



# LEVENDI THORNBRIDGE DEFINED RETURN FUND

*NOT FOR DISTRIBUTION TO RETAIL INVESTORS.*



LEVENDI

INVESTMENT MANAGEMENT



## LEVENDI THORNBRIDGE DEFINED RETURN FUND

- Levendi Investment Management
- The Fund, objectives, investment strategy
- Performance / comparisons versus popular funds
- Where does the Fund fit into portfolios
- Example investments
- Liquidity
- Fund analysis
- Risk management
- Share classes / fees and charges
- How to invest



## LEVENDI INVESTMENT MANAGEMENT LTD

- Specialist investment manager based in London
- Over \$1bn in AUA
- Runs a flagship UCITS V fund established on January 31<sup>st</sup>, 2018
- Levendi Team
  - 2 Trading and Risk Management
  - 1 Research
  - 3 Distribution
- Expertise
  - Structured products and equity derivatives
  - Pricing and risk management
  - Investment solutions



## OUR PEOPLE



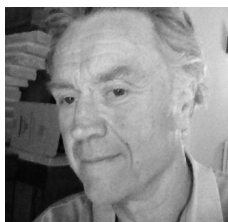
### **FRANK COPPLESTONE, DIRECTOR**

Frank has 25 years experience in structured products and derivatives, having started his career at Credit Suisse Financial Products. He spent a decade working as an equity-derivatives trader at Bankers Trust and Commerzbank before moving to Deutsche Bank to build and manage the Quantitative Products Engineering businesses. In 2008 he joined Morgan Stanley to run Financial Engineering in EMEA and Americas and later became Global Head of the Retail Structured Products platform at Morgan Stanley. Prior to launching Levendi Investment Management, Frank was the Global Head of Equities (Structured Products) at Jefferies. Frank holds a Doctorate from Oxford University.



### **MICHAEL JEALOUS, DIRECTOR**

Michael joined Levendi Investment Management in January 2020. He has more than 25 years of financial markets experience. After qualifying as a barrister in 1993 he started working for the London Stock Exchange before moving to LIFFE (now part of NYSE) where he worked in various roles including regulation and product development. He joined the derivatives research group at UBS in 1997 and then moved into trading. In his last role there he managed a team of traders focused on US and Asian equity derivatives.



### **ART NOBLE, RESEARCH AND ANALYSIS**

Art is responsible for the product analysis. Art started to develop the model that the Fund uses to evaluate risk and return immediately after the March 2012 paper from the FCA. Prior to working on this Art was developing statistical arbitrage strategies and portfolio optimisation tools at Noble and Co. At J.P. Morgan Art was responsible for marketing derivative products and had a particular focus on hedge fund derivative solutions and asset and liability modelling. He was also responsible for building pricing models, risk management tools and value-at-risk techniques that became RiskMetrics.



## A DEFENSIVE COVERED PUT FUND FOR LOWER RISK INVESTORS

### TARGET MARKET

- Lower risk investors
- Want a high chance of a positive return in a wide range of market conditions
- Daily liquidity

### INVESTMENT OBJECTIVES

- Maximise the chance of generating GBP Deposit rates +6% returns
- Minimise the chance and scale of losses
- Maximise liquidity

### INVESTMENT STRATEGY

- Invest in equity linked securities
- Implement a long dated, low strike covered put strategy
- Manage risk and control volatility with an active risk management overlay

# THE EQUITY INSURANCE PREMIUM

## THE EQUITY INSURANCE PREMIUM

The Equity Insurance Premium is the excess return that investors can receive through absorbing equity market risk. It is caused by three main factors:

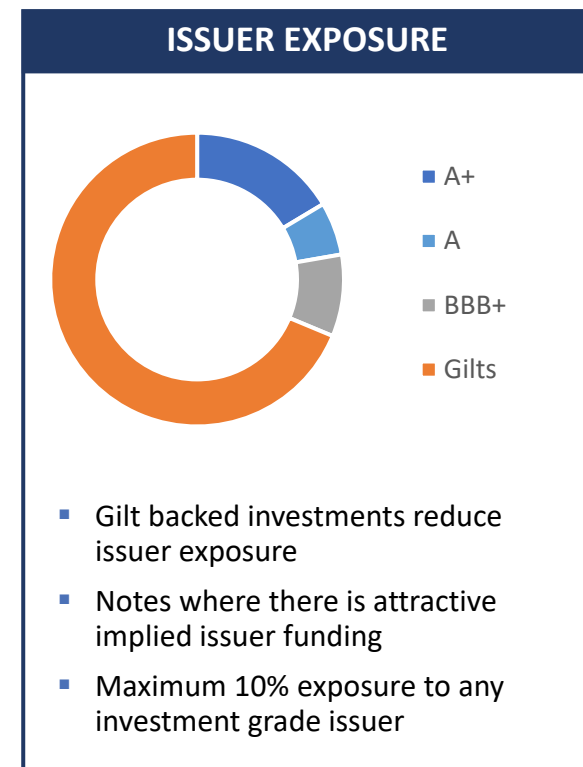
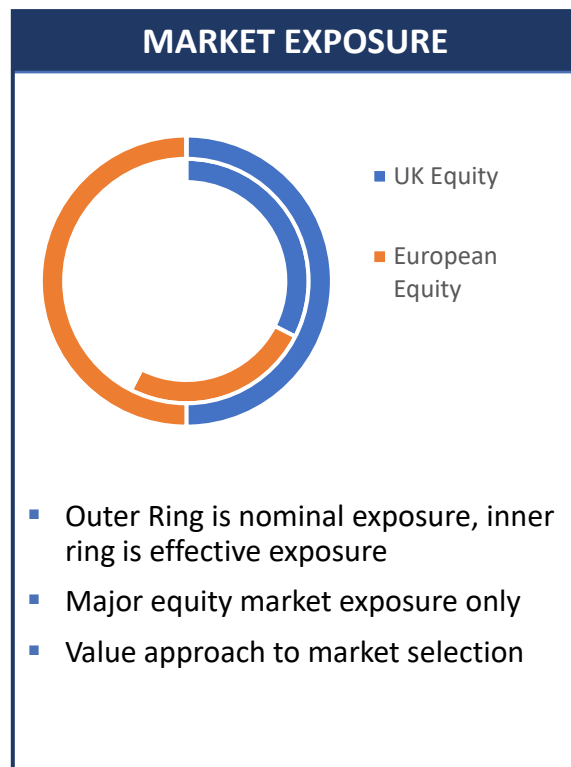
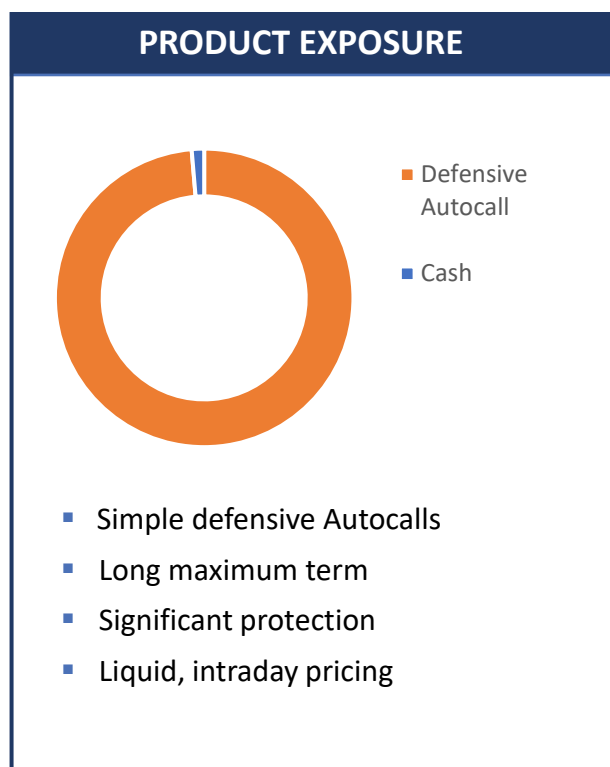
- **Regulation;** Banks, Insurance Companies, Pension Funds and other large investors are required by regulations to limit the effect of a large fall in equity markets
- **Limited Capacity For Loss;** Many investors including charities, trusts, endowments and retail investors are unable to risk capital. Any equity exposure must be hedged.
- **Behavioural Factors;** Investors have a strong loss aversion and are prepared to give up returns in order to avoid losses.

## BENEFITS OF LONG DATED EQUITY LINKED SECURITIES

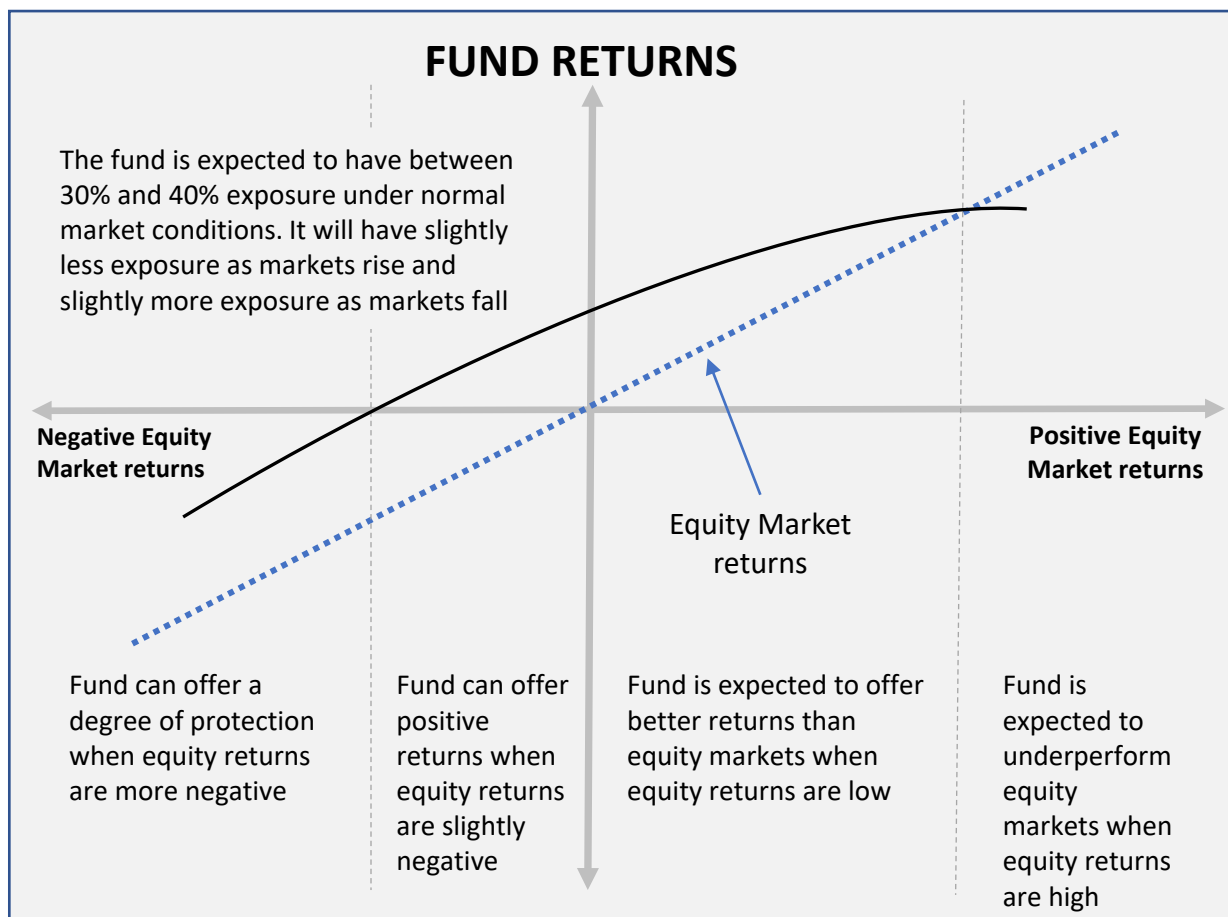
- Longer dated investments capture the increasing gap between risk-neutral forward values and investor forecast values
- Long dated volatility is typically more stable and higher than short dated volatility.
- Low strike options normally have a higher volatility than higher strike options
- Lower volatility; mark to market volatility is reduced by Autocall feature
- Return Multiplier; the return is typically conditional on an Autocall feature. This increases the maximum return that is available

## WHAT DOES THE FUND HOLD?

The graphs below show current levels and updated at the release of each monthly factsheet.



## HOW MIGHT THE FUND PERFORM?

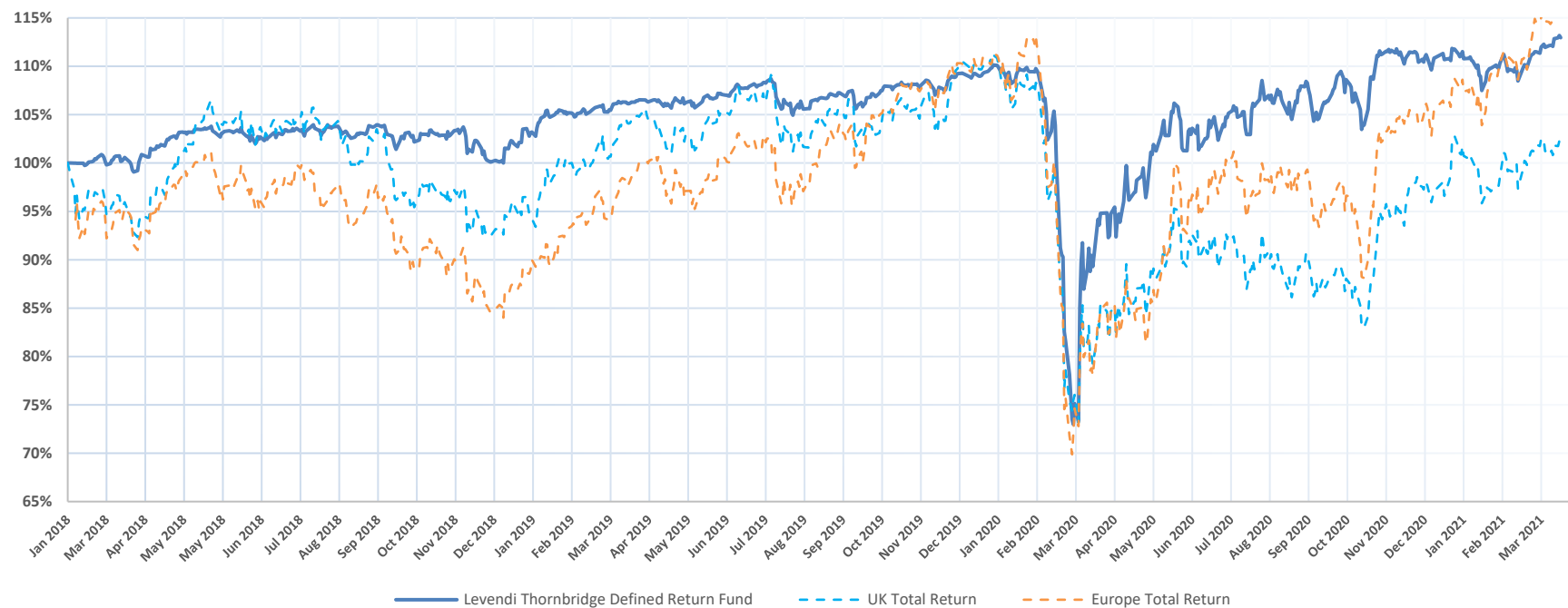






## REALISED FUND RETURNS SINCE INCEPTION

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	FY
2018		0.54%	0.34%	2.32%	(0.07%)	(0.44%)	0.77%	(0.47%)	0.95%	(0.86%)	(0.02%)	(2.96%)	<b>0.11%</b>
2019	4.15%	0.55%	1.21%	0.41%	(0.78%)	1.47%	0.96%	(1.71%)	0.98%	0.08%	0.60%	0.51%	<b>8.66%</b>
2020	(0.52%)	(5.37%)	(10.93%)	7.10%	5.31%	(0.32%)	0.42%	3.18%	(0.03%)	(2.14%)	6.09%	0.40%	<b>1.76%</b>
2021	(2.88%)	0.91%	4.13%										<b>2.05%</b>



## PORTFOLIO APPLICATIONS

### ENHANCED EQUITY INCOME

- Constant 5% annual from distribution share class
- Total return investment avoids concentration in high yielding assets
- Lower volatility than enhanced income / covered call funds

### ABSOLUTE RETURN / LIQUID ALTERNATIVES

- Positive returns if equity markets are lower
- Target GBP Deposit Rates +6% returns
- Transparent strategy

### BOND SUBSTITUTE

- High annual returns
- Low duration
- Low default risk



## REPLACEMENT FOR STRUCTURED PRODUCTS

### CONVENIENCE / COST

- Immediate access to a diversified portfolio, no delay
- Reduced time / risk / compliance cost
- Fund invests in institutional products that have lower costs

### LIQUIDITY

- Buy and sell fund units daily
- Underlying assets all offer daily liquidity

### BENEFIT OF FUND WRAPPER

- Consistent with managed portfolios
- Available through all platforms, no application form required
- Professional management
- Risk management overlay

## LIQUIDITY

The Fund is managed to provide investors with daily liquidity through a three-stage process.

### PRODUCT

- Standard product shapes
- Liquid underlying markets
- Issuer selection based on credit quality and service levels
- No restrictions on secondary trading

### VALIDATION

- Issuer publishes daily price
- Levendi calculate independent fair value
- Daily reconciliation with issuers
- Independent arbitration if necessary

### DEALING PROCESS

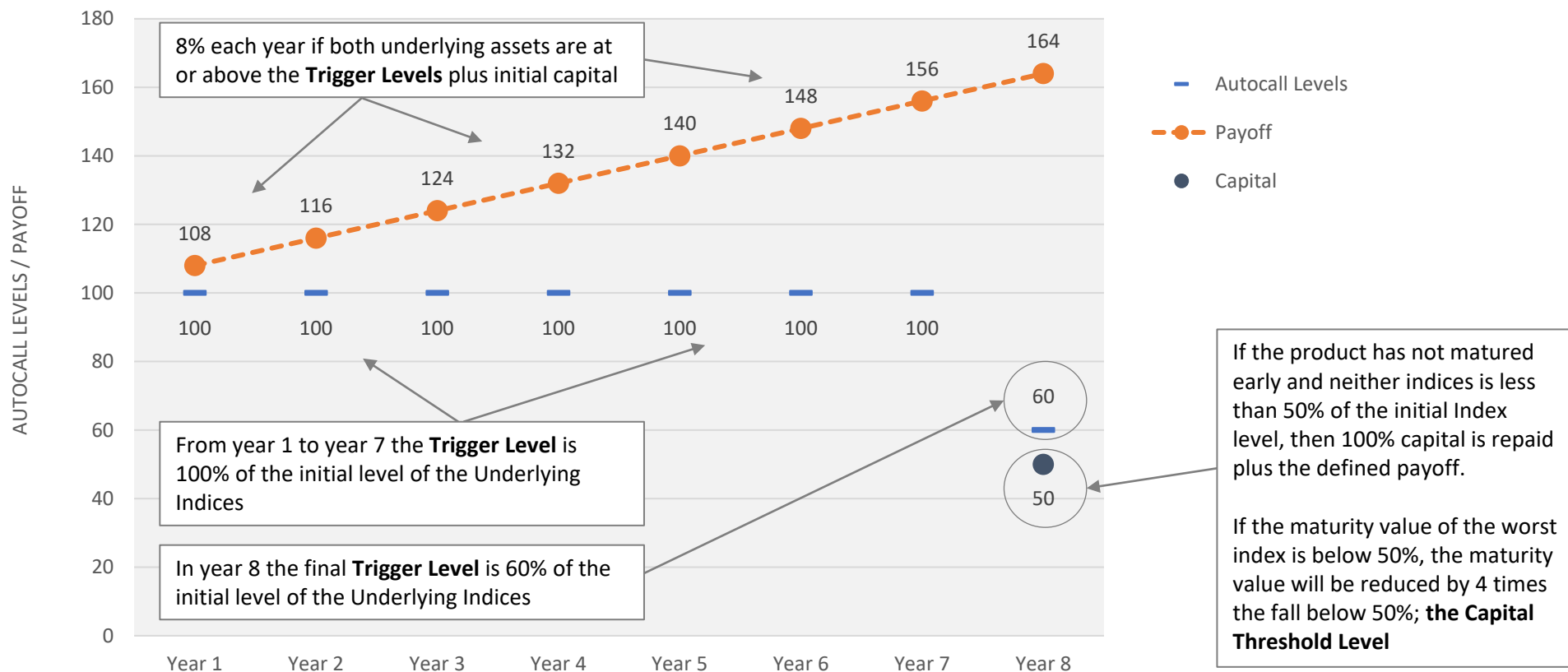
- Issuer provides bid/offer
- Issuer can create and redeem assets
- No need to find a 3<sup>rd</sup> party buyer
- No premium / discount to fair value



## EXAMPLE PRODUCT

<b>UNDERLYING</b>	Worst of FTSE 100 and Eurostoxx 50 Index	Value approach to selection of underlying markets
<b>MAXIMUM TERM</b>	8 years	Additional term gives investors more chances
<b>PRODUCT SHAPE</b>	Autocall.	Best shape for lower risk investors
<b>AUTOCALL LEVELS</b>	Years 1 to 7; 100% Year 8; 60%	Low final trigger maximises chance of a positive return
<b>PAYOFF</b>	8% each year if both underlying assets are above the Autocall Levels	Return target in excess of fund return target
<b>CAPITAL</b>	If the product has not matured early and neither indices is less than 50% of the initial Index level, then 100% capital is repaid plus the defined payoff. If the maturity value of the worst performing asset is below 50%, the maturity value will be reduced by 4x the fall below 50%	Progressive risk minimises chance and scale of losses

## EXAMPLE PRODUCT





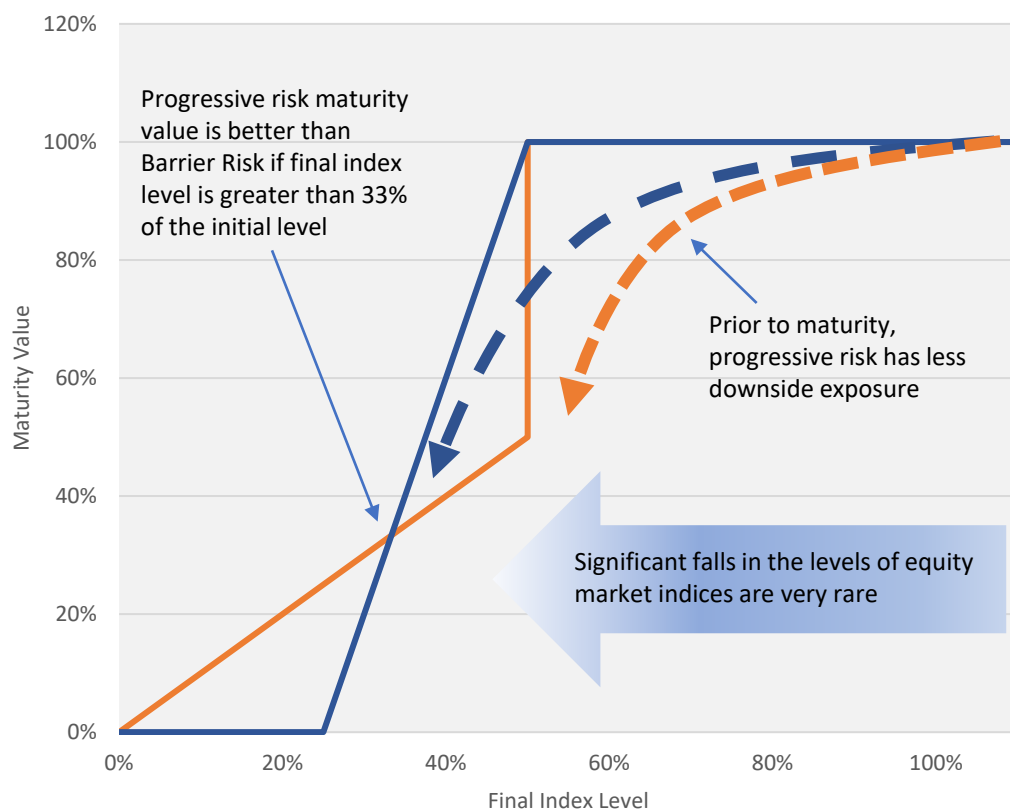
## PRODUCT ANALYSIS

EVENT	HISTORIC OCCURANCE	STRESS TEST PROBABILITY	ANNUALISED RETURN
YEAR 1; 100%	64%	50%	8.0%
YEAR 2; 100%	8%	15%	7.7%
YEAR 3; 100%	3%	8%	7.4%
YEAR 4; 100%	6%	5%	7.2%
YEAR 5; 100%	2%	3%	7%
YEAR 6; 100%	2%	3%	6.8%
YEAR 7; 100%	1%	2%	6.6%
YEAR 8; 60%	11%	9%	6.4%
MATURITY AT 100%	1%	3%	0.0%
CAPITAL LOSS; 50%	2%	2%	Hist: -1.6% Stress: -6.5%

RETURN	HISTORIC	STRESS TEST
BEST RETURN	8%	8%
CHANCE OF GAIN	97%	95%
CONDITIONAL GAIN	7.6%	7.5%
AVERAGE RETURN	6.9%	5.9%
EXPECTED TERM	2.5y	2.9y

RISKS	HISTORIC	STRESS TEST
VOLATILITY OF RETURNS	2.5%	6.9%
CHANCE OF LOSS	2%	2%
CONDITIONAL LOSS	-1.6%	-6.5%
AVERAGE WORST 5% LOSSES	+1%	-28%

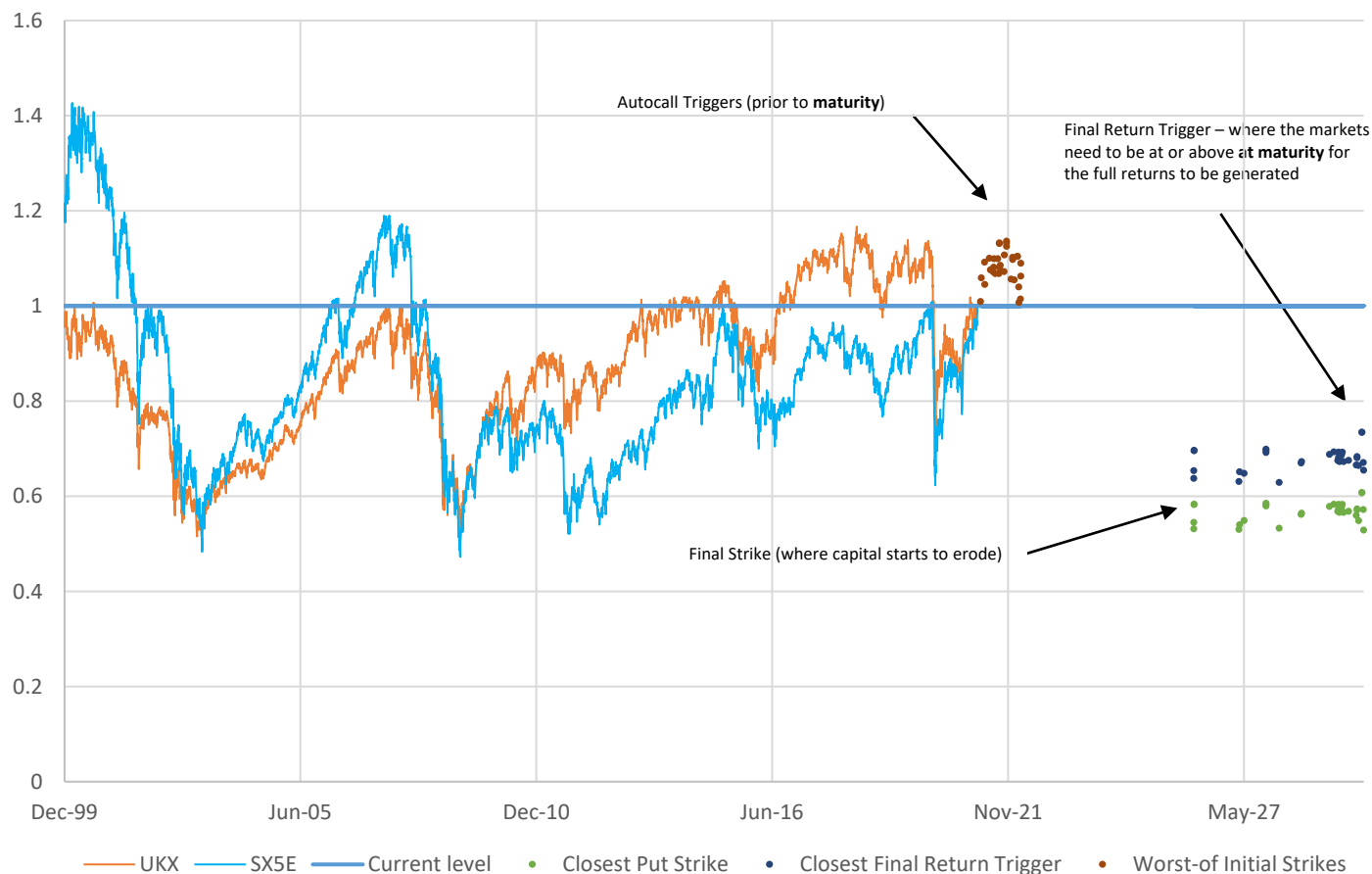
## PROGRESSIVE RISK BEFORE AND AT MATURITY



	FINAL VALUE AT MATURITY (%)	
Final Index Level (%)	Levendi Fund Autocall	Traditional Autocalls (%)
90	164	164
80	164	164
70	164	164
60	164	164
50	100	100
49	96	49
48	92	48
45	80	45
40	60	40
35	40	35
30	20	30
25	0	25



## BARRIER VERSUS HISTORIC INDEX LEVELS



- Indices have been rebased so that last value is 100%.
- A 50% fall from current levels would mean that both FTSE and Eurostoxx would fall below the lows of the Dot-Com crash and the Global Financial Crisis.

## BENEFITS OF PRODUCT DESIGN

### Major equity market exposure

- Liquidity
- Multiple Providers

### 50% capital protection

- Reduces the chance of loss

### Low final trigger

- Increases chance of a positive return

### Progressive risk

- Reduces market to market volatility
- Reduced downside exposure
- Reduces scale of losses

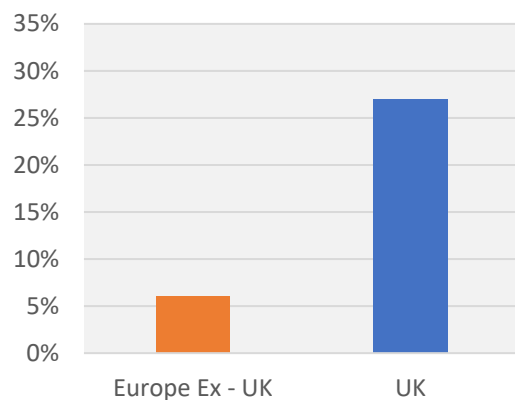
### Additional term

- More opportunities for products to meet conditions for positive return
- Reduced chance of loss

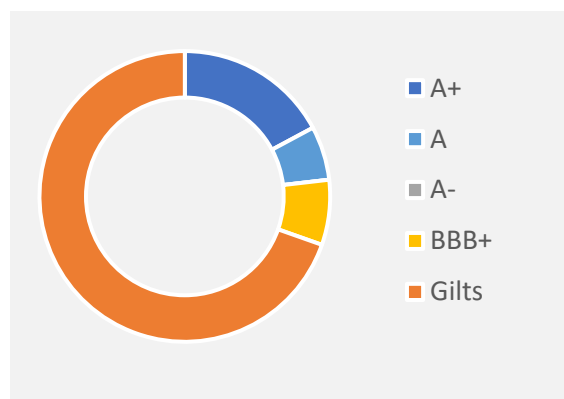


## PORTFOLIO METRICS

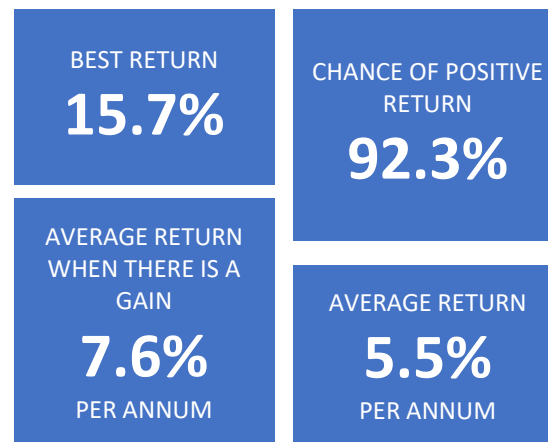
### MARKET EXPOSURE



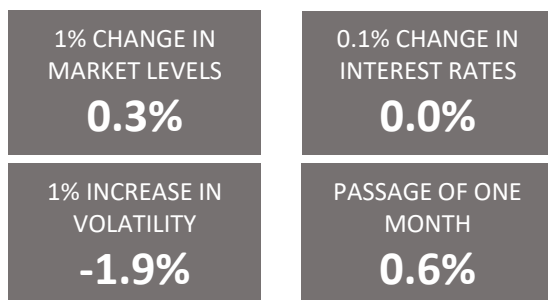
### ISSUER EXPOSURE BY CREDIT QUALITY



### STRESS TEST RESULTS

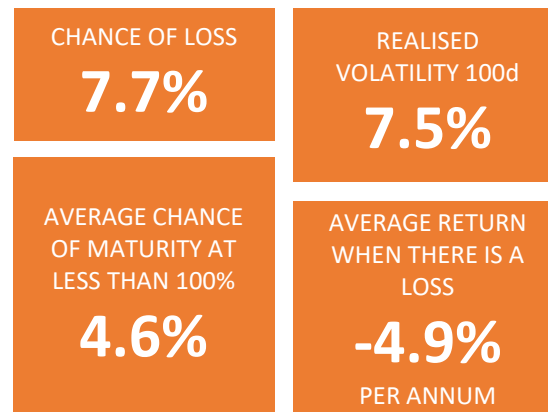


### SENSITIVITIES



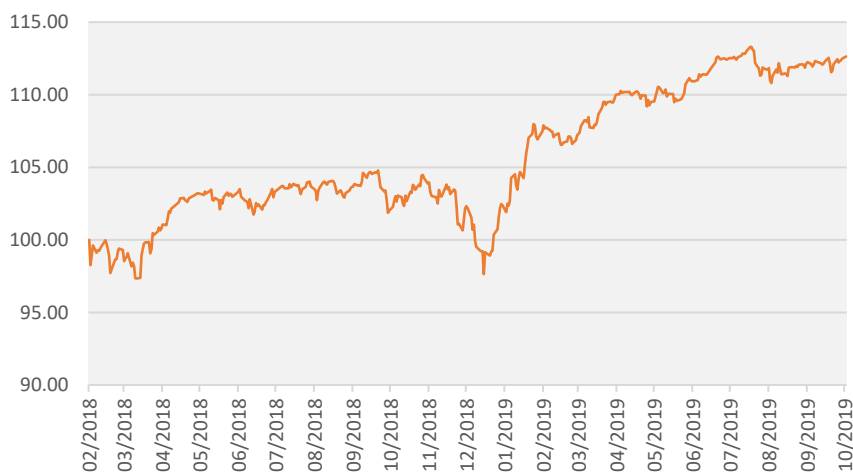
### TOP 4 HOLDINGS

<b>Gilt-Backed 10YR UKX/SX5E Autocall</b> <b>8.0%</b>	5.0%
Gilt-Backed 10YR UKX/SX5E Autocall 7.9%	4.2%
Gilt-Backed 10YR UKX/SX5E Autocall 7.7%	4.2%
Gilt-Backed 10YR UKX/SX5E Autocall 7.3%	4.2%



# FUND INVESTMENT EXAMPLE – MS FTSE / SX5E AUTOCALL

## MS 8yr FTSE / EUROSTOXX AUTOCALL



Source; Levendi, Bloomberg

The note missed the 1<sup>st</sup> Autocall date on 15<sup>th</sup> March and is now pricing in the chance of maturing next year. It has accrued a good return since it was issued and the risk/return remain attractive. In order to mature in March 2020 FTSE needs to increase by 1.4%, this would generate an annual return of 6.5%. We estimate that there is a 48% chance that this happens. The annual return to a the next maturity date would be higher.

### PRODUCT TERMS

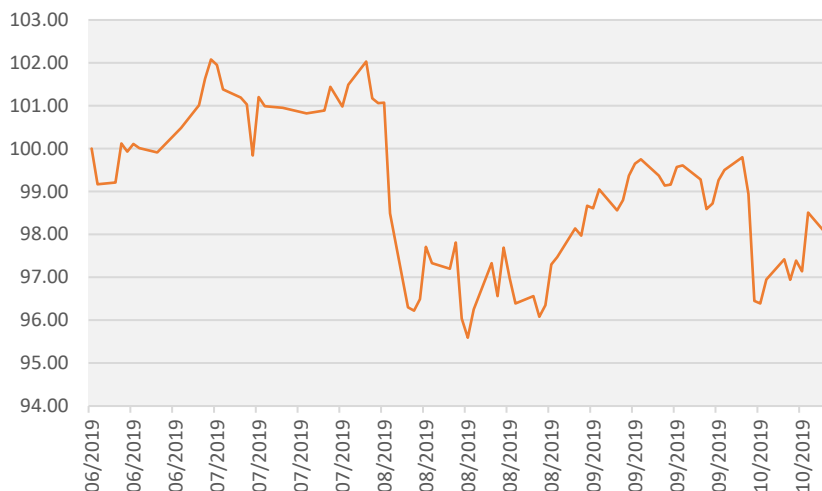
Initial Valuation Date	2018-02-05
Final Valuation Date	2026-03-20
Growth Description	Accrues 8.35% pa until kickout. Kicks out on first anniversary when all underlyings close at or above 100%. At maturity, percentages are 60% and 55% for UKX and SX5E respectively.
Market Risk to Capital Description	Short 4x 50%-25% put spreads
Initial References	UKX 7,353, 101.4% of current level SX5E 3,483, 97.3% of current level
Bid / Ask	112.5 / 113.5

### ANALYSIS

Chance of gain	96%
Conditional gain	6.9% p.a.
Chance of loss	4%
Conditional Loss/payoff	-5.6% p.a. / 78.3%

# FUND INVESTMENT EXAMPLE – CITI 10yr AUTOCALL SWAP

## CITI 8.2yr FTSE / EUROSTOXX AUTOCALL



Source; Levendi, Bloomberg

The investment has a 14m front leg when we initiated the position. The next Autocall is in July 2020. Eurostoxx is 4.7% above the next Autocall level, FTSE 0.2% below the next Autocall level. If the product matures then the payoff of 8.35% would be an 11.3% return. The lack of any increase in the price since the position was initiated reflects the increase in volatility and the reduction of correlation between the two indices. We would expect that the price will appreciate from here if markets remain at or slightly above current levels. There is a 97% chance of a gain from here and the conditional gain is 8%.

### PRODUCT TERMS

Initial Valuation Date	2019-05-07
Final Valuation Date	2029-07-30
Growth Description	Product will pay 8.35% p.a. if autocalled save for extended first period
Market Risk to Capital Description	Product is short 4x 53/28% put spread on w/o asset
Initial References	UK 7,620, 100.2% of current level SX5E 3,401, 95.3% of current level
Bid / Ask	98.5 / 99.5

### ANALYSIS

Chance of gain	97%
Conditional gain	8.0% p.a.
Chance of loss	3%
Conditional Loss/payoff	-6.4% p.a. / 51.9%



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## RISK MANAGEMENT



### OBJECTIVES

- Keep volatility below 10%
- Maintain appropriate exposure
- Lock-in gains
- Minimise turnover and costs



### SOURCES OF RISK

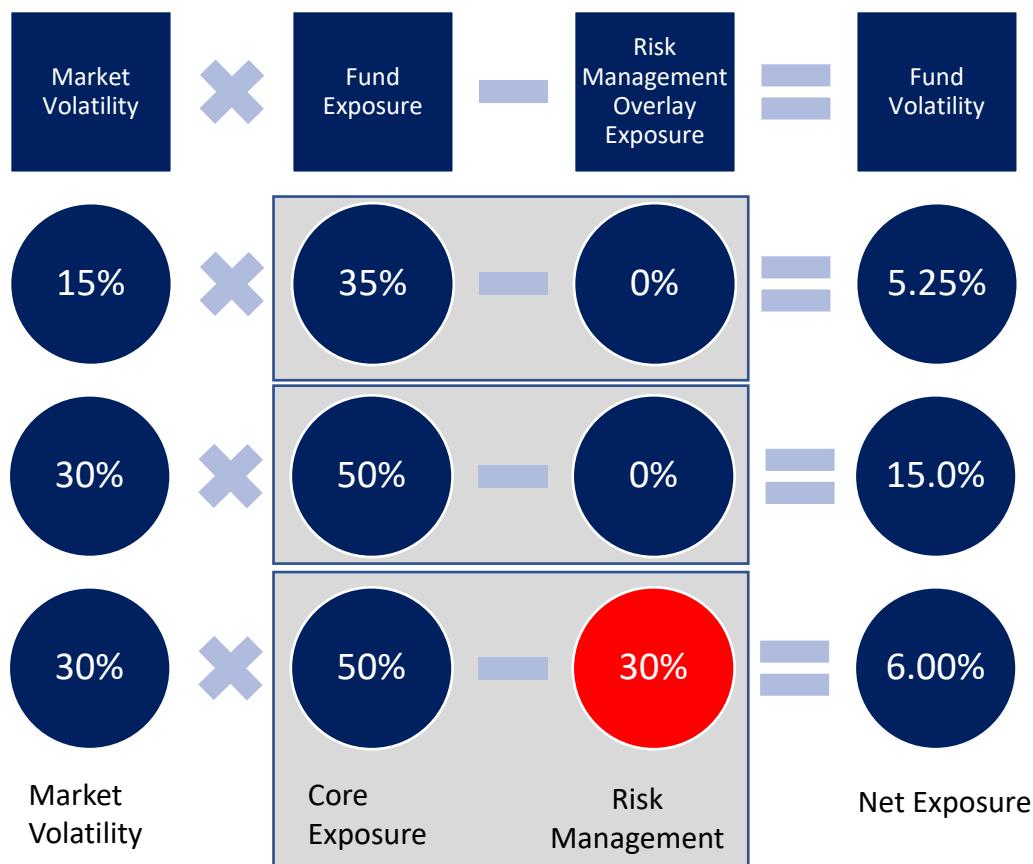
- Fall in equity markets
- Interest rates increase
- Increased Volatility
- Default risk



### PROCESS

- Cap volatility
- Use futures to maintain appropriate market exposure

# RISK MANAGEMENT OVERLAY CAPS FUND VOLATILITY



Fund volatility can be approximated as **Market Volatility x Exposure**

In normal market conditions exposure is expected to be between 4% and 6%

When markets fall, volatility tends to increase and exposure will rise so the volatility of the fund will rise to be too high

The risk management overlay reduces market exposure and so caps the volatility of the fund



## SHARE CLASSES

SHARE CLASSES	
ACCUMULATION	<p>All returns in the Fund are capital growth</p> <p>Fund does not pay any distributions/dividends</p> <p>Share class available for Institutional &amp; Retail investors</p>
5% DISTRIBUTION	<p>Quarterly payment of 1.25% of the value of the Fund paid from capital</p> <p>Payment Dates</p> <ul style="list-style-type: none"> <li>- 31<sup>st</sup> January</li> <li>- 30<sup>th</sup> April</li> <li>- 31<sup>st</sup> July</li> <li>- 31<sup>st</sup> October</li> </ul>

INITIAL CHARGE	None
AMC/ TER / OCF	B Class Institutional: 0.60%/ 0.76%, A Class Retail: 0.75% / 0.91%
DEALING/DEALING FEES	Daily / None
LIQUIDITY	Daily
STRUCTURE	UCITS V
REGULATION	Central Bank of Ireland
FUND PLATFORM	Davy Skyline Umbrella Fund ICAV
AVAILABLE VIA ISA?	Yes
AVAILABLE VIA SIPP?	Yes
AVAILABLE VIA OFFSHORE BOND	Yes





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## PLATFORMS

- AJ BELL
- ASCENTRIC
- AVIVA
- BREWIN
- CHARLES STANLEY
- FIDELITY
- FUSION WEALTH
- HSBC LIFE
- JAMES BREARLEY
- NOVIA
- NUCLEUS
- OLD MUTUAL WEALTH
- PRAEMIUM
- RAYMOND JAMES
- TRANSACT
- PLATFORM ONE
- STANDARD LIFE
- ZURICH
- 7IM



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## CONTACT

For further information about Levendi Investment Management Limited or the Levendi Defined Return Fund, please contact us:

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