BNP PARIBAS

The bank for a changing world

S&P 500 FUTURES DEFINED VOLATILITY

Bloomberg ticker: SPXFD356 Index
For further information, please visit the Index website

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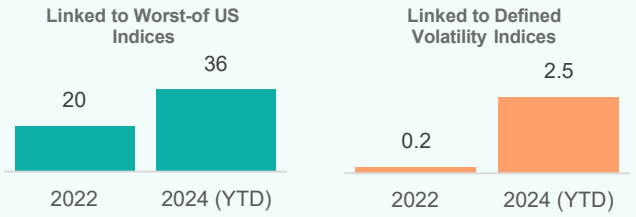
Market Overview and Opportunity

Recent market conditions, characterized by lower rates and reduced volatility, have worsened pricing conditions for many callable notes. **This shift has created a significant opportunity for the growth of defined volatility indices** (see chart on the right). The benefits of using these include pricing consistency and reduced reinvestment risk, as well as simplicity and transparency with a single underlying. Note that these may increase drawdowns due to leverage and typically higher volatility compared to regular broad-based benchmarks.

Issuance volumes for the U.S. market in Billions USD



Source: BNP Paribas, for illustrative purposes only. 2024 YTD until end-September.

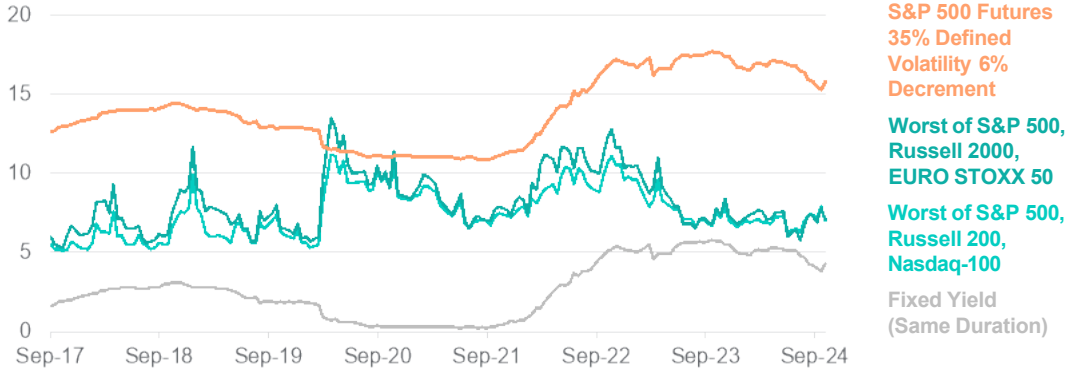
Hypothetical Backtested 3-year Callable Yield Notes Coupons with 70/70 EKI[1]/Coupon Barrier

(daily simulations on notes issued from 6 Sep 2017 to 9 Oct 2024, and maturing from 6 Sep 2020 to 9 Oct 2027)[2]

Indicative Terms

- **Type:** Callable Yield Notes
- **Maturity:** 3 Years
- **Reoffer:** 97%
- **Autocall Barrier:** 100%
- **EKI[1]/Coupon Barrier:** 70%
- **Observation Frequency:** Quarterly
- **Non-callable Period:** 6 Months

Hypothetical Backtested Coupons vs Benchmark Baskets[2]



Hypothetical Backtested 3-year Callable Yield Notes Returns

(daily simulations on notes issued from 1 Jan 2005 to 30 Oct 2021, and maturing from 1 Jan 2008 to 30 Oct 2024)[2]

Underlier(s)	Coupon used for simulation	Average yield	% of times the note was called (barrier at 100%)[3]	% of times the note knocked-in (barrier at 70%)	Average loss given knock-in (barrier at 70%)
S&P 500 Futures 35% Defined Volatility 6% Decrement	**14.00%**	**12.35%**	**88.35%**	**5.31%**	**-50.37%**
Worst of S&P 500, Russell 2000, Nasdaq-100	7.00%	6.94%	89.84%	0.40%	-31.27%
Worst of S&P 500, Russell 200, EURO STOXX 50	7.10%	6.23%	85.24%	5.83%	-36.39%

[1]European Knock-in.

[2]Source: BNP Paribas. Bloomberg tickers: SPX (S&P 500), RTY (Russell 2000), NDX (Nasdaq-100), SX5E (EURO STOXX 50), SPXFD356 (S&P 500 Futures 35% Defined Volatility 6% Decrement). All retrospective levels provided in the graphs and tables on this page are simulated and must be considered illustrative only. These simulations are the result of estimates made by BNP Paribas at a given moment based on the parameters selected by BNP Paribas, certain assumptions that may or may not hold in future periods, of market conditions at this given moment and of historical data, which should not be used as guidance, in any way, of the future results of the financial instruments mentioned on this page.

[3]After a non-callable period of 6 months.

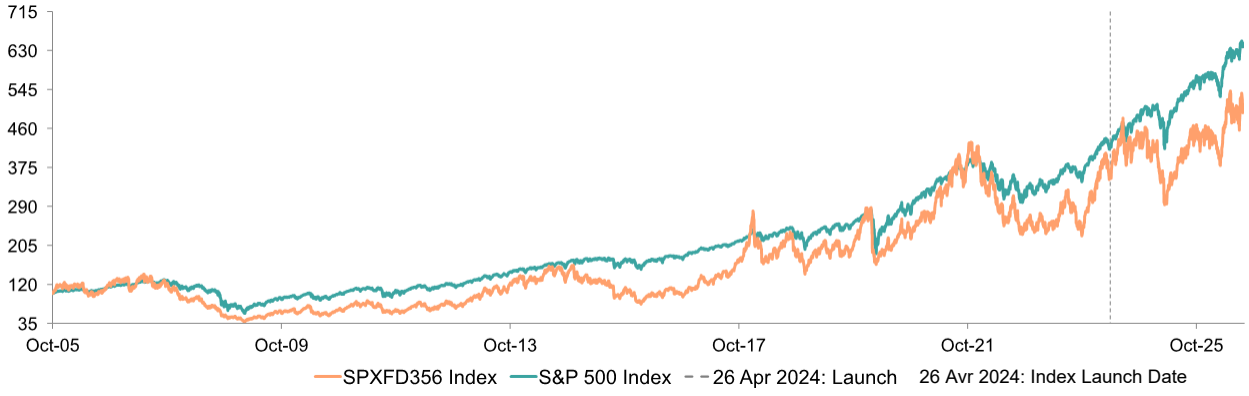
Index Methodology and Overview

- **The S&P 500 Futures 35% Defined Volatility 6% Decrement Index tracks the performance of the S&P 500 Index and deploys leverage with the objective of maintaining a 35% level of Implied Volatility, and a 6% Synthetic Dividend.**
- Created by S&P Dow Jones Indices as an alternative to the typical worst-of index basket underlying, this price efficient index is designed to define a previously un-definable pricing metric in implied volatility. As a result, callable yield notes issued by BNP Paribas linked to the S&P 500 Futures 35% Defined Volatility 6% Decrement Index are intended to display a consistent and higher level of yield, compared to classic worst-of index baskets.
- Instead of achieving attractive terms in callable yields notes only when the market sells off and implied volatility is high, investors can maintain attractive terms regardless of market environment by linking to defined volatility indices.
- The chart and statistics table below show an analysis of the levels of the S&P 500 Futures 35% Defined Volatility 6% Decrement Index. The performance shown is hypothetically simulated until 26 April 2024.

Bloomberg Ticker	SPXFD356 Index	**Index Type**	Excess Return[2]
Calculation Agent	S&P Dow Jones Indices	**Weighting**	Weekly Rebalancing
Currency	USD		
Average Leverage[3]	263%	**Launch Date**	26 Avril 2024

Hypothetical and Historical Index Performance and Statistics[1]

As of August 31st, 2026



Oct 05 - Aug 26	SPXFD356 Index	S&P 500 Index
YTD Return	15.00%	12.28%
1Y Annualized Return	21.66%	18.98%
5YAnnualized Return	4.73%	11.18%
10Y Annualized Return	16.53%	13.47%
Annualized Volatility (since 31 Oct 2005)	34.18%	19.27%
Correlation Since Start Date	0.83	-

[1]Source: Bloomberg, BNP Paribas from 31 October 2005. Past performance is not an indicator of future performance.

The S&P 500 Futures 35% Defined Volatility 6% Decrement Index is based on hypothetical Past Performance Data ("PPD") prior to the Launch Date of 26 Avril 2024, actual/historical performance begins after Launch Date. Because The S&P 500 Futures 35% Defined Volatility 6% Decrement Index did not exist prior to the Launch Date, all retrospective levels provided in the graphs and tables above are simulated and must be considered illustrative only. The presentation of hypothetical data reflects the deduction of fees and charges. These simulations are the result of estimates made by BNP Paribas at a given moment based on the parameters selected by BNP Paribas, certain assumptions that may or may not hold in future periods, of market conditions at this given moment and of historical data, which should not be used as guidance, in any way, of the future results of the S&P 500 Futures 35% Defined Volatility 6% Decrement Index. Correlation to SPX is not a reliable indicator of relative performance. The Index's high leverage and decrement do not affect its correlation, and strong correlation may still result in significant underperformance versus the SPX.

[2]The S&P 500 Futures 35% Defined Volatility 6% Decrement Index is an "Excess Return Index" meaning its returns are derived from changes in the level of its components (known as "price return") and profit or loss gained from rolling from one futures contract to another (known as "roll return"). Unlike Total Return Indices, it does not derive returns based on interest earned on cash or other collateral deposited in connection with the purchase of futures contracts (known as "collateral return").

[3]From 28 October 2005 to 18 January 2025.

Callable Notes Indicative Terms

Annual Review Note

- **Maturity:** 5 Years
- **Autocall Barrier:** 100%
- **Coupon:** 18.00% Per Annum (paid when called or at maturity)
- **European Knock-in Barrier:** 50%
- **Observation Frequency:** Annual
- **Reoffer:** 95%

Annual Review Note With Step Down

- **Maturity:** 5 Years
- **Autocall Barrier:** 100%
- **Coupon:** 13.05% Per Annum (paid when called or at maturity)
- **European Knock-in Barrier:** 50%
- **Observation Frequency:** Annual
- **Reoffer:** 95%

Callable Yield Note

- **Maturity:** 5 Years Non-Call 6M
- **Autocall Barrier:** 100%
- **Coupon:** 7.40% Per Annum
- **EKI/Coupon Barrier:** 50%
- **Observation Frequency:** Quarterly
- **Reoffer:** 95%

Hypothetical and Historical Monthly Returns of the Index[1]

As of August 31st, 2026

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	SPXFD35 6 Return	SPX Return
2026	2.53%	-3.21%	-9.37%	20.48%	13.23%	-7.72%	-2.93%	4.63%					15.00%	12.28%
2025	3.69%	-7.30%	-10.48%	-5.43%	6.56%	10.36%	5.80%	1.63%	9.84%	1.16%	-2.21%	-2.64%	8.85%	16.39%
2024	2.87%	14.64%	7.59%	-12.66%	9.69%	8.87%	0.54%	3.63%	-1.09%	-4.51%	7.90%	-10.82%	25.29%	23.31%
2023	10.10%	-6.83%	2.33%	2.63%	-0.18%	16.66%	8.43%	-9.09%	-16.42%	-6.24%	21.22%	13.69%	33.52%	24.23%
2022	-14.53%	-5.87%	5.32%	-16.14%	-1.03%	-12.44%	13.74%	-8.84%	-13.02%	9.19%	8.11%	-11.63%	-42.06%	-19.44%
2021	-3.84%	1.12%	7.36%	15.72%	0.32%	4.95%	8.35%	8.48%	-16.56%	21.19%	-2.89%	5.78%	55.29%	26.89%
2020	0.31%	-26.69%	-8.10%	11.24%	5.21%	-1.82%	8.10%	15.54%	-6.25%	-6.46%	12.32%	8.35%	3.50%	16.26%
2019	15.00%	7.44%	0.08%	13.12%	-17.88%	13.93%	1.60%	-7.63%	2.15%	5.24%	15.15%	9.73%	66.83%	28.88%
2018	28.67%	-21.42%	-16.23%	-1.10%	4.47%	1.77%	11.68%	11.50%	0.22%	-17.98%	-1.11%	-16.09%	-24.36%	-6.24%
2017	4.21%	19.59%	-4.92%	0.09%	5.18%	2.11%	8.30%	-1.32%	7.26%	10.95%	14.58%	3.24%	91.64%	19.42%
2016	-12.89%	-1.18%	14.94%	-0.41%	4.72%	-3.06%	12.56%	-0.85%	-4.48%	-6.27%	6.43%	2.83%	9.38%	9.54%
2015	-10.62%	12.24%	-10.89%	-0.56%	3.16%	-5.39%	-0.42%	-19.08%	-4.71%	18.70%	-2.74%	-8.14%	-29.35%	-0.73%
2014	-15.26%	12.40%	-0.05%	-1.08%	8.81%	6.68%	-6.47%	10.35%	-7.40%	0.30%	8.96%	-13.39%	-1.12%	11.39%
2013	12.58%	4.68%	10.00%	0.89%	7.92%	-4.71%	12.77%	-11.95%	7.14%	12.63%	9.90%	5.99%	87.72%	29.60%
2012	8.90%	9.56%	8.24%	-3.44%	-14.51%	5.86%	3.01%	4.81%	5.27%	-7.29%	1.03%	-0.09%	20.02%	13.40%
2011	4.89%	6.47%	-1.33%	8.85%	-4.56%	-7.99%	-7.22%	-7.97%	-9.43%	9.39%	-2.66%	1.11%	-12.30%	-0.00%
2010	-8.58%	4.14%	13.82%	2.50%	-16.74%	-9.56%	8.99%	-8.47%	14.94%	7.48%	-4.27%	14.88%	13.33%	12.78%
2009	-8.72%	-9.54%	5.34%	8.49%	6.72%	-0.84%	8.99%	5.08%	6.26%	-5.73%	8.14%	2.17%	26.58%	23.45%
2008	-13.79%	-6.54%	-2.70%	5.77%	-1.22%	-16.59%	-3.08%	1.20%	-11.73%	-17.72%	-6.04%	-0.00%	-54.27%	-38.49%
2007	0.77%	-11.02%	-3.67%	13.96%	10.26%	-8.96%	-8.45%	0.19%	4.09%	0.76%	-9.22%	-3.47%	-16.71%	3.53%
2006	4.81%	-1.23%	1.44%	2.42%	-12.15%	-2.14%	-2.34%	4.52%	5.71%	9.72%	4.21%	2.37%	10.53%	11.78%

Source: Bloomberg, BNP Paribas from 1 January 2006. Past performance is not an indicator of future performance.

[1]The S&P 500 Futures 35% Defined Volatility 6% Decrement Index is based on hypothetical Past Performance Data ("PPD") prior to the Launch Date of 26 April 2024, actual/historical performance begins after Launch Date. Because The S&P 500 Futures 35% Defined Volatility 6% Decrement Index did not exist prior to the Launch Date, all retrospective returns provided in the table above are simulated and must be considered illustrative only. The presentation of hypothetical data reflects the deduction of fees and charges. These simulations are the result of estimates made by BNP Paribas at a given moment based on the parameters selected by BNP Paribas, certain assumptions that may or may not hold in future periods, of market conditions at this given moment and of historical data, which should not be used as guidance, in any way, of the future results of the S&P 500 Futures 35% Defined Volatility 6% Decrement Index.

Selected Risk Considerations related to the Index:

The Index is leveraged (up to 500%) which might generate higher drawdowns.
The Index has a volatility of 35% by construction, higher than regular broad-based benchmarks.
The Index might underperform the S&P 500 due to the 6% synthetic dividend.

Risks Relating to the Index: No Assurance Can Be Given that the Strategy Used to Construct the Index Will Achieve Its Intended Results or that the Index Will Be Successful – No assurance can be given that the investment strategy on which the Index is based will be successful or that the Index will outperform any alternative strategy that might be employed with respect to the Index Components. The Index has been developed based on predetermined rules that may not prove to be advantageous or successful, and that will not be adjusted for market conditions.

The Index is Subject to Risks Associated with Significant Leverage – At times, the Index will use significant leverage to achieve its target volatility. When the Index employs leverage, any declines in the Index will be magnified, resulting in accelerated losses.

The Index May Not Be Fully Invested – On a weekly rebalancing day, the Index's exposure to the S&P 500 Index (the "SPX" or "Underlying Index") will be less than 100% when the implied volatility is greater than the volatility target. If the Index's exposure to the Underlying Index is less than 100%, the Index will not be fully invested, and any uninvested portion will earn no return.

The Index May Not Approximate Its Target Volatility – No assurance can be given that the Index will maintain a realized volatility that approximates its target volatility. The actual realized volatility may be greater than or less than the target volatility, which may adversely affect the performance of the Index.

The Volatility Target Mechanism May Cause the Index to Perform Poorly in Adverse Market Conditions and to Underperform in Rising Markets – Because the amount of leverage to be applied is determined only at the weekly rebalancing, the Index may not meaningfully reduce its leverage during adverse market conditions, and, because of the delayed application, by the time reduced exposure takes effect, market conditions may have already recovered. Similarly, when markets rise rapidly, the volatility target mechanism will reduce the Index's leverage.

The Index Is An Excess Return Index That Does Not Reflect "Total Returns" – The values tracked by the Index only reflect changes in the prices or levels of the relevant Index Components. The level of the Index will not benefit from any collateral return on any futures contracts or any dividends or other distributions on any Index Components.

The Daily Level of the Index Is Calculated Based on Performance Measured From the Preceding Weekly Rebalancing Date, Which Could Adversely Affect the Level of the Index – The level of the Index on each day that is not a rebalancing day will be calculated based on the performance of the Underlying Index from the preceding rebalancing day and by reference to the level of the Index as of the prior rebalancing day. The level of the Index may be more favorable if such calculations were done over a different time-horizon – i.e., if such calculations were made based on the levels on the prior trading day rather than the prior rebalancing day or if such calculations were made based on less frequent rebalancing days.

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