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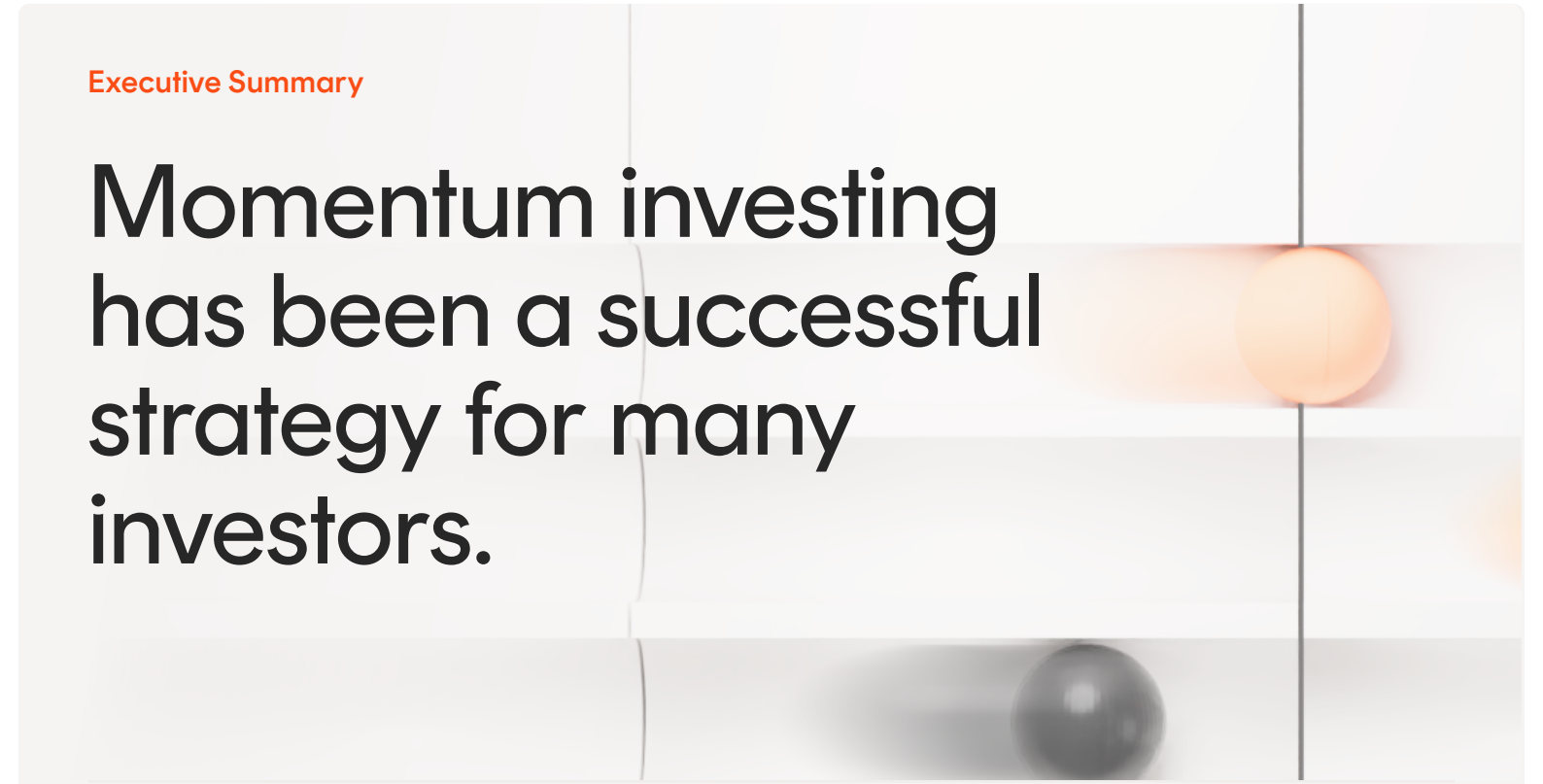
Riding the Wave

The Power of Momentum Investing

Whitepaper

Executive Summary

Momentum investing has been a successful strategy for many investors.



Based on the premise that stock prices exhibit persistent trends in performance (stocks that have performed well tend to continue to perform well and vice versa), the momentum factor is grounded in several human behavioural biases.

In this paper, we set out the frameworks for momentum investing – what it is and the conditions under which it has worked in the past. We then highlight some of the challenges one might face when implementing a traditional momentum strategy and highlight a superior alternative which can be easily implemented.

Finally, we look at the potential for enhanced investment outcomes that a blend of different factors (including momentum) can achieve within an Australian equities portfolio.

Whilst our findings show that the momentum factor in Australia has generated higher absolute and risk-adjusted returns than the S&P/ASX 200 Index over the long run, momentum, like other factors, can experience periods of under-performance during different market environments.

As timing factors can be difficult, investors can look to diversify across multiple factors to smooth out the investment journey over time relative to the broader Australian market.

1. What is momentum investing?

Momentum investing is based on the premise that stocks that have performed well will continue to perform well, and stocks that have performed poorly will continue to perform poorly.

Alongside value and quality, momentum has proven to be a time-tested and rewarded style factor, backed by academic research, which has been shown to persistently generate positive excess returns over the long run[1].

This naturally raises the question: If a factor like momentum is widely known and well documented, then how can superior returns be sustained over time? Why hasn't this source of return premium been competed away?

1.1. Why has momentum investing continued to work?

There are important criteria that an investment factor should meet for a long-term premium to exist. These include the robustness of the factor across different time periods and markets, the ability for the factor to hold up under different definitions, as well as behavioural, logical and risk-based explanations. In the case of momentum, research has shown the factor to be robust.

The initial research on momentum was published by Jegadeesh and Titman in 1993[2] and has been found to be persistent since that time[3], and pervasive across a range of countries[4] and asset classes, including equities, currencies, government bonds and commodities[5].

1.2. Behavioural explanations

There are various investor biases that may create the conditions for stock price momentum:

- Cognitive biases like **herding behaviour** say that the buying pressure of investors following the crowd leads to a self-fulfilling prophecy which accelerates the momentum trend and the fear of missing out.
- Another behavioural explanation is '**limited attention bias**'. This assumes there is a limit to the amount of information an investor can process in a given period and refers to how a person's perception may be affected by recent trends. For example, a person may be more likely to act (buy or sell) when there is a large movement or strong trend in the share price of a company, as this information is more noticeable than when a stock moves in a small and gradual manner. The end result is that investors with this bias tend to buy into stocks that are going up faster than others while selling those that are going down faster than others – fuelling momentum.
- **Confirmation bias** occurs when people seek out information that confirms their existing beliefs. In the case of momentum investing, confirmation bias can lead to people only considering information that supports their investment thesis (positive share price movements), while ignoring information that suggests they could be wrong (negative share price movements).

[1] Jegadeesh, Narasimhan and Sheridan Titman, "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency Author(s)", March 1993
[2] Jegadeesh, Narasimhan and Sheridan Titman, "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency Author(s)", March 1993, pp. 65-91
[3] Swedroe, Larry E. and Andrew L. Berkin, "Your Complete Guide to Factor-Based Investing", 2016, pp. 78
[4] Fama, Eugene F. and Kenneth R. French, "Size, Value, and Momentum in International Stock Returns," Journal of Financial Economics, September 2012, 105(3): 457-72
[5] Geczy, Christopher C. and Mikhail Samonov, "215 Years of Global Multi-Asset Momentum: 1800-2014 (Equities, Sectors, Currencies, Bonds, Commodities and Stocks)," May 2015.

1.3. Risk-based explanations

The risk-based explanation holds that **momentum investors are being compensated for bearing risk** – i.e. the risk of markets suddenly plunging in the event of a recession or major correction. While momentum has positive expected returns over the long run, it can come with large but less frequent losses that risk averse investors may wish to avoid.

For example, momentum experienced a sharper and larger correction throughout the Global Financial Crisis of 2008 relative to other factors but recovered in the years after.

Other explanations as to why momentum investing has continued to produce a risk premium is the costs and limitations around short selling to take advantage of any mispricing.

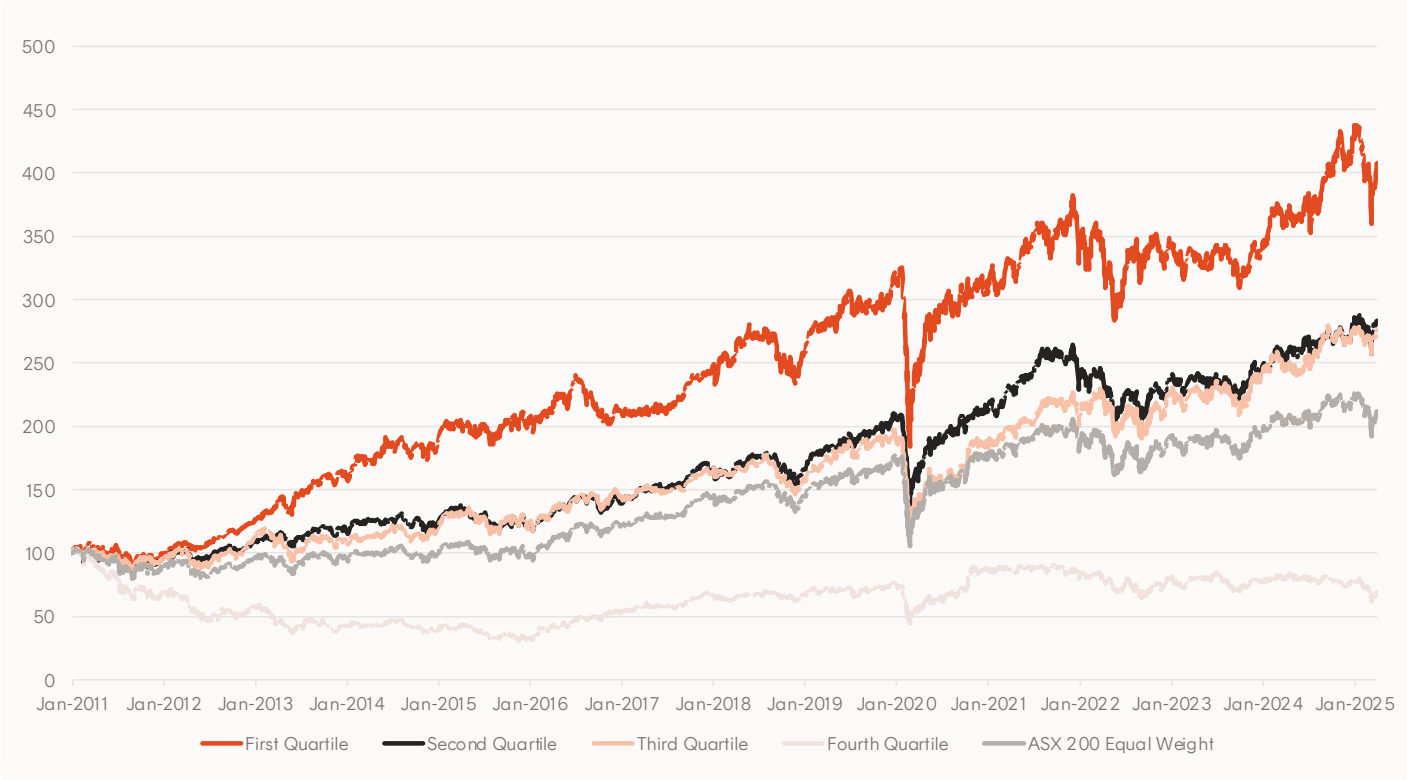
1.4. Momentum investing around the world and in Australia

The momentum premium has been persistent for more than 20 years since the publication of the aforementioned 1993 paper by Jegadeesh and Titman.

It has also been pervasive across different geographies and asset classes. Evidence from a 2012 study "Size, Value, and Momentum in International Stock Returns" by Fama and French examined international stock returns for 23 countries across four regions (North America, Japan, Asia Pacific ex Japan and Europe) where they found that momentum returns have been strong everywhere except for in Japan.

Indeed, the MSCI World Momentum Index returned 11.25% p.a. from 30 June 1994 to 30 April 2025 outperforming its parent index (the MSCI World) by 2.92% p.a.

FIGURE 1 AUS STOCKS WITH STRONG MOMENTUM OUTPERFORM THOSE WITH WEAK MOMENTUM JAN 2011–APR 2025



Source: *Bloomberg, Betashares. The analysis covers the period from 31 January 2011 to 30 April 2025. Past performance is not indicative of future returns.*

Whilst momentum has been well documented in larger markets like the US, the factor has worked just as well in Australia.

Research by S&P[6] showed that compared to the S&P/ASX 200 Index, both an equal weight and float-cap weighted portfolio of high momentum Australian stocks achieved higher absolute returns between December 2004 to May 2020. Additionally, a portfolio of high momentum stocks in Australia outperformed a portfolio of low momentum stocks on both an absolute and risk-adjusted basis with similar risk characteristics over the same period.

Additionally, momentum strategies in Australia were not only present but often performed stronger than in other markets[7], and in the period after the Global Financial Crisis[8].

We conducted our own analysis of the momentum effect in Australia. This was done by splitting 200 of the largest listed companies in Australia into quartiles ranked by momentum scores (measured by 12-month risk-adjusted returns).

Each of the four quartile portfolios were rebalanced every 6 months with stock positions equally weighted.

Unsurprisingly, we found that the highest quartile momentum portfolio (the orange line in Figure 1) outperformed the lowest quartile momentum portfolio (grey line) by almost 13% p.a. since 2011.

As previously highlighted, high momentum stocks (represented by the highest quartile portfolio in our study) can be particularly susceptible to sharp reversals such as during early 2020 when the Covid pandemic shocked markets. During the worst of the selloff that year (from 20 February to 23 March), the highest momentum stocks (first quartile) sold off around -44% compared to -40% for the ASX 200 Equal Weight Index.

However, subsequent results support the risk-based explanation that momentum investing has tended to reward investors who are willing to bear this increased risk, with the highest quartile portfolio outperforming the ASX 200 Equal Weight Index by 0.69% p.a. since the highs of Covid (20 February 2020 to 30 April 2025) which includes the larger drawdown experienced during that period.

[6] Zeng, Liyu and Priscilla Luk, "How Smart Beta Strategies Work in the Australian Market", June 2020, pp. 9
[7] Demir, Muthuswamy and Walter, "Momentum returns in Australian equities: The influences of size, risk, liquidity and return computation", 2004
[8] Tan and Cheng, "Industry and liquidity-based momentum in Australian equities", 2019

2. A systematic approach to momentum investing

We believe a systematic approach to momentum investing is critical, which seeks to remove all human biases that can lead to unpredictable and non-repeatable results.

As mentioned in the previous section, momentum investing can be difficult to implement in practice and very time consuming due to the vast amounts of data, and regular and ongoing execution, that is required. In addition, high portfolio turnover is typically associated with momentum strategies. As a result, if execution costs are high and market impact costs are not considered, this may result in lower returns over time.

To address these impracticalities, investors may consider an ETF that tracks a rules-based index such as the Betashares Australian Momentum ETF (ASX: MTUM), which seeks to track the performance of the Solactive Australia Momentum Select Index (before fees and expenses). MTUM is the first ETF to provide access to an Australian equities momentum strategy and is available to invest in via the ASX.

MTUM provide investors a low cost way of accessing a well-established and proven investment style, professionally managed and systematically rebalanced, without the need to continuously track winners and losers and the ongoing execution that would otherwise be required to ensure the factor does not decay[9].

2.1. Considerations when implementing a momentum strategy

There are several known drawbacks with momentum investing that MTUM seeks to mitigate including the impact from sharp reversals, market impact costs and false signals. Firstly, momentum is a short-term trend-following strategy, hence incorporating fundamental trading principles can improve outcomes.

There are several fundamental trading principles that a successful momentum strategy can adopt, including:

1. Removing all human biases
2. Not going 'all in' on a single signal
3. Adding to winning positions only, rather than those going against you
4. Cut significant 'losers' quickly
5. Taking profits or trimming positions as they go deeply in favour, which can reduce the impact from sharp reversals
6. Diversification, and
7. Applying 'sensible' position sizing.

2.2. How does MTUM differ from other momentum strategies?

Typically, what occurs with a standard momentum index is that following each selection date (generally six months apart), the entire index will rebalance fully into the highest ranked momentum stocks (e.g. 50 out of 200) at that point in time. However, this approach goes against some of the general principles outlined above.

On the other hand, MTUM's Index positions the portfolio at each rebalance into companies which exhibit the highest momentum scores at each of the four prior selection dates (which occur every two months). At each rebalance, the oldest selection date result rolls off and the newest selection date result is incorporated.

[9] 'Factor decay' refers to the decline in the effectiveness or exposure of a specific investment factor over time.

A simple hypothetical illustration is provided below, showing the inclusion and weighting of 4 example stocks within the overall index stock universe.

TABLE 1 EXAMPLE STOCKS

Stock	June selection date	August selection date	October selection date	December selection date	Preliminary portfolio (PP)
A	0.0%	0.0%	0.0%	4.0%	1.0%
B	5.0%	5.0%	5.0%	0.0%	3.8%
C	4.0%	0.0%	0.0%	0.0%	1.0%
D	2.0%	4.0%	6.0%	8.0%	5.0%

The preliminary portfolio (PP) is the average weight of each stock at each of the prior four selection results. That is, each stock's PP weighting is the sum of its weightings at the preceding four selection dates, divided by 4. For example, stock A has recently shown strong momentum and is assigned a 4% weight at the most recent selection date. But since it did not perform strongly enough to qualify for the portfolio at the previous three selection dates, stock A is only weighted partially at 1% (the average weight of the four prior results).

If stock A continues to outperform at the next selection date in 2 months' time, when the oldest selection date (June in the table above) result drops off and the newest is added (February of the following year), it gets upweighted further i.e. the index only adds to positions which continue to perform well (Principle 3).

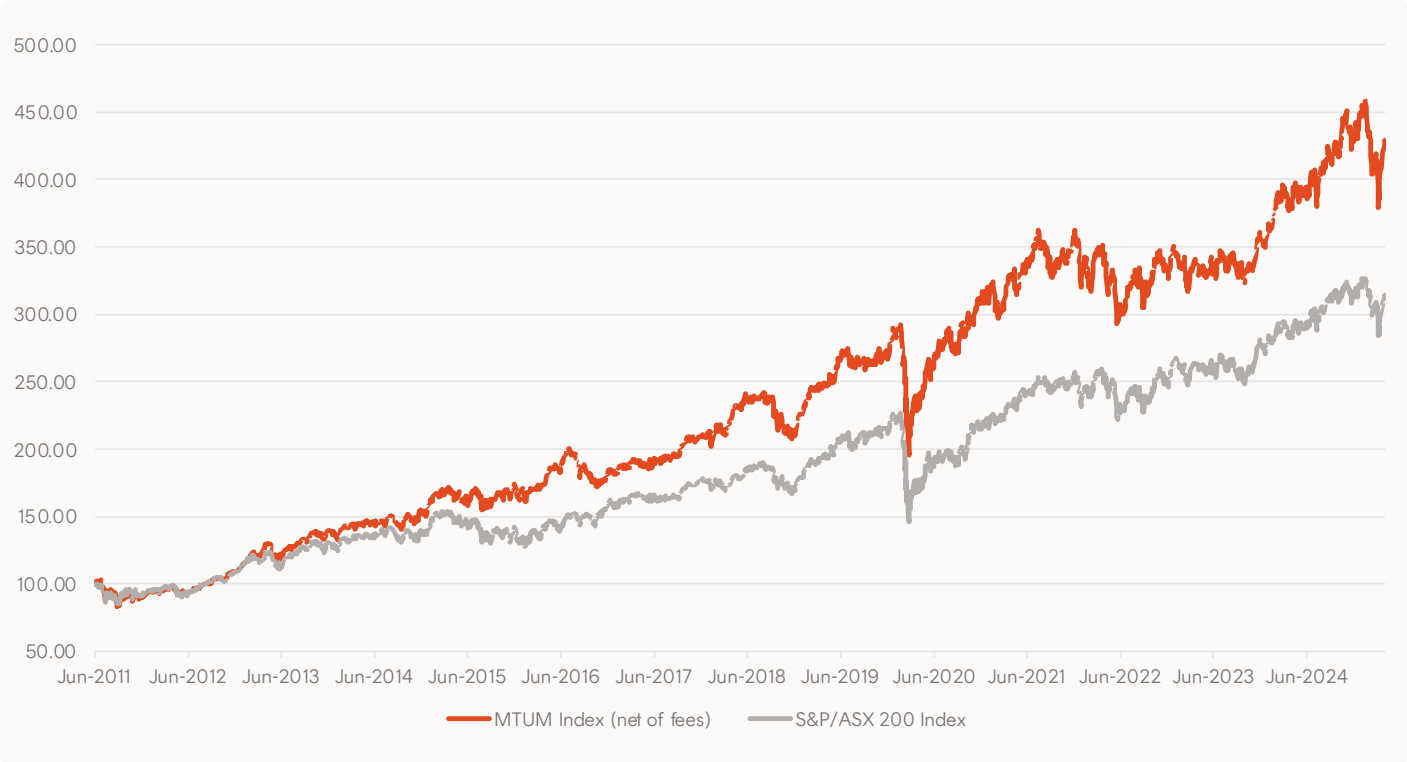
This unique positioning framework achieves the following:

- Stock positions are increased as stocks show consistent performance, with a full weight allocation built up if a stock has passed the momentum rankings at the four most recent selection dates (e.g. stock D).
- Stock D is also an example of trimming back positions vulnerable to a sharp reversal (Principle 5). As the stock continues to perform strongly, its weight in the broader market cap benchmark increases and the assigned weight at each successive selection date gets larger and larger. However, by taking the average weight over the previous selection dates, stock D has a 5% weighting in the PP, which is lower than the December selection date alone, being 8%.
- False signals are mitigated by entering positions partially or not going all in (Principle 2). Should a stock not rank favourably in the following selection date (implying relative under-performance), the negative contribution will be significantly reduced due to the initial partial weight entry (e.g. stock C).
- Turnover and hence market impact costs at each rebalance are significantly mitigated by partially entering (e.g. stock A) and exiting (e.g. stock B) positions rather than completely.
- Factor decay is mitigated by rebalancing the portfolio every two months (versus the typical six months) which helps keep the momentum signal fresh and identify stocks earlier which may lead to the next rally in momentum.
- Given the index holds a mix of partial and full positions, stock diversification is increased, with MTUM holding circa 90 stocks on average rather than the top 50 at each selection (Principle 6).
- Once the PP is constructed, the final portfolio at each rebalance incorporates fast exit rules, cutting those stocks which are in the bottom decile of performance immediately (Principle 4) along with maximum stock limits to manage single stock risk (Principle 7).

Details of MTUM's index methodology can be found in the conclusion section of this whitepaper.

2.3. How has MTUM's index performed?

FIGURE 2 MTUM INDEX (NET OF FEES) VS. S&P/ASX 200 INDEX PERFORMANCE 30 JUNE 2011–30 APRIL 2025



Source: *Bloomberg. MTUM Index refers to the Solactive Australia Momentum Select Index. Chart shows MTUM's index performance net of MTUM's management fees and costs of 0.35% p.a. MTUM's inception date was 22 July 2024. You cannot invest directly in an index. Past performance is not indicative of future performance of MTUM's index or MTUM.*

Since June 2011, MTUM's Index (net of fees) has delivered a return of 11.10% p.a., which is 2.48% p.a. above the S&P/ASX 200 Index, with a similar volatility and maximum drawdown profile, as well as a 32% increase in risk adjusted returns net of fees as measured by the Sharpe Ratio.

TABLE 2 BLEND INDEX (NET OF FEES) 30 JUN 2011–30 APR 2025

30 Apr 2025	MTUM Index (net of fees)	S&P/ASX 200 Index
1 year	12.00%	9.79%
3 years	7.63%	7.18%
5 years	12.33%	12.14%
7 years	9.76%	8.59%
10 years	10.03%	7.72%
30 Jun 2011	11.10%	8.62%
Volatility (p.a.)	15.46%	15.17%
Excess return (p.a.)	2.48%	
Tracking error (p.a.)	5.76%	
Information ratio*	0.431	
Sharpe ratio**	0.62	0.47
Max drawdown	-33.21%	-35.93%

Source: *Bloomberg. MTUM Index refers to the Solactive Australia Momentum Select Index. Table shows MTUM's index performance net of MTUM's management fee and costs of 0.35% p.a. MTUM's inception date was 22 July 2024. You cannot invest directly in an index. Past performance is not indicative of future performance of MTUM's index or MTUM.*

* Information Ratio measures the risk-adjusted performance of a portfolio by dividing the excess return above a benchmark by the volatility of that excess return

** Sharpe Ratio provides another measure of risk-adjusted performance by dividing the excess return above a "risk-free rate" by the volatility of that excess return

MTUM's fund performance has also been strong since its inception in July 2024, net of fees and costs. MTUM has returned 7.49%, outperforming the S&P/ASX 200 index by 2% as at 30 April 2025.

However during this period, MTUM also experienced a larger drawdown during the H1 2025 ASX earnings season – a period marked by a change in stock leadership.

Whilst these observations were made over a relatively short time frame of less than a year, it is this outperformance and susceptibility to turning points in markets which are consistent with the return profile characteristics of the momentum factor.

3. Building momentum: Harnessing factor investing in Australian equities

As mentioned above, momentum can be susceptible to turning points in markets, and like other investment factors, will go through periods of outperformance and periods of underperformance across the market cycle. Rather than allocate solely to a single investment factor, investors may consider the merits of blending multiple factors together.

By diversifying across factor risk premiums, asset allocators and investors can seek to reduce overall portfolio volatility and enhance risk-adjusted returns.

However, in order to narrow down from the extensive list of potential factors a portfolio may be influenced by, we first look at the evolution of statistical models that attempt to explain the relevant return drivers or factors of a diversified portfolio's return.

The Capital Asset Pricing Model (CAPM), for example, used only one variable to compare the returns of a portfolio to the returns of the market (i.e. market beta). In contrast, the Fama-French 3 factor model added 2 additional factors to the CAPM, being size and value, which improved the explanatory power of the model to over 90% compared to around 70% from the CAPM.

Subsequent models such as Mark Carhart's 4 factor model included momentum, which increased yet again the explanatory power to over 95% of a diversified portfolio's returns to these underlying factors, while newer competing models included quality metrics such as profitability, which eliminate almost all the anomalies that exist with earlier models.

The following identified factors:

- Market beta;
- Size;
- Value;
- Momentum; and
- Quality,

are not only grounded in academic literature[10], but have the following in common, which explain why they are still relevant today:

- They hold across long periods of time;
- They hold across countries, regions, sectors and even asset classes;
- They hold for different definitions of the metric;
- Are investable; and
- There are logical or behavioural reasons that explain the past and expectations for the future.

[10] Jegadeesh, Narasimhan and Sheridan Titman, "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency Author(s)", March 1993

In the following section, we will explore how constructing a diversified portfolio built on these time-tested factors has the potential to generate more efficient outcomes.

What is critical in the construction process is having the building blocks delivered in a systematic and transparent manner, removed from human biases. This is where transparent low cost passively managed ETFs can become valuable tools, providing access to each return driver in an unbiased and consistent manner.

If an investment process is subjective then human biases can lead to inconsistencies and style drift, making it difficult for allocators to optimally blend factors together to achieve more efficient results. In addition the starting point is important.

For example, the average actively managed Australian large cap equities strategy held around 2.4% in cash[11], and this can vary over time. There may be a number of reasons for this, including having a bearish bias on the market, a lack of current opportunities or allowing flexibility around capital raisings. However, holding a material amount of cash reduces the most significant return driver of a portfolio, being market beta.

Assuming market beta returns on average 9% p.a. with an average cash holding of 2.4%, then the impact on returns would be a negative drag of 0.22% p.a. Conversely, the typical passively managed fund or ETF often holds almost nil cash, delivering substantially the entire market beta embedded in that strategy.

3.1. Blending factors to create a more efficient portfolio

The Betashares Australian Quality ETF (ASX: AQLT) is designed to track the performance of 40 high quality companies, while the Betashares FTSE RAFI Australia 200 ETF (QOZ) through its rebalancing mechanism weights a portfolio of stocks which exhibit value characteristics.

In the following section we will discuss why these time-tested factors, including momentum, may create more efficient outcomes.

We can see from the table below that AQLT, QOZ, and MTUM exhibit a strong exposure to the quality, value and momentum factors respectively and these characteristics are generally expected to be consistent over time given the systematic nature of the indexes they track.

TABLE 3 FACTOR EXPOSURES OF SELECTED AUSTRALIAN EQUITY ETFS

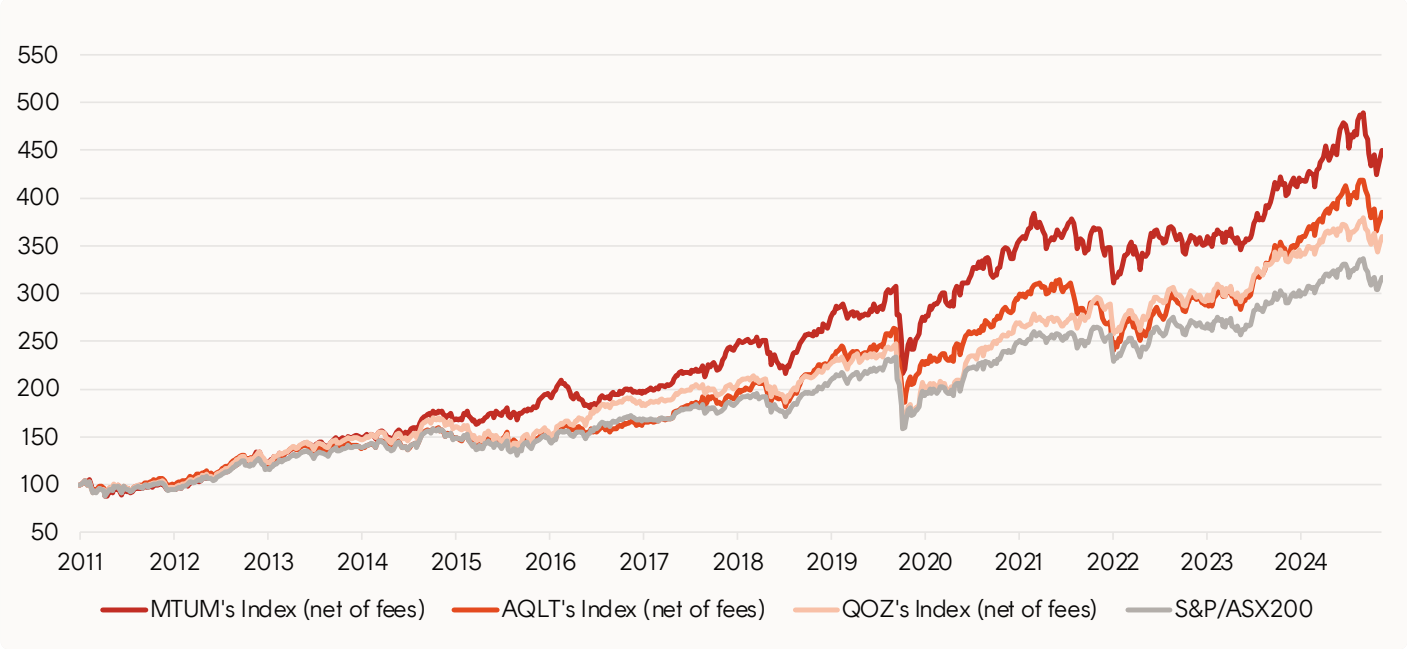
Ticker	Name	Factor	Value	Quality	Momentum
AQLT	Betashares Australian Quality	Quality	22.30	86.39	88.65
QOZ	Betashares FTSE RAFI Australia 200	Value	81.87	9.13	38.17
MTUM	Betashares Australia Momentum	Momentum	17.40	11.16	97.16
A200	Betashares Australia 200 ETF	Market Beta	39.69	18.13	62.40

Source: *Morningstar Direct. As at 30 April 2025.*

[11] Morningstar Australian Active Large Cap Equities. As at November 2024.

Since common inception, the indices that AQLT, QOZ and MTUM track (net of fees) have exhibited a positive return premium above the S&P/ASX 200 Index consistent with the global academic research on the efficacy of factor investing, as shown in Figure 3.

FIGURE 3 AUSTRALIAN FACTOR INDICES V S&P/ASX 200 JUN 2011–APR 2025

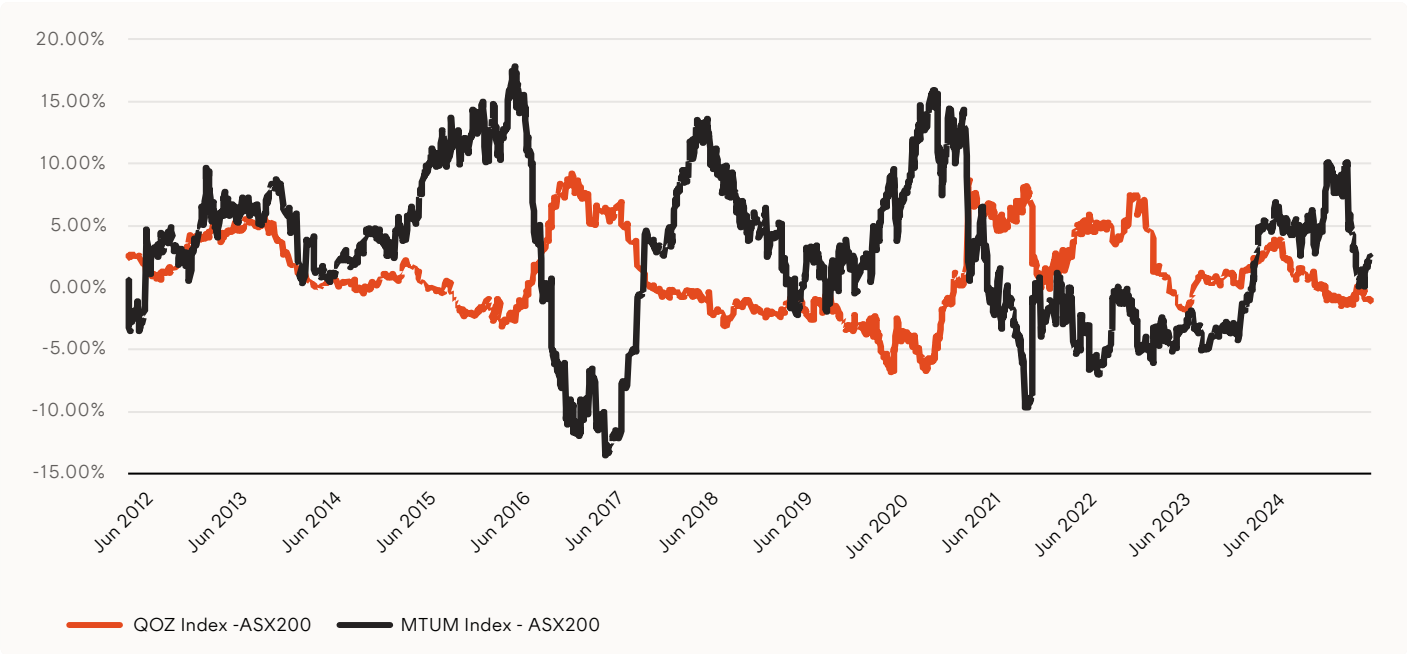


Source: *Bloomberg, Betashares from 17 June 2011 to 25 April 2025. AQLT's Index is the Solactive Australia Quality Select Index. QOZ's Index is the FTSE RAFI Australia 200 Index. MTUM's Index is the Solactive Australia Momentum Select Index). Performance shown is net of ETF management costs of 0.35% p.a. for MTUM and AQLT, and 0.40% p.a. for QOZ. You cannot invest directly in an index. Past performance is not indicative of future returns of the indices or the ETFs.*

Academic research has suggested market beta on average can explain circa 70% of a diversified portfolio's returns, while the other nearly 30% can be explained by these time-tested factor excess returns[12].

If we look at the excess returns from factors such as value (QOZ Index) and momentum (MTUM Index), their 1 year rolling excess returns have been negatively correlated.

FIGURE 4 1 YEAR ROLLING EXCESS INDEX RETURNS VS. S&P/ASX 200 JUN 2012–APR 2025



Source: *Bloomberg. As at 30 April 2025. Chart shows index performance (not actual fund performance) to illustrate the potential diversification benefits of using QOZ and MTUM together within a portfolio and does not take into account ETF management costs of 0.35% p.a. for MTUM and 0.40% p.a. for QOZ. You cannot invest directly in an index. Past performance is not indicative of future returns of the indices or the ETFs.*

[12] Fama and French, "The Capital Asset Pricing Model: Theory and Evidence", 2004, pages 25-46

The advantage of blending negatively correlated factors together is that they can smooth out the investment journey relative to the broader market – i.e. an investor's experience of getting to the end point can be just as important as the end point itself.

Hence, the goal of maximising the excess returns per unit of excess risk (tracking error or volatility relative to the broader market), i.e. the information ratio, can be used as a metric to measure that investment journey.

Table 3 highlights the 1-year rolling excess return distribution for each individual factor exposure return as well as an 'optimal' blend which maximises the information ratio.

What you will notice is QOZ's Index (value) has outperformed the S&P/ASX200 benchmark 61% of the time, with a maximum 1 year rolling excess return of 9.24% and a minimum 1 year rolling excess return of -6.83%. The average 1 year rolling excess return (1.19%) is greater than the median (0.73%) which suggests the distribution of 1 year rolling excess returns for QOZ's index has exhibited positive skew or fatter tails on the positive side which drags up the average.

On the other hand, AQLT's Index (quality) and MTUM's Index (momentum) have exhibited a negative skew where the average 1-year rolling excess return is lower than their median, suggesting both have fatter negative tails which drag down the average.

TABLE 4 AQLT'S INDEX (QUALITY) AND MTUM'S INDEX (MOMENTUM) JUN 2011–APR 2025

1Y Rolling Excess Return	% Positive	Max	Min	Average	Median	Info. Ratio
(1) QOZ Index	61.1%	9.24%	-6.83%	1.19%	0.73%	0.38
(2) AQLT Index	66.0%	14.07%	-13.54%	1.56%	2.38%	0.36
(3) MTUM Index	68.4%	17.88%	-13.69%	2.89%	3.35%	0.50
[Blend 1/2/3]: (50/30/20%)	**76.4%**	**5.64%**	**-2.91%**	**1.63%**	**1.75%**	**0.96**

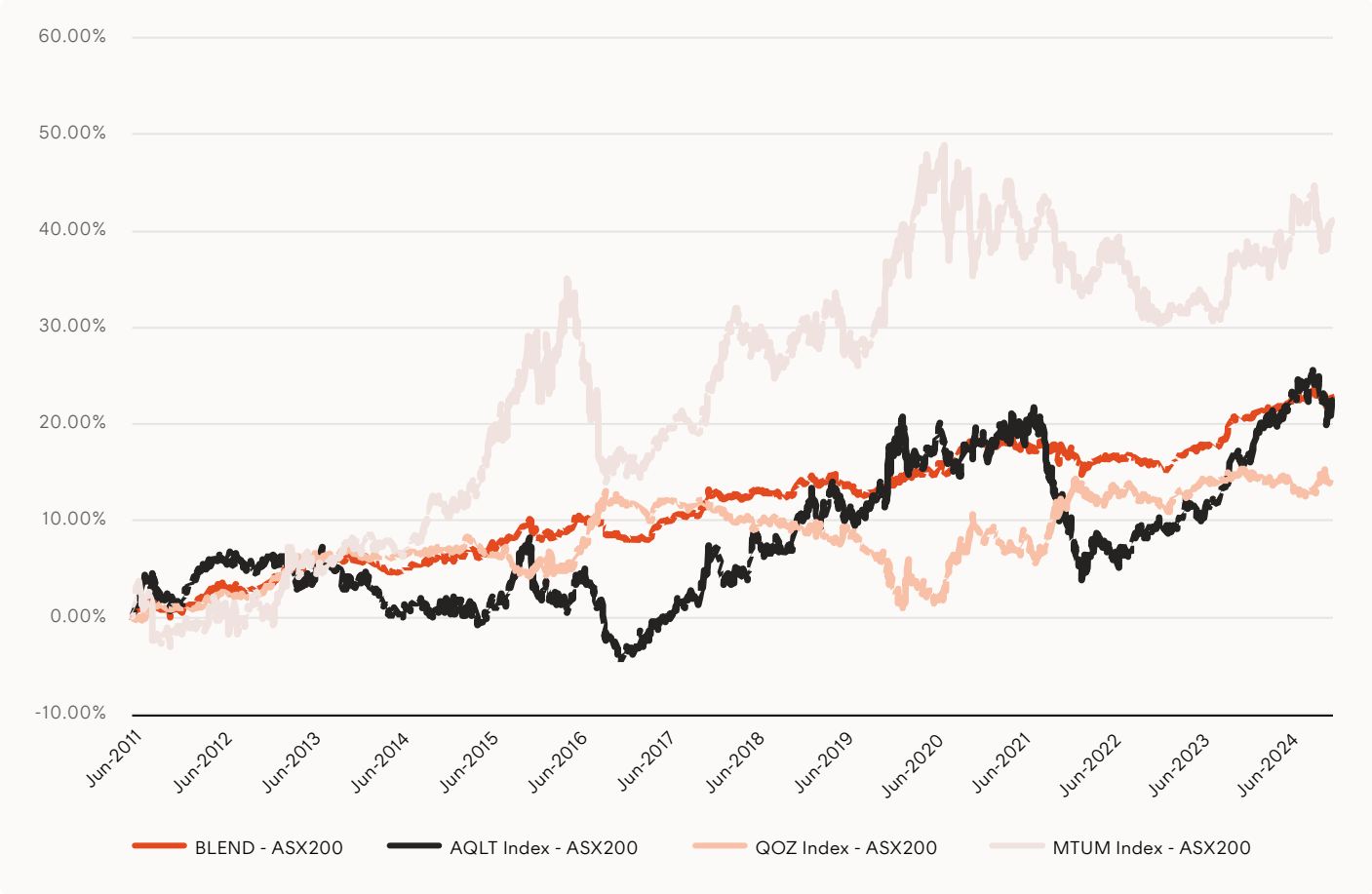
Source: *Bloomberg. As at 30 April 2025. Table shows index performance (not actual fund performance) to illustrate the benefits of blending different factor exposures and does not take into account ETF management costs of 0.35% p.a. for MTUM and AQLT and 0.40% p.a. for QOZ. You cannot invest directly in an index. Past performance is not indicative of future returns of the indices or the ETFs.*

By 'optimally' blending all 3 return factors together, this resulted in a shift in the excess return distribution to the right, resulting in a higher period of time experiencing a positive 1-year rolling excess return (76.4%), while the average and median 1-year excess returns are now almost similar (1.63% and 1.75%), which implies a large reduction in the distribution skew.

Importantly, the information ratio[13] of the blend (0.96) is significantly higher than the information ratio at the individual factor level (between 0.36 and 0.50), resulting in a smoother investment journey as shown in Figure 5 which highlights the cumulative excess returns of the blend against the individual factor excess returns.

[13] The information ratio (IR) measures portfolio returns beyond the returns of a benchmark, usually an index, compared to the volatility of those returns.

FIGURE 5 CUMULATIVE EXCESS RETURNS JUN 2011–APR 2025



Source: *Bloomberg. As at 30 April 2025. Chart shows index performance (not actual fund performance) to illustrate the benefits of blending different factor exposures to reduce overall portfolio volatility and does not take into account ETF management costs of 0.35% p.a. for AQLT and MTUM, and 0.40% p.a. for QOZ. You cannot invest directly in an index. 'BLEND' refers to a blended portfolio which consists of 50% exposure to QOZ's index, 30% to AQLT's index, and 20% to MTUM's index. Past performance is not indicative of future returns of the indices or the ETFs.*

Another advantage with passively managed strategies is the generally lower management fees and this touches back on the importance of ensuring a good starting point. The blended portfolio returns shown in Table 5 has a weighted average management fee of 0.375% p.a., significantly lower than the average Australian active large cap equity manager fee of 1.06% p.a.[14]

[14] Morningstar Australian Active Large Cap Equities Nov 2024

TABLE 5 BLEND INDEX (NET OF FEES) 30 JUN 2011–30 APR 2025

30 Apr 2025	Blend Index (net of fees)	S&P/ASX 200 Index
1 year	11.10%	9.79%
3 years	8.44%	7.18%
5 years	13.41%	12.14%
7 years	9.61%	8.59%
10 years	8.90%	7.72%
30 Jun 2011	9.88%	8.62%
Volatility (p.a.)	14.93%	15.17%
Excess return (p.a.)	1.26%	
Tracking error (p.a.)	1.74%	
Information ratio	0.725	
Sharpe ratio	0.56	0.47
Max drawdown	-35.47%	-35.93%

Source: *Bloomberg. As at 29 November 2024. 'BLEND' refers to a blended portfolio which consists of 50% exposure to QOZ's index, 30% to AQLT's index and 20% to MTUM's index. BLEND's returns are based on index returns net of ETF management costs of 0.35% p.a. for MTUM and AQLT, and 0.40% p.a. for QOZ. Past performance is not indicative of future returns of any index/ETF.*

When we combine this with the average cash drag of 0.22% p.a., the compounded differences over time can be material, making it difficult to even break even with the S&P/ASX 200 Index. Having to overcome the higher fees and cash drag explains why most active managers have not outperformed their benchmark net of fees[15] over time.

In summary, there are notable portfolio benefits in using a combination of time-tested return drivers or factors such as market beta, value, quality and momentum through transparent passively managed low-cost building blocks.

This combination can help deliver consistent factor attributes in an unbiased manner, with almost zero cash drag and the nature of the excess return profiles being negatively correlated aim to deliver a smoother investment journey over time.

[15] SPVIA Score card: https://www.spglobal.com/spdji/en/documents/spiva/spiva-australia-year-end-2024.pdf

Conclusion

In conclusion, momentum is a well-known factor backed by empirical research which has been proven to be persistent across time, and pervasive across different countries and asset classes. Several behavioural biases and risk-based explanations explain why the momentum premium exists.

Whilst it may be tempting for an individual to capture this premium by implementing a momentum strategy themselves, there are many hurdles to overcome in practice.

Instead, adopting a systematic approach to momentum investing provides a way to overcome these hurdles, which MTUM has been designed to do.

Finally, we discussed the potential benefits and improved investment journey experience of blending time tested factors together using low cost, true to label factor building blocks.

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1. Betashares Australian Momentum ETF (ASX: MTUM)
2. Betashares FTSE RAFI Australia 200 ETF (ASX: QOZ)
3. Betashares Australian Quality ETF (ASX: AQLT)

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