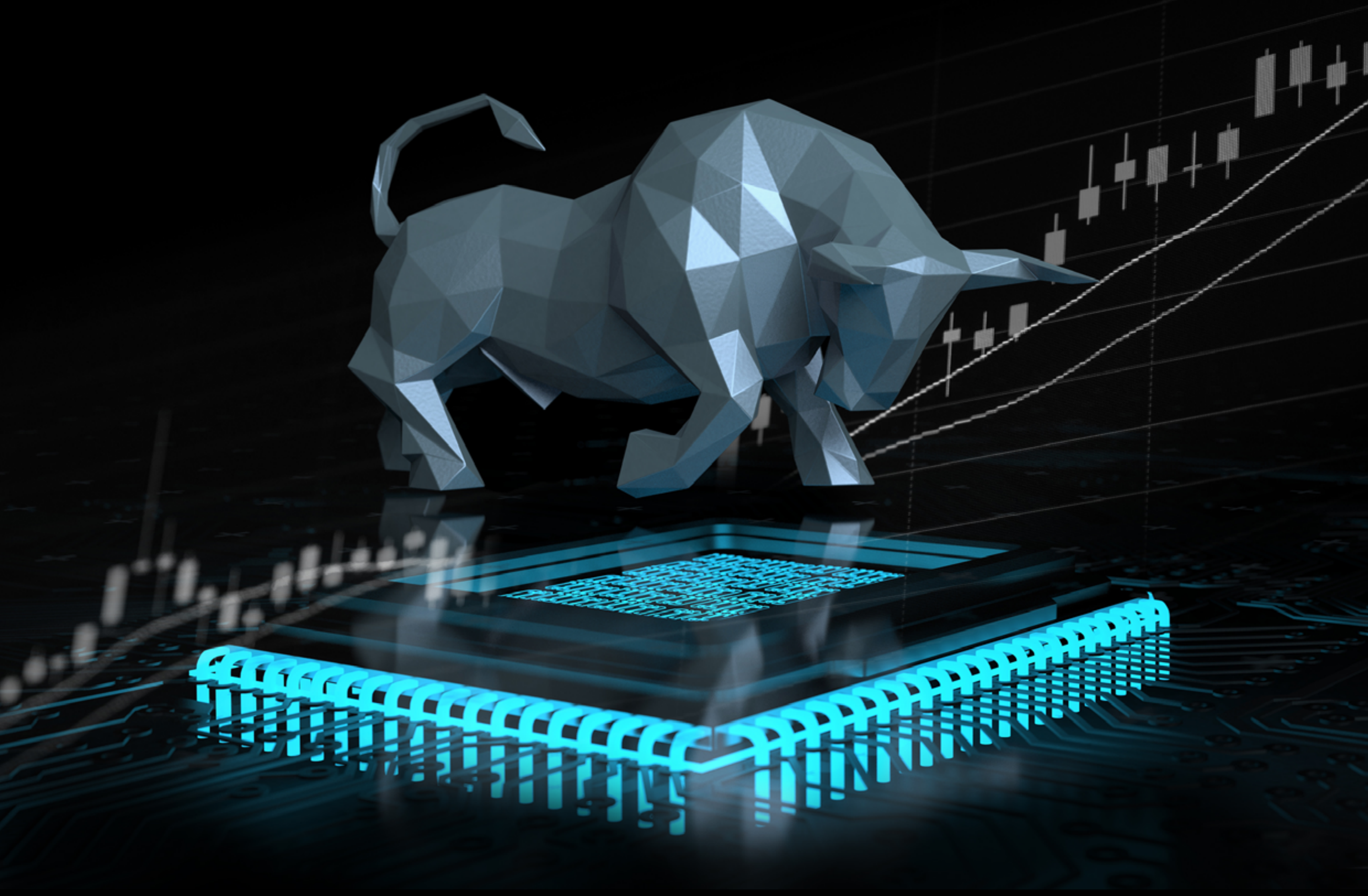
Pie Funds

Slice of Pie

KEEPING YOU UP TO DATE WITH PIE FUNDS AND THE MARKETS

ISSUE 179 • JULY 2023



AI's bullish momentum

A MESSAGE FROM MIKE
Back in a bull market?

AI ON A PAGE
Examinig AI's future in business

Pie Funds

> “We exist to make money for clients, so performance matters more than growing our customer base.”

Mike Taylor
Founder & CIO

A MESSAGE FROM MIKE

Back in a bull market?

There's an old saying, "If it looks like a duck, swims like a duck, and quacks like a duck, then it probably is a duck". So, after a strong start to 2023, with the S&P500 up over 20% from its October lows, investor sentiment thawing out, interest rates close to a peak, inflation falling and company earnings improving, it's probably fair to say that we are back in a bull market. Now, of course, that's not the case for all markets and all sectors. I've talked recently about how small caps, the ASX and NZX are lagging, with both exchanges barely up 10% since the low and virtually flat during 2023. But it would appear to me that because the dire forecasts of last year haven't materialised – I think that peak pessimism was around December – markets have recalibrated based on the data. Sure, AI has helped fuel this rally, but there are fundamental reasons why the market is trading where it is.

So pleasingly, our funds had a strong June, with Australasian Growth performing the best, up 5.7% for the month and up 17.1% for 1 year. And while the XSO (ASX small ords) was down for the month, much of the consumer slowdown, which has been a drag on the ASX XSO, might well now be priced in.

AI on a page

It's funny, I'm asking myself as I sit here writing this on a Saturday night, "Should I just get ChatGPT to write this article?" I'm sure it would do a far better job than I could (without the Mike Taylor flair, of course), but I could easily tweak its first draft to put in my own words... (I haven't, by the way). But it's very tempting. And that's the crux of AI, really.

Currently, it lacks creativity – but that will come soon, as it learns.

Back to the future

According to Harvard University, the concept of AI has been around for over 70 years. One of the early scientists to conceive the possibility of AI was British mathematician Alan Turing in 1950. Turing suggested that humans use available information as well as reason in order to solve problems and make decisions, so why couldn't machines do the same thing? This was the logical framework of his 1950 paper, Computing Machinery and Intelligence, in which he discussed how to build intelligent machines and how to test their intelligence, aptly named the Turing Test.

Since then, humans have had a fascination with AI, and Hollywood has captured our imagination with countless futuristic settings in which AI is either helping us (the Jetson's) or trying to kill us (Skynet and the Terminator). Now life is imitating art.

The future is already here

Other than ChatGPT, many of us have already had some very basic exposure to AI in recent years, either via the algorithms on Facebook or your Spotify account or one of the many chatbots on a company's website. The benefit from these developments is that AI has been able to process vast amounts of data – far more than humans could assimilate – and use that to improve the user experience (UX). I think it's fair to say most of us have had mixed experiences to date with AI. We see some advantages, some disadvantages, and a number of ways it can be misused.

From what I've read, the gains from here are going to be exponential. Where AI was in the background until late 2022, it's upon us now and within 2-3 years it will be integrated almost completely into our everyday lives. From the replacement of jobs to streamlining processes, generative AI could automate functions, such as customer service, marketing and sales, inventory and supply chain management – to name but a few. Of course, software engineering is one of the biggest areas that will be impacted.

Tomorrow is the future

I am a big podcast listener and I recently tuned in to an episode entitled Emergency Response: Ex-Google Officer Finally Speaks Out On The Dangers of AI! It was an interesting review, and I would certainly recommend it. Beware, though, as it's very alarmist in its outlook for the world under AI, and the summary is that AI is more dangerous to the world than nuclear weapons, and we better hope that, in the future, it doesn't get weaponised by the wrong people. It does point out that AI is not the risk, the risk is the humans that programme AI.

If AI becomes infinitely more capable than us, solving our problems and creating our content – which I think it will be in the very near future – it begs the question, "What does that mean for us?"

I don't know the answer to that yet, but it's certainly keeping me up at night.

So, where once I studied calculus at school, today my son is studying coding. Where pre-industrial revolution, life didn't change much decade-to-decade, our future is going to be very, very different from the recent past. Whether it be from climate change or AI, humans are on course to destroy our planet in the next 50 years. Or at least, the planet as we know it. I hope that humanity will do the right thing, but I wouldn't guarantee it and we might only realise what we have done when it's too late. The warning signs are there. What can we do? Educate ourselves on both of these topics and ensure WE do the right thing – and of course, live in the moment.

Who knows, maybe AI will solve climate change and numerous other problems we haven't found solutions to, in ways we can't imagine.

Are we better off with or without AI? Unlike some of humanity's other great inventions, I'm not convinced AI will on a net-net basis actually improve our lives, a bit like having a computer in your pocket. There are advantages, but also disadvantages.

How do we make money from this?

The speed at which the stock market re-prices assets, its inability to price the future accurately, and our desire as humans to see around the corner, means that many investments will start to price in AI-led gains, such as improved efficiency, new capabilities, and greater productivity, long before the revenue and profits arrive.

Whilst we are already seeing revenue gains from the likes of Nvidia and data centre providers, the rest of the tech industry is still to come. Even with companies such as Adobe, who are utilising AI software in Photoshop, we are still unable to quantify the upside, let alone the potential downside.

So as far as the improvements for the rest of the market, we can see that it's coming, perhaps 18-24 months away, but at this stage, it's still difficult to quantify. However, someone has had a stab in the dark. According to a report from McKinsey, AI could add US$ 2.6-4.4 trillion annually (that's 5-10% of global GDP). The potential is there.

CASE STUDY: In 2013, McDonald's was one of the largest employers globally, with 440,000 staff. But as they have automated their ordering system over the last decade, this has fallen to just 150,000. Remarkable. With AI, it's logical to conclude that this trend will continue. A taste of what's to come? Perhaps in another 10 years, there won't be any humans in the restaurant except the customers. Since 2013, Earnings Per Share has grown from roughly US$5 to over US$10 today, yet revenue has actually declined. The stock price has moved from US$100 to $300. A gain of 200% over the decade or 11.6% p.a. excluding dividends.

In terms of general themes we are already invested in or looking at, automation is an obvious one, but we are also constantly reviewing our investments to see if their business model is in some way threatened by AI. And we are also engaging with management teams, particularly in the small-cap space, to see how and when AI will be integrated into their business model. For many, it's still at the concept stage, but as with the above McDonald's case study, it's clear that we will be looking for productivity gains to drive revenue growth and labour efficiency to improve margins.

Usually, bull markets are born out of a new form of technology, and it certainly feels like the next big swing up will be led by the AI-leaders and the productivity gains it provides for the rest of the economy. Almost certainly we are on the cusp of a giant leap forward. Don't be left behind... unless that is intentional, of course!

Thank you again for your support. If you have any questions, please don't hesitate to email me on mike@piefunds.co.nz

Mike Taylor
Founder and Chief
Investment Officer

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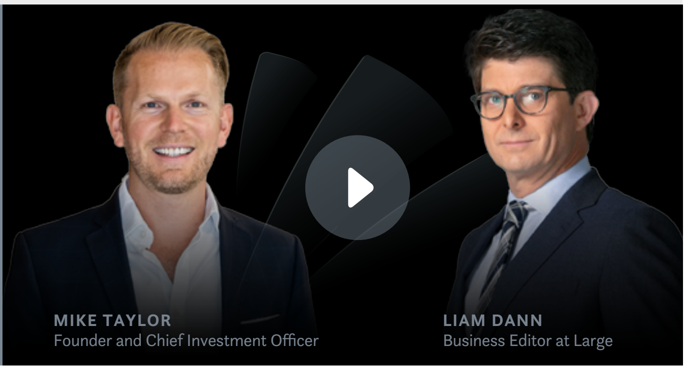
Market Watch

WILL AI-MANIA CRASH THE STOCK MARKET, OR CREATE REAL WEALTH?

Founder & Chief Investment Officer Mike Taylor and the NZ Herald's Liam Dann discuss the latest in markets.



Monthly Updates

KEEPING YOU UP TO DATE WITH PIE FUNDS AND THE MARKETS

Funds Snapshot

Monthly Update as at 30 June 2023

AUSTRALASIAN GROWTH | GLOBAL GROWTH | DIVERSIFIED

FUND DETAILS

	Fund Status	Inception Date	Unit Price	Standard Withdrawal Period	Lead Portfolio Manager(s)	Co-Portfolio Manager
Australasian Growth	CLOSED	Dec-07	$6.25	20 working days	Michael Goltsman	Mike Ross
Australasian Dividend Growth	OPEN	Sep-11	$3.82	10 working days	Mike Ross	Michael Goltsman
Australasian Emerging	CLOSED	Apr-13	$5.51	3 months	Kent Williams	Michelle Lopez
Australasian Growth 2	CLOSED	Aug-15	$2.12	10 working days	Michelle Lopez	Kent Williams
Global Growth	OPEN	Sep-13	$2.51	10 working days	Guy Thornewill*, Toby Woods* & Mike Taylor	
Growth UK & Europe	OPEN	Nov-16	$1.72	10 working days	Guy Thornewill*, Toby Woods* & Mike Taylor	
Global Growth 2	OPEN	May-18	$1.20	Up to 5 working days	Guy Thornewill*, Toby Woods* & Mike Taylor	
Conservative	OPEN	Apr-15	$1.14	Up to 5 working days	Mike Taylor & Travis Murdoch	
Chairman's**	OPEN	Sep-14	$2.22	20 working days	Mike Taylor	

**Guy Thornewill and Toby Woods are responsible for research and analysis*
***Minimum investment is $500,000*

PERFORMANCE

	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	10 yrs (p.a.)	Annualised since inception
Australasian Growth	5.7%	17.1%	-2.0%	4.9%	4.1%	8.8%	12.6%
Australasian Dividend Growth	2.8%	11.3%	14.3%	10.1%	11.9%	12.8%	15.4%
Australasian Emerging	2.0%	15.8%	9.5%	11.3%	10.4%	18.1%	18.2%
Australasian Growth 2	2.3%	14.5%	0.8%	6.1%	8.3%		10.1%
Global Growth	1.6%	15.1%	10.1%	9.3%	11.6%		9.9%
Growth UK & Europe	-0.3%	7.6%	11.7%	6.5%			8.5%
Global Growth 2	1.5%	15.0%	6.1%	4.3%			3.8%
Conservative	0.5%	6.1%	1.9%	2.5%	3.3%		3.5%
Chairman's	1.8%	13.1%	7.9%	8.0%	9.2%		9.6%

Returns after fees but before individual PIR tax applied

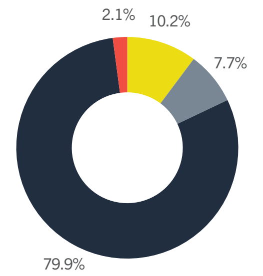
Funds Snapshot

Monthly Update as at 30 June 2023

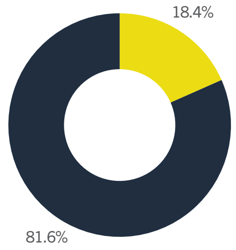
TOTAL FUNDS UNDER MANAGEMENT: $1.6b[1]

INVESTMENT MIX

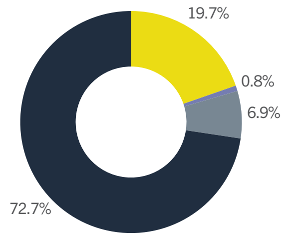
AUSTRALASIAN GROWTH



AUSTRALASIAN DIVIDEND GROWTH

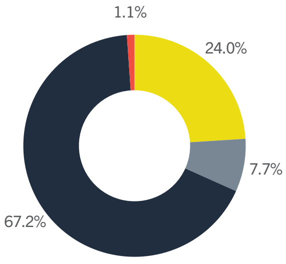


AUSTRALASIAN EMERGING

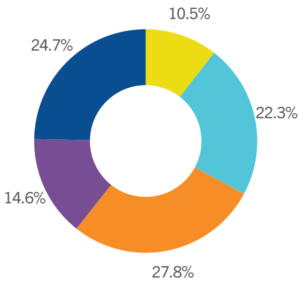


- ● Cash/other (including short and long derivatives)
- ● New Zealand fixed income
- ● Global fixed income
- ● Asian equities
- ● Emerging markets equities
- ● European equities
- ● UK equities
- ● US and Canadian equities
- ● New Zealand equities
- ● Australian equities
- ● Listed property

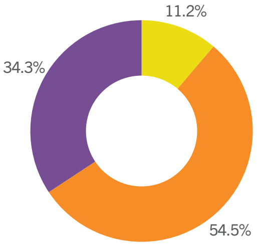
AUSTRALASIAN GROWTH 2



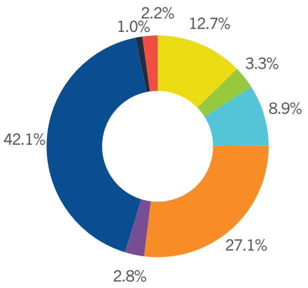
GLOBAL GROWTH



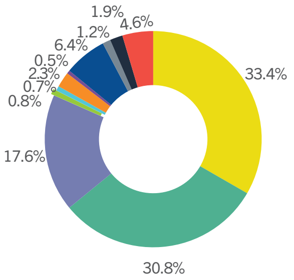
GROWTH UK & EUROPE



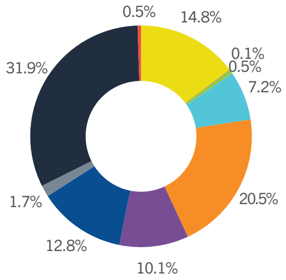
GLOBAL GROWTH 2



CONSERVATIVE



CHAIRMAN'S



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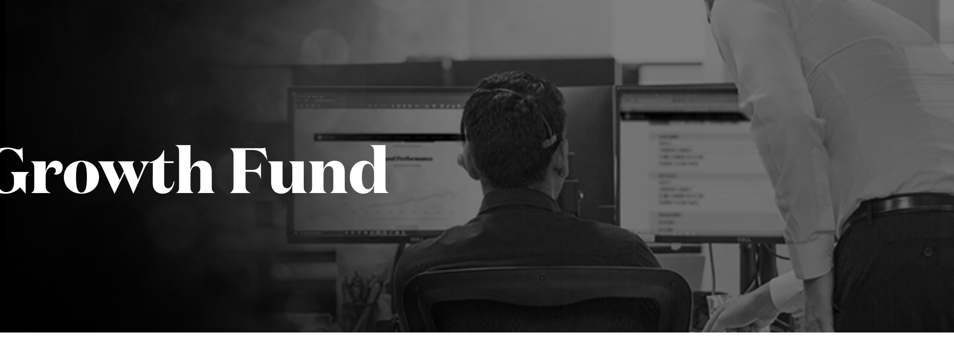
1. Total funds under management includes $207m of interfund investments ie Chairman's Fund investing into other funds.

Information is current as at 30 June 2023. Pie Funds Management Limited is the manager of the funds in the Pie Funds Management Scheme. Any advice is given by Pie Funds Management Limited and is general only. Our advice relates only to the specific financial products mentioned and does not account for personal circumstances or financial goals. Please see a financial adviser for tailored advice. You may have to pay product or other fees, like brokerage, if you act on any advice. As manager of the Pie Funds Management Scheme investment funds, we receive fees determined by your balance and we benefit financially if you invest in our products. We manage this conflict of interest via an internal compliance framework designed to help us meet our duties to you. For information about how we can help you, our duties and complaint process and how disputes can be resolved, or to see our product disclosure statement, please visit www.piefunds.co.nz. Please let us know if you would like a hard copy of this disclosure information. Past performance is not a reliable indicator of future returns. Returns can be negative as well as positive and returns over different periods may vary.

Pie Funds



Australasian Growth Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

MICHAEL GOLTSMAN
Lead Portfolio Manager

MIKE ROSS
Co-Portfolio Manager

FUND COMMENTARY

The Australasian Growth Fund returned 5.7% in June, bringing it to a 12-month return of 17.1%.

Macquarie Technology Group (formerly Macquarie Telecom) was a key contributor, finishing the month up 14.8%. The fund participated in the company's first capital raising since IPO in June. The transaction raised $160m for Macquarie to fund its growing data centre business. Macquarie is founder-led and supported by cloud and data megatrends which are only likely to intensify with the rise of AI.

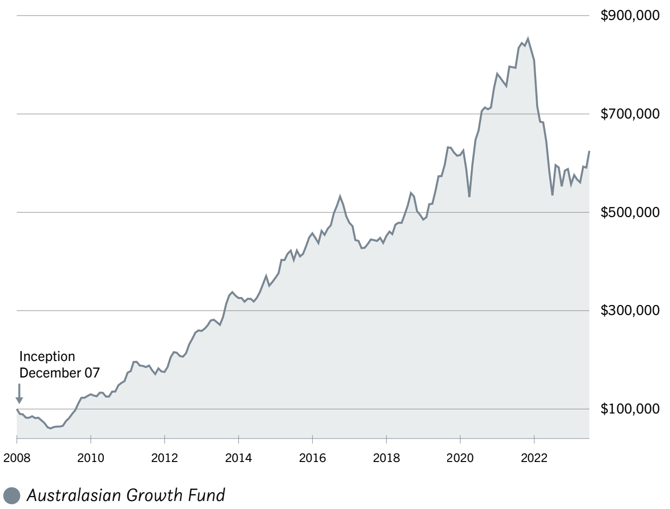
Electrical distributor IPD Group also revealed FY23 earnings guidance that was ahead of the markets expectations and pushed the shares up 14.4% this month. We continue to be attracted to the company's embedded growth arising from its exposure to the electrification thematic and its deepening relationships with original equipment manufacturers, which are driving market share gains.

Johns Lyng was a key detractor to performance in June. The company upgraded its earnings but its share price fell 16.2%. Overall, the business is performing strongly and retains a strong outlook for FY24, but the share price response demonstrates investors expected more. The upgrade was driven by catastrophe work which is more volatile and currently outperforming, and included increased one-off losses as management took the opportunity to bring forward losses in its commercial construction division.

We have observed a notable increase in M&A activity in recent months as strategic and private buyers begin to swoop on public market assets. This activity is consistent with our view that small caps are trading at depressed valuations that can support strong future returns for investors. We have continued to deploy capital into new opportunities and cash levels now sit at 10%.

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.



FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed Australasian smaller companies.
Inception date	December 2007
Standard withdrawal period	20 working days

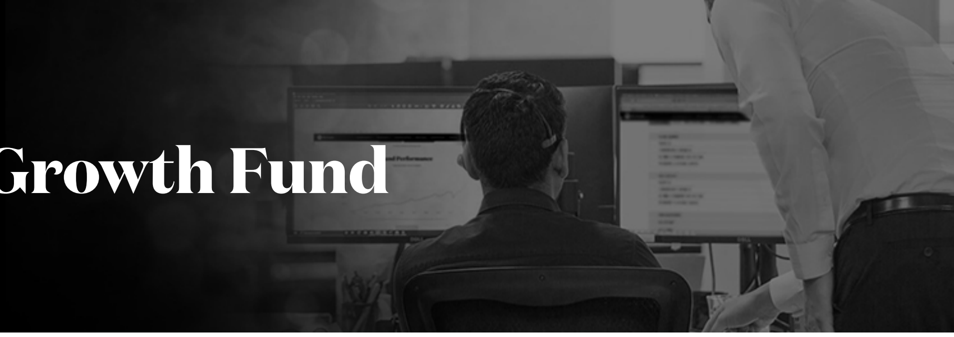
Risk indicator

Potentially Lower Returns — Potentially Higher Returns

1 2 3 4 **5** 6 7

Lower Risk — Higher Risk

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents



Australasian Growth Fund

Monthly Update as at 30 June 2023

PERFORMANCE

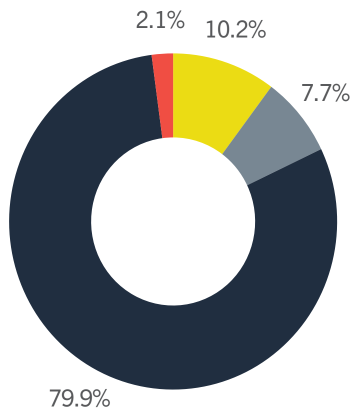
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	10 yrs (p.a.)	Annualised since inception
Australasian Growth Fund	5.7%	17.1%	-2.0%	4.9%	4.1%	8.8%	12.6%
MARKET INDEX[1]	0.7%	6.5%	5.7%	2.1%	6.4%	5.9%	0.5%

Returns after fees but before individual PIR tax applied

1. *S&P/ASX Small Ordinaries Total Return Index (NZD)*

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	10.2%
●	New Zealand equities	7.7%
●	Australian equities	79.9%
●	Listed property	2.1%



TOP FIVE EQUITY HOLDINGS

Clearview Wealth Ltd	CVW AU
IPD Group Ltd	IPG AU
Life360 Inc	360 AU
Probiotec Ltd	PBP AU
Reject Shop Ltd/The	TRS AU

Holdings are listed in alphabetical order.

UNIT PRICE

$6.25

ANNUALISED RETURN SINCE INCEPTION

12.6% p.a.

after fees and before tax

FUND STATUS

CLOSED OPEN

Pie Funds

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Australasian Dividend Growth Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

MIKE ROSS
Lead Portfolio Manager

MICHAEL GOLTSMAN
Co-Portfolio Manager

FUND COMMENTARY

The Dividend Growth returned 2.8% in June, bringing it to a 12-month return of 11.3%.

Insurance brokers AUB and PSC Insurance were both strong performers in June, up 16.3% and 18.3% respectively. AUB has performed well since upgrading earnings guidance in May and acquiring 100% of Tysers' retail business. Competitors have recently provided positive commentary on the premium rate environment, which should support future earnings.

Macquarie Technology (formerly Macquarie Telecom) was also a key contributor to performance, finishing the month up 14.8%. The fund participated in the company's first capital raising since IPO in June. The transaction raised $160m for Macquarie to fund its growing data centre business. Macquarie is founder-led and supported by cloud and data megatrends, which are only likely to intensify with the rise of AI.

Johns Lyng was a key detractor to performance. The company upgraded earnings but its share price fell 16%. Overall, the business is performing strongly and retains a strong outlook for FY24, but the share price response demonstrates investors expected more. The upgrade was driven by catastrophe work which is more volatile and currently outperforming, and management took the opportunity to bring forward one-off losses in its commercial construction division.

Workforce and staffing business PeopleIn fell 18.7% in June. The company announced a strategic review had yielded no alternatives to sticking to its business plan, reiterating earnings guidance. The shares fell further when the company announced its co-founder would leave the business.

Maas Group fell 22.3% in June, undoing May's gains as the market adjusted to reduced earnings guidance provided in late-May.

Estia Health gained 18.4% during the month after Bain Capital increased its non-binding takeover proposal for the company.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.

● *Australasian Dividend Growth Fund*

FUND DETAILS

Recommended minimum investment period	5 years
Objective	Generate income and capital growth over a period exceeding 5 years.
Description	Invests predominantly in listed Australasian smaller and medium growth companies paying dividends or that will produce cash-flow for future distributions.
Inception date	September 2011
Standard withdrawal period	10 working days
Risk indicator	Potentially Lower Returns – Potentially Higher Returns 1 2 3 4 5 **6** 7 Lower Risk – Higher Risk

Australasian Dividend Growth Fund

Monthly Update as at 30 June 2023

PERFORMANCE

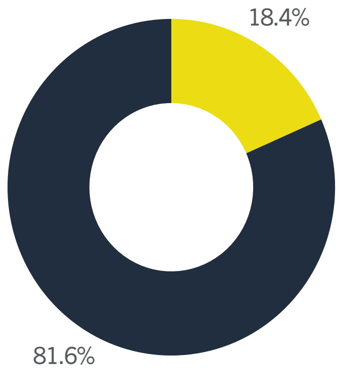
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	10 yrs (p.a.)	Annualised since inception
Australasian Dividend Growth Fund	2.8%	11.3%	14.3%	10.1%	11.9%	12.8%	15.4%
MARKET INDEX[1]	0.7%	6.5%	5.7%	2.1%	6.4%	5.9%	3.0%

Returns after fees but before individual PIR tax applied

1. *S&P/ASX Small Ordinaries Total Return Index (NZD)*

INVESTMENT MIX

🟡	Cash/other (including short and long derivatives)	18.4%
●	Australian equities	81.6%



TOP FIVE EQUITY HOLDINGS

AUB Group Limited	AUB AU
Data#3 Ltd	DTL AU
Macquarie Technology Group Ltd	MAQ AU
Mermaid Marine Australia Ltd	MRM AU
Smartgroup Corp Ltd	SIQ AU

Holdings are listed in alphabetical order.

UNIT PRICE

$3.82

ANNUALISED RETURN SINCE INCEPTION

15.4% p.a.

after fees and before tax

FUND STATUS

CLOSED **OPEN**

Pie Funds

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Australasian Emerging Companies Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

KENT WILLIAMS
Lead Portfolio Manager

MICHELLE LOPEZ
Head of Australasian Equities
and Co-Portfolio Manager

FUND COMMENTARY

The Australasian Emerging Companies Fund returned 2.0% in June, bringing it to a 12-month return of 15.8%.

The key contributors to performance were Fleetwood and Kip McGrath, while Dropsuite and Lindsay Australia were the main detractors.

Fleetwood experienced a strong rally of approximately 23%. This was mainly driven by the announcement of an extension to their contract with Rio Tinto. The contract extension significantly expands the utilisation of Fleetwood's accommodation asset, and will contribute to the medium-term earnings of the business. Furthermore, there is anticipation of another potential contract announcement for the Searipple accommodation village. If successful, this would bring the village in Karratha to near full capacity, leading to a substantial increase in earnings over the next three years. We believe that the current share price only reflects the impact of the Rio Tinto contract, and there is further upside if another contract is announced.

Kip McGrath also performed well, with a rally of approximately 18% during the month. The company confirmed its earnings guidance for FY23, indicating an incremental improvement in the business's run rate. This positive checkpoint gives us confidence as we look ahead to FY24. We view Kip McGrath as one of the most attractively priced companies on the ASX, trading at around 7 times price-to-earnings (PE) ratio with a future earnings per share (EPS) growth rate of 30% per annum.

Dropsuite and Lindsay Australia experienced declines in their share prices during the month. These declines occurred without any significant news catalysts, following strong performance in previous months.

Early in the month we completed our buying of Fleetwood, which as mentioned has been a strong performer.

We continue to actively seek new investment opportunities, but we remain prudent in deploying capital, ensuring that only the very best ideas are included in the fund.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.

FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed Australasian emerging companies.
Inception date	April 2013
Standard withdrawal period	3 months
Risk indicator	Potentially Lower Returns — Potentially Higher Returns 1 2 3 4 5 **6** 7 Lower Risk — Higher Risk

Australasian Emerging Companies Fund

Monthly Update as at 30 June 2023

PERFORMANCE

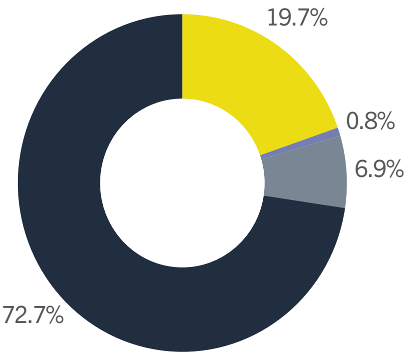
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	10 yrs (p.a.)	Annualised since inception
Australasian Emerging Companies Fund	2.0%	15.8%	9.5%	11.3%	10.4%	18.1%	18.2%
MARKET INDEX[1]	3.3%	5.5%	17.2%	8.5%	9.4%	9.1%	6.1%

Returns after fees but before individual PIR tax applied

1. S&P/ASX Emerging Companies Index (Total Return) (NZD)

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	19.7%
●	Global Fixed Income	0.8%
●	New Zealand equities	6.9%
●	Australian equities	72.7%



TOP FIVE EQUITY HOLDINGS

Dropsuite Ltd	DSE AU
Duratec Ltd	DUR AU
IPD Group Ltd	IPG AU
Kip McGrath Education Centres	KME AU
Mermaid Marine Australia Ltd	MRM AU

Holdings are listed in alphabetical order.

UNIT PRICE

$5.51

ANNUALISED RETURN SINCE INCEPTION

18.2% p.a.

after fees and before tax

FUND STATUS

[✓ CLOSED] OPEN

Pie Funds

Australasian Growth 2 Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

MICHELLE LOPEZ
Head of Australasian Equities
and Lead Portfolio Manager

KENT WILLIAMS
Co-Portfolio Manager

FUND COMMENTARY

The Australasian Growth Fund 2 returned 2.3% in June, bringing it to a 12-month return of 14.5%.

Insurance brokers AUB and PSC Insurance were both strong performers in June, up 16.3% and 18.3% respectively. AUB has performed well since upgrading earnings guidance in May and acquiring 100% of Tysers' retail business. Competitors have recently provided positive commentary on the premium rate environment, which should support future earnings.

GQG Partners performed strongly, off the back of improving net inflows and stronger performance in their underlying Funds. Valuations are still attractive, with the stock trading on a 12 month forward PE of 10x and 8% yield, a discount to other comparable Wealth managers.

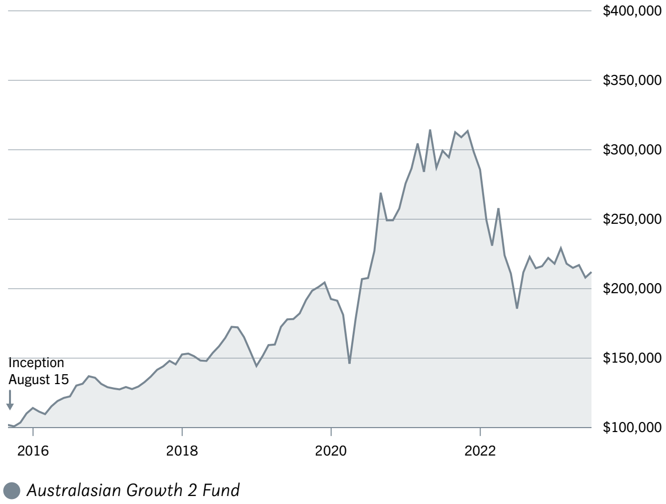
Partially offsetting the strong performance was the Fund's position in mining contractor, Perenti, which was sold off following their announced merger with DDH1, a drilling service provider. Whilst the merger appears to be EPS accretive, improves cash-flow conversion and balance sheet strength, the cyclical nature of the business and DDH1's intention to sell is being questioned by the market.

In terms of activity, the Fund initiated a new position in Infratil in June, and participated in the company's equity raising to gain full control of the One New Zealand company (ex-Vodafone). Infratil owns a strategic portfolio of assets, with significant investments in digital infrastructure, renewables, healthcare and airports. The core assets spin off a large amount of cash, enabling the company to continue to sustainably invest into future growth opportunities. We will continue to selectively deploy capital over the coming months, focusing on mis-priced companies and high quality businesses, with strong economic moats and industry positioning.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.



FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed Australasian smaller and medium companies.
Inception date	August 2015
Standard withdrawal period	10 working days
Risk indicator	Potentially Lower Returns … Potentially Higher Returns 1 2 3 4 5 **6** 7 Lower Risk … Higher Risk

Australasian Growth 2 Fund

Monthly Update as at 30 June 2023

PERFORMANCE

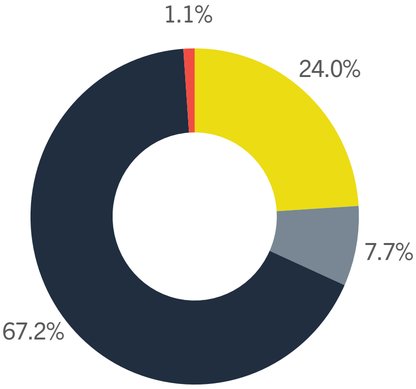
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	Annualised since inception
Australasian Growth 2 Fund	2.3%	14.5%	0.8%	6.1%	8.3%	10.1%
MARKET INDEX[1]	0.7%	6.5%	5.7%	2.1%	6.4%	7.0%

Returns after fees but before individual PIR tax applied

1. *S&P/ASX Small Ordinaries Total Return Index (NZD)*

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	24.0%
●	New Zealand equities	7.7%
●	Australian equities	67.2%
●	Listed property	1.1%



TOP FIVE EQUITY HOLDINGS

Aroa Biosurgery Ltd	ARX AU
Credit Corp Group Limited	CCP AU
HUB24 Limited	HUB AU
Imdex Ltd	IMD AU
Seven Group Holdings Ltd	SVW AU

Holdings are listed in alphabetical order.

UNIT PRICE

$2.12

ANNUALISED RETURN SINCE INCEPTION

10.1% p.a.

after fees and before tax

FUND STATUS

CLOSED OPEN

Pie Funds

Global Growth Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

GUY THORNEWILL*
Head of Global Research

TOBY WOODS*
Senior Investment Analyst

MIKE TAYLOR
Founder and Chief Investment Officer

**Guy Thornewill and Toby Woods are responsible for research and analysis*

FUND COMMENTARY

The Global Growth Fund returned 1.6% in June, bringing it to a 12-month return of 15.1%.

With the second quarter reporting season approaching, company profits overall look to be holding up, even though consumer spending is weak in some areas, and the destocking cycle continues to inhibit industrial growth. We remain cautiously optimistic with cash levels significantly lower than in 2022.

June saw good performance from new holding DO & Co, which provides airline catering services, and FRP Advisory, which bounced from oversold levels.

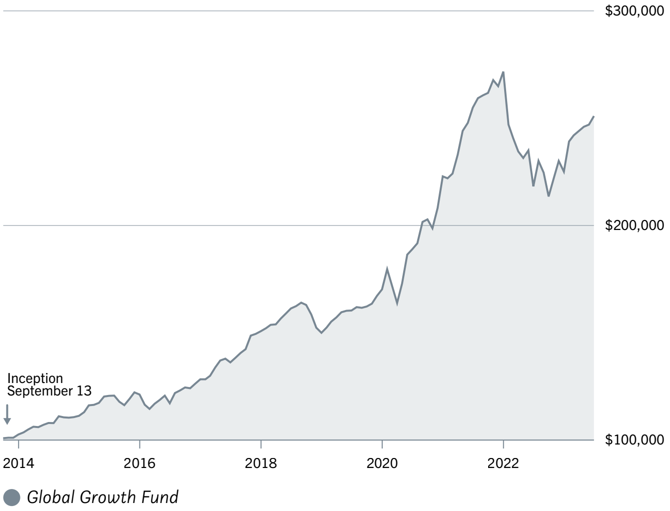
The worst performer during the month was SES imagotag, the French global leader in manufacturing electronic shelf labels for retailers. Until recently this had been a very successful investment for the fund, but in June it was subject to an attack by a short seller, which questioned some of its accounting practices, and made various other derogatory accusations. This caused the shares to fall more than 50% the day after the report was released, although it has since rallied. The management has denied all of the accusations, stating its accounting has followed all the rules and its auditors have provided certificates to corroborate this. Since the event, we have spent significant time speaking to the company and considering the allegations. Our view is that while management could have disclosed more numbers before, which they have now done, the report is mostly baseless, and indeed inaccurate and misleading in many ways. We have also not changed any of our growth estimates looking forward. Nevertheless, these events usually impact a company's reputation and valuation, whether or not the allegations are true, and the short seller has indicated it will publish more comments. Therefore, we halved the position in the fund to reduce risk, and will continue to monitor events closely.

The fund also started new positions in Hillman Solutions, a provider of home improvement products which should benefit as US housing demand recovers, and Radnet, which operates imaging centres across the US, with growth driven by demographic trends.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.



FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed international smaller companies, international managed funds and other products issued by Pie Funds.
Inception date	September 2013
Standard withdrawal period	10 working days
Risk indicator	Potentially Lower Returns — Potentially Higher Returns 1 2 3 4 **5** 6 7 Lower Risk — Higher Risk

Global Growth Fund

Monthly Update as at 30 June 2023

PERFORMANCE

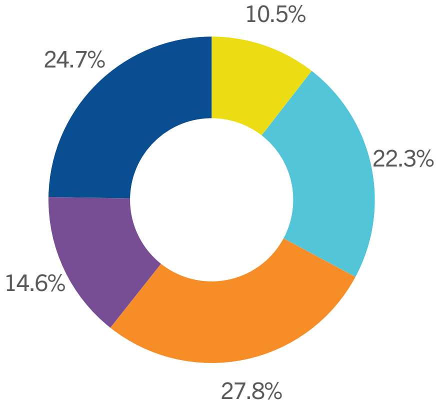
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	Annualised since inception
Global Growth Fund	1.6%	15.1%	10.1%	9.3%	11.6%	9.9%
MARKET INDEX[1]	4.0%	15.3%	12.3%	6.6%	10.4%	10.1%

Returns after fees but before individual PIR tax applied

1. S&P Global SmallCap (Total Return) Index (NZD)

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	10.5%
●	Emerging markets equities	22.3%
●	European equities	27.8%
●	UK equities	14.6%
●	US and Canadian equities	24.7%



TOP FIVE EQUITY HOLDINGS

Discoverie Group PLC	DSCV LN
Frp Advisory Group PLC	FRP LN
Ishares Russell 2000	IWM US
Vietnam Enterprise Investments Limited	VEIL LN
William Blair SICAV - Emerging	WBSEMIC LX

Holdings are listed in alphabetical order.

UNIT PRICE

$2.51

ANNUALISED RETURN SINCE INCEPTION

9.9% p.a.

after fees and before tax

FUND STATUS

CLOSED [✓ OPEN]

Pie Funds

Information is current as at 30 June 2023. Pie Funds Management Limited is the manager of the funds in the Pie Funds Management Scheme. Any advice is given by Pie Funds Management Limited and is general only. Our advice relates only to the specific financial products mentioned and does not account for personal circumstances or financial goals. Please see a financial adviser for tailored advice. You may have to pay product or other fees, like brokerage, if you act on any advice. As manager of the Pie Funds Management Scheme investment funds, we receive fees determined by your balance and we benefit financially if you invest in our products. We manage this conflict of interest via an internal compliance framework designed to help us meet our duties to you. For information about how we can help you, our duties and complaint process and how disputes can be resolved, or to see our product disclosure statement, please visit www.piefunds.co.nz. Please let us know if you would like a hard copy of this disclosure information. Past performance is not a reliable indicator of future returns. Returns can be negative as well as positive and returns over different periods may vary.

Growth UK & Europe Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

GUY THORNEWILL*
Head of Global Research

TOBY WOODS*
Senior Investment Analyst

MIKE TAYLOR
Founder and Chief
Investment Officer

**Guy Thornewill and Toby Woods are responsible for research and analysis*

FUND COMMENTARY

The Growth UK and Europe Fund declined 0.3% in June, bringing it to a 12-month return of 7.6%.

While it may look like a placid month, it was anything but. There were strong moves up from FRP (administrator), Grenergy (renewable energy) and Elmos Semiconductor (auto supplier), while it was more challenging for SES imagotag, Impax (sustainable investment) and Volution (ventilation manufacturer). Two new companies joined the portfolio, Jungheinrich (forklift & automation manufacturer) and Musti (pet retailer), and we exited Encavis (renewable asset owner). We also sold our bond ETFs and took a position in a European small cap ETF to gain immediate market exposure, which will be rotated into direct stocks in the coming months.

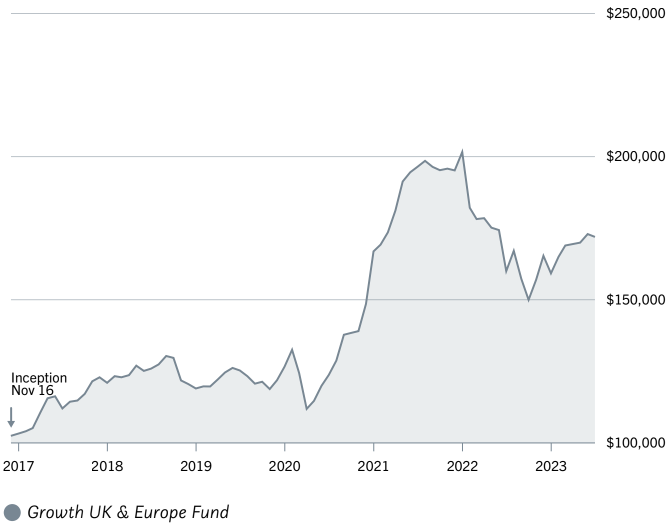
The worst performer this month was SES imagotag, the French global leader in manufacturing electronic shelf labels for retailers. This had been a very successful investment for the fund, but in June it was subject to an attack by a short seller, which questioned some of its accounting practices and made various accusations. Shares fell more than 50% the day following the report's release, though it's since rallied. The management denied the accusations, stating it had followed all the rules and its auditors provided certificates to corroborate this. Since then, we've spent time speaking to the company and considering the allegations. Our view is, while management could have disclosed more numbers before, which they've now done, the report is mostly baseless, inaccurate and misleading in many ways. Nevertheless, these events usually impact a company's reputation and valuation, whether true or not. Therefore, we halved the position in the fund to reduce risk, and will continue to monitor events closely.

On the whole, we're confident European equities will appreciate through the summer, given improving inflation across all major regions, except the UK (reflected in particularly low valuations). Falling inflation will boost consumer confidence and consumption, which have anyway remained remarkedly resilient across Europe so far.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.



FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed UK & European smaller companies.
Inception date	November 2016
Standard withdrawal period	10 working days
Risk indicator	Potentially Lower Returns — Potentially Higher Returns 1 2 3 **5** 4 6 7 Lower Risk — Higher Risk

Growth UK & Europe Fund

Monthly Update as at 30 June 2023

PERFORMANCE

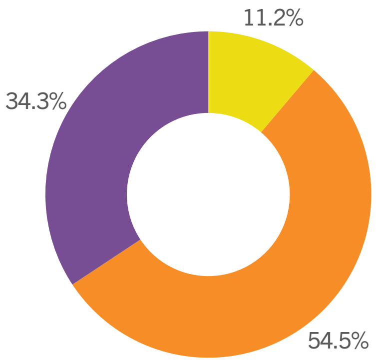
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	Annualised since inception
Growth UK & Europe Fund	-0.3%	7.6%	11.7%	6.5%	8.5%
MARKET INDEX[1]	1.0%	13.2%	8.6%	3.5%	8.5%

Returns after fees but before individual PIR tax applied

1. MSCI Europe Small Cap Net Return Index (NZD)

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	11.2%
●	European equities	54.5%
●	UK equities	34.3%



TOP FIVE EQUITY HOLDINGS

Bufab AB (publ)	BUFAB SS
Discoverie Group PLC	DSCV LN
Do & Co AG	DOC AV
iShares MSCI Europe Small Cap ETF	IEUS US
Nexus AG	NXU GR

Holdings are listed in alphabetical order.

UNIT PRICE

$1.72

ANNUALISED RETURN SINCE INCEPTION

8.5% p.a.

after fees and before tax

FUND STATUS

CLOSED [✓ OPEN]

Pie Funds

Information is current as at 30 June 2023. Pie Funds Management Limited is the manager of the funds in the Pie Funds Management Scheme. Any advice is given by Pie Funds Management Limited and is general only. Our advice relates only to the specific financial products mentioned and does not account for personal circumstances or financial goals. Please see a financial adviser for tailored advice. You may have to pay product or other fees, like brokerage, if you act on any advice. As manager of the Pie Funds Management Scheme investment funds, we receive fees determined by your balance and we benefit financially if you invest in our products. We manage this conflict of interest via an internal compliance framework designed to help us meet our duties to you. For information about how we can help you, our duties and complaint process and how disputes can be resolved, or to see our product disclosure statement, please visit www.piefunds.co.nz. Please let us know if you would like a hard copy of this disclosure information. Past performance is not a reliable indicator of future returns. Returns can be negative as well as positive and returns over different periods may vary.

Global Growth 2 Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

GUY THORNEWILL*
Head of Global Research

TOBY WOODS*
Senior Investment Analyst

MIKE TAYLOR
Founder and Chief Investment Officer

**Guy Thornewill and Toby Woods are responsible for research and analysis*

FUND COMMENTARY

The Global Growth 2 Fund returned 1.5% in June, bringing it to a 12-month return of 15.0%.

Markets were firm in June, and with second quarter reporting season approaching, company profits overall look to be holding up. However, consumer spending remains weak in some areas, and the destocking cycle continues to inhibit industrial growth. We remain cautiously optimistic with cash levels significantly lower than in 2022.

Adobe performed well in June, benefiting from the AI theme as well as good results, and we took some profits. Intuitive Surgical was also strong, as elective surgery procedures continued to recover.

The worst performer during the month was SES imagotag, the French global leader in manufacturing electronic shelf labels for retailers. Until recently, this had been a very successful investment for the fund, but in June it was subject to an attack by a short seller, which questioned some of its accounting practices, and made various other derogatory accusations. This caused the shares to fall more than 50% the day after the report was released, although it has since rallied. The management has denied all of the accusations, stating its accounting has followed all the rules and its auditors have provided certificates to corroborate this. Since the event, we have spent significant time speaking to the company and considering the allegations. Our view is that while management could have disclosed more numbers before - which they have done now - the report is mostly baseless, and indeed inaccurate and misleading in many ways. Nevertheless, these events usually impact a company's reputation and valuation, whether or not the allegations are true. Therefore, we exited the position in the fund to reduce risk.

The fund was active in June. We added new positions in Fanuc (robotics), Hillman Solutions (US housing play) and Spotify. We also exited Volkswagen despite the low valuation, as our EV thesis is taking longer to play out than we had expected.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.

FUND DETAILS

Recommended minimum investment period	5 years
Objective	Capital growth over a period exceeding five years.
Description	Invests predominantly in listed international large companies.
Inception date	May 2018
Standard withdrawal period	Up to 5 working days
Risk indicator	Potentially Lower Returns — Potentially Higher Returns 1 2 3 4 **5** 6 7 Lower Risk — Higher Risk

Global Growth 2 Fund

Monthly Update as at 30 June 2023

PERFORMANCE

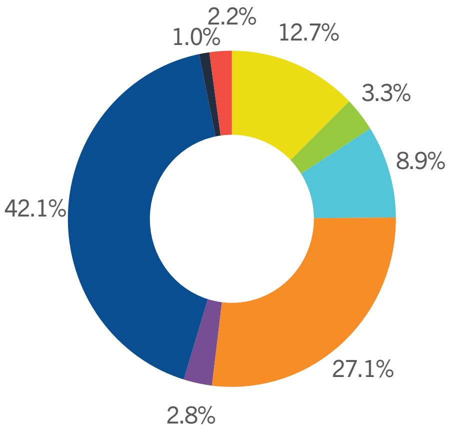
	1 month	1 yr	3 yrs (p.a.)	5yrs (p.a.)	Annualised since inception
Global Growth 2 Fund	1.5%	15.0%	6.1%	4.3%	3.8%
MARKET INDEX[1]	3.1%	16.5%	10.9%	8.3%	8.6%

Returns after fees but before individual PIR tax applied

1. *MSCI ACWI Index (NZD)*

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	12.7%
●	Asian equities	3.3%
●	Emerging markets equities	8.9%
●	European equities	27.1%
●	UK equities	2.8%
●	US and Canadian equities	42.1%
●	Australian equities	1.0%
●	Listed property	2.2%



TOP FIVE EQUITY HOLDINGS

Alcon AG	ALC SW
Apple Inc	AAPL US
Microsoft Corporation	MSFT US
Schneider Electric SE	SU FP
Taiwan Semiconductor Manufacturing Co Ltd	2330 TT

Holdings are listed in alphabetical order.

UNIT PRICE

$1.20

ANNUALISED RETURN SINCE INCEPTION

3.8% p.a.

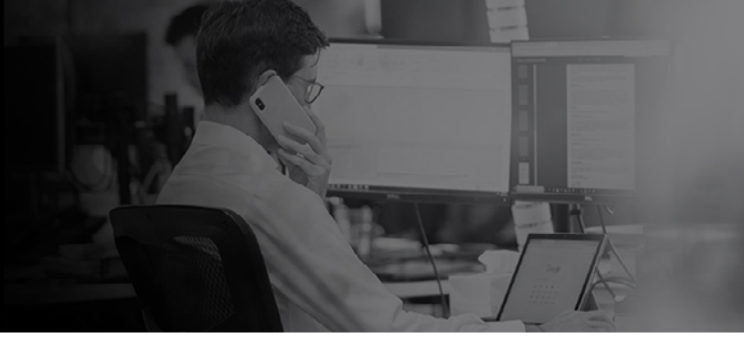
after fees and before tax

FUND STATUS

CLOSED [✓ OPEN]

Pie Funds

Information is current as at 30 June 2023. Pie Funds Management Limited is the manager of the funds in the Pie Funds Management Scheme. Any advice is given by Pie Funds Management Limited and is general only. Our advice relates only to the specific financial products mentioned and does not account for personal circumstances or financial goals. Please see a financial adviser for tailored advice. You may have to pay product or other fees, like brokerage, if you act on any advice. As manager of the Pie Funds Management Scheme investment funds, we receive fees determined by your balance and we benefit financially if you invest in our products. We manage this conflict of interest via an internal compliance framework designed to help us meet our duties to you. For information about how we can help you, our duties and complaint process and how disputes can be resolved, or to see our product disclosure statement, please visit www.piefunds.co.nz. Please let us know if you would like a hard copy of this disclosure information. Past performance is not a reliable indicator of future returns. Returns can be negative as well as positive and returns over different periods may vary.



Conservative Fund

Monthly Update as at 30 June 2023

PORTFOLIO MANAGER(S)

MIKE TAYLOR
Founder and Chief
Investment Officer

TRAVIS MURDOCH
Head of Fixed Income and
Portfolio Manager

FUND COMMENTARY

The Conservative Fund returned 0.5% in June, bringing it to a 12-month return of 6.1%.

Our 12-month return is now well ahead of term deposits over the same time period, which is pleasing for the Fund's unit holders. Remembering the average deposit rate a year ago was only 2%, so we're very pleased with these numbers.

Bonds had a tough month, as central banks remain under pressure to raise interest rates in the face of resilient economic growth and inflation that remains too high. NZ government bonds were no exception, but were a relative out-performer after the Reserve Bank of New Zealand (RBNZ) indicated in May they were done with hiking rates. However, with only limited progress on inflation locally, bond markets remain wary that the RBNZ may need to hike rates again before the end of the year. Australian dollar denominated bonds were generally the Fund's worst performers, after the Reserve Bank of Australia surprised markets by hiking rates by 0.25% and noted further hikes may be required.

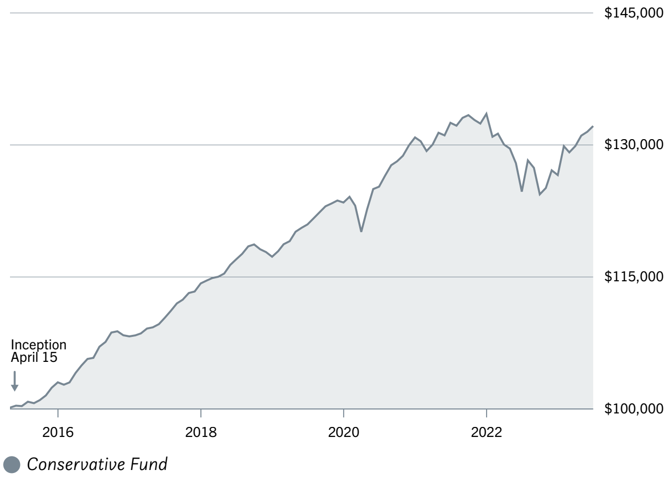
Equities, in particular US-tech, were once again the shining light for the Fund. Holdings in Apple, Microsoft, Uber, Spotify and Adobe were all up strongly for the month. We started to see some green shoots in Australia, although the performance overall from our ASX holdings was still quite mixed.

The Fund retains a very high cash level given the returns we can achieve, meaning we don't feel it necessary to push the boat out in any way, but can still keep up with markets and unit holder expectations.

For more information on our funds, please visit
www.piefunds.co.nz/Investor-Documents

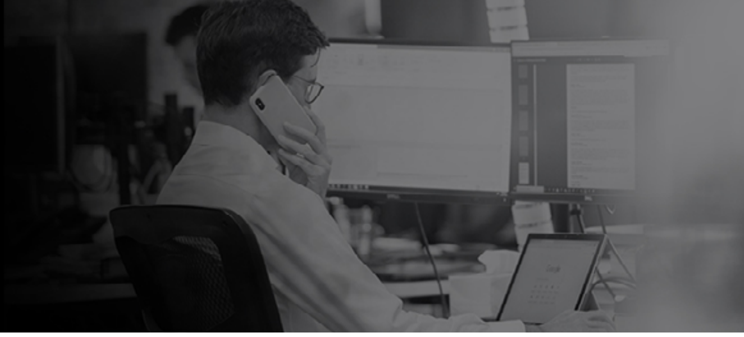
CUMULATIVE FUND PERFORMANCE

If you had invested $100,000 at inception, the graph below shows what it would be worth today.



FUND DETAILS

Recommended minimum investment period	3 years
Objective	Preserve capital (with some growth), which outperforms the market index over a 3-5 year period.
Description	Invests predominantly in fixed interest securities and some cash, with an allocation to equities (directly or through other products issued by Pie Funds).
Inception date	April 2015
Standard withdrawal period	Up to 5 working days
Risk indicator	Potentially Lower Returns – Potentially Higher Returns 1 2 [✓ 3] 4 5 6 7 Lower Risk – Higher Risk



Conservative Fund

Monthly Update as at 30 June 2023

PERFORMANCE

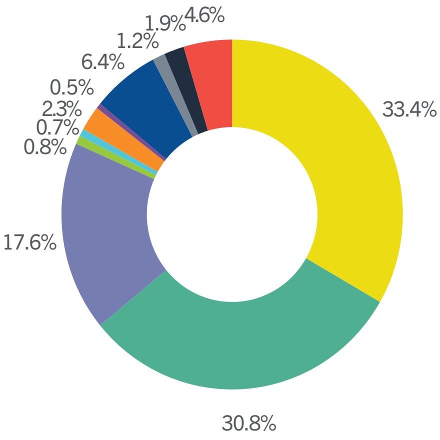
	1 month	1 yr	3 yrs (p.a.)	5 yrs (p.a.)	7 yrs (p.a.)	Annualised since inception
Conservative Fund	0.5%	6.1%	1.9%	2.5%	3.3%	3.5%
MARKET INDEX[1]	0.7%	5.0%	2.2%	3.0%	3.7%	3.8%

Returns after fees but before individual PIR tax applied

1. The market index is a composite index (25% NZBond Bank Bill Index (NZD), 30% S&P NZX Investment Grade Corporate Bond Total Return Index (NZD), 20% Bloomberg Barclays Global Aggregate Total Return Index Hedged (NZD), 5% S&P/ASX All Ordinaries Accumulation Index (NZD), 15% MSCI ACWI IMI Net Total Return Index (NZD), 5% S&P Global REIT Total Return Index (NZD)).

INVESTMENT MIX

●	Cash/other (including short and long derivatives)	33.4%
●	New Zealand fixed income	30.8%
●	Global fixed income	17.6%
●	Emerging markets equities	0.8%
●	European equities	0.7%
●	UK equities	2.3%
●	US and Canadian equities	0.5%
●	New Zealand equities	6.4%
●	Australian equities	1.2%
●	Listed property	1.9%
		4.6%



TOP FIVE HOLDINGS (EXCLUDING CASH)

Contact Energy Bond 5.62% 06/04/2029	CEN080
Housing New Zealand 2.183% 24/04/2030	HOUSNZ 2.183 04/24/30
US Treasury Bond 4.125% 15/11/2032	T 4.125 11/15/32
Vector Bond 1.575% 06/10/2026	VCTNZ 1.575 10/06/26
Westpac Corp Bond Float 06/07/2026	WSTP 0 07/06/26

Holdings are listed in alphabetical order and exclude cash.

UNIT PRICE

$1.14

ANNUALISED RETURN SINCE INCEPTION

3.5% p.a.

after fees and before tax

FUND STATUS

CLOSED [✓ OPEN]

Pie Funds

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