Risk Report - As at close of business on 31-Oct-2018

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#### NAV: \$2,834mm

summary

Performance

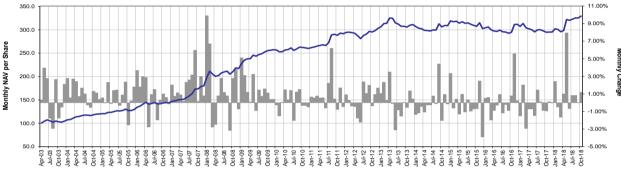
Performance graph

Brevan Howard Fund Limited ("BHFL") USD Class A Shares NAV Per Share % Change Feb Mav Jul Aua Sep Oct YTD Year Jan Mar Apr Jun Nov Dec 2003 0.31 3.95 2.75 2.62 2.09 4.62 2004 2.76 0.56 2.70 2.41 0.68 1.66 1.01 1.29 1 11 0.38 14.62 2005 0.56 2.31 -0.10 1.37 1.42 0.85 2.33 0.20 1.77 8.03 3.68 1.79 2.98 2.86 0.93 1.50 0.30 1.00 0.59 11.10 2006 2007 1.99 0.74 1.13 0.89 0.15 2.32 2.60 3.16 5.97 0.15 2.97 0.77 25.21 0.78 2008 9.89 6.70 0.78 2.78 1.16 2.78 3.76 20.43 1.18 0.09 1.57 2009 5.11 3.07 3.24 1.42 0.73 1.10 0.38 0.39 18.65 2010 0.05 1.47 0.33 1.39 1.22 1.48 1.01 0.66 0.51 6.19 1.68 2011 0.75 0.52 0.56 -0.5 2.21 0.40 -0.75 12.15 2012 0.90 0.24 1.03 1.98 0.92 1.68 3.93 2.37 2013 1.02 2.32 0.25 3.50 -1.54 0.03 1.35 0.42 2.68 2014 -1.14 0.75 -0.12 4.40 0.92 -0.79 2015 3.33 -0.61 0.38 -1.30 0.95 0.33 -0.96 -0.72 2.44 -1.96 -1.06 -3.88 2016 0.50 0.58 -0.86 -0.20 0.94 -1 17 -0.89 0.78 5.57 0.22 3.03 0.10 2017 -1.49 2.01 -2.91 -0.72-0.70 -1.47 1.44 -0.88 0.10 -0.00 -5.40 11.61 2018 2.42 0.96 7.92 0.82 0.80 0.04 1.19

Performance Statistics <sup>1</sup>	MTD (%)	QTD (%)	YTD (%)	12M (%)	LTD <sup>2</sup> (%)	ARR <sup>3</sup> (%)	Risk <sup>4</sup> (%)	Sharpe <sup>5</sup> (X)
BHFL USD Class A Shares	1.19	1.19	11.61	11.72	229.36	7.95	5.57	1.15

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. Data for October 2018 is estimated by Brevan Howard Asset Management LLP ("BHAM")

# BHFL NAV Per Share and Monthly Change <sup>1</sup>



PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. Data for October 2018 is estimated by BHAM.

## Securities Leverage (ratio of absolute value of securities (excluding derivatives) to NAV) as at 31 October 2018

0.3

## DV01 Summary (Change in Fund NAV for a 0.01% rise in rates)

ссу	3M	2Y	10Y+	Total
EUR	(0.01%)	0.05%	0.00%	0.05%
USD	0.03%	(0.07%)	0.05%	0.01%
JPY	0.00%	(0.01%)	0.01%	(0.00%)
GBP	(0.00%)	(0.02%)	0.01%	(0.01%)
Other	0.01%	(0.04%)	0.01%	(0.02%)
Total	0.03%	(0.09%)	0.08%	0.02%

## Historical Simulations (%NAV)

Scenario	Period	Performance
Asian Crisis 5-Day	07/10/97 - 14/10/97	(1.8)
Russia Deval 5 Day	24/08/98 - 31/08/98	4.1
LTCM	01/08/98 - 30/11/98	14.9
Sep 2001	10/09/01 - 28/09/01	2.3
Aug-03	30/07/03 - 01/08/03	(0.5)
Lehman	15/09/08 - 20/11/08	34.2
European Sovereign Crisis	22/07/11 - 08/08/11	3.0
Taper Tantrum	23/05/13 - 24/06/13	7.1

## Net Fx Delta Exposure (% NAV)<sup>6</sup>

Region	Delta
Asia	(11%)
Europe	(7%)
Other	6%
USD	12%

Total IR Vega Exposure (% NAV) <sup>8</sup> 0.42%	Total IR Vega Exposure (% NAV) <sup>8</sup>	0.42%
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## Other Asset Classes - Net Exposure (% of NAV)

Class	Delta
Equity	4%
Commodity	(0%)
Credit	(6%)

Total	Fx Vega Exposure (% NAV) <sup>9</sup>	0.65%

#### Sources:

Risk

Performance Data: Unless otherwise indicated, monthly return data is provided by the fund's administrator, International Fund Services (Ireland) Limited ("IFS"). Performance statistics have been estimated by Brevan Howard Asset Management LLP ("BHAM")

Risk Exposure Data: BHAM

#### Notes:

1. Performance data is represented by the performance of BHFL Class A USD shares, net of all investment management fees (2% annual management fee and 20% performance fee) and all other fees and expenses payable by BHFL and BHMF, including an operational services fee payable by BHMF of 0.5% per annum.

- Since inception (April 2003).
- 3. ARR: Annualised Rate of Return, since inception.
- Risk: Annualised standard deviation of returns (based on daily data estimated by BHAM), since inception.
- 5. Sharpe: Annualised excess return (over Federal Funds target rate) / annualised standard deviation of excess returns (based on daily data estimated by BHAM), since inception.
- 6. Figures are rounded to the nearest whole number. Therefore in some instances the total may not equal 100% or 0% (as applicable).
- 7. Equity & commodity net delta; Credit net iTraxx Xover equivalent for EUR denominated positions, net CDX HY equivalent for all others (beta adjustments estimated by BHAM based on 2 years' risk history). Please note that prior to 31 August 2014, a different methodology for calculating net credit exposure was used.
- Change in BHMF NAV for a relative rise of 10% in implied normal yield volatility.
- 9. Change in BHMF NAV for an absolute 1% rise in implied volatility.

Note: Brevan Howard measures leverage according to three calculation methodologies: (i) the "Gross Method" (as required under the EU Alternative Investment Fund Managers Directive ("AIFMD")), (ii) the "Commitment Method" (as required under the AIFMD) and (iii) its own leverage calculation methodology (the "Manager's Method"). For further information, please see the BHMF AIFMD Leverage Report.

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BHM20181031

## **BREVAN HOWARD MASTER FUND LIMITED ("BHMF")**

#### BREVAN HOWARD

Risk Report - As at close of business on 31-Oct-2018

Com

Credit

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Value at Risk (% NAV) <sup>1</sup> 0.36				
VaR by Product				
Product	VaR \$mm	%NAV	%Total	
IR	9.1	0.32%	48%	
Vega FX	3.6	0.13%	19%	
FX	4.5	0.16%	23%	
Equity	1.2	0.04%	6%	

0.01%

0.02%

1%

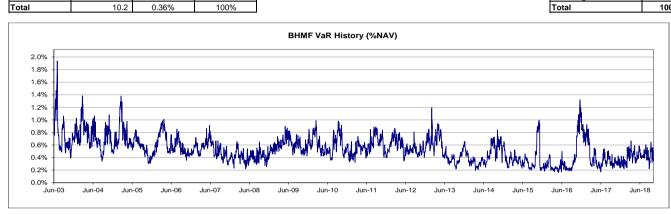
3%

0.2

0.6

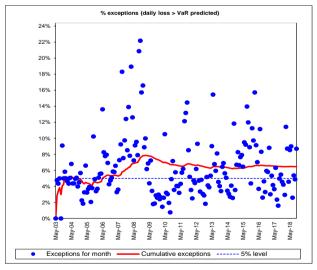
IR VaR by Currency <sup>2</sup>		
Currency	IR VaR	
EUR	0.05%	
USD	0.16%	
JPY	0.00%	
GBP	0.01%	

Exposure by Geographic Region <sup>3,4</sup>		
Region	%	
Americas	40%	
Europe	39%	
Asia	12%	
Oceania	4%	
Africa	1%	
Multi-Region	4%	
Total	100%	



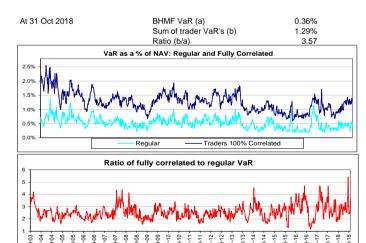
## VaR - Accuracy of VaR Methodology

The VaR method is intended to describe the level of loss that would be exceeded no more than 5% of the time. The method uses historical market data from the last 2 years. The graph shows the actual incidence of losses that are greater than the estimated VaR ("VaR Exceptions"). During 2008, exception rate was greater than 5% because actual market moves were much more volatile than the historical data. The selection of different confidence intervals may achieve different results, including a higher incidence of exceptions which exceed the VaR calculation



## VaR - Reliance on beneficial correlation among Traders

The VaR of BHMF takes account of beneficially low correlations among traders. To account for situations where these correlations change sharply BHAM calculates the VaR assuming all traders are 100% correlated.



Risk

- Calculated using historical simulation based on a 1 day, 95% confidence interval.
- IR risks may exist for currencies other than those listed.
  Geographical Exposure is based on VaR by region.
- 4. Figures are rounded to the nearest whole number. Therefore in some instances the total may not equal 100% or 0% (as applicable). urce: Underlying data provided by the Administrator, IFS Limited. Information derived using software provided by Murex and RiskMetric

BHM20181031

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Brevan Howard has established a risk management framework which is intended to identify, measure, monitor, report, and where appropriate, mitigate key risks identified by the Funds' investment managers. Amongst other things, the risk management framework addresses portfolio risks (such as market, credit, liquidity, counterparty and funding risks), operational risks and outsourcing risks.

Portfolio risks which are monitored by the risk management team include, as at the date hereof, analysis of sensitivity measures, gross and net exposures, value at risk, leverage, stress tests and scenario analyses, with a view to identifying and mitigating the potential impact of extreme market movements. These analyses may be changed from time to time. Brevan Howard believes its risk management framework to be appropriate but gives no warranty as to the adequacy or sufficiency of this framework, or that it is exhaustive or able to address the entire universe of possible risks to which an investment manager or the Funds may be subject.

## Risk Factors

Acquiring an investment in a Fund or any of the other products or services described herein may expose an investor to a significant risk of losing all or a substantial amount of the amount invested. Any person who is in any doubt about investing in a Fund or any of the other products or services described herein should consult an authorised person specialising in advising on such investments, products or services. Any person making an investment in a Fund must be able to bear the risks involved, which include, besides such other risks as may be described in any prospectus or offering memorandum for the relevant Fund, the following:

- The Funds are speculative and involve substantial risk and may have limited, or no, operating history.
- The Funds will be leveraged and will engage in speculative investment practices that may increase the risk of investment loss.
- The Funds will invest in illiquid and volatile securities.
- · Investments in the Funds are subject to restrictions on transfer, withdrawal and redemption and should be considered illiquid.
- As there is no recognised market for interests in the Funds (and no secondary markets are expected to develop), it may be difficult for an investor to realise its investment or to obtain reliable information about its value or the extent of the risks to which an investor is exposed through its investment.
- Past results of the Funds' investment managers are not necessarily indicative of future performance of the Funds, and the Funds' performance may be volatile
- While the Funds are subject to market risks common to other types of investments, including market volatility, the Funds employ certain trading techniques, such as the use of leverage and other speculative investment practices that may increase the risk of investment loss.
- The investment managers have total investment and trading authority over the Funds, and the Funds are dependent upon the services of the investment managers. The use of a single advisor could mean lack of diversification and, consequently, higher risk.
- The Funds are not required to provide periodic pricing or valuation information to investors with respect to individual investments.
- The Funds are not subject to the same regulatory requirements as mutual funds or other regulated fund products.
- The Funds and their managers are subject to conflicts of interest.
- Changes in interest rates or exchange rates may have an adverse effect on the value, price or income of interests in the Funds.
- A portion of the trades executed for the Funds may take place on markets outside the United States and the United Kingdom.
- The Funds are dependent on the services of certain key personnel, and if certain or all of them were to become unavailable, the Funds may prematurely terminate.
- The Funds' managers will receive performance-based compensation, which may give such managers an incentive to make riskier investments than they otherwise would and may offset the Funds' trading profits.
- The Funds' incentive and performance-based compensation, fees and expenses may offset their trading and investment profits.
- The Funds may involve complex tax structures and there may be delays in the provision of important tax information to investors.
- Returns generated from an investment in a Fund may not adequately compensate investors for the business and financial risks assumed.
- The Funds may make investments in securities of issuers in emerging markets. Investment in emerging markets involves particular risks, such as less strict market regulation, increased likelihood of severe inflation, unstable currencies, war, expropriation of property, limitations on foreign investments, increased market volatility, less favourable or unstable tax provisions, illiquid markets and social and political upheaval.

The above summary risk factors do not purport to be a complete description of the relevant risks of an investment in the Funds and therefore reference should be had to the prospectus or offering documents of the Funds and related offering documentation for a more detailed description of these and other relevant risks prior to making any investment.

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