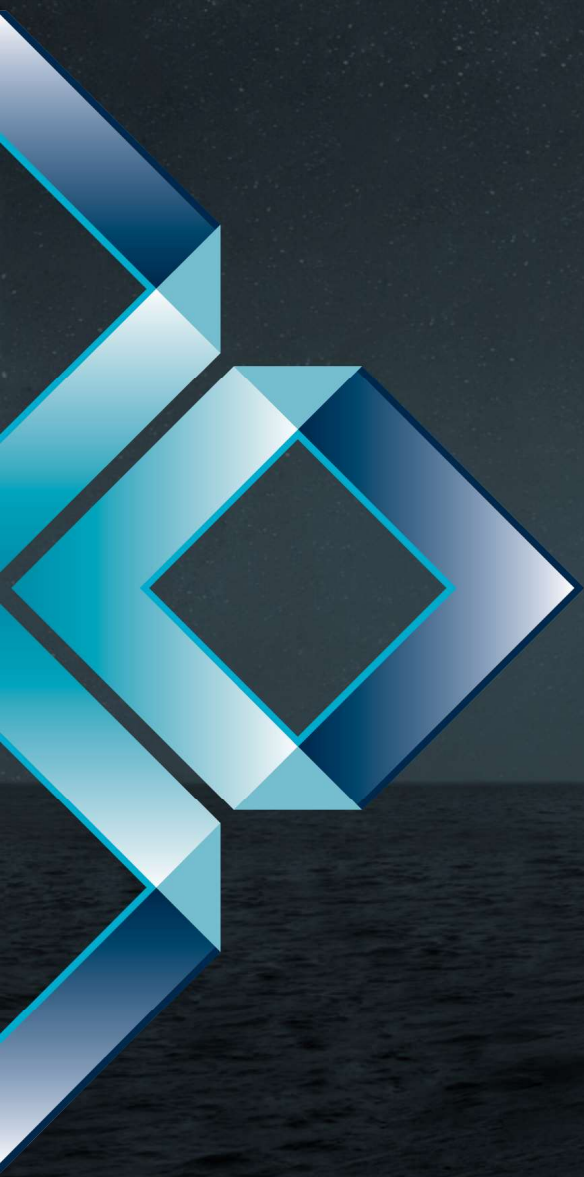




PORTFOLIO MANAGEMENT CONFERENCE 2022

Portfolio Management Under Uncertainty

15 March 2022
#PMC2022



Upcoming IMAP events



FUM Census results



Webinar Series: The Investment Implications of Interest Rate rises



21st March – Macroeconomic Background



23rd March – Investment Impact

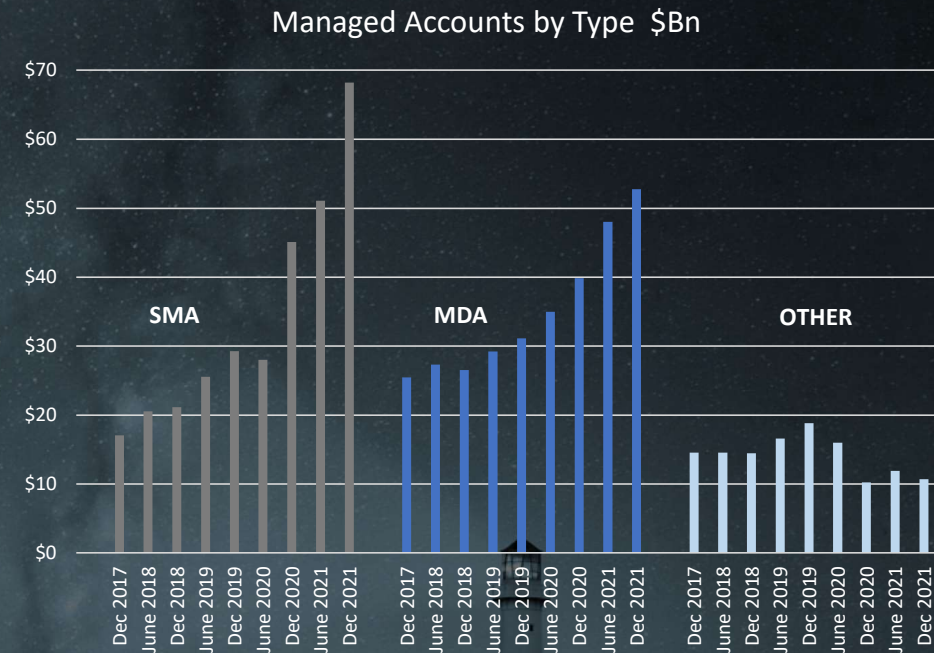
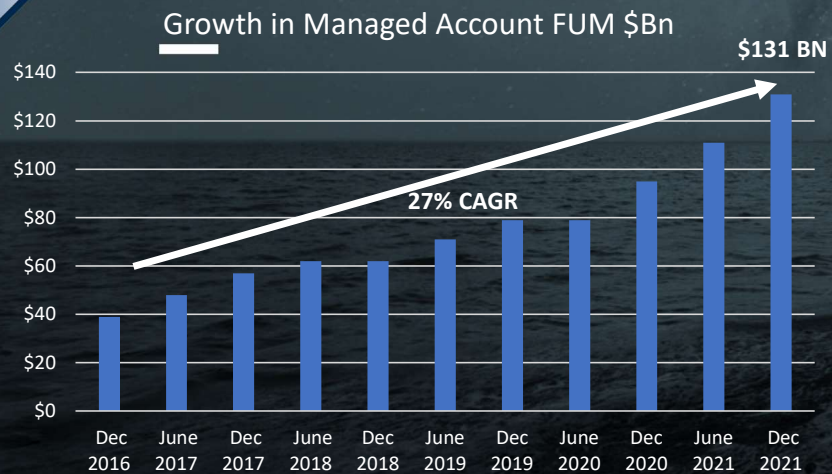


25th March – Portfolio Management Considerations

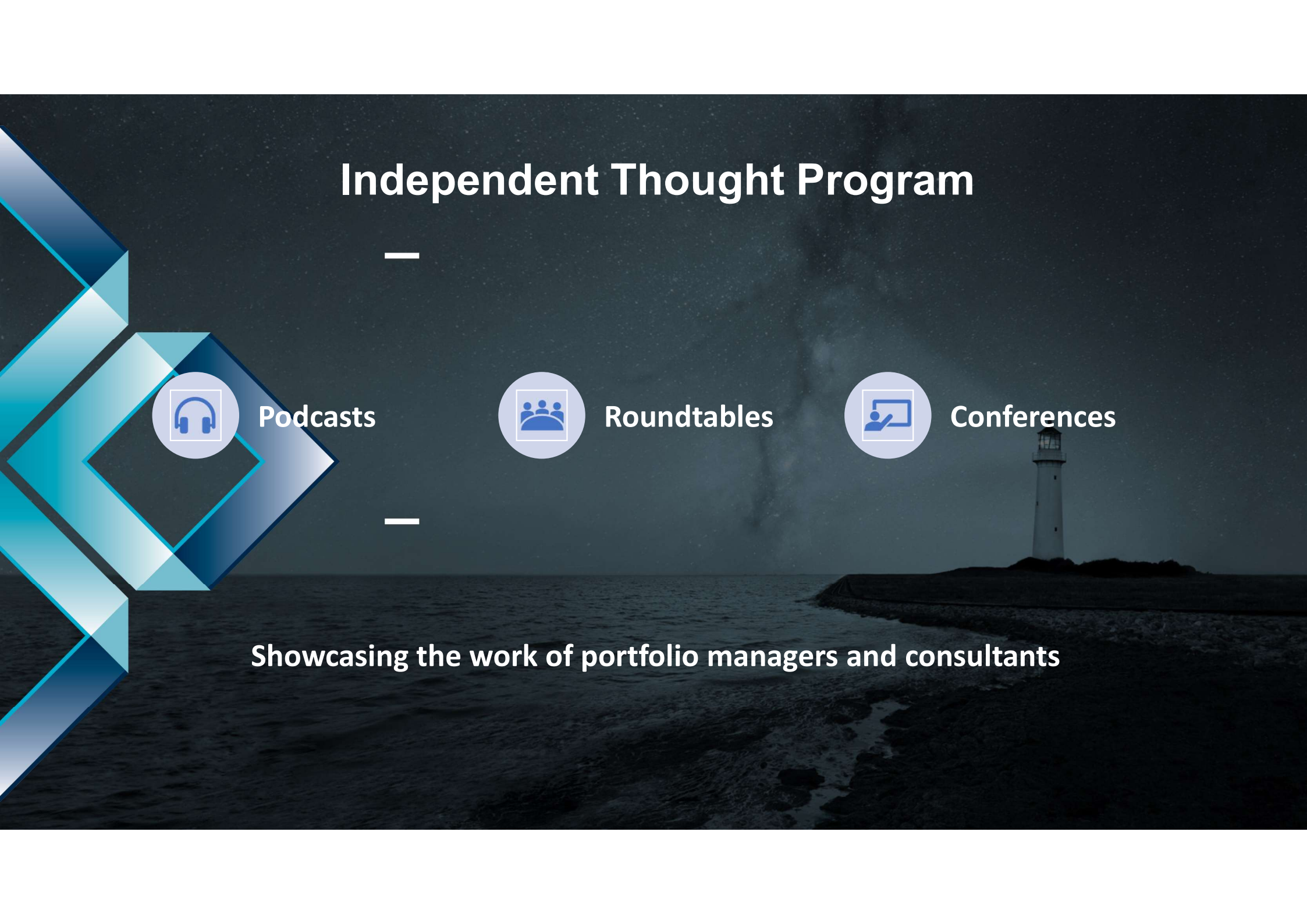


Managed Account Awards: Submissions Open April

IMAP FUM Census



Independent Thought Program



Podcasts



Roundtables



Conferences

Showcasing the work of portfolio managers and consultants

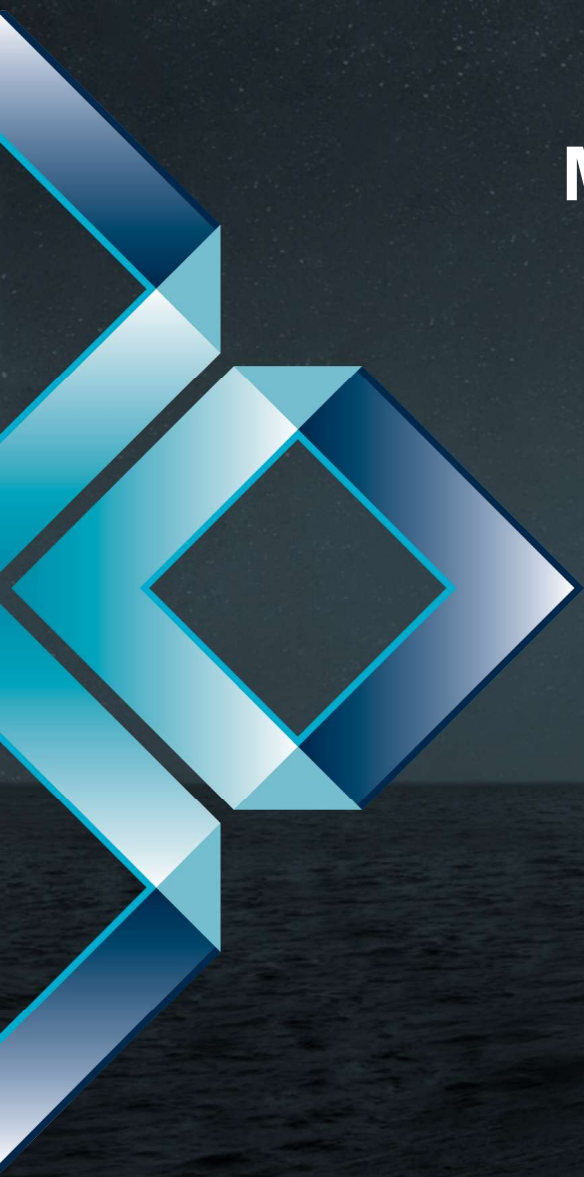
Independent Thought Conference

Sydney 12th April

Alternatives
Australian Equities
Property and Infrastructure
International Equities
Fixed Interest

Pinnacle
Schroders
First Sentier
Ironbark
Franklin Templeton

JANA Investment Advisors
Lonsec
Morningstar
Drummond Capital
Oreana Portfolio Advisers
Centrepont Alliance
Insight Investment consultants
Viridian Advisory
Clime Investment Management
Bellmont Securities



Managed Account Awards

Asset Class Categories

- Australian Equities
 - Small Cap
 - Fixed Interest
 - International Equities
 - Multi Asset
-

Specialty Categories

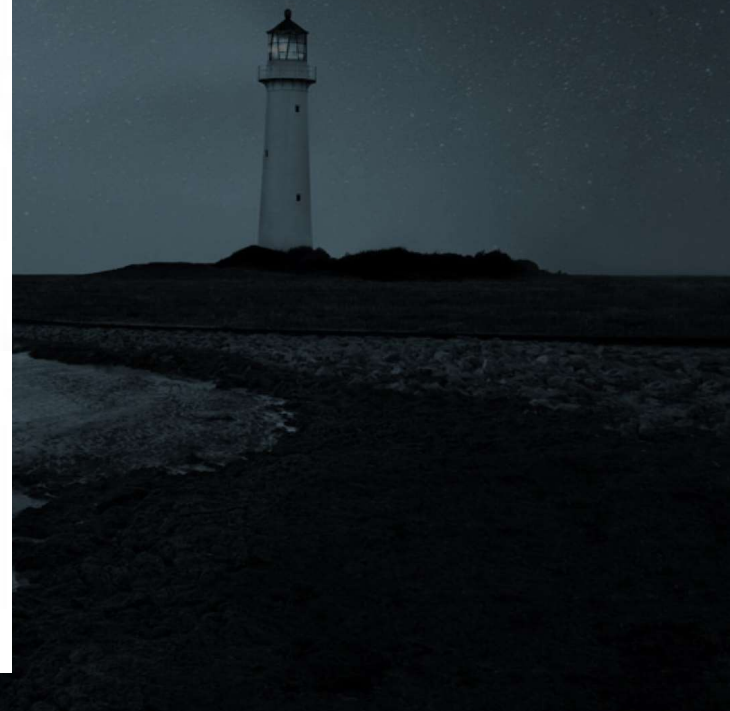
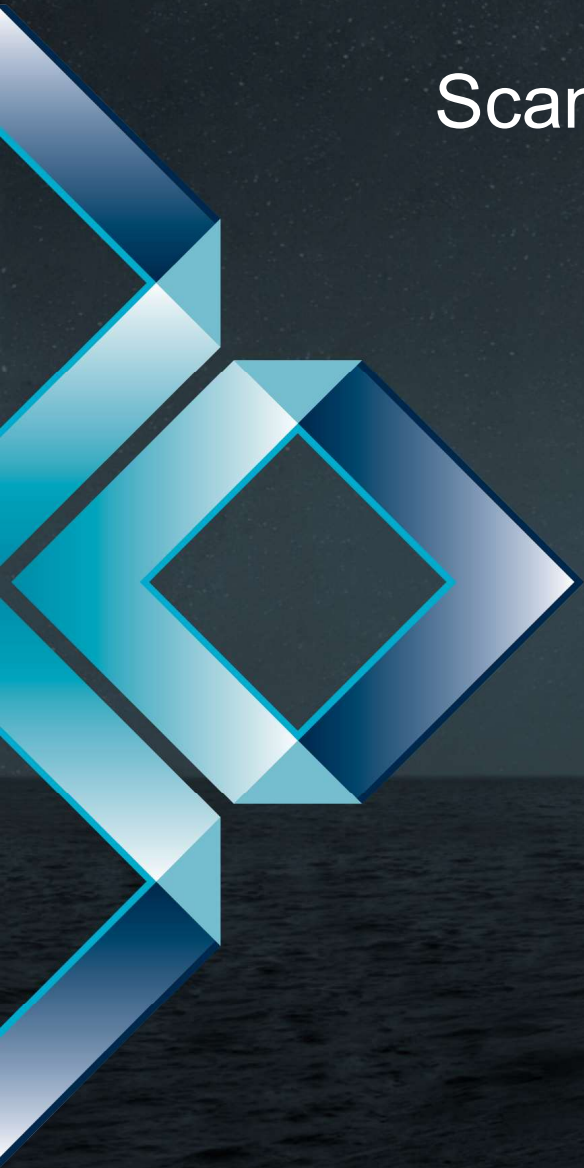
- Licensee
- Innovation
- ESG / Sustainable Portfolio

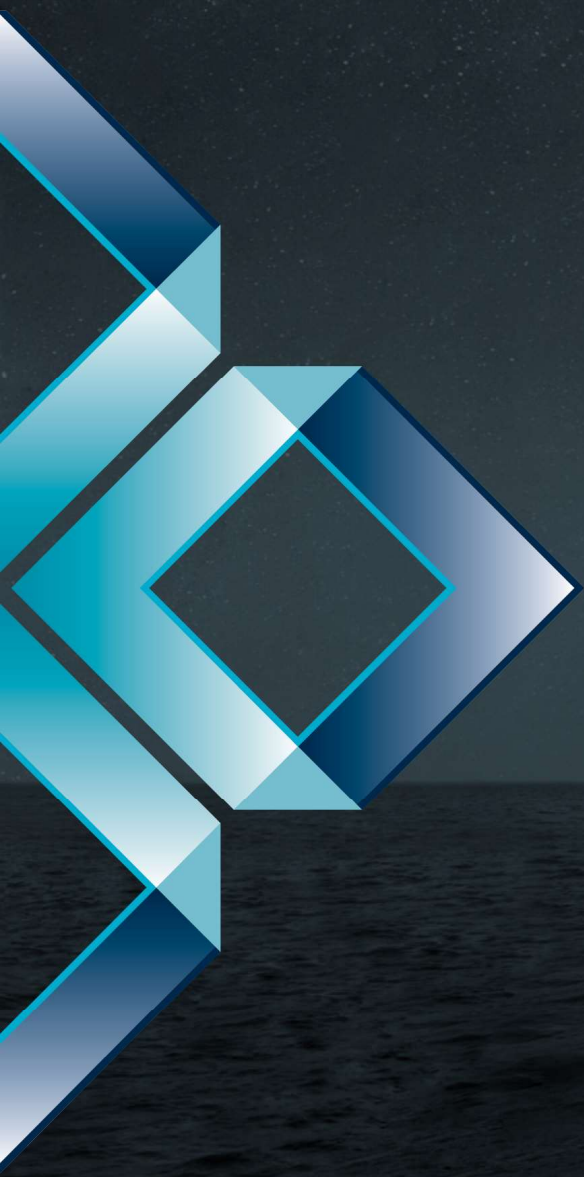


SPONSORS



Scan below QR code for conference material





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Can we protect against downside risk?

—

Dominic McCormick
Stephen Coltman, Abdn
Victor Huang, Milliman



abrdn Global Risk Mitigation

Stephen Coltman, Senior Investment Manager - Alternatives

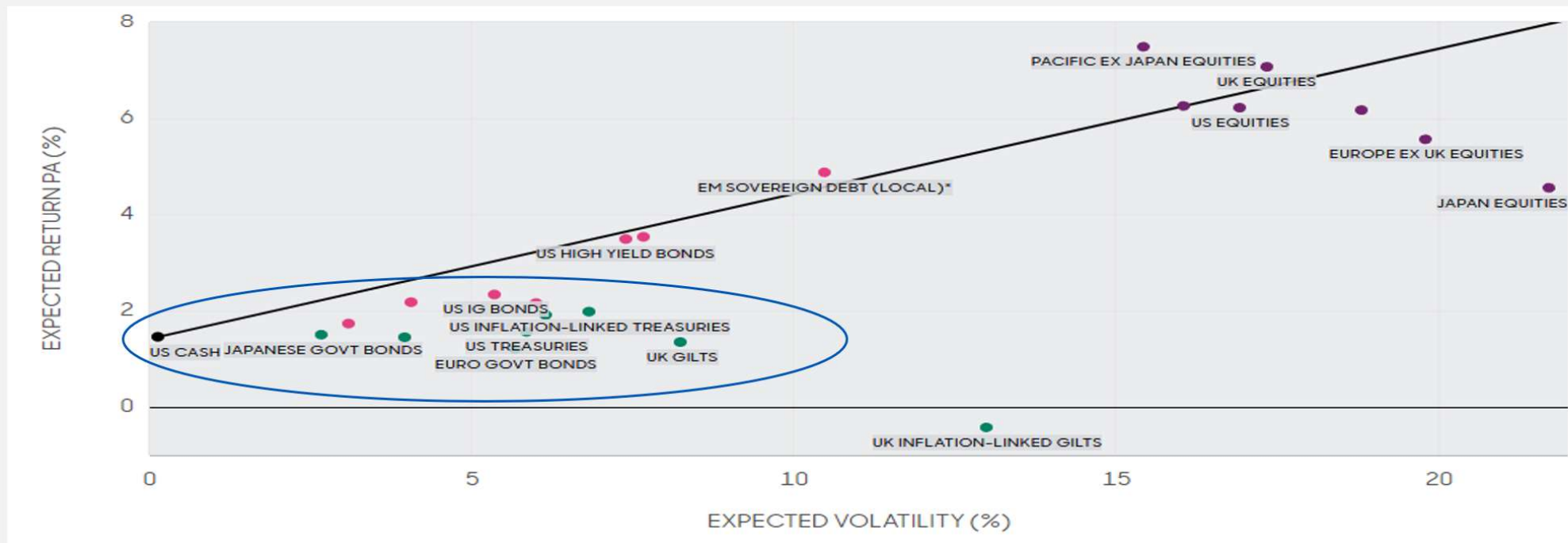
IMAP Portfolio Management Conference

15th March 2022

abrdn.com

Long-term returns from high quality fixed income assets are expected to be poor

Return seeking investors are being pushed in to either taking more equity risk and/or increasing exposure to less liquid assets abrdn
10yr Asset Class Return Forecasts USD hedged



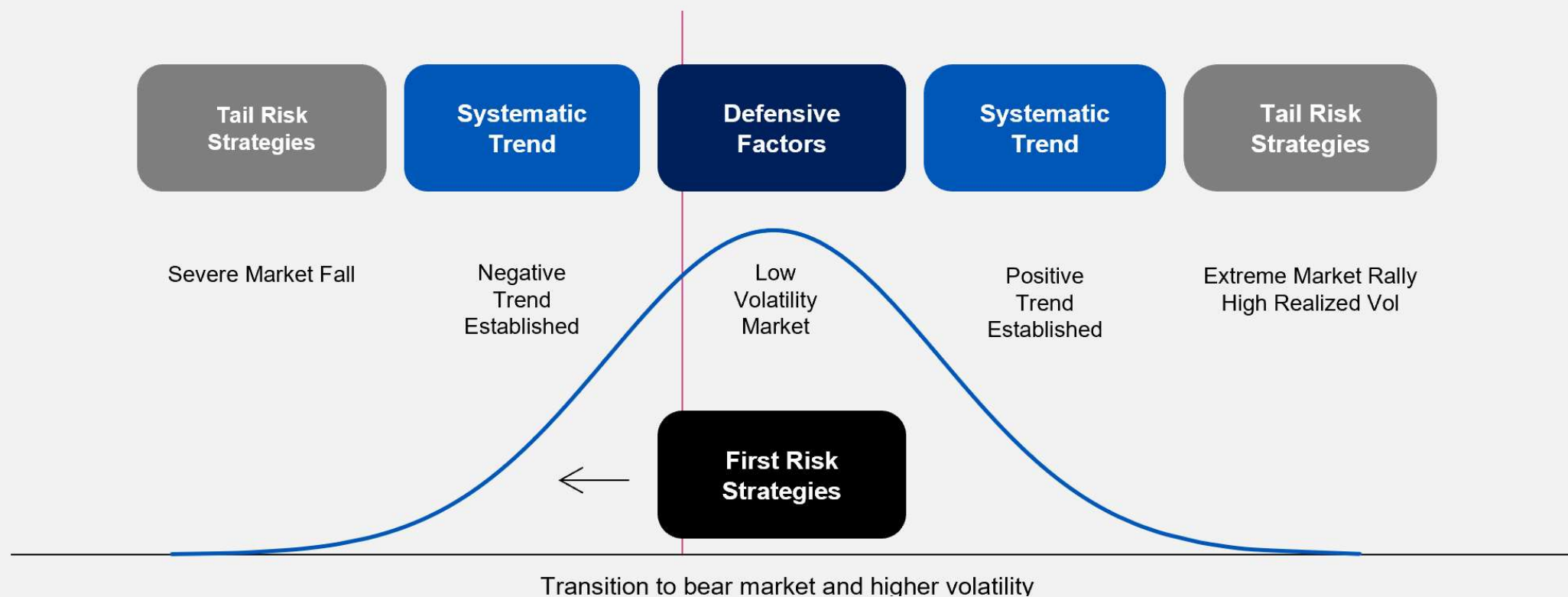
For illustrative purposes only.
Source: abrdn Research Institute, February 2022

Global Risk Mitigation building blocks



How the different strategies pay off at different points in the cycle

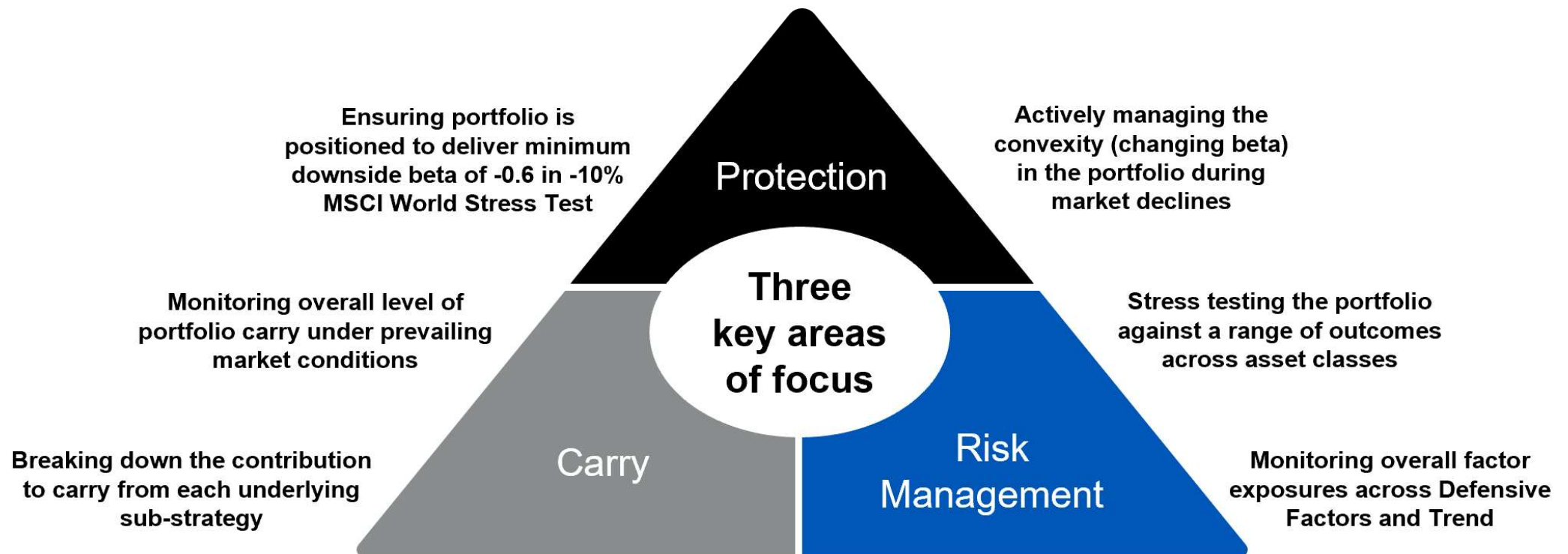
Illustrative distribution of returns for an equity portfolio and preferred environment for each risk mitigation building block



Source: abrdn, February 2022

Managing the portfolio to deliver GRM objectives

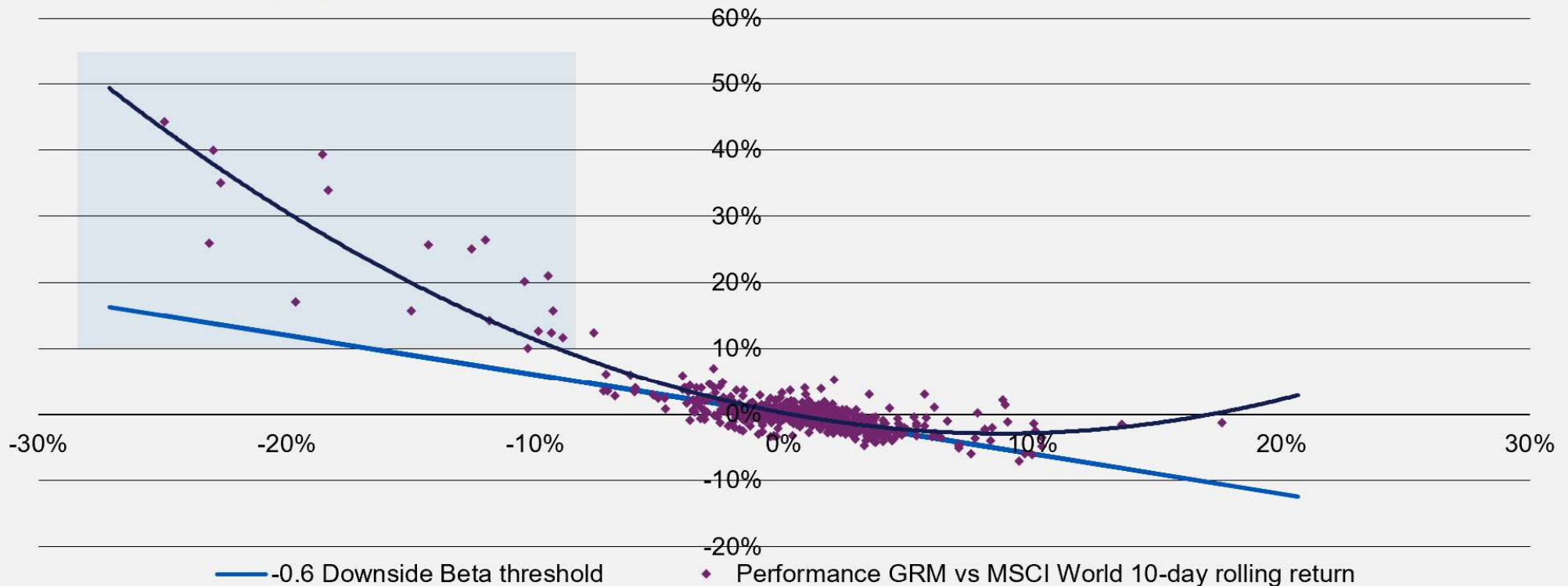
Three key areas of focus



GRM investment objectives

Maximising performance with downside beta to equities lower than -0.6

Aim to deliver maximum long term return while still populating the area shaded below



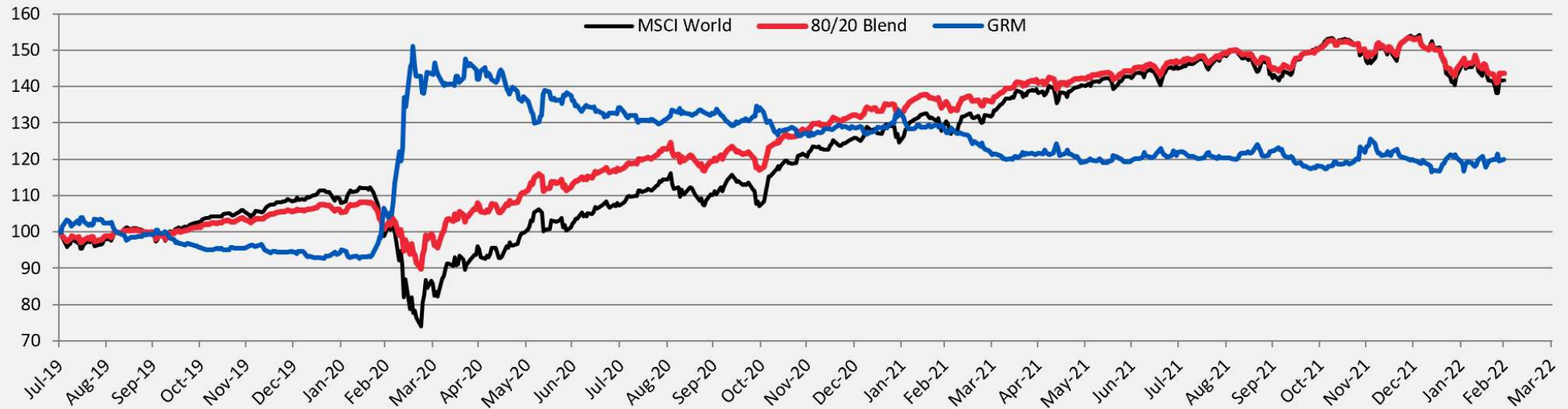
For illustrative purposes only. Forecasts are offered as opinion and are not guaranteed. Actual events or results may differ materially.
Source: abrdn Research Institute, February 2022.

Adding GRM Fund to a portfolio of equities

Adding negatively correlated strategies to a portfolio smooths compound returns

Period July 19 – Feb 22

	MSCI World	80/20 blend	GRM
Total Return	41.55%	43.58%	20.00%
Annualised return	14.40%	15.03%	7.31%
Max Drawdown	-34.03%	-20.12%	-24.41%
Volatility	20.04%	12.42%	16.10%
Return/Vol	0.72	1.21	0.45



Source: February 2022, abrdn, BNP Paribas, shows GRM index ticker ENHAGRM3 gross of management fees and fund expenses but net of all transaction costs combined with MSCI World NR (M1WO Index) and rebalanced quarterly. Several key assumptions were made in the preparation of the above simulated performance. Changes in these assumptions may have a material impact on returns presented.

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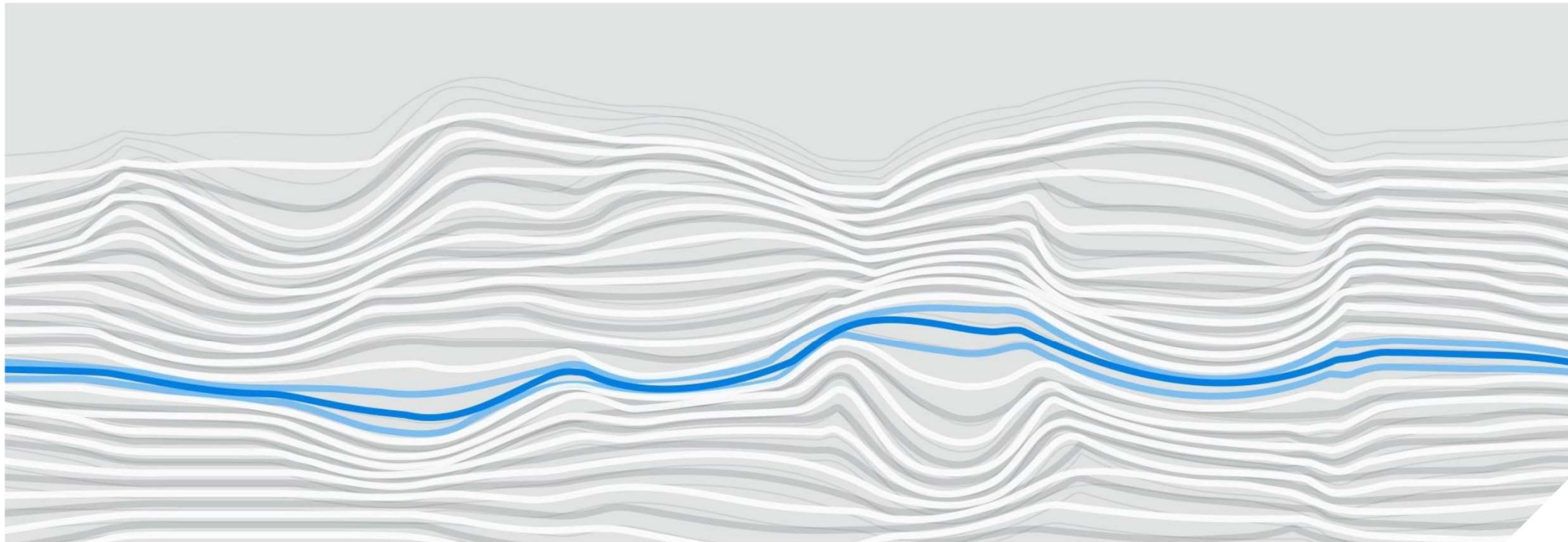
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Can we protect against downside risk?



Victor Huang

MARCH 2021



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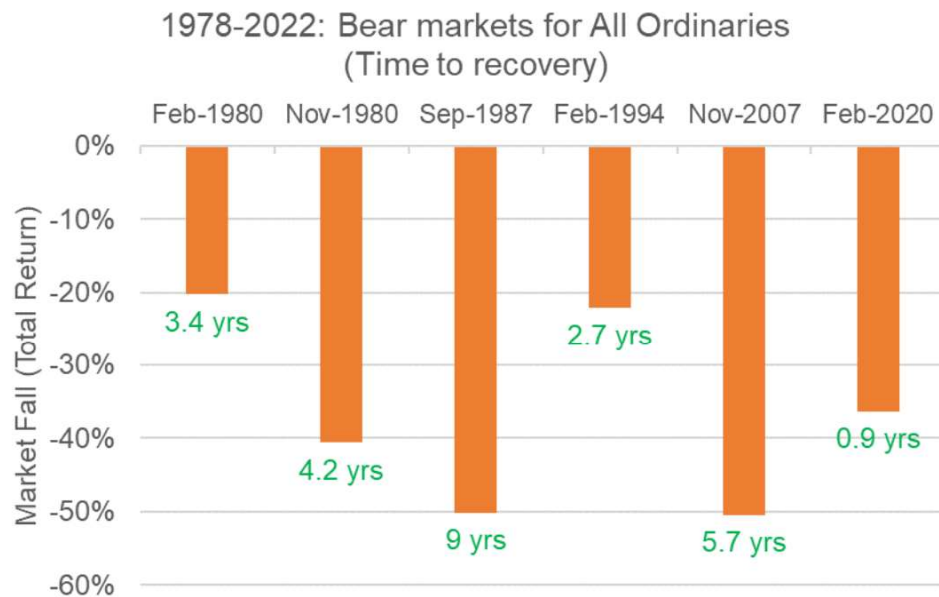
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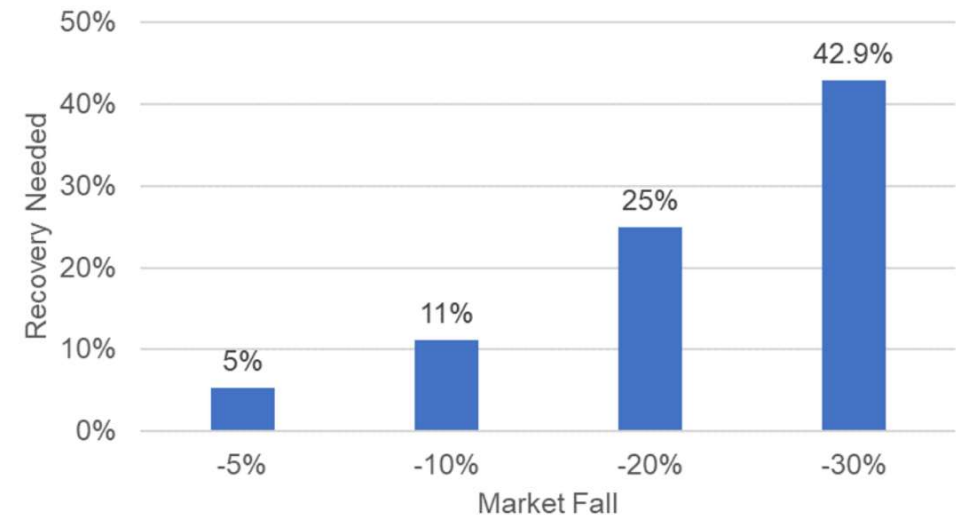
Why protect against downside risk?



Large corrections are likely

- All Ordinaries had six 20%+ falls in the past 50 years
- Fortunately, markets do recover.

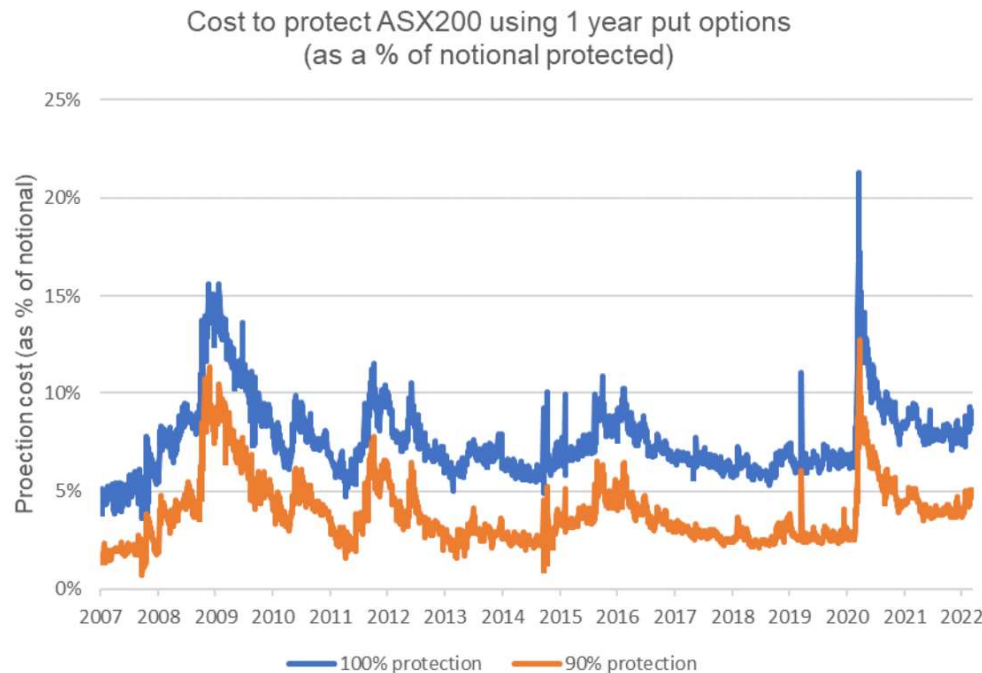
What's needed to recover from a fall



Recovery can seem difficult

- A 30% market correction needs +43% to recover
- Wisdom and literature suggest you 'stay invested', but risk aversion is strong factor driving behaviour for retirees

Purchasing insurance is expensive



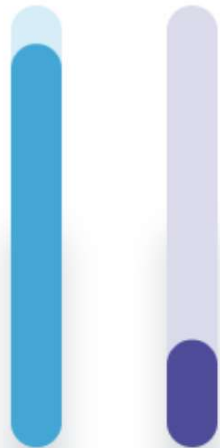
- Put options can be purchased on major market indices to provide full protection
- For full protection, it costs between 4% to 21% per annum over the past 15 years (currently ~9%)
- For protection up to 10% market falls, it costs between 1% to 13% over the same period (currently ~5%)

Explicit protection can be purchased, but because of how expensive it can be, we need to come up with different ways to manage risk.

Derisking can be ineffective, and comes with hidden costs

ESTATE

Average bequest at target age



\$245K

\$120K

Growth

Balanced

- **Derisking from Growth to Balanced is expected to cost:**
 - 1.1% reduction in expected annual returns.
 - 51% reduction in average bequest (from 245k to 120k) under the same withdrawal strategy.¹
- **Is derisking into Fixed Income really ‘derisking’ in this market?**
 - Inflationary pressures are expected to push the yield curve up (hurting bond investors)

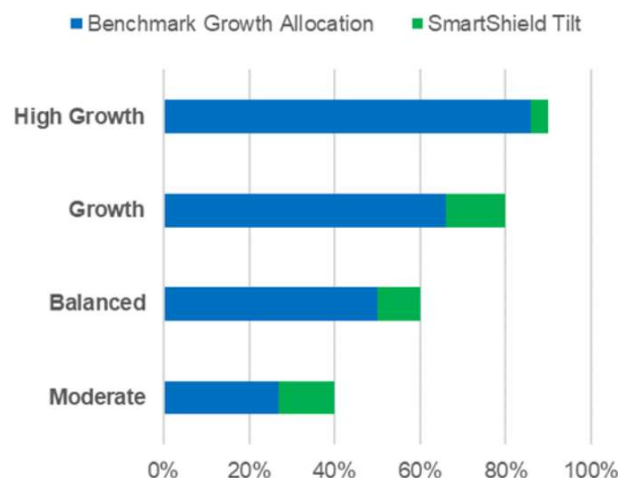
There is generally a cost to removing risk from a portfolio, whether it is explicit or implicit.

Milliman's approach (in SmartShield)

Providing 'built-in' risk management in managed accounts

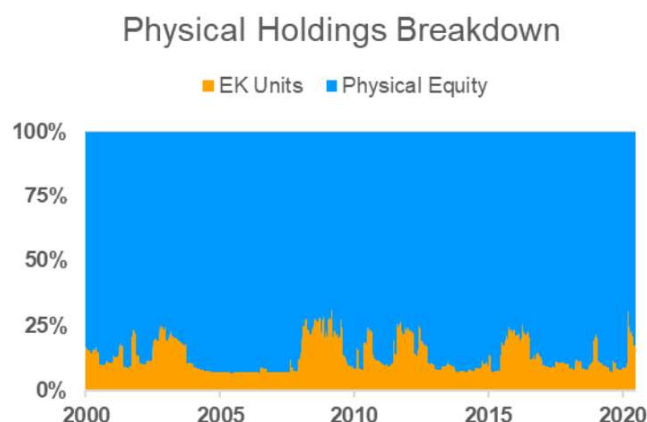
Begin with typical diversified portfolio with a tilt towards growth assets

- Asset allocations track Morningstar's Target Allocation indices
- With tilt towards growth assets to help 'fund' the risk management strategy



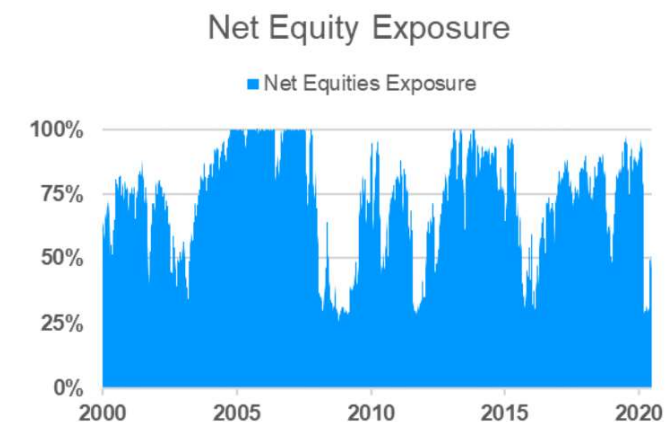
Add a small allocation to 'Even Keel' units to gain risk management

- For every \$100 of equity exposure, ~\$5-\$25¹ is allocated to Even Keel units
- The Even Keel units houses a dynamic portfolio of futures contracts to deliver risk management



Get efficient risk managed exposure to equities

- The resultant exposure to equities is dynamically adjusted to provide risk management
- In benign markets, the **allocation to Even Keel is equitised** through the use of Futures Contracts to eliminate drag.



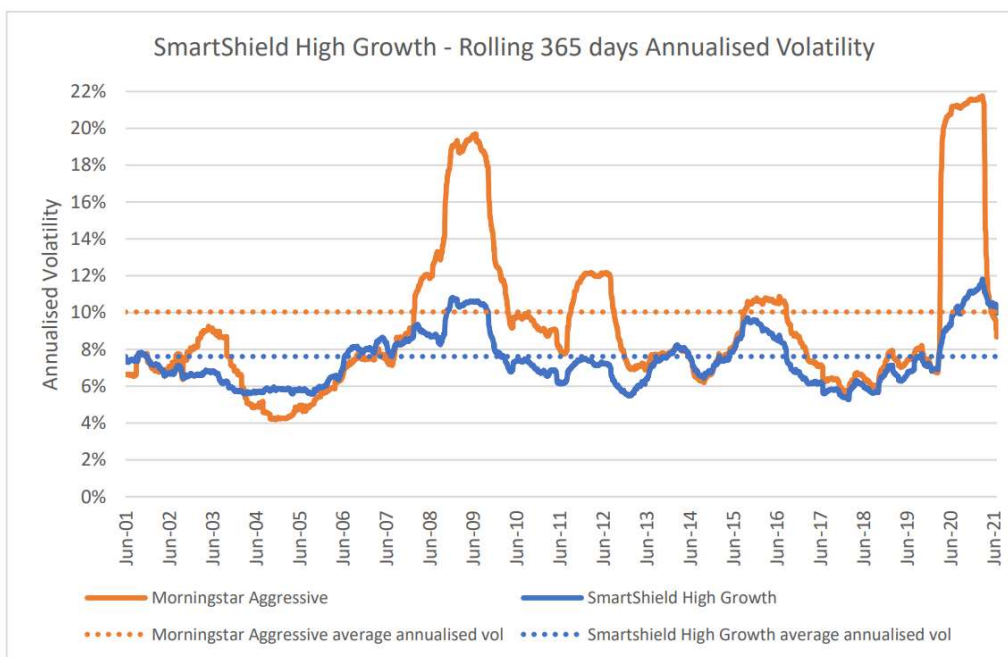
Under the hood of SmartShield's risk management strategy

Component 1: Volatility Management

- Strategy seeks to **cap portfolio volatility** by dynamically adjusting the exposure to equities using futures
- Benefits from **higher exposure to equities during low volatility periods**, and vice versa in stressed market environments

Component 2: Put Option Replication

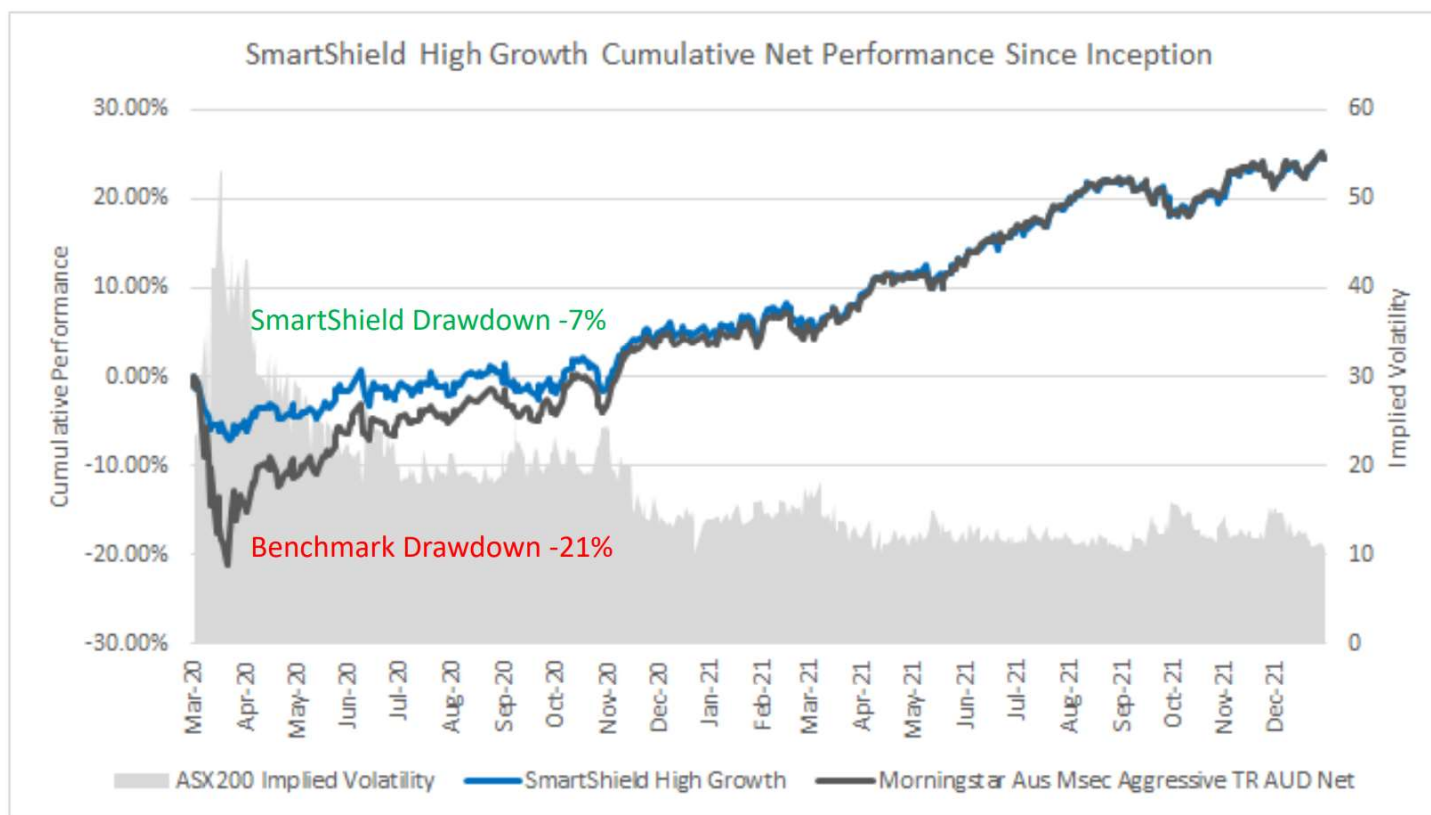
- Aims to “**manufacture**” a **long dated put option payoff** by dynamically rebalancing a basket of futures contracts. This approach is expected to be more efficient than purchasing options in the long-term.
- Expected to **reduce losses** during periods of significant market sell-off



Live performance so far



High growth



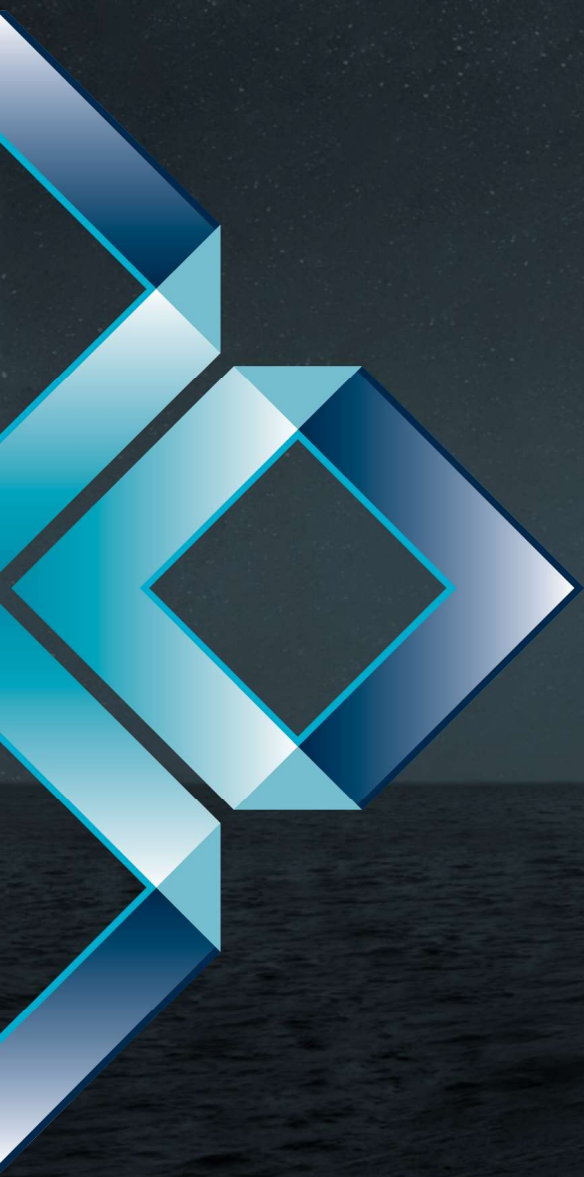
Since Inception Performance	SmartShield High Growth	Benchmark
Performance p.a.	12%	11.9%
Volatility p.a.	10.6%	18.7%
Sharpe Ratio	1.13	0.64
Max Drawdown	-7.1%	-21%

Thank you.

SmartShield: advice.milliman.com/SmartShield

Simulator: smartshield.millimandigital.com





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All portfolios should consider the impact
of climate change

—

Paul Saliba, Evolutionary Portfolio Services
Dan Powell, Nanuk Asset Management
Cameron Gleeson, BetaShares







“ALL PORTFOLIOS
SHOULD CONSIDER
THE IMPACT OF
CLIMATE CHANGE”



15th March 2022



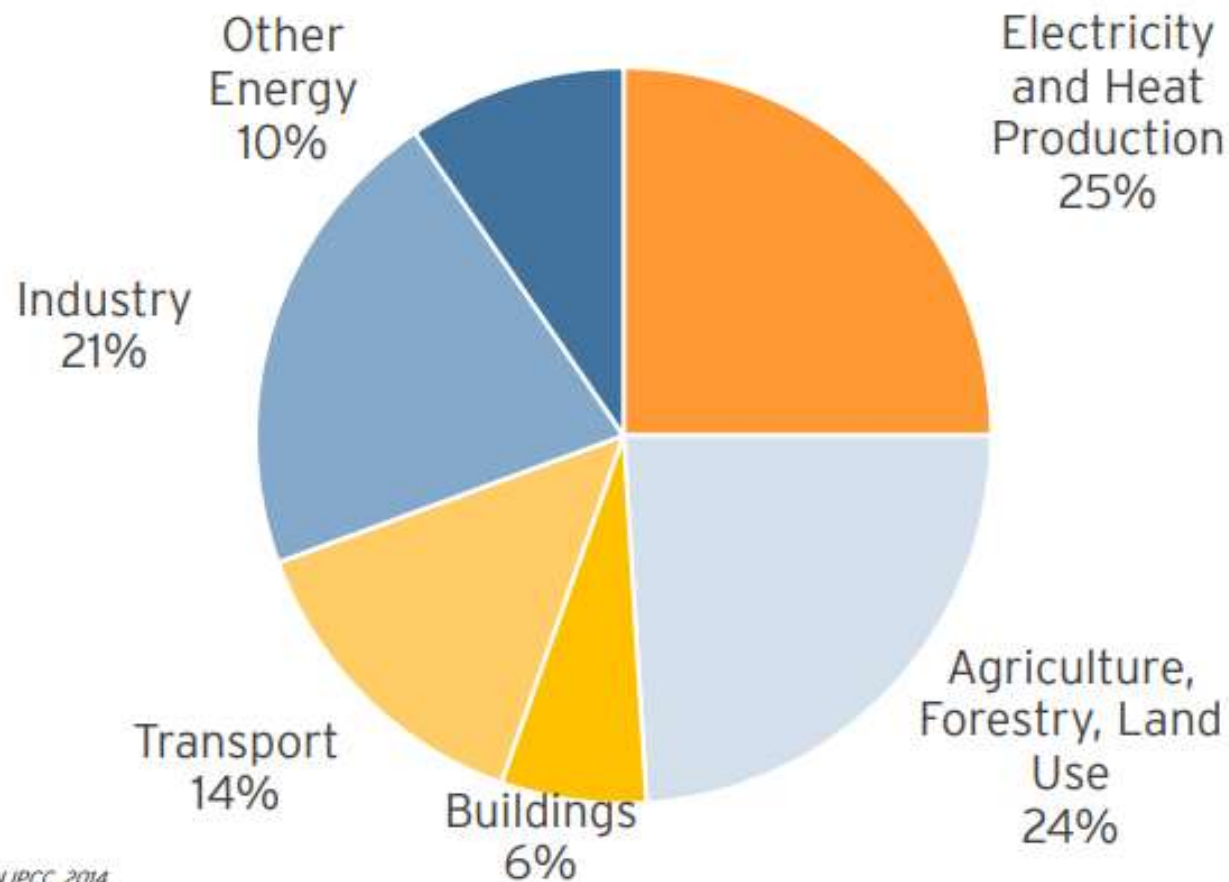
EXECUTIVE SUMMARY

Climate change will impact equities returns, necessitating

- Offensive tactics to capitalize on the opportunities
- A defensive strategy to mitigate inevitably lower equities returns

LONG TERM CHANGES ARE INEVITABLE AND PREDICTABLE

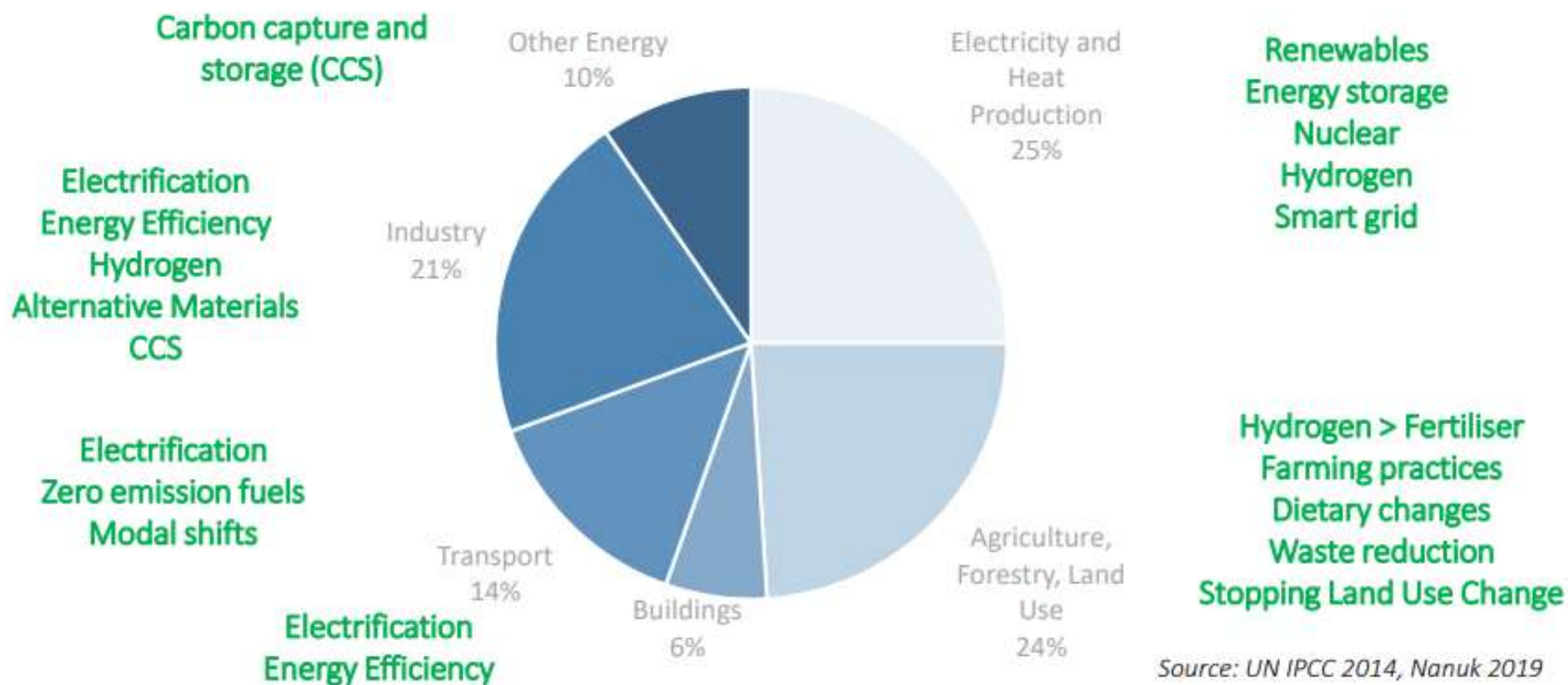
Direct Greenhouse Gas Emissions by Sector



Source: UN IPCC 2014

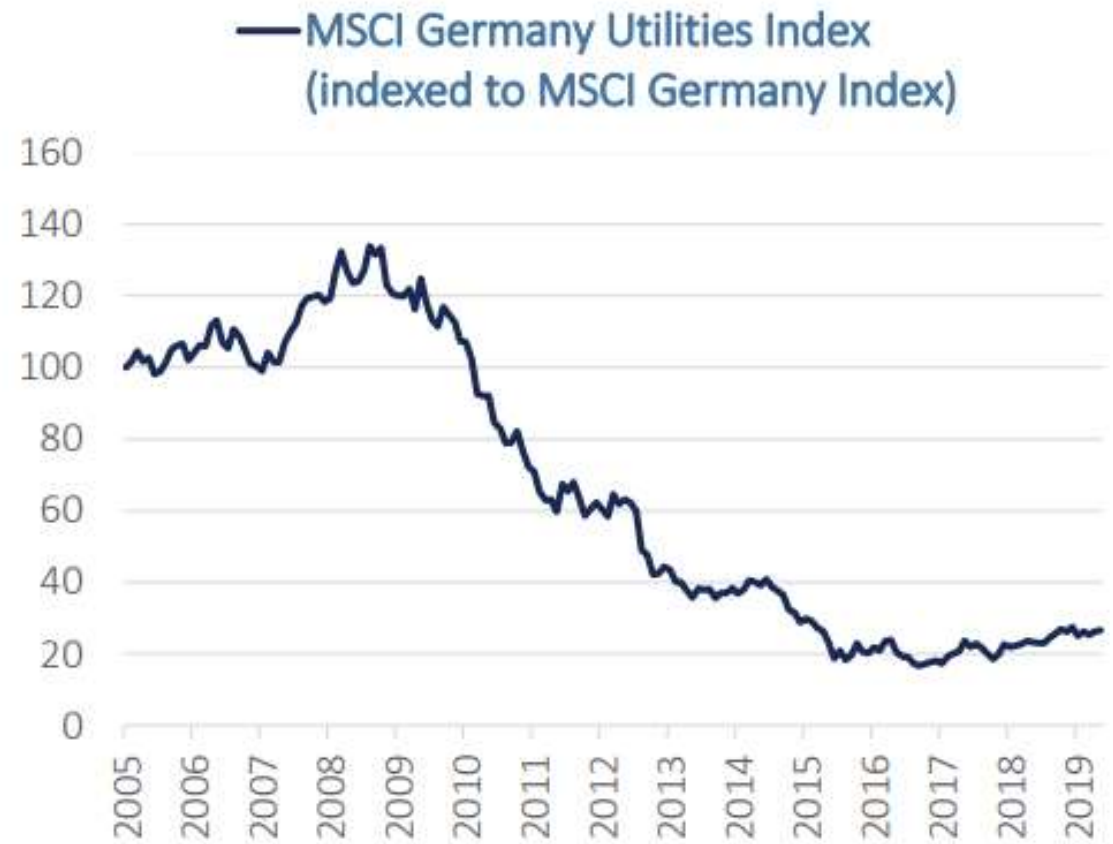
LONG TERM CHANGES ARE INEVITABLE AND PREDICTABLE

Direct Greenhouse Gas Emissions by Sector (and Solutions)



Source: UN IPCC 2014, Nanuk 2019

VALUE DESTRUCTION WILL OCCUR EARLY AND QUICKLY



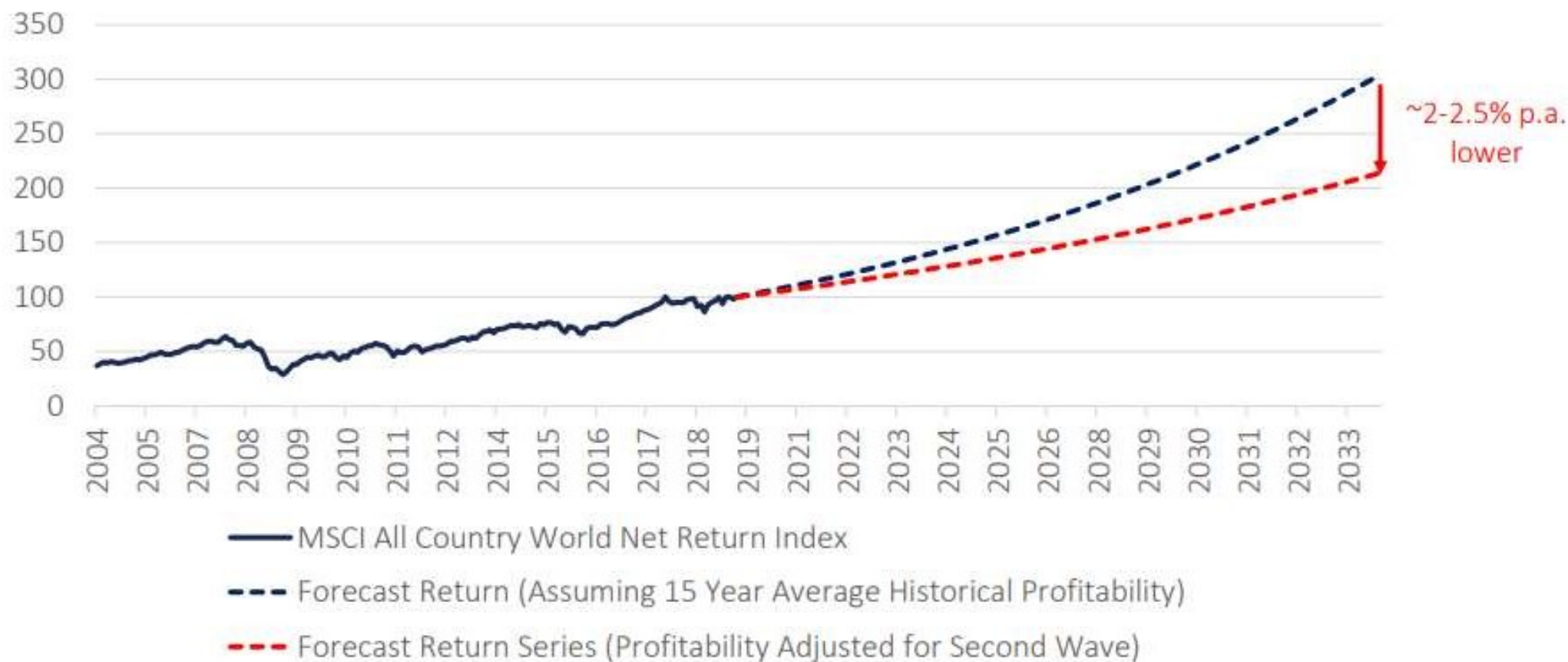
Source: Bloomberg

RETURN ON CAPITAL IMPACTED ACROSS THE ECONOMY

Advertising/Marketing Services	Chemicals: Specialty	Engineering & Construction	Information Technology Services	Motor Vehicles	Real Estate Development
Aerospace & Defense	Coal	Environmental Services	Insurance Brokers/Services	Movies/Entertainment	Real Estate Investment Trusts
Agricultural Commodities/Milling	Computer Communications	Finance/Rental/Leasing	Integrated Oil	Multi-Line Insurance	Recreational Products
Air Freight/Couriers	Computer Peripherals	Financial Conglomerates	Internet Retail	Oil & Gas Pipelines	Regional Banks
Airlines	Computer Processing Hardware	Financial Publishing/Services	Internet Software/Services	Oil & Gas Production	Restaurants
Alternative Power Generation	Construction Materials	Food Distributors	Investment Banks/Brokers	Oil Refining/Marketing	Savings Banks
Aluminum	Consumer Sundries	Food Retail	Investment Managers	Oilfield Services/Equipment	Semiconductors
Apparel/Footwear	Containers/Packaging	Food: Major Diversified	Investment Trusts/Mutual Funds	Other Consumer Services	Services to the Health Industry
Apparel/Footwear Retail	Contract Drilling	Food: Meat/Fish/Dairy	Life/Health Insurance	Other Consumer Specialties	Specialty Insurance
Auto Parts: OEM	Data Processing Services	Food: Specialty/Candy	Major Banks	Other Metals/Minerals	Specialty Stores
Automotive Aftermarket	Department Stores	Forest Products	Major Telecommunications	Other Transportation	Specialty Telecommunications
Beverages: Alcoholic	Discount Stores	Gas Distributors	Managed Health Care	Packaged Software	Steel
Beverages: Non-Alcoholic	Drugstore Chains	Home Furnishings	Marine Shipping	Personnel Services	Telecommunications Equipment
Biotechnology	Electric Utilities	Home Improvement Chains	Media Conglomerates	Pharmaceuticals: Major	Textiles
Broadcasting	Electrical Products	Homebuilding	Medical Distributors	Pharmaceuticals: Other	Tobacco
Building Products	Electronic Components	Hospital/Nursing Management	Medical Specialties	Precious Metals	Tools & Hardware
Cable/Satellite TV	Electronic Equipment/Instrument	Hotels/Resorts/Cruiselines	Medical/Nursing Services	Property/Casualty Insurance	Trucking
Casinos/Gaming	Electronic Production Equipment	Household/Personal Care	Metal Fabrication	Publishing: Books/Magazines	Trucks/Construction/Farm Machinery
Catalog/Specialty Distribution	Electronics Distributors	Industrial Conglomerates	Miscellaneous	Publishing: Newspapers	Water Utilities
Chemicals: Agricultural	Electronics/Appliance Stores	Industrial Machinery	Miscellaneous Commercial Services	Pulp & Paper	Wholesale Distributors
Chemicals: Major Diversified	Electronics/Appliances	Industrial Specialties	Miscellaneous Manufacturing	Railroads	Wireless Telecommunications
Climate change impact on ROE and Asset Values		Very High	High	Moderate	Low

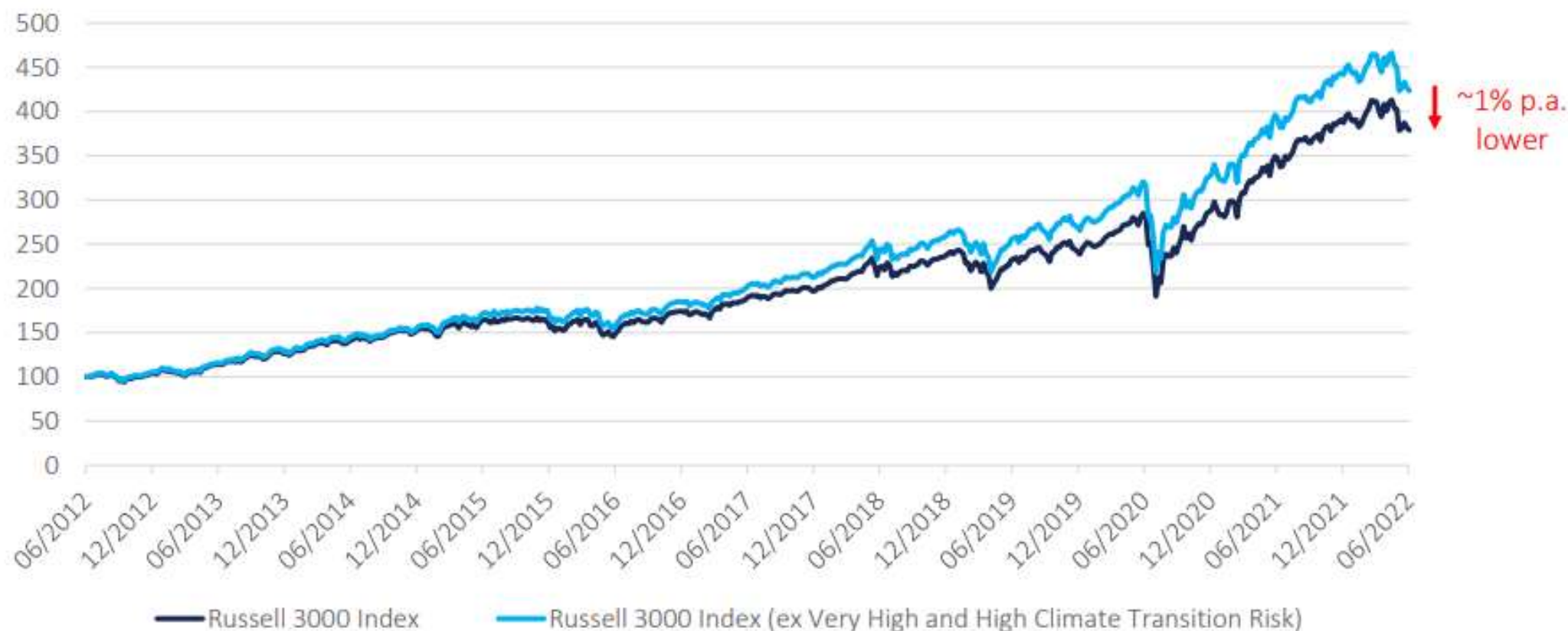
LOWER EQUITIES MARKET RETURNS

Historical and Forecast Global Equity Return



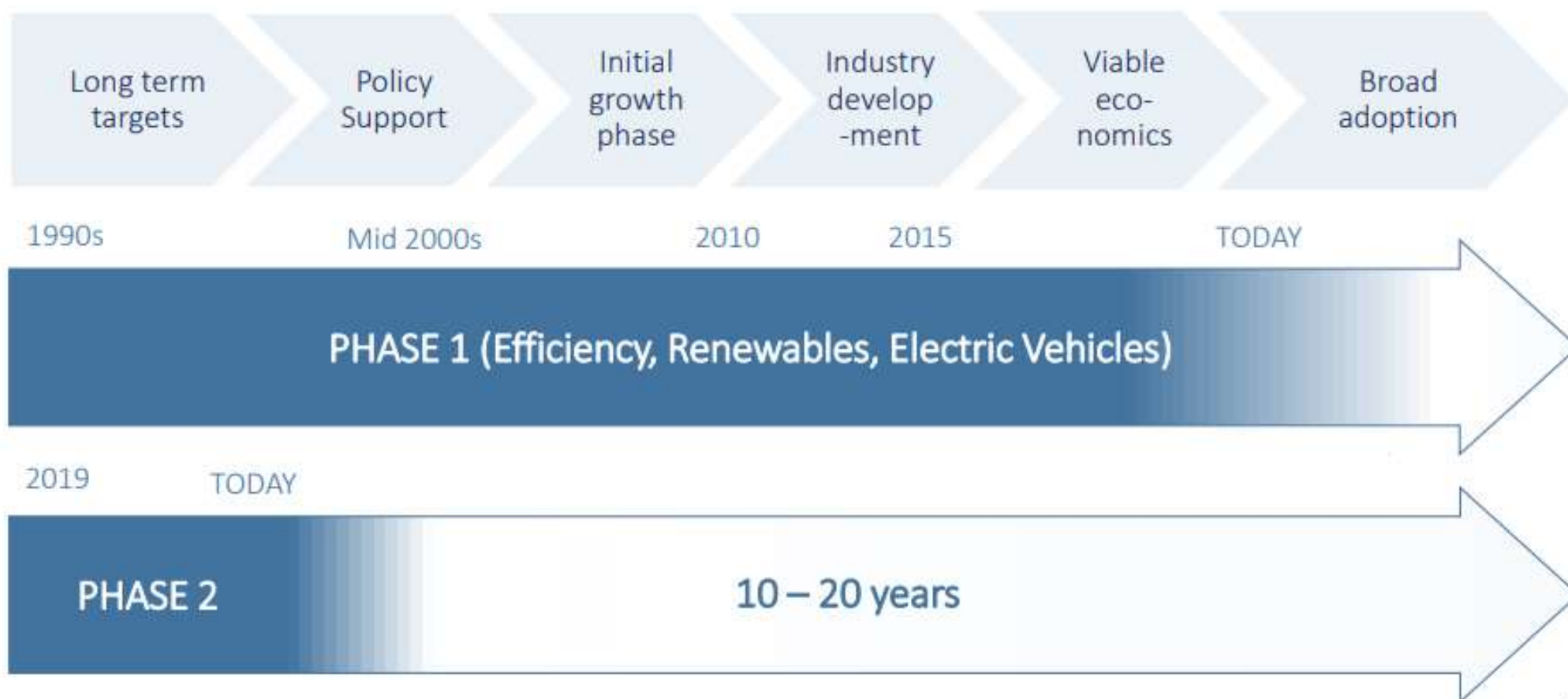
Source: Nanuk Asset Management, FactSet

CLIMATE-RELATED IMPACTS ALREADY EVIDENT OVER LAST DECADE

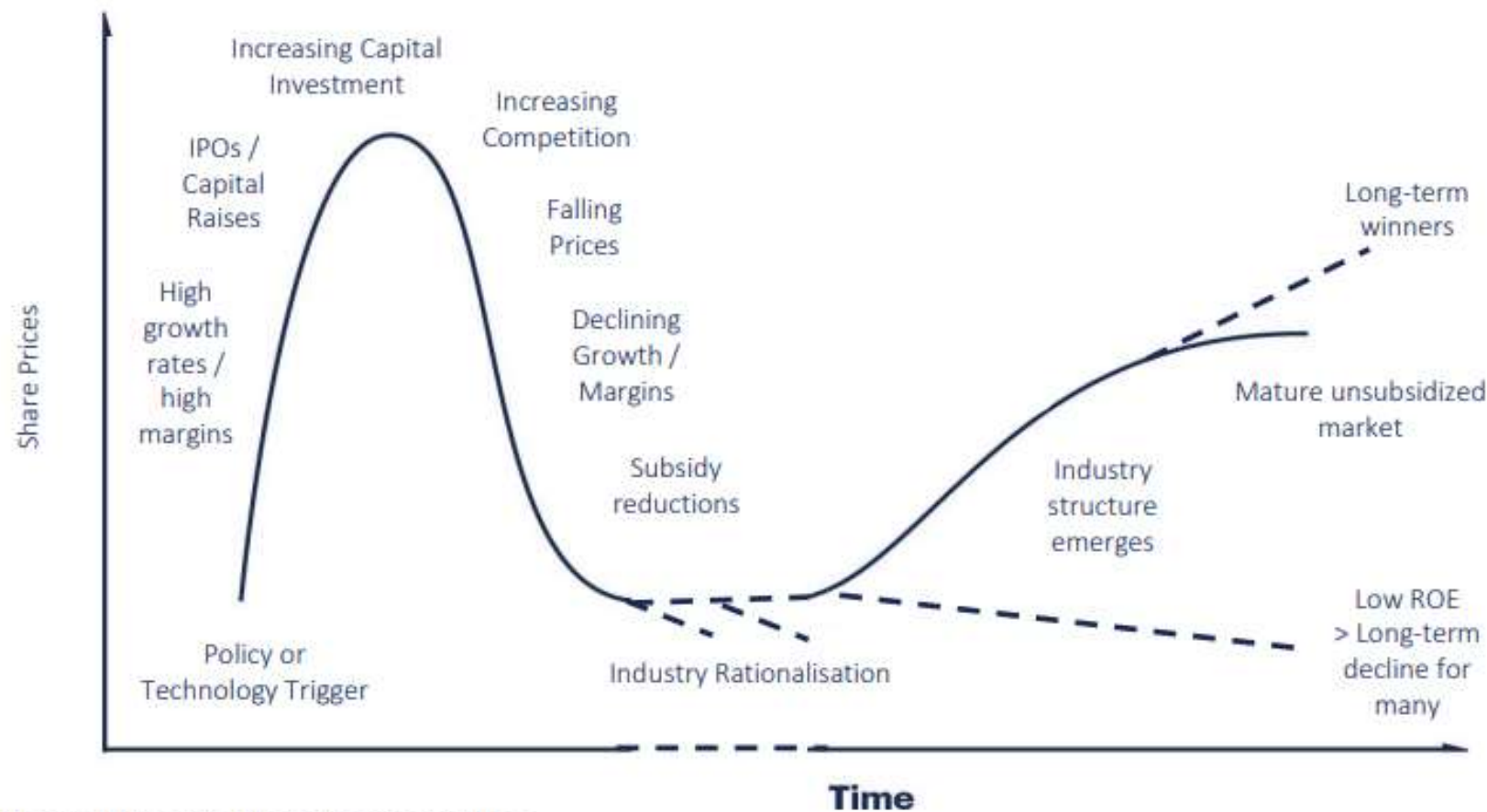


Source: Nanuk Asset Management, FactSet. Very High and High Climate Climate Transition Risk refers to industry groups on slide 6

HOW THE CHANGES ARE IMPLEMENTED IS CLEAR



MARKET RESPONSES ARE PREDICTABLE (AND REPEATING)



Source: Nanuk, with acknowledgement to Gartner

STRUCTURAL GROWTH ALONE DOES NOT DRIVE RETURNS



Annual global solar and wind installations (■ ,GW, LHS) vs clean energy equities (—, RHS)



Source: Bloomberg, BloombergNEF, Clean energy equities represented by the WilderHill Clean Energy (ECO) Index

LOW CARBON COMPANIES MAY NOT EQUATE TO CLIMATE CHANGE



	Specialty Finance	Software	Food and Tobacco	Renewable Energy Utility	Waste Management	Electric Vehicles
Emission Intensity (mTCO ₂ e/\$m, lower is better)	Carbon Emission Intensity					
	0.3	3	18	2610	664	35
ESG Rank (score out of 100, higher is better)	ESG Ranking (Sustainalytics)					
	92	95	91	61	26	10
Total SDG Contribution (% of revenue, higher is better)	Sustainable Platform SDG based Sustainability Assessment					
	27	60	5	77	97	91

Sources: Bloomberg, ISS, Sustainable Platform, August 2021

FUND COMPARISON (TOP 10 HOLDINGS)

Vanguard International Shares	 Ethically Conscious Intl Shares	Core MSCI World ex Aus ESG Leaders	 Sustainable Global Core Fund	Climate ESG Intl Equities	Nanuk New World Fund
Apple	Apple	Apple	Microsoft	Apple	Cognizant
Microsoft	Microsoft	Microsoft	Apple	Microsoft	Ciena
Alphabet	Amazon	Alphabet A	Amazon	Amazon	Carlisle
Amazon	Alphabet	Alphabet C	Meta Platforms	Alphabet C	Wolters Kluwer
Meta Platforms	Meta Platforms	Tesla	Alphabet A	Meta Platforms	Alteryx Inc
Tesla	Tesla	Nivida Corp	Alphabet C	Tesla	Siemens Healthineers
Nivida Corp	Nivida Corp	Home Depot	Johnson & Johnson	Alphabet A	International Flavors & Fragrances
JP Morgan Chase	JP Morgan Chase	Proctor & Gamble	United Health	Cisco Systems	Accton
Johnson & Johnson	Home Depot Inc	Mastercard	Proctor & Gamble	Tokyo Electron	Alten
United Health	United Health	ASML	Tesla	NVIDIA Corp	Pearson

Sources: SQM Research, Fund websites, 31 Dec 2021

SUMMARY

Climate change will predictably impact equities returns, necessitating

- Offensive tactics to capitalize on the opportunities
- A defensive strategy to mitigate inevitably lower equities returns
- Don't assume all climate change products will provide a solution
- Get under the hood of product offerings, do they align with client expectations

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**“All portfolios should
consider the impact
of climate change”**

***IMAP Sydney Portfolio
Management Conference***

**Cameron Gleeson
Senior Investment Specialist
15 March 2022**





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Different scopes of emissions

**Every company is responsible for three types of carbon emissions.
In order to achieve net-zero, significant spending is required across all three:**



Scope 1:

Direct emissions from owned or controlled sources



Scope 2:

Indirect emissions from the generation of purchased energy



Scope 3:

Indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream emissions (from purchased goods) and downstream emissions (from sold products).



ERTH's focus: "Scope 4" or Avoided Emissions

How do enabling solutions reduce the carbon footprint of Business-As-Usual reference product (existing less carbon efficient products and services)?

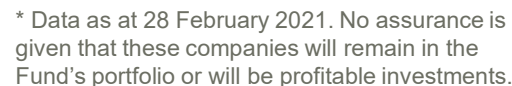
Identify companies offering effective enabling solution:

Net Avoided Emissions = BAU baseline emissions – emissions of enabling solution replacing BAU

Example of avoided emissions evaluation across the entire product life-cycle



Majority Green Revenue: iClima assess each companies' share of revenue from enabling products/services



ESG Ratings: No consensus is indicative of subjectivity of ratings processes

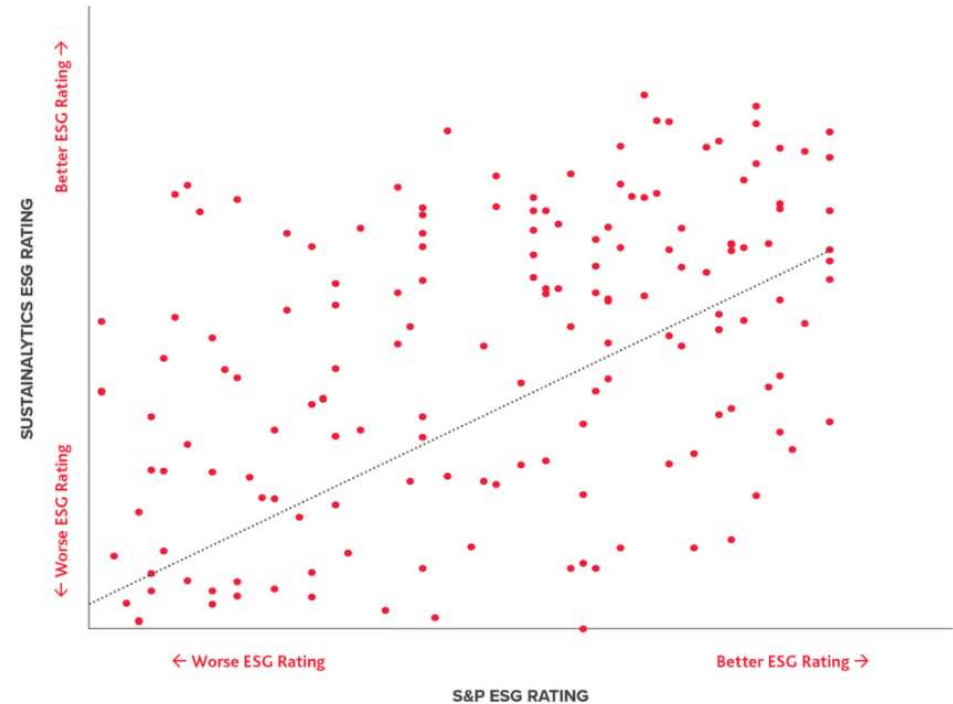
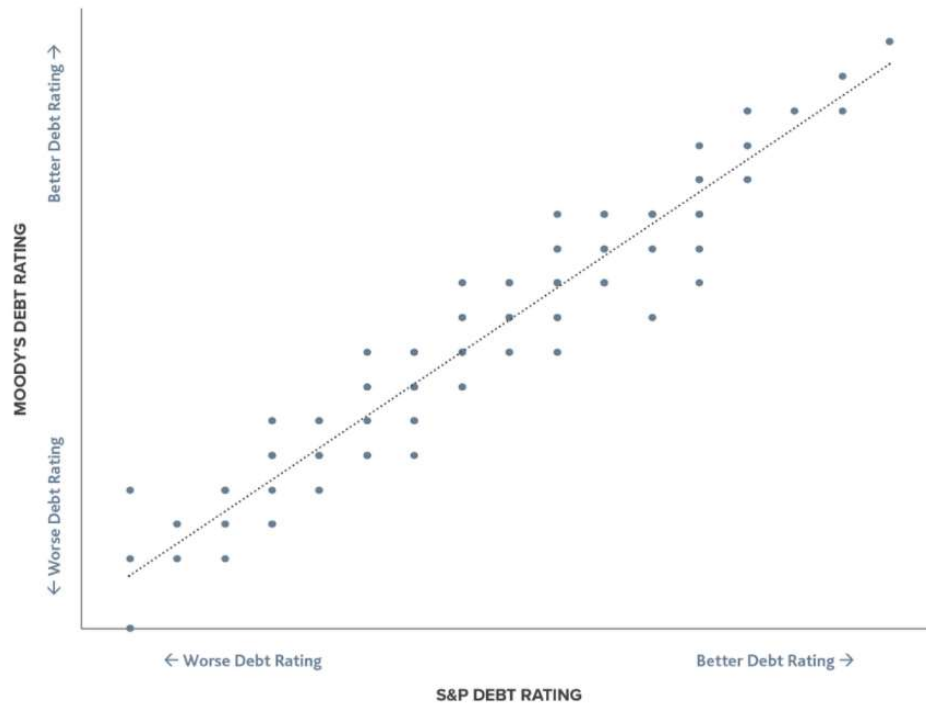


Correlation of ESG Ratings -
Sustainalytics Versus S&P

Correlation of Debt Ratings -
Moody's Versus S&P

Correlation of ESG Ratings -
Sustainalytics Versus S&P

Correlation of Debt Ratings -
Moody's Versus S&P



Source: BDO USA, LLP. 2021

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RIAA's responsible investment spectrum

APPROACH	TRADITIONAL INVESTMENT	RESPONSIBLE & ETHICAL INVESTMENT							PHILANTHROPY
		ESG Integration	Exclusionary/ negative screening	Norms-based screening	Corporate engagement and shareholder action	Positive / best-in-class screening	Sustainability-themed investing	Impact investing	
METHOD	Providing limited or no regard for environmental, social, governance and ethical factors in investment decision making	Explicitly including ESG risks and opportunities into financial analysis and investment decisions based on a systematic process and appropriate research sources	Excluding certain sectors, companies, countries or issuers based on activities considered not investable due principally to unacceptable downside risk or values mis-alignment	Screening of companies and issuers that do not meet minimum standards of business practice based on international norms and conventions; can include screening for involvement in controversies	Executing shareholder rights and fulfilling fiduciary duties to signal desired corporate behaviours - includes corporate engagement and filing or co-filing shareholder proposals, and proxy voting guided by comprehensive ESG guidelines	Intentionally tilting a proportion of a portfolio towards solutions; or targeting companies or industries assessed to have better ESG performance relative to benchmarks or peers	Specifically targeting investment themes e.g. sustainable agriculture, green property, 'low carbon', Paris or SDG-aligned	Investing to achieve positive social and environmental impacts - requires measuring and reporting against these, demonstrating the intentionality of investor and underlying asset/ investee and (ideally) the investor contribution	Using grants to target positive social and environmental outcomes with no direct financial return
FEATURES AND OUTCOMES	Delivers competitive financial returns								
	Manages ESG risks								
	Contributes to better system stability and economic sustainability								
	Pursues opportunities and creates real-economy outcomes								

* This spectrum has been adapted from frameworks developed by Bridges Fund Management, Sonen Capital and the Impact Management Project

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