



# NEWSLETTER September 2019

**PFA**  
INVESTMENT FUND

Performance & NAV	<b>AA</b>	<b>A</b>	<b>B</b>
Monthly return	<b>1.14%</b>	<b>1.10%</b>	<b>1.10%</b>
Return year-to-date	<b>9.46%</b>	<b>8.46%</b>	<b>8.17%</b>
NAV per share	<b>335.41</b>	<b>163.19</b>	<b>148.40</b>

*All statistics, unless otherwise stated, are for the AA share class.*

#### MARKET UPDATE September 2019

Financial markets in general experienced realized volatility throughout September as several effects took their toll on market movements.

From historically very low levels of interest rates, with Euro 10 year interest rate swap at around -27bp, improved political sentiment from the ongoing trade war between China and the US as well as Brexit and southern Europe combined with continued positive assessment of the US economy from the FED sent interest rates northbound towards the middle of September.

10 Year EUR swap rates 'topped' at 0%, only to slide downwards to -15bp at the end driven primarily by the ECB and the, opposite FED, negative outlook laid out by the Central Bank for the European economy.

Equities took another leg up and kept pushing towards all-time highs, as volatility across asset classes remained subdued.

It remains evident that the global manufacturing sector stays in contractionary territory, whereas the service sector remains positive. Aided by continued optimistic US consumers it seems the correction in risky assets have been pushed further down the road.....if it will materialize.....

The Midgard Fixed Income Fund provided a positive return of 1.14% in September, bringing the YTD performance to 9.46%.

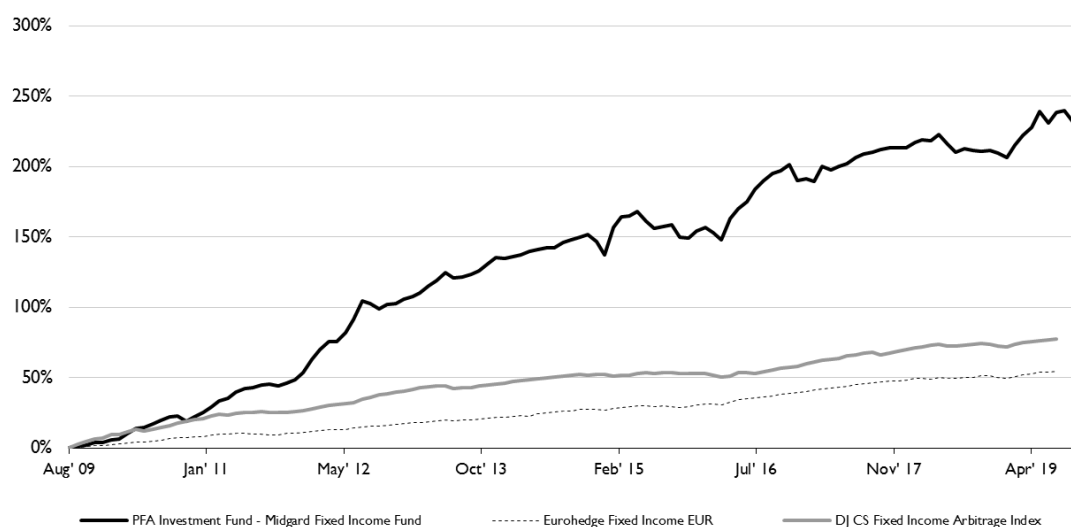
In September we saw a partial rebound of the risk off mood from August. This meant a reversal of the August action including higher yields, steeper curves and Scandi rate markets outperforming versus Euro. As a consequence the non-core portfolio performed quite well and a partial reversal of the August loss followed. On the other hand the core portfolio was a drag on performance due to moderate asset swap spread widenings in both Danish and Swedish covered bonds, where e.g. a generic 4y SEK covered bond widened by approx. 4 bps in asset swap terms. The core portfolio composition remains intact.

Jesper Slemming  
Chief Investment Officer, PFA Investment Fund



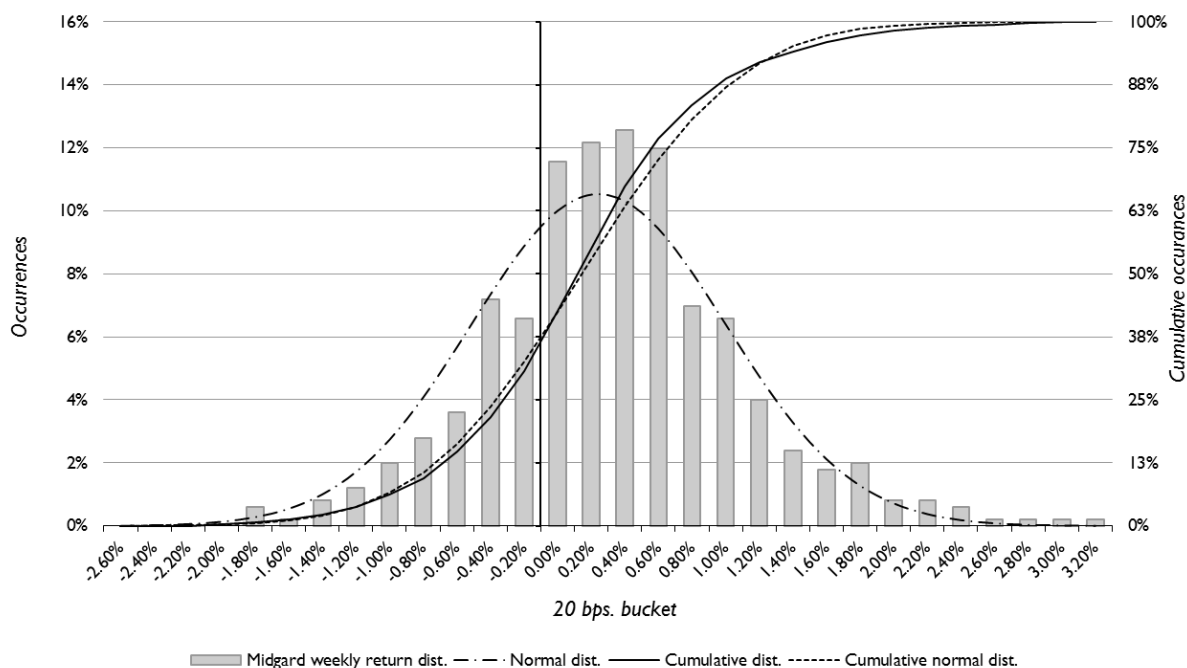
**HISTORICAL PERFORMANCE**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YoY
2009									1.66%	0.59%	1.32%	0.39%	4.01%
2010	1.98%	0.44%	3.23%	3.34%	0.91%	2.32%	2.16%	2.03%	0.31%	-2.98%	2.80%	2.56%	20.67%
2011	2.71%	3.40%	1.65%	3.32%	1.74%	0.30%	1.49%	0.18%	-0.75%	1.31%	1.77%	3.45%	22.50%
2012	6.20%	4.03%	3.56%	-0.01%	3.43%	5.25%	6.97%	-1.07%	-1.82%	1.47%	0.50%	1.54%	34.00%
2013	0.91%	1.01%	2.41%	1.81%	2.70%	-1.82%	0.36%	0.89%	1.14%	2.24%	1.71%	-0.16%	13.95%
2014	0.51%	0.41%	1.29%	0.42%	0.64%	-0.05%	1.57%	0.62%	0.83%	0.88%	-2.06%	-3.82%	1.11%
2015	8.18%	3.01%	0.07%	1.26%	-2.69%	-1.74%	0.37%	0.53%	-3.37%	-0.28%	1.92%	1.18%	8.27%
2016	-1.67%	-1.86%	5.99%	2.64%	1.94%	3.09%	2.39%	1.63%	0.61%	1.62%	-3.75%	0.41%	13.42%
2017	-0.62%	3.53%	-0.84%	0.82%	0.74%	1.45%	0.87%	0.33%	0.57%	0.42%	0.08%	-0.07%	7.46%
2018	1.23%	0.68%	-0.20%	1.24%	-2.12%	-1.80%	0.77%	-0.26%	-0.25%	0.10%	-0.60%	-0.93%	-2.18%
2019	2.90%	2.08%	1.88%	3.39%	-2.39%	2.29%	0.41%	-2.43%	1.14%				9.46%



Return	PFA Investment Fund - Midgard Fixed Income Fund	EuroHedge Fixed Income Arbitrage Index	DJ CS Fixed Income Arbitrage Index
Annualized	12.75%	4.54%	6.02%
Last 12 months	7.89%	3.75%	3.05%
Last 3 months	-0.91%	1.38%	1.21%
Since inception	235.41%	54.81%	77.75%
Best month	8.18%	1.51%	2.77%
Worst month	-3.82%	-0.76%	-1.19%
Positive months	76.03%	83.05%	82.20%
Negative months	23.97%	16.95%	17.80%
Volatility	7.00%	1.48%	2.27%
Sharpe Ratio	1.81	3.00	2.61

RETURN DISTRIBUTION

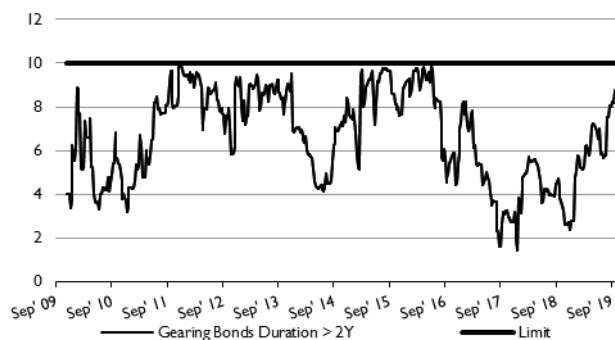


<b>Moments</b>	<b>PFA Investment Fund - Midgard Fixed Income Fund</b>	<b>EuroHedge Fixed Income Arbitrage Index</b>	<b>DJ CS Fixed Income Arbitrage Index</b>
Return	12.75%	4.54%	6.02%
Standard deviation	7.00%	1.48%	2.27%
Kurtosis	1.57	0.32	1.20
Skewness	0.38	-0.27	0.10

<b>Correlation analysis</b>	<b>PFA Investment Fund - Midgard Fixed Income Fund</b>	<b>EuroHedge Fixed Income Arbitrage Index</b>	<b>DJ CS Fixed Income Arbitrage Index</b>
Correlation coefficient	-	53.22%	31.32%
Beta	-	251.80%	96.53%
Alpha	-	1.28%	7.02%
R2	-	28.32%	9.81%
Autocorrelation	18.96%	8.10%	34.12%

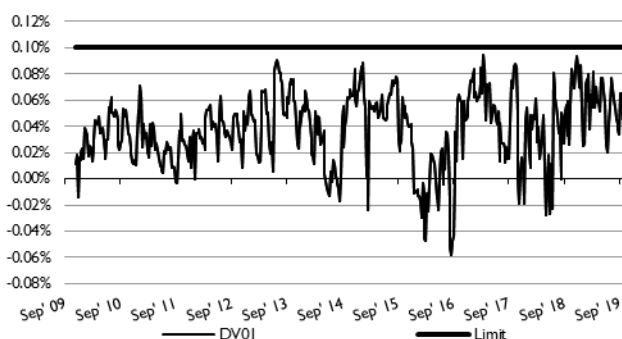
### RISK & LINE LIMITS

#### GEARING BONDS DURATION > 2Y

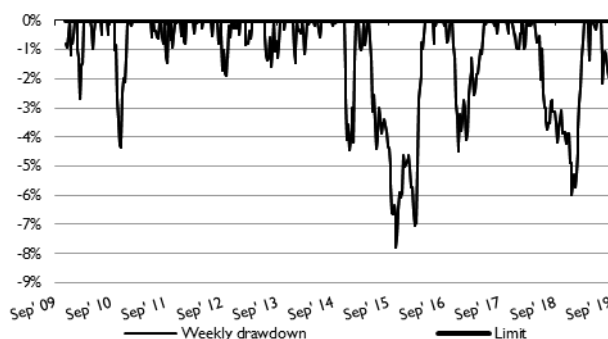


Risk	Midgard	Lime/limit
DV01	0.08%	± 0.10%
Leverage	8.71	Max. 10
VaR	0.54%	Max. 2 %
FX exposure	22.88%	Max. 100 %

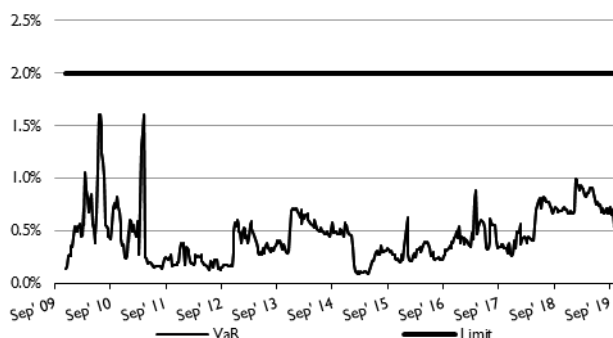
#### DV01



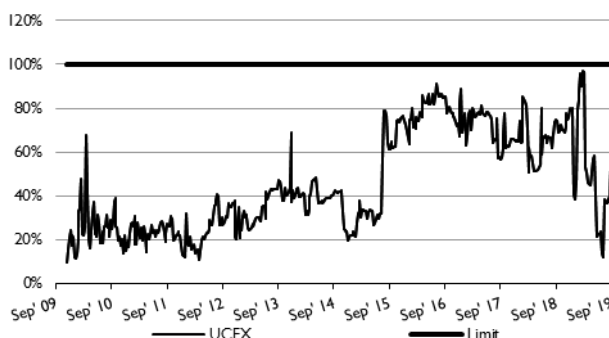
#### WEEKLY DRAWDOWN



#### VaR



#### NON-COVERED FX EXPOSURE



RISK FIGURES

Risk Figure	Weekly data		Note
	Since inception	1Y	
<i>Period</i>			
Portfolio return ( $r_p$ )	12.75%	7.89%	
Excess return ( $r_p - r_f$ )	12.70%	8.30%	
<i>36 month</i>			
Portfolio return ( $r_p$ )	4.15%	-	
Excess return ( $r_p - r_f$ )	4.53%	-	
Maximum drawdown since inception	7.78%	5.97%	
Maximum drawdown 36m	5.97%	-	*
Largest individual drawdown			
First	1.86%	1.30%	
Second	1.85%	1.21%	
Third	1.57%	1.13%	
Average	1.76%	1.22%	
Calmar Ratio	0.76	-	*
MAR Ratio	1.63	1.39	
Sterling ratio	7.22	6.49	
Downside risk	0.60%	1.30%	
Upside risk	1.02%	1.07%	
Loss standard deviation	5.85%	4.85%	
Gain standard deviation	4.91%	3.81%	
Mean absolute moment, downside	-24.28%	-24.13%	
Mean absolute moment, upside	33.47%	28.09%	
Omega ratio	1.69	0.82	
Volatility skewness	0.71	0.62	

\* Not applicable for 1-year returns

# PFA

INVESTMENT FUND

Strategy AUM	EUR 324.6 million
Listing	Irish Stock Exchange
ISIN	LU1439934933
Bloomberg ID	MIDGFXI LX Equity
Investment Manager	PFA Asset Management Sundkrogsgade 4 2100 Copenhagen Denmark +45 39 17 50 00 <a href="http://www.pfaassetmanagement.dk">www.pfaassetmanagement.dk</a>
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Prime Broker	Skandinaviska Enskilda Banken AB +45 33 36 85 07
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