# Deuterium Global Dynamic Allocation Fund

Investor Presentation
December 2023

www.deuterium.us

**Global Mixed Asset Fund Strategy** 



# **Agenda**

- 1. Identity and Offering
- 2. Philosophy
- 3. Investment Process
- 4. Environmental, Social & Governance
- 5. Track Record
- 6. Current View
- 7. About the Team
- 8. About Deuterium
- 9. Why Invest

Case Studies

Disclaimer



# **GDA Identity and Offering**

#### Structure

• Umbrella: Deuterium UCITS ICAV

O Domicile: Ireland

• Regulatory Status: UCITS V

• Management Company: Waystone Management Company (IE) Limited ("WMC")

Investment Manager and Deuterium Capital Management, Distributor: LLC ("DCM")

DCM Investment Adviser
 Deuterium Investment Advisors

and Fund Sub-Distributor: Limited

Administrator and Transfer CACEIS INVESTOR SERVICES
Agent: IRELAND LTD

• Depository: CACEIS IS Bank

## **Key Facts**

• Launched: 26 January 2021

• AuM: \$48.1m

# Holdings: 187 Holdings

Base Currency: US Dollar

Morningstar and IMA Flexible Allocations

• Dealing: Daily

O Priced: Single Swing

Share Class Currencies: USD, EUR, GBP, CHF

ESG Status
 Article 8 Fund under SFDR



# **Philosophy**

The fund's objective is to generate positive returns over the course of the global business cycle, which typically runs for five years; by pursuing a policy of active allocation across asset classes and global markets – global equities (countries, regions and sectors), debt (and durations), currencies, commodities, property and cash. Decisions are driven by a global, long-term and dynamic asset allocation model that is adjusted from time to time by short-term tactical asset allocation shifts in anticipation of changing market, fiscal and political conditions.

## Our beliefs



**Macroeconomic factors** drive the majority of broad asset class returns. Quantitative analysis of these factors, focused particularly on the short term, is key to predicting market direction.



**Quantitative processes** that are evidence-driven, transparent, dispassionate and systematic have a significant edge over the human brain.



Quantitative processes have their limitations, so it is essential that **experienced managers** interpret their output and exercise discretion.



**Diversification** and **flexibility** are critical to delivering superior risk-adjusted returns.



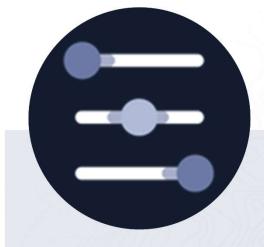
## Introduction

**Our approach:** To combine quantitative, fundamental macro modelling with decades of manager experience to deliver high risk-adjusted returns.



#### Diversified

Investing across up to 35 markets, with ~350 holdings on average, alpha is generated from equity direction, currency and bond direction, regional equity weightings, sector weightings and commodities



#### Flexible

Not constrained by narrow bands nor managed to a benchmark. The portfolio can dynamically adjust its allocation, with equities free to move flexibly over the course of a business cycle



## Liquid

Directly invested in global large and mega-cap securities; equities (average market cap US\$119bn\*), sovereign debt of the largest developed countries, currencies and any commodities exposure achieved with liquid ETFs



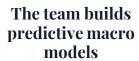
<sup>\*</sup> Source: Deuterium

## **Investment Process**

Our four-step process blends the power of large-scale quantitative analytics with fund manager expertise. The process is designed to be evidence-driven, systematic, dispassionate, seamless and transparent.



1. Models



Analysis of 27 countries and 28 economic factors. 4-6 weeks forecasts updated 4 times per hour with new data.



2. Scores

#### Models produce market directional scores

Scores for 27 equity and sovereign bond markets, USD currency pairs and US sectors. Aggregated with central bank policy, price pattern and valuation scores.



3. Positions

# Scores translate into suggested fund positions

Positions are formulated in deep liquid markets. and identified by reference to global market cap weightings.



4. Discretion

# Managers discuss and interpret positions

Managers will adjust suggested positions for policy and politics influence on market behaviour. The final decision rests with the Lead Fund Manager.

Source: Deuterium



## 1. Models









Fundamental Macro and Financial Data

50 million data series are considered



~800,000 data series used in our model processing



~100,000 series are retained in final models



Each series is mapped for economic influence



Database updates are 4 times per hour every hour

## Key Macro Predictions mapped to their GDP Components

#### Consumer

Consumption
Consumer Confidence
Personal Income
Consumer Credit
Employment
Unemployment Inverse
Initial Jobless Inverse

#### **Producer**

Production
Factory Orders
Durable Goods
Exports
Imports

#### **Capital Spending**

Retail Sales
Business Credit
House Prices
Mortgage Applications
Housing Starts
Existing Home Sales
New Home Sales

Investment

#### Price

CPI
PCE
Core CPI
Service Inflation
Goods Inflation
PPI
Core PCE
PCE Services





# 1. Model Projections

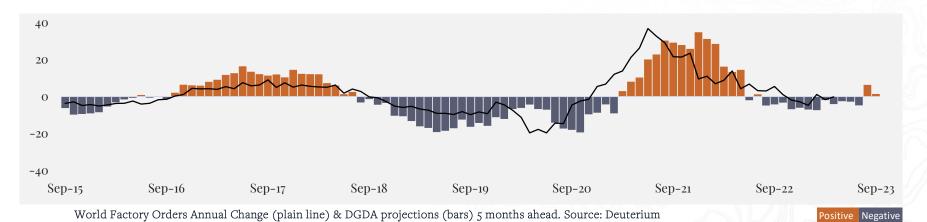




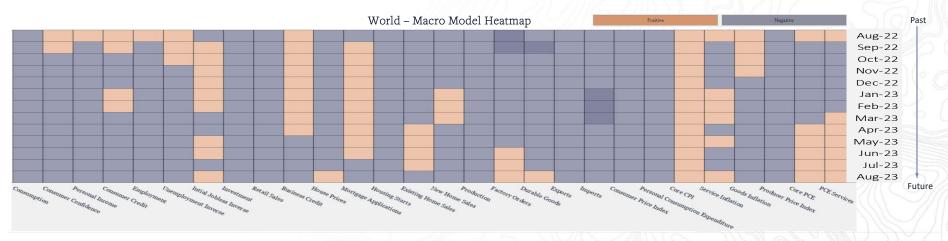




The process seeks to forecast, several months ahead, the key Macro Variables that drive asset prices.



The macro model outputs may be viewed as heat maps that show the projections for each country and region.





#### 2. Scores









Macro Models combine with Policy, Valuation and Price inputs to produce an overall market direction probability score (% chance the market will go up/down in the next 4 to 6 weeks).



Macro Score

Model projections combined with Policy models for each country



Valuation Score

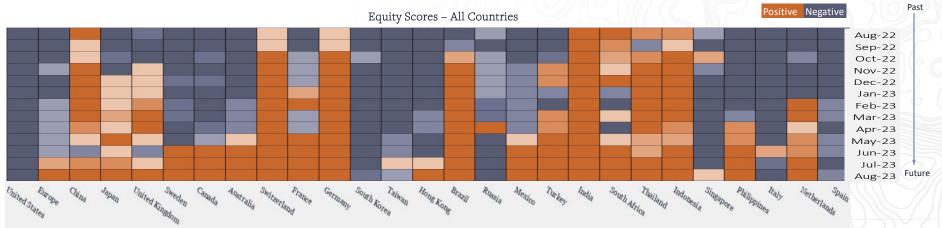
Valuation scores look at key market valuation metrics



Price Score

Price pattern scores look at a number of technical indicators

The market scores outputs may be viewed as heat maps showing market forecasts in each country.





## 3. Positions

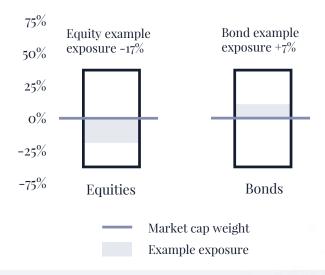


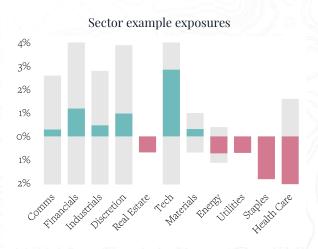






Our Quant systems recommends long/short weights that reflect our equity, sector, bond, and currency scores.





- Equity market positions are set by scores with reference to liquidity and market cap
- US sector positions are set by scores and
   implemented through our own market baskets
   built with ESG compliant shares

- Currency positions are set by scores of the major currency markets relative to the USD and to each other
- Major sovereign bond positions are set by the scores, and can be implemented through futures, directly, and with options



## **Manager Discretion**

Managers can choose to hold or delay implementation of positions for several reasons.





**Policy** responses (and policy mistakes) that can have market effects more rapid than can be captured in underlying data

**Negative** score in a market that could lead to contagion across global markets

**Timing** effects to reflect differences between scores across various regions in asset classes











#### When exercised

**Daily** real time, investment team discussions, aiming to make unanimous decisions. Lead Manager has ultimate decision-making authority

**Weekly** structured and minuted risk meeting sets GDA current macro view. The majority of trading takes place as a result of this weekly meeting

**Quarterly** Investment Summary (QIS) publication outlines model projections for the coming months. This can be distributed to clients



## **Environmental Social & Governance**

By investing in equities directly, the fund can focus upon ESG



The fund seeks to avoid exposure to harmful business practices and products. Article 8 compliant; promotes environmental, social or both characteristics and follows good governance practices.



Unlike funds which invest in ETFs, the fund buys equities directly. This means it is able to exclude companies based on business practices and products determined to be harmful to the environment and society.



Exclusions include industries such as tobacco and controversial weapons, as well as companies causing severe environmental damage, or involved in serious violations of ethical norms and human rights.



# **GDA GBP Long Only 10 year Outperformance vs Morningstar index**

With a 10 year track record for the fund strategy. John Ricciardi, with the support of the team of analysts, has managed the strategy to the same investment objective, policy and process since April 2012.





Source: Deuterium, Morningstar Past performance is not a guide to future performance. The value of your investment can fall as well as rise and you may not get back the original amount you invested.



## **Track Record GBP**

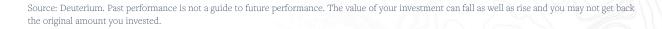
## Consistent month-on-month performer with strong performance characteristics relative to our peer group

### Fund performance month-on-month net of fees

|      | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | YTD  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | -    | -    | -    | -    | -    | -    | 0.4  | -0.6 | -0.3 | 0.2  | 1.5  | 0.2  | 1.4  |
| 2013 | 8.0  | 7.2  | 1.2  | -0.7 | 1.5  | -3.4 | 1.9  | -4.5 | -1.0 | 3.4  | -1.7 | 0.2  | 11.8 |
| 2014 | -1.9 | 1.8  | 0.1  | -1.1 | 2.1  | -1.1 | 1.2  | 4.2  | 0.4  | 3.3  | 4.6  | -0.6 | 13.5 |
| 2015 | 6.4  | -1.7 | 6.5  | -1.7 | 0.5  | -5.2 | 0.5  | -2.9 | -1.2 | 2.2  | 2.3  | 0.2  | 5.4  |
| 2016 | -0.5 | 0.5  | -0.1 | -1.9 | 2.0  | 9.8  | 3.8  | 1.1  | 1.5  | 5.5  | -3.0 | 3.4  | 23.6 |
| 2017 | -0.7 | 3.5  | -1.1 | -1.8 | 1.7  | -1.7 | -0.4 | 3.0  | -3.7 | 1.5  | -1.5 | 1.3  | -0.3 |
| 2018 | -2.0 | -0.4 | -3.1 | 2.6  | 4.2  | 1.1  | 1.8  | 2.0  | -0.9 | -0.3 | 1.6  | -2.2 | 4.2  |
| 2019 | 0.3  | -0.5 | 3.8  | 0.9  | 2.1  | 2.7  | 5.2  | -0.2 | 0.2  | -4.3 | 1.6  | -0.6 | 11.3 |
| 2020 | 1.0  | -3.0 | -5.7 | 5.8  | 3.4  | 1.5  | -1.7 | 0.7  | 1.8  | -1.3 | 4.8  | -0.9 | 5.8  |
| 2021 | -0.3 | -0.6 | 1.6  | 2.6  | -1.5 | 3.7  | -1.1 | 3.0  | -1.5 | 2.8  | 1.7  | -0.3 | 10.4 |
| 2022 | -2.1 | -2.2 | 2.3  | 1.5  | 1.0  | -0.5 | 3.1  | 2.9  | 0.9  | -1.5 | 2.5  | -2.5 | 5.3  |
| 2023 | 1.8  | -2.2 | 1.1  | -0.2 | 1.1  | 2.7  | 1.6  | -2.2 | -0.3 | -1.8 | 4.9  |      | 6.5  |

## Trustnet IA Flexible Investment Quartile Rankings

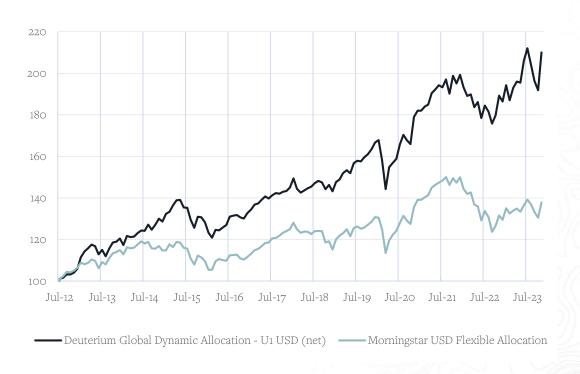






# **GDA USD Long Only 10 year Outperformance vs Morningstar index**

With a 10 year track record for the fund strategy. John Ricciardi, with the support of the team of analysts, has managed the strategy to the same investment objective, policy and process since April 2012.





Source: Deuterium, Morningstar Past performance is not a guide to future performance. The value of your investment can fall as well as rise and you may not get back the original amount you invested.



## **Track Record USD**

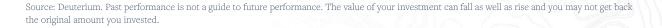
## Consistent month-on-month performer with strong performance characteristics relative to our peer group

### Fund performance month-on-month net of fees

|      | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | YTD  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | -    | -    | -    | -    | -    | -    | 1.1  | 0.6  | 1.6  | -0.1 | 0.8  | 1.8  | 5.8  |
| 2013 | 5.4  | 2.5  | 1.4  | 1.5  | -0.7 | -3.3 | 1.9  | -2.7 | 3.3  | 2.5  | 0.3  | 1.3  | 13.9 |
| 2014 | -2.6 | 3.7  | -0.4 | 0.2  | 1.4  | 1.0  | -0.1 | 2.5  | -1.9 | 1.9  | 2.3  | -1.1 | 6.8  |
| 2015 | 2.9  | 0.8  | 2.3  | 1.8  | 0.1  | -2.6 | -0.1 | -4.3 | -2.9 | 4.2  | -0.2 | -1.9 | -0.3 |
| 2016 | -3.9 | -1.9 | 3.1  | -0.2 | 1.1  | 1.0  | 3.2  | 0.4  | 0.2  | -0.8 | -0.4 | 2.0  | 3.5  |
| 2017 | 1.3  | 1.8  | 0.4  | 1.3  | 1.2  | -0.7 | 1.1  | 0.8  | -0.2 | 0.6  | 0.3  | 1.2  | 9.3  |
| 2018 | 3.0  | -3.4 | -1.2 | 0.7  | 0.8  | 0.5  | 1.2  | 0.7  | -0.4 | -2.3 | 1.5  | -2.1 | -1.3 |
| 2019 | 3.1  | 0.8  | 2.1  | 0.9  | -0.9 | 3.2  | 0.8  | -0.2 | 1.3  | 0.9  | 1.5  | 2.0  | 16.4 |
| 2020 | 0.7  | -5.9 | -8.7 | 7.3  | 1.3  | 1.3  | 4.3  | 2.8  | -1.5 | -1.1 | 7.9  | 1.7  | 9.2  |
| 2021 | 0.0  | 1.1  | 0.5  | 3.0  | 0.9  | 1.0  | -0.5 | 2.0  | -3.5 | 4.5  | -1.9 | 2.1  | 9.5  |
| 2022 | -3.0 | -2.1 | 0.4  | -3.2 | 1.3  | -4.1 | 3.4  | -1.6 | -3.2 | 2.2  | 5.3  | -1.5 | -6.4 |
| 2023 | 4.2  | -3.7 | 3.3  | 1.5  | -0.3 | 5.4  | 2.9  | -3.6 | -3.9 | -2.3 | 9.5  |      | 12.7 |

## Morningstar USD Flexible Allocation Category Quartile Ranking

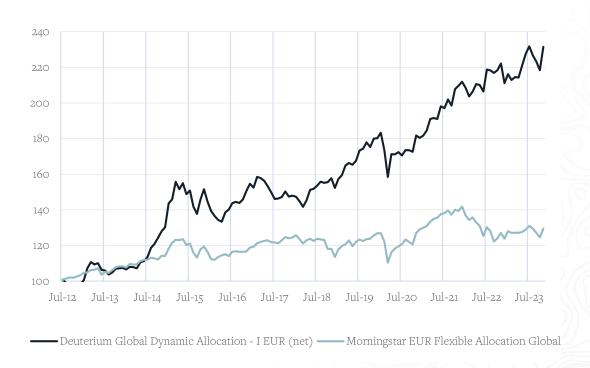






# **GDA EUR Long Only 10 year Outperformance vs Morningstar index**

With a 10 year track record for the fund strategy. John Ricciardi, with the support of the team of analysts, has managed the strategy to the same investment objective, policy and process since April 2012.



Kestrel launches Global Dynamic Allocation (GDA) Fund. 2012 Merian acquires global dynamic DEC allocation team, analytics, and GDA 2019 Fund from Kestrel. Fund rebranded Merian. Jupiter completes its acquisition of Merian. 2020 Deuterium agrees to acquire GDA analytics from Jupiter and to take on **AUG** the team, which continues to run the 2020 Merian fund while setting up the new fund. Merian fund closes and Deuterium fund launches with just an 8 days 2021 performance period gap.





# **Track Record EUR**

Consistent month-on-month performer with strong performance characteristics relative to our peer group

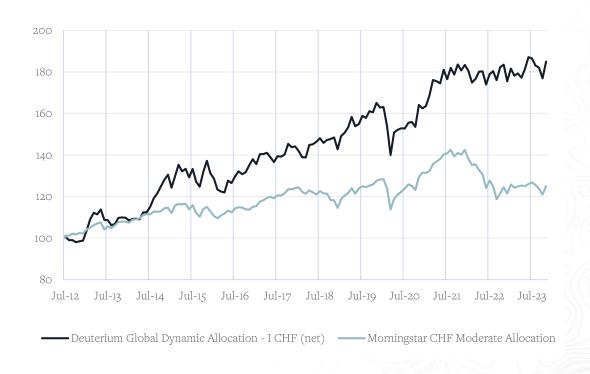
Fund performance month-on-month net of fees

|      | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | YTD  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | -    | -    | -    | -    | -    | -    | 0.6  | -1.6 | -0.6 | -0.9 | 0.6  | 0.2  | -1.7 |
| 2013 | 2.4  | 6.6  | 3.3  | -1.2 | 0.6  | -3.4 | -0.3 | -2.1 | 1.0  | 2.1  | 0.3  | 0.2  | 9.3  |
| 2014 | -0.8 | 1.3  | -0.2 | -0.5 | 3.1  | 0.6  | 2.1  | 4.5  | 1.9  | 2.8  | 2.9  | 1.8  | 21.3 |
| 2015 | 10.2 | 1.6  | 6.7  | -2.7 | 2.3  | -4.0 | 1.4  | -6.0 | -2.8 | 5.9  | 4.0  | -4.6 | 11.0 |
| 2016 | -3.6 | -2,2 | -1.5 | -0.8 | 4.0  | 1.2  | 2.6  | 0.5  | -0.4 | 1.4  | 3.3  | 2.7  | 6.9  |
| 2017 | -1.4 | 4.0  | -0.4 | -1.0 | -1.9 | -2.3 | -2.5 | 0.2  | 0.6  | 2.1  | -1.9 | 0.3  | -4.3 |
| 2018 | -0.4 | -1.7 | -2.1 | 2.6  | 4.0  | 0.5  | 1.1  | 1.5  | -0.4 | 0.2  | 1.4  | -3.4 | 2.9  |
| 2019 | 3.3  | 1.4  | 3.4  | 0.9  | -0.6 | 1.4  | 3.4  | 0.6  | 2.0  | -1.5 | 2.7  | 0.2  | 18.3 |
| 2020 | 1.7  | -5.3 | -8.7 | 8.0  | 0.0  | 0.7  | -1.1 | 1.7  | 0.0  | -0.5 | 5.3  | -0.7 | 0.1  |
| 2021 | 0.7  | 1.6  | 3.5  | 0.3  | -0.3 | 3.7  | -0.5 | 2.5  | -1.7 | 4.7  | 0.9  | 1.1  | 17.4 |
| 2022 | -1.6 | -2.3 | 1.3  | 2.0  | -0.2 | -1.8 | 6.0  | -0.2 | -0.7 | 0.7  | 1.8  | -5.0 | -0.4 |
| 2023 | 2.4  | -1.5 | 0.8  | -0.2 | 3.2  | 2.9  | 1.8  | -2.1 | -1.5 | -2.2 | 6.0  |      | 9.7  |



# **GDA CHF Long Only 10 year Outperformance vs Morningstar index**

With a 10 year track record for the fund strategy. John Ricciardi, with the support of the team of analysts, has managed the strategy to the same investment objective, policy and process since April 2012.



Kestrel launches Global Dynamic Allocation (GDA) Fund. 2012 Merian acquires global dynamic DEC allocation team, analytics, and GDA Fund from Kestrel. Fund rebranded 2019 Merian. Jupiter completes its acquisition of Merian. 2020 Deuterium agrees to acquire GDA analytics from Jupiter and to take on **AUG** the team, which continues to run the 2020 Merian fund while setting up the new fund. Merian fund closes and Deuterium fund launches with just an 8 days 2021 performance period gap.

Source: Deuterium, Morningstar Past performance is not a guide to future performance. The value of your investment can fall as well as rise and you may not get back the original amount you invested.



# **Track Record CHF**

Consistent month-on-month performer with strong performance characteristics relative to our peer group

Fund performance month-on-month net of fees

|      | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | YTD  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2012 | -    | -    | -    | -    | -    | -    | 0.7  | -1.6 | 0.0  | -1.0 | 0.4  | 0.4  | -1.2 |
| 2013 | 4.7  | 5.5  | 2.8  | -0.7 | 2.1  | -4.4 | -0.1 | -2.3 | 0.6  | 2.7  | 0.2  | -0.2 | 11.1 |
| 2014 | -1.2 | 0.7  | 0.1  | -0.3 | 3.1  | 0.0  | 2.4  | 3.5  | 2.0  | 2.7  | 2.6  | 1.9  | 18.9 |
| 2015 | -4.8 | 4.4  | 4.3  | -2.4 | 0.9  | -3.1 | 3.2  | -4.7 | -1.8 | 5.8  | 4.0  | -4.4 | 0.5  |
| 2016 | -1.9 | -4.1 | -0.7 | -0.4 | 4.7  | -0.9 | 2.5  | 1.9  | -1.0 | 0.8  | 2.6  | 2.1  | 5.2  |
| 2017 | -1.7 | 3.5  | 0.0  | 0.5  | -1.6 | -1.6 | 2.0  | -0.1 | 0.7  | 3.7  | -1.1 | 0.3  | 4.5  |
| 2018 | -1.6 | -2.1 | 0.0  | 4.3  | 0.2  | 0.9  | 1.2  | -1.5 | 0.9  | 0.3  | 0.5  | -3.8 | -1.0 |
| 2019 | 4.4  | 1.1  | 1.7  | 3.3  | -2.8 | 0.7  | 2.6  | -0.6 | 2.1  | -0.3 | 2.8  | -1.4 | 14.1 |
| 2020 | 0.1  | -5.7 | -9.1 | 7.8  | 0.9  | 0.4  | 0.0  | 1.8  | 0.3  | -1.5 | 6.9  | -1.0 | -0.3 |
| 2021 | 0.7  | 3.1  | 4.4  | -0.4 | -0.6 | 3.8  | -2.5 | 3.1  | -1.8 | 2.7  | -1.5 | 1.4  | 12.8 |
| 2022 | -1.4 | -3.2 | 1.0  | 2.0  | 0.1  | -3.5 | 2.8  | 0.8  | -2.4 | 3.5  | 0.7  | -4.4 | -4.3 |
| 2023 | 3.5  | -1.9 | 0.6  | -1.2 | 2.4  | 3.1  | -0.3 | -1.8 | -0.5 | -2.8 | 4.6  | 1    | 5.4  |



## **Investment Team**



John Ricciardi Lead Fund Manager and Head of Global Asset Allocation

Before joining Deuterium, John was the Head of Global Asset Allocation at Merian Global Investors. John cofounded Kestrel Investment Partners LLP in 2011, whose global asset allocation business was acquired by Merian in 2019. Prior to Kestrel, John's notable appointments were as Iveagh's Head of Asset Allocation between 2006 and 2011, where he launched the Iveagh Wealth Fund, and as Head of Global Asset Allocation for AllianceBernstein between 1996 and 2003.

John has also cofounded and built two successful asset allocation solutions businesses: Cursitor Management which was sold to Alliance Capital in 1996 and Bullrun Financial which was sold to Quantal International Inc. in 2010.



Osman Ozsan Chief Investment Officer

In 2018, Osman founded Deuterium Capital Management, the investment manager of the Deuterium Global Dynamic Allocation Fund. In addition to his role on the GDA team, Osman also manages a private investment portfolio and a private equity pool for clients of the firm.

Osman has led an extensive international career in investment banking working at Barclays and UBS, trading interest rate and currency derivates, as well as debt instruments. Osman studied law at the University of Bristol before moving to graduate study in Finance at the Stern School of Business in New York.



Vijay Modhvadia Managing Director

Vijay joined Deuterium in Dec 2021. Vijay has led an extensive international career in investment banking working at UBS Zurich, Credit Suisse, Barclays and HSBC Bank trading interest rates, government bonds and currency derivates.

Vijay has extensive experience in leading teams having been Head of G10 STIR at UBS and team leader at Barclays. Vijay has quantitative background with first class degree in Software Engineering and most recently completed courses in Artificial Intelligence and Machine Learning from MIT.



## **Data Science Team**



Ravi Kishore Booka Head Quant Analyst

Ravi is the Head Quant Analyst within the GDA team, a position he has held since Jan 2021 having joined Kestrel in September 2011 as the Chief Technology Officer. Ravi is responsible for the team's technology strategy and he plays a key role in developing systems to power both the investment process and the research effort. Ravi previously worked with John at Iveagh as technology consultant and was instrumental in developing the innovative tools that drove its investment process.

Ravi began his career as a software engineer with Intoto Software Ltd in India. Ravi has a BSc in Mathematics and Computer Science and an MSc in Electronics from Andhra University, India.



Pramila Prasingu Data Analyst

Pramila is a Data Analyst within the GDA team, a position she has held since November 2020 having joined Kestrel in August 2011 as a developer. Pramila is responsible for web administration and the data analysis that underlies the team's investment modelling capabilities. Pramila previously worked with John at Iveagh as intern and was instrumental in data processing.

Pramila began her career with Andhra Bank in India as Helpdesk Executive. Pramila holds a Master's degree in Computer Networks from Middlesex University.



Sarath Kotamarthi
Quant Analyst

Sarath is a Quant Analyst within the GDA team, a position he has held since November 2020 having joined Kestrel in December 2012 as a consultant developer. Sarath is responsible for organising, analysing and reporting on non-macro-economic and financial market data in support of the team's investment modelling systems.

Sarath began his career with PC DOCTOR 24 in London. Sarath holds a BSc in Computer Science and a MSc in Computer Networking from London Metropolitan University.



## **About Deuterium**

#### For professional investors only

- Deuterium Capital Management LLC ("Deuterium") managing more than \$1 billion in assets, as of 31-Dec-2022 including \$260 million in absolute return style, long/short, private fund assets, has launched the Deuterium Global Dynamic Allocation Long/Short ("GDALS"), its global macro hedge fund on the same UCITS, daily-dealing platform as the Deuterium Global Dynamic Allocation Fund ("GDA"), its long-only, multi-asset fund.
- GDALS Deuterium's Global Dynamic Allocation Long/Short Fund, looks to combine the best of quantitative macro fundamental analysis with decades of manager experience in a UCITS, daily dealing, global macro hedge fund.
- GDA The Deuterium Global Dynamic Allocation Long Only Fund, a UCITS, daily dealing, long only, multi asset fund with a ten-year track record has a 5-star Morningstar USD and 5-crown Trustnet GBP rating.



# Why Invest with Deuterium's Global Dynamic Allocation (GDA)?

#### Seven reasons

- Simple approach with a deep focus: We do not seek to invest across too many classes, but we focus on those where there is a depth and history of reliable data to support our predictions.
- 2. Pragmatic emphasis on the near-term: With one eye on the long term, we focus on near-term (4-6 week) catalysts and trends that really drive asset prices, and where our models and data are most dependable.
- **3.** Leadership in macro analysis: A long running, continually updated macro-analysis system combined with decades of macro-experience across several economic cycles.
- 4. Glass box rather than black box: Models and analysis are shared with clients through quarterly commentaries, with direct real-time access to our SmartMarkets quantitative research and analysis for significant supporters.

- **5.** The long only fund has a macro-driven, liquid, ESG-compliant security selection: We are not individual stock pickers, but we select global large and mega cap securities in countries and sectors which are filtered for ESG to meet Article 8.
- 6. Team longevity and dynamics: The core team has worked together for many years and the move to Deuterium has enhanced the blend of dynamics, experience and insight.
- 7. Strong and consistent numbers vs. peer group performance







# **Case Studies**

# **Lead Manager Track Records**

More than three decades of performance in multi-asset investing: John Ricciardi's long-term track records



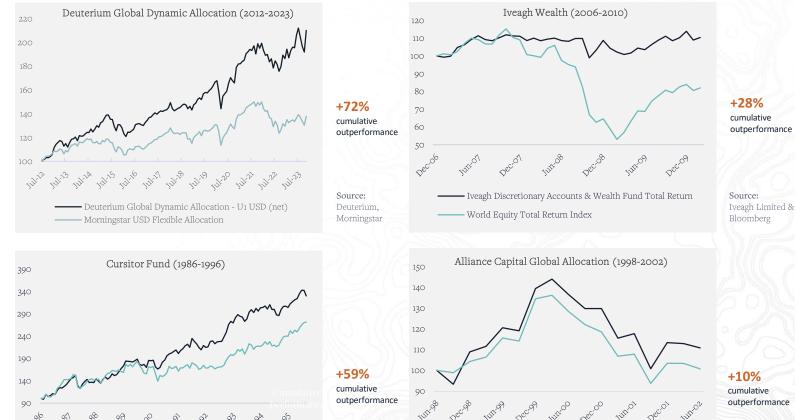
John Ricciardi
Partner and Lead Manager
35 years experience

Head of global asset allocation for Alliance Bernstein, \$450 billion AUM

Manager of \$10 billion Cursitor Global Asset Rotation Fund

Head of global asset allocation for Iveagh Ltd

Co-founder of Cursitor and founder of Bullrun Financial, a pioneer of quantitative portfolio strategies



Source:

Cursitor /

Alliance

& Bloomberg

Sources: Bloomberg, Deuterium. The track records on this slide were achieved using prior versions of the modelling and allocation strategies used by the Fund. Past performance is not a guide to future performance. The value of investments can go down as well as up and is not guaranteed.

· Cursitor Fund



Watson Wyatt Median Manager

Alliance Capital GTAA Fund

Source:

Alliance

Bernstein &

Watson Wyatt

World Equity Total Return

## Case Study Dec 2021: Sell US Discretionary & Technology Sectors

## In December 2021 Scores project high probability for losses in US Discretionary (-35%) & Technology (-30%) Sectors

| December 11, 2021      |        |                          |   |
|------------------------|--------|--------------------------|---|
| US Sector              | Dec 21 | Mar score -<br>Dec score |   |
| Consumer_Staples       | -50%   | 13%                      |   |
| Materials              | 27%    | 36%                      |   |
| Energy                 | 14%    | 0%                       |   |
| Utilities              | -27%   | 27%                      |   |
| Telecommunications     | -44%   | 33%                      |   |
| Consumer_Discretionary | 33%    | -56%                     | * |
| Financials             | 89%    | -78%                     |   |
| Real_Estate            | -17%   | 44%                      |   |
| Information_Technology | 57%    | -100%                    | × |
| Industrials            | 69%    | -25%                     |   |
| Health_Care            | -60%   | 0%                       |   |

US Equity Sector Direction Scores (+/- 100%)

| December 11, 2021      |         |                 |     |      |
|------------------------|---------|-----------------|-----|------|
|                        |         | Price Move      |     |      |
|                        | Current | required to get |     |      |
| US Sector              | price   | to target price | Buy | Sell |
| Consumer Discretionary | 1614.44 | -35.3%          |     | CDR  |
| Consumer Staples       | 771.24  | -6.8%           |     |      |
| Energy                 | 430.61  | 27.8%           | ENE |      |
| Financials             | 647.84  | -4.8%           |     |      |
| Health Care            | 1565.37 | -3.2%           |     |      |
| Industrials            | 888.50  | -24.9%          |     | IDS  |
| Information Technology | 3068.89 | -30.0%          |     | TEC  |
| Materials              | 552.89  | -0.3%           |     |      |
| Real Estate            | 306.72  | -12.9%          |     |      |
| Communication Services | 266.26  | -28.1%          |     | тсо  |
| Utilities              | 349.30  | -14.3%          |     |      |

**US Equity Sector Valuation Targets** 



CNBC John Interview

30<sup>th</sup> December 2021

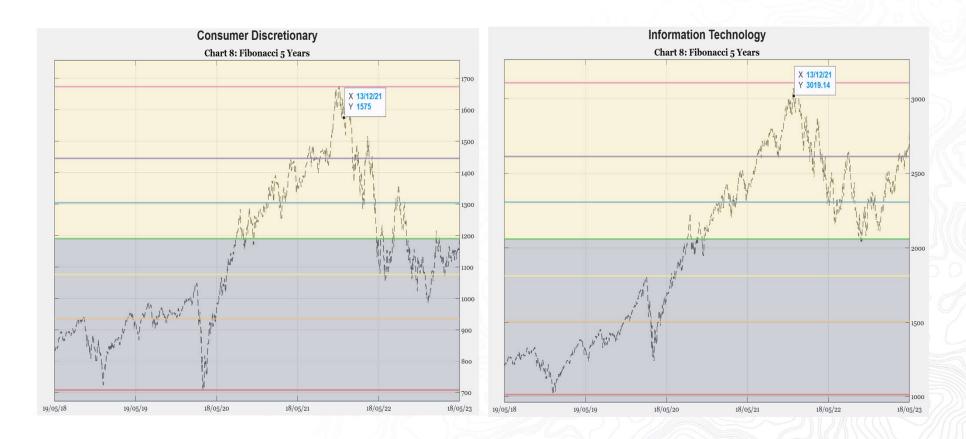
https://youtu.be/7S5EjlePnmU





## US Discretionary Sector drawdown (-36.5%)

## US Technology Sector drawdown (-32%)



Source: Deuterium, Refinitiv.



#### Case Study Dec 2021: Sell US Discretionary & Technology Sectors

Deuterium Long-only returns (+8.5%) vs World Equity (-0.4%) & US 10-year bond return (-17.8%)



Source: Deuterium, Bloomberg Past performance is not a guide to future performance. Refer to important disclaimers at the end of this presentation.



# Case Study: Managing Through the Covid-19 Crisis

In Mar 2020 The Team Extended Bond Durations, Stayed Overweight Equities Anticipating The Rebound, and Concentrated Positions In Technology, Communications and Discretionary Sectors



#### COVID-10 Crisis

To start 2020 the GDA models showed a strong upswing in the global cycles to come over the next quarters, leading the team to hold an overweight in equities. When the Covid-19 crisis was recognized as a pandemic in March, the team shifted US Treasury bond positions up to an equivalent of 100% 10 year Treasury duration. This underpinned portfolio performance during March in one of the most rapid and deep crashes in stock market history.

The team implemented proprietary short term liquidity and market monitors to assess the effects of central bank interventions and fiscal policy measures on global debt and consumption. This kept the portfolio overweight equities and concentrated positions in technology, communications and discretionary sectors.

#### The outcome

By Sep 2020 the fund had recovered to better its previous high in Feb 2020. This meant that the fund significantly outperformed the peer index with its Jan 2020 to Nov 2020 return of +6.4%. Adjusting the portfolio allocations for external shocks remains a core team competence.



Past performance is not a guide to future performance. The value of investments can go down as well as up and is not guaranteed.

Source: Deuterium, Bloomberg as at 18/11/2020. Refer to important disclaimers at the end of this presentation.



# Case Study: Discretionary Added Value 2018

In Late 2018 the Managers Decided to Increase Equity Exposure, Ahead of the Fed Flip Flopping on Interest Rates



#### Fed Flip Flops

The US Federal Reserve (Fed) flipped from raising interest rates until December 2018 to cutting them between August 2019 and October 2019.

The fund was able to benefit from this change in direction.

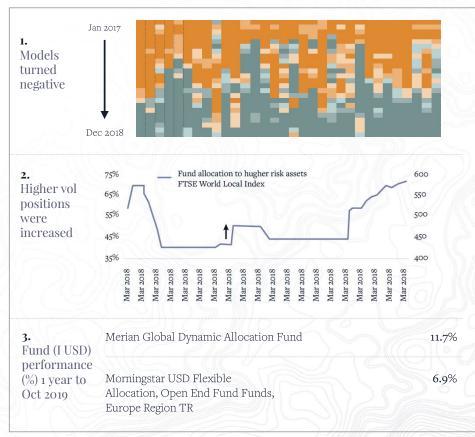
In the latter months of 2018, the team's models showed that worsening economic conditions would make it very difficult for the Fed to continue on its rate hiking path.

#### Manager Discretion

Was introduced because a judgment needed to be taken on human decision making within the Fed. Exposure to equities was increased.

#### The Outcome

The fund significantly outperformed peers during the twelve months to October 2019.



Past performance is not a guide to future performance. The value of investments can go down as well as up and is not guaranteed. Source: Deuterium, Bloomberg, Morningstar. Merian U1 USD Acc (in USD) performance 1 year at October 2019. Performance is shown net of fees and expenses. Refer to important disclaimers at the end of this presentation.



# Case Study: Avoiding the Crash of 2008

In January 2008, The Lead Manager Reduced Equities Below 30%



#### Great Financial Crisis

When the great financial crisis hit in September 2008, the fund's lead manager was well prepared. He had only 27% allocated to equities. Consequently, the performance of the fund he was then managing held up well, while equity markets tumbled in one of the worst crashes in stock market history.

He was led to his cautious stance because his macro models had long been forecasting a global recession in 2008.

#### Manager Discretion

Was introduced because a judgment needed to be taken on human decision making within the Fed. Exposure to equities was increased.

#### The Outcome

The fund he was then managing significantly outperformed the market during the worst of the crisis, suffering a fall of only -1.0% during the period 1 September 2008 to 2 January 2009, compared to the -11.2% fall of the MSCI World Index (in GBP). Protecting against downside risk remains a key part of his investment philosophy to this day.



Past performance is not a guide to future performance. The value of investments can go down as well as up and is not guaranteed. Source: Iveagh Wealth LTD, Bloomberg as at Jan-2010. Refer to important disclaimers at the end of this presentation.



## **Important Disclosures**

This communication is issued by Deuterium Capital Management, LLC 1006 North Fort Harrison Avenue, Clearwater, Florida 33755 - 3017 and Deuterium Investment Advisors Limited, Cannon Green, 27 Bush Lane London EC4R OAA (together or separately "Deuterium"). Deuterium Capital Management, LLC ("DCM") is an SEC-registered investment adviser, CRD #294051, SEC #801-112932. Registration as an investment adviser with the SEC does not imply a certain level of skill or training of DCM, or its personnel. Deuterium Investment Advisors Limited ("DIA") (FRN - 804110) is an appointed representative of Kroll Securities Limited (FRN - 466588), which is authorised and regulated by the Financial Conduct Authority in the United Kingdom ("UK"). Deuterium UCITS ICAV is registered under the laws of Ireland with registered number C438489 as an Irish Collective Asset-management Vehicle which is constituted as an open-ended umbrella UCITS fund with segregated liability between sub-funds. Deuterium UCITS ICAV is authorised and regulated by the Central Bank of Ireland. This publication has not been reviewed, endorsed or approved by any regulatory body. This is a marketing communication. This communication is not a contractually binding document. Please refer to the prospectus of the Deuterium UCITS ICAV and to the KIID and/or PRIIPS KID and do not base any final investment decision on this communication alone. This document is intended for authorized recipients only. This communication is directed only at professional clients, professional investors, Advisers or eligible counterparties as defined by the Financial Conduct Authority in the UK ("FCA"). Many of the protections provided by the UK regulatory structure to retail clients may not apply to investments in any fund promoted by Deuterium including access to the Financial Services Compensation Scheme and the Financial Ombudsman Service. This document is for information purposes only and is not intended as investment advice, an offer or solicitation with respect to the purchase or sale of any security and investors should consider seeking further financial advice before subscribing. It includes proprietary information of Deuterium and is presented for discussion purposes only. Any unauthorized copying, disclosure, or distribution of the information in this material is strictly forbidden without the express written consent of Deuterium. There is no guarantee that any investment objective will be achieved. Past performance is not indicative of future results, which may vary. Actual results may differ materially from those expressed or implied. Past performance is not a guide to future performance. The value of your investment can fall as well as rise and you may not get back the original amount you invested. The positions and stocks identified herein do not represent all of the investments made or recommended by Deuterium. It should not be assumed that other investments made, or investments made in the future by Deuterium are or will be profitable. Past performance does not guarantee future results. The Deuterium Global Dynamic Allocation Fund (the "Fund") is an Undertakings for the Collective Investment in Transferable Securities ("UCITS"), a sub-fund of an Irish Collective Asset-management Vehicle ("ICAV") and is not marketed in the United States. Past performance results of the fund strategy include results of the Merian Global Dynamic Allocation Fund (the "Merian Fund") and are for illustrative purposes and are not necessarily indicative of future performance of the strategy. The Merian Fund was managed from its inception by John Ricciardi and with a substantively similar investment objective and investment process as the Fund. That being said, any performance results portrayed for the Merian Fund relate only to the investment strategy employed for the Merian Fund over the specified investment period. No direct comparison should be presumed between the Merian Fund and Fund or any other current or future funds managed by Deuterium. No representation is being made that any portfolio managed by Deuterium will or is likely to achieve results similar to those of the Merian Fund, and this data is provided for informational purposes only. Simulated/Hypothetical performance results are unaudited and do not reflect actual results of the current Fund. Simulated/Hypothetical performance results are for illustrative purposes only and are not necessarily indicative of performance that would have been actually achieved if an investment utilized the current strategy during the relevant periods, nor are these simulations necessarily indicative of future performance of the strategy. The graphs, charts and other visual aids are provided for informational purposes only. None of these graphs, charts or visual aids can of themselves be used to make investment decisions. No representation is made that these will assist any person in making investment decisions and no graph, chart or other visual aid can capture all factors and variables required in making such decisions.



## **Important Disclosures**

An investment with Deuterium is speculative and involves significant risks, including the potential loss of all or a substantial portion of invested capital, the use of leverage, and the lack of liquidity of an investment. This document contains forward-looking statements. The opinions, forecasts, projections or other statements, other than statements of historical fact, are forward-looking statements. Actual events or results or the actual performance may differ materially from those reflected or contemplated in such statements. Prospective investors should pay close attention to the assumptions underlying the analyses and forecasts contained in this presentation, which are based on assumptions believed to be reasonable in light of the information presently available. Such assumptions may require modification as additional information becomes available. Nothing contained in this presentation may be relied upon as a guarantee, promise, assurance or a representation as to the future. These statements have not been reviewed by anyone outside of Deuterium and while Deuterium believes these statements are reasonable, they do involve a number of assumptions, risks and uncertainties. References to market or composite indices or other measures of relative market performance over a specified period of time are provided for information only. Reference or comparison to an index does not imply that the portfolio will be constructed in the same way as the index or achieve returns, volatility, or other results similar to the index. Indices are unmanaged, include the reinvestment of dividends and do not reflect transaction costs or any performance fees. Unlike indices, the Fund will be actively managed and may include substantially fewer and different securities than those comprising each index. Morningstar USD Flexible Allocation: Flexible Allocation portfolios have a largely unconstrained mandate to invest globally in a range of asset types. These portfolios tend to hold regularly rotating positions in stocks, bonds, commodities, cash and their related derivatives. These funds may exhibit characteristics fitting cautious allocation, moderate allocation, or aggressive allocation at any point in time. They may also regularly rotate between countries and regions. These portfolios typically hold from 20% to 80% of exposure in equities and between 20% to 80% of exposure in fixed income and cash. Morningstar CHF Moderate Allocation: CHF Moderate Allocation funds have a mandate to invest in a range of asset types for a CHF-based investor. The equity component will usually be between 35% & 65% in the normal running of the fund. These portfolios tend to hold regularly rotating positions in stocks, bonds, commodities, cash and their related derivatives. These funds may exhibit characteristics fitting cautious allocation, moderate allocation, or aggressive allocation at any point in time. They may also regularly rotate between countries and regions. Morningstar EUR Flexible Allocation – Global: funds have a largely unconstrained mandate to invest globally in a range of asset types for an EUR-based investor. Funds in this category may have up to 30% gross exposure allocated to alternative sub-strategies. These portfolios tend to hold regularly rotating positions in stocks, bonds, commodities, cash and their related derivatives. These funds may exhibit characteristics fitting cautious allocation, moderate allocation, or aggressive allocation at any point in time. They may also regularly rotate between countries and regions. Morningstar GBP Flexible Allocation: funds have a mandate to invest in a range of asset types including equities, bonds, property, commodities, cash and liquid alternatives for a GBP-based investor. These portfolios tend to exhibit a 'home bias' but have a largely unconstrained mandate to invest in a mix of equity and non-equity securities. Funds in this category may have up to 30% gross exposure allocated to alternative sub-strategies. A decision to invest should take into account all of the objective and characteristics of the fund as set out in more detail in the fund documents. The relevant articles of association, prospectus, supplement and key investor information document (KIID) and/or PRIIPS KID, available in English, and the latest annual/semi-annual report (as applicable) are available free of charge by clicking on https://www.deuterium.us/. Complete information on the risks of investing in the Fund are set out in the Fund's prospectus. A summary of your investor rights is available in English by clicking on https://www.deuterium.us/ The on-going charges are the fees the Fund charges to investors to cover the costs of running the Fund. Additional costs, including transaction fees, will also be incurred. These costs are paid out by the Fund, which will impact on the overall return of the Fund. For the avoidance of doubt, if you make a decision to invest, you will be buying shares in the Fund and will not be investing directly in the underlying assets of the Fund.

