Investment Newsletter

Results for differing portfolios over last 20 years

MJW Investments

January 2016

Introduction

As investment consultants, clients ask us to propose investment strategies to meet the stated objectives for the funds they manage. Accordingly we model and project the outcome of portfolios with varying allocation levels to growth and income assets. The right strategy for a client will depend on their investment objectives and their tolerance to risk defined as the variability of the annual return. Other things being equal the greater the exposure to growth assets (in the main shares) the higher the long term return but the more variable the outcome over shorter time periods. While all the modelling is clearly looking forward, illustrating historical outcomes is valuable to show how different portfolios have performed in the past.

The newsletter looks back over 20 years at the returns from each of the major asset classes. It explores the fortunes of 3 portfolios labelled Income, Balanced and Growth each with 20%, 50% and 80% exposure respectively to growth assets. Overall the period has been favourable to share markets albeit with some major movements experienced. However the returns from shares have not outperformed bonds as much as an investor would have ideally liked, given the risks inherent with share investments. This is in the main due to bond markets benefitting from a steady fall in interest rates over the period.

We look at the components of the return from each portfolio highlighting how the return on the income assets produces the regular consistent return favoured by many investors while the exposure to growth assets both boosts the long term return while being responsible for the large returns both positive and negative.

Portfolios – Their asset allocations

Our model portfolios are shown in Table 1. The asset allocations are broadly similar to the current KiwiSaver funds, which in the main have a high exposure to global assets.

Table 1	Income %	Balanced %	Growth %
NZ Shares	2.5	6.3	10.0
Australian Shares (unhedged)	2.5	6.3	10.0
Global Shares (50% hedged)	15.0	37.5	60.0
Growth Assets	20.0	50.0	80.0
NZ Bonds	17.5	15.0	5.0
Global Bonds	35.0	30.0	10.0
NZ Cash	27.5	5.0	5.0
Income Assets	80.0	50.0	20.0

The bond portfolios show a consistent preference to global bonds over NZ bonds 2:1 which given the general outperformance of global bonds over NZ bonds will have boosted the returns to investors. The allocation to shares has a 3:1 bias to global assets with an equal split between NZ and Australian shares. The hedging position is 100% hedged for global bonds given the role they play in the portfolio, while the exposure to global shares is 50% hedged. As one might expect the approach to building portfolios has varied over the last 20 years, a major difference 20 years ago would have been lower global exposure and certainly lower hedging for global shares, as we all tried hard to show how good we were at timing the currency!

Returns over the total 20 year period

In Table 2 we summarise the key market statistics at the beginning and end of the period with share indices in local currency terms. We show the statistics for the end of 2014 just to illustrate how markets have fared over the last year.

Comparing 1995 to 2015 we see:

- The NZD is up both against the USD and the AUD. Having said that the fall in the value of the NZD against the USD over the last 12 months is apparent.
- Interest rates have fallen dramatically and re affirm the new world we now live in. At the same time, rates in NZ remains high compared to the US.
- The rise in the share indices levels is substantial. However over the last year only the NZX has enjoyed strong growth with the other 3 markets flat or down for the period.

Table 2	31 Dec 1995	31 Dec 2014	31 Dec 2015
NZX 50[1]	1,422	6,396	7,359
ASX 200	8,621	47,139	48,346
S&P 500	616	2,059	2,044
MSCI Emerging Markets	16,902	97,553	92,281
NZ Official Cash Rate[2]	9.00%	3.50%	2.75%
NZ Govt Stock - 10 year	7.23%	3.65%	3.57%
US Federal Funds Rate	4.73%	0.06%	0.20%
US Treasury - 10 year	5.58%	2.17%	2.27%
NZD / USD	0.654	0.782	0.685
NZD / AUD	0.879	0.955	0.941

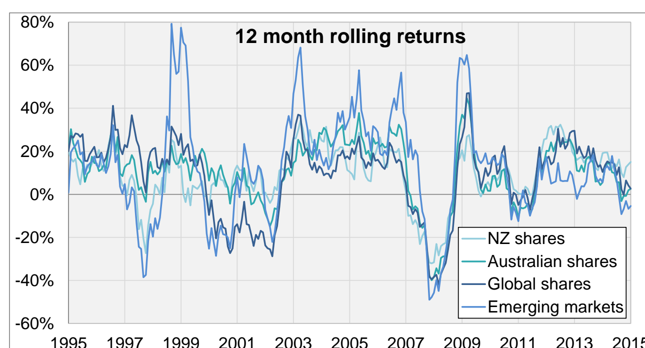
[1] The NZX 50 only goes back to 2003 and so prior to then we used its predecessor, the NZSE 40.
[2] The Official Cash Rate was introduced in 1999 and so we have shown the level of the overnight interbank cash rate at 30/06/94.

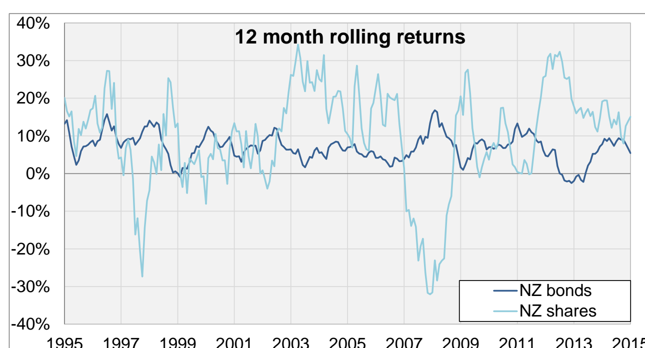
Individual sector returns split into 5 year periods

Table 3 shows the results for the individual asset classes over the whole 20 year period and looking individually at the four 5 year periods. Following on are 2 graphs which first compare the rolling 12 month return on the different share markets and a comparison of the NZ share and equity markets.

Table 3	Returns				
	5yrs to 31 December				20yrs to Dec 2015
	2000 % pa	2005 % pa	2010 % pa	2015 % pa	% pa
NZX50	4.0	14.8	1.2	15.4	8.7
ASX200 (NZ$)	14.6	9.2	8.5	2.6	8.6
MSCI (NZ$)	21.2	-6.3	-0.3	10.5	5.7
MSCI (hedged)	17.0	4.8	0.5	12.2	8.4
EM (NZ$)	3.7	9.5	10.0	-1.9	5.2
NZGS	8.1	6.4	6.4	5.7	6.7
BGAI	7.8	9.2	8.2	6.8	8.0
90 day BB	7.4	6.1	6.2	3.0	5.7

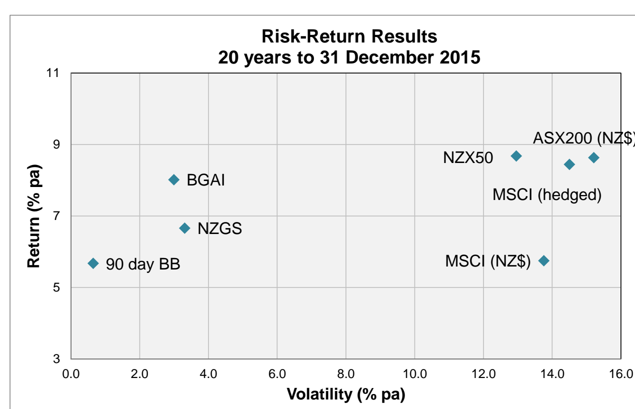
- Over the whole period, NZ and Australian have had very similar results – between 8.6% and 8.7% per annum. Interestingly developed global markets were slightly weaker and on a hedged basis returned 8.4% per annum. The return on an unhedged basis was just 5.7% however, and with the dollar not changing much of the 20 year period most of the variance from the hedge result of 8.4% was due to the value of the forward points – a big bonus. For income assets, global bonds have done the best with the BGAI up 8.0% per annum.
- Over the first 10 years we had the global and Australian share markets strong, but NZ and emerging markets soft over the 5 years to 2000. For the following 5 years we have the opposite with NZ markets rallying while other markets struggled in comparison.
- Over the second 10 years for the period up to 2010, which includes the GFC, we see weak NZ and global markets but strong Australia and emerging markets, possibly providing perhaps evidence of correlation between Australia and the emerging markets. In the last 5 years to 2015, NZ and global markets were again strong with Australia and emerging markets both poor.
- Income assets have had more uniform returns, though the decreased return from cash over the past 5 years is apparent. NZ government bonds outperformed global bonds in the 1996-2000 period, a result which has not been repeated over any period since.





Below we show the same results with a risk return chart illustrating again the variability of each sectors' results.

- As expected the volatility is considerably lower for income (defensive) assets than for their growth counterparts.
- The NZ and Australian shares achieve a higher return providing some compensation for the higher volatility experienced.
- The risk premium measuring the difference between NZ shares and NZ bonds is worth just 2.0% per annum and reflects the strong rally in recent years' for bonds.
- Global bonds have simply outperformed NZ bonds, and interestingly with less volatility.

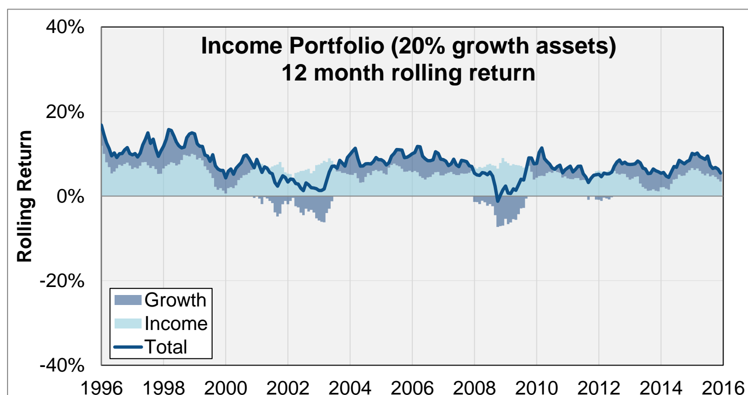


Portfolios – The returns from growth and income assets

Building robust portfolios and ones fit for purpose means using the underlying attributes of the different asset sectors to arrive at the required result and optimise the chances of meeting the client's investment objectives. The income and growth assets have very different characteristics and so roles within the portfolio, with the former there to provide steady annual returns with some certainty of preserving the capital invested. In contrast the growth assets are expected over time to produce the greater returns to compensate for the regular

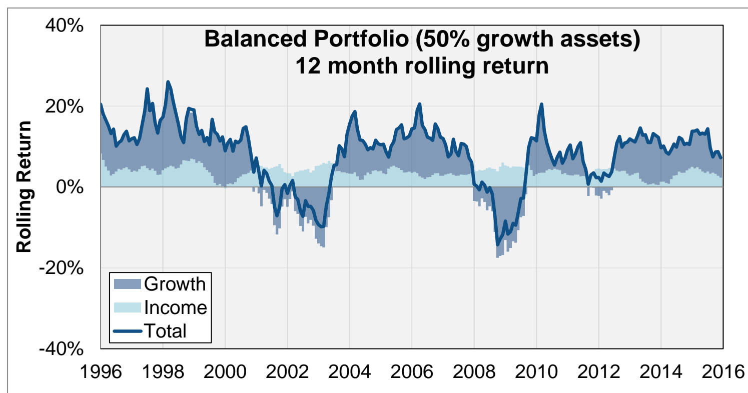
fluctuations of the returns. Put simply an investor in growth assets is looking for an extra return in order to compensate for the additional risks involved.

To illustrate the above the following three charts look at the contribution made by the income and growth assets over the period to the total return of each portfolio.



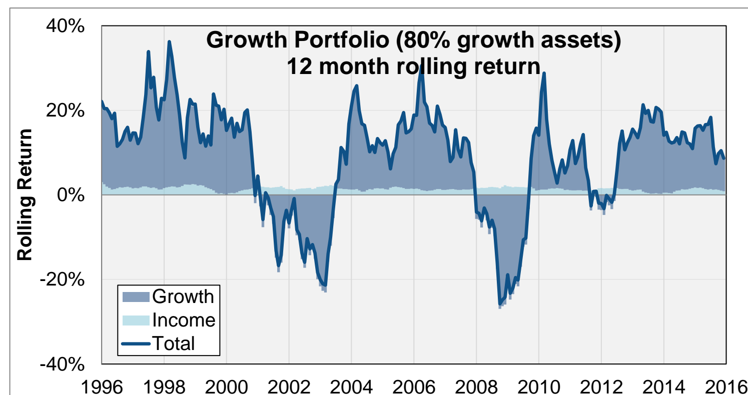
Income portfolio

The income component (which is the light blue area) is fairly steady over the period with the exception of 1996 and 2000 when interest rates rose and the fall in the capital value of the bonds reduced the total return from income assets. But, except for late 2008, the overall return on the portfolio has always been positive. The return on the shares component (the dark blue area) of the portfolio in contrast has been highly variable but the limited exposure to this sector has limited the overall impact on the total return.



Balanced portfolio

The results are naturally a combination of the lows and highs of the other two portfolios. The impact of the higher exposure to growth assets is clear and looking at the 2008/9 period one can see that the fall in the growth assets outweighs the return on the income assets and so the overall portfolio has a negative return period - as was the case in 2003. Arguably what is of interest is how variable the results have been. However, out of the 20 years ending December we have seen only 2 negative years.



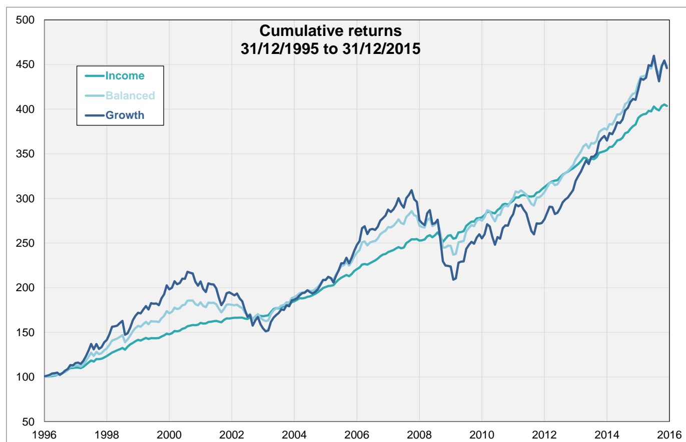
Growth portfolio

The overall return is dominated by the return on the growth assets with the income assets providing just a small cushion to reduce the losses in 2000 to 2003 and the 2008/09 period. The results here illustrate how tough the period was in the early 2000 with the burst of the internet bubble – a period that has been overshadowed by the GFC experience. The variability has been high with the returns varying between -25% in 2008 to +36% in 1998.

Portfolios – The cumulative returns over the 20 year period

The chart alongside illustrates the cumulative returns over the period for the three portfolios.

- The three portfolios have different volatilities with the Growth portfolio as expected experiencing the greatest amount of annual fluctuations and the Income portfolio the least. The Balanced portfolio has in contrast enjoyed a steady regular increase in returns with only an occasional negative result.
- Over the whole period, there is no difference in returns between the Balanced and the Growth portfolio – both have achieved 7.8% per annum. This outcome will be due to the impact of the high global bond returns over this period. This



factor also goes some way to explain the high relative return of 7.2% on the Income portfolio, which is higher than one might normally expect over the long term.

- There were intervals during the 20 year period when the Growth portfolio was the top performing portfolio - as at 2007 the Growth portfolio was 190% of the Income portfolio. In contrast as at March 2009 the Growth portfolio was just 87% of the Income portfolio. The Balanced portfolio has mainly produced intermediate results.

Concluding comments

Markets over the period:

- It has certainly been a highly interesting period for markets and overall a rewarding period for investors. While there has been two tough periods in total the returns have been good. Arguably the period illustrates the importance of setting a strategy and keeping to it. Any investor who was a bit hesitant when share markets retreated in the early 2000's and in 2008/09 and cashed up would have found it hard to get their timing right getting back into the market.
- The returns from the portfolios haven't quite worked out as the asset consultant's assumptions expect. If they had the return on the balanced fund would have been less and similarly the return on the Conservative fund would have been a lot weaker. What has driven this outcome is the usual 20 year bull run in bond markets.
- Looking at NZ share markets over the period they have achieved similar results to Australia and similar to global shares but only if the latter were fully hedged which would have been the extreme exception. But over this period the NZ market was weak for the 1st 5 years and arguably the outcome for the last 5 years has been exceptional and possibly partly due to the impact of the inflow of KiwiSaver funds into the market. This result has supported the often pursued strategy for some charities of a high allocation to NZ share. But questions abound as to whether this is the right strategy going forward.
- Possibly the results illustrate that investing is a long term game and the challenge for the investor is to be able to manage their way through the times when their agreed strategy is not achieving what they expect.

Going forward

- With markets where they are at the start of 2016 the challenges are immense. It certainly looks harder at the current time to feel confident about whatever strategy one chooses in the short term. Shares may well fall and interest rates may well stay at their current levels leaving limited returns for investors. Possibly negative returns. But thinking in terms of strategies which look to preserve capital values in the short term with a high exposure to cash run the risk of not being invested in markets when they decide to move forward again. For the investor it's arguably a case of being crystal clear on what their funds are there for and ensuring that they meet both short term needs for liquidity and set the fund up for the investor's longer term requirements. And being realistic that when markets go down the great majority of investors lose money and the exceptions are far and between albeit that the stories of those who did not will abound in the media.

Mark Weaver

About Melville Jessup Weaver

Melville Jessup Weaver is a New Zealand firm of consulting actuaries. The areas in which we provide advice include superannuation, employee benefits, life insurance, general insurance, health insurance, asset consulting, accident insurance and information technology. The firm, established in 1992, has offices in Auckland and Wellington. The firm is an alliance partner of Willis Towers Watson, a leading global services company with business areas covering Corporate risk and broking, Exchange solutions, Human capital and benefits, Investment risk and reinsurance. Willis Towers Watson has 39,000 associates around the world and is located on the web at willistowerswatson.com.

Asset consulting services:

- Establish investment objectives.
- Determine long-term investment strategies.
- Determine the optimum investment manager configuration.
- Provide quantitative and qualitative analysis of investment performance.
- Asset/Liability modelling.
- Performance monitoring against investment objectives and competitors.
- Manager research and selection.

For further information please contact:

Mark Weaver *09 300 7156*	***Ian Midgley*** *04 815 8888*	***Bernard Reid*** *09 300 7163*	***William Nelson*** *09 300 7150*
mark.weaver@mjw.co.nz	*ian.midgley@mjw.co.nz*	*bernard.reid@mjw.co.nz*	*william.nelson@mjw.co.nz*