S&P Dow Jones Indices

December 31, 2024

Dashboard: S&P 500[®] Engle 10% VT Index

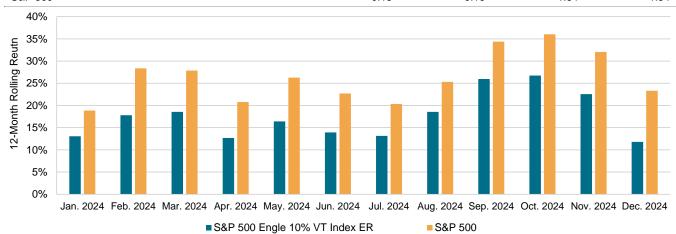
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Performance Summary

- The S&P 500 Engle 10% VT Index ER, launched on Dec. 18, 2024, fell 4.47% in December amid a market sell off.
- U.S. equities declined, with the S&P 500 down 2.50%. Although the Federal Reserve lowered rates by 25 bps, it signaled there may be fewer rate cuts in 2025, which caused investor pessimism.
- Realized volatility of the S&P 500 for the month was 14.26%, above the 12-month average of 12.65%.
- Equity weight in the index was over 100% for the first half of the month, dropping below 100% after the Fed meeting on Dec. 18. The resulting average equity weight for the month was 94%.

Exhibit 1: Index Returns and Risk

Index	1-Month (%)	QTD (%)	YTD (%)	12-Month (%)
Index Returns				
S&P 500 Engle 10% VT Index ER	-4.47	-2.64	11.80	11.80
S&P 500	-2.50	2.07	23.31	23.31
Index Volatility				
S&P 500 Engle 10% VT Index ER	14.99	12.50	10.51	10.51
S&P 500	14.26	12.59	12.65	12.65
Risk-Adjusted Return				
S&P 500 Engle 10% VT Index ER	-0.30	-0.21	1.12	1.12
S&P 500	-0.18	0.16	1.84	1.84



The S&P 500 is a price return index and, as such, may display higher or lower returns due to the rate component not being subtracted while dividends are not included. S&P 500 Engle 10% VT Index is an excess return index which extracts risk free rate but includes dividends. Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2024. Index performance based on return in USD. The S&P 500 Engle 10% VT Index was launched Dec. 18, 2024. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

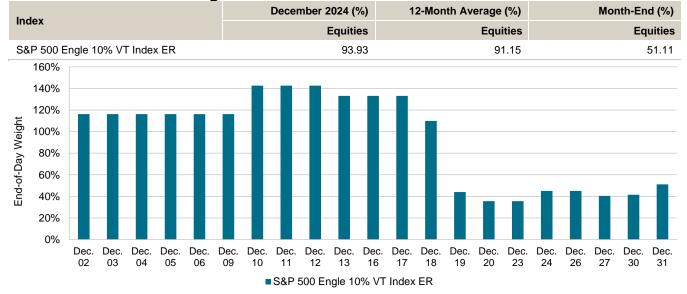
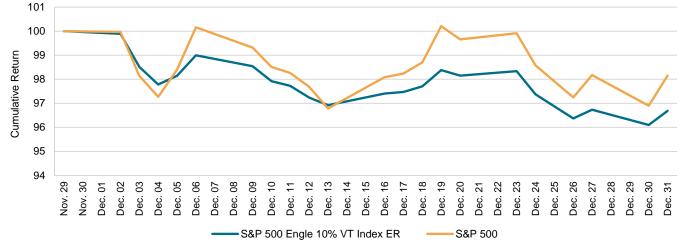


Exhibit 2: Asset Class Weights

The S&P 500 is a price return index and, as such, may display higher or lower returns due to the rate component not being subtracted while dividends are not included. S&P 500 Engle 10% VT Index is an excess return index which extracts risk free rate but includes dividends. Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2024. The S&P 500 Engle 10% VT Index was launched Dec. 18, 2024. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 3: Cumulative Returns



Index levels are rebased to 100 as a starting point at the beginning of the period shown. Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2024. Index performance based on return in USD. The S&P 500 Engle 10% VT Index was launched Dec. 18, 2024. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

Year	Index	Jan.	Feb.	March	April	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann.
2015	S&P 500 Engle 10% VT Index ER	-3.91	3.75	-1.97	-1.27	-0.85	-1.83	0.15	-3.81	-1.44	5.34	-0.69	-2.38	-4.98
2015	S&P 500	-3.10	4.12	-1.89	-0.03	-0.04	-2.10	1.27	-6.26	-3.46	8.08	0.05	-2.79	-0.73
2016	S&P 500 Engle 10% VT Index ER	-4.38	0.39	3.40	-0.14	1.24	-1.31	3.02	-0.10	0.18	-2.39	3.66	2.41	7.48
	S&P 500	-5.07	-0.41	3.69	0.07	1.53	-0.01	3.36	-0.12	-0.36	-1.94	3.40	2.18	9.54
2017	S&P 500 Engle 10% VT Index ER	2.52	6.73	-0.93	1.23	1.42	0.60	2.23	-0.58	2.94	3.23	4.36	2.18	28.15
2011	S&P 500	1.79	4.41	-0.86	0.68	0.98	0.44	1.93	0.05	2.51	2.22	2.91	1.19	19.42
2018	S&P 500 Engle 10% VT Index ER	7.80	-4.92	-1.59	-0.78	0.22	-0.64	3.01	3.50	0.70	-4.60	1.52	-3.88	1.00
2010	S&P 500	5.62	-6.16	-1.87	0.27	1.90	-0.21	3.60	3.03	0.44	-7.28	2.89	-9.18	-6.24
2019	S&P 500 Engle 10% VT Index ER	5.52	5.38	0.36	4.46	-4.95	3.90	0.83	-1.92	0.99	2.32	4.35	1.19	22.25
2015	S&P 500	7.87	6.20	1.10	3.93	-5.87	5.48	0.54	-1.81	1.72	3.31	3.09	2.86	28.88
2020	S&P 500 Engle 10% VT Index ER	0.29	-2.99	-1.78	3.72	2.50	1.82	1.95	7.78	-2.09	-2.02	4.10	1.21	18.29
2020	S&P 500	-0.16	-9.75	-16.36	10.88	7.55	1.84	4.98	7.01	-4.13	-3.28	10.75	2.56	16.26
2021	S&P 500 Engle 10% VT Index ER	-1.25	2.14	1.37	5.91	-0.57	3.02	0.04	2.85	-4.19	4.75	0.89	1.70	17.11
2021	S&P 500	-1.11	5.05	4.01	5.62	0.55	2.22	1.74	2.90	-4.89	5.70	-0.83	5.61	26.89
2022	S&P 500 Engle 10% VT Index ER	-5.55	-3.38	2.19	-4.21	1.32	-3.47	1.80	-1.28	-3.49	1.71	1.98	-2.12	-12.42
LULL	S&P 500	-5.26	-2.83	3.83	-10.22	0.01	-8.97	7.97	-4.24	-10.05	7.99	4.59	-5.82	-19.44
2023	S&P 500 Engle 10% VT Index ER	3.56	-1.04	0.57	1.93	-0.24	5.70	2.00	-2.26	-4.91	-2.06	7.38	4.04	16.38
2020	S&P 500	6.18	-2.93	1.57	2.93	0.29	5.82	3.11	-1.77	-5.02	-2.20	9.62	3.81	24.23
2024	S&P 500 Engle 10% VT Index ER	0.60	1.53	1.74	-4.31	3.56	4.46	1.25	2.41	1.06	-0.25	1.79	-4.47	11.80
	S&P 500	1.59	3.42	2.28	-4.16	5.16	4.30	0.86	2.28	2.02	-0.06	3.76	-2.50	23.31

Exhibit 4: Monthly Returns

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2024. Index performance based on return in USD. The S&P 500 Engle 10% VT Index was launched Dec. 18, 2024. All data prior to such date is back-tested hypothetical data. Past performance is no guarantee of future results. Chart and table are provided for illustrative purposes. Please see the Performance Disclosure linked at the end of this post for more information regarding the inherent limitations associated with back-tested performance.

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The S&P 500 Engle 10% VT Index was launched December 18, 2024. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spglobal.com/spdji. Past performance of the Index is not an indication of future results. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results. Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

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