AHL TargetRisk Programme

Dynamic multi-asset allocation investing

December 2018

For investment professionals only.
Not for public distribution.

Investor considerations

One should carefully consider the risks associated with investing, whether the strategy suits your investment requirements and whether you have sufficient resources to bear any losses which may result from an investment:

Market Risk: The Strategy is subject to normal market fluctuations and the risks associated with investing in international securities markets and therefore the value of your investment and the income from it may rise as well as fall and you may not get back the amount originally invested.

Counterparty Risk: The Strategy will be exposed to credit risk on counterparties with which it trades in relation to on-exchange traded instruments such as futures and options and where applicable, 'over-the- counter'('OTC', 'non-exchange') transactions. OTC instruments may also be less liquid and are not afforded the same protections that may apply to participants trading instruments on an organised exchange.

Currency Risk: The value of investments designated in another currency may rise and fall due to exchange rate fluctuations. Adverse movements in currency exchange rates may result in a decrease in return and a loss of capital. It may not be possible or practicable to successfully hedge against the currency risk exposure in all circumstances.

Liquidity Risk: The Strategy may make investments or hold trading positions in markets that are volatile and which may become illiquid. Timely and cost efficient sale of trading positions can be impaired by decreased trading volume and/or increased price volatility.

Financial Derivatives: The Strategy will invest financial derivative instruments ('FDI') (instruments whose prices are dependent on one or more underlying asset) to achieve its investment objective. The use of FDI involves additional risks such as high sensitivity to price movements of the asset on which it is based. The extensive use of FDI may significantly multiply the gains or losses.

Leverage: The Strategy's use of FDI may result in increased leverage which may lead to significant losses.

Model and Data Risk: The Investment Manager relies on quantitative trading models and data supplied by third parties. If models or data prove to be incorrect or incomplete, the Strategy may be exposed to potential losses. Models can be affected by unforeseen market disruptions and/or government or regulatory intervention, leading to potential losses.

Commodity Risk: The Strategy may have exposure to commodities, the value of which can be volatile may carry additional risk. Commodity prices can also be influenced by the prevailing political climate and government stability in commodity producing nations.

www.man.com

An overview of Man Group[1]

- A global investment management firm focused on delivering performance for clients through a diverse spectrum of specialist active investment disciplines, empowered by the latest technology
- Individual performance-driven investment engines with centralised operations and services, managing around USD 114.1 billion[1]
- Large institutional client base, including sovereign wealth funds, endowments and pension funds
- Headquarters in London, with offices in every major region
- Actively engaged industry leader, a signatory of the UN-supported PRI and founding member of the Standards Board for Alternative Investments (former HFSB)

Man AHL

- Systematic investment manager
- Offering absolute return and long-only quantitative funds
- One of the longest running systematic traders with over 30 years' experience
- AuM USD 25.1 billion
- Founded in 1987
- 116 investment professionals

Man numeric

- Fundamentally driven quantitative asset manager
- Offering long-only, active extension, and hedged equity strategies across regions, styles, and capitalisations
- Focus on risk adjusted alpha
- AuM USD 33.8 billion[2]
- Founded in 1989
- 39 investment professionals

Man GLG

- Discretionary investment manager
- Offering absolute return and long-only funds across asset classes, sectors and geographies
- Investment teams benefit from a collaborative environment and are unconstrained by a house view
- AuM USD 38.0 billion
- Founded in 1995
- 114 investment professionals

Man GPM

- Focused on investments in private markets, including real and corporate assets across the capital structure globally
- Differentiated risk and return characteristics to public market investments
- AuM USD 2.3 billion
- Current capabilities include US residential real estate equity and debt, US and European commercial real estate debt, and US direct lending to specialty finance vehicles
- 25 investment professionals

Man FRM

- Global alternative investment specialist
- Flexible approach to building alternatives portfolio solutions[3] through managed accounts, commingled strategies and advisory relationships
- Operates one of the largest independent dedicated managed account platforms
- AuM USD 14.8 billion[4]
- Founded in 1991
- 37 investment professionals

Man Solutions

1. As at 30 September 2018. Throughout this presentation reference to 'Man' refers to all Man Group plc and its subsidiaries. Combined AUM of all affiliated Man investment managers. All investment management services are offered through Man affiliated investment managers. 2. Man Numeric firm total AUM is USD 33.8 billion (AUM excludes approximately USD 900 million in leveraged assets). 3. The use of the term 'solutions' within this presentation does not constitute or imply any guarantee that any product/strategy will be successful or that its aims or objectives will be achieved. 4. Man FRM firm total used here (USD 14.8 billion) is different from that quoted in the Q3 2018 trading statement (USD 14.0 billion) released by Man Group on 12 October 2018. The former represents aggregate FUM at the product fund/strategy level while the latter breaks down FUM across the underlying related investment managers within a fund/strategy/product.

Features of investing in systematic multi-asset portfolio

Balanced, long-only approach

- Actively managed, long-only, multi-asset approach
- Applies systematic techniques, honed through AHL's 30-year experience, to reduce overall drawdowns and boost long term performance

Active risk management

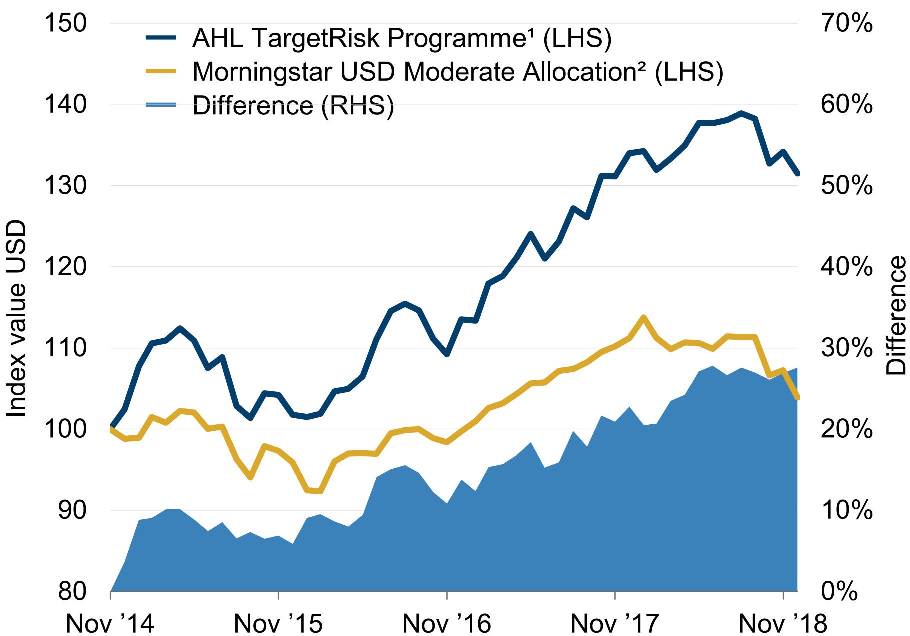
- Momentum overlay to reduce exposure during market sell-offs
- Reduce exposure when markets become increasingly correlated
- Dynamic risk control for volatility targeting and downside protection

Diversification

- Systematic process leads to scalability across many markets
- Diversification across a broad range of markets, covering global equities, corporate credit, inflation, and commodities

AHL TargetRisk Programme[1]

Performance since inception



	AHL TargetRisk Programme[1]	Morningstar USD Moderate Allocation index[2]
Total return	**31.5%**	3.9%
Annualised return	**7.0%**	0.9%
Annualised volatility	**7.9%**	6.1%
Sharpe ratio[4]	**0.74**	n/a
Correlation	**1.00**	0.67

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual return
2018	0.19%	-1.72%	1.08%	1.18%	2.07%	-0.01%	0.28%	0.62%	-0.48%	-4.01%	1.11%	-2.00%	**-1.86%**
2017	-0.14%	4.01%	0.81%	1.89%	2.39%	-2.44%	1.73%	3.32%	-0.86%	4.05%	-0.02%	2.16%	**18.01%**
2016	-0.25%	0.37%	2.69%	0.32%	1.44%	4.29%	3.13%	0.79%	-0.73%	-3.03%	-1.74%	3.96%	**11.55%**
2015	5.17%	2.59%	0.33%	1.33%	-1.32%	-3.07%	1.26%	-5.52%	-1.44%	3.01%	-0.21%	-2.33%	**-0.66%**
2014												2.45%	**2.45%[3]**

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

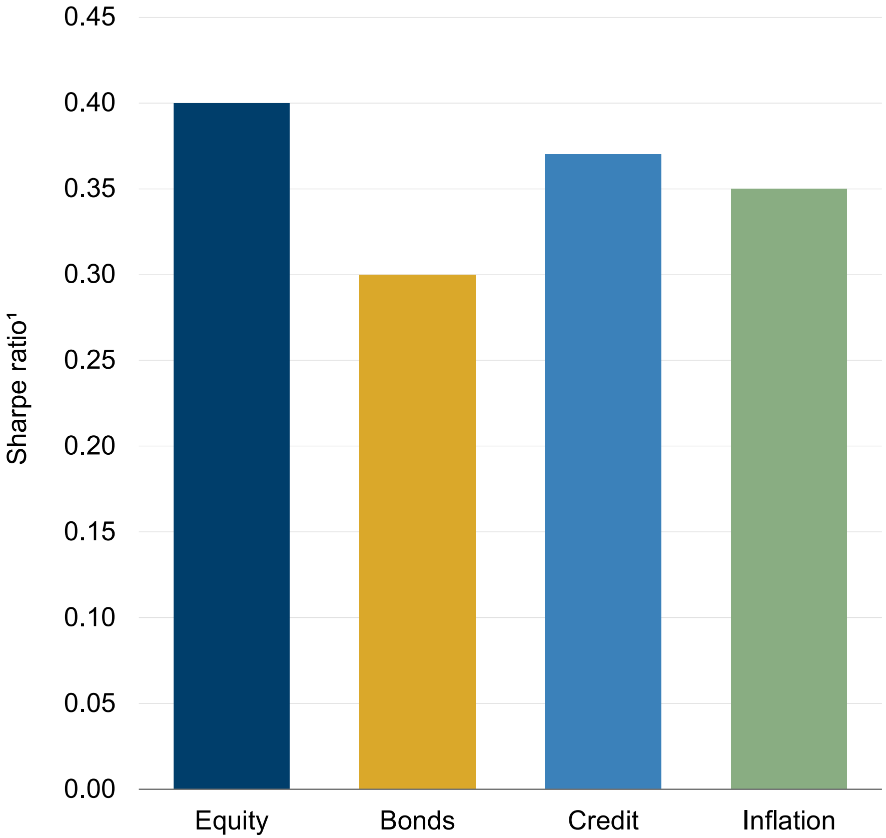
Date range: 11 December 2014 to 31 December 2018. Please note that the performance data is not intended to represent actual past or simulated past performance of an investment product. 1 The data is based on a representative investment product or products that fully invest in the Programme. Target Risk Programme is net of estimated fees and service cost of 0.95% in USD. 2. This is not an investment product 3. Part years. 4. Sharpe ratio is a measure of risk-adjusted performance that indicates the level of excess return per unit of risk. It is calculated using the risk-free rate (3 month interbank rate) in the appropriate currency over the period analysed. Where an investment has underperformed the risk-free rate, the Sharpe ratio will be negative. As the Sharpe ratio is an absolute measure of risk-adjusted return, negative Sharpe ratios can be misleading and are therefore shown as n/a.

Source: Man Group database and Morningstar.

Systematic investing can harvest a wider set of market exposure

Trading broader range of asset classes increases opportunities and diversification

Positive returns in all assets…



…and diversification helps

	Inflation	Credit	Equity	Bonds
Inflation	1.00			
Credit	0.31	1.00		
Equity	0.12	0.78	1.00	
Bonds	0.03	-0.33	0.06	1.00

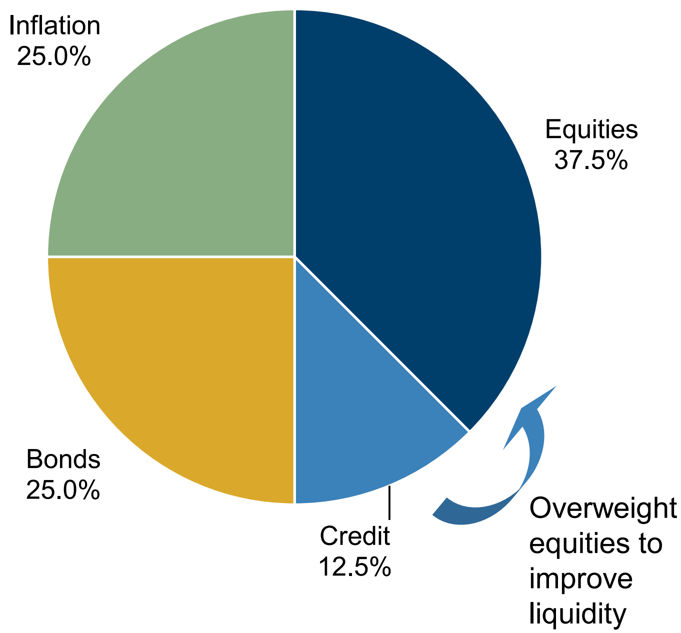
Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

Date range for all asset classes from January 1970 to December 2017. Asset classes shown are all part of the AHL Target Risk Programme, using representative time series. 1. Sharpe ratio is a measure of risk-adjusted performance that indicates the level of excess return per unit of risk. It is calculated using the risk-free rate (3 month interbank rate) in the appropriate currency over the period analysed. Where an investment has underperformed the risk-free rate, the Sharpe ratio will be negative. As the Sharpe ratio is an absolute measure of risk-adjusted return, negative Sharpe ratios can be misleading and are therefore shown as n/a. Equity = MSCI World Net Total Return Index hedged to USD; Bonds = Bloomberg Barclays Global Aggregate Bond Index Hedged USD; Credit = HFRX Fixed Income Credit Index; Inflation = 50/50 risk-weighted average of Bloomberg Barclays Global Inflation-linked (TR) USD Hedged and S&P GSCI Excess return index.

Source: Man Group database and Bloomberg.

AHL TargetRisk portfolio
Current allocation based on risk weighting and cross asset correlations

AHL TargetRisk Programme long-term risk allocation



Strategic asset allocation philosophy

- Asset allocation based on risk budgeting approach
- Seeks to capture positive expected returns in each asset class
- Diversification seeks to preserve capital and improve performance
- Balanced portfolio aims to perform positively in a range of market environments
- Additional risk management techniques can improve the overall performance by helping in challenging market environment

As at 31 December 2018. Showing Current allocation based on risk weighting and cross asset correlations which are subject to change without notice.
Source: Man Group database.

AHL TargetRisk Strategy invests into five global asset classes

Global diversification helps perform in many different types of market environments

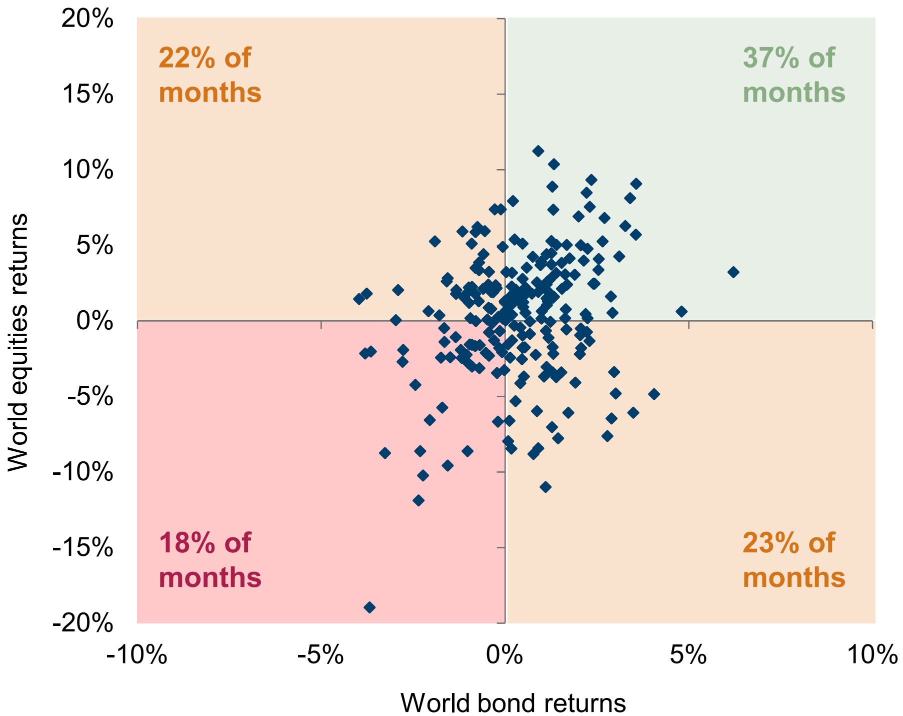
	Equities 37.5% of risk	Credit 12.5% of risk	Bonds & rates 25.0% of risk	Inflation 25% of risk
Region:				
US / Canada	3 markets	2 markets	6 markets	US TIPS, 3 European markets and diversified index exposure (ex Agriculturals and Livestock)
Europe	10 markets	2 markets	7 markets	
Japan	2 markets	-	1 market	
Asia ex-Japan	7 markets	-	4 markets	
RoW	2 markets	-	-	
Benefit from:				
Inflationary growth		✓		✓
Non-inflationary growth	✓			
Recession			✓	✓

12.5% allocation to control leverage

As at 31 December 2018.
For illustration purposes only. Please note that the weightings shown are indicative, correct as at the date of this presentation and are subject to change without notice.
Source: Man Group database.

Targeting the protection of wealth

Monthly returns from January 2000 to December 2018



- A global balanced strategy works well in most environments:
  - 37% both risk on and risk off markets rally
  - 45% of the time, risk on and risk off act as hedging
- However, 18% of months both bonds and equities fall

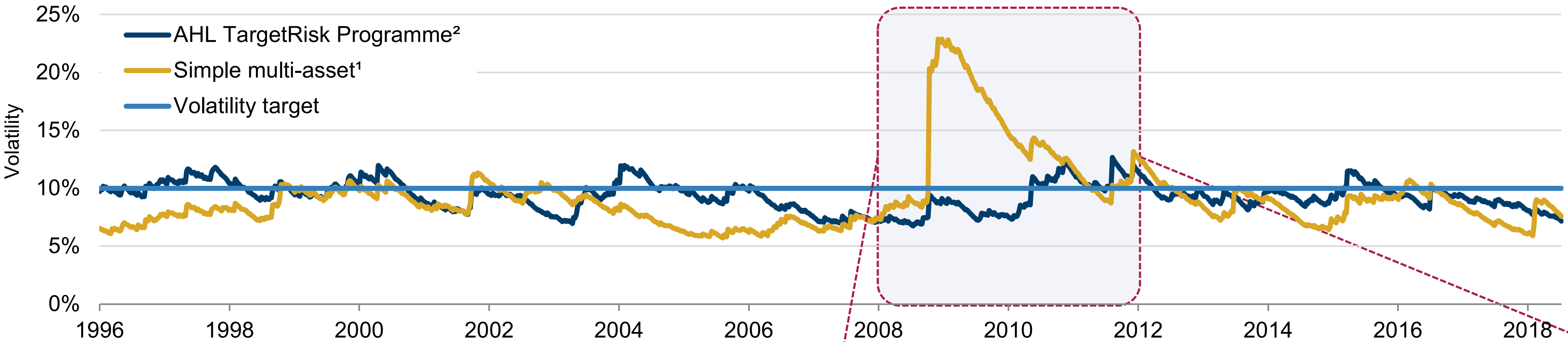
- Apply proprietary risk management techniques
  - Volatility scaling/switching
  - Momentum overlay
  - Correlation overlay

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

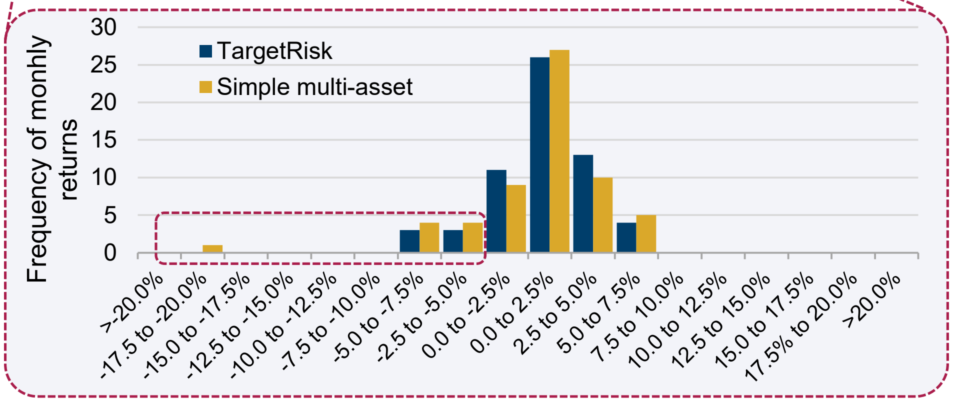
World equities represented by MSCI World Net Total Return and World bonds represented by Barclay Capital Global Aggregate Bond index
Source: Bloomberg.

Precise volatility targeting improves return profile

Rolling three-year volatility over time



- 'Volatility targeting' applied at market, sector and portfolio level
- 'Volatility switching' reactive to sharp increases in measured volatility
- Better volatility control aims to provide:
  - More stable return stream (easier timing on entry/exit)
  - Decreased tail losses
  - Better risk-adjusted performance



Simulated past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

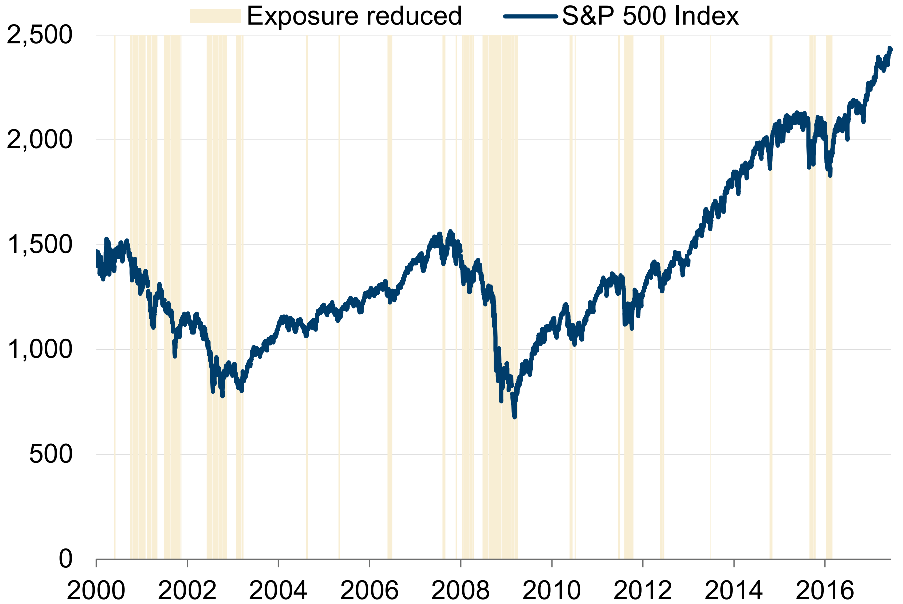
Date range: 1 January 1993 to 30 June 2018 1. Simple multi-asset is represented with the same volatility targeting and the same asset class allocation as AHL TargetRisk Programme. Simple multi-asset uses annual rebalancing with a three year volatility look back and is adjusted for the same fees as AHL TargetRisk Programme. 2. The performance, volatility, exposure and/or other information on the AHL TargetRisk Programme is simulated backtested performance meaning a systematic trading model has been applied to historic data. The simulated track record is subject to change without notice as models develop over time. The performance results provided herein were based on simulations with trading costs estimated using internal slippage models. TargetRisk Programme is net of estimated fees and service cost of 0.95%. This approach has inherent limitations, including that results may not reflect the impact material economic and market factors might have had on the investment manager's decision-making had the strategy been managed throughout the period over which the simulated performance is illustrated and since the trades have not been executed, the published results may have under-or-over compensated for the impact, if any, of certain market factors, such as lack of liquidity. The simulated performance is shown for information purposes and has been adjusted for fees and costs in order to better represent the fee and cost structure of an example fund.

Source: Man Group database.

Momentum overlay

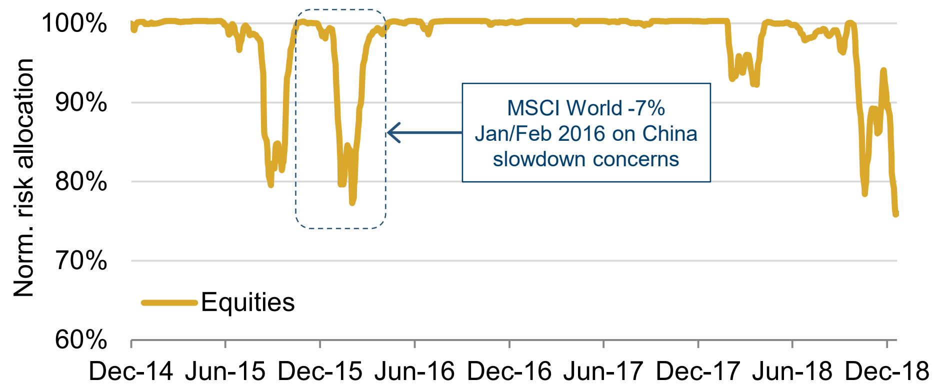
Why be 100% invested when history suggests it may be worth taking off some risk?

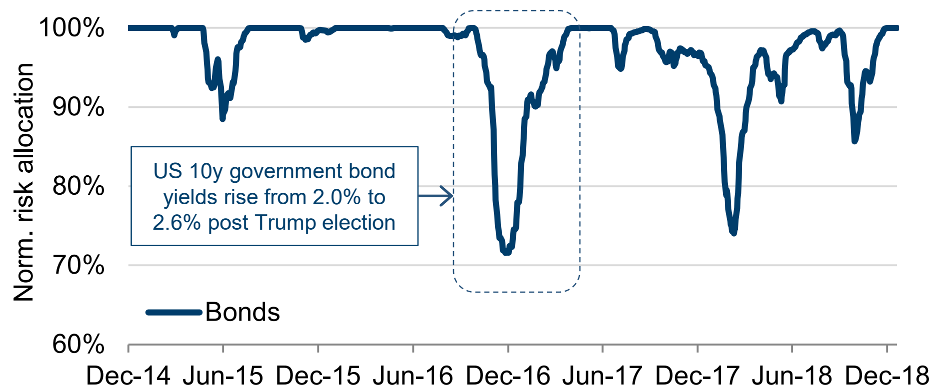
Trending markets



- Markets tend to have prolonged periods of sell offs and can be painful for traditional multi-asset funds
- Suggests the potential use of trend following strategies to reduce exposure during market sell offs

Can be applied to all asset classes





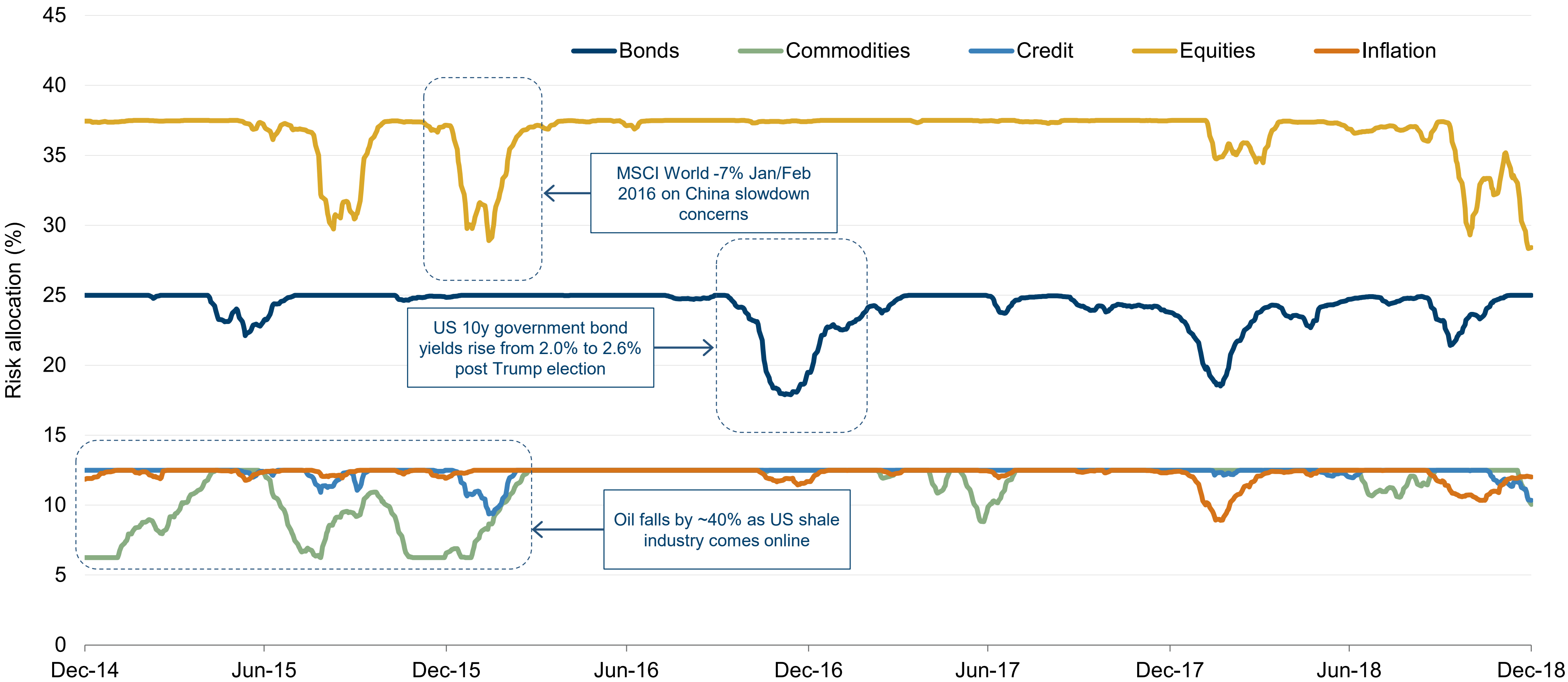
Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

S&P500 Index future price adjusted for contract rolls. The financial instruments mentioned are for reference purposes only. The content of this material should not be construed as a recommendation for their purchase or sale.

Source: Man Group database and Bloomberg.

Momentum overlay
Asset allocations superimposed only with the momentum overlay

Asset allocation

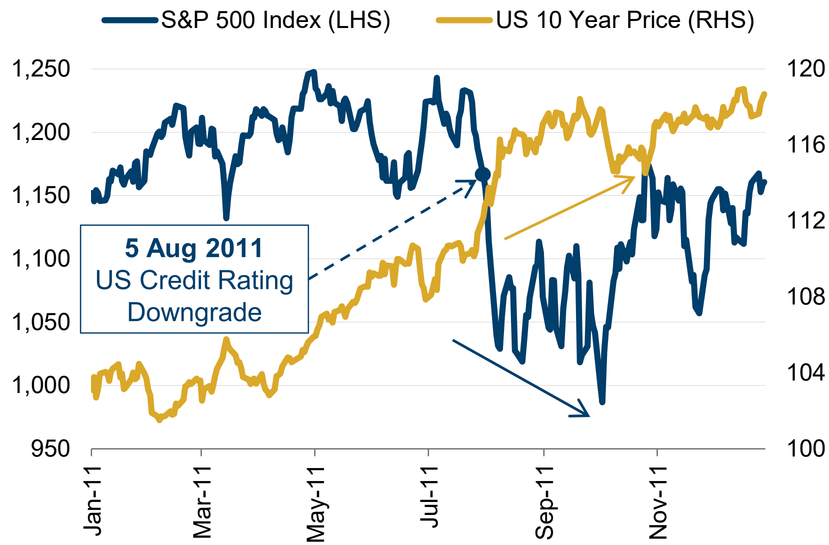


Data as at 31 December 2018.
Source: Man Group database.

Correlation overlay

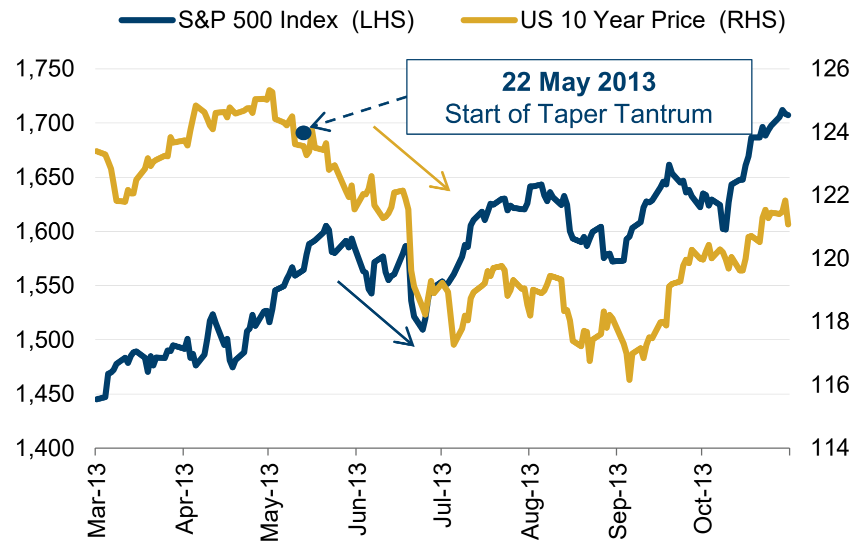
Seeking to mitigate the risks of a bond-driven sell off

Equity-driven sell off



- In past market crisis environments, bonds typically acted as a hedge to equities. A 'flight to quality' saw money move out of risk assets including equities, and into safe havens such as sovereign bonds
- **Multi-asset portfolios aim to offer some protection in such environments**

Bond-driven sell off



- However, when a sell-off driven by the bond market begins, the dynamics have been quite different.
  This environment has been characterised by a rise in correlations between bonds and equities, indicating that no part of the portfolio offers protection
- **This may potentially be a challenging situation for multi-asset portfolios**

HEAVY[1] model seeks to mitigate bond-driven sell off

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

S&P500 Index and US 10 Year Price are adjusted for contract rolls. The financial instruments mentioned are for reference purposes only. The content of this material should not be construed as a recommendation for their purchase or sale. 1. Noureldin, D., Shephard, N., Sheppard, K. (2011): Multivariate High-Frequency-Based Volatility (HEAVY) Models, Journal of Applied Econometrics

Source: Man Group database and Bloomberg.

Seeking to mitigate the risks of a bond-driven sell off
Intraday correlation monitor

Detecting a bond-driven sell off

1. Sharp sell-off in Bonds
2. Increasingly positive correlation between Bonds and Equities

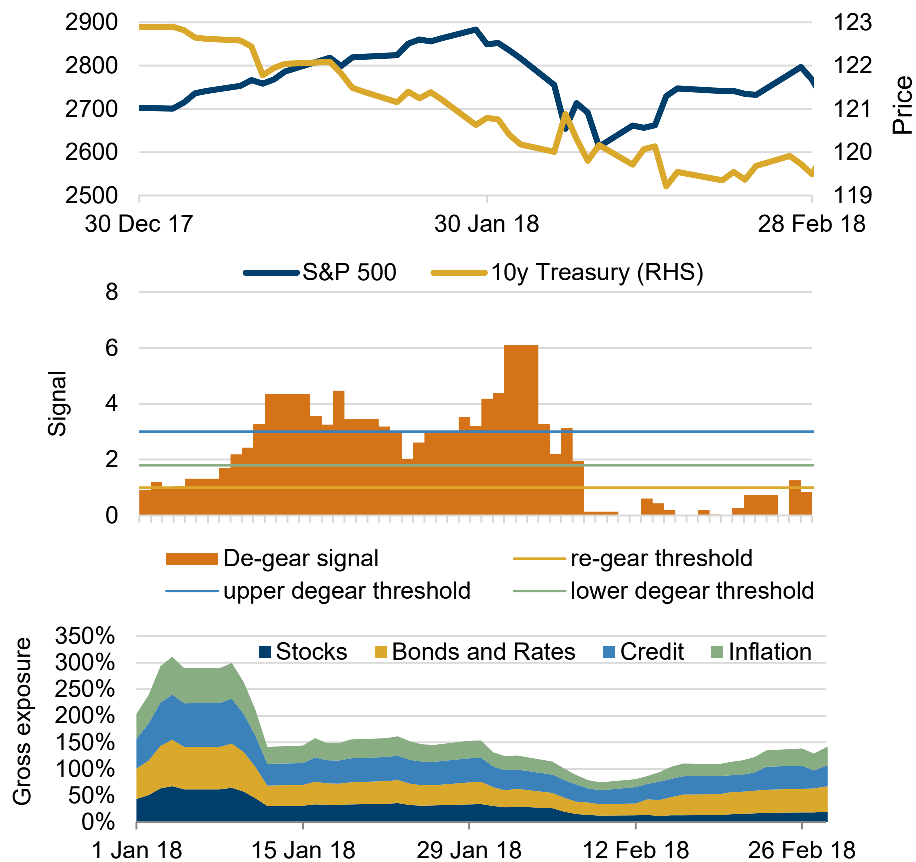
Conditions normalize:

3. Correlations start to fall and bond prices stabilize

Sensible risk control

- We have a risk management system in place which has been designed with the aim to detect the start of a bond-driven sell off which uses intraday data to monitor bonds/equities correlation
- Based on ‘HEAVY’ model[1] which was developed in collaboration with University of Oxford, as used in AHL’s TailProtect Programme.
- Triggers ‘alarm signal’ when normal hedge relationship collapses, and yields rise. Cuts portfolio exposure by 50%, re-enters when conditions normalise

Case study: January/February 2018 Sell-Off



Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

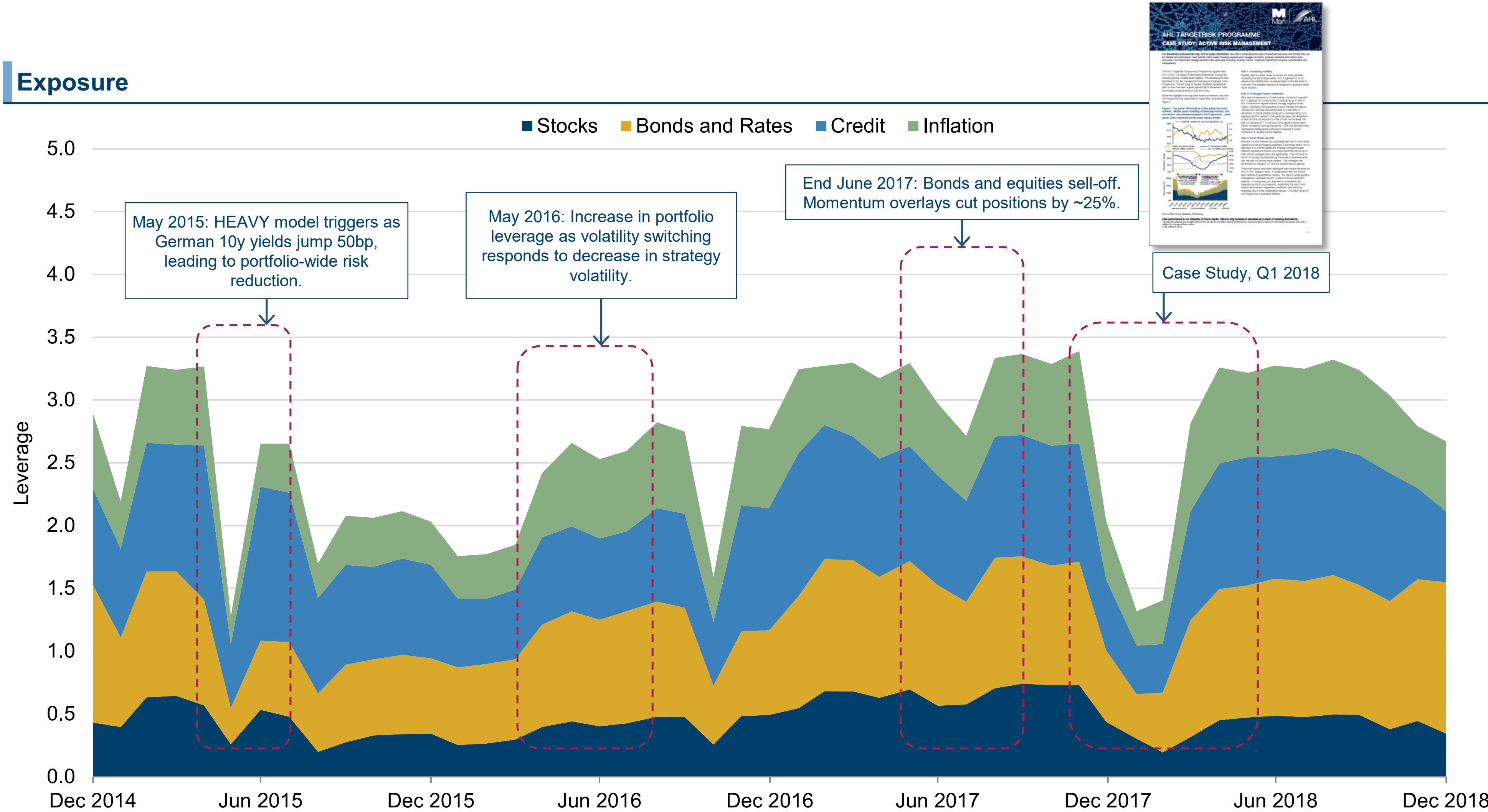
1. Noureldin, D., Shephard, N., Sheppard, K. (2011): Multivariate High-Frequency-Based Volatility (HEAVY) Models, Journal of Applied Econometrics.

S&P500 Index and US 10 Year Price are adjusted for contract rolls. Please note that the performance data is not intended to represent actual past or simulated past performance of an investment product. The drawdown data is based on a representative investment product or products that fully invest in the Programme. Target Risk Programme is net of example fees and service cost of 0.95% in USD. Unadjusted returns are calculated from a simulation of the same track record without using the HEAVY model. Date range: 30 December 2017 to 31 March 2018. The period selected is exceptional and is not representative of typical performance. Source: Man Group database and Bloomberg.

AHL TargetRisk Programme Tactical Asset Allocation

Systematic methodologies reduce exposure to asset classes

Exposure



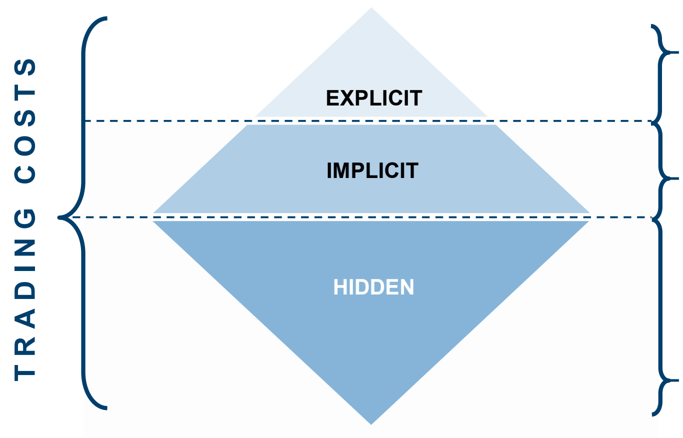
Data as at 31 December 2018. Please note that allocations are subject to change without notice.
Source: Man Group database.

Trading execution

In-house trading platform seeks to help protect clients' returns from hidden costs

- Reactive models and active risk management only possible with efficient execution
- Man has **three decades of experience** in developing systematic trading methodologies
- Institutional scale helps sustain investment in **in-house developed global execution**
- Continuous R&D to improve platform and rigorous **benchmarking** with external brokers

Why execution matters: total cost of accessing a market



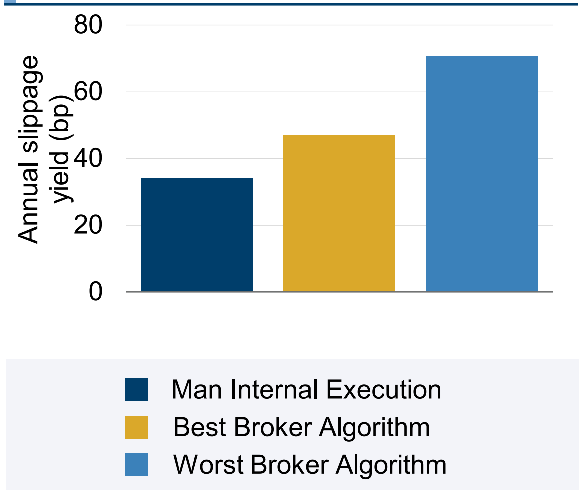
- Commissions
- Settlement costs
- Custodian costs
- Administration costs

- Bid/offer spreads
- Timing
- Market impact
- Return decay

- HFT Interference
- Pre-trade impact
- Signal gaming

Example of Man's execution costs in 2018[1]

Futures markets



1. The AHL slippage yields above are the realized annual costs to the programme during 2018 of electronically executed transactions. AHL executes a portion of its trades using broker algorithms for benchmarking purposes. The Best/Worst algo slippage numbers apply statistics derived from this portion of the flow to all electronically executed trades. A weighted average of equities, FX, and fixed income is used.

Any descriptions or information involving investment process or strategies is provided for illustration purposes only, may not be fully indicative of any present or future investments, may be changed in the discretion of the investment manager and are not intended to reflect performance. See Important Information at the beginning of this document.

Source: Man Group Database.

Performance comparison

Simulation

1 January 1995 to 31 December 2018

	60/40 benchmark[1]	Simple multi-asset[1]	Add risk management overlays: AHL TargetRisk Programme[2]
Sharpe ratio[3]	0.46	0.77	1.15
Sortino ratio	0.58	1.03	1.97
Maximum drawdown	-36.0%	-39.2%	-19.2%
Skewness	-0.83	-0.86	-0.18
Annualised return	6.8%	13.8%	**13.5%** (simulated performance)

Simulated past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

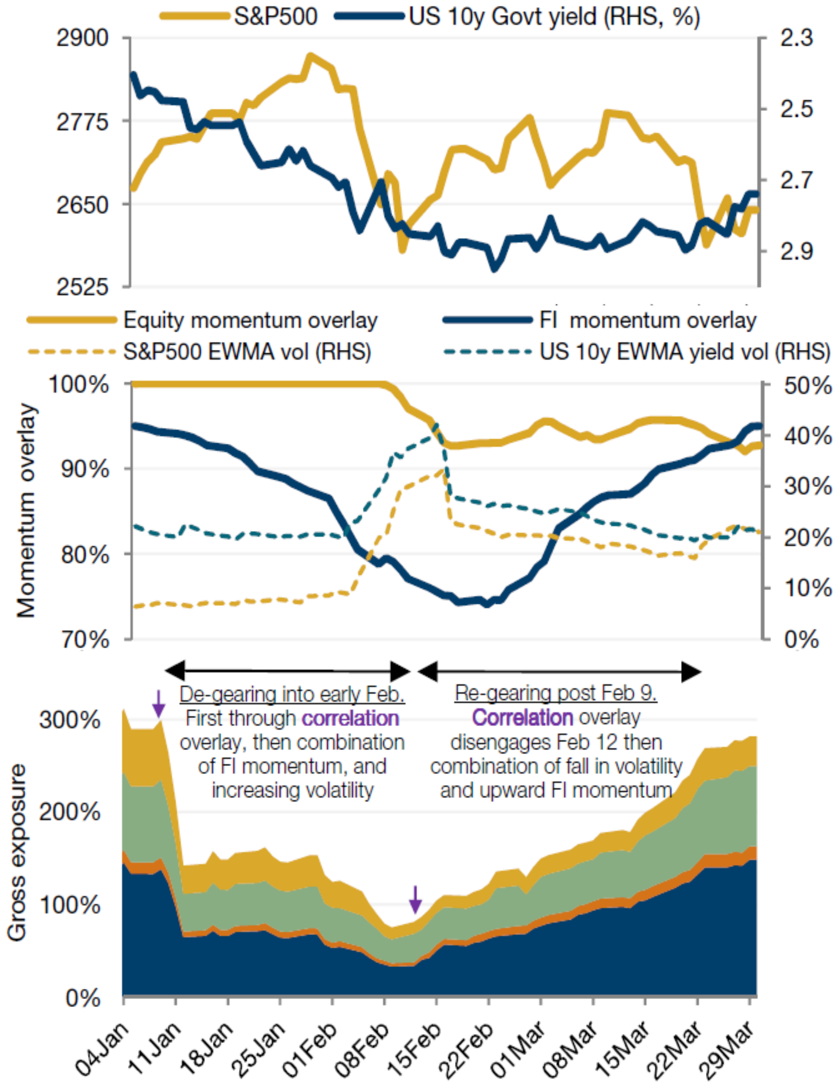
1. 60/40 benchmark is represented by monthly rebalancing of 60% MSCI World Net Total Return Index and 40% of Barclays Capital Global Aggregate Bond Index hedged to USD. Simple multi-asset is represented with the same volatility targeting and the same asset class allocation as AHL TargetRisk Programme. Simple multi-asset uses annual rebalancing with a three year volatility look back and is adjusted for the same fees as AHL TargetRisk Programme. 2. The performance, volatility, exposure and/or other information on the AHL TargetRisk Programme is simulated. The simulation has been created by 'back testing' a systematic trading model to historic data. The synthetic track record is subject to change without notice as models develop over time. The performance results provided herein were based on simulations with trading costs estimated using internal slippage models. TargetRisk Programme is net of estimated fees and service cost of 0.95%. This approach has inherent limitations, including that results may not reflect the impact material economic and market factors might have had on the investment manager's decision-making had the strategy been managed throughout the period over which the simulated performance is illustrated. The simulated performance is shown for comparison purposes and has been adjusted for fees and costs in order to better represent the fee and cost structure of an example fund and and since the trades have not been executed, the published results may have under-or-over compensated for the impact, if any, of certain market factors, such as lack of liquidity. 3. Sharpe ratio is a measure of risk-adjusted performance that indicates the level of excess return per unit of risk. It is calculated using the risk-free rate (3 month interbank rate) in the appropriate currency over the period analysed. Where an investment has underperformed the risk-free rate, the Sharpe ratio will be negative. As the Sharpe ratio is an absolute measure of risk-adjusted return, negative Sharpe ratios can be misleading and are therefore shown as n/a.

Source: Man Group database, MSCI and Bloomberg.

Case study: AHL TargetRisk Programme – January/February 2018

All layers were active in managing risk exposure

AHL TargetRisk Programme Case Study: Active Risk Management. Q1 2018.



- S&P rallied in January, but fell severely in February
- 10yr Treasuries fell steadily throughout February and March…
- … hence fixed income momentum overlay was cutting risk throughout January and February
- Volatility in bonds and equities rose in February
- All of which impacted exposures:
  - Low exposure going into February
  - Build up in exposure post February

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

Illustrative example. The periods selected are exceptional and the results do not reflect typical performance. Exposure data is shown for information purposes only and is subject to change without notice.
Data period: 4 January 2018 to 31 March 2018.
Source: Man Group database

Why Man AHL for multi-asset class investing?

Applying AHL's expertise in systematic trading to **a balanced multi-asset** class portfolio

AHL's core strength	▪ AHL TargetRisk Programme trades the same markets on the same platform as AHL's core strategies ▪ Applies systematic techniques with decades of experience
Risk management	▪ Accurate volatility targeting. The strategy aims to deliver returns with a targeted level of volatility, regardless of market conditions. ▪ Systematic drawdown controls aim to mitigate the risks in traditional investing
Efficient execution	▪ May benefit from investment and innovations in execution to drive down costs ▪ Efficient execution helps to enable enhanced portfolio responsiveness

Appendix

AHL TargetRisk Programme[1]

Net monthly returns in USD

11 December 2014 to 31 December 2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual return
2018	0.19%	-1.72%	1.08%	1.18%	2.07%	-0.01%	0.28%	0.62%	-0.48%	-4.01%	1.11%	-2.00%	**-1.86%**
2017	-0.14%	4.01%	0.81%	1.89%	2.39%	-2.44%	1.73%	3.32%	-0.86%	4.05%	-0.02%	2.16%	**18.01%**
2016	-0.26%	0.37%	2.69%	0.32%	1.44%	4.29%	3.13%	0.79%	-0.73%	-3.03%	-1.74%	3.96%	**11.55%**
2015	5.17%	2.59%	0.33%	1.33%	-1.32%	-3.07%	1.26%	-5.52%	-1.44%	3.01%	-0.21%	-2.33%	**-0.66%**
2014												2.45%	**2.45%[2]**

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

1. Please note that the performance data is not intended to represent actual past or simulated past performance of an investment product. The data is based on a representative investment product or products that follow the programme. TargetRisk Programme is net of example fees and service cost of 0.95%. 2. Part year.

Source: Man Group database.

AHL TargetRisk Programme[1]

Simulated net monthly returns

1 January 1993 to 10 December 2014

Based on paper trading performance Simulated performance

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual return
2014	0.41%	4.50%	0.21%	2.11%	3.19%	1.66%	-0.49%	3.40%	-0.02%	-0.43%	4.05%	-1.77%[3]	**17.92%[3]**
2013	1.01%	1.53%	3.66%	3.08%	-2.75%	-4.59%	1.10%	-0.76%	3.63%	2.70%	0.21%	-0.75%	**8.00%**
2012	4.74%	2.28%	-1.24%	1.15%	-1.54%	0.70%	5.91%	1.72%	2.61%	-1.10%	3.64%	1.27%	**21.75%**
2011	-0.37%	2.81%	-0.77%	6.02%	0.15%	-1.66%	4.12%	-4.91%	-2.14%	2.94%	-1.96%	2.85%	**6.74%**
2010	-1.55%	1.80%	4.22%	2.77%	-1.15%	0.82%	4.39%	4.22%	5.03%	1.66%	-2.16%	1.62%	**23.57%**
2009	-4.12%	-1.64%	3.29%	1.39%	0.72%	0.92%	4.03%	2.89%	2.55%	0.16%	3.87%	-0.50%	**14.05%**
2008	-2.90%	0.71%	0.07%	0.47%	-0.22%	-1.64%	-1.12%	1.71%	-6.77%	-7.04%	2.41%	5.53%	**-9.09%**
2007	-0.43%	2.15%	-0.76%	2.29%	-1.24%	-2.92%	-2.48%	0.91%	3.72%	3.16%	-0.59%	-0.68%	**2.91%**
2006	2.53%	-0.84%	-0.04%	1.17%	-1.77%	-0.52%	2.81%	3.94%	0.57%	2.30%	2.07%	-1.63%	**10.91%**
2005	0.09%	2.02%	-0.39%	-2.22%	5.51%	4.21%	3.35%	3.87%	2.35%	-4.69%	3.24%	4.50%	**23.53%**
2004	2.33%	4.41%	0.18%	-3.68%	-0.66%	0.55%	-0.70%	2.73%	4.11%	2.80%	3.76%	3.04%	**20.19%**
2003	1.97%	3.42%	-2.66%	4.09%	8.72%	-0.44%	-1.74%	1.00%	-0.51%	2.92%	1.28%	8.19%	**28.78%**
2002	-1.26%	1.24%	2.81%	-0.03%	-1.26%	-2.87%	-1.77%	2.66%	-0.43%	0.70%	2.28%	2.47%	**4.42%**
2001	2.77%	-3.32%	-1.57%	0.43%	-0.52%	-1.58%	1.82%	-1.07%	-6.05%	3.89%	0.80%	-0.86%	**-5.54%**
2000	-3.60%	2.76%	2.96%	-2.80%	0.77%	2.63%	-0.56%	3.25%	-1.12%	-0.97%	2.07%	2.69%	**8.06%**
1999	2.45%	-3.01%	3.64%	3.86%	-4.21%	1.69%	-0.64%	1.57%	0.31%	2.18%	3.46%	4.60%	**16.63%**
1998	4.80%	0.93%	2.96%	-0.78%	0.35%	0.91%	0.23%	-2.78%	3.63%	-0.89%	2.12%	0.42%	**12.29%**
1997	4.15%	0.97%	-1.89%	3.62%	4.20%	2.42%	7.53%	-3.69%	7.09%	-2.63%	-0.87%	1.28%	**23.71%**
1996	3.77%	-2.87%	1.86%	2.89%	0.74%	0.74%	-3.37%	1.52%	5.69%	2.65%	6.26%	-1.79%	**19.06%**
1995	-0.36%	1.38%	3.79%	2.80%	4.07%	-1.06%	3.41%	1.23%	2.08%	-0.10%	5.98%	2.77%	**29.04%**
1994	3.33%	-4.30%	-2.69%	0.28%	-0.55%	-1.41%	2.77%	1.12%	-2.31%	1.46%	-0.22%	0.67%	**-2.11%**
1993	1.25%	3.79%	1.74%	0.10%	0.64%	3.12%	3.32%	6.80%	-3.40%	4.23%	-3.04%	4.22%	**24.70%**

Simulated past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

1. The performance, volatility, exposure and/or other information on the AHL TargetRisk Programme is simulated. The simulation has been created by 'back testing' a systematic trading model to historic data. The synthetic track record is subject to change without notice as models develop over time. The performance results provided herein were based on simulations with trading costs estimated using internal slippage models. TargetRisk Programme is net of estimated fees and service cost of 0.95%. This approach has inherent limitations, including that results may not reflect the impact material economic and market factors might have had on the investment manager's decision-making had the strategy been managed throughout the period over which the simulated performance is illustrated. The simulated performance is shown for comparison purposes and has been adjusted for fees and costs in order to better represent the fee and cost structure of an example fund and since the trades have not been executed, the published results may have under-or-over compensated for the impact, if any, of certain market factors, such as lack of liquidity. Paper trading is defined as the process whereby a systematic trading strategy is run in real time, generating trade orders as if live. However, these orders are not sent to the market, and instead fill prices are estimated using an internal cost model. It does not involve the running of a live fund, but unlike backtest it is not influenced by hindsight bias. 2. Part year. 3. to 10 December.

Source: Man Group database.

Morningstar USD Moderate Allocation index
Monthly returns (USD)

1 January 2013 to 31 December 2018

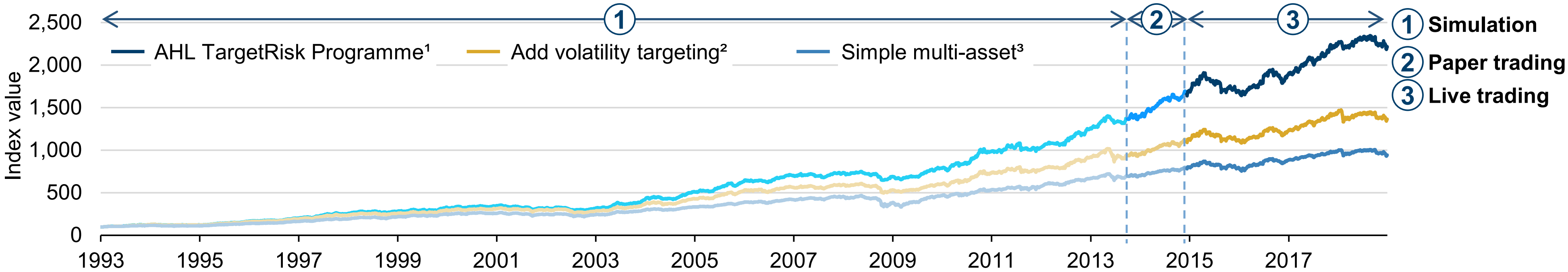
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual return
2018	2.30%	-2.20%	-1.26%	0.74%	-0.07%	-0.64%	1.40%	-0.06%	-0.04%	-4.21%	0.59%	-3.12%	**-6.56%**
2017	1.25%	1.61%	0.58%	1.09%	1.24%	0.12%	1.34%	0.22%	0.77%	1.17%	0.66%	0.88%	**11.49%**
2016	-3.60%	-0.11%	3.96%	1.02%	0.05%	-0.08%	2.61%	0.41%	0.09%	-1.11%	-0.49%	1.37%	**4.00%**
2015	0.11%	2.59%	-0.68%	1.43%	-0.18%	-1.95%	0.24%	-3.99%	-2.35%	4.12%	-0.63%	-1.44%	**-2.95%**
2014	-1.83%	2.83%	-0.10%	0.50%	1.41%	1.11%	-0.75%	0.98%	-2.35%	0.30%	1.15%	-1.19%	**1.97%**
2013	2.56%	-0.40%	0.98%	1.77%	-0.48%	-2.95%	2.58%	-1.45%	3.00%	2.28%	0.40%	0.78%	**9.25%**

Past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuation.

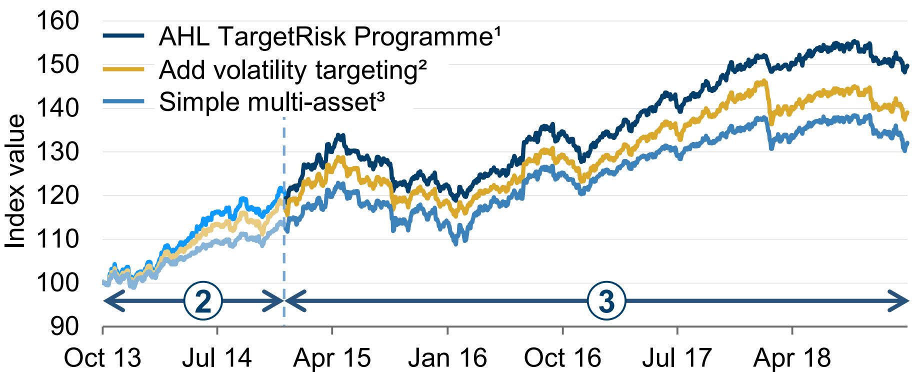
Morningstar USD Moderate Allocation index is selected by the Investment Manager for performance illustration and comparison purposes only. It is not a formal benchmark and does not form part of the programme's investment objectives or investment policy. Source: Morningstar.

Overlays adding value
Simulated performance (daily data)

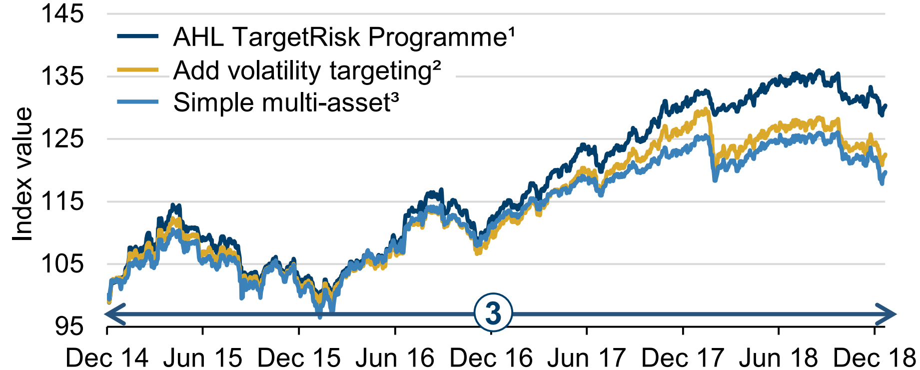
1 January 1993 to 31 December 2018



1 October 2013 to 30 September 2018



11 December 2014 to 30 September 2018



Simulated past performance is not indicative of future results. Returns may increase or decrease as a result of currency fluctuations.

1. The performance, volatility and/or other information on the AHL TargetRisk Programme is simulated. The simulation has been created by 'back testing' a systematic trading model to historic data. The synthetic track record is subject to change without notice as models develop over time. The performance results provided herein were based on simulations with trading costs estimated using internal slippage models. TargetRisk Programme is net of example fees and service cost of 0.95%. This approach has inherent limitations, including that results may not reflect the impact material economic and market factors might have had on the investment manager's decision-making had the strategy been managed throughout the period over which the simulated performance is illustrated. The simulated performance is shown for comparison purposes and has been adjusted for fees and costs in order to better represent the fee and cost structure of an example fund and since the trades have not been executed, the published results may have under-or-over compensated for the impact, if any, of certain market factors, such as lack of liquidity. 2. Volatility targeting uses daily rebalancing and is adjusted to the same fees as AHL TargetRisk Programme and is normalised for volatility. 3. Simple multi-asset is represented with the same volatility targeting and the same asset class allocation as AHL TargetRisk Programme. Simple multi-asset uses annual rebalancing with a three year volatility look back and is adjusted for the same fees as AHL TargetRisk Programme. Source: Man Group database.

Man Group's commitment to responsible investment

Upholding and promoting the highest standards of stewardship

Our approach

Our significant breadth of capabilities means that there is no single environmental, social and governance (ESG) framework which can be applied uniformly across strategies. Each of our investment engines applies the best practices of responsible investment in the way that is most relevant to their fields of research – there is no 'one size fits all'.

Responsible investment at Man Group

- Man Group maintains a Responsible Investment Committee and firm-wide Responsible Investment policies that support globally-recognised norms
- We strive to meet the evolving needs of our clients in the context of a rapidly changing regulatory environment
- Environmental, social and governance ('ESG') criteria are a key part of our stewardship responsibility, and we are committed to furthering the interests of our clients in this area
- We understand the importance of a robust infrastructure when it comes to investing responsibly. At Man, each portfolio manager benefits from the support and resources needed to integrate ESG factors into their investment process
- Man Group is represented on a number of industry committees and working groups: PRI Fixed Income Advisory Committee, PRI Academic and Hedge Fund Advisory Committees, Imperial College Climate Finance & Investment Centre Advisory Board

Stewardship	ESG factors	Promotion & Education
Enhancing the value and interests of our clients' assets through voting and active engagement	Considering and/or applying ESG criteria in the investment decision-making process	Participating, promoting and educating responsible investing within the investment community

As a signatory of the UN-supported PRI, and as part of our ongoing commitment to responsible investment, we are proud to be involved with the following organizations and initiatives as a member, supporter or in an advisory capacity:

PRI Principles for Responsible Investment · SBai Standards Board for Alternative Investments · AIMA · CPLC Carbon Pricing Leadership Coalition · FAIRR Farm Animal Investment Risk & Return, A Coller Initiative · The Investment Association · Climate Action 100+

Why customise?

Our customised client portfolio solutions seek to address common issues facing investors

We recognise that responsible investment is fundamental to our fiduciary duty. Sound stewardship is extremely important in managing investors' capital, and our approach to responsible investment closely aligns us with the values of our clients, shareholders, and other stakeholders.

Find out more: ***https://www.man.com/responsibility***

Man AHL is one of the longest running systematic traders, bringing a scientific, empirical mind-set to investing.

For thirty years, Man AHL has applied a systematic approach to the development and deployment of investment strategies which are largely quantitative and rely on large datasets to which are applied complex financial, econometric and statistical theories through proprietary research and modelling.

We believe that these tools can help **support analysis of ESG-related factors** across markets.

Man Numeric is an institutional manager focused on strategies ranging from long-only, active extension, and market neutral equities across geographic regions, investment styles and capitalisation strata.

As a **signatory of the UN-supported PRI since 2014**, Man Numeric is committed to a socially-responsible investment approach that combines best practices in environmental, social and governance analysis with the interests and values of our clients.

Man GLG is a discretionary investment manager that seeks to deliver absolute return and long-only investment strategies across asset classes, sectors and geographies.

As a **signatory of UN-supported PRI since 2012**, Man GLG is committed to a socially-responsible investment approach that combines best practices in environmental, social and governance analysis with the interests and values of our clients.

Man Global Private Markets focuses on investment in less liquid assets, including real estate. Responsible investment in this context involves working closely with individual partners to ensure that all opportunities are taken with due consideration of non-financial factors, including ESG.

These dynamics will differ between asset types, but Man GPM **works closely with Man Group's central Responsible Investment Committee** to ensure that decisions are taken in line with our high standards of stewardship.

Man FRM, as a hedge fund investment specialist, engages its sub-managers to promote the inclusion of ESG factors into their investment processes, policies and practices.

Man FRM also **promotes the acceptance of the UN-supported PRI** with our sub-advisors and encourages their participation as signatories to the Principles.

Investment solutions

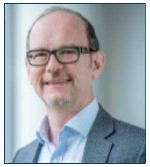
Tailored and optimised to meet specific client needs

- We offer a comprehensive suite of investment solutions and formats that can be tailored and optimised to meet specific client needs[1]:
- Investment solutions offer optionality including; liquidity, control, investment restrictions, investor customisation and transparency

UCITS	Alternative investment funds	US 40 Act funds	Regional funds[2]	Separate accounts	Advisory mandates	Bespoke fund vehicles

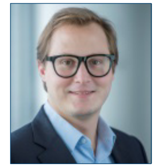
1. Access to investment products and mandate solutions are subject to applicable laws and regulations including selling restrictions and licensing requirements. Investment solutions listed above may not be compatible for all investment strategies and may be subject to minimum subscription requirements.
2. In addition to UCITS and AIFs registered across the EEA, a number of investment strategies are available in vehicles registered in Chile, Netherlands, Hong Kong, Japan, Singapore, South Korea and Switzerland.

Biographies



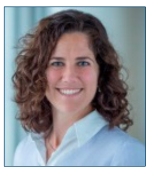
Matthew Sargaison

Matthew Sargaison is Co-Chief Executive Officer of Man AHL, acting Chief Investment Officer, and a member of the Man Group Executive Committee. Matthew was previously Man AHL's Chief Investment Officer, with overall responsibility for investment management and research from 2012 and 2017, as well as Chief Risk Officer between 2009 and 2012. Before joining Man AHL in 2009, he spent 13 years working at Deutsche Bank, Barclays Capital and UBS. Matthew originally worked for Man AHL from 1992 to 1995 as a trading system researcher and institutional product designer. Matthew holds a degree in Mathematics from the University of Cambridge and a Master's Degree in advanced computer science from the University of Sheffield.



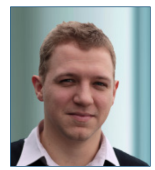
Antoine Forterre

Antoine Forterre is Co-Chief Executive Officer of Man AHL ('AHL') and a member of the Man Executive Committee. He was previously its Chief Operating Officer, with overall responsibility for technology and other non-investment functions. Antoine was previously Head of Corporate Development and Group Treasurer of Man Group, where he was responsible for sourcing and executing acquisitions as well as managing the Group's capital markets activities. Before joining Man Group in 2011, Antoine worked at Goldman Sachs in Securities, Asset Management and Investment Banking. Antoine graduated from ESSEC with a Masters in Finance and Strategy.



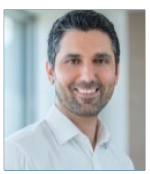
Kate Straker

Kate Straker is Chief Operating Officer of Man AHL ('AHL'), having previously been responsible for product strategy and project management. Kate joined Man Group in 2006 and prior to joining AHL worked in a number of areas across the group, including product development and operations. She qualified as an ACA with PKF (UK) LLP, which is now part of BDO LLP and holds a first class degree in Pathology and Microbiology from the University of Bristol.



James Munro

James Munro is Chief Technology Officer of Man AHL. James leads Man AHL's ('AHL') technology team and is responsible for AHL's Research and Trading Systems. He works with Man Group's central trading technology and quant platform teams along with the research and operations teams within AHL to deliver and maintain the outcomes of our quant research process in trading. James has been an Engineer at AHL since 2011 and holds a PhD in Theoretical Physics from University College London.



Russell Korgaonkar

Russell Korgaonkar is Director of Investment Strategies of Man AHL ('AHL'), and a member of AHL's management and investment committees. He has overall responsibility for AHL's Liquid Strategies unit, which creates and runs scalable systematic strategies, as well as the Institutional Solutions business. Russell joined the firm in 2001 as a researcher and later portfolio manager focused on systematic cash equity strategies, and was instrumental in building up AHL's expertise in this space. In 2011 he became Head of Portfolio Management, responsible for constructing and managing AHL's growing range of portfolios, and was promoted to his current role in June 2017. Russell holds a BA/MA (First Class) in Physics from the University of Oxford.

Graham Robertson

Graham Robertson is the Head of Client Portfolio Management at Man AHL ('AHL') with principal responsibility for product development and client communication. Prior to joining AHL in 2011, Dr Robertson developed capital structure arbitrage strategies at KBC Alternative Investment Management and equity derivative relative value models for Vicis Capital. He started his career at Credit Suisse in fixed income markets before moving to Commerzbank where he established the relative value team and subsequently became Head of Credit Strategy. Graham holds a DPhil from Oxford University in Seismology and a BSc in Geophysics from Edinburgh University.

Source: Man Group database.

Important information

The value of an investment and any income derived from it can go down as well as up and investors may not get back their original amount invested. Alternative investments can involve significant additional risks.
This material is for information purposes only and does not constitute an offer or invitation to invest in any product for which any Man Group plc affiliate provides investment advisory or any other services. Prior to making any investment decisions, investors should read and consider the fund's offering documents.
Opinions expressed are those of the author as of the date of their publication, and are subject to change.
Some statements contained in these materials concerning goals, strategies, outlook or other non-historical matters may be "forward-looking statements" and are based on current indicators and expectations at the date of their publication. We undertake no obligation to update or revise them. Forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those implied in the statements.
Unless stated otherwise the source of all information is Man Group plc and its affiliates as of the date on the first page of this material.
This material was prepared by AHL Partners LLP ("Investment Manager") (company number OC380907) which is registered in England and Wales at Riverbank House, 2 Swan Lane, London, EC4R 3AD. Authorised and regulated in the UK by the Financial Conduct Authority. This material is distributed pursuant to global distribution and advisory agreements by subsidiaries of Man Group plc ("Marketing Entities"). Specifically, in the following jurisdictions:
Australia: To the extent this material is distributed in Australia it is communicated by Man Investments Australia Limited ABN 47 002 747 480 AFSL 240581, which is regulated by the Australian Securities & Investments Commission (ASIC). This information has been prepared without taking into account anyone's objectives, financial situation or needs.
European Economic Area: Unless indicated otherwise this material is communicated in the European Economic Area by Man Solutions Limited which is an investment company as defined in section 833 of the Companies Act 2006 and is authorised and regulated by the UK Financial Conduct Authority (the "FCA"). Man Solutions Limited is registered in England and Wales under number 3385362 and has its registered office at One Curzon Street, London W1J 5HB, England. As an entity which is regulated by the FCA, Man Solutions Limited is subject to regulatory requirements, which can be found at http://register.fca.org.uk.
Germany/Liechtenstein: To the extent this material is distributed in Germany and/or Liechtenstein it is communicated by Man (Europe) AG, which is authorised and regulated by the Liechtenstein Financial Market Authority (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under www.eas-liechtenstein.li. This material is of a promotional nature.
Hong Kong: To the extent this material is distributed in Hong Kong, this material is communicated by Man Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission in Hong Kong. This material can only be communicated to intermediaries, and professional clients who are within one of the professional investors exemptions contained in the Securities and Futures Ordinance and must not be relied upon by any other person(s).
Switzerland: To the extent the material is distributed in Switzerland the communicating entity is Man Investments AG, which is regulated by the Swiss Financial Market Supervisory Authority.
Recipients of this material are deemed to be investment professionals and/or qualified investors that have employed appropriately qualified individuals to manage their financial assets and/or are a financial services entity appointed by an investor to provide fiduciary advisory and/or portfolio management services in respect of their financial assets. Information provided in response to queries regarding investment strategies and products managed by the Investment Manager will not be deemed to be provision of investment advice or personal investment recommendations, or assessment of the suitability or appropriateness of any investment products or consideration of the particular circumstances specific to any individual recipient to whom this material has been sent.
This material is not suitable for US persons.
This material is proprietary information and may not be reproduced or otherwise disseminated in whole or in part without prior written consent. Any data services and information available from public sources used in the creation of this material are believed to be reliable. However accuracy is not warranted or guaranteed.