IMAP Sydney Conference: Market uncertainty and the role of intelligent indexing

Today's presenter:
Cameron Gleeson – Senior Investment Strategist

12 September 2023

Important information

This presentation has been prepared for financial adviser/wholesale client use only. It must not be distributed or made available to retail clients.

This presentation has been prepared by Betashares Capital Limited ABN 78 139 566 868, AFSL 341181 (Betashares). The information is general in nature only and does not take into account any person's financial objectives, situation or needs. Investors should consider its appropriateness taking into account such factors and seek financial advice. It is not a recommendation to make any investment decision or adopt any investment strategy.

Investments in Betashares Funds are subject to investment risk and investors may not get back the full amount originally invested. Future outcomes are inherently uncertain. Actual outcomes may differ materially from those contemplated in any opinions, estimates or other forward-looking statements given in this presentation.

Past performance is not indicative of future performance.

Any Betashares Fund that seeks to track the performance of a particular financial index is not sponsored, endorsed, issued, sold or promoted by the index provider. No index provider makes any representations in relation to the Betashares Funds or bears any liability in relation to the Betashares Funds.

Any person wishing to invest in a Betashares Fund should obtain a copy of the relevant Product Disclosure Statement and Target Market Determination from www.betashares.com.au and consider whether the product is appropriate.

About Betashares

$30B+	**80+**	**130+**	**5**	**800k+**
in assets under management	exchange traded products on the ASX	colleagues	offices across Australia and New Zealand	clients

As at 30 June 2023

Today I want to talk about building core portfolios

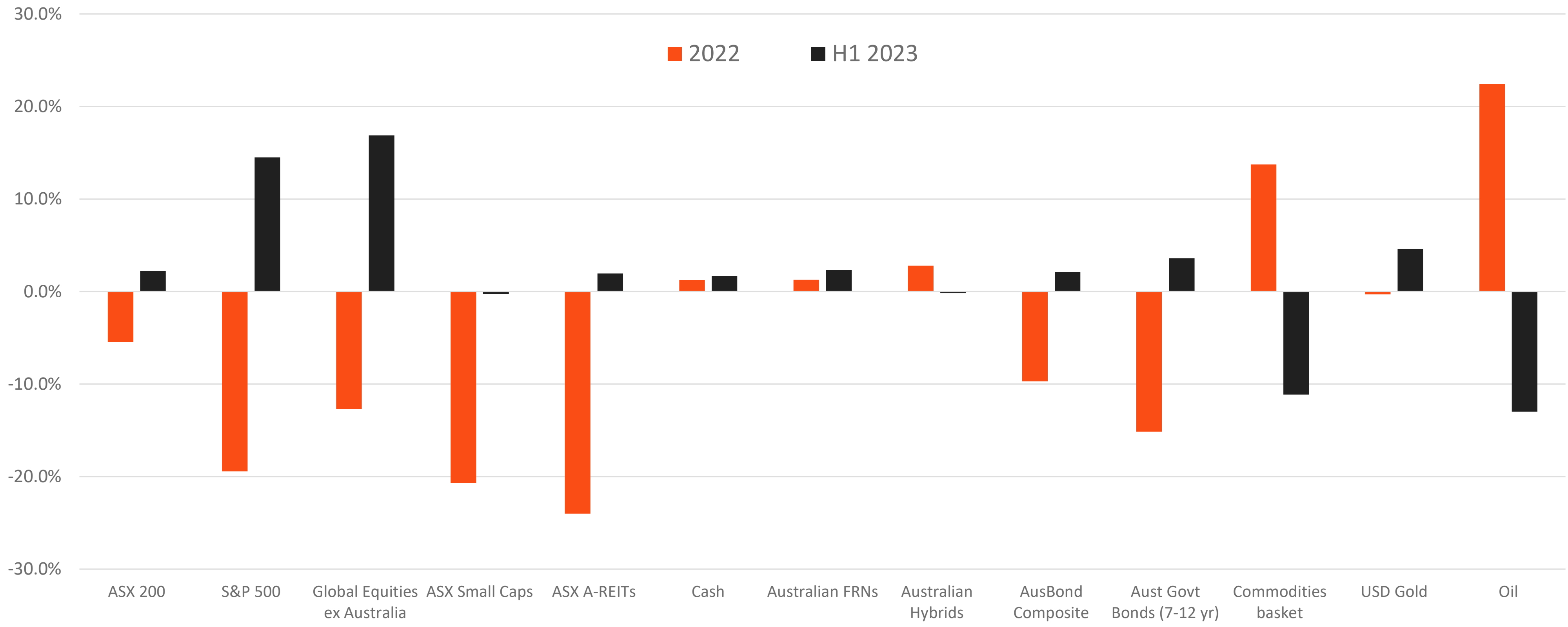
Asset allocators must address the challenges of **diversification**, **cost** and **performance**

I aim to:

- Change the way you think about passive investing
- Challenge your understanding of how active managers generate ‘alpha’
- Show the value and benefit of using low-cost beta and ‘smarter indexing’ solutions to build a robust core

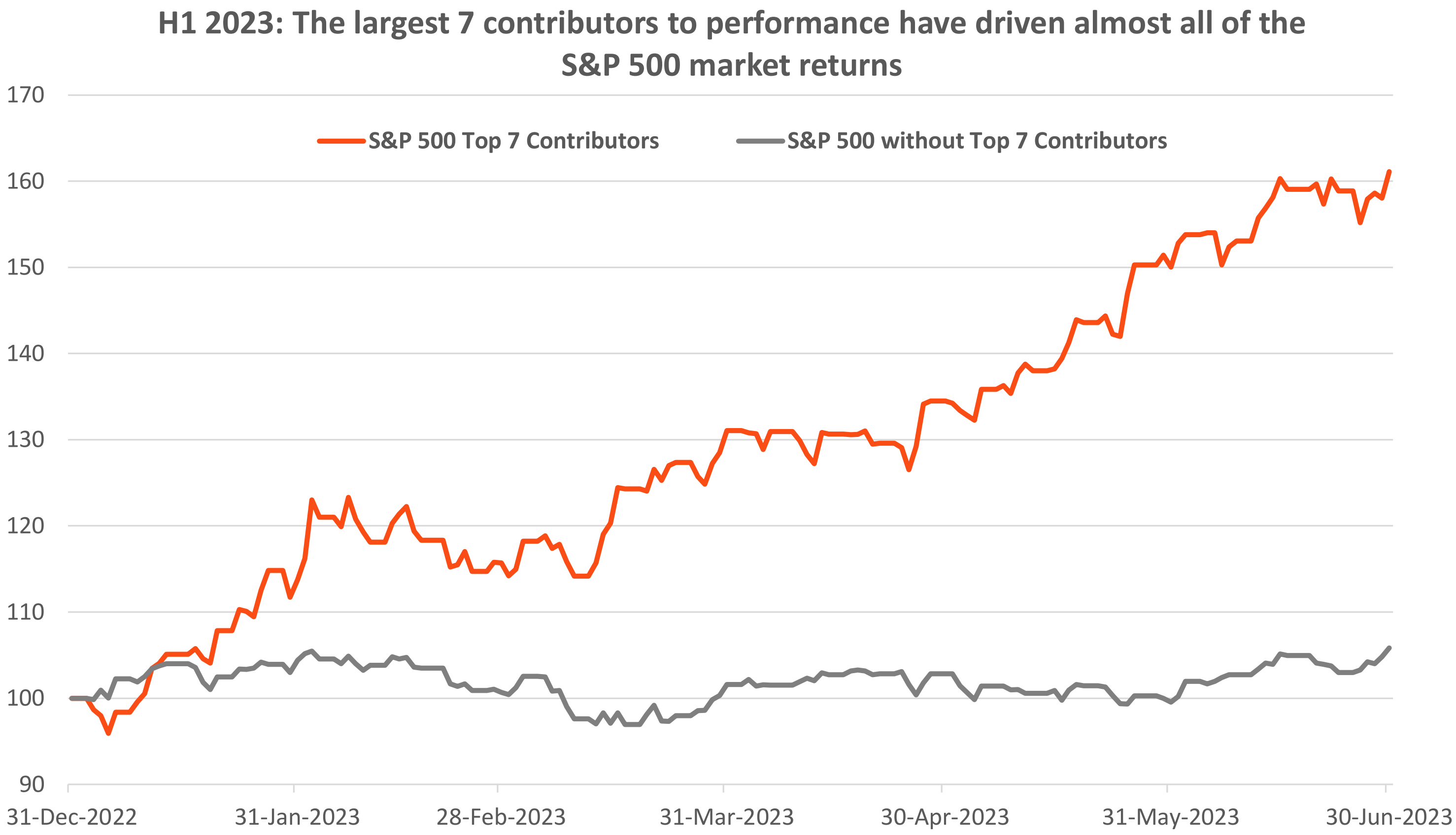
The current challenges for core portfolios

Asset class returns 2022 and H1 2023



Source: Bloomberg. H1 2023 figures are as at 30 June 2023. **Past performance is not an indicator of future performance.** Global Equities ex Australia is Solactive GBS Developed Markets ex Australia Large & Mid Cap Index, ASX Small Caps is S&P/ASX Small Ordinaries Index, ASX A-REITs is S&P/ASX 200 A-REIT Index, Cash is Bloomberg AusBond Bank Bill Index, Australian Hybrids is Solactive Australian Hybrid Securities Index, Ausbond Composite is Bloomberg AusBond 0+ Yr Index, Aust Govt Bonds (7–12yr) is Solactive Australian Government 7-12 Year AUD TR Index, Commodities Basket is Bloomberg Commodity Index, USD Gold is XAU Currency Index, Oil is Bloomberg WTI Crude Oil Subindex Index. Index used for asset class returns. You cannot invest directly in an Index.

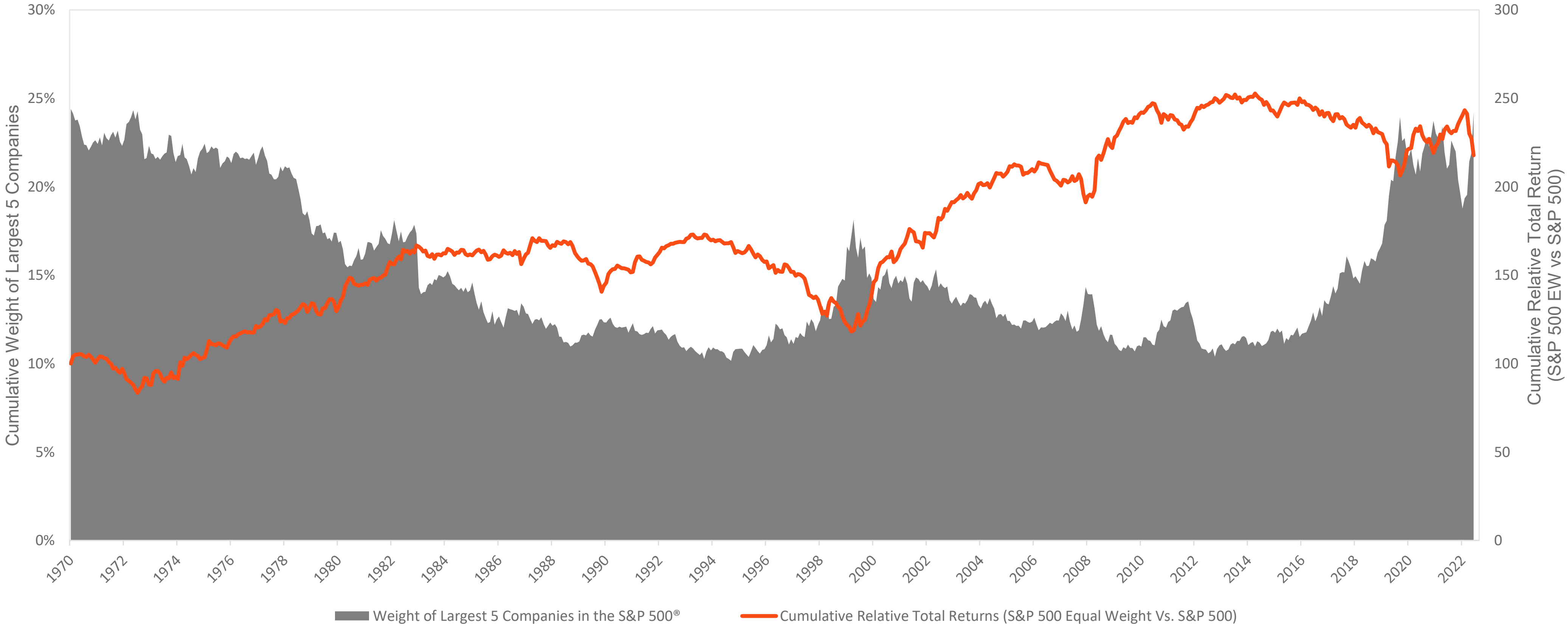
Top-heavy US equity markets poses risk to investors



Source: Bloomberg. As at 30 June 2023. S&P 500 ‘top 7 contributors’ calculated using market capitalisation index returns of the relevant stocks. The ‘top 7 contributors’ were Apple, Microsoft, Nvidia, Google (A and C class combined), Amazon, Meta, and Tesla. **Past performance is not an indicator of future performance.** You cannot invest directly in an index.

betashares

US equities: Equal weight has tended to outperform when concentration is high and subsiding

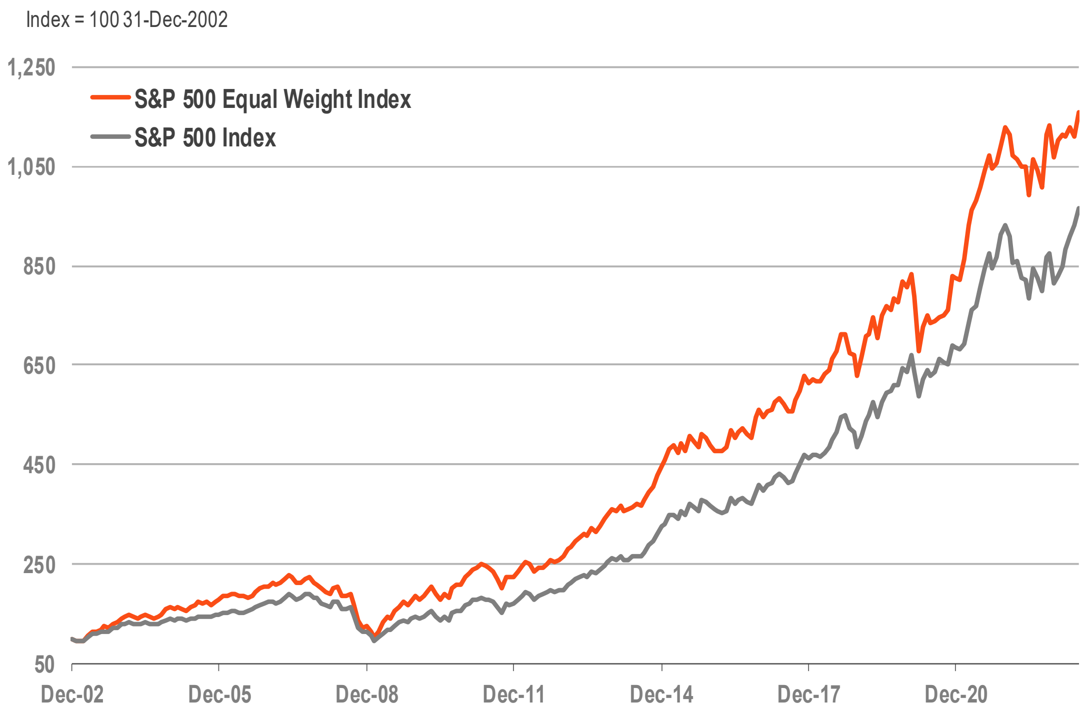


Source: Bloomberg. From 1 January 1990 to 31 May 2023. Top 5 companies as at 31 May 2023 were Apple, Microsoft, Nvidia, Google (A and C class combined) and Amazon. Past performance is not an indicator of future performance of any index or ETF. Does not take into account any ETF fees and costs. You cannot invest directly in an index.

betashares

S&P 500 Equal Weight Index has outperformed S&P 500 Index since inception

S&P 500 Equal Weight Index v S&P 500 Index: December 2002 – June 2023



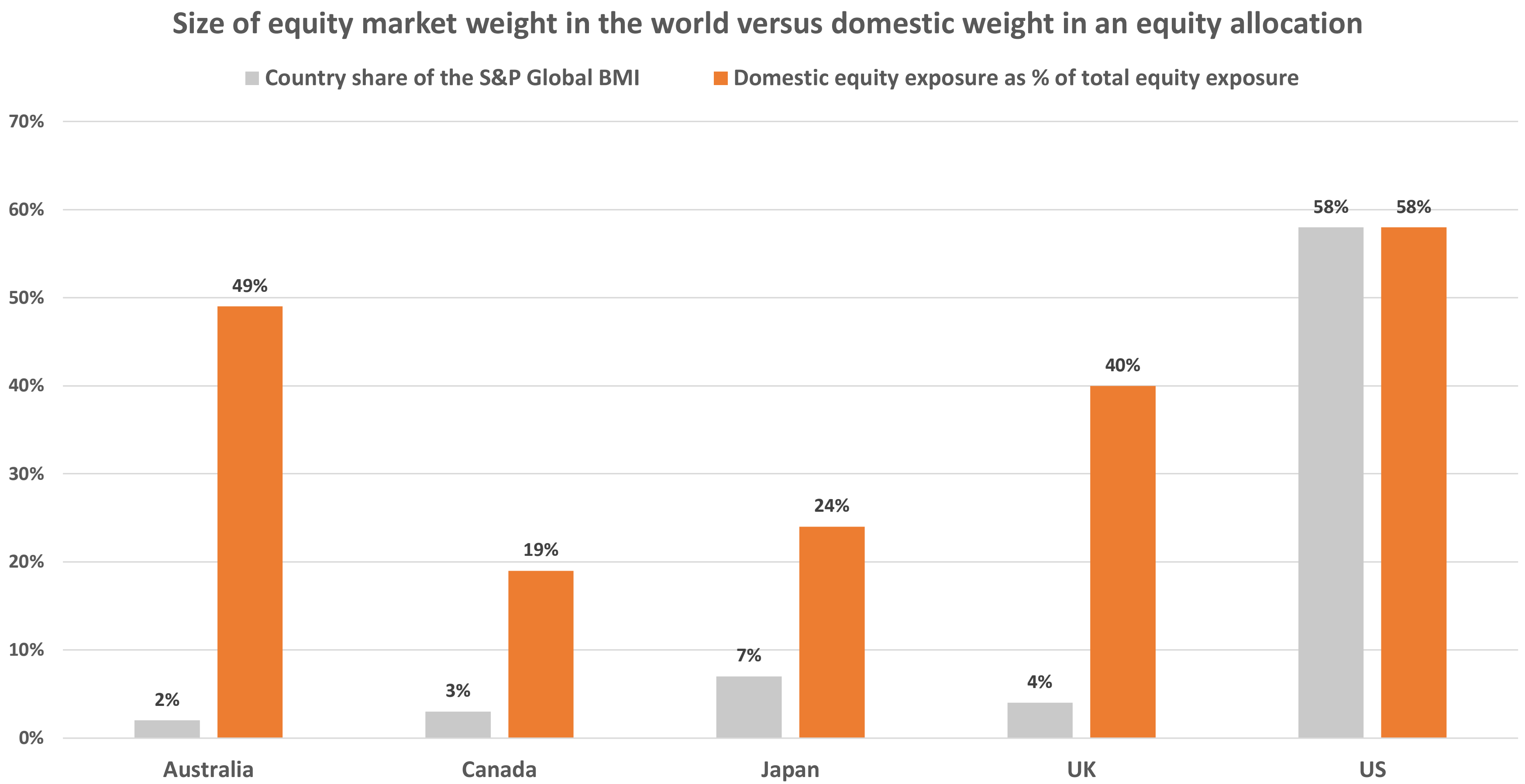
TOTAL RETURN	S&P 500 Equal Weight Index	S&P 500 Index
3M	4.4%	9.2%
6M	8.7%	18.8%
1 YR	16.9%	23.0%
3 YR (p.a)	16.5%	15.4%
5 YR (p.a)	11.9%	14.1%
10 YR (p.a)	14.2%	15.6%
Inception (p.a)	12.7%	11.7%
Volatility (p.a)	15.4%	13.3%
Risk-adjusted return	0.82	0.88
Ending value of $100	$ 1,159	$ 965

Value added since inception:
1% p.a

Source: Bloomberg, S&P Dow Jones. Past performance is not indicative of future performance of any index or ETF. You cannot invest directly in an index. Does not take into account ETF fees and costs.

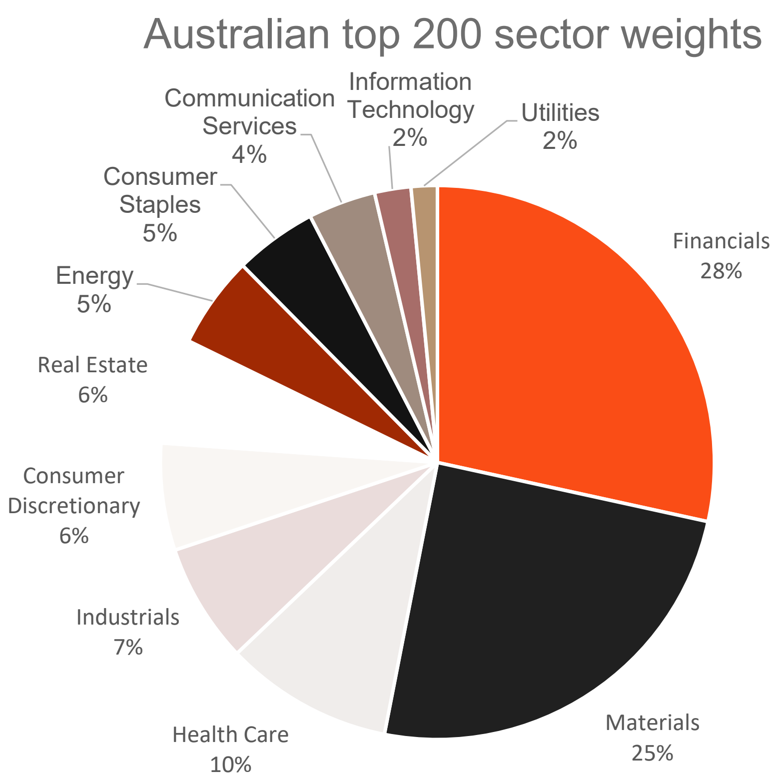
betashares

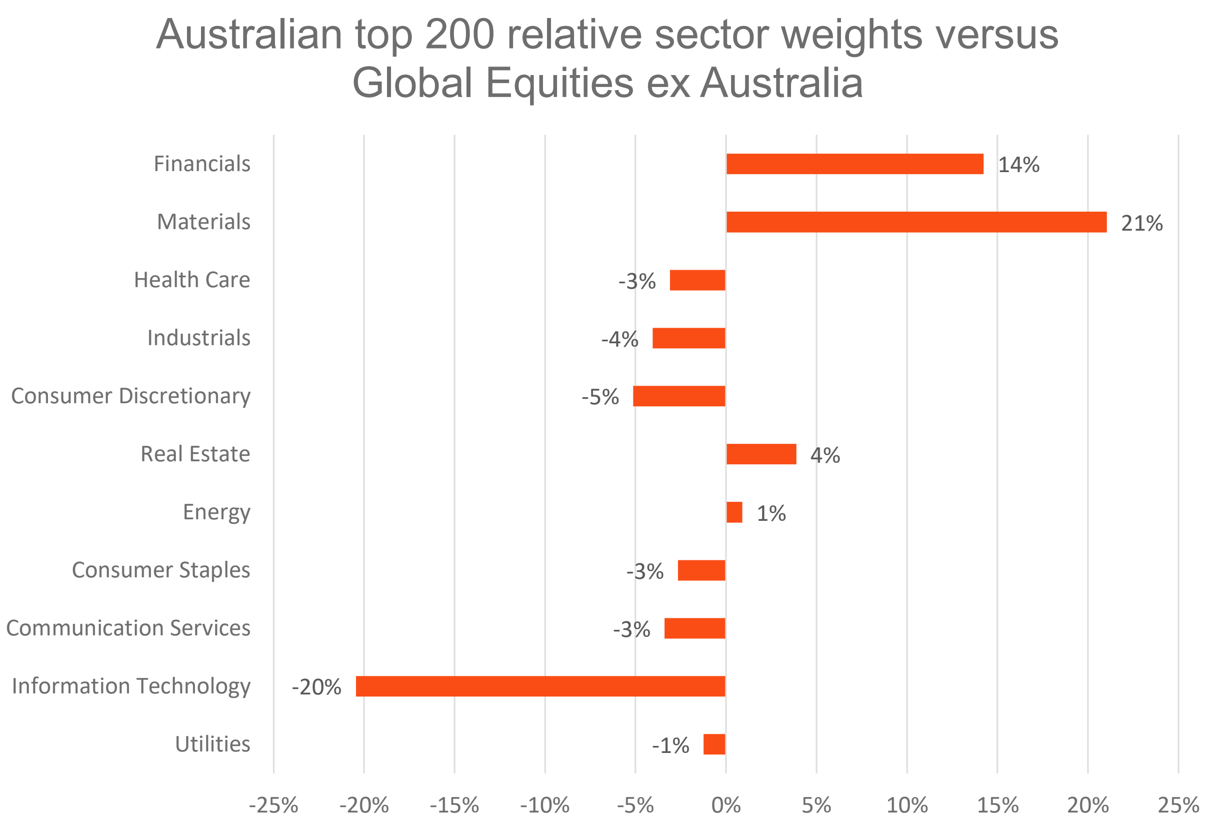
Australians have a large home country bias



Source: S&P Dow Jones Indices, Global Pension Assets Study (GPAS) 2023. As at 31 December 2022. Chart is for illustrative purposes only.

And the Australian market has significant sector skew





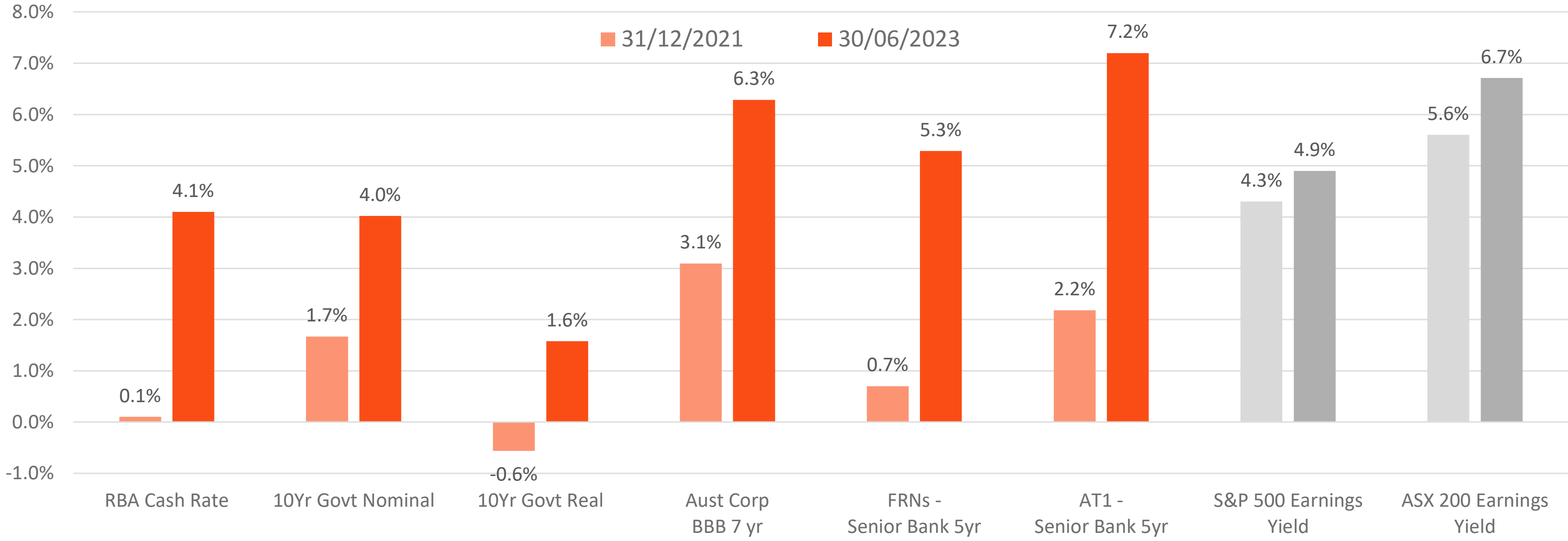
Source: Bloomberg. As at 30 June 2023. Australia top 200 represented by Solactive Australia 200 Index. Global Equities ex Australia represented by Solactive GBS Developed Markets ex Australia Large & Mid Cap Index.

The appeal of fixed income has increased with yields

Higher starting yields matter because of:

- Income, in both absolute terms and relative to equities
- Equity diversification potential

Yields of selected Australian cash, fixed, floating rate securities, and equity markets



Source: Bloomberg, Westpac. 10Yr Govt Nominal, 10Yr Govt Real, Aust Corp BBB 7 yr are yield to worst. FRNs – Senior Bank 5yr, AT1 – Senior Bank 5yr are All-in-yields S&P 500 Earnings Yield and ASX 200 Earnings Yield are inverted 12-month forward P/E ratios. Yields are subject to change.

betashares

Key principles for building a robust core portfolio

betashares

What is key for core?

The core of a portfolio is the 'anchor' of any investor's portfolio.

We believe investment building blocks used to construct a core portfolio should have the following characteristics:

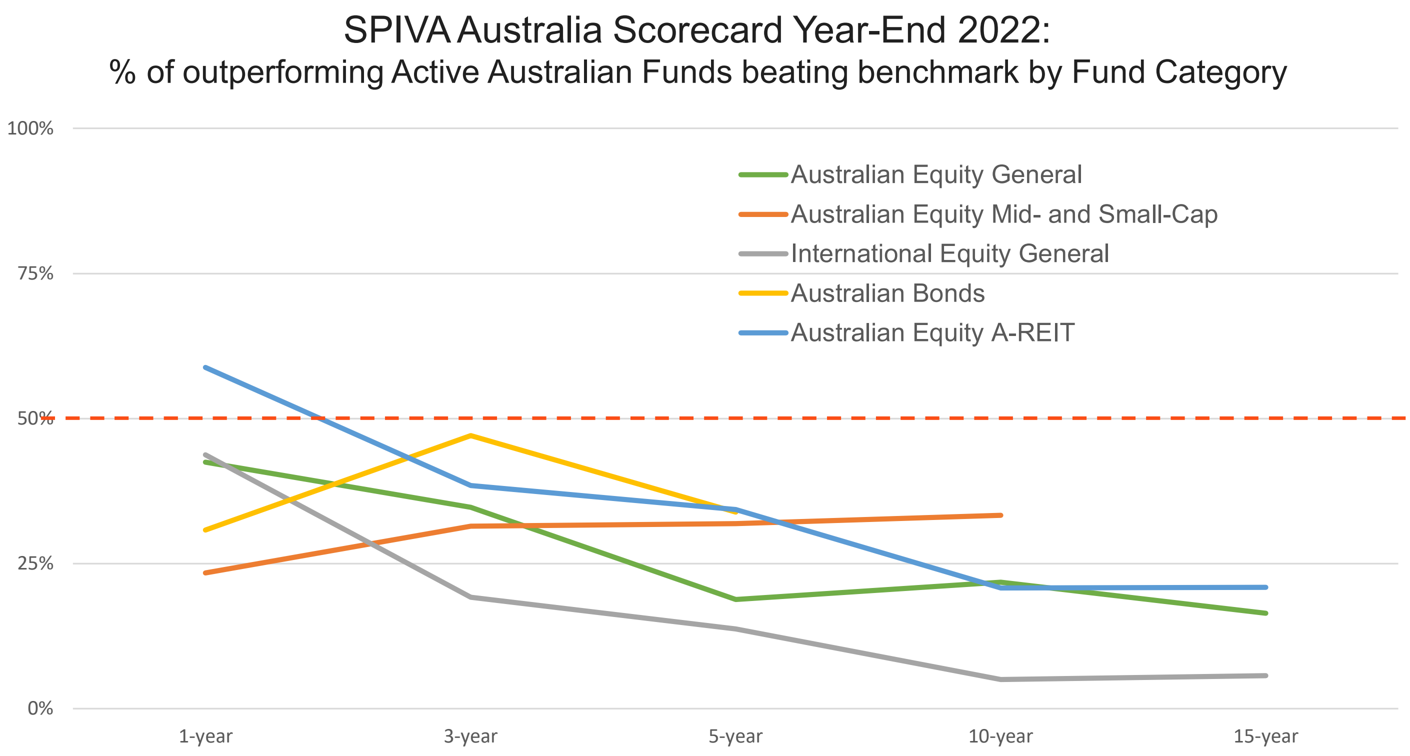
Provide asset class exposure
(Strategic asset allocation process)

Be able to be held for the long run

Compelling 'value'
Robust, long-term, net-of-fee performance

Seek to reduce **overall volatility of the portfolio** through diversification

Myths about Active:
1. Active managers are better placed in a volatile market



Source: S&P Dow Jones Indices LLC, Morningstar. Data as of Dec. 30, 2022. Chart is provided for illustrative purposes. Underperformance rates for Australian Bonds and Australian Equity Mid- and Small-Cap categories are reported for time horizons over which the respected benchmark indices were live. You cannot invest directly in an index. **Past performance is not indicative of future performance.**

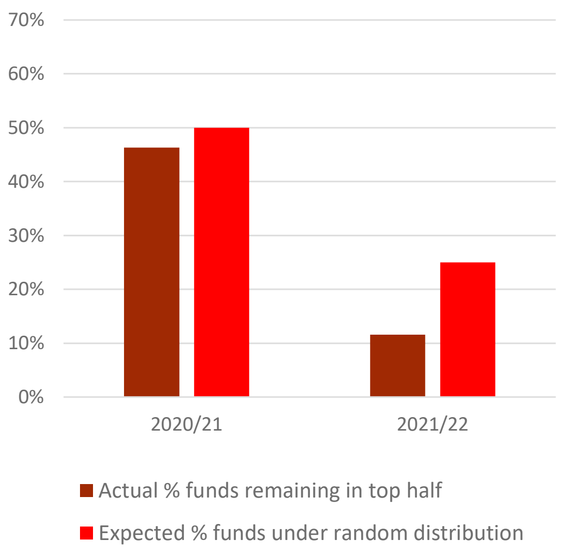
2022 was supposed to be the perfect environment for stock picking and active management.

However, the majority of active managers underperformed in 2022 in all categories except for A-REITs.

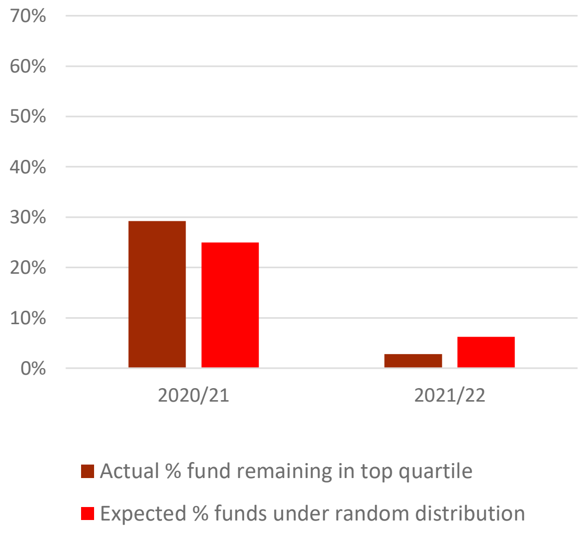
The remaining proportion of active funds that do outperform generally shrinks as you extend the investment time horizon.

Myths about Active:
2. Its all about picking the best active manager

% of Active funds in the top half for 2019/20, repeatedly remaining in top half



% of Active funds in top quartile for 2019/20, repeatedly remaining top quartile



Some assume that active funds fall into two groups – the good ones that persistently outperform and the bad ones that constantly underperform.

The probability of an active fund that is in the top half of its peer group in year 1 remaining in the top half of its peer group the following year can roughly be described as a coin toss.

Source: S&P Dow Jones Indices LLC, Morningstar. Data as of June 30, 2022. Chart is provided for illustrative purposes.
Past performance is no guarantee of future results.

Compounding hurts active managers over time

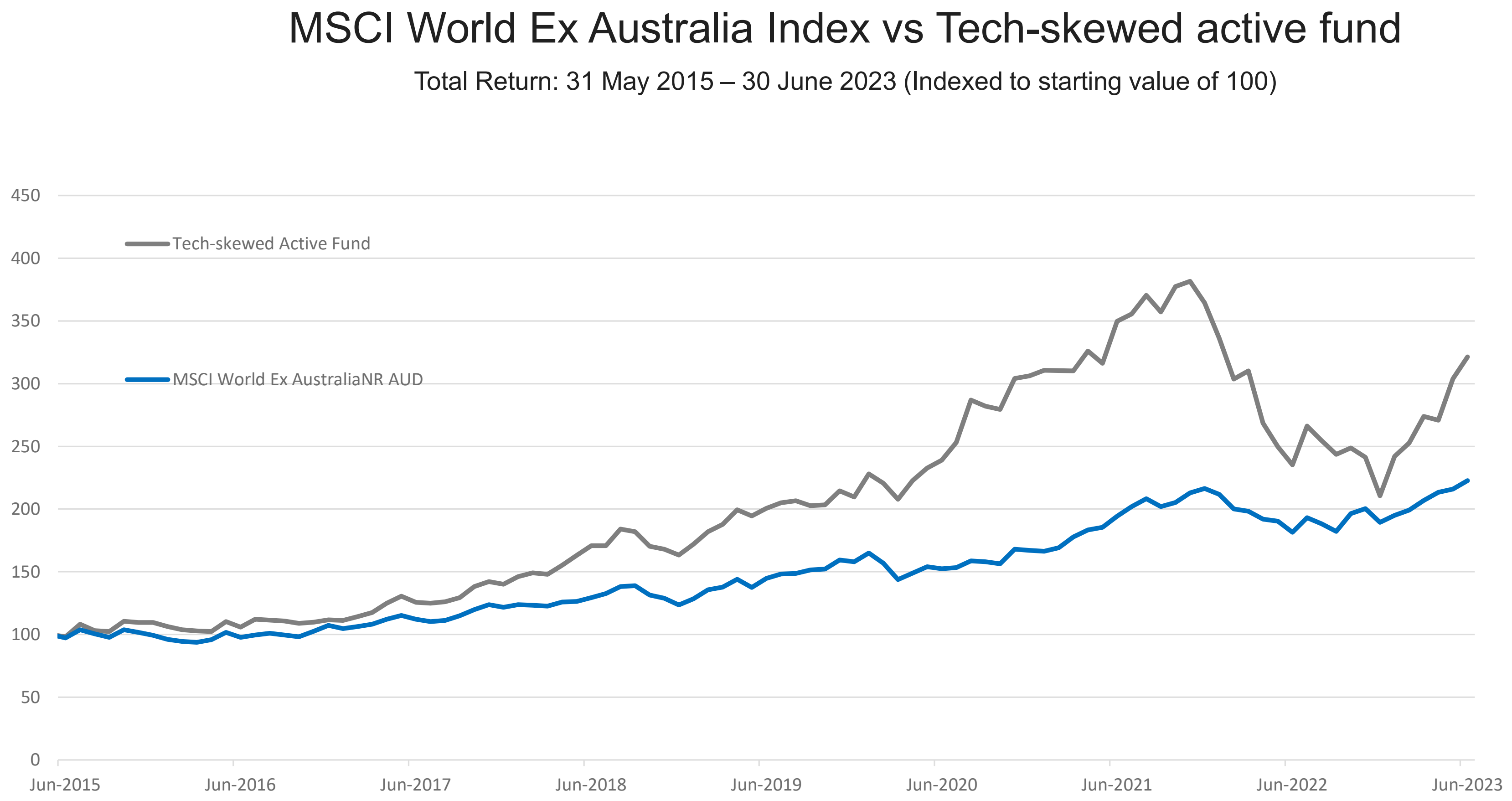
Impact on long term performance

- Where active outperformance is transient, it does not compound.
- Higher fees and costs **always** compound in the same direction, eroding capital.
- The cost of staying with an underperforming active manager can be significant (“Do I switch or do I stay?”).
  - Using index funds in the core portfolio reduces this risk.

How do you move beyond broad market beta?

Default answer for a lot of investors has been to choose an active manager that pursues a particular style or investment process

Do active funds generate alpha…

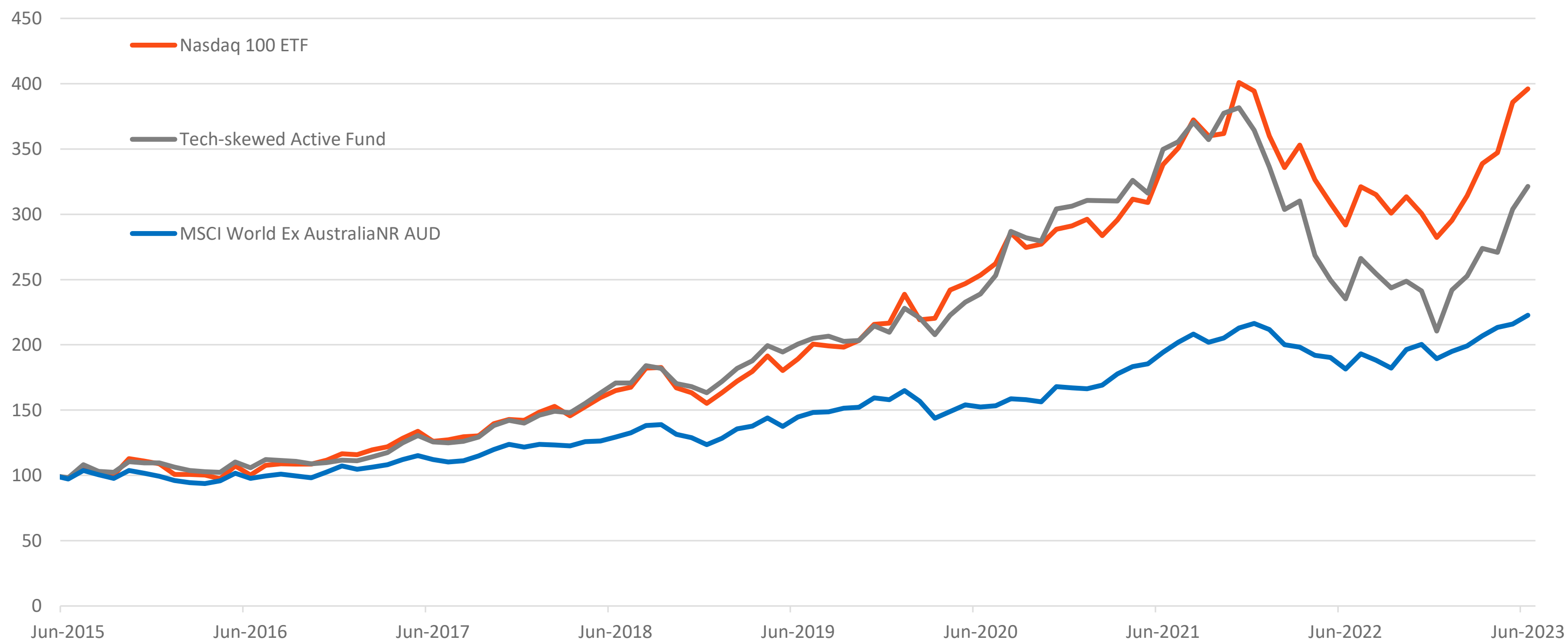


Source: Morningstar. As at 30 June 2023. Common inception date of May 2015 for the "Tech-skewed active fund" and the index. **Past performance is not indicative of future performance of any index or fund**.

…or are active funds just factors in disguise?

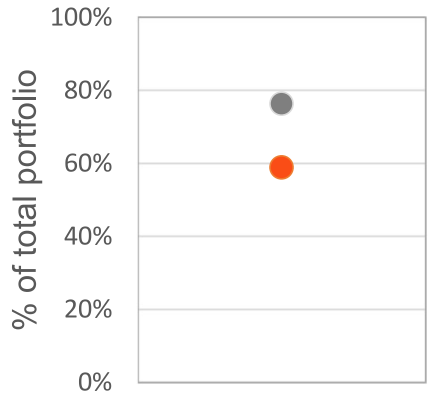
NASDAQ 100 ETF (ASX: NDQ) vs Tech-skewed active fund

Total Return: 31 May 2015 – 30 June 2023 (Indexed to starting value of 100)

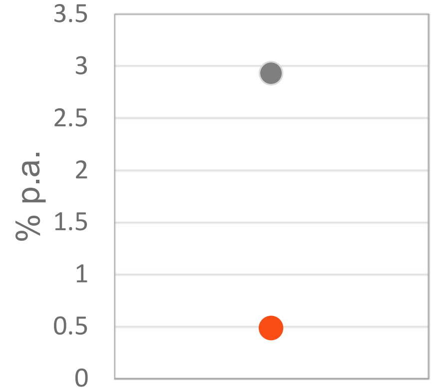


Comparison provided for illustrative purposes only. Not a recommendation to make any investment decision or adopt any investment strategy.
Source: Morningstar. As 30 June 2023. Common inception date of May 2015 for the "Tech-skewed active fund", NDQ and the index. **Past performance is not indicative of future performance**.

NDQ vs active fund Top 10 holding weight

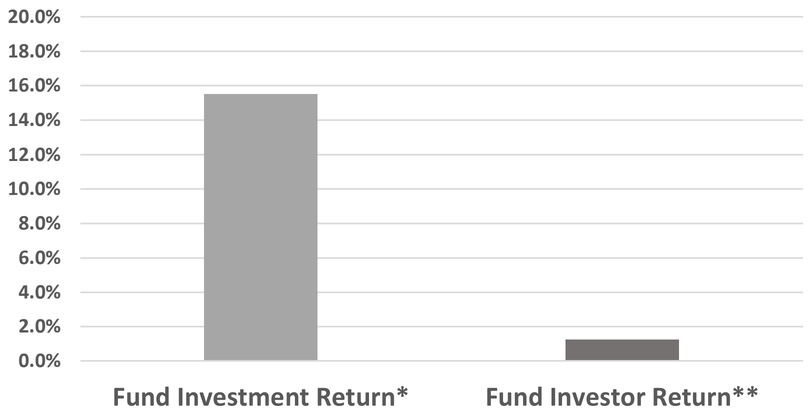


NDQ vs active fund Management costs

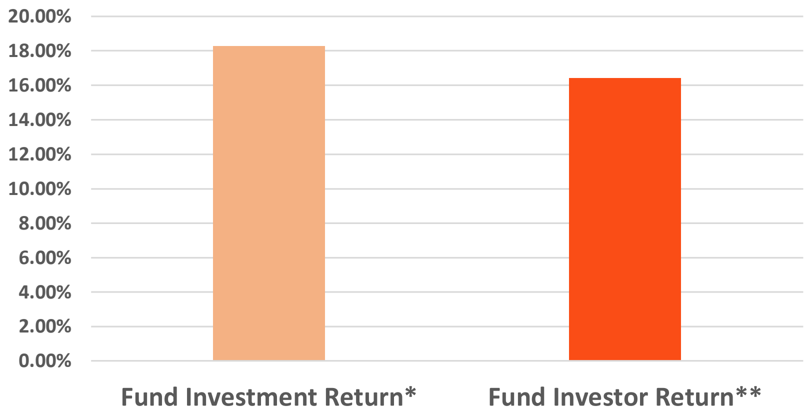


And what were the outcomes for Investors in this funds…

Tech-skewed active fund



Betashares NASDAQ-100 ETF



Performance Fees:

+$30million for 2020, 2021 financial years

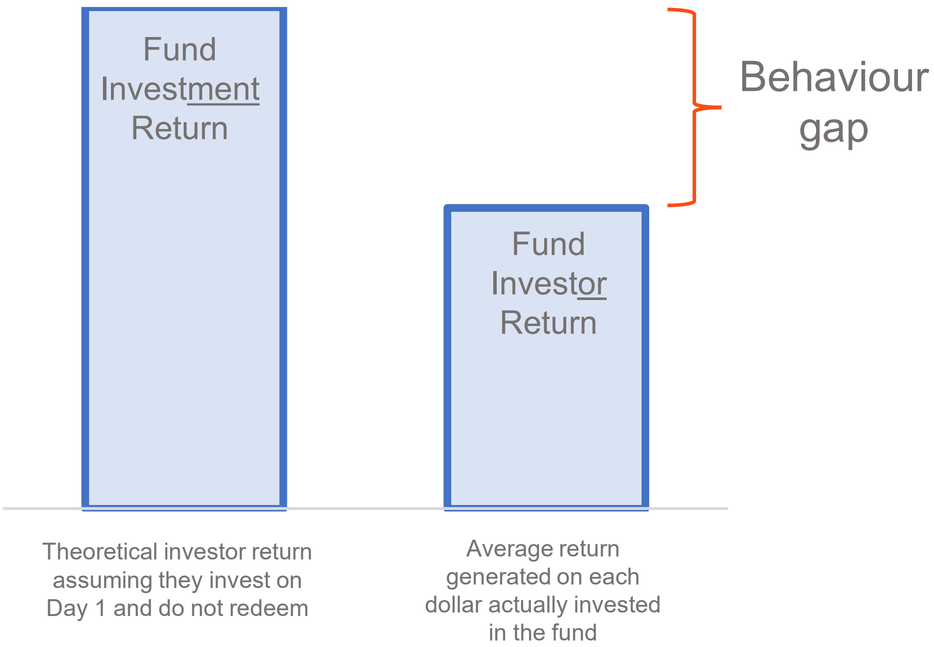
Zero for 2022 financial year***

Betashares NASDAQ-100 ETF has no performance fees

* Source: Morningstar. Return (net of fund management costs) from common inception (being 26 May 2015) to 31 May 2023.
** Source: Morningstar, Betashares. Estimated dollar-weighted return (net of fund management costs) from common inception (being 26 May 2015) to 31 May 2023. Based on Morningstar's estimated monthly net flow and monthly return data since common inception date.
*** Source: Performance fees for 'Tech-skewed active fund' based on fund's annual financial reports.
Past performance is not indicative of future performance.

betashares

The behaviour gap and actively managed funds:



Significant empirical evidence from behavioural finance that shows biases detrimentally impact fund investors' returns*

Fund investors generating poorer returns than the funds they invest in, known as the 'behaviour gap'

The behaviours gap is, on average:

- Larger for actively managed funds than index tracking funds
- Larger for higher fee funds

*Sources: Geoffrey C. Friesen, Travis R.A. Sapp, "Mutual fund flows and investor returns: An empirical examination of fund investor timing ability", Journal of Banking & Finance, 31:9 (September 2007)
Jason Hsu, Brett Myers, Ryan Whitby, "Timing Poorly: A Guide to Generating Poor Returns While Investing in Successful Strategies", Journal of Portfolio Management, 42:2 (Winter 2016).
Karthik Padmanabhan, Constantijn Panis, Timothy J. Tardiff, "The ability of Investors to Time Purchases and Sales of Mutual Funds", U.S. Securities and Exchange Commission (November 2017)

Why we think Quality never goes out of style

Investing in a diversified portfolio of quality companies provides the potential for:
outperformance + lower overall portfolio volatility

Quality has the key characteristics for a core portfolio holding:

- ✓ **Can be held for the long-term**
- ✓ **Benefits from the "flight to quality" during periods of market stress**
- ✓ **Can contribute to lowering overall portfolio volatility**

Why Quality could be considered right now:

- Profit margins under pressure – Quality companies typically enjoy high and stable profitability
- Higher financing costs – Quality companies typically have lower leverage
- A quality portfolio can be constructed without significant stock specific exposure to 'US megacap tech stocks'

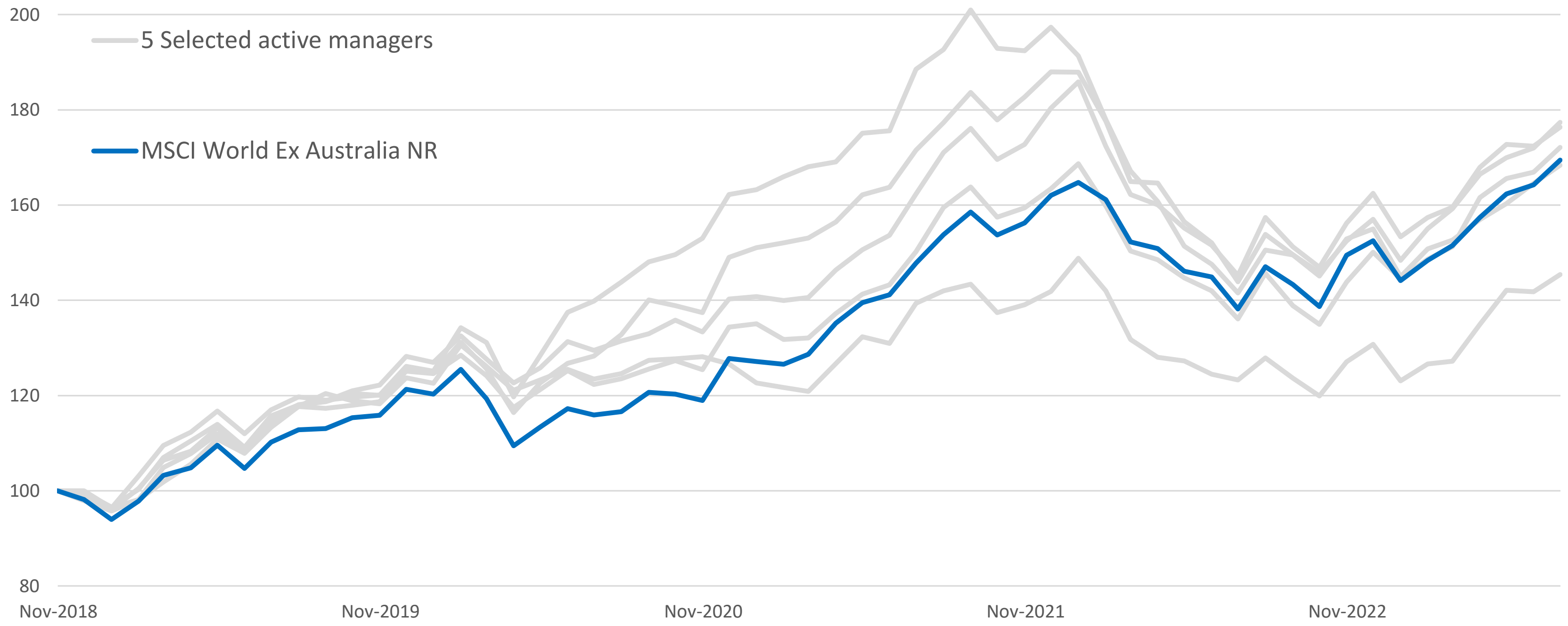
betashares

Evidence of outperformance by some active global quality funds

MSCI World Ex Australia vs

Selected Active Global Quality Managers

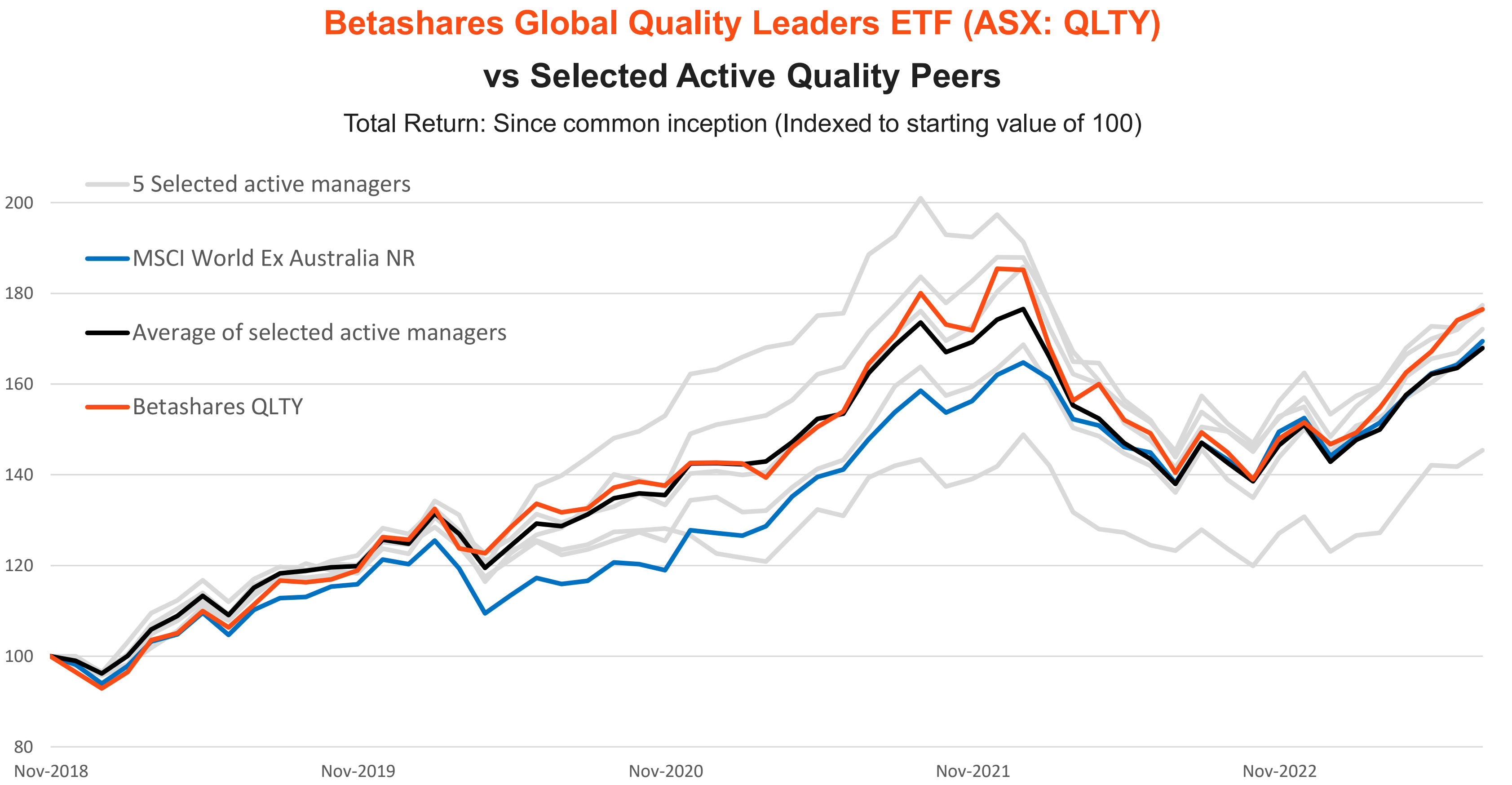
Total Return: Since 5 November 2018 (Indexed to starting value of 100)

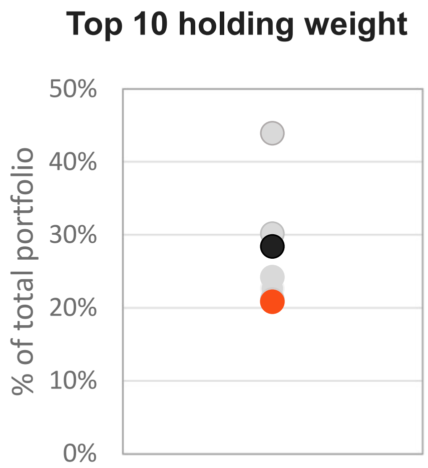


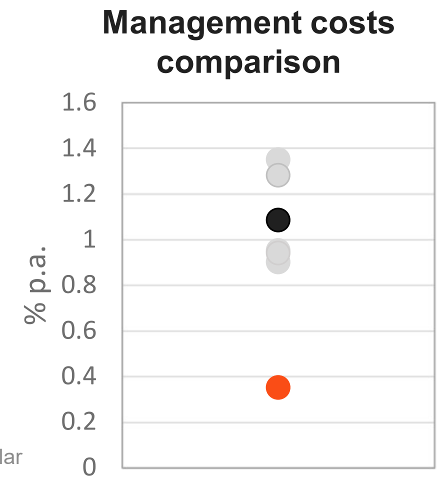
Source: Morningstar. As at 30 June 2023. Common inception date is 5 November 2018. Active Quality Peers selected from Australian domiciled global equity active funds with similar factor profile to QLTY (as determined by Betashares). You cannot invest directly in an index. **Past performance is not indicative of future performance of any index or fund.**

betashares

Betashares QLTY has outperformed active quality managers







Source: Morningstar. As at 30 June 2023. Common inception date is 5 November 2018. Active Quality Peers selected from Australian domiciled global equity active funds with similar factor profile to QLTY (as determined by Betashares). You cannot invest directly in an index. **Past performance is not indicative of future performance of any index or fund.**

betashares

What does an active ‘quality’ manager investment process look like?

Simplified example of a typical investment process for a quality-style active manager*

Step 1:
Quantitative filtering on companies to reduce investment universal to pool of quality companies

Step 2:
Fundamental analysis and stock specific research to select stocks and construct portfolio

This step looks a lot like the identification of stocks for a quality factor index

Does this step add any alpha?

*Provided for illustrative purposes only. Not representative of any particular active manager or fund.

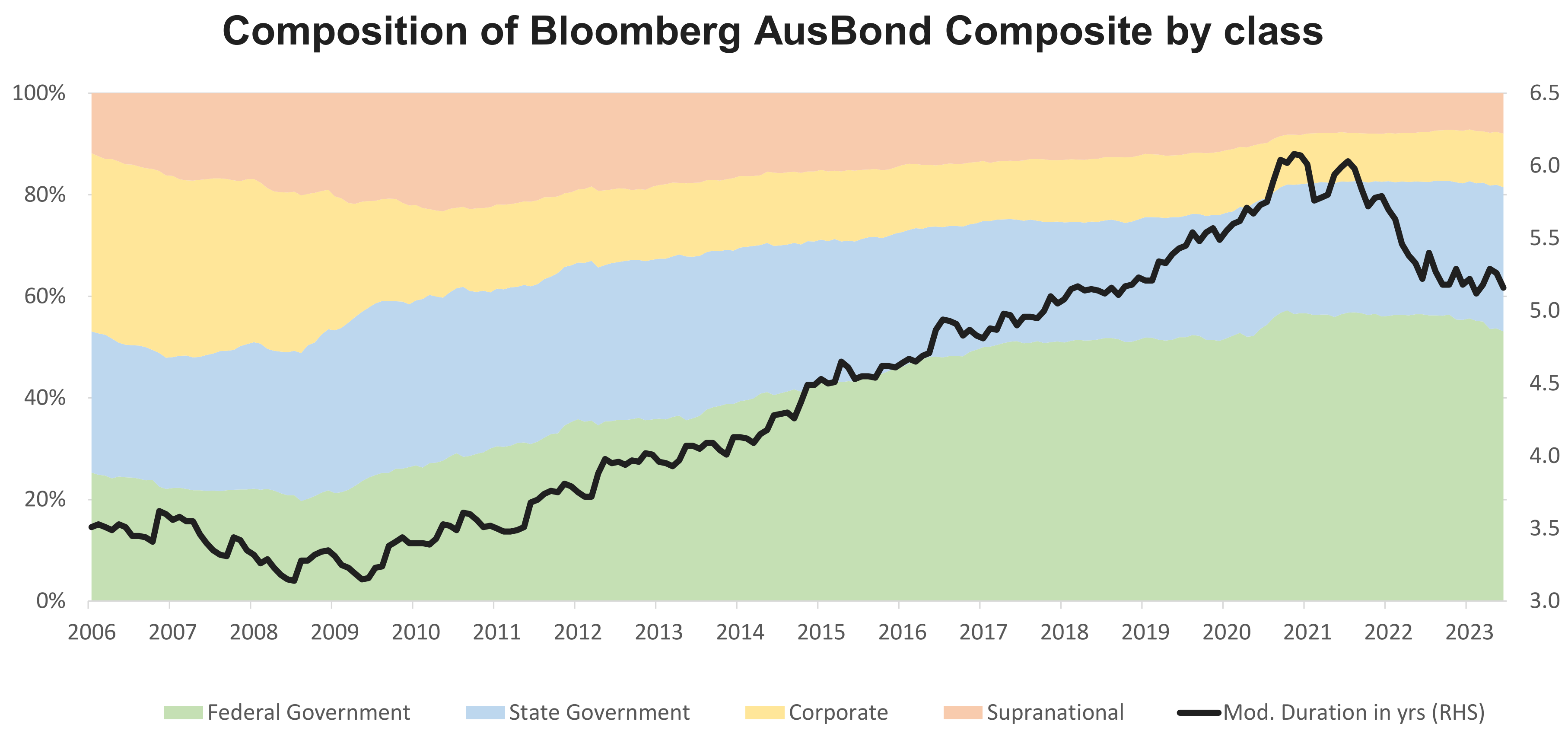
What does fixed income offer for portfolio construction?

Key considerations for how you use fixed income in portfolio construction

How to approach selecting your core allocation to fixed income:

- Understand the biases and economics of active management
- Consider the shortcomings of traditional fixed income benchmarks
- Two questions to ask yourself when looking at core fixed income allocation:
  1. “What growth assets do I hold?”
  2. “What do I need from my fixed income to complement those growth assets, out of capital stability, income and equity diversification?”

Duration and segment creep of traditional indexes

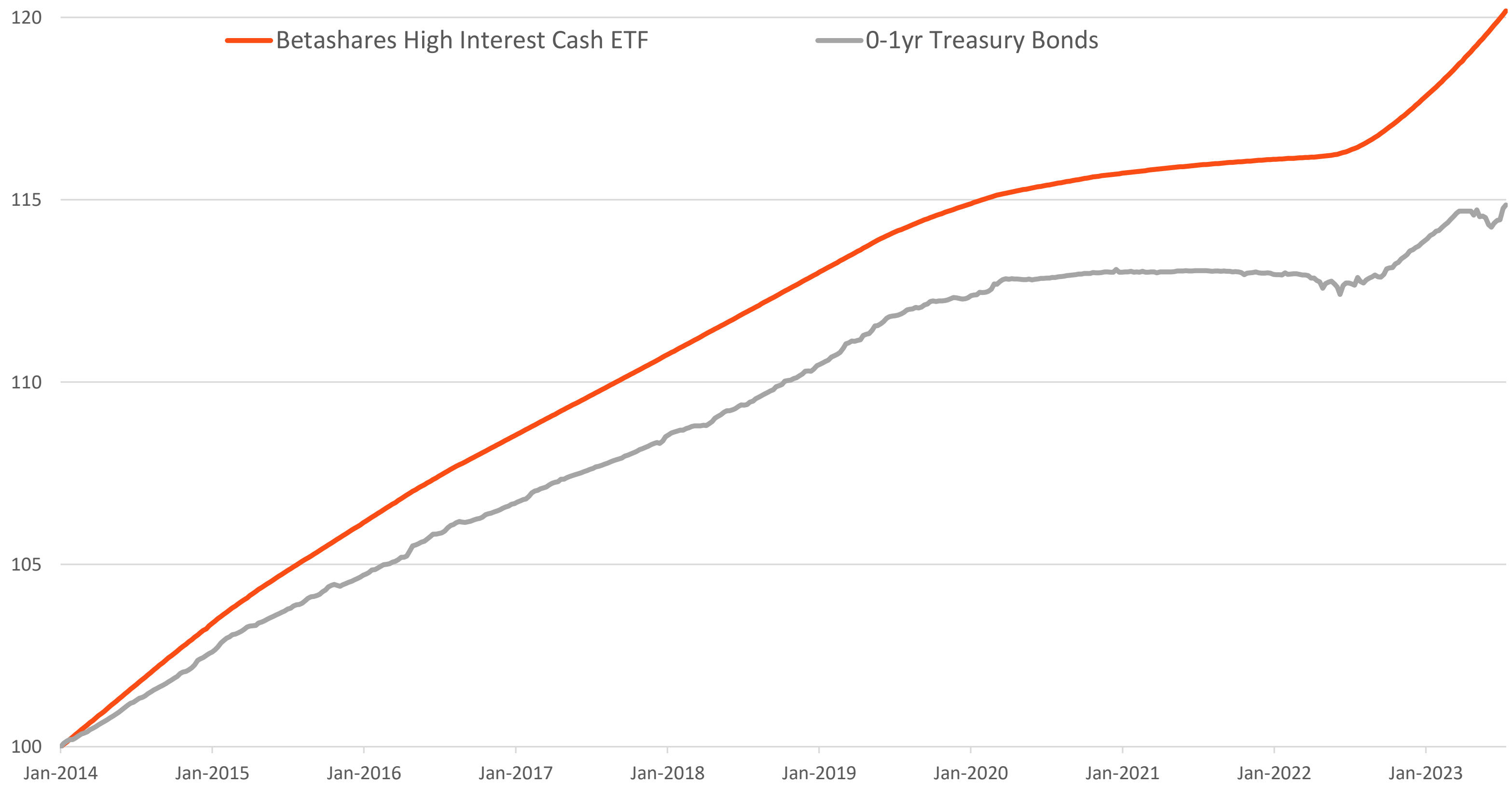


Sources: Bloomberg; Betashares. As at 30 June 2023

A very inefficient part of traditional fixed income indices

0-1 year Australian Treasury Bonds versus Betashares High Interest Cash ETF

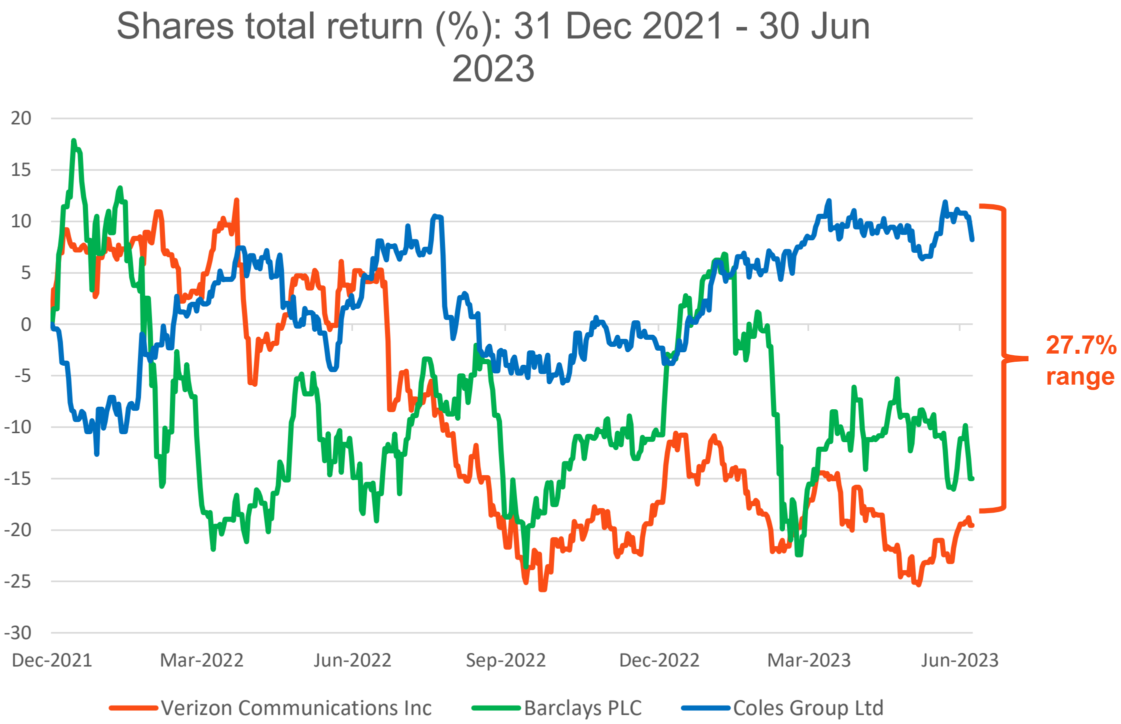
Total Return (series start indexed to 100): 3 Jan 2014 – 23 July 2023



Source: Bloomberg; Betashares Capital, as at 23 July 2023. **Past performance is not an indicator of future performance of any index or ETF.**

betashares

Comparative performance of selected Australian Corporate Bonds

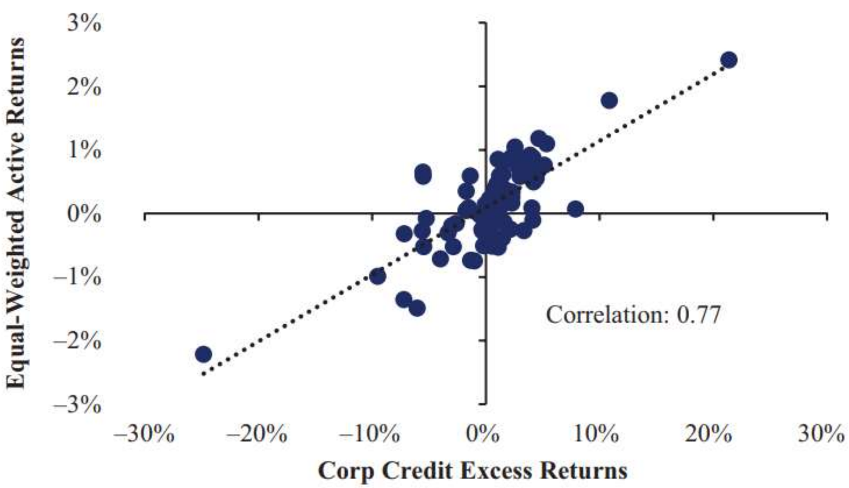


Source: Bloomberg. AUD fixed rate bonds selected from Betashares Australian Investment Grade Corporate Bond ETF (ASX; CRED) portfolio as at 30 June 2023, with term-to-maturity 5-7years and S&P credit rating of BBB+. Where the bond issuer has listed shares the total return of those shares is also shown. **Past performance is not indicative of future performance.**

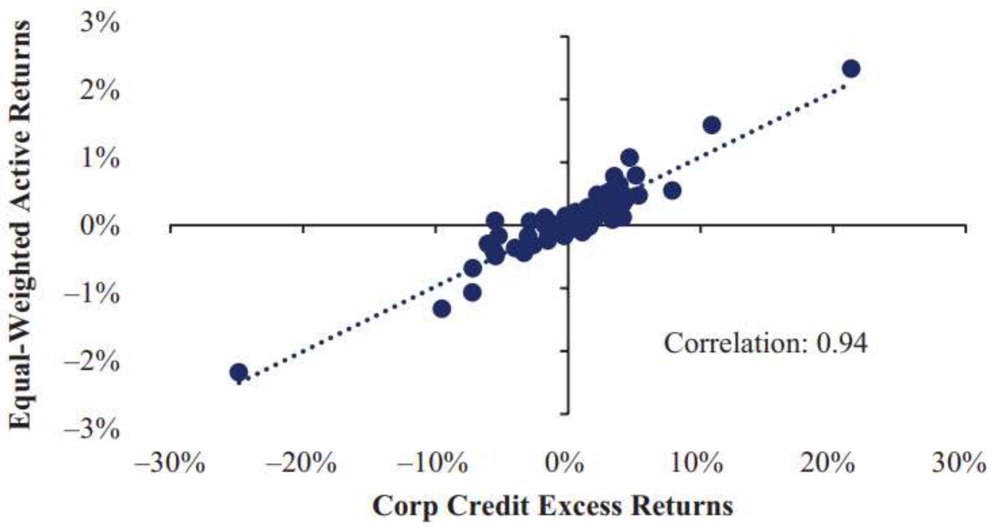
Active Fixed Income: AQR study on the "illusion" of active alpha

US mutual funds, quarterly returns, 1997-2019

Active managers benchmarked to Global Aggregate



Active managers benchmarked to US Aggregate



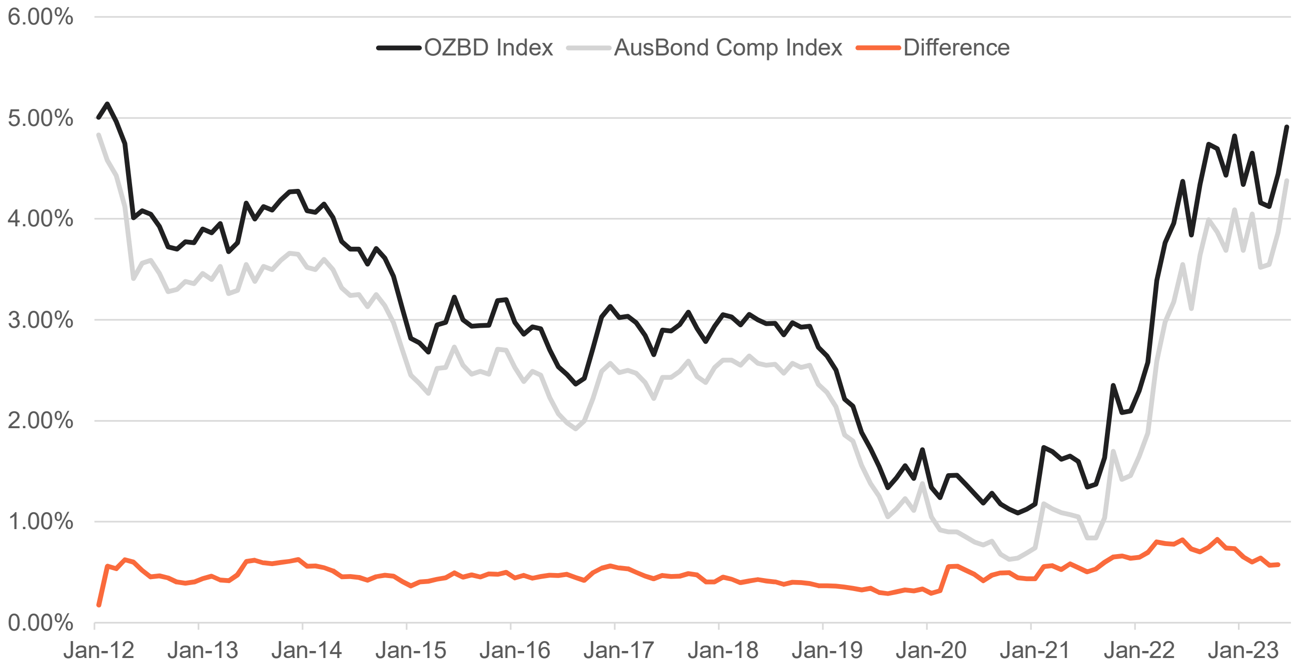
Source: AQR, 2019, https://www.aqr.com/Insights/Research/Journal-Article/Active-Fixed-Income-Illusions

betashares

OZBD's index yield premium at attractive levels

Comparison of historical yield-to-worst for Bloomberg Australian Enhanced Yield Composite Bond Index (OZBD's Index) and AusBond Comp Index

31 Jan 2012 to 30 Jun 2023



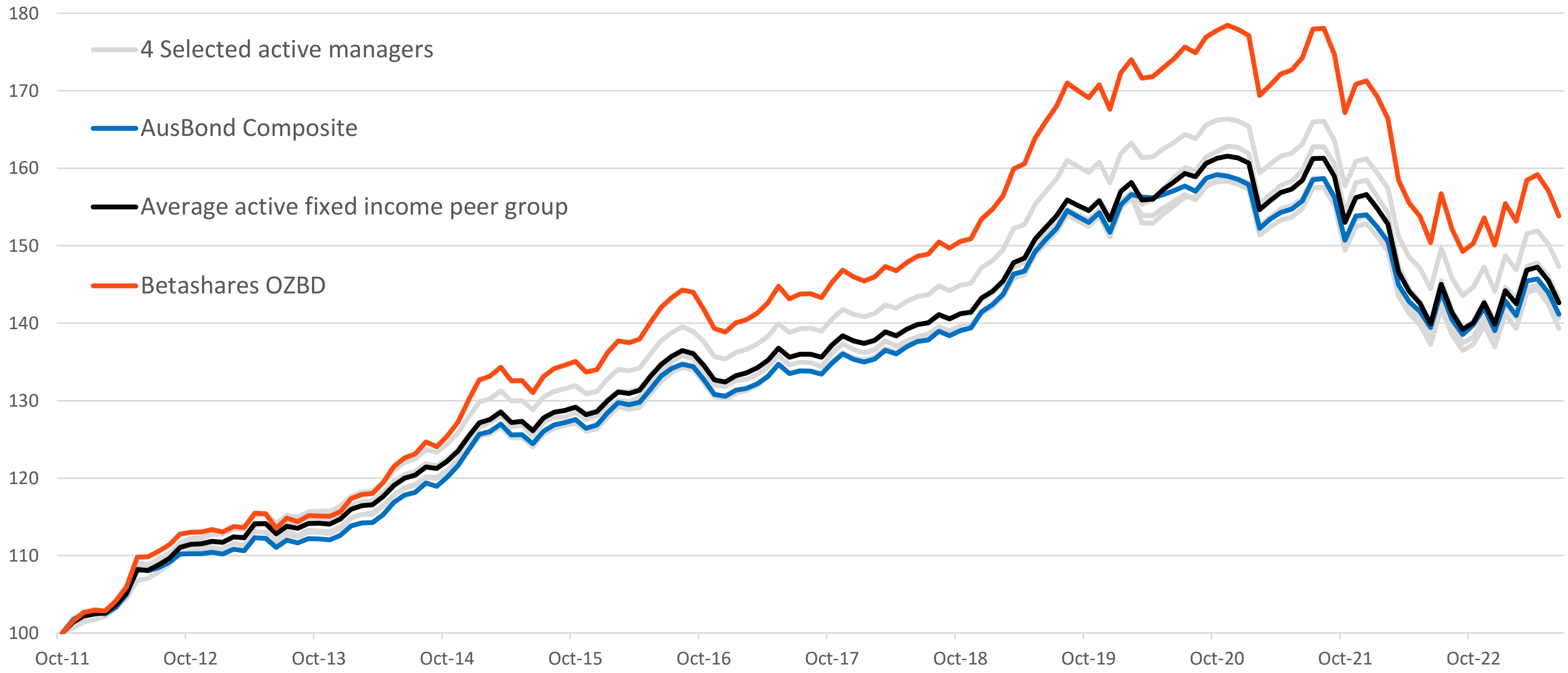
Source: Bloomberg; Betashares. As at 30 June 2023. You cannot invest directly in an index. Does not take into account ETF fees and costs. Past performance is not an indicator of future performance of any index or ETF. Index performance includes back-tested data by the index provider using the index methodology at index launch date. Yield will vary and yield differential compared to AusBond Composite may be lower or negative over time.

A smarter index approach and low fees can make a significant difference

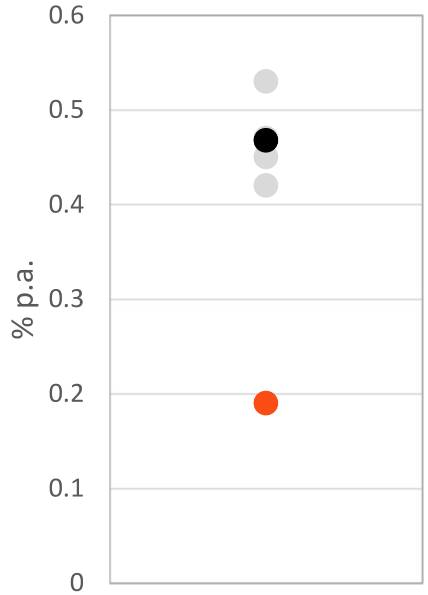
Betashares Australian Composite Bond ETF (ASX: OZBD) Live + Index (less MER)

vs Selected Active Fixed Income Peers

Total Return: Since common inception (Indexed to starting value of 100)



Management costs comparison



Source: Morningstar. As at 30 June 2023. Common inception date is 31 October 2011. Active Fixed Income Peers selected from Morningstar Australian fixed income active funds with similar fund profile to OZBD (as determined by Betashares). OZBDs performance is a blend of live and historical index performance less OZBDs MER. You cannot invest directly in an index You cannot invest directly in an index. **Past performance is not indicative of future performance of any index or fund.**

betashares

In conclusion

- Shorter, sharper cycles make market timing even harder to execute
- Interest rates have 'normalised' – re-evaluate what defensive assets are offering
- Yes – the majority of active managers historically have underperformed broad market benchmarks
- But also – there are now rules-based index funds that can provide exposure to the same risk premias that active managers have relied on
- Low-cost index tracking funds provide an excellent toolkit for building a strong core over the long term, incorporating both broad market beta and intelligent indexing solutions.

Things to consider

- **Investment risk:** The value of an investor's portfolio can go down as well as up. Depending on the fund, risks may include interest rate risk, credit risk, market risk and index tracking risk.
- **No guarantees:** Future outcomes are uncertain – desired returns may not be achieved
- **General information only:** Today's discussion does not take into account any person's individual circumstances and is not personal financial advice.
- **Research:** See the PDS and Target Market Determination (TMD) at www.betashares.com.au for more information about risks and other features of the Fund.

betashares

Thank you