

A step by step guide to obtaining a long
and prosperous retirement

Lesson 5 – Financial Terminology

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Introduction

This document is part of the training material written to assist Kiwi's in their 50's or 60's that are looking at retirement but have no idea what to do, what is needed, and how or where to get help. Or those that already have some ideas of how to survive retirement, are looking at alternatives, or just checking they are on the right path. They might even be looking on behalf of their 'elderly' parents, to ensure they are considering all options available to them.

This course supports our simple step by step process to create your own retirement plan. This process includes a guide, road map, lessons and discussion topics to help you prepare for your retirement. It will help you answer questions such as:

- *How much money do I need in retirement?*
- *How much money will I receive from Government Superannuation?*
- *How, and from where, can I get more money?*
- *Where can I safely investment my money?*
- *How much should I put into KiwiSaver?*
- *Should I buy a 2nd property, a business, or invest in the share market?*
- *How much do I need to keep aside for a rainy day?*

all from a very New Zealand perspective.

Course outline

This document is "Lesson 5 – Financial Terminology" of the course material and comprises:

- a summary 'Retirement Planning Guide'
- a 'Retirement Roadmap'
- a supporting 'Retirement Planning excel spreadsheet'
- more comprehensive training guides ("Lessons") for various tasks along the way if you need them
- additional supporting spreadsheets if you need any further assistance

All material can be downloaded and printed from the downloads page on our website:

<http://www.bizxtra.co.nz/>

Most people complete their retirement plan using just the Planning Guide, Roadmap and the Excel spreadsheet that supports the guide. Additional information is provided to support you along the way if you get stuck, don't understand a concept, or just need some further ideas to try out as part of your planning.

"Don't ever forget, that the main plan in life is always to enjoy a long and prosperous retirement."

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Latest Version

Market prices, superannuation and benefit rates, Government policies, inflation, costs of living, house values etc. all change on a regular basis. The numbers in this document have been updated to reflect the market position as at July 2025.

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Lesson 5 - Basic Financial Terminology

There are some initial financial terms and concepts we will refer to often throughout our retirement planning guide and lessons.

The first three concepts we need to understand are:

1. "compound interest"
2. "income generating assets"
3. "Net Wealth"



We will expand on these concepts and introduce additional terminology in later Lessons to ensure we all have the same understanding.

You may already understand these concepts and can skip over this lesson, but a 2000 survey of New Zealanders used the OECD-INFE measure of financial knowledge.

They found:

*"New Zealanders have a good understanding of inflation, interest and risk and return.....
...however, they struggle with understanding compound interest, risk diversification and time value of money."*

They made a number of recommendations including:

"The results indicate that the areas to be addressed as a priority are the understanding of simple and compound interest and time value of money....."

Understanding of simple and compound interest is particularly important for consumers choosing and using savings and credit products.

When choosing credit products, sub-optimal choices can increase the risk of financial hardship or exacerbate existing financial hardship.

Young people should be the priority for increasing the understanding of compound interest because they can reap the greatest benefits from compounding interest on savings or investments over a long period of time."

Compound Interest

Key concepts we need to understand in retirement planning are the concepts of interest and compounding interest. These apply as much to income and investments, as they do for debt, and we need to refer to these concepts regularly when planning for retirement.

It is important that you understand these concepts first and foremost in regard to how they impact debts, and how this understanding can help prioritise which debts need to be repaid first.

For example, if you borrowed \$2,000 to buy a car from a 2nd hand car dealer and agreed to put it on your credit card, and assuming you made no other purchases on that card and met all minimum payment requirements (of \$40 per month):

- it would take you 13.6 years to repay the money you borrowed,
- you would have paid the bank \$4,523 in interest, and
- the car will have actually cost you over \$6,500.

Banks typically charge you an interest rate of somewhere between 20% and 25% per year on the amount owing on a credit card. They usually offer an interest-free period (typically 1 month) but that is just to get you on their hook.

If you decided to use a 'payday loan' instead – these sharks used to charge you interest at a rate of 0.8% per day! Remember credit card sharks typically only charge 22.5% per year. A payday loan shark was charging you 292% per year on any money you borrowed from them (0.8% * 365 days). Where are the shark hunters when you need them? Recently the law was changed so now they can only charge annual interest up to 100% of the value of the loan.

The following table shows you the impact of borrowing money to buy a car from different people that may be happy to lend you money:

Purchase	Amount borrowed	Via	Annual Interest Rate	Min Monthly Payment	Years until repaid	Interest paid	Total Cost	Security
Car	\$ 2,000	Bank Credit Card	22.5%	\$40.00	13.66	\$4,454	\$ 6,454	Any money in other accounts
Car	\$ 2,000	Personal Loan	19.50%	\$60.33	4.00	\$896	\$ 2,896	The car
Car	\$ 2,000	Add to mortgage	5.50%	\$16.34	15	\$942	\$ 2,942	Your House
Car	\$ 2,000	Payday loan	292.00%	\$525.15	1	\$ 2,000	\$ 4,000	Your car, TV, whitewear, stero .. Anything they can get their hands on

Table L2.1

Every day that you owe someone money (have debts) you are paying someone else interest for the cost of using their money (instead of yours). The longer you have a loan or debt, the more it will cost you. The sooner you can pay back any money you borrow, the better off you will be, and the more income you have left over each month to put towards your retirement.

For example, if you had made the mistake of buying a car on your credit card (or maybe that holiday in Australia) and paid it off quicker, you will end up paying the bank a lot less interest. If you increased the "Minimum Monthly payment", the "years until paid" will reduce.

Purchase	Amount borrowed	Via	Annual Interest Rate	Min Monthly Payment	Years until repaid	Interest paid	Total Cost
Car	\$ 2,000	Bank Credit Card	22.5%	\$40.00	13.66	\$4,454	\$ 6,454
Car	\$ 2,000	Bank Credit Card	22.5%	\$60.00	4.83	\$1,297	\$ 3,297
Car	\$ 2,000	Bank Credit Card	22.5%	\$100.00	2.32	\$583	\$ 2,583

Table L2.2

The table above demonstrates the impact of changing the 'min monthly payment' from \$40 to \$60 and to \$100 per month. The years until the debt is repaid falls from 13.6 years to 2.3 years.

Maybe if we can afford to pay an extra \$100 per month, we could swap the loan from our credit card to our mortgage and increase our mortgage payments by \$100 per month.

Purchase	Amount borrowed	Via	Annual Interest Rate	Min Monthly Payment	Years until repaid	Interest paid	Total Cost
Car	\$ 2,000	Bank Credit Card	22.5%	\$100.00	2.32	\$583	\$ 2,583
Car	\$ 2,000	Add to mortgage	5.5%	\$100.00	1.80	\$105	\$ 2,105

Table I2.3

We avoid an extra \$478 in interest payments and pay the car loan off in 1.8 years.

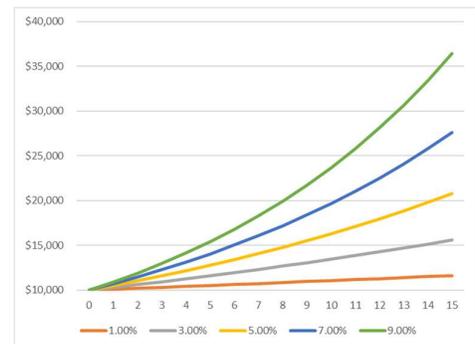
Just as compounding interest will change the overall amount you pay on a debt and will impact the amount of time it takes to repay the debt, it also determines the amount of return you will receive on any investments you have.

If you had \$10,000 and you invested it for 15 years, without making any further payments or withdrawals:

Invested at 1% you would receive \$11,610

Invested at 5% you would receive \$20,789, and

Invested at 9% you would receive \$36,425



That is the power of compounding interest and we will investigate how we can invest our money to generate these types of returns in a later lesson.

Income generating assets

Assets, is a term used to describe something we own, that has value. ‘Income generating assets’ is a description given to any asset that generates money for you, even while you are asleep. Obvious examples are savings accounts with banks. If you deposit money and leave it with the bank, they will pay you interest on that money. That is an income generating asset. If you rented out a spare room in your house, then that would be another asset that is generating income for you. You could buy a share in a company that pays dividends, that is another type of income generating asset.

This is often referred to as generating passive income. Your assets are working for you by generating more money rather than active income, whereby you do all the work for which in return you receive an income (i.e. you get paid for your labour).

These different examples of income generating assets all have different risks and generate different levels of income. In retirement planning you need to ensure you have enough income, on a regular basis to meet your requirements. If we were in our 20’s we could survive a couple of speed bumps along the way to saving for our retirement, but at 60 and 55, John and Jane Doe couldn’t afford to risk losing any money (assets) they had. We will cover this concept of risk later as we need to understand what risks we are taking.

A key strategy for retirement is to ensure there are sufficient income generating assets (e.g. investments) that will provide the additional income needed to top up superannuation, to meet the lifestyle we want for our retirement.

Our guide will help you look at the various types and options of income generating assets that are available, and are suitable for pre-retirees (and early retirees) to make retirement more enjoyable.

Just as we have income generating assets, we can also have non income generating assets. These are things we own (of value) that do not generate income for us. For many people this is the family home, the car (unless we are a taxi driver), or the Picasso hanging on the wall.

Net Wealth

What is 'Net Wealth'

Once we have a list of our assets and our debts (our liabilities), we can calculate something called our "Net Wealth":

$$\text{Our Net Wealth} = \text{Our Assets} - \text{Our liabilities.}$$

This is basically the amount of money that would end up in our hand if we sold everything we owned and paid back all our debts. It is a common financial term used by banks and other finance companies when determining the level of risk 'you' are when they decide to lend you any additional money. If you ever had a mortgage, you would have provided the information to the bank to allow them to calculate this number. Now you will know how to calculate it yourself.

If 'Net Wealth' is a negative number (i.e. you have greater debts than assets) you are technically insolvent, and unless you have income that can repay the debts quickly, you could become or be declared bankrupt.

John and Jane had a net wealth (at least on paper) of \$747,574. They had \$795,524 of assets, less their liabilities of \$47,950, providing a Net Wealth of \$747,574.

We will explain in more detail how they calculated this very soon, but first we want to show you why 'Net Wealth' is such an interesting concept.

Is Jane and Johns 'Net Wealth' of just over \$747,000 a good or bad number?

Apart from those few people that like to flash their wealth around, it can be difficult to compare ones-self with their neighbours. Just because their house looks bigger and better from the outside doesn't mean they have more wealth. They may just have a lot more debt (i.e. a bigger mortgage).

In New Zealand, the annual census collects and publishes comparative data that shows the net wealth of households in \$100k bands. It also collects data by gender/age groups/ethnicity etc., but the most useful range of data is by household (and that is what we have just calculated for John and Jane).

By comparing their household net wealth number with the 2021 data on the right, we can see they are in the top 33% of the country. Their \$747,000 Net Wealth falls into the \$700k-\$800k band.

Net worth band June 2021	Cummulative % of households in that band
Less than -\$100,000	5.47%
-\$100,000 to \$0	4.29%
\$1 to \$100,000	94.53%
\$100,001 to \$200,000	72.37%
\$200,001 to \$300,000	63.63%
\$300,001 to \$400,000	56.12%
\$400,001 to \$500,000	49.79%
\$500,001 to \$600,000	43.94%
\$600,001 to \$700,000	38.63%
\$700,001 to \$800,000	33.37%
\$800,001 to \$900,000	29.88%
\$900,001 to \$1,000,000	26.39%
\$1,000,001 to \$1,100,000	23.61%
\$1,100,001 to \$1,200,000	20.87%
\$1,200,001 to \$1,300,000	18.72%
\$1,300,001 to \$1,400,000	17.11%
\$1,400,001 to \$1,500,000	15.56%
More than \$1,500,000	14.43%

Table L3.1

If John and Jane were 'statistically' in such good shape, but struggling to get their retirement planning sorted, how are other households coping? This also shows that almost 67% of New Zealand households have less Net Wealth than John and Jane.

From the same 2021 census data, individuals identified as 'over 65yr olds' still had over 13 Billion NZD in debt. Although the majority of this debt related to property debt, over 118 million related to 'education loans' outstanding (Student Loans). In a later lesson we will learn the risks of retiring when there are debts that remain unpaid.

How to calculate your Net Wealth

To calculate net wealth you first need to assign a notional value to all your assets and debts.

Not an easy task – so you need to make quite a few broad assumptions along the way. Remember the fun thing about planning is that you can always revisit and revise your assumptions as you learn more.



When you look at the value of assets, you need to look at what is called the 'net value of the assets' (another new financial term). A good example of this is how much money do we (not the bank) own in our house. In a simple example John and Jane calculated the value of their home as:

	Today's Value	
Estimated value of our house (RV)	\$ 710,000	Asset
Less what we have to pay back to the bank	-\$ 45,000	Less Debt
Net Value of House	\$ 665,000	equals Net Value

Table L3.2

John and Jane Doe had a net asset value of their house of \$665,000. To keep it simple for now they ignored the costs of the sale such as real-estate fees, lawyers fees, advertising etc. But as we will learn, the net value of the house could increase before they retired, hopefully they could pay off the remaining mortgage to the bank, or their house may even go up in value. They also had lots of other things to consider regarding their house in retirement (as do all retirees) – but we will save that for later.

As you look at your assets, you will often pick up any debts associated with the purchase of the asset, so you need to make sure you have compiled a full list of your debts.

While doing this, you can also identify any potential income generating assets already owned, and what income (if any) they are currently generating. This way you can estimate the amount of income they could be generating at your planned retirement date (or some future date).

Income Generating Assets

To be able to evaluate and understand the various options available, you need to first understand the basic concepts of investments.

Different Markets

At a high level there are different markets within which you can make investments. The most common ones are:

- Cash Market: This is basically interest-bearing bank accounts. Different banks have different interest rates, different account types have different interest rates. Different banks have different risks.
- Bond Market: This is where you loan money to companies or the government at a higher interest rate than a bank offers you. This option is sometimes called the Debt market.
- Property Market: This is where you own a property of some type (residential/commercial) and rent/lease it to someone else for a regular rent.
- Share Market: This is where you buy a small slice of a large company. If they make money, they pay the owners a % of that profit. If other people think it is a good profitable company, they may pay you a bit extra to buy back your share of that company i.e. the value of the company increases – thereby the price of a share of that company increases.



These different markets each have different risks, and as we have learnt, different risks offer different returns. You often find additional markets added to similar diagrams (Gold, Antiques, Art etc.) These are often added by people trying to convince you that the particular market they sell products in, are low risk, and you should be buying them. It doesn't mean the value of artwork doesn't – but you need a lot of 'Art Knowledge' to ensure the art you purchase will increase in value. These alternate markets are normally in the top RH corner of the previous chart (or in our case, planning for our retirement - they should be considered "off the chart") .

As can be seen in the diagram, the Share Market has more risk than the property market, as many people who held shares in 1987 will remember.

Even within a particular market, there are different risks and rewards.

If you had purchased an average house in June 2020 in Wellington, according to Quotable Value (QV), three years later that house could be worth 6% more. If you had instead purchased in Napier, it could be worth 18% more than what you paid for it.

Average Property Values		Wellington	Nelson	Napier
Buy Property	Apr-20	\$ 916,200	\$ 668,425	\$ 627,287
Sell Property	Apr-23	\$ 973,520	\$ 787,531	\$ 744,369
Gain/Loss		\$ 57,320	\$ 119,106	\$ 117,082
		6.3%	17.8%	18.7%

Source: <https://www.qv.co.nz/>

If you purchased shares in Spark New Zealand, depending on when you made your purchase and sold your shares, would determine the type of return you received.

Spark New Zealand: SPK			
	Option 1	Option 2	Option 3
buy	18/08/2018 \$ 3.92	16/02/2018 \$ 3.45	14/12/2018 \$ 4.25
sell	16/08/2019 \$ 3.98	15/02/2019 \$ 4.07	7/06/2019 \$ 3.79
gain/loss	\$ 0.06	\$ 0.62	-\$ 0.46
% Gain/loss	1.5%	18.0%	-10.8%

Table LS.1

If instead you purchased Infratil, you may have done slightly better over the same time ranges. Different returns, different risks, different choices.

Infratil:IFT	<u>Option 1</u>		<u>Option 2</u>		<u>Option 3</u>	
buy	18/08/2018	\$ 3.37	16/02/2018	\$ 3.08	14/12/2018	\$ 3.30
sell	16/08/2019	\$ 4.66	15/02/2019	\$ 3.93	7/06/2019	\$ 4.33
gain/loss		\$ 1.29		\$ 0.85		\$ 1.03
% Gain/loss		38.3%		27.6%		31.2%

Table LS.2

If you had diversified and purchased shares in both (or even more companies) you would have made less gain, but you would have been exposed to less risk. You would have been diversified.

Diversification

Diversification is the process of managing your investments in a way that reduces the exposure to any one particular market, asset category or risk. A common path towards diversification is to reduce risk or volatility by investing in a variety of different things or markets.

Basically you are not putting all your eggs in one basket, or all your money in one piggy bank.



The number of baskets (or piggy banks) needed, the size and shape, are all determined by your appetite for risk, and when you need money.

Hopefully you now appreciate that the closer you get to retirement (or if you are already in retirement) the lower the risks you can afford to take. You don't have time to recover from stock market crashes, property market crashes, or any other global trend that may occur that reduces the money you have to live on, or could destroy the value of your income generating assets.

Diversification doesn't just involve looking at spreading your hard-earned money across different markets (cash, bonds, property etc), to minimise risk you should also consider diversification across geographies. If for example you wanted to buy shares in the biggest companies, none of the 'worlds best' are headquartered in New Zealand. Household names such as: Apple, Microsoft, Amazon, Alphabet (Google), Alibaba are not New Zealand Companies. You would have to buy shares in US companies instead – a whole new level of investing needed.

What sort of Investor am I?

Sorted.Org.NZ have excellent tools to help you work out where you could invest your money to get an appropriate return. In fact, Sorted have many tools that can assist you, but if you are not sure what you need – you are never too sure which of their many tools you should be using.

Similar tools are available on the internet to help you determine what type of investments you need, and the good thing is they all tend to have one thing in common: *The categories of the investments that you need.*

Investments typically fall into five common categories. The categories define the mix of the underlying assets (and markets) that you should be aiming for – basically based on risk. A defensive investor wants significantly less risk than an aggressive investor.

A defensive investor:

- Requires investments to be protected to minimise ups and downs in value
- Is prepared to accept lower long-term returns
- Most likely needs regular income from their investments



A conservative investor:

- Looks to minimise ups and downs in the value of their investments
- Is prepared to accept lower returns
- May need regular income from their investments



A balanced investor:

- Tolerates some ups and downs in the value of their investments
- Can achieve good returns over the long term
- Needs minimal income from their investments



A growth investor:

- Accepts significant ups and downs in the value of their investments
- Can achieve high returns over the long term
- Needs minimal income from their investments



An aggressive investor:

- Accepts extreme ups and downs in the value of their investments
- Can achieve higher returns over the long term
- Does not need regular income from their investments



Within each category, the sites make recommendations as to the mix of market assets:

Market Assets	Investor Categories				
	Defensive	Conservative	Balanced	Growth	Aggressive
Cash	10%	7%	4%	4%	4%
Bonds	70%	63%	46%	26%	6%
Property	6%	8%	9%	10%	10%
Shares	14%	22%	41%	60%	80%

Table L5.3

As can be seen in the above table, a Defensive investor would have 14% in the share market, whereas an Aggressive Investor would have 80% in that market.

These Investor Categories also have other characteristics that are important to understand: the timeframe for the investment (remember as retirees we don't have time on our side), the average expected return (that you hope to achieve in a year) and the typical range of returns you might actually experience in any year (the swings and roundabouts).

Characteristics	Investor Categories				
	Defensive	Conservative	Balanced	Growth	Aggressive
Timeframe (years)	2 to 3	4 to 5	6 to 8	9 to 12	13
Annual avg return	4.6%	5.0%	5.9%	6.7%	7.5%
Range or return in any year	0.7% 10.2%	-1.4% 11.9%	-3.6% 16.4%	-6.3% 21.4%	-9.0% 27.0%

Table LS.4

In retirement, you may need to access your money quickly (to go on a trip, pay medical bills, fix the car etc.), and if your investments are down -8% that year, you don't want to have to sell and crystallise that loss. You would want to hold your investment another year or two until it recovers (as they generally do if you have purchased wisely).

For this reason, when we are looking at the types of investments we often add a 'buffer'. We keep more money accessible than we actually plan to spend just in case. An emergency fund.

Managing money in retirement

Buckets of Money

A very common and easy money management strategy to manage money in retirement, is to visualise your money in buckets, cascading down into each lower one:



At the bottom is the money needed for the next 6 months. This should be in low risk accessible bank accounts, that is still generating income – but it is low risk and very accessible.

The bottom bucket is being filled by a higher bucket that has enough money (an income generating asset), for 1 years expenses, generating income (via interest) at a higher rate than the bottom bucket. We will only take money out of the 2nd bucket every six months to top up the bottom bucket.

Each higher bucket contains income generating assets, each generating income at higher rates of interest (and taking more risk) than the lower bucket (as we don't need the money for longer), with each bucket topping up the bucket below as needed.

This is a very simple way to visualise the management of income generating assets.

These buckets can also be filled by external sources of money – Government or worked income. Money generally flows directly into the bottom bucket, as earned or paid fortnightly.

As we start to approach the end of our retirement, we will reduce the number of buckets. We will empty (and remove) them from the top down, when we no longer need them.

Understanding the bottom bucket

This is the bucket of money needed for the next 6 months. We plan for 6 months as it provides a buffer for emergencies, it covers the lumps in our budget (every month does not have the same number of days, we pay some expenses only once or twice a year: WOF, Insurance, Car registrations etc.), and a monthly budget is not actually the annual budget / 12.

We fill the bottom bucket from:

- All worked income
- All Government Income

We take out of this bottom bucket:

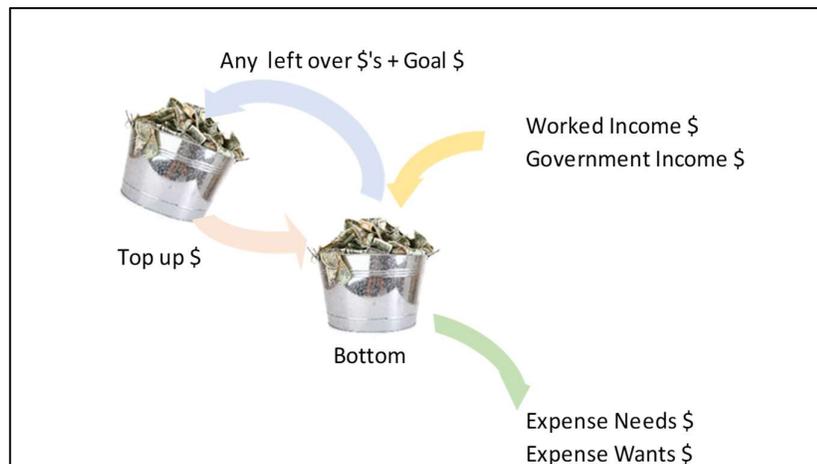
- Money to cover our weekly living costs (food, utility bills, regular lifestyle costs etc)

If there is anything left over, or money we are saving to fund our goals:

- we will use that to top up the bucket above

And if it ever starts to empty too fast,

- we will top it back up from the bucket above.



We will also ensure that any money 'sloshing around in a bucket' is working for us. Think of each bucket as being an income generating asset, that will have its contents appropriately invested to ensure the correct balance of risk and liquidity (i.e. liquidity means we can access it when we need it).

For example, the bottom bucket is generally an interest-bearing bank account, the one above could be 6 month term deposits or some other defensive investment. We will get to those when we work out how many buckets we need, add numbers to the flows in and out of the various buckets, and then have a guess at when each lower one will need to be topped up.

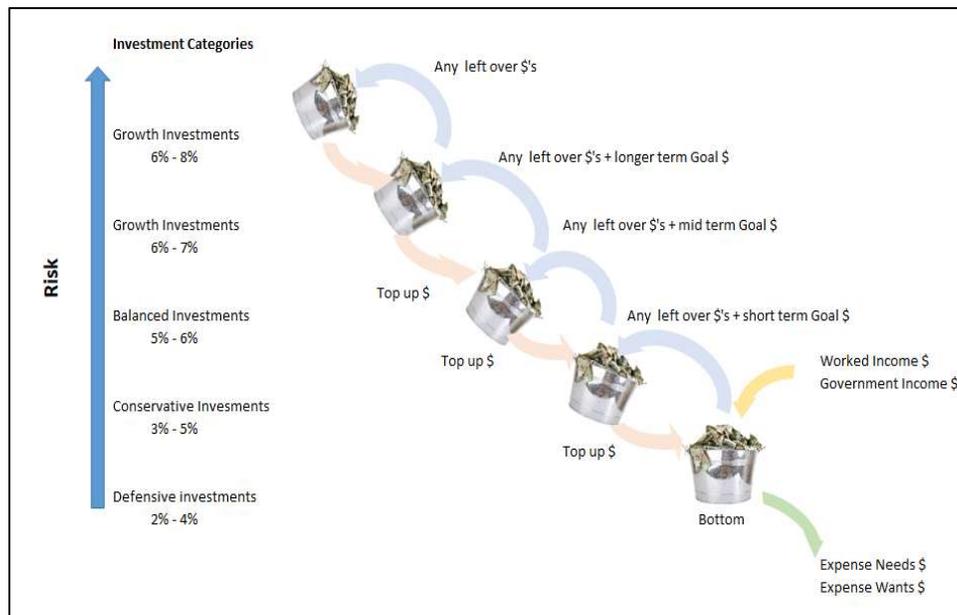
As we go higher up the bucket chain, we should be able to use a different mix of investments (or they can be a different investor category), each having a slightly higher level of risk and return.

We will re calibrate our buckets (adjust the taps re what goes in and out) as we progress through the phases of our retirement. We may find as we move into the later phases of retirement, we have

nothing left in the upper most buckets, but hopefully that will not be an issue as we will have planned for that occurrence.

We will end up with a chain of buckets, with each level comprising higher risk investments with longer timeframes, before its' contents are required to top-up a lower bucket. This concept is shown in the following diagram.

The Bucket Chain



We take money out of the bottom bucket, and we invest with different risk profiles in the upper buckets based on when we think money is needed to top up a lower bucket, based on the timeframes identified in our retirement plan.

This concept aligns with the 'overall average interest rate' we selected on Form 3. Using an example of a 1 Million dollar portfolio of income generating assets, when spread across multiple investment types, still provides an overall average return of 6.5%.

Using the average returns of each investment type:

	Investment Types					
	Cash	Defensive	Conservative	Balanced	Growth	Aggressive
Annual avg return	3.00%	4.60%	5.00%	5.90%	6.70%	7.50%

and assuming a value of income generating assets of \$ 1,000,000 spread across multiple buckets as follows:

	Investment Types					
	Cash	Defensive	Conservative	Balanced	Growth	Aggressive
\$'s and Percentage by Investment Type	2.00%	15.00%	5.00%	8.00%	20.00%	50.00%
	\$ 20,000	\$ 150,000	\$ 50,000	\$ 80,000	\$ 200,000	\$ 500,000

Each bucket would generate an average annual return of:

	Investment Types					
	Cash	Defensive	Conservative	Balanced	Growth	Aggressive
Annual avg return	3.00%	4.60%	5.00%	5.90%	6.70%	7.50%
Annual Return	\$ 600	\$ 6,900	\$ 2,500	\$ 4,720	\$ 13,400	\$ 37,500

This equates to an overall average annual return of \$ 65,620
Giving a 6.56% return over the \$1,000,000 portfolio of income generating assets.

So now that we understand and can visualise the concept of the cascading buckets to manage our investments and money, we need to think about each bucket to determine:

- How many buckets are needed?
- How much money is needed in each bucket?
- What type of Investor Category is applicable for each bucket?
- When will the contents (of the bucket) be needed to top up the bucket below it?

And the good thing is, we worked out a lot of this information when reviewing each phase of retirement, and the expected timeframes for each retirement phase.

Different people (based on their circumstances) will have or need a different number of buckets. The number of buckets, and the size of buckets will change over time as they move through retirement, but the concept will still continue to operate.

While it might be a great idea that when we retire, we will have created this 'multilevel cascading bucket money generating machine' that we can leave to our children – that should not be our goal. They need to look after themselves and our only responsibility is to ensure they are financially literate enough to look after themselves in their retirement (so feel free to give them a copy of this document – job done).

We can start to use the capital (assets) we have accumulated to fund our lifestyle in the later phases of our retirement. i.e. we can plan to use our higher buckets, to top up our lower buckets – and even reduce the number of buckets in the later phases.

Keeping Cash on hand

As people get older, they start to worry about the future more, and as such like to keep 'cash on hand' for a rainy day. This is natural – but dumb. Cash stored under the mattress may be 'there while you are asleep' – but it is definitely 'not working for you while you are asleep'.

Some people keep cash available because they think it is a low risk option. In some cases keeping a bundle of cash around the house increases your risk of losing it. Theft, inflation, spending on wants, missed growth opportunities, are just some of the factors eating away at your cash.

Somewhere in the middle is the correct balance, and we will start to work that out as we move further through our planning process, and as we increase our financial literacy. But before we do that, it is time for another quick reality check up.

When to sell your assets?

During life we go through various stages from having no net wealth (as we have debts), we start to accumulate wealth as we start paying off our debts or our assets go up in value, and then we should start spending that wealth in our retirement.

Ideally our goal should be to leave nothing for our kids i.e. to get our net wealth to \$0 the day before we die. But as we know, we can't predict that date, we need to always plan for a longer life, the odd rainy day, a few speedbumps – and a great time in our retirement.

As such, we should not be afraid to use the capital we have spent our working lives accumulating for ourselves. We should not be afraid to sell some of our income generating assets, and non-income generating assets to fund the later phases of our retirement.



Table L5.6

Many of us now start adulthood with a large student debt that we try and pay off. We get that sorted, then we take out a mortgage to buy our first home, then we get that paid off, and we start saving for retirement, and then we stop working and start spending all that we have accumulated, in the hope it will last until the end of our days.

We should be able to adjust numbers in the early phases of our retirement (in our spreadsheet), to ensure we have sufficient assets and income in the later phases of our retirement.

The challenge here is trying to guess 'what is sufficient?', and what is the correct time to sell.

The most common asset people need to think about is their home. It is usually their largest asset, and in most cases generates no income. As we start to look at options we will spend some time investigating what we could do with the house to free up some money.

If you follow the bucket concept, as the upper buckets are emptying, you are basically selling your assets in a controlled way, while maximising the return you get on the lower buckets. This will enable you make your assets last longer (and work harder).

Tax and inflation

You have most likely heard about the concepts of tax and inflation and might be wondering why we are ignoring them. For now, we are deliberately leaving them out of our plan, but we will address them at the end. You just need to do a quick check that any worked income and Government, are 'after tax' numbers (net of any tax paid).

At the moment, we are still drilling into the big numbers and assumptions to see if we need to shift the goal posts, and it is too early to worry about these smaller problems just yet.

It is a lot easier to consider if our food costs will be higher or lower when we retire, than they currently are. If we have to guess that we might eat less, but inflation may mean they cost more, we can't guess the impact on our budget at each phase. If we think we will eat 10% less food than we currently eat (people eat less as they get older), we can assume if food today costs \$300 per week, it will cost \$270 per week during early retirement. We will adjust for inflation and tax later.

And don't forget superannuation is currently adjusted each year in-line with any increases in average wages. The rates are adjusted annually to 66% of the net average wage.

What about the children!

Many New Zealanders think they should leave all their accumulated wealth to their children to help them get ahead in life. They even choose to go without themselves in retirement (and pre-retirement) to leave something for the kids.

The kids have a lifetime to accumulate their own wealth and can sink or survive on their own decisions and their own financial knowledge. Generally, they will have 20 years longer than you have to get yourself ready.

From a planning perspective – if you can leave anything for your children think of that as a bonus. There are still a lot of speed bumps ahead, and you want to make it to the end of the road before you run out of money.

If you do want to help your children or grandchildren during your retirement, don't give them free handouts. Any monetary assistance given must be by way of a well-documented loan, secured over an asset. If you want to loan them money to help them with a house deposit, agree when they will repay you, check that they can repay you, agree what interest rate will be charged (and what penalty interest will be charged), and what security they will provide.

Too many retirees get into financial trouble during their retirement because of money they lend to family – usually their children, or their children's partners.

The best gift you can give your family is financial literacy – not a financial handout.

- If you ever want to lend money to family, make sure they have shown you their plan of how and when they will repay you, and that you agree it is a low risk plan to yourself. If you offer them an interest free loan for a period of time, still expect them to repay principal each and every month to you.

Next add this to your retirement plan, and see what happens if they are late paying, or default on their payments – what happens to your retirement. Are you sure you want, and can afford, to take that risk? They still have time on their side. You do not.

- If you are ever asked to lend money to friends – walk away. Statistically most of these arrangements end in disputes. Why won't the bank lend them money? Why can't they pay the bill themselves? Will you ever see the money again? What assets are they providing as security? What interest rate will they pay you?

Remember the old saying *"give a man a fish – feed him for a day. Teach him how to fish – feed him for life"*. If you lend them money today – they will be back asking for more tomorrow. Maybe give them a copy of this guide instead (after your kids have read it).

- If you have children that are working, help them understand the benefits of KiwiSaver, compounding interest, Government top ups, and the correct type of fund they should be in. Unless they can use the fund to assist their first home purchase, the majority should be in at least Growth funds as the timeframe before they can access the funds is so far in the future.

We have provided a later lesson on the best way to manage any family lending to reduce the risks to your retirement. Ensure you read it before lending anyone any money.

Maximising assets already owned

Previously you created a list of potential income generating assets, then refined that list into ones that are generating income today, and those that have the potential to generate income in the future, and some others that will never generate any income.

You have already learnt that interest is generated by assets at different rates. What this means is that different assets are better at generating income for us than others.

Putting cash under the mattress, generates no income. Putting it in a bank account, might currently generate somewhere between 1% and 3% per year, paying off a debt might have the same impact as receiving 20% – 25% percent (if you have credit card debts).

Renting out a spare room for a year to an overseas student might provide \$250 per week, a rental property might provide a return of 2% or 3%. Buying a share of a company on the stock exchange might offer 7%.

You also know that the higher the return, generally the higher the risk. If someone tells you, they have a way to make 10% to 20% return on any money you give them it could be a scam. They plan to take your money from you. These people aren't sharks they are pirates, out to steal your money. Walk away from them.

The concept you need to understand is called compounding interest, and we have already learnt the importance of this concept. If you can't remember the lesson, go back and reread Lesson 2.

If we have \$100 invested in a bank account receiving 1% per year and leave it there for 5 years, at the end of the 5 years we will have \$110. If we invested it at 2%, we would have \$122.

If our KiwiSaver was in a default type of account, and we changed to a higher interest type account, that could make a significant impact.

The following table shows the impact of changing the interest rate John and Jane receive in their bank accounts and KiwiSaver investments. These changes could generate an additional \$31,000 over 10 years.

Amount	Asset type	Current Interest rate	Value in 10 years	New Interest rate	Value in 10 years	Impact
\$ 100.00	Interest bearing bank account	1%	\$110.46	2%	\$121.90	\$11.44
\$ 4,500.00	Interest bearing bank account	1%	\$4,970.80	2%	\$5,485.47	\$514.68
\$ 68,246.39	Kiwisaver Accounts	3%	\$91,717.44	6%	\$122,218.89	\$30,501.45

Table LS.7

You want to ensure the assets you already own, are working harder for you, albeit in a small way. Potential areas where you can increase the income generated by the assets you currently own include:

Savings – you may have some savings in an account, but you might have it in the 'wrong type of account'. When you go to a bank, they are not going to offer you the best interest-bearing account they have on offer, that will cost them money. Different banks offer different rates, maybe it is time to shop around?

Or maybe those savings sitting in an account collecting very little interest could be used to repay debts that have an even higher interest rate.

KiwiSaver – If you have a KiwiSaver account, you are receiving interest on any money that is in it. If you just opened it as a 'default' KiwiSaver account, you will probably be getting the worst rate they could give you. Changing the provider of a KiwiSaver, or the type of fund you

are in, can have a major impact on the interest rate you are receiving, and if you have some years before you retire then the effect of compounding interest at the new rate will be significant.

If you are making additional payments into your KiwiSaver (not being matched by your employer), are you expecting them to compound (via interest) at a rate greater than what you are paying off any debt. If your KiwiSaver is only generating an annual return of 6%, and you have debts that you are being charged 12% for, then you should stop those additional (unmatched) payments and apply that money toward your debts.

Old life insurance policies – Old insurance policies sometimes have options to modify them from a life policy (where they pay your estate money when you die), to endowment (where they still pay you money if you die, but also part of the money you have paid, back to you when you reach a certain age, or at some specified date in the future).

Shares – if you own some shares, and they are not giving you a good return, maybe it is time to finally cut your losses and move on. The money could be better used paying off debts.

Our House – could you rent out a room (or 2) or even the garage to generate some additional income? Rent out a room for 12 months and clear away some debts. We will investigate what to do with houses in the next Lesson in a lot more detail.

A 2nd property – Do you currently own a 2nd property that is only used for the occasional holiday?, can you rent it out? Should you sell it?

A Business – If you own a small business, now is a good time to estimate its value, and to start planning an exit strategy. Do you want to sell it to a staff member, a family member, or just someone else who might be interested in it? As part of the sale, could you somehow get a recurring income stream from it (a royalty, some part time work if you want it, maybe leave in some vendor finance where the new owner is paying you interest on the loan)?

Saleable items - Sometimes you might have old items you have kept that you no longer want nor need that you could sell. Some may have some monetary value that could be better used (e.g. to repay debt).

Inheritance - If your parents are more financially literate than yourself there may be some estate money that may be left to you at some future date. While this should never be planned for, as your parents or relatives may need it to survive their own retirement, depending upon family circumstances, some value may be assumed to be received in the future.

What is an income generating asset again?

In retirement we want our money working for us so we can get on and enjoy life. In Lesson 2, we introduced the idea of 'income generating assets', with the income generated by these assets is called passive income. Our money generating more income even while we sleep. Sounded great didn't it.

Before retiring, our overall goal should have been to accumulate enough income generating assets to provide us the income we need in our retirement. Many people do manage to accumulate sufficient income generating assets within 65 years either through luck or good financial management.

For others, they don't quite make it! They arrive at retirement and were not able to accumulate income generating assets. For some, they believed 'The Government' was going to provide for them. For others they left it too long before they started, they put it off till tomorrow, as retirement was such a long way away. And others accumulate assets but don't know how to generate income from them.

Many people today fail to realise that they could easily have just as much time in retirement (35 years: age 60 to 95) as they do in their working life (35 years: age 25 to 60). And for some people (the younger ones), superannuation may no longer exist when they need it, might only exist for the 'really poor', or if it still somehow exists, there is a pretty high chance it will have been significantly reduced (remember the converging trends from Lesson 1!).

When we previously looked at our assets, we made an initial list of things we owned that could be part of the assets that generate passive income for us.

We will drill into the period we have identified (if we have one) between now and our planned 'retirement date'. We do this to see if we can narrow the gap between the income generating assets we have now, and the amount of income generating assets we need for retirement. The longer we have in this period, the greater the chance we have, to accumulate or restructure sufficient income generating assets.

Most likely, not all our current assets are currently generating any income, or can generate income. If we have a 2nd house or batch, can that generate income? The family home, only if we want people living with us and we are prepared to rent out some rooms? The family car, maybe we could moonlight as an Uber driver? We need to identify our potential 'income generating assets' from our 'non income generating assets'.

While we may not want to have borders living with us throughout our retirement, maybe we could put up with them for a year if it meant we would enjoy a longer retirement. Maybe we could rent our house on Airbnb each time we go overseas on holiday? Maybe we rent a room on Airbnb just for big local events when there is a shortage of hotel accommodation, and we can get a premium rate?

You need to look at each asset you currently own, the income it currently generates and think about ideas of how it could be used to generate more income. It doesn't mean we are going to do this (and people will start moving in at the end of the week), we are looking for income generating ideas that we may want (or need) to use before or during our retirement.

In the next step of our planning process we will look at each of our current assets to see if we can make changes to enable them to generate (or free up) more income. We will then look at developing a strategy to obtain additional income generating assets to bridge any financial gaps we still have.

Common areas of passive interest

If you are still unsure about passive income, or where to look for, this next section provides a brief overview of the most common forms of passive income.

Bank accounts

In Lesson 2 we introduced the concepts of interest and compounding interest.

Just as you must pay interest on any money you borrow from someone; you receive money from anyone you lend money to. Banks borrow from you (your savings accounts) and pay you interest, currently between 1% - 2%, then lend that money to someone else to buy a house earning interest between 4% - 7%.



When you are leaving money in a bank account overnight, you are lending that money to the bank so they can generate income for themselves with it. They are using your money while you sleep, to generate more money for themselves. They invest in things like the overnight markets, foreign currencies, mortgages, government bonds, and lots of other options available to them. But some of these options are also available to you.

But like all good investments, the higher the return – generally the higher the risk.

Therefore, we need to make choices. Do we put all our eggs in one high risk basket, or do we spread the eggs across multiple baskets – that have different risks associated with them. This concept is called diversification that we learnt about in Lesson 5.

The last thing anyone needs in retirement is to lose their income generating assets, because they took too higher risks. What they needed was more baskets.

A good way to balance your assets is to ensure you protect those that are needed to generate enough income to meet our 'needs' and 'obligations' in a low risk manner, and maybe take a few sensible risks with the assets needed to generate income to fund our 'wants' and 'goals'. That way if some unplanned global (or local) event occurs during your retirement that you didn't see coming, you can still survive (meet your needs and obligations) – but you may have to just defer your next trip for a while (our 'wants').

Other things you need to remember is that you don't need all that income at day 1 (it would be a great overseas trip though wouldn't it), and you don't need to leave all those income generating assets to your children (they should be accumulating their own!).

So somewhere during our retirement, you can start cashing up those income generating assets and spend some of that money to fund your remaining needs and wants. And this is the bucket concept we introduced in Lesson 5.

Based on John and Janes budget, we already have the bottom bucket. The Bank Savings account they setup. Based on their budget it appears it will have more money than needed in it when they retire. This is a great start. Unfortunately, it will only keep them in retirement for 2 or 3 years before it empties.

What we need to do, is confirm the passive interest we can generate from our savings account and KiwiSaver accounts into our budget and see what impact it makes.

KiwiSaver

KiwiSaver – despite its name – is not a savings account. It is an investment account. Savings accounts are low risk we can ‘bet the bank on them’. Investment accounts have a degree of risk. And with risk we hope to receive a higher interest rate and therefore a greater return on our investment – i.e. we can generate more income. The higher the interest rate – the more income we should receive, but the higher the interest rate – the greater the risks.

At this stage John and Jane assumed an interest rate per year of 2% on their savings, and 3% for the balance of their KiwiSaver investment funds. While you are working (in your pre-retirement) your employer contributes 3% of your salary to your KiwiSaver fund. Maybe it is time to check you are in the best fund, most suitable to your needs.

Sorted.org.nz maintain a very good website that helps you determine the most suitable investment fund type you should be in, and compares various fund providers to help you select an appropriate fund : <https://fundfinder.sorted.org.nz/>.

The various categories were defined in Lesson 5, but a quick rule of thumb indicates that the type of fund can easily be selected based on the number of years before you retire or need to access the money within the fund (remember you may not need it on your 65th birthday)

Characteristics	Investor Categories				
	Defensive	Conservative	Balanced	Growth	Aggressive
Timeframe (years)	2 to 3	4 to 5	6 to 8	9 to 12	13
Annual avg return	4.6%	5.0%	5.9%	6.7%	7.5%
Range or return in any year	0.7% 10.2%	-1.4% 11.9%	-3.6% 16.4%	-6.3% 21.4%	-9.0% 27.0%

Table L5.4 (repeated)

John and Jane have both received, on average, a 3% return on their KiwiSaver funds. Given they cannot access their KiwiSaver funds until 65 years old, indicates they are in the wrong type of fund (or have a very poor fund manager). They should be in funds generating a higher rate of return. A more suitable rate based on when they can access their funds would be providing a 5% -7% annual average return.

The Government (for the majority of people pre-retirement) currently provide an annual top up into KiwiSaver funds. This is currently set at 50c for every dollar you (not your employer) contribute, up to a maximum of \$521.43 each year. A 2019 survey by the IRD found that 62% of people contributing into KiwiSaver, were not contributing enough to get the maximum ‘free government contribution’.

To get the full government contribution, you need to have put in at least \$1,042.86 each year between 1 July and 30 June. Currently Employer contributions, government contributions and

amounts transferred from Australia under the Trans-Tasman retirement savings portability do not count towards eligibility for the government contribution. If you are working part time, or on a low wage, then each year you should check the amount you have contributed to KiwiSaver and should make a small top-up if needed to get the maximum contribution. Just remember the IRD must receive the top-up by the 30th of June.

Our House

The bulk of your assets are usually tied up in your house. In retirement you need to live somewhere. So unless you plan (and can afford) to travel 365 days a year and live in hotels or on a cruise boat, you need some accommodation somewhere.

This is probably the hardest decision people have to make either in, or planning for, their retirement.

Events that influence the timeframe for something to be done about the 'family home' generally revolve around:

- I can't afford to maintain or keep the home any longer
- I am too sick to live in or access the home
- I am too old to maintain the house any more
- my house is in the wrong location for the lifestyle I am living
- my house is too big, and we never use these extra rooms or large yard area any more
- I can use some of the value tied in my house for a better purpose (income generating).

As your financial literacy grows, the emotional answers to all these questions, start to become financial answers.

Q: "Why do we maintain two extra bedrooms for the family to stay in when they come to visit?"

A: "because it's the family home, we want to watch the grandkids enjoying all the things their parents did around the house."

Becomes:

Q: "Why do we maintain two extra bedrooms for the family to stay in when they come to visit?"

A: "We could get a smaller place, and just book a nearby AirBnB or motel for the two weeks every couple of years when they come to stay – and even if we paid for it – we'd still be financially better off."

What to do with the house, and when to do it are big decisions. They need to be planned, so this topic is covered in more detail in the next Lesson.

You need to start thinking about how you can turn this big asset (that eats a lot of your income to maintain) into some form of income generating asset. You might need to make a decision about the house, but you may not be ready to make it just yet.

Options that we will evaluate include:

- subdivide the section and sell it off (either with a new house on it or not)

- renovate so part of it could be rented out or made into a granny flat or studio apartment
- rent out the spare rooms for a while
- rent out the whole place – either all the time, or just when we are travelling
- sell it and buy a smaller house, or one that costs us less each year to maintain
- sell it and just go back to our student days – we'll rent something. Maybe we could get a different flat in a different city, in a different country every two years.

With a house, you have lots of options, and generally there is lots of money involved. This one requires the most thought, the most financial planning of options, and has the most emotional links. Even the family like to offer help “But Mum, I love staying in my old room when we visit each Christmas”. The kids get a week's enjoyment, while you get a full year's worth of costs.

The other thing to remember, is while you are planning for your retirement, and are drilling into the 'early retirement' phase of your plan, you may still have a number of years before you retire. John and Jane had 5. They had all this money tied up in their house not generating any income, but there were things they could consider and evaluate now – rather than in 5 years' time?

Working a bit longer

While the whole intention of retirement is to stop working and sit back and enjoy life. Working in some capacity is enjoyable – you get out, meet people, and get extra income that you can spend in your retirement. Also, just because John has reached the age of '65' doesn't mean Jane has to give up her part time job if she enjoys it. She may 'want' to, but she doesn't 'need' too.

While working in retirement offers opportunities to receive income, it also provides other areas of wellbeing that need to be considered in retirement. John doesn't have to give up work, maybe a change of role, become an advisor part time to the same employer, offer to work in busy times to help out. Lots of options to start thinking about – and still 5 years before a decision is needed.

But if you think you will continue in some type of work – even though you haven't quite decided what it is (remember you may still have a number of years) you should add this to your worked revenue line in your budget. You can always take it out later once you work out how to get your passive income greater than your expenses.