Keeping you up to date with financial markets and Frame Funds.

Frame Funds.

February 2023 // Issue 22

IN THE FRAME

QUANTITATIVE INVESTING

FUND PERFORMANCE

How our strategies performed in January

BREAKAWAY MOMENTUM

What does this indicator mean for equity markets

WHAT I SAW
JANUARY 2023

WRITTEN BY HUE FRAME

HUE FRAME
Managing Director & Portfolio Manager

In this issue of 'What I saw', Hue covers recent market performance and Australian inflation data. He covers the highly effective indicator called 'Breakaway Momentum' and provides updates on how our strategies performed in January.

January saw global share markets rise. The S&P and Russell 2000 rose by +6.18% and +8.40% respectively. Fixed Income markets rose over the course of the month as investors continued to speculate on a slower path of interest rate increases this year.

Breakaway momentum

On the 13/01 the US markets experienced breakaway momentum. This is the 25th time since 1945. For readers who haven't heard of Breakaway momentum (some people call it a "breadth thrust") it occurs when ten-day total advances on the NYSE are greater than 1.97 times ten-day total NYSE declines. 96% of occurrences seen since 1945 have resulted in a positive 12 month performance, with the average being 20.7%.

Australian inflation

On the 25th January, Australian inflation numbers were released. It showed an annualised increase of 8.4% vs expectations of 7.6%. Prior to this release, the RBA had maintained its dovish stance on interest rates (versus other global central banks), however with such a large beat, expectations of further rate increases have now spiked.

As goes January, so goes the year

Generally attributed to Yale Hirsh of the Stock Trader's Almanac, it has generated much excitement recently, as the US market's return in January 2023 was not only positive, but it was among the highest 10% of monthly returns over the past 40 years. After a very tough 2022, investors are understandably looking for some hope that the year ahead will be better.

Portfolio performance

During January, The Frame Long Short Australian Equity Fund (FLSAEF) rose +1.34%, while the Frame Futures Fund 1F (FFF) declined by -1.20%.

Largest contributors for the FLSAEF were Mineral Resources Ltd **(ASX: MIN)**, Lovisa Holdings Ltd **(ASX: LOV)** and Pro Medicus Ltd **(ASX: PME)**. Largest detractors were Pilbara Minerals Ltd **(ASX: PLS)** and Reliance Worldwide Corp **(ASX: RWC)**.

Largest contributors for the FFF were investments in gold, lean hogs, canola, Nasdaq, NYFANG and Copper. Largest detractors were natural gas, Japanese government bonds, and Indian index exposure.

Outlook

Through-out February, we will be reaching out to current and future investors to provide updates on Frame Funds Management and our recent strategy development work. There have been many exciting developments on both a corporate and strategy level which we will communicate to everyone.

MARKET INSIGHTS
Quantitative Investing

WRITTEN BY FRAME FUNDS RESEARCH

In this issue of 'Market Insights', we provide an introduction to Quantitative Investing, how it should be a key part of an investor's portfolio, and what is strategy optimisation.

An Introduction to Quantitative Investing

Quantitative investing, also known as quantitative analysis or "quant" investing, is a strategy that uses mathematical and statistical models to make investment decisions. This approach has been gaining popularity in recent years, and for good reason. Here are some of the key reasons why an investor should consider incorporating quantitative investing strategies into their portfolio.

First and foremost, quantitative investing can help to reduce the impact of human emotions on investment decisions. This is because the models used in quantitative investing are based on objective data and mathematical calculations, rather than subjective opinions or feelings. This can help to eliminate the potential for biases and mistakes that can occur when making decisions based on emotions or intuition.

In addition, quantitative investing can also lead to more efficient and effective portfolio management. Quantitative models can be used to identify and analyze patterns in financial data, which can then be used to make more informed investment decisions. This can lead to better risk management and higher returns on investment.

One of the most significant benefits of quantitative investing is its ability to identify undervalued assets. By analyzing large amounts of financial data and identifying patterns that are not immediately obvious to the human eye, quantitative models can help to identify assets that are undervalued by the market. This can lead to significant returns for investors who are able to capitalize on these opportunities.

Quantitative investing can also help to diversify an investment portfolio. By using mathematical models to identify different types of investments, investors can access a wider range of assets and reduce the overall risk of their portfolio. This can be especially beneficial for investors who are looking to spread their risk across multiple asset classes.

Quantitative investing has been proven to be effective by academic research and practical results. According to a study by AQR Capital Management, a quantitative investment management firm, a portfolio that is invested in quantitative strategies has achieved an average return of 14.1% per year between January 1995 and December 2019. This is compared to a return of 9.8% per year for the S&P 500 index during the same period.

This research indicates that quantitative investing can lead to higher returns than traditional investing methods.

In conclusion, quantitative investing is an effective and efficient way to manage an investment portfolio. By using mathematical models to make investment decisions, investors can reduce the impact of human emotions, increase returns, and diversify their portfolio.

With the benefits of quantitative investing, it is essential to include it as a strategy in an investment portfolio. In addition, the statistics and evidence have shown that quantitative investing has been successful in achieving higher returns than traditional methods.

MARKET INSIGHTS
Quantitative Investing cont.

WRITTEN BY FRAME FUNDS RESEARCH

What is Optimisation?

Optimization of a trading strategy is the process of adjusting the parameters of a strategy to achieve the best performance.

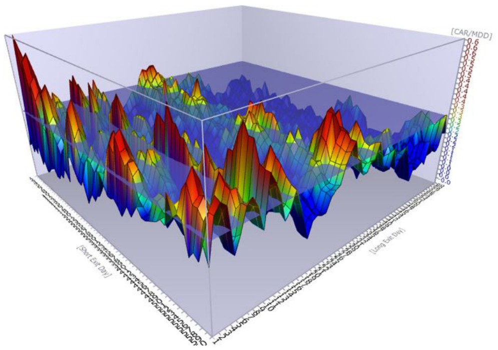
Why should you optimise a strategy?

There are several reasons for running an optimization of a trading strategy.

Identify the best set of parameters for a strategy, which can lead to improved performance.

Help identify any potential issues with a strategy, such as overfitting or poor risk management.

Optimisation example



Source: Frame Funds Management Research

Identify the best trade entry and exit points, which can improve the accuracy and distribution of the strategy.

Why shouldn't you optimise a trading strategy?

There are some reasons against running an optimization of a trading strategy.

Computationally expensive, especially for complex strategies.

Optimization can lead to overfitting, which can result in poor performance on new, unseen data. This is because the optimizer may find a set of parameters that fit the historical data well but not the future data.

Over-parametrised. When you run an optimisation, generally strategy complexity increases, which reduces sample size, increasing in-sample returns and performance statistics. This may not reflect well during out of sample testing.

In summary, Optimization of a trading strategy can lead to improved performance and risk management. However, it also has its drawbacks, such as the potential for overfitting and computational expense.

It's crucial to use techniques like in-sample, out-of-sample, and walk-forward testing to ensure that the strategy is robust enough to changing market conditions.

MULTI-STRATEGY QUANTITATIVE HEDGE

WRITTEN BY HUE FRAME

Frame Futures Fund 1F

Units of the Frame Futures Fund 1F declined by -1.20%. Equity investments rose +1.67%, while currency, commodity and fixed income investments declined by -0.08%, -2.12% and -0.38% respectively.

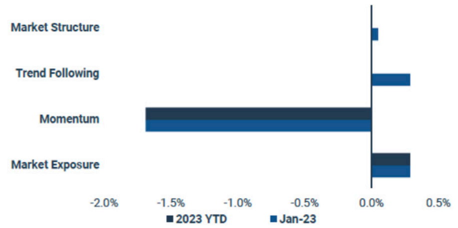
Largest contributors were investments in gold, lean hogs, canola, Nasdaq, NYFANG and Copper. Largest detractors were natural gas, Japanese government bonds, and Indian index exposure.

The Fund ended the month with margin to equity of 21.05%, versus, the end of December of 18.18%.

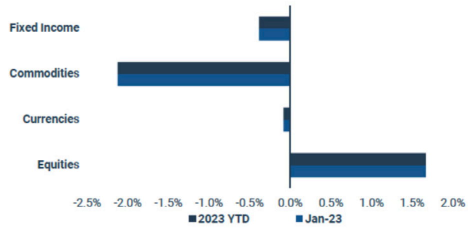
In terms of strategy attribution, Momentum detracted -1.69%, Market Exposure added +0.29%, Trend Following added +0.29%, while Market Structure added +0.05%.

In terms of fund activity, the strategies were active in 47 markets, with a large skew to commodity and equity markets.

STRATEGY ATTRIBUTION (%)



ASSET ATTRIBUTION (%)



FUND PERFORMANCE as at 31ST January 2023

	1-Mth	3-Mth	1-Yr	2-Yr p.a	3-Yr p.a
Frame Frame Futes Fund 1F	**-1.20%**	**-3.82%**	**-**	-	-
RBA Cash Rate + 3%	0.48%	1.42%	-	-	-
Excess Return	**-1.68%**	**-5.23%**	**-**	-	-

Past performance is not an indicator for future performance. This is not intended to be financial advice and does not take into account any particular person's circumstances. Before relying on this information, please speak to an independent financial adviser.

QUANTITATIVE AUSTRALIAN EQUITIES

WRITTEN BY HARRY HEANEY

Frame Long Short Australian Equity Fund

Units of the Frame Long Short Australian Equity Fund increased +1.34% in January. Comparatively, the S&P/ASX200 Accumulation Index advanced +6.23%.

Global equity markets had a hot start to the year, with the 'soft landing' narrative taking centre stage. Investors seemed optimistic that both growth and inflation would slow to a sustainable level, allowing central banks to ease monetary policy. Counter to this theory, inflation in Australia hit a new high for the December quarter at 7.8%.

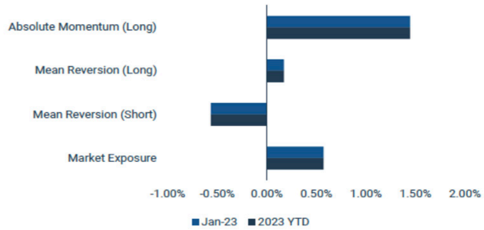
Absolute momentum strategies (long only) fared well in January, contributing +1.45%. Our diverse basket of longer-term holdings allowed us to participate in the upward move. As the market continues to show signs of resilience, we will increase our investment in momentum signals of all frequencies. Top performers were Mineral Resources Ltd (ASX: MIN), Lovisa Holdings Ltd (ASX: LOV) and Pro Medicus Ltd (ASX: PME). They contributed approximately +0.28%, +0.17% and +0.15% respectively.

Mean reversion strategies (long and short) underperformed for the month, detracting -0.39%. The primary driver of underperformance were short trades which suffered as markets trended higher, especially in the lithium miner space. The largest detractors were Pilbara Minerals Ltd (ASX: PLS) and Reliance Worldwide Corporation Ltd (ASX: RWC). They detracted approximately -0.22% and -0.20% respectively.

The market exposure strategy (long and short) performed solidly over the month. It was able to increase gross exposure at the beginning of the month as the market moved off local lows and began to trend. It contributed approximately +0.57%.

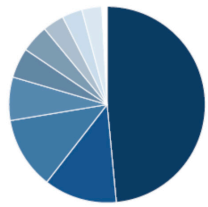
Activity was higher than average over the course of the month and the Fund has exposure in every sector. The highest weighted sector remains materials at 11.88%.

STRATEGY ATTRIBUTION (%)



SECTOR ALLOCATION

Sector	Weight
Cash	47.87%
Materials	11.88%
Financials	11.71%
Industrials	7.05%
Consumer Staples	4.86%
Energy	4.50%
Communication Services	3.48%
Consumer Discretionary	3.28%
Real Estate	3.23%
Health Care	0.86%
Utilities	0.66%
Information Technology	0.63%



FUND PERFORMANCE as at 31ST January 2023

	1-Mth	3-Mth	1-Yr	2-Yr p.a	3-Yr p.a
Frame Long Short Australian Equity Fund	**+1.34%**	**-0.74%**	**-12.43%**	-	-
RBA Cash Rate + 3%	0.54%	1.55%	4.69%	-	-
Excess Return	**+0.80%**	**-2.29%**	**-17.12%**	-	-

Past performance is not an indicator for future performance. This is not intended to be financial advice and does not take into account any particular person's circumstances. Before relying on this information, please speak to an independent financial adviser.

Frame Funds.

Contact

Frame Funds Management Pty Ltd
Ph: +61 2 8668 4877
Email: investors@framefunds.com.au
Address: Suite 401, 161 Walker Street
North Sydney, NSW, 2060
Website: www.framefunds.com.au