

# Monthly Report – November 2018

## Clear Alpha Global Index (CLAXGBL Index) -0.60% in November, -4.23% in the last 12 months

### About the Clear Alpha Global Index and its sub-indices

The Clear Alpha Global Index™ is designed to be representative of the universe of trading strategy indices. It is calculated and published daily. Its constituents and their respective weights are updated once a quarter. At the end of November 2018, the database contained 2,561 live and 2,085 discontinued trading strategy indices. Indices are considered for inclusion in the Clear Alpha Global Index™ if they i) are unique due to either a different algorithm, sponsor, region or asset class, and ii) aim to exhibit substantial de-correlation to traditional asset benchmarks.

### Clear Alpha Global Index Monthly Performance, 2012 to 2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2012</b>	0.94%	0.44%	-0.28%	-0.16%	-0.38%	-1.17%	0.47%	0.30%	-0.14%	-0.36%	0.25%	0.30%	<b>0.18%</b>
<b>2013</b>	0.14%	-0.19%	0.14%	0.27%	-0.01%	-0.47%	-0.02%	-0.40%	0.38%	0.67%	0.15%	-0.78%	<b>-0.14%</b>
<b>2014</b>	-0.75%	0.10%	0.32%	0.35%	0.95%	0.64%	-0.75%	0.74%	-0.51%	-0.37%	0.79%	0.07%	<b>1.57%</b>
<b>2015</b>	0.09%	0.34%	0.21%	-0.45%	-0.05%	-1.27%	0.45%	-1.88%	0.31%	0.80%	0.77%	-0.11%	<b>-0.81%</b>
<b>2016</b>	-0.08%	1.03%	0.25%	-0.37%	-0.13%	0.70%	0.64%	-0.21%	0.45%	-0.02%	0.05%	0.04%	<b>2.37%</b>
<b>2017</b>	0.42%	1.26%	0.17%	0.77%	0.23%	-0.15%	0.61%	0.92%	0.19%	0.90%	0.30%	0.53%	<b>6.31%</b>
<b>2018</b>	0.20%	-2.07%	0.50%	0.02%	-0.06%	-0.58%	0.17%	-0.18%	-0.27%	-1.93%	-0.60%		<b>-4.74%</b>

### The Global Index reflects the performance of all indices across our database, rather than a product managed by Clear Alpha

	Nov Return	1Y Return	1Y Sharpe	5Y Return	5Y Sharpe
<b>Global Index</b>	<b>-0.60%</b>	<b>-4.23%</b>	<b>-1.66</b>	<b>3.63%</b>	<b>0.02</b>
Arbitrage	-1.04%	-2.96%	-1.04	11.46%	0.45
Carry	2.28%	-0.94%	-0.48	-2.75%	-0.24
Commodity	-8.78%	-5.79%	-0.90	22.99%	0.56
Fixed Income	3.58%	8.84%	1.35	27.71%	0.82
Volatility	0.64%	-6.99%	-0.90	5.45%	0.07
Economic Indicators	-0.64%	-5.86%	-1.81	-3.87%	-0.46
Research	-1.16%	-10.52%	-1.79	-16.00%	-0.72
Macro	0.08%	0.61%	-0.32	7.44%	0.25
Momentum	0.09%	-4.21%	-1.07	1.10%	-0.11
Mean Reversion	0.43%	-6.81%	-0.71	2.57%	-0.02
Trend Following	-0.06%	-3.30%	-1.19	-0.15%	-0.18

November was a difficult month for alternative beta strategies; the Global Index finished down -0.60%.

Global equity markets made marginal gains, volatility declined (as measured by the VIX index, down -3.2 points), EM currencies rallied, oil prices dropped by around -20%, and interest rates fell across major curves (for example, the USD 10 year rate finished -15bps lower at 3.06%).

Regardless of the above, the key price action this month was in natural gas futures which had their biggest intraday gain in eight years amid concerns about colder winter weather in the U.S. (January contracts were up +40% over the month). The difference between March and April futures, normally around \$0.3, blew out to \$1.75 on November 14<sup>th</sup> (around +600%), drawing comparisons to the turmoil surrounding Amaranth's collapse in 2006. The result was a massive inversion in natural gas futures which caused major losses in commodity arbitrage positions. The aggregate Commodity Arbitrage Index fell -8.78%, its worst monthly drop since our records began.

Aside from commodity arbitrage strategies, Fixed Income arbitrage positions posted substantial gains (+3.58%) as interest rates declined, and FX Carry positions progressed as well (+2.28%) helped by strong high yield currency returns versus the USD.

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The rest of the strategy groups saw moderate movement: smaller gains in Volatility Arbitrage and Mean Reversion strategies were offset by losses in Equity Factors. Among the latter, Low Vol and Value factors produced excess returns (+1.5% and +0.3% respectively) while cross-section Momentum strategies sustained losses (-1.5%).

## Top 3 Sub-index Constituents<sup>1</sup> (ranked by 1 year Sharpe ratio)

		1Y Sharpe	1Y return	Nov- 18	YTD return	2017 return	2016 return	2015 return
<b>Arbitrage - Carry</b>								
1) CIBC FX G10 USD Carry	G10 FX Carry Arbitrage	1.7	12.2%	0.2%	10.4%			
2) BOA Merrill Lynch Foreign Exchange Arbitrage	G10 FX Carry Arbitrage	1.4	7.7%	2.2%	5.9%	-0.7%	6.8%	-5.7%
3) Barclays Intelligent Carry	G10 FX Carry Arbitrage	1.2	7.2%	1.2%	6.0%	-2.0%	0.4%	-1.9%
<b>Arbitrage - Commodity Yield Optimization</b>								
1) CIBC COT Enhanced Roll Agriculture	Commodity Congestion Arbitrage	1.7	3.0%	0.0%	2.9%	1.5%	2.2%	0.3%
2) RBS Aquantum Pegasus EL	Commodity Future Arbitrage - 24 commodities	0.7	3.5%	-1.6%	3.6%	7.4%	0.9%	3.8%
3) UBS CMCI Essence	Commodity Future Arbitrage	0.5	2.6%	-0.2%	2.8%	2.6%	1.1%	1.6%
<b>Arbitrage - Fixed Income</b>								
1) Societe Generale BOSS	Global Yield Curve Carry Arbitrage	1.3	5.9%	1.6%	6.7%	1.4%	-0.5%	2.2%
2) Morgan Stanley Enhanced FRB+ USD	USD Forward Rate Bias Arbitrage	1.2	2.8%	-0.2%	2.5%	1.7%	-0.1%	1.2%
3) DB Pulse Basket	USD & EUR Forward Rate Bias Arbitrage	0.9	2.0%	0.1%	1.9%	1.0%	0.3%	0.6%
<b>Arbitrage - Volatility</b>								
1) Credit Suisse Adaptive Volatility Index All Rolls USD	Short USD Swaption Straddles	1.7	6.9%	0.2%	6.8%	6.5%	6.5%	8.6%
2) BOA Merrill Lynch Short Synthetic Variance Index - GL	Short SPDR Gold ETF Variance Swaps	1.4	8.9%	1.7%	8.0%	11.7%	7.8%	14.4%
3) BOA Merrill Lynch Dynamic Synthetic Variance Index - DVXY	Short JPY/USD Variance Swaps	1.2	6.3%	1.8%	5.4%			
<b>Economic Indicators - Research</b>								
1) Morgan Stanley EF Global Quality	Global Equity Long/Short Quality Factor	1.5	8.4%	0.8%	9.4%	3.7%		
2) BOA Merrill Lynch Japan Long-Short Volatility Index	Japan Equity Long/Short Low Vol Factor	1.3	7.7%	0.7%	7.3%	-0.8%		
3) BOA Merrill Lynch Europe Long-Short Volatility	Europe Equity Long/Short Low Vol Factor	1.2	6.6%	1.8%	7.0%	2.9%		
<b>Economic Indicators - Macro</b>								
1) Nomura Macro Cross-Country	Government Bonds Relative Value Investing	1.4	3.0%	0.0%	3.2%	0.4%	0.2%	1.3%
2) Citi Commodities Dynamic Backwardation Alpha	Commodity Backwardation	1.1	6.6%	3.0%	6.5%	4.3%	-2.2%	2.8%
3) Barclays FX Switch	Carry Value Momentum Factor Allocation	1.1	4.5%	0.4%	5.0%	-1.0%	0.2%	0.9%
<b>Momentum - Mean Reversion</b>								
1) Societe Generale Interest Rates Strangle Premium Euro	Short EUR Swaption Strangle	1.2	2.7%	0.2%	2.6%	4.6%	6.5%	-2.0%
2) UBS American Buy-Write	S&P 500 Buy-Write	0.4	4.7%	1.2%	4.6%	2.6%	2.0%	3.7%
3) Societe Generale Tactical Short	Europe Single Stock Mean Reversion - Short	0.3	2.0%	0.3%	1.7%	0.9%	1.3%	-2.2%
<b>Momentum - Trend Following</b>								
1) Nomura Macro Pulse	USD, EUR, JPY, GBP & CAD Short Term Interest Rate	1.3	2.0%	0.2%	1.9%	0.9%	0.2%	0.2%
2) Commerzbank Multi Asset Sharpe	Global Multi-Asset Macro Allocation (Sharpe)	1.2	11.2%	1.2%	10.5%	5.8%		
3) BOA Merrill Lynch Fixed Income Trend	USD, EUR, JPY, GBP Interest Rate & Bond Futures	1.2	4.1%	0.0%	4.0%			

annual performance is blank for indices that were not live during the full year

<sup>1</sup> All performance figures are based on daily snapshots of published returns, not allowing for corrections or restatements at a later stage. In order for all indices to be comparable, the performance numbers in this report have been adjusted when an index is not published in USD or its return is not expressed as a total return.

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## Arbitrage Strategies (CLAXARB Index)

**-1.04% in November, -2.96% in the last 12 months**

### Carry Strategies (CLAXCAR Index) +2.28% in Nov, -0.94% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	-2.11%	2.39%	2.75%	0.13%	0.72%	0.37%	-0.30%	0.73%	-2.61%	0.38%	0.12%	-1.14%	1.30%
2015	-2.82%	1.02%	-0.83%	0.97%	-0.87%	-1.42%	-1.92%	-4.18%	-1.76%	2.88%	0.74%	-1.03%	-9.04%
2016	-1.20%	-0.44%	2.68%	0.09%	-0.90%	1.69%	0.28%	0.55%	0.74%	1.90%	0.38%	0.88%	6.78%
2017	-0.05%	1.91%	-0.39%	-0.61%	-0.37%	0.22%	0.61%	-0.40%	0.67%	-0.63%	-0.42%	1.44%	1.95%
2018	-0.45%	-0.17%	-0.29%	0.91%	-0.84%	-1.05%	1.42%	-5.05%	1.49%	-0.43%	2.28%		-2.34%

Save for one exception, FX Carry strategies all finished positive in November, up 2.1% in aggregate across 25 indices. High yield currencies in the G10 sector posted gains and emerging market currencies finished mostly higher against the USD<sup>2</sup>. Global FX Carry indices performed best, up +1.7% across 14 strategies, while G10 positions showed average profits of +1.3% (11 indices). Equity carry algorithms, mostly comprising Euro Stoxx 50 dividend arbitrage strategies, were broadly flat.

#### Top 3 movers (ranked by 1 month returns)

Arbitrage - Carry	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) DB Ascent Broad Global FX Carry Arbitrage	4.1%	6.4%	0.6	7.7%
2) Barclays Benchmark World Carry Global FX Carry Arbitrage	3.8%	-3.3%	-0.7	-2.2%
3) CIBC FX Global USD Momentum Enhance Global FX Carry Arbitrage	3.6%	5.3%	0.5	6.0%

### Commodity Yield Optimisation (CLAXCYO Index) -8.78% in Nov, -5.79% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	-3.92%	1.63%	1.16%	0.77%	1.29%	1.57%	2.13%	0.79%	-0.20%	0.41%	0.04%	1.53%	7.29%
2015	0.71%	0.08%	0.30%	-3.96%	-1.41%	0.33%	0.87%	-0.70%	-0.12%	2.72%	4.07%	2.97%	5.75%
2016	0.80%	2.96%	-0.05%	-2.11%	0.03%	1.04%	2.58%	-0.02%	0.13%	0.40%	0.73%	-1.29%	5.22%
2017	2.41%	1.14%	0.24%	1.13%	-0.19%	0.78%	0.90%	2.03%	-0.11%	0.21%	1.61%	-0.42%	10.13%
2018	1.92%	2.16%	0.73%	-1.37%	1.75%	-3.26%	2.10%	2.34%	-2.48%	-0.04%	-8.78%		-5.40%

Last month, the Commodity Arbitrage sub-index was up +3.7% year to date and appeared on track to record another solid, positive performance in 2018. The index has been positive every calendar year since we started calculations in 2011. November put an end to this, as the index lost a staggering -8.78% in 30 days. Across the 35 strategies we follow, only six indices finished positive and the average loss stood at -2.3% (before leverage at sub-index level). The primary reason were natural gas future positions, which suffered from an massive curve inversion: the discount of Jan 20 to Jan 19 future prices dropped from -8.4% to -34.5% as the front end of the curve rallied on fears of colder winter weather in the U.S. Jan 19 futures rallied +39.7% in November, including a one day gain of +18.1% on the 14<sup>th</sup>. During the same period, oil prices fell and their future curves steepened<sup>3</sup>, but gains were insufficient to offset losses in natural gas.

#### Top 3 movers (ranked by 1 month returns)

Arbitrage - Commodity Yield Optimization	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) Citi Commodities Congestion/Liquidity Commodity Congestion Arbitrage	0.8%	-2.8%	-1.3	-2.9%
2) Citi Commodities Liquidity Navigator Commodity Congestion Arbitrage	0.4%	0.6%	-1.1	0.7%
3) BOA Merrill Lynch Commodity MLCIC1LS Commodity Congestion Arbitrage	0.2%	1.7%	0.1	1.8%

<sup>2</sup> The NZD and AUD were up +5.5% and +3.3%. The EUR was up +0.1% and the JPY lost -0.5%. The J.P. Morgan Emerging Markets currency index was up +1.9%. Source: Bloomberg

<sup>3</sup> The WTI crude oil Jan 19 contract was down -22.2%. The Jan 20 to Jan 19 curve steepened from -0.4% to +1.9%. Source: Bloomberg

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## Arbitrage Strategies (CLAXARB Index)

**-1.04% in November, -2.96% in the last 12 months**

### Fixed Income Arbitrage Strategies (CLAXFIA Index) +3.58% in Nov, +8.84% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	1.33%	1.93%	-0.18%	1.25%	1.61%	-0.57%	-1.19%	2.38%	-1.09%	3.25%	1.79%	-1.59%	9.14%
2015	2.21%	-0.12%	1.77%	0.12%	-0.27%	-1.57%	1.33%	1.09%	1.87%	0.41%	0.03%	-1.21%	5.74%
2016	3.84%	0.88%	-0.29%	-0.34%	-0.27%	3.22%	-0.35%	-0.29%	0.03%	-1.47%	-4.19%	-1.20%	-0.67%
2017	-0.43%	1.25%	0.20%	1.70%	1.47%	-1.92%	0.14%	0.77%	-0.08%	1.19%	-0.65%	-1.33%	2.25%
2018	0.41%	0.31%	1.16%	0.27%	1.70%	1.24%	0.84%	0.53%	-1.64%	1.53%	3.58%		10.31%

Fixed Income Arbitrage algorithms produced solid gains of +3.58% in November, supported by falling interest rates. Ten year swap rates were down -15bps in USD, -8bps in EUR, -4bps in GBP and -8bps in JPY. Two year swap rates came down by smaller amounts. The two year versus ten year USD curve flattened to 8bps (-6bps lower). Except for two USD Forward Rate Bias indices which were positioned short futures, all strategies in this group were positive. Carry strategies positioned in longer tenors, such as SGI's BOSS, Deutsche Bank's Muni Bond arbitrage, Barclays' SABER, or Nomura's Macro Duration, performed well (+0.8% on average). Diversified Forward Rate Bias strategies contributed +0.6%. Fixed Income Arbitrage, up +10.31% year to date, is now the only sub-strategy that has done well this year.

#### Top 3 movers (ranked by 1 month returns)

Arbitrage - Fixed Income	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) Societe Generale BOSS Global Yield Curve Carry Arbitrage	1.6%	6.7%	1.3	5.9%
2) HSBC Uniform Basket VB USD, EUR & GBP Forward Rate Bias Arbitrage	1.5%	4.1%	0.5	3.8%
3) Societe Generale FIRM Gulf Stream USD & EUR Forward Rate Bias Arbitrage	1.1%	3.6%	0.9	3.3%

### Volatility Arbitrage Strategies (CLAXVOA Index) +0.64% in Nov, -6.99% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	-1.65%	0.93%	0.03%	0.59%	0.69%	1.08%	-0.81%	0.99%	-0.19%	-2.45%	0.83%	-1.61%	-1.63%
2015	-1.37%	2.89%	-0.90%	1.10%	0.13%	-1.24%	2.27%	-5.35%	-0.07%	1.45%	0.83%	-0.12%	-0.64%
2016	-1.80%	-0.65%	1.91%	0.08%	2.12%	-2.29%	0.74%	1.39%	0.08%	0.71%	-0.20%	1.12%	3.15%
2017	1.22%	1.61%	0.99%	1.35%	1.07%	0.25%	1.59%	0.34%	1.32%	1.31%	0.92%	0.71%	13.43%
2018	-0.87%	-7.10%	-0.76%	0.79%	-0.93%	0.51%	1.22%	0.13%	0.87%	-2.15%	0.64%		-7.64%

The Volatility Arbitrage sub-index recovered +0.64% in November. Volatility strategies were positive across equities (+1.0%), fixed income (+0.9%) and currencies (+0.7%); commodities was the only asset class suffering losses (-3.7%) due to the sell-off in oil prices and the turmoil in natural gas futures (for example, the implied volatility for WTI crude oil futures almost doubled, from 26.0% to 47.8%). Equity volatility arbitrage positions (mostly short variance swaps) benefitted from a fall in implied and realised volatilities on the S&P 500 and the Euro Stoxx 50 indices<sup>4</sup>. Short volatility positions in EUR and USD interest rates made gains as interest rate movements were limited<sup>5</sup>. Similarly, FX volatility arbitrage strategies were profitable because major currency prices were stable throughout the month<sup>6</sup>.

#### Top 3 movers (ranked by 1 month returns)

Arbitrage - Volatility	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) BOA Merrill Lynch Short Synthetic Variance Short HYG ETF Variance Swaps	4.0%	11.1%	1.1	12.7%
2) DB Europe Volatility Carry Short Euro Stoxx 50 delta hedged options	3.7%	2.1%	0.1	3.6%
3) Nomura Volatility Risk Premia Short S&P 500 Variance Swaps	3.6%	-14.1%	-0.1	-10.6%

<sup>4</sup> The VIX and VStoxx indices were -3.2 and -1.8 points lower, at 18.1 and 18.5 respectively. 20-day realised volatilities for the S&P 500 and Euro Stoxx 50 indices came down from 24.4% to 19.6%, and from 16.2% to 12.3% respectively. Source: Bloomberg.

<sup>5</sup> 20-day realised normal volatility for USD 10 year swap rates fell to 31bps per annum, from 44bps last month (its one year average stands around 50bps). Source: Bloomberg.

<sup>6</sup> For example, the 20-day realised volatility of the JPY/USD cross dropped from 5.6% to 4.5%. Source: Bloomberg.

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## Economic Indicator Strategies (CLAXECI Index)

**-0.64% in November, -5.86% in the last 12 months**

### Research Strategies (CLAXRES Index) -1.16% in Nov, -10.52% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	2.34%	0.11%	0.49%	-1.78%	-1.20%	1.20%	-2.73%	0.89%	-2.39%	0.27%	-1.01%	1.23%	-2.69%
2015	-1.71%	0.76%	0.69%	-1.30%	1.63%	0.08%	-2.66%	-3.20%	-1.19%	-1.04%	-0.22%	0.81%	-7.22%
2016	-3.64%	1.08%	1.80%	-1.12%	-0.79%	-4.33%	0.73%	-0.90%	2.30%	-0.11%	2.69%	1.72%	-0.83%
2017	0.08%	0.80%	0.33%	0.32%	-0.68%	0.99%	0.33%	0.67%	1.12%	1.26%	0.43%	0.33%	6.14%
2018	-1.37%	-0.51%	1.89%	-0.87%	-0.02%	-2.17%	-1.75%	-0.17%	-1.89%	-3.28%	-1.16%		-10.81%

Equity factor strategies suffered losses in November, down -1.16%. Across the spectrum, Low Vol and Value factors were positive (+1.5% and +0.3%) while Momentum factor algorithms declined (-1.5%). Quality and Size factors were flat on average. Small cap and tech stocks underperformed: the Russell 2000 index was up +1.4%, the Nasdaq Composite index was up +0.3%, while the S&P 500 index was up +1.8% (the order was similar for European indices, albeit with negative returns). For the second consecutive month, Value stocks have been outperforming Growth stocks by a wide margin<sup>7</sup>. Geographically, U.S strategies (+0.6%) have fared better than their European peers (-0.3%), possibly helped by stronger equity markets in the U.S (the S&P 500 index was up +1.8%, the Euro Stoxx 50 index was down -0.8%).

#### Top 3 movers (ranked by 1 month returns)

Economic Indicators - Research	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) DB Equity Low Beta TurnOver Control Fac Global Equity Long/Short Low Vol Factor	3.3%	8.1%	0.9	7.7%
2) Societe Generale US Low Volatility Beta US Equity Long/Short Low Vol Factor	3.1%	3.3%	-0.2	0.6%
3) Societe Generale US Quality Carry Beta I US Equity Long/Short Quality Dividend Factor	2.5%	-0.4%	-0.6	-1.1%

### Macro Strategies (CLAXMAC Index) +0.08% in Nov, +0.61% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	-0.33%	-2.25%	-0.04%	0.16%	1.81%	0.31%	-0.60%	0.24%	0.59%	-0.16%	0.29%	-0.60%	-0.64%
2015	-0.55%	-0.49%	0.22%	-0.55%	-0.04%	-2.19%	1.72%	-0.20%	0.57%	1.10%	0.29%	0.06%	-0.10%
2016	0.80%	1.79%	-0.38%	-0.37%	-0.95%	1.08%	1.27%	-0.33%	-0.35%	-0.92%	0.45%	-0.26%	1.82%
2017	-0.00%	1.39%	0.35%	1.30%	0.44%	-0.21%	0.24%	1.49%	0.38%	0.92%	1.01%	0.56%	8.13%
2018	0.13%	-0.96%	0.93%	0.48%	-0.54%	0.49%	-0.53%	-0.82%	2.22%	-1.37%	0.08%		0.05%

The Macro sub-index was broadly flat this month (+0.08%). Commodity value strategies were widely dispersed as gains in natural gas futures offset losses in crude oil and agriculture futures<sup>8</sup>. Depending on the weighting scheme adopted by the algorithm, the result could either be a large gain, a large loss or a marginal return. FX value strategies were up +0.3% on average, benefitting from gains in EM currencies (the J.P Morgan EM currency index was up +1.9%, see also table below). Equity strategies gained +0.8% helped by turn of the month positions on the S&P 500 index (see table below). Finally fixed income strategies were up +0.4% on average as the USD interest rate curve flattened<sup>9</sup>.

#### Top 3 movers (ranked by 1 month returns)

Economic Indicators - Macro	Nov-18 return	YTD return	1Y Sharpe	1Y return
1) Societe Generale Commodity Curve Mon Commodity Backwardation - GSCI Weights	6.6%	-7.4%	-0.3	-3.9%
2) Barclays TOM US Long/Short Turn of Month S&P 500	6.3%	9.8%	0.5	7.6%
3) CIBC FX EM USD Value EM FX Value Convergence	4.4%	-5.7%	-0.5	-3.1%

<sup>7</sup> The Russell 1000 Value Index has outperformed the corresponding Growth Index by +1.8% in November and +3.7% in October. Source: Bloomberg.

<sup>8</sup> Natural gas futures (Jan 19) were up +39.7% (inverted curve), WTI crude oil futures were down -22.2% (inverted curve), and Soybean futures were up +5.0% (positive curve). Source: Bloomberg.

<sup>9</sup> The USD 2 year versus 10 year curve flattened -6bps, to 8bps. Source: Bloomberg.

# Monthly Report – November 2018

## Momentum Strategies (CLAXMOM Index) +0.09% in November, -4.21% in the last 12 months

### Mean Reversion Strategies (CLAXMRE Index) +0.43% in Nov, -6.81% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	0.18%	0.93%	1.38%	1.04%	0.78%	0.07%	-0.45%	-0.07%	-0.89%	-3.02%	0.21%	0.47%	0.56%
2015	0.24%	0.52%	0.75%	-0.24%	0.37%	0.06%	-0.20%	-3.32%	2.36%	0.19%	0.27%	0.56%	1.48%
2016	-1.54%	0.33%	0.08%	-0.18%	0.45%	1.56%	-0.05%	0.40%	1.01%	0.19%	-0.31%	-0.25%	1.65%
2017	0.75%	0.38%	0.84%	0.73%	0.37%	0.47%	1.18%	1.73%	0.07%	0.65%	-0.86%	1.21%	7.77%
2018	-1.42%	-6.31%	0.37%	0.81%	-0.45%	0.37%	1.37%	0.43%	-0.76%	-2.81%	0.43%		-7.92%

The Mean Reversion sub-index gained a modest +0.43% in November. Buy-write strategies on the S&P 500 index were the best performers (+1.9% across six indices), helped by positive U.S. stock market returns (the S&P 500 was up +1.8%). Buy-write strategies on the Euro Stoxx 50 index were up +0.8% on average. Short term mean reversion signals on the S&P 500 index sustained losses of -0.5% on average (across ten indices). Similar signals on the Euro Stoxx 50 index on the other hand finished slightly positive (up +0.1%, six indices). The losses on the S&P 500 index (by short term mean reversion signals) was due to a prolonged sequence of negative daily returns (with little corrections) between November 7<sup>th</sup> and November 23<sup>rd</sup>.

#### Top 3 movers (ranked by 1 month returns)

Momentum - Mean Reversion		Nov-18 return	YTD return	1Y Sharpe	1Y return
1) Natixis US Equity Enhanced Buy Write	S&P 500 Buy-Write and Low Vol Factor	3.6%	1.5%	-0.1	-0.1%
2) BNP Paribas Buy Write 103	S&P 500 Buy-Write	1.9%	2.7%	0.1	3.8%
3) BNP Paribas 103 EU Call Carry	Euro Stoxx 50 Buy-Write	1.8%	-1.4%	-0.5	-2.1%

### Trend-Following Strategies (CLAXTRF Index) -0.06% in Nov, -3.30% in the last 12 months

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	-1.29%	-0.20%	-0.60%	0.49%	0.99%	0.82%	-1.30%	0.91%	0.35%	-0.39%	2.01%	0.91%	2.66%
2015	1.82%	-0.36%	0.33%	-0.62%	-0.00%	-2.08%	0.73%	-1.01%	0.60%	-0.32%	0.82%	-1.36%	-1.51%
2016	0.68%	1.01%	-1.21%	0.24%	-0.22%	1.75%	-0.05%	-1.33%	0.59%	-0.27%	0.13%	0.04%	1.32%
2017	-0.22%	1.54%	-0.68%	0.33%	0.26%	-1.28%	0.28%	0.58%	-1.13%	1.39%	-0.17%	0.83%	1.70%
2018	2.51%	-2.55%	-0.13%	-0.27%	0.01%	-0.10%	-0.42%	0.51%	-0.52%	-3.05%	-0.06%		-4.09%

Trend following strategies finished slightly lower in November as Commodity and Fixed Income strategies gained (+0.3% each), while Equity and FX indices declined (-1.0% and -0.7%, respectively). Commodity positions were positive due (in part) to the rise in natural gas futures<sup>10</sup>. Fixed income trend following strategies were helped by falling interest rates and rising government bond prices<sup>11</sup>. FX strategies lost ground because EM currencies corrected upwards (they are down -11.9% year to date as per the J.P. Morgan EM Currency index). Equity algorithms were undermined by a VIX trend following algorithm which held a long position as prices came back down. Finally, multi-asset trend following indices remained unchanged, as equity, commodity and bond benchmarks did not consistently follow previous trends.

#### Top 3 movers (ranked by 1 month returns)

Momentum - Trend Following		Nov-18 return	YTD return	1Y Sharpe	1Y return
1) BNP Paribas Alpha Momentum	Commodity Trend Following - Long/Short	6.9%	0.1%	-0.2	-0.2%
2) BNP Paribas Alpha Commodity Trend	Commodity Trend Following	6.4%	4.4%	0.9	5.3%
3) CIBC Cross Asset Momentum	Multi-Asset Trend Following - Long/Short	4.6%	-2.3%	-0.3	-0.5%

<sup>10</sup> The front month gas contract (Jan 19) was up +39.7% in November. It is up +8.7% in the six months ended October 2018. Source: Bloomberg

<sup>11</sup> The current Bund price (0.25% Aug 2028) was up +0.7% in November. The 0.5% Aug 2027 German Government bond is up +2.0% over the past six months. Source: Bloomberg