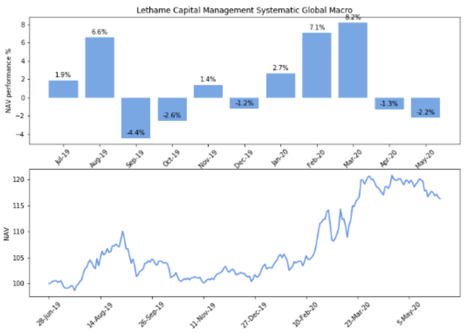
Lethame Capital Management

Technology : Research : Investing

Program Update May 2020

	1 month	3 month	YTD	Inception*
Lethame Capital Management	-2.2%	4.5%	14.5%	15.9%

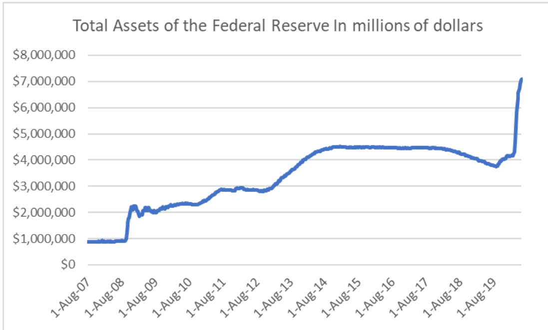
This commentary refers to the performance of the strategy of my personal investment vehicle, please see disclaimer. *Live trading from 1st July 2019.



The system delivered a return of -2.2% for the month of May. This highlights the nature of the edge we are aiming to capture. While markets are in a transition phase or simply in a period of uncertainty the strategy suffers many small losses resulting in drawdown. When the next clear trading signal presents itself we hope to capture it generating an outsized return. In fact we are clear from our extensive research that losses will occur something more than 50% of the time, such is the nature of a diverging strategy. As uncomfortable as it is, we believe it is for this reason that the edge still exists and has not been arbitraged away.

The strong performance of risk assets reflects continued optimism that the actions of central banks will result in a 'V' shaped recovery rather than many of the other letters of the alphabet that have been bandied around. In U.S. equities it is in fact shaping up to be the strongest 50 day rally ever, beating even the rally off the 2009 low.

It should be remembered that the stimulus in place is unprecedented. The Federal Reserve has expanded its balance sheet by an astonishing 73% since the beginning of the year a bigger increase than in the four years following the 2008 crisis.



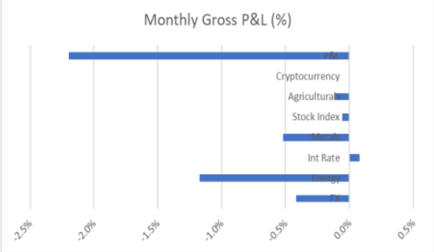
Despite all of this there remain signs of concern in the bond market. One particular historic milestone was that Fed Fund futures traded with an implied negative yield for the first time during the month, even the U.S. market is starting to seriously anticipate the possibility of negative interest rates.

Governments continue to create the money that the private financial sector is unwilling or unable to create. In normal times private sector banks create the majority of money. When they don't do this there cannot be economic growth. Since 2008 central banks have stepped in to fill the gap created by banks not lending with their various quantitative easing programs. The process of credit creation is positive if it funds productive assets, but the recent history is that money which was created first by the private sector and now by the government is finding its way mainly into non-gdp producing financial assets. Bridgewaters[1] Bob Prince this month claimed that of the US$6tn that the Fed was printing as part of its latest round of quantitative easing US$2tn would support the governments fiscal policies and the rest would make its way into financial markets.

In relation to those fiscal policies it appears that they are generally temporary in nature and governments are contemplating tax increases to fund them[2]. Fiscal policy that is not linked to credit creation cannot boost economic growth and thus will not create inflation.

Lethame Capital Management

Technology : Research : Investing



Winning positions	
Gold	
Eurodollar	
Soybeans	
Losing Positions	
West Texas Intermediate	
Copper	
Platinum	

Month End Risk Overview	
30 Day VaR at 99% Confidence	6.84%
Margin to Equity	8.14%
Max Drawdown	9.0%

Concerns about inflation in the real economy abound in the financial media but the bond market does not seem too concerned as yet. There is plenty of inflation to be seen in asset markets and given the current nature of policy we believe this is where it will stay. Historically, when governments print money which ends up in financial assets it is asset price inflation that results and not the inflation of the goods sector that the market fears.

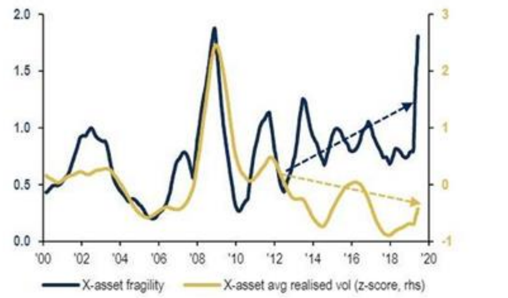
It is unclear given the extent of government intervention whether markets are able to perform their capital allocation function effectively and as such it one has to reserve a degree of caution even in the face of this unprecedented rally.

On this note Bank of America may have highlighted a good reason for continued caution as they have found that markets remain 'fragile' despite the fact that more obvious measures of stress like option implied volatility have receded. Lethame Capital's system has its own measure of the fragility of the assets it trades and that measure remains more than 2 standard deviations above its long term average indicating, in our opinion, that market has not yet returned to 'normal'.

Within the portfolio with the exception of interest rates every asset class gave back gains as the reversal of prior trends continued. Of particular note were losses in crude oil, which did not see the delivery story outlined here last month play out in the June expiry.

Not surprisingly it was other risk asset short positions such as those in the metals complex that were costly during the month. The 8% rally in platinum and 4% rally in copper underline the markets return to risk taking and these three positions account for almost 100% of the strategies monthly loss.

Chart 17: The divergence between x-asset fragility and volatility since 2013 only widened further in 2020 as markets reacted to COViD-19



Source: BofA Global Research. Data from Oct-99 to May-20. X-asset fragility & X-asset realized vol are computed for: Equity: SPX, SX5E, FTSE, NKY, HSCEI. Rates: 10y UST, Bunds, Gilts, JGBs, BTPs. FX: EURUSD, GBPUSD, USDJPY, AUDJPY, MXNUSD. Commodities: Oil, Nat Gas, Aluminum, Gold, Corn. Credit: US & EU IG & HY, EM credit. Fragility = 1y kurtosis of weekly returns (1y MA). Realised vol = z-score of 1y vol of weekly returns (1y MA)

In terms of profits, interest rates were helpful as there was a modest profit on Eurodollars and a slightly less positive performance generated by t-notes. Gold was the best performing long position during the month.

[1]https://www.investmentmagazine.com.au/2020/06/bridgewater-sees-41-trillion-hole-in-income/#:~:text=Bridgewater%20Associates%2C%20the%20world's%20largest,the%20outbreak%20of%20the%20pandemic.

[2]https://www.theguardian.com/business/2020/may/13/treasury-tax-hikes-pay-freezes-covid-19-costs-budget-deficit-spending

Lethame Capital Management

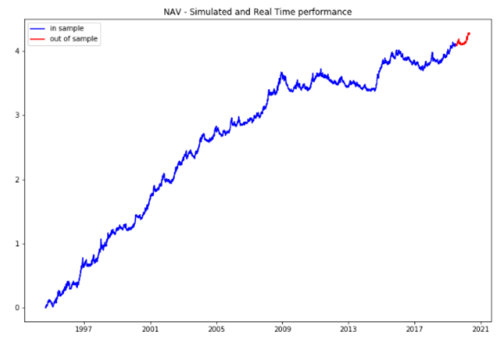
Technology : Research : Investing

System Management

Lethame Capital's systematic investment program is designed to provide exposure to a diversified range of return streams. The program is calibrated so that it scales back the risk it takes should the instruments it trades exhibit an unusually high level of co-movement indicating that markets are being driven by a single underlying factor and making the program more vulnerable to a reversal of that single factor.

The positively skewed expectation of strategies of this nature is many small losses and a smaller number of large profits. As such our observation is the system will suffer losses as much as half of the time. The dynamic nature of the strategy introduces a convexity to the payoff which has similarities to an option position. The observation so far of larger monthly profits than the smaller monthly losses is encouraging in that it consistent with the profile we set out to achieve.

Complete Time Series of Backtested and Live Performance



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
1994									2.55%	6.44%	2.78%	-1.89%	10.07%
1995	-6.22%	1.26%	3.89%	-0.86%	11.91%	3.73%	-3.36%	1.40%	2.05%	5.03%	6.04%	5.13%	32.95%
1996	1.24%	-10.70%	2.95%	2.94%	0.06%	0.86%	-6.01%	6.72%	10.75%	14.04%	14.16%	-11.82%	23.32%
1997	5.97%	-6.37%	3.65%	-0.55%	-0.11%	0.23%	15.02%	-11.34%	2.19%	4.16%	7.84%	7.30%	28.61%
1998	2.24%	-3.39%	5.53%	0.79%	7.55%	3.52%	1.94%	9.77%	-1.57%	-2.77%	-0.91%	8.44%	34.61%
1999	0.20%	3.76%	-3.35%	-2.48%	5.46%	-3.52%	-2.55%	-0.80%	1.16%	0.49%	1.60%	4.96%	4.49%
2000	4.02%	10.30%	-1.80%	2.04%	-2.40%	-1.64%	6.62%	0.83%	4.48%	5.90%	5.15%	6.24%	46.64%
2001	6.37%	2.46%	12.99%	-8.17%	1.32%	1.82%	6.26%	1.23%	10.07%	6.16%	-12.06%	3.84%	33.89%
2002	-1.64%	0.23%	-3.68%	3.40%	0.86%	10.37%	4.48%	4.76%	7.58%	-4.05%	0.48%	10.70%	37.35%
2003	2.48%	2.91%	-3.93%	4.06%	1.68%	0.02%	-5.52%	0.09%	3.99%	2.31%	3.09%	9.73%	22.03%
2004	4.55%	7.22%	3.33%	-9.04%	-1.03%	-0.71%	0.21%	1.44%	2.50%	4.57%	7.43%	5.91%	28.33%
2005	-4.04%	-3.37%	-4.62%	-1.88%	5.48%	2.03%	-3.42%	3.17%	-1.45%	4.85%	11.99%	-5.48%	1.77%
2006	3.31%	-5.19%	1.58%	5.94%	-0.27%	-5.69%	-0.05%	2.98%	-1.23%	1.56%	5.30%	-1.76%	5.91%
2007	0.92%	0.17%	-1.81%	7.17%	-0.94%	2.51%	0.14%	-1.84%	7.40%	4.16%	1.16%	0.07%	20.24%
2008	7.61%	19.59%	-3.82%	-1.38%	-0.12%	5.42%	-5.84%	2.52%	9.53%	7.28%	6.74%	2.94%	60.19%
2009	-3.78%	0.74%	-8.21%	-4.56%	-4.77%	-1.90%	-1.67%	1.96%	4.56%	-1.60%	11.02%	-6.96%	-15.47%
2010	-3.64%	-2.30%	5.89%	1.62%	-6.05%	1.07%	-1.24%	0.97%	7.03%	8.05%	-5.21%	8.90%	14.49%
2011	2.35%	-0.34%	-1.11%	10.41%	-9.68%	-3.67%	3.87%	-2.30%	0.74%	-6.58%	-1.76%	-1.29%	-10.25%
2012	-1.72%	2.73%	-3.48%	-2.04%	6.59%	-2.05%	6.77%	-5.25%	-3.20%	-4.24%	-1.88%	1.87%	-6.57%
2013	4.67%	-2.55%	2.27%	0.02%	-2.23%	0.58%	-2.96%	-0.28%	-3.39%	-1.58%	2.87%	4.16%	1.16%
2014	-6.10%	-1.04%	-0.61%	-0.76%	2.43%	-0.14%	-1.86%	3.92%	16.43%	3.98%	9.81%	1.36%	28.85%
2015	10.92%	-5.01%	4.61%	-4.37%	2.66%	-2.29%	12.73%	-2.38%	0.03%	-4.05%	11.60%	-5.73%	17.48%
2016	3.72%	1.16%	-5.27%	-5.68%	-0.41%	-0.20%	3.01%	-0.22%	-5.25%	-3.68%	1.80%	0.05%	-10.99%
2017	-4.77%	3.15%	-4.84%	-2.14%	-1.51%	-1.15%	3.78%	5.90%	-4.30%	3.01%	1.13%	4.37%	1.84%
2018	9.30%	-7.91%	-1.52%	-0.88%	-3.02%	1.38%	-1.37%	5.56%	5.28%	2.46%	-2.98%	8.19%	13.87%
2019	-4.00%	8.61%	1.90%	4.96%	-2.39%	0.49%	1.90%	6.60%	-4.40%	-2.60%	1.40%	-1.20%	10.84%
2020	2.70%	7.10%	8.20%	-1.30%	-2.20%								14.50%

Simulated
Real Time