (S&P = 0.92), only **15%** outperformed—versus 12% under Sharpe. (Appendix Exhibit 5)
- Category-wide **average Capture Ratio** per strategy**:** only **49%**

Context:

The industry frequently talks about a 70% capture ratio as an annual target. Despite that target, very few reached that capture ratio over the 5+ year window we analyzed.

Sharpe Ratio is a traditional measure of risk adjusted returns as it compares the returns of the strategy to the volatility (ie, standard deviation of returns). Since hedged strategies propose to manage risk exposure very closely, we'd expect to see more strategies shine thru when using this measure. Unfortunately, we don't.

Sortino Ratio is the tailor made measurement for the Hedged space. Sortino is like Sharpe except that the volatility measure (std dev) isolates the negative months only. The positive months are treated as zeros when calculating the standard deviation. Negative months in the markets are the months that are inherently built for hedged equity to out-perform the underlying market index. Unfortunately, the Sortino results leave a lot to be desired in this space just like Sharpe.

Conclusion: Despite S&P 500-like equity exposure, 85% of strategies underperformed the index on a risk-adjusted basis using the risk measure that is tailor made for this industry (Sortino).

Identifying Top Performers

Only **six strategies** stood out—those with:
• ≥ **60% Capture Ratio** to the S&P 500
• Sharpe and Sortino Ratios **above** the S&P 500

See Appendix Exhibit 6

Table: Top 6 Strategies | Jan 1, 2020 – Apr 30, 2025
(*Source: Morningstar*)

Name	Cum. Net Return	Capture Ratio	Sharpe	Sortino
Alpha DNA Large Cap Hedged Equity - SMA	**82.8%**	**88.1%**	**0.66**	**1.01**
Alpha DNA All Cap Hedged Equity - SMA	**74.4%**	**86.2%**	**0.62**	**1.00**
Measured Risk Portfolio Core - SMA	**64.7%**	**73.9%**	**0.76**	**1.34**
Innovator Growth-100 Pwr Buff ETF™ Oct (ticker: NOCT)	**54.5%**	**60.9%**	**0.63**	**0.98**
JPMorgan Hedged Equity I (ticker: JHEQX)	**54.8%**	**64.5%**	**0.66**	**0.97**
Swan Defined Risk US Large Cap Prime - SMA	**61.3%**	**63.9%**	**0.74**	**1.23**

Common Characteristics of Top Strategies:

- **Dynamic Hedge Management:** 3 of the top 6 actively reset their hedges after material moves in the markets; 2 of the 6 actively take profits from hedges and reinvest in equities—an effective risk/reward enhancer.
- **Active Equity Selection:** Strategies like JPMorgan's JHEQX and both Alpha DNA strategies apply proprietary research and data science to stock selection.

The ETF from Innovator (NOCT) is an outlier among Innovator products. Its outperformance stemmed from fortuitous timing (put expiry at market bottom). Effectively, it rolled its hedges to new lower settings one year out at market bottom in 2022 – and those profits from the hedges (ie, avoided losses) would have permitted it to buy more equity exposure for the fund when it rolled to the Sep 2023 expirations. Ironically, this validates our Dynamic Hedging point above – if you take profits when hedges have a material profits and re-invest them in to equity markets when it is trading at new lows, this is an advantageous time to re-invest given that markets have always rebounded from every historical sell off.

We have a saying at Alpha DNA: "If you are invested in a Hedged Equity strategy and your manager does not take profits in the hedges when markets are materially displaced, then why are you even hedged? That sounds like a volatility dampening strategy – not a hedged strategy. Do you know what you call a Hedge Fund manager that does not harvest the profits in his hedges when markets sell off only to watch them lose their value when markets rebound? We call that manager UNEMPLOYED."

Fee Drag & Structural Inefficiencies

The average reported mutual fund fee according to Morningstar: **91 bps**
The actual 64-month performance drag from gross to net: **1250 bps**

This drag is more than 2.5× the stated fee over 5 years. When markets appreciate materially like they did in this window, the drag from fees is exacerbated as it drags down the positive impact of compounding.

Advisory Layer Drag: Add an average **1% RIA fee**, compounding the underperformance even further.

Despite fee justifications tied to active management of derivatives, most strategies offer minimal active oversight—particularly in Defined Outcome funds where options are auto-executed by design.

Growth without Merit:
Assets across 600+ funds in the derivative-based categories rose from ~$30B on January 2020 to **$248B** as of April 30, 2025—despite weak performance. (Source: Morningstar)

Conclusion: A Call for Accountability

The AQR critique was warranted. Most Hedged Equity strategies fail to deliver compelling returns—especially when adjusted for risk and fees. That said, a small subset does outperform, and they share key traits:

- Active equity and options management
- Opportunistic hedging and reinvestment
- Disciplined downside risk design

Investor takeaway:
Allocate selectively. Demand real hedge mechanisms. Favor managers who actively manage both sides of the portfolio.

At Alpha DNA, our Large Cap and All Cap Hedged Equity SMA strategies stand among the few outperformers. We combine:

- AI-driven stock selection
- Real-time hedge management
- Competitive pricing

To learn more: www.alphadnaim.com
Explore the featured strategies directly:

- Alpha DNA Large Cap Hedged Equity – Click here
- Alpha DNA All Cap Hedged Equity – Click here

Appendices

All Exhibits use the population of 75 strategies identified earlier in the white paper for the time period of January 1, 2020 to April 30,2025. All 75 of the strategies are listed in the final appendix.

Exhibit 1: Comparison to S&P 500 index

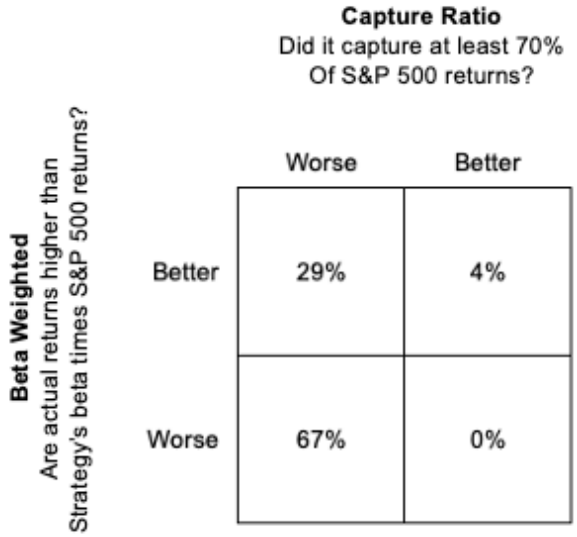
January 1, 2020 – April 30, 2025

Drawdown Compared to US Equities	Cumulative Return Compared to US Equities: Worse	Cumulative Return Compared to US Equities: Better
Better	89%	0%
Worse	11%	0%

This exhibit draws out the direct comparison to the AQR analysis. The Cumulative return is from Jan 1, 2020 to April 30, 2025. The two drawdowns that the fund must out-perform the S&P to qualify as better were the periods: (i) 1/1/2020 to 3/31/2020; and (ii) 1/1/2022 to 9/30/2022.

Exhibit 2: Capture Ratio x Beta Weighted Returns

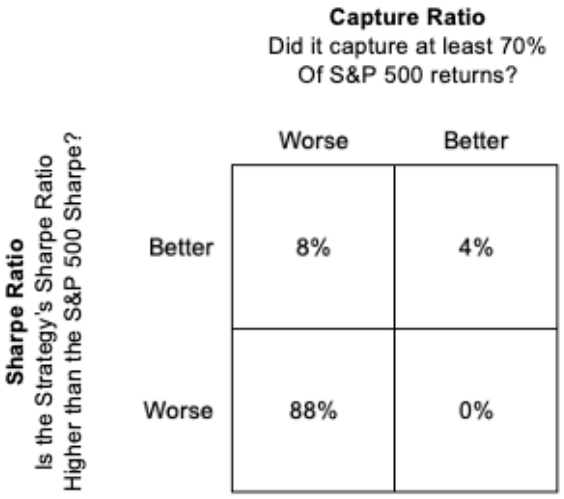
January 1, 2020 – April 30, 2025



This exhibit also draws out the comparison to the AQR analysis. The Capture ratio is the net returns reported by Morningstar for the strategy compared to the returns of the S&P 500 and whether the ratio exceeds 70%. The beta-weighted comparison is the Beta of the strategy (reported by Morningstar based on the S&P 500) times the returns of the S&P 500 over the reporting period compared to returns of the Strategy over the time period.

Exhibit 3: Capture Ratio x Sharpe

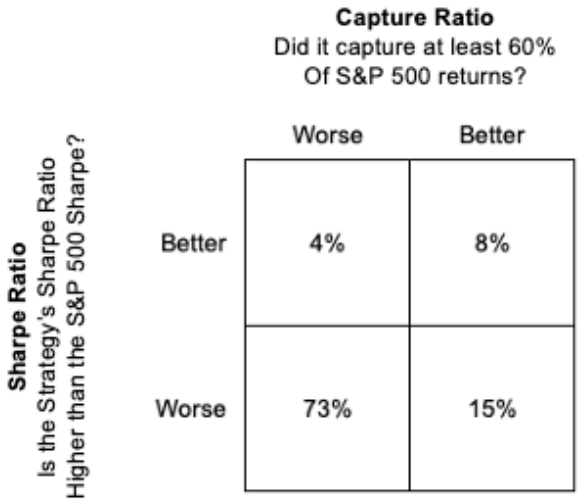
January 1, 2020 – April 30, 2025



This analysis compares the risk-adjusted returns calculated using Sharpe Ratio (Source: Morningstar) to the Capture Ratio – as calculated the same as the prior chart.

Exhibit 4: Capture Ratio x Sharpe

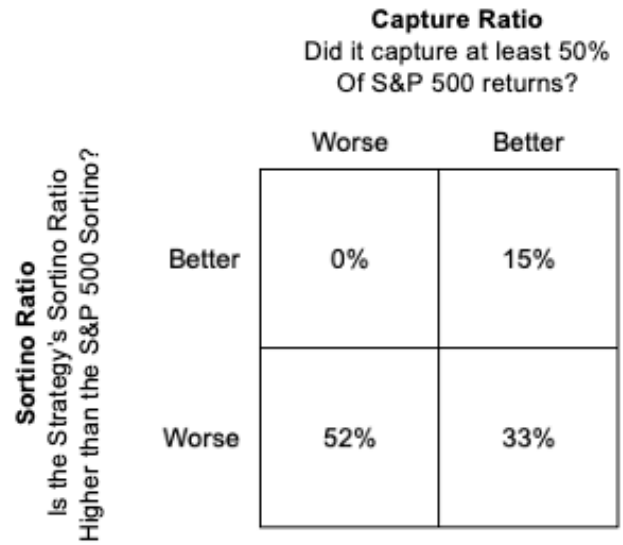
January 1, 2020 – April 30, 2025



This is the same chart as the Exhibit 3 but the bar for Capture Ratio has been lowered to 60% to see how many more strategies qualify at a lowered Capture Ratio expectation.

Exhibit 5: Capture Ratio x Sortino

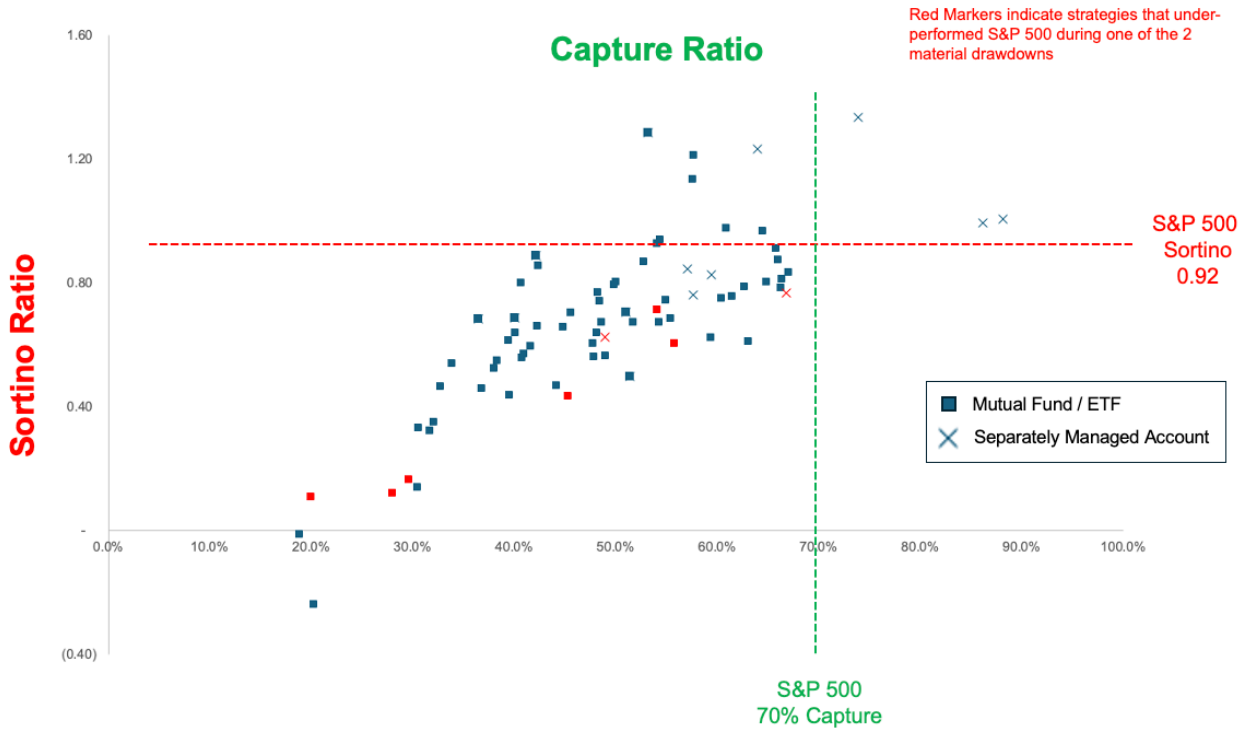
January 1, 2020 – April 30, 2025



This chart further lowers the bar for Capture Ratio to only 50% of the S&P 500 returns while switching to Sortino Ratio (Source: Morningstar). The Sortino should better benefit the Hedged Equity space and while more strategies have a better Sortino than the S&P 500 Sortino compared to a better Sharpe than the S&P 500, it is still only a woeful 15% - despite the Sortino Ratio being a 'tailor-made' metric for the hedged equity space.

Exhibit 6: Strategy Plot - Capture Ratio x Sortino

January 1, 2020 – April 30, 2025



When all of the 75 strategies are plotted on Sortino Ratio and Capture Ratio, you can see the significant clustering of strategies towards the bottom left – or the quadrant of least value.

Only a handful cluster in the upper right quadrant:

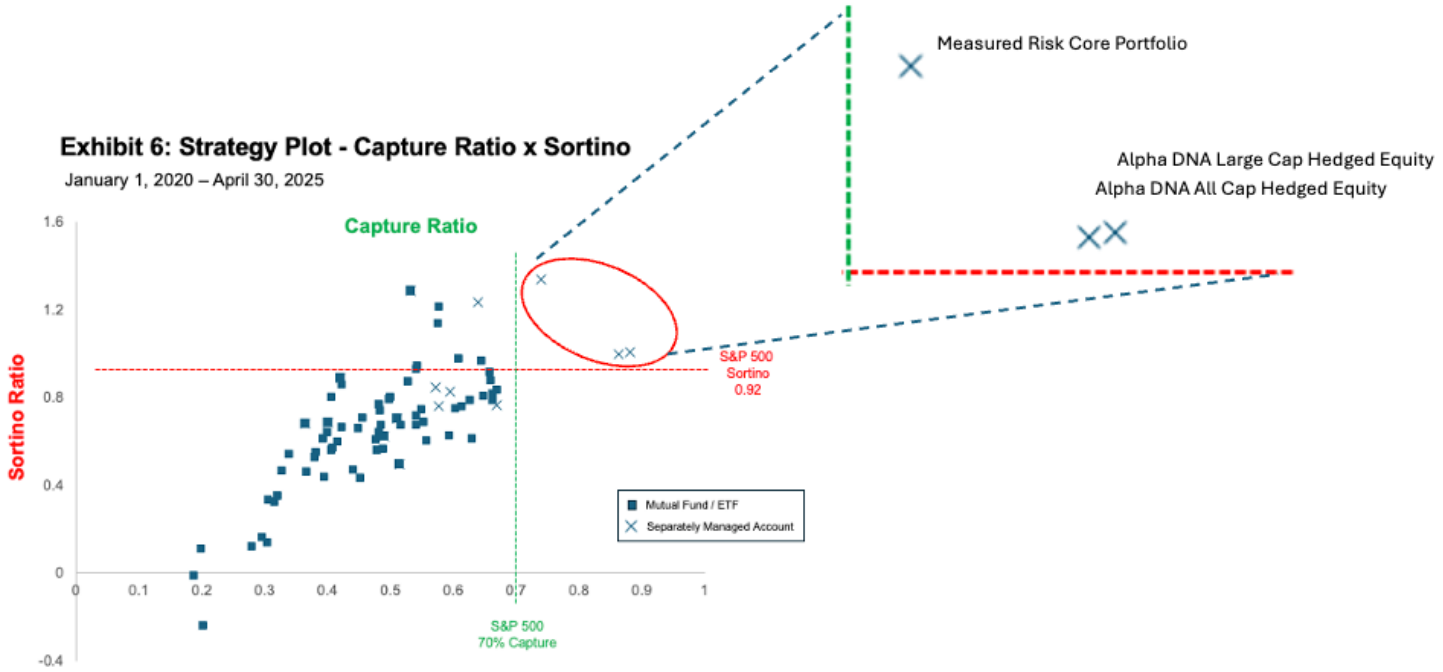


Exhibit 7: List of Strategies in Analysis – sorted by Capture Ratio to S&P 500

Time period for all Metrics: January 1, 2020 to April 30, 2025 – Source: Morningstar

Name	Ticker	Cumulative Net Return	Capture Ratio	Sharpe	Sortino	Observed Beta to S&P 500
Alpha DNA Large Cap Hedged Equity	(Separate Acct)	82.8%	88.1%	0.66	1.01	0.76
Alpha DNA All Cap Hedged Equity	(Separate Acct)	74.4%	86.2%	0.62	1.00	0.74
Measured Risk Portfolio Core	(Separate Acct)	64.7%	73.9%	0.76	1.34	0.56
Innovator US Equity Buffer ETF-Sep	BSEP	60.1%	67.0%	0.54	0.83	0.71
ZEGA Buffered Index Growth Standard	(Separate Acct)	55.9%	66.8%	0.52	0.77	0.91
Innovator US Equity Buff ETF™ Jan	BJAN	59.3%	66.4%	0.53	0.81	0.71
Soundwatch Hedged Equity ETF	SHDG	56.1%	66.3%	0.52	0.78	0.67
Innovator U.S. Equity Buffer ETF™ Oct	BOCT	59.4%	66.0%	0.56	0.88	0.64
Aptus Collared Investment Opp ETF	ACIO	57.4%	65.8%	0.57	0.91	0.61
Innovator U.S. Equity Buffer ETF Aug	BAUG	57.8%	64.9%	0.53	0.80	0.70
JPMorgan Hedged Equity I	JHEQX	54.8%	64.5%	0.66	0.97	0.44
Swan Defined Risk US Large Cap Prime	(Separate Acct)	61.3%	63.9%	0.74	1.23	0.53

Cambria Value and Momentum ETF	VAMO	49.6%	63.1%	0.39	0.61	0.37
Innovator U.S. Equity Buffer ETF July	BJUL	54.7%	62.7%	0.51	0.79	0.66
Innovator U.S. Equity Buffer ETF™ - Dec	BDEC	54.4%	61.5%	0.49	0.76	0.68
Innovator Growth-100 Pwr Buff ETF™ Oct	NOCT	54.5%	60.9%	0.63	0.98	0.46
Innovator U.S. Equity Buffer ETF™ - Apr	BAPR	50.7%	60.5%	0.50	0.75	0.59
Aptus Drawdown Managed Equity ETF	ADME	47.6%	59.4%	0.41	0.62	0.71
Swan Defined Risk Growth	(Separate Acct)	53.6%	59.4%	0.55	0.83	0.67
Easterly Hedged Equity I	JDIEX	53.7%	57.7%	0.76	1.21	0.40
Innovator U.S. Equity Power Buf ETF™ Oct	POCT	53.7%	57.6%	0.70	1.14	0.42
Glenmede Secured Options	(Separate Acct)	50.6%	57.6%	0.53	0.76	0.59
ZEGA Buy and Hedge Classic	(Separate Acct)	50.3%	57.1%	0.55	0.85	0.73
NEOS Nasdaq-100 Hdg Eq Inc ETF	QQQH	50.1%	55.8%	0.42	0.60	0.59
Vest US Large Cap 10% Buffer StratsInstl	BUIGX	47.7%	55.4%	0.46	0.68	0.62
Parametric Volatil Risk Prm-Defensv I	EIVPX	50.5%	55.0%	0.53	0.74	0.57
Innovator U.S. Equity Power BffrETF™-Jul	PJUL	49.2%	54.4%	0.59	0.94	0.47
FT Vest US Equity Buffer ETF Nov	FNOV	47.9%	54.2%	0.44	0.67	0.66
Ironclad Managed Risk	IRONX	47.5%	54.1%	0.56	0.93	0.43
Vest US Large Cap 20% Buffer Strats Inst	ENGIX	50.2%	54.1%	0.47	0.71	0.61
Measured Risk Portfolio Lite (MRP Lite)	(Separate Acct)	47.5%	53.1%	0.74	1.29	0.44
Innovator US Equity Power Buffer ETF-Sep	PSEP	48.7%	52.8%	0.56	0.87	0.50
FT Vest US Equity Buffer ETF Aug	FAUG	46.1%	51.8%	0.44	0.67	0.63
ZEGA Buffered Index Growth IRA	(Separate Acct)	32.0%	51.4%	0.35	0.50	0.79
Toews Managed Risk Blueprint	(Separate Acct)	43.4%	51.0%	0.45	0.71	0.58
Innovator U.S. Equity Power BufferETFAug	PAUG	45.7%	50.1%	0.52	0.80	0.49
Innovator US Equity Power Buff ETF™ Jan	PJAN	45.8%	49.9%	0.52	0.79	0.49
Innovator US Equity Buffer ETF Nov	BNOV	42.5%	49.0%	0.38	0.57	0.66
ZEGA Buy and Hedge Retirement	(Separate Acct)	38.4%	48.9%	0.42	0.63	0.76
Beacon Planned Return Strategy Instl	BPRLX	43.9%	48.7%	0.44	0.67	0.56
Calamos Hedged Equity I	CIHEX	43.6%	48.4%	0.49	0.74	0.51
Horizon Defined Risk Investor	HNDRX	45.0%	48.2%	0.52	0.77	0.48

Oakhurst Strategic Defined Risk Instl	OASDX	43.2%	48.2%	0.43	0.64	0.59
Innovator U.S. Equity Buffer ETF™ - June	BJUN	41.3%	47.9%	0.38	0.56	0.64
Rational Equity Armor Fund Instl	HDCTX	40.5%	47.8%	0.39	0.60	0.50
Innovator US Equity Power Buffer ETF Nov	PNOV	41.6%	45.6%	0.46	0.70	0.47
Invesco Income Advantage U.S. Fund A	SCAUX	39.1%	45.3%	0.31	0.43	0.78
Innovator U.S. Eq Power Buffer ETF - Dec	PDEC	40.4%	44.9%	0.43	0.66	0.50
Glenmede Secured Options Institutional	GLSOX	37.6%	44.2%	0.35	0.47	0.58
Innovator U.S. Equity Ultra Buf ETF™ Oct	UOCT	38.3%	42.4%	0.55	0.85	0.33
Equable Shares Hedged Equity I	EQHEX	39.6%	42.3%	0.47	0.66	0.43
Wellington Hedged Alpha Opportunities	(Separate Acct)	38.6%	42.1%	0.57	0.89	0.42
Innovator U.S. Equity PowerBffrETF™-Apr	PAPR	35.5%	41.7%	0.41	0.60	0.42
Innovator U.S. Equity Power BffrETF™-Jun	PJUN	34.6%	40.9%	0.37	0.57	0.46
Gateway Y	GTEYX	36.2%	40.7%	0.39	0.56	0.49
Innovator US Equity Ultra Buff ETF™ Jan	UJAN	36.7%	40.7%	0.51	0.80	0.33
Innovator US Equity Ultra Buffer ETF-Sep	USEP	35.3%	40.1%	0.42	0.64	0.40
Gateway Inv Index/ RA (Risk Adjusted)	(Separate Acct)	35.4%	40.0%	0.47	0.69	0.49
Innovator Growth-100 Pwr Buff ETF™ Jan	NJAN	33.8%	39.6%	0.32	0.44	0.49
FT Vest US Equity Deep Bffr ETF Nov	DNOV	34.7%	39.4%	0.39	0.61	0.41
Innovator U.S. Equity Ultra BufferETFAug	UAUG	33.0%	38.3%	0.36	0.55	0.42
Innovator U.S. Equity Ultra BffrETF™-Jul	UJUL	31.8%	38.1%	0.36	0.52	0.41
Swan Defined Risk I	SDRIX	33.0%	36.8%	0.32	0.46	0.52
Swan Defined Risk U.S. Large Cap	(Separate Acct)	34.8%	36.4%	0.47	0.68	0.43
Innovator US Equity Ultra Buffer ETF Nov	UNOV	30.0%	33.9%	0.37	0.54	0.32
Innovator U.S. Equity Ultra BffrETF™-Dec	UDEC	28.4%	32.8%	0.30	0.46	0.37
Innovator U.S. Equity Ultra BffrETF™-Jun	UJUN	25.5%	32.1%	0.24	0.35	0.39
Catalyst Buffered Shield Fund I	SHIIX	26.5%	31.7%	0.22	0.32	0.51
FT Vest US Equity Deep Bfr ETF Aug	DAUG	25.9%	30.6%	0.23	0.33	0.46
Toews Tactical Defensive Alpha	TTDAX	17.2%	30.5%	0.10	0.14	0.85
Catalyst Nasdaq-100 Hedged Equity I	CLPFX	19.6%	29.6%	0.12	0.16	0.73

Amplify BlackSwan Gr & Trsry Cor ETF	SWAN	17.4%	28.0%	0.09	0.12	0.59
Core Alternative ETF	CCOR	5.1%	20.2%	(0.16)	(0.24)	0.13
Innovator Laddered Allc Pwr Bfr ETF™	BUFF	16.1%	20.0%	0.09	0.11	0.65
Innovator U.S. Equity Ultra BffrETF™-Apr	UAPR	13.2%	18.9%	(0.01)	(0.01)	0.37