Te Tohu Whakahaere Pūtea

Certificate in Money Management

Wāhanga Tuawhā: Ngā Hua me ētahi atu Whakatupuranga

Module 4:

Equity and Other Investments

Programme Developers and Authors

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Module Outline

Introduction

Sharemarket investments are one of the main means by which individuals save for their future. In fact, with the introduction of ***KiwiSaver***, the use of sharemarket investments has become even more common in recent years. As such, the performance of sharemarkets and of individual companies around the world is regularly reported in newspapers, on internet news sites and in television news broadcasts.

The problem is that many of us do not really understand what the details of these news reports actually mean and how markets actually work. This is the case even though many of us are KiwiSaver members or have, at some stage, signed up to some type of ***managed fund*** investment scheme!

In other words, many people do not have a solid knowledge about the investments they have and of what they can expect from them. This is a huge problem for the average New Zealander who wants to effectively use their investments to reach their financial goals.

The main purpose of this Module is, therefore, to 'demystify' key concepts relating to sharemarkets so that tauira can learn how they can effectively participate in this type of investment. Throughout the Module, tauira will also be introduced to:

- private equity investment (becoming an owner or part-owner in a business),
- debt investment, and
- a number of investment tools including, for example, ***derivatives*** and ***commodities***.

Tauira will be provided with practical information that they can use to help decide which particular investments or funds best suit their situation and the level of risk they are willing to take on. They will also be informed of how they can actually go about investing their money in the various types of investments available.

Definitions of Terms

A lot of new words and terms are introduced throughout this Module. These terms are explained in the Module content. In addition, a glossary of terms is provided at the end of the Module.

Words and terms which are included in this glossary of terms are shown in ***bold and italics*** when first introduced in the Module. Therefore, if you see a word in bold and italics in the Module content, you will know that you can find a definition for this word in the glossary of terms.

Learning Outcomes

Core Module Learning Outcomes

By the end of this module tauira will be able to:

1. Demonstrate an understanding of how sharemarkets work and how an individual can participate in this type of investment.
2. Demonstrate an understanding of how managed fund investments operate and of key factors to consider when utilising this type of investment.
3. Demonstrate an understanding of a range of investment options and tools.
4. Demonstrate an understanding of general investment terminology and key concepts.*
5. Identify and explain key considerations regarding private equity investment.
6. Conduct a basic valuation of a business for investment purposes.*

** These are also literacy and numeracy learning outcomes.*

Literacy and Numeracy Learning Outcomes

By the end of this module tauira will be able to:

A. Locate and identify information of relevance in a case study and / or programme materials.
B. Compare and evaluate information to identify missing or contradictory information.
C. Evaluate the relevance of information to a particular situation.
D. Write comprehensible sentences in response to questions and tasks.
E. Write an example which demonstrates understanding of a concept.
F. Demonstrate an understanding of terminology relating to private equity investment.

Section 1

Introduction to the Sharemarket

1.0 Introduction to the Sharemarket

It seems that everybody knows somebody who has lost or made a lot of money on the ***sharemarket*** – you may have even lost or made money yourself. Many people invest in shares without fully understanding:

- what they are investing in,
- why they are investing, and
- how the sharemarket works.

You would not buy a house without knowing how the housing market works, so why not arm yourself with as much knowledge as possible to increase the likelihood of your investment working for you?

Key point:

Like any investment,
sharemarket investments involve risk.
But the risk faced by those who do not understand
how the sharemarket works,
is generally much higher.

1.1 The Sharemarket

1.1.1 Shares and Shareholders

1.1.1.1 What is a Share?

Shares are sometimes called ***equities*** and, in the United States of America (USA), they are often referred to as ***stocks***. Whatever you want to call them, they all mean the same thing.

A ***share*** simply represents part of the ownership of a ***company***. Thus, a company's owners are called ***shareholders*** as they 'hold' shares in the company.

A company may have:

- only one or a few shareholders, such as is common in a small family business, OR
- hundreds or even thousands of shareholders, as is common in large companies such as Telecom.

How many shares can a company issue?

The answer - as many as the ***directors*** of the company want!

Small, family-owned businesses often have 100 or 1,000 shares. Large companies will usually have millions or sometimes billions of shares. For example, as at October 2013, Microsoft had approximately 8.33 billion shares in issue![1]

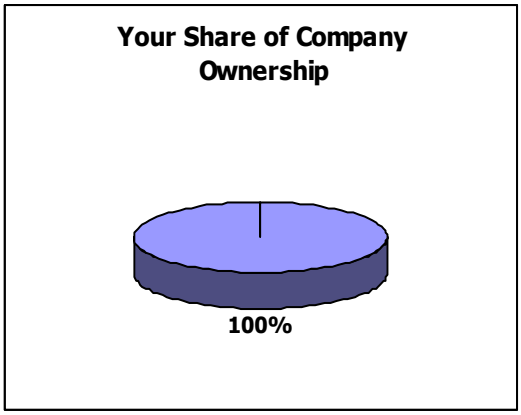
[1] Yahoo! Finance. *Microsoft Corporation (MSFT) Key Statistics.* Retrieved 4 October, 2013, from http://finance.yahoo.com/q/ks?s=msft

Although large companies usually have more shares than smaller companies, the number of shares and of shareholders that a company has does NOT necessarily show how much the company is worth to its owners.

In other words,

More shares ≠ **A more valuable company**

Instead, the value of a company depends on the value of its shares AND the number of shares. Every share has a value. For example, a single share may be worth just $1 or as much as $10,000 or more!



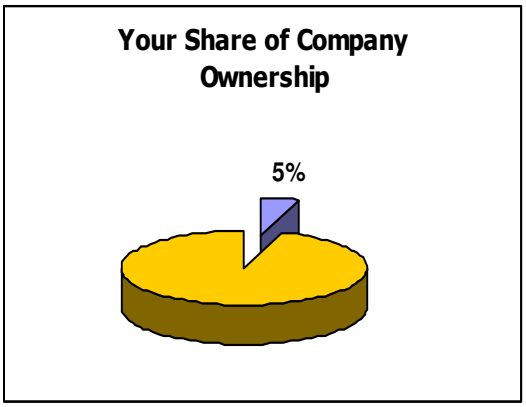
If you have your own company, and you are the only shareholder, this means that you own 100% of the shares. In other words, you own the whole company.

If your company has 30,000 shares valued at $1 each, then your company (and the value of your ownership) is said to be worth $30,000.

Now let's suppose that you want to own part of another company. You might do this by buying 1,500 of its shares.

If this company has a total of 30,000 shares, then this means that you now own 5% of the company.

If these shares are valued at $1 each, this means that the company is worth $30,000 and your 5% stake is worth $1,500 ($30,000 x 0.05).



So which of these two companies is worth more?

Company A

- Number of shares: 20,000
- Value of each share: $5
- Number of shareholders:1,000

Company B

- Number of shares: 500
- Value of each share: $500
- Number of shareholders: 2

The answer is Company B. Company B is worth $250,000, whereas Company A is worth $100,000.

Value of Company A	=	20,000 shares x $5
	=	$100,000

Value of Company B	=	500 shares x $500
	=	$250,000

Shareholders get to vote on matters that affect the company. This includes voting on the ***directors*** who will be ***appointed*** to run the company.

Generally, shareholders get one vote for every share owned. So if, for example, a shareholder owns 15 shares, they will get 15 votes. However, this is not always the case.

As you can see, if you own 51% of the shares, you can outvote everybody else, even if they all group together and vote the same way. This means that you could basically make all of the decisions in the business – that is, you would have complete control of the company!

As a result, most countries (including New Zealand) have rules relating to the rights of ***minority shareholders***. This gives them some protection from ***majority shareholders***.

1.1.1.2 Payment to Shareholders

Owning shares means that you are ***entitled*** to a share of the profits of the company. This ***entitlement*** is in ***proportion*** to the number of shares that you own.

So if, for example, you own 50% of the shares in a company, and the company distributes $100,000 to its shareholders, you will receive 50% (which is $50,000) of this.

However, this does NOT mean that whenever the company makes a ***profit***, you will receive a payment equal to your share of the total profit.

For example, if a company makes a profit of $100,000 and you have a 2% shareholding in the company, you will NOT be likely to receive a payment of $2,000.

Why is this?

The main reason is that companies do not usually pay out all their profits to the shareholders. Companies need to keep part of their profits aside to invest in the future growth of their business. This money could be used, for example, to:

- replace worn out equipment,
- invest in research and development for a new product, or
- fund the growth of the business into a new market (e.g. cover the costs of the business opening new stores in other countries).

The less money that is needed to invest for the future and to replace equipment, the greater the profits that can be paid out to shareholders.

The portion of profits paid to shareholders is called ***dividends***.

Most large New Zealand companies pay dividends twice per year, although some (such as Telecom) pay quarterly. In the USA, it is usual for companies to pay dividends quarterly.

It is important to note that if a company of which you are a shareholder goes bankrupt, you will not be ***liable*** for any of its debts. In other words, you do not have to pay for the company's unpaid debts.

However, your shares will be worth nothing. This means that you will lose the amount you originally invested in the business. If this happens, hopefully you will have at least received some ***dividends*** over the time that you have owned the shares.

Discussion Question:

What are the pros and cons of investing in a company which pays high dividends?

1.1.2 The Sharemarket

In its very simplest terms, the ***sharemarket*** is just like any other market – it is a place where people who want to buy meet up with people who want to sell.

The main difference between a sharemarket and a vegetable market is that in the vegetable market, people buy and sell vegetables, whereas in the sharemarket, people buy and sell (yes, you've guessed it) shares.

=

A sharemarket is often referred to as a ***stock exchange*** in many countries, or as a ***bourse*** in parts of Europe.

In days gone by, people who wanted to buy and sell shares did actually meet in person (or at least people acting on their behalf did).

However nowadays, as with many other types of markets, the meeting takes place electronically. Computers have removed the need for trading floors where buyers and sellers shout orders at each other.

1.1.2.1 Public Companies and Stock Exchanges

If a company wishes to offer their shares for sale to the general public, it goes through the process of becoming a ***public company***.

The term 'public company' has two meanings:

1. It is commonly used to refer to a company that is owned by the Government (the ***public sector***); and

2. It is also used to refer to a company that members of the general public can buy shares in.

For the purposes of this programme, the term 'public company' will always be used to refer to the second option (a company that members of the general public can buy shares in).

A company which does not offer shares for sale to the general public is referred to as a ***private company***. Small businesses which are companies are typically private businesses. You cannot, for example, expect to be able to buy shares in the local family restaurant, but you can, for instance, buy shares in companies such as Sky Television and ANZ.

In most cases, a public company sells shares to the public by ***listing*** on a ***stock exchange***. A stock exchange operates as a business. That is, it earns income from providing a ***facility*** for companies to list their shares and other ***securities*** and for investors to trade these securities.

The word 'securities' is a broad term for shares and other investments that represent a legal claim to part ownership of a company (and / or to financial ***entitlements***)[2].

The most important stock exchanges in the world are generally considered to be:

- The New York Stock Exchange
- The Tokyo Stock Exchange
- The NASDAQ
- The Euronext
- The London Stock Exchange

Above: The New York Stock Exchange

[2]NZX. Retrieved 15 January, 2010, from http://www.nzx.com/investing/glossary

New Zealand Exchange Limited (NZX) is the name of the company that operates securities markets in New Zealand. Based in Wellington, NZX has three markets:

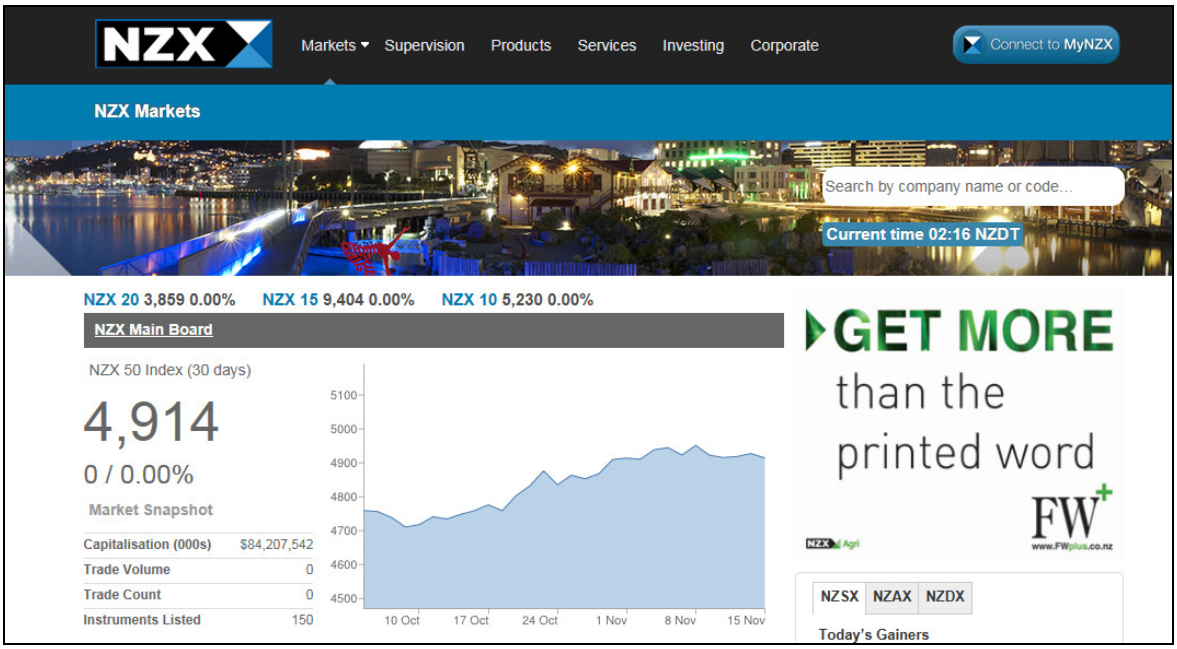
1. ***NZSX***: The New Zealand Stock Market. This is also known as New Zealand's 'main' market. Companies listed on the NZSX include New Zealand's well-known enterprises such as Telecom, AMP, Briscoe Group and The Warehouse.

2. ***NZDX***: The New Zealand Debt Market. Other securities, including corporate and government bonds (***debt securities***), are sold on this market.

3. ***NZAX***: The New Zealand Alternative Market. This is a market for shares in fast-growing and developing companies. Companies listed on this exchange are generally smaller and less-established than those listed on the NZSX.

NZX is, itself, a public company, with its shares being listed on its main market (the NZSX).

Screen Print: The NZX Website[3]



Discussion Question:

How many companies can you think of that are listed on the NZSX?

[3] NZX. Retrieved 18 November, 2013, from https://www.nzx.com/

1.1.2.2 Sharemarket Participants

Participants in the stock market range from small individual investors (such as you and me), placing an order for just a few hundred or few thousand dollars, to large banks, placing orders for millions of dollars.

When an investor would like to buy or sell shares, they use the services of a ***sharebroker***. Someone cannot simply walk into the offices of NZX and buy shares themselves.

A ***broking firm*** is an organisation that has been ***accredited*** by a stock exchange to trade on behalf of investors. Investors pay ***brokerage fees*** for the use of these services.

Many years ago, most investors in the ***sharemarket*** were individuals, such as wealthy businessmen with long family histories linked to particular companies. But over time, markets have become more ***institutionalised***.

That is, nowadays, buyers and sellers are usually large ***institutions*** such as:

- superannuation funds,
- insurance companies,
- investment companies,
- ***hedge funds***,
- investor groups, and
- banks.

The increase in participation by ***institutional investors*** has resulted in some improvements in sharemarket operations around the world. Specifically, in the past, brokerage fees were generally quite high.

However, as ***institutions*** are now major customers for sharebrokers, they have more bargaining power – they have therefore been successful in negotiating lower fees. Over time, these lower fees were passed on to 'small' investors.

Nowadays, ***online trading*** has helped lower fees even further. This involves people being able to place trades via the internet.

1.1.3 Direct and Indirect Investments

When making investment decisions, there are basically two ways you can do it, just as there are two options for painting your house – you can either:

1. do it yourself, or
2. pay somebody else to do it for you.

Sometimes you will have no choice but to invest indirectly, such as is the case with ***KiwiSaver***. There is no 'self-select' KiwiSaver available.

1.1.3.1 What are Direct Investments?

Direct investing means deciding for yourself what shares you want to buy and then buying them through your sharebroker. The only costs involved in this are the sharebroker's ***commission***. However, to do the job properly involves quite a lot of your time spent in research and checking.

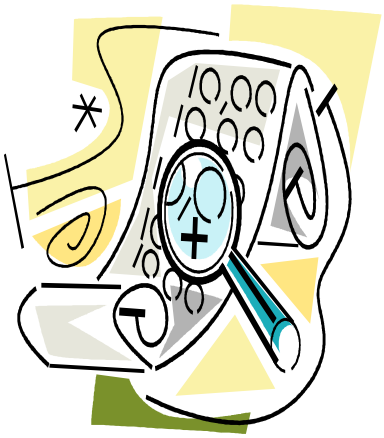
The research part means that firstly you should understand shares, how they work, what affects share prices and the terminology and jargon involved. There are many websites that provide good information about this. There are also many useful books on investing available for purchase. Libraries will have some books, but the choice may be very limited in smaller libraries.

You then have to decide on your ***criteria*** for buying shares:

In your opinion, what will make a good investment?

This will involve understanding what various numbers, percentages and ratios mean. For example, what is a ***P/E Ratio***? What about ***Div CPS***? (Note that these are covered in Section 1.2.2).

You also need to understand that different industries have different ratios (etc.) that are regarded as normal, and some numbers do not apply to certain businesses. For instance, it is normal for a technology-based business to have a higher P/E ratio than a business such as an electricity provider (you will learn why this is the case in Section 1.2.2).



If you want to take this part further, a lot of number crunching using computer spreadsheets can be involved.

You then have to find shares that match your ***criteria*** (of what would make a good investment).

This is much easier than it used to be. Some investment websites have search engines that you can use to do this. You put in your criteria and the search facility comes up with the shares that match your chosen criteria.

After you have found the shares that match your criteria and have purchased them, you should keep an eye on them to check:

- Have any conditions changed which mean that these shares no longer meet your criteria? If so, is now a good time to sell them or would you prefer to wait until the share price is higher?
- Have the ***dividends*** been paid?
- How are they doing? Has the share price been increasing?
- What sort of return am I getting from them?

You will also have to deal with the paperwork you receive from the company.

When you buy shares or other investments, they will be held in your name. So if, for example, you buy 1,000 Telecom shares, the Telecom ***share register*** (the list of shareholders) will show that you have 1,000 shares.

So, why would you want to invest directly?

Generally, a number of the main reasons why people want to invest directly are the same reasons people paint their own house:

- Some people find it fun and / or satisfying.
- So you can save money on costs.
- You are someone who is prepared to spend the necessary time to deal with everything.
- Because you have more control over which investments you have.

1.1.3.2 What are Indirect Investments?

Indirect investing is generally much simpler than ***direct investing***.

Why? Because you're paying somebody else with all the knowledge to do the 'legwork' for you, just as you would if you paid somebody else to paint your house for you.

Indirect investments generally involve using ***managed funds***. With these, you do not need to do any of the research, or anything else that follows. All you have to do is hand over your money, and the fund manager will take care of everything for you.

However, on the other hand, it is a good idea to do some research into the past performance of the funds that the fund manager has. In other words, find out whether your fund manager has managed to get good financial returns for investors in the past. (Note that this will be covered further in Section 2: Managed Funds).

When you put money in a managed fund, none of the investments will be held in your name. Instead, they will be held in the name of the manager who is looking after your money, e.g. XYZ Asset Management.

You will usually be charged fees which are calculated as a percentage of the money you have in the fund. These are often charged on a monthly basis.

Depending on the type of fund you choose, fund management fees can be up to 2.0% per year. However most managed fund fees are 1.0% to 1.5% per year.

So, why would you want to invest indirectly?

Generally, a number of the main reasons why people want to invest directly are the same reasons people pay to have their house painted! That is, you may like this option if you:

- do not have the necessary skills and equipment.
- do not have the time or inclination to do it yourself.
- are prepared to pay fees for someone else to do it.
- do not find it very interesting and / or rewarding.

Another reason why you might like to invest indirectly is because you can have access to investments that you may not be able to afford on your own.

Discussion Question:

What appeals to you most – direct investments or indirect investments? Why?

1.1.4 Stock Market Indices

Every day that trading in a stock market takes place, some share prices will go up, some will go down and some will stay the same.

So how do we know how the overall market has performed that day?

We do this by calculating what is known as an ***index***. The plural of the word index is ***indices***, although you will often see the word 'indexes' used also.

A ***stock market index***
is basically an average value
of how all the shares in the index
have performed.

Notice that the index is only based on the performance of the shares 'in the index'. This means that sharemarket indices do not include all of the companies in the world. Instead, for each index, there is a list of companies that are included. There may only be 30 companies in the index, or there may be hundreds.

Different stock market indices are calculated in different ways.

Two of the most common methods of calculating indices are:

1. The ***market-weighted*** method.
2. The ***price-weighted*** method.

1.1.4.1 Market-Weighted Indices

A market-weighted index is based on the total ***market value*** of the companies in the index. The market value of a company is calculated as follows:

Market Value of a Company = Share price x Number of Shares

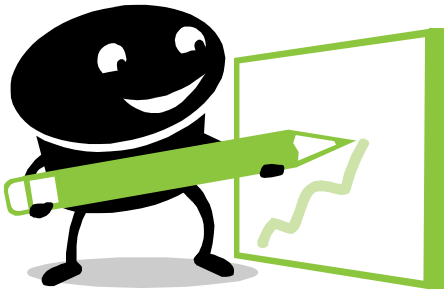
Therefore the total market value is simply the sum of all the market values of companies in the index (i.e. all of the market values added together). The total market value of a company or index is called the ***market capitalisation***.

A market-weighted index basically looks at how the market capitalisation then changes over time.

Does it go up?

Does it go down?

Does it stay the same?



There are a few ways of calculating the index value. You could just leave the calculation as being the ***market capitalisation***, however, you would then be dealing with very large numbers.

For example, the market capitalisation of the main New Zealand stock index (the ***NZX 50***) was $52,943,284,000 as at 4 October, 2013[4]!

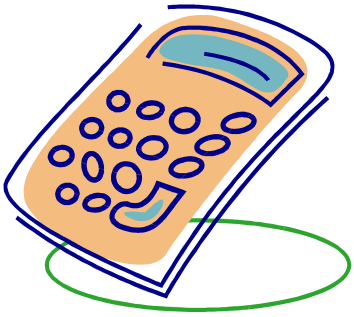
It is more common to divide this number to make it smaller. For instance, the NZX 50 index on 4 October, 2013 was reported as 4759.384[5]. This smaller number is much nicer to work with!

[4] NZX. *Indices*. Retrieved 4 October, 2013, from https://www.nzx.com/markets/NZSX/indices/NZ50
[5] NZX. *Indices*. Retrieved 4 October, 2013, from https://www.nzx.com/markets/NZSX/indices/NZ50

So how do you get a smaller index number?

In reality, the way that the final index number is calculated gets quite complicated. BUT, the calculations are based on some very simple ideas.

A common option is to decide that the very first time the market capitalisation for the index is calculated, the index will be equal to a nice, round number, such as 100 or 1,000. Then, if the market capitalisation increases by (for instance) 5%, the index will increase by 5% (to, say, 105 or 1,050).



Another option is to divide the market capitalisation by the number of companies in the index. An example of how this works is given below.

Example of a Market-Weighted Index

Let's suppose we have a stock market with three companies called A, B and C, and share prices of $2, $3, and $4, respectively. If company A has 300 shares, B has 250, and C has 200, we would calculate the index as follows:

Step 1:

Calculate the total value of shares in the market (the ***market capitalisation***). This is worked out by multiplying the share price by the number of shares.

Company	Share Price	No of Shares	Total Value
A	$2.00	300	$600
B	$3.00	250	$750
C	$4.00	200	$800
Total for A, B and C (Market Capitalisation)			**2,150**

Step 2:

Calculate the average. The average value of the three companies is calculated as 2,150 divided by 3 (i.e. 3 being the number of companies). Our sharemarket index is then 716.67.

Sharemarket Index = Market Capitalisation / Number of Companies
= 2,150 / 3
= 716.67

The Next Day

Each day, the share prices of A, B and C will usually change. For example, the next day, prices may be as follows:

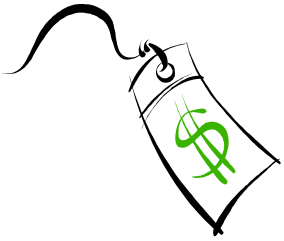
Company	Share Price	No of Shares	Total Value
A	$2.10	300	630
B	$3.10	250	775
C	$3.90	200	780
Total for A, B and C (Market Capitalisation)			**2,185**

In this example, the share prices of companies A and B have gone up, but the share price of company C has gone down. Our stock market index is now 728.33.

Sharemarket Index = Market Capitalisation / Number of Companies
= 2,185 / 3
= 728.33

As this is higher than the previous index of 716.67, the market is considered to have improved.

1.1.4.2 Price-Weighted Indices



As the name suggests, a ***price-weighted index*** is based on the *share prices* of the companies included in the index.

This differs from a ***market-weighted index***, which is based on the *total value* of the companies in the index.

As such, price-weighted indices do **not** accurately reflect the overall performance of the companies within an index.

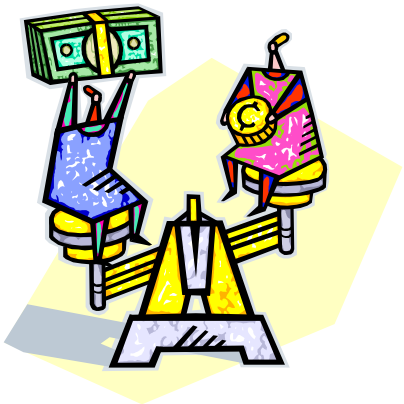
For example, assume there are two companies (Company X and Company Y) which, on one day, each have a value of $100 million:

- Company X has 100 million shares valued at $1 each, and
- Company Y has 1 million shares, each valued at $100.

Even though they have the same total market value, a price-weighted index will mainly reflect the performance of Company Y. In fact, on this particular day, Company Y will make up *100 times* more of the index than Company X.

So if, for example, assume that the next day:

- the price of shares in Company X increased by 10% to $1.10 (meaning that the total value of Company X would now be $110 million), and
- the price of shares in Company Y only increased by 1% to $101 (meaning that the total value of Company Y would now be $101 million).



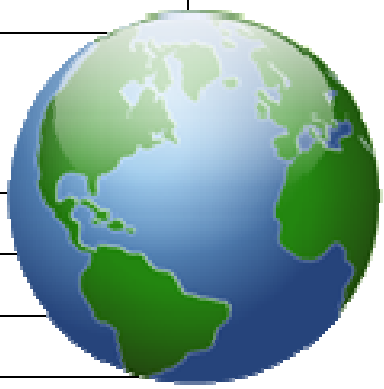
Even though Company X is now worth $9 million more than Company Y, the increase of $1 in Company Y's share price would be given more importance than the increase of $0.10 in Company X's share price.

This is because the number of shares each company has is not even considered. All that matters is that Company Y's price increased by $1, whereas Company X's price only increased by 10 cents!

1.1.4.3 Main Stock Market Indices

The main stock market indices from around the world are:

Country / Region	Index / Indices
Australia	S&P / ASX 200
Japan	Nikkei 225
Hong Kong	Hang Seng
USA	DJIA S&P 500 NASDAQ 100
UK	FTSE 100
Germany	DAX 30
France	CAC 40



The letters in the names all stand for something. For example, S&P / ASX 200 stands for Standard and Poor's / Australian Stock Exchange. The numbers refer to the number of companies in the index.

Probably the best known stock market index in the world is the ***Dow Jones***, or the ***Dow Jones Industrial Average*** (***DJIA***), to give it its proper name. This is a ***price-weighted index*** that has been around since 1896, when it was developed by Charles Dow and Edward D Jones.

The DJIA consists of 30 of the largest companies in the USA, many of which (or their products) are household names in New Zealand. Examples include:

- 3M (Post-it notes)
- Coca-Cola
- McDonalds
- Microsoft
- Johnson & Johnson
- Walt Disney
- General Electric

Discussion Question:

Why do you think that information about the performance of US indices is regularly reported here in New Zealand?

1.1.4.4 The NZX 50

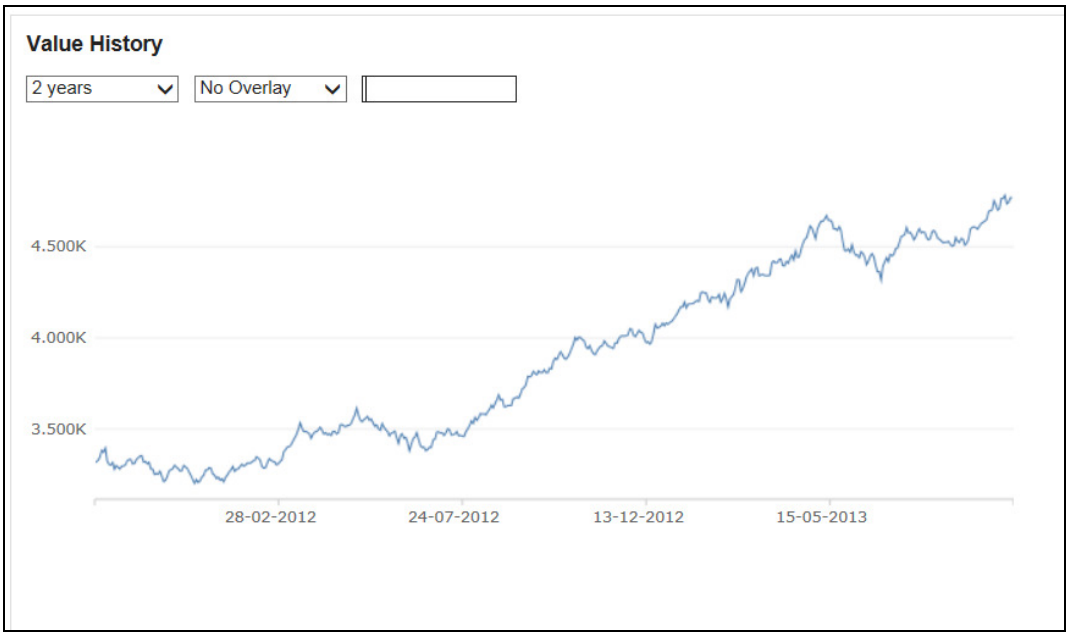
The main New Zealand ***sharemarket index*** is the NZX 50. It reflects the value of the top 50 companies in the NZSX market. Some of the companies that make up this index include:

- Air NZ
- AMP
- ANZ
- Auckland International Airport
- Contact Energy
- Fletcher Building
- Hallenstein Glasson
- Michael Hill
- Pumpkin Patch
- Sky City
- Sky Network Television
- Telecom
- The Warehouse
- Westpac

No doubt you recognise, and buy things from, many of these companies. You will see that, although listed on the New Zealand Stock Exchange, not all of these companies are majority New Zealand-owned e.g. ANZ, AMP, Westpac.

The following chart, shows the performance of the NZX 50 for the two years through to October 2013.

Screen Print: Value of the NZX 50 for the Past Two Years[6]



[6] NZX. *NZX 50 Index*. Retrieved 4 October, 2013, from https://www.nzx.com/markets/nzsx/indices/NZ50?icharts=true

1.2 Share Information and Terminology

By now, you will have noticed that the investment world is full of many specific investment terms.

Throughout this section, you will be introduced to some of the most common terms relating to shares and to the sharemarket.

You will also learn where to find information about shares. However, once you start reading business articles and documents containing financial information, you will find that there are also many other terms used in the financial world.

In order to really understand and use financial information, you will need to become familiar with investment terms. For those terms not covered within this programme, a good way to do this is to:

1. scan through the business section in the daily newspapers to find terms that you do not understand.
2. look up the meaning online using a search engine such as Google, and then
3. read the article in which you found the word, to make sure that you understand what the word means in relation to the article.

You will find the weekend editions of newspapers are a great source of information. They contain a wide variety of general business articles and information about key companies both here in New Zealand and globally. Other good sources of information include websites such as:

- www.stuff.co.nz/business
- www.nzherald.co.nz/business
- http://business.scoop.co.nz/

1.2.1 Finding Share Information

It is very easy to find information about shares these days, and a lot of this information is available on the internet at no cost. The following websites are just three of many websites that contain useful investment information:

1. **www.nzx.com**

   This is the website of ***New Zealand Exchange Limited*** (***NZX***). As well as providing information about the New Zealand stock exchange and ***stock market indices***, it provides details about all companies listed with NZX.

   Information provided for each company includes, for example:

   - Share prices and volumes traded over time.
   - Ratios (e.g. ***P/E ratio***, ***earnings per share***, ***dividend yield***, etc).
   - ***Market announcements*** made by the company.
   - The number of shares the company has.
   - The market value (***market capitalisation***) of the company.

Screen Print: Example of Information on the NZX Website[7]

FBU

$9.520

▼-$0.070 / -0.73%

52 Week Change:
▲$2.270 / 31.31%

Issued By	Fletcher Building Limited
ISIN	NZFBUE0001S0
Security Type	Ordinary Shares
Indices	NZX 50, NZX 20, NZX 15, NZX 50 Portfolio, NZX 10, and NZX All
Sector	Primary / Building

Activity		Performance		Fundamental	
Trading Status	Trading	**Open**	$9.590	**P/E**	20.130
Trades	176	**High**	$9.550	**EPS**	$0.476
Value	$12,846,265.50	**Low**	$9.450	**NTA**	$2.562
Volume	1,351,051	**High Bid**	$9.490	**Gross Div Yield**	4.235%
Capitalisation (000s)	$6,531,638	**Low Offer**	$9.520	**Shares Issued**	686,096,427

[7] NZX. (3 October, 2013). *FBU.* Retrieved 3 October, 2013, from http://www.nzx.com/markets/NZSX/FBU

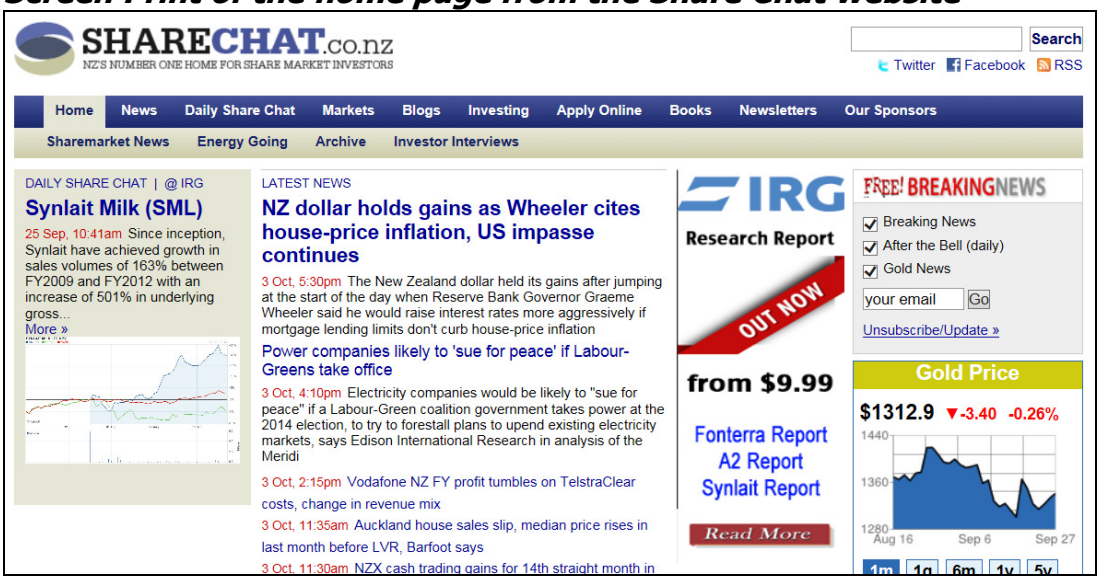
2. www.sharechat.co.nz

This website contains up-to-date news articles about ***public companies*** as well as ***market announcements*** made by companies. It also provides share price information for companies listed on the NZX and the ***Australian Securities Exchange*** as well as links to the company websites.

If you have invested in a company, or are thinking about investing in a particular company, this is a good website to find articles and announcements relating to your company of interest. You can use this information to help make decisions about whether you are going to buy shares, hold shares or sell shares. In fact, you can even subscribe to be emailed news alerts of interest to you (refer to the box titled 'Free! Breaking News' in the below screen print).

If you want more detailed information about a particular company, visit their shop (http://shop.sharechat.co.nz/). Here you can buy detailed research reports for a number of companies.

Screen Print of the home page from the Share Chat website[8]



3. www.asx.com.au

This is the website of the ***Australian Securities Exchange*** (***ASX***). This site provides information similar to that on the NZX site, except it is for ***securities*** listed on the ASX.

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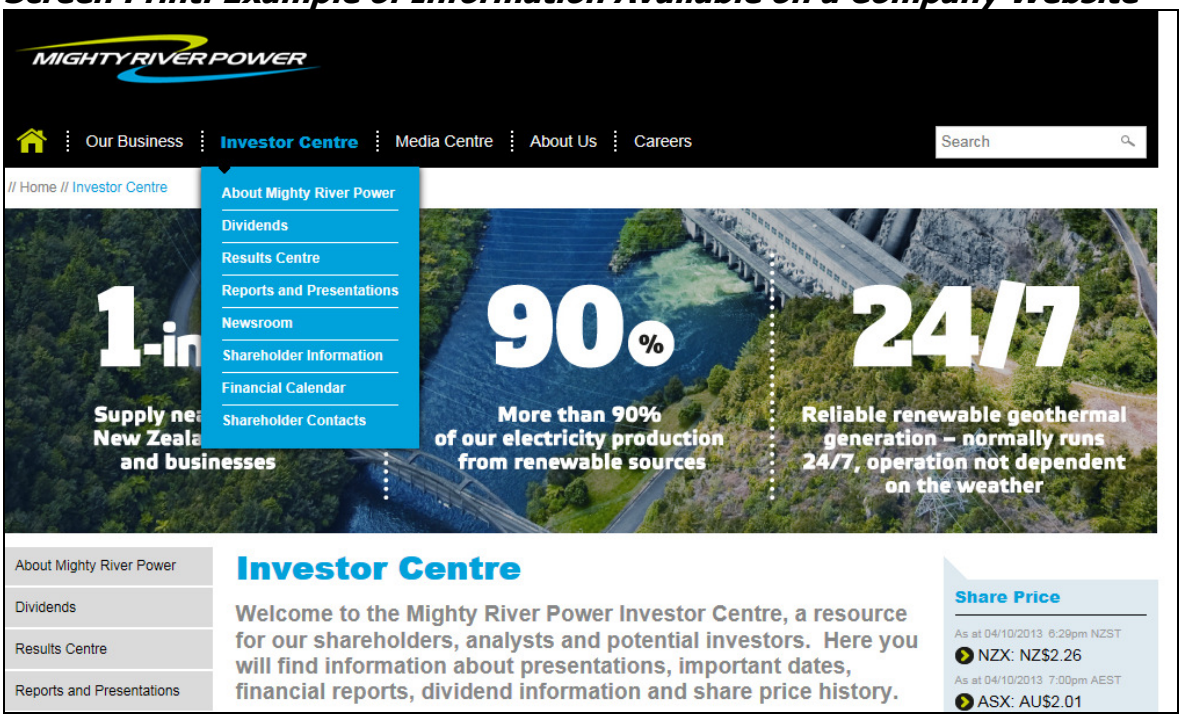
[8] Investment Research Group Limited. Retrieved 3 October, 2013, from http://www.sharechat.co.nz/

1.2.1.1 Company Websites

If you want to find out more information about a particular company, you can usually get this information from the company's own website. This is quite often found under a link on the website called something like 'Investor Relations', 'Shareholders' or 'Our Company'.

For example, on the website of Mighty River Power, there is a tab along the top of the labelled 'Investor Centre'. When you click on this tab, it takes you to the following page:

Screen Print: Example of Information Available on a Company Website[9]



You will usually find the following type of information on company websites:

- The amount of ***dividends*** paid in recent years.
- ***Market announcements***.
- Annual reports. These contain documents such as the ***Income Statement*** (which shows profits and losses) and the ***Statement of Financial Position*** (which shows what assets and liabilities the company has).
- Details about, and ***minutes*** of, shareholder meetings.

[9] Mighty River Power. *Investor Centre*. Retrieved 5 October, 2013, from http://www.mightyriver.co.nz/Investor-Centre.aspx

1.2.1.2 Other Sources of Information

Other sources of share price and company information include:

- **The business sections of daily newspapers.**

  The NZ Herald, Dominion Post and Christchurch Press have particularly good coverage.

- ***Sharebrokers***

  Sharebrokers often send daily information updates to clients. These usually give general business information and share prices, as well as information about selected companies, ***foreign exchange rates*** and interest rates.

- **General news websites and television programmes.**

  These usually report the most significant share price changes of the day and the prices of some of the larger companies.

  Many of the good investment internet sites are based in the USA. If you just want to learn the basics of investing, it is not a problem referring to these sites as the same rules and principles apply no matter what country you live in.

  However, if you want to find out information specific to New Zealand, it's best to use New Zealand websites.

1.2.2 Understanding Information in the Newspaper

As you will have just learnt, it is easy to find information about the share price and performance of companies listed on the stock exchange.

However, if you are new to the sharemarket, the large volumes of data given can be confusing and scary. The purpose of this sub-section is to explain what the figures in the share price tables in the newspapers actually mean.

The following figure shows share prices for some of the companies listed on the ***NZSX***. It was copied from a newspaper and is very similar to share price reports in many newspapers.

The names of companies are listed down the left side of the table and various terms relating to share prices are given along the top of the columns. Data shown in the table relates to the previous day.

To the left of the names of the companies, you will see the company '***code***'. If you are watching the news or looking at information on websites such as the NZX site, quite often you will see that this code is used instead of the company name.

Share Information Reported in The Press[10]

NZX Mkts www.nzx.com Source: NZX

Latest Market Results Data compiled at 5:30pm Wednesday, November 30, 2011

Main Board

Code	Company, QB	Buy	Sell	Last Sale	Daily Move	000's Daily	Daily High	Daily Low	Div CPS	Div Yld%	IMP Credits	Gross Yld%	PE Ratio	NTA
ABA	**Abano Healthcare**	390	400	**400**	–	8.90	400	400	21.00	5.25	9.00	7.50	6.6	-29.1
AIR	**Air NZ**	95	98	**97**	–	502.2	98	95.5	5.50	5.67	1.29	7.00	13.0	133
ALF	**Allied Farmers**	3.3	4.0	**3.0**	–	0	–	–	–	–	–	–	–	-35.4
AMP	**AMP**	541	572	**544**	+9	113.7	544	535	39.66	7.29	–	7.29	17.2	123
ANO	**AMP NZ Office**	83.5	84	**84**	+2	521.3	84	83	3.78	4.50	0.57	5.18	80.6	88.5
ANZ	**ANZ Banking Gr** XD	2555	2590	**2590**	+65	671.7	2605	2555	187.04	7.22	–	7.22	9.9	1494
APN	**APN News & Media**	96	111	**102**	–	0	–	–	14.02	13.75	–	13.75	–	-78.3
ARG	**Argosy Prop Tr** CD	80.5	81	**81**	–	639.5	81.5	81	6.75	8.33	–	8.33	4.6	86.3
ASBPA	**ASB Capital A Pr**	68.9	70	**68.9**	–	67.07	68.9	68.9	3.38	4.91	1.40	6.94	20.6	100
ASBPB	**ASB Capital B Pr**	63.1	65	**63.1**	-0.9	181.4	64	63.1	3.00	4.75	1.24	6.72	19.7	100
AIA	**Auckland Intl Apt**	233.5	234	**234**	+2	4.47m	235	231	8.70	3.72	3.73	5.31	30.6	187
AFI	**Aus Found Inv Co**	534	542	**534**	-1	14.80	538	534	26.86	5.03	–	5.03	17.9	581
AWF	**AWF Gr**	188	195	**190**	–	4.05	190	190	11.40	6.00	4.89	8.57	10.1	20.0
BIT	**Bankers Inv Tr** XD	750	760	**748**	–	1.35	–	–	6.23	0.83	–	0.83	6.7	869
BRM	**Barramundi** CD	66	67	**66**	–	60.50	66	66	7.43	11.26	0.14	11.46	9.3	76.2
BTU	**Bathurst Res**	85	92	**89**	-2	4.00	89	89	–	–	–	–	–	33.7
BLT	**BLIS Tech**	3.2	3.5	**3.5**	+0.1	50.00	3.5	3.5	–	–	–	–	–	-1.08
BLTPA	**BLIS Tech Pr**	–	–	**110**	–	0	–	–	–	–	–	–	–	–
BGR	**Briscoe Gr**	135	141	**135**	-2	173.3	135	135	9.50	7.04	4.07	10.05	11.3	60.1
BPL	**Broken Hill Prosptg**	9.0	–	**18.0**	–	0	–	–	–	–	–	–	–	0.88
BPLOA	**Broken Hill Prosptg Opt**	–	–	**2.0**	–	0	–	–	–	–	–	–	–	–
CDN	**Caledonia Inv** CD	2870	2895	**2875**	–	0	–	–	72.81	2.53	–	2.53	–	3787
CAV	**Cavalier Corp**	216	219	**219**	-3	10.46	219	216	18.00	8.22	7.71	11.74	8.2	134
CDI	**CDL Inv**	31	33	**31**	–	2.60	31	31	1.20	3.87	0.51	5.53	32.3	36.6
CNU	**Chorus**	329	330	**329**	-2	12.37m	331	322	–	–	–	–	–	–
TCL	**City Of London** XD	555	575	**560**	–	0	–	–	26.70	4.77	–	4.77	4.3	553
CLA	**Claridge Capital**	0.7	0.8	**0.8**	–	0	–	–	–	–	–	–	–	0.33
CMO	**Colonial Motor**	260	262	**262**	–	0	–	–	19.00	7.25	8.14	10.36	10.5	351
CVT	**Comvita** CD	272	280	**275**	-12	26.23	280	270	3.00	1.09	1.29	1.56	16.5	93.5
CEN	**Contact Energy**	531	532	**532**	-1	1.6m	536	528	22.83	4.29	9.78	6.13	22.0	416
CUE	**Cue Energy Res**	26	31	**30**	–	0	–	–	–	–	–	–	10.9	17.1
DGL	**Delegat's Gr**	215	220	**220**	–	0.10	220	220	8.00	3.64	3.43	5.19	6.8	166
DIL	**Diligent BM Services**	191	192	**190**	+2	305.2	192	188	–	–	–	–	36.1	1.60
DNZ	**DNZ Property Fund** XD	126	126.5	**126.5**	-1	415.2	126.5	125.5	8.10	6.40	0.23	6.58	3.6	152
DPC	**Dorchester Pac**	7.5	9.8	**8.5**	-0.8	50.90	8.5	8.5	–	–	–	–	–	13.4
DPCOA	**Dorchester Pac Opt**	1.0	2.0	**2.0**	–	0	–	–	–	–	–	–	–	–
DOW	**Downer EDI**	–	–	**–**	–	0	–	–	–	–	–	–	–	257
EBO	**Ebos Gr**	611	614	**614**	-1	21.58	619	614	31.50	5.13	13.50	7.33	10.0	117
ECO	**Ecoya**	98	105	**100**	–	6.33	100	100	–	–	–	–	–	-11.3
MAD	**Energy Mad**	44	80	**80**	–	0	–	–	–	–	–	–	–	6.69
EUT	**European Invest Tr**	930	1000	**970**	–	0	–	–	–	–	–	–	19.4	1145
FCS	**F&C Small Co**	1025	1050	**1040**	–	0	–	–	6.79	0.65	–	0.65	2257	1058
FPA	**F&P Appliances**	34.5	35	**35**	-0.5	1.16m	36	35	–	–	–	–	10.9	55.5
FPH	**F&P Healthcare** XD	235	245	**240**	-2	183.8	240	234	12.40	5.17	4.82	7.18	19.6	56.1

[10] The Press. (30 November, 2011). *NZX Markets*. Christchurch.

Let's look at the meanings of the terms used:

1. ***Buy*** – the highest price (in cents per share) that someone was offering to pay for shares in the company when the sharemarket closed. If you owned shares, and were considering selling them, this is the price you could have received. Also known as the ***Bid Price***.

2. ***Sell*** – the lowest price (in cents per share) at which someone was offering to sell their shares in the company at the time the market closed. If you wanted to buy shares, this is the price you would have paid.

3. ***Last Sale*** – the price (in cents per share) at which shares last traded for.

4. ***Daily Move*** – the difference between the current ***last sale*** price and the opening price for the day (i.e. the previous day's last sale price).

5. ***000's Daily*** – the number of shares traded during the day.

6. ***Daily High*** – the highest price the shares traded for during the day.

7. ***Daily Low*** – the lowest price the shares traded for during the day.

8. ***Div CPS*** – ***Dividend Cents per Share***. This is the value of dividends paid to shareholders for each share over the previous twelve months.

9. ***Div Yield %*** – ***Dividend Yield***. This figure indicates how much your shares would earn over a year, expressed as a percentage. It is calculated as:

Div Yield % = Annual Dividends Per Share / Current Share Price x 100

It is usually based on the previous year's dividends.

10. ***Imp Credits*** – ***Imputation Credits***

When a company pays tax on its profits, it will carry ***tax credits*** called imputation credits. These tax credits avoid ***double taxation*** of company profits when paid to shareholders. In other words, these make sure that shareholders do not have to pay tax on all of the company's profit when the company has already paid some tax.

This column of the newspaper indicates the amount of imputation credits attached to each ***dividend*** (for each share). When a company attaches imputation credits to dividends, the dividends are referred to as being ***imputed***. Depending on the tax status of the company, dividends can be fully, partially or not imputed.

11. ***Gross Yield %*** – last year's dividends (per share), including imputation credits, as a ***proportion*** of the current share price. This is expressed as a percentage.

$$\text{Gross Yield \%} = \frac{\text{Annual Dividend Per Share} + \textbf{\textit{Imputation Credits}}}{\text{Current Share Price}} \times 100$$

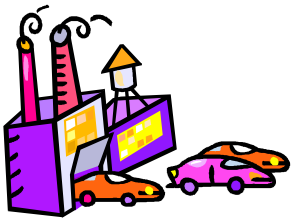
12. ***PE Ratio*** – ***Price Earnings Ratio*** (***P/E Ratio***). This is the share price divided by the previous year's full published ***earnings per share***.

P/E Ratio = Current Share Price / ***Earnings Per Share***

The higher the P/E Ratio, the more that investors are willing to pay for each dollar of profit. Also (generally) the higher the P/E Ratio, the higher the risk in an investment.

- A high P/E ratio indicates that investors expect the profits of the business to grow a lot.
- A low P/E ratio indicates investors do not expect large growth in profits.

- ***NTA*** – ***Net Tangible Asset Backing***.



This indicates how a company would be worth (on a per share basis) if the company was to stop trading. It is the value of physical assets (per share) left after paying all debts in the company that would be available to shareholders.

$$\text{NTA} = \frac{(\text{Total Assets} - \textbf{\textit{Liabilities}} - \textbf{\textit{Intangible Assets}})}{\text{Number of Shares}}$$

An ***intangible asset*** is one that has no physical presence. I.e. it is an asset that you cannot see or touch. An example is ***goodwill***. You will learn about goodwill in Section 5 of this Module.

A few other examples of information often reported in share price tables include:

13. ***52 Week High*** – the highest price the shares have traded at over the last year (52 weeks).

14. ***52 Week Low*** – the lowest price the shares have traded at over the last year (52 weeks).

15. ***Adjusted EPS*** – ***EPS*** stands for ***Earnings per Share***.

    The EPS is the amount of profit (after tax) that the company has earned, for each share in the company.

$$\text{EPS} = \text{Profit (after tax)} / \text{Number of Shares}$$

As company profits are not reported on a daily basis, the profit figure is usually either for the previous quarter or year. The *adjusted* EPS adjusts the profit figure so that it is not affected by one-off unusual transactions.

1.2.2.1 Case Study: Air New Zealand

Look at these figures for Air New Zealand reported in the newspaper table shown previously (in the 30 November 2011 edition of The Press).

	Buy	Sell	Last Sale	Daily Move	000's Daily	Daily High	Daily Low
Air NZ	95	98	97	-	502.2	98	95.5
	Div CPS	**Div Yield %**	**Imp Credits**	**Gross Yield %**	**PE Ratio**	**NTA**	
	5.50	5.67	1.29	7.00	13.0	133	

1. **Buy** – if you wanted somebody to buy your Air NZ shares, i.e. you wanted to sell them, the price you were likely to receive at that time was $0.95. This means that if you wanted to sell 1,000 shares, you would have received $950 (from which you would have had to pay your sharebroker's fees).

2. **Sell** – if you wanted somebody to sell Air NZ shares to you, i.e. you wanted to buy them, the price you were likely to pay at that time was $0.98. This means that if you wanted to buy 1,000 shares, you would have paid $980 (plus your sharebroker's fees).

3. **Last Sale** – the last trade the previous day was made at $0.97. This is the price that is usually quoted as the closing stock price, even though it may not be the one you could buy or sell at.

4. **Daily Move** – The final sale price for Air NZ shares had not changed since the day before. This means the last trade the day before was also at $0.97.

5. **000's Daily** – the number of shares traded (bought and sold) on the previous day was approximately 502,200.

6. **Daily High** – the highest price at which the shares had traded during the day was $0.98.

7. **Daily Low** – the lowest price at which the shares had traded during the day was 95.5 cents.

8. **Div CPS** – over the previous year, every shareholder received a dividend of 5.5 cents for every share they owned. This means that if you owned 1,000 shares, you would have received $55 in dividends. This amount is after tax.

9. **Div Yield %** – this means that the 5.5 cents per share dividend is 5.67% of the share price of $0.97.

Div Yield % = Annual Dividends Per Share / Current Share Price x 100
= $0.055 / $0.97 x 100
= 5.67

10. **Imp Credits** – ***Tax credits*** of 1.29 cents come with each dividend of 5.5 cents. New Zealand shareholders can use this to offset (reduce) tax that they will have to pay for receiving income (i.e. the dividends) from the company.

11. **Gross Yield %** – if you add the imputation credits of 1.29 cents per share to the dividend paid of 5.5 cents per share, you get a ***gross dividend*** (before tax dividend) of 6.79 cents per share (***cps***). This means that the 6.79 ***cps*** gross dividend is 7% of the share price of $0.97.

$$\text{Gross Yield\%} = \frac{(\text{Annual Dividend Per Share} + \textbf{\textit{Imputation Credits}})}{\text{Current Share Price}} \times 100$$

= ($0.055 + $0.0129) / $0.97 x 100
= $0.0679 / $0.97 x 100
= 7.00%

12. **PE Ratio** – The P/E ratio of 13.0 is the share price ($0.97) divided by the Earnings Per Share (EPS).

    Although the EPS is not shown in this table, from the information we have been given, we can work it out to be about 7.5 cents per share:

P/E Ratio = Current Share Price / ***Earnings Per Share***

So:

Earnings Per Share = Current Share Price / P/E Ratio
= $0.97 / 13.0
= $0.07462

The EPS of $0.07462 means that the company earned about 7.5 cents of profit for each share that it has.

The P/E Ratio of 13 therefore means that the share price is 13 times bigger than the last year's profit. So if someone bought a share, they paid 13 times more for this share than the company earned in profits! Although this seems high, a P/E ratio of 13 is quite common (perhaps even a little low). It is not uncommon for P/E Ratios to be above 50.

A high P/E Ratio indicates that investors expect that profits will be higher in the future.

In the case of Air NZ, if the business doesn't grow and start earning higher profits, it will take 13 years before the company has earned enough profits to cover the price investors paid for their shares!

On the other hand, a high EPS figure could indicate that the shares are over-valued.

13. **NTA -** Tangible assets are things that you can touch. For Air NZ, this would include the planes, computers, buildings, etc. that they own. Air NZ's intangible assets would include things such as the value of the Air NZ brand name.

    Air NZ's Net Tangible Asset backing of 133 means that, if the company was to stop trading, after paying all debts, about $1.33 per share would be available to shareholders.

1.2.2.2 Dividend Terms

When you are looking at share information reported in newspapers, you may also see some letters next to the company name. The two most common sets of letters you might see are ***XD*** and ***CD***.

XD CD

- ***CD*** means ***cum dividend***, where 'cum' is Latin for 'with'. This means that if you buy a share marked CD, you will be ***entitled*** to the next dividend payment unless, of course, you sell before it goes ***ex dividend*** (***XD***).

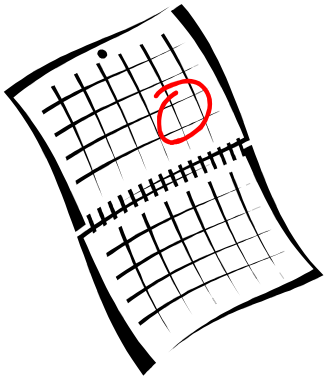
- ***XD*** means ***ex dividend***. This means that if you buy a share marked XD you will **not** be entitled to the next dividend payment. The dividend amount, the

record date, the ***ex dividend date*** and the ***payment date*** are all announced when the company publishes its financial statements.

- People who are registered as shareholders at the close of business on the ***record date*** are people who are entitled to a dividend.

- The ***ex dividend date*** in New Zealand is the day after the ***record date***. People who buy the company's share on (or after) this day will not receive the dividend.

  On the ex dividend date, the company's share price will fall by the amount of the dividend as long as nothing else happens. For example, if the share price is $2.00 on the record date and the dividend is 10 cents per share, the share price will fall to $1.90 on the ex dividend date.



- The ***payment date*** is the date that the dividend is paid. In NZ, this is usually between one and four weeks after the ex dividend date. Overseas, it is common for this period to be three months.

- The dividend amount is the amount of dividend that will be paid by the company. This is given in cents per share. So if, for example, it is 129, this means that 129 cents (or $1.29) will be paid per share. The amount of the dividend is nearly always given *after* imputation credits (i.e. after tax, *without* the imputation credits being added back on).

1.2.2.3 Other Sharemarket Terminology

We live in a global economy. This means that events overseas have an effect in our country, as well as others. You will therefore generally find that stock markets around the world move together and follow similar trends.

Small economies, such as New Zealand, are particularly influenced by the performance of large economies, such as the USA. That is why here, in New Zealand, we hear a lot of news about the US economy and USA ***stock market indices*** such as the ***Dow Jones*** and ***S&P 500***.

When you listen to the daily news on the TV and radio, you are likely to hear terms that describe trends in ***stock market indices***. Some of the most common terms include 'bull market', 'bear market' and 'crab market'.

- ***Bull Market***

  When sharemarket prices are following an upward trend, we are said to be in a ***bull market***. People who are ***optimistic*** about sharemarkets (i.e. they think company share prices will rise) are often referred to as ***bulls***, or as being ***bullish***.

- ***Bear Market***

  A ***bear market*** is the opposite of a bull market. In a bear market, company share prices are falling. People who are ***pessimistic*** about future share prices are often referred to as ***bears***, or as being ***bearish***.

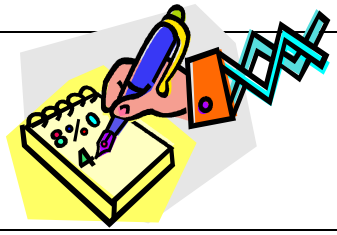
- ***Crab Market***

  When share prices are not trending up or down, but are instead moving along steadily (sideways), it is said to be a crab market.

1.2.3 Using Share Information

You can use the data reported in share tables (such as the one shown previously in this section) to help you decide whether a particular company's shares are worth buying. However:

There is no single number, ratio or combination of numbers which will guarantee success.



Numbers, percentages and ratios that are 'usual' will be different from industry to industry and from company to company. Therefore, a figure that is considered 'excellent' in one industry may be considered as 'poor' in another. However, the following points may be useful when deciding how to use share information:

- **The Spread**

  The difference between the buy and sell prices is called the ***spread***.

  For example: if the sell price is $1.07 and the buy price is $1.00, the spread is 7 cents.

  - If you were to buy this share, you would pay $1.07 plus your sharebroker's fees.
  - If you were to sell it straight away, you would only receive $1.00 and would have to pay fees again.

  Thus, it is better to wait until the share price has increased enough so that the buy price is above $1.07.

The larger the spread,
the more the share price has to go up
before you will make a profit.

Some companies have a spread of 10%. This means that the share price will have to go up by about 11% or 12%, including an amount for your sharebroker's fees, just so you can ***break even***.

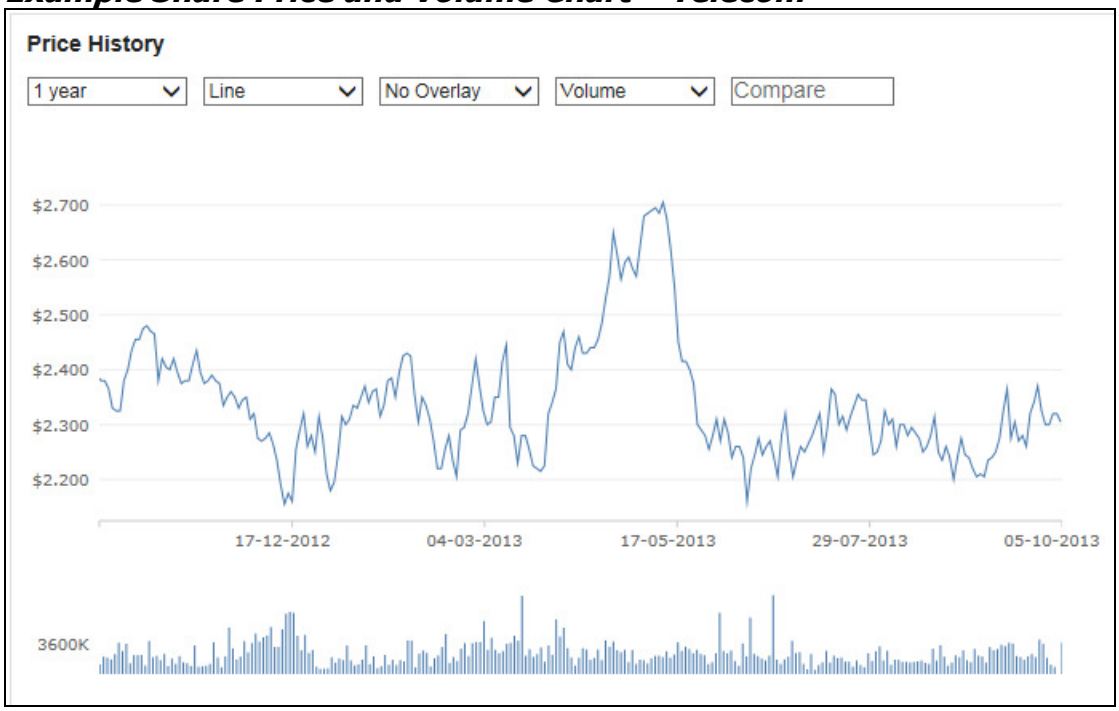
- **The Volume**

Figures for the ***000's Daily*** and ***000's Weekly*** terms (which show the number of shares traded) is also called the ***volume***.

If the price changes (increases or decreases) and there is a high volume of shares traded, this is considered more significant than if there had only been a low volume. For this information to be of use to you, you need to know what volume is normal for the company that you are interested in.

Often share price charts include a separate chart, showing the volume. The below example of this is the Telecom share price and volume chart from NZX.

Example Share Price and Volume Chart – Telecom[11]



[11] NZX. *Telecom Price History.* Retrieved 5 October, 2013, from https://www.nzx.com/markets/NZSX/securities/TEL?icharts=true

- **The 52 Week High and 52 Week Low**

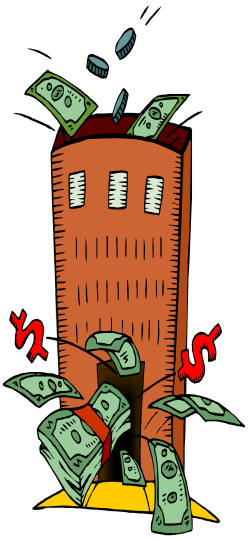
One investment strategy based on the ***52 Week High*** and ***52 Week Low*** figures involves buying shares in companies for which there is a large difference between the high and low (i.e. the company share price has moved a lot lately).

A company whose share prices change a lot is much more likely to experience a sudden increase in share prices in the near future than a company with a stable share price.

If this happens, the investor can then sell their shares at a higher price and earn a profit. However, note that it is also more likely to experience a sudden decrease in share prices!

- **Dividends**

Some investing strategies involve buying shares in companies that pay high dividends. This is because dividends provide a financial return to investors. This reduces the risk associated with holding shares.



For example, assume that you hold shares in a company that does not pay any dividends at the moment and does not expect to within the next few years.

The only way you will financially benefit from the company during this time is if the share price increases and you sell your shares at a higher price than you bought them for. If the company instead goes bankrupt during this time, you will lose the total amount you invested in its shares.

Now assume that you hold shares in a company that pays dividends. If this company goes ***bankrupt***, at least you will have received some return on your investment over the period for which you held the shares.

If a company pays low dividends, this is often an ***indicator*** that it intends to grow a lot in the near future. This is because it is re-investing all of its profit back into the company.

- **The P/E Ratio**

The P/E Ratio is used a lot in investment decision-making. Generally, a low P/E ratio is better than a high P/E ratio.

If a P/E ratio is very high, it may mean that the shares are overpriced. That is, people are paying far more for the shares than the company is worth in terms of the profit it generates. If this is the case, the price could drop substantially.

However, you need to be careful – a small, fast-growing company may well have a high P/E ratio, whereas a company just about to go bankrupt may have a very low P/E ratio.

Generally, the reason why a company has a high P/E ratio is because investors believe that the company is growing and will perform very well in the future.

For example, although profits in the previous year may have only been $1 million, the company may have invested in a new product that is expected to increase profits to $20 million in the next year.

Thus, people are really paying the high price based on *future profits*, not past profits. As a result, some investors actually prefer to invest in companies that have high P/E ratios.

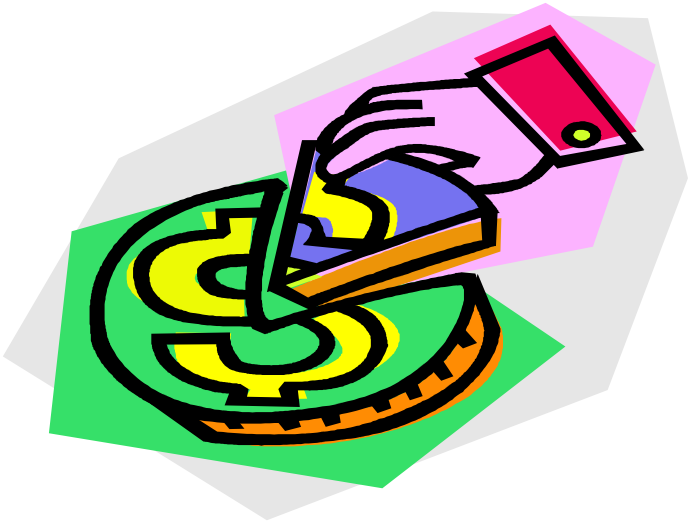
As an investor, it is a good idea to compare the P/E ratio of a company that you are considering investing in with that of other companies in the same industry. Also compare the expected growth of each company.

Even if a company has quite a high P/E ratio, if you think that the growth prospects of this company are very high compared to other companies in the industry, it may well be a good company to invest in.

- **Net Tangible Assets**

  A high value of ***NTA*** (net tangible assets) in relation to the share price is generally a good sign. If the NTA value is higher than the share price, this means that, if the business was to go out of operation, there is a good chance that investors would get back some (or even all) of the money they had invested in shares.

  However, be aware that asset values recorded in financial statements are calculated based on accounting procedures. They do not necessarily reflect current market values. As a result, if a company was to stop trading and sell its assets, it may not be able to receive as much money as indicated in the financial statements. Alternatively, it could receive much more.



1.3 Trading Shares and Tracking Performance

1.3.1 Buying and Selling Shares

In this section we cover the process of buying and selling shares, as well as the costs involved.

1.3.1.1 How do I Buy and Sell Shares?

Buying and selling shares now quite an easy process.

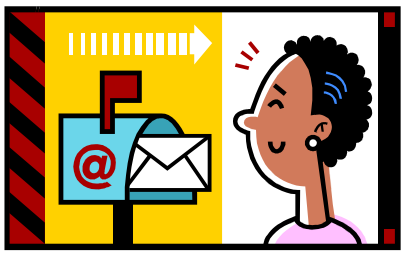
1. First, you need to open an account with a ***sharebroker***. To do this you will need a bank account and you will need to provide identification, just as you would when you open a bank account.

   You will need to complete your sharebroker's account opening forms, which will require you to provide further information about yourself (including your IRD number). Once you have done this, you will need to send these forms back to the sharebroker before they will deal for you.

2. If you want to buy shares, you will probably have to place enough money in your sharebroker's bank account before they will buy on your behalf.

3. Your sharebroker will then place a buy order to purchase the shares.

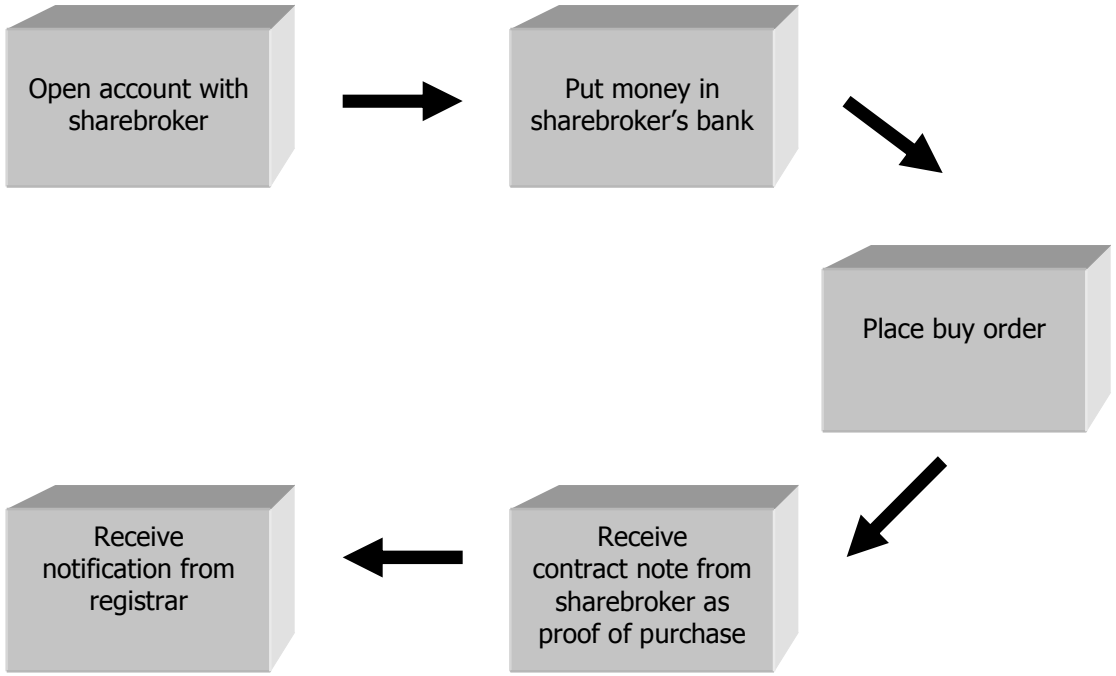
4. After you have bought the shares, your sharebroker will send you a ***contract note***, usually by email. This shows exactly what you have bought, how much you paid and lists any other charges.



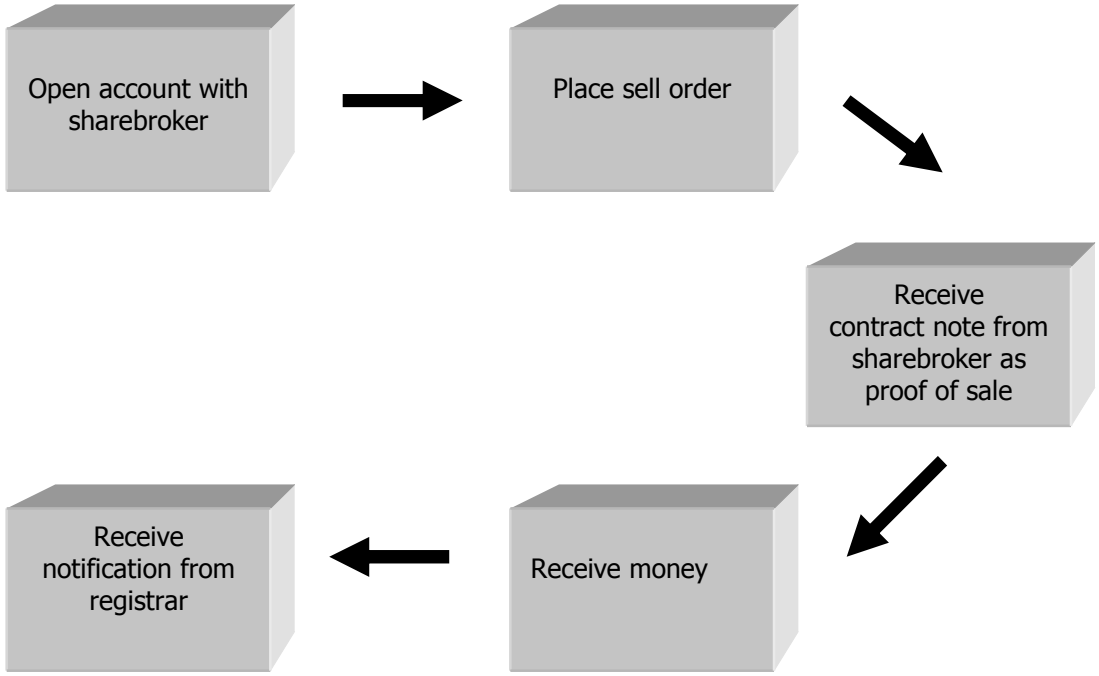
5. The ***share register*** for the company will be updated to show how many shares you own. You will then receive a document from the company's ***share registrar*** confirming these details.

The processes for buying and selling shares are shown on the following page. Note that the procedure for selling overseas shares may be different.

The Process of Buying Shares



The Process of Selling Shares



1.3.1.2 Share Registers

The last steps in the processes of buying and selling shares (shown on the previous page) are to 'receive notification from the registrar'.

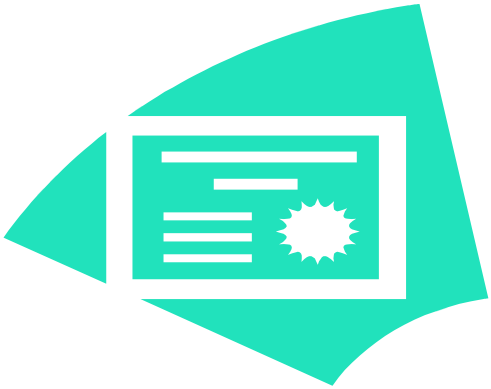
Registrars are paid by a company to look after that company's ***share register***. The share register lists all the names and contact details of the company's shareholders.

The main share registrars in New Zealand are:

1. Computershare (www.computershare.co.nz).
2. Link Market Services (www.linkmarketservices.co.nz).

Computershare operates in several countries, and acts as the registrar for most New Zealand companies.

In days gone by, after you had bought shares, the company would send you a fancy, and often engraved, ***share certificate***. These old certificates are now sought after by collectors.



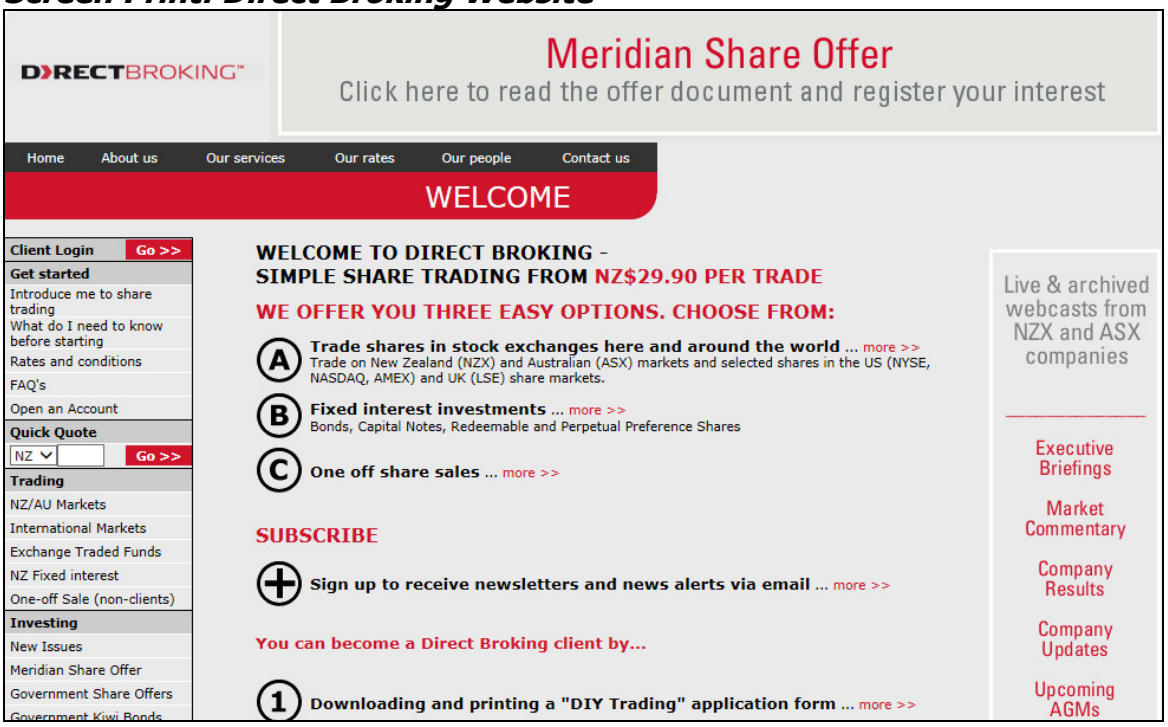
However, nowadays, share registers are electronic. When you buy shares, all you will receive now is an ordinary piece of paper from the company's share registrar showing how many shares you own. You will receive an update of all your share holdings with that particular registrar every time you buy or sell shares.

1.3.1.3 Online Share Trading

The process involved in share trading has now been made even easier with the availability of online share trading.

Direct Broking, a subsidiary of ANZ Bank New Zealand Limited, was the pioneer of online trading in New Zealand. If you are interested in buying and selling shares, you can complete an application form and open an account with Direct Broking via their website www.directbroking.co.nz.

Screen Print: Direct Broking Website[12]



Once the registration process has been completed, you are then able to trade ***securities*** registered on both the ***NZX*** and ***ASX*** stock exchanges, as well as some shares in the US and UK sharemarkets.

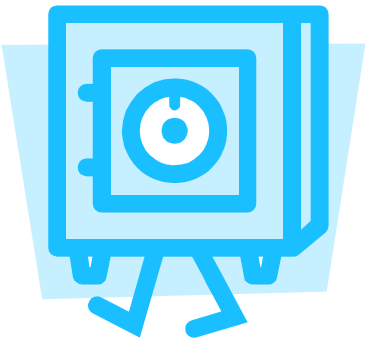
Like ANZ, nowadays, a number of other banks either work in partnership with a ***broking firm*** or have a broking firm as a ***subsidiary company***, so that they can offer share trading as part of their online services. Thus, when you register for online banking, you can also register for online share trading.

[12] Direct Broking Limited. Retrieved 5 October, 2013, from http://www.directbroking.co.nz/directtrade/static/home.aspx

1.3.1.4 Identification and Shareholder Numbers

When you buy New Zealand shares for the first time, you will be given the following two numbers:

1. *FASTER Identification Number (FIN)*



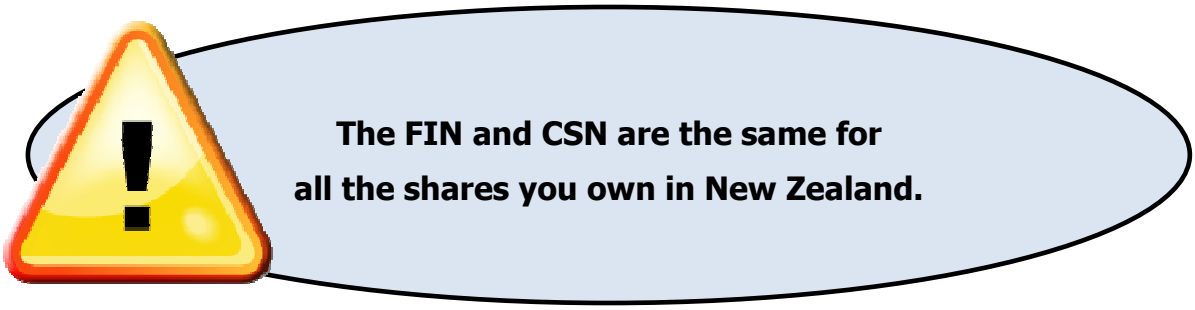
'***FASTER***' is the electronic system used to buy and sell shares on the ***NZX*** markets. It stands for Fully Automated Screen Trading and Electronic Registration System.

The ***FIN*** acts like a PIN number for an EFTPOS transaction, so you should keep it in a safe place. If you want to sell New Zealand shares, you will need to quote your FIN number.

If you lose your FIN you will not be able to sell your shares. To find out what it is, you will have to contact the ***registrar***. It will take a few days to get your FIN as, for security reasons, they will only post it out to you. So if you want to be able to sell shares in a hurry, you need to keep your FIN handy.

2. *Common Shareholder Number (CSN)*.

The ***CSN*** is the number that share registrars use to keep a record of all the shares you hold.



1.3.1.5 How Much Does it Cost?

When buying or selling shares, you pay ***commission*** to your ***broker***, just in the same way as you would pay commission to a real estate agent when you sell a house. It is cheaper to buy using online broking services than it is using the telephone and actually speaking to a person.

Some sharebrokers will also offer advice on what to buy or sell, but it is quite common for them to act on an 'execution only' basis. This means that they will just follow the instructions they are given to buy or sell shares and will not offer any advice.

Typical costs for buying shares are outlined below. Please note, however, that rates do vary from broker to broker. Also, sometimes brokers may give discounted rates for larger purchases (e.g. for purchases above $50,000).

Typical Commission Fees Charged Using the Telephone

- New Zealand shares:
  - 0.7 to 1.0% of the transaction value
  - minimum fee of $30.00 - $35.00
- Australian shares:
  - 0.7 to 1.0% of the transaction value
  - minimum fee of A$35.00 - A$40.00
- UK shares:
  - 0.6 to 2.0% of the transaction value
  - minimum fee of £50.00 - £70.00
  - In the UK there is also British government stamp duty of 0.5% on share purchases.
- USA shares:
  - 0.6% to 2.0% of the transaction value, including an 'agency fee'
  - minimum fee of US$40.00 - US$70.00

Typical Commission Fees Charged Using Internet Broking Services

- New Zealand shares:
  - 0.2 to 0.4% of the transaction value
  - minimum fee of $30.00
- Australian shares:
  - 0.3% to 0.7% of the transaction value
  - minimum fee of A$30.00 - A$40.00

For more information about the processes and costs involved in trading shares, you can contact:

- ASB Securities (www.asbsecurities.co.nz)
- Direct Broking Limited (www.directbroking.co.nz)
- First NZ Capital Limited (www.firstnzcapital.co.nz)
- Forsyth Barr (www.forbar.co.nz)

Screen Print: The ASB Securities Rates & Fees Webpage[13]

Brokerage Rates

	Internet	Telephone
New Zealand Trades	0.3% with a minimum of NZ$30.00 per trade	0.7% with a minimum of NZ$35.00 per trade
Australian Trades	0.3% with a minimum of AU$30.00 per trade	0.7% with a minimum of AU$35.00 per trade
United States Trades-For orders up to US$50,000		0.8% with a minimum of US$50.00 per trade **plus** Agency Fee 0.4% with a minimum of US$40.00 per trade
United States Trades-For orders above US$50,000		Negotiable Contact us **0800 272 732**
United Kingdom Trades-For orders up to £50,000		1% with a minimum of UK £50.00 per trade **plus** Agency Fee 0.4% with a minimum of UK £40.00 per trade
United Kingdom Trades-For orders above UK £50,000		Negotiable Contact us **0800 272 732**
Canadian Trades		0.8% with a minimum of CAD$40.00 **plus** Agency fee 0.4% with a minimum of CAD$30.00 per trade

[13] ASB Securities. *Brokerage Rates.* Retrieved 20 September, 2013, from https://www.asbsecurities.co.nz/section91.asp?. Note that this is a screen print only and should not be considered as an advertisement.

1.3.2 Financial Returns

There are basically only two types of returns on your money you can get from owning any investment:

1. **Capital growth** (often shortened to just 'growth')

   Capital growth is the value of your investment increasing. In terms of the sharemarket, you receive ***capital returns*** when you sell your shares for a higher price than what you purchased them for.

2. **Income**

   This is the money you receive from your investment over the time that you own it. Income includes, for example:

- interest from cash deposits and term investments.
- interest from ***bonds*** (called ***coupon*** payments).
- rent from property investment.
- ***dividends*** from shares.

NZ companies pay out a very high ***proportion*** of their profits as dividends compared to companies in other countries. Sometimes companies will buy back some of their shares to try to increase the share price. That is, if there are fewer shares, then each share may be worth more.

Many companies offer a facility to shareholders to reinvest their dividends into company shares. They do this by using the cash from the dividends to buy more shares. The dealing costs for this are usually free or very low.

Note that, in most countries, ***capital gains*** are taxed at a lower rate than income.

1.3.2.1 Returns from Types of Investments

Let's take a look at four key types of investments and see what types of returns we can expect from each:

1. Cash

Description of Investment:

Money in the bank, term deposits, etc.

Returns Available:

All returns will be income, in the form of interest payments.

2. Bonds

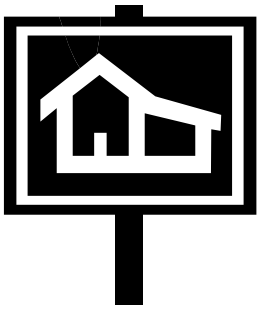
Description of Investment:

Debt. That is, it involves lending money to companies so that they can grow their businesses without seeking more money from investors (i.e. without issuing more shares). Governments and local authorities may issue bonds so that they can raise money without increasing taxes or rates. I.e. these are basically loans, or IOUs, to companies, etc.

Returns Available:

Returns from bonds are mainly cash from interest payments, but it is possible to make capital gains from trading bonds.

3. Property



Description of Investment:

Rental properties, commercial properties, etc.

Returns Available:

Returns will be a mix of income from rent and capital gains from property values increasing over time.

4. Shares

Description of Investment:

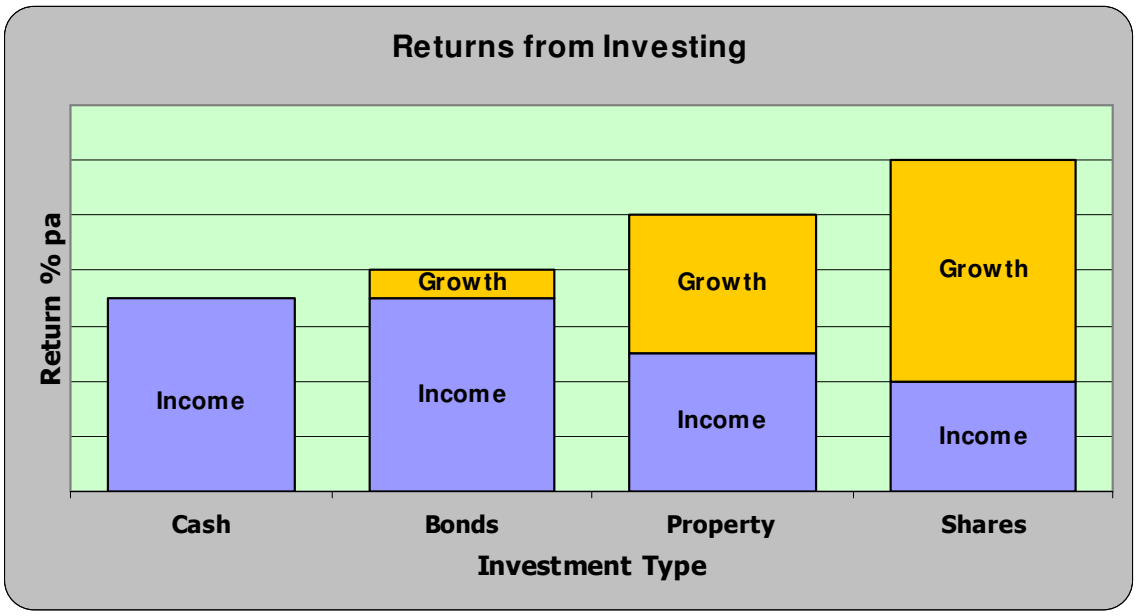
Investing money so that you own a part of a company. This could include private companies and public companies.

Returns Available:

Investing in shares can sometimes be a bit of a rollercoaster ride. Most advisers would not recommend buying shares if you only intend to keep them short term.

However, over the long term, shares should show good returns, from both capital growth and from dividends.

The chart below shows the types of returns, and approximate long-run average amounts of returns, you can expect from these four main types of investments.



Note that returns from individual investments may be quite different from the above chart.

The **risk** involved in each of these types of investments increases from cash, through to bonds, to property and then to shares.

Remember:

the riskier an investment,

the higher the chance that the investment will produce

very high returns OR very low returns.

Therefore, although, on average you could expect a much higher rate of return for shares, it is possible that a company could perform really poorly. The return on this particular investment may therefore be much lower than the return you receive on a cash investment!

Also note that, rates of return between types of investments vary from year to year - it is not uncommon for the property market to provide higher returns than the sharemarket in some years.

Discussion Question:

Why do you think that the income returns on shares are generally lower than the income returns on other investments?

Section 2

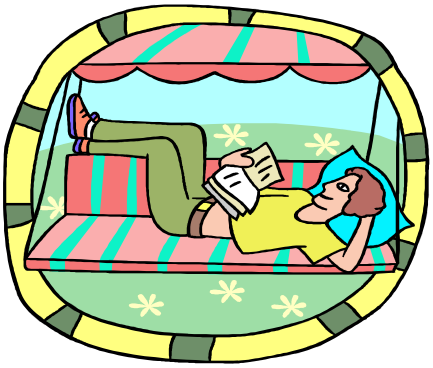
Managed Funds

2.0 Managed Funds

Not everyone wants to have ***direct investments*** and then be responsible for managing their own investment ***portfolio***. Some people choose not to because they do not have enough investment knowledge. Others choose not to because they do not have the time or desire to do so.

Managed funds are an easy alternative:

You pay an investment expert to manage your investment, while you sit back and wait for your investment to grow.



Note: Managed funds are a type of ***indirect investment***.

This does not, however, mean that you do not have to build some basic investment knowledge. Investors who leave everything to the professionals can find that their investments do not give them the returns that they wanted. This will leave them disappointed and frustrated.

Key point:

Managed funds can be a useful investment vehicle.

However, you need to understand the investment basics before you leave everything to the experts!

2.1 About Managed Funds

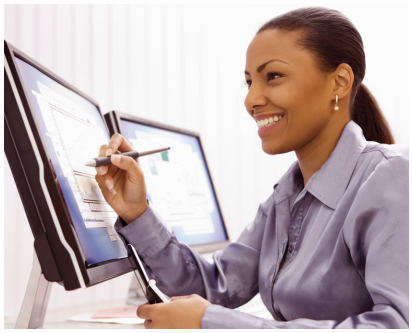
2.1.1 What is a Managed Fund?

A ***managed fund*** is a professionally-managed investment. It involves pooling money from many investors and investing this money on their behalf. In other words, it involves an investment company getting money from a lot of investors (such as yourself), joining this money all together, and investing it.

Individual investors are given ***units*** or ***shares*** in the fund. The number of units an investor gets depends upon the amount of money they invested.

A managed fund is ***administered*** through an investment company. This investment company ***appoints*** a ***fund manager***, also known as a ***portfolio manager***, to look after the fund.

The ***fund manager*** is responsible for:



- Deciding which investments (shares, bonds, etc.) to buy and sell for the fund. Their goal is to increase the value of the fund for its investors.

- Collecting the income for the investment (i.e. dividends and interest that the fund has earned) and making sure it is correct.

2.1.1.1 Types of Managed Funds

In New Zealand, there are four main types of managed funds:

1. *Unit Trusts*

A ***unit trust*** is a managed fund that is governed by the *Unit Trusts Act 1960*. Every unit trust has a ***Trust Deed*** which sets out the rules that the trust must follow. A unit trust must have an ***independent trustee*** to look after the interests of investors.

When you invest in a unit trust, you buy 'units'. The price of these units moves up and down to reflect the value of the investments in the fund.

In the USA, unit trusts are known as ***mutual funds***.

2. *Group Investment Funds (GIFs)*

A ***GIF*** is similar to a Unit Trust. The main difference is that a GIF does not require an ***independent trustee***. That is, the ***trustee*** and the manager can be the same person / ***entity***.

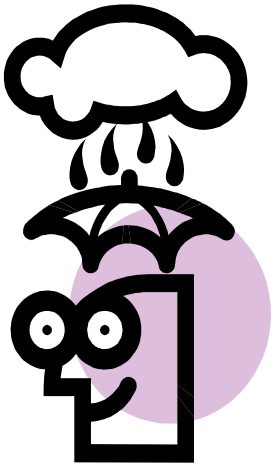
3. *Superannuation Funds*

Along with Unit Trusts, these are one of the most popular types of managed investment in New Zealand.

Investors in these funds usually set a date at which their investment ***matures*** (ends). Or they will have a date set for them. This date is usually an estimated retirement date based on the investor's age.

Most superannuation funds either require some, or all, of the invested funds to be 'locked in' until the ***maturity date***, or they provide an option for investors to do this. When funds are 'locked in', you usually have to wait until the maturity date to get your money out, BUT in some circumstances (e.g. death or disability) the money may be available sooner.

4. *Insurance Bonds*



A number of ***insurance companies*** offer ***life insurance*** policies that are investment-linked.

Insurance bonds are similar to unit trusts – when someone purchases insurance bonds, they (the ***bondholder***) are given units in a managed fund (in ***proportion*** to how much they contribute).

No income or ***dividends*** are paid out to investors. Instead, any earnings are re-invested in the fund. The price of bonds will then change depending on the value of the investments in the fund.

When the bondholder dies, their investment and any earnings on the investment are returned to their estate, tax free.

2.1.1.2 Open-End and Closed-End Funds

Managed funds can either be 'open-end' or 'closed-end' funds:

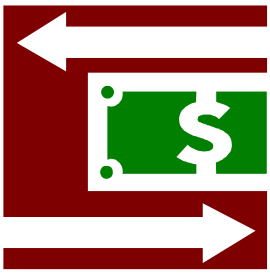
- ***Open-end funds***

  This is the most popular type of fund. People who invest in an open-end fund can invest more money at any stage – the fund simply issues more shares.

  Similarly, investors can 'cash out' their shares in the fund at any stage (i.e. sell them to get money back).

- ***Closed-end funds***

  A closed-end fund does not issue (or ***redeem***) shares once it is set up.



People who want to invest in a closed-end fund after it has been set up are not able to simply put money in the fund. Instead, they need to buy shares off someone else who has already invested in the fund.

Investors who want to take their money out of a closed-end fund need to sell their shares to another investor.

2.1.1.3 Why Invest Using a Managed Fund?

Some of the advantages of using managed funds are outlined below:

☑ Investors in managed funds do not need to have specialist investment knowledge. This is because the fund manager decides which shares (etc.) to purchase and when to do so.

☑ Investors who use managed funds spend much less time looking after their investment than those who invest directly themselves.

☑ You can gain access to a wider range of investments even with small amounts of money (this is called ***diversification***). Investors who only have a small amount of money available to invest in shares may not have enough money to buy shares in the companies that they want, in the ***proportions*** that they want.

For example, an investor may want 60% of their shares to be in biotechnology companies, and the remaining 40% to be split across shares in companies in a wide range of other industries.

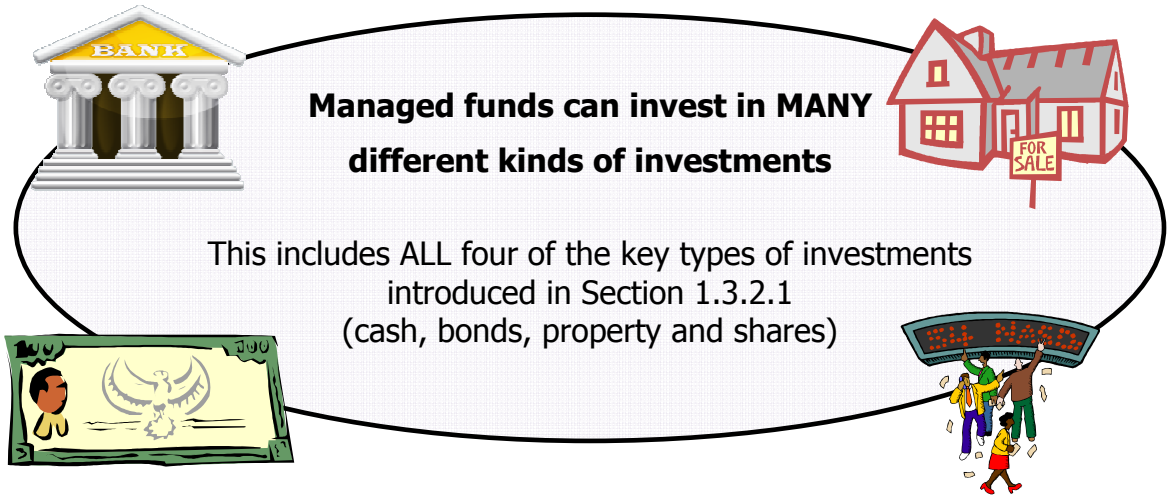
However, 40% of their available money may not be a large enough amount to personally buy shares in numerous different companies – it may only be enough to buy a couple of shares in two or three companies.

If the investor instead put their money in a fund which invests in the type of companies that they want to invest in, the investor would then achieve their desired investment mix.

☑ It is ***not*** costly to regularly invest small amounts of money.

Assume you wanted to invest $100 per month (approx $25 per week). It would be expensive to buy shares from your sharebroker because the minimum charge is generally $30! However this is not the case with managed funds because you are pooling your money with other investors.

2.1.1.4 What do Managed Funds Invest In?



The investments that a fund can include depend on the ***investment policy*** of the fund. For example, an investment company may manage several funds:

- the investment policy of one of these funds may be to only invest in property,
- the investment policy of another fund may be to only invest in shares, and
- the investment policy of another fund may be to invest only in ***fixed interest investments*** (e.g. bonds).

There are also many ***balanced funds*** which include a mix of types of investments.

What countries can a fund invest in?

The investment policy of a fund is often even more specific than simply stating what types of investments it will include. Some also specify the countries in which a fund will invest.

Both fixed-income (bond / debt) and share funds can choose to invest wherever they like. For example, the investment statement may say that they only invest:

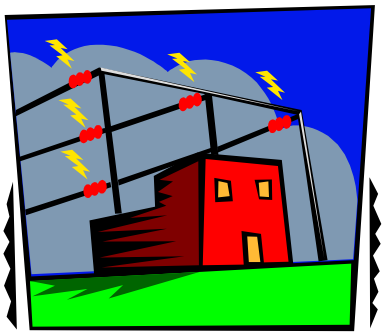
- in one country (e.g. New Zealand or USA),
- in several countries (e.g. both New Zealand and Australia), or
- in one continent (e.g. Europe).

Some funds will even invest in a continent, but not include a country (e.g. Asia excluding Japan).

Alternatively, the investment statement may say that the fund may invest worldwide! These types of funds are commonly called ***global funds***.

Industries and Company Size

There are also funds that concentrate on a particular industry.



For example, some funds may only buy shares in companies operating in the technology industry, primary industries or utilities (e.g. electricity companies).

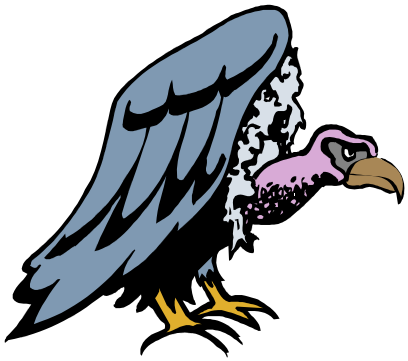
These are known as ***sector funds***. There is no limit to the different sectors that can be included.

Other managed funds specialise in investing in small companies. This is because the fund manager considers that small companies will grow more quickly than large ones. If they do, investors can make more money more quickly.

Of note are ***venture capital funds***. These funds specialise in providing finance to small companies which have quite a high possibility of rapid growth. These are often companies with unique products or inventions.

Other fund managers may choose to only invest in large companies. This is because they believe that large companies are more secure financially than small ones.

Vulture Funds



Vulture funds are funds that specialise in investing in companies which are in financial distress (i.e. almost ***bankrupt***). However, the fund manager only invests if they think the business has quite a good chance of becoming profitable again.

If the companies do survive, the value of the fund's investment will increase a lot. ***Capital returns*** will be very high.

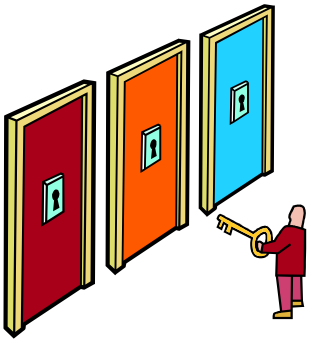
Of course, if the company does go bankrupt, the vulture fund may lose all they have invested. For this reason, this type of fund is of high-risk to investors.

Funds of Funds

Funds of funds are managed funds that invest in other managed funds. That is, they are funds that are made up entirely of other funds.

The main advantage of funds of funds is the enormous amount of ***diversification*** available for small amounts of money (diversification is discussed in Section 2.3). The major disadvantage is the cost: they have two lots of fees – one for the funds of funds manager, and the other for the normal funds managers!

What Fund Should I Choose?



The type of managed fund you choose will depend on:

- your financial goals,
- your life stage, and
- your attitude to risk.

In Section 2.3.3, we discuss ***Asset Allocation***, which relates to deciding how you spread your money across investments. This discussion will also help guide you in deciding which managed fund (if any) you would choose to invest in.

Also of particular note are ***index funds***, which are discussed on the following pages.

2.1.1.5 Index Funds vs Active Funds

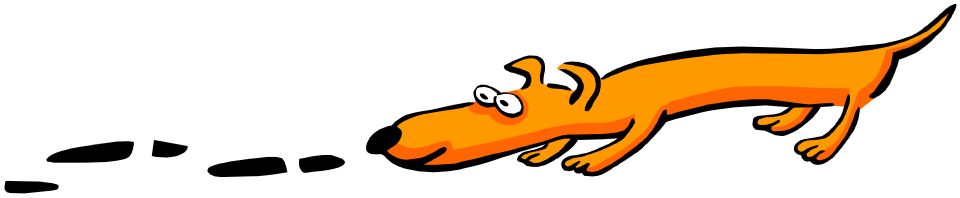
An ***index fund*** is a managed fund which simply copies a ***stock exchange index***. That is, the fund manager purchases shares in the same companies that are included in a stock market index. So a fund could, for example, copy the ***NZX 50*** by buying shares in the same 50 companies that are in the NZX 50 index.

The number of shares that an index fund holds in each company is in ***proportion*** to how that company is represented in that index. However, sometimes an index fund may not *exactly* copy the index it is meant to follow.

An ***index fund*** copies a stock exchange index.

The performance of an index fund will therefore be the same as the performance of the index. For example, if the NZX 50 index falls by 1%, the value of an NZX 50 index fund would also fall by 1%.

It is for this reason that index funds are often referred to as ***tracker funds*** (because they 'track' the performance of an index).



Index funds are also known as ***passive funds***. This is because the fund manager does not decide which ***securities*** to invest in – they simply copy the index. In fact, the purchasing and selling decisions for a passive fund are often made by computer software.

The advantages of index funds therefore include low costs (no expensive managers to pay) and good performance. However, do not expect massive, above average, returns from an index fund – that is not what they are designed to do.

The opposite of passive funds are *active funds*.

Active fund managers believe that they can do better than the stock exchange index. They believe they have the skill to make decisions that will result in higher returns for their investors than they would get if they simply invested in an index fund.

Unfortunately for many active managers, the statistics show that most *do not* perform better than index funds.

The main advantage of active funds is the *possibility* of above average returns. But you would need to choose the right one.

The disadvantage is that active funds cost more to investors. This is because 'star' managers, just like star rugby players, cost a lot of money. However, if they do their job well, they may also make a lot more money too!

2.1.2 Deciding Where to Invest

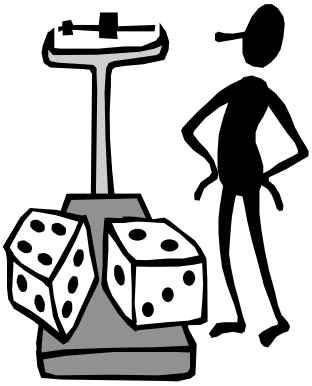
So now you have made the decision to invest, how do you decide what fund to invest in?

Here are five principles that will help you to make better investment decisions. These principles apply to ANY type of investment – not just to selecting managed funds.

Five Principles of Investing

1. Know your risk profile

Investing always has risk. Do you want slow but steady investment growth, or are you prepared to withstand more fluctuations in the value of your investment in the hope of greater returns over the longer term?



Knowing and understanding your ***risk profile*** will help you find the investments that give the best trade off between risk and returns for you. Your ***financial adviser*** will be able to help you complete a risk profile, or you can find one online.

For more information, you can visit: www.sorted.org.nz or www.amp.co.nz

2. Diversify your investments

It's the old saying – "Don't keep all your eggs in one basket." You can reduce your risk levels by spreading your investments across different types of investments (i.e. cash, fixed interest, property and shares) and by using different fund managers.

Investments diversified across these should produce relatively good long-term returns without being so much of a rollercoaster ride along the way.

3. Keep your expenses to a minimum

If you're not going to do all the investing yourself, you're going to have to pay for it. Always find out from your financial adviser what the fees are going to be.

What may seem to be a small percentage amount in fees each year will add up over the years and could make a significant difference to the amount you receive in the end.

4. Keep your investments simple

Make sure that you know what you're getting yourself into before you commit to it. Due to charges such as, for example, establishment fees, changing your mind shortly after making a decision can be costly.

Make sure you ask your financial adviser as many questions as you need to in order to feel that you understand what you're doing. When you know what to expect, misunderstandings and disappointments are less likely to occur.

5. Stick with it

Once you have decided what to do and are happy with your decision, then stick with it. Chopping and changing according to the latest fad is a recipe for disappointment.

Investment markets can (and do) move up and down rapidly in response to economic and world events. History shows that the investor who has a strategy, stays the course and weathers the inevitable storms, will usually come out ahead in the end.

Adapted from: www.amp.co.nz[14]

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[14] AMP. *Five Principles of Investing*. Retrieved 5 October, 2013, from https://www.amp.co.nz/wps/portal/au/AMPAUGeneral3C?vigurl=%2Fvgn-ext-templating%2Fv%2Findex.jsp%3Fvgnextoid%3D067994b0b2014310VgnVCM1000001903400aRCRD%26vgnextchannel%3D8e182988f1ce3310VgnVCM1000001903400aRCRD

2.1.3 Costs of Investing in Managed Funds

The two main types of fees costs associated with managed funds are Annual Management Fees and Activity Fees.

Annual Management Fees (Fund Management Fees)

This is a fee to cover the ongoing administration costs of the fund. I.e. this is the general running costs of the business.

It is often charged as a flat-rate fee. For example, you may be charged a fee of $50, regardless of the size of the fund or of the amount you have invested in the fund.

However, some funds use 'break-points' when they charge fees. When the value of the fund increases to a certain 'break-point', the fee paid decreases. Some funds may also offer lower fees if the investor chooses to 'lock in' their investment for a set period of time (i.e. not have access to their investment over this period).

Activity Fees

These fees cover the costs of buying and selling investments. With a mutual fund, investors often contribute regular small amounts (e.g. $120 per month) – activity fees cover the costs to the fund of receiving payments from investors and then using this money to buy investments. Similarly, activity fees cover the costs of selling investments.

Activity fees are often charged as a percentage of monthly payments made. There may also be 'break-points' in fees. For example, an investor may be charged 8% of contributions up to monthly contributions of $150 and then 5% on amounts over $150.

Note that some funds do not charge separate annual management fees and activity fees. Instead, they may choose to charge only one fee to cover both of these types of fees. This fee is often based on a percentage of the overall value of the fund (e.g. 1.8%).

Other Fees

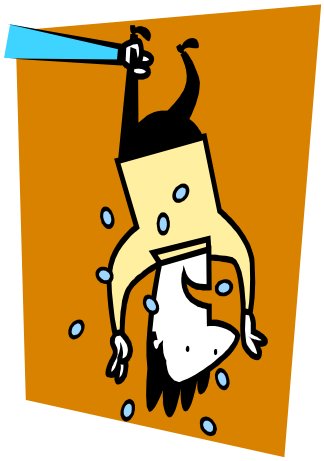
Managed funds may also have various other types of fees (sometimes referred to as 'special fees'). These could include:

1. Performance Fees

Some funds charge a performance fee if the fund manager increases the value of the fund by an agreed amount.

2. Upfront Fees (Establishment Fees)

These are the fees paid by you to buy the investment. These are often paid to a financial adviser.



Be sure to check how much these fees are – it is possible they could be 50% or more of your contributions into a fund for the first year. If you decide to increase the amount of your contributions at a later time, you may need to pay more fees.

For example, you may decide to contribute $30 per week to your fund. If the fund charges upfront fees of 50% in the first year, this means that $15 per week of your $30 will go towards fees. That's $780 of fees in the first year!

3. Trustee Fees

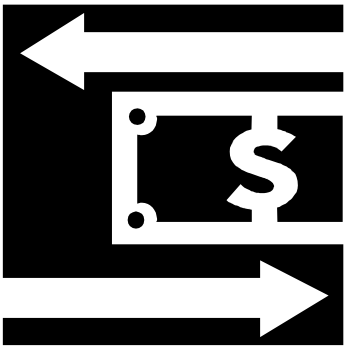
The fee paid for ***Trustee*** services is often about 0.1% to 0.15% of the value of the fund's assets.

Remember, a Unit Trust has to have an independent ***trustee***. The job of the trustee is to make sure that the fund manager keeps to the fund's investment policy and to safeguard the fund's assets for the investors.

4. Processing Fees

A fee may be charged if, for example, you close your account and withdraw your investment.

5. Transfer Fees



A fee may be charged if you switch between funds. For example, if your investment company offers several types of managed funds, and you switch from their 'Global Equity Fund' to their 'Property Fund', you may be charged a fee.

6. Withdrawal Fees

A fee may be charged if you make withdrawals from your investment. Some funds allow you to make, for example, one free withdrawal per year. Sometimes, a special fee (a short-term trading fee) may be charged if you make a withdrawal within a short period (e.g. 90 days) of the initial investment.

7. Special Account Management, Advisory and Reporting Fees

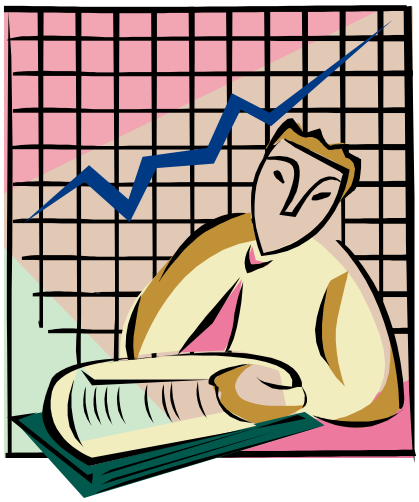
If you request any special / extra services, you may be charged for these.

2.1.4 Monitoring the Performance of Managed Funds

How can I find out how my managed fund is doing?

Fund management companies send reports to their investors at least once per year. Depending on what type of managed fund you have, these reports will usually contain information such as:

- ☑ The number of ***units*** you have (if applicable).
- ☑ The value of your investment.
- ☑ The amount of fees charged.
- ☑ The percentage return on your investment. This is given for the most recent period (usually a year) and for previous periods.



FundSource

If you want to find out how your managed fund is performing, a website that is very useful is FundSource (www.fundsource.co.nz).

This site contains search functions which allow you to view the returns on various funds in New Zealand for up to seven years. It even includes a rating system that you can use to compare the performance of various types of funds.

The site also contains a section in which you can find out the ***unit price*** of various funds. Fund values are updated every week. As long as you know how many units you have, if you multiply this by the value from Fund Source, this will give you an approximate value of your investment.

For example, if you know that you have 9,500 units in a fund, and the current unit price is 1.2871, you know that your investment is currently worth about $12,227.45 (i.e. 9,500 x $1.2871).

Screen Print: Example of Unit Prices on the FundSource Website[15]

Fund Prices

Get the latest prices (weekly) by either fund sector or manager.

Fund Sector - Diversified Balanced PIEs

Weekly Prices

Fund	Date	Entry Price	Exit Price
AMP Classic PSS Dyn Mkts Bal*	02 Oct 2013		1.4795
AMP Classic PSS Lifesteps Stability*	02 Oct 2013		1.4904
AMP Classic PSS LS Consolidation*	02 Oct 2013		1.4375
AMP Classic PSS LS Progression*	02 Oct 2013		1.4929
AMP Classic PSS Select Balanced*	02 Oct 2013		1.4306
AMP Classic PUT Dyn Mkts Bal*	02 Oct 2013		1.4649
AMP Classic PUT Select Balanced*	02 Oct 2013		1.3809
ANZ Investment Funds Balanced Fund	02 Oct 2013		1.2813
ANZ Investment Funds Cons Bal Fund	02 Oct 2013		1.2464
ASB EasyFund Balanced	02 Oct 2013	1.1587	1.1535

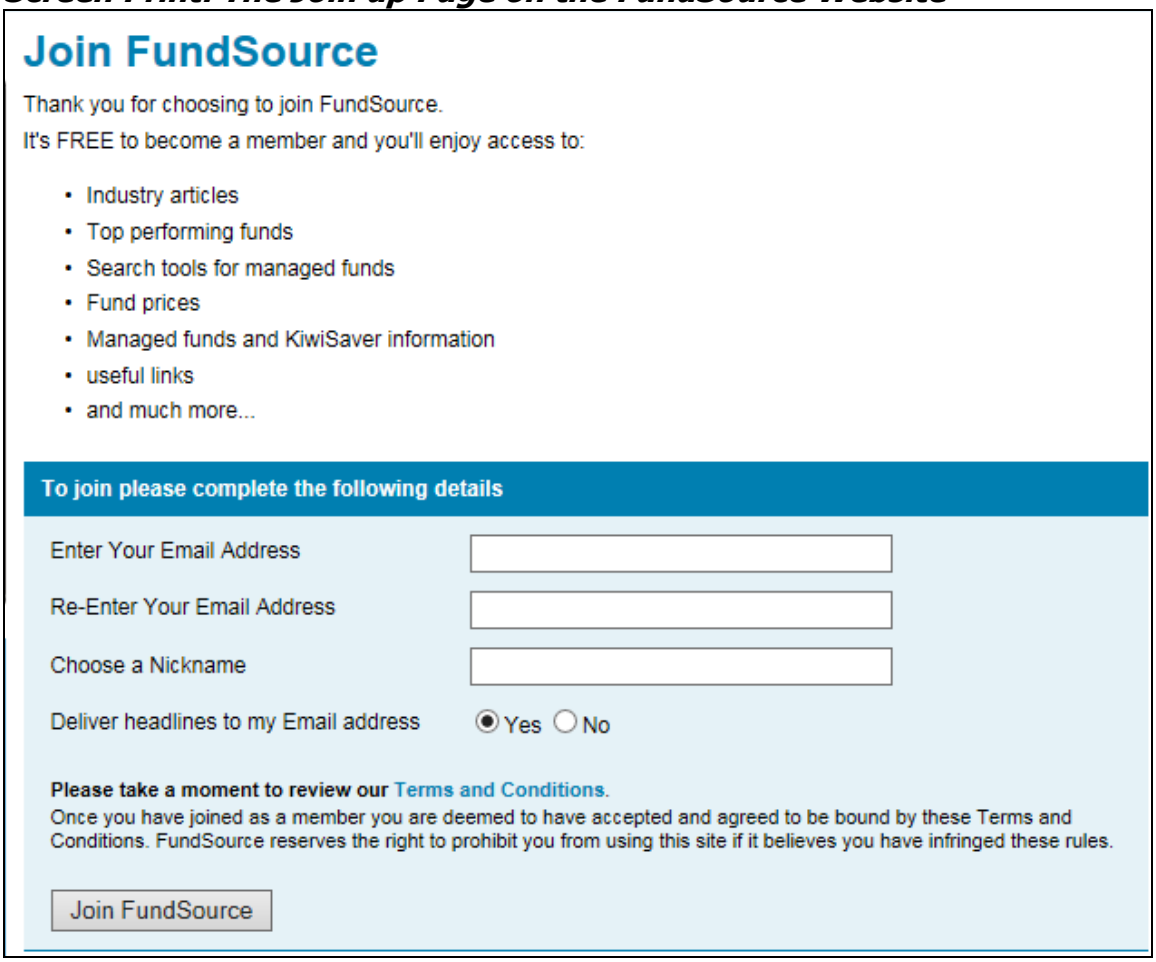
Another way to find out fund prices is to go to the website of the investment manager for the fund. In all cases, it is important that you know the exact name of your fund, as fund managers may have several funds with similar names.

You will find that there are some parts of the FundSource website that you cannot access unless you are a member. However, becoming a member is free and the registration process only takes a few moments. Simply enter your email address and a username and then decide whether you want information emailed to you. You will then be sent an email containing your password to log in to the website.

[15] Fundsource. (2 October, 2013). *Fund Prices*. Retrieved 5 October, 2013, from http://www.fundsource.co.nz/FundPrices.asp

Once you are a member of FundSource, you will gain access to all parts of the website. This includes access to information such as, for example, details of the top performing managed funds and feature articles.

Screen Print: The Join up Page on the FundSource Website[16]



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- Top performing funds
- Search tools for managed funds
- Fund prices
- Managed funds and KiwiSaver information
- useful links
- and much more...

To join please complete the following details

Enter Your Email Address

Re-Enter Your Email Address

Choose a Nickname

Deliver headlines to my Email address ◉ Yes ○ No

Please take a moment to review our Terms and Conditions.
Once you have joined as a member you are deemed to have accepted and agreed to be bound by these Terms and Conditions. FundSource reserves the right to prohibit you from using this site if it believes you have infringed these rules.

Join FundSource

[16] FundSource. *Join FundSource.* Retrieved 5 October, 2013, from http://www.fundsource.co.nz/newmember.asp

2.2 Investing in KiwiSaver

KiwiSaver, New Zealand's main retirement savings scheme, was discussed in Module 2 of this programme. Details covered included:

- rules around joining and opting out of KiwiSaver,
- incentives for joining,
- employer and employee contributions, and
- accessing your money and taking contributions holidays.

In this Module, we will focus on:

- selecting which fund you will use for your KiwiSaver scheme, and
- understanding how funds are taxed.

2.2.1 Selecting a KiwiSaver Provider

If you join KiwiSaver, your KiwiSaver contributions are put into a managed fund (a KiwiSaver scheme) in your own name. Although there are many different KiwiSaver schemes available, each person can only have **one** KiwiSaver account at any one time.

The schemes are offered by various investment companies, all of which are ***private entities***. That is, they are not owned by Government.

These entities include well-known managed fund providers such as:

- Tower
- ANZ
- Craigs Investment Partners Limited
- Westpac
- OnePath
- Fisher Funds

A list of all scheme providers, along with contact phone numbers and website addresses, is given on the KiwiSaver website (www.kiwisaver.govt.nz).

Screen Print of the List of Providers on the KiwiSaver Website[17]

Locate a KiwiSaver scheme provider

Below is a list of organisations that provide KiwiSaver schemes to members of the public.

Selecting a provider does not automatically enrol you into KiwiSaver. You can find out more information about the different schemes by selecting the appropriate web address or calling the telephone number in the table below.

This list is current as at 20/9/2013.

Provider	URL	Phone Number
AMP	www.amp.co.nz	0800 808 267
ANZ Investments	www.anz.co.nz	0800 736 034
Aon New Zealand Ltd	www.aonkiwisaver.co.nz	0800 266 463
ASB Group Investments Ltd	www.asb.co.nz	0800 ASB RETIRE (0800 272 738)
BNZ	www.bnz.co.nz	0800 269 5494
Brook Asset Management Limited	www.brook.co.nz	0800 802 766
Civic Assurance	www.supereasy.co.nz	04 978 1250
Craigs Investment Partners Limited	www.craigsip.com	0800 878 278
Diversified Wealth Management Limited	www.lawretirement.co.nz	0800 445 586
Fisher Funds Management Ltd	www.kiwisaver.fisherfunds.co.nz	0800 FF KIWI (0800 335 494)
Forsyth Barr	www.forsythbarr.co.nz	0800 367 227

2.2.1.1 Types of KiwiSaver Schemes

When you join KiwiSaver, you can select which scheme you want to join. This includes choosing which provider and what type of investment. There are five general types of KiwiSaver schemes. These are as follows:

1. ***Cash funds:***

These funds only invest in bank deposits and other ***fixed interest investments***.

They're a low risk option, so they are suitable if you're planning to retire in the next few years. However, if you choose this option, do not expect high growth.

[17] Sourced from Inland Revenue. Crown copyright reserved. Retrieved 5 October, 2013, from http://www.kiwisaver.govt.nz/providers/ks-providers.html

2. *Conservative funds:*

These are a low-to-medium risk option. They are generally suitable if you're planning to retire in the next few years.

A high ***proportion*** of these funds (around 80%) are invested in bank deposits and fixed interest investments. The remaining amount is invested in growth assets such as shares and property.

The KiwiSaver ***default schemes*** are conservative funds – that is, if you do not select which fund you want when you join up, you will be allocated to a conservative fund.

3. *Balanced funds:*

The money in these funds is invested in a range of investments. Funds are generally equally split between higher risk growth assets such as shares and property, and more stable investments such as fixed interest and bank deposits.

This is a medium risk option.

4. *Growth funds:*

A high proportion of these funds is invested in shares and property. A small proportion is in stable investments such as bank deposits.

This is a medium-high risk option. It is generally more suitable for someone investing for at least 5 years.

5. *Aggressive funds:*

These are invested mainly in shares, with the aim of achieving high growth over a longer timeframe. This is the highest risk option.

The type of investment YOU choose should depend on how close you are to retirement, and how much risk you want, and can afford, to take.

2.2.1.2 Selecting a Scheme and Provider

If you do not choose your scheme, this decision will be made for you. If your employer has chosen a ***preferred scheme***, this will be the scheme that you will join. However, if not, you will be allocated to one of the default providers.

Five financial organisations have been chosen by the government to be ***default scheme providers***. They are:

- AMP Services (NZ) Limited
- ASB Group Investments Limited
- ANZ New Zealand Investments Limited (formerly called OnePath)
- Mercer (NZ) Limited
- Tower Managed Funds Limited

Screen Print from the Mercer website[18]

[18] Mercer. *About KiwiSaver.* Retrieved 5 October, 2013, from https://secure.superfacts.com/public/kickstart/content.tpz?TP=PL_KiwiSaver_About&QL=QL_KiwiSaver_About

It is recommended that you **select your own scheme**. This way, you can choose a fund that best meets your ***risk profile***. Remember, you learnt about risk profiles in Module 2.

For example:

- If you are planning on retiring in the next ten years or if you are very risk averse (do not like risk), you can choose a scheme that has quite a ***conservative*** investment policy,

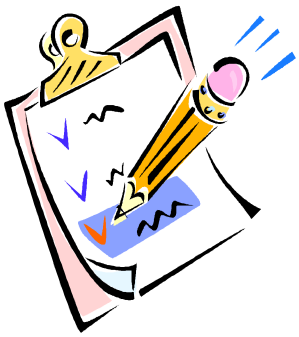
  OR

- If you have 30 or more years until retirement, and/or are willing to face some risk in return for the possibility to get very high returns on your money in the long term, you could choose an aggressive fund.

Information about the type of investments that are included in each scheme is given in the scheme's ***Investment Statement***. Therefore, look for this document on the provider's website.

Also consider the following factors when deciding what provider to use and which fund you want:

- The level of fees.
- Whether it appears simple and transparent to you.
- The level of flexibility it offers.
- The assistance the provider can offer you.



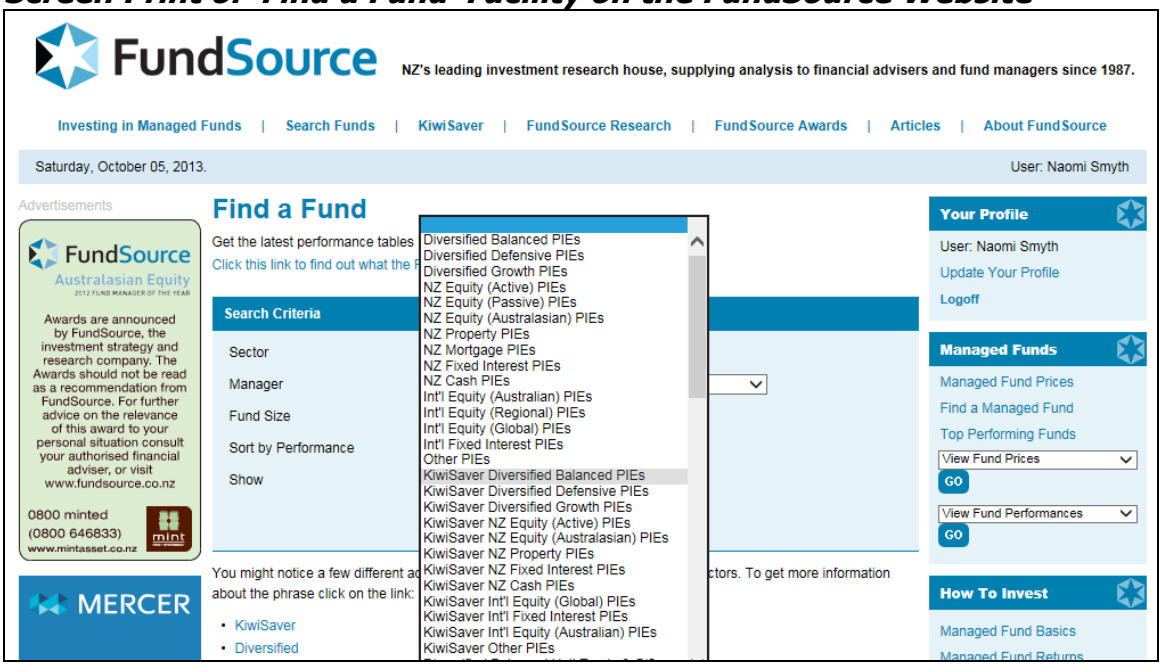
Past Performance

When selecting which KiwiSaver scheme to join, it is also worthwhile to check the past performance of the various funds. Since 2013, all KiwiSaver providers have been required to report their performance, fees and a range of other information, in a standard format on their website. This makes it easier to compare the performance of one fund to another.

However, if you want to check the past performance of a number of funds without having to visit each provider's website, try using the FundSource website (www.fundsource.co.nz). Note that this website was discussed earlier in this section of the Module.

You can use the 'Find a Managed Fund' part of the site to look up the various KiwiSaver funds and compare performance. If you search by 'Sector', a list of the types of managed funds in New Zealand (including KiwiSaver funds) will appear (refer to the following screen print).

Screen Print of 'Find a Fund' Facility on the FundSource Website[19]



If you then select one of these sectors, for example 'KiwiSaver NZ Property PIEs', a list of KiwiSaver schemes that invest in New Zealand property, along with the past performance of these funds, will be provided. Alternatively, you can search by 'Manager' (e.g. Sovereign, etc.).

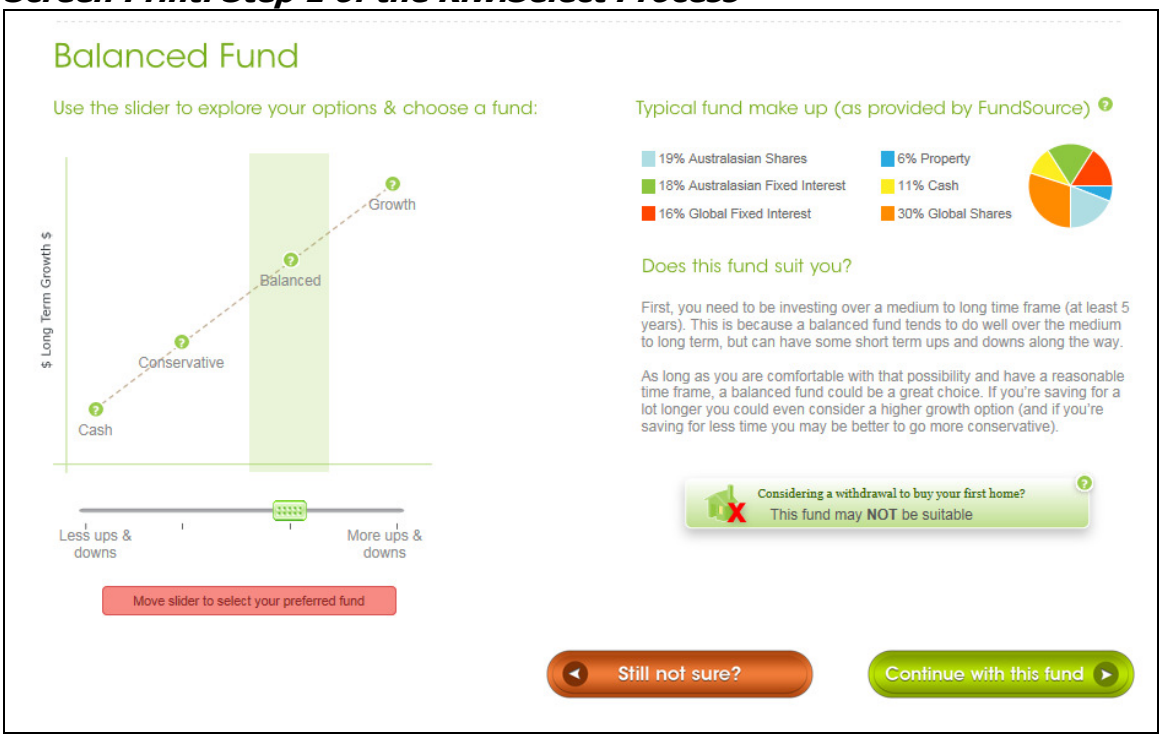
[19] FundSource. *Find a Fund.* Retrieved 5 October, 2013, from http://www.fundsource.co.nz/findafund.asp

Once you have chosen a scheme, you do not have to stick with it until you retire. Instead, you can change between KiwiSaver schemes (although remember that you can only belong to one scheme at any time).

The KiwiSelect Website

Another very good website to check out is www.kiwiselect.co.nz. This website takes you through a 3-step process of selecting a KiwiSaver fund.

Screen Print: Step 1 of the KiwiSelect Process[20]



Step 1 of the process involves identifying which type of KiwiSaver fund would be most suited to you – cash, conservative, balanced or growth. Details about the types of investments which are in each type of fund, along with some notes to help identify whether this fund is suitable to you, are shown on the right-hand side of the webpage.

In the screen print example above, the 'Balanced' fund option is selected on the left-hand side of the page and details about balanced funds are given on the right-hand side of the page.

[20] KiwiSelect. Retrieved 5 October, 2013, from https://www.kiwiselect.co.nz/home/choose-fund/?id=6257&MultiFormSessionID=x1ZZzZ4b9a7hDkpWLvDuoDzGepOOJQHo5dbUjviNg3OQboPQiyjQcaWo6yE5X4faALSC76f58n6zdN7pvRVJaqR73kndJ3EXezv

Screen Print: Step 2a of the KiwiSelect Process[21]

Compare & Choose your Provider

KiwiSelect offers plans from eight quality providers. There are some differences, but all are solid choices (also remember that you can change your KiwiSaver provider easily in the future).

Please

Click ? for more information	AMP	ANZ INVESTMENTS	brook	fisher funds
Set & forget option available	✓	✓	✓	
Has Responsible Investment Fund		✓		
Suitable for the financially savvy		✓	✓	
NZ owned and operated				✓
Total Funds Under Management *	$2.5b	$3.9b	$8.27m	$945.35m
Your Suggested Fund	AMP Balanced Fund	OneAnswer Balanced Fund	Balanced Fund	Balanced Strategy
Fund fees *	0.96%	1.11%	1.30%	1.14%
Monthly plan fees *	$3.00	$2.00	$2.50	$3.00
FundSource fund rating *	✪✪✪	✪✪✪✪✪	✪✪	n/a
6 months return *	4.27%	5.51%	6.04%	7.20%
1 year return *	13.69%	14.42%	13.04%	12.00%
3 year return *	8.42%	9.90%	6.11%	5.20%
5 year return *	4.54%	6.93%	3.95%	n/a

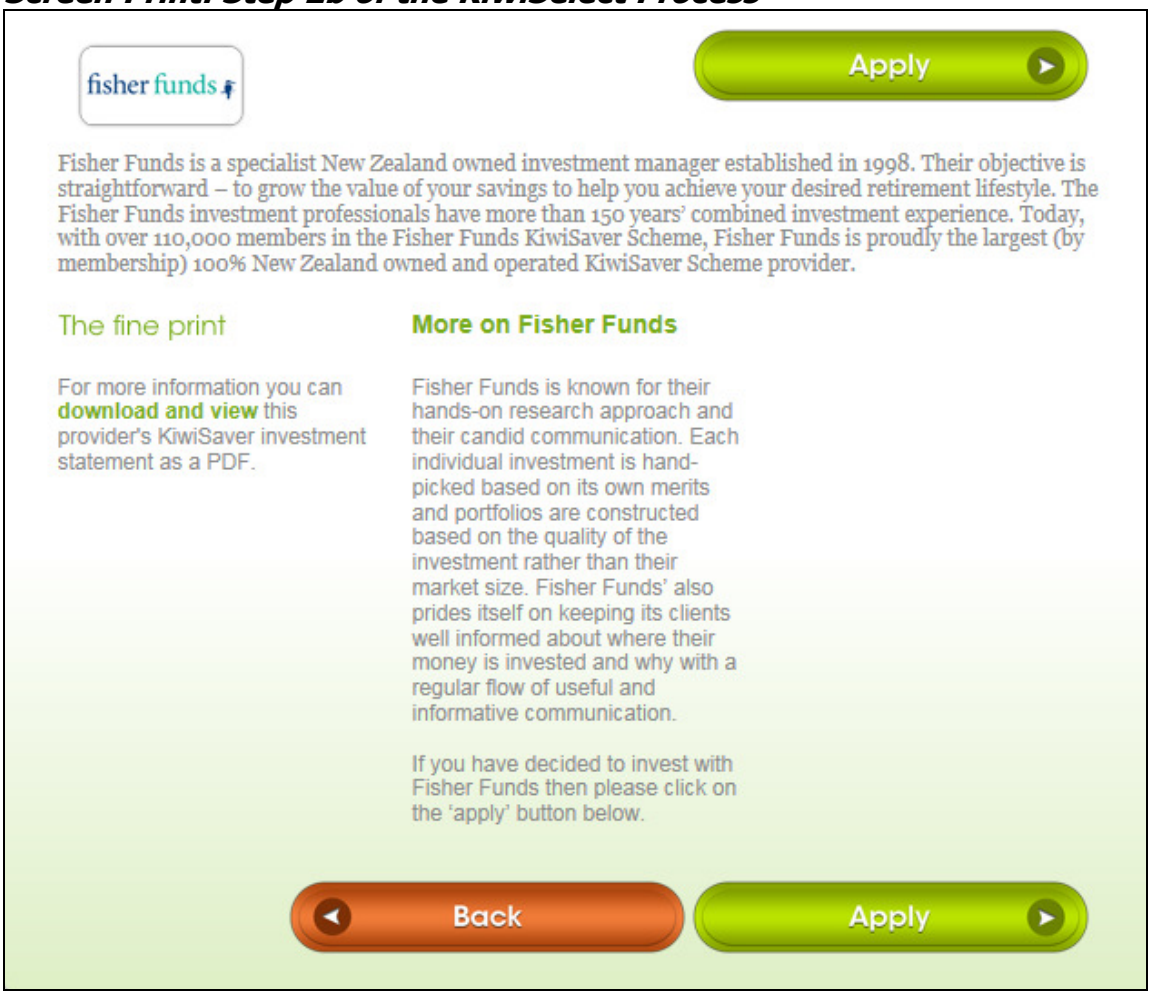
In Step 2 of the process, you will be presented with a number of options of KiwiSaver providers and the funds that they offer. Details about each of these funds are provided. This includes information about the previous performance (e.g. the 12 month return), the fees involved, etc. This makes it easy to compare the various schemes.

To learn more about a fund, simply select it. An example of the type of information you will be presented with is shown in the Screen Print 2b on the next page. If you are happy with the fund you have selected, you continue to Step 3 by pressing the 'Apply' button.

The final step of the process involves applying online to the fund you have selected. You will need to supply personal details such as your name, contact details and employment status, and identify how much you would like to contribute – i.e. 3%, 4% or 8% of your gross pay.

[21] KiwiSelect. Retrieved 5 October, 2013, from https://www.kiwiselect.co.nz/home/compare-providers

Screen Print: Step 2b of the KiwiSelect Process[22]



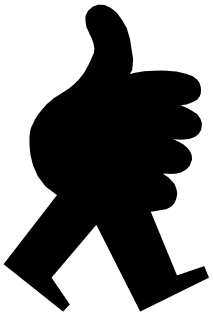
[22] KiwiSelect. Retrieved 13 December, 2012, from https://www.kiwiselect.co.nz/home/step5/?MultiFormSessionID=68d1ab077ea62f07a3417318fd830bf8d69770df

2.2.2 KiwiSaver Fund Taxation and PIEs

Any earnings from your KiwiSaver investment will be taxed. The tax will be ***deducted*** (taken out) by your ***scheme provider***. The scheme provider will then pay the tax to the IRD for you.

Most schemes will be a ***Portfolio Investment Entity (PIE)***. This includes all of the KiwiSaver default schemes. The PIE structure has been available since October 2007.

Before PIEs were introduced, managed funds were taxed at the company tax rate. At the time, this rate was 33% (remember, it is now 28%). So even if an investor was on a lower marginal tax rate, they had to pay 33% tax on their investment returns.



However, if a fund has PIE status, the fund itself does not pay tax. Instead, the fund ***deducts*** income tax on behalf of the investors. This means that any income in a PIE is taxed based on the individual investor's income.

It is NOT taxed at a flat rate for the entire fund.

The tax rate for your investment earnings from a PIE is referred to as your ***prescribed investor rate (PIR)***. The PIRs for New Zealand residents are given in the below table.

Income Details for New Zealand Residents	PIR
If you have a taxable income of $14,000 or less, and a total income (including your income from the PIE) of $48,000 or less in either of the last two years to 31 March.	10.5%
If you do not meet the above ***criteria***, and have a taxable income of $48,000 or less, and a total income (including your income from the PIE) of $70,000 or less in either of the last two years to 31 March.	17.5%
If you have a taxable income of MORE than $48,000, and/or your total income (including your income from the PIE) is more than $70,000 in both of the last two years to 31 March.	28%

You might have noticed that these tax rates are NOT always the same as the current personal income tax rates. Remember, the current personal tax rates are:

Income Range	Marginal Personal Tax Rate
$0 - $14,000	10.5%
$14,001 - $48,000	17.5%
$48,001 - $70,000	30%
$70,001 or more	33%

In fact, in some cases, the PIR is better!

For example, assume that you are on a salary of $52,000 per year. Your current marginal tax rate is therefore 30%. So if, for instance, you got a pay rise of $1,000, you would need to pay 30% of this ($300) in tax.

However, if you have money invested in a PIE, any income you earn is only taxed at 28%!

Even if you are on a salary of $100,000, your income from an investment in a PIE will only be taxed at 28%, not 33%.

In addition, note that PIEs are not taxed on ***capital gains*** from New Zealand share investments (and most listed Australian share investments).

So if:

- your fund invests in some New Zealand shares, and
- the share price suddenly increases, and
- your fund manager sells these shares and makes a profit for you,

this profit will not be taxed. For these investments, PIEs only ***deduct*** tax on income (e.g. dividends).

2.3 Risk and Diversification

The trade off between risk and return was introduced in Module 3.

As the riskiness of an investment increases,
the likelihood of higher returns also increases.

So:

- Investments which have high levels of uncertainty are much more likely to give you high financial returns than less-risky investments, BUT
- These investments are also much more likely to result in very poor financial returns!

The ***risk-return trade off*** is the balance that you are happy with between wanting the lowest possible risk and the highest possible return.

In this Module, we look at some of the types of risk that investors may face and how we can reduce this risk through ***diversification***.

2.3.1 Types of Risk

When most people think of risk, they only think about losing the money they have invested. However, risk is also the uncertainty of not knowing what you're going to receive in return for this investment.

Risk factors are factors that can cause the value of an investment to change. There are therefore many different kinds of risk.

Here are some of the main risks:

- ***Capital Risk***

  Capital risk is the risk of losing some, or all, of the money you originally invested.

- ***Inflation Risk***

  Inflation risk is the risk of the return you get on your investment being less than the inflation rate. If this happens, it means that the value of your investment, in ***real terms***, is less than it was before you invested.

- ***Interest Rate Risk***

  This is the risk of a change in interest rates. If you have ***bonds*** and the interest rates rises, the current value of the bonds will fall. If you need to sell the bonds before the ***maturity date***, they may therefore make a loss.

Similarly, a rise in interest rates has a negative impact on share prices. There are a number of reasons for this, but perhaps the main reason is that higher interest rates mean companies face a higher cost of borrowing. This reduces their profits. Because company share prices are based on the expected future profits of companies, share prices then fall.

- ***Reinvestment Risk***

  If you have an investment that pays regular income, the money you receive needs to be reinvested, unless you are going to spend it of course. Remember, examples of income you could receive from investments include:

  - interest (from bank deposits),
  - ***coupon*** payments (from bonds),
  - rent (from property investment), and
  - dividends (from shares).

  Until you actually reinvest this money, you will not know what rate you will receive. The risk is that you will not be able to get a return as good as you originally had, without risking more.

  For example, assume that you decide to put your money in a term deposit for six months and, during that time interest rates decrease. When you reinvest your money, you are likely to have to accept a lower interest rate – unless you choose to invest in a riskier investment. In comparison, you could have chosen to put your money in a term deposit for a longer period of time.

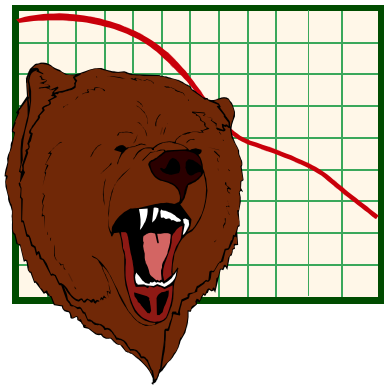
- ***Opportunity Risk***

  This is the risk associated with locking your money into one form of investment and not being able to take advantage of other investment opportunities that come up in the meantime which might offer a better rate of return.

  For example, you may think that interest rates are quite high, and decide to put your money in a term deposit for two years. However, sometime later, interest rates may increase even further! You therefore miss out on this better interest rate.

- ***Market Risk***

There are some factors that affect the entire market. For example, if investors, in general, become very ***bearish*** (remember, this means that they start thinking the stock market will go down), they will start trying to sell their shares. As a result, share prices **will** go down.



So, even if you have a great investment, such as shares in a fast growing and excellently run company, they are likely to lose value if the market as a whole goes down.

This is also known as ***systematic risk.***

- ***Liquidity Risk***

This is the risk that an investor will not be able to ***liquidate*** their investment (i.e. sell it) when they need to without selling it very cheaply.

This particularly applies to property investments. For example, if you suddenly need to sell a house within a week, you may need to offer it for a very low price. Even then, you might not be able to sell it.

However, if you have more time to sell it, you could wait until you got a price offer that you were happy with – or at least get one that was in line with general ***market prices***.

In comparison, shares and bonds in large companies are very ***liquid*** - you can sell them easily and receive your money just a couple of days later. You may not like the price you receive for them, but at least you know how much you will get and this amount will be in line with market prices. If it is lower than you like, this will be due to other risk factors such as, for example, interest rate risk, capital risk, etc.

This ability to sell shares quickly and easily is one of the reasons that share prices are so ***volatile*** (why they change a lot).

- ***Legislative Risk***

Legislative risk is the risk that a change in the law will affect the investment you choose. This risk could have a positive or negative impact.

For example, a change in legislation could mean that some of the ingredients used in a company's product are banned. This would stop them from selling their product, unless they changed the ingredients. In this case, their profits and share prices would decrease.

BUT, a change in legislation may also result in an increase of share prices. For example, the same legislation which banned the use of some ingredients used in a company's product could have a positive effect on the share prices of that company's competitors (if they use different ingredients).

- ***Currency Risk***

Sometimes called ***exchange rate risk***, this is the risk involved with an investment that is not in your home currency. For New Zealanders, this would mean investing in anything that is not in New Zealand dollars (***NZD***).

Like many risks, this risk could work to your disadvantage or to your advantage. If the NZD strengthens at a time when you are changing money from your investments back into NZD, the value of your investments will suffer. This is because it will cost more to buy NZD, so you will not be able to receive as much NZD as you would have previously been able to. On the other hand, if the NZD weakens, this will be to your advantage.

You could, for example, invest in an Italian company that performs poorly. As a result, you decide to sell your investment and make a loss (you get less ***Euro*** than what you paid for the investment). Note that the Euro is the currency used in many European countries.

However, when you go to change your Euro to NZD, it could be the case that the NZD has fallen in value against the Euro. If this is the case, you will get more NZD for your Euro. You may even get enough to outweigh the loss you made from the lower share price!

- ***Default Risk***

This is one of the risks with ***debt securities***. A ***bond***, for example, is a debt security. When you buy a bond, you are loaning money to whoever issued the bond. They agree to repay the bond at a later date (the ***maturity date***) and to pay interest.

Default risk is the risk that the borrower is financially unable to make interest payments or pay back your money at the ***maturity date***. Default risk is also known as ***credit risk***.

- ***Timing Risk***

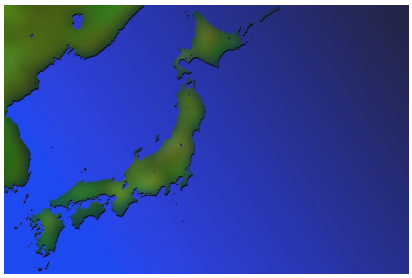
Timing risk is simply the risk that an investor may buy or sell an investment at what turns out to be a particularly bad (or good) time.

As a result, they would receive lower (or higher) returns than they otherwise would have received.

- ***Country Risk***

This is the risk involved in investing in a particular country.

For example, ***political instability*** can have a significant impact on the value of investments in a country. So assume, for example, it is a government election year. If it looks likely that the political party that will be elected is one that will make changes which disadvantage companies, share prices may fall.

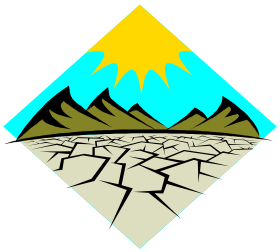


There are many other situations which can affect the stocks of a particular country. For instance, the earthquake and tsunami in Japan in early 2011 had a very negative effect on the share prices of Japanese manufacturing companies.

As another example, share prices of Greek companies significantly declined in recent years due to the country's financial problems. However, note that that these situations also had an effect on numerous other share prices around the world.

- ***Industry Risk***

  This is the risk of factors that affect a particular industry.

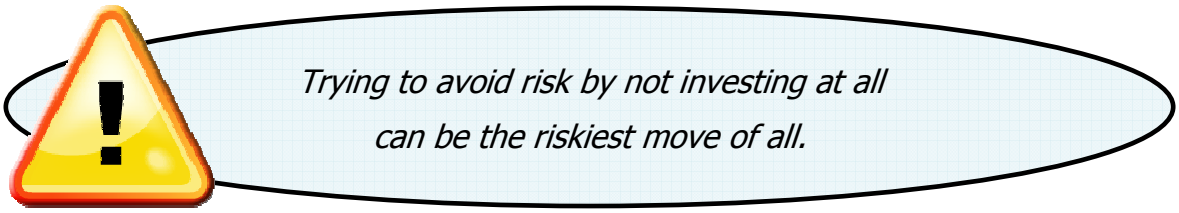
  

  If, for example, you invest in agricultural companies, a drought would have a negative effect on this industry more so than other industries.

> ***Discussion Question:***
>
> Are there some forms of risk that you are more worried about than others?
>
> If so, which ones and why? Would this affect your decision of what investments you would choose?

2.3.2 Diversification

We have learnt that whilst some investments certainly involve less risk than others, no investment is risk-free. But here is a key point to keep in mind:



It is a bit like trying to cross a busy street without leaving the pavement. Unless your financial destination is very close, you'll never reach it without some risk.

With investing, as with crossing that street, you should:

- carefully consider your situation,
- accept a comfortable level of risk, and
- carry on to where you want to go.

Although risk can never be eliminated (completely cut out), it can be managed. Let's take a look at the different types of risk, how different investment classes behave, and some tips to help manage risk.

2.3.2.1 What is Diversification?

Diversification is one of the ***fundamental concepts*** in the finance industry. In fact, diversification is probably the most important factor in managing your risk levels.

Diversification was first introduced in Module 2, in relation to wealth and retirement planning. As explained in Module 2, diversification can be likened to the saying "don't put all your eggs in one basket".

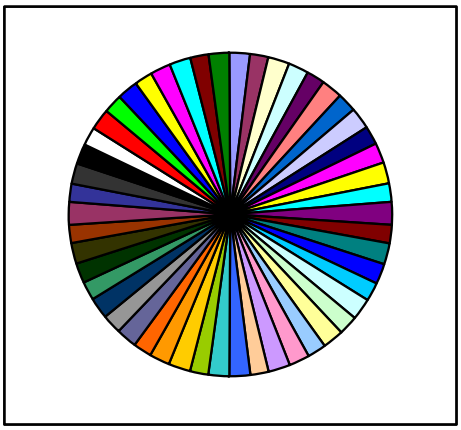
Diversification involves spreading your money across several different types of investments. In this way, you benefit when each investment is doing well, but also limit the downside when some are doing badly.

If you have a lot of different types of investments, it is very rare for all of these to do badly at the same time.

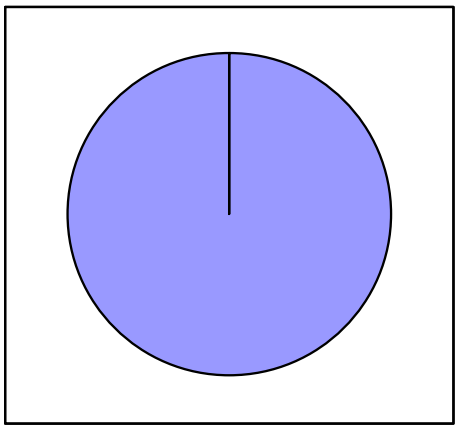
Even if you decide to put all your money into one ***asset class*** (e.g. shares), you should spread your money around quite a number of different companies, rather than putting it all into one. The same goes for all the other investment asset classes.

Diversification reduces the risk associated with one, or a few, of your investments performing poorly. Consider the pie charts below:

A Diversified Portfolio of Investments



Investing in One Company



Look at the two pie charts on the previous page. Now, think of each of your investments as 'a piece of the pie'. If you have invested in many different types of investments, you have many small pieces of pie - the pie chart on the left will therefore apply.

If you only invest in one asset, e.g. one company, you only have one big piece of pie - the pie chart on the right will therefore apply.

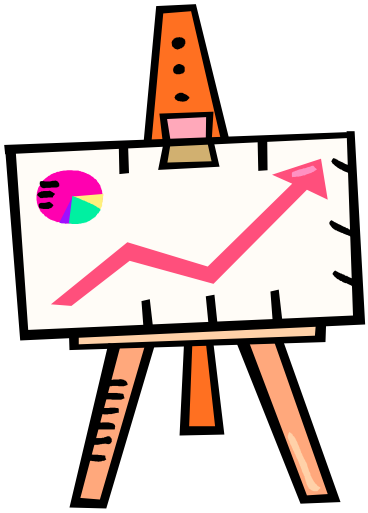
Now assume that one of the companies you invest in goes ***bankrupt***:

- If the left pie applies, this will not make too much difference to the overall size of your pie.

- But, if you only invest in one company, and that one company happens to be the one that goes bankrupt, you will lose your entire pie.

As you can see, it is much **less risky** for an investor to hold a ***diversified portfolio*** instead of an individual stock.

In the previous scenario, we only considered the situation of one of the investments performing poorly and thus the overall 'pie' being reduced by a small amount as opposed to being totally lost.



However, in reality, if you ***diversify*** your investments well, the overall size of your pie will usually increase. This is because, over time, markets tend to go up in value.

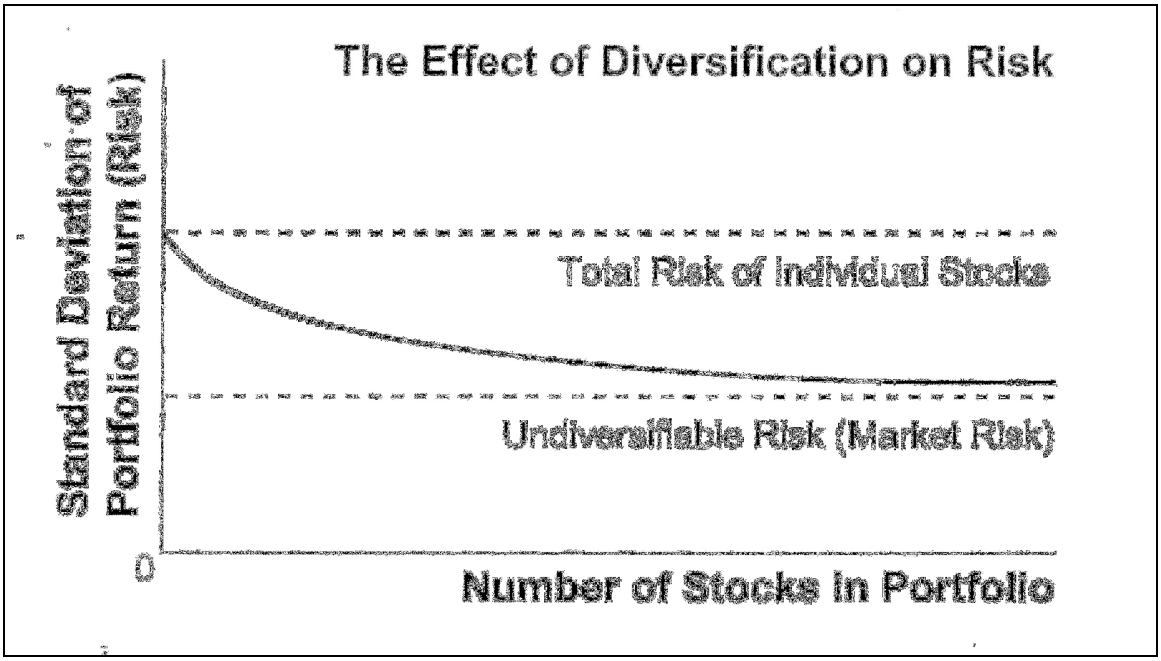
You can therefore generally expect that if you have a wide range of investments, in the long-term, the overall value of your ***portfolio*** (your collection of investments) will increase.

This will happen even if some of the investments within it perform poorly.

2.3.2.2 How Much Risk can be 'Diversified Away'?

As you increase the number of investments in your portfolio, you reduce the amount of risk you face. In general, the biggest reduction in risk occurs when you increase the number of your investments from one to two. If you add a third investment to your portfolio, the risk further decreases, but by less than the initial reduction. Similarly, as you continue to add investments, the amount of risk continues to decrease, at a decreasing rate.

Consider the graph below.



The above graph shows the amount of ***variance*** in the value of an investment portfolio on the ***vertical axis*** (referred to as the Standard Deviation).

The more variance there is, the riskier the portfolio of investments is. The number of stocks, that is, the number of different companies invested in, is shown along the ***horizontal axis***.

You can see that as the number of companies increases, the amount of risk decreases, at a decreasing rate. However, the risk does not completely disappear.

A key point here is that:

You can diversify away the risk associated with individual businesses, such as ***industry risk***, ***currency risk***, etc., but you cannot remove all of the risk associated with investing.

What you are left with is ***market risk***.

Remember, ***market risk*** reflects the overall trends in the market. E.g. in a ***bullish*** market, investors are ***optimistic*** and there is an overall upward trend in share prices. However, in a ***bearish*** market, investors are ***pessimistic*** and there is an overall downward trend in share prices. This risk cannot be diversified away.

When you look at the graph on the previous page, you will be able to see that the benefit of adding (for example) the 20th investment to the ***portfolio***, would only be a fraction of the benefit you receive when adding the 2nd investment to the portfolio. This means that you can achieve the majority of the benefits of diversification by spreading your money across as few as 10 to 15 different investments.

If you can find investments whose values are ***negatively correlated*** you can achieve the benefits of diversification with even fewer investments.

If two investments are negatively correlated, this means that the value of one investment tends to move in the opposite direction to the value of the other investment. So, if one investment does badly, this may be offset by an increase in the value of the other investment.

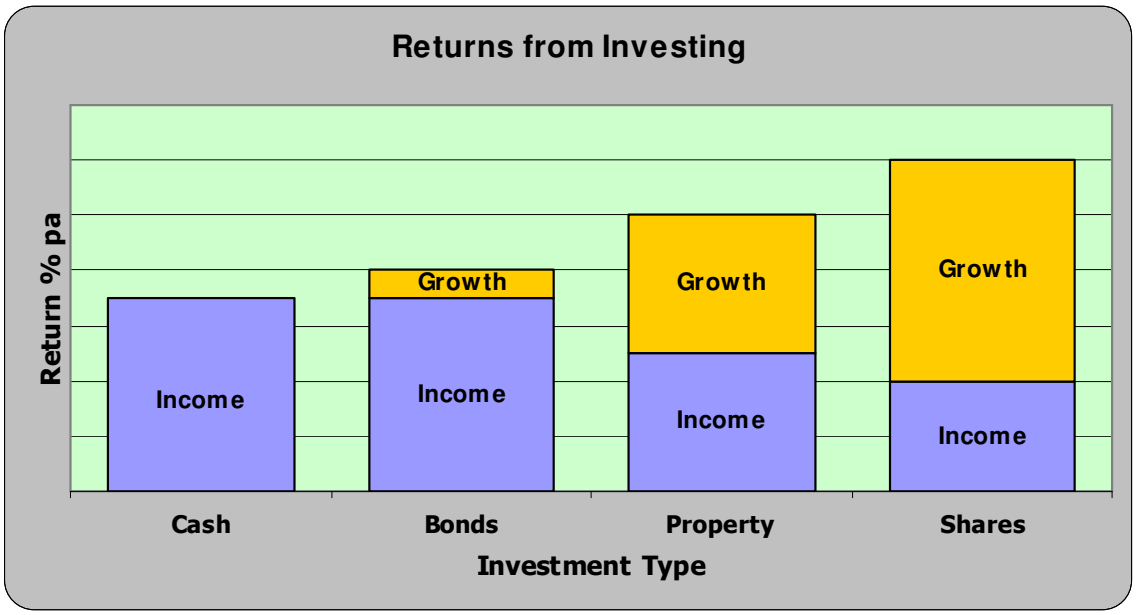
2.3.3 Asset Allocation and Risk Management

In Section 1.3.2.1, we introduced four key types of investments (four ***asset classes***) and discussed the types of returns we could expect from each of them.

These four asset classes are:

1. Cash
2. Bonds
3. Property
4. Shares

We also showed the following chart, which indicates the difference in returns that you can generally expect from these four basic asset classes.



In this previous sub-section, we learnt that higher expected returns are associated with higher expected risk. If we apply this to the above chart, this indicates that the riskiness of the asset classes increases from cash through to bonds, then property and shares. Overall, this is the case in reality.

Note that the four asset classes mentioned above are not the only asset classes available. They are, however, the main asset classes. These asset classes can be broken down further into ***sub-asset classes***. For example, the 'shares' asset class includes domestic shares, global shares and emerging markets, and each of these sub-asset classes can be broken down even further based on (for example) the size and growth rates of the companies invested in. As another example, the 'property' class includes the sub-asset classes of residential property, retail property and industrial property. These were discussed in Module 3.

2.3.3.1 Asset Allocation and the Risk / Return Ladder

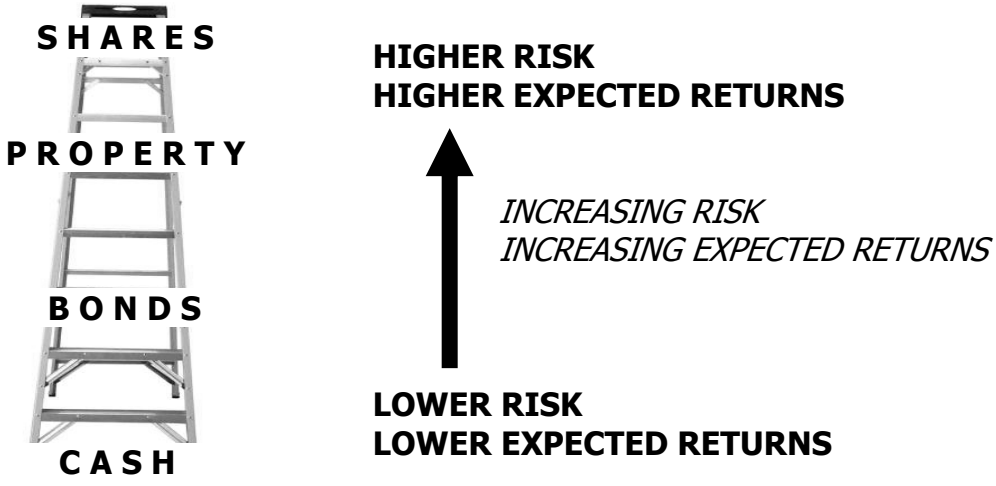
The riskiness of the various asset classes is sometimes described in relation to a risk / return ladder.

The higher you go up the risk / return ladder,
the higher the risk AND
the higher the expected returns you need
to ***compensate*** for this additional risk.

Spreading your investment money across the various asset classes shown in the risk / return ladder can help you to manage risk – that is, it can help you to achieve a level of risk that you are comfortable with.

The way you spread your money across types of investments is referred to as ***Asset Allocation.*** The more risk you are happy with, the more you could put into shares and property. The less risk you want to take, the more you would put into bonds and cash, especially cash.

The Risk / Return Ladder - Levels of Expected Risk and Returns



1. Cash

Of the four basic asset classes, cash is the one with the least risk. The less risk you want to take, the higher the ***proportion*** of your investments you should have in cash.

If you invest your money with a very stable financial institution, the main uncertainty with cash is the interest rate you will receive. There is very little risk associated with losing your initial investment.

However, ***inflation risk*** must be taken into consideration. If you take ***inflation*** and tax into account, returns can be much lower than the rates advertised in the banks' windows.

For example, assume that a bank advertises its interest rate on a term deposit as being 7%. In this case, the real return may be less than half of this amount!

Interest rate	–	Tax	–	Inflation	=	***Real Return***
7%	–	2.1%	–	2%	=	2.9%

2. Bonds

The prices of bonds do move up and down, but normally not as much as shares. Many people think of bonds as ***conservative*** (relatively safe) investments.

However, the returns can be very variable, especially if interest rates move a lot.

Note that bond values move in the **opposite direction** to interest rates. Why? A bond promises to pay a fixed amount of money at a certain time (the ***maturity date***). The higher the amount of interest, the lower the price of the bond must be in order to provide this interest.

Let's look at a simple example:

You are thinking about buying a bond. If you buy this bond, the company will repay you $1,000 in one year's time. If the interest rate was 5%, the price of the bond would need to be about $952. This is because $952 plus a 5% return would equal $1,000.

Amount you Receive at ***Maturity*** =	Bond price + Interest
	$952 + (5% of $952)
	$952 + (0.05 x $952)
	$952 + $48
	$1,000

However, if the interest rate was 10%, in order to receive this much interest, the bond price would need to be lower – at around $909. This is because $909 + 10% interest equals $1,000.

Amount you Receive at ***Maturity*** =	Bond price + Interest
	$909 + (10% of $909)
	$909 + (0.1 x $909)
	$909 + $91
	$1,000

So, in summary:

Interest rate up ↑	Bond value ↓
Interest rate down ↓	Bond value ↑

3. Property

Returns from property over the long term are generally very good. They easily beat cash and bonds.

However, returns from property are probably not as stable as they appear. This is because properties are not valued or sold frequently as is the case with shares.

Property is the most ***illiquid*** of the asset classes. That is, there is a lot of ***liquidity risk*** involved in property. It can take a long time to sell a property and get your money out. It can also be difficult, and often impossible, if you only want to sell part of a property. Ever tried selling one bedroom in your house? With the other asset types, part sales are easily possible.

Although, note that you can invest in a company or managed fund which invests in a range of properties. This way your investment will be more liquid and you will have an indirect stake in a number of individual properties. An example of a company listed on the NZX which invests in property is Kiwi Income Property Trust (www.kipt.co.nz).

4. Shares

Share prices can move up or down, sometimes by a lot.

- Bad news can mean a company's share price can go down by 20% or more in a day.
- Good news can mean it goes up 20% or more in a day.

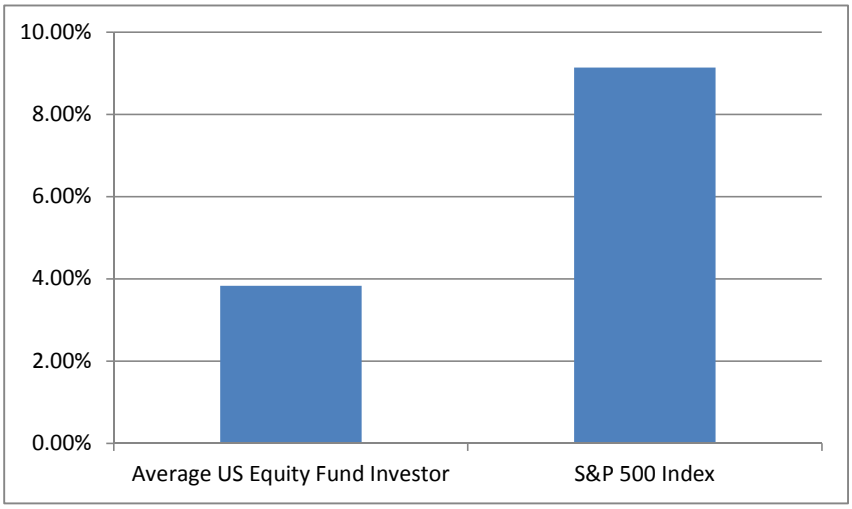
Returns on a group of shares from year to year can change a lot. BUT, over longer timeframes, returns on shares have been significantly higher than inflation. They have easily topped the returns from cash and bonds as well. Returns from shares are usually slightly higher than from property.

However, people who invest in shares often do not receive the returns that they should. This is usually because they take an active approach to investing and do not ***diversify*** their share ***portfolio*** enough (or they invest in an active fund that is not well diversified).

Active funds were introduced in Section 2.1.1.5. Remember, an ***active fund*** is the opposite of an ***index fund***. With an active fund, the fund manager tries to do better than the stock exchange index by picking the shares that they think are going to produce the best returns.

Research shows that the average investor in a United States Equity fund only received a return of 3.83% over the 20 year period to 31 December 2010. In comparison, the United States sharemarket earned returns of 9.14% over this time.

Equity Investment Returns from 1991 - 2010[23]



This means that, on average, people who invest in index funds get higher returns than those who invest in active funds or are active investors.

When diversifying your share portfolio, do not limit yourself to shares in New Zealand companies. To get the full benefit of the returns available on share investments, also consider global equities, including ***emerging markets***. An emerging market is the market of an economy that is in the process of rapid growth and development. Examples include China and India.

[23] DFA Australia Limited. *Your Window on Investing: Markets Work, v3.0*. Original Source: Dalbar, 2011. *Quantitative Analysis of Investor Behaviour 2011*.

2.3.3.2 The Impact of Asset Allocation on Returns

Studies have shown that over the last 100 years or so, shares have averaged about 4.6% per year more than cash.[24] This extra 4.6% per year doesn't seem very much, especially when you read about share prices doing nothing but go down – so why would you take the risk for such a small additional return?

When you ***compound*** this difference in interest rates over long periods, it makes an enormous difference.

For example:

$10,000 invested for 20 years
@ 5% per annum
= $26,532

$10,000 invested for 20 years
@ 9.5% per annum
= $61,416

If you are saving for retirement over 40 years through KiwiSaver, or similar, the difference is even more noticeable.

For example:
- $100 per month invested for 40 years @ 5% pa = $152,602
- $100 per month invested for 40 years @ 9.5% pa = $543,629

Over long periods such as this, even 1% extra per annum makes a big difference.

For example:
- $100 per month invested for 40 years @ 5% pa = $152,602
- $100 per month invested for 40 years @ 6% pa = $199,149

[24] An example of such a study is: Dimson, E., Marsh, P., and Staunton, M. (2002). *Global Evidence on the Equity Risk Premium.* Retrieved 17 January, 2010, from http://faculty.london.edu/edimson/assets/documents/Jacf1.pdf

So what looks like just a small difference and not really worth bothering about, can make a huge difference over the very long term. The bigger the sum you are investing and the longer you are investing for, the bigger this difference works out to be.

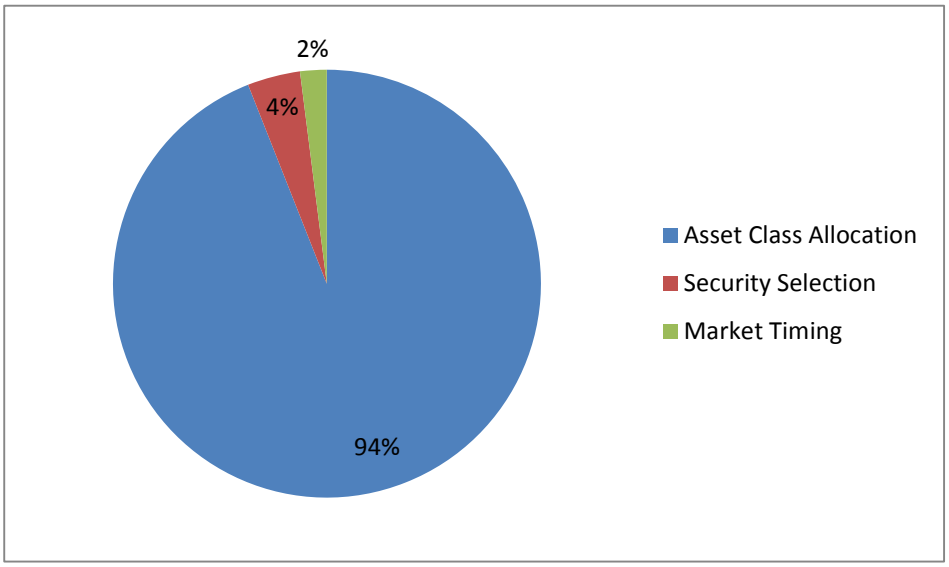
However, this does not necessarily mean that you should put a high ***proportion*** of your investments in shares. Remember, the higher the return, the higher the risk. You need to first work out your ***risk profile*** so that you know how much risk you are comfortable with. Risk profiles were covered in Module 2 of this programme.

A key point to note is that:

Asset allocation has a bigger impact on returns than security selection.

That is, if you have a well-diversified portfolio, the way you choose to split your money across the various asset classes will affect the returns you get MORE so than the individual investments you choose to include in your portfolio. Consider the following graph:

Factors affecting the Financial Performance of an Investment Portfolio[25]



[25] Source: Brinson, G.P., Hood, L.R, and Beebower, G.L. (1989). *Determinants of Portfolio Performance*, Financial Analysts Journal, Jul-Aug 1989.

The graph on the previous page shows that 94% of the returns you get from your investment depend on how you have chosen to spread your investment across the various asset classes. Only 4% of a portfolio's performance depends on the actual individual investments chosen (within each asset class).

So, for example, choosing to increase the proportion of your money that you invest in shares will have a greater impact on your overall financial returns than choosing to invest in companies A, B and C instead of companies D, E and F.

Many investors try to time the market right – that is, invest just before prices increase. However, the previous graph shows that only 2% of financial returns depend on the timing of an investment.

However, for this to be true, you need to have numerous investments in your portfolio (or invest in funds that have many individual investments). You need to spread your risk within each asset class – do not (for example) just invest in one or two companies!

2.3.4 Dollar Cost Averaging

Some people use ***dollar cost averaging*** as a strategy to reduce risk.

Dollar Cost Averaging
involves consistently buying a fixed dollar amount
of a particular investment
at regular time intervals

It is similar to deciding to invest $100 each month into your bank account.

So how does it reduce risk?

Because share prices are continually changing, the amount of shares that you will get for your set amount of money will change each time you make a purchase. For example, if you spend $1,000 on a particular company's shares every month, if the share price is $10, you will be able to buy 100 shares, but if the price drops to $8, you will be able to buy 125 shares.

In other words, you will end up buying more shares when the price is low and fewer shares when the price is high. This reduces the risk of investing a large amount of money at what you later find to have been 'the wrong time'.

Dollar cost averaging, however, cannot guarantee that you get a positive return on your money if the market is going down. In addition, you must consider your ability to continue investing on a regular basis under all market conditions. It can be very difficult to carry on paying money into an investment when it has done nothing but go down in value for a long period of time.

One thing you should consider with this strategy is the **transaction costs**.

Remember that the minimum transaction fee is likely to be around $30. If you are only investing a small amount of money, these fees may outweigh any benefit from the strategy.

Also note that there is a reasonable amount of disagreement as to whether or not this strategy actually works and if it is a good idea. One argument is as follows:

- If you have a large sum to invest and choose to invest it all at once, although there is the risk of bad timing, **at least you have money invested** that can grow over the long term.

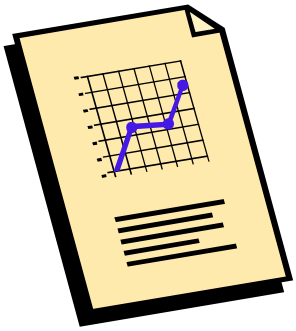
- If you instead drip-feed your money into an investment over a long period of time (using dollar cost averaging), overall, **your money spends less time invested**.

If, for example, the market performs very well in the years after you start your strategy, you will not benefit much from this. This is because you would not yet have much money invested. Also, your set amount of money would not be buying as many shares as you would have been able to buy had you simply invested it all as a lump sum at the beginning. Furthermore, recall the graph shown in the previous section – according to this, market timing has very little effect on the overall performance of a portfolio.

2.4 Investment Statements and Taxes

2.4.1 What is an Investment Statement?

An ***Investment Statement*** is a document that describes the details of the investment that you are considering. It is often in the form of a glossy brochure.



It is a legal requirement for most, but not all, investments to have a written Investment Statement.

Investment Statements must be given to investors *before* deciding to invest. You will therefore find that the application form for many investments is attached to the Investment Statement.

The *Securities Act 1978* describes the **purpose** of an investment statement as being:

- To provide certain key information that is likely to assist a ***prudent***, non-expert, person to decide whether or not to subscribe for (buy) ***securities***, and
- To bring to the attention of such a person the fact that other important information about the securities is available to that person in other documents.

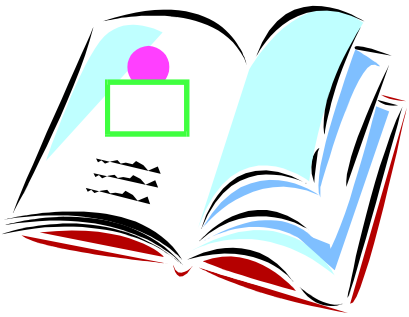
This means that everything an investor should know about an investment must be clearly laid out in the Investment Statement.

Before deciding to invest, you should read the Investment Statement. If there is anything that you do not understand, make sure you ask your ***financial adviser***. NEVER rely only on the advice of friends or neighbours.

The information outlined in the Investment Statement includes answers to the following 11 questions:

- What sort of investment is this?
- Who is involved in providing it for me?
- How much do I pay?
- What are the charges?
- What returns will I get?
- What are my risks?
- Can the investment be altered (changed)?
- How do I cash in my investment?
- Who do I contact if I have questions about my investment?
- Is there anyone to whom I can complain if I have problems with the investment?
- What other information can I obtain about this investment?

In addition, if the particular type of investment requires a ***prospectus***, this will be noted in the Investment Statement. The prospectus is a much longer and more detailed document and will be available on request.



2.4.2 Choosing an Investment Adviser

An ***investment adviser*** is someone whose job is to guide clients as to how, in the adviser's opinion, they should invest their money to reach their financial goals. Most people who use investment advisers (also called ***financial advisers***) do so because they feel they do not have the time or skills to invest their own money. Other people choose to use advisers because they simply are not interested in doing this work themselves.

2.4.2.1 Who may be a Financial Adviser?

Most financial advisers are self-employed and may be part of larger groups, such as Spicers or Goldridge, etc. Examples of people / organisations that may provide investment advice include:

- Financial planners
- Sharebrokers
- Banks
- Insurance Companies
- Accountants
- Independent advisers

Some lawyers may also act as investment advisers.

In the past, one of the disadvantages of using a financial adviser was that you could not be confident that the person had the skills and qualifications to be an adviser. In other words, anyone could call themselves a financial adviser – even if they had never had any training or experience in the area!

Now, under the *Financial Advisers Act 2008*, financial advisers need to have certain levels of skills, knowledge and experience to be able to call themselves "financial advisers" and to offer financial advice services.

There are three types of financial adviser:

1. An ***authorised financial adviser***. This is the most skilled type of financial adviser. They are able to provide advice about complicated types of investments such as ***securities***, land investment products and ***futures*** (futures are discussed in Section 3). Authorised financial advisers must also be 'registered financial advisers'.

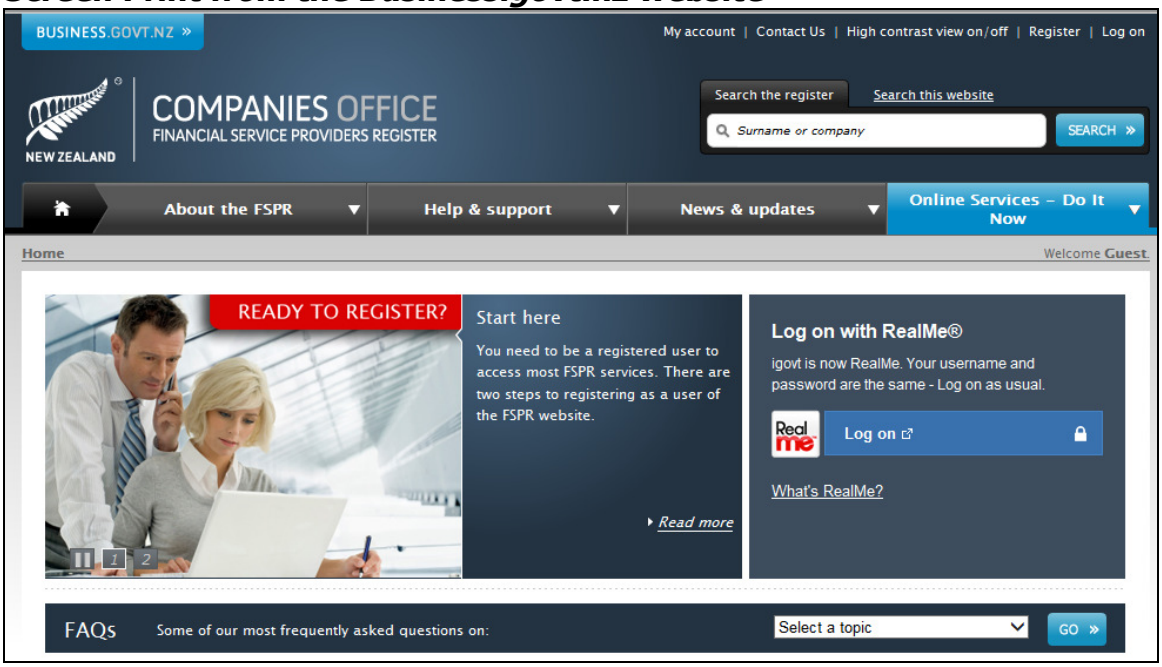
2. A ***registered financial adviser***. This type of adviser can provide advice about more basic types of financial products. These products include (amongst other things) bank term deposits, basic insurance products, consumer credit contracts and bonus bonds. Common examples of registered financial advisers include insurance brokers.

3. A financial adviser who is not authorised or registered, but who is an employee of a '***qualifying financial entity***'. A qualifying financial entity (***QFE***) is an organisation which is registered to provide financial advice.

   Common examples of QFEs include banks and insurance companies. In other words, if someone is employed by a QFE, they are able to provide financial advice on behalf of that organisation, even if they are not personally a registered financial adviser or an authorised financial adviser.

A list of all financial advisers is kept on the Government 'Business' website www.business.govt.nz/fsp. So if you need to make sure that your adviser IS authorised and / or qualified, be sure to check out this site. You can also use this website to help you find an adviser.

Screen Print from the Business.govt.nz website[26]

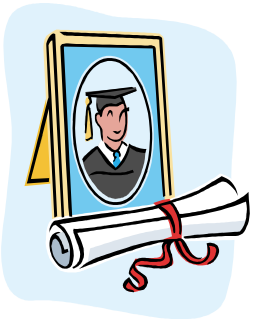


[26] Sourced from Ministry of Business, Innovation and Employment. Crown copyright reserved. Retrieved 5 October, 2013, from http://www.business.govt.nz/fsp

2.4.2.2 Advantages and Disadvantages of Using an Adviser

When using the services of an Investment Adviser, you should consider the advantages and disadvantages.

Advantages



- **Knowledge and experience base of the adviser.** This is the main advantage. If you want advice about a full range of investment products, make sure your adviser is an ***authorised financial adviser*** (AFA). In order to be an AFA, a financial adviser must be able to demonstrate that they have the ***competence***, knowledge and skills required to provide financial advice services. In addition, they must keep their knowledge up-to-date and continue to be involved in professional training.

  Therefore, if you are using an AFA, you can be reasonably confident that they have a practical and up-to-date knowledge of the investment options available. They should therefore be able to identify investments that meet your needs.

- Can **save time** on research and monitoring of investments. Your investment adviser should be well-informed about the various investment options and thus give you the information you need to help make decisions.

Disadvantages

- There are **costs** involved. Make sure you understand the total costs, including upfront costs, ongoing costs, buying costs and selling costs, before you start working with an adviser.

- **Possible *conflict of interest***. Your best interests and the adviser's best interest may not be the same. For example, the adviser may get more commission if they can convince you to put your money in a particular investment. However, this investment may not be the best one for you.

However, your adviser must provide you with details of how they earn their income and if the amount of money they make depends on the investments you choose (refer to the following sub-section about '***Disclosure***').

- The adviser **may only work with a limited range of products and services**. Make sure you know what they do, and do not, advise on (refer to the following sub-section about '***Disclosure***').

- Some financial advisers only work with people who **already have a large asset base**. Often, authorised financial advisers specialise in helping people who already have a lot of money to further invest their money – they might not work with people who currently have no asset base.

Discussion Questions:

- Who acts as an investment adviser in your community?
- Have you used the services of any of these individuals?
- If so, how much did it cost? How beneficial were their services to you?

2.4.2.3 Disclosure

It is worth noting that how you invest your money can affect the adviser's income. Different investments often pay different levels of ***commission***.

Advisers who work for banks, etc., do not usually receive commission; however they sometimes receive bonuses based on the amount of profit made for the bank. They may also have targets to meet for certain types of investments. Remember who the adviser works for!!

Fortunately, under the *Financial Advisers Act 2008*, investment advisers must ***disclose*** (tell investors about) certain key details. They must do this before giving investment advice, or even before receiving any investment money from you. This is done in the form of a written ***disclosure statement***.

The disclosure statement that a financial adviser must provide depends on what type of financial adviser they are. The disclosure statement for ***an Authorised Financial Adviser*** (AFA) is more detailed than that for someone who is only a ***Registered Financial Adviser***.

In fact, AFAs have two types of disclosure statements that they must provide:

1. A 'primary' disclosure statement.
2. A 'secondary' disclosure statement.

The contents of these disclosure statements are outlined below.

A **primary disclosure statement** for an ***Authorised Financial Adviser*** must include the following sections (amongst others):

1. What sort of adviser am I?

This section explains what an Authorised Financial Adviser is.

2. How can I help you?

In this section, the adviser is to provide a list of the financial adviser services that they are authorised to provide. They also need to state whether they provide advice relating to:

- Only financial products provided by one organisation.
- Financial products provided by between two and five organisations.
- Financial products provided by a broad range of organisations (i.e. more than five organisations).

So if you want a financial adviser who can consider a number of investment products when deciding the best product for you, make sure they select the third option.

3. How do I get paid for the services that I provide to you?

The adviser must 'tick' which of the following statements apply to them:

Payment Type	**Description**
Fees Only	My services are only paid for by the fees that you pay. I do not receive payments from other people or organisations that might influence my advice.
Fees	My services are paid for by the fees that you pay as well as in other ways.
Commissions	There are situations in which I will be paid by other organisations. How much that payment will be depends on the decisions that you make.
Extra payments from my employer / principal	I may receive extra payments from my employer (or principal) depending upon the decisions that you make.
Non-financial benefits from other organisations	Other organisations may give me (or my employer, etc.) non-financial benefits depending on the decisions that you make.

The adviser must also tell their clients the specific fees, commissions, extra payments and other benefits that they have received, or will (or may) receive, in relation to the services that they provide to you.

This must be told to the client before they are given the advice. If that is not ***practicable***, the adviser must tell the client as soon after providing the advice as is practicable.

4. What are my obligations?

The adviser must let the client know that:

- They are required to comply with the ***Code of Professional Conduct*** for Authorised Financial Advisers.

- That they have other obligations under the *Financial Advisers Act 2008* and under general law.

Note that the Code of Professional Conduct is on the Financial Markets Authority website. You can view this document by using the following address: http://www.fma.govt.nz/media/283463/afa-code-of-conduct.pdf

This ***Code of Professional Conduct*** includes standards relating to:

- ***Ethical behaviour***. This covers, for example, acting in the best interests of the client and generally not doing things that would give the financial advisory industry a bad name.

- **Client care.** This covers standards relating to (for example) behaving professionally, making sure that clients are able to make informed decisions and keeping good records.

- ***Competence.*** This relates to the skills and knowledge that the adviser has and what training they do to keep their knowledge up-to-date.

5. What else should you know about me?

In this section, the adviser must state whether they have:

- Been declared ***bankrupt*** within the previous 5 years. This must include details of the dates for that bankruptcy.

- Entered into the No Asset Procedure within the previous 5 years. This must include, amongst other things, details of dates.

- Within the previous 5 years, been the subject of ***disciplinary proceedings*** before the Disciplinary Committee and, as a result, a recommendation or order made has been made in relation to them.

Note that the Disciplinary Committee deals with complaints regarding Authorised Financial Advisers.

In other words, the adviser must say whether they have been found to have done something wrong by this committee.

- Been ***expelled*** from (or ***prohibited*** from) being a member of a professional body within the previous 5 years.

  If so, they must give details of the name of the professional body and the reasons for being expelled / prohibited.

- Any criminal convictions.

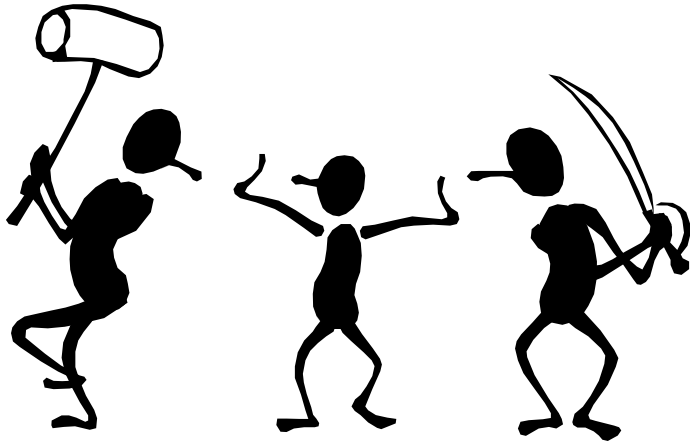
- Been found by a court or ***disciplinary tribunal*** to have done something wrong. Note that not every type of 'wrong' action must be identified - they only have to identify things that are relevant to them being a financial adviser. The terms and conditions for being an Authorised Financial Adviser identify what information is required to be disclosed.

6. What should you do if something goes wrong?

If a client has a problem, concern, or complaint about any part of their financial adviser's service, they are to first try to sort this out with the adviser (or their employer, etc.). Details of who to contact must be given in this section of the disclosure statement.

If a client is not able to sort their problem out with the adviser (or their employer, etc.) the next step is for them to contact the adviser's ***dispute resolution scheme***.

All ***Authorised Financial Advisers*** and ***Registered Financial Advisers*** must be a member of a ***dispute resolution scheme***. Contact details for the dispute resolution scheme must be given in this part of the statement.



7. If you need to know more, where can you get more information?

Advisers must tell clients that they should ask them directly, if they have any questions about any information in the disclosure statement, or, if they would like to know more information about them.

If clients have questions about financial advisers generally, they are advised that they can contact the Securities Commission.

8. How am I regulated by the Government?

In this section, the adviser must let clients know how to check that they are an Authorised Financial Adviser at http://www.business.govt.nz/fsp/.

This section also contains information about the Securities Commission's role in authorising and regulating financial advisers.

The secondary disclosure statement for an *Authorised Financial Adviser*

As noted earlier, ***Authorised Financial Advisers*** (AFAs) are required to provide two disclosure statements. The purpose of the second document is to give specific details about the products and services that the AFA is recommending to their client.

One of the standards in the ***Code of Professional Conduct*** requires AFAs to make sure clients have enough information to be able to make informed decisions about whether to use their services or to follow their advice. So if there is anything important that hasn't already been covered in the primary disclosure document, it must be covered in this second document.

2.4.3 Taxation of Investments

What taxes will I have to pay?

It is said that the only certainties in life are death and taxes. You will almost certainly have to pay, either directly or indirectly, tax on the profits from investing.

There is no getting away from the fact that taxes on investments are complicated. The information provided in this section is only a brief summary about taxes. You are strongly advised to consult your tax adviser before you invest, as various investments are treated differently for tax reasons.

When choosing a tax adviser or accountant, make sure that they are familiar with the tax rules for your investments as this is a specialised area of tax.

The rules that cover how, what and when taxes are paid depend on several things.

These include:

- How is my investment held – personally or in a ***trust***?
- What is my ***marginal tax rate***?
- If I invest in a managed fund, is it a ***portfolio investment entity*** (***PIE***)?
- Am I considered to be a ***trader***?
- Where are my investments – NZ and Australia, or in other countries?

2.4.3.1 Tax Rates for Various Entities

In most cases, income you receive from investments will be added to any other income you have. It is then taxed at personal income tax rates. Thus, the tax you pay will depend on your marginal tax rate. These rates were given earlier in the Module, and are shown again below:

Income Range	Marginal Personal Tax Rate
$0 - $14,000	10.5%
$14,001 - $48,000	17.5%
$48,001 - $70,000	30%
$70,001 or more	33%

However, if you do not personally own the investment, the tax rate will depend on the ***entity*** which does own the investment.

- Family trusts pay tax at a rate of 33%, whereas
- Companies and unit trusts pay tax at a rate of 28%.

Imputation Credits

New Zealand dividends usually come with ***imputation credits*** attached. Imputation credits were introduced in Section 1.2.2. Basically, the purpose of imputation credits is to prevent company profits being taxed twice.

New Zealand companies will pay tax on their profits (at a rate of 28%). However, they may then distribute some of their profits out to their shareholders as ***dividends***.

These dividends are income to the shareholder. The shareholder may therefore have to pay income tax on them. This means that, without imputation credits, a company's profit may be taxed twice!

When a company attaches ***imputation credits*** to the dividends it pays, shareholders can use these to reduce their tax bill, provided that they have other income.

For example:

- Assume the investor is an individual who earns $80,000 of income. Their marginal tax rate is therefore 33%.
- If the dividends have ***imputation credits***, the investor will only have to pay 5% tax on the dividends they receive.
- This is because the investor's marginal tax rate is 33%, yet the company has already paid 28%. This leaves only 5% for the investor to pay.
- If the investor earned, for instance, $30,000 and was therefore on a tax rate of 17.5%, they would actually be refunded 10.5% (i.e. 28% less 17.5%).

Australian shares come with the Australian ***franking credits***. These are like imputation credits, but they cannot be used in New Zealand. This means that you will have to pay two lots of tax on dividend income from Australian shares.

You should take this into consideration when looking at the returns of a fund that invests in Australian companies.

2.4.3.2 Managed Funds

In most cases, New Zealand ***managed funds*** have tax ***deducted*** by the manager and you will probably not have any additional taxes to pay. In other words, the fund manager takes care of paying the tax for you.

The tax rate for unit trusts is 28%. However, special rules apply if a fund is set up as a ***Portfolio Investment Entity*** (PIE). PIEs were introduced in Section 2.2.2 (which relates to KiwiSaver Fund Taxation).

The key points covered in Section 2.2.2 about PIEs are as follows:

- PIEs do not pay tax themselves. That is, there is not a set tax rate which PIEs must pay.
- The fund manager ***deducts*** tax on behalf of investors at rates which depend on the investor's income. This rate is referred to as the ***prescribed investor rate (PIR)***.
- There are differences between PIRs and marginal income tax rates.
- The top PIR is only 28%. There are also two lower rates (10.5% and 17.5%).
- PIEs are **not** taxed on capital gains from New Zealand and most listed Australian share investments. For these investments, PIEs only deduct tax on income (e.g. dividends).

2.4.3.3 Capital Gains Tax

Capital Gains Tax

is a tax on the increase in value of an asset.

In the case of shares, a capital gain occurs when you sell a share at a higher price than you paid for it. For example, if you purchased a share for $2.00 and then sold it for $2.60, you have made a capital gain of $0.60.

There is currently no capital gains tax on New Zealand company shares unless the IRD considers that you are a ***trader***.

A ***trader*** is someone who trades assets frequently and is seen to be **in the business** of trading assets.

That is, they are seen to be purchasing assets with the main goal of being able to sell them at a capital profit.

For example:

- Someone who buys shares when the market is low, and then sells them a month later when the market rises is likely to be considered a 'trader'.
- On the other hand, someone who buys and hold shares for the long term would not usually be considered as a 'trader'. This is the case even if they get a capital profit when they finally sell their shares.

The difference between who is, and who is not, a trader is often unclear.

These rules about capital gains tax also apply to most Australian shares, but you need to be careful here. Some companies which you would probably regard as Australian are legally not Australian companies. You need to check where the company is registered.

If a company is registered in a different country (other than New Zealand or Australia), this means that they are taxed based on the ***fair dividend rate*** approach. This is described in the following sub-section.

Also, the listed Australian trusts, such as Macquarie Infrastructure Group, do not count as Australian companies under New Zealand tax law. They therefore also fall under the ***fair dividend rate*** approach.

Finally, remember that there is no ***capital gains tax*** at all on New Zealand company shares and most listed Australian shares if the shares are held by a ***PIE***.

2.4.3.4 Overseas Investments and The Fair Dividend Rate

If you own shares in companies outside of New Zealand and Australia, these may be taxed under the ***fair dividend rate*** scheme.

The fair dividend rate scheme:

- Each financial year you pay tax based on 5% of the average market value of overseas shares (excluding Australian shares).
- The market value used is the opening value of your investment. That is, the value at the start of the ***financial year***.

For a managed fund, this is paid no matter what the actual returns were, or the amount of dividends that these shares produced.

For example, if a portfolio:

- was worth $1 million at the start of the ***financial year***,
- received $75,000 of dividend income through the year, and
- was valued at $1.2 million at the end of the year,

  the amount of tax owing would only be based on the opening value of $1 million.

In other words, tax would be paid at the relevant income tax rate for the organisation, based on a taxable income of $50,000 (i.e. 5% of $1 million – which is the market value of the shares at the start of the financial year).

So if the relevant tax rate was 28%, a total of $14,000 tax would need to be paid. This is summarised in the following box:

Tax payable	**= 28% of 5% of $1,000,000**
	= 28% of (0.05 x $1,000,000)
	= 28% of $50,000
	= 0.28 x $50,000
	= $14,000

What if I buy more shares through the year?

As we saw in the previous example, the amount of tax you pay depends on the value of your investment portfolio at the *start* of the year. This doesn't take into account shares that you buy later on throughout the year.

Shares bought during the year are therefore generally ignored when it comes to calculating the taxable income. If the fund still owns them, they will be accounted for in the opening balance of the portfolio in the following year.

However, **if shares are bought and sold in the same tax year**, the tax owed is based on the **lowest** of:

- 5% of the price you paid for the shares, and
- the actual profit made.

The fair dividend rate is not supposed to be a tax on profits. Therefore, losses on overseas investments are not usually tax deductible.

There are also a number of ***exemptions*** that apply. That is, the rules are different in some situations.

More detailed information about the fair dividend rate method is available on the IRD website: www.ird.govt.nz.

Individuals and Family Trusts

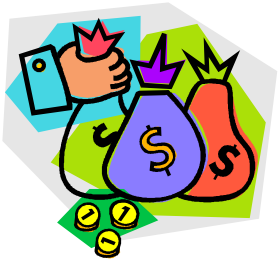
There are some ***exemptions*** to the fair dividend rate method. That is, there are some situations in which the fair dividend rate method doesn't apply to overseas investments.

Individuals whose foreign shares cost them less than $50,000

This rule applies only to individuals who own shares directly (not in a ***family trust***):

- If you have foreign shares which cost you less than $50,000 ($100,000 for a couple) when you bought them, you can choose to simply just pay income tax on any income that you receive. I.e. you can just pay tax on the dividend income.
- This only applies if you own less than 10% of the company.

Individuals whose foreign shares cost them more than $50,000



If you own your shares directly (not in a ***family trust***), and these investments cost you over $50,000 when you purchased them, you are taxed depending on the return on your investment. There are three possible scenarios:

1. <u>Total Return is Greater than 5%</u>

   If your total return (including both ***capital gains*** and dividends) is more than 5%, you are taxed using the ***Fair Dividend Rate*** method. I.e. you are taxed based on 5% of the value of your portfolio as at the start of the tax year.

   - For example, if a portfolio has a value of $100,000 at the start of the financial year, received $5,000 in dividends throughout the year and was worth $125,000 at the end of the financial year, the total returns would be $30,000. This is a 30% return.
   - However, because, under the fair dividend rate, taxable income is limited to 5% of the opening value of your portfolio, the taxable income would only be $5,000 (this is 5% of $100,000). Tax would then be paid on this $5,000, based on the individual's tax rate.

2. Total Return is Between 0% and 5%

   If your total return (including both ***capital gains*** and dividends) is between 0% and 5%, you are taxed based on the **actual total return**. This is called the 'Comparative Method'. Note that family trusts can also use this method.

   - For example, if a portfolio has a value of $100,000 at the start of the financial year, received $1,000 in dividends throughout the year and was worth $102,000 at the end of the financial year, the total returns would be $3,000. This is only a 3% return.
   - Therefore, instead of having a taxable income of $5,000 (which is 5% of the start value of the portfolio), you are taxed based on a taxable income of $3,000.

3. If the Total Return is Below 0%

   If the investor actually makes a loss during the year – i.e. total value of the portfolio, including the value of dividends, decreases from the previous year, **no tax is payable**.

   This loss cannot be offset against other income or ***carried forward***. Note that ***family trusts*** can also use this method.

Imputation Credits

An additional point to remember in regards to overseas investments is that it is unlikely that you will be able to claim a credit for any foreign tax that has been deducted – i.e. ***imputation credits*** do not apply.

This means that, if you hold shares in an overseas company, that company will pay tax to their Government on their profits. You will not be able to offset this tax amount against any tax that you have to pay. This means that you are, in effect, paying **more tax** on these overseas investments. This can make investing in overseas companies unattractive for New Zealanders.

As you can see, taxation on investments is very specialised! Make sure you seek professional advice before you invest to make sure that you maximise the returns on your investment.

Section 3

Bonds, Derivatives and Other Investments

3.0 Bonds, Derivatives and Other Investments

Apart from the investments already introduced, there are many other different investments available and this Section will show you the basic details of how some of them work.

Some of these investments can get very complicated, but you do not need to worry; you only need to understand them really well if you intend to trade them.

In this Section we simply **introduce** you to a number of the investments which you may come across at some stage in your life.

The aim is to give you a basic knowledge of what they involve, so that you can make a decision as to whether they are something you would consider using.

You are **NOT** expected to have an in-depth understanding of these investment options based on the content of this Section.

Key point: Some of the investments mentioned in this Section are not for the faint hearted.

Before being tempted by the thought of great riches, you need to understand what you're getting yourself into.

3.1 Bonds

3.1.1 What is a Bond?

When you buy ***shares*** in a company, you are buying part of the ownership of that company. This ***entitles*** you to a part of the profits (if there are any).

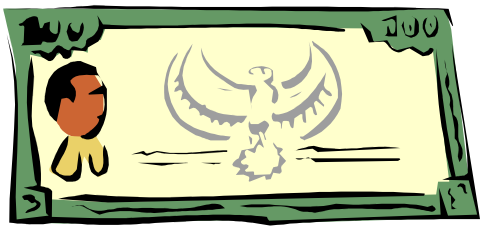
On the other hand, when you buy a company's ***bonds***, you are *lending* money to the company. This is the same kind of arrangement as when a bank lends money to you to buy a car or house, etc. This does not mean that you are in debt. Instead, it means that the company is in debt to you – they must pay you your money back.

Shares form part of a company's ***equity***,

and

bonds form part of a company's ***debt***.

Note that bonds are also issued by governments and government agencies, not just companies.



Bonds are generally issued for a set period of time, e.g. six months or five years. They usually pay a fixed rate of interest, which is why they may also be referred to as ***fixed interest investments***.

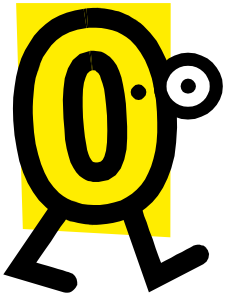
Over the period of the bond, interest is usually paid every six months, but is sometimes paid every three months. The interest paid by a bond is called the ***coupon***.

At the end of the term of the bond (at ***maturity***) you get your money back. The amount of this lump sum payment is often referred to as the:

- ***principal***,
- ***face value***, or
- ***par value***.

So if, for example, someone buys a bond with a par value of $1,000, this means that, at the end of the term of the bond, the company is required to pay them $1,000.

Types of Bonds



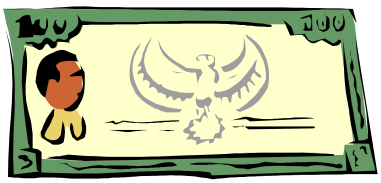
Bonds can come in a number of shapes and forms.

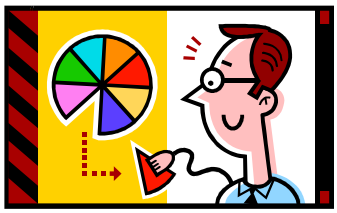
Some bonds do not pay any coupons at all - these are called ***zero-coupon bonds***.

This does NOT mean that the investor doesn't get any return on their money.

Instead, the interest that an investor earns on a ***zero-coupon bond*** is simply the difference between what they pay for a bond and the par value. For example, they may pay $950 for a bond with a ***par value*** of $1,000. This means that they earn $50 interest on their investment.

Other bonds may be ***convertible*** into shares in the company. This means that, instead of receiving your cash back, the company pays you back by giving you shares in the company (which you may choose to sell or keep).





In some instances, it may be compulsory that these bonds convert into shares, but in other instances, it may be the company's decision as to whether they do.

Another example of a type of bond is one which is ***inflation*** protected. If you have one of these bonds, the par value will increase with inflation.

For example, if there is inflation of 2% over the period of the bond, the company will pay you back an extra 2%. This protects the value of your investment.

There are even bonds available which have no ***maturity*** date. These are called ***perpetual bonds*** (also known as ***perpetuities***).

Which Bonds are Safer?

If you are looking to invest in bonds, you should be aware of the difference between ***senior bonds*** and ***subordinated bonds***. In the situation where a company (or other organisation) goes ***bankrupt***, there is a ***hierarchy*** in terms of the order in which people get their money back.

Investors who hold ***senior bonds*** are the first type of bondholder to be paid.

If there is any money left after this, then the holders of ***subordinated bonds*** get some, or all, of their money back. This means that subordinated bonds are more risky than senior bonds. As such, they usually have a lower ***credit rating***.

How do I Buy Bonds?

You can buy bonds in the same way as you can buy shares – that is, through a sharebroker (also known as a ***stockbroker***). Also, as with shares, you are able to register with a broker to trade bonds online. You can then log onto your share and bond trading account in a similar way to which you log on to do your online banking.

Also, as with purchasing shares, the bonds you buy are recorded on a register. Remember, the two main registrars in New Zealand are:

1. Computershare (www.computershare.co.nz), and
2. Link Market Services (www.linkmarketservices.co.nz).

If you do not already have a ***Common Shareholder Number (CSN)***, you will be given one of these. The registrar will use this number to record all of the shares and bonds that you buy. You will also need a ***Faster Identification Number (FIN)*** to buy and sell bonds listed on the ***NZX***. Common Shareholder Numbers and Faster Identification Numbers were introduced in Section 1.3.1.4.

You can find information about New Zealand bonds listed on the NZX Debt Market (remember, this is called the NZDX) on the NZX website at https://www.nzx.com/markets/NZDX/bonds. An example of the type of information that is available for each form of bond offered is given in the below screen print.

Screen Print: Example of Bond Information Available on the NZX Website[27]

AIA080

4.640%

0.000 / 0.00%

52 Week Change:
▲0.400 / 9.43%

Issued By	Auckland International Airport Limited
ISIN	NZAIADT110C2
Type	Yield Traded
Price Per $100	$112.788
Maturity Date	15 Nov 2016
Last Payment Date	15 May 2013

Activity		**Performance**		**Fundamental**	
Trading Status	Trading	**Open**	4.640%	**Face Value**	$1.000
Trades	0	**High**	0.000%	**Coupon**	8.000%
Value	$0.00	**Low**	0.000%	**Next Record Date**	5 Nov 2013
Volume	0	**High Bid**	4.640%	**Frequency**	Half Yearly
Outstanding (000s)	$129,992	**Low Offer**	-	**Minimum Holding**	10,000

The above example is of a bond issued by Auckland International Airport. It has a maturity date of 15 November 2016, a face value of $1.00 and a coupon of 8%. If you want to buy this bond, the minimum amount to buy is 10,000 and the price is currently $112.219 per 100 bonds.

[27] NZX. *Auckland International Airport Ltd (AIA080)*. Retrieved 5 October, 2013, from https://www.nzx.com/markets/NZDX/bonds/AIA080

If you want to include bonds in your investment portfolio, but do not want to invest thousands of dollars into one type of bond, a good option is to invest in a managed fund that invests in bonds. This will diversify your investment and reduce the risk that you face.

An example of a well-known provider of bond funds is the Dimensional worldwide group of companies, which includes DFA Australia Limited (http://www.dfaau.com/). This company offers a global bond fund that is based in New Zealand dollars.

Changes in Bond Prices

Once a bond has been issued (made available for investors to buy), the price of the bond will go up and down. These changes will depend on factors such as interest rate levels:

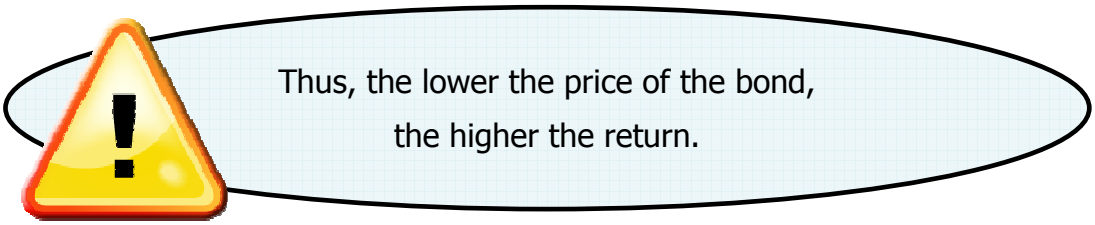
- **If interest rates go up, bond prices go down** (all else being equal – that is, assuming other factors do not also influence bond prices).

  Consider this example:

  If you pay $980 for a ***zero-coupon bond*** that has a ***par value*** of $1,000, you are only getting a return of $20 on your investment. However, if you paid $950 for the same bond, you would get a return of $50.

  If interest rates go up, investors are not as willing to pay as much for the bond since they are likely to get a better return on their money from another investment.

- **If interest rates go down, bond prices go up** (all else being equal).



New Zealand Government Bonds

People buy good quality bonds to give them reliable income and because they are relatively safe investments. ***New Zealand Government Bonds*** are the safest investment you can buy in New Zealand. The government is not going to go bust – if they want more money, they can simply raise taxes!

This does not mean you cannot lose money on New Zealand Government Bonds – you can if you trade them. That is, bond prices do go up and down. So if you need to sell them at a time when prices have gone down, you may make a loss.

BUT, if you plan on holding them until maturity, there is a government guarantee that you will get your money back. There aren't many investments available with a government guarantee!

New Zealand Government Bonds that are offered directly to the public (and only available to New Zealand residents) are called ***Kiwi Bonds***. Kiwi Bonds are issued in six-month, one-year and two-year ***maturities***. They have fixed interest that is paid quarterly.

Information on Kiwi Bonds can be found on the New Zealand Debt Management Office website (www.nzdmo.govt.nz).

If you are looking to invest in Kiwi Bonds, the minimum amount required is $1,000 (maximum of $500,000).

In 2011, the Government introduced a four-year Earthquake Kiwi Bond.

These are just like any other type of bond, except that the Government is using the money invested by bond holders to go towards meeting the recovery costs in Christchurch following the major earthquakes there.

As with other New Zealand bonds, New Zealand's market for trading these ***debt securities*** is the ***NZDX***.

3.1.2 Bonus Bonds

Bonus Bonds are an investment that was introduced by the New Zealand Government in 1970, in an effort to encourage New Zealanders to save[28].

When you buy Bonus Bonds, you are issued with ***units***. These units give you interest in the ***net assets*** of the Bonus Bonds Trust. This is New Zealand's largest retail ***unit trust***.

The key feature of Bonus Bonds is that investment income from this trust is **not** given out to ***bondholders*** in ***proportion*** to the number of bonds they have.

Instead, investment returns are put into a 'prize pool'. They are then distributed to bondholders monthly in the form of randomly selected (tax-paid) cash prizes. This means that, although you may get investment income, there is a chance that you may not.

The Bonus Bonds Trust

The Bonus Bonds Trust is managed by ANZ. Funds in the trust are mainly invested in low-risk ***debt securities*** issued by:

- The Government,
- Selected local authorities,
- New Zealand banks, and
- Selected large businesses.

The fund has a Standard & Poor's ***credit rating*** of AAf[29]. This is close to the top rating available (AAAf). This means that Bonus Bonds are a very low-risk investment. However, it also means that the average returns are also very low. Although, there is a chance that you could be the lucky winner of $1 million!

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[28] Image Source: ANZ Investment Services (New Zealand) Limited. Retrieved 5 October, 2013, from http://www.bonusbonds.co.nz/savingAndWinning.html

[29] ANZ Investment Services (New Zealand) Limited. *Our Credit Rating*. Retrieved 5 October, 2013, from http://www.bonusbonds.co.nz/ourCreditRating.html

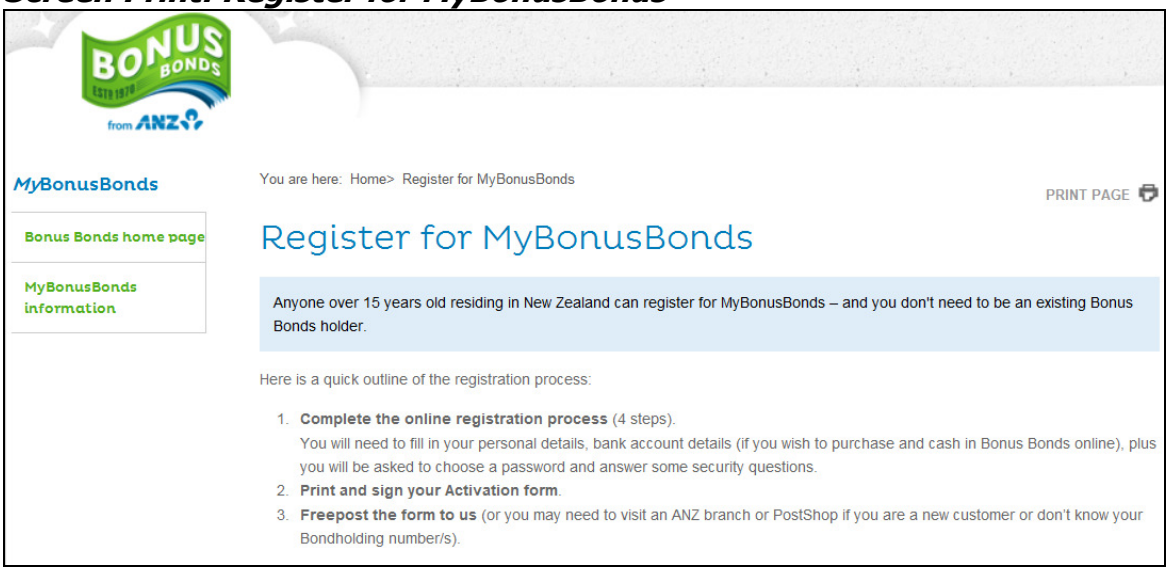
Buying Bonus Bonds

Bonus Bonds are sold for $1 per unit. There are no fees for purchasing the bonds, but each purchase must be for a minimum of 20 units (i.e. $20).

They can be purchased by anyone living in New Zealand. They can also be bought in the names of trusts, incorporated societies and companies.

Application forms to buy Bonus Bonds can be found at any ANZ branch or your local PostShop. You will need identification the first time you buy Bonus Bonds, but from that point onwards, you can buy them in a number of ways, including phone or internet banking, automatic payment and by post. There is also an online service called 'MyBonusBonds' which you can use to buy them.

Screen Print: Register for MyBonusBonds[30]



How Much Can I Win?

The current prize structure for Bonus Bonds consists of three major prize amounts per month:

1st prize:	$1 million
2nd prize:	$100,000
3rd prize:	$50,000

[30] ANZ Investment Services (New Zealand) Limited. *Register for MyBonusBonds.* Retrieved 5 October, 2013, from https://secure.bonusbonds.co.nz/registration/UI2004_RegistrationForMyBonusBonds.seam

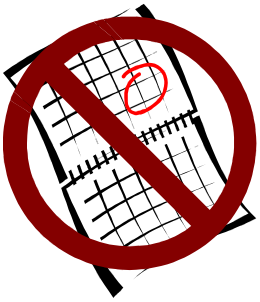
There are also a number of monthly prizes of $5,000, $500, $100, $50 and $20. The actual number of prizes available each month varies depending on the performance of the investments.

However, as a guide, at October 2010, Bonus Bonds had given out a total of 54,095,680 prizes since it began in 1970. The total value of these prizes was almost $2 billion (it was $1,921,973,140)[31]. This is an average of $35.53 per prize.

Every Bonus Bond you buy gives you a chance to win one of these prizes. Note that these prizes are tax-paid. This means that you do not need to pay any tax on any prize money you receive – even if you win the top prize of $1 million.

Also note that, given that money is distributed as prizes – you may not receive any return at all! In fact, under the *Finance Act 1990*, it is required that no unit shall have a better chance of winning a prize than 1 in 9,600. Yet, on the other hand, it is possible that you could win a lot of money.

Bonus Bonds do not have an expiry date. Thus, as winners are selected randomly, Bonus Bonds bought many years ago have exactly the same chance of winning as Bonus Bonds bought this year.



In addition, it is common for a single Bonus Bond to win numerous prizes over time.

It's like having a lotto ticket that you can use for every single lotto draw!

[31] Retrieved 30 May, 2011, from http://www.bonusbonds.co.nz/funFacts.html

How Do I Know If I've Won?

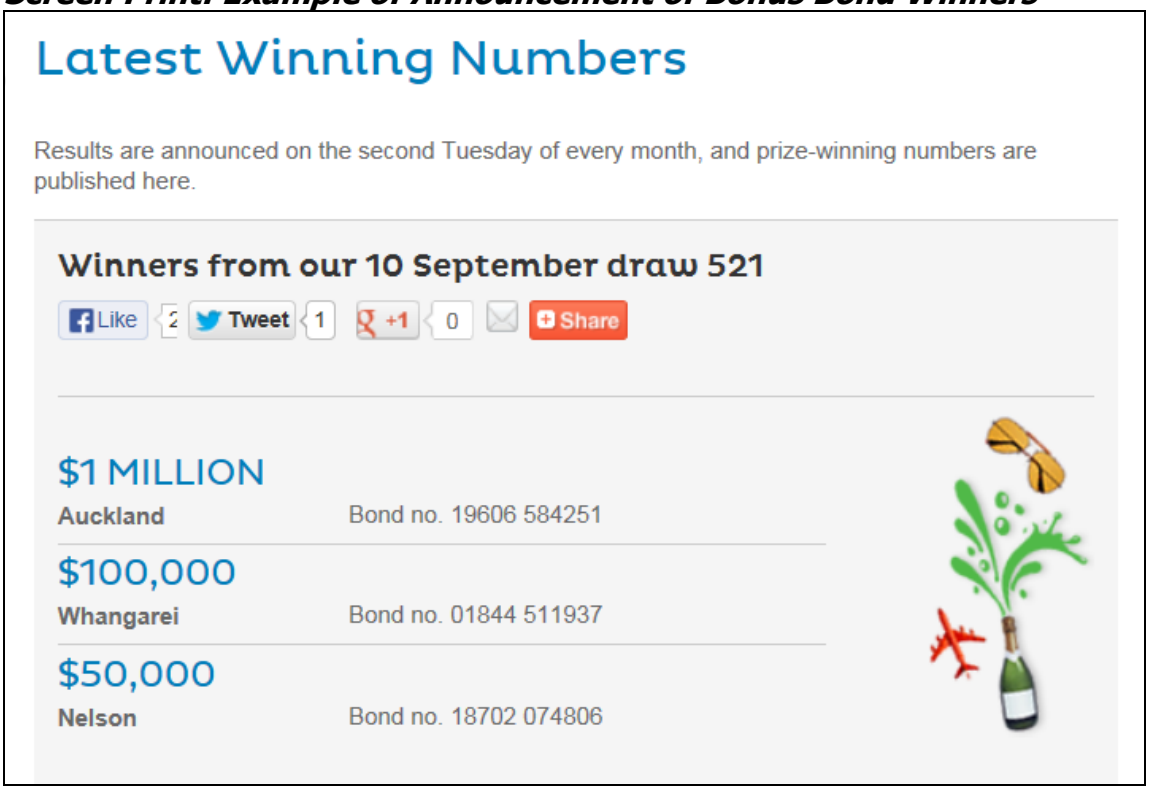
Winners are chosen by the Bonus Bonds random selector (known as ELSIE). The first number to be drawn wins first prize, and so on down to the smallest prize.

Results are announced on the second Tuesday of each month and published on the Bonus Bonds website. Winners are then sent a letter notifying them of their prize and method of payment.

If you sign up to the 'MyBonusBonds' service which allows you to manage your Bonus Bonds online, you'll also be sent an email to notify you of your win.

The full prize list is also available from any ANZ branch or your local PostShop.

Screen Print: Example of Announcement of Bonus Bond Winners[32]



Latest Winning Numbers

Results are announced on the second Tuesday of every month, and prize-winning numbers are published here.

Winners from our 10 September draw 521

Like 2 Tweet 1 +1 0 Share

$1 MILLION	
Auckland	Bond no. 19606 584251
$100,000	
Whangarei	Bond no. 01844 511937
$50,000	
Nelson	Bond no. 18702 074806

[32] ANZ Investment Services (New Zealand) Limited. *Latest Winning Numbers.* Retrieved 5 October, 2013, from http://bonusbonds.co.nz/winningNumbers.html#.Uk_gvUT29pM

Redeeming Bonus Bonds

Redeeming a bond simply means 'cashing it in' and getting your money back.

You are able to redeem your Bonus Bonds online using the 'MyBonusBonds' service.

Another way to ***redeem*** Bonus Bonds is to complete a 'repayment form'. This is available at ANZ and PostShop branches.

If bondholders do redeem their bonds, they are usually ***entitled*** to be paid their money within 28 working days. In practice, they are usually paid within 5 working days.

However, the Bonus Bonds ***Trust Deed*** does state that this could be delayed for up to 30 days if extraordinary circumstances arise. Examples of such circumstances would include financial, political or economic conditions affecting financial markets which cause the ***fund manager*** to believe that it is not practical to pay money out from the investment fund at that time. However, in an emergency, bondholders can choose to pay a fee of $60 to redeem their bonds.

The amount that bondholders receive when they redeem their bonds is $1 per unit. Remember, this is the same amount as the purchase price. Note that this means that, if you buy bonus bonds, and do not win anything, the value of your money would have decreased due to ***inflation***.

Although it is expected that the ***redemption amount*** of $1 per unit will stay the same in the future, it is possible that the price of this could change. This would depend on the performance of the fund and other redemption claims.

Discussion Questions:

- Have you ever bought Bonus Bonds?
- Have you ever won anything?
- What do you estimate the return on your investment to be?

3.2 Derivatives

3.2.1 What is a Derivative?

A ***derivative*** is a financial tool whose value depends on the value of something else. It is referred to as a 'derivative' for this reason – that is, its value is ***derived*** from something else.

In terms of the 'something else', this can be a range of different things. A few examples include:

- share prices
- bonds
- ***exchange rates***
- interest rates
- ***inflation***
- ***commodity*** prices
- weather conditions

For example, the value of a derivative investment may depend on changes in interest rates.

Note that, with derivatives, the values of these external factors do not have to increase in order for you to benefit – it is also possible to benefit if values go down. For instance, it is possible to earn a good financial return if a share price goes down.

Whether or not you make a profit also depends on what 'position' you take. The key terms used in relation to derivatives in this regard are ***long*** and ***short***:

- If you take a ***long position***, you are buying a derivative from which you will benefit if the value of the asset on which it is based goes up.

- If you take a ***short position***, you are buying a derivative from which you will benefit if the value of the asset on which it is based goes down.

There are two main uses of derivatives. These relate to the level of risk involved:

1. Hedging

Hedging involves **reducing risk**. If you use hedging, you are referred to as a ***hedger***.

Depending on the type of derivative used, this could involve, for example:

- Fixing the price to be paid (or received) for something in the future, or
- Off-setting some risk that you already face, by buying a tool that works in the same way as insurance. I.e. a tool that allows you to benefit if a price moves in your favour, but ***minimises*** your losses if it moves in a different direction. The cost of buying the derivative in this case is like an ***insurance premium***.

Another way of thinking about investing in derivatives in this manner is to liken it to 'betting on' the **opposite outcome** to the outcome you want for an investment you already have. This way, if your current investment makes a loss, at least you will get back some (or all) of your money from your derivative investment.

2. Speculating

Speculators choose to *have* exposure to risk. This is very different from a ***hedger***, who aims to reduce the risk involved in their investments.

A speculator is someone who wishes to bet on a certain outcome – they want to take the risk that a price will either go up or down.

When using derivatives for the purpose of speculating, you are increasing the amount of risk that you face.

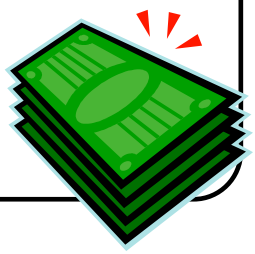
- It is possible to make very large profits in a short period of time using derivatives,
- BUT, if you get it wrong, there is the potential to make very large losses in a short period.

Consider the following example of how this works (note: the various types of derivatives will be discussed later in this Section).

Example: Using Derivatives to Increase Returns

- Assume you have $5,000 that you want to invest.
- There is a company whose share price is currently $70. You believe that this price is going to increase a lot within the next two months.
- With your $5,000, you could simply buy 71 shares. This would cost $4,970 (ignoring fees). If your hunch is correct, and the share price increases to $80, you would have just made $710 (71 x $80 = $5,680).

Profit from shares = Increase in share price x quantity of shares
= ($80 - $70) x 71
= $10 x 71
=$710



- However, instead of buying the stock, you could buy a ***derivative*** that bets that the price will increase to $80 within this time.
- The cost of this derivative may be $2.50. Given that you have $5,000, you could therefore buy 2,000 of these derivatives.
- If the price then rises to $80, you would then 'win the bet'.

- With this particular type of derivative, you would be able to buy 2000 shares for the old share price of $70 and sell them instantly for $80.
- This means you would instantly receive $10 for each of the 2,000 shares. Your profit would therefore be $20,000, less the cost of the derivatives.

Profit from derivatives = Increase in share price x quantity of derivatives
- cost of derivatives
= ($10 x 2,000) - $5,000
= $20,000 - $5,000
= $15,000

- The risk with this particular derivative, however, is that if the price doesn't increase to the point you expected it to, within the time you expected, your derivatives are worth nothing!

- In this case, you would have just lost the entire $5,000 that you invested.

- For example, if the share price actually reduced to $68, your profit (loss) would be as follows:

Profit from derivatives = Increase in share price x quantity of derivatives
- cost of derivatives
= ($0 x 2,000) - $5,000
= $0 - $5,000
= -$5,000

- On the other hand, if you had simply bought 71 shares, you would still be able to sell them and get whatever price is currently going in the market. For example, if the share price reduced to $68, you would be able to sell and recover $4,828 of the money you originally invested. This means you only lost $142.00.

Profit from shares = Increase in share price x quantity of shares
= ($68 - $70) x 71
= -$2 x 71
= -$142.00

Key Point:

If you are going to use derivatives for speculation, you really need to know what you're getting into and be prepared for the potential losses.

At the beginning of 2008, a trader from Société Générale (a large French bank, commonly known as 'Soc Gen') fraudulently (illegally) used bank money to invest in derivatives.

In doing so, he managed to lose 4.9 billion Euros in a few weeks. At the time, this equalled about NZ$9.3 billion!

As this shows, the potential losses from using derivatives for speculation are very large.

Discussion Questions:

- Would you classify yourself as a ***hedger*** or a ***speculator***?
- In what situations are you most likely to hedge?
- In what situations would you be most likely to speculate?

The four main types of derivatives include:

1. ***Forwards***;
2. ***Futures***;
3. ***Options***; and
4. ***Swaps***.

Each of these will be discussed throughout the remainder of this sub-section.

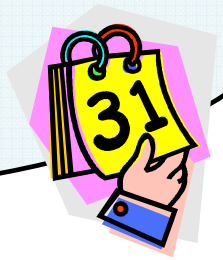
3.2.2 Forwards

A ***forward*** is a ***legally binding*** agreement

to buy <u>or</u> sell a specific quantity and quality of a particular asset

for a price agreed to today,

at a particular time in the future.



The agreed price is commonly referred to as the ***delivery price***.

You can either take a ***long position*** or a ***short position*** with a forward:

- ***Long position:*** If you take a long position, you are agreeing to **buy** the particular asset at the particular time in the future for a certain price.

  If the market price then goes **up**, this is to your benefit. This is because you have an agreement where you will buy the asset for a cheaper price than the market price. If you really want, you can then sell that asset straight away and make a profit!

- ***Short position:*** If you take a short position, you are agreeing to **sell** the particular asset at the particular time in the future for a certain price.

  If the market price then goes **down**, this is to your benefit. This is because you have an agreement where you will sell the asset for a higher price than the market price. On the day you make the transaction, you can buy the asset at the cheaper market price, and sell it straight away and make a profit!

A couple of key points about forward contracts are that:

1. Forward contracts are not ***standardised*** – they are customised depending on your needs. That is, there is no set 'standard' forward contract that you buy or sell.

2. Forward contracts are not traded on formal exchanges.

3.2.2.1 Uses of Forwards

One of the most common uses of forward contracts is to ***hedge*** against ***currency risk***. Consider the following example:

Example: Using Forwards to Hedge against Currency Risk

- Assume you own a business which imports clothing from the USA.

- You have placed a large order for winter clothing (worth US$25,000) that is due to be delivered in two months' time, in April. The supplier will invoice on delivery, at which time you must make full payment in US$.

- You only have a maximum of $34,000 to spend on this order. Due to the size of the order, you need to be careful with your budgeting to ensure that you can pay for the goods at that time.

- If the value of the NZ dollar stays the same as it is currently, which is NZD/USD = 0.78, you can afford your order (i.e. it will cost NZ$32,051.28).

Cost of Order = Price in USD divided by the NZD/USD exchange rate
= US$25,000 / 0.78
= $32,051.28

- However, if the exchange rate falls below NZD/USD = 0.735, you will not be able to afford your order. This number was calculated as follows:

Minimum Exchange Rate	= Price in USD / Maximum Budget (in NZD)
	= US$25,000 / $34,000
	= 0.735

For example, at NZD/USD = 0.72, your order for US$25,000 worth of goods will cost you $34,722.

Cost of Order	= Price in USD divided by the NZD/USD exchange rate
	= US$25,000 / 0.72
	= $34,722.22

- You therefore decide to take a ***long position*** in a ***forward contract***. Under this contract, you agree to buy US$25,000 at an exchange rate of NZD/USD = 0.78 on a specific date in April.

  You are now confident that, on the date that you need to pay for your order, you will be able to do so.

- Sure, it is possible that the exchange rate may increase to, for example, NZD/USD = 0.8 on the delivery date. In this case, had you not bought the forward contract, the order would have only cost you $31,250 instead of $32,051.28.

Cost of Order = Price in USD divided by the NZD/USD exchange rate
= US$25,000 / 0.8
= $31,250.00

However, given you only had $34,000, you are not prepared to take the risk.

A couple of other examples of uses of forward contracts include:

- A farmer entering into a contract to sell his sheep on a specific date in the future for a specific price.

- Airlines, including Air New Zealand, entering into contracts to buy oil at certain prices on certain dates. This allows them to budget better and ensure they can cover their costs for particular flights.

3.2.3 Futures

A ***future*** is very similar to a forward:

A ***future*** is a ***legally binding*** agreement

to buy <u>or</u> sell a specific quantity and quality of a particular asset

for a price agreed to today,

at a particular time in the future.

<u>The key differences between a *future* and a *forward* are</u>:

1. *Futures* are normally **traded on exchanges**. In contrast, *forward contracts* are private agreements between two parties.

   One of the advantages of being traded on an exchange is that it gives the two parties to an agreement a guarantee that the contract will be honoured (i.e. that both parties will keep their end of the agreement, even if it is not favourable for them).

2. *Futures* are **standardised contracts**.

   For example, if you needed to buy 10,200 bushels of wheat on a particular date, you may decide to try to find someone who is willing to enter a *forward* contract with you to sell you this quantity of wheat.

   OR, you may decide to simply contact your sharebroker and arrange to 'go long' (remember, this is agreeing to *buy* the asset) in two *futures contracts* for, for example, 5,000 bushels of wheat (a total of 10,000 bushels). You would then bear the risk associated with price movements for the remaining 200 bushels of wheat you require.

3. *Futures contracts* **do not usually specify an exact delivery date**, whereas *forward contracts* do.

A futures contract is referred to by its delivery month. The exchange specifies the period during the month when delivery must be made.

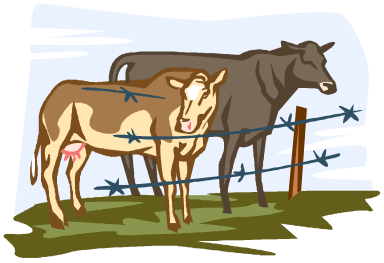
4. The great majority of *futures contracts* are **'closed out' before the end of the contract**.

I.e. instead of actually delivering the asset (or the contract being settled in cash), investors can offset the contract by taking the *opposite position* on the contract.

For example, someone who has a ***short position*** in a futures contract can buy a ***long position***. This will cancel any ***obligation*** they had to actually sell a particular asset at the end of the contract.

For this reason, it is much more common for people to use futures for ***speculating***.

Someone can take a ***short position*** in a futures contract even when they do NOT have any of the particular asset to sell AND / OR Someone can take a ***long position*** in a futures contract even when they do not want to buy a particular asset.



For example, someone who does NOT own any live cattle could take a short position in a futures contract involving live cattle. This means they are agreeing to sell cattle at a certain price by a certain time, even though they do not have any cattle to sell.

Before the end of the contract, they could then take a long position. One way to look at this situation is that the person then has a contract with themselves – they therefore do not need to buy or sell cattle to anyone else.

Why do you think that someone would enter a futures contract if they intended to 'close' it out before the end of the period?

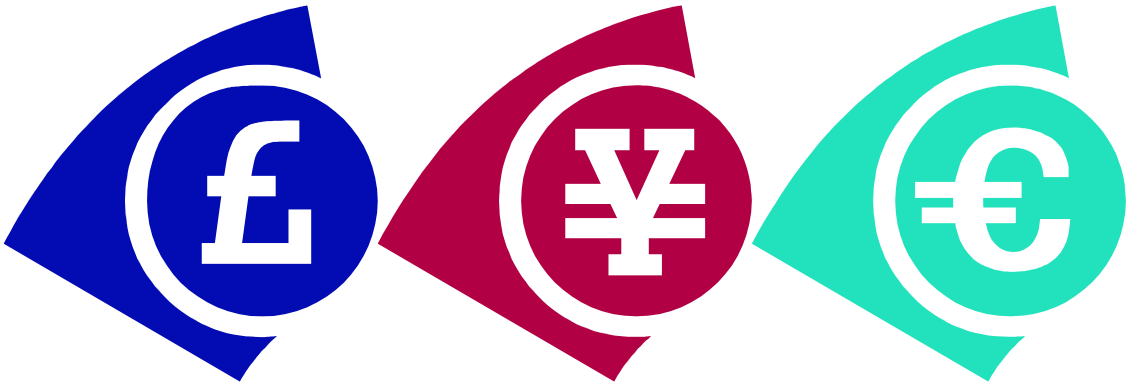
The answer: *because they could possibly make a profit.*

The profit (or loss) is calculated as the difference between the price of the futures contract when it was entered in to, and the price when it is closed out.

Note that, due to the standardised nature of futures contracts, there are not many types of futures contracts available. In comparison, you can enter a forward contract for almost anything.

The main exchange on which futures contracts are traded is the Chicago Board of Trade. This offers futures in a range of ***commodities*** and financial assets from pork bellies and lumber through to copper, interest rates and currencies.

Refer to the NZX website (www.nzx.com) for information about futures in New Zealand.

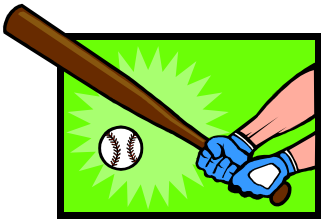


Discussion Questions:

- Would you use futures at all?
- If so, in what situations?
- If not, why not?

3.2.4 Options

An ***option*** gives the buyer the **right**,
but not the ***obligation***,
to buy <u>or</u> sell an asset,
at an agreed price,
on, or before, a certain date.



The agreed price is referred to as the ***strike price***.

The main difference between ***futures*** and ***options*** is as follows:

- With a ***future***, you have a ***binding obligation*** to buy or sell the asset (even though you can 'close the contract out' by purchasing the opposite ***position*** – e.g. enter an agreement to buy the asset that you had agreed to sell); whereas

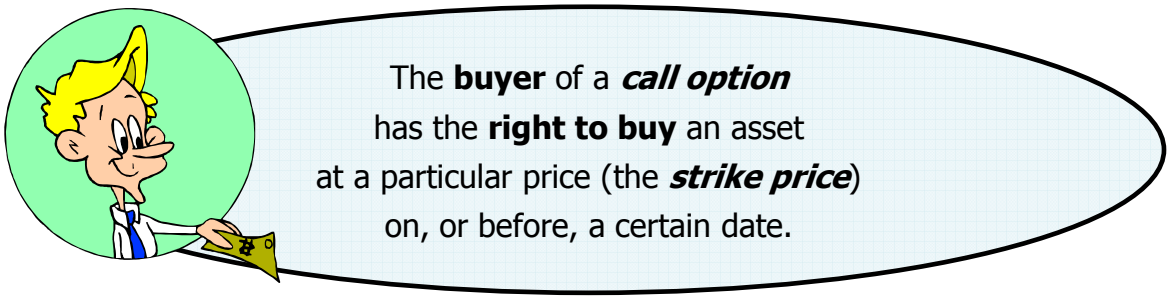
- With an ***option***, you have the choice (the option) of buying or selling the asset.

  If you choose to use your option, this is referred to as ***exercising*** your option.

There are two types of options – **Call Options** and **Put Options**.

3.2.4.1 Call Options

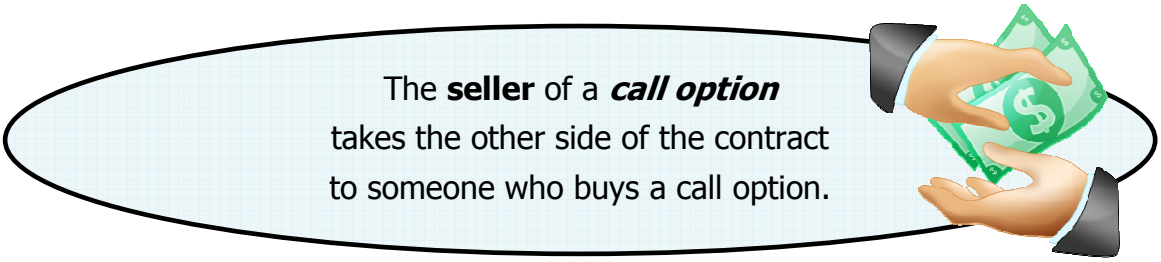
You can either buy or sell a call option.



That is:

- You pay a price to buy the call options.
- If the share price doesn't **increase** above the ***strike price***, you do not ***exercise*** your call options. In this case, the price you paid to buy the call options is your loss.
- But, if the share price increases above the strike price, you do ***exercise*** your options.

  To do this, you buy the shares at the strike price. You can then choose to immediately sell the shares at the current market price (which is higher) and make a profit.



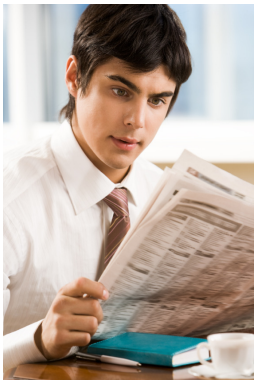
That is:

- As soon as you sell the call options, you will receive a payment of the price for the options (x the number of options you sold).
- If the buyer of the call options doesn't exercise the options, the payment you received will be your profit.
- If the buyer of the call options chooses to exercise them, you must sell shares to them at the agreed price (the strike price).

  If this happens, you will make a loss. This is because you need to sell the shares to the buyer at a price which is lower than the market price.

Consider the following two examples:

Example 1: Buying a Call Option



- The share price of Company A's shares is currently $4.70.
- Kenny believes that this price will increase to at least $4.85 in the next couple of months.
- Kenny therefore decides to buy some call options with a strike price of $4.80.
- These call options cost him $0.02 per option.
- It turns out that Kenny is right – the share price increased. In fact, it actually increased to $4.88 within the period of the options contract.
- Kenny therefore ***exercised*** his options by buying shares at $4.80.
- Kenny then immediately sold the shares for $4.88.
- The profit he earned was $0.06 per share (see below).
- If Kenny had bought a contract for 5,000 options, he would have just made a profit of $300.

Profit from buying call options	= (Share price – ***Strike price*** - Price of option) x Quantity of options purchased
	= ($4.88 - $4.80 - $0.02) x 5,000
	= $0.06 x 5,000
	= $300

If the share price was to instead decrease, or not increase above $4.80 within the period of the option, Kenny simply would not exercise the option. In other words, Kenny would not have to buy the shares at $4.80 per share if the share price was actually only, for example, $4.79.

Kenny's losses are therefore limited to the $0.02 he paid for each option. If he bought 5,000 options, his loss would therefore be $100 ($0.02 x 5,000 = $100).

Example 2: Selling a Call Option

- The share price of Company A's shares is currently $4.70.
- Christine believes that the share price is unlikely to increase. If anything, she thinks the share price will actually go down.
- Christine therefore decides to sell 5,000 call options to Kenny, with a strike price of $4.80.
- Christine charges Kenny $0.02 per option. She therefore receives a total of $100. If Kenny doesn't exercise his options, this $100 will become her profit.
- It turns out that Christine is wrong – the share price increased. In fact, it actually increased to $4.88 within the period of the options contract.
- Unfortunately for Christine, Kenny therefore decides to ***exercise*** his options.
- Christine does not actually own any shares in Company A, so she has to buy some at the current price of $4.88 and then sell them to Kenny for $4.80.
- Christine therefore makes a loss.

Loss from selling call options	= (Share price – ***Strike price*** – Price of option) x Quantity of options sold
	= ($4.88 - $4.80 - $0.02) x 5,000
	= $0.06 x 5,000
	= $300

If the share price was to instead decrease, or not increase above $4.80 within the period of the options, Kenny would not exercise the options, and Christine would not need to sell any shares.

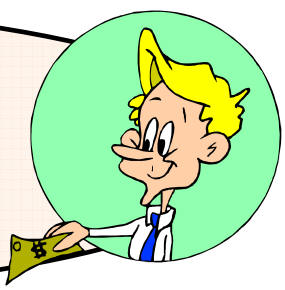
Christine's profits are therefore limited to the $0.02 she received for each option. If she sold 5,000 options, her profit would therefore be $100 ($0.02 x 5,000 = $100).

However, Christine's losses are unlimited! This is because, the higher the share price goes (within the period of the contract), the higher her losses will be.

3.2.4.4 Put Options

As with a call option, you can either buy or sell put options.

The **buyer** of a ***put option***
has the **right to sell** an asset
at a particular price (the ***strike price***)
on, or before, a certain date.



That is:

- You pay a price to buy the put options.
- If the share price doesn't **decrease** below the ***strike price***, you do not ***exercise*** your put options. In this case, the price you paid to buy the put options is your loss.
- But, if the share price decreases below the strike price, you do ***exercise*** your options.

  To do this, you buy shares at the current market price. You then use your put options to sell them at the strike price (which is higher).

The **seller** of a ***put option***
takes the other side of the contract
to someone who buys a put option.

That is:

- As soon as you sell the put options, you will receive a payment of the price for the options (x the number of options you sold).
- If the buyer of the put options doesn't exercise the options, the payment you received will be your profit.
- If the buyer of the put options chooses to exercise them, you must buy shares to them at the agreed price (the strike price).

  If this happens, you will make a loss. This is because you have paid more for shares than they are currently worth. If you sell them straight away you will need to accept the lower market price.

Example 1: Buying a Put Option

- The share price of Company A's shares is currently $4.70.
- Mia believes that this price will decrease to at least $4.50 in the next couple of months.
- Mia therefore decides to buy some put options with a strike price of $4.65.
- These call options cost her $0.02 per option.
- It turns out that Mia is right – the share price decreased, but not all the way to $4.50. It only decreased to $4.51 within the period of the options contract.
- Mia therefore buys shares at the current market price of $4.51.
- She then immediately ***exercises*** her options by selling the shares for $4.65.
- Mia earns a profit of $0.12 per share (see below).
- If Mia had bought a contract for 5,000 options, she would have just made a profit of $600.

Profit from buying put options	= (***Strike price*** – Share Price - Price of option) x Quantity of options purchased
	= ($4.65 - $4.51 - $0.02) x 5,000
	= $0.12 x 5,000
	= $600

If the share price was to instead increase, or not decrease below $4.65 within the period of the option, Mia simply would not exercise the options. In other words, Mia would not have to sell shares for only $4.65 per share if the share price was actually higher.

Mia's losses are therefore limited to the $0.02 she paid for each option. If she bought 5,000 options, her loss would therefore be $100 ($0.02 x 5,000 = $100).

Example 2: Selling a Put Option

- The share price of Company A's shares is currently $4.70.
- Kath believes that the share price is going to increase.
- Kath therefore decides to sell 5,000 put options to Mia, with a strike price of $4.65.
- Kath charges Mia $0.02 per option. She therefore receives a total of $100. If Mia doesn't exercise her options, this $100 will become Kath's profit.
- It turns out that Kath is wrong – the share price decreased below $4.65.
- Unfortunately for Kath, Mia waited for the share price to decrease all the way to $4.51 before choosing to ***exercise*** her options.
- Kath is therefore required to buy 5,000 shares from Mia at a price of $4.51 each! This costs her $22,550!
- Kath actually doesn't want to spend this much money on shares, so she needs to immediately sell the shares to get some of her money back. She can only sell the shares for the current market price of $4.51.
- Kath therefore makes a loss.

Loss from selling put options	= (***Strike price*** – Share Price - Price of option) x Quantity of options sold
	= ($4.65 - $4.51 - $0.02) x 5,000
	= $0.12 x 5,000
	= $600

If the share price was to instead increase, or not decrease below $4.65, Mia would not exercise the options, and Kath would not need to buy the shares.

Kath's profits are therefore limited to the $0.02 she received for each option. If she sold 5,000 options, her profit would therefore be $100 ($0.02 x 5,000 = $100).

However, Kath's potential losses are huge! This is because the share price could decrease all the way to $0 (if the company goes out of business).

3.2.4.3 Summary of when you would use Put and Call Options

The following table shows which type of options benefit in different situations. It is explained further below.

	Call Option		Put Option	
	You make money when the value of the underlying asset			
Buy	Goes up	↑	Goes down	↓
Sell (write)	Goes down	↓	Goes up	↑

Refer to the previous table.

If you believed the price of an asset was going to *increase*, you would either:

- *Buy a Call Option*

  In this case your loss is limited to the amount you pay for the call option. However, your potential profits are unlimited – the higher the price of an asset rises beyond the strike price, the higher your profit is!

Potential Profit	=	Unlimited!

Potential Loss	=	The amount you pay to buy the call options

- *Sell a Put Option*

  In this case your profits are limited to the amount you receive for the put option. However, your potential loss is equal to the amount of the ***strike price***, less the amount you received for the put.

Potential Profit	=	The amount you receive for selling the options

Potential Loss	=	Strike Price – Amount you receive for selling the put options

  For example, if a company was to go completely bust and you had sold a put option with a strike price of $10.80 per share, you could lose the full $10.80 (less the amount you received for the option). This is because you would be required to buy a stock that is absolutely worthless for a price of $10.80.

If you believed the price of an asset was going to decrease, you would either:

- *Buy a Put Option*

  In this case your loss is limited to the amount you paid for the put option. However, you could possibly make a profit as large as the strike price of the option, less the amount you paid for the option.

  For example, if your option has a strike price of $10.80 and the value of the asset dropped to $0.02, you would be able to buy the asset at $0.02 and sell it for $10.80.

Potential Profit	=	Strike Price – Amount you pay to buy the put options

Potential Loss	=	The amount you pay to buy the put options

- *Sell a Call Option*

  In this case your profits are limited to the amount you receive for the call option. However your potential losses are unlimited!

  For example, consider a situation where you sell a call option with a strike price of $10.80 and the company created a breakthrough invention which saw its price almost triple to $30.

  In this case, if you didn't already own the shares, you would have to buy some at $30 and sell them at only $10.80! This is a loss of $19.20 per share, less the amount you would have received for the option. If you had sold options for 1,000 shares, this is a whopping loss of $19,200 (less the amount you received for the option).

Potential Profit	=	The amount you receive for selling the options

Potential Loss	=	Unlimited!

Discussion Questions:

Given the potential loss involved in selling a put or call option, why do you think people choose to take these positions?

How do you think they manage the risk they face?

3.2.4.4 Key Points Regarding Options

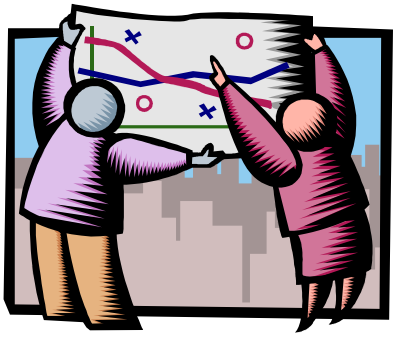
- Selling an option is also commonly referred to as ***writing an option***. For example, instead of saying "sell a call option", you could say "***write*** a call option".

- Due to the potential losses involved in either selling a put option or selling a call option, be very careful about taking either of these positions. When you sell an option, your profit is limited, but your losses are not!

	Level of Risk
Buying Options	Limited to premium paid
Selling (writing) Options	***Potentially*** unlimited

- Different strategies can be created by buying and selling puts and calls in varied quantities at different ***strike prices*** and expiry dates.

  You can, for example, buy and/or sell puts or calls in ways that will limit your losses and your gains within certain ranges. Some of the names of the various strategies include *strips*, *straps*, *straddles* and *strangles*, as well as *bull spreads*, *bear spreads* and *butterfly spreads*.



- Like ***futures*** and ***forwards***, options can be used both for ***hedging*** (reducing risk) and for ***speculation***.

  For example, if you owned shares in Telecom, you could ***hedge*** by buying put options. This would be like buying insurance in case the share price fell below the ***strike price***. If the share price did fall, you would be able to sell your shares at the strike price instead of at a lower market price.

- You can get options on a wide variety of assets. You can even get options on other ***derivatives***, such as ***futures options*** and ***swaptions*** (options on ***swaps***).

3.2.5 Swaps

As the name suggests, a ***swap*** involves two parties agreeing to exchange something.

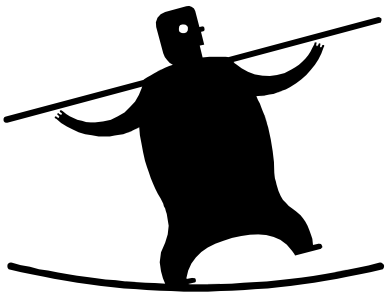
A ***swap*** is a ***legally binding*** agreement
where two parties agree to
exchange cashflows in the future.

One of these parties is usually a 'swaps dealer', who takes a fee for doing so. Unlike a forward or a future, swaps generally involve exchanges of cashflows on several dates.

The most common type of swap is a ***'plain vanilla' interest rate swap***. In this type of swap:

- One party (Party A) agrees to pay the other party (Party B) cashflows based on a fixed interest rate, and
- Party B agrees to pay Party A cashflows based on a floating interest rate.

3.2.5.1 When are Swaps used?



Swaps can be used by:

- ***hedgers*** to reduce risk relating to their liabilities or assets, or by
- ***speculators*** who hope to profit from changes in things such as interest rates.

Consider the following example of how a business can use a swap to **reduce risk** involved in interest rate changes.

Example of an Interest Rate Swap

- Company A has borrowed $1 million to purchase an important new asset.

- The only agreement they were able to come to with the lender was for a ***floating interest rate***.

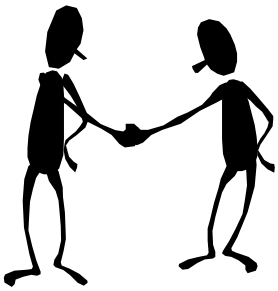
- Most of Company A's income comes from five main customers. Each of these customers has entered into three-year agreements with Company A which involve them paying set contract payment amounts in return for Company A's services. Company A is therefore quite confident in regards to its future cashflows.

- Company A is, however, worried about the impact that rising interest rates could have on its profit margins.

- Company A enters into a swap agreement with Party B whereby:
  - Company A agrees to pay Party B cashflows every six months for the next three years.

    The amount of these cashflows is based on a ***fixed interest rate*** of 10% per annum on a ***notional principal*** of $1 million.

    Note that this ***principal*** is **not** exchanged between parties - it is only used to calculate how much cash needs to be paid.



$$\text{Amount of Payment} = \frac{10\% \text{ of } \$1{,}000{,}000}{\text{number of payments per year}}$$

$$= \$100{,}000 / 2$$

$$= \$50{,}000$$

This means that Company A will pay Party B about $50,000 every six months.

- Party B agrees to pay Company A cashflows every six months for the next three years. The amount of these cashflows is based on a ***floating interest rate*** and a ***notional principal*** of $1 million.

  Again, note that this ***principal*** is **not** exchanged between parties – only the cashflows are.

- Over the three years of the swap agreement, the floating interest rate may change.
  - It may, for example, go from 11% right down to 8%. In this case Party B would benefit: Company A would be giving Party B $50,000 in exchange for $40,000 (i.e. 8% of $1,000,000 divided by 2).
  - However, at other times, the floating rate may rise to, for example, 14%. In this case, Party B would be disadvantaged – they would still only receive $50,000 per payment from Company A, but would be paying Company A $70,000.

Why enter this arrangement?

- The impact of this swap arrangement is that Company A would have, in effect, swapped the floating interest rate that they pay on their debt to a fixed interest rate.
- This is because the floating rate cashflows it receives from Party B could be paid directly to the finance company from which it is borrowing money.

- If the floating rate increases, Company A would have to pay more interest to the finance company, but this would be offset by the increase in cashflows it receives from Party B.
- It is as if Party B is paying for the interest on Company A's loan, and company A instead pays a fixed rate of interest to Party B.
- As for Party B, they may enter this arrangement because they believe that interest rates are going to decrease. If they are right, they get a profit because they will receive more money from Company A than they have to pay.

Interest Rate Swaps are Very Common

Although the previous example was based on a business, you may be surprised to learn that, in a way, interest rate swaps affect many of us.

If you have a fixed rate mortgage, the interest charged to you by the bank is based on the relevant swap rate. For example, this means that if you have a two-year fixed rate mortgage, and the two-year swap rate is 8.2%, you are likely to be paying about 9.0% for your mortgage.

Why do banks do this?

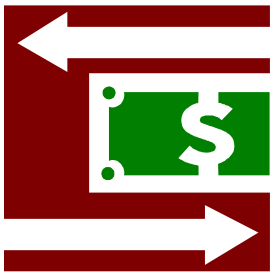
Most people who have mortgages these days have fixed mortgage rates, the most common being for about two or three years. Banks do not have enough of their own money to lend out, so they borrow it, much of it from bank depositors.

Most depositors have their money invested for relatively short terms, with three to six months being the most common.

If interest rates rise, the banks will have to pay more to their depositors before they can start charging more for their mortgages (since mortgages are typically for longer periods of time).

To get around this risk, they can use interest rate swaps. If interest rates rise, they still have to pay more to their depositors, but this is offset by the profits they will make from their interest rate swaps.

3.2.5.2 Other Types of Swaps



There are many other types of swaps that can be arranged. In addition to the 'plain vanilla' fixed-for-floating interest rate swap discussed above, other popular types of swaps involve different currencies.

Examples include:

- ***Fixed-for-floating interest rate swap*** – in different currencies.
- ***Fixed-for-fixed interest rate swap*** – in different currencies.
- ***Floating-for-floating interest rate swap*** – in different currencies.

3.3 Other Investments

3.3.1 Term Deposits

Term deposits are one of the simplest investments that you can make:

With a ***term deposit***,
you put your money in a ***financial institution*** (usually a bank)
for a certain length of time.
The financial institution tells you in advance
what interest rate you will receive for that period.

Usually, but not always, the longer you agree to tie your money up, the higher the interest rate you will receive.

It doesn't matter what happens to interest rates in the meantime, the rate you agree to at the start is the interest rate you will receive.

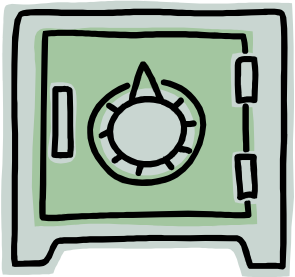
Term deposits generally pay a higher interest rate than other types of bank accounts.

The main disadvantage with term deposits is that you are 'locked in'. This means that if you want your money back before the end of the term, the bank (or other financial institution) does not have to give it back to you, although it is very rare for banks not to do so.

However, if the bank lets you break your term deposit, you are most likely to be ***penalised*** for doing so. You will lose a large amount, if not all, of the interest that has been earned.

What do I need to consider when investing in term deposits?

- Security – how safe is my money?



It pays to remember that the 'return OF your money' is more important than the 'return ON your money'.

Therefore, be familiar with the ***credit rating*** of the financial institution before arranging a term deposit. Credit ratings are discussed later in this Section.

- Who is offering them?

  Term deposits are offered by all sorts of institutions, from the large banks to accountants and solicitors. In general terms, the larger the institution, the safer your money is.

  This doesn't mean that you shouldn't invest with a small institution - but you should make sure the interest rate is high enough to compensate for the extra risk.

- Can I get my money back early?

  When you take out a term deposit, you are entering into a legal contract. You are agreeing that the financial institution can have use of your money for a set period of time.

  The large banks will generally let you break this and get your money back at any time, even though you may lose some or all of your interest.

  The smaller financial institutions may not let you do this. This is because they may not have enough money coming in to replace the money you are taking out. That is, they may be counting on using your money for the entire time you agreed to lend it for.

- <u>When do I want my money back?</u>

  Longer terms usually offer higher interest rates than shorter terms. However, be careful about the term you agree to – the penalties for breaking a term deposit will more than outweigh any extra interest earned.

  For example, you may agree to a 12 month term deposit because it pays 6.35% interest, instead of only 5% (which is what is available for a six month period). As you are investing $10,000, this is approximately $635 instead of $500 in interest (assuming that when the six months is finished you invested the money for another six months at 5% interest).

  However, before the year has finished, you may find that you urgently need this $10,000 to go towards the deposit on a house you want to buy. If you break the term deposit, you are likely to lose all of the $635.

  In this case, you would have been better off to take the lower rate of 5% and only be locked in for six months.

- <u>What do I think is going to happen with interest rates?</u>

  If you believe that interest rates are on their way down, it probably pays to choose a longer term for your deposit. This way, you will get the higher rate for a longer period of time.

  If you believe that interest rates are going to go up, then you should probably invest for a shorter term. This way, you can get the new higher interest rates as soon as possible.

  You should bear in mind, however, that the level of interest rates is very difficult to forecast.

- <u>Can I add more money to an existing term deposit?</u>

  The general answer to this question is 'no'. However, what you can do is start a new term deposit. Alternatively, you can wait until your current term deposit matures (ends) and then add more money to your original amount and invest it.

- <u>What difference does more frequent compounding make?</u>

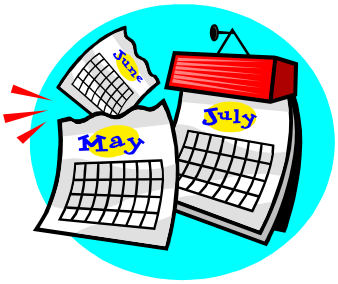
  As you would have learnt in earlier modules of this programme, the more often the ***compounding*** takes place, the more interest you will earn.

  A term deposit that compounds monthly is therefore better than a term deposit that compounds quarterly. This is, of course, providing the interest rates are the same. This is because interest is added to your account at the end of the month and you will earn interest on the interest sooner.

  Banks usually offer lower interest rates for term deposits which compound more frequently, so you would have to do some calculations to check out which is best.

  Bank staff would probably be able to help you with this.

- <u>How long do I have to invest for?</u>



  Banks will usually offer term deposits for anything from seven days to five years.

  For shorter terms (30 days or less), you may be better off keeping the money in a savings account which you can easily access.

- <u>How much money do I need?</u>

  Most banks will require a minimum of $1,000 for a term deposit.

  There is no upper limit – your bank manager will like you very much if you deposit $5 million from your Lotto win!

3.3.2 Commodities

3.3.2.1 What are Commodities?

The two most common ***commodities*** that you often hear of in regards to investments are gold and oil.

However, there are many more items which come under the general term 'commodities'.

Commodities are often divided into two categories – hard commodities and, yes, soft commodities.

- **Hard commodities** are usually those which are mined. Examples include metals such as gold and copper.

- **Soft commodities** are usually those which are grown. Examples include wheat and cocoa.

  Investing in soft commodities is done both by farmers wishing to lock-in the future prices of their crops and by ***speculators*** in the hope of making a profit.

Commodity markets are markets in which commodities are bought and sold. They are usually bought and sold using ***futures*** contracts. Most commodities are priced in USD. This is why the price of petrol often goes up when the NZD falls against the USD.

The main commodities exchanges are:

Exchange	Abbreviation	Location	Types of Commodities
Chicago Board of Trade	CBOT	Chicago	Agricultural, Biofuels, Precious Metals
Chicago Mercantile Exchange	CME	Chicago	Agricultural, Biofuels
Euronext		Europe	Agricultural
London Metal Exchange	LME	London	Industrial Metals, Plastics
New York Board of Trade	NYBOT	New York	Agricultural, Biofuels
New York Mercantile Exchange	NYMEX	New York	Energy, Agricultural, Industrial Metals, Precious Metals

3.3.2.2 Investing in Commodities

There are several different ways to invest in commodities. Using gold as an example, some of these are as follows:

- **Buy gold coins**

Examples of gold coins you could buy include:

- The New Zealand gold kiwi.
- The South African krugerrand.
- The Canadian maple leaf.
- The British sovereign.

However, there may be difficulties with storage and insurance – how safe is your front door?

- **Buy gold bars**

  The same problems apply for gold bars as for gold coins. I.e. where will you store them? How safe is it to have them at your house? Will your insurance cover this?

  Some companies will store gold bars for you, at a price, of course.

- **Buy gold jewellery**

  Although gold jewellery is valuable and can look very attractive, it is not good for investment or speculation. This is because much of the value may depend on the quality of the workmanship.

- **Invest in derivatives**

  Another option is to invest in ***derivatives*** that are based on the value of this commodity. However, if you are going to do this, make sure you are completely aware of the risk involved!

- **Buy shares in companies that produce gold**

  If the price of gold rises, the chances are that the share prices of companies which produce gold will also rise. An example of such a company is Newcrest Mining in Australia.

If you buy the actual physical commodity, such as gold bars, barrels of oil, or bags of cocoa, unlike most investments, you will not get any income from them until you sell them.

A bag of cocoa doesn't pay any interest. There will also be the costs of storage and insurance to consider. Agricultural commodities can also 'go off'.

These factors are some of the main reasons why investing in commodities is not usually done through holding the actual commodity itself.

3.3.2.3 Financial Returns from Gold

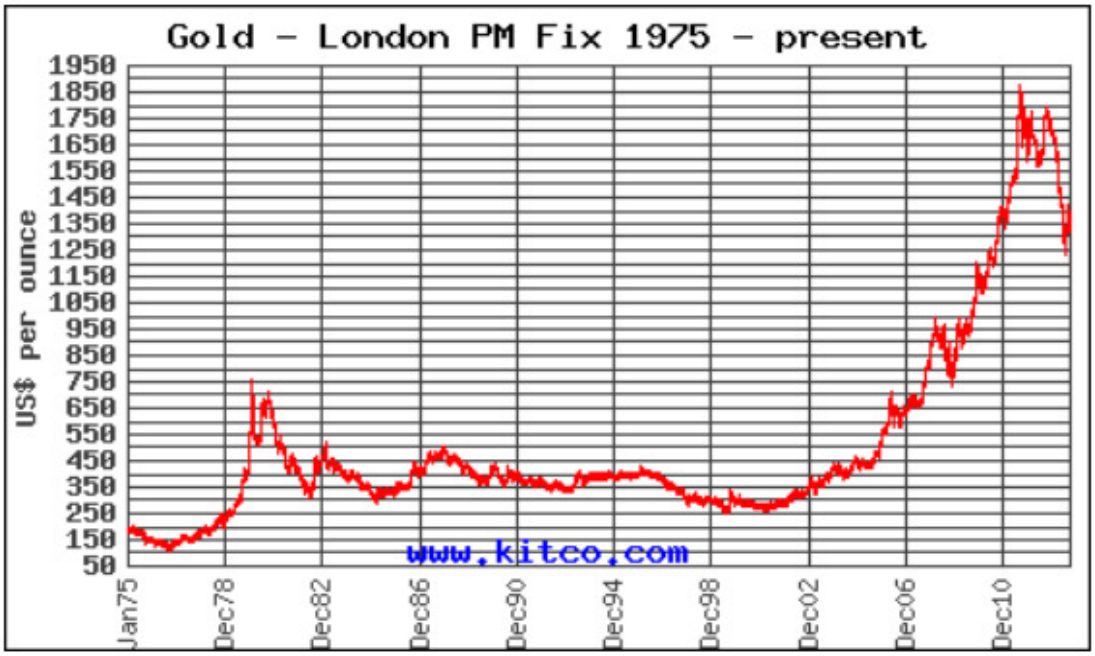
If you had invested in gold about 10 years ago, and still have that gold, you would be able to sell it and realise massive returns on your investment.

In October 2002, the price of gold was around US$315 per ounce. However, the price then increased to reach a record price of over US$1,850 in 2011! If you had purchased gold in October 2002 and held onto it for 10 years, you would have made a profit of about US$1,460 per ounce. This is more than a 350% increase in price in only 10 years!

Thus, commodities can offer good returns. But, you should also understand that they can go for long periods of time with low (or negative) returns. Look at the following chart which shows gold prices (in ***USD***) since 1975.

You can see that, after reaching a high in 1980, the gold price began a long, slow decline that lasted for about 20 years. It wasn't until about 2001 that the price of gold began to rise again. Furthermore, as of October 2013, the price of gold was down to around $1,300 per ounce. This means that, if you had purchased gold in 2011, and sold it in 2013, you would have made a loss of about 30%.

Screen Print: The Price of Gold[33]



[33] Kitco. *Historical Gold.* Retrieved 5 October, 2013, from http://www.kitco.com/scripts/hist_charts/yearly_graphs.plx

3.3.2.4 Using Commodities as Part of a Portfolio

So where do commodities fit into an investment ***portfolio***?

The main advantage of using commodities is that the returns on them are not ***highly correlated*** (to use the technical jargon) with returns on other investments.

What does this mean? It means that commodity prices do not tend to follow share prices and the prices of other investments. Therefore, if your other investments go down in value, the value of your commodity investments will not necessarily also go down. This means that the returns on your overall investment portfolio will be smoother.

Let's consider oil as an example as to why this might be. If the price of oil goes up, other businesses suffer because their profit margins go down.

This is unlike the ***correlation*** between New Zealand and US shares. If share prices in the United States go down, there is a good chance that shares in New Zealand and Australia will go down as well. They are said to be fairly ***highly correlated***.

Adding commodities to the range of investments that you have is therefore a good way of achieving the benefits of ***diversification*** (i.e. reduced risk).

3.3.2.5 Commodities and the Exchange Rate

When investing in commodities, you need to consider that most will be priced in ***USD***. This means that New Zealand investors need to take into account changes in the USD/NZD exchange rate as well changes in the commodities' price.

The way in which exchange rates affect the value of investments is discussed in the next sub-section.

3.3.3 Currencies

3.3.3.1 The New Zealand Dollar and Exchange Rates

The ***exchange rate*** of the New Zealand dollar (***NZD*** or NZ dollar) against other currencies is what is known as a ***floating exchange rate***. This means that it is not fixed against any particular currency.

The exchange rate therefore goes up and down depending on supply and demand for the NZ dollar.

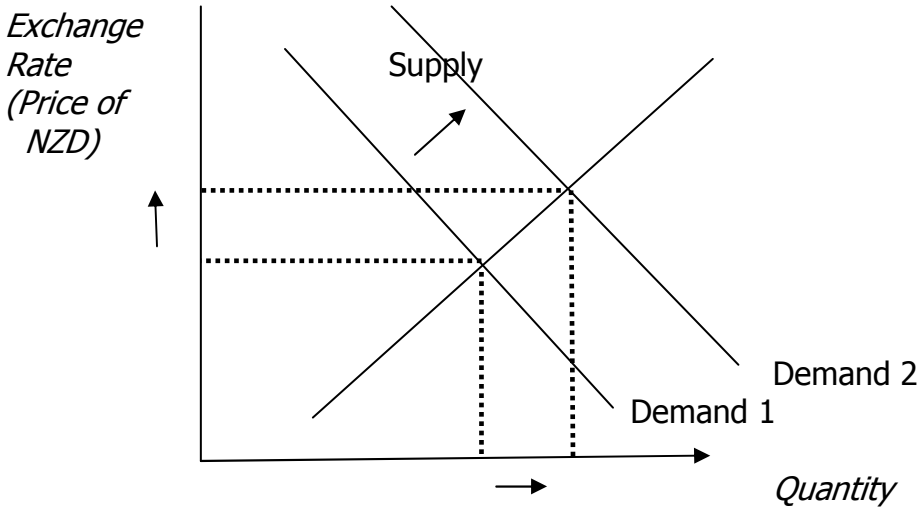
For example, when New Zealand businesses ***export*** their goods and make sales in NZ dollars, overseas individuals or businesses must buy NZ dollars to pay for the goods.

This demand for NZ dollars pushes the value of the NZ dollar upwards.

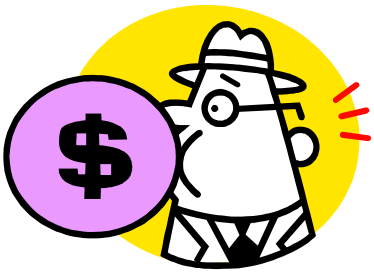
On the other hand, when New Zealanders ***import*** goods, we use our NZ dollars to buy ***foreign currencies***. This increases the supply of NZ dollars and thus pushes the value of the NZ dollar downwards.

Remember the supply and demand curves that were introduced in Module 3 in relation to the property market? These also apply to foreign exchange. As we can see in the following diagram, the exchange rate (which is the price of the NZ dollar) increases if the demand for NZ dollars increases.

The Impact of an Increase in the Demand for NZ Dollars



The exchange rate can be influenced by the ***Reserve Bank of New Zealand*** (the ***RBNZ***), who can buy and sell currency to attempt to either increase or decrease the value.



All currencies have three letter symbols – have a look at the lists at the international exchange desk next time you go to your bank. Some of these three letter symbols, along with the exchange rates as at 5 October, 2013, are as follows:

Currency	**Symbol**	**Exchange Rate (NZD / Foreign Currency)**
Australian dollar	AUD	0.8821
US dollar	USD	0.8322
Euro	EUR	0.6139
British pound	GBP	0.5195
Singapore dollar	SGD	1.0373
Swiss franc	CHF	0.7549
South African rand	ZAR	8.3159

Source: http://www.x-rates.com/calculator.html. Retrieved 5 October, 2013.

This means that one NZD is worth about 88 Australian cents, 83 US cents, etc.

3.3.3.2 How does the NZ Dollar Affect Me?

Have you ever been on holiday overseas? If you go to Australia for a holiday, you want the value of the NZ dollar (***NZD***) to be high.

If the value of the NZD is high, you can buy more Australian dollars (***AUD***) with your hard earned savings (or it costs less in NZ dollars to buy the amount of Australian dollars that you want). This makes your holiday cheaper - i.e. things in Australia cost less to buy when the NZD is high against the AUD.

Case Study Example: Graham goes to Australia

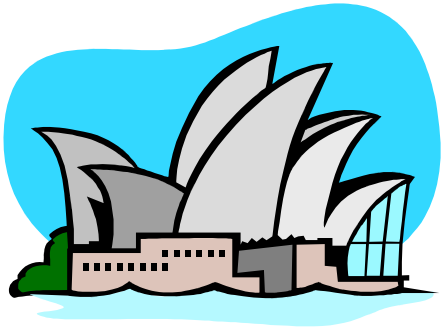
Graham and two of his friends plan a holiday to Australia. They each want to have $1,000 (in AUD) for spending money for the trip. About 10 days before they leave, Graham goes past a bank and sees the exchange rate of NZD/AUD 0.77 in the window. This means that each New Zealand dollar is worth 77 Australian cents.

However, Graham is in a hurry so he doesn't go inside and buy any AUD. He visits the bank a few days later when he has time, and now the exchange rate is NZD/AUD 0.74. He is charged NZ$1,351.35, plus fees, to buy AU$1,000.

Graham later checks with his friends to see if they have each exchanged their money. They have, but Graham is surprised to find he had to pay more for his AU$1,000 than they did.

- *Pete, who exchanged his money a month ago at a rate of NZD/AUD 0.83, only paid NZ$1,204.82; and*
- *Corbin, who exchanged his money two weeks ago at a rate of NZD/AUD 0.81, only had to pay NZ$1,234.56.*

Graham is annoyed with himself because he realises that had he bought his AUD when he first checked out the exchange rate, he would have only had to pay NZ$1,298.70.



As you can see, with a high exchange rate (0.83), Australian dollars were cheaper than they were with a low exchange rate (0.74). This means that:

- If the NZD is high, you need more AUD in order to equal NZD 1,000.
- If the NZD is low, you need fewer AUD in order to equal NZD 1,000.

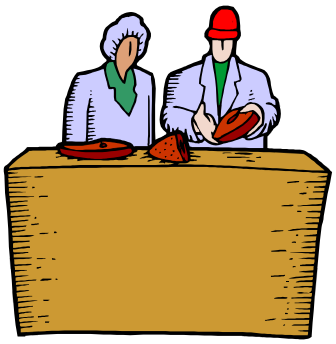
For Graham, this means that his trip to Australia is more expensive than it is for his friends.

3.3.3.3 Business and Exchange Rates

Exchange rates can make a huge difference to the profits a company makes.

Companies that ***import*** goods from overseas, such as clothing, footwear and electronics businesses (e.g. The Warehouse) enjoy the NZD being high.

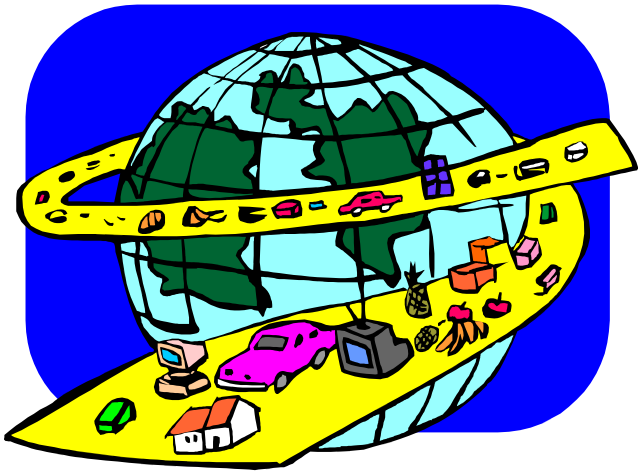
This is because it means that they pay less for the things they sell.



Companies that ***export*** goods and services (meat production companies, etc.), enjoy the NZD being low. This is because it means that:

- if they quote their prices in foreign dollars, they get more for the things they sell, OR
- if they sell in New Zealand dollars, their products are cheaper for overseas customers who will therefore buy more.

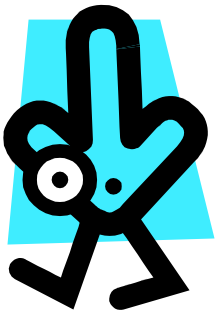
This is one reason why many manufacturing companies have moved their production facilities overseas in recent years (i.e. the high value of the NZD is a problem for exporters). You may have also noticed other industries make headlines as their profits are squeezed by the currently high NZD.

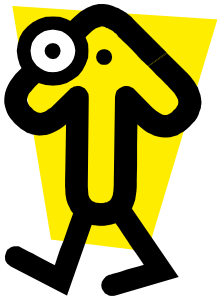


Exchange rates affect most companies in some way - particularly now that we are living in a global economy.

Take a look at the scenarios on this page to see how businesses you invest in (or would like to), are affected. You may also prefer to think about those businesses you buy from as a consumer.

If your business…	Then you are likely to prefer…	Because….
Imports goods for resale and pays in foreign currencies	A high NZ dollar	It costs less in NZ dollars to buy the goods you want.
Imports goods for resale and pays in NZ dollars	A high NZ dollar	As your supplier will receive more foreign money, it is possible that they will consider reducing prices to remain competitive.
Exports goods and then invoices your customers in NZ dollars	A low NZ dollar	Overseas customers will view your products as being cheaper and may therefore buy more.
Exports goods and then invoices your customers in foreign currencies	A low NZ dollar	Your foreign dollars will convert to more NZ dollars.





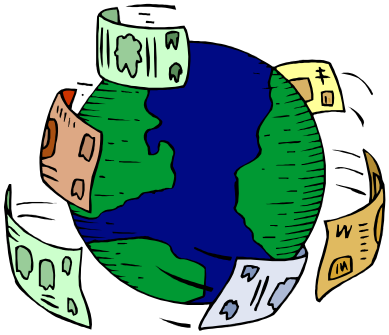
3.3.3.4 What Does this Mean for Overseas Investments?

If you have overseas investments, the exchange rate **will** have an impact on the financial return you will get from your investment.

If the value of the *NZD* increases (after buying your overseas investment), your investment will not be as valuable.

This is because your foreign dollars will not buy as much in NZD. That is, NZD are now more expensive. When you receive dividends, or sell your investment, and need to convert your money back into NZD, you will get less in NZD than you would if the exchange rate was higher.

This means that it is possible that, even if your investment performed well, when you sell it and convert your money back into NZD, you may have less money than what you originally invested.



On the other hand, **if the value of the NZD decreases**, your investment will be more valuable.

This is because your foreign dollars will be able to buy more NZD. I.e. NZD are now cheaper. When you receive dividends, or sell your investment, and need to convert your money back into NZD, you will get more NZD than you would if the exchange rate was lower.

This means that it is possible that, even if your investment performed poorly, when you sell it and convert your money back into NZD, you may end up with a profit.

Look at the example below to understand how currency can affect the value of your investment:

Example: The Impact of Exchange Rates on Returns on Microsoft Shares

Let's suppose you bought 100 Microsoft shares on 4 October 2002 and still owned them ten years later on 4 October 2012.

	Microsoft share price USD[34]	**Value of 100 shares in USD**	**Exchange rate**[35]	**Value of 100 shares in NZD**
4 Oct 2002	$16.74	$1,674	0.4781	$3,501
4 Oct 2012	$30.03	$3,003	0.8190	$3,667

What this means is that:

- **For US investors**, paying in USD, the value of their investment would have almost doubled (an increase of about **79% -** i.e. $3,003 - $1,674 equals a profit of $1,329. This is 79% of $1,674).

- **For NZ investors**, paying in NZD, the value of their investment would have only increased by about **5%** (i.e. $3,667 - $3,501 equals a profit of $166. This is 4.7% of $3,501).

As you can see from this, the exchange rate of the NZD can dramatically affect the value of any foreign investments.

If the NZD rises against the currency of the country where you are investing, it will lower the value of your investment.

But if the NZD falls, the value of your foreign investments will increase.

[34] Prices adjusted for dividends and share splits. Source: Yahoo! UK & Ireland Finance. *Microsoft Corporation: Historical Prices.* Retrieved 8 October, 2012, from http://uk.finance.yahoo.com/q/hp?s=MSFT

[35] Exchange rates retrieved 8 October, 2012, from http://www.x-rates.com/cgi-bin/hlookup.cgi

3.3.3.5 What Affects Exchange Rates?

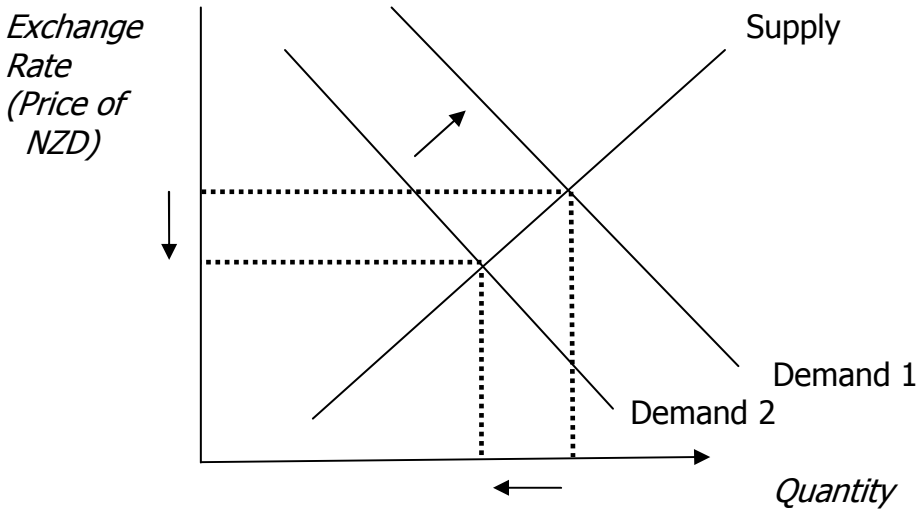
Floating exchange rates are constantly changing. This is because the price of the currency depends on supply and demand for it. Many factors affect the supply and demand (and thus the NZ exchange rate) such as the:

- Strength of the economy
- Political situation
- Level of unemployment
- ***Balance of trade*** (how much money we are spending on imported goods)
- ***Government surplus*** or ***Government deficit***

For example, if the political situation in a country is unstable:

- Foreign companies may be less willing to buy goods from that country and tourist numbers will also drop.
- This reduces the demand for that country's currency.
- This will make the exchange rate fall.

The Impact of a Decrease in the Demand for NZ Dollars



Discussion Question:

How do you think the level of unemployment may affect exchange rates? What about the Government surplus?

One of the most important factors affecting exchange rates is the level of the country's interest rates.

For several years, the interest rate in New Zealand has been one of the highest in the developing world. Even though interest rates are much lower now than 5 years ago, they are still relatively high. For example, as at October 2013, the ***official cash rate*** in New Zealand was 2.5%. This compares to 0.25% in the USA and 0.5% in the UK. Although note that it is the same as Australia's rate (see below screen print).

Screen Print: Interest Rates of Major Foreign Central Banks[36]

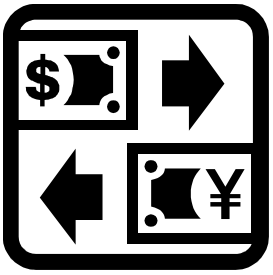
Summary of current interest rates of a large number of central banks

Name of interest rate	country/region	current rate	direction	previous rate	change
American interest rate FED	United States	0.250 %	↓	1.000 %	12-16-2008
Australian interest rate RBA	Australia	2.500 %	↓	2.750 %	08-06-2013
Banco Central interest rate	Chile	5.000 %	↓	5.250 %	01-12-2012
Bank of Korea interest rate	South Korea	2.500 %	↓	2.750 %	05-09-2013
Brazilian interest rate BACEN	Brazil	9.000 %	↑	8.500 %	08-28-2013
British interest rate BoE	Great Britain	0.500 %	↓	1.000 %	03-05-2009
Canadian interest rate BOC	Canada	1.000 %	↑	0.750 %	09-08-2010
Chinese interest rate PBC	China	6.000 %	↓	6.310 %	07-06-2012
Czech interest rate CNB	Czech Republic	0.050 %	↓	0.250 %	11-01-2012
Danish interest rate Nationalbanken	Denmark	0.200 %	↓	0.300 %	05-02-2013
European interest rate ECB	Europe	0.500 %	↓	0.750 %	05-02-2013
Hungarian interest rate	Hungary	3.600 %	↓	3.800 %	09-24-2013
Indian interest rate RBI	India	7.500 %	↑	7.250 %	09-20-2013
Indonesian interest rate BI	Indonesia	7.250 %	↑	7.000 %	09-12-2013
Israeli interest rate BOI	Israel	1.000 %	↓	1.250 %	09-23-2013
Japanese interest rate BoJ	Japan	0.100 %	↓	0.100 %	10-05-2010
Mexican interest rate Banxico	Mexico	3.750 %	↓	4.000 %	09-06-2013
New Zealand interest rate	New Zealand	2.500 %	↓	3.000 %	03-10-2011
Norwegian interest rate	Norway	1.500 %	↓	1.750 %	03-14-2012

Because of the high interest rates, the ***NZD*** has been one of the main targets of the "carry trade". In other words, it is attractive for investors to borrow money in a country with low interest rates, such as the Japanese yen (JPY), and then invest the borrowed money at a higher interest rate in New Zealand. The investor then earns a profit from the difference between the two interest rates.

[36] Global-rates.com. *Central Banks – Summary of Current Interest Rates*. Retrieved 5 October, 2013, from http://www.global-rates.com/interest-rates/central-banks/central-banks.aspx

For example, someone could (for example) borrow $1,000 in Japan, paying interest of 3%, and then invest it in a term deposit in New Zealand, at an interest rate of 4.5%. They therefore earn 1.5% interest on money they do not even own!



The biggest risk for this type of strategy is that, if the NZD loses value against the JPY, any gains may be wiped out.

3.3.3.6 Trading Currencies

Currencies can be traded just like anything else – in fact, the biggest markets in the world are the currency markets. Average daily turnover in the currency markets is about US$3.98 trillion[37]!

The major currency traders are the big international banks. No – this does not include any New Zealand / Australian banks. The top 10 are all from the USA, Germany, Switzerland and the UK.

The banks do this trading on behalf of their customers, such as you and me, but more importantly for their business clients. If Air NZ wants to buy a new plane (and these can cost $100 million and more, each) they have to pay in ***USD*** to Boeing or in ***EUR*** to Airbus. This means converting ***NZD*** to ***USD*** or ***EUR***. The banks also trade currencies on their own behalf (called 'proprietary trading') simply to make a profit for the bank.

The major currencies traded are:

- ***USD*** (US Dollar)
- ***EUR*** (Euro)
- ***JPY*** (Japanese Yen)
- ***GBP*** (Pound Sterling)

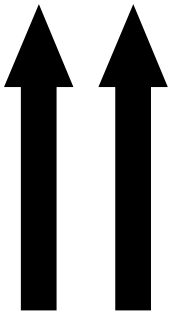
These currencies account for about 80% of all currency trading, with the USD being the leader by a wide margin. The NZD has become much more widely traded in recent years because New Zealand's high interest rates have greatly increased its popularity.

[37] Wikipedia. *Foreign Exchange Market.* Retrieved 5 December, 2011, from http://en.wikipedia.org/wiki/Foreign_exchange_market

As shown through the earlier examples in this section, it is possible to make a profit (or a loss) through trading currencies. You can do this without even investing in any currency you buy.

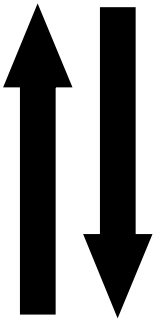
For example, you can simply buy US$10,000 and hold it in the bank, here in New Zealand. If the NZD decreases in value against the USD, you can sell your US$10,000 for more NZD than what you originally had. This means that you do not have to actually use these USD to buy shares in a US company.

However, the biggest problem with investing in currencies is that it is difficult to forecast the direction in which exchange rates will move.



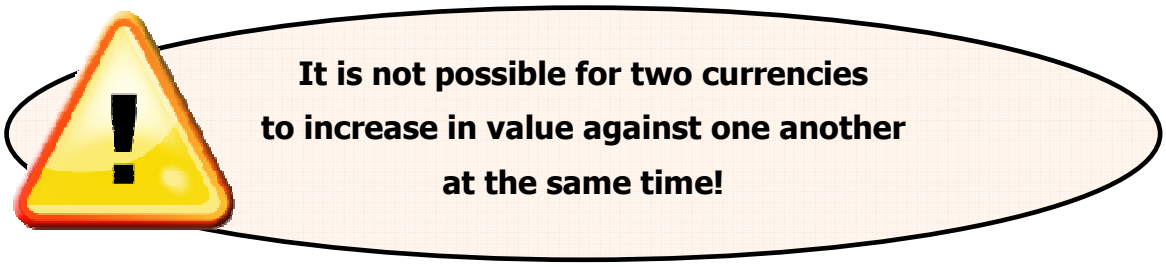
When you invest in businesses, on average, you can expect the value of your investment to increase as the businesses generate wealth.

When one business does well, this does not stop another business from doing well (depending on the nature of the two businesses, of course!). In fact, when one business is doing well, this is likely to contribute to other businesses doing well.



Investing in currencies is **very different** to investing in companies. There is a much higher likelihood that the value of a currency will go down.

After all, the value of a currency is relative to the value of another currency – if the value of one currency goes up, it means that the value of the other currency goes down.



Discussion Question:

Would you buy foreign currency as part of your investment strategy? Why (and in what situations)? Why not?

3.3.4 Collectables and IPOs

3.3.4.1 Collectables

A ***collectable*** is any object that is considered to have value by the person collecting it. However, the types of collectables referred to in this Module are those which have a monetary value. These collectables are mainly 'manufactured collectables'.

A ***manufactured collectable*** is a manufactured item which is specifically designed for people to collect.

The important point is that: **the main purpose of a manufactured collectable is for people to collect them**. This is what makes these collectables different from other items which people may collect, such as butterflies and postage stamps.

The earliest collectables were included as incentives with other products. An example is cigarette cards, which were sold with cigarettes.

However, nowadays people collect all sorts of objects, such as Barbie dolls, teddy bears, Star Wars toys, classic cars and so on.

Although these examples of collectables are used for other purposes (e.g. toys and transport), if they are promoted as a 'special edition' or 'limited edition' item, they are considered a manufactured collectable.

The early versions of a product, made in limited numbers before they became popular, can become very valuable. For this reason, some people choose to include collectables in their investment strategy.

Discussion Questions:

Would you invest in collectables as part of your investment strategy? Why / Why not?

If you were to invest in collectables, what type of collectable would you be most likely to invest in?

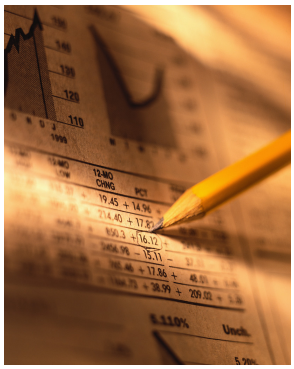
3.3.4.2 Initial Public Offerings

An ***initial public offering (IPO)***
is the first sale of shares
by a company to the public

When a private company becomes a public company, shares in the company are made available to the public to buy. When this happens, this is called an ***IPO***. If the company later issues more shares, that is not an ***IPO***.

IPOs are often issued by relatively smaller, younger companies looking for funds to expand. However, they may also be done by large companies looking to become publicly traded. Note that the term 'smaller companies' refers to companies that are small *relative to other companies which are already publicly traded*. It does not refer to the typical small to medium sized business such as, for example, your local takeaways shop, accountancy firm or home-based jewellery manufacturer.

The two main reasons for ***listing*** on a ***stock exchange*** (and therefore issuing an IPO) are:



1. To raise money for the company to expand. In this case, new shares are issued.

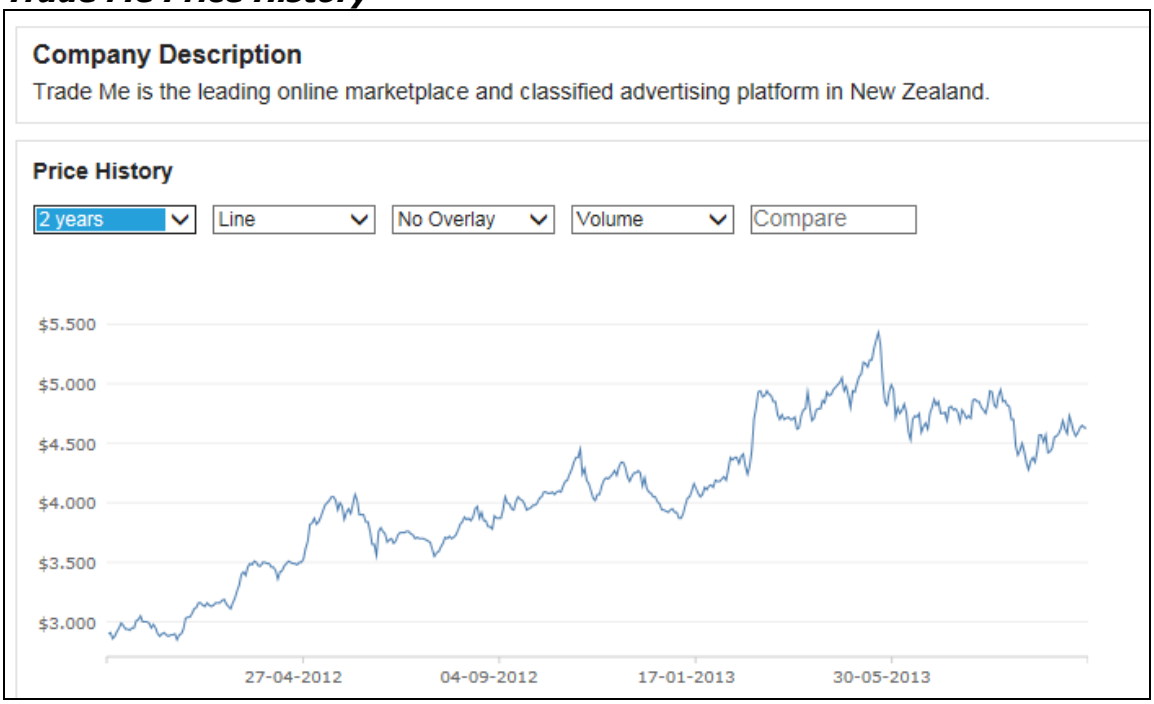
2. To enable the existing owners to sell their 'stake' in the business. In this case, it is possible that new shares are not issued. An example of this happening was when Telecom NZ was ***privatised*** (sold by the Government).

Financial Returns from IPOs

It can be difficult to predict how shares of a company will perform after an IPO. Two examples of recent IPOs for which share prices performed very differently are Trade Me and Facebook. Those who bought Trade Me shares at listing have done much better than those who bought Facebook shares.

- Trade Me shares were first publicly traded on the NZX on Tuesday 13 December 2011 at $2.70.
- A year later, on 13 December 2012, they traded at $4.08 (refer to the following price chart sourced from NZX).
- The price has climbed higher since then.

Trade Me Price History[38]



- Facebook shares were first publicly traded on the NASDAQ on Friday 18 May 2012 at US$38.00.
- A year later, on 17 May 2013, they were trading at $26.25[39].

[38] NZX. *TME*. Retrieved 6 October, 2013, from https://www.nzx.com/markets/NZSX/securities/TME?icharts=true
[39] NASDAQ. *Facebook Historical Share Prices*. Retrieved 6 October, 2013, from http://www.nasdaq.com/symbol/fb/historical

What this means is that:

- Facebook investors who bought 1,000 shares at the IPO saw the value of their investment of US$38,000 fall to US$26,250 within a year, a fall of 31%.

- Trade Me investors who bought 1,000 shares at the IPO saw the value of their investment of $2,700 grow to $4,080 within a year, a rise of 51%!

	Share price at IPO	**Cost of 1,000 shares**	**Share price 12 months later**	**Value of 1,000 shares**
Facebook	US$38.00	US$38,000	US$26.25	US$26,250
Trade Me	$2.70	$2,700	$4.08	$4,080

$$\text{\% Change in Facebook Share Price} = \frac{\text{New Share Price} - \text{Old Share Price}}{\text{Old Share Price}} \times 100$$

$$= (\$26.25 - \$38) / \$38 \times 100$$

$$= -\$11.75 / \$38 \times 100$$

$$= -30.9\%$$

$$\text{\% Change in Trade Me Share Price} = \frac{\text{New Share Price} - \text{Old Share Price}}{\text{Old Share Price}} \times 100$$

$$= (\$4.08 - \$2.70) / \$2.70 \times 100$$

$$= \$1.38/\$2.70 \times 100$$

$$= 51.1\%$$

Shares bought in an IPO, such as Facebook and Trade Me above, are said to be bought on the ***primary market***. Shares bought via a stock exchange are said to be traded on the ***secondary market***.

3.3.5 Wrap Accounts

A wrap account is not a type of investment, but is instead a system for investing.

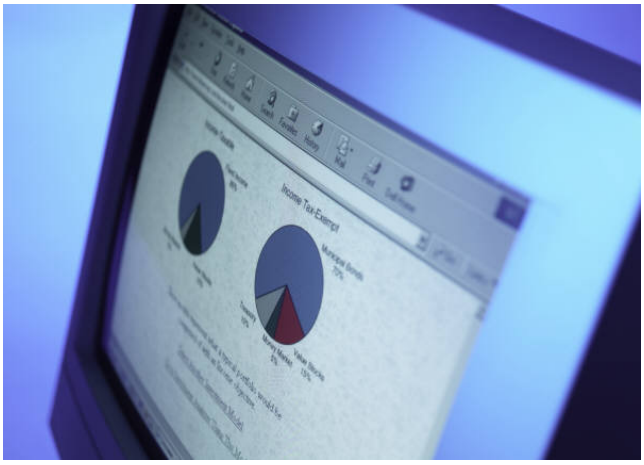
A ***Wrap Account*** is a service which manages an investor's ***investment portfolio***.

Instead of managing your range of investments yourself, you can choose to use a wrap account. A wrap account is a service which keeps all of your investments together and takes care of the administration involved in managing these investments.

Through this service, you are given access to a wide range of investment products. This includes, for example, managed funds, shares, term deposits, bonds, etc. You can either decide yourself where you want your funds invested, or you can have these decisions made for you.

A wrap account usually includes a cash account. The income you receive from your investments, and any income tax you owe, may be paid using this account.

You can then go online and monitor the performance of your investments, and perhaps even make investment transactions.



The main benefits of having a wrap account are as follows:

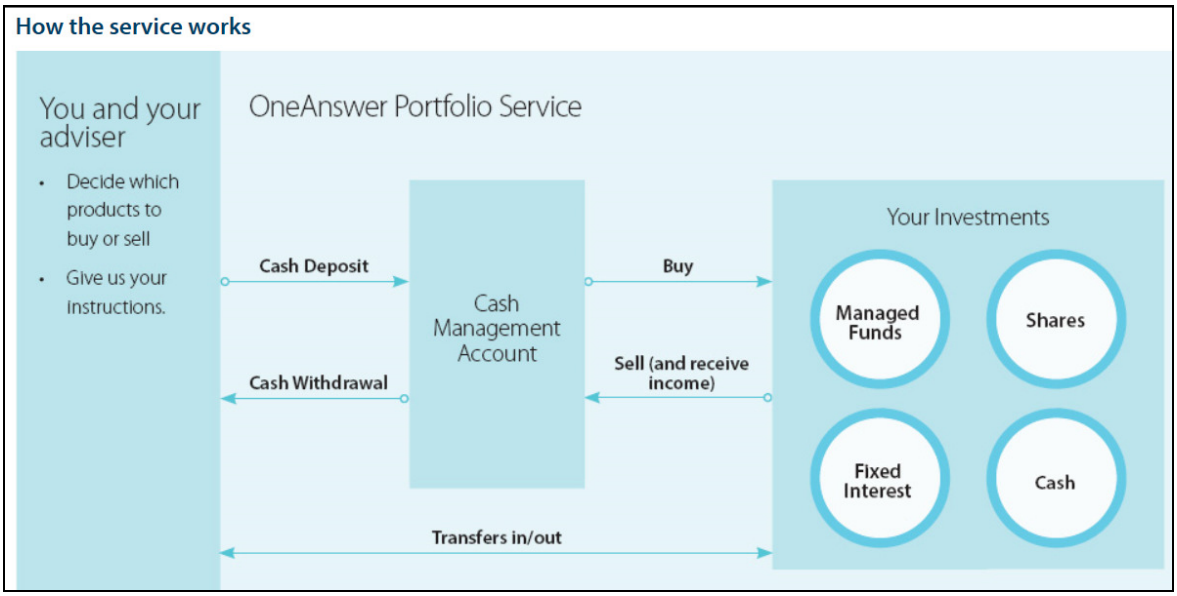
- You only have one party to deal with. This means you aren't spending time monitoring your investments with various banks, fund managers, etc.
- It is easier to monitor the overall performance of your investments. In fact, you may be able to go online and view your financial position on a daily basis.
- You will receive an annual summary of your investments and the income earned, which makes it is easier to work out how much tax you have to pay.

The disadvantage is the fee involved. However, if you do not want to spend much time managing investments, this may be a good option for you.

The two main wrap account services in New Zealand are:

- OneAnswer (www.oneanswer.co.nz)
- Aegis (www.aegisnet.co.nz)

Screen Print: The OneAnswer Portfolio Service[40]



[40] ANZ New Zealand Investments Limited. *OneAnswer Portfolio Service*. Retrieved 4 October, 2013, from https://investments.anz.co.nz/portfolio-service/about/

3.3.6 Credit Ratings

Credit ratings were discussed in relation to your *personal* financial situation in Module 2.

Just as your credit rating helps a ***finance company*** or bank decide whether or not they will loan money to you, YOU should use credit ratings to help decide which investments you will make.

Note that credit ratings can refer to a particular company or even to an entire country.

A ***Credit Rating*** is an ***independent assessment*** of the ***credit worthiness*** of an ***entity*** or country.

- An ***independent assessment*** means that the business deciding on the credit rating is completely separate from the entity being assessed. In other words, you can trust that the credit rating is **not** given by someone involved with the company you want to invest in.

- The ***credit worthiness*** of an entity refers to that entity's ability to meet their financial obligations (e.g. pay interest and principal loan payments on time).

When you are considering a new investment (whether that be putting money in a ***term deposit***, buying ***bonds*** or buying ***shares*** in a company, etc.), check to see whether a credit rating is available.

3.3.6.1 Important Points Regarding Credit Ratings

There are some important points to be aware of in regards to credit ratings:

1. A credit rating does NOT say anything about price movements (e.g. changes in the share price of a company). Investments with both very good and very poor credit ratings will go up and down in value. **You can still lose money on an investment with an excellent credit rating**.

2. Although credit ratings are well-researched, **they are only opinions** – they are **not** guarantees. Investments with high, solid credit ratings can still go 'belly up' (although this is not common).

3. The credit rating **only applies at the date it is issued**. When things change (as they do) an investment with a good credit rating may be 'downgraded' to a poor rating. Investments can also be 'upgraded' from poor to good ratings.

   As investments with good ratings are almost always more expensive (i.e. the price is higher), some investors specialise in buying investments with poor credit ratings which they believe will be upgraded to a higher rating. If they are correct, the value of their investment will increase.

3.3.6.2 Rating Agencies and Symbols

The three most famous and largest ***credit ratings agencies*** from the USA, are:

- Standard & Poor's
- Moody's
- Fitch IBCA

In this part of the world, there is the Rapid Ratings system (refer to www.rapidratings.com). There are also some companies which rate investments, a very well-known one being Morningstar (refer www.morningstar.com).

The following chart gives an overview of the ratings symbols used by the three main US credit rating agencies.

Level of Risk	**Grade**	**Rating Symbol Used by Credit Rating Agency**		
		Moody's	**Standard & Poor's**	**Fitch**
Lowest Risk	Investment	Aaa	AAA	AAA
Low Risk	Investment	Aa	AA	AA
Low Risk	Investment	A	A	A
Medium Risk	Investment	Baa	BBB	BBB
High Risk	Junk	Ba, B	BB, B	BB, B
Highest Risk	Junk	Caa,Ca,C	CCC,CC,C	CCC,CC,C
In Default	Junk	C	D	D

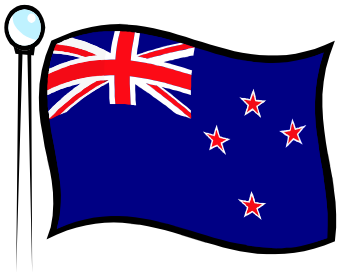
Standard & Poor's and Fitch credit ratings may be followed by a '+' or a '–' sign, and Moody's by a '1', '2', or '3' (with '1' being the best). E.g. A company may have a credit rating of AA- or BBB+ etc.

The risk of ***default*** (i.e. investments not meeting their payment obligations) increases very slightly from AAA ratings through to BBB ratings. Default rates then increase at an increasing rate, often doubling, as ratings move from BBB through to CCC ratings.

This means that, although investments with a BBB rating are still reasonably secure, each 'notch' down the grade belt from this point onwards involves more risk.

3.3.6.3 Ratings in New Zealand

New Zealand's Credit Rating



New Zealand's credit rating was downgraded in September 2011 from AA+ to AA by both Standard & Poor's and Fitch.

The main reason for this was the level of debt New Zealand had.

The Government's net debt was about 20% of our annual ***Gross Domestic Product*** (***GDP***). This was not overly high compared to other countries, but it was our private sector (non-Government) debt which was of most concern. When the amount of private sector debt was added to Government debt, our country's debt was about 70% of ***GDP***. As of October 2013, New Zealand's credit rating was still AA.

Although the downgrade in our credit rating was very bad news for New Zealand, it reflected the general financial situation around the world. Other countries also faced downgrades in their credit ratings.

Bank Credit Ratings

The list of registered banks in New Zealand, along with their credit ratings, is given on the Reserve Bank of New Zealand's website. A screen print showing these credit ratings, as at 4 October 2013, is given on the following page[41].

As you will see from the following screen print, the most common credit rating for banks operating in New Zealand is AA-. Before New Zealand's credit rating fell from AA+ to AA, the most common credit rating for a bank in New Zealand was higher (AA).

Also of note is that the lowest rating for a bank is BBB-. This rating means that these banks are 'medium risk' and are of 'investment grade'. There are no banks in New Zealand with a 'high risk' rating.

[41] Note that credit ratings may have changed since the date of the screen print. It is recommended that you visit the RBNZ website for current credit ratings.

Screen Print: Credit Ratings of Registered Banks in New Zealand[42]

Name of registered bank	Name of credit rating agency and rating		
	Standard & Poors	Fitch	Moody's
ANZ Bank New Zealand Limited	AA-	AA-	Aa3
ASB Bank Limited	AA-	AA-	Aa3
Australia and New Zealand Banking Group Limited (B)	AA-	AA-	Aa2
Bank of Baroda (New Zealand) Limited	-	BBB-	-
Bank of India (New Zealand) Limited	BBB-	-	-
Bank of New Zealand	AA-	-	Aa3
Citibank N A (B)	A	A	A3
Commonwealth Bank of Australia (B)	AA-	AA-	Aa2
Deutsche Bank A G (B)	A	A+	A2
Heartland Bank Limited	BBB-	-	-
JPMorgan Chase Bank NA (B)	A+	A+	Aa3
Kiwibank Limited	A+	AA+	Aa3
Kookmin Bank (B)	A	-	A1
Rabobank Nederland (B)	AA-	AA	Aa2
Rabobank New Zealand Limited	AA-	-	-
Southland Building Society	-	BBB	-
The Bank of Tokyo-Mitsubishi UFJ (B)	A+	A	Aa3
The Co-operative Bank Limited	BBB-	-	-
The Hongkong and Shanghai Banking Corporation (B)	AA-	AA-	Aa2
TSB Bank Limited	BBB+	-	-
Westpac Banking Corporation (B)	AA-	AA-	Aa2
Westpac New Zealand Limited	AA-	AA-	Aa3

Finance Company Credit Ratings

Before 2007, investing with a ***finance company*** looked attractive to many investors. A term deposit with a finance company was often more appealing than a bank term deposit as it offered more interest.

[42] Reserve Bank of New Zealand. (17 September, 2013). *Credit Ratings of Banks in New Zealand*. Retrieved 4 October, 2013, from http://www.rbnz.govt.nz/finstab/banking/4560094.html

However, a number of investors in finance companies ignored the risks involved. Good economic times hid the real risks involved with finance companies, and very few finance companies even had credit ratings.

Many investors have since learned the hard way how real the risk is. Dozens of finance companies in New Zealand collapsed in 2007 and 2008, losing a lot of investor money. Note, the finance companies that went bankrupt in New Zealand in recent years did not have a credit rating from the main credit ratings agencies, apart from Hanover Finance which had a BB+ rating.

As a result, the *Reserve Bank of New Zealand Amendment Act 2008* was passed into law. This Act requires finance companies, ***building societies***, ***credit unions*** and other deposit-takers to get credit ratings. This Act also introduced tougher requirements for these entities in regards to being ***prudent*** (careful) with money.

You can find out the credit ratings of New Zealand finance companies directly from the company. These may be shown on their website, as is the case with UDC finance (see following screen print). Alternatively, ask to see their ***Investment Statement***.

Section 4

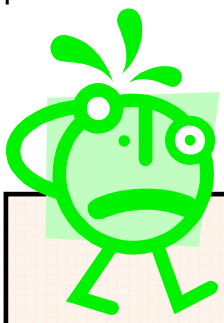
Equity Investment

4.0 Equity Investment

Owning a business or a part-share in a business is a dream for many of us. It is easy to dream about high profits that continue into our later years of life.

However, the reality is usually somewhat different. In New Zealand, it is not uncommon to hear stories of people who have invested in privately-owned businesses only to find that the riches are not as easy as they had imagined and the effort required to gain profits is too high a price to pay.

Just remember, businesses are built on hard work and sound business skills. There are many examples of successful small businesses, but just as many (if not more) of businesses that never realise their full potential.

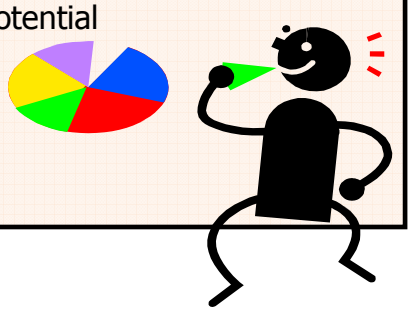


Key Points

Investing in a privately-owned business can be a highly rewarding, yet difficult, experience.

Success relies on understanding the nature of the investment, the likely risks and potential rewards.

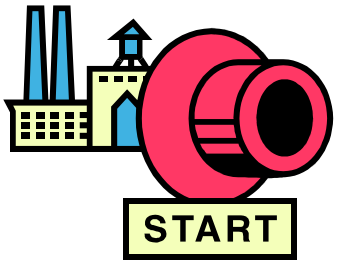
Paying the right price for a business in an industry that has profit potential is critical to success.



4.1 Introduction to Business Investment

4.1.1 Start or Buy a Business?

OR



Unless you are given one, there are only two ways you can get to have your own business:

1. buy one, or
2. start one 'from scratch'.

Let's take a look at the advantages and disadvantages of each of these.

Advantages of Buying a Business

- **Existing customers**:

  This is perhaps the main advantage of buying a business. Cash will be coming in immediately.

  There is much less risk about how much income your business will generate as you already have a customer base to build on.

- **Existing staff**:

  Existing employees know what they're supposed to be doing. This keeps ***productivity*** high and reduces training needs. Another benefit of already having staff is that you can usually learn a lot from these employees – they may know what strategies do, and do not, work well for the business.

- **Existing equipment and buildings:**

  This reduces uncertainty in regards to knowing how suitable the location is. It also reduces uncertainty in regards to knowing what you need and what costs are involved.

- **Existing systems and processes:**

  Systems will already exist, for example, for production, ordering stock, employee rosters, etc. Even if these systems are not ideal, it may be easier to improve existing systems than it is to develop entirely new ones.

- **Advice:**

  Sellers often stay on for a while to provide help and advice.

- **Track record:**

  There is more certainty around likely income and the associated costs.

- **Existing Suppliers:**

  The business will already have suppliers. Furthermore, if the relationship with these suppliers is good, there is more chance that the suppliers could be willing for the business to have credit arrangements. That is, they may be more willing for you to receive goods now, and then pay on invoice the following month (or even later).

Disadvantages of Buying a Business

- **Cost:**

It can sometimes be more expensive to buy a business than start a new one. This is because you may be expected to pay ***goodwill***.

Goodwill is an amount of money that reflects the value the business has already developed due to, for example, a good reputation. Goodwill is paid in addition to the value of the physical assets of the business.

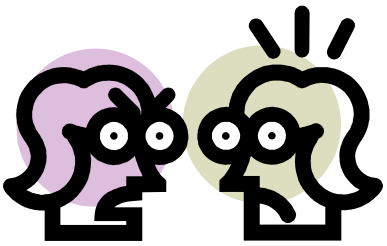
However, on the other hand, there is more certainty around the cost. When you start a business, the costs involved may turn out to be equal to, or more than, the cost of buying a business.

- **Reputation:**

The reputation of the previous owners will initially affect your business. This reputation could be good or bad. It is difficult to encourage customers to come back to a business if they have previously had a bad experience.

- **Changes:**

It can be difficult to make changes in an existing business. If you want to change processes, staff may not be willing to do things in a different way.



In addition, customers may resist, for example, changes in prices and products.

For example, if a business owner wants to change the product range of a clothing shop from high fashion, expensive items, to low-cost casual clothing, they may lose existing customers. This is because the business no longer stocks the products they want. Yet, new customers may still not visit the business as they will continue to associate the business with high prices (that is, they will think the business still only sells expensive items).

- **Uncertainty regarding information:**

  There is some uncertainty around the information provided by the previous owners before the sale is made. A new business owner cannot rely only on past financial statements and the previous owner's word in terms of the current position and the future prospects of the business.

  For example, the values of ***fixed assets*** that are shown in the financial statements are based on an accounting process called ***depreciation*** (remember, ***depreciation*** was introduced in Module 3). As a result, the values of assets shown in the financial statements do NOT usually reflect true market values.

  In addition, the value of the ***stock*** (products to be sold to customers) the business has on hand may be ***overstated*** in the financial statements.

  This is because stock figures may include items that are outdated or damaged, or that may not sell well. If an accurate stock take hasn't been taken, you may also find that the value includes items that are not even in stock.

  New business owners should therefore personally inspect all assets and stock and get an ***independent valuation*** if they have any doubts.

- **Hidden Problems:**

  One of the biggest risks associated with buying a business is that it may have problems that you are not aware of.

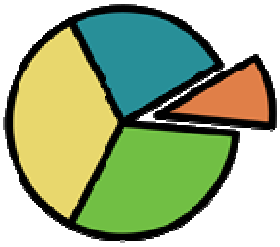
  For example, a business may have returned a great profit in the past, but the reason why the business owner is selling may be because they are aware of new competitors entering the market.

  As another example, the business owner may be aware that key staff members are about to leave the business.

4.1.2 Purchasing and Selling a Part Interest in an SME

You need to be especially careful when buying a ***part interest*** in a small business. That is, when you buy part of a business, not the whole business.

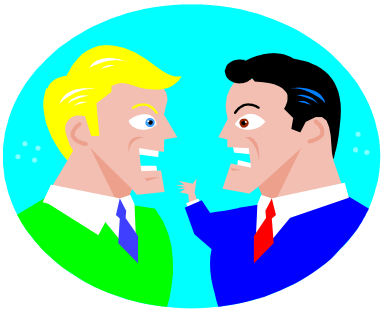
This probably does not apply if you and your spouse are buying a business together – your aspirations will probably be the same. However, if are buying a business with a friend, or buying a ***non-controlling interest*** in an existing business, there are some extra things you need to be aware of and take into consideration.



A ***non-controlling interest*** refers to a situation where you do not own enough of the business, and therefore do not control enough votes, for the business to go in the direction that you want.

There are many reasons why disagreements with ***majority owners*** (those who do have a ***controlling interest*** in the business) may happen. Some of the most common reasons are:

- You do not think that they are working hard enough in the business.
- They do nothing but work in the business and expect you to do the same.
- They will not take on risky ventures.
- They take on too many risky ventures.
- They get paid a lot more than you.



Before buying a part of someone else's business, you need to make sure that their expectations for:

☑ the business,

☑ your part in the business, and for

☑ their vision of the future,

match closely with your own expectations.

For husband and wife / couples businesses, you need to consider the impact of a relationship breakdown.

This is a risk that you need to think carefully about, and for which you maybe even should get professional advice.

4.1.2.1 Silent Partners

A ***silent partner*** is
somebody who invests in a small business
but does not work in it and
takes no part in the day-to-day running of the business.

Silent partners can be very useful for raising additional money, if you cannot get enough yourself.

However, there is quite a possibility that the silent partner can become unhappy with the way the business is run and the financial returns they get. In these situations, your silent partner may turn out to have a very loud voice!

People who work in a business are ***entitled*** to wages but, by definition, silent partners do not work in a business. They can therefore only take ***dividends*** that come from the profits.

The disagreement may therefore come from what to do with the profits:

- You may want to use profits to expand the business, but
- your silent partner may want the profits as dividends.

Whoever owns most of the business will have the final say in the matter. But if you own half each, you will have to come to some sort of agreement (one which perhaps neither of you are very happy about).

4.1.3 Is It Right for You?

The potential benefits and rewards of business ownership appeal to many people. These benefits and rewards commonly relate to factors such as:

- **Financial rewards:**

Self-employment is often perceived as a means to financial freedom. The amount that you can earn is not restricted by a salary limit.

If you have the right product or service and run your business well enough, the financial returns are practically unlimited.

- **Independence:**

Being your own boss is an exciting thought. The idea of making your own decisions and having the ability to decide what work you do, and when and how you do it, is appealing.

- **Flexibility:**

As an employee, you often have to perform certain tasks at certain times, often between the hours of 8.30am and 5.00pm, regardless of how you feel on that day or what else you want to be doing.

As a small business owner, you may be able to create a business environment that can fit around your life and what you want to do.

So if, for example, you want to be able to pick up the children from school every day at 3pm and spend a couple of hours with them before getting back into work at 8pm, you may be able to arrange this.

- **Doing work you enjoy:**

It can be hard to find the right job for you – one that you enjoy and which motivates you.

However, with self-employment, you can create that 'right job'. You can, for example, turn a hobby or interest into a business, so that you are doing something that you love and are getting paid for it!

All of the above factors are ***valid*** and important potential benefits of self-employment. However, what you need to bear in mind is that these are *potential* benefits – **they do not automatically come hand-in-hand with self-employment**.

For example, it could be that there is no market for the work you enjoy. You may therefore need to alter your business idea in order to have a successful business. And, although great profits are a possibility, they are not a guarantee!

As another example, it may be a long time before your business is in a position where it can employ someone to assist you. In the meantime, although you do not have to live up to employer expectations about when and how well you work, *you do need to meet your customers' expectations*.

For instance, your customers may expect your business to be open at certain hours or for work to be completed within certain timeframes. If so, it is up to you to either satisfy these expectations or accept the consequences (poor customer satisfaction and, ultimately, lower profits).

Therefore, when deciding whether or not to go into business, you need to realistically ask yourself:

How likely is it that I will **get the full benefits** of self-employment, **for the type of business** I want to operate?

The answer to this will depend on the business idea as well as your personal strengths and weaknesses.

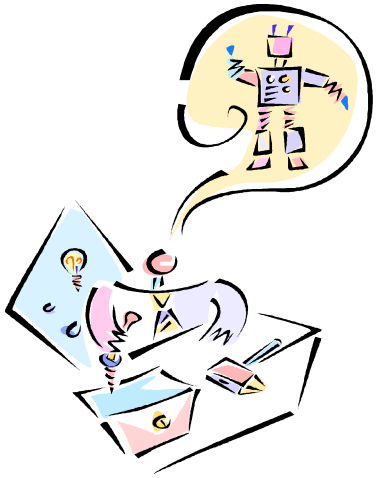
4.1.3.1 Evaluating the Business Idea

Take the time to consider your responses to the following questions:

- Do I have a product or service which is much better than those presently in the marketplace?

- Will customers come to me rather than to my competitors?

- Have I identified a gap in the market for a product or service for which there will be a strong demand?



In other words:

Make sure there is a real opportunity for what you have to offer!

If you intend on being in business for a long time, your business opportunity should appeal to enough potential customers to keep your business going for this amount of time. Remember, 'the latest craze' may only be a short fad.

Be honest with yourself about how real your opportunity is.

Do not let yourself get carried away with an idea because it sounds good to you – do the research to make sure that other people agree with you and are likely to actually buy your product.

You have a lot at stake, so do not jump into a new business venture without being realistic about the financial returns you will get.

4.1.3.2 Evaluating your Personal Strengths and Weaknesses

A willingness to be in business,

together with a profitable business idea,

is definitely a great starting point for someone thinking about self-employment...

but it is not the entire recipe.

You need to also have the skills and qualities required to run a business, or at least a willingness to learn / obtain these.

Some of the most important strengths and qualities of small business owners are as follows:

- **Excellent interpersonal skills:**

  Being in business is not only about making a product or delivering a service. It is also about communicating with others and being able to build good working relationships.

  Business owners need to deal, in a professional manner, with:

  - suppliers,
  - customers,
  - employees,
  - accountants, and
  - the general public.

  Successful business owners are able to work with **all personality types** while maintaining a positive image for their business.

  In addition to being **friendly** and **approachable**, business owners need to:

  ☑ speak with confidence,

  ☑ listen well, and

  ☑ clearly communicate their message.

- **Time Management:**

  Starting and growing a successful business requires a large time commitment and hard work. So, although self-employment *can* offer benefits in terms of flexibility, there are still a lot of tasks that will need to be completed. In fact, there is probably more work involved than if you were to remain as an employee of another business.

  Thus, if you choose to structure your work hours around your life, be aware that there are likely to be a lot more work hours to fit into your day than previously. This is where good time management becomes important.

  Time management is also critical as a business owner because it is up to you to monitor and drive your own performance. You will need to be able to set priorities and organise your work (and your life) to achieve business success.

  - If you, as an employee of another business, do not do a task within a reasonable timeframe, you are answerable to your boss or manager for this.
  - However, as a small business owner, you do not have a direct responsibility to anyone other than yourself.

- **A willingness to sacrifice:**

  As a small business owner, you need to be willing to accept the fact that you are the **last one to be paid**. Before taking your own salary or drawings from the business, you need to pay employees, the bank (or any other lenders), suppliers and, of course, the Inland Revenue Department.

  You must also be willing to **sacrifice your free time** to build your business.

It *is* possible that you will build a business which will allow you to have 4 weeks' holiday per year and only involve 30 – 40 hours of work per week.

BUT the reality for most businesses is that it does not start out this way, and may not happen for a very long time (if at all).

Other key qualities and skills include (amongst others):

- Passion for the business.
- Vision.
- A willingness to plan.
- Commitment and ***perseverance***.
- Problem solving skills.
- Ability to cope well with stress.
- Creativity and innovation.
- Decision making skills.
- And of course.... **Money management skills!**

It will also help considerably if you have:

- had some **experience in the industry** in which you want to operate a business, and have
- already been involved in the management of a small business.

One point to remember is that, as a business owner, you need to conduct many roles. Until your business is large enough to employ others you will be responsible for all of the following:

- Marketing
- Planning
- Sales
- Customer service
- Finance
- Distribution
- Sourcing products
- Making the product or providing the service!

To help decide if self-employment is right for you, you could complete a table such as the one given on the following page. This involves ranking yourself against a set of skills and qualities.

Self-Analysis Table: My Strengths and Weaknesses

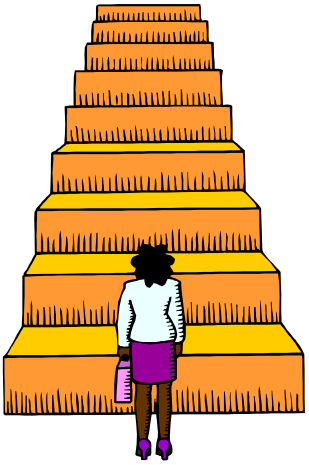
	Your Response				
	Very Poor	Poor	Reasonably Good	Good	Excellent
Interpersonal skills					
Communication					
Time management					
A willingness to sacrifice					
Passion					
Vision					
Planning skills					
Commitment					
Problem Solving					
Ability to cope with stress					
Creativity and innovation					
Decision making skills					
Money management skills					

4.2 The Business Purchase Process

If you have decided that business is right for you, and have decided that you would prefer to buy a business, you will need to know how to go about purchasing one and where to get funding from. You will also need to be supported through this process with good professional advice. These considerations are the focus of this sub-section.

4.2.1 Steps to Purchase a Business

Buying an interest, either part or whole, in a ***company*** is relatively straight-forward in theory. You simply buy shares off the current owner. All companies have ***shareholders***.



Often small companies have only one or two shareholders, and usually 100 to 1,000 shares in issue. How many shares can a company have? Some large companies have over a billion shares!

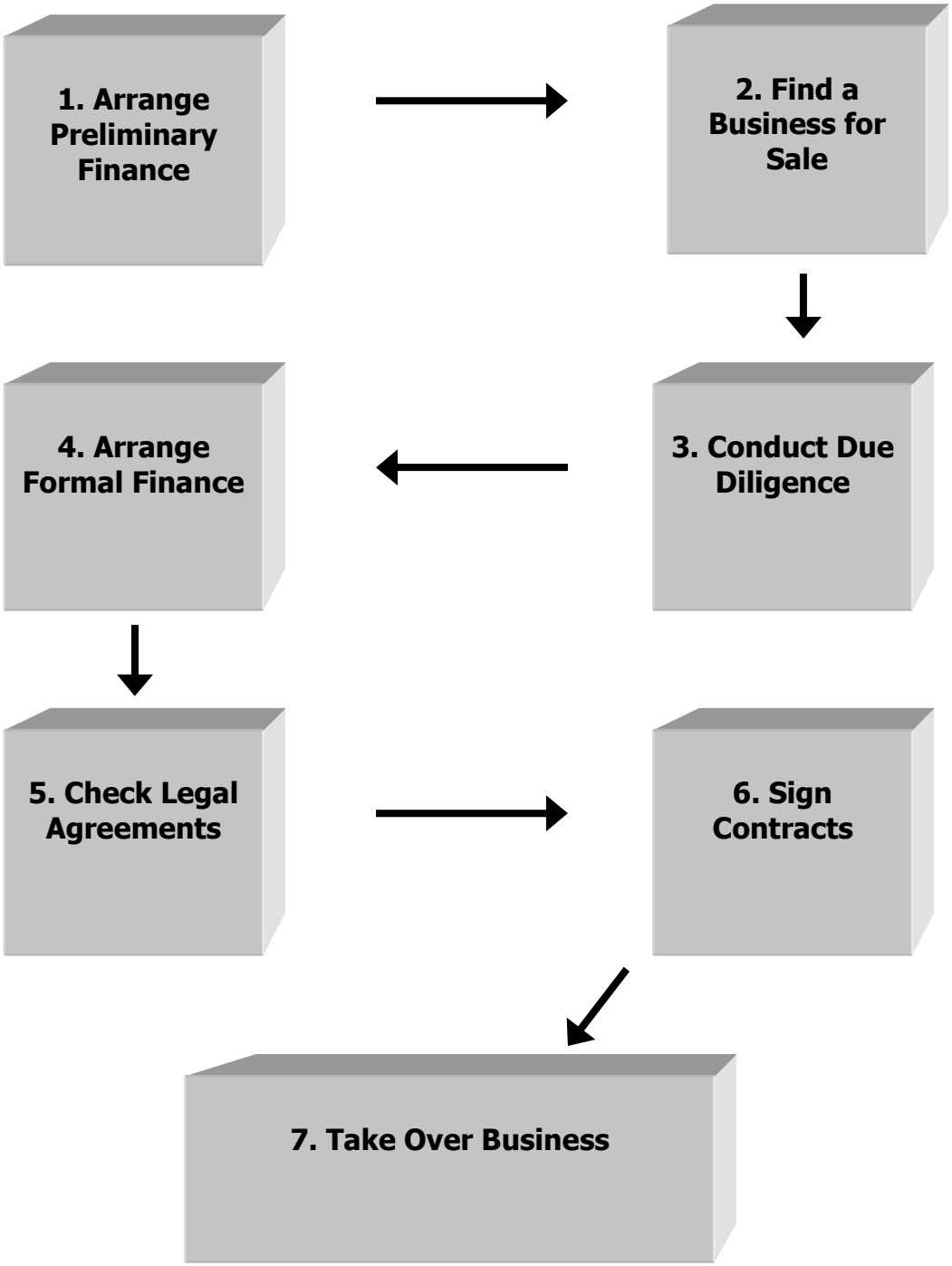
The more complicated parts of buying a business relate to:

- the process of deciding whether or not to purchase a particular business, and
- how much you are willing to pay for that business.

If you decide to buy a business from a ***sole trader***, then you must buy the assets of the business from that person. Although this is usually not complicated, it can be much more expensive and time consuming than simply transferring shares, especially if buildings are involved.

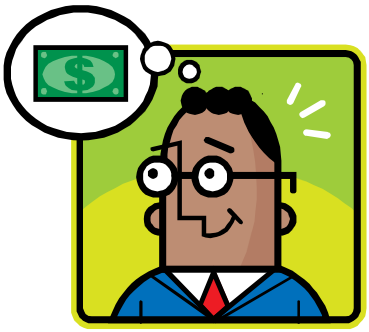
Be sure to take **proper advice** in regards to the ***liabilities*** of the business – the last thing you want is to find that you have bought the bills of the business for past years!

The process for buying a business is summarised below:



Some key points about the first five steps of this process are given on the following pages.

1. Arranging *Preliminary Finance*



You may already have the finance you need to buy a business. You could, for example, have enough savings, an investment property or even another business which you could sell in order to get the funds necessary. However, it is also possible that you will need to arrange a loan.

Regardless of your source of finance, before looking for a business to buy, you need to have a good understanding of your own financial position. You need to know what you can and cannot afford.

You need to know, for example:

- How much you need to be able to draw from the business each year in order to support yourself (and your family).
- Whether or not you can afford to buy a business in which you would have to make a lot of changes which could lead to you not being able to draw any money out at all from the business over the first year.
- The value of any assets that you have which you would be prepared to offer to a bank as ***security*** for a loan (if required).
- How much you can afford to (and are prepared to) borrow.

Financing a business is discussed further in the next sub-section (Section 4.2.2).

2. Finding a Business for Sale

Before looking for a business, make a 'wish list' of things that you would like the business to offer (as well as a list of what you do not want in a business).

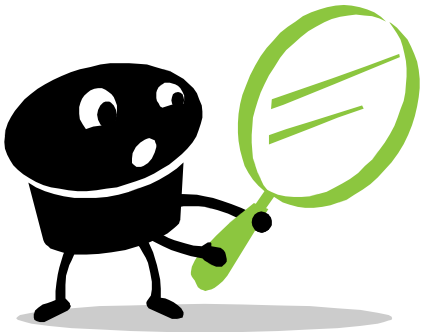
When you find a business opportunity, it is very easy to get so caught up in the excitement of buying that particular business that you overlook the 'downsides' to the business and rush into the purchase of it.

Preparing a 'wish list' before you start looking for a business will help you to objectively analyse whether or not the business is right for you.

Things you can consider when preparing a wish list include:

- What industries you have skills and experience in.
- What you enjoy doing.
- What your weaknesses are.
- The operating hours of the business and how many hours per week you are prepared to work yourself.
- How much money you will need to be able to draw from the business in the first year (and how much in each subsequent year).
- The distance and travel time from your home and whether or not you are prepared to move to live closer to a business.
- How many staff members you feel comfortable managing.
- How much risk you are prepared to take on – do you need a business with a long track record of consistent profits, or are you prepared to buy a relatively new business that has innovative new products?

3. <u>Conducting Due Diligence</u>



The term ***due diligence*** refers to the process of investigating and evaluating all important aspects of a business before you purchase it.

Section 4.3 of this Module is devoted to due diligence.

At the same time that you are conducting due diligence, you should also be:

- preparing your own valuations of the business (valuations are discussed later in Section 5 of this Module),
- working out how much you are prepared to offer for the business, and
- seeking professional business advice from a chartered accountant in regards to the financial situation of the business.

Note that, when you make an offer for the purchase of a business, you can include a ***due diligence clause*** in the agreement. This will allow you to pull out of the deal at any time within a set period of time if you find anything about the business that is unsatisfactory to you.

So, although you should conduct as much due diligence as possible *before* making an offer, it is a good idea to safeguard yourself by including a clause such as this. This will give you further opportunity to cancel the arrangement if you need to.

4. Arranging Formal Finance

When you have finished conducting ***due diligence*** and are satisfied that the particular business meets your needs, it is time to confirm your finance arrangements.

A key point is to prepare a detailed (and realistic) ***cashflow forecast*** for the first year in business. A cashflow forecast shows all the money you expect will be going in, and out, of the bank account during the year.

A cashflow forecast is particularly important if you are going to be buying new equipment for the business or making other major changes that could affect sales or expenses during the first year. After all, you need to make sure you have got finance arrangements in place to get you through this initial period.

Prepare your cashflow forecast for each month of the year separately, so you can see if there are any months in which you will need to put more money into the business.

Then if, for example, you know that you are going to need to contribute $10,000 to the business in three months' time, you can prepare for this.

For instance, you may wish to reduce your initial deposit (and thus increase the amount you are borrowing to buy the business) so that you will have this cash ready when you need it. Alternatively, you may arrange an ***overdraft*** facility in advance, so it is ready when you need it.

5. Checking Legal Agreements

With finance arrangements in place, it is time to finalise negotiations and get legal sale and purchase agreements signed.

Ensure that a legal professional checks through the purchase agreement prior to 'going ***unconditional***'. Once the agreement is 'unconditional' you are required to purchase the business.

4.2.2 Financing the Business

Going into self-employment usually requires a large financial commitment.

If you are buying a business, it is quite easy to identify the costs involved – that is, the purchase price plus any costs associated with making changes to the business (e.g. renovations, sign-writing).

However, you also need to be prepared to cover costs associated with the ongoing operation of the business.

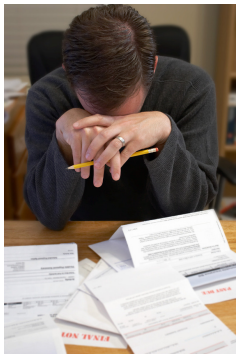
For example, it may be that bills such as rent, wages and supplier invoices need to be paid within the first week of you taking over the business. If so, how confident can you be that cash inflows within that initial week of trading are going to be enough to cover these costs?

If you are starting a new business, it becomes even more difficult to work out what finances you need. This is for two reasons:

1. You need to build a customer base before you can make sales and earn income (and cash!). Usually, you cannot be sure how long this will take.

2. You need to spend a lot of time working out exactly what you will need and then getting quotes. This is different to when you buy a business, as you do not simply pay one lump sum and get all the equipment and supplies required to operate the business!

   This is a time-consuming process. In addition, if you are new to business or to the industry, it can be easy to overlook some expenses during the planning stage.



It is often said that the first year in business is very difficult, financially.

However, the reality is that this often extends beyond the first year – it may be **three years or more** before a new business becomes ***financially independent***.

In the meantime, you need to be able to financially support the business and yourself.

Most businesses are funded, at least in part, by the owner's own funds. Even if you intend to get a business loan, most lenders will require that you contribute some of your own money – usually around 30%.

Therefore, if self-employment is something that you want to pursue, you will probably need to first set (and reach) some financial goals relating to saving money to use as start-up funds. Remember, self-employment is a type of investment: you put money and hard work in, in return for long-term prospects of on-going profits.

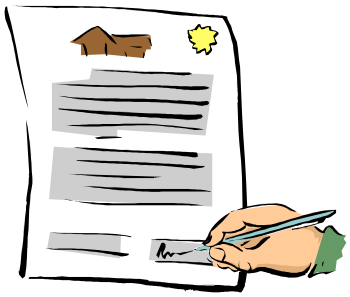
4.2.2.1 Debt Financing

Debt financing involves borrowing money to fund your business.

Examples of debt finance include:

- Bank or ***finance company*** loans
- ***Overdrafts***
- Credit cards
- ***Hire purchase*** agreements

It also includes loans from family and friends.



If you intend to get debt financing from a bank or finance company, some form of ***security*** is usually required.

Although the assets of the business may be used as security, you are also often required to give some kind of personal security. This may be in the form of a ***personal guarantee*** or ***mortgage*** on your home.

There are several organisations which offer an alternative to using banks and finance companies for debt finance. Two examples include:

1. The Māori Women's Welfare Development Incorporation (MWDI). This organisation offers low interest loans to entrepreneurs of Māori descent. Refer to www.mwdi.co.nz.

2. Just Dollar$. This is a trust which offers loans to businesses in the Canterbury region that have difficulty getting finance from banks. Refer to www.csbec.org.nz/justdollars.

Screen Print: The Just Dollar$ Website[43]

[43] Christchurch Small Business Enterprise Centre. *Just Dollar$.* Retrieved 4 October, 2013, from http://www.csbec.org.nz/justdollars

4.2.2.2 Equity Financing

Equity financing involves giving a portion of your business to an investor in return for money to be invested in the business.

Equity financing involves
an investor giving you money to invest in the business,
in return for them becoming a part-owner in the
business.

Two advantages of equity finance are that:

1. you do not have to make loan repayments, and
2. the investor may have networks and expertise to offer the business.

Examples of equity finance include:

- ***Partnerships***
- ***Angel investment***
- ***Venture Capital***
- ***Listing*** your company on the ***stock exchange***

Angel investors are generally wealthy individuals or groups of individuals who use their own money to invest in high risk, innovative businesses.

Most angel investors favour investing at start-up or early expansion stages of the business. They do not usually want to invest at the 'seed' stage (when the business venture is still only just an idea) or later expansion stages.

Venture capital can be defined as a high risk investment in a high potential business opportunity. So if you are starting a business, you are unlikely to receive venture capital funding (or even angel investment) unless your business idea is something unique with high earnings potential.

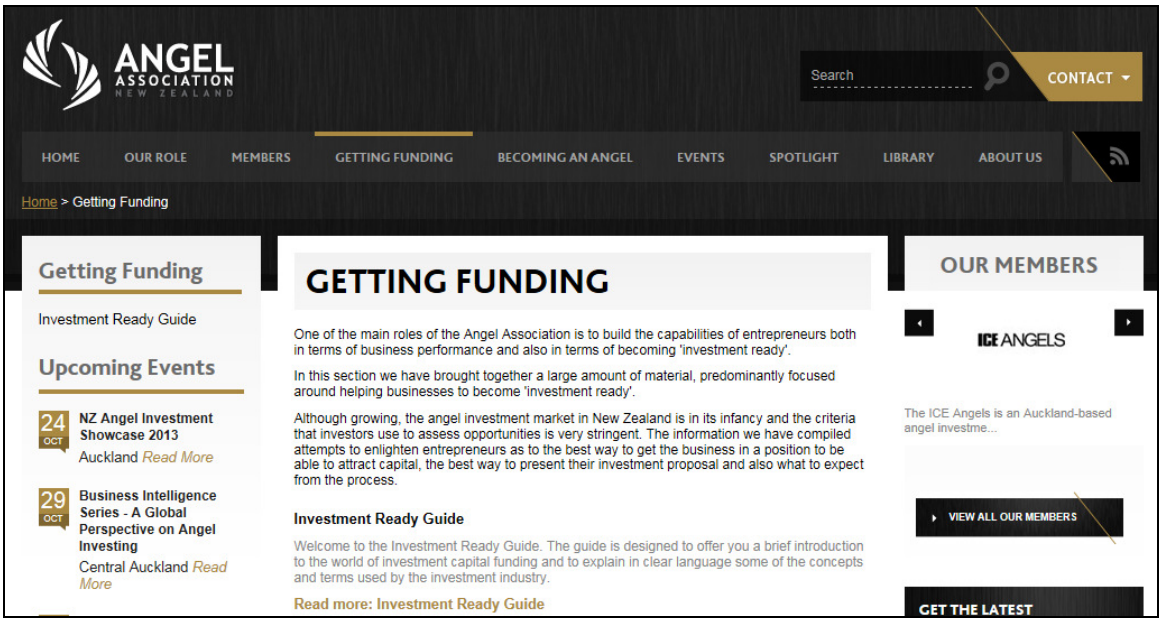
What is the difference between venture capital and angel investors?

- Unlike angel investors, venture capitalists are usually groups or organisations that use organisational funds money rather than personal funds.
- They tend to invest a higher amount of money (usually over $1 million), and are looking for a return of 30-50%.
- Venture capitalists often want to play a far more active role in the management of the business than an angel investor would.

If you are interested in seeking venture capital (or finding an angel investor), visit the following websites:

- The New Zealand Venture Capital Association (www.nzvca.co.nz).
- The New Zealand Venture Investment Fund Ltd (www.nzvif.com). This is a Government-owned company which invests in venture capital funds and partners with angel investor groups to invest in New Zealand companies.
- Angel Association New Zealand www.angelassociation.co.nz. This organisation aims to promote the growth of angel investment in New Zealand.

Screen Print: The Angel Association New Zealand Website[44]



[44] Angel Association of New Zealand. *Getting Funding.* Retrieved 4 October, 2013, from http://www.angelassociation.co.nz/getting-funding/

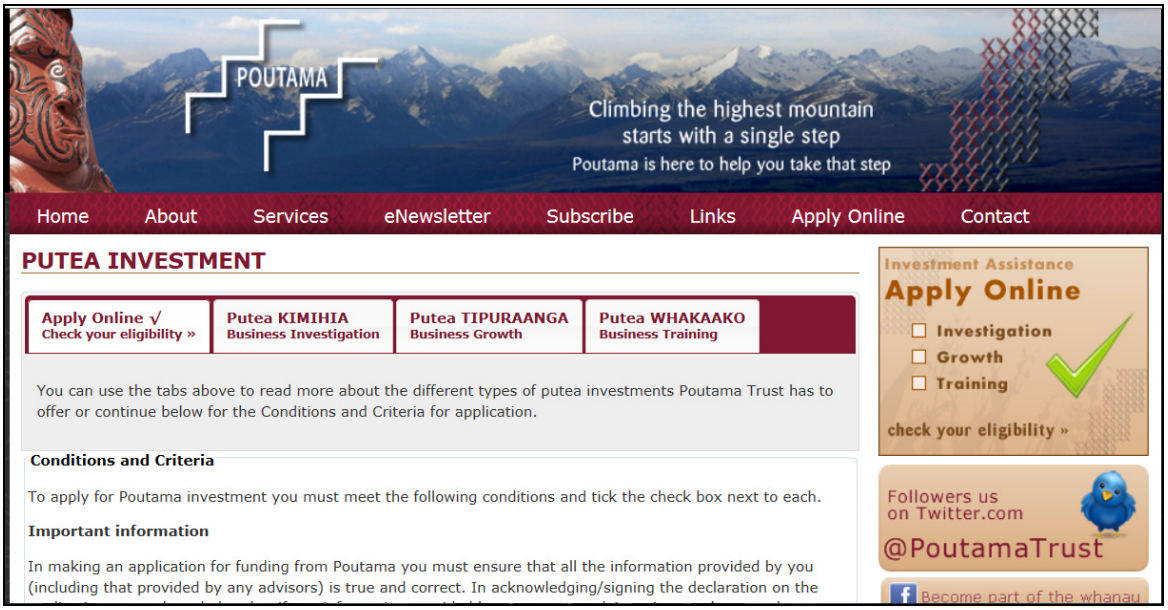
4.2.2.3 Business Grants

There are a few organisations that provide support for new businesses. However, most business-related organisations provide ***non-monetary support*** in the form of mentoring and training.

A few examples of organisations and Government Departments that may be able to provide ***monetary assistance*** include:

- Ministry of Social Development (www.msd.govt.nz), including Work and Income (www.workandincome.govt.nz) – offers several ***subsidies*** and grants. For example, The Flexi-wage Self Employment programme can help with costs while you are getting started in business.
- Independent Business Foundation NZ (www.ibf.org.nz).
- New Zealand Trade and Enterprise (www.nzte.govt.nz).
- Poutama Trust (www.poutama.co.nz) – assists existing Māori businesses with a range of business enabling services.
- Amber Grants (www.womensnet.net) – provides grants for women in business.

Screen Print from Poutama Trust website[45]



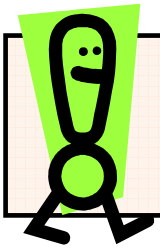
[45] Poutama Trust. *Putea Investment*. Retrieved 4 October, 2013, from www.poutama.co.nz/putea/investment.htm

4.2.2.4 Arrangements with Suppliers

Suppliers are the businesses from which you buy the goods (or components of goods) that you then sell in your business.

For example, if you are a cabinet maker, suppliers will include businesses from which you purchase timber, varnishes and hinges.

Although some suppliers require payment for goods at the time that you order them, it is quite common for many suppliers to not require payment until *after* goods have been supplied. This could be 7 days, 14 days or at 'the 20th of the month following the invoice'.



If a supplier doesn't require payment immediately, or in advance, they are effectively providing short-term funding for a business!

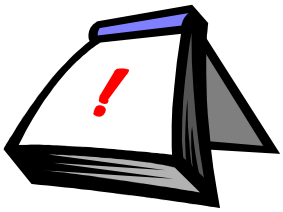
For example, assume that:

- A business received stock from a supplier on the 1st of May,
- the invoice for this was received during the month of May, and
- the payment terms were 'by the 20th of the month following invoice'.

In this situation, the business would not need to pay that invoice until the 20th of June – **51 days after receiving the goods**!

Within that timeframe, it may be possible for the business to sell some, or all, of the goods received and use these funds to pay the invoice. In comparison, if a supplier requires payment upon receiving goods, the business would need to find money from elsewhere.

If supplier timeframes for payment are short, it is best to negotiate with the supplier for a longer timeframe *before* placing an order. Do not let yourself get into a situation where you are not able to pay your suppliers on time and therefore get behind in payments.



Even if you never intend to order goods from that particular supplier again in the future, situations such as this can cause a lot of damage to your business's reputation. It may also affect the ability of the business to make credit arrangements with other potential suppliers.

4.2.2.5 Advance Payments from Customers

In some cases it may be possible to get customers to pay for goods in advance or to pay a deposit fee. If so, this also is a source of finance for a business as the business owner can use the funds to buy the supplies needed.

Some examples of situations where advance payment is likely to be appropriate include:

- A **large order** which the business would have trouble financing with their own money.
- A **special order** which the business would not be able to sell to any other customer if the customer changed their mind and decided they did not want the product.
- An order for **a customer who is likely to change their mind** and decide they no longer want the product.
- An order for a **new customer** who does not have a track record with supplier.
- An order for a customer who has a **poor credit record**.
- An order that would take a **long time to complete**.

Even if none of the above situations apply, if you have a good relationship with a customer, you may be able to arrange payment in advance. You may need to offer an incentive such as a discount, but this could work out as a relatively cheap source of finance for the business.

4.2.3 Getting Good Advice

The importance of good professional advice is mentioned in several places throughout the Modules for this programme. When it comes to buying a business, the need for professional assistance is extremely important - always remember the golden rule:

Seek advice BEFORE you commit to anything!

It's too late to ask for advice after you've signed something. That would be like trying to lock the stable door after the horse has already bolted.

4.2.3.1 Information to Provide to an Adviser

As you will be aware by now, most professional advisers will charge you by the hour (or part of it). So make sure that, when you visit an adviser, you go well prepared. If you are not prepared, not only will you appear unprofessional to them, you will not make the most of your time and money.

Ensure you have your questions ready beforehand. Time spent in their offices thinking about what to ask will cost you money.

So what information should you take along to a professional adviser when purchasing a business?

Here is a starter list for you to consider. Depending upon the type of business, there may be other documents that you should take along to your first meeting.

1. A written overview of the business summarising the key points. Include both good and bad things about the business. This means that you will need to have done your own research (this is discussed in the next sub-section).

2. Financial statements – preferably for the last 3-5 years. This gives your adviser clues about how the business has performed in the past. It will also help put together future cashflow statements.

3. Written notes about your current personal situation so that you can discuss an appropriate ***legal structure*** (e.g. company) to operate the business.

4.2.3.2 About Business Advisers

There are a number of business advisers available to help you make a business investment decision. Some advisers specialise in this area, whereas others can give you general advice. It is important that you understand an adviser's area of speciality.

Your accountant will look at the business from a financial viewpoint, but this is only part of the story. Make sure that you gather all the information you require before you make a final investment decision.

Accountants

The obvious place to start is with your accountant, and if you do not have one then you need to find one. Ask a friend in business who they use and whether they recommend them.

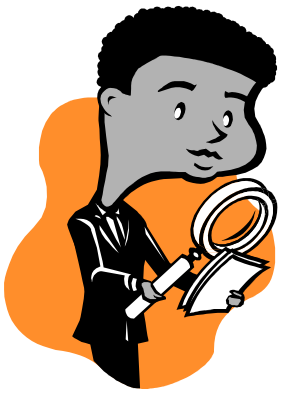
If you cannot find one that way, there are many listed in the Yellow Pages. Make sure your accountant is a Chartered Accountant. Only members of the Institute of Chartered Accountants are able to use the letters 'CA' (which stands for 'Chartered Accountant') after their name.

Your accountant will be able to advise you on the accountancy and tax side of running a business. Get your accountant to go through the past financial statements with you. They can explain what everything means. If the accountant cannot explain things in ways you can understand, you need to find one who can.

If you are not familiar with analysing financial accounts, ask your accountant to explain such things as ***margins*** and key ***ratios***, and what they mean.

If they have been in business for a while, there is a good chance they will have some clients in this same line of business. Although they will not be able to discuss their other clients' businesses, it does mean that they should know what ratios and margins are good or bad for the type of business you are looking at.

You should be aware that, when preparing financial statements for small businesses, accountants will rely on what they are told by the owner. You will see that in the ***disclaimer***, usually near the front.



This means that the accounts, although probably accurate, may not tell "the truth, the whole truth, and nothing but the truth". You can rely more on the accounts if they have been ***audited***, but again, they only tell part of the story.

If accounts have been ***audited*** this means that an accountant has at least done some checking to see that what the client has said is true. However, as small businesses do not need to have audited accounts, very few do this. Nearly all small businesses only have accounts done because they have to for tax reasons.

One point to note is that it is possible that a change of ownership may have unfavourable tax implications. For example, ***imputation credits*** (i.e. tax credits) in the company could be lost. Make sure you talk to your accountant about this *before* you sign a sale agreement.

Lawyers

There are several things that you should speak to a lawyer about when buying a business. These include advice on:

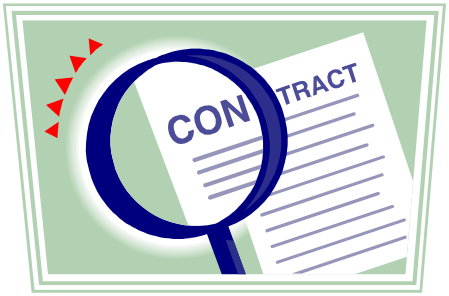
- ***legal structures***,
- ***asset protection***, and
- the contents of contracts (e.g. the contract to buy the business).

If you haven't got a lawyer, you can find one in much the same way as you can find an accountant.

Your lawyer will be able to help you to decide what ***legal structure*** you should operate your business under (i.e. ***sole trader***, company, etc.). All structures have advantages and disadvantages and the one that is right for you will depend on your personal situation.

A major factor that your lawyer should take into consideration is ***asset protection***. That is, they will look at your situation to work out the best way for you to operate. This is to reduce the risk of getting into a situation where you end up losing the assets that matter most to you – including your home.

In terms of agreements, make sure your lawyer reads through the ***sale and purchase agreement*** that you need to sign to buy the business. They can let you know if there are any clauses that are not currently in it, but which would be of benefit to you to include.



Lawyers can also assist with matters such as:

- employment agreements for staff members,
- ***lease*** and rental agreements, and
- ***restraint of trade*** agreements.

Your lawyer can give you advice in regards to complying with legislation that relates to your business as well.

Business Consultants (Advisers)

You will probably find that business advisers will talk to you about a wider range of topics than what lawyers and accountants usually will.

Business advisers can help you in many aspects of business, including preparing a business plan.

Business advisers usually offer help and advice on such things as:

- Marketing
- Finance
- ***Mediation*** and employment matters
- Information systems
- Exporting
- Business planning
- Human resources
- ***Franchising***
- Coaching and mentoring

Business advisers may specialise in just a few of these areas, so make sure you go to somebody who deals in the area you need help with.

When buying a business, you may choose to use a business adviser to help you conduct ***due diligence*** on the particular business. Due diligence is discussed further in the next section.

However, remember that, even if you use a business adviser, you still need to seek professional legal advice from a lawyer.

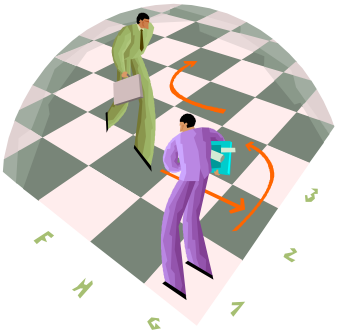
Bank Advisers

As well as helping you raise a loan, bank advisers can be a valuable source of information.

Remember again, that when you go to see a bank adviser, to go well prepared (especially if you are expecting them to lend you some money).

You are more likely to get the loan if:

- you look professional,
- know what you are talking about, and
- have already done your homework.



A bank adviser will almost certainly want to see a business plan if you are starting / buying a business and want a loan.

The part of the business plan the bank will be most interested in is, not surprisingly, the financial section. Be sure that you understand your business plan and can talk about it, especially if somebody else (such as a business adviser) has prepared it for you.

You will not be charged any fees simply for seeing a bank adviser. However, they are paid to make money for the bank by giving out loans. So do not expect them to spend a lot of time helping you if there's no realistic chance of you borrowing money from them.

Bank advisers are able to answer questions such as:

- Will the bank lend me any money?
- If so, how much?
- What security does the bank want?
- How much will it cost?
- What are the repayments?
- What other terms and conditions are there?

Do not be surprised if the bank wants you to use your house as ***security*** for a loan.

If you agree to this, you must understand that if the business does not do well, the bank will have the right to repossess your house to claw back any monies owing to them.

So think carefully before you agree to this.

Business Courses

There are many business courses available, some of which are free, that can help you get into business and run a business.

Examples of courses include:

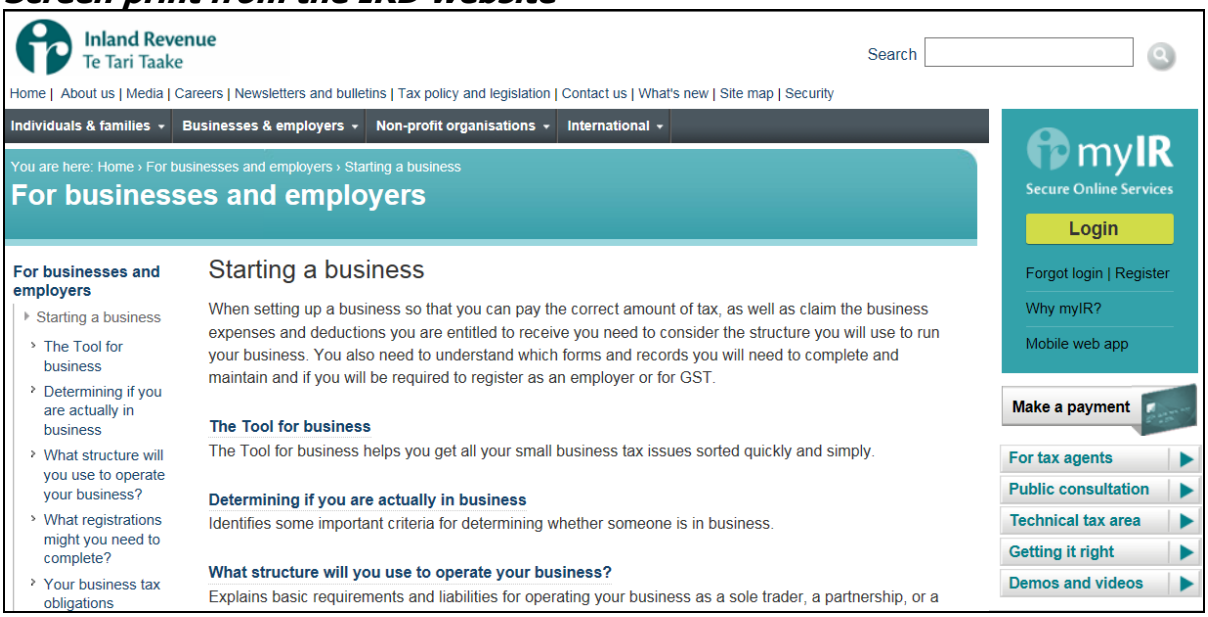
- the Certificate in Small Business Management, through Te Wānanga o Aotearoa,
- courses through New Zealand Trade and Enterprise (see www.nzte.govt.nz), and
- courses arranged by your Local Chamber of Commerce.

Inland Revenue Department (IRD)

The IRD is very helpful to new business owners, and their service is free. A staff member can visit you and provide lots of advice on GST, income tax (including the provisional tax regime and residual tax), etc. They can show you how to fill in their various forms and what you can do to make your dealings with the IRD less stressful.

Why do they do this? Because in the long run, it makes their job easier and helps ensure that they collect what money is due to them.

Screen print from the IRD website[46]



[46] Sourced from Inland Revenue Department. Crown copyright reserved. Retrieved 4 October, 2013, from www.ird.govt.nz/yoursituation-bus/starting/

4.3 Due Diligence and Understanding Data

Investing in an ***SME*** (a small-medium sized business) is generally riskier than investing in a ***blue-chip company***. A blue-chip company is one that has been around for some time with a good track record for making profits – like Telecom.

Because Telecom is listed on the stock exchange and has been in business for a long time, it is easier to rely on the information that is available to the public and potential investors.

Thus, when investing in an SME,
it is even more important than ever to:

DO YOUR HOMEWORK!

The process of carefully examining the business that you are intending to buy is referred to as conducting ***due diligence***.

Obviously, two of the most important parts of this process include:

1. investigating why the business is for sale, and
2. analysing the business's financial statements.

4.3.1 Why is the Business for Sale?

Always try to find out why the business is for sale. Some common reasons given may be that the owner(s):

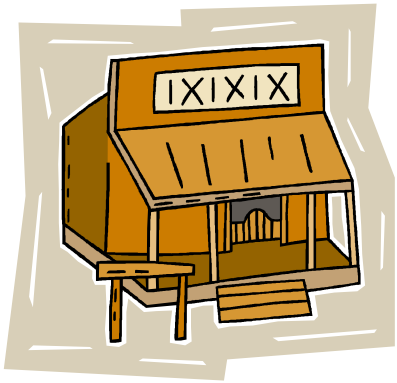
- Intends to retire.
- Is moving out of the area.
- Is not in good health, or is feeling they are too old.
- Does not have the time to run their own business.
- Is no longer interested in the business and would like a change of career.

These reasons alone are usually of no concern to the buyer. However, there may also be other reasons that the buyer has not told you about, which may be of concern.

Other reasons, which may be a concern, could include:

- Loss of customer base or insufficient customer base to begin with.
- An increase in competition or a known (or expected) future increase in competition.
- Increase in costs.
- Problems with suppliers.
- A loss of a major contract.

- Poor management resulting in reduced business profitability.
- Key staff leaving the business, without whom the earning power of the business will be reduced.
- Unmotivated and careless staff.
- Customers slow to pay.
- Cashflow problems.
- Changing government regulations which may impact on the current operations and costs of the business.



- Location no longer ideal: The business location may be a place which is no longer experiencing growth. Customers may now prefer to shop in a different area.
- The building and facilities may need a serious upgrade in order to be competitive.
- Building and location may restrict growth of the business.

You will need to ask very specific questions and conduct your own research to work out the likely reasons that a business is for sale.

However, even if some of the previously stated factors are a reason why the business is for sale, this does **not** necessarily mean you should not buy it.

What is important is that you **understand the implications** of these factors on the business. This way, you can make an informed decision about whether or not you will buy the business.

There is nothing necessarily wrong with buying a business in a poor state – just so long as you know it's in a poor state and **only pay what it's really worth**.

You will have to pay a lot more for a well-run and extremely profitable business.

A poor business may have the potential to be turned around into a thriving enterprise. Turning a poor business into a great one won't be easy, but there is the chance of making a much better return on your investment.

4.3.2 The Financials

One of the first things you should do is:

Obtain a copy of the most recent financial statements of the business.

Ideally, get the statements for the previous few years.

If the seller won't show you any of these, or is continually making excuses as to why they are not available, then you need to be very wary. You should not make any offer on a business until you have seen all the financial information you want. An honest seller should have no problems showing you any of the information typically found in financial accounts and letting you take this to your accountant or any other adviser you need to.

Some tips of what to look for when examining the financial statements of a business are outlined in this sub-section. However, if you do not understand financial information really well, then you must use somebody who does. This is likely to involve asking a qualified accountant or business consultant.

4.3.2.1 The Income Statement

The ***Income Statement*** is also known as the:

- ***Statement of Financial Performance***, and the
- ***Profit and Loss Statement***.

This statement shows:

- Income
- Expenses
- Profit before Tax
- Tax Payable
- Profit after Tax

Before continuing any further, it is important to realise and understand that:

***Profit* is not cash in the bank.**

Thus, when you are looking at the '***bottom line***' (i.e. Profit after Tax) this will NOT show you how much cash will be available for you to take out of the business each year. Instead, it is the ***Cashflow Statement*** which will show this.

Questions to Answer

When examining the Statement of Financial Performance, try to answer the following questions:

1. Are profits increasing steadily or decreasing?

   Note that a set of financial statements will usually also show figures for the previous year. In order to identify whether profits are steadily increasing or decreasing, you will need to obtain copies of financial statements for several years.

2. Are all regular expenses included? Are there any 'one-off' expenses included?

3. Are there any large expenses that are due in the coming years (e.g. repairs and maintenance of the building)?

4. Are all wages, including those of the owner included? On the other hand, are wages inflated in some way?

5. Can costs be cut in any way?

6. Are ***ratios*** (e.g. profitability ratios) similar to industry averages?

   For example, if other businesses in the industry usually have ***net profit margins*** of around 50%, but the business you are interested in buying only has a profit margin of 30%, this indicates potential problems with the business.

Look for trends – do not focus on one year only

When looking at financial statements, in particular the Income Statement, it is more important to look at longer term trends than it is to look at information for a single year. Often a single year is not ***representative*** of the business as a whole.

Imagine if a business in central Christchurch was judged solely on their performance throughout the 2010 – 2011 financial year in which the earthquakes struck. It is unlikely that this would be representative of the business's true potential.

You should examine the accounts over a three to five year period. Look for nice steady increases and decreases over this time.

A business that is very volatile, with enormous changes in profit from year to year, is worth less than one with steady improvements.

Consider the financial information in the table below:

	Profits				
	2009/10	**2010/11**	**2011/12**	**2012/13**	**2013/14**
Business A	$100,000	$110,000	$125,000	$140,000	$160,000
Business B	$100,000	$80,000	$170,000	$125,000	$160,000

You will notice that the total profits of the two businesses referred to in the above table are the same over the given period. I.e. Over these five years, both businesses earned total profits of $635,000.

Total Profits = $100,000 + $110,000 + $125,000 + $140,000 + $160,000
(Business A) = $635,000

Total Profits = $100,000 + $80,000 + $170,000 + $125,000 + $160,000
(Business B) = $635,000

Question: Based solely on these figures, which of these businesses do you think is the more valuable?

The Answer: Business A would seem to be more valuable because its profits are more consistent and thus more reliable.

If you had to guess how much each of these businesses would make in 2014/15, what would you guess?

- Estimating profits for Business A seems fairly straightforward. Based on the previous five years, you would probably expect somewhere around $175,000 to $185,000.
- But what about Business B? Based on the previous five years, you could expect anything from about $100,000 to $350,000.

Because of the uncertainty involved in Business B's profits, most people would be willing to offer more for Business A.

4.3.2.2 The Statement of Financial Position

The ***Statement of Financial Position*** is also known as the ***Balance Sheet***.

This financial statement lists the assets, liabilities and equity of the business as at a certain date in time. In other words, it shows what the business owns, what it owes and (to some extent) what it is worth.

Some of the items that show in this statement include:

Assets:

- money in the bank
- ***accounts receivable*** (also known as ***debtors***)
- ***stock on hand*** (***inventory***)
- computers
- shelving and furniture
- machinery
- vehicles
- buildings

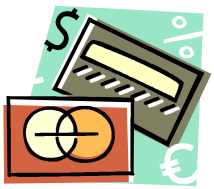
Liabilities:

- loans
- ***mortgages***
- ***hire purchase*** amounts
- bills received but not yet paid
- credit card balances
- any GST and other tax owing

Equity:

The ***net worth*** of the business is also called the ***net assets***. We learnt how this is calculated in Module 3:

Equity = **Assets** - **Liabilities**



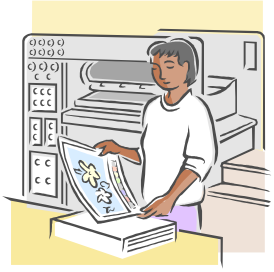
Questions to Answer:

When analysing the ***Statement of Financial Position***, you should also examine the assets which are being referred to.

Try to answer the following questions about the business's **assets**:

- **Do you actually want to buy the assets that are shown?**

  Maybe you intend to use new systems in the business which would require different types of equipment.

  For example, if you are buying a printing business, perhaps you only want to use digital presses, in which case you would not be interested in buying a large traditional printing press.

  As another example, maybe you do not want to sell the ***inventory*** that the business has on hand (i.e. you may be planning to change the product range and if so, why buy items that you do not want to sell?).

- Are the **values of assets** shown in the financial statements ***representative*** of the market values of the assets?

  For example, a vehicle may show as being worth $9,000 in "the books".

  However, when you inspect that particular car, you may see it has had a lot of use, has several dents and needs lots of maintenance.

  If you are unsure about the real value of assets, including inventory, it could be worthwhile to seek the opinion of a professional valuer.

- **How old are the assets and what condition are they in?**

  - Are any assets ***obsolete*** (of no use because they are out of date)?
  - When will assets need replacing or repairing?
  - Are you likely to need to have to buy new equipment in the near future? How much will that cost?

- **Which assets does the business actually own?**

  The business premises may have a number of items of equipment in it that are actually leased or rented. Assets in the business may even be owned by someone else (such as the landlord!).

- **Do you want to buy the *accounts receivable*?**

  These are the amounts owed to you by customers. If you are considering buying them, examine them very closely and negotiate to buy them at a discounted price (as some customers may never pay you).

  Anything under 30 days old is much more likely to be received than amounts over 30 days. **Do not pay for anything over 60 days**.

  If practical, it is also a good idea to contact the customers to check that they agree with the amount that they owe the business. If they disagree, even if the amount is accurate, this indicates that they may not pay their accounts.

- **What *proportion* of the annual sales are customer debts (*accounts payable*)?**

  It could be that sales amounts shown in the Statement of Financial Performance are high, yet very little money may actually be received from customers. If customer debts are not being collected quickly, why is this?

- **Does anyone else, other than customers, owe money to the business?**

  How much and how likely is it that this will be received? You don't want to end up paying for money that will never be received.

- **Does the business actually own the entire *inventory* (stock) that is on its premises?**

Some of the inventory may have already been sold and paid for, but not yet sent to customers.

You need to be careful that you do not include the value of this stock in your purchase price.

- **Is there any out-dated or slow-moving inventory?**

  Find out if there are any inventory records that you can use to work this out.

- **Is the amount of inventory kept on hand normal for the industry?**

  If there is more than normal, why is there so much?

Also answer the following questions relating to the **liabilities** of the business:

1. **What does the business owe? What *proportion* of the total assets of the business is this?**

   For example, if total assets of the business amount to $100,000, and debts amount to $90,000, then 90% of the assets of the business are actually owed to other ***entities***.

2. **Are any taxes due or unpaid to date?**

   If so, find out if there are any penalties on this.

3. **Are there any unpaid wages owing to employees?**

If so, how much and why haven't employees been paid?

Also check to see if there are large amounts of holiday leave owing to employees. If there is, why is this the case? Be aware of how much it could cost you if that employee decides to take their leave and you also need to pay wages to someone else to fill in for them.

4. **Are there any liabilities that are <u>not</u> recorded in the financial statements?**

   If so, what are they and why aren't they recorded?

5. **Are any of the debts overdue?**

   Examine any unpaid bills to see when they are due. If they are overdue, find out why they have not been paid and if there are any legal claims in relation to these.

   Unpaid bills could indicate that the business is being sold due to cashflow problems.

6. **Does the business have any loans, leases or mortgages?**

   If so, what are the amounts and regular payments? Do you, as the purchaser, want to take over these? If so, on what terms?

7. **Are there any *contingent liabilities*?**

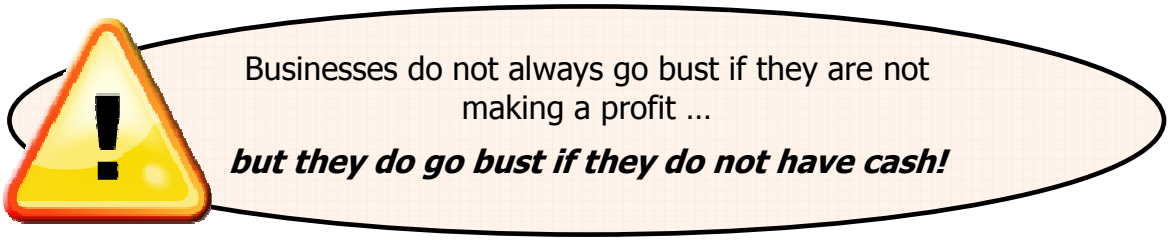
   A ***contingent liability*** is a liability that only becomes due under certain circumstances. An example would be money that may be owed depending on the outcome of a court case that someone has taken against the business (which has not yet been resolved).

4.3.2.3 The Cashflow Statement

It is extremely important to realise that **profit is not cash**. It is common for a business to be making a very healthy profit but still be short of cash.

Cashflows are simply the money going into and out of the business bank account. This is what a ***cashflow statement*** shows.

Note that the cashflow statement is not usually included with the financial statements. However, ask the current business owner if they are able to provide one for each month in the past year. It is quite likely they will be able to do this if they use accounting software. Alternatively, you can ask to look at past bank statements.



Questions to Answer:

When analysing the ***Cashflow Statement***, try to answer the following questions:

- **Are there seasonal fluctuations?**

  Seasonal trends are particularly common in agriculture, tourism and hospitality industries.

  Will you need to find additional cash during the winter months before the high season begins? Or should you wait until the winter months have passed before purchasing?

- **When are taxes payable?**

- **How are shortfalls currently funded?**

  In other words, if there are more expenses that need to be paid than there is money in the bank, how are these paid for? Does the current business owner have to put additional money into the business at any time or does s/he have an overdraft?

  How will *you* fund any shortfalls? Do not assume just because the current owner has an overdraft facility that you will get one with the same limit.

- **Do customers regularly pay on time?**

  If not, how does this affect funding the business?

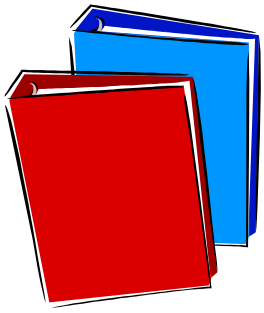
- **At what times of the year will you be able to take cash out of the business?**

  Even if the business is profitable and is able to give you good financial returns, you may not be able to withdraw this money at regular intervals (e.g. monthly) throughout the year. It may be the case, for example, that the business only has cash available to withdraw during the months of September to December.

Also think about the changes you intend to make to the business will when you buy it. Based on the cashflow statement and your own financial situation, will you be able to fund these changes and make the changes when you want?

For example, you may want to conduct a business makeover of the buildings, buy new equipment and change the product range. How will you pay for these items?

4.3.2.4 Other Financial Information



There are other sources of financial information that can give you a more complete and up-to-date picture of what's going on in the business. These include GST returns, till receipts and stock records.

These are particularly useful given that you are unlikely to receive exactly up-to-date financial statements when you buy a business (they could be a year or so old).

GST Returns

It is worth reviewing the latest GST returns to see that these match up with the financial statements you have been given. For example, if the financial accounts show that sales have been around $360,000 per annum, you would expect that a two-monthly GST return would show 'taxable supplies' of about 1/6 of this amount (i.e. $60,000), unless, of course, the business is seasonal.

If sales have been substantially lower, investigate why. It is possible that something has happened in the business within the past few months that affects future profitability. For example, a new competitor may have just opened up across the road, thus affecting current sales and future sales.

Till Receipts

Some small businesses, such as fish and chip shops, have till rolls. You can check these to see if they match the other information you have been given.

Inventory Records

Inventory records can be quite complicated to analyse – particularly if a business holds a wide range of products and frequently buys items. If the business uses computerised accounting software, this makes analysing stock records easier.

Is there is any stock in the business which you do not think would sell well? If so, you should be able to search the history of these items using the software to see when a particular product was last bought and how often it sells.

4.3.3 Other Considerations

Even if the financial statements of a business look promising, and the owner appears to have a genuine reason for selling the business (other than one relating to low profitability, of course!) you still need to examine the following:

- Industry information
- Employees
- Customers
- General information

4.3.3.1 Industry Information

What do you know about the industry? The more information, knowledge and experience you have, the better. A number of business owners choose a business that they are passionate about, but this does not necessarily mean that they can create a successful business.

Take a look at the local dairy. Many have closed down due to supermarkets. What does the future hold for the local dairy?

Questions to Answer:

- How competitive is the industry and who are your key competitors? How much influence and money do they have to keep you away from their customers? Would they be able to take all your customers from you?
- Are you aware of any new competitors entering the industry? How easy is it for them to do so?
- What new products and services are there in the industry? Is the business you are buying offering these for sale? If not, why not?

- What technology is available in the industry? How could the business benefit from this technology? Is it worthwhile investing in it?

- How does the business create a competitive advantage? E.g. does it have unique products, services, systems, technology?

- Are there many suppliers in the industry? Does the business have a good relationship with these suppliers and is it likely that any arrangements the current business owner has with suppliers will continue once you have bought the business?

- Is it easy to find skilled employees for the business in the local area?

- Is there any upcoming legislation that will negatively impact on the business by, for example, increasing expenses?

4.3.3.2 Employees

Employees can be amongst the most important assets of the business. The past success of a business may be due to the efforts of just a few staff members. If so, you need to find out who the key employees are, and also find out how likely they will be to stay with the business if you were to purchase it.

It is possible that key employees, who are critical to the future success of the business, have already left the business or are intending to leave. This may be the reason why the owner is looking to sell.

Spend time with employees to also find out:

- Whether or not you think you will be able to work well with these employees, or if there are large personality problems.

- Whether employees are likely to be happy with the changes you would like to make.

- How good the relationship is between employees and the current owner.

4.3.3.3 Customers

A strong, loyal customer base

is the most valuable asset of a business.

However, you need to find out whether or not existing customers are likely to stay with the business in a change of ownership. It may be that the strong customer base is due to good personal relationships with the current owner. If so, once the business is sold, customers may go elsewhere.

This is more common in service-oriented businesses where there is a lot of contact between customers and staff.

Remember that if customers have a good relationship with employees (who intend to stay with the business), it is more likely that the business will be able to keep the existing customer base.

Before meeting with the current owners, pay an undercover visit to the business. Look for the level of customer service and also get an idea of the number of customers the business has.

Then, once you meet with the current business owner, try to find out the following information:

- **Does the business have a customer list?**

  If so, will you have access to it?

- **Is there a customer mailing list or email list?**

  If so, will you have access to it? Note that, under the *Unsolicited Electronic Messages Act 2007*, you need permission to include someone on a business's email list – does the business have this permission in writing?

- **After selling the business, will the owner make use of the customer lists for their own purpose?**

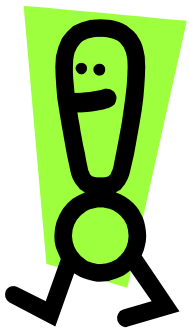
It may be that the current owner intends to set up another business in a better location and then be your competitor!

To avoid this situation, consider putting a 'non-competition clause' in the purchase agreement. This type of clause stops the previous owner from setting up a competing business within a certain geographical area within a certain timeframe. It is also called a ***restraint of trade clause***.

- **How many customers are there?**

Does the business rely on a few major customers, or are there many small ones? If the business relies on a few major customers, how likely is it that these customers will stay with the business after a change of ownership?

Remember, do not rely solely on what the current business owner tells you about their customer base and demand for their products.



Conduct your own market research to work out how solid the customer base is.

Just because a business was successful in the past, this does not mean it will be successful in the future.

Discussion Question:

If you buy an existing business, what steps could you take to encourage existing customers to continue to buy from you?

4.3.3.4 General Considerations

Some other factors you should consider when conducting your ***due diligence*** are as follows:

- What **insurances** *should* the business have? Does the business currently have these insurances? If not, how much will they cost?

- What **leases** are in place? Will the new business owner be able to take these over?

- Does the business comply with **current legislation**?

  For example, does a building have all of the necessary permits and consents? Are there good health and safety arrangements in place? For example, are there hazards in the workplace that will need to be fixed? If so, how much will this cost?

- Have you asked friends, family and other contacts about the business? Remember, **reputation is critical**. It may be easier to start a new business than to overcome a negative reputation.

- How suitable is the business's **location**?

Are there any new developments that may impact upon the future of the business in this regard?

For example, a new road may mean that customers may take their business elsewhere.

As another example, a planned shopping centre nearby may bring more customers to the area.

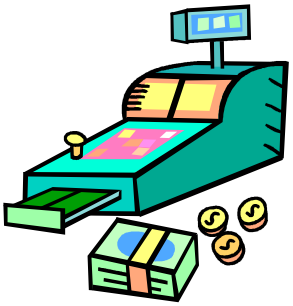
4.3.4 SME Considerations

We have already looked at things to consider when purchasing a business. When purchasing a ***SME*** (small to medium sized business), there are some additional questions that you should take into account.

A few examples of these are as follows:

The Income Statement

- Is the owner's salary included in the wages?



- Are other family members or friends working in the business, but not being paid?

- Is the business making enough profits and cash to employ staff?

- Are there additional expenses such as ***fringe benefit tax*** or costs associated with company cars that are not essential to running the business?

  It is possible that the business owner has purchased a very expensive family car within the business. The business may therefore be paying fringe benefit tax on the use of this car, as well as higher petrol costs. The ***depreciation*** expense of this vehicle (i.e. the cost of the vehicle spread over a number of years) would also be high.

The Statement of Financial Position

- Are home office assets included in the purchase price?

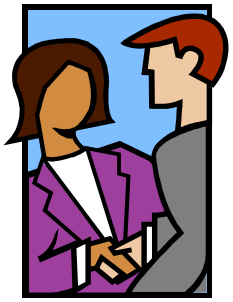
- Review equipment and vehicles carefully – are all items needed to run the business? It is possible that the owner purchased these through the business and is partly using these for personal use (refer the example relating to company cars given previously).

Other Considerations

- If running a home-based business, does the business comply with local ***resource consent*** requirements? Will it comply with them at your home? In other words, will you be allowed to run the business from your home?

- Is there a ***restraint of trade clause*** that can be put in place to stop the current business owner from setting up in the same region in competition to you?

  After all, you do not want to get into the situation whereby you pay the ***vendor*** (seller) for the business, and then have all of the customers follow him / her to their new business – leaving you with no sales!



- Alternatively, are the vendors willing to help the new owners following the sale?

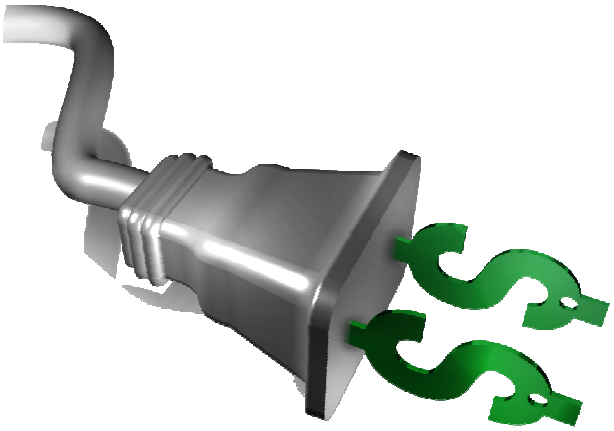
- Very often, owners of small businesses will tell buyers that they take money out of the till and pay no tax on it. They say this to let you know (or make you think) that the profits are higher than shown in the financial statements.

  Apart from the fact this is illegal, you have no way of checking the truth of this.

  If somebody is willing to cheat the IRD, do you think they would be too worried about cheating the purchaser? They have a lot more reason to be honest to the IRD than to prospective purchasers!

Section 5

Business Valuations



5.0 Business Valuations

Once you've made the decision that you want to buy a business, you need to decide how much you'll be willing to pay for it.

It doesn't matter how well run a business is, how profitable, how well known, or how many customers it has, you can still end up paying too much!

If you overpay for your chosen business,

it will be a long time before you earn back what you have spent,

let alone receive a return on your investment.

5.1 The Art of Valuation

When you buy a business, what you should be paying for is the profits that the business is going to be providing you with in the future.

However, there is no 100% accurate way of knowing what the profits are going to be. After all, you're trying to estimate and predict what is going to happen to the business in the future.

As Sam Goldwyn (the 'G' in MGM films – i.e. Metro Goldwyn Mayer) once said:

"Predicting is very difficult, especially about the future."

Thus, it is important to realise that valuing a business is as much art as science.

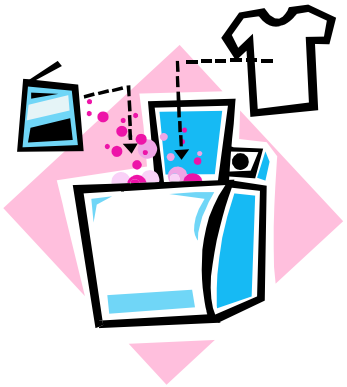
Just look at the following examples of share prices of publicly listed companies. (Remember, share prices indicate the value of a business):

Telecom[47]

- The share price of Telecom recently varied between $2.14 and $2.74 over the period of a year.
- There were 1,817,239,000 shares in issue.
- This means the value of the company ranged between approximately $3.9 billion and $5.0 billion in one year.
- This is a difference of approximately $1.1 billion!

Fisher & Paykel Appliances[48]

- The share price of Fisher & Paykel Appliances recently varied between $0.33 and $1.28 over the period of a year.
- There were 724,235,100 shares in issue[49].
- This means the value of the company ranged between approximately $239 million and $927 million in one year.
- The value at one time was about a quarter of what it was at its peak!



If extremely smart and well paid professional investors cannot really work out how much Telecom is worth,

do not expect to be able to put a 100% accurate figure on a business that you're interested in!

[47] Share prices are based on the 52 week high / low figures retrieved 6 October, 2013, from http://www.findata.co.nz/markets/stockquote/nzx/tel.htm. The number of shares in issue was also obtained from this site.

[48] Share prices are based on the 52 week high / low figures retrieved 6 October, 2013, from http://www.findata.co.nz/markets/stockquote/nzx/fpa.htm. The number of shares in issue was also obtained from this site.

So how do I value a business?

All businesses, from very large ones, such as Telecom, to the one you're thinking of buying, can be valued in much the same way. This is by looking at:

- how much profit is currently being made,
- the expected future profits, and
- the value of its assets.

Basically, you are paying for **future profits**. But you are likely to use past profits as a guide to how much future profits will be.

You are deciding how much you would be willing to pay now, in order to receive an average profit of, for example, $50,000 for each of the upcoming years.

Valuing a Small Business

However, when it comes to buying a small, privately owned business, you need to look carefully at profit figures. You may have to adjust some of the figures in the financial statements with your accountant to find the *true level of profits* for a small business.

Why do you think this is?

For a small business, the profits can be what the owner wants them to be (within reason).

The focus for small businesses is often to reduce tax. This can be done by, for example, claiming the maximum amount they can of their home office and vehicle expenses as being business expenses.

However, when it comes to selling the business, this can be a problem as it can decrease the value of the business. This is because the owners can take out whatever amount they want in wages, or pay family members whatever they want, as long as they've got the money to do so.

For example, a business owner could pay their spouse, who has no other income and is therefore on a low tax rate, $40,000 in wages from their business. They can do this even if their spouse spends very little time in the business.

The benefit of this would be that this amount of money would be taxed at the low rate of 17.5%. If this money was not paid to the spouse, it would instead become part of the business's profits. A higher tax rate may then apply.

What this means is that a business could be making no profit and still be worth buying; the owners could be taking out $120,000 per year in wages.

On the other hand, the owners may be working a lot of hours in the business and taking **very little money** out of it. In this case, there could be some profit in the business.

This would make the business appear more valuable than a business which has no profit but for which the owners are receiving a good income.

Key Tip:

If you are investing in a small business, but are only buying a small percentage of that business (called a ***non-controlling interest***), you should aim to pay relatively less than you would if you were buying the whole business.

For example, if you buy a 5% shareholding in a business, you should negotiate to pay **less than 5%** of what you calculate the total value of the business to be worth.

This is because when you buy the whole business, you can pretty well do with it as you please.

However, when you buy a small part of a business, you have to accept that you will have no real control of what happens in the business. This is particularly the case if there is one party who, alone, owns over 50% of the shares.

5.1.1 Goodwill

In accountancy terminology, ***goodwill*** is the difference between:

- the purchase price of the business, and
- the value of the ***net assets*** of the business (the assets minus any liabilities that the business has).

Goodwill = Purchase Price - Net Assets

For example, assume that, based on a business's profits you calculate that it is worth $250,000 and therefore pay this much for it.

However, the actual net assets of the business are only valued at $100,000. In this case, your accountant will classify the extra $150,000 as being for 'goodwill'.

Put simply:

	Purchase Price	$250,000
-	Net Assets	$100,000
=	**Goodwill**	**$150,000**

Note: When calculating the value of the assets of a business (e.g. the equipment, furniture, computers, etc.), the values shown in the business's financial statements are used.

The value in the accounts is equal to the purchase price, less any ***depreciation*** on the assets to date.

It is not equal to the current market value of the assets.

Goodwill is sometimes referred to as 'the value of the brand'.

Suppose you were thirsty, and you wanted a cola drink, so you stopped at the local dairy.

There you had a choice of two – Coca-Cola and Graham's Cola, both at the same price.

- Which would you choose?
  The chances are it would be Coca-Cola.
- What would it take for you to buy Graham's Cola? Probably a large price difference.

This higher price ('premium') that you would be willing to pay for a can of Coke is the value of the brand.

A few cents extra per can doesn't sound very much, but when you consider that Coke sells millions of cans every day, a few cents extra per can means a BIG, BIG difference. Especially when you consider that Coca-Cola can most likely produce their cola for a lower price because of their sheer size.

What does Goodwill Reflect?

For a successful and thriving business, goodwill can be the most important part of a business valuation. If you have a business of your own, the value of your brand can be your most important asset.

If the business provides services, the goodwill value will reflect the value of the client base. Factors such as loyalty and potential future business will increase the amount of goodwill you will need to pay to buy the business.

This is all taken into account when you estimate the value of the business using calculations such as the ***capitalisation rate method***.

If there is strong customer loyalty, expected future profits will be high and, thus, the value of the business will be higher.

Be careful about the amount of Goodwill you pay!

If you are buying a business, you should, however, look very carefully at the amount of goodwill that the seller wants.

People selling a business often greatly overestimate the true value of their business's goodwill. That is, they often think it is much higher than it really is.

They may have worked long and hard over many years in their business, and have become emotionally attached to it.

Who wants to think that, after all the hard work and long hours, there is very little goodwill? In reality, this is often the case with small businesses in New Zealand.

Just remember that goodwill should be based entirely on the business's ability to make profits in the future. It should **not** be based on emotional attachment.

The hours that the current owner puts in are totally irrelevant when calculating the business's true value. You need to be 'hard-nosed' when making business financial decisions, and not feel sympathetic towards the seller and his / her retirement savings.

Remember, the seller is unlikely to feel sorry for you for paying too much!

5.2 The Capitalisation Rate Valuation Method

5.2.1 Introduction to the Capitalisation Rate Method

As previously noted, the value of a business should be based on the expected profits (or cashflows) from the business. The usual way of estimating this value is to use what is known as the ***capitalisation rate method***.

The capitalisation rate method involves dividing the expected profits of the business by a number called the ***capitalisation rate***. The capitalisation rate is a percentage.

$$\textbf{Value of Business} = \frac{\textit{Profits}}{\textit{Capitalisation Rate}}$$

Refer to the following two examples to see the impact of the ***capitalisation rate*** on the value of a business:

Example 1: Right Way Driving School

You are interested in buying 'Right Way Driving School', a business that produces profits after tax of $50,000 per year. A capitalisation rate of 25% is applied. The value of the business would therefore be calculated as follows:

$$\textbf{Value of Business} = \frac{\textit{Profits}}{\textit{Capitalisation Rate}}$$

$$= \frac{\$50{,}000}{25\%}$$

$$= \$200{,}000$$

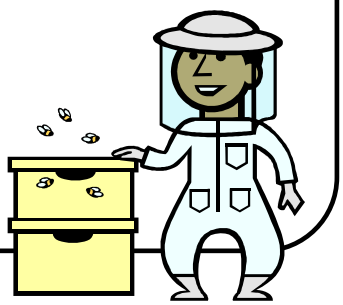
Example 2: Keeper's Beehives

You are interested in buying Keeper's Beehives, a business that produces profits after tax of $50,000 per year, but for which a capitalisation rate of 35% should be applied. The value of the business would therefore be calculated as follows:

Value of Business $= \dfrac{\textit{Profits}}{\textit{Capitalisation Rate}}$

$= \dfrac{\$50{,}000}{35\%}$

$= \$142{,}857$



Compare the two examples given. In both cases, the profits were $50,000. The only difference is the ***capitalisation rate*** used. As you can see, a higher capitalisation rate resulted in a lower business value.

5.2.1.1 What is a 'Capitalisation Rate'?

You can think of the ***capitalisation rate*** as an interest rate. The capitalisation rate is therefore the rate of return you want to get out of a business.

A key point, which you can see from the previous examples given, is that:

The higher the capitalisation rate, the lower the value of the business.

Now that we know that a capitalisation rate is like an interest rate, this is the same as saying:

The larger the return that you want out of a business,

the less you should pay for it now.

For example, assume that you are thinking about investing in a business which is expected to produce profits of $30,000 in the next year.

- If you expect a **high rate of return** on your investment, you may only be willing to pay, for example, $10,000 now for this expected profit. In this case, you would triple your money over a year – what a great return!
- But, if you were happy to receive a **lower rate of return** on your investment, you may, for example, pay $25,000 now for this expected future profit of $30,000.

As you can see: the larger the required rate of return (i.e. the capitalisation rate), the lower the current value of the business.

5.2.1.2 The Link Between the Capitalisation Rate and the P/E Ratio

Do you remember the ***P/E ratio*** which was introduced in Section 1.2.2? The P/E ratio (Price Earnings Ratio) is calculated as follows:

P/E Ratio = Current Share Price / ***Earnings Per Share***

Another way to look at the P/E Ratio is that it is the value of the business divided by its profits from the previous year. This is because:

- the value of a business = the current share price x the number of shares, and
- the business's profits are its earnings.

In other words, the P/E ratio can also be calculated as follows:

P/E Ratio = Value of Business / Previous Year's Profits

There is a clear link between the P/E Ratio and the capitalisation rate. When looking at the above formula, you might have noticed that it includes both the 'value of the business' and 'profits'. Both of these types of numbers are also in the capitalisation rate formula given earlier in this section.

Another way of writing the formula for the capitalisation rate method is as follows:

$$\text{Value of business} = \frac{100\%}{\text{Capitalisation Rate}} \times \text{Profits}$$

Let's use the example of Right Way Learning School (given earlier in this Section) to see how this formula works. Remember, the business in this example had expected profits of $50,000 and a capitalisation rate of 25%.

$$\text{Value of business} = \frac{100\%}{\text{Capitalisation Rate}} \times \text{Profits}$$

$$= \frac{100\%}{25\%} \times \$50{,}000$$

$$= 4 \times \$50{,}000$$

$$= \$200{,}000$$

Notice that the value of $200,000 is the same number we arrived at when we did the calculations using the simpler formula earlier on in this section.

So what is the link between the capitalisation rate and the P/E ratio?

Look at the version of the capitalisation rate formula given on the previous page.

If the profit figure used in this calculation is the previous year's profits, the number we have just calculated in the first part of the above equation (i.e. 100% divided by the capitalisation rate) is the same as the **P/E Ratio**.

Let's quickly calculate the P/E Ratio for this example:

P/E Ratio	=	Value of Business / Previous Year's Profits
	=	$200,000 / $50,000
	=	4

This is the same as the number calculated in the first part of the equation on the previous page: 100% / 25% = 4!

Why is this relevant?

Another name for the P/E Ratio is the ***earnings multiple.*** This figure tells you how many times this year's profits, the value of a business is. Here are some examples:

- If the P/E Ratio is 3, then you would only pay three times the current profits of the business to buy it.
  - So if profit over the most recent ***financial year*** was $23,200, the value of the business would be $69,600 (which is $23,200 x 3).

- If the P/E Ratio is 6, then you would pay six times the current profits of the business to buy it.
  - So if profit over the most recent financial year is $23,200, the value of the business would be $139,200.

> The P/E Ratio tells us how many times this year's profits,
> the value of a business is.

An interesting way to think about the capitalisation rate is, therefore, in relation to the **number of years you want to earn back the purchase price of the business**.

If, for example, you use a capitalisation rate of 40%, and a business has annual profits of $80,000, you would pay $200,000 for the business.

$$\textbf{Value of Business} = \frac{\text{Profits}}{\text{Capitalisation Rate}}$$

$$= \frac{\$80{,}000}{40\%}$$

$$= \$200{,}000$$

If the business continues to earn profits of $80,000 per annum, after 2.5 years you would have earned $200,000 in profit from the business ($80,000 x 2.5 = $200,000). This is the same amount you paid for the business.

If you want to earn the purchase price back faster, a higher capitalisation rate would need to be used.

Consider the following table:

If you set the capitalisation rate at...	The earnings multiple, and the number of years before you 'earn back' the price you paid for the business, is...
20%	(100/20) = 5
25%	(100/25) = 4
30%	(100/30) = 3.3
40%	(100/40) = 2.5
50%	(100/50) = 2

5.2.2 Applying the Capitalisation Rate Method

Recall the equation used to value a business using the capitalisation rate method:

$$\textbf{Value of Business} = \frac{\textbf{Profits}}{\textbf{Capitalisation Rate}}$$

As per this equation, the capitalisation rate method of valuing a business is based on two key figures:

1. The ***Capitalisation Rate***
2. The ***Profit*** Figure

In this sub-section, we will look at what capitalisation rate you should use, as well as what profit figure you should use, when performing this calculation.

5.2.2.1 What Capitalisation Rate Should I Use?

This is the most difficult question to answer. There are no 'hard and fast' rules about what is the 'right' capitalisation rate to use, except those in the following table:

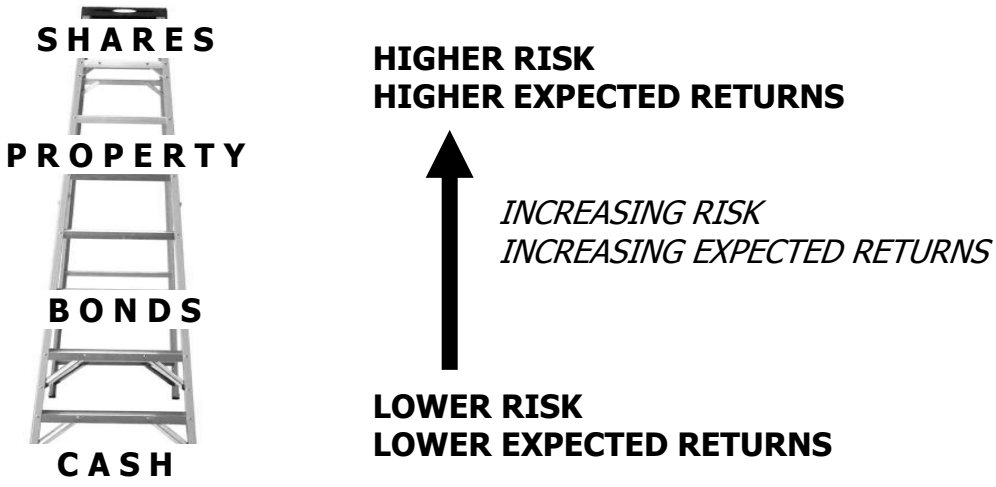
Risk of Business	Capitalisation Rate
Higher	Higher
Lower	Lower

Why should you have a relatively high capitalisation rate if there is a high level of risk involved in the business?

Remember, the capitalisation rate can be thought of as the interest rate, i.e. the return you are getting on your money.

Now, recall the risk / return ladder which was introduced in Section 2.3:

The Risk / Return Ladder – Levels of Expected Risk and Returns



Key Points:

- Cash in the bank is at the bottom of the ladder, and shares are at the top.

- Some businesses are riskier than others, therefore some shares will involve more risk.

  In particular, small businesses are generally riskier than larger businesses, for many reasons. For example, if the government was to introduce a new piece of legislation that requires a business to employ someone full-time to oversee human resource matters, which business would handle the cost better? A large bank with 6,000 employees, or Joe's Plumbing which only has 3 employees?

- Buying a small business is therefore at the top of the risk / return ladder.

- The higher you go up the risk / return ladder, the higher the risk. Therefore, the higher the expected returns you need to make up for this additional risk.

For small businesses, you should use a capitalisation rate of **not less than 20%**. After all, if you can get 6-8% from the bank with next to no risk, why would you accept less than 20% for owning a business?

No small business is as safe as cash in the bank, no matter what the seller believes or tells you. Whether you can convince them of that is a different matter.

There are many uncertainties (risks) surrounding being in business that do not exist with bank deposits.

So when you are trying to figure out what rate to use, start with a base figure of 20%, and then increase it based on the amount of risk associated with the particular business.

Only consider using a rate as low as 20% if the business:

- is very secure.
- is well-established and has a good track record.
- has steady profits.
- has a good reputation.
- has a good financial outlook.

5.2.2.2 What Profit Figure Should I Use?

Now that we know what a ***capitalisation rate*** is, and what factors should affect your decision of what capitalisation rate to use, let's think about what ***profit*** figure should be used when valuing a business.

When you buy a business, ideally:

- You should be paying the existing owner a fair amount for the contribution they have made to the business (i.e. in getting profits to the stage that they are **currently** at).
- You should not pay more for it than it is worth to you (i.e. more than the value of future profits).

The amount that the current business owner has contributed to the business may be very different to the amount that it is worth to you. This will especially be the case if you intend to make a lot of changes / improvements to the business.

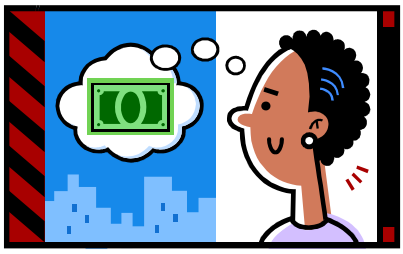
In this situation, it is a good idea to **work out two values of the business:**

1. A value based on current profits, and
2. A value based on expected profits.

Consider the following scenario:

- A business earns a profit of $35,000 per year.
- You decide that you should use a capitalisation rate of 65%.
- The value of the business based on current profits is therefore $53,846.

$$\text{Current Value of Business} = \frac{\$35{,}000}{65\%} = \$53{,}846$$



- You also work out how much the business is **worth to you**. In doing so, you calculate that profits will increase to an average of $43,000 per year.
- The value of the business to you is therefore $66,154.

$$\text{Value of Business to You} = \frac{\$43{,}000}{65\%} = \$66{,}154$$

- You offer the current owner $50,000 for the business. They turn the offer down.
- You negotiate all the way up to $53,846. This is what you believe the current value of the business to be.
- However, the existing owner says 'no' to your offer. They want more than $53,846.

- If you really want the business, you could be prepared to offer up to $66,154.
  - The existing owner would get more value than what you believe they have contributed to the business,
  - but at least **you still get the return you want**.
- In fact, if you pay any amount less than $66,154, your expected return will be better than what you require.

However, an important point to note is that future profits of the business are not just dependent on you – other factors may affect them. These factors, in turn, should affect the amount that you are prepared to pay for a business.

To demonstrate this, we will revisit one of the valuation examples given at the beginning of Section 5.2.1:

Example: Right Way Driving School

Right Way Driving School had after-tax profits of $50,000 per year and a capitalisation rate of 25% was applied.

Using the basic calculation given previously, we estimated the value of Right Way Driving School to be $200,000.

A **key assumption** that underlies this basic calculation is that:

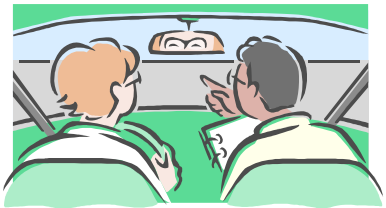
Future profits are expected to be about the same as current profits.

Thus, in the example given, Right Way Driving School has been valued on the assumption that it will continue to have profits of $50,000 per year for each year in the future.

If you believe that it is much more likely that average future profits are going to be very different, you should use the ***expected average profit*** figure instead of the current profit figure in the calculation.

Consider the following two scenarios for Right Way Driving School:

- **Scenario 1: An Increase in Profits**



Government legislation regarding driver's licences has just changed. The new legislation makes it compulsory for everyone to receive a minimum of six professional driving lessons in order to get their driver's licence.

Right Way Driving School has just been awarded the contract to provide all driver's licence lessons in the local district for the next three years.

As a result, it is estimated that demand for the business's services will quadruple. Now, instead of earning an after-tax profit of $50,000 per year, the business will earn approximately $200,000 per year!

Therefore, as well as valuing the business based on its most recent financial statements, an interested buyer in the business should value it based on profit figures of $200,000 per annum:

$$\text{Value of Business} = \frac{\$200{,}000}{25\%} = \$800{,}000$$

This is a large increase from $200,000. Sure, you could still offer $200,000 – and maybe the current owner will accept your offer.

However, if there are a number of people interested in the business, you may need to be prepared to offer an amount closer to $800,000 so that you do not miss out!

- **Scenario 2: A Decrease in Profits**

Recently, Right Way Driving School had a very bad experience with one of its employees. This employee was a poor driving instructor.

As a result, several of the business's customers were in minor accidents while under the supervision of this employee. Even worse, one customer was in a major accident and suffered critical injuries.

Although the employee is no longer with the business, the driving school has developed such a bad reputation that customer demand has significantly dropped.

Moreover, a new driving school has set up in the region. This driving school is part of a reputable nationwide franchise of driving schools. It has therefore been successful in securing a large portion of the market.

Although the business has been earning after-tax profits of $50,000 per year, it is more realistic to expect that profits will be closer to $18,000 per year from now onwards. Assuming a capitalisation rate of 25% still applies, the new value would therefore be $72,000.

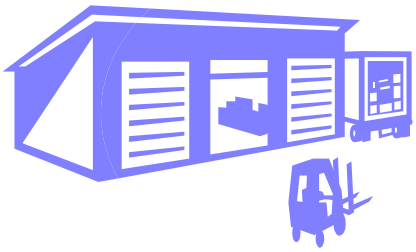
$$\text{Value of Business} = \frac{\$18{,}000}{25\%} = \$72{,}000$$

So why pay the current owner $200,000 for the business, when the damage that has been caused to it under their management is expected to result in much lower profits in the future?

5.3 Other Valuation Methods

There are many other methods that can be used to value businesses. Some of these are explained below:

5.3.1 Valuing a Business Based on Net Assets



Net assets are what the business would be worth if you sold everything it owns (e.g. buildings, land, vehicles, computers, etc) and paid off any debts in the business.

This method can be useful for valuing a business if, for some reason you cannot use profits or cashflow figures. For example, if there is a very high level of uncertainty regarding the future of a business, the most you would be willing to pay for it is what you would get if you simply 'cashed up' the business and stopped trading.

If you were to use the net assets method of valuing a business, you should use the **current market values** of the assets.

Net Assets	=	Current Market Values of Assets - Liabilities

The current market values of a business's assets may be quite different from the values of the assets given in the books of the business! Consider the following two examples:

- The business may have purchased a property for $200,000. This may be the value shown in the financial statements.

  However, due to a booming property market, the amount that you are likely to receive for it if you sold it could be much, much higher.

- The business may have purchased a brand new work car for $49,000 + GST about three months ago.

  According to the IRD depreciation rates, this car may now be valued at about $45,900 on the books.

  However, in reality, it may be that the market value of the car actually dropped from $49,000 to $42,000 as soon as it was purchased.

5.3.2 Valuing a Business Based on Sales

Methods of valuing a business based on its sales are often based on ***rules of thumb***. Rules of thumbs are general guidelines – they are not intended to be strictly accurate and reliable.

For example, it could be a rule of thumb in a particular industry that you pay 20% of the average sales figure for a business, whereas, in another industry, it may be a rule of thumb that you pay 50% of the average sales figure.

Consider the following scenario:

- XYZ has sales of $300,000 per year.
- Rule of thumb: Value = 50% of sales

Value of XYZ =	50% x $300,000
=	$150,000

This is a very basic way of valuing a business. It doesn't take into account the costs you will face and thus the likely profits you will actually receive from the business.

For example, imagine if there are two businesses, both of which operate in the same industry:

- Business A makes sales of $500,000 each year. It employs 8 full-time staff, has a large office in an expensive part of town, and makes a profit only $20,000 per year.

- Business B also makes sales of $500,000 each year. It employs 3 very efficient staff members and operates from a smaller, less expensive building than Business A. It makes a profit of $100,000 per year.

As you can see, Business B earns five times as much profit as Business A. However, based on a sales 'rule of thumb' alone, these businesses would be valued the same!

When should I use a Sales Rule of Thumb?

Valuing a business based on a sales rule of thumb can, however, be a good ***benchmark*** to compare another valuation against.

For example, assume that:

- you have worked out, using another valuation method, that a business is worth $92,000, and that
- you have also been told that the rule of thumb for the industry is that the value of a business is 35% of annual sales.

If sales for the particular business are $230,000, this would place the value of the business, according to this rule of thumb, at $80,500.

Thus, you may choose to place your initial offer for the business at $80,500, but be prepared to pay up to $92,000.

Businesses that are most often valued using this method tend to include those:

- that do not have many assets, and
- for which the value lies in how much its clients spend every year.

Examples of such businesses include accountants, lawyers and business consultants.

You may find that the only assets businesses such as these own are office equipment. If you think about how much a computer is worth after two years, you'll get a good idea of why the ***net assets*** valuation method is unlikely to be suitable for these types of businesses.

5.3.3 Valuing a Business Based on Cashflow

When it comes to valuing a business, you can apply the ***capitalisation rate method*** using either:

1. ***net profit*** figures, or
2. ***net cashflow*** figures.

If you are going to use ***net profit*** figures (as is usually done), an easy way to do this is to use the formula for the capitalisation rate method shown previously through this Section.

If you do this, you are essentially paying the existing owner of the business for the contribution they have made to the business – that is, for building profits to the stage where they currently are at.

However, as discussed in earlier parts of this Section, current profit values are not necessarily ***representative*** of future profits.

If you are buying a business, you want to make sure that you are not going to pay more for it than you will get back in the future! Future returns from a business will depend on the way you operate the business, including any changes / improvements that you make.

As well as valuing a business using net profits and the capitalisation rate method introduced previously, it is a good idea to also value it based on expected future returns from the business. This will help you decide what you should be prepared to offer for a business.

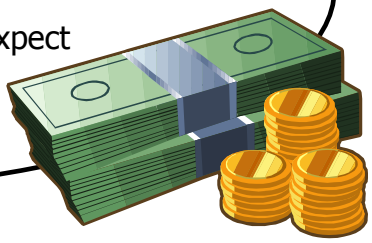
For example:

- Assume that you value a business at $60,000 based on current net profits and then value it at $68,000 based on future expected returns from the business. In this situation, you know that if the current owner is not prepared to accept $60,000 for their business, you can offer a higher amount, but should not offer any more than $68,000.

- Now assume that you value this business at only $55,000 based on future expected returns. In this case, it would not be a good idea to offer the full $60,000 for the business.

The best way of valuing future returns from a business involves using the business's forecasted **net cashflows**.

Valuing a business using
the business's forecasted ***net cashflows***
basically involves valuing the business based on
the amount of cash that you actually expect
to get from the business.



For a number of reasons (discussed further on the next page), ***net profit*** amounts are NOT usually equal to the amount of cash that is actually available for you to withdraw from a business.

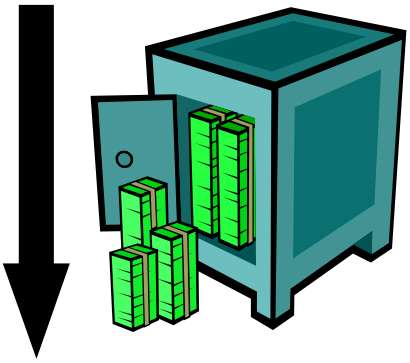
Net Profit ≠ Cash in the Bank

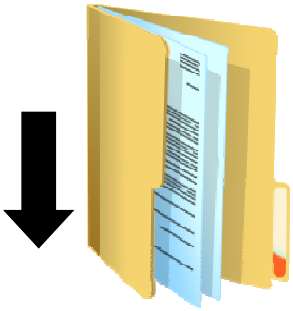
If you are familiar with accounting practices, you will be aware that one of the main reasons why profit figures are different from the amount of cash in the bank is how ***fixed assets*** are recorded in the accounts.

Fixed assets are assets that the business owns that cost the business $500 or more and that have a useful life of more than one year. Examples of fixed assets include cars, computers, furniture and machinery.

When you use money from your business bank account to buy a ***fixed asset*** for the business, this reduces how much cash you have available in your bank account.

So if, for instance, you spend $2,000 cash on buying a new laptop, that will mean there is $2,000 less in your bank account (and therefore $2,000 less that you can withdraw for yourself).





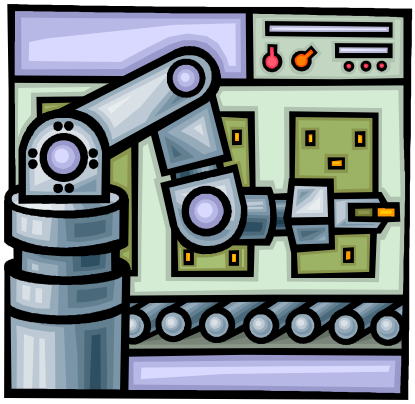
However, buying a fixed asset such as this has a *smaller* effect on net profit. That is, net profit does not decrease by $2,000. This is because, when it comes to calculating profit, the value of the asset is spread over the lifetime of the asset.

So instead of the full $2,000 being treated as an expense in the year the asset was purchased, the $2,000 will be spread over (for example) four years.

This is referred to as *depreciation*.

Remember, *depreciation* was introduced in Module 3.

Here's another example



- Josh, who has just started a business, buys a piece of machinery for his business at a cost of $60,000.
- He pays cash for this, so his bank balance decreases by $60,000.
- However, according to the Inland Revenue Department's depreciation rates, only $12,000 is depreciated each year.
- This would mean that profit in the first year will only be reduced by $12,000, not $60,000.
- During his first year in business, Josh manages to make a profit of $48,000. He is very happy about this and would like to withdraw some money from the business.
- However, Josh has absolutely no money in the bank account at the end of that particular year!
- This is because $48,000 of the cost of the asset has **not yet** been counted as an expense.
- If the full $60,000 was counted as an expense, the net profit would have been $0 (the same as the bank balance).
- The following year, Josh does not buy another expensive asset. His net profit figure is still around $48,000, but this year he happens to have $30,000 cash in the bank at the end of the year!

As you can see from the example above, net cashflows for a business can be very different from year to year.

This is particularly the case during the first few years of a business or after major changes are made to a business (as often happens when someone buys a business). This is because it is during these years that the business is likely to purchase a lot of ***fixed assets***.

So how do you value a business using cashflows?

Given the large possible changes in cashflows from year to year, if you want to value a business based on net cashflows, it is best to extend the ***capitalisation rate method*** formula.

Instead of simply dividing one net cashflow figure by a capitalisation rate, you would use a few ***net cashflow*** figures in the calculations.

Net Cashflow	=	Cash Received – All Cash Paid Out

Here are the steps you would follow:

1. Forecast Net Cashflows for the next 3-5 years

Start by forecasting the ***net cashflows*** of the business for a number of years.

In other words, how much cash do you think the business will receive during the first year of business? How much of this will be left after paying all expenses and buying assets etc. during this time? The amount that is left is the ***net cashflow***.

2. Work out an Average Net Cashflow Figure

Once net cashflows begin to get quite steady (perhaps after three to five years), **work out an average net cashflow figure** for the following years.

For example, you might expect that, after four years in business, the net cashflows will be quite steady at about $55,000 per year.

3. Work out the Present Value of the Cashflows

This is the tricky part. You can work out the ***present value*** of each of these cashflows by '***discounting*** them by the ***capitalisation rate***.

Example of Valuing a Business Using Cashflows and an Extended Capitalisation Rate Formula

Assume the following:

Year 1:

- You expect to receive cash of $300,000 into the business in the year that you buy it. This amount is similar to what the business currently receives.

- However, you will make substantial changes to the business. This includes ***renovating*** and buying new equipment.
- This means you will pay out $295,000 in expenses (including your salary) and in buying fixed assets during the year.
- Net cashflow is therefore $5,000.

Year 2:

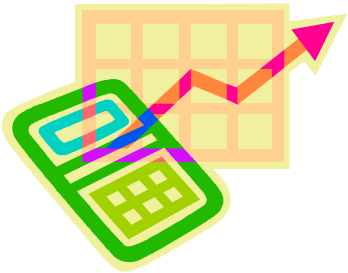
- You expect cash received to increase by 20% to $360,000 as customers become aware of the changes you have made to the business.
- However, cash outflows are expected to drop to $260,000. This is because you do not need to buy many more fixed assets.
- Net cashflow is therefore $100,000.

Year 3:

- You expect cash received to increase by 10% to $396,000 as customer awareness about the changes to your business continues to increase.
- Over this time, cash outflows are expected to increase by 5% to $273,000.
- Net cashflow is therefore $123,000.

Year 4 onwards:

- You expect cashflows will become quite steady from now on with both the cash inflows and cash outflows increasing by 5% per year.
- Net cashflows are therefore expected to increase by 5% per year.



Here are the steps that you would use to value a business based on the information given:

1. **Decide what *capitalisation rate* you will use.**

   Remember that a ***capitalisation rate*** is like the 'interest rate' that you want to earn on your investment. Refer to Section 5.2 for a discussion about selecting a rate.

   Remember, the riskier a business is, the higher the rate of return you should choose, and thus the lower the estimated value of the business. For this particular example, let's assume a rate of 50% is chosen.

2. **Calculate the *present values* of the net cashflows for Years 1 to 3.**

   Something that we learnt very early on in this programme is that $1 today is worth more than $1 tomorrow.

   This means that the net cashflows of $100,000 that are expected throughout Year 2 are worth less than $100,000 right now. That is, we would not pay $100,000 today to receive $100,000 in two years' time!

   To calculate the present values of the net cashflows, we divide the net cashflows by the capitalisation rate. This can be done by using the following formula:

Present Value = Net cashflows per period / $(1 + r)^n$

Where: r = the required rate of return (the ***capitalisation rate***)

n = the number of time periods (e.g. years)

Using this formula we get the following present values shown on the next page.

Present Value of Year 1 Net Cashflows

$$= \frac{\$5{,}000}{(1.50)^1}$$

$$= \frac{\$5{,}000}{1.5}$$

$$= \$3{,}333.33$$

Present Value of Year 2 Net Cashflows

$$= \frac{\$100{,}000}{(1.50)^2}$$

$$= \frac{\$100{,}000}{1.5 \times 1.5}$$

$$= \frac{\$100{,}000}{2.25}$$

$$= \$44{,}444.44$$

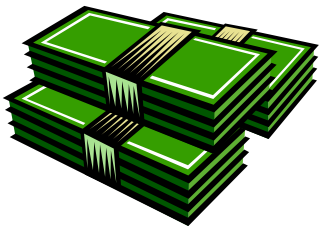
Present Value of Year 3 Net Cashflows

$$= \frac{\$123{,}000}{(1.50)^3}$$

$$= \frac{\$123{,}000}{1.5 \times 1.5 \times 1.5}$$

$$= \frac{\$123{,}000}{3.375}$$

$$= \$36{,}444.44$$



Let's look at these figures for a moment.

You can see that a net cashflow of $123,000 received in three years is only worth paying $36,444.44 for today.

You can check this as follows:

If you require a 50% return on an investment of $36,444.44,

- After one year you would have $54,666.67 (i.e. $36,444.44 x 1.5).
- If you were to reinvest that $54,666.67 for a further year at a 50% interest rate, you would have $82,000 (i.e. $54,666.67 x 1.5).
- Then, if you invest that $82,000 for a year, you would have $123,000 at the end of that year.

Thus, based on Years 1 to 3 alone, the business would be valued at $84,222.21 (I.e. $3,333.33 + $44,444.44 + $36,444.44). However, we also need to add on the value of the business for net cashflows received after the first three years.

3. Discount cashflows from Year 4 onwards.

According to the information given, net cashflows in Year 4 are estimated to be **$129,150**. This is calculated as $123,000 plus 5% (i.e. $123,000 x 1.05).

The following formula can be used to calculate the ***present value*** of the business's net cashflows which happen after a certain number of years (in our case, after three years):

$$\textbf{Present Value} = \frac{\textbf{Net Cashflow x (1 + g) / (r)}}{(1 + r)^{n}}$$

Where: g = the growth rate in net cashflow (e.g. 5%)

r = the ***capitalisation rate*** (e.g. 50%)

n = the number of periods (e.g. 4 years)

Using this formula the value of the business, from Year 4 onwards is:

Present Value of net cashflows from Year 4 onwards

$$= \frac{\text{Net Cashflow} * (1 + g) / (r)}{(1 + r)^{n}}$$

$$= \frac{\$129{,}150 \times (1 + 5\%) / 50\%}{(1.5)^{4}}$$

$$= \frac{\$129{,}150 \times (1.05)/0.5}{1.5 \times 1.5 \times 1.5 \times 1.5}$$

$$= \frac{\$129{,}150 \times 2.1}{5.0625}$$

$$= \frac{\$271{,}215}{5.0625}$$

$$= \$53{,}573.33$$

These calculations show that:

- At the start of Year 4, the business would be valued at $271,215.
- When this is ***discounted*** to the ***present value***, this only works out to be $53,573.33.
- In other words, you should only be prepared to pay a maximum of $53,573.33 for the cashflows that the business is expected to have after Year 3 (from Year 4 onwards).

4. Add all of the discounted cashflows together.

That is, add all the values calculated in Steps 2 & 3.

Present value of cashflows for Year 1 =	$3,333.33
Present value of cashflows for Year 2 =	$44,444.44
Present value of cashflows for Year 3 =	$36,444.44
Present value of cashflows during and after Year 4 =	$53,573.33
Total value of all cashflows into the business =	**$137,795.54**

The resulting figure of $137,795.54 represents how much you expect this business to be worth to you, given all the changes you expect to make.

In other words:

The valuation based on net cashflows is $137,795.54.

You should not pay more than this figure for the business.

If current net profits are $55,000, according to the basic capitalisation rate formula (and assuming you expect a 50% return), you would have valued the business at $110,000.

Value of Business (based on net profits) = $\frac{\$55,000}{50\%}$

= $110,000

If the current owner wants a higher price than $110,000, you will know not to pay more than $137,795 for the business.

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Clip Art Images
Clip Art Images were retrieved from Microsoft Clip Art Online, unless otherwise referenced in the footnotes.

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Glossary of Terms

000's Daily: The number of shares traded during the day (in thousands).

000's Weekly: The number of shares traded during a week (in thousands).

52 Week High: The highest price at which shares for a company have traded over the past year (52 weeks).

52 Week Low: The lowest price at which shares for a company have traded over the past year (52 weeks).

Accounts Payable: Money that a business owes for goods and services it has purchased, but not yet paid for. Includes short term debts such as unpaid bills to product suppliers, electricity companies, trades people, etc. Also called ***creditors***.

Accounts Receivable: Money owed to a business by its customers. Also called ***debtors***.

Accredited: Officially approved.

Active Funds: A type of ***managed fund*** where the ***fund manager*** does not simply copy a ***stock exchange index***. Instead, the fund manager chooses which ***securities*** they want to invest in.

Activity Fees: Fees which cover the costs of buying and selling investments.

Adjusted EPS: Adjusted ***Earnings Per Share***. This is the amount of ***profit*** (after tax) that a ***company*** has earned, for each ***share*** in the company.

Administered: Responsibility for the running of something.

Aggressive Funds: One of the five types of ***KiwiSaver*** funds. These funds aim to achieve high growth over a long timeframe. They are the highest risk option of KiwiSaver funds, and invest mainly in ***shares***.

Angel Investment: Money invested in a business by an ***angel investor***.

Angel Investor(s): People, or groups of people, who use their own money to invest in new businesses. These businesses are usually high risk or innovative businesses. In return for providing money, the angel investor gets ***equity*** in the business (that is, they become a part-owner).

Annual Management Fees: Fees that are charged to investors in a ***managed fund*** to cover the ongoing costs of running the fund. Also called ***Fund Management Fees***.

Appoint(ed): Select(ed) for a job. Put in a position for a job. Assign(ed) a duty.

Asset: Something of value. In this programme it usually refers to items that someone can own that have a monetary value. Examples include houses, savings, investments and vehicles.

Asset Allocation: The way you spread your money across the various kinds of investments available.

Asset Class(es): Types of investments that are similar. The main four asset classes are cash, ***bonds***, ***property*** and ***shares***.

Asset Protection: Methods for protecting your ***assets*** from ***liabilities*** that may arise. For example, this could include putting measures in place to ensure that your family home would not have to be sold if your business could not pay its debts.

Assumption: In this Module, an assumption is something that you decide on in order to make calculations. For example, you may assume that the inflation rate will be 2% in the future – there is no way you can know this for sure, but in order to calculate something you may need to 'assume' this.

ASX: The ***Australian Securities Exchange***.

AUD: Australian dollars.

Audited: When the financial accounts of a business (or other ***entity***) are officially examined to check if they are reliable and correct.

Australian Securities Exchange: The main ***stock exchange*** in Australia.

Authorised Financial Adviser: Someone who is approved, under the *Financial Advisers Act 2008*, to give advice about advanced investment products such as ***securities*** and ***derivatives***.

Balance of Trade: The difference between the value of a country's exports and the value of its imports over a period of time.

Balance Sheet: Refer to ***Statement of Financial Position***.

Balanced Fund(s): A type of managed fund that invests in a range of different types of investments. I.e. it usually invests money across the four major asset classes (cash, bonds, property and shares).

Bankrupt(cy): A situation where someone (or a business) is legally declared to be unable to pay their debts.

Bear Market: When ***share*** prices in a market are falling. A general decline in a ***stock market*** over a period of time.

Bearish: When people think ***share*** prices are going to fall, they are said to be bearish.

Bears: People who are ***pessimistic*** about future ***share*** prices. That is, people who think share prices are going to fall.

Benchmark: Something that you can compare something else to. A general standard.

Bid Price: Refer to ***Buy***.

Binding: Proper legal authority. If a decision is 'binding' on someone, that means that, legally, that person must follow the outcome of the decision.

Binding Obligation: Something that you are legally required to do.

Blue-Chip Company: A company which has been around for quite a long time and has a good track record for making profits.

Body Corporate: An arrangement where the law allows a group of people to act as if they were one single person.

An example of a body corporate was given in Module 3 – that is, a group / committee that all the owners in a block of apartments belong to. This group manages the running of the building and, in particular, the upkeep of areas of the property shared by all owners.

Bond(s): A type of ***debt security***. With a bond, an investor lends money to a company, organisation or Government. This money must be repaid to the investor at a certain time.

Bondholder: An investor who owns a ***bond*** (who has lent money to a company, organisation or Government).

Bonus Bonds: A type of ***bond*** investment that was introduced by the New Zealand Government. Instead of receiving a ***coupon*** payment, or an agreed return on your investment, all investment returns are grouped together into a 'prize pool'. Investment returns are then distributed to some of the ***bondholders*** as prizes.

Bottom Line: The ***net profit*** of a business. The last line of a business's ***Income Statement***.

Bourse: A ***sharemarket*** is called a bourse in parts of Europe.

Breakeven: To earn enough income to cover all expenses, but not yet make a ***profit***. When profit = $0.

Broker: There are many types of brokers. In this Module, the term 'broker' refers to a ***sharebroker*** or ***broking firm***.

Brokerage Fees: The fees that an investor must pay to a ***sharebroker*** (or ***broking firm***) for them to buy and sell ***securities*** on a ***sharemarket*** for them.

Broking Firm: An organisation that has been officially approved by a ***stock exchange*** to be able to buy and sell shares on the exchange on behalf of investors.

Building Society: A type of ***financial institution*** which is owned by its members (people who have saved money in an account or borrowed from them) and is set up under the *Building Societies Act 1965*. Originally building societies were formed to help their members buy houses, but now they provide a range of financial services.

Bull Market: When ***share*** prices in a market are going up. A general increase in a ***stock market*** over a period of time.

Bullish: When people think ***share*** prices are going to increase, they are said to be bullish.

Bulls: People who are ***optimistic*** about future ***share*** prices. That is, people who think share prices are going to increase.

Buy: In regards to ***share*** price information, the 'buy' figure shows the highest price (how many cents per share) that someone is offering to pay for shares in a company. For 'buy' figures reported in a newspaper (etc.), this was the highest price that someone was willing to pay when the ***sharemarket*** closed. If you are selling shares, it is the price you could receive. Also known as the ***Bid Price***.

Call Option: A type of ***derivative***. The buyer of this type of ***option*** is given the right to buy a particular ***asset*** at a particular price on (or before) a certain date. If the buyer decides to buy the asset, the seller of the option must sell it to them.

Capital: ***Assets*** of value, usually money and property such as land and buildings.

Capital Gain: Profit earned on an ***asset***. For example, when you purchase ***shares*** and then sell them for a higher amount, the profit you make is the capital gain.

Capital Gains Tax: A tax on the increase in value of an ***asset***.

Capital Growth: An increase in the value of an ***asset***. For example, if you purchase shares and the share price increases, this increase is called capital growth.

Capital Returns: Refer to ***Capital Gain***.

Capital Risk: The risk of losing some, or all, of the money you originally invested.

Capitalisation Rate: The ***rate of return*** that you want to get out of an investment in a business.

Capitalisation Rate Method: A method of valuing a business which involves dividing the ***profits*** or ***cashflows*** of the business by the ***capitalisation rate***.

Carried Forward: When a figure from the previous period is added on to the balance for the current period. This Module talks about financial losses being 'carried forward'. If a business makes a loss one year, and this can be carried forward, this means that the amount of income tax the business has to pay the next year is based on the profit for that year minus the loss from the previous year. This reduces the amount of income tax to be paid.

Cash Funds: One of the five types of ***KiwiSaver*** funds. These funds only invest in bank deposits and other ***fixed interest investments***. They are the lowest risk option of KiwiSaver funds.

Cashflow: The movement of cash. It refers to when and how much cash is received, compared to when and how much cash is paid.

Cashflow Forecast: An estimate of all the ***cashflows*** that a business will have over a certain period of time in the future. It shows all cash that is expected to be received, all cash that is expected to be paid out and the amount of cash expected to be left in the business at the end of the period.

Cashflow Statement: A financial document that records ***cashflows*** into and out of a business over a certain period of time. It shows all cash received, all cash paid out and the amount of cash left in the business at the end of the period.

CD: Short for ***Cum Dividend***.

CEO: Short for ***Chief Executive Officer***.

Chief Executive Officer: The highest ranking manager of a business.

Closed-end Funds: A type of ***managed fund*** that does not issue more shares once it is set up. People who want to invest in a closed-end fund after it has already been set up have to buy shares off someone else who has already invested in the fund.

Code of Professional Conduct: A set of rules and expectations that a group of people in a certain type of business are required to follow when carrying out their work.

Collateral: An item of yours which a lender is allowed to take and sell so they can get back money that you owe to them (if you fail to make payments). Also called ***'security'***.

Collectable: Any object that is considered to have value by the person collecting it. However, in relation to investments, collectables need to have financial value. The term 'collectable' often refers to a ***manufactured collectable***.

Commission: A type of payment which is based on outcomes. For example, a ***sharebroker*** gets paid a fee from an investor each time they buy or sell shares for this investor.

Commodities: More than one ***commodity***.

Commodity: A raw material, or a primary agricultural product, which can be bought and sold. Examples include gold, oil and cocoa.

Commodity Markets: Markets in which ***commodities*** are bought and sold.

Common Shareholder Number: The number that ***share registrars*** use to keep a record of all the ***shares*** that an investor owns. Called CSN for short. Everyone who directly owns shares in a ***public company*** has a CSN.

Company: A type of business organisation. If you use this business structure, the business is a separate legal ***entity*** from yourself. It is run by one or more ***directors*** and is owned by one or more ***shareholders***.

Compensate: To make up for something unfavourable. For example, an investor would want a higher possible financial return in order to compensate (make up for) the higher risk involved.

Competence: Having the ability to do something successfully or well.

Compound Interest: ***Interest*** which is earned on interest that has already been earned. For example, if you save $100 and earn $2 interest, then the next time interest is calculated, it is calculated based on the total amount of money you now have saved ($102) instead of only the original amount ($100).

Compound(ing): When interest is earned on interest that has already been earned.

Conflict of Interest: When someone (or an entity) has competing interests. In this Module, conflicts of interest are discussed in relation to ***financial advisers***. If a financial adviser has a conflict of interest, it means that they may personally benefit from giving you advice which may not be the best advice for you. For instance, they could advise you to invest in a managed fund that their spouse runs, but this may not be the best managed fund for you to invest in.

Conservative: Cautious. Not risky. Quite safe.

Conservative Funds: One of the five types of ***KiwiSaver*** funds. A high proportion of the money in these funds is invested in bank deposits and other ***fixed interest investments***. The remaining amount is invested in higher risk investments such as ***shares*** and property. They are the second lowest risk option of KiwiSaver funds.

Contingent Liability: When something has happened that could possibly result in a business (or other ***entity***) having a ***liability***, that possible liability is called a contingent liability. For example, if a customer sues a business for $10,000, this is a contingent liability because the business will only owe the $10,000 if it loses the court case.

Contract Note: A document which a ***sharebroker*** sends an investor after they have bought or sold ***shares***, which confirms the details of the transaction (e.g. quantity bought or sold, share price, any fees / charges paid, etc.).

Controlling Interest: A situation where someone owns enough ***shares*** of a business to control the outcome of votes regarding business decisions. Although, in theory, this means they would have to own at least 50% of the company, in reality, it is common for shareholders to have a controlling interest with less than 50% of the shares. This is because, in large companies, many of the ***minority shareholders*** do not vote.

Convertible: Able to be changed into something else.

Correlation: Link. Related. If there is a high correlation between share prices, this means that the share prices tend to move together – if one goes up, it is likely that the other will also go up.

Country Risk: This is the risk involved in investing in a particular country.

Coupon(s): The interest paid on a ***bond*** investment.

Crab Market: When ***share*** prices in a market are not trending upwards or downwards. Instead, although they may ***fluctuate***, they seem to stay around a certain level.

Credit Rating: An estimate of how likely it is that someone (or a business or organisation) will be able to pay their debts. It is based on someone's history of borrowing and making payments.

Credit Rating Agency: A business which examines other businesses and decides what ***credit rating*** they deserve.

Credit Risk: Refer to ***Default Risk***.

Credit Union: A ***financial institution*** that is owned and operated by its members. It is not-for-profit and the members save and borrow from each other. Members must have a ***mutual interest***, meaning that they all must have something in common.

Credit Worthiness: The ability of someone (or another entity, such as a business) to pay their debts.

Creditors: Refer to ***Accounts Payable***.

Criteria: Rules, requirements or standards.

CSN: Short for ***Common Shareholder Number***.

Cum Dividend: If you buy ***shares*** in a ***company*** that are 'cum dividend', it means that you are ***entitled*** to receive the next ***dividends*** paid for those shares.

Currency: The system of money used in a particular country. For example, the currency in New Zealand is ***NZD*** (New Zealand Dollars).

Currency Risk: This is the risk involved with an investment that is not in your home ***currency***. For New Zealanders, this is the risk of investing in anything that is not in New Zealand dollars. It is also called ***exchange rate risk***.

Daily High: In relation to ***shares***, this is the highest price that shares have traded for during a particular day.

Daily Low: In relation to ***shares***, this is the lowest price that shares have traded for during a particular day.

Daily Move: In relation to ***shares***, this is the difference between the ***last sale*** price and the ***last sale*** price for the day before. It shows how much the share price has changed in a day.

Debenture Stock: A type of investment with a specialist ***finance company***. People who buy debenture stock are lending money to the finance company and, in return, they receive interest. Debenture stock is therefore a type of debt for the finance company.

Debentures: Refer to ***Debenture Stock***.

Debt: Something owed to someone else. In this Module, debt refers to money that is owed.

Debt Financing: Borrowing money to fund a business.

Debt Securities: Any type of ***debt*** investment which can be bought and sold between different parties. Examples are ***debenture stock*** and ***bonds***.

Debtors: Refer to ***Accounts Receivable***.

Deduct(ed): Take away. Subtract.

Default: This refers to when you do not make payment on a ***debt*** when payment is due.

Default Risk: The risk that a borrower does not repay money borrowed (or pay interest) when they had agreed.

Default Scheme(s): In relation to ***KiwiSaver***, a default scheme is a fund that your money will be invested in if you join KiwiSaver but do not choose which KiwiSaver fund you want your money to be invested in.

Default Scheme Providers: The companies which run the ***default schemes*** for ***KiwiSaver***.

Delivery Price: If someone enters into a ***forward contract*** or a ***futures contract***, this is the price at which they agree to buy or sell an asset at a particular time.

Depreciation: The process of spreading the cost of an ***asset*** over the useful life of that asset. Instead of recording the entire cost of an asset as an expense in the financial accounts at the time it is bought, only part of the cost is recorded. This reflects the fact that the asset is still worth something at the end of the year.

Derivative: A financial tool whose value depends on the value of something else. For example, the value of a derivative may depend on the value of ***shares*** in a particular ***company***, or on ***interest rates***.

Derived: Based on something else. Originating from something.

Direct Investing: Deciding for yourself what ***shares*** and other ***securities*** you want to buy and then using your ***sharebroker*** to buy them.

Direct Investment(s): An investment made by ***direct investing***.

Director(s): A director of a company is someone who has the job of overseeing the management of a ***company***. For most small businesses, the company directors manage the company themselves.

Disciplinary Proceedings: A set of actions that are taken when it appears that someone has not followed rules.

Disciplinary Tribunal: A person or group of people who have the authority to judge whether or not someone has followed rules.

Disclaimer: A statement that denies responsibility for something. Accountants usually put a disclaimer in the financial accounts they prepare for their clients to make it clear that they prepared the accounts based on the information their client supplied them with, and that they (the accountants) are not responsible for that information being completely correct.

Disclose(d): Make something known. Tell people about something.

Disclosure: The act of making something known.

Disclosure Statement: A document which ***financial advisers*** must give their clients which informs clients of certain information about the adviser. This includes, for example, the experience and qualifications that the adviser has.

Discounting: Reducing the price of something. When valuing a business, the future cashflows of a business are discounted (reduced) by the amount of the financial return that the investor wants to receive.

Dispute Resolution Facilities: Services which can be used to help resolve (fix) problems and disagreements between people (or other ***entities***).

Dispute Resolution Scheme: Refer to ***Dispute Resolution Facilities***.

District Plan: A document which local authorities must prepare, which sets out plans to manage the effects of activities on the environment.

Div CPS: Refer to ***Dividend Cents Per Share***.

Div Yield %: Refer to ***Dividend Yield***.

Diversification: Spreading your money across a number of types of investments to reduce risk. That is, investing in a range of different investments instead of putting all of your money in only one or two investments.

Diversify(ied): To invest in a range of different types of investments. Refer to ***diversification***.

Dividend(s): Company profits which are paid to its ***shareholders***.

Dividend Cents Per Share: The value of ***dividends*** paid to ***shareholders*** over the previous year (for each ***share*** they have).

Dividend Yield: The amount of ***dividends*** that were paid to ***shareholders*** the previous year, shown as a percentage of the price of the ***shares***. It indicates the ***rate of return*** you might get on your shares based on dividend income alone.

DJIA: Short for ***Dow Jones Industrial Average***.

Dollar Cost Averaging: An investment strategy that involves regularly buying a certain dollar value of a particular investment. This is done instead of putting all of your money into the investment at one time. This strategy reduces the risk involved in investing your money at (what you later find out to be) the 'wrong' time.

Double Taxation: When something is taxed twice. This usually refers to a situation where a ***company*** pays income tax on its ***profits***, then distributes these profits to ***shareholders*** (as ***dividends***), and the shareholders are then charged income tax on the dividends. Thus, both the company and the shareholder pay tax on the same profit.

Dow Jones: Short for ***Dow Jones Industrial Average***.

Dow Jones Industrial Average: A ***price-weighted index*** developed by Charles Dow and Edward D Jones. This ***stock market index*** reflects changes in the prices of 30 of the largest companies in the United States of America.

Due Diligence: The process of investigating everything important about a business before purchasing it. In other words, 'doing your research'.

Due Diligence Clause: A clause (statement) that someone can put in a ***Sale and Purchase Agreement*** that allows the buyer to pull out of the deal (within a certain period of time) if they do not like what they find out when doing their ***due diligence***.

Earnings Multiple: Another name for the ***P/E Ratio***. It is called the Earnings Multiple because it tells us how many times this year's profits, the value of a business is. For example, if the P/E ratio is 2, it means that the value of the company is twice as much as this year's profits.

Earnings per Share: The amount of profit that the company has earned for each share in the company. It is calculated as the profit (after tax) for the previous quarter or year, divided by the number of shares the company has.

Emerging Market: A market of an economy that is in the process of rapid growth and development.

Entitle(d)(s): Have a right to. For example, if you own shares in a company, you are entitled to a share of the profits.

Entitlement(s): Something you have a right to.

Entity(ies): Something which has a separate existence. For example, each person is an entity. Companies and other organisations are also entities.

EPS: Short for ***Earnings per Share***.

Equity: The difference between the value of ***assets*** and the value of ***liabilities***. In relation to business ownership, equity is the value of the owners' interest in the business. That is, it is the value of the business, less any liabilities that the business has.

Equity Financing: Funding a business by giving investors a share of the ownership of the business. It involves an investor giving you money to invest in the business, in return for them becoming a part-owner in the business.

Equities: Another word for ***shares***.

Estate: Everything you own when you die.

Ethical Behaviour: 'Ethics' relate to what is considered 'right' and 'wrong'. Therefore, ethical behaviour generally involves people acting honestly and respectfully.

EUR: Short for ***Euro***.

Euro: The ***currency*** used in many European countries.

Ex Dividend: If you buy ***shares*** in a ***company*** that are 'ex dividend', it means that you are not ***entitled*** to receive the next ***dividends*** paid for those shares.

Ex Dividend Date: People who buy ***shares*** in a ***company*** on (or after) this day are not ***entitled*** to receive the next ***dividends*** paid for those shares.

Exchange Rate: This rate determines how much of one country's currency (money) can be changed for another. It is the price of another country's money – e.g. how much it costs us to buy $1 of their money (or how much of their money they have to pay to buy $1 of New Zealand money).

Exchange Rate Risk: Refer to ***Currency Risk***.

Exemption(s): When a rule doesn't apply. For example, if there is a tax exemption, it means that the usual amount of tax that would need to be paid does not need to be paid.

Exercise(d)(s): In relation to ***options***, this word is used to refer to a situation where the buyer of an option decides to use the option. For instance, if someone exercises a ***call option*** on a company's ***shares***, it means they decide to buy shares at the price that the call option ***entitles*** them to buy shares.

Exercising: When an option is ***exercised***.

Expected Average Profit: The amount of ***profit*** (per year) that you expect a business will usually make in the future.

Expelled: When an organisation decides that someone is not allowed to be a member of their organisation anymore. 'Kicked out' for not following the rules.

Export(s): When goods or services from one country are sold to customers in another country. For example, if a New Zealand business sells goods to a customer in Australia, those goods are considered as exports for New Zealand, and as ***imports*** for Australia.

Face Value: The amount of money that a ***bondholder*** receives at the end of the term of the ***bond***. Also called ***par value*** or ***principal***.

Facility: The space or equipment required for doing something.

Fair Dividend Rate: A method that is used to work out how much tax New Zealand investors pay on overseas ***shares*** (except for Australian shares). The amount of tax is based on 5% of the average ***market value*** of the overseas shares, as at the start of the ***financial year***.

Family Trust: A type of ***trust*** in which family assets, such as a family home, are held. Assets are placed in a family trust for legal protection.

FASTER: The name of the electronic system that is used to buy and sell shares on the ***NZX*** markets.

FASTER Identification Number: A number that investors use when they sell shares on the ***NZX*** markets (which use the ***FASTER*** system). It acts like a PIN number for an EFTPOS card, so every investor has a different number. Referred to as a ***FIN***.

FIN: Short for ***FASTER Identification Number***.

Finance Companies: Companies which are in the business of lending money to people. Unlike a bank, they do not accept deposits. In other words, you can borrow money from a finance company, but you cannot open a savings account with one.

Financial Adviser(s): An individual or business which looks at someone's financial situation and then recommends (or suggests) how they should invest and manage their money in order for them to reach their financial goals. To be a financial adviser, someone must be authorised and / or registered under the *Financial Advisers Act 2008* or must work for a ***Qualifying Financial Entity***. Also called an ***investment adviser***.

Financial Institution: An organisation that is in the business of dealing with money. Common services provided by a financial institution include borrowing, lending and investing money.

Financial Return: The profit received on an ***investment***. It is usually calculated as a percentage of the original investment. For example, if someone invests $200 and earns interest of $6, the financial return is 3%.

Financial Year: The 12 month period for which the financial statements of a business or organisation are prepared. Most businesses have a financial year that goes from 1 April to 31 March, the following year.

Financially Independent: When a business is able to operate without getting more funding from owners. That is, when it earns enough ***profit*** and has enough cash to be able to fund itself. A person who is financially independent is able to support themselves based on their own income or asset base, without receiving any assistance from anyone else.

Fixed Asset(s): ***Assets*** that a business owns which cost the business $500 or more and which have a useful life of more than one year.

Fixed-for-Fixed Interest Rate Swap: A type of ***swap*** where two parties agree to exchange cash at agreed times in the future. The amounts paid by each party are both based on a ***fixed interest rate***, but different ***currencies***. For example, someone may agree to pay someone else an amount of cash equal to 8% fixed interest on $1 million in New Zealand dollars, in exchange for cash equal to 6% fixed interest on $1 million in Australian dollars.

Fixed-for-Floating Interest Rate Swap: A type of ***swap*** where two parties agree to exchange cash at agreed times in the future. The amounts paid by one party are based on a ***fixed interest rate***, whereas the amounts paid by the other are based on a ***floating interest rate***. If the amounts are in the same ***currencies*** (e.g. both in New Zealand dollars), this is called a ***Plain Vanilla Interest Rate Swap***. However, the amounts can be based in different currencies.

Fixed Interest Investment: An investment for which you are promised a fixed rate of interest for a certain period of time. The amount of interest that you will receive is set before you invest your money.

Fixed Interest Rate: An ***interest rate*** that doesn't change for a certain period of time. For example, you may borrow money at an interest rate of 8% ***per annum*** for two years – over this two year period, the amount of interest you pay remains at 8% per annum.

Floating-for-Floating Interest Rate Swap: A type of ***swap*** where two parties agree to exchange cash at agreed times in the future. The amounts paid by each party are both based on a ***floating interest rate***, but different ***currencies***. For example, someone may agree to pay someone else an amount of cash equal to the floating interest rate in New Zealand, based on $1 million, in exchange for cash equal to the floating interest rate in Australia on $900,000 in Australian dollars.

Floating Exchange Rate: An ***exchange rate*** which changes depending on supply and demand for the ***currency***. It moves up and down as people buy and sell the currency. For example, the New Zealand dollar is a floating exchange rate – it is not fixed at (for instance) $0.70 for each US$1.

Floating Interest Rate: An ***interest rate*** that may change over a period of time. Lenders change floating interest rates depending on the ***official cash rate (OCR)***. That is, if the OCR increases, so will floating interest rates.

Fluctuate: Change – go up and down. If a price fluctuates, it often goes up and down.

Foreign Currency: The currency (money) of another country.

Forward(s): A ***legally binding agreement*** to buy or sell a specific quantity and quality of a particular asset for a price agreed to today, at a particular time in the future. This is a private arrangement between two parties – you cannot buy forwards on a ***securities market***.

Forward Contract: Refer to ***Forwards***.

Franchising: A business method which involves giving another business the right to use your business's trade marks, products and methods of doing business. The other business pays for this right. Examples of a franchise business include McDonald's, Paper Plus and Fastway Couriers.

Franking Credits: The Australian version of ***imputation credits***.

Funds of Funds: A type of ***managed fund*** that only invests in other managed funds.

Fund Management Fees: Fees that an investor must pay to a ***fund manager*** for investing their money in the ***managed fund*** that the fund manager operates. There are many types of fund management fees.

Fund Manager: Someone (or a company) who has the job of managing investments. They decide how the money in a fund will be invested and when.

Fundamental Concept: Primary Idea. Basic Fact. Key Principle. Keystone.

Future(s): A ***legally binding agreement*** to buy or sell a specific quantity and quality of a particular asset for a price agreed to today, at a particular time in the future. This agreement is traded on a financial exchange (a ***securities market***).

Futures Contract: Refer to ***Futures***.

Futures Options: An ***option*** which is based on the value of a ***futures contract*** (instead of on, for example, a ***share*** price).

GBP: Pound Sterling. Also called the 'British pound', or just the 'pound'. The official ***currency*** in the United Kingdom.

GDP: Short for ***Gross Domestic Product***.

GIF(s): Short for ***Group Investment Funds***.

Global Funds: A type of ***managed fund*** that invests in ***securities*** from a number of different countries.

Goodwill: This is calculated as the purchase price of a business, less its ***net assets***. It is the value of a business, in addition to the actual assets the business has. It reflects things such as the reputation of the business and its customer base.

Government Deficit: When the Government has more expenses in a year than it collects in income.

Government Surplus: When the Government collects more money in a year than it spends.

Gross Domestic Product: The dollar value of all goods and services that a country produces within a 12 month period.

Gross Yield %: The amount of ***dividends*** received (per share) over the previous year, including ***imputation credits***, divided by the current share price. It is shown as a percentage. It is similar to the Div Yield %, but includes the value of imputation credits.

Group Investment Funds: A type of managed fund which is similar to a ***unit trust***, but does not need to have an ***independent trustee***.

Growth Funds: One of the five types of ***KiwiSaver*** funds. A high proportion of the money in these funds is invested in ***shares*** and property. The remaining amount is invested in low risk investments such as bank deposits. They are the second highest risk option of KiwiSaver funds.

Hedge: To use investments in a way that reduces the risk that you face.

Hedge Fund(s): A type of investment fund which invests in a wide range of investments and is designed to try to protect the fund's investors from downturns in the market, while still making a return when the market goes up.

Hedger: Someone who uses investments to reduce the risk they face.

Hedging: To ***hedge***.

Hierarchy: An arrangement where things are ranked in order of priority, importance or authority, etc.

Highly Correlated: When the values of two investments tend to move together. If the value of one investment goes down, it is likely that the value of the other investment will also go down.

Hire Purchase: A way of paying for a purchase. The customer is able to take the goods home and use them before they have fully paid for them. However, the customer does not legally own the goods until they have finished paying for them.

Horizontal Axis: The bottom line on a graph.

Illiquid: Not ***liquid***. Cannot quickly be changed into cash. Property is an example of an illiquid investment because it takes time to sell a property and receive the payment for this.

Imp Credits: Short for ***Imputation Credits***.

Import(s): When goods or services from another country are bought by customers in the home country. For example, if a business in New Zealand buys goods from a business in Australia, those goods are considered as imports for New Zealand, and as ***exports*** for Australia.

Imputation Credits: A type of ***tax credit*** in New Zealand. They are designed to avoid ***double taxation*** on ***dividends***. If you receive dividends which have imputation credits with them, you can use these credits to reduce the amount of income tax you have to pay on the dividend income.

Imputed: When ***imputation credits*** are paid to investors with ***dividends***, the dividends are said to be 'imputed'.

Income Statement: One of the main financial statements prepared for a business each year. It shows the income that the business earned during the ***financial year*** as well as the expenses over that time. It is used to work out the ***profit*** that the business made.

Independent Assessment: When the person or organisation assessing a business (or other entity) has no involvement in that entity. For example, if the manager of a business worked out a ***credit rating*** for their own business, this would not be an independent assessment.

Independent Trustee: A ***trustee*** for a ***trust*** who is not involved in the day-to-day management of the trust. An independent trustee for a ***managed fund*** cannot be the same person as the ***fund manager***. This is because it is their role to make sure the fund manager is acting in the best interests of investors.

Independent Valuation: In this Module, the term 'independent valuation' is given in relation to valuing the ***assets*** of a business that is for sale. It refers to a situation where someone, who is not involved in a business, works out the current value of the assets of a business (instead of simply relying on the asset values shown in the financial accounts).

Index: In this Module, the word 'index' is used to refer to a ***stock exchange index***. An index is a measure that is used to show changes in the values of something.

Index Fund(s): A type of ***managed fund*** which copies a ***stock exchange index***. That is, it invests in the same companies (in the same proportion) as are in the ***index***.

Indicator: Something which indicates / suggests / shows something.

Indices: More than one ***index***.

Indirect Investing: Paying someone else to decide what ***shares*** and other ***securities*** you are going to invest in and then investing your money for you. This generally involves using ***managed funds***.

Indirect Investment(s): An investment made by ***indirect investing***.

Industry Risk: The risk of factors that affect the industry in which you have invested. For example, if you have bought shares in a company that operates in the food industry, an outbreak of foot and mouth disease or bird flu is likely to affect this industry and your business.

Inflation: The general increase in prices of goods and services over time.

Inflation Risk: The risk that the return you get on your investment is less than the ***inflation*** rate (or that an increase in inflation reduces the ***real rate of return*** on your investment).

Initial Public Offering: The first sale of ***shares*** by a company to the public. This is what happens when a ***private company*** becomes a ***public company*** and makes its shares available to buy for the first time.

Institution(s): In this Module, the word 'institution' refers to large organisations.

Institutional Investors: An organisation which pools money from a number of investors and then invests this money for them. E.g. ***managed funds***.

Institutionalised: In this Module, the word 'institutionalised' refers to the fact that most of the trading done on ***stock markets*** is done by organisations instead of individual investors.

Insurance: A promise that you will get compensation (some sort of payment) if you experience a loss.

Insurance Bond(s): A type of ***bond*** which is linked to ***life insurance***. When investors purchase these bonds, they are given ***units*** in a ***managed fund***. All income that the fund earns is re-invested in the fund. When the investor dies, their investment and any earnings on the investment are paid to their ***estate***.

Insurance Company: A business which sells insurance to people and other organisations. This business agrees to make a payment to the people (or organisations) it insures if they suffer a loss.

Insurance Policy: A contract between an insurance company and an insured person (or organisation) which states the key terms and conditions for providing the insurance. For example, it will outline what specifically is insured, the value of a payment that will be made in the event that a loss happens, how long the insurance lasts for, etc.

Insurance Premium: Refer to ***Premium***.

Intangible Asset: An asset that has no physical presence. That is, it is an asset that you cannot see or touch. Examples include ***goodwill*** and trade marks.

Interest: The price someone pays for borrowing money.

Interest Rate: The percentage of the total amount of money borrowed that is charged as ***interest***.

Interest Rate Risk: The risk that the value of your investments will be affected by a change in ***interest rates***.

Inventory: Products (as well as unfinished products and materials used to make products) that a business owns to sell to its customers.

Investment: When you commit money or ***capital*** to something with the hope that it will make a profit.

Investment Adviser(s): An individual or business which looks at someone's financial situation and then recommends (or suggests) how they should invest and manage their money in order for them to reach their financial goals. In order to provide advice about complicated investments, they must be an ***authorised financial adviser***.

Investment Policy: A written statement which sets out the rules that the ***fund manager*** of a ***managed fund*** must follow when deciding what investments are to be included in the fund.

Investment Statement: A document which provides important details about an ***investment***. The aim of an investment statement is to provide enough information about an investment for someone to make an informed decision as to whether or not they think the investment is right for them. For example, it will include information about the risks and costs involved in the investment.

IPO: Short for ***Initial Public Offering***.

JPY: Japanese yen. The official ***currency*** in Japan.

Kiwi Bonds: ***Bonds*** that are issued by the New Zealand Government which New Zealand residents can buy. This is the safest type of bonds that you can buy in New Zealand. If you buy Kiwi Bonds, you are lending money to the New Zealand Government.

KiwiSaver: New Zealand's main voluntary ***superannuation*** scheme. People who participate in this scheme contribute a percentage of their earnings, out of each pay, to their retirement savings fund.

Last Sale: In relation to share price information reported in newspapers (etc.) the last sale is the price at which the shares last traded for on a particular day.

Lease: An agreement for someone to use / rent property that belongs to someone else.

Legal Structure: The type of ***entity*** that a business operates under. For example, a business could operate as a ***sole trader***, a ***partnership***, a ***company*** or under a ***trust***.

Legally Binding: Something that can be enforced by law.

Legislative Risk: The risk that the value of your investments may be affected by changes in law. For example, the Government may introduce a new law which increases the costs that a business faces, and thus reduces its profits.

Liabilities: More than one ***liability***.

Liability: Something that you owe. A debt.

Liable: Legally responsible. If you are liable to pay for something, this means that, by law, you must make payment.

Life Insurance: A type of ***insurance*** on the life of a person. If the person dies, an amount of money is paid to whoever owns the insurance policy (the policy holder).

Liquid: Something which can be quickly changed into cash. A liquid investment is one that you can quickly sell and receive payment for.

Liquidate: The process of selling investments or other ***assets*** to get cash.

Liquidity Risk: The risk that an investor will not be able to sell their investment (and receive payment for this) when they need to unless they sell it for a very cheap price.

Listed Company: This is another term for a ***public company***.

Listing: Refers to the process of becoming a ***public company*** (i.e. listing the ***company*** on a ***stock exchange*** so members of the general public can buy and sell ***shares*** in the company).

Local Authorities: Local government organisations. They include local councils and regional councils.

Long: If you 'go long' this means taking a ***long position***.

Long Position: Buying a ***derivative*** from which you will benefit if the value of the asset on which it is based goes up.

Majority Owner(s): Refer to ***Majority Shareholders***.

Majority Shareholder(s): A ***shareholder*** who owns over half the ***shares*** of a ***company***. In some cases, the term majority shareholder can refer to a small group of shareholders, who together own over half of the company's shares.

Managed Fund(s): A fund of money where the savings from a lot of investors is joined together and then invested by a professional ***fund manager***.

Manufactured Collectable: A manufactured item (an item which has been man-made) which is specifically designed for people to collect. That is, the main purpose of a manufactured collectable is for people to collect them. A manufactured collectable has a financial value.

Marginal (Personal) Tax Rate: The highest tax rate that a person needs to pay on any income they earn. For example, if someone earns $50,000, their marginal tax rate is 30%. But, if their income increases to over $70,000, their marginal tax rate will then be 33% (all income *over* $70,000 will be taxed at 33%).

Margins: A margin is the difference between two numbers. It is sometimes shown as a percentage. An example is the ***net profit margin***, which is calculated as the net profit (which is the difference between the total income for a business and the total expenses for a business over a period of time) divided by the total income figure.

Market Announcements: When a public company tells information about the company to its investors and the general public. A company could, for example, announce its latest ***profit*** figures or announce that it intends to buy another business.

Market Capitalisation: The total ***market value*** of a company or a ***stock market index***. The market capitalisation of a company is the price of its ***shares*** multiplied by the number of shares it has. The market capitalisation of an ***index*** is the market capitalisations of all the companies in the index added together.

Market Price(s): Refer to ***Market Value***.

Market Risk: The risk associated with factors that affect an entire sharemarket. For example, if investors get nervous and start selling their sharemarket investments, this can affect the value of all shares in the market. Also called ***systematic risk***.

Market Value: The price that would be paid for an item if it was to be sold in an 'open market'. In regards to an ***asset*** that a business owns, it is the price that people would be willing to pay for it if it was sold – this may be very different from the value which is recorded in the business's financial accounts.

Market-Weighted Index: A ***stock market index*** which is based on the total ***market value*** of all the companies in the index.

Mature(s): When an investment reaches the end of the agreed investment period. That is, when an investment reaches ***maturity***.

Maturities: Investment periods. Lengths of time. If there are several different maturities, this means there are several different ***maturity dates*** available for a type of investment. You could, for example, choose an investment which ***matures*** in one year or choose one that matures in two years.

Maturity: For an investment, maturity is the end of the investment – the final date when the investor receives their money back plus any interest owed to them.

Maturity Date: The date on which it is agreed that an investment will end. If you buy a ***bond***, the maturity date is the day on which you receive your money back from the organisation you lent it to.

Mediation: A process where someone helps two people or entities (e.g. a business and an employee) to work through their problems and come to a solution.

Minimises: Make something as small as possible.

Minority Shareholder(s): A ***shareholder*** who owns less than half of the ***shares*** in a ***company***.

Minutes: A written record of what happens at a meeting. This includes details such as who was present, what was discussed and what decisions were made.

Monetary Assistance: Help in the form of money (instead of giving, for example, free advice or information).

Mortgage: A special type of loan agreement which is used to buy property. The lender uses the property as ***security*** for the loan, meaning that they can take the property and sell it if the required repayments are not made by the borrower.

Mutual Funds: ***Unit trusts*** are known as mutual funds in the USA.

Negatively Correlated: When the values of two investments tend to move in the opposite direction to each other. So, when one investment decreases in value, it is likely that the other investment will increase in value.

Net Assets: The ***net worth*** of a business. I.e. it is calculated as the total value of the business's ***assets***, less the total value of its liabilities. Usually the values of the assets used are those that are shown in the financial accounts. They might be quite different from the ***market values***. It is the same as ***equity***.

Net Cashflows: The total amount of cash that a business receives over a period of time, less the amount of cash it pays out over that same time.

Net Profit: The income that a business receives over a period of time, less all of the expenses the business faces over this same period of time. Tax can either be included as one of the expenses (i.e. net profit after tax) or not included (i.e. net profit before tax).

Net Profit Margin: The ***net profit*** calculated as a percentage of the total income. That is, ***Net profit*** / total income x 100.

Net Tangible Asset (Backing): A figure which shows how much a ***share*** in a ***company*** would be worth if the company was to stop trading. It is calculated as the total ***assets*** of the company less the value of its ***liabilities*** and the value of its ***intangible assets***, divided by the number of shares in the business.

Net Worth: The total value of someone's ***assets***, less the total value of their ***liabilities***. It is the same as ***equity***.

New Zealand Exchange Limited: The name of the company that operates ***securities markets*** in New Zealand.

New Zealand Government Bonds: ***Bonds*** issued by the New Zealand Government. That is, the Government borrows money from investors and then pays this money back on an agreed date.

New Zealand Stock Exchange: The ***sharemarket*** in New Zealand. A lot of well-known New Zealand companies, such as Telecom and Fisher & Paykel, have their ***shares*** available for sale on this sharemarket. The New Zealand Stock Exchange is run by a company called ***New Zealand Exchange Limited*** and is referred to as the ***NZX***.

Non-Controlling Interest: A situation where someone does not own enough ***shares*** of a business to control the outcome of votes regarding business decisions. That is, they may always be 'outvoted' by the other shareholders.

Non-Monetary Support: Help or support in ways that do not include giving money. E.g. it may include giving free advice and information.

Notional Principal: A figure that is used to calculate the amount of a payment to be made for a ***swap***. This figure does not relate to an actual amount of ***principal*** that will be swapped.

NTA: Short for ***Net Tangible Assets***.

NZAX: The New Zealand Alternative Market. This is a market operated by ***New Zealand Exchange Limited*** which is for fast-growing and developing companies. Companies listed on this sharemarket are generally smaller and newer than those listed on the ***NZSX***.

NZD: New Zealand dollars. The official ***currency*** of New Zealand.

NZDX: The New Zealand Debt Market. This is a market operated by ***New Zealand Exchange Limited*** on which investors can buy and sell ***debt securities***.

NZSX: The New Zealand Stock Market. The main ***sharemarket*** operated by ***New Zealand Exchange Limited***.

NZX: Short for ***New Zealand Exchange Limited***. This is the ***company*** that operates ***securities markets*** in New Zealand. Often referred to simply as the New Zealand Stock Market.

NZX-50: The main New Zealand ***sharemarket index***. It reflects the value of the top 50 companies in the ***NZSX*** market. It is a ***market-weighted index***.

Obligation: A duty. Something that you are required to do (must do).

Obsolete: Something that is no longer of any use because it is out of date.

OCR: Short for ***Official Cash Rate***.

Offence: When a rule or law is broken.

Official Cash Rate: The ***interest rate*** that the ***Reserve Bank of New Zealand*** sets to control the level of prices (and thus the amount of ***inflation***) in New Zealand. This is the rate that the ***RBNZ*** pays and charges other banks in New Zealand on the accounts that they have with them (the RBNZ). As a result, the interest rates that banks charge their customers depend on the Official Cash Rate.

Online Trading: Using an internet service to buy and sell investments.

Open-end Funds: A type of ***managed fund*** that is able to issue more shares once it is set up. This means that people who want to invest in a closed-end fund after it has already been set up can do this *without* having to buy shares off someone else who has already invested in the fund.

Opportunity Risk: The risk involved with locking your money into one form of investment, and then not being able to be involved in other investment opportunities that come up in the meantime which might offer a better ***rate of return***.

Optimistic: Hopeful and confident that the future will be positive. If investors are optimistic about ***sharemarket*** prices, it means they think sharemarket prices will increase.

Option: A type of ***derivative***. If you buy an option, you are given the right to buy or sell an asset at an agreed price, on or before a certain date. It is called an 'option' because the buyer has the choice of whether they will buy or sell the asset. The buyer does not have an ***obligation*** to buy or sell the asset.

Overdraft: An overdraft occurs when the amount of money withdrawn from a bank account is more than the funds available in the account. An overdraft facility is therefore a service which banks provide that allows people to withdraw more money (up to a set amount) than is in their bank accounts.

Overstated: If the value of an asset is overstated in a business's financial accounts, it means that the asset is worth less than is shown in the financial accounts.

Par Value: The amount of money that a ***bondholder*** receives at the end of the term of the ***bond***. Also called ***face value*** or ***principal***.

Part Interest: If you have a part interest in a business, it means that you own some, but not all, of the business.

Partnership: A type of business structure where two or more people run the business together, share the profits of the business and are together personally ***liable*** for the ***debts*** of the business.

Passive Funds: Refer to ***Index Funds***. The opposite of ***Active Funds***.

Payment Date: In relation to ***dividends***, the payment date is the date on which shareholders are paid their dividends.

P/E Ratio: Refer to ***Price Earnings Ratio***.

PE Ratio: Refer to ***Price Earnings Ratio***.

Penalised: Punished. For example, if you break a term deposit, you are likely to be punished by losing some (or all) of the interest you would have earned on your investment.

Per annum: Per year. ***Interest rates*** are often given as an amount 'per annum'. That means the rate of interest charged, each year.

Perpetual Bond: A ***bond*** which has no maturity date.

Perpetuities: Refer to ***perpetual bond***.

Perseverance: Continuing to do something, even if it is difficult or takes a lot of work.

Personal Guarantee: In relation to buying a business, this is when you agree to be personally responsible for paying the business's ***debt*** if the business is not able to pay it.

Pessimistic: When someone thinks that the future will be not be good. If investors are pessimistic about ***sharemarket*** prices, it means they think sharemarket prices will decrease (or at least not increase as much as other people expect).

PIE: Short for ***Portfolio Investment Entity***.

PIR: Short for ***Prescribed Investor Rate***.

Plain Vanilla Interest Rate Swap: A type of ***swap*** where two parties agree to exchange cash (in the same ***currency***) at agreed times in the future. The amounts paid by one party are based on a ***fixed interest rate***, whereas the amounts paid by the other are based on a ***floating interest rate***.

Political Instability: A situation where the government of a country is going through a period of change. This could include very unfavourable situations such as coups (when someone or a group of people try to take over the government) as well as a possible change in government due to an election.

Portfolio: In regards to investments, a portfolio is a collection of investments.

Portfolio Investment Entity: A special type of legal structure that is available for some ***financial institutions***. If you invest money in a Portfolio Investment Entity, there are advantages to the way the income you earn is taxed.

Portfolio Manager: Refer to ***Fund Manager***.

Position: In relation to ***options***, this refers to whether you have chosen to take a ***long position*** or a ***short position***, or if you are buying, or are instead selling, options.

Potentially: Possibly. In this Module, the words 'potentially' and 'potential' are used in relation to the financial returns that you might get from a higher risk investment. It is important to note that this means that, although you may possibly get higher returns, this is not definite – you may instead get lower returns.

Practicable: Able to be done. Feasible.

Preferred Scheme: A ***KiwiSaver*** scheme that an employer chooses for their employees. If an employer chooses a preferred scheme, their employees' KiwiSaver contributions will go into this scheme instead of into one of the ***default schemes*** (unless the employee chooses a different KiwiSaver scheme).

Preliminary Finance: In relation to buying a business, getting preliminary finance means getting the bank (or another lender) to let you know approximately how much money they would be prepared to lend you. This happens before you even find a business and make an offer to buy it.

Premium: An insurance premium is the price an insurance company charges for ***insurance***. For example, if you are charged a premium of $240 per annum, this means you must pay $240 each year in return for the insurance company's promise that they will give you compensation if you suffer a loss.

Prescribed Investor Rate: The tax rate that applies to income you earn from investing in a ***Portfolio Investment Entity***.

Present Value(s): The current value of money which is expected to be received in the future. For example, if you think a business is likely to give you a profit of $50,000 in two years' time, you would not be willing to pay $50,000 now for this profit – especially considering the business might not even make a profit at all. Instead, you would only be willing to pay a smaller amount (maybe $25,000) so that you can earn a return on your investment that reflects the amount of risk there is.

Price Earnings Ratio: The share price divided by the previous year's full published ***earnings per share***. Also called the ***earnings multiple***. It shows how high much a share costs to buy compared to the amount of ***profit*** the business recently earned for that share.

Price-Weighted Index: A ***stock market index*** which is only based on the ***share*** prices of all of the companies in the index. It doesn't take into account how many shares each ***company*** has, and therefore doesn't take into account the overall ***market value*** of each company.

Primary Market: The part of a ***sharemarket*** that deals with new ***securities***. If you buy ***shares*** in an ***initial public offering***, these are bought on the primary market.

Principal: The actual amount of money that has been borrowed.

Private Company: A ***company*** which is not listed on a ***sharemarket***. That is, members of the public cannot buy and sell ***shares*** in this type of company on the sharemarket.

Private Entities: An ***entity*** which is not owned by the government. The term 'private entity' can also relate to a ***private company***.

Privatised: When a business which is owned by the Government is sold (so it is no longer Government-owned). Note that a company which has been privatised can be ***listed*** on a ***sharemarket*** (and therefore be a ***public company***).

Productivity: A measure of output compared to the amount of inputs. For example, a business which makes five products per hour using only one employee and one machine, has a higher rate of productivity than a business which needs two employees and two machines to make this same quantity of products.

Professional Indemnity Insurance: A type of ***insurance policy*** that protects someone in a situation where they give bad advice. For instance, if you lose a lot of money because your ***investment adviser*** gave you incorrect information and advice, this insurance may be able to cover your losses.

Profit(s): The income that a business receives over a period of time, less the expenses the business faces over this same period of time. If all expenses are ***deducted***, the profit figure is called the ***net profit***. Usually, the term 'profit' refers to 'net profit'.

Profit and Loss Statement: Refer to ***Income Statement***.

Prohibited: Forbidden. Not allowed.

Proportion(s): When the percentage of something is the same as the percentage of something else. So if, for example, someone owns 10% of the ***shares*** in a ***company***, they are ***entitled*** to receive 10% of the ***dividends***. This means that the dividends they receive are in 'proportion' to the shares they own. If they received more or less than 10% of the dividends, this would *not* be in proportion to their ownership.

Prospectus: A more detailed version of an ***Investment Statement***.

Prudent: Careful, sensible and cautious.

Public Company: A company which offers its ***shares*** for sale to the general public. Also referred to as a ***listed company***, because its shares are listed on the sharemarket where they can be bought and sold.

Public Sector: The part of the economy which is owned by Government. It includes Government departments and organisations, as well as businesses owned by the Government (such as, for example, New Zealand Post and Kiwibank).

Put Option: A type of ***derivative***. The buyer of this type of ***option*** is given the right to sell a particular ***asset*** at a particular price on (or before) a certain date. If the buyer decides to sell the asset, the seller of the option must buy it from them.

QFE: Short for ***Qualifying Financial Entity***.

Qualifying Financial Entity (QFE): An organisation which is approved, under the *Financial Advisers Act 2008*, to be able to provide financial advice services to the public. Employees and agents of a QFE may provide these services, even if they are not personally registered or authorised to provide them.

Rate of Return: The 'return' you get from an investment is the amount of money you earn from it. The rate of return is therefore the amount of income you receive calculated as a percentage of your original investment.

Ratios: A ratio compares two numbers. For example, a price earnings ratio compares the share price of a company to the profits made (per share) by the company.

RBNZ: Short for the ***Reserve Bank of New Zealand***.

Real Rate of Return: The ***rate of return*** you get after taking into account the cost of ***inflation***. It can also be defined as the rate of return you get after taking into account other costs as well as inflation, such as taxation.

Real Returns: Refer to ***Real Rate of Return***.

Real Terms: Figures which have taken into account the effect of inflation.

Record Date: In relation to ***dividends***, it is the date on which it is determined who the dividends of a ***company*** will be paid to. If you are registered as a ***shareholder*** of a company at the end of its record date, you will be entitled to receive some of the dividends which are about to be paid.

Redeem: Repurchase. Buy back. 'Cashing in' a ***bond*** so that you get your money back.

Redemption Amount: The amount of money that you receive when a ***bond*** is ***redeemed***.

Registered Financial Adviser: Someone who is approved, under the *Financial Advisers Act 2008*, to give advice about basic financial products such as bank term deposits, basic insurances, consumer credit contracts and bonus bonds.

Registrar(s): An organisation (or person) who looks after a register and keeps this register up to date. A share registrar looks after a ***share register***.

Reinvestment Risk: The risk that you will need to accept either a lower rate of interest or a higher amount of risk when you reinvest your money. For instance, if you want to invest your money for two years and decide to first invest it in a 12 month term deposit (in the hope that interest rates will increase), there is a risk that interest rates will actually decrease during that 12 months. As a result, when you reinvest your money for another 12 months, you will have to accept a lower interest rate. You may have then been better off had you simply invested your money in a two year term deposit.

Representative: Accurately reflecting / indicating something. Make a realistic picture of something.

Reserve Bank of New Zealand: The central bank of New Zealand. It is mainly responsible for looking after the level of ***inflation*** in New Zealand. It does this by controlling a special ***interest rate*** called the ***Official Cash Rate***. It is also solely responsible for issuing New Zealand dollars and coins, and supervises other banks in the New Zealand banking system.

Resource Consent: Permission from a ***local authority*** to carry out an activity on a property which is not allowed based on the ***District Plan***.

Restraint of Trade Clause: A clause (statement) that someone can put in a ***Sale and Purchase Agreement*** that stops the ***vendor*** from setting up another business in competition to the business they are selling.

Risk Profile: A description of how much risk you are prepared to take in return for the possibility of getting higher financial returns.

Risk-Return Trade Off: The fact that, if you want higher potential financial returns, you usually have to accept a higher amount of risk; and if you want a lower amount of risk, you usually have to accept lower potential financial returns.

Rules of Thumb: General guidelines of how to do something.

S&P 500: A ***market-weighted index*** which shows how 500 of the largest ***public companies*** in the United States of America have performed.

Sale and Purchase Agreement: A ***legally binding*** written contract used to record the sale and purchase of a property. Also called an ***Agreement for Sale & Purchase***.

Scheme Provider: The term 'scheme provider' is used in this Module in relation to ***KiwiSaver***. A KiwiSaver scheme provider is a business which offers a KiwiSaver investment fund. They manage and invest all the money in this fund. If you are part of the KiwiSaver scheme, you have a scheme provider. You can either choose your scheme provider or one will be chosen for you.

Secondary Market: The part of a ***sharemarket*** where you can trade (buy and sell) ***securities*** with other investors. The great majority of all securities are traded on the secondary market. However, if you want to buy ***shares*** in a ***company*** directly from a company (and not from another investor), these are sold on the ***primary market***.

Sector Funds: Managed funds which mainly buy shares in companies that operate in a particular industry (or group of industries).

Security: (1) An item of yours that a lender is allowed to take and sell so that they can get back money that you owe to them (if you fail to make payments).

(2) Refer to ***Securities***.

Securities: Financial instruments. There are three broad types of securities: ***debt securities*** (such as ***bonds***); equity securities (such as shares); and ***derivatives*** (such as ***options*** and ***futures***).

Securities Markets: Markets on which you can buy and sell ***securities***.

Sell: In regards to ***share*** price information, the 'sell' figure shows the lowest price (how many cents per share) that someone is willing to sell their shares in a company for. For 'sell' figures reported in a newspaper (etc.), this was the lowest price that someone was willing to sell their shares for when the ***sharemarket*** closed. If you are buying shares, it is the price you would pay.

Senior Bond(s): A bond that is given a higher priority for repayment than other bonds. If a company that issues bonds gets into financial difficulty, the holders of senior bonds are more likely to get their money back than the holders of ***subordinated bonds***.

Share(s): The ownership of a company is divided into shares. Therefore, if you own a share, you have part-ownership of a company.

Sharebroker(s): A person or business who has permission to buy and sell ***shares*** on a ***sharemarket***. Not everyone can buy or sell shares on a sharemarket – instead, if you want to do this, you need to arrange for a sharebroker to do it for you.

Sharemarket: This is a market that is used to buy and sell ***shares*** of ***public companies***. All companies have shares, but some companies make their shares available for the general public to buy. They do this by listing themselves on the sharemarket (to become a public company). People can then use the sharemarket to buy and sell shares of that company. A sharemarket is also called a ***stock exchange***.

Sharemarket Index: Refer to ***Stock Market Index***.

Sharemarket Indices: Refer to ***Stock Market Indices***.

Share Register: A list of all of the names and contact details of a company's ***shareholders***. It also shows how many ***shares*** each shareholder owns.

Short: If you 'go short' this means taking a ***short position***.

Short Position: Buying a ***derivative*** from which you will benefit if the value of the asset on which it is based goes down.

Silent Partner: Someone who invests in a small business, but does not work in it and takes no part in the day-to-day running of the business.

SME: Small to medium sized business. In New Zealand, a SME is often defined as a business which employs 19 or fewer full-time employees.

Sole Trader: A type of business structure where one person operates a business and is entitled to receive all the profits of the business, but is personally ***liable*** for the business's debts.

Speculating: Choosing an investment which exposes you to risk. This is done in the hope that you will make a profit, however, you could end up making a loss.

Speculator: Someone who chooses investments which involve risking their money (in the hope of making a profit).

Spread: The spread mentioned in this Module refers to the difference between the ***buy*** and ***sell*** prices of a company's ***shares***.

Standardised: Set to a standard. For example, it may be the case that one futures contract on gold relates to 100 'troy ounces' of gold. If this is standardised, you will not be able to enter a futures contract for 80 or 110 'troy ounces' of gold (for instance).

Statement of Financial Performance: Refer to ***Income Statement***.

Statement of Financial Position: A document which shows the value of the ***assets*** a business (or person) owns, the value of all of its ***liabilities***, as well as its ***net worth*** or ***equity*** at a particular date.

Stock(s): (1) Another word for ***shares***.
(2) Another word for ***inventory***.

Stockbroker: This is another term for ***sharebroker***.

Stock Exchange: This is another term for ***sharemarket***.

Stock Market Index: A measure of how a group of ***shares*** have performed. It is basically an average value of either the prices of the shares or the values of the companies included in the index.

Stock Market Indices: More than one ***stock market index***.

Stock on Hand: Refer to ***inventory***.

Strike Price: The price in an ***options*** contract at which the buyer of the option can buy (or sell) an asset at.

Sub-Asset Class(es): Types of asset classes, within an asset class. For example, one of the asset classes is shares. Sub-asset classes of shares include shares in private companies (referred to as 'private equities') and shares in public companies (referred to as 'public equities').

Subordinated Bond(s): A bond that is given a lower priority for repayment than other bonds. If a company that issues bonds gets into financial difficulty, the holders of subordinated bonds are less likely to get their money back than the holders of ***senior bonds***.

Subsidiary Company: A company which is controlled by another company. The other company owns at least half of the shares in the subsidiary company.

Subsidy(ies): A type of financial assistance.

Superannuation Funds: A type of ***managed fund*** which usually 'locks in' some, or all, of an investor's money until a ***maturity date***. The maturity date is usually the approximate date when the investor intends to retire.

Swap(s): A ***legally binding*** agreement where two parties agree to exchange cashflows in the future.

Swaptions: ***Options*** on ***swaps***.

Systematic Risk: Refer to ***Market Risk***.

Tax Credit(s): An amount of your tax that you either do not need to pay, or that gets returned to you.

Term Deposit: A savings account at a financial institution (usually a bank) which is for a set period of time such as 6 months, 1 year or even 5 years. You cannot add money to money invested in a term deposit and you are likely to lose some (or all) of the interest to be earned if you withdraw money before the end of the agreed period of time.

Timing Risk: The risk that you may buy or sell an investment at what turns out to be a bad time.

Tracker Funds: Refer to ***Index Funds***.

Trader: Someone who buys and sells assets, such as ***shares,*** frequently in order to try to make a ***capital gain***. They are considered to be 'in the business' of trading assets.

Trust: A type of legal structure in which ***assets*** are held. Assets placed in a trust are held for the benefit of people and other ***entities*** which are identified as being the ***beneficiaries*** of that trust.

Trust Deed: A document which is used to set up a ***trust***. It sets out the rules that a trust is to follow when it operates.

Trustee: Someone (or an organisation) who looks after ***assets*** for the benefit of other people. A trustee for a ***unit trust*** oversees the financial position of the fund to help make sure that investors' money is safe.

Unconditional: When an agreement to buy a business or property does not have any conditions attached to it. A ***sale and purchase agreement*** may be 'unconditional' to begin with, or may originally be a ***conditional agreement*** and then become 'unconditional' once all of the conditions have been met.

Unit(s): A unit represents someone's investment in a ***managed fund***. The value of the fund is divided up into units. When you invest money, you therefore buy units.

Unit Price: The price of a ***unit*** in a ***managed fund***. This price can move up and down as it depends on the current value of the fund. So if, for example, the investments that the fund has made perform well, the value of the fund (and the unit price) will increase.

Unit Trust(s): A type of ***managed fund*** which meets the requirements of the *Unit Trusts Act 1960*. A unit trust must have an ***independent trustee***. When someone invests money in a unit trust, they buy ***units***. Unit trusts are known as ***mutual funds*** in the United States of America.

USD: US dollars. The official ***currency*** of the United States of America.

Valid: Acceptable.

Variance: Amount of changes.

Vendor(s): The legal owner of a business (or property) who is selling their business (or property).

Venture Capital: A high risk investment in a high potential business opportunity, such as an investment in a small company which has quite a high possibility of rapid growth. Providers of venture capital are often quite actively involved in the management of the business.

Venture Capital Funds: A type of ***managed fund*** which specialises in providing finance to small companies which have quite a high possibility of rapid growth.

Vertical axis: The vertical line (the line that goes up and down) on the side of a graph.

Volatile: Unsteady. Changing or likely to change.

Volume: The number of ***shares*** traded over a period (e.g. over a day or a week).

Vulture Funds: A type of managed fund that specialises in investing in companies in financial distress (i.e. almost bankrupt).

Wrap Account: A service which manages an investor's ***investment portfolio***.

Write: To sell an ***option***.

Writing an Option: Selling an ***option***.

XD: Short for ***Ex Dividend***.

Zero Coupon Bond(s): A ***bond*** which does not pay any ***coupons*** to the ***bondholders***. Instead, investors earn a return on their money by buying the bond for a lower price than they will receive back from the business.