

Investing in retirement

March 2016

This article discusses how Michael, a single 65 year old just entering retirement, with retirement assets of \$500,000 should invest them. We also look at how the investment strategy might vary under different circumstances. The article does not look at the wider financial issues including insurances, wills etc.

To keep it simple, we have assumed that Michael is debt free and lives in the house that he intends to stay in for the rest of his life. Also, other than to leave each of his children an equal share of the value of the house, he has no requirement or desire to leave any additional capital to his children. Any extra capital will be a bonus.

When it comes to investing the choice is to rely on luck, or follow a disciplined investment process. With retirement savings luck helps, but relying on luck is not normally a good thing.

Contents

Investment process
Income needs
Investment principles
Retirement strategies
age 65 strategy
age 70 strategy
Managed income
Risks
Q&A

Investment process

We look at each of these steps.

A. Goals

1. Michael needs to decide what income he needs in retirement from his investments. What income is needed in the immediate future and over the long-term? In respect of long-term income, Michael must also consider the impact of inflation.
2. Michael then needs to work out how much of his income will come from investment earnings and how much will be met by spending his capital. Remember that the New Zealand Superannuation benefit will also be payable.
3. Michael must decide how much he needs in reserve for a "rainy day" or emergency fund. This provides security should his circumstances change, or something else change.

As with any investment decision, an investor like Michael, should:

- A. Decide on his objectives and set goals
- B. Determine the appropriate strategy to achieve the goals
- C. Implement the strategy
- D. Review the goals and strategy.

B. Strategy

4. The next step is for Michael to decide what mix of cash, bonds, property and shares his capital should be invested in, to achieve his goals and his income needs over the short, medium and long term, given his appetite for risk.

C. Implementation

5. Then Michael must decide how to implement the investment strategy to receive the income. In this instance, we assume that SuperLife will be used. Often a combination of SuperLife and some direct investments may be best.
6. A key issue in the implementation stage for Michael, is deciding how involved he wants to be, in the year-to-year investment process. Some people want to leave it to others and some want to be actively involved.

7. The more effort he puts in, the more risks he can manage and therefore capture the risk premium. He is also less reliance on third parties.

D. Review

8. Finally, Michael must work out how the goals will be revisited and how changes will be made to the investment strategy throughout his retirement. He also needs to decide how he will monitor whether or not the investments are performing as he expected.

Income needs

The starting point in setting goals, is to determine the expected future expenditure, both regular and occasional lump sums. This involves preparing a budget of expenditure. It also requires a decision of how long the income is required for, i.e. the period of your retirement.

To keep things simple in the first instance, we assume that Michael will live exactly 23¹ years in retirement i.e. until age 88. We know that the average is 17 years, but that a quarter of 65 year olds live beyond age 88 and 10% live beyond age 93.

We also note that Michael receives a NZ Super benefit of about \$19,500 (after-tax) a year and that this is "inflation proofed". Michael will plan to spend both the investment earnings and capital over the 23 years to top up the NZ Super benefit to the required total income.

Michael has prepared a budget of his likely expenditure in retirement using the SuperLife budget form, on the SuperLife Web site. He has worked out that he needs a total after-tax income of \$49,500 a year or \$30,000 after allowing for New Zealand Superannuation. \$30,000 a year is \$2,500 a month. In addition, he wants the income to increase with inflation and in 2 years' time, he needs an extra \$10,000 to upgrade his car.

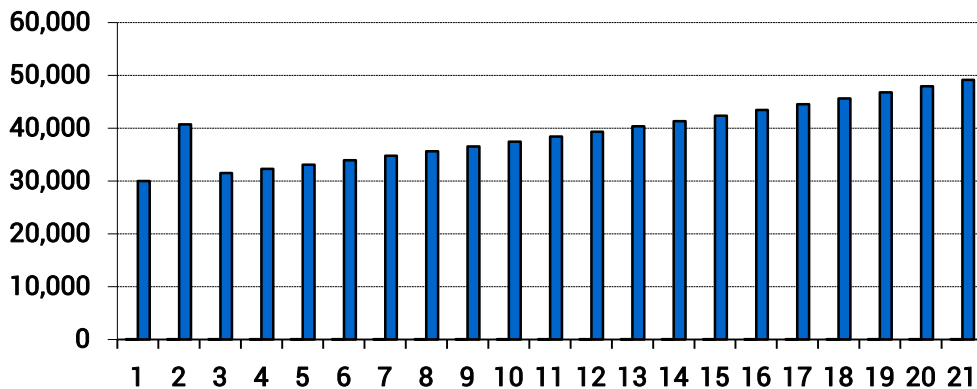
Post tax NZ Super rates from 1 April 2016	
Married couple	\$30,781 p.a.
Single living alone	\$20,008 p.a.
Single (sharing)	\$18,468 p.a.

The expenditure pattern required from the investments is:

- The investment return is 2.5% p.a. after-tax on average. By assuming a "low" rate, you can use the extra return to increase the future income that you receive - for example, because of inflation.
- Your life expectancy is at the 75th percentile. The 75th percentile is the date or period such that out of 100 New Zealanders your age, 75 will live less than that date and 25 will live longer than that date. This assumes that you live longer than average (the 50th percentile). To understand how long you might live in retirement you should read the SuperLife article "**How long will I live in retirement?**"

¹Details of average life expectancies are set out in a separate SuperLife article.

Projected expenditure pattern



Investment principles

The key investment principles that will normally influence your investment strategy decisions include:

- it is your money but it's also your retirement savings, and so must meet your income needs.
- sleeping at night (and not worrying about your investments) is normally more important than getting that "extra" return.
- with higher long-term average returns (i.e. over 20 years), you may get lower short-term returns (i.e. over 1 year). Any strategy has to be able to cope with negative returns as, even in a "bad" year, you still need an income to live on.
- if you invest in assets that go up and down in value, it is important that you are never forced to sell them on a particular date i.e. you always need some assets that don't go down (i.e. cash).
- any investment strategy needs to be able to cope with change; changes to your circumstances and changes to legislation.

Retirement strategies

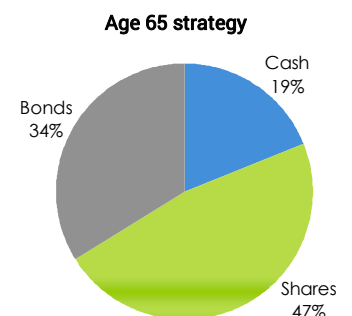
Age 65 strategy

Based on the required expenditure pattern, the theoretical investment strategy for a 65 year old male in these circumstances, to ensure that the expenditure can be met is:

The cash assets represent the value of the planned expenditure over the next 3 years including the extra \$10,000. Having this money in cash ensures certainty of payment and minimises the short term risks.

The bond assets represent the planned expenditure between years 3 and 10. This gives an expected return slightly higher than cash and enough time to ride out the ups and downs of bonds, should a "down" occur in the next couple of years. At some point in time over the next 3 years, some of the bonds should be converted to cash to meet the expenditure that has now become the then "immediate" expenditure (i.e. occurring within the following 3 years). The bonds minimise the medium term risk.

The share allocation represents the expenditure in the years that are more than 10 years away. This helps protect Michael against higher than expected inflation and minimises the long term risk.



It should also give him a higher average return than either cash or bonds. At some point in time over the next 10 years, some of the shares should be sold to top up the bonds. This can be done at any time, but ideally should be done when the markets appear to be “up”. It is only important to sell some shares at some point in the next seven years; it does not have to happen in any particular year. You should also consider the state of the markets.

Age 70 strategy

As we get older, the theoretical strategy changes. We need more cash and bonds and less in shares. This is because the number of years of our remaining retirement that are more than 10 years away, become fewer. Shares are normally ideal only for long-term expenditure when inflation is the biggest risk.

Different ages

Based on Michael’s income needs, the appropriate investment strategy at different ages, is:

	Age 65	Age 70	Age 75	Age 80	Age 85	Age 90
	%	%	%	%	%	%
Cash	19	20	24	33	45	61
Bonds	34	41	51	67	55	39
Shares	<u>47</u>	<u>39</u>	<u>25</u>	<u>0</u>	<u>0</u>	<u>0</u>
	100	100	100	100	100	100

Managed income

To receive the income each month, the best way is to elect a SuperLife managed income². This requires setting the income level, in Michael’s case, \$2,500 a month, knowing that it can be changed and lump sums taken out at any time.

The managed income should be taken from your cash assets i.e. the assets held for the next 2 to 3 years’ expenditure. During that period, you will top up the cash from time to time from bonds and top up the bonds from shares to maintain your cash levels.

Risks

Successful investing also includes managing risk of which are important and need to be managed; others of which are of interest, but not particularly important.

Volatility

With investments in shares, values will go up and down. At times, the down can last up to 10 years. This is why shares should only be bought for expenditure that is more than 10 years away. This way, the volatility doesn’t put at risk your ability to meet your immediate income requirements.

Inflation

A key risk relates to inflation. When you require an income over the long term, it is normally important that it goes up to protect you against inflation. Also, the key inflation risk is unexpected inflation. To protect your retirement income against the risks of inflation, you need an exposure to assets such as shares and property. For this reason even when the theoretical allocation to shares reduces to 0% because of the future time frame, an investor might still maintain a minimum 5% level in these assets.

When we determined the theoretical investment strategy for Michael, we assumed that the investment return would be 2.5% p.a. after tax and expenses. To the extent that the return is

²Managed incomes are explained in a separate SuperLife article.

above 2.5% p.a. on average, the monthly income can be increased. This allows in part, for inflation.

Liquidity

Because our circumstances can change it pays to always maintain some cash. This ensures that if something happens (e.g. the house needs repairs) money is available and there is reduced risk that you might be forced to sell some shares when the share market is down.

Q&A

What if Michael lived 28 years (to 93), i.e. the age at which 1 out of 10, 65 year olds, will live to?

If Michael's \$500,000 has to be spread over 28 years and not 23 years, the theoretical amount to draw down each year is \$24,260 not \$30,000. Several options are open:

- Michael could cut back on his retirement expenditure to allow for the possibility that he could live longer than 23 years.
- Michael could plan on spending less in his latter years. Some expenditure e.g. travel, will reduce over time.
- Michael could decide that, if he lived longer, he would spend some of the equity in his house i.e. the children will get less when he dies.

What happens to the theoretical strategy if Michael had more assets?

Currently, by coincidence, the present value of the \$30,000 a year income required, plus \$10,000 in year two, equates to approximately \$500,000. If Michael had \$600,000 then the extra \$100,000 should be invested based on when it is going to be spent.

Unless Michael increases his expenditure pattern, it is unlikely to be spent until he dies, when the money passes to the children. In this case, it should increase the allocation to shares. Michael might also decide to hold more in cash, i.e. in reserve for unexpected expenditure.

What if Michael weren't debt free?

If you have debt at retirement, it is normally a good idea to take some of your retirement savings and pay it off. It doesn't make sense to earn interest with your savings, pay tax on the earnings and then pay interest on the debt. Even if you can claim a tax deduction for the debt, the interest on the debt for most people, is likely to be more than the investment earnings on the savings. Reducing debt also reduces your risks.

What if Michael were married?

If Michael were married, the principles would not change. In this case the relevant period is not how long Michael will live, but how long the second to die of Michael and his spouse, will live. Also, on the death of the first, the income needed might go down but will probably not halve. A lot of costs e.g. rates, don't change because there is one not two people.

What if Michael did not have any capital expenditure other than his normal expenditure?

The strategy on page 3 allowed for the planned \$10,000 expenditure in year two. If that expenditure were not required, i.e. only a uniform steadily growing income were required, the theoretical strategy at age 65 would have been:

	Age 65
	%
Cash	17
Bonds	35
Shares	<u>48</u>
	100

What if Michael were Rebecca?

A key driver of the investment strategy is the period to go until death. At 65 we assumed that Michael would live for 23 years. If Michael were Rebecca, at age 65, she would have an equivalent life expectancy of 27 years. The theoretical investment strategy is therefore:

	Age 65	Age 70	Age 75	Age 80	Age 85	Age 90
	%	%	%	%	%	%
Cash	15	18	21	28	36	52
Bonds	31	36	43	57	64	48
Shares	<u>54</u>	<u>46</u>	<u>36</u>	<u>15</u>	<u>0</u>	<u>0</u>
	100	100	100	100	0	0

Conclusion

Setting an investment strategy to spend your retirement capital, is based on understanding five concepts:

- **Timing:**
When will you spend the money?
- **Importance:**
How important is the expenditure?
- **Diversification:**
Do you have other sources of income?
- **Patience:**
How long can you wait if something goes wrong?
- **Risk tolerance:**
What type of investor you are?