



Milford Unit Trust PIE Funds Monthly Review December 2018

Market and Economic Review

November was a challenging month for several reasons including the sharp appreciation in the New Zealand dollar, market volatility and negative earnings revisions.

The ASX 200 Accumulation Index was down 4.2% in New Zealand dollar terms - compared with a negative 2.2% in Australian dollars - because of the Kiwi's strong performance.

The US S&P500 Index fell 3.2% in NZ dollars compared with a positive 2.0% return in US dollars and the STOXX Europe 600 Index, which comprises companies from 17 European countries, declined by 1.0% in Euro terms but was down 6.0% in NZ dollars.

Most Milford funds have currency hedging strategies, which partially protects them against the impact of a strong NZ dollar, but they are not fully hedged. Consequently, our funds had negative returns for the month with the Active Growth Fund down 1.3%, Diversified Income 0.04%, Balanced 0.5%, Trans-Tasman Equity 1.5%, Global Equity 0.6%, Dynamic 0.9% and Conservative 0.3%.

Financial markets are being driven by three major factors at present; President Trump's tariff policies, interest rates and company earnings.

Trump's tariff policies are a major concern although the outcome of the G20 summit meeting in Buenos Aires was encouraging. However, it is difficult to determine which way Trump will go next and financial markets will continue to react to his policies in this area. The best outcome would be for the US President to moderate his harsh stance on tariffs, particularly as the country's mid-term elections have been completed.

The outlook for interest rates remains mixed with the US Federal Reserve expected to hike rates on 19 December and at least twice next year. However, we don't expect either the New Zealand or Australian central banks to raise rates before the end of 2019. This should result in a slight depreciation of the NZ dollar against the US dollar over the next twelve months.

Company earnings are being revised downwards in the United States, Europe and Australia because of rising costs and competitive pressures. In New Zealand, Fletcher Building, Metro Glass, NZME, Gentrack and several NZX mid-cap and small-cap companies have announced profit downgrades.

We expect market conditions to remain volatile but there is a reasonable chance of a pre-Christmas rally, particularly if the US/China trade war stays out of the headlines.



Trans-Tasman Bond Fund

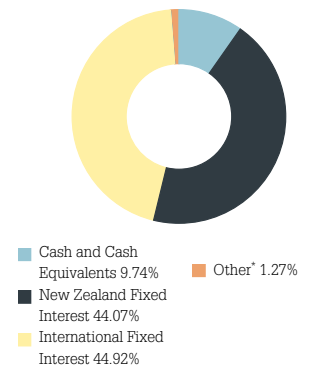
Portfolio Manager: Paul Morris

Australasian corporate bonds continue to outperform the weakness in offshore peers. That said, they were weaker in November and the Fund posted a negative monthly return (-0.2%) for the first time since June last year. Losses were limited by cautious positioning, reflecting our view that Australasian corporate bond valuations were elevated in the context of heightened risks.

This year we increased the Fund's average credit rating, reduced exposure to subordinated bonds (now the lowest in ~2 1/2 years) and reduced holdings in offshore bonds of Australasian issuers to the lowest since the Fund's inception. Though small, the latter exposure still weighed on returns given ongoing offshore corporate bond weakness. The Fund still holds above neutral levels of cash but we did buy some lower risk bonds, including from Christchurch City Holdings, Bank of New Zealand and Westpac.

Looking forward, Australasian bonds may be supported by expectations for an extended period of unchanged central bank monetary policy, albeit NZ dollar rate cuts are now less likely after stronger economic data. Nevertheless, we will remain cautious due to the risk for higher offshore corporate bond yields which may negatively impact Australasian bonds. This means continuing to limit interest rate exposure and, for now, focusing exposure to lower risk domestic Australasian corporate bonds.

Actual investment mix¹



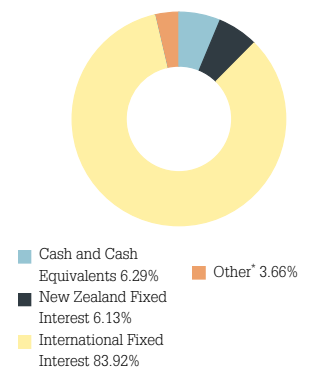
Global Bond Fund

Portfolio Manager: Paul Morris

November was another difficult month for global corporate bonds even though government bonds yields generally fell. 2018 is shaping to be the worst year for global corporate bonds since 2008. The Fund is typically more exposed to corporate bonds which we believe will outperform government bonds over time. Irrespective of cautious Fund positioning it lost 0.4% in the month.

Corporate bond weakness was across currencies, industry sectors and across both investment grade and high yield bonds. This year, given elevated valuations and growing risks, we have improved the average credit rating of bond holdings and reduced their tenor. Over recent months we have also increased the Fund's direct cash holdings significantly. Near term, there are reasons to anticipate an improvement in returns, however, we believe it prudent to remain defensive given ongoing elevated risks.

Corporate bond valuations have improved (in absolute terms and relative to government bonds) and we are cautiously optimistic for global economic growth. However, monetary policy support is waning, company debt levels are high, investor sentiment is fragile and we expect significant new bond issuance. We will therefore continue to limit the Fund's interest rate and credit exposure. Looking further out over the Fund's recommended investment timeframe, active management should support a moderate return and benchmark outperformance.



*Other includes currency derivatives used to manage foreign exchange risk.

¹The actual investment mix incorporates the notional exposure value of equity derivatives and credit default swaps, where applicable.

Conservative Fund

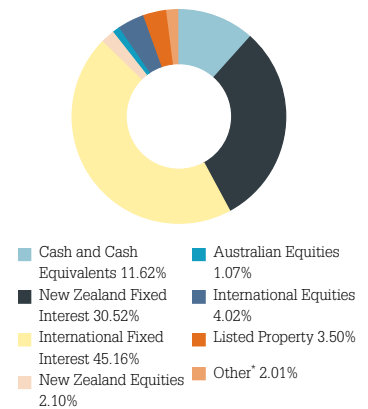
Portfolio Manager: Paul Morris

Performance across the broad asset classes into which the Fund is invested was mixed in November, culminating in a negative return of 0.3% in the month, but a positive 2.6% return over one year. Australasian shares were mixed while the contribution from global shares was somewhat offset by a stronger NZ dollar, due to the Fund's small foreign currency exposure. The return from the Fund's corporate bond holdings was negative (corporate bonds underperformed government bonds).

This month's return was irrespective of the Fund's defensive positioning. Over recent months we have increased cash and bond holdings at the expense of the allocation to shares. We have also reduced the corporate bond portfolio risk by improving credit quality and shortening maturity.

Looking forward, we remain cautiously optimistic for economic growth, albeit noting myriad risks. Valuations across bonds and shares are now less stretched but waning global monetary support means medium-term returns may moderate relative to recent years. Moreover, they are likely to be accompanied by higher volatility. We will therefore retain cautious positioning, holding less shares than would be the long-run normal, and higher levels of cash and fixed interest. Within fixed interest we will continue to limit interest rate exposure and hold a larger proportion of higher rated corporate bonds.

Actual investment mix¹



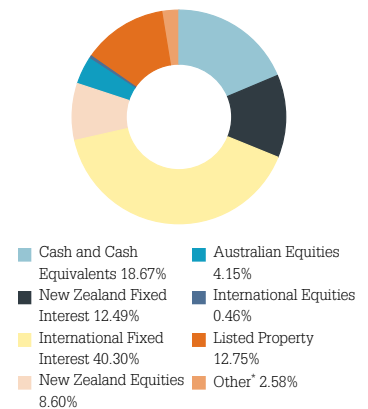
Diversified Income Fund

Portfolio Manager: David Lewis

The Fund return was flat in November and has returned 3.8% in the past year. The Fund's holdings in NZ shares performed well this month, however this was offset by global bonds which posted a small loss after weakness in European and US corporate bond markets. In terms of individual share holdings, there were several positive highlights this month. Collins Food rose 14.7% after reporting good sales growth for its fast food restaurants in Australia. Argosy, the NZ property company which has been one of the Fund's larger and longstanding share exposures, rose 8.4% after a strong set of results, including good valuation and rental growth across its properties.

In portfolio activity this month, allocations between shares (26%), bonds (53%) and cash (21%) were little changed. That said, there were several changes among individual shareholdings including a new position in Australian gas pipeline company APA Group, increased exposure to Orora the Australian packaging company, and a reduction in Collins Food following strong performance. In the bond portfolio, we took advantage of more attractive prices on select new issues in both the Australian and US dollar markets.

Looking ahead, while there was some better news in the past week regarding both global trade and monetary policy, we still believe that a cautious approach is warranted. If market valuations improve notably, the Fund's high cash level leaves it in a good position to add exposures to the right companies. We will be more focussed on companies that we regard as higher quality, with stable business models that will be more resilient to the risk of an economic slowdown.



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Balanced Fund

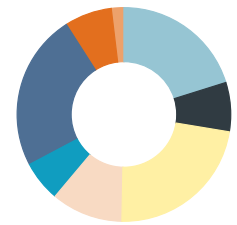
Portfolio Manager: Mark Riggall

The Fund fell 0.5% in November, with a 1-year return of 2.3%. Another difficult month for markets saw mixed share market returns whilst corporate bond prices fell and the NZ dollar rallied sharply. After the volatility in October, market confidence is slow to return as investors contend with an escalating trade war amid slowing global economic growth.

Global shares had a strong finish to the month as the Federal Reserve chairman backed away from previous remarks about how many more rate hikes are coming. Australian shares continued their fall as concerns about the housing market and its knock-on impact on the economy build. The performance of company bonds was poor in November, to a certain extent playing catch up following poor equity performance the previous month. NZ dollar performance was a headwind. The currency appreciated, reflecting stronger local economic data compared to slowing growth for the rest of the world.

The Fund remains defensively positioned with over 20% in cash and a share market exposure of around 48% (compared to 61% neutral). Asset class valuations have improved (but can't be described as cheap) and there has been some parting of the clouds around the trade war. However, global growth continues to slow and rising interest rates reduce the attractiveness of risk assets. The Fund will continue to be defensive and use market strength to reduce risk further.

Actual investment mix¹



Cash and Cash Equivalents	20.17%	Australian Equities	6.12%
New Zealand Fixed Interest	7.44%	International Equities	23.69%
International Fixed Interest	22.70%	Listed Property	7.16%
New Zealand Equities [†]	10.82%	Other [*]	1.90%

Active Growth Fund

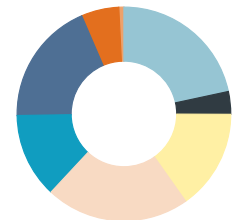
Portfolio Manager: Jonathan Windust

The Fund fell 1.3% during the month and is up 4.8% over the last year. The market was negatively impacted by falls in Australian shares, weak credit markets and the rise in the value of the NZ dollar. The NZ dollar rose 5.4% versus the US dollar due to strong New Zealand employment data. Share markets remained volatile during the month in response to uncertainties over slowing global economic growth, Brexit, trade wars and falling Australian house prices.

Key positives for the month were Trade Me (+26.4%), Indian Bank HDFC (+14.1%) and airlines Air New Zealand (+10.0%) and Qantas (+9.0%). Trade Me rose following a takeover offer whilst the airlines benefited from the fall in oil price. During the month, we added to holdings in a2 Milk which provided a strong update at its AGM, sales for the first four months of the year were up 40.5% versus the previous year.

Looking forward we believe markets are likely to remain volatile given the previously mentioned uncertainties although, following falls, market valuations are now more attractive. Importantly whilst we expect growth to slow we believe it will remain at reasonably healthy levels. Given uncertainties, the strategy of the Fund is to have a lower than average weight to shares and higher weight to cash, and take advantage of market volatility to purchase companies which we believe are attractively valued.

Please note this Fund is closed to new investors.



Cash and Cash Equivalents	21.63%	Australian Equities	12.82%
New Zealand Fixed Interest	3.43%	International Equities	18.77%
International Fixed Interest	15.15%	Listed Property	5.70%
New Zealand Equities [†]	21.73%	Other [*]	0.77%

[†]Includes unlisted equity holdings of 0.25% [‡]Includes unlisted equity holdings of 2.04% ^{*}Other includes currency derivatives used to manage foreign exchange risk.

¹The actual investment mix incorporates the notional exposure value of equity derivatives and credit default swaps, where applicable.

Australian Absolute Growth Fund

Portfolio Manager: William Curtayne & Wayne Gentle

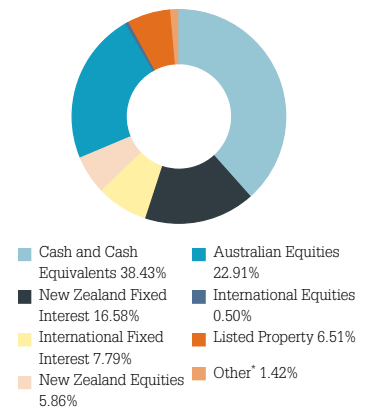
The Fund fell 0.5% in November. While most global equity markets achieved modest gains in November, the Australian share market underperformed with a 2.2% decline. Falling domestic house prices, next year's federal election and growth concerns in China are responsible for the negative sentiment towards the Australian market.

Mining and oil companies were particularly weak over the month. While the Fund has no exposure to non-gold mining companies, we do have oil exposure through our investments in Sundance Energy, Woodside Petroleum and Origin Energy. These three stocks fell 39.3%, 10.9% and 11.1% respectively and were the worst performers for the month.

Collins Food once again performed strongly over the month with a 14.7% rally on the back of its half year earnings release. Collins' KFC stores in Australia continue to perform strongly while initiatives in Europe with KFC and Australia with Taco Bell continue to develop as future growth drivers. Automotive repair shop operator, AMA Group, rallied 11.0% as some strategic shareholders provided the business with capital. We also had positive gains from our hedges in put options and gold mining companies.

Overall the Fund remains cautiously positioned as the weak Australian housing market and slower growth in China are likely to have some negative impact on the Australian economy in 2019.

Actual investment mix¹



Global Equity Fund

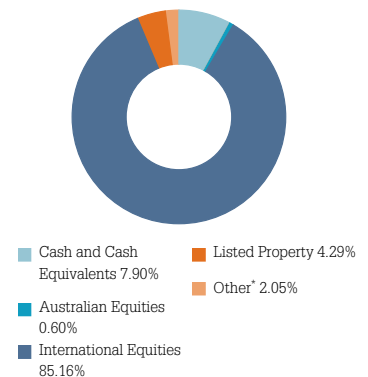
Portfolio Manager: Felix Fok

Global markets posted a modest rebound in November, up 1.2% in local currency. However, the NZ dollar more than offset this with the MSCI World falling 3.9% in NZ dollars. The Fund was down 0.6%, better than its benchmark, that is 50% hedged to the NZ dollar, which was down 1.4%. The outperformance was primarily driven by direct stock holdings.

The biggest positive contributors were Indian financial services firm HDFC Bank (+14.1%) and two Asian computer game developers, NCSOFT (+19.2%) and Tencent (+16.9%). HDFC Bank is a long-held position tapping into the potential of India. HDFC Bank has a record of profitable, high growth despite many challenges in that country over the years. We consider it a best-in-class operator in a market with a long runway for development. Game studios are the modern-day Hollywood where players engage with created characters, storylines, and other fellow players around the world. NCSOFT is a leading developer of long-form role-playing games catering to the Asian markets. Tencent is a game developer and has the largest distribution website in China, a large market where games are increasingly played on the smartphone.

The biggest detractor was Apple (-18.1%). Investor expectations of iPhones sales moderated which may pressure profits in the future. The shares were also sold, in part, because of the perception that Apple will lose from US-China trade tariffs. Amongst our external managers, MTX Sustainable Emerging Markets Leaders (+5.3%) was a notable gainer.

Overall, economic growth has moderated from a high level but remains healthy, particularly in the US. Concerns over geopolitical risks and the inflation outlook are leading to increased market volatility. Our portfolio positioning remains focused on our key investment themes and dominant companies.



^{*}Other includes currency derivatives used to manage foreign exchange risk.

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Trans-Tasman Equity Fund

Portfolio Manager: Sam Trethewey & Wayne Gentle

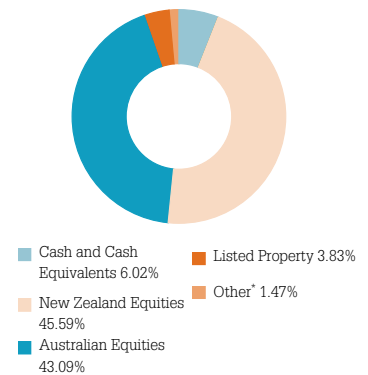
Local equity markets continued to be impacted by the global volatility in November. The Fund fell 1.5%.

Over the month the Fund continued to position more defensively, and our cash levels remained elevated. We reduced our exposure to the Australian market and also reduced growth orientated exposures in New Zealand such as Fisher & Paykel Healthcare where we see downside risk to earnings or stretched valuations.

Highlights for the Fund included Mainfreight (+6.7%) and Qantas (+9.0%). Mainfreight reported a very strong result driven by improvements in the US and European operations. Qantas rose as the reversal of the oil price took the pressure off its earnings forecasts. The Fund's holdings in Gentrack (-11.0%) and Aristocrat (-10.7%) were key detractors this month. Both companies reported results broadly in line with market expectations, however the outlook was clouded by the need for further investment to support future growth.

Looking ahead, market volatility is likely to remain elevated despite recent rhetoric from the US Federal Reserve on interest rate hikes along with positive progress on US-China trade discussions. We will continue to take advantage of opportunities to purchase investments which have attractive returns relative to the risk and take profits where we believe the potential return is no longer worth the risk.

Actual investment mix¹



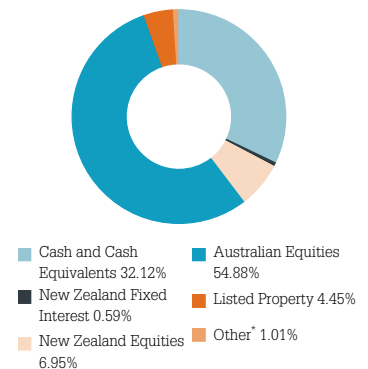
Dynamic Fund

Portfolio Manager: William Curtayne & Michael Higgins

The Fund fell 0.9% in November, while the broader Small Cap Industrial benchmark increased 0.8%, taking the 12 month Fund return to 3.1% versus a fall of 0.9% by the benchmark. Heightened volatility continues to be a theme in the market with the Fund's benchmark trading as high as 3.5% early in the month before falling as low as -2.1% mid-month. The 5.6% range highlights a directionless and skittish market with global concerns around trade wars, a China slowdown, the end of quantitative easing and rate rises all weighing heavily on markets.

Domestic concerns in Australia also linger, with accelerating house price declines (Sydney housing is now down 9.5% since its peak in July 2017) weighing on consumer confidence and spending. Winners for the month included agriculture company Costa Group (+24.8%), independent financial platform HUB24 (+21.2%) and fast food retailer Collins Food (+14.7%). Collins delivered a solid result with KFC stores located in New South Wales and Queensland returning to positive like-for-like sales. Laggards included Sundance Energy (-39.3%), salary packaging business McMillan Shakespeare (-14.2%) and building materials company James Hardie (-14.9%).

We enter the last month of the calendar year positioned defensively with elevated cash levels. We continue to rotate out of expensive growth companies as we expect value and quality companies will outperform going forward.



Upcoming Distributions	Target	Payment Date
Trans-Tasman Bond Fund	0.75 cents (Quarterly)	19/12/2018
Global Bond Fund	0.75 cents (Quarterly)	19/12/2018
Conservative Fund	0.75 cents (Quarterly)	17/01/2019
Diversified Income Fund	1.6 cents (Quarterly)	20/02/2019
Trans-Tasman Equity Fund	1.5 cents (Biannually)	20/03/2019

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¹The actual investment mix incorporates the notional exposure value of equity derivatives and credit default swaps, where applicable.

Fund Performance

	Past month	1 year	3 years (p.a.)	5 years (p.a.)	Since Fund inception (p.a.)	Unit price \$	Fund size \$
Trans-Tasman Bond Fund**	-0.18%	3.02%	4.47%	—	5.40%	1.1212	410.3 M
Global Bond Fund**	-0.38%	-0.20%	—	—	3.46%	1.0112	332.6 M
Conservative Fund*	-0.32%	2.57%	6.07%	—	6.02%	1.1074	216.3 M
Diversified Income Fund*	-0.04%	3.77%	8.75%	10.26%	11.27%	1.6540	1,916.2 M
Balanced Fund	-0.55%	2.26%	7.21%	8.94%	9.56%	2.1313	577.0 M
Active Growth Fund#	-1.33%	4.76%	8.85%	10.44%	12.33%	3.4317	971.2 M
Australian Absolute Growth Fund	-0.54%	—	—	—	—	0.9994	100.6 M
Global Equity Fund†	-0.56%	-1.04%	3.94%	6.63%	7.15%	1.4659	465.4 M
Trans-Tasman Equity Fund*	-1.50%	2.80%	11.86%	10.33%	10.49%	2.5244	334.2 M
Dynamic Fund	-0.89%	3.08%	10.26%	10.85%	11.75%	1.7584	227.6 M

For details of how investment performance is calculated, and returns at each PIR please see www.milfordasset.com/funds-performance/view-performance#tab-performance
Performance figures are after total Fund charges have been deducted and at 0% PIR.

Please note past performance is not a guarantee of future returns.

Inception dates for the Funds: Active Growth Fund: 1 October 2007, Trans-Tasman Equity Fund: 1 October 2007, Balanced Fund: 1 April 2010, Diversified Income Fund: 1 April 2010, Global Equity Fund: 12 April 2013, Dynamic Fund: 1 October 2013, Trans-Tasman Bond Fund: 2 December 2013, Conservative Fund: 1 September 2015, Global Bond Fund: 1 February 2017, Australian Absolute Growth Fund: 1 March 2018.

*Performance figures include the reinvestment of the Funds' distribution.

^Returns prior to 1 March 2018 are from when the Fund was previously offered to wholesale investors only and have been adjusted for current Fund charges.

†Returns prior to 1 October 2018 are from when the Fund was structured to achieve an absolute return.

#The Active Growth Fund is closed to new investors.

Key Market Indices

	Past month	1 year	3 years (p.a.)	5 years (p.a.)	7 years (p.a.)
S&P/NZX 50 Gross Index (with imputation credits)	0.88%	8.92%	14.42%	14.37%	16.68%
S&P/ASX 200 Accumulation Index (AUD)	-2.21%	-0.96%	7.69%	5.83%	9.42%
S&P/ASX 200 Accumulation Index (NZD)	-4.23%	-4.82%	6.49%	4.74%	6.07%
MSCI World Index (local currency)*	1.15%	1.64%	8.30%	8.24%	11.80%
MSCI World Index (NZD)*	-3.86%	0.04%	7.01%	10.42%	12.25%
S&P/NZX 90-Day Bank Bill Rate	0.15%	1.94%	2.19%	2.66%	2.67%
Bloomberg Barclays Global Aggregate Bond (USD-Hedged)	0.49%	0.54%	2.33%	3.04%	3.26%
S&P/NZX NZ Government Bond Index	0.00%	3.93%	4.17%	5.27%	4.24%

*With net dividends reinvested

Milford Unit Trust PIE Funds Monthly Review as at 30 November 2018

Top Security Holdings (as a percentage of the Fund's Net Asset Value)

Trans-Tasman Bond Fund	Global Bond Fund	Conservative Fund	Diversified Income Fund	Balanced Fund
Christchurch City 3.58% 2024 3.35%	BMO Float 2021 2.40%	Westpac Float 2021 2.66%	Contact Energy 2.70%	iShares MSCI EAFE Index Fund 4.31%
NZLGFA 6% 2021 2.92%	Microsoft 2.875% 2024 2.36%	Summerset 4.2% 2025 2.30%	ASB Bank 5.25% 2026 2.00%	Contact Energy 1.84%
NZLGFA 2.75% 2025 2.89%	Apple 3.7% 2022 2.20%	BNZ 3.648% 2023 2.26%	Meridian Energy 1.89%	Vanguard Intl Select Excl Index Fund 1.58%
Spark New Zealand 3.37% 2024 2.43%	Intel 3.25% 2019 1.93%	Kiwibank 3.1% 2019 2.09%	Westpac 4.695% 2026 1.63%	Meridian Energy 1.20%
Summerset 4.2% 2025 2.38%	AT&T 3.45% 2023 1.69%	ANZ 2.91% 2019 1.62%	Argosy Property 1.48%	Spark New Zealand 1.05%
BNZ 3.648% 2023 2.34%	Amazon 2.8% 2024 1.60%	Christchurch City 3.58% 2024 1.48%	QBE 6.75% 2044 1.46%	a2 Milk Company 0.97%
ING Float 2021 2.16%	Citigroup 5.95% 2049 1.51%	NZLGFA 2.75% 2025 1.39%	Kiwi Property Group 1.43%	iShares MSCI EAFE Min Vol ETF 0.96%
Suncorp-Metway 3% 2023 2.08%	Dell Float 2023 1.50%	QBE 6.75% 2044 1.38%	Transurban Group 1.31%	ASB Bank 5.25% 2026 0.88%
Auckland Council 3.17% 2023 2.00%	Vodafone Group 3.1% 2079 1.48%	Investore Property 4.40% 2024 1.29%	Aventus Capital Float 2025 1.29%	Wellington Global Health Care 0.86%
ANZ 3.23% 2018 1.85%	Goodman 1.375% 2025 1.42%	NZLGFA 6% 2021 1.29%	Aventus Retail Property 1.23%	Transurban Group 0.85%

Top Security Holdings (as a percentage of the Fund's Net Asset Value)

Active Growth Fund	Australian Absolute Growth Fund	Global Equity Fund	Trans-Tasman Equity Fund	Dynamic Fund
iShares MSCI EAFE Min Vol ETF 3.24%	Transurban Group 3.48%	Wellington Global Health Care 4.89%	a2 Milk Company 6.29%	Collins Foods 3.46%
Contact Energy 3.02%	ANZ 2.97% 2018 2.95%	Vontobel Sust. EM Leaders 4.36%	Commonwealth Bank 4.58%	Credit Corp Group 3.10%
Spark New Zealand 1.71%	Kiwibank 3.1% 2019 2.95%	Wellington Strategic Euro 4.29%	BHP Billiton 3.88%	Seven Group Holdings 2.52%
CYBG 8% 2049 1.68%	ANZ 2.14% 2018 2.79%	iShares MSCI EAFE Min Vol ETF 3.26%	Fisher & Paykel Healthcare 3.83%	Aristocrat Leisure 2.36%
a2 Milk Company 1.66%	Contact Energy 2.70%	Energy Select SPDR 3.00%	Spark New Zealand 3.68%	Orora 2.33%
Delegat Group 1.47%	Orora 2.45%	Health Care Select SPDR 2.83%	Auckland Airport 3.39%	Smartgroup Corp 2.30%
Alphabet 1.24%	Scentre Group 2.44%	Euro Stoxx 50 ETF SPDR 2.58%	Contact Energy 3.31%	AUB Group 2.29%
Unibail-Rodamco-Westfield 1.22%	Collins Foods 2.17%	Financial Select SPDR 2.20%	Westpac Banking Corp 2.95%	Wellcom Group 2.25%
Vanguard Intl Select Excl Index Fund 1.19%	Evolution Mining 1.95%	iShares Russell 2000 1.77%	National Australia Bank 2.92%	Evolution Mining 2.20%
Westpac 5% 2027 1.19%	National Australia Bank 1.94%	Crown Castle 1.74%	Aristocrat Leisure 2.92%	Equity Holdings 2.17%

Note: Fixed interest securities are reported in the following format: Issuer name, interest (coupon) rate, maturity year, size of fund holding (as % of total portfolio).

Milford and Milford staff have approximately \$29.1 million invested across our Unit Trust PIE Funds as at the end of November 2018.

Level 28, 48 Shortland Street, Auckland
 PO Box 960, Shortland Street, Auckland 1140
 Free phone 0800 662 345
milfordasset.com



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