

ETS GO Dividend Investment strategy proposal



December 2024

Delivering algorithmic investment strategies since 1987.

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the exclusive use of the intended recipient*

Robusta nace en México impulsado por ETS

Robusta ayuda a un grupo limitado de asesores en inversión y Family Offices a **transformar** sus **estrategias activas**, generando alfa consistentemente, ganar tiempo y sobre todo a **diferenciarse**.

Actúa como una extensión de las áreas de inversiones de sus clientes, ofreciendo en exclusiva en México los servicios de su **fábrica cuantitativa**: ETS Asset Management Factory.

Nuestros pilares son bases de datos de alta calidad, algoritmos propios, equipo científico especializado y la **experiencia** necesaria de casi **40 años** para saber combinarlos.



Our Factory **by the Numbers**

+ 35 years
innovating in
asset
management

+ 25 years
of “real track
record”

+ 30
AI specialist

+4bn USD
under advisory

+ 110bn USD
currency
hedging
optimization

The 3 pillars of **our Open Factory**

Data



Raw Data
+8M symbols

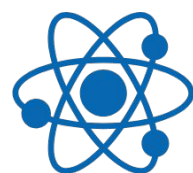


Alternative Data



Augmented Data

Algorithms



Atomic Architecture



Real-Time Monitoring



Research Data Lake +500 signals

People



37 years designing quantitative investment strategies



+30 financial data scientists



Long lasting partnerships with top financial institutions

A UNIQUE COMBINATION OF MULTI-ASSET FINANCIAL DATA AND AUGMENTED DATA THAT, TOGETHER WITH A WIDE VARIETY OF PROPRIETARY ALGORITHMS, ALLOWS US TO DESIGN AND BACKTEST ANY MULTI-ASSET INVESTMENT STRATEGY

Trust that drives your Investments

+30 years building the best investment solutions for clients just like you.



EDMOND
DE ROTHSCHILD

“ETS has been able to develop products that, above all, **meet the client’s needs**”.

*Daniel Tréves, former **President**
Compagnie Benjamin de Rothschild*



INTERSECT
Capital Management

“ETS team is **A+**”.

*Curt Brockelman, Meaning Partner of
Intersect Capital Management*



MUTUACTIVOS
GRUPO MUTUAMADRILEÑA

“ETS is not just a provider, but a **Trusted Business Partner for us**”.

*Juan Aznar, president of **Mutuactivos***

With Tier I institutional clients, amassing AuM by 5bn USD+.

REGULATED BY Spanish Securities Market Commission (CNMV) as an Institutional Financial Advisor (EAF) European Certified for R+D+i



Index

1. Methodology
2. Proposed Portfolio & Results
3. Real track record

Leading AI in Finance : ETS Myriad (™)

The Challenge:

Generating synthetic financial time series to test robustness of different investment strategies

ETS' solution:

MYRIAD (™) A GAN financial time series generator developed from 2013 to 2018.



Link to the **Myriad Video**

Myriad
FINANCIAL SCENARIO GENERATOR

MUTUAL FUNDS STOCKS

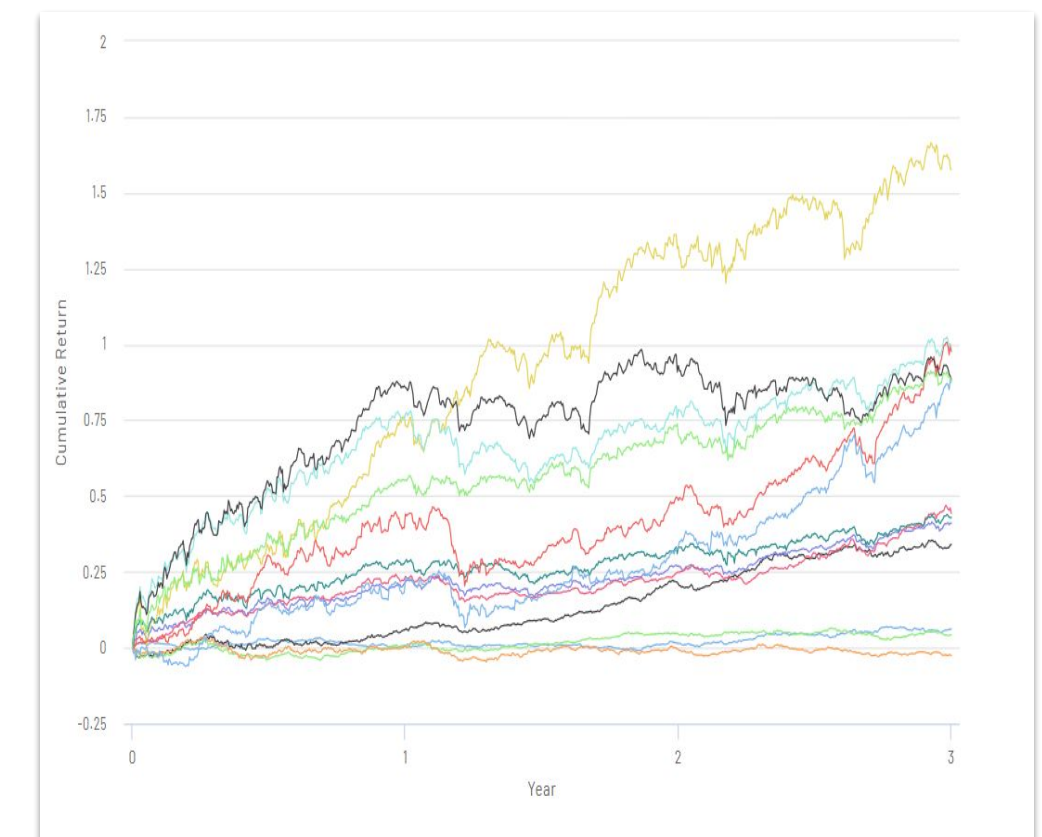
— YEARS
1 3 5

— RISK FAMILY Choose up to 25 series in total

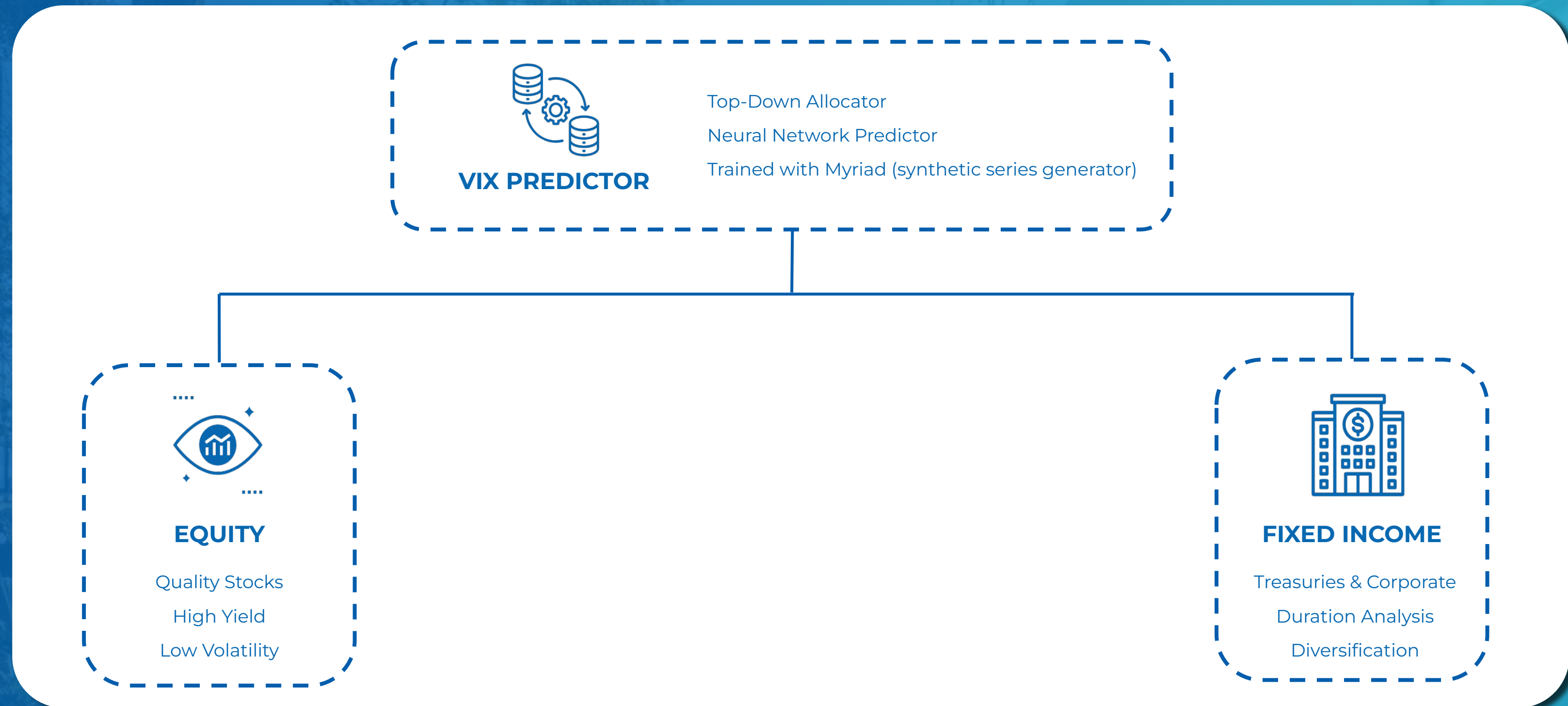
Fixed Income	−	4	+
Balanced	−	2	+
Equity	−	7	+

GENERATE

Myriad Presentation



Methodology: GO Dividend



Methodology: **GO Dividend**

The **GO Dividend** is a GTAA strategy designed to offer **moderate risk** and have a **dividend yield** tilt.

This type of portfolios have exposure to 2 key asset classes:

- Large cap equities (mainly US)
- Fixed Income (US only, through ETFs)



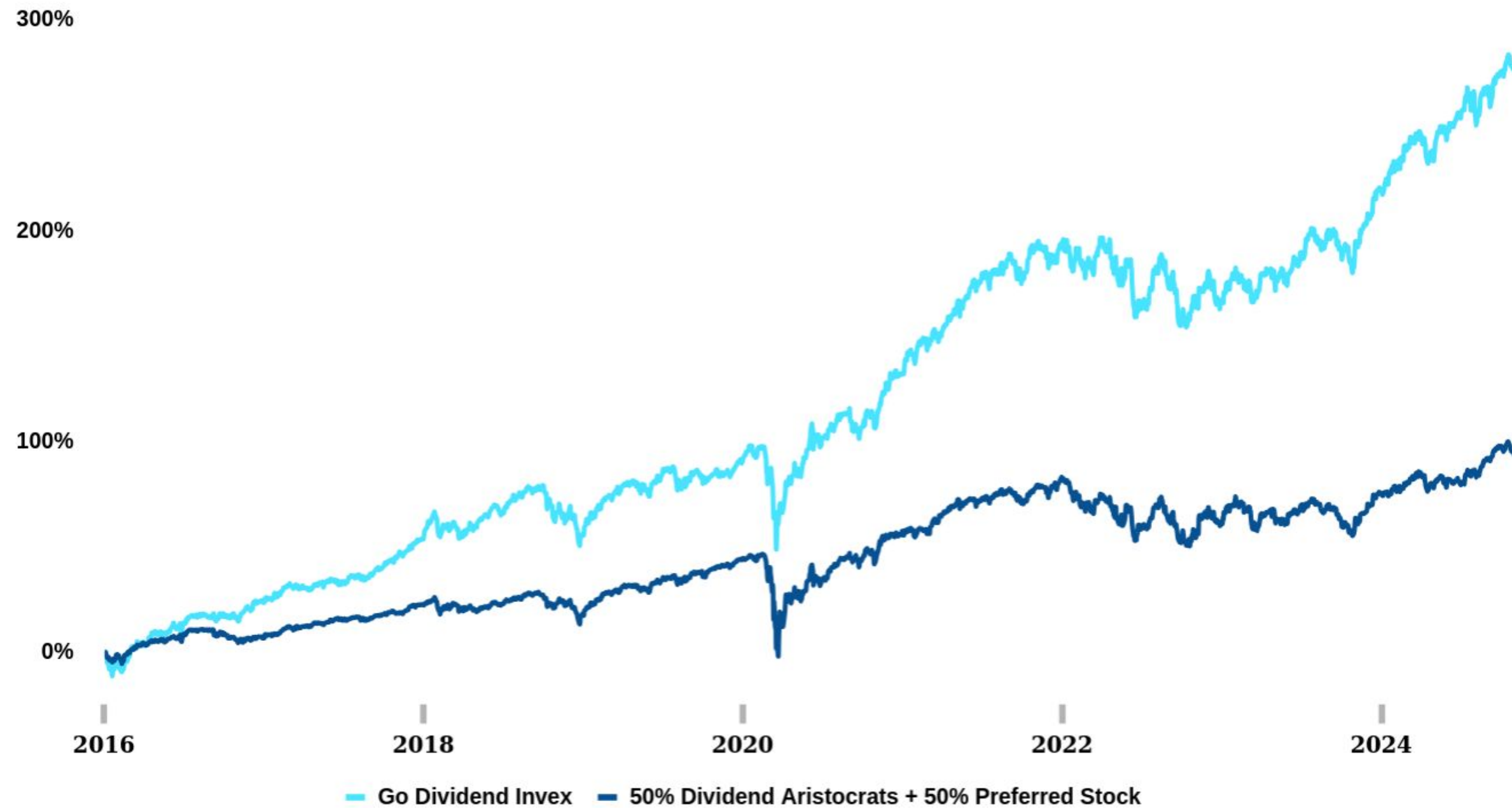
The strategy overweights **High Yield-Quality Equities** and adjusts the allocation dynamically to maximize the diversification effects that the other classes offer.

GO Dividend: Risk

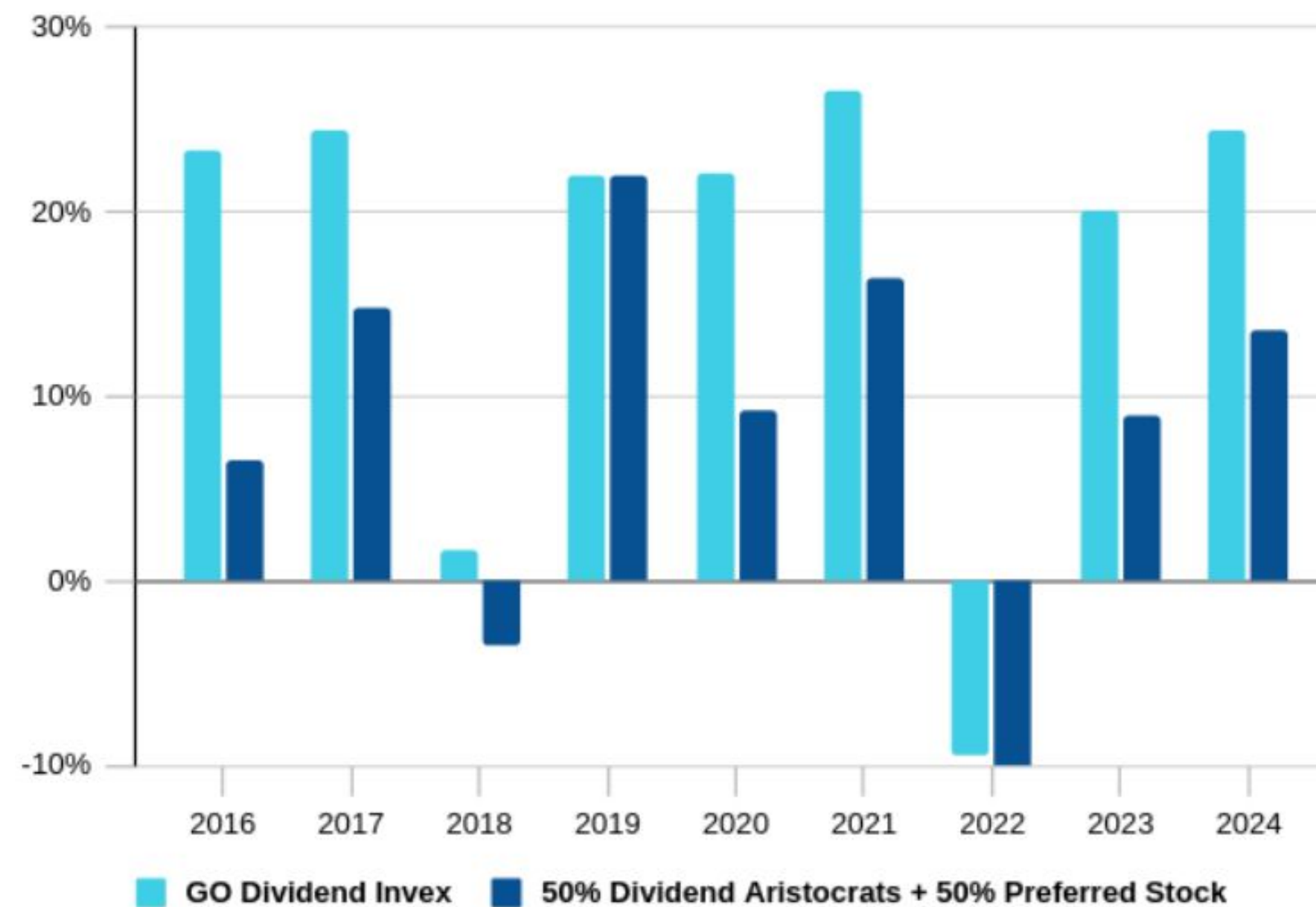
- Higher returns with **lower drawdowns** than the benchmarks

	GO Dividend Invex	40% Dividend Aristocrats + 60% Preferred Stock	50% Dividend Aristocrats + 50% Preferred Stock	60% Dividend Aristocrats + 40% Preferred Stock
Annualized Return	16.78%	7.21%	8.03%	8.85%
Cumulative Return	298.16%	85.89%	99.06%	112.82%
Volatility	12.26%	13.17%	13.53%	14.01%
Sharpe Ratio	1.33	0.60	0.64	0.68
Calmar Ratio	0.68	0.22	0.24	0.26
Avg Drawdown	-2.73%	-3.84%	-3.72%	-3.63%
Max Drawdown	-24.77%	-32.58%	-32.99%	-33.43%
Turnover	4.36	-	-	-

GO Dividend: Performance

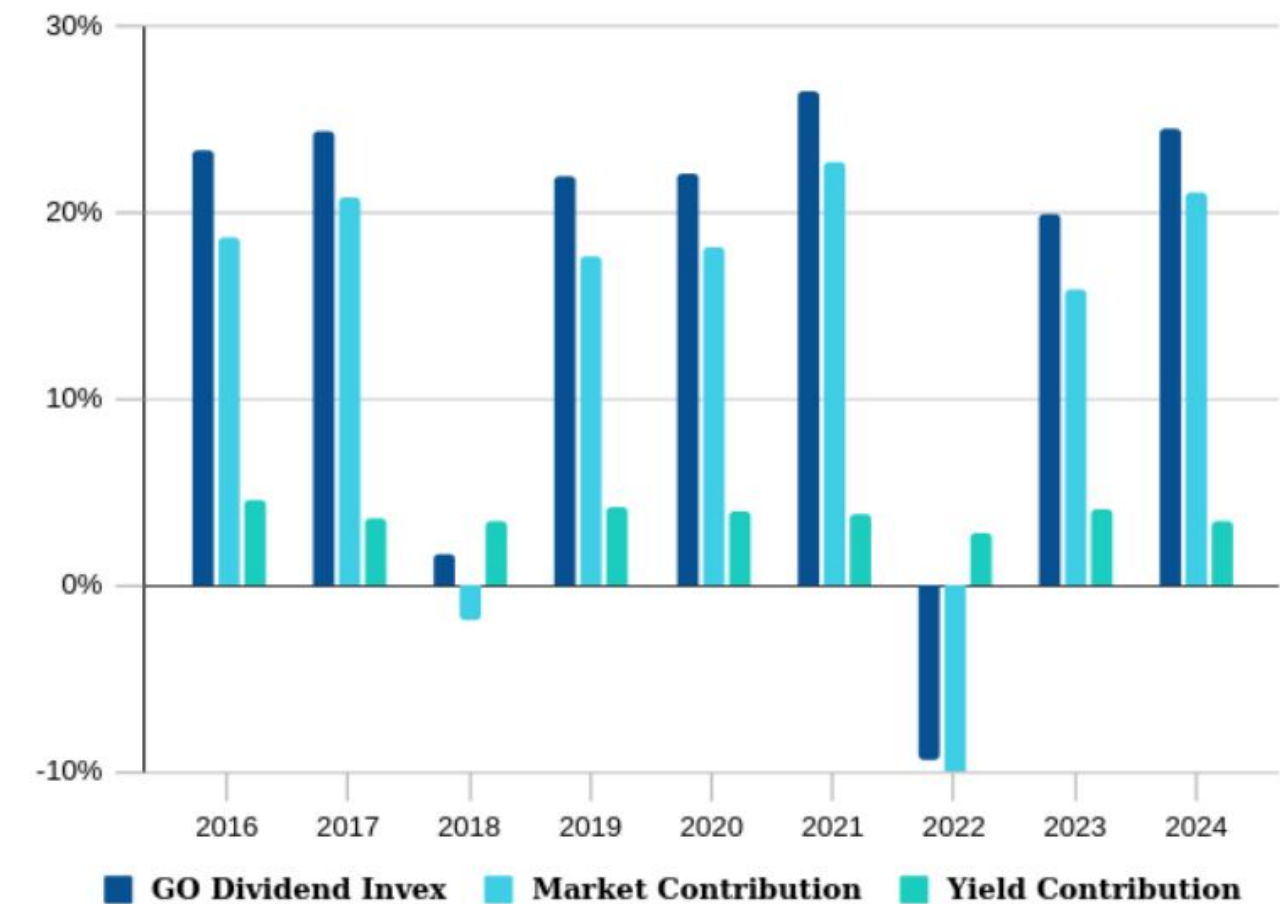


GO Dividend: Performance



GO Dividend: Yield Contribution

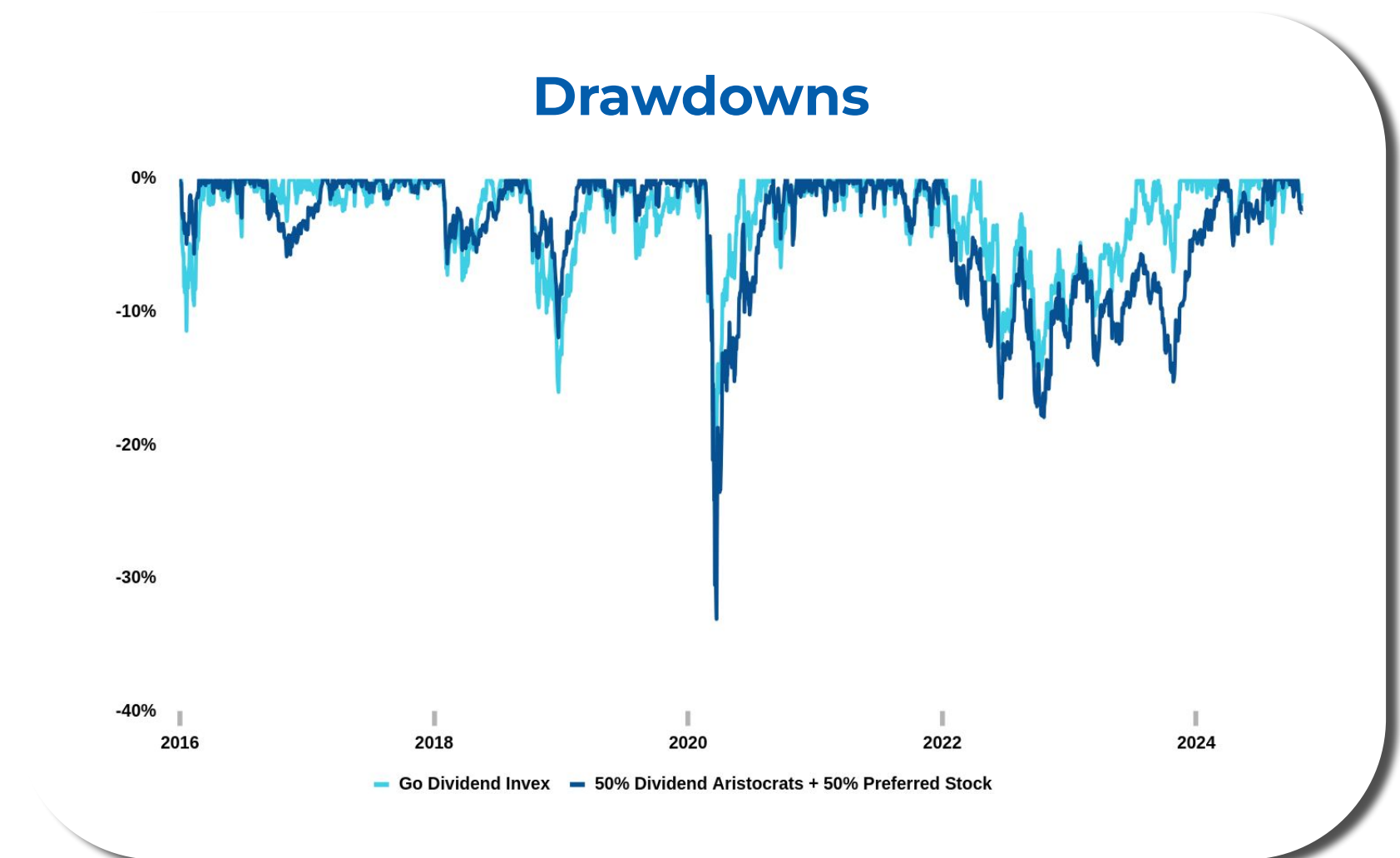
	GO Dividend Inxv	Market Contribution	Yield Contribution
2016	23.40%	18.74%	4.65%
2017	24.42%	20.84%	3.58%
2018	1.64%	-1.83%	3.46%
2019	21.98%	17.70%	4.28%
2020	22.10%	18.18%	3.92%
2021	26.58%	22.78%	3.80%
2022	-9.40%	-12.27%	2.87%
2023	20.01%	15.85%	4.16%
2024	24.48%	21.05%	3.43%



- Average dividend contribution **higher than 3.7%**
- High performance generation **thanks to stocks exposure**
- **Risk reduction** due to **Fixed income allocation**

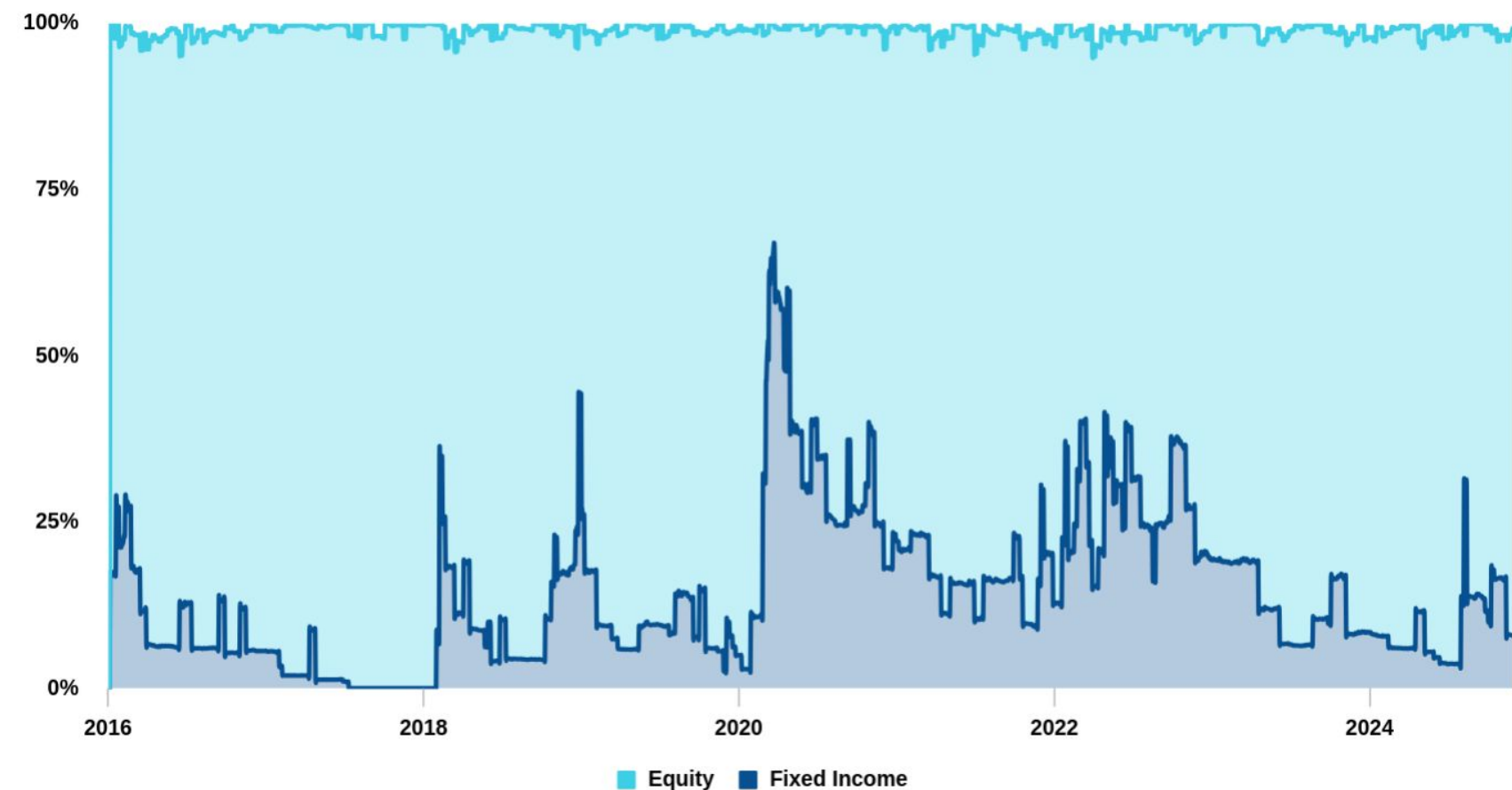
GO Dividend: Drawdown

- Drawdowns in line with the reference.
- **Highest drawdown** when the market falls sharply.



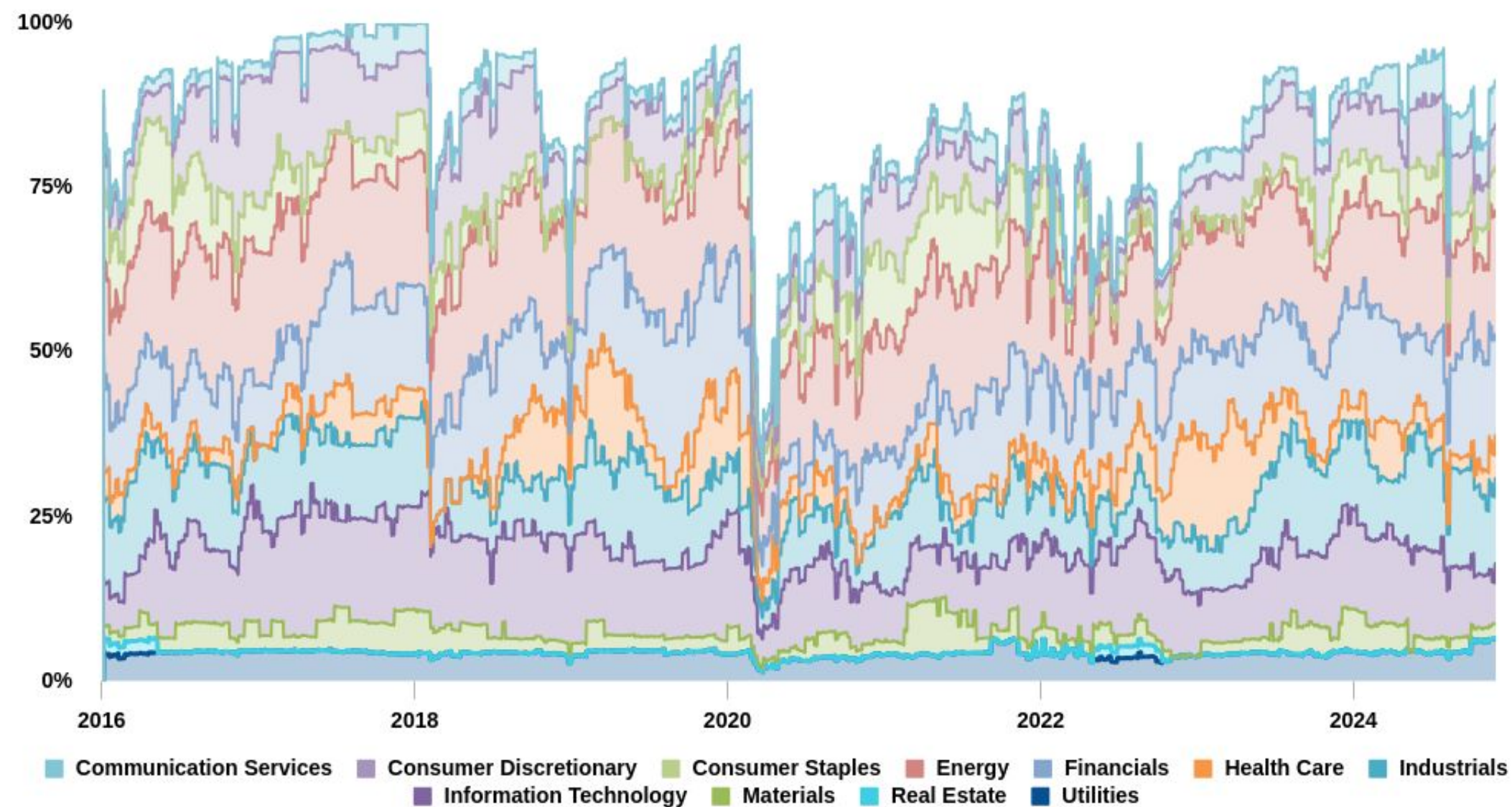
GO Dividend: Exposure. Risk family

	Equity	Fixed Income
2016	87.25%	10.09%
2017	97.93%	1.46%
2018	88.03%	10.85%
2019	88.96%	9.94%
2020	68.81%	30.20%
2021	81.65%	16.86%
2022	71.63%	27.06%
2023	86.40%	12.66%
2024	89.62%	9.25%
Total	84.48%	14.26%



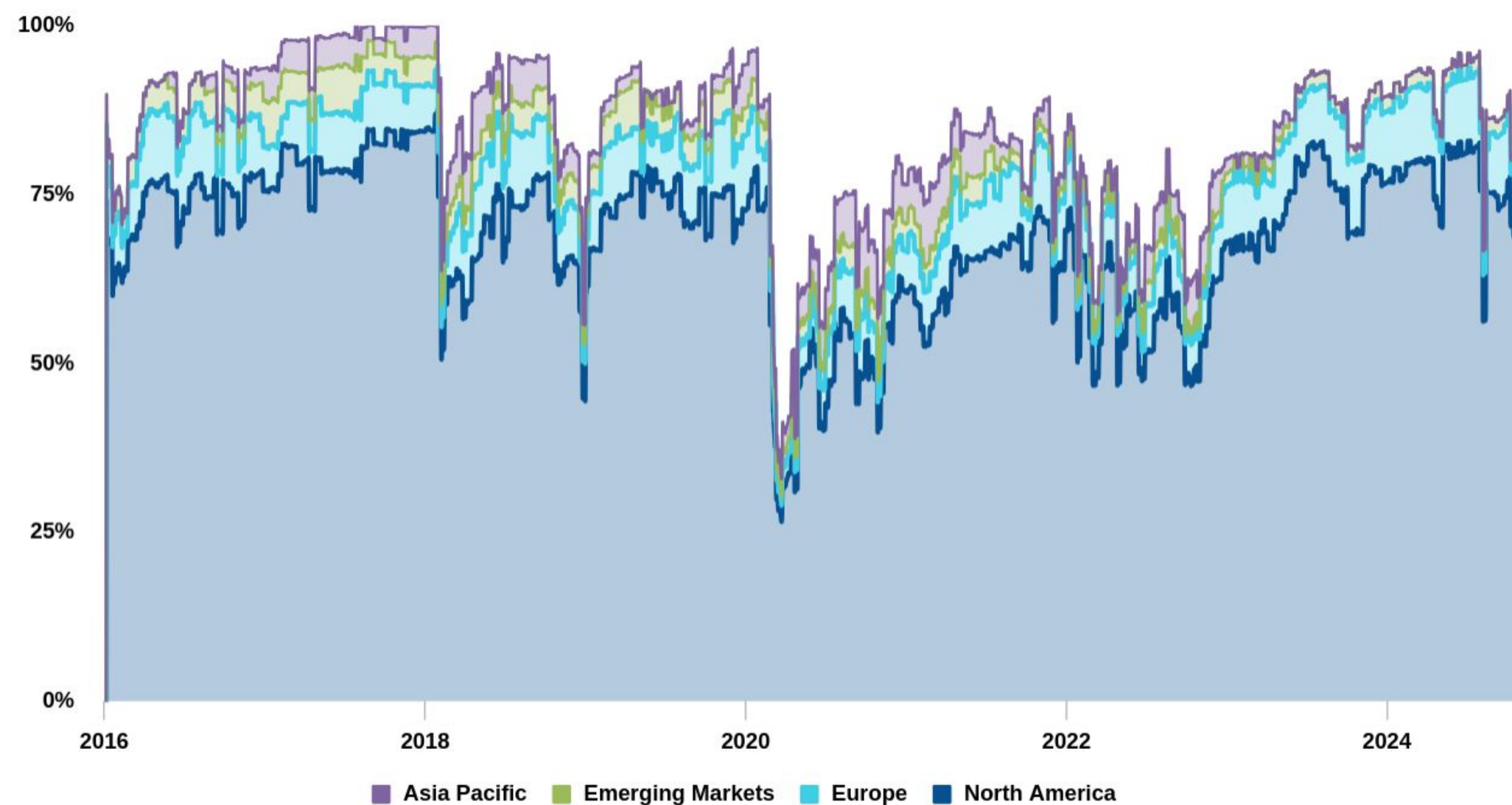
- The strategy adapts dynamically to make the most of **each risk family**.

GO Dividend: Exposure. Equity sectorial



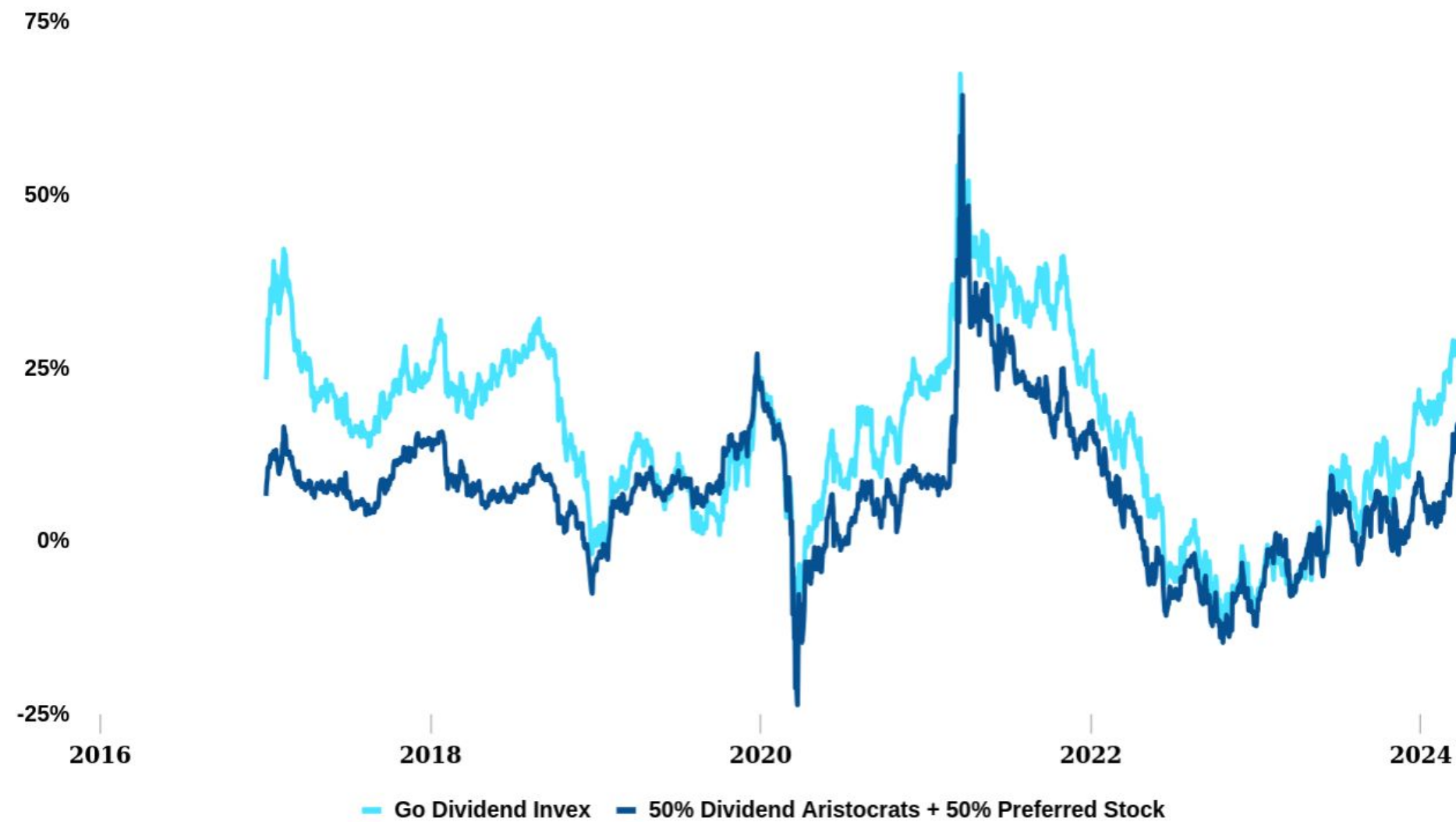
- Equity exposure is always **balanced across sectors**.

GO Dividend: Exposure. Equity regional



- Equity exposure is **biased to U.S.**

GO Dividend: Annual Rolling Returns



- In a 1-year rolling window, the strategy **is above the market 90% of the time.**
- The annual return on the strategy **is on average 10% higher than the reference.**

GO Dividend: Monthly Returns

2016	-4.97%	3.06%	6.85%	3.62%	1.02%	3.67%	3.44%	-1.14%	1.70%	-1.37%	3.39%	2.45%	23.40%
2017	2.27%	4.14%	-0.07%	0.27%	1.20%	-0.10%	1.61%	1.09%	2.57%	3.27%	3.66%	2.24%	24.42%
2018	6.39%	-3.00%	-1.28%	1.86%	3.35%	0.96%	3.75%	3.05%	-0.10%	-7.23%	1.23%	-6.42%	1.64%
2019	7.14%	3.85%	2.19%	1.71%	-3.47%	4.95%	0.78%	-1.11%	0.78%	0.70%	0.13%	2.80%	21.98%
2020	0.99%	-6.05%	-6.16%	10.55%	4.73%	1.99%	3.67%	2.68%	-3.08%	-0.13%	8.95%	3.45%	22.10%
2021	1.91%	2.68%	2.82%	4.10%	3.03%	3.32%	1.13%	2.14%	-3.98%	5.74%	-2.19%	3.51%	26.58%
2022	-2.45%	-0.62%	2.95%	-4.65%	1.37%	-7.45%	7.00%	-2.29%	-7.18%	5.18%	3.97%	-4.37%	-9.40%
2023	5.13%	-3.15%	2.73%	0.79%	-2.54%	5.71%	3.87%	-0.64%	-2.64%	-2.72%	7.89%	4.77%	20.01%
2024	2.56%	3.16%	2.57%	-4.02%	4.14%	1.96%	3.51%	0.51%	1.98%	0.08%	6.01%		24.48%
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL

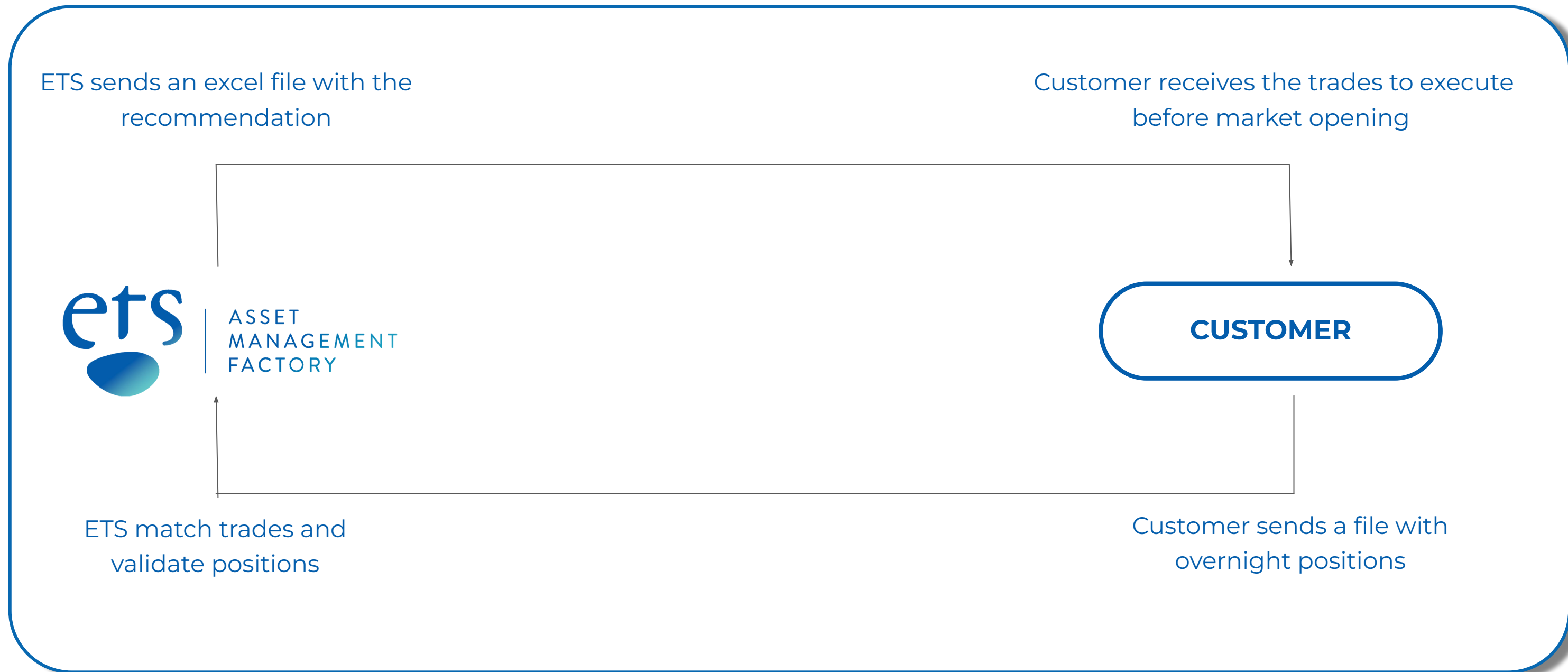
**Positive asymmetry
in monthly returns
along the years**

GO Dividend: Alpha Generation



- We are **adding Alpha** in two ways:
 - Through dynamic exposure among risk families.
 - Through the selection in each of the risk families.

Operational Flow





“Our mission at ETS is to cultivate and sustain a highly skilled, unified, and motivated team in an engaging and inspiring work environment, equipped with cutting-edge technology, to consistently deliver top-tier quantitative management services to our clients.”

ROBUSTA
Avda. Antonio de Mendoza 140
Lomas de Chapultepec
11000 CIUDAD DE MÉXICO.

robustaquant.com

ETS ASSET MANAGEMENT FACTORY
CAÑADA DE LA CARRERA 2 – 4.
URBANIZACIÓN LA CABAÑA.
28223. POZUELO DE ALARCÓN, MADRID

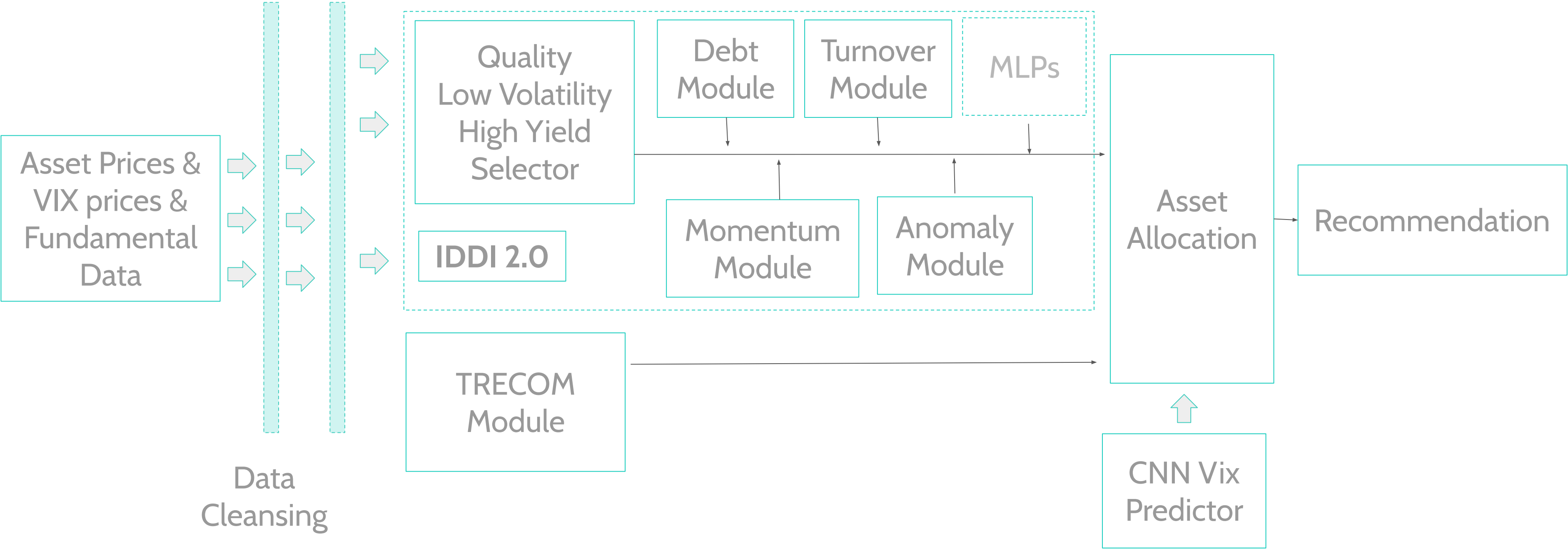
etsfactory.com

Go Dividend Strategy

ETS Algorithm

Data Transform
(ratios,
factors, etc)

The Go Dividend strategy is driven by an algorithm based on a Convolutional Neural Network VIX predictor to allocate the weight among the Equity part and Treasuries and Commodities ETFs (TRECOM), that act as Equity diversifiers.



Quality Factor: Identifying profitable & safe companies

Our **ETS In-House Quality Factor** construction is based on automatic and AI algorithms based on fundamental data and quantitative statistics with prevalence in the measurement of:

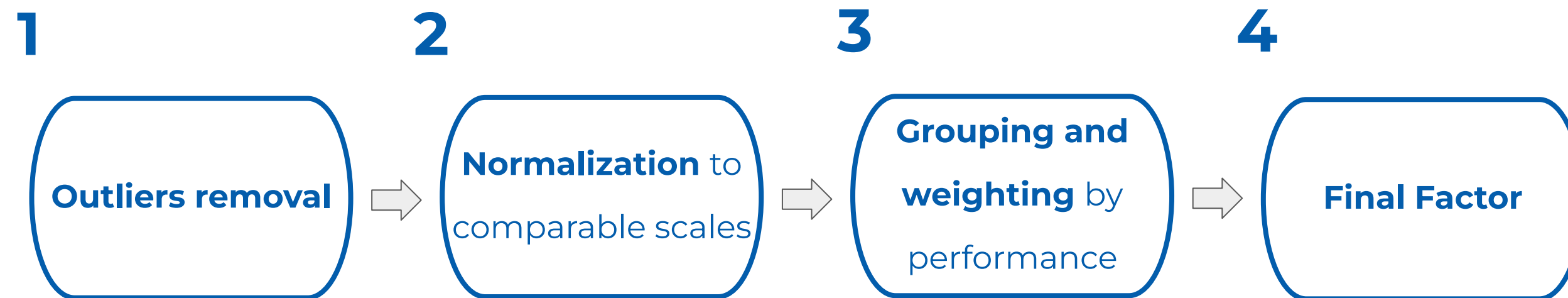
- **Financial profitability:** financial ratios associated with company profitability over different time horizons (ROE, ROA, etc).
- **Capital structure:** measures of the company's debt.
- **Shareholder remuneration:** dividends, buybacks, etc.
- **Robustness of price evolution:** valuation of future price range based on financial statements, quant data and qualitative data (sectors, geographic areas, etc.) price trends and risk.
- **Positive price trend:** assessment of the positive trend of the company's market value growth.
- **Anomaly penalization:** detection of anomalies in price evolution.

All these processes are intertwined and weighted to obtain a final valuation of each company.

Quality Factor: Creation

After numerous analyses of the reliability and robustness of the information that measures different aspects of companies, we have arrived to a suitable way of combining the fundamental information in the form of ratios to obtain an assessment of the quality of the company.

The study and knowledge of company information continues to evolve, making our system a living entity.



One of our generators: VIX estimation

Augmented Financial Data for fighting overfitting

01 Increasing the limited Financial Time Series Datasets

with **more diverse but plausible data** for training, validating and testing investment models.

02 Incrementing the amount of data to train Machine Learning Algorithms for achieving a better generalization in investment strategies.

03 Multiplying the richness, in quantity and variety, of financial scenarios Quant models will be testing over.

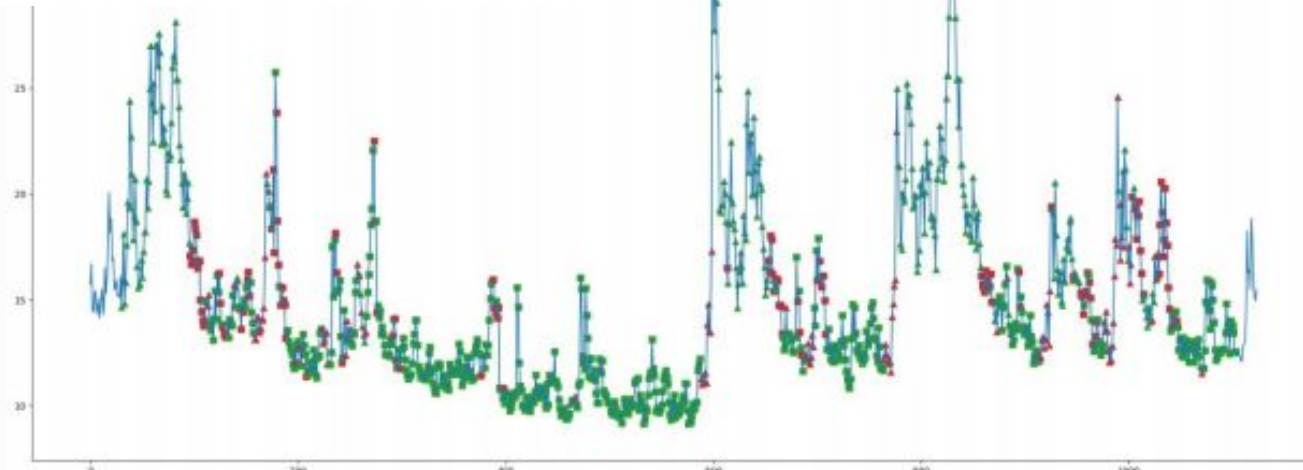
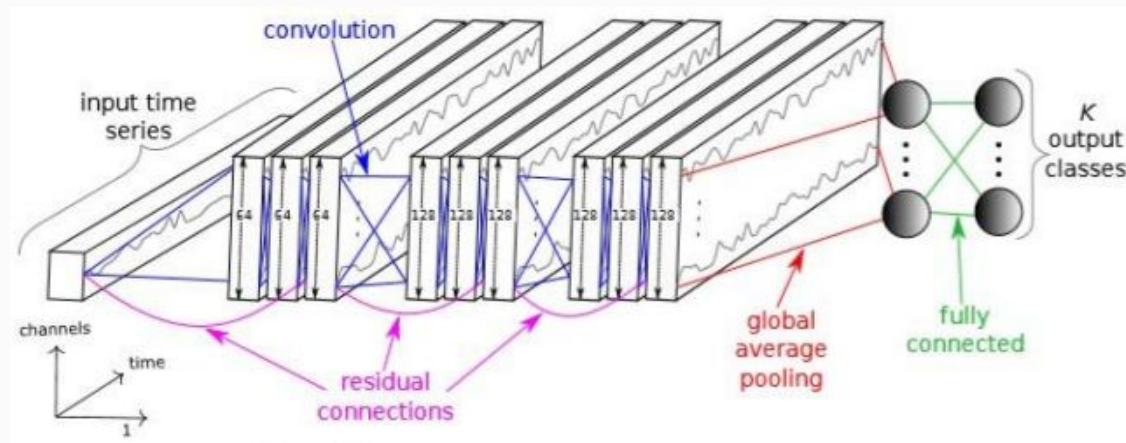
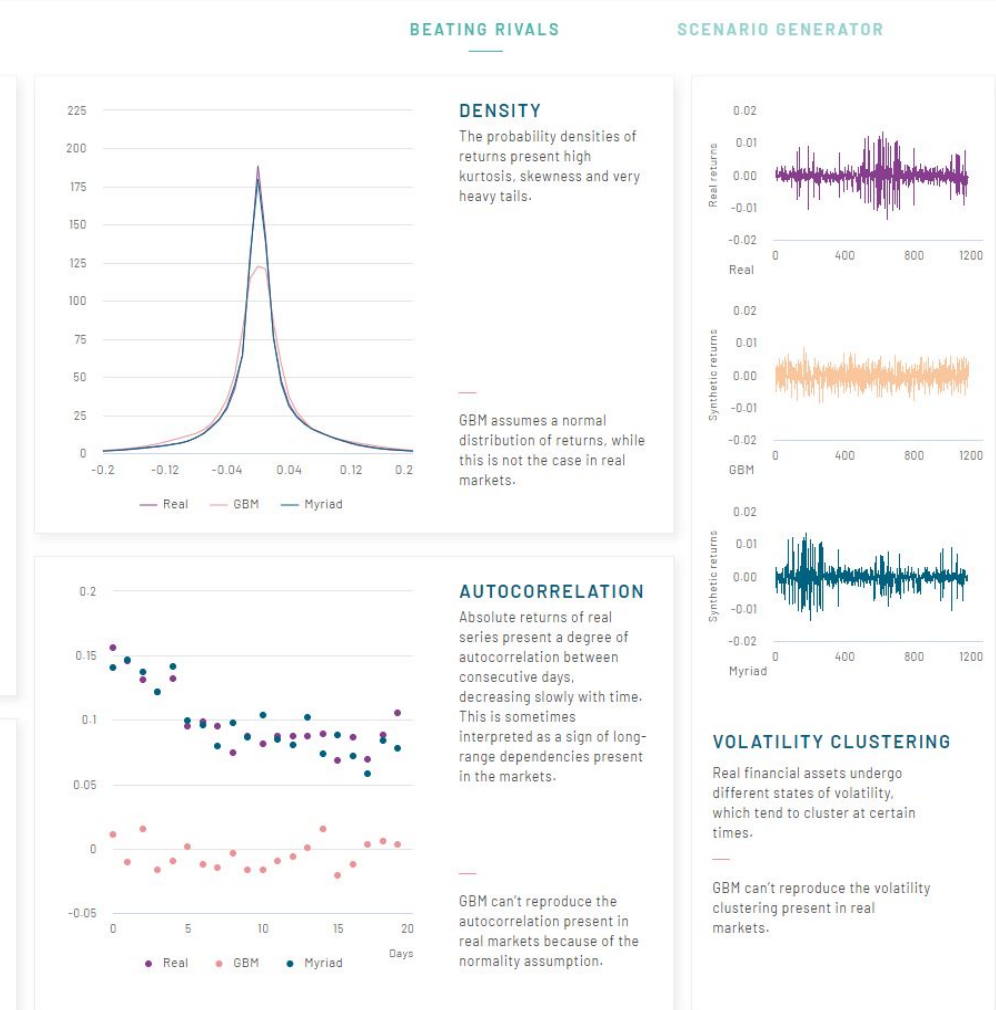


Figure 5: ResNet predictions on the VIX level.

Myriad
FINANCIAL SCENARIO GENERATOR



Forecasting VIX Index with neural networks

VIX exhibits few recognizable patterns and is largely unpredictable. In order to avoid overfitted our models, we can enlarge the train dataset with synthetic scenarios with Myriad and model one of the “main actors”.

With different objectives we are able to **create different classifiers** that will allow us to send precise signals in terms of **direction, intensity or range**.

<https://myriad.etsfactory.com/>