

**Quantitative Investment Strategies & Index Solutions** 



# **Contents**

- 01 Our Approach
- 02 Thematic & Enhanced Beta
- 03 Risk Premia Indices
- 04 Annex

# BBV∧ **01**

Our Approach

# **BBVA Global Markets Quantitative Investment Strategies (QIS)**



### BBVA Group

- 168 year committed to our clients
- Present in more than 25 countries
- 76 million clients
- Building a more sustainable and inclusive future

### / BBVA QIS

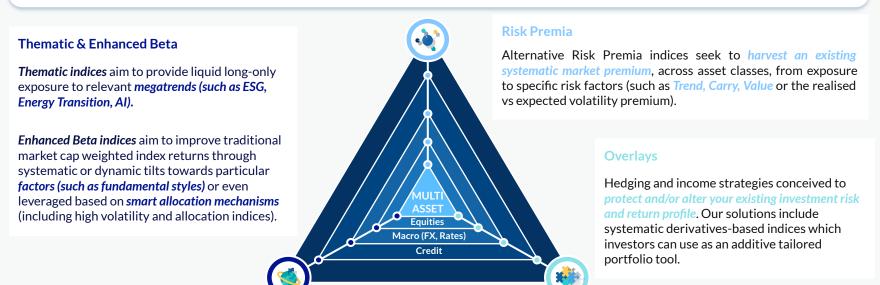
- 20+ Professionals providing clients with innovative Investment Solutions
- Global Product Development and Trading hubs
- 5 Structuring and pricing hubs
- Servicing QIS clients in Europe, US and Latin America



# **BBVA Global Markets QIS & Index Solutions**



BBVA GM QIS offers an integrated platform to design, implement and invest in rule-based investment strategies in a flexible and cost-efficient format. Our toolset and offering allow investors to seek complementary sources of return, harvest alternative risk premia or modify risk returns of their existing portfolios in a transparent manner. QIS strategies can be implemented through various payoffs and wrappers, tailoring the final product to client specific objectives and risk appetite.



Additionally, our **Index Solutions Framework** enables clients to access **baskets of indices** or **instruments across different asset classes** to express investment views. Please reach out to your BBVA representative.



Thematic & Enhanced Beta: liquid long-only exposure to megatrends and improved traditional market index returns

	5Y(a)*		5Y(a)*		5Y(a)*
Solactive BBVA ixESG Global Leaders	8.6%	Solactive BBVA Next Generation Networks	16.2%	Solactive BBVA Energy Transition	5.0%
Solactive BBVA Climate Action PAB Europe	4.8%	Solactive BBVA Cybersecurity	13.4%	Solactive BBVA US REITs	4.7%
Solactive BBVA Climate Action CTB Europe	3.9%	Solactive BBVA AI & Virtual Reality	16.3%	Solactive BBVA US Small Caps Select	14.3%
Solactive 360 Euro IG Corporate CTB	-0.56%	Solactive BBVA Health & Wellness	7.7%	Solactive BBVA Global Infrastructure	6.4%
Solactive BBVA ixS Global Inclusive Growth	4.3%	Solactive BBVA Resource Scarcity	11.4%	Solactive BBVA Transatlantic Defense	New
Solactive BBVA ixG Global Governance and Board Diversity	5.5%	Solactive BBVA Top Trends	10.9%		







<sup>\* 5</sup>Y annualized return calculated in EUR. Data from December 2019 to December 2024. Figures may be partly composed of historical performance based on a backtest.





Thematic & Enhanced Beta: liquid long-only exposure to megatrends and improved traditional market index returns

**Fundamental factor based:** Indices designed to enhance diversification, generate outperformance and manage risk through exposure to fundamental risk factors

BBVA US Sector Neutral Growth Index	Long Only, sector- neutral strategy selecting large and mid cap securities exhibiting overall Growth style characteristics across the US Market.
BBVA US Sector Neutral Value Index	Long Only, sector- neutral strategy selecting large and mid cap securities exhibiting overall Value style characteristics across the US Market.
BBVA US Sector Neutral Quality Index	Long Only, sector- neutral strategy selecting large and mid cap securities exhibiting overall Quality style characteristics across the US Market.
BBVA US Sector Neutral Momentum Index	Long Only, sector- neutral strategy selecting large and mid cap securities exhibiting overall Momentum style characteristics across the US Market.



Thematic & Enhanced Beta: liquid long-only exposure to megatrends and improved traditional market index returns

*Multi-factor sector indices:* Indices designed to enhance diversification, generate above-market returns and manage risk through exposure to an ensemble of "style" factors, while maintaining similar risk to a particular industry sector.

Bloomberg Europe Energy Select Multi-Factor indices

Bloomberg Europe Automotive Select Multi Factor Indices

Bloomberg Euro Banks Select Multi-Factor Indices Bloomberg Europe Basic Resources Select Multi Factor Index

Bloomberg Europe Healthcare Select Multi Factor Index Bloomberg US Financials Select Multi Factor Indices

Bloomberg US Energy Select Multi Factor Price Return Indices

Bloomberg US Healthcare Select Multi Factor Price Return Indices Bloomberg US Industrials Select Multi Factor Price Return Indices

Bloomberg US Technology Select Multi Factor Indices

Decrement in percentage and fixed points versions available



Thematic & Enhanced Beta: liquid long-only exposure to megatrends and improved traditional market index returns

High Volatility: Indices designed to offer a leveraged exposure to market benchmarks through a specific Volatility target

Russell 2000 Futures 40% ATV Volatility Index Russell 2000 Futures 40% ATV Volatility Index aims to target a realised volatility of 40%, by dynamically changing exposure to the underlying reference futures index.

S&P 500 Futures Volatility Watcher 35% VT TCA ER Index S&P 500 Futures Volatility Adjustment 35% VT TCA ER Index is designed to target a realised volatility of 35%, by dynamically changing exposure to the underlying reference futures index (S&P 500 Futures ER Index).



Risk Premia: Long/short Indices that seek to isolate and harvest excess returns from exposure to specific risk factors

**Multi Asset Trend-Based Allocators:** Indices using trend signals to dynamically adjust allocation across asset classes, while optimizing the risk exposure

BBVA SMART 5% RC Index

Long-only, multi-asset (Equity, Bonds and Gold) & multi-region (US, EU and JP) Allocator, dynamically allocating between low correlated asset classes to maximize the return of a portfolio for a given amount of risk. Risk control mechanism mitigating strong variations in periods of high uncertainty.

BBVA Gold Shield US Equity 11% RC Index  $Long-only, multi-asset \ (Equity \ and \ Gold) \ Allocator, \ dynamically \ allocating \ between \ low \ correlated \ asset \ classes \ to \ maximize \ the \ return \ of \ a \ portfolio \ for \ a \ given \ amount \ of \ risk. \ Risk \ control \ mechanism \ mitigating \ strong \ variations \ in \ periods \ of \ high \ uncertainty.$ 



Risk Premia: Long/short Indices that seek to isolate and harvest excess returns from exposure to specific risk factors

Credit	
BBVA Credit Trend	Gaining exposure to the trends generated in the credit market by changing macro and micro economic conditions
BBVA Credit Carry	Capture relative illiquidity and company risk premia between High Yield and Investment Grade
EUA Carbon	
2071 04.10011	
Solactive BBVA EUA Carbon Futures	Tracks the performance of the Intercontinental Exchange (ICE) December EUA Carbon future

Fixed Income	
BBVA Bond Futures Trend (US, EU)	Capture risk premia in Bond Futures Markets generated by macroeconomic factors
BBVA Interest Rate Swaps Trend (US, EU)	Capture risk premia in Rates Markets generated by macroeconomic factors

FX	
BBVA FX Trend (G8, Global Macro, LatAm)	Capture risk premia in FX Markets generated by macroeconomic factors
BBVA FX Carry (Global Macro, LatAm)	Borrowing in the lowest yielding currencies and investing in the highest yielding currencies
BBVA FX Relative Value (G8, Global Macro, LatAm)	Capture the medium-term deviation and reversion of each currency from its relative level



Overlays: Hedging and income strategies conceived to protect and improve existing investment risk and return profile.

#### BBVA

**Put Spread Protection Index** 

Systematic derivatives-based index which investors can use as an additive tailored portfolio tool

#### BBVA

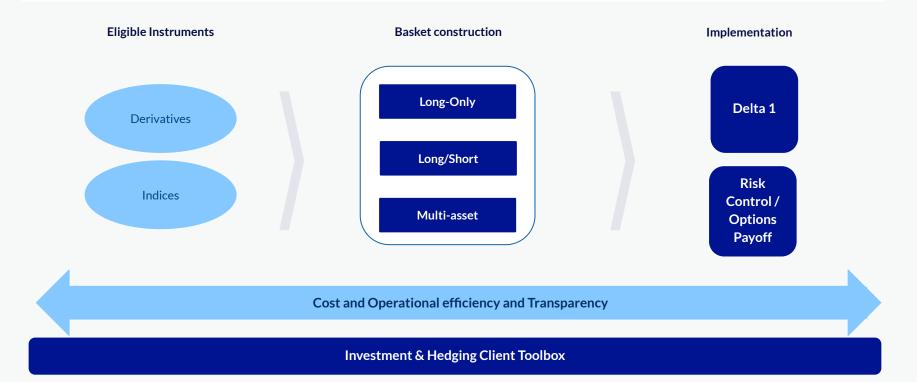
**Collar Protection Index** 

Systematic derivatives-based index which investors can use as an additive tailored portfolio tool

### **BBVA Index Basket Framework**

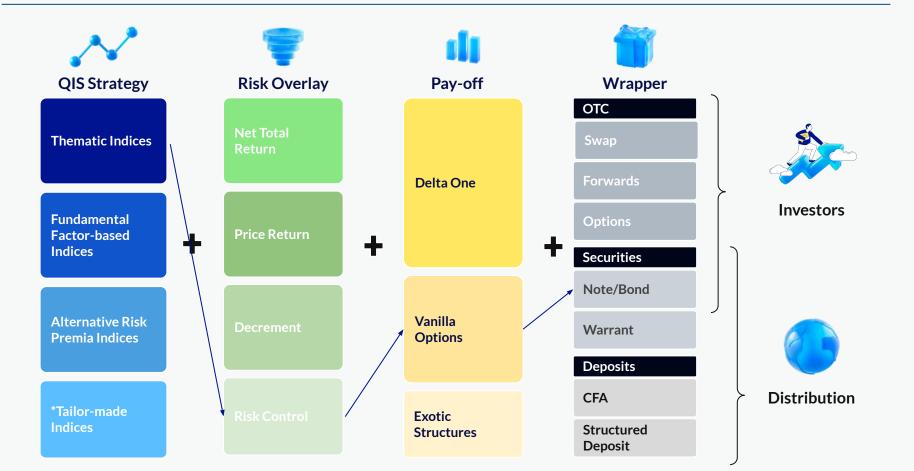


The BBVA Index Basket multi asset Framework allows an immediate deployment with specific underlying weights or allocations in the already existing BBVA Indices and trackers. Framework allow clients to access a toolbox to express market views in cost efficient way, streamlined from an operational perspective and offering full transparency.



# **Fully Customized Investments Solutions**





BBVA

BBVA

02

**Thematic and Enhanced Beta** 

### **State-of-the-art Manufacturing**

Our index manufacturing goes beyond the traditional product development process. Thanks to our best-in-class analysis capabilities, we deep dive into the most relevant market trends, assessing them from both quantitative and fundamental perspectives to identify their value drivers and integrating them at the core of the methodology of our indices.



### / Market Monitoring

- Our experienced strategy team monitors the markets continuously, assess new investment trends and build innovative indicators.
- Our proprietary intelligence platform combined with our strong analytical capabilities enable our strategy team to produce first class content and actionable investment ideas across all asset classes.



### / Top-Down Trend Analysis

- Strategy team performs a fundamental and quantitative analysis of the trend by deep diving into its roots, assessing the sub-themes that are driving it, and identifying the sub-industries (Factset Level 6) that will benefit the most from its future evolution.
- The selected sub-industries are grouped into buckets based on each sub-theme.



### / Index Development

- Trend value drivers are transformed into financial metrics and rules which are used to define the weights of the buckets and select the final constituents of the index.
- Standard liquidity, exposure and diversification rules are also embedded in the methodology to ensure the index will remain well balanced and investable over time.

# **Unique Thematic Methodology**



# Solactive BBVA ixESG Global Leaders Index



### **Bloomberg ticker: SBVESGEN < GO>**

#### Investment rationale

Solactive BBVA ixESG Global Leaders Index offers investors the opportunity to achieve their ESG investment goals by selecting the leading companies in ESG according to Sustainalytics ESG rating. It includes two innovative features:

- Innovative dynamic exclusion of controversial activities

Thresholds for activity exclusions decrease over time (in particular for Nuclear Power Generation and Thermal Coal Power Generation), being 0% for 2035.

Fast exit rule

Companies that lose their ESG quality are excluded in a monthly review.

### / Performance



### / Key facts

- Long-only equity thematic investment strategy focused on ESG
- Investment universe: Developed Markets Large and Mid Cap
- Dynamic exclusion of controversial activities
- Fast exit rule for companies that lose their ESG quality
- Preserves benchmark's sector and country weights
- Applies liquidity and diversification filters
- Constituents are Equally weighted with annual rebalancing

	SBVESGEN_EUR Index	SDMLMCUN_EUR Index	Diff
Avg Ret	11.39%	14.45%	-3.06%
Total Return	71.49%	96.36%	-24.86%
Volatility	13.57%	13.81%	-0.25%
Maximum Drawdown	-20.27%	-20.38%	0.11%
Sharpe Ratio	0.8	1.0	-0.2

# **Solactive BBVA Climate Action PAB Europe Index**



### **Bloomberg ticker: SBVPAEEN <GO>**

#### Investment rationale

Solactive BBVA Climate Action PAB Europe Index is a **Paris-Aligned Benchmark (PAB) to invest in companies at the forefront of the climate transition,** based on the EU Climate Benchmarks

Complying with the requirements set by the EU, our strategy goes much further. Our goal is to leverage on transitional opportunities avoiding environmental risks, and targeting an average temperature well below 2°C placing it on the most demanding scenario.

Portfolio decarbonized 50% at inception and achieves minimum 7% YoY decarbonization.

### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on Climate Action
- EU Compliant climate benchmark. The portfolio is associated with a
  potential temperature increase of 1.5°C by 2050.
- Seize transitional opportunities avoiding risks through the Carbon Risk Rating
- 50% relative decarbonization at inception with respect to the parent index
- 7% YoY self-decarbonization of the portfolio
- Overweights transitional opportunities
- Applies liquidity and diversification filters

		SEULMCEN_EUR	
	SBVPAEEN_EUR Index	Index	Diff
Avg Ret	8.2%	12.4%	-4.2%
Total Return	48.2%	79.1%	-30.8%
Volatility	13.8%	13.8%	-0.1%
Maximum Drawdown	-25.6%	-19.9%	-5.7%
Sharpe Ratio	0.6	0.9	-0.3

# **Solactive BBVA Climate Action CTB Europe Index**



**Bloomberg ticker: SBVCTEEN <GO>** 

#### Investment rationale

Solactive BBVA Climate Action CTB Europe Index is a Climate Transition Benchmark (CTB) to accompany the transition to a low-carbon economy, based on the EU Climate Benchmarks.

Complying with the minimum requirements set by the EU, our strategy goes much further. Our goal is to leverage on transitional opportunities, avoiding risks, and targeting an average temperature well below 2°C placing it on the most demanding scenario.

Portfolio decarbonized 30% at inception and achieves minimum 7% YoY decarbonization.

### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on Climate Action
- EU Compliant climate benchmark. The portfolio is associated with a
  potential temperature increase of 1.5°C by 2050.
- Seize transitional opportunities avoiding risks through the Carbon Risk Rating
- 30% relative decarbonization at inception with respect to the parent index
- 7% YoY self-decarbonization of the portfolio
- Overweights transitional opportunities
- Applies liquidity and diversification filters

	SBVCTEEN_EUR Index	SEULMCEN_EUR Index	Diff
Avg Ret	7.7%	12.4%	-4.6%
Total Return	45.1%	79.1%	-33.9%
Volatility	13.7%	13.8%	-0.1%
Maximum Drawdown	-25.1%	-19.9%	-5.2%
Sharpe Ratio	0.6	0.9	-0.3

# **Solactive 360 Euro IG Corporate CTB Index**



### **Bloomberg ticker: SBV360ET < GO>**

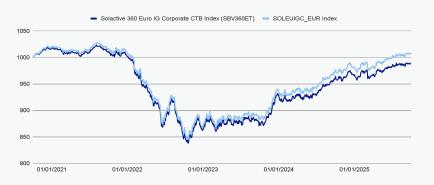
#### / Investment rationale

The index is a fixed income thematic investment strategy that applies a rules-based methodology to capture alpha from the exposure to EUR denominated investment grade corporate debt while increasing transparency on investors' alignment with the needs of ambitious climate scenario.

It provides exposure to a **portfolio lined up with a 1.5°C above pre industrial levels scenario through 2050.** At the same time, the index has very similar credit and interest rate risk distributions compared to its parent index: Solactive EUR IG Corporate Index.

The Index follows the requirements outlined in the Commission delegated regulation on minimum standards for EU Climate-Transition Benchmarks.

### / Performance



### **Key facts**

- Investable credit thematic investment strategy
- EU Compliant climate benchmark
- Seize transitional opportunities avoiding risks through the Carbon Risk Rating
- 30% relative decarbonization at inception with respect to the parent index
- 7% YoY self-decarbonization of the portfolio
- Overweights transitional opportunities + alignment with a webll below 2°C scenario

	SBV360ET Index	SOLEUIGC_EUR Index	Diff
Avg Ret	-0.20%	0.17%	-0.37%
Total Return	-1.02%	0.86%	-1.87%
Volatility	3.83%	3.75%	0.07%
Maximum Drawdown	-18.12%	-17.85%	-0.27%
Sharpe Ratio	-0.1	0.0	-0.1

### Solactive BBVA ixS Global Inclusive Growth Index



### **Bloomberg ticker: SBVGIGEP < GO >**

#### Investment rationale

Solactive BBVA ixS Global Inclusive Growth Index offers investors the opportunity to invest in leading growth companies at a reasonable price, together with a social focus according to the UN Sustainable Development Goals with a global scope

The index seeks firms posed for sustained, above-average earnings growth, not yet fully reflected in the stock's price, based on PEG and EV/EBITDA to EBITDA growth metrics. We emphasize companies that secure future growth through the investment cycle.

The Social tilt is both included in the exclusion process and weighting process. Social UN SDGs as per considered in the ICMA Social Bond Principles Mapping (1 - 11)

#### / Performance



### **Key facts**

- Long-only equity thematic investment strategy with global ESG scope and focused on Social Goals
- Selection: Financial Model. Value-adjusted growth
- Social United Nations Sustainable Development Goals. Based on the ICMA standards for Social Bonds
- ISS ESG as the ESG data provider
- Dynamic exclusions of controversial activities
- Modified equally weighted based on the highest score on Social SDGs

	SBVGIGEN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	2.8%	14.5%	-11.6%
Total Return	14.9%	96.4%	-81.5%
Volatility	11.9%	13.7%	-1.7%
Maximum Drawdown	-22.3%	-20.4%	-1.9%
Sharpe Ratio	0.2	1.1	-0.8

# Solactive BBVA ixG Global Governance & Board Diversity Index



### **Bloomberg ticker: SBVGGDEP < GO >**

#### Investment rationale

Solactive BBVA ixG Global Governance & Board Diversity Index select the **leading global companies in their Corporate Governance**, according to Sustainalytics G rating. Moreover it **overweights companies with a better Diversity Board Score**.

The selection of the components is done according to the best G rating by Sustainalytics, preversing the sectoral and country weight of its parent index.

Thresholds for activity exclusions decrease over time (in particular for Nuclear Power Generation and Thermal Coal Power Generation), being 0% for 2035.

Companies that lose their G quality are excluded in a monthly review.





### **Key facts**

- Solactive BBVA ixG Global Governance & Board Diversity Index select the leading global companies in their Corporate Governance, according to Sustainalytics G rating. Moreover it overweights companies with a better Diversity Board Score.
- The selection of the components is done according to the best G rating by Sustainalytics, preversing the sectoral and country weight of its parent index.
- Thresholds for activity exclusions decrease over time (in particular for Nuclear Power Generation and Thermal Coal Power Generation), being 0% for 2035.
- Companies that lose their G quality are excluded in a monthly review.

	SBVGGDEN Index	SDMLMCUN_EUR Index	Diff
Rentabilidad anual	9.0%	14.5%	-5.5%
Rentabilidad total	53.9%	97.0%	-43.1%
Volatilidad realizada	11.9%	13.6%	-1.7%
Caída Máxima	-16.4%	-20.4%	4.0%
Ratio de Sharpe	0.8	1.1	-0.3

### **Solactive BBVA Next Generation Networks Index**



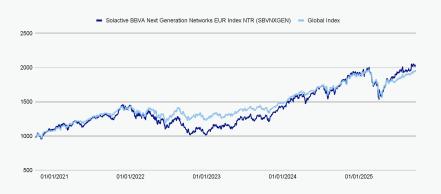
### **Bloomberg ticker: SBVNXGEN <GO>**

#### Investment rationale

The true potential of 5G lies in the increased densification of the network that will provide service to millions of intelligent devices for the Internet of Things (IoT), in addition to the installation of new fibre-optic sections that enable the speed and response characteristics of the new network. This should promote new business models in several industries.

Solactive BBVA Next Generation Networks Index selects the leading global companies in the deployment of the 5th (and subsequent) Generation of Telecommunications Networks.

#### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on enhanced connectivity (5G and Beyond)
- Investment universe: Developed markets + China ex A-shares + South Korea + Taiwan
- Leading companies in 5 topics: Core equipment, core software & services, end-user equipment, semiconductors and telecommunication services
- Applies liquidity and diversification filters
- Modified market cap weighting tilted by Next Generation revenues

	SBVNXGEN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	15.36%	14.45%	0.91%
Total Return	104.26%		7.91%
Volatility	18.77%	13.82%	4.95%
Maximum Drawdown	-30.44%	-20.38%	-10.06%
Sharpe Ratio	0.8	1.0	-0.2

# **Solactive BBVA Cybersecurity Index**



### **Bloomberg ticker: SBVCYBEN <GO>**

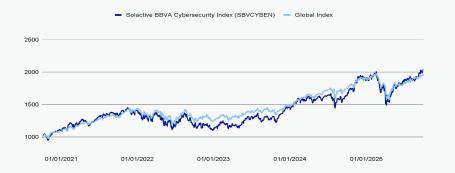
#### / Investment rationale

The global cybersecurity market size is projected to grow from USD 217.9 Billion in 2021 to USD 345.4 Billion by 2026, recording a Compound Annual Growth Rate (CAGR) of 9.7% from 2021 to 2026.

The fastest growing market subsegment is cloud security due to the growing popularity of using non-PC devices for interacting with core business processes

Solactive BBVA Cybersecurity index selects companies in the frontline of digital security, providing data protection and cyber-risk insurance, creating secure online transaction platforms and heeding the call for cyber defense, thanks to the low-latency network infrastructure and components.

### / Performance



### / Key facts

- Long-only equity thematic investment strategy focused on enhanced connectivity (5G and Beyond)
- Investment universe: Developed markets + China ex A-shares + South Korea + Taiwan
- Leading companies in 5 topics: Core equipment, core software & services, end-user equipment, semiconductors and telecommunication services
- Applies liquidity and diversification filters
- Modified market cap weighting tilted by Next Generation revenues

	SBVCYBEN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	15.4%	14.5%	0.9%
Total Return	104.9%	97.0%	7.9%
Volatility	19.9%	13.9%	6.0%
Maximum Drawdown	-25.3%	-20.4%	-5.0%
Sharpe Ratio	0.8	1.0	-0.3

# **Solactive BBVA AI & Virtual Reality Index**



### **Bloomberg ticker: SBVAVREN <GO>**

#### / Investment rationale

Artificial Intelligence is emerging as the next evolutionary leap. It refers to the exponential expansion of the predictive, problem-solving and Interactive capacities of information processors built upon massive data analysis capabilities. These interactions are furthered by the parallel development of Virtual Reality and Augmented Reality environments and devices, through which users can experience highly-reactive cyber-domains offering endless social and commercial possibilities.

**Solactive BBVA Artificial Intelligence and Virtual Technologies Index** selects companies shaping the traits of this new generation of digital systems, creating the core infrastructure and components, enhancing their accessibility and design, and ensuring their fitness for data management.

#### **Performance**



### **Key facts**

- Long-only equity thematic investment strategy focused on AI & Virtual Reality
- Investment universe: **Developed markets Large and Midcaps.**
- Leading companies in 5 topics: Infrastructure, Processing, Access, Architecture and Data Management
- Applies liquidity and diversification filters.
- Modified market cap weighting tilted by Al and Virtual reality revenues

	AI & VR Index	Global Index	Diff
Avg Ret	11.5%	13.4%	-1.9%
Total Return	72.1%	87.3%	-15.1%
Volatility	26.7%	14.0%	12.7%
Maximum Drawdown	-44.4%	-20.4%	-24.1%
Sharpe Ratio	0.4	1.0	-0.5

### **Solactive BBVA Health & Wellness Index**



### **Bloomberg ticker: SBVHAWEN < GO>**

#### Investment rationale

The Covid-19 pandemic has impacted people's life in every way, but mainly, it has prompted a global awareness on the importance of health.

With a society long-time concerned with aging and healthcare affordability, a renewed interest for disease "prevention" over "treatment" is growing rapidly; thus, paving the way for innovative therapies and major advancements in biopharmaceuticals, medical technology and consumer care products and services.

Solactive BBVA Health & Wellness Index selects companies taking human health at its heart; leading the fight against infectious and chronic diseases, serving the needs of the elder, refining healthcare management and favouring a healthy lifestyle and well-being.

### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on global Health and Wellness
- Companies ranked based on x-trend and single trend value drivers
- Leading companies in 5 topics: Aging population, chronic diseases treatment, consumer health & wellness, healthcare management and infectious diseases & pandemics prevention
- Excessive leverage filter (NDF/OCF)
- Modified market cap weighting tilted by H&W revenue exposure

	SBVHAWEN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	3.72%	14.45%	-10.73%
Total Return	20.06%		-76.30%
Volatility	13.70%	13.82%	-0.12%
Maximum Drawdown	-22.29%	-20.38%	-1.91%
Sharpe Ratio	0.3	1.05	-0.8

# **Solactive BBVA Resource Scarcity Index**



### **Bloomberg ticker: SBVRESEN <GO>**

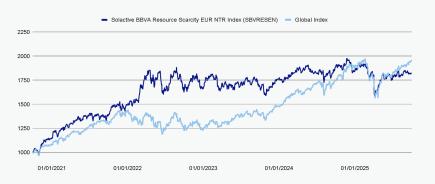
#### Investment rationale

The unmatched level of human development and prosperity achieved in the last few decades has run parallel to the **overuse and erosion of natural resources**. Today, these valuables appear more critical than ever to the needs of a global society increasingly concerned with the effects of the rapid population growth and climate change.

In this context, some firms are actively gearing their business to ensure the flow of these natural assets and promote the maximum efficiency of their uses.

Solactive BBVA Resource Scarcity Index selects the companies harnessing nature's most unscattered riches; easing water and food supply, improving forestry and mineral harvesting, managing urban physical space and providing the energy of tomorrow.

### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on resource scarcity
- Leading companies in 5 topics: Water, Food and Forest, Energy, Metals and Rare Elements and Urban Physical Space
- Companies ranked based on x-trend and single trend value drivers
- Applies liquidity and diversification filters
- Excessive leverage filter (NDF/EBITDA)
- Modified market cap weighting tilted by Resource Scarcity revenue exposure

	SBVRESEN Index	SDMLMCUN_EU R Index	Diff
Avg Ret	12.66%	14.45%	-1.79%
Total Return	81.47%	96.36%	-14.89%
Volatility	14.70%	13.82%	0.87%
Maximum Drawdown	-20.15%	-20.38%	0.23%
Sharpe Ratio	0.9	1.0	-0.2

# **Solactive BBVA Energy Transition Index**



### **Bloomberg ticker: SBVENTEN <GO>**

#### / Investment rationale

The path to Net-Zero emissions and the growing concern about Energy security are triggering a transformation in the Energy system world wide.

The cumulative investment over the next three decades in the Energy Transition related sectors is expected to exceed 190 USD trillion with a projected +80% capex increase from 2022 to 2050 (BNEF).

**Solactive BBVA Energy Transition index selects** companies in the frontline of energy resources, energy generation, its distribution and storage and enabling the efficiency along the whole value chain from the production to consumption.

#### / Performance



### **Key facts**

- Long-only equity thematic investment strategy focused on Energy Transition.
- Investment universe: Developed markets Large and Midcaps.
- Leading companies in 5 topics: Metal resources, Fuel resources, Energy Generation, Energy Distribution and Storage and Energy Efficiency Enablers.
- Applies liquidity and diversification filters.
- Modified market cap weighting tilted by Energy Transition revenues.

	SBVENTEN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	9.7%	14.5%	-4.8%
Total Return	58.8%	97.0%	-38.2%
Volatility	15.2%	13.9%	1.3%
Maximum Drawdown	-26.8%	-20.4%	-6.4%
Sharpe Ratio	0.6	1.0	-0.4

# **Solactive BBVA Top Trends Index**



### **Bloomberg ticker: SBVTT1PN < GO>**

#### Investment rationale

Megatrends are transformative movements and drivers that will change societies and economies in the upcoming years.

Solactive BBVA Top Trends Index selects the leading global companies of the most relevant revolutions:

- 1. ESG revolution
- 2. Energy Transition revolution
- 3. Technological Breakthrough revolution
- 4. Future Healthcare revolution
- 5. Urbanisation revolution

### Performance



### / Key facts

- Long-only equity investment strategy with exposure to the most relevant global megatrends
- Investment universe: QIS Thematic Indices
- Companies are weighted based on their market capitalization and on their revenues exposure to buckets (2-4). Companies are equally weighted in the ESG bucket. Final aggregation of all buckets allocating each a 25% weight on the final index.

	SBVTT1PN_EUR Index	SDMLMCUN _EUR Index	Diff
Avg Ret	10.75%	14.45%	-3.70%
Total Return	66.64%	96.36%	-29.72%
Volatility	13.70%	13.82%	-0.13%
Maximum Drawdown	-18.58%	-20.38%	1.79%
Sharpe Ratio	0.8	1.0	-0.3

### **Solactive BBVA US REITs Index**

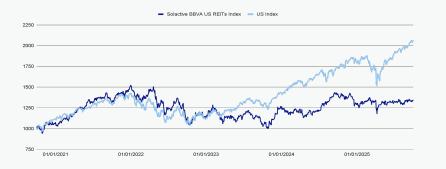
### BBVA

### **Bloomberg ticker: SBVURTUN <GO>**

### Investment rationale

- Real Estate Investment Trusts present an outstanding opportunity to gain exposure to the Real Estate sector through a liquid, diversified and tax-efficient vehicle.
- US REITs have outperformed steadily the S&P 500 during the past twenty
  years. Furthermore, they tend to behave especially well in periods of high
  inflation, acting as a shelter, as rental fees tend to be CPI-linked.
- Solactive BBVA US REITs Index selects the best positioned US REITs, that offer a recurrent dividend income source, avoiding excessive financial leverage in the undertakings and providing a critical hedge against raging inflation.

### / Performance



### / Key facts

- **Long-only Equity thematic** investment strategy focused on US REITs
- Investment universe: US large and mid cap REITs
- Applies liquidity, market cap and excess financial leverage filters
- Initial weights are based on market cap, tilted by dividend yield
- Final weights are dispersion-corrected

	SBVURTUN_USD Index	US500N_USD Index	Diff
Avg Ret	6.1%	15.6%	-9.5%
Total Return	34.6%	106.7%	-72.2%
Volatility	18.8%	17.2%	1.6%
Maximum Drawdown	-34.3%	-26.0%	-8.3%
Sharpe Ratio	0.3	0.9	-0.6

# **Solactive BBVA US Small Caps Select Index**



### **Bloomberg ticker: SBVUSSUN <GO>**

### Investment rationale

Small-cap stocks tend to outperform big-caps over time given their ability to grow more rapidly than larger companies. Moreover, most academic research finds **small high-quality** companies tend to significantly outperform their large cap equivalents over all variety of economic conditions and time periods.

**Solactive BBVA US Small Caps Select Index** picks the largest and highly liquid small cap companies by sector in the US, with a focus on balance sheet quality and profitability.

### **Key facts**

- Long-only equity thematic investment strategy focused US Small caps.
- Largest and most liquid companies in each sector, preserving sector neutrality.
- Applies liquidity and diversification filters.
- Excessive leverage filter (NDF/EBITDA).
- Modified market cap weighting tilted by ROCE.

### / Performance



	SBVUSSUN Index	RU20N30U Index	Diff
Avg Ret	14.5%	10.8%	3.7%
Total Return	97.0%	67.3%	29.7%
Volatility	18.9%	22.6%	-3.8%
Maximum Drawdown	-22.2%	-32.1%	9.9%
Sharpe Ratio	0.8	0.5	0.3

### **Solactive BBVA Global Infrastructure Index**



### **Bloomberg ticker: SBVGINUN <GO>**

#### Investment rationale

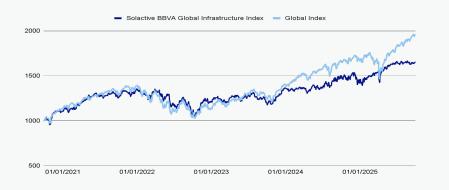
Infrastructure companies have proven to be generators of stable and predictable cash even during economic recessions, times when countries have resisted by relying on networks, generally managed by experienced operators. These companies have been able to cover society's main sanitation, commerce and communications needs, while consolidating the cash flow obtained from their fundamental services.

Solactive BBVA Infrastructure index selects companies that ensure the proper functioning of nations' infrastructures, optimizing water and waste management; and facilitating transport flow and connectivity.

### / Key facts

- Long-term thematic investment strategy focused on infrastructure
- Investment universe: Developed markets, large and medium capitalization.
- Leading companies in 5 topics: Energy, Ports and Airports, Highways and Railways, Telecommunications, Water and Waste.
- Apply liquidity and diversification filters
- Modified weighting by market capitalization favoring those with greater income exposure to infrastructure and dividend yield

#### / Performance



	SBVGINUN Index	SDMLMCUN_USD Index	Diff
Avg Ret	10.7%	14.4%	-3.8%
Total Return	65.9%		-30.4%
Volatility	13.2%	14.3%	-1.1%
Maximum Drawdown	-22.8%	-26.2%	3.4%
Sharpe Ratio	0.8	1.0	-0.2

### **BBVA US Sector Neutral Growth NTR USD Index**



### **Bloomberg ticker: BBEQUGUN < GO>**

#### Investment rationale

BBVA US Sector Neutral Growth Index selects those companies in the US Market showing high growth potential in each sector.

The index methodology is based on specific growth investment style features:

Non Financial companies: Sales and EBIT Growth (historic and estimated) and a Long Term growth metric.

Financials - Banks: Net Interest Income, Net interest margin and Net Income historic growth and a Long Term growth metric. Financials - Insurance Sector: Sales and Net Income Growth, and a Long Term growth metric.

### / Performance



### / Key facts

- Long Only strategy selecting large and mid cap securities exhibiting overall growth style characteristics across the US Market.
- Modified market cap weighted.
- Sector Neutral.
- Growth scores are equally weighted.
- Quarterly rebalance.
- Risk Control versions available.

	BBEQUGUN Index	US500N_USD Index	Diff
Avg Ret	20.5%	15.6%	4.9%
Total Return	154.5%	106.7%	47.7%
Volatility	18.2%	17.2%	1.0%
Maximum Drawdown	-24.8%	-26.0%	1.3%
Sharpe Ratio	1.1	0.9	0.2

### **BBVA US Sector Neutral Value NTR USD Index**



### **Bloomberg ticker: BBEQUVUN <GO>**

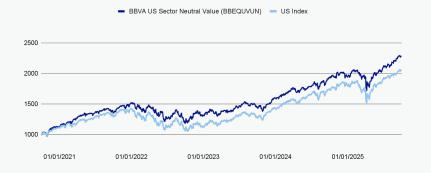
### Investment rationale

BBVA US Sector Neutral Value Index selects those companies in the US Market showing high value potential in each sector.

The index methodology is based on specific value investment style ratios:

- Best earnings to price
- Dividend yield
- Book value to price
- Free cash flow yield
- EBITDA to Enterprise Value

#### / Performance



### / Key facts

- Long Only strategy selecting large and mid cap securities exhibiting overall value style characteristics across the US Market.
- Modified market cap weighted.
- Sector Neutral.
- Value scores are equally weighted.
- Quarterly rebalance.
- Risk Control versions available.

	BBEQUVUN Index	US500N_USD Index	Diff
Avg Ret	17.95%	15.64%	2.31%
Total Return	128.25%	106.73%	21.52%
Volatility	15.51%	17.17%	-1.66%
Maximum Drawdown	-22.50%	-26.03%	3.53%
Sharpe Ratio	1.2	0.9	0.2

# **BBVA US Sector Neutral Quality NTR USD Index**



### **Bloomberg ticker: BBEQUQUN < GO>**

#### Investment rationale

BBVA US Sector Neutral Quality Index selects companies in the US Market showing high quality potential in each sector, based on specific quality investment style ratios.

For **financial companies**, quality ratios include:

- Return on Capital
- Net Interest Income to Revenues

For non-financial companies, quality ratios include:

- Return on Equity
- EBITDA Margin
- Current Ratio

### / Performance



### / Key facts

- Long Only strategy selecting large and mid cap securities exhibiting overall quality style characteristics across the US Market.
- Modified market cap weighted.
- Sector Neutral.
- Quality scores are equally weighted.
- Quarterly rebalance.
- Risk Control versions available.

	SBVGINUN Index	SDMLMCUN_USD Index	Diff
Avg Ret	10.7%	14.4%	-3.8%
Total Return	65.9%		-30.4%
Volatility	13.2%	14.3%	-1.1%
Maximum Drawdown	-22.8%	-26.2%	3.4%
Sharpe Ratio	0.8	1.0	-0.2

# **BBVA US Sector Neutral Momentum NTR Index**



# **Bloomberg ticker: BBEQUMUN <GO>**

#### Investment rationale

BBVA US Sector Neutral Momentum Index selects those companies in the US Market showing strong Momentum.

The index methodology is based on 5 specific Momentum investment style features:

- Total returns over 3 months, 6 months, 12 months
- Forward EPS changes over 3 months and 6 months

Momentum scores are built as a 50/50 combination of the total returns and forward EPS changes.

## / Key facts

- Long Only strategy selecting large and mid cap securities exhibiting overall
   Momentum style characteristics across the US Market
- Modified market cap weighted
- Sector Neutral
- Quarterly rebalance
- Risk Control versions available

## / Performance



	BBEQUMUN Index	US500N_USD Index	Diff
Avg Ret	16.5%	15.6%	0.8%
Total Return	114.2%	106.7%	7.4%
Volatility	18.3%	17.5%	0.8%
Maximum Drawdown	-24.2%	-26.0%	1.8%
Sharpe Ratio	0.9	0.9	0.0

# **Bloomberg Europe Energy Select Multi-Factor Index**



# **Bloomberg ticker: EUREMFN <GO>**

#### Investment rationale

Bloomberg Europe Energy Select Multi Factor Index has been designed to provide access to the energy sector in Europe, enhanced with targeted exposures to academically recognized style factors.

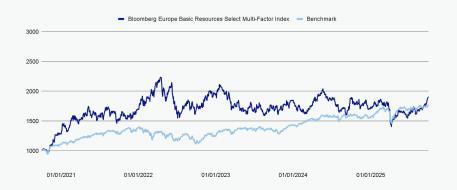
Style factors are based on specific fundamental metrics selected for their ability to generate alpha specifically within the energy sector.

The index aims to generate superior performance over time while maintaining a similar risk profile to the sector.

## **Key facts**

- Long-only equity sector investment strategy focused on Energy stocks
- Investment universe: Europe
- Modified market cap weighting tilted by fundamental factors
- Available versions: EUREMFP (Price Return), EUREMFT (Gross Total Return), EUREMFN (Net Total Return), EUREFPT (50 Fixed Points Decrement), EUREFPC (5% Decrement)

#### / Performance



	EURBRFN Index	EURP600N Index_EUR	Diff
Avg Ret	13.9%	12.2%	1.7%
Total Return	91.5%	77.9%	13.5%
Volatility	26.2%	13.9%	12.3%
Maximum Drawdown	-37.0%	-20.5%	-16.5%
Sharpe Ratio	0.5	0.9	-0.3

# **Bloomberg Europe Automotive Select Multi-Factor Index**



# **Bloomberg ticker: EURAMFN<GO>**

#### Investment rationale

Bloomberg Europe Automotive Select Multi Factor Index has been designed to provide access to the auto sector in Europe, enhanced with targeted exposures to academically recognized style factors.

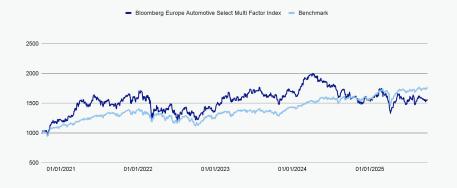
Style factors are based on specific fundamental metrics selected for their ability to generate alpha specifically within the auto sector.

The index aims to generate superior performance over time while maintaining a similar risk profile to the sector.

## **Key facts**

- Long-only equity sector investment strategy focused on Autos
- Investment universe: Europe
- Modified market cap weighting tilted by fundamental factors
- Available versions: EURAMFP (Price Return), EURAMFT (Gross Total Return), EURAMFN (Net Total Return), EURAFPT (50 Fixed Points Decrement), EURAFPC (5% Decrement)

#### / Performance



	EURAMFN Index	EURP600N Index_EUR	Diff
Avg Ret	9.4%	12.2%	-2.8%
Total Return	56.6%	77.9%	-21.3%
Volatility	23.3%	13.9%	9.4%
Maximum Drawdown	-33.6%	-20.5%	-13.1%
Sharpe Ratio	0.4	0.9	-0.5

# **Bloomberg Euro Banks Select Multi-Factor Index**



# **Bloomberg ticker: EURBKMFN<GO>**

#### / Investment rationale

Bloomberg Euro Banks Select Multi Factor Index has been designed to provide access to the auto sector in Europe, enhanced with targeted exposures to academically recognized style factors.

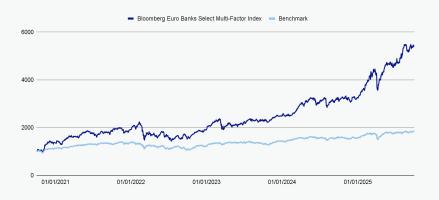
Style factors are based on specific fundamental metrics selected for their ability to generate alpha specifically within the auto sector.

The index aims to generate superior performance over time while maintaining a similar risk profile to the sector.

## **Key facts**

- Long-only equity sector investment strategy focused on Banks
- Investment universe: Eurozone Banks
- Modified market cap weighting tilted by fundamental factors
- Available versions: EURBKMFP (Price Return), EURBKMFT (Gross Total Return), EURBKMFN (Net Total Return), EURBMFPT (50 Fixed Points Decrement), EURBMFPC (5% Decrement)

#### / Performance



	EURBKMFN Index	EURODN Index	Diff
Avg Ret	40.4%	13.3%	27.1%
Total Return	445.5%		358.7%
Volatility	26.3%	15.9%	10.4%
Maximum Drawdown	-36.2%	-24.9%	-11.3%
Sharpe Ratio	1.5	0.8	0.7

# **Bloomberg Europe Basic Resources Select Multi-Factor Index**



# **Bloomberg ticker: EURBRFN<GO>**

#### Investment rationale

Bloomberg Europe Basic Resources Select Multi Factor Index has been designed to provide access to the auto sector in Europe, enhanced with targeted exposures to academically recognized style factors.

Style factors are based on specific fundamental metrics selected for their ability to generate alpha specifically within the auto sector.

The index aims to generate superior performance over time while maintaining a similar risk profile to the sector.

## **Key facts**

- Long-only equity sector investment strategy focused on Resources stocks
- Investment universe: Europe
- Modified market cap weighting tilted by fundamental factors
- Available versions: EURBRFP (Price Return), EURBRFT (Gross Total Return), EURBRFN (Net Total Return), EURBFPT (50 Fixed Points Decrement), EURBFPC (5% Decrement)

## / Performance



	EURBRFN Index	EURP600N Index_EUR	Diff
Avg Ret	13.9%	12.2%	1.7%
Total Return	91.5%	77.9%	13.5%
Volatility	26.2%	13.9%	12.3%
Maximum Drawdown	-37.0%	-20.5%	-16.5%
Sharpe Ratio	0.5	0.9	-0.3

# **Bloomberg Europe Healthcare Select Multi-Factor Index**



# **Bloomberg ticker: EURHCFN<GO>**

#### Investment rationale

Bloomberg Europe Basic Healthcare Select Multi Factor Index has been designed to provide access to the auto sector in Europe, enhanced with targeted exposures to academically recognized style factors.

Style factors are based on specific fundamental metrics selected for their ability to generate alpha specifically within the auto sector.

The index aims to generate superior performance over time while maintaining a similar risk profile to the sector.

## **Key facts**

- Long-only equity sector investment strategy focused on Healthcare stocks
- Investment universe: Europe
- Modified market cap weighting tilted by fundamental factors
- Available versions: EURHCFP (Price Return), EURHCFT (Gross Total Return), EURHCFN (Net Total Return), EURHFPT (50 Fixed Points Decrement), EURHFPC (5% Decrement)

#### / Performance



	EURHCFN Index	EURP600N Index_EUR	Diff
Avg Ret	6.5%	12.2%	-5.7%
Total Return	37.1%	77.9%	-40.9%
Volatility	14.9%	13.9%	1.0%
Maximum Drawdown	-25.5%	-20.5%	-5.0%
Sharpe Ratio	0.4	0.9	-0.4

# **Solactive BBVA Transatlantic Defense EUR NTR Index**



# **Bloomberg ticker: SBVTDEFN<GO>**

#### Investment rationale

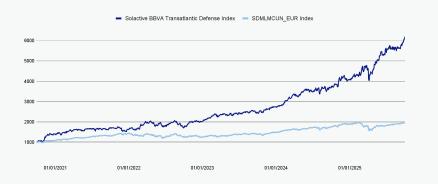
The **Solactive BBVA Transatlantic Defense EUR Index** provides exposure to 30 Developed Markets securities with business activities related to the Defense sector and which demonstrate strong fundamental attributes.

The index is **equally weighted** and rebalanced quarterly. The static universe is originally selected through fundamental factor scoring.

## / Key facts

- Long-only equity thematic investment strategy
- Investment universe: Developed Markets stocks (Europe and North America)
- Companies in the defense sector with strong fundamental attributes
- Applies liquidity and diversification filters
- Available index versions (Bloomberg tickers): PR EUR (SBVTDEFP), TR EUR (SBVTDEFT), NTR (SBVTDEFN) and 8% Volatility Target (SBVTDEVT).

#### / Performance



	SBVTDEFN Index	SDMLMCUN_EUR Index	Diff
Avg Ret	43.9%	14.5%	29.5%
Total Return	517.2%	96.4%	420.8%
Volatility	20.4%	13.8%	6.5%
Maximum Drawdown	-17.7%	-20.4%	2.6%
Sharpe Ratio	2.2	1.0	1.1

# **BBVA Smart 5% RC Index**



# **Bloomberg ticker:** BBSMARTE<GO> / BBSMARTU<GO>

## Investment rationale

- Diversification: Dynamic allocation between low correlated asset classes maximizes the return of a portfolio for a given amount of risk
- Trend following: Assets tend to move in trends during various types of market conditions. Trend following strategies capitalizes on market tendency, or behavioral biases, by overweighting the best-performing asset class
- Risk budgeting: Theory holds that dispersed risk should lead to better performance. In particular, risk parity should create a buffer between the portfolio and bear markets

#### / Performance



## / Key facts

- Long-only, multi-asset (Equity, Bonds and Gold) & multi-region (US, EU and JP) Allocator
- It applies price trend signals to dynamically allocate weights in the different assets, overweighting the best-performing asset class
- Market shock indicator to protect the portfolio in case of big sell offs
- Two Risk management layers: Risk parity scales the volatility of the Index components, while Risk control mitigates strong variations in periods of high uncertainty by setting a specific volatility target
- The Index is Excess return and includes charges

BBSMARTU	20Y	10Y	Since live date
Annual Excess Return	4.3%	4.4%	4.9%
Realised Volatility	5.2%	5.2%	5.2%
Maximum Drawdown	-11.6%	-11.6%	-4.8%
Sharpe Ratio	0.8	0.8	0.9

# **BBVA Gold Shield US Equity Index**

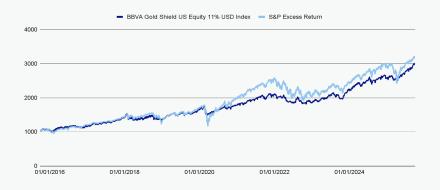


# **Bloomberg ticker: BBXIGUXI<GO>**

## Investment rationale

- **Diversification:** Dynamic allocation between low correlated asset classes maximizes the return of a portfolio for a given amount of risk
- Trend following: Assets tend to move in trends during various types of market conditions. Trend following strategies capitalizes on market tendency, or behavioral biases, by overweighting the best-performing asset class
- Risk budgeting: Risk control mitigates strong variations in periods of high uncertainty by setting a specific volatility target

#### / Performance



## **Key facts**

- Long-only, multi-asset (Equity and Gold) Allocator
- It applies **price trend signals** to dynamically allocate weights in the different assets, overweighting the best-performing asset class
- Market shock indicator to protect the portfolio in case of big sell offs
- 11% volatility target
- The Index is Excess return and includes charges

	BBXIGUXI Index	SPXFP Index	Diff
Avg Ret	11.66%	12.37%	-0.70%
Total Return	201.43%	220.94%	-19.51%
Volatility	15.24%	17.61%	-2.37%
Maximum Drawdown	-14.56%	-34.15%	19.60%
Sharpe Ratio	0.8	0.7	0.1

# **Russell 2000 Futures 40% ATV Volatility Index**



# **Bloomberg ticker: RUTF40V<GO>**

#### Investment rationale

Russell 2000 Futures 40% ATV Volatility Index aims to target a realised volatility of 40%, by dynamically changing exposure to the underlying reference futures index.

To remain close to the specified target vol level, Russell Volatility indices leverage (de-leverage) i.e. increase (decrease) allocation to the underlying, based on a realised vol estimate.

## / Performance



## **Key facts**

- Base currency: USD
- Realised volatility estimator is based on EWMA (Exponentially Weighted Moving Average) methodology
- Index component: FTSE Russell Excess Return Index (RTYFPE Index)
- Rebalanced Daily
- Maximum Leverage: 300%
- The Index has been live since 31 Jan 2025
- Index available in 5% decrement version: Ticker RUTF40VD Index

	RUTF40V Index
Avg Ret	0.0%
Total Return	0.1%
Volatility	41.6%
Maximum Drawdown	-69.3%
Sharpe Ratio	0.0

# **S&P 500 Futures Volatility Watcher 35% VT TCA ER Index**



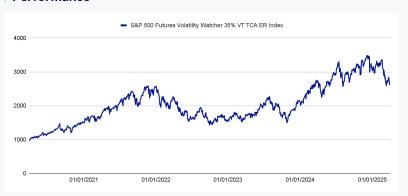
# **Bloomberg ticker: SPFV35T<GO>**

#### Investment rationale

*S&P 500 Futures Volatility Adjustment 35% VT TCA ER Index* is designed to target a realised volatility of 35%, by dynamically changing exposure to the underlying reference futures index (*S&P 500 Futures ER Index*).

The dynamic allocation is based on an innovative volatility estimator capturing both short term realized and implied volatility

#### Performance



## **Key facts**

- Innovative Volatility Estimator based on a combination of:
  - Change in closing levels of the Cboe Volatility Index (VIX Index)
  - Short term Realized Volatility Estimator on the underlying Index component
- Base currency: USD
- Index component: S&P 500 Futures ER Index
- Rebalanced Daily
- Maximum Leverage: 400%
- Index available in 5% decrement version: Bloomberg Ticker SPFV35TD

# / Key Metrics

	S&P 500 Futures Volatility Watcher 35% VT TCA ER Index			
Avg Ret	21.6%			
Total Return	166.4%			
Volatility	35.5%			
Maximum Drawdown	-44.2%			
Sharpe Ratio	0.6			

Data from March 2020 to 2025. Figures computed in USD. Chart may be partly composed of historical performance based on a backtest. Please refer to specific S&P disclaimers in the appendix.

# BBVA 03 Risk Premia Indices

# **Credit Risk Premia Indices: BBVA Credit Trend Index**



# **Bloomberg ticker: BBCITREU<GO>**

#### Investment rationale

Trend following credit strategy aims to capture the trend risk premia generated by changing macro and micro economic conditions, by taking long/short positions in credit markets via itraxx and CDX Indices.

#### Top features:

- Uncorrelated market returns especially in risky environment
- Forward looking indicator to capture sharp changes in macroeconomic conditions
- Efficient and transparent way to improve sharpe ratio of a portfolio

#### / Performance



## / Key facts

- Long/Short time series trend investment strategy with forward looking indicator to capture sharp changes
- Investment universe: four most liquid 5Y credit default swap indices iTraxx
   EU Main, iTraxx EU Xover, CDX NA HY and CDX NA IG
- Short and medium term technical indicators (1mo SMA, 3mo SMA) are used to determine trend and trigger Risk ON / NEUTRAL / OFF position
- Forward looking indicator based on a volatility indicator (VIX)
- Constituents are equally risk weighted

	20Y	10Y	5Y	1Y
Avg Ret	2.58%	0.52%	0.16%	-1.49%
Total Return	60.40%	5.28%	0.82%	-1.49%
Volatility	4.57%	3.84%	3.19%	2.25%
Maximum Drawdown	-9.70%	-9.70%	-7.88%	-5.38%
Sharpe Ratio	0.6	0.1	0.1	-0.7

# **Credit Risk Premia Indices: BBVA Credit Carry Index**



# **Bloomberg ticker: BBCICREU<GO>**

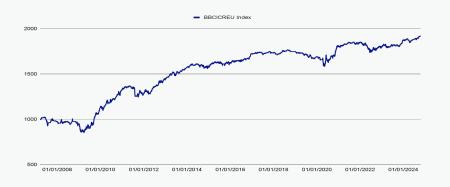
#### Investment rationale

Carry risk premia credit strategy aims to capture relative illiquidity and company risk premia between High Yield and Investment Grade by taking beta adjusted Spread position (HY - Beta x IG)

#### Top features:

- Alternative source of carry returns
- Aims to hedge market risk via beta adjusted short position
- Forward looking protection mechanism to capture sharp changes in macroeconomic conditions

#### / Performance



## Key facts

- Spread credit carry investment strategy with market shocks protection
- Investment universe: credit default swap indices iTraxx EU Main, iTraxx EU Xover, CDX NA HY and CDX NA IG
- Captures premia by selling protection on the high yield, and buying beta adjusted protection on the investment grade.
- Buying protection is scaled by ratio of medium to long term beta on HY vs IG
- Shock protection mechanism based on a volatility indicator (VIX)
- Regions are equally risk weighted

	20Y	10Y	5Y	1Y
Avg Ret	3.6%	1.9%	2.6%	1.6%
Total Return	94.6%	20.9%	13.9%	1.6%
Volatility	4.7%	3.4%	3.2%	2.2%
Maximum Drawdown	-16.8%	-10.4%	-6.3%	-3.1%
Sharpe Ratio	0.8	0.6	0.8	0.7

# **FX Risk Premia Indices: FX Trend**



# Bloomberg ticker: BBFXG8TU<GO> / BBFXGMTU<GO> / BBFXLMTU<GO>

#### Investment rationale

Carry risk premia credit strategy aims to capture relative illiquidity and company risk premia between High Yield and Investment Grade by taking beta adjusted Spread position (HY - Beta x IG)

#### Top features:

- Alternative source of carry returns
- Aims to hedge market risk via beta adjusted short position
- Forward looking protection mechanism to capture sharp changes in macroeconomic conditions

#### / Performance



## / Key facts

- Spread credit carry investment strategy with market shocks protection
- Investment universe: credit default swap indices iTraxx EU Main, iTraxx EU Xover, CDX NA HY and CDX NA IG
- Captures premia by selling protection on the high yield, and buying beta adjusted protection on the investment grade.
- Buying protection is scaled by ratio of medium to long term beta on HY vs IG
- Shock protection mechanism based on a volatility indicator (VIX)
- Regions are equally risk weighted

	Full History	10Y	5Y	1Y
Annual Excess Return	1.5%	0.8%	3.3%	-2.6%
Alliuai Excess Return	1.5%	0.0%	3.3/6	-2.0%
Realised Volatility	7.2%	5.9%	4.7%	2.8%
Maximum Drawdown	-21.5%	-21.5%	-21.4%	-8.1%
Maximum Drawdown	-21.5%	-21.376	-21.470	-0.176
Sharpe Ratio	0.2	0.1	0.7	-0.9

# **FX Risk Premia Indices: FX Global Carry**



# **Bloomberg ticker: BBFXGCRU<GO>**

#### Investment rationale

FX Carry strategy aims to capture the carry risk premia generated due to overestimation of risk of depreciation in high yielding currencies by taking long/short positions across the fourteen most liquid & non-pegged FX markets.

#### Top features:

- Efficient & transparent way to capture the Carry Risk Premia embedded in FX markets
- Six portfolios to capture Carry Premia in Global Markets and LatAm

## **Key facts**

- Long/short cross-sectional investment strategy
- Investment universe: fourteen most liquid currencies
- Each month the strategy borrows in the lowest yield currencies and invests in the highest yielding currencies, as implied by the 2M Forward rates
- Constituents are equally weighted

#### Performance



	Full History	10Y	5Y	1Y
Annual Excess Return	4.7%	5.2%	6.9%	6.2%
Realised Volatility	7.2%	6.6%	5.8%	5.6%
Mariana Baradana	40.707	45 (0)	40.00/	0.40/
Maximum Drawdown	-18.6%	-15.6%	-10.3%	-8.4%
Sharpe Ratio	0.7	0.8	1.2	1.1

# FX Risk Premia Indices: FX Global Carry with Risk Filter



# **Bloomberg ticker: BBFXGCFU<GO>**

#### Investment rationale

FX Carry strategy aims to capture the carry risk premia generated due to overestimation of risk of depreciation in high yielding currencies by taking long/short positions across the fourteen most liquid and non-pegged currency markets.

#### Top features:

- Efficient & transparent way to capture the Carry Risk Premia in FX
- Forward looking indicator to capture sharp changes in macroeconomic conditions
- Six portfolios to capture Carry Premia in Global Markets and LatAm

## **Key facts**

- Long/short cross-sectional investment strategy
- Investment universe: fourteen most liquid currencies
- Each month the strategy borrows in the lowest yield currencies and invests in the highest yielding currencies, as implied by the 2M Forward rates
- Constituents are equally weighted
- Forward looking indicator based on a volatility indicator (VIX Index)

#### / Performance



	Full History	10Y	5Y	1Y
Annual Excess Return	5.2%	5.3%	6.5%	4.3%
Realised Volatility	6.5%	6.3%	5.8%	5.4%
Maximum Drawdown	-13.3%	-13.3%	-8.5%	-8.5%
Sharpe Ratio	0.8	0.8	1.1	0.8

# **FX Risk Premia Indices: FX Relative Value**



# Bloomberg ticker: BBFXG8VU<GO> / BBFXGRVU <GO> / BBFXLRVU <GO>

#### Investment rationale

FX Relative Value strategy aims to capture the value risk premia generated by over or underreaction to changing macro and micro economic conditions, by taking long/short positions across the fourteen most liquid and non-pegged currency markets.

#### Top features:

- Uncorrelated market returns
- Efficient & transparent way to capture the Relative FX Value Risk Premia
- Three portfolios to capture Value Premia in G8, Global and LatAm

#### / Performance



## **Key facts**

- Long/Short time series investment strategy
- Investment universe: fourteen most liquid currencies
- Z-Score indicator based on Short Term (2m), Medium Term (6m) and Long
   Term (12m) relative exchange rate
- Forward looking indicator based on a volatility indicator (VIX Index)
- Constituents are equally weighted

	Full History	10Y	5Y	1Y
Annual Excess Return	0.9%	2.1%	0.1%	-5%
Realised Volatility	7.4%	6.3%	6.6%	6.4%
Maximum Drawdown	-25.8%	-13.7%	-11.2%	-11.2%
Sharpe Ratio	0.1	0.3	0.0	-0.8

# **Solactive BBVA EUA Carbon Futures Index**



# **Bloomberg ticker: SBVEUACF < GO>**

#### Investment rationale

- Carbon markets (Emissions Trading Systems) are market-based mechanisms aimed at reducing greenhouse gas emissions by putting a price on carbon through the trading of carbon credits or allowances. The European Union Emissions Trading System covers c.38% of the EU's total emissions. It is the oldest and most liquid one, operating through a 'cap and trade' system where the cap is lowered over time.
- The debate on Carbon pricing is currently shifting from "if" to "when" the price will surpass \$100 per ton, a critical prerequisite for achieving the net-zero transition. Various regulatory initiatives may help to achieve these price levels

## **Key facts**

- Tracks the performance of the Intercontinental Exchange (ICE) December month EUA Carbon future
- Rolls the exposure over 10 days from the December contract to the December next year's contract
- 10% Long / short Risk Control versions available

#### / Performance



	SBVEUACF Index
Avg Ret	19.88%
Total Return	147.56%
Volatility	39.24%
Maximum Drawdown	-51.17%
Sharpe Ratio	0.5

# **BBVA UST 10Y Bond Futures Trend USD Index**



# **Bloomberg ticker: BBIFTYTU <GO>**

#### / Investment rationale

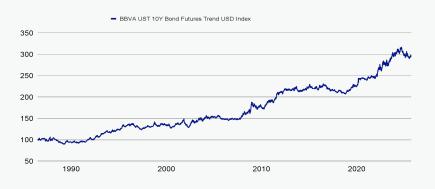
The BBVA Bond Futures Trend strategy aims to capture the trend risk premia generated by changing macro and micro economic conditions, by taking long/short positions in Government Bond Futures.

- Uncorrelated market returns especially in risky environment
- Rules-based and transparent method to capture Trend Risk Premia
- To capture Trend Premia in US Treasury 10Y Bond Futures markets.

# / Key facts

- Investment universe: UST 10Y Bond Future
- Dynamic daily signal based on:
  - Moving average indicator across 3 windows: Short Term
     (1w), Medium Term (2m) & Long Term (12m)
  - Volatility Regime as defined by realized volatility.

#### / Performance



	Full History	10Y	5Y	1Y
Annual Excess Return	2.8%	2.8%	3.9%	-5.8%
Realised Volatility	5.9%	5.3%	6.2%	5.3%
Maximum Drawdown	-16.2%	-10.3%	-8.6%	-8.6%
Sharpe Ratio	0.48	0.53	0.63	-1.11

# **BBVA G II Government Bond Futures Trend USD Index**



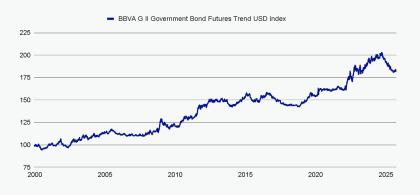
# **Bloomberg ticker: BBIFG2TU <GO>**

#### / Investment rationale

The BBVA Bond Futures Trend strategy aims to capture the trend risk premia generated by changing macro and micro economic conditions, by taking long/short positions in Government Bond Futures.

- Uncorrelated market returns especially in risky environment
- Rules-based and transparent method to capture Trend Risk Premia
- Portfolio across geographies to capture Trend Premia in both US and EU (Ger) Government 10Y Bond Futures markets.

# Performance



## **Key facts**

- Investment universe: UST 10Y Trend 60% and Bund Trend 40%
- Dynamic daily signal based on:
  - Moving average indicator across 3 windows: Short Term
     (1w), Medium Term (2m) & Long Term (12m)
  - Volatility Regime as defined by realized volatility.

	Full History	10Y	5Y	1Y
Annual Excess Return	2.4%	1.9%	2.4%	-9.4%
Realised Volatility	4.9%	4.8%	5.8%	4.1%
Maximum Drawdown	-10.9%	-10.9%	-10.9%	-10.9%
Sharpe Ratio	0.48	0.40	0.42	-2.31

# **BBVA EU Government Bond Futures Trend EUR Index**



# **Bloomberg ticker: BBIFEUTE <GO>**

#### / Investment rationale

The BBVA Bond Futures Trend strategy aims to capture the trend risk premia generated by changing macro and micro economic conditions, by taking long/short positions in Government Bond Futures.

- Uncorrelated market returns especially in risky environment
- Rules-based and transparent method to capture Trend Risk Premia
- Portfolio across tenors; to capture Trend Premia in EU (Ger) Government 10Y, 5Y and 2Y Bond Future Markets.

### Performance



## / Key facts

- Investment universe: Bund Trend (10Y) 50%, Bobl Trend (5Y) 30% and Schatz Trend (2Y) 20%.
- Dynamic daily signal based on:
  - Moving average indicator across 3 windows: Short Term
     (1w), Medium Term (2m) & Long Term (12m)
  - Volatility Regime as defined by realized volatility.

	Full History	10Y	5Y	1Y
Annual Excess Return	0.9%	0.3%	-0.1%	-10.3%
Realised Volatility	3.8%	4.1%	5.0%	3.5%
Maximum Drawdown	-11.6%	-11.6%	-11.6%	-11.6%
Sharpe Ratio	0.2	0.1	0.0	-3.0

# **BBVA Bund Futures Trend EUR Index**



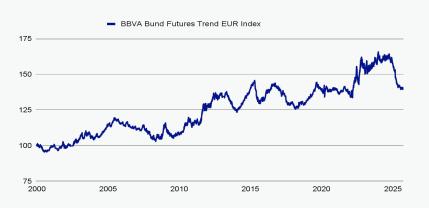
# **Bloomberg ticker: BBIFRXTE <GO>**

#### / Investment rationale

The BBVA Bond Futures Trend strategy aims to capture the trend risk premia generated by changing macro and micro economic conditions, by taking long/short positions in Government Bond Futures.

- Uncorrelated market returns especially in risky environment
- Rules-based and transparent method to capture Trend Risk Premia
- To capture Trend Premia in Bund Futures markets.

# Performance



## **Key facts**

- Investment universe: Bund Futures
- Dynamic daily signal based on:
  - Moving average indicator across 3 windows: Short Term (1w), Medium Term (2m) & Long Term (12m)
  - Volatility Regime as defined by realized volatility.

	Full History	10Y	5Y	1Y
Annual Excess Return	1.3%	0.6%	0.1%	-14.5%
Realised Volatility	5.6%	6.0%	7.2%	4.9%
Maximum Drawdown	-15.9%	-15.9%	-15.9%	-15.9%
Sharpe Ratio	0.23	0.10	0.01	-2.96

BBVA

BBVA

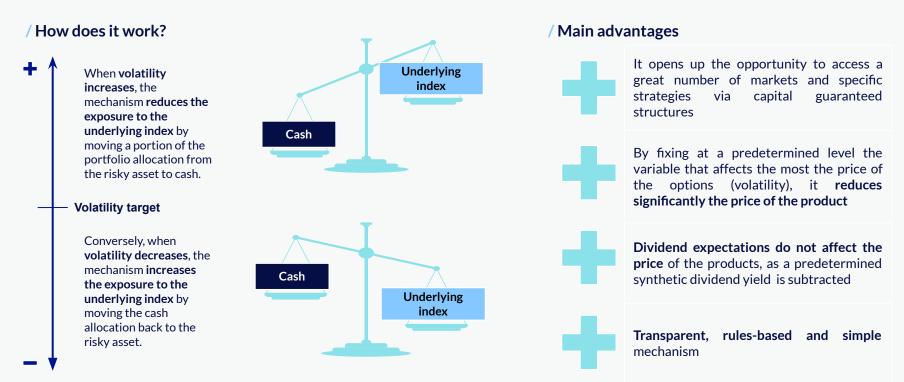
04

Annex

# **Risk Control Mechanism**



Risk control indices are designed to **keep risk at a predetermined level** for the investment strategy, **dynamically adjusting the exposure to the underlying index** (risky asset) depending on the **market realised volatility level**.





# **Quantitative Investment Solutions**

"Our purpose is to bring responsible and transparent investment opportunities through investable indices"

Global Markets

#### DISCLAIMER BBVA Quantitative Investment Strategies (Disclaimer BBVA Index Administration)



This marketing material includes information relating to one or more indices created by BBVA (each, an "Index"). Each Index is the exclusive property of BBVA.

BBVA may act in a number of different capacities in relation to the Index and/or products linked to the Index, which may include, but not be limited to, acting as market-maker, issuer or offeror, hedging counterparty, index administrator and index calculation agent. Such activities could result in potential conflicts of interest that could influence the price or value of a Product. BBVA has policies and procedures to identify, consider and manage potential conflicts of interest that may arise in such circumstances.

The methodology of and rules governing the relevant Index are proprietary and may not be disclosed or disseminated without the permission of BBVA. The use of Indices may be subject to licensing restrictions. A license may be required from BBVA to use, display, create derivatives works of and/or develop or create any transaction and/or distribute any product or service that uses, is based on, and/or developed and/or refers to any indices and/or index data owned by BBVA. BBVA does not sponsor, endorse, sell or promote any transaction and makes no representation regarding the advisability of investing in any such transaction.

BBVA does not make any representation whatsoever, whether express or implied, as to the advisability of, the ability of the Index to track relevant markets' performances, or otherwise relating to the Index or any transaction or product with respect thereto, or of assuming any risks in connection therewith. BBVA has no obligation to take the needs of any party into consideration in determining, composing or calculating the Index. BBVA shall not have any liability to any party for any act or failure to act in connection with the determination, adjustment, calculation or maintenance of the Index.

#### DISCLAIMER BBVA Quantitative Investment Strategies (Not administrator)

The Indexes are not calculated, sponsored, administered or published in any manner by Banco Bilbao Vizcaya Argentaria, S.A. nor any of its affiliates (hereinafter, "BBVA"). BBVA does not act as an administrator or a contributor of the Indexes. BBVA does not offer any express or implicit guarantee or assurance with regard to the calculation, publication or results of using the Indexes and/or Indexes trade mark or the Indexes prices or levels at any time or in any other respect.

There is no corporate ownership relationship between BBVA and the third party organisation relevant to this particular index, being independent companies.

BBVA is not responsible for the Indexes in any case. BBVA makes no representations or warranties, either explicit or implied, as to the accuracy, reliability or completeness of the matters stated in this marketing communication (hereinafter, the "Document"). All statements, information and data in this Document are merely indicative and subject to change without notice and shall not in any case be deemed to constitute an offer, invitation, solicitation, investment advice or a recommendation to enter into any transaction or to trade, nor shall they form the basis of any contract, commitment or investment decision of any kind. Historical performance of securities, instruments, products or indexes (including the Indexes) or the historical results of investments do not guarantee future performance. This Document and its content do not constitute, and shall not be deemed to in any way offer, invitation or solicitation to purchase or subscribe any securities or other instruments, or to undertake investments or divestments and they are therefore not intended to form the basis of any contract or commitment. The document does not constitute investment advice, legal advice, tax advice or personal recommendation. You acknowledge that the products described herein may not be appropriate for you due to your specific investment or risk management goals, financial positions or risk profiles. Therefore, before entering into a transaction, you should independently evaluate the financial, market, legal, regulatory, credit, tax and accounting risks and consequences involved and consult your own advisors. BBVA is not providing any such advice. The performance by BBVA of any of the tasks mentioned in this Document is conditional upon all of the definitive legal documentation being entered into between itself and a potential client, and BBVA having access to any of the third party platforms or services mentioned in it. BBVA does not accept any liability for any action taken by you or any third party in reliance on the matters stated

No part of this Document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. It is understood that you accept all of the warnings and conditions contained herein in its entirety.



#### DISCLAIMER BBVA Quantitative Investment Strategies for BBVA QIS (Credit Trend and Credit Carry Indices)

BBVA Credit Carry index and BBVA Credit Trend index (the "Indexes") are indexes calculated, administered and published by IHS Markit.

The Indexes are not calculated, sponsored, administered or published in any manner by Banco Bilbao Vizcava Argentaria, S.A. nor any of its affiliates (hereinafter, "BBVA"), BBVA does not act as an administrator or a contributor of the Indexes. BBVA does not offer any express or implicit guarantee or assurance with regard to the calculation, publication or results of using the Indexes and/or Indexes trade mark or the Indexes prices or levels at any time or in any other respect. There is no corporate ownership relationship between IHS Markit and BBVA, being independent companies. BBVA is not responsible for the Indexes in any case. BBVA makes no representations or warranties, either explicit or implied, as to the accuracy, reliability or completeness of the matters stated in this marketing communication (hereinafter, the "Document"). All statements, information and data in this Document are merely indicative and subject to change without notice and shall not in any case be deemed to constitute an offer, invitation, solicitation, investment advice or a recommendation to enter into any transaction or to trade, nor shall they form the basis of any contract, commitment or investment decision of any kind. Historical performance of securities, instruments, products or indexes (including the Indexes) or the historical results of investments do not guarantee future performance. This Document and its content do not constitute, and shall not be deemed to in any way offer, invitation or solicitation to purchase or subscribe any securities or other instruments, or to undertake investments and they are therefore not intended to form the basis of any contract or commitment. The document does not constitute investment advice, legal advice, tax advice or personal recommendation. You acknowledge that the products described herein may not be appropriate for you due to your specific investment or risk management goals, financial positions or risk profiles. Therefore, before entering into a transaction, you should independently evaluate the financial, market, legal, regulatory, credit, tax and accounting risks and consequences involved and consult your own advisors. BBVA is not providing any such advice. The performance by BBVA of any of the tasks mentioned in this Document is conditional upon all of the definitive legal documentation being entered into between itself and a potential client, and BBVA having access to any of the third party platforms or services mentioned in it. BBVA does not accept any liability for any action taken by you or any third party in reliance on the matters stated in this Document, nor for any direct or indirect damage, cost or loss of any nature whatsoever arising out of any error or inaccuracy in it. If you are a U.S. person (as defined in Regulation S under the Securities Act of 1933), the information presented here is provided to you by BBVA Securities Inc. ("BSI"), the U.S. broker-dealer of the BBVA Group. You should directly contact your representative at BSI for further information should you have any questions. Under Section 871(m) of the IRS, trading on U.S. underlyings could be restricted. This Document is not intended for distribution to, or to be used by, any person or entity in any jurisdiction or country which distribution or use would be contrary to law or regulation.

No part of this Document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. It is understood that you accept all of the warnings and conditions contained herein in its entirety.



#### DISCLAIMER IHS Markit Disclaimer Index Administrator (Credit Trend and Credit Carry Indices)

Copyright © 2022, IHS Markit Benchmark Administration Limited.

The BBVA Credit Carry Index and the BBVA Credit Trend Index (the "Indices") referenced herein are the property of Banco Bilbao Vizcaya Argentaria, S.A. ("BBVA" or "Index Owner") and the Indices are solely calculated, administered and published by IHS Markit Benchmark Administration Limited and/or its affiliates ("Index Administrator"). For the avoidance of doubt, BBVA does not act as an administrator or as a contributor of the Indices. Each user and party acknowledges and agrees that the Indices are not supported, endorsed or promoted by the Index Administrator or the Index Owner. Neither the Index Administrator nor the Index Owner make any representation whatsoever, whether express or implied, and hereby expressly disclaim all warranties (including, without limitation, those of merchantability or fitness for a particular purpose or use), with respect to the Indices or any data included therein or relating thereto, and in particular disclaims any warranty either as to the quality, accuracy and/or completeness of the Indices or any data included therein, the results obtained from the use of the Indices and/or the composition of the Indices at any particular time on any particular date or otherwise and/or the creditworthiness of any entity, or the likelihood of the occurrence of a credit event or similar event (however defined) with respect to an obligation, in the Indices at any particular time on any particular date or otherwise. Neither the Index Administrator nor the Index Owner shall be liable (whether in negligence or otherwise) to the parties or any other person for any error in the Indices, and they are under no obligation to advise the parties or any person of any error therein.

Neither the Index Administrator nor the Index Owner make any representation whatsoever, whether express or implied, as to the advisability of, the ability of the Indices to track relevant markets' performances, or otherwise relating to the Indices or any transaction or product with respect thereto, or of assuming any risks in connection therewith. Neither the Index Administrator nor the Index Owner has no obligation to take the needs of any party into consideration in determining, composing or calculating the Indices. Neither the Index Owner, nor the Index Administrator, shall have any liability to any party for any act or failure to act by the Index Administrator in connection with the determination, adjustment, calculation or maintenance of the Indices.

For the avoidance of doubt, there is no corporate ownership relationship between the Index Administrator and the Index Owner, which are separate and independent companies.

The Indices are based on the iTraxx EU Main, iTraxx EU Xover, CDX NA HY and CDX NA IG. ITraxx is a mark of Markit Indices GmbH, CDX is a mark of Markit North america Inc., iTraxx EU Main, iTraxx EU Main, iTraxx EU Xover referenced herein are property of Markit Indices GmbH, CDX NA HY and CDX NA IG referenced herein are property of Markit North america Inc. All of them are used under license. The Indices are not sponsored, endorsed or promoted by Markit or any of its members.

#### DISCLAIMER S&P Dow Jones (Disclaimer VIX) (Credit Trend and Credit Carry Indices)

The BBVA Credit Trend Index and the BBVA Credit Carry Index (the "Derived Indices") are a product of Banco Bilbao Vizcaya Argentaria, S.A. ("Licensee") and use as a component thereof the Cboe Volatility Index® (VIX®), which is a product of S&P Dow Jones Indices LLC, its affiliates and/or third party licensors ("S&P DJI") under license. S&P®, S&P 500®, US 500®, The 500®, iBoxx®, iTraxx®, and CDX® are registered trademarks of S&P Global Inc. or its affiliates ("S&P"), Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"), and VIX® and CBOE® are registered trademarks of Cboe Exchange, Inc. ("CBOE"). The trademarks have been licensed to S&P Dow Jones Indices and have been sublicensed for use for certain purposes by Licensee. The Derived Indices are not owned, endorsed, or approved by or associated with S&P Dow Jones Indices. The Derived Index Product is not sponsored, endorsed, sold or promoted by S&P DJI, S&P, Dow Jones, CBOE and S&P DJI, S&P, Dow Jones and CBOE does not make any representation regarding the advisability of investing in the Derived Indices Product.



#### DISCLAIMER IHS Markit (Disclaimer Index Administrator) (SMART)

The BBVA SMART Index (the "Index") referenced herein is the property of Banco Bilbao Vizcaya Argentaria, S.A. ("BBVA" or "Index Owner"), however the Index is solely calculated, administered and published by IHS Markit Benchmark Administration Limited and/or its affiliates ("Index Administrator" or "Markit"). For the avoidance of doubt, BBVA does not act as an administrator or as a contributor of the Index nor does BBVA and the Index Administrator offer any express or implicit guarantee or assurance with regard to the calculation, publication or results of using the Index and/or Index trade mark or the Index Price at any time or in any other respect. There is no corporate ownership relationship between the Index Administrator and BBVA, which are separate and independent companies.

#### DISCLAIMER CME

CME group market data is used under license as a source of information for certain BBVA products. CME group has no other connection to BBVA products and services and does not sponsor, endorse, recommend or promote any BBVA products or services. CME group has no obligation or liability in connection with the BBVA products and services. CME group does not guarantee the accuracy and/or the completeness of any market data licensed to BBVA and shall not have any liability for any errors, omissions, or interruptions therein. There are no third-party beneficiaries of any agreements or arrangements between CME group and BBVA.

#### DISCLAIMER S&P (Disclaimer VIX)

The BBVA Systematic Multi Asset Regional Trend Index (the "Derived Indices") is a product of Banco Bilbao Vizcaya Argentaria, S.A. ("Licensee") and use as a component thereof the Cboe Volatility Index® (VIX®), which is a product of S&P Dow Jones Indices LLC, its affiliates and/or third party licensors ("S&P DJI") under license. S&P®, S&P 500®, US 500®, The 500®, iBoxx®, iTraxx®, and CDX® are registered trademarks of S&P Global Inc. or its affiliates ("S&P"), Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"), and VIX® and CBOE® are registered trademarks of Cboe Exchange, Inc. ("CBOE"). The trademarks have been licensed to S&P Dow Jones Indices and have been sublicensed for use for certain purposes by Licensee. The Derived Indices are not owned, endorsed, or approved by or associated with S&P Dow Jones Indices. The Derived Index Product is not sponsored, endorsed, sold or promoted by S&P DJI, S&P, Dow Jones, CBOE and S&P DJI, S&P, Dow Jones and CBOE does not make any representation regarding the advisability of investing in the Derived Index Product.

#### DISCLAIMER S&P (usage of VIX)

This index (the "Derived Index") is a product of Banco Bilbao Vizcaya Argentaria, S.A. ("Licensee") and uses as a component thereof the Cboe Volatility Index® (VIX®), which is a product of S&P Dow Jones Indices LLC, its affiliates and/or third party licensors ("S&P DJI") under license. S&P®, S&P 500®, US 500®, The 500®, iBoxx®, iTraxx®, and CDX® are registered trademarks of S&P Global Inc. or its affiliates ("S&P"), Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"), and VIX® and CBOE® are registered trademarks of Cboe Exchange, Inc. ("CBOE"). The trademarks have been licensed to S&P Dow Jones Indices and have been sublicensed for use for certain purposes by Licensee. The Derived Index is not owned, endorsed, or approved by or associated with S&P Dow Jones Indices. The Derived Index Product is not sponsored, endorsed, sold or promoted by S&P DJI, S&P, Dow Jones, CBOE and S&P DJI, S&P, Dow Jones and CBOE does not make any representation regarding the advisability of investing in the Derived Index Product.

#### DISCLAIMER WMR (usage of Fx WMR)

"The WM/Refinitiv Intra-Day Spot Rates", "The WM/Refinitiv Intra-Day Forward Rates" and "The WM/Refinitiv Intraday Non-Deliverable Forward Rates" are provided by Refinitiv. Refinitiv shall not be liable for any errors in or delays in providing or making available the data contained within this service or for any actions taken in reliance on the same"



#### DISCLAIMER BBVA Quantitative Investment Strategies (Disclaimer BBVA Index Administration for Gold Shield)

BBVA is the administrator (the "Index Administrator") of Gold Shield (the "Index). The Index is the exclusive property of BBVA, and BBVA retains all property rights therein. BBVA does not guarantee that there will be no errors or omissions in computing or disseminating the Index. The methodology of and rules governing the Index (the "Index Methodology") is based on certain assumptions, certain pricing models and calculation methods adopted by the Index Administrator. Information prepared on the basis of different models, calculation methods or assumptions may yield different results. You have no authority to use or reproduce the Index Methodology in any way, and neither BBVA nor any of its affiliates shall be liable for any loss whatsoever, whether arising directly or indirectly from the use of the Index or Index Methodology or otherwise in connection therewith. BBVA reserves the right to amend, supplement, replace or supersede the Index Methodology from time to time and shall have no liability for any such amendment, supplement, replacement or supersession. Any subsequent Index Methodology published by the Index Administrator will supersede any previous versions.

BBVA is not under any obligation to continue the calculation, publication or dissemination of the Indices and accept no liability for any suspension, interruption or cessation in the calculation thereof which is made in accordance with the rules governing those. Therefore, BBVA reserves the right to terminate the relevant Index at any moment. The Index Administrator does not accept any liability in connection with the publication or use of the level of the Index at any given time. The market data used to calculate the level of the Index may be furnished by third party sources and is believed to be reliable; however the Index Administrator make no representation or guarantee with respect to, and are under no obligation to verify, the accuracy and completeness thereof. The Index Methodology may embed certain costs in the strategy. The levels of such costs (if any) may vary over time in accordance with market conditions as determined by the Index Administrator acting in a commercially reasonable manner. BBVA and/or its affiliates may act in a number of different capacities in relation to the Index and/or products linked to the Index, which may include, but not be limited to, acting as market-maker, hedging counterparty, issuer of components of the Index, Index Administrator. Such activities could result in potential conflicts of interest that could influence the price or value of a product linked to such index. The Index Methodology will be made available upon request and, if applicable, subject to a BBVA lindex or the relevant index methodology is provided on a confidential basis and solely for information purposes. By accepting a copy of the relevant index methodology, you agree that you will not disclose, reproduce, redistribute or transmit, in whole or in part, the relevant index methodology without the written consent of BBVA.

#### DISCLAIMER S&P (Gold Shield)

The BBVA Gold Shield US Equities (the "Derived Indices") is a product of Banco Bilbao Vizcaya Argentaria, S.A. ("Licensee") and use as a component thereof the Cboe Volatility Index® (VIX®), which is a product of S&P Dow Jones Indices LLC, its affiliates and/or third party licensors ("S&P DJI") under license. S&P®, S&P 500®, US 500®, The 500®, iBoxx®, iTraxx®, and CDX® are registered trademarks of S&P Global Inc. or its affiliates ("S&P"), Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"), and VIX® and CBOE® are registered trademarks of Cboe Exchange, Inc. ("CBOE"). The trademarks have been licensed to S&P Dow Jones Indices and have been sublicensed for use for certain purposes by Licensee. The Derived Indices are not owned, endorsed, or approved by or associated with S&P Dow Jones Indices. The Derived Index Product is not sponsored, endorsed, sold or promoted by S&P DJI, S&P, Dow Jones, CBOE and S&P DJI, S&P, Dow Jones and CBOE does not make any representation regarding the advisability of investing in the Derived Index Product.



#### DISCLAIMER Bloomberg

BLOOMBERG, BLOOMBERG INDICES and this particular Bloomberg Select Multi Factor Index (the "Indices") are trademarks or service marks of Bloomberg Finance L.P. Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited, the administrator of the Indices (collectively, "Bloomberg") or Bloomberg's licensors own all proprietary rights in the Indices. Bloomberg does not guarantee the timeliness, accuracy or completeness of any data or information relating to the Indices. Bloomberg makes no warranty, express or implied, as to the Indices or any data or values relating thereto or results to be obtained therefrom, and expressly disclaims all warranties of merchantability and fitness for a particular purpose with respect thereto. It is not possible to invest directly in an Index. Back-tested performance is not actual performance. Past performance is not an indication of future results. To the maximum extent allowed by law, Bloomberg, its licensors, and its and their respective employees, contractors, agents, suppliers and vendors shall have no liability or responsibility whatsoever for any injury or damages - whether direct, indirect, consequential, incidental, punitive or otherwise - arising in connection with the Indices or any data or values relating thereto - whether arising from their negligence or otherwise. This document constitutes the provision of factual information, rather than financial product advice. Nothing in the Indices shall constitute or be construed as an offering of financial instruments or as investment action involving any specific interest or interests) by Bloomberg or a recommendation as to an investment or other strategy by Bloomberg. Data and other information available via the Indices should not be considered as information sufficient upon which to base an investment decision. All information provided by the Indices is impersonal and not tailored to the needs of any person, entity or group of persons. Bloomberg does not express an opinion on the future or expected va

The BLOOMBERG TERMINAL service and Bloomberg data products (the "Services") are owned and distributed by Bloomberg Finance L.P. ("BFLP") except (i) in Argentina, Australia and certain jurisdictions in the Pacific islands, Bermuda, China, India, Japan, Korea and New Zealand, where Bloomberg L.P. and its subsidiaries distribute these products, and (ii) in Singapore and the jurisdictions serviced by Bloomberg's Singapore office, where a subsidiary of BFLP distributes these products.

#### DISCLAIMER S&P (Disclaimer Index Administrator)

"The index referred to in this presentation is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and [Third Party Licensor], and has been licensed for use by [Licensee]. Standard & Poor's@ and S&P@ are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones@ is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by [Licensee]. [Third Party Licensor's Trademark(s)] are trademarks of the [Third Party Licensor] and have been licensed for use by SPDJI and [Licensee]. [Licensee Product] is not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, or [Third Party Licensor] and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the [Index].



#### DISCLAIMER FTSE/Russell

All rights in the Russell 2000 Futures 40% ATV Volatility Index (the "Index") vest in the relevant LSE Group company which owns the Index. "FTSE®" "Russell®", "FTSE Russell®" are trade marks of the relevant LSE Group company and is/are used by any other LSE Group company under license.

The Index is calculated by or on behalf of FTSE International Limited or its affiliate, agent or partner. The LSE Group does not accept any liability whatsoever to any person arising out of (a) the use of, reliance on or any error in the Index. The LSE Group makes no claim, prediction, warranty or representation either as to the results to be obtained from the Index or the suitability of the Index for the purpose to which it is being put by BBVA.

FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc. and FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings. FTSE Russell hereby notifies users of the index series that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation of, the index series and therefore, any financial contracts or other financial instruments that reference the index series or investment funds which use the index series to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series who choose to follow this index series or to buy products that claim to follow this index series should assess the merits of the index series' rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell for any losses, claims and expenses suffered by any person as a result of:

- any reliance on these Ground Rules, and/or
- any inaccuracies in these Ground Rules, and/or
- any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
- any inaccuracies in the compilation of the index series or any constituent data.

The indices are published at the end of each day on which the underlying index is published excluding days that fall on 1 January, 4 July and 25 December and the imediately preceding weekdays that fall before these dates, such a day being an Index Calculation Day. Further guidance can be found in the following document:

https://www.lseg.com/content/dam/ftse-russell/en us/documents/policy-documents/ftse-russell-index-policy-for-trading-halts-and-market-closures.pdf