Reinvesting Dividends for Long Term Financial Success

May 2024

Background

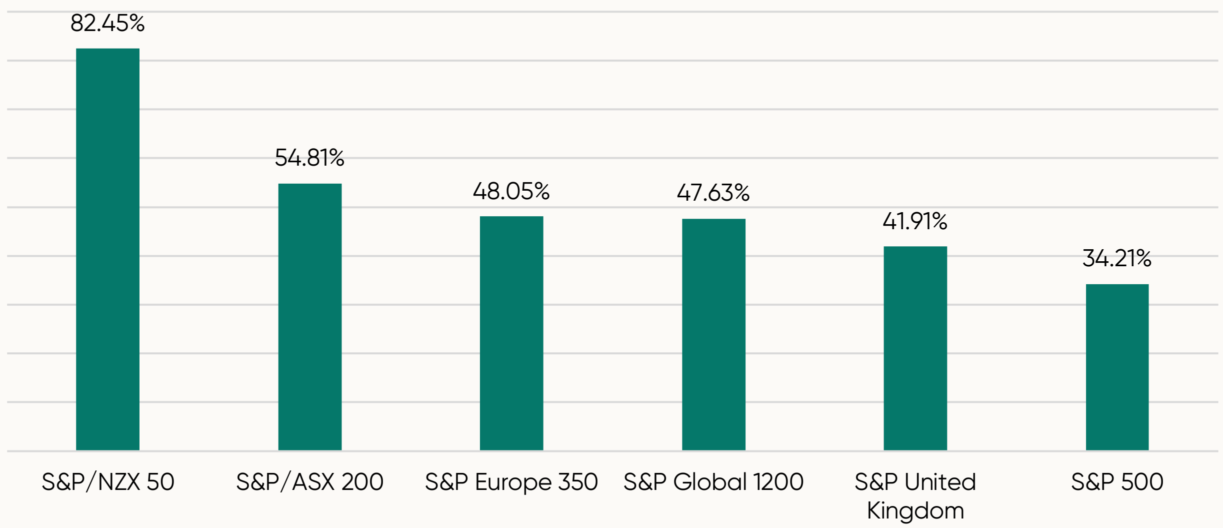
In the dynamic landscape of financial markets, dividend policies play a pivotal role in shaping investor sentiment and influencing investment decisions. At its core, a dividend policy is a key strategic decision by a company's board of directors.

They determine how much of its profit will be retained by the company to fuel growth, expansion and stability and how much is distributed to shareholders as dividends. The balance between paying out profits and retaining them for reinvestment or debt repayment is crucial. It affects a company's trajectory, potential, and the appeal to investors.

New Zealand's high dividend payout policy – A global standout

In the financial world, New Zealand is recognised for its high dividend payouts. In 2023, New Zealand companies distributed an impressive 82.5% of their post-tax income as dividends – far surpassing the global average of 47.6%.

Figure 1: Payout ratios of Global headline indices in 2023



Source: S&P Dow Jones Indices LLC. Data as of 31 December 2023. Index-level pay-out ratio is estimated by multiplying the index-level dividend yield by the index-level trailing price to earnings ratio as of 31 December 2023.

In contrast to New Zealand, U.S. companies allocated only 34.2% of their profits as dividends. This implies that the focus of those 500 companies leans toward corporate growth and capital gain rather than immediate cash returns.

The UK's and Europe's dividend pay-out ratios hover around 45-50%, striking a balance between dividends and retained earnings. Our Trans-Tasman neighbour, Australia, despite also embracing a franking credit system to avoid double taxation of corporate profits (very similar to NZ's imputation credit system), has a significantly lower payout ratio of 55% in 2023.

We posit that there are four main factors contributing to why New Zealand companies exhibit higher dividend payout ratios compared to companies in other countries:

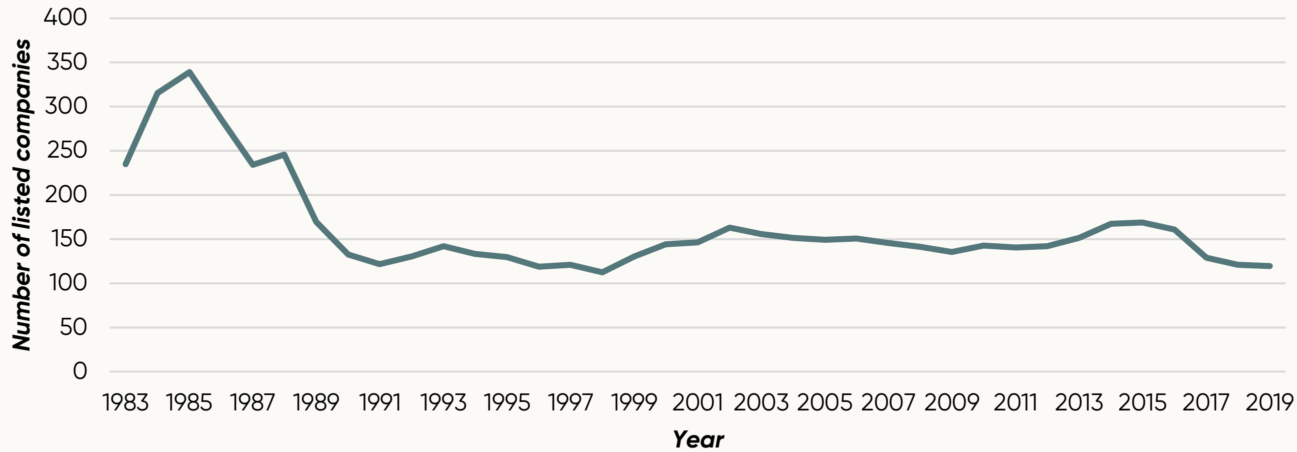
1. Tax

The high dividend payout culture in New Zealand is influenced by the dividend imputation credit regime, introduced on 1 July 1987.

Under this system, double taxation on company profits is mitigated by attaching imputation credits (representing tax paid at the company level) to cash and non-cash dividends distributed to shareholders, incentivising companies to distribute profits to shareholders in the form of dividends.

The commencement in 1987 is a critical timing with the demise of many speculative companies in the October 1987 crash, leading to a flight to quality and stability which has persisted since the 1990s as shown in the Figure 2 below.

Figure 2: Number of listed companies in New Zealand



Source: World bank data

Furthermore, a study conducted by EY in 2015 regarding the impact of the imputation regime on the New Zealand corporate dividend policies[1] shows that while only 60% of the corporates participating in the study mentioned imputation credits and tax efficiency as a primary driver for NZ's uncommon dividend practice, 84% of the participants agree that imputation itself is strongly in the background of corporate thinking.

2. Stable economy with limited investment opportunities

Second, New Zealand's relatively stable economy coupled with its smaller market size simply translates to fewer corporate investment opportunities compared to other larger economies and markets. This encourages companies to distribute a higher proportion of their profits as dividends rather than retaining them for reinvestment.

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[1] *"Imputation and the New Zealand Dividend Psyche: An analysis of corporate and investor attitudes" - September 2015 Report by EY.*

To be more specific, companies in the S&P/NZX 50 index – the 50 largest stocks listed on the Main Board (NZSX) of the New Zealand Stock Exchange by float-adjusted market capitalization – often, are large and mature companies.

They tend to fall less in market downturns and are less likely to go bust compared to less mature or high growth companies. In other words, lower growth prospects are often associated with high dividend payouts. However, dividends are certainly not free money – that amount could have otherwise been retained or reinvested back into the company to support further growth opportunities.

3. Investor preferences

Third, New Zealand investor demographics have a history of favouring companies that provide regular dividends. High dividend-yield stocks are attractive to income-seeking investors. Hence, companies may align their dividend policies with market expectations to retain and attract investors. In the analysis of 12 investor groups acting as proxies), the 2015 EY report reveals that 75% of respondents attribute the New Zealand market's high pay-out ratios to investor demand for dividends.

In line with this finding, nearly all the companies involved in the study emphasize the importance of meeting payout targets as a primary factor in shaping their corporate dividend policies. Moreover, a staggering 84% of corporates surveyed perceive themselves as predominantly yield-driven, despite also having the capacity to grow further.

In practice, investors generally favour dividends, even in the countries where dividend payments incur additional taxes. This phenomenon has also been debated for years by academics. Some explanations contribute to this paradox include:

- **Prospect theory**: individuals often prioritise immediate value over uncertain future gains. Cash dividends, received promptly, can outweigh potential capital appreciation down the line.
- **Mental accounting bias**: selling shares can be more emotionally painful because it depletes capital while dividends leave capital intact, with investor consumption limited to dividend flows.

- **Naïve investor perception**: Investors can mistakenly view blue-chip shares as bond proxies. Rather than seeing themselves as long-term owners benefiting from corporate success, they perceive blue-chips as safe havens for regular income. This bias arises from anchoring – where familiar reference points (like well-known brands) shape expectations.

- **Transaction costs**: For small cap stocks, receiving dividends are easier than selling stocks which may involve high transaction costs, and other market constraints.

4. Internal corporate governance

In the field of corporate governance, the relationship between internal practices and dividend payout policies has been extensively studied. However, findings from various studies remain diverse.

Early research by John and Knyazeva (2006) suggests that dividends can act as a substitute for weak governance. In other words, when strong governance mechanisms are lacking, firms may use dividends to align interests between directors and shareholders.

By contrast, Agrawal (2009) and Harford & Maxwell (2012) show that higher dividends are often associated with stronger board governance. Robust corporate governance practices seem to encourage more generous dividend distributions. In the context of the New Zealand market, Brown and Roberts (2016) also investigate the relationship between the internal corporate governance and dividend payout levels of NZ firms.

Their research reveals a significant and non-linear correlation between the level of dividends and beneficial director ownership. Specifically, at director ownership levels of 26% and 56%, a negative-positive-negative pattern emerges. For beneficial director ownership of less than 26%, the negative correlation implies that increased director-shareholder alignment reduces the need for higher dividends.

Between 26% and 56%, positive correlation aligns with managerial entrenchment[2], consistent with previous research by Farinha (2003), which found that higher dividend payments can mitigate agency costs[3] associated with entrenched ownership.

However, beyond 56%, the correlation turns negative again. In essence, when directors hold substantial equity stakes, their alignment with shareholder wealth makes a high dividend payout policy less necessary for aligning interests.

The NZ market provides an interesting setting to examine the interplay between the corporate governance and dividend payout policy. Two key factors contribute to this uniqueness. First, the market for corporate control in NZ is notably less active compared to other developed markets, potentially resulting in a weaker disciplining effect on managers.

Second, the pool of director talent is small, allowing directors to serve on multiple boards. This situation, however, can weaken their ability to act independently in the best interests of respective shareholders. And observed by Brown and Roberts (2016), when the director ownership falls within the range of 26% to 56%, there remains a reliance on dividends to compensate for unaligned interests between managers and shareholders.

These factors collectively contribute to the trend of New Zealand companies paying out more profits as dividends compared to their international counterparts. While, obviously, dividends and capital gains – the two wealth-building blocks of the stock market – often involve trade-offs, for New Zealand investors, whether the high level of dividend payouts has balanced out the slide in capital growth is still an open debate. Let's explore the pros and cons of investing for dividends as a passive income stream.

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[2] *Managerial entrenchment or entrenched ownership occurs when a significant portion of a corporate's shares is held by insiders, such as founders, executives or large institutional investors. These insiders may have substantial control over decision-making processes, leading to agency problems which refer to the issues incurred when managers prioritise their interests over those of other stakeholders.*

[3] *Agency costs refer to the expenses incurred due to conflicts of interest between different stakeholders within a company.*

Pros of investing for dividends

Many investors favour high dividend paying companies in order to build a passive income.

Often, these dividend-paying companies distribute profits to shareholders every six months, with some companies doing so quarterly. This potential to provide a regular and sometimes predictable (but not guaranteed or contracted) stream of cash flow can be particularly appealing for individuals seeking consistent income to supplement their earnings.

Additionally, dividend payments may provide some protection against inflation as blue-chip companies, particularly those that have inflation-linked revenues, tend to have dividend yields that are higher than the rate of inflation.

Moreover, dividends can offer a form of diversification within an investment portfolio, since dividend paying companies tend to be more stable and more mature companies. Historically, they have exhibited lower volatility compared to their non-dividend paying counterparts.

Finally, reinvesting dividends, in other words, reinvesting the cash payment received back into more shares of the same company - can compound your investment returns over time, potentially accelerating long-term wealth accumulation.

Cons of investing for dividends

While investing for dividends can offer some benefits, there are many drawbacks to consider.

Dividend yields are subject to market conditions as well as company performance

First, a high dividend yield does not necessarily mean that high yield is guaranteed into the future. Dividend yields are backwards looking, and a high yield may be based on the period when a company is more profitable, and subsequently issued lower guidance or “profit warnings” to market.

Despite general desires for stability and track records, dividend yields may fluctuate depending on market conditions and the company's profitability, or even be cut during economic downturns or if a company faces financial challenges. It is ultimately a regular decision for the Board.

Focusing solely on dividends may overlook the growth potential and overall company financial health

Dividends and capital gains are two sides of the coin and often involve trade-offs. This is because high dividend paying companies are often more mature and established companies with lower capital growth prospects and fewer areas to reinvest their profits. Hence, relying solely on dividends as a passive income stream will potentially limit the exposure to growth opportunities in emerging sectors.

Cashing out dividends is tax inefficient

In New Zealand, dividends and interest income are taxable in most cases, meanwhile capital gains are often tax-free. For instance, let's say you are a NZ tax resident, and you own shares in a NZ company.

Even if fully imputed and 28% is available as credits against other income, a dividend yield of 3.5% is taxable and will result in a net yield closer to 2.35% once tax is taken away at a 33% rate or a yield including imputation credits of 3.32%.

On the other hand, having your share price go up by 3.5% is usually tax-free (trader intentions aside). So, earning $1 from capital gains, in general, would give you better outcome compared to earning $1 from dividend payouts.

Opting for immediate dividend payouts comes at the cost of losing out on compounding growth

When investors choose to receive immediate dividend payouts, they gain access to cash in hand at no transaction/realisation cost which can be useful for covering expenses. However, this decision comes at the cost of foregoing the benefits of compounding growth.

When dividends are reinvested, they contribute to the compounding effect as the reinvested dividends generate additional returns. Over time, this snowball effect can significantly boost your investment returns. By choosing immediate payouts, investors sacrifice their long-term wealth accumulation.

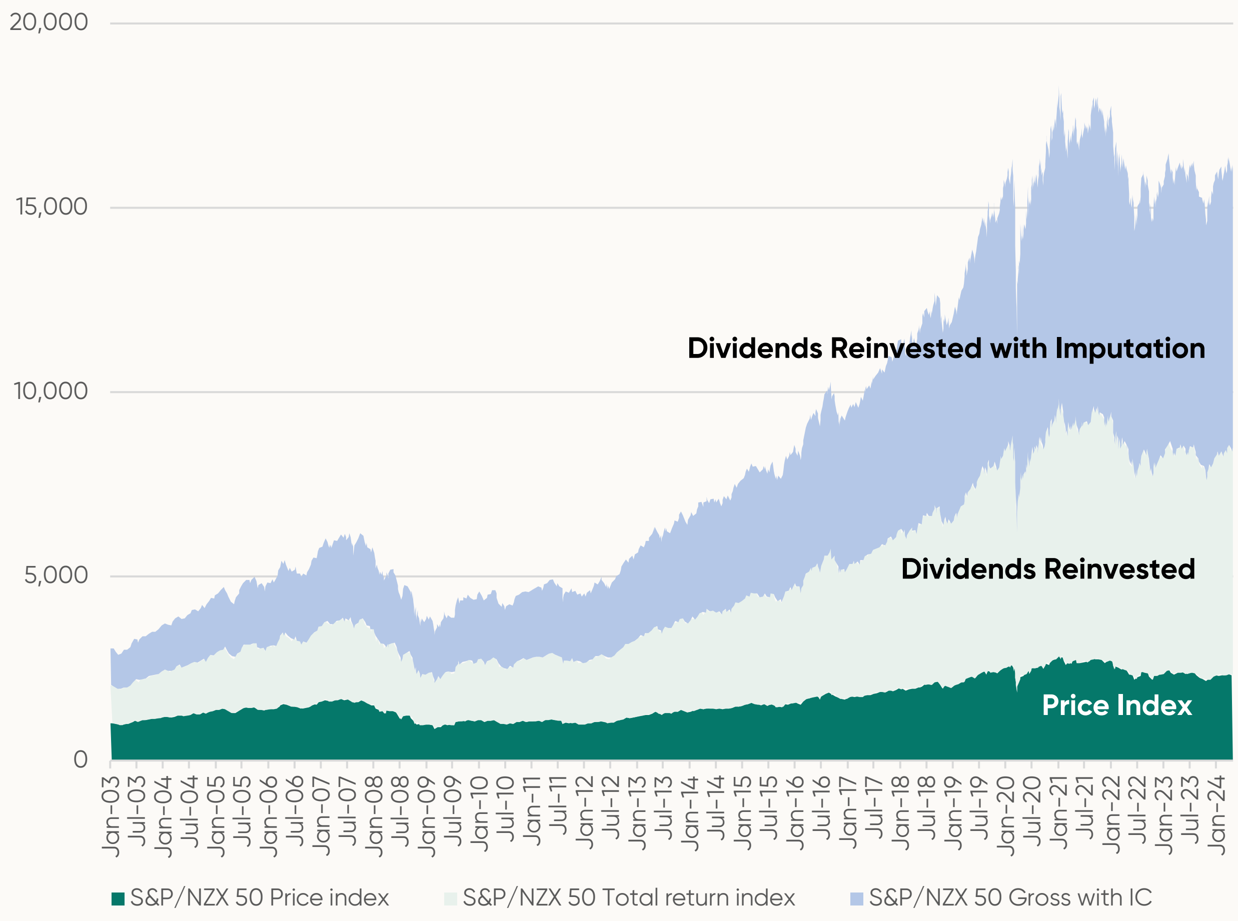
Overall, investing for dividends as a passive income stream presents both advantages and disadvantages. While dividend paying stocks offer a regular source of cash flow and may also offer some protection against inflation, dividend payout policy is subject to market conditions and company performance, potentially leading to fluctuating income and overlooking growth opportunities.

However, one of the key benefits of dividend investing lies in the option to reinvest dividends for long-term wealth accumulation, which will be discussed further in the following section.

Reinvesting dividends for long-term wealth accumulation

One of the primary reasons for New Zealand's high dividend payout policy is its dividend imputation regime – an uncommon practice among countries around the world.

Figure 2: The impact of dividends reinvested on long-term returns in the S&P/NZX 50 index



Source: S&P Dow Jones Indices LLC. Data

As a result, New Zealand's dividend strategy may provide investors with robust income. Figure 2 unveils the significant role and importance of reinvesting dividends in total long-term equity returns. Between 03 Jan 2003 and 30 April 2024, the price index increased by 129%.

Notably, during the same period, the total return index – factoring in reinvested dividends - rose by an impressive 504.2%. Moreover, gross with imputation credits index – which accounts for both reinvested dividends as well as any associated imputation credits- surged by 653.8%. This data reveals that approximately 57% of the S&P/NZX 50 Index's total return was due to reinvestment of dividends, and 23% was due to reinvestment of imputation credits.

Table 1 below illustrates the investment outcome of two investors with investor A planning to cash out all periodic dividends as their regular source of income and investor B deciding to auto-reinvest the dividends, disregarding any associated costs.

Suppose they both invested in the S&P/NZX 50 with an initial amount of $10,000 and made no further contributions.

Over a 5-year span, investor A, who opted for immediate dividend payouts, ended up with a portfolio that was $4,069 (averaging across different investment start dates) lower than investor B, who reinvested dividends. Notably, as the holding period extended, this disparity in investment outcomes grew even larger. Remarkably, after 20 years, the gap had widened to $51,831!

Table 1: Investment outcomes with and without dividends reinvested.

	Returns without dividends reinvested	Returns with dividends and imputation credits reinvested	Investment Outcome for A	Investment Outcome for B	Difference in Outcome
5 years from 31/01/2003	39.02%	95.91%	$13,902	$19,591	$-5,689
5 years from 31/01/2008	-11.26%	24.46%	$8,874	$12,446	$-3,573
5 years from 31/01/2013	60.39%	111.39%	$16,039	$21,139	$-5,099
5 years from 31/01/2018	22.61%	41.76%	$12,261	$14,176	$-1,916
10 years from 31/01/2003	23.36%	143.83%	$12,336	$24,383	$-12,047
10 years from 31/01/2008	42.33%	163.10%	$14,233	$26,310	$-12,077
10 years from 31/01/2013	96.65%	212.06%	$19,665	$31,206	$-11,541
15 years from 31/01/2003	97.86%	415.42%	$19,786	$51,542	$-31,756
15 years from 31/01/2008	74.50%	288.40%	$17,450	$38,840	$-21,390
20 years from 31/01/2003	142.58%	660.90%	$24,258	$76,090	$-51,831

The impact of transaction fees on the investment outcome

While reinvesting dividends offers significant benefits for long-term wealth accumulation, the investment mechanism chosen in the first place can impact the costs and overall returns. Investing directly in a range of NZ shares, and subsequently reinvesting dividends via direct investment in NZ shares has consequences. There are additional costs such as brokerage fees and the ongoing research and monitoring of individual companies.

While participating in a company's Dividend Reinvestment Plan (DRP) allows shareholders to automatically reinvest dividends without incurring brokerage fees, it's essential to recognize that buying and selling shares still involve such fees.

Over time, these fees can impact returns, particularly for smaller investors with limited capital. By contrast, investing in an unlisted index fund typically comes with no transaction fees. This is because, with an unlisted index fund, you buy and sell units directly with the fund manager. Furthermore, it should be noted that in New Zealand, DRPs are indeed not as common as in some other countries.

Some might argue that index funds incur management fees, whereas investing directly in shares typically involve no management fees. However, it’s noteworthy that investing in individual stocks demands research and ongoing monitoring of the specific companies, transaction fees, and tax calculated at an investors RWT rate compared to a funds PIR rate.

Additionally, the potential lack of diversification inherent in direct investment exposes investors to higher company-specific risks, which can magnify portfolio impact if a specific company underperforms or fails.

In order to compare these two different cost structures, we back-tested the impact over the last 10 years. The table below shows the impact of transaction fees and management fees on the investment outcome of two investors with one investing directly in the 20 companies in the S&P/NZX 20 index (investor A) and the other investing in an unlisted index fund tracking the S&P/NZX 20 index (investor B).

Though both investors reinvested dividends, investor A needed to pay the brokerage fees for the periodic dividends amount being reinvested while investor B doesn’t have to pay that cost. Meanwhile investor B must pay a management fee which we have assumed to be 0.25%p.a. the same as Kernel’s NZ 20 Fund. Suppose both investors had $10,000 to invest on 30 April 2014 and each month invested $1,000 for 10 years to build wealth.

When it comes to calculating brokerage fees for buying and selling stocks in New Zealand, for each time of buying or selling shares, suppose that investor A must pay a 1.9% transaction fee on the amount invested (or sold), up to a fee cap of $25 NZD.

Table 2 below summarises the impact of fees on the investment outcome of the two investors after 10 years of accumulating wealth. We use the gross with imputation credits (gross with IC) index series to calculate the monthly gross returns with dividends and imputation credits reinvested and use the price index return to calculate the monthly price return without dividends reinvested.

The difference between the two series reflects the dividend return from which the monthly dividend amount is derived. Each month during the period from 30/04/2014 to 30/04/2024, in addition to the $1000 contribution, investor A needed to reinvest the monthly dividend amount and had to pay brokerage fees on total transaction value.

The average monthly brokerage fee was $25. The value of the periodic brokerage fee was then adjusted for the gross with IC returns to calculate the total amount of fees investor A should have saved after 10 years if reinvested instead. The total cost under this approach was $5,232, and the investment outcome after fees was $210,173.

Investor B, despite not having to pay transaction fees, needed to pay annual management fees at 0.25% of Net Asset Value. We also adjust those fees for the Gross with IC returns to see how much money investor B would have saved after 10 years if fees were reinvested instead. The result stands at $2,835. Considering the investment outcome after fees, investor B's total amounts to $212,571.

So, compared to directly buying and selling NZ shares, investing in a low fee index fund would be more cost-effective.

Particularly in this example, investor A would have saved 1.13% of the investment outcome if choosing to invest in an index fund.

Table 2: Investment period - 30/4/2014-30/04/2024, tracking the returns of the S&P/NZX 20 index

Initial investment amount	$10,000
Monthly contribution	$1,000
Average monthly dividend amount	$361.97
Average monthly price index return	0.75%
Average monthly Gross with IC return	1.15%
Investor A	**Investor B**
Brokerage fees (Average per month): $25	Management fees: 0.25% of NAV per year
Investment outcome after fees: $210,173	Investment outcome after fees: $212,571
Value of brokerage fees if reinvested: $5,232	Value of management fees if reinvested: $2,835

Additionally, it's essential to note that these calculations do not account for taxes. For investors subject to a 30%, 33%, or 39% RWT (Resident withholding tax) rate, the disparity in returns would likely be more significant, especially given that our index fund offerings are PIE funds, with tax capped at 28%. This consideration could substantially affect the comparative advantage of investing in the index fund versus directly buying and selling shares.

Dividends are not safer than portfolio drawdown

While it's often assumed that cashing out dividends is a safer strategy than selling shares, this isn't necessarily the case. Cashing out dividends is akin to making a withdrawal. In simple terms, if you choose not to reinvest your dividends, you have effectively made a drawdown.

In fact, dividend irrelevance has been known for over 50 years. The theory originated from the influential work of Merton Miller and Franco Modigliani in 1961 "Dividend Policy, Growth and the Valuation of shares". They argued that, in an ideal market without frictions like trading costs and taxes, investors should be indifferent between a $1 dividend (which causes the stock price to drop by $1) and obtaining $1 by selling some shares.

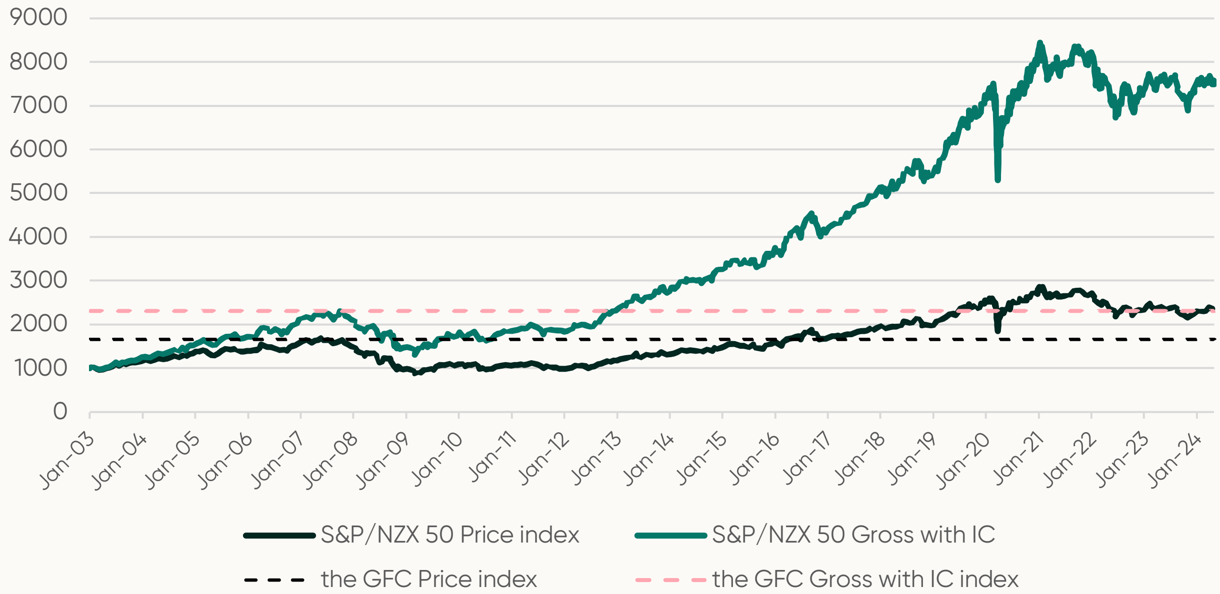
It's also important to remember that dividends are not guaranteed or reliable as they are subject to market conditions, company performance, and the discretion of the company's Board. They may fluctuate or even be cut during economic downturns or in case a company faces financial challenges.

In times of market downturns, investors might hesitate to sell their holdings. However, some may not realise that by not reinvesting dividends during these market conditions, they are effectively withdrawing from their investment portfolio. The higher the dividends, the greater the impact on their overall portfolio.

The figure 3 below depicts the impact of cashing out dividends in down markets on the overall investment outcome by comparing the S&P/NZX 50 Price index - the series without dividends reinvested and the S&P/NZX 50 Gross with IC index – the series with dividends and imputation credits reinvested.

Looking at the S&P/NZX 50 Gross with IC series, it can be seen that, after the Global Financial Crisis (GFC), the market recovered and surpassed its previous peak within 5 years. However, when dividends were not reinvested, it took nearly 10 years for recovery. The dotted lines in the chart represent the peak level prior to the impact of the Global Financial Crisis.

Figure 3: The impact of not reinvesting dividends during market downturns



Source: S&P Dow Jones Indices LLC. Data

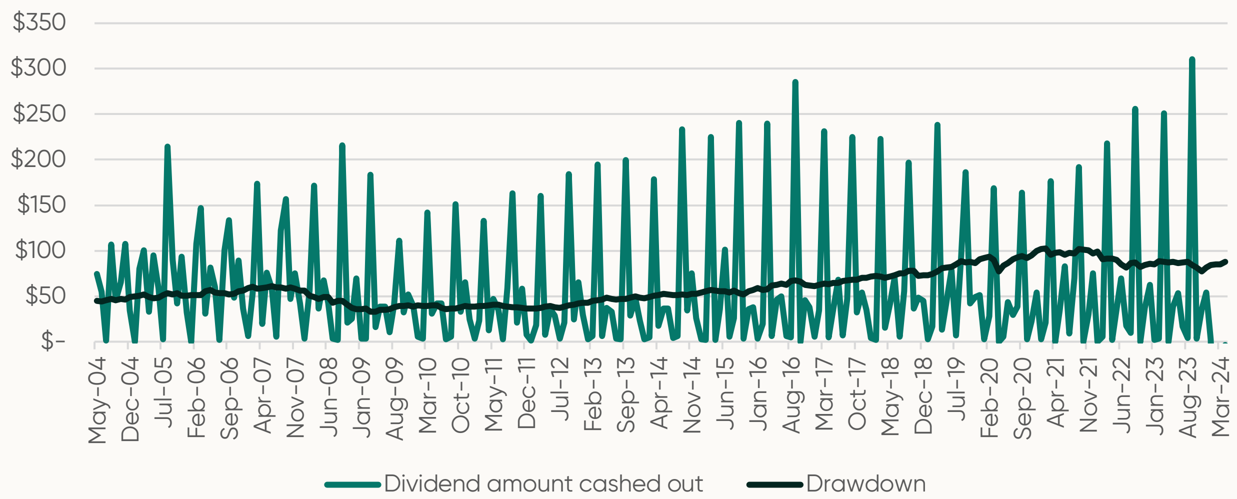
Regular portfolio drawdown vs. lumpy dividends

Another argument is that an investor should regularly drawdown rather than relying on the irregular and unknown amount of dividend payments. This enables better household budget management and a higher standard of living rather than a windfall mentality.

To test this hypothesis, we conduct a study examining the investment outcomes of two investors investing in an index fund tracking the S&P/NZX 50 index with one receiving all dividends as cash during the investment period from April 2004 to April 2024 and the other reinvesting dividends but making a monthly withdrawal of 0.45% of the capital value of the investment portfolio.

This 0.45% matches with the average monthly dividend yield of the index during the 20 year period from April 2004 to April 2024. Figure 4 shows two different methods of withdrawing from the investment portfolio.

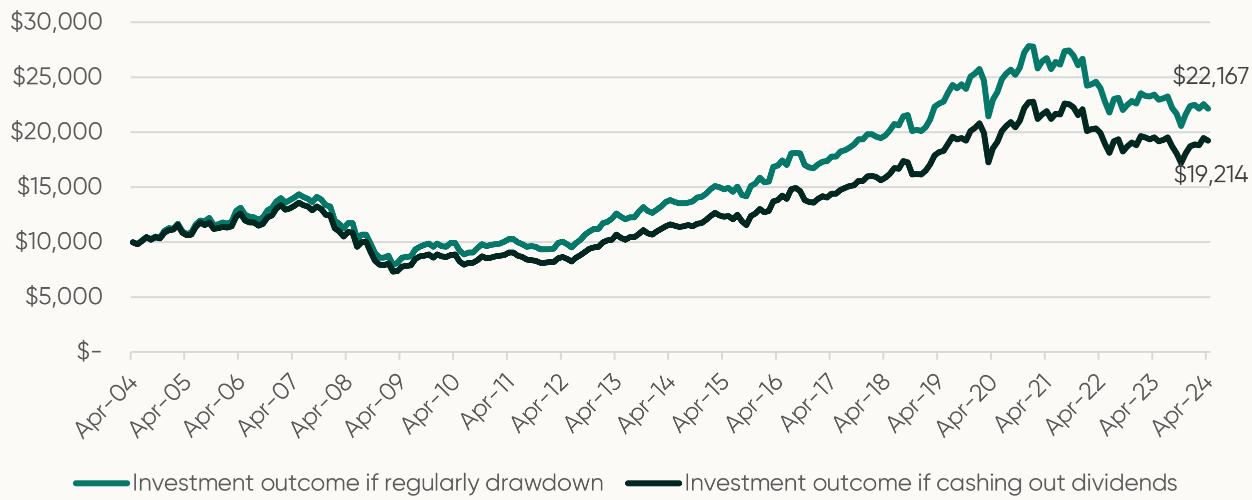
Figure 4: Cashing out dividends versus regular drawdown



Further suppose both investors had $10,000 as an initial investment amount and made no further contributions during the investment period of 20 years from 30 April 2004 to 30 April 2024. After 20 years, an investor who decided to cash out all dividends ended up having the portfolio value of $19,214.

Meanwhile, investor who decided to make a regular withdrawal of 0.45% of the capital value of the investment portfolio could achieve $22,167 by the end of April 2024. (Figure 5).

Figure 5: Investment outcome with regular drawdowns and with dividends cashed out



Summary

To summarise, reinvesting dividends for long-term wealth accumulation serves as a powerful strategy for investors seeking to maximise their returns and build substantial financial portfolios. While the economic and fiscal environments might incentivise companies to distribute profits as dividends, most investors are advised to reinvest those dividends immediately.

By harnessing the compounding effect over time, reinvested dividends have the potential to significantly boost overall investment growth, ultimately leading to greater wealth accumulation and financial security for the future. While dividends have their appeal, a strategic approach to reinvesting this passive income stream should be carefully considered.

First, investing via a low fee index fund would be more cost effective than investing directly in NZ shares. Second, regular portfolio drawdowns can often offer a more consistent and manageable income stream.

This method can be particularly advantageous over relying on the unpredictable nature of dividends, providing investors with a clearer financial pathway, and potentially enhancing the overall stability of their investment strategy.

Finally, if you are a higher income earner, PIE funds where taxes are capped at 28% allow investors to manage their investments more efficiently while minimizing tax obligations and having higher net returns.

Kernel

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For more information on the risks and features of Kernel Funds, please refer to the Product Disclosure Statements at www.kernelwealth.co.nz