



**BNP PARIBAS CATALYST SYSTEMATIC ALPHA INDEX**

For more information about the index please visit: [casaindex.bnpparibas.com](https://casaindex.bnpparibas.com)

## INTRODUCING BNP Paribas Catalyst Systematic Alpha Index

### Access

BNP Paribas Catalyst Systematic Alpha Index (the “BNPP CASA Index”) is designed to provide exposure to strategies that are not typically accessible through traditional investment products or asset classes.

### Multi-Strategy Approach

BNPP CASA Index allocates to a range of rules-based BNP Paribas Indices (the “BNPP Index Components”) that were each specifically designed to systematically harvest non-traditional sources of return across the equity, fixed-income, commodity, and currency markets.

### Diversification Potential

The BNPP CASA Index seeks to maintain a diversified exposure to the selected BNPP Index Components and to generate positive risk-adjusted returns with low to moderate correlation to the broad markets.

## ABOUT BNP PARIBAS

BNP Paribas is one of the world’s largest banks by assets, with three major business lines providing a substantial diversified asset base. With offices in 68 countries across five continents and over 193,000 employees, BNP Paribas offers wide coverage of financial markets and an extensive global banking network.

### BNPP Quantitative Investment Strategies Team

For more than a decade the BNP Paribas Quantitative Investment Strategies (“QIS”) Team has been a leader and a pioneer in developing rules-based systematic investment strategies. The BNPP QIS Team consists of over 20 investment professionals, with trading, financial engineering, and academic backgrounds, which focus exclusively on generating and implementing new systematic strategies.

Index Fees - The BNPP CASA Index levels are shown net of rebalancing fees, replication fees, and annual fees of the BNPP CASA Index and the BNPP Index Components and their respective sub-components. Rebalancing fees will vary during different market conditions. If BNP Paribas is able to rebalance the index at a lower fee amount than the level of fees established for such index, this could potentially result in greater profitability for BNP Paribas, as the lower fee will not be reflected in the level of the BNPP CASA Index. For more information about these fees, please contact: [bnpp.casaindex@us.bnpparibas.com](mailto:bnpp.casaindex@us.bnpparibas.com).

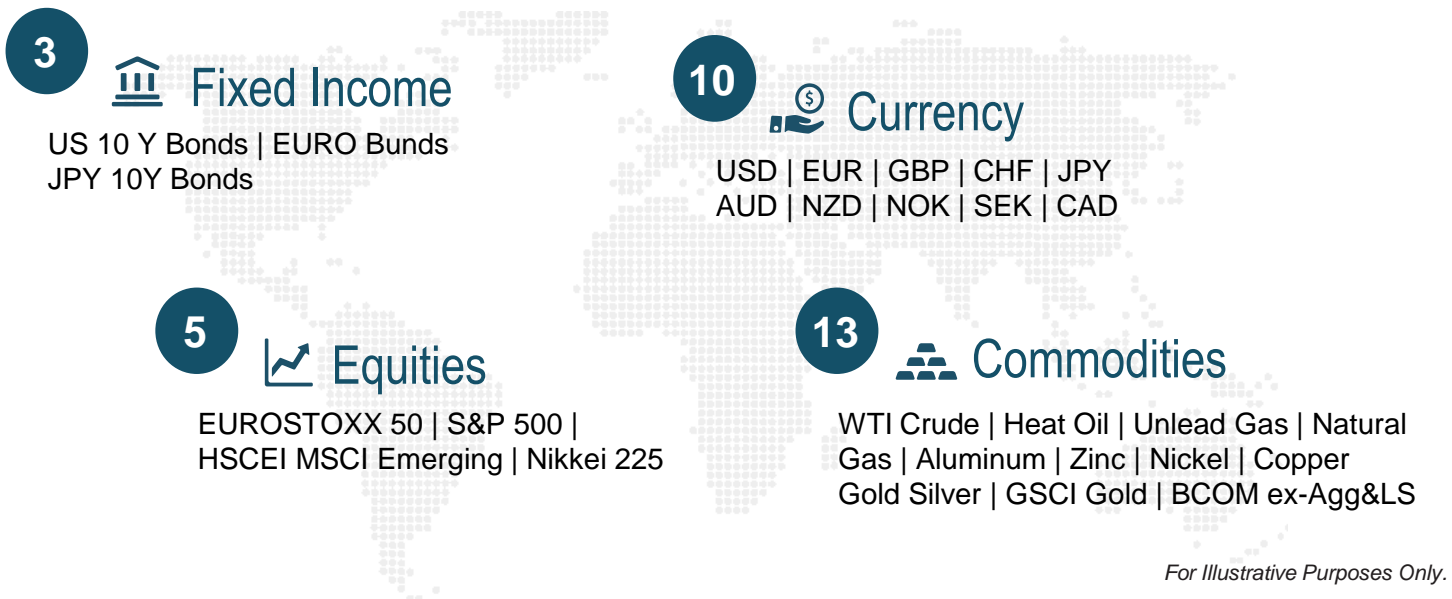
The BNPP CASA Index is an “Excess Return” index, and reflects the performance of the BNPP Index Components, which require little or no cash to obtain the economic exposure and risk that is the objective of the BNPP CASA Index. The BNPP CASA Index Level does not reflect interest from cash instruments or other related returns that might be realized when obtaining the performance of an index that would require a cash investment equal to the value of the BNPP CASA Index.

See risk factors section for additional index disclosures.

# INVESTMENT PROCESS

The BNPP QIS Team, in cooperation with Catalyst Investment Advisors, created the BNPP CASA Index to access a diversified portfolio of BNPP Index Components.

Each day, the BNPP CASA Index dynamically allocates to **SEVEN** BNPP Index Components, which invest in **THIRTEEN** regions/countries and trade **THIRTY-ONE** different instruments across **FOUR** asset classes.



The **SEVEN** BNPP Index Components were chosen because they have historically exhibited low correlation to each other as well as the broad markets, further increasing the potential effectiveness of the BNPP CASA Index over a variety of market cycles.

Each of the **SEVEN** BNPP Index Components systematically implements techniques such as short sales, spread trading, and the use of leverage and derivatives, as summarized below.

	STYLE (RISK PREMIA)	BNPP INDEX COMPONENT	ATTEMPTS TO HARVEST	EXAMPLE OF IMPLEMENTATION*
Volatility	Equities Volatility	BNPP Dynamic Volatility Roll Down US Index (BNPIDVRU)	Shape of Volatility Futures Curve	Sell First and Second Month VIX Index Futures Contracts
	Equities Volatility	BNPP AIR US TR Index (BNPIAIRU)	Spread Between Implied and Realized Volatility	Buy S&P 500 Index forwards and Sell S&P 500 Index Calls and Puts
	Fixed Income Volatility	BNPP AIR T-Note ER Index (BNPIAIRT)	Spread between implied and realized volatility	Buy US Treasury Note Futures and Sell US Treasury Note Futures Calls and Puts
Momentum	Equities Momentum Commodities Momentum Fixed Income Momentum	BNPP Multi-Asset Diversified vol 16 USD FX Hedged Future Index (BNPID16U)	Momentum in multiple Asset Classes	Buy Positively Trending Futures and Sell Negatively Trending Futures Across Multiple Asset Classes
Carry	Commodities Carry	BNPP DR Alpha Ex-Agriculture and Livestock Index (BNPIDRXA)	Spread Between Commodity Futures Contracts	Buy Cheaper to Roll Futures Contracts and Sell Front Month Futures Contracts on Individual Commodities
	Commodities Carry	BNPP Dynamic Pre-Roll Alpha Ex-Agriculture and Livestock Target Vol 3 Index (BNPIPRX3)	Spread Between Futures Contracts During Commodity Benchmark/ETF Rebalances	Buy Cheaper to Roll Futures Contracts and Sell During Commodity Benchmark/ETF Monthly Rebalances
	Currencies Carry	BNPP GALAXY G10 Excess Return USD Index (BPFXGGUR)	Spread Between Low Yielding and High Yielding Currencies	Buy High Yielding Currency Forward Contracts and Sell Low Yielding Currency Forward Contracts

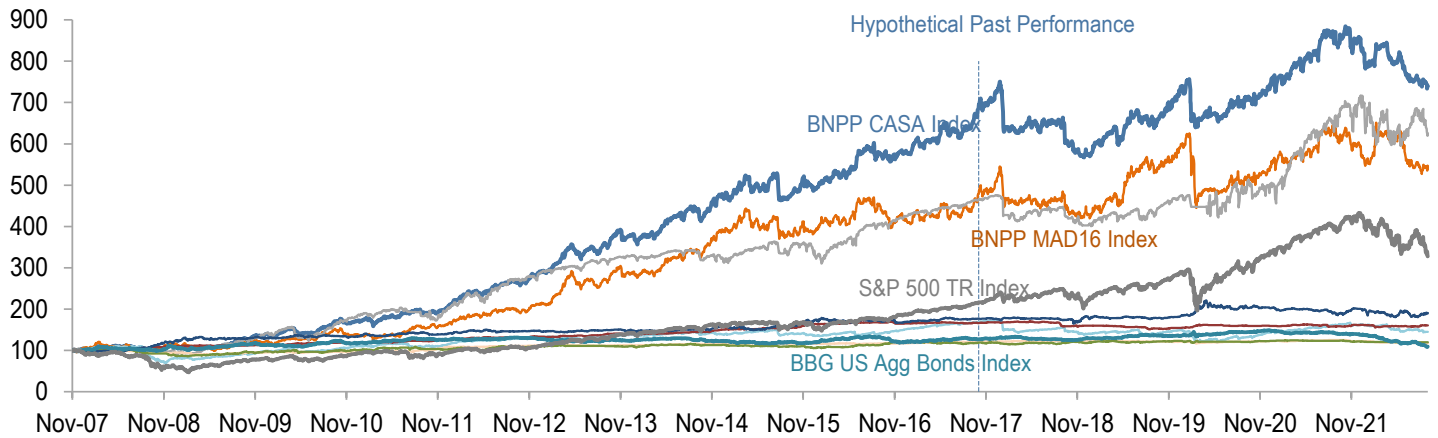
*\*Abbreviated terms for illustrative purposes only and do not reflect actual index mechanics. Underlying instruments may be accessed through other BNP Paribas Indices.*

# PERFORMANCE ANALYSIS\*

## Indices Levels (actual and hypothetical simulations)

The charts and tables below show an analysis of the back-tested levels of the BNPP CASA Index. The BNPP CASA Index was launched on 31 October 2017. The prior performance shown is simulated\*.

### INDICES LEVELS - Actual and Hypothetically Simulated



- BNP Paribas Catalyst Systematic Alpha Index
- BNPP Dynamic Volatility Roll Down US Index
- BNPP AIR T-Note ER Index
- BNPP GALAXY G10 Excess Return USD Index
- Bloomberg US Agg Bonds Index
- BNPP Multi-Asset Diversified vol 16 USD FX Hedged Future Index
- BNPP AIR US Index
- BNPP Dynamic Pre-Roll Alpha ex-Ag. & Lv. Target Vol 3 Index
- BNPP DR Alpha ex-Ag. & Lv. Index
- S&P 500 TR Index

### INDEX RETURN SUMMARY

	Ann. Return	Volatility	Sharpe Ratio	Max Drawdown
BNP Paribas Catalyst Systematic Alpha Index	14.42%	12.28%	1.17	-24.55%
BNPP AIR US Index	2.53%	10.45%	0.24	-36.81%
BNPP AIR T-Note ER Index	1.08%	3.43%	0.31	-10.21%
BNPP Dynamic Pre-Roll Alpha ex-Ag. & Lv. Target Vol 3 Index	3.24%	3.10%	1.04	-11.14%
BNPP GALAXY G10 Excess Return USD Index	1.23%	5.49%	0.22	-16.11%
BNPP Dynamic Volatility Roll Down US Index	13.15%	16.30%	0.81	-22.15%
BNPP Multi-Asset Diversified vol 16 USD FX Hedged Future Index	12.04%	15.90%	0.76	-28.89%
BNPP DR Alpha ex-Ag. & Lv. Index	4.44%	7.94%	0.56	-18.63%
Bloomberg US Agg Bonds Index	0.61%	6.38%	0.10	-27.67%
S&P 500 TR Index	8.32%	20.85%	0.40	-53.96%

### INDEX INFORMATION

Bloomberg ticker	BNPICASA Index
Calculation Agent	BNP Paribas Arbitrage SNC
Index Sponsor	BNP Paribas
Index Type	Excess Return
Weighting	Daily rebalancing
Index Launch Date	31 October 2017
Index Start Date	31 May 2002

Sources: Bloomberg, BNP Paribas from 30 November 2007 to 30 September 2022. Past performance is not an indicator of future performance. The BNPP CASA Index is based on Hypothetical Past Performance Data ("PPD") prior to 31 October 2017. Because the BNPP CASA Index did not exist prior to this date, all retrospective levels provided in the graph and table above are simulated and must be considered illustrative only. These simulations are the result of estimates made by BNP Paribas at a given moment on the basis of 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 BNPP CASA Index. The BNPP CASA Index levels are shown net of rebalancing fees, replication fees, and annual fees of the BNPP CASA Index and the BNPP Index Components and their respective sub-components. Rebalancing fees will vary during different market conditions. \*BNPP CASA Index levels prior to Nov 2007 do not include all selected sub-indices and is not reflective of performance had all 7 BNPP Index Components been available.

# SELECTED RISKS AND CONSIDERATIONS

## Associated with the Index

### **The BNPP CASA Index levels are based on the values of notional assets and liabilities.**

The BNPP CASA Index only calculates the exposure to a dynamic, hypothetical portfolio that tracks the excess returns of the underlying components and is purely notional. There is no actual portfolio of assets to which any person makes any investment or has any ownership interest.

### **No recommendation.**

BNP Paribas makes no recommendation as to the suitability for investment of the BNPP CASA Index or any products or strategies based partly or wholly on the BNPP CASA Index. You should reach a decision after careful consideration with your advisors.

### **The strategy or methodology of the BNPP CASA Index may not be successful**

There can be no assurance that the strategy or methodology of the BNPP CASA Index will achieve its objectives or that the intended strategy of the BNPP CASA Index will outperform any alternative strategy that might be constructed from the BNPP Index Components or any other assets.

### **The BNPP CASA Index level may differ from the value of the BNPP Index Components**

The BNPP CASA Index does not have any direct or indirect ownership interest or rights in the BNPP Index Components (or sub-components thereof). The BNPP CASA Index level may not reflect the return that may be achieved from an investment in one or more of the BNPP Index Components.

### **The BNPP CASA Index and the BNPP Index Components (and sub-components thereof) contain embedded fees**

The BNPP CASA Index is subject to an annual fee of 0.10% per annum fee and a deduction for the cost of hypothetically implementing the weighted portfolio of BNPP Index Components. As a result of these deductions, the levels of the BNPP CASA Index will be lower than would otherwise be the case if such fees were not included. Some of the BNPP Index Components (and sub-components thereof) are also subject to a daily deduction of fixed and/or variable fees in connection with the related methodology. As a result of these deductions, the levels of the BNPP Index Components will be lower than would otherwise be the case if such fees were not included. Because the BNPP CASA Index is linked to the performance of the weighted portfolio of seven BNPP Index Components, any deduction of costs or fees from the levels of the BNPP Index Components (and sub-components thereof) will lower the level of the BNPP CASA Index. The deductions of fees from the levels of the BNPP Index Components are in addition to the deduction of fees from the level of the BNPP CASA Index and the cumulative effect of these deductions may be significant. The BNPP CASA Index will not appreciate unless the performance of the BNPP Index Components is sufficient to offset the negative effects of the cumulative fees, and then only to the extent that the total return of the BNPP Index Components is greater than the deducted amounts. As a result of these deductions, the level of the BNPP CASA Index may decline even if the total return of the BNPP Index Components is positive.

### **The BNPP CASA Index has a very limited performance history**

Calculation of the BNPP CASA Index began on October 31, 2017 (the "Launch Date"). Therefore, the BNPP CASA Index has a very limited performance history and no actual investment which allowed tracking of the performance of the BNPP CASA Index was possible before this date. The BNPP CASA Index performance data prior to the Launch Date has been retrospectively calculated using historical market data to the extent such data is available and the same methodology. Although the Index Sponsor believes that these retrospective calculations represent accurately and fairly how the BNPP CASA Index would have performed before the Launch Date, the BNPP CASA Index did not, in fact, exist before the Launch Date. Furthermore, the BNPP CASA Index Methodology was designed, constructed and tested

using historical market data and based on knowledge of factors that may have possibly affected their performance. The returns prior to the Launch Date were achieved by means of a retroactive application of such back-tested index methodology designed with the benefit of hindsight. It is impossible to predict whether the BNPP CASA Index will rise or fall. The actual performance of the BNPP CASA Index may bear little relation to its retrospectively calculated performance.

### **The BNPP CASA Index and some of the BNPP Index Components are subject to the potential use of leverage**

The BNPP CASA Index and one or more of the BNPP Index Components may use leverage to increase the notional exposure to certain components. When a component is leveraged, any movements in the levels of such component will result in greater changes in the level of the BNPP CASA Index or the BNPP Index Component than if leverage were not used. In particular, the use of leverage will magnify any negative performance of the leveraged component, which, in turn, could adversely affect the level of the BNPP CASA Index and/or the BNPP Index Component, as applicable.

### **The BNPP CASA Index may perform poorly during periods characterized by short-term volatility**

The BNPP CASA Index's weight allocation strategy is based on recent historical volatility. Each day, the BNPP CASA Index will allocate a higher weight (up to a specified maximum) to the BNPP Index Components that have exhibited near-term low volatility and a lower weight to the BNPP Index Components that have exhibited near-term high volatility. The BNPP CASA Index's weight allocation strategy may be effective at identifying the current market direction in trending markets. However, in non-trending, sideways markets, such a strategy is subject to "whipsaws". A whipsaw occurs when the market reverses and does the opposite of what has recently occurred, resulting in a trading loss during the particular period. Consequently, the BNPP CASA Index may perform poorly in non-trending, "choppy" markets characterized by short-term volatility.

The BNPP CASA Index's weight allocation strategy is based on momentum investing. Momentum investing strategies are effective at identifying the current market direction in trending markets. However, in non-trending, sideways markets, momentum investment strategies are subject to "whipsaws". A whipsaw occurs when the market reverses and does the opposite of what is indicated by the trend indicator, resulting in a trading loss during the particular period. Consequently, the BNPP CASA Index may perform poorly in non-trending, "choppy" markets characterized by short-term volatility.

### **There are risks associated with an index methodology that attempts to replicate a momentum-based allocation strategy**

One or more of the BNPP Index Components is constructed using what is generally known as a momentum-based allocation strategy to construct its hypothetical portfolio of underlying components. A momentum-based allocation strategy generally seeks to capitalize on positive market price trends based on the supposition that such trends may continue. However, there is no guarantee that trends existing in a prior period will continue in the future. A momentum-based allocation strategy is different from a strategy that seeks long-term exposure to a hypothetical portfolio consisting of constant components with fixed weights. The BNPP Index Component may fail to realize gains that could occur as a result of obtaining exposures to financial instruments that have experienced negative returns, but which subsequently experience a sudden spike in positive returns. As a result, if market conditions do not represent a continuation of prior observed trends, the level of the BNPP Index Component, which is rebalanced based on prior trends, may decline.

### **One or more of the BNPP Index Components will be synthetically short**

One or more of the BNPP Index Components' (and sub-components thereof) strategy is implemented by synthetically replicating a



# SELECTED RISKS AND CONSIDERATIONS

## Associated with the Index

“short” position on their component(s). Accordingly, such short position will not benefit from any positive price movements of such component(s) and may limit appreciation of the BNPP Index Component notwithstanding appreciation of its component.

### **There is short exposure to some components of BNPP Index Components and such exposure may result in a significant drop in the level of the BNPP Index Components**

Since one or more of the BNPP Index Components’ (and sub-components thereof) synthetically replicates a short position on their component(s), a positive return on such component will have a negative impact on the level of the BNPP Index Component. Accordingly, if the component posts significant positive returns, it may have a large negative impact on the level of the BNPP Index Component. In addition, due to its short position on the component(s), the level of the BNPP Index Component could potentially fall to zero without the value of the underlying component falling to zero.

### **One or more of the BNPP Index Components is subject to volatility risk**

One or more of the BNPP Index Components aim to generate returns by gaining synthetic exposure to the spread between the implied and realized volatility of an underlying reference asset. If the realized volatility of such reference asset were to increase sharply, then the performance of the BNPP Index Component may decrease significantly during such periods of high volatility.

### **One or more of the BNPP Index Components may utilize a “long-short” strategy and be subject to additional risks**

One or more of the BNPP Index Components employs a technique generally known as a “long-short” strategy. This means the BNPP Index Component may include both synthetic “long” positions and synthetic “short” positions. Unlike long positions, short positions are subject to unlimited risk of loss because there is no limit on the amount by which the price that the relevant asset may appreciate before the short position is closed. Short positions will not benefit from any positive price movements of the relevant sub-components and may limit appreciation of the BNPP Index Component notwithstanding appreciation of the sub-component(s).

### **The level of carry calculated for some BNPP Index Components may not be indicative of future performance**

The BNP Paribas GALAXY G10 ER USD Index is designed to take positions in its components based on a calculation of the expected carry return on the currency pair underlying each component. Its methodology assigns weights to its components based on this calculation of carry, taking long positions in components associated with higher carry and short position in components associated with lower carry. The selection mechanism limits the number of currency pairs which may be selected. Certain currency pairs which are not selected based on these criteria may outperform some currency pairs which have been selected. There can be no assurance that currency pairs with higher carry will outperform currency pairs with lower carry. The strategy employed by the BNP Paribas GALAXY G10 ER USD Index may perform poorly during periods of higher risk aversion.

### **Components of some of the BNPP Index Components may not reflect publicly available prices**

The components of the BNP Paribas GALAXY G10 ER USD Index are intended to reflect the hypothetical present value of a simulated FX Forward. Such hypothetical present value is determined using a simplified valuation model developed by BNP Paribas or one of its affiliates that is not publicly available. The valuation model may produce results that may differ from calculations by other sources using the same market data.

### **The volatility of commodities prices may adversely affect some of the BNPP Index Components**

One or more of the BNPP Index Components is comprised of commodities futures contracts. Commodities prices are highly

volatile and are affected by numerous factors in addition to economic activity.

These include political events, weather, labor activity, direct government intervention, such as embargos, and supply disruptions in major producing or consuming regions. Those events tend to affect prices worldwide, regardless of the location of the event. Market expectations about these events and speculative activity also cause prices to fluctuate. These factors may adversely affect the performance of the BNPP Index Components.

### **One or more of the BNPP Index Components may be highly concentrated in one or more regions, industries or economic sectors**

The BNPP CASA Index is designed to provide exposure to a diversified portfolio of assets, including a variety of asset classes and geographical regions. Exposure to any particular BNPP Index Component may vary over time, and may be reduced to zero. As a result, the exposure of the BNPP CASA Index may be concentrated in one or more asset classes or geographic regions at any time. Such concentration may increase the risks that the price, value or level of other assets in these geographic regions, industries or economic sectors or the levels of the BNPP Index Components may decline, thereby adversely affecting the BNPP CASA Index level.

For example, a financial crisis could erupt in a particular geographic region, industry or economic sector and lead to sharp declines in the currencies, equities markets and other asset prices in that geographic region, industry or economic sector, threatening the particular financial systems, disrupting economies and causing political upheaval. A financial crisis or other event in any geographic region, industry or economic sector could have a negative impact on some or all of the BNPP Index Components and the BNPP CASA Index.

### **Risks relating to the futures markets may adversely affect some of the BNPP Index Components**

Some of the components (or sub-components thereof) of BNPP Index Components are futures contracts. The prices of futures contracts may be affected by a number of factors, including but not limited to changes in supply and demand relationships, interest rates and governmental and regulatory policies. The policies of the exchanges on which the futures contracts trade may include certain trading restrictions, margin requirements and other requirements, which are subject to change and may have a negative impact on prices. Futures markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity in the markets, participation of speculators, and government regulation and intervention. These factors and can cause the prices of futures contracts to be volatile and unpredictable, and may adversely impact the BNPP Index Component.

Prices of futures contracts are subject to sudden changes and can change dramatically over short periods of time, even when they have been relatively stable for an extended period of time. Such changes may result in a dramatic decline in the level of the BNPP Index Component.

### **Negative roll returns associated with futures contracts may adversely affect the performance of some of the BNPP Index Components**

Some of the components (or sub-components thereof) of BNPP Index Components are futures contracts. Unlike common securities, futures contracts, by their terms, have stated expirations. As the futures contracts that comprise the BNPP Index Component (or sub-component) approach expiration, they are synthetically replaced by a contract with a later expiration. Excluding other considerations, if prices are higher in the distant delivery months than in the nearer delivery months, the notional purchase of the futures contract with the later expiration date would take place at a price that is higher than the price of the futures contract that is expiring, thereby creating a negative “roll return.” Negative roll returns may adversely affect the level of the BNPP Index Component (or sub-component) which in turn may have a negative effect on the BNPP CASA Index (or BNPP

# SELECTED RISKS AND CONSIDERATIONS

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Index Component). Because of the potential effects of negative roll returns, it is possible for the level of the BNPP Index Component (or sub-component) to decrease over time, even when the near-term or spot price of the underlying futures contract is stable or increasing.

### **Consistent trends in the performance of components of BNPP Index Components may not be indicative of such future performance**

One or more of the BNPP Index Components is designed to track consistent trends in the performance of its components. The methodology for such BNPP Index Component assigns weights to its components based on the performance of such components over a specified period in the past. There can be no assurance that performance trends existing in the past will continue in the future. The strategy employed by the BNPP Index Component may perform poorly during non-trending periods or periods characterized by high volatility.

### **Actual volatility of the BNPP Index Component may not equal the target volatility**

One or more of the BNPP Index Components may employ a volatility control mechanism with the objective of limiting the volatility of the level of such BNPP Index Component. There can be no assurance that any particular volatility control mechanism will achieve its specific volatility target. There can be no assurance that the performance of any component of the BNPP Index Component or the BNPP Index Component will be below a specific volatility target at any point in time, or will remain below a specific volatility target in the future.

### **Volatility control may limit the performance of the BNPP Index Component**

A volatility control mechanism with the objective of maintaining a specified level of volatility may be employed by one or more of the BNPP Index Components, which may reduce the weighting of the component(s) composed in such BNPP Index Component. This mechanism may limit the performance of the BNPP Index Component which in turn may limit the performance of the BNPP CASA Index. The expected volatility of the BNPP Index Component may be estimated using historical volatility, which may not be indicative of future levels of volatility. There can be no assurance that a specified level of volatility will be achieved.

### **Historical volatility may be a poor indicator of future volatility**

One or more of the BNPP Index Components measures the expected risk of their respective components based on historical volatility. There can be no assurance that the historical volatility of such components will be indicative of future volatility. In addition, other potential measures of volatility may be more predictive of future volatility than historical volatility. As a result, the measure of expected risk used by the methodology of the BNPP Index Component may be less accurate than other measures that could have been used.

### **The value or performance of the BNPP Index Components may offset each other**

Changes in value or return of the BNPP Index Components may not correlate with each other. The impact on the BNPP CASA Index level of an increase in the value of one or more BNPP Index Components may be reduced or offset by the decrease in value of other BNPP Index Components.

Performance amongst the BNPP Index Components comprising the BNPP CASA Index may become highly correlated from time to time, including, but not limited to, a period in which there is a substantial decline in the relevant markets. High correlation during periods of market decline may have a negative impact on the BNPP CASA Index. The correlation amongst BNPP Index Components comprised in the BNPP CASA Index may change over time. Any historical trend in correlation amongst the BNPP Index Components is not an indication of such correlation at any time in the future.

### **Publicly available information related to the BNPP CASA Index is limited**

The BNPP CASA Index is a custom index developed by BNP Paribas, the Index Sponsor. There is limited information relating to the BNPP CASA Index that is publicly available. None of BNP Paribas, the Index Sponsor, the Index Calculation Agent, any market data provider or any other source is required to make information publicly available relating to the composition, method of calculation or rebalancing of the BNPP CASA Index unless otherwise agreed in writing or required by law. Additional information is available solely through the Index Sponsor and may be provided subject to certain restrictions. Only a limited amount of historical data exists with respect to the BNPP CASA Index. Use of the BNPP CASA Index or investment in any financial instrument or transaction that references the BNPP CASA Index may involve a greater risk than one or more indices with a more established performance record.

### **The BNPP CASA Index and the BNPP Index Components may be subject to corrections**

In the event that the Index Sponsor, the Index Calculation Agent or any of their affiliates becomes aware of any error, miscalculation or other discrepancy in the calculation of the BNPP CASA Index or any BNPP Index Component, the Index Sponsor will determine if a correction is required, taking into consideration the source of the error and the impact on the level of the BNPP CASA Index. If a correction is to be made, the Index Calculation Agent will correct and republish the affected index level(s) in accordance with the rules for such index. In certain circumstances, corrections will not be made and the index level will remain uncorrected. The Index Sponsor and the Index Calculation Agent shall have no liability for any loss arising from or related to any such error or miscalculation.

### **The BNPP CASA Index is an excess return index**

The BNPP CASA Index is an "Excess Return" index, and reflects the performance of the BNPP Index Components, which require little or no cash to obtain the economic exposure and risk that is the objective of the BNPP CASA Index. The level of the BNPP CASA Index does not reflect interest from cash instruments or other related returns that might be realized when obtaining the performance of an index that would require a cash investment equal to the value of the BNPP CASA Index.

### **BNP Paribas Arbitrage SNC, an affiliate of the Index Sponsor of the BNPP CASA Index, BNP Paribas, is the Index Calculation Agent who is responsible for calculating the levels of the BNPP CASA Index**

The policies and calculations for which the Index Calculation Agent is responsible could have an impact, positive or negative, on the level of the BNPP CASA Index. BNP Paribas and its affiliates are under no obligation to consider your interest as an investor in a product linked to the BNPP CASA Index.

### **Legal and regulatory regimes may affect the BNPP CASA Index or the BNPP Index Components**

The BNPP CASA Index and the BNPP Index Components (and sub-components thereof) are subject to legal and regulatory regimes in various regions and, in some cases, in other countries that may change in ways that could negatively affect the BNPP CASA Index or the BNPP Index Components. Changes to the applicable legal or regulatory regimes may have a negative impact on the BNPP CASA Index level and/or the value of any transactions that reference the BNPP CASA Index.

The BNPP Index Components (and sub-components thereof) that are traded on one or more public exchanges are subject to the rules of the relevant exchange. Such rules may be changed or revised in a manner that adversely affects the BNPP Index Components and may adversely affect the BNPP CASA Index.

# IMPORTANT INFORMATION

## Associated with the Index

The BNP Paribas Catalyst Systematic Alpha Index (the “BNPP CASA Index”) is the exclusive property of BNP Paribas or one of its affiliates (BNP Paribas and its affiliates are hereinafter called “BNPP”) and is determined, composed and calculated by BNPP. “BNP”, “BNPP”, “BNP Paribas”, “BNP Paribas Catalyst Systematic Alpha Index”, and “BNPP CASA Index” (collectively, the “BNPP Marks”) are trademarks or service marks of BNPP.

The BNPP CASA Index is the exclusive property of BNP Paribas (the “Index Sponsor”). BNP Paribas Arbitrage SNC (the “Index Calculation Agent”) and the Index Sponsor do not guarantee the accuracy and/ or completeness of the composition, calculation, publication and adjustment of the BNPP CASA Index, any data included therein, or any data from which it is based, and the Index Calculation Agent and the Index Sponsor shall have no liability for any errors, omissions, or interruptions therein. The Index Calculation Agent and the Index Sponsor make no warranty, express or implied, as to results to be obtained from the use of the BNPP CASA Index. The Index Calculation Agent and the Index Sponsor make no express or implied warranties, and expressly disclaim all warranties of merchantability or fitness for a particular purpose or use with respect to the BNPP CASA Index or any data included therein. Without limiting any of the foregoing, in no event shall the Index Calculation Agent and the Index Sponsor have any liability for any special, punitive, indirect, or consequential damages (including lost profits), even if notified of the possibility of such damages.

**BNP PARIBAS HAS DEVELOPED, MAINTAINS AND IS THE SOLE PARTY RESPONSIBLE FOR THE METHODOLOGY THAT IS EMPLOYED IN CONNECTION WITH THE BNPP CASA INDEX. PROSPECTIVE INVESTORS ARE ADVISED TO MAKE AN INVESTMENT IN ANY PRODUCT ONLY AFTER CAREFULLY CONSIDERING THE RISKS ASSOCIATED WITH INVESTING IN SUCH PRODUCT, AS DETAILED IN A PROSPECTUS OR SIMILAR DOCUMENT THAT IS PREPARED BY OR ON BEHALF OF THE ISSUER OF THE PRODUCT OR THE INDEX SPONSOR.**

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## For additional information

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