Over the last 30 years, the gross return from NZ shares averaged 10.4% a year. But the after-tax and after-fees return, actually received by a typical person saving in the NZ share market, was less than 4.1% a year. This highlights the importance of understanding the impact of tax and fees on your investment returns. Also, at 4.1% a year in the hand, it was less than the average rate of inflation (4.4% a year) over the period.

Therefore, if you are going to make a decision on the basis of past performance, it is important that you understand which manager, which investment strategy and what investment approach, will best achieve the returns you want. In most cases it will be a low cost passive investment approach.

Understanding investment returns

Quoted investment returns and investment performance comparisons are often not what they seem. This is because there is a conflict between using returns to encourage investors to invest, as opposed to explaining returns so that investors understand what they are investing in. It is not helped by the misuse of statistics. So, if past performance forms part of your decision process, it is important to focus on the returns that are relevant and important to your financial goals. This will typically be the after-tax and after-expenses returns, and the returns that allow for cash flows. It also helps to see them in terms of dollars, as for most people dollars mean more than percentages. However, reporting returns that are after-tax, after-fees and allow for cash flows, as well as showing actual dollars, is not common market practice.

The reasons managers prefer to show gross returns is that they are normally higher (i.e. look better), can be manipulated and are often not verifiable.

Average NZ market returns – last 30 years

Gross return	10.4%	What managers mostly quote
Net of fees return	9.3%	
Net of tax & fees return	6.8%	
Net of tax & fees and impact of cash flows	4.1%	What investors actually got

Managers also prefer to show returns ignoring the effect of cash flows. This means that they quote returns based on a single lump sum invested at the start of the period in question. If instead, they quoted on the basis of a regular payment made each year over the period in question, the returns could be quite different. It is important to know on what basis the returns are quoted as they are very relevant to the investor. The argument against showing returns allowing for cash flows, is that as they [the manager] cannot influence the timing of cash flows, they should not be penalised because someone invested money, or took money out during the period measured. In reality, investors receive returns after the impact of not only their cash flows, but the cash flows of the other investors. While a manager may not be able to influence the timing of the cash flows, an investor should be with a manager that has a pattern of cash flows that reflect their own pattern of investing and so will not detract from their returns that they would otherwise get. If an investor, for example, is with a

manager that has negative cash flows (i.e. they are losing business), the returns to the investor will be lower than they would be, if they were with a manager with positive cash flows.

Most managers do not show investment returns in dollar amounts because it would mean that for every investor they would have a unique amount determined for them. One exception is SuperLife. SuperLife shows on its member website and in member statements, net returns after expenses and allowing for cash flows. Returns are shown in both dollars and as percentages.

What does the last 30 years reveal?

The last 30 calendar years (1 January 1982 to 1 January 2012) has been a challenging period for investing. We have seen among other events; the 1987 share market crash, the early 90's bond market fall, the 2000 tech bubble burst and the 2007 global financial crisis. It has been a period where inflation averaged 4.4% a year. If we look at the returns over this period for NZ bonds and NZ shares, we can see why it can be misleading to use gross returns and to ignore the effect of cash flows when you compare performance.

The market returns in percentage terms (% p.a.) were:

Average returns earned on a $1,000 lump sum investment on 1 January 1982

Without cash flows	NZ bonds	NZ shares
Before tax (gross) return	10.6% p.a.	10.4% p.a.
Net-of-fees return	9.8% p.a.	9.3% p.a.
Net of tax return	7.1% p.a.	8.1% p.a.
Net-of-tax and net-of-fees return	6.3% p.a.	6.8% p.a.

Average returns earned on $1,000 invested regularly each year since 1 January 1982

With cash flows	NZ bonds	NZ shares
Net of tax return	6.1% p.a.	5.5% p.a.
Net of tax and net of fees return	5.3% p.a.	4.1% p.a.

Over the period, bonds (at 10.6%) outperformed shares (10.4%) before-tax, but shares outperformed bonds both after-tax and after fees. These returns ignored the impact of the cash flows from savings and assume that there was a single lump sum investment at the start of the period. However, when the impact of the cash flows from regular savings are added in, bonds outperformed shares and the difference was material. The difference became even greater when "typical" manager fee levels were allowed for.

Dollars tell a clearer story

The returns above are percentages and for many investors, this means very little. It is often hard to comprehend what 5.3% a year return means relative to 4.1% a year return. Over the short term differences in percentages do not make a material difference but long-term, a 1% difference in percentage returns is significant. So by showing returns in dollar terms illustrates the impact in a more meaningful way.

Over the 30 year period, the average returns earned after-tax is deducted but ignoring fees on a single $1,000 investment were:

	Accumulated balance ($)	Return ($)	Return (%)
NZ bonds	$7,735	$6,735	7.1% p.a.
NZ shares	$10,315	$9,315	8.1% p.a.
Shares less bonds	$2,580	$2,580	

Likewise, for an investor who invested $1,000 a year for the 30 years ($30,000 in total), the returns after tax is deducted but ignoring fees were:

	Accumulated balance ($)	Return ($)	Return (%)
NZ bonds	$83,098	$53,098	6.1% p.a.
NZ shares	$75,381	$45,381	5.5% p.a.
Shares less bonds	-$7,717	-$7,717	

When expressed in dollars it is easier to see the return advantage. Relative to the $30,000 of savings, the return difference of $7,717 (bonds above shares) represents just over a quarter of the savings. Put another way, instead of saving $1,000 a year, an investor could have saved $742 a year in bonds and got the same end result as an investor who invested in shares.

Of course the next 30 years will be different and may be the other way round. But what is important is for an investor to be able to see the actual return they get, which is after-tax and after-fees and allowing for cash flows. Anything else does not tell the full picture.

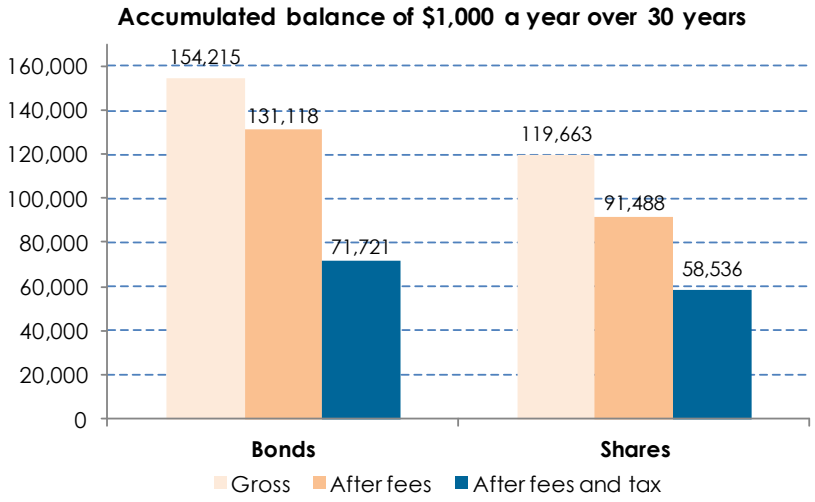
Fees are also important

The difference of $7,717 above still excludes the impact of fees. If average manager fee levels are included in the calculation, the position becomes:

	Accumulated balance ($)	Return ($)	Return (%)
NZ bonds	$71,721	$41,721	5.3% p.a.
NZ shares	$58,571	$28,571	4.1% p.a.
Shares - bonds	-$13,150	-$13,150	

In the case of shares, typical fees reduce the after-tax balance of $75,381 by a further $16,810 to $58,571. This is a material amount in the context of 30 years and $30,000 personal savings.

Tax, fees and cash flow are all important components of the information you need before you make important decisions on who you invest with.



The analysis in this Update used the investment return data for the period 1 January 1982 to 1 January 2012. It looks at the total returns both before and after tax. To get the after-tax returns, we have adjusted the gross returns for tax at a flat rate of 33% to reflect the "average" tax rate over the period. The analysis is used to illustrate the differences that arise from ignoring tax and also ignoring the cash flows and ignoring fees. Without allowing for tax, cash flows and fees, it would be easy to make a poor decision. Where we have adjusted for fees we have used 0.75% of assets a year for bonds and 1.25% of assets a year for shares. We note that SuperLife's standard fees are significantly below these but that the average fee in the market place is often above these levels particularly when monitoring fees are also included.