NZFUNDS



Is the Minimum 3% KiwiSaver Contribution Sufficient?

March 2020

Contents

Executive Summary	03
How much should the average investor save?	03
KiwiSaver Features	08
NZ Funds WealthBuilder	09
Disclaimer	10
About MyFiduciary	11

Executive Summary

MyFiduciary has been engaged by NZ Funds to analyse KiwiSaver contribution levels and to assess whether NZ Funds WealthBuilder scheme is a viable option for increased levels of retirement savings.

The benefits of KiwiSaver are fully captured by those making a 3% annual contribution. Beyond that level the restrictions associated with KiwiSaver make investment in other retirement products more attractive. We determine that, for most investors, a 3% savings rate will potentially leave them short of their retirement goals. NZ Funds' WealthBuilder scheme provides a viable option for these extra savings.

How much should the average investor save?

We consider the question for five prospective investors:

Table 1: Five Prospective KiwiSaver Investors

	Investor 30y/o	Investor 35y/o	Investor 40y/o	Investor 45y/o	Investor 50y/o
Current Age	30	35	40	45	50
Initial Salary	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Initial KiwiSaver Balance	nil	nil	\$25,000	\$50,000	\$75,000
Salary Growth Rate	3.25%	3.25%	3.25%	3.25%	3.25%
KiwiSaver Contribution Rate	3%	3%	3%	3%	3%
Employer Contribution	3%	3%	3%	3%	3%
Retirement Age	65	65	65	65	65
Required income in retirement as a % of final working income	70%	70%	70%	70%	70%
Forecast age at the end of retirement spending	90	90	90	90	90

Our five investors are all earning \$75,000 per annum and are aged five years apart. They all expect to retire at 65, with a retirement income equal to 70% of their final working income, with enough capital to support them until they are 90 years of age.

We assume each investor contributes the minimum 3% to their KiwiSaver account, and that both their income and New Zealand Superannuation (New Zealand Super) grows at 3.25% per annum. Their balances at the end of their working life, and at age 90, can be seen in Table 2 below. We also assume that tax rates remain unchanged.

Importantly, we assume that each investor invests in NZ Funds' KiwiSaver scheme utilising NZ Funds' LifeCycle 'glidepath' and use MyFiduciary's long term asset class assumptions to derive investment returns.

Table 2: Investor Balances

	Investor 30y/o	Investor 35y/o	Investor 40y/o	Investor 45y/o	Investor 50y/o
Balance at end of working life	\$597,000	\$395,000	\$351,000	\$301,000	\$251,000
Age at capital exhaustion	80	74	74	74	73
Age 90 Balance	-\$723,000	-\$1,443,067	-\$1,241,000	-\$1,103,000	-\$1,007,000
Employee contribution level needed to generate desired income until age 90	5.1%	9.1%	10.8%	14.0%	19.6%
Total contribution (employee and employer) needed to generate desired income until age 90¹	8.1%	12.1%	13.8%	17.0%	22.6%

Despite seemingly healthy balances at the end of their working lives, none of our investors has sufficient capital to support them until age 90 at the income levels they desire. Only investor 30y/o, who has the benefit of saving for longer, has enough capital to reach age 80.

The savings rate necessary to accumulate enough capital upon retirement to deliver the desired income level is shown in the bottom row of Table 2.

This illustrates the benefit of starting to save as young as possible. But nevertheless, for investors 30 years and older, the minimum 3% savings rate will not be adequate; the required rate is substantially higher. Indeed, for those closer to retirement age the required savings rates become unattainably high.

The analysis above is very sensitive to assumptions for the investors' future wage increases, for New Zealand Super increases (tied to average wages), years until retirement, investment returns and required income in retirement. We analyse each investor's sensitivity to these factors below.

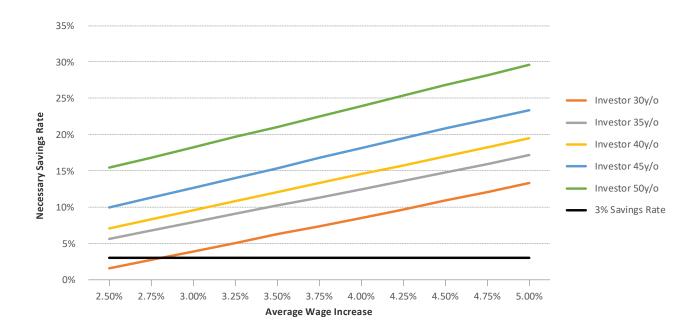
We also assume that the employer contribution is capped at 3%. Some employers will match their employees' contributions beyond this level up to a certain ceiling. In these circumstances the employees should make any savings beyond 3% within their KiwiSaver scheme to capture the additional employer contributions.

In the charts that follow, the area above the black 3% savings line indicates situations in which the investors need to save greater than 3%. In each chart we fix all other variables at the level of the base case assumptions.

With all other variables fixed, a higher rate of salary increase across a career means a higher rate of savings is required in order to support a retirement income at a fixed percentage of final working income. The assumption is that the investors' requirements in retirement will be a function of the lifestyle their working income had given them. Higher incomes drive higher dollar contributions, at the same 3% minimum level, to KiwiSaver and will provide some offset. However, investors who expect to achieve wage increases equal to, or greater than average, need to save even more, or accept a greater than desired reduction in post-retirement income.

^{1.} These calculations assume the investor receives the member tax credits of \$521.43 each year.

Chart 1: Savings Rates Required to Exhaust Capital at age 90 for given Wage Increases



Higher rates of increase in New Zealand Super mean that the state pension can make a greater contribution to post-retirement incomes. New Zealand Super is currently indexed to the average wage and our base assumption is for a 3.25% increase, based on 2% inflation and 1.25% productivity growth.

Chart 2: Savings Rates Required to Exhaust Capital at age 90 for given New Zealand Super Increases

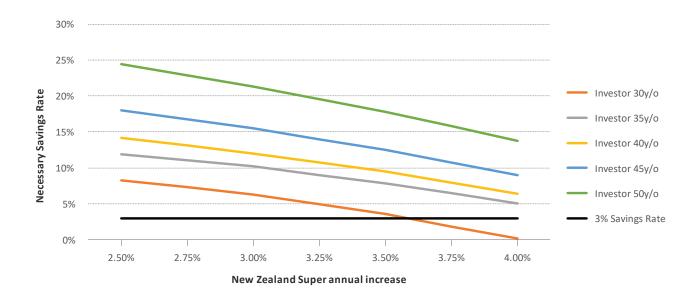
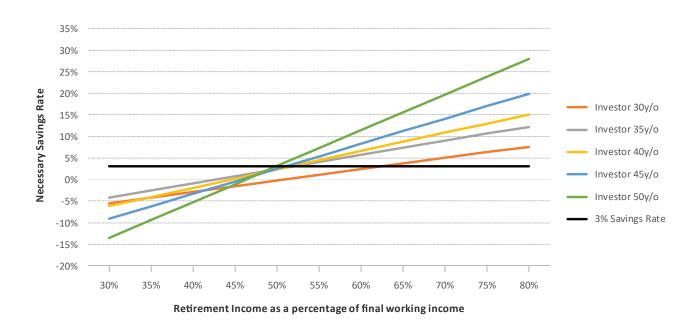


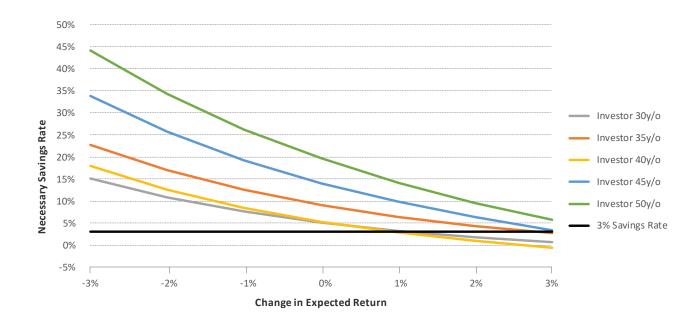
Table 2 illustrates that the impact of time is dramatic. Our five investors have five years between them respectively in age and start with identical incomes and savings rates. Investor 30y/o, aged 30, should be able to reach the necessary level of savings by investing 5.1% of their income. Investor 50y/o, at age 50, even with an assumed \$75,000 starting balance that Investor 30y/o does not have, needs to save 19.6% of their income. This huge difference is due to time. This variable, unlike some of the others, is one the investor can control absolutely. At whatever age, starting immediately is key to achieving targets.

Chart 3: Savings Rates Required to Exhaust Capital at age 90 for changes to Required Retirement Income Relative to Final Working Income



Reducing the proportion of an investor's final working income needed in retirement has a significant impact on the savings rate required. For all five of our investors saving 3% would probably be sufficient if they were content with 50% or less of their final working income in retirement.

Chart 4: Savings Rates Required to Exhaust Capital at age 90 for changes in Expected Investment Returns



Expected investment returns have a dramatic effect – if expected returns are 3% pa lower than expected then all five investors need to save in excess of 15% of their incomes in order to achieve their goals. Choosing a quality provider and not being too defensive too early are key.

It is clear from the charts above that it would be unwise for almost any investor to assume that the minimum 3% KiwiSaver contribution will be sufficient to provide their required retirement income. There are factors beyond their control, such as the growth rate of New Zealand Super, that will have a material impact on their necessary savings.

Other factors over which they have a degree of control, namely, their own wage growth and their investment returns (they elect how much risk to take), also play a significant role. However, there are two factors that they can control precisely that have a substantial impact – the percentage of their income at retirement age that they require going forward and, perhaps most crucially of all, when they choose to start saving.

KiwiSaver Features

KiwiSaver has several compelling advantages over other forms of retirement saving. These benefits should be maximised.

1. Member tax credit

The government will pay 50c for every dollar a member contributes to their KiwiSaver account up to a maximum of \$521.43 per annum.

2. Employer Contribution

Employers have to put 3% of an employee's income into their KiwiSaver accounts. Some may elect to pay more, but 3% is the minimum required. The 3% is taxable.

3. Savings withdrawal for first home

Members with more than 3 years tenure may withdraw some or all of their KiwiSaver balance to put towards the purchase of a first home. Those who make use of this facility will need to increase their savings rates in order to recover the diverted capital.

4. KiwiSaver HomeStart Grant

Grants of \$10,000 for the purchase of an existing property, or \$20,000 for a new property are available for KiwiSaver members with at least 3 years of contributions if their income is less than \$85,000 per annum (or \$130,000 for couples).

5. Significant Financial Hardship

Withdrawal of some savings is possible in cases of significant financial hardship.

All of these benefits are obtained by Members investing 3% of their income into their KiwiSaver fund. Beyond that level, no additional benefits accrue, but the following disadvantages still apply:

- 1. Lack of liquidity other than for a first home purchase or in cases of significant financial hardship, KiwiSaver balances cannot be accessed until the member turns 65.
- 2. Potential Rule Changes Members are subject to legislative change to the rules of KiwiSaver. Even if these changes are to the detriment of Members, the funds cannot be withdrawn.

In addition, there are no tax benefits from investing in KiwiSaver versus non-KiwiSaver products. The tax treatment is the same.

We conclude that from a strictly financial point of view, retirement savings in excess of 3% are better off being invested in a comparable non-KiwiSaver product that does not have the various withdrawal restrictions. The key exception to this would be for savers who may not be able to resist the temptation to 'dip into the nest-egg' before retirement.

NZ Funds WealthBuilder

NZ Funds WealthBuilder scheme has two components, SelfSelect and LifeCycle. Both consist of portfolios built from NZ Funds Income, Inflation and Growth Strategies, as does the NZ Funds KiwiSaver Scheme. WealthBuilder offers investors the same fees, asset allocation and, via LifeCycle, the same glidepath, as their KiwiSaver Scheme, but without the restrictions.

MyFiduciary has previously reviewed the LifeCycle approach available in NZ Funds WealthBuilder.

We concluded that:

"In our view, the NZ Funds glidepath options are well designed and are one of the best in the New Zealand market.

Compared with other glidepaths in New Zealand, the NZ Funds' approach is more likely to achieve the retirement objectives of most investors. It avoids two of the most common pitfalls that are seen in lifecycle products here and overseas — especially by (a) not starting to reduce risk at too young an age; and (b) not becoming too conservative around the retirement age."

Chart 4 illustrates the importance of investment returns and that the impact of becoming too conservative too soon is substantial. This is a risk that NZ Funds LifeCycle approach avoids better than other products available in the New Zealand market because it has a higher weighting to growth investments, especially beyond age 55.

Disclaimer

This report is prepared for NZ Funds Management Limited only under the terms of the Service Agreement dated 23 July 2019 and for no other purpose.

To the fullest extent permitted by law, MyFiduciary accepts no duty of care to any third party in connection with the provision of this report and/or any related information or explanation. Accordingly, regardless of the form of action, whether in contract, tort (including without limitation, negligence) or otherwise, and to the extent permitted by applicable law, MyFiduciary accepts no liability of any kind to any third party and disclaims all responsibility for the consequences of any third party acting or refraining to act in reliance on the Information.

This analysis is based on assumptions and information derived from a variety of sources. MyFiduciary has not sought to establish the reliability of those sources or verified the information provided. Accordingly, no representation or warranty of any kind (whether express or implied) is given by MyFiduciary to any person as to the accuracy or completeness of the information.

Simulated or indexed returns may have been used and do not represent performance from actual investments. The report provides analysis and information, but not all the material economic and market factors that might matter for the decision-making process of an investor.

This report does not contain personal retail advice as defined by the Financial Markets Conduct Act (2013). Investors requiring advice should seek assistance from an Authorised Financial Adviser.

About MyFiduciary

MyFidicuary Limited is an independent investment consultant founded in 2006. We provide investment and governance support to a range of investors including advisers, charities, foundations, Māori and Iwi organisations, pension providers and industry bodies. Our services include portfolio design, monitoring and compliance; asset allocation; due diligence support; independent reviews of governance policies, processes and providers; and training for stewards and staff.

Greg Peacock



Greg has over 30 years' experience in financial markets, primarily with direct responsibility for researching, constructing and managing multi-manager and direct investment portfolios. After graduating from the University of Canterbury with a Bachelor of Engineering (Chemical and Process) with First-Class Honours he began his career at Mair Astley Ltd where he assisted with the hedging of their foreign exchange and money market exposures.

In 1992 he joined Clime Asset Management, the Auckland based family office of the late John Spencer, and in 1994 was appointed Investment Manager. His roles included the management of a portfolio of global equity and hedge funds, direct portfolios of domestic equities, private equity investments, currency and futures trading, and oversight of other group proprietary trading activities.

After 18 years with Clime, Greg joined New Zealand Assets Management Ltd as a Principal and Chief Investment Officer. NZAM operated as an absolute return mandated fund of funds and Greg had overall responsibility for fund due diligence and portfolio construction, and currency management. In 2017 Greg returned to work for the Spencer family, focussed on private and public market investment opportunities in Australia and New Zealand.

David Rae



David Rae is a Principal at MyFiduciary and Fi360 Pacific. He is a member of several investment committees including the New Plymouth District Council's Fund and the Māori-backed Te Pūia Tāpapa direct investment fund. His company directorship roles include renewable energy, gas infrastructure and a Commercial Pilot Academy. Prior to that he led the Investment Analysis team at the NZ Superannuation Fund.