Te Tohu Whakahaere Pūtea
Certificate in Money Management

Wāhanga Tuawhā:
Ngā Hua me ētahi atu Whakatupuranga
Module 4: Equity and Other Investments

Whakamātautau Tuatahi: Te Mākete Tauhokohoko me ngā Huarahi Whakatupuranga

Assessment 1: Sharemarkets and Investment Options

Ngā Whakautu Hei Tauira
Model Answers

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Part One

1. A company must have more than one shareholder unless it is a family business. If it is a family business it can have just one shareholder.

True or False? ***False***

Re-written statement, if needed:

A company is allowed to have only one shareholder, regardless of whether or not it is a family business.

2. The directors of a company vote on matters relating to the business, while the shareholders actually run the company.

True or False? ***False***

Re-written statement, if needed:

The shareholders of a company vote on matters concerning the business while the directors actually run the company.

3. Owning shares means that, each year, you will receive a share of the profits of the company for that year. The amount of the payment you will receive will be in direct proportion to the percentage of shares that you own. This means that if, for example, you own 5% of the shares in a company which makes a profit of $100,000 one year, you will receive a payment of $5,000 that year.

True or False? ***False***

Re-written statement, if needed:

Owning shares means that you are entitled to a share of profits in proportion to the shares you own, BUT it does not mean you will actually receive payment in direct proportion to the shares you own. This is because companies usually keep part of their profits within the business to invest in the future of the business. Not all profits are paid out to the shareholders each year.

4. A public company is a company that members of the general public can buy shares in. In contrast, a non-public company is one which does not offer shares for sale to the general public.

True or False? ***True***

5. 'Direct investing' means deciding for yourself what companies you want to buy shares in, and then buying those shares direct from the companies. In comparison, with 'indirect investing', once you have done the research to decide what companies you want to invest in, you instruct a sharebroker as to which shares to buy in what quantities.

True or False? ***False***

Re-written statement, if needed:

Note: tauira answers may be quite varied for this statement. An example of a correct answer is as follows:

'Direct investing' means deciding for yourself what companies you want to buy shares in and then approaching a sharebroker and instructing them as to which shares to buy in what quantities. In comparison, with 'indirect investing', you do not make any decisions about what companies you will invest in.

6. A stock market index is basically an average value of all the shares within the sharemarket index. Changes in the index show whether, overall, the share prices have gone up or down or remained at the same price.

True or False? ***True***

7. A lot of information about shares can be found on the internet. A particularly useful site is www.nzx.com. Here you can find information about companies listed on the New Zealand stock exchange. This includes details such as market announcements (i.e. company news), share prices and PE ratios.

True or False? ***True***

8. The PE ratio should be used to guide you when deciding which companies you will buy shares in. If a company has a low PE ratio, it means that profits are very low and the shares are likely to be overpriced. It is therefore safer to invest in a company which has a higher PE ratio.

True or False? ***False***

Re-written statement, if needed:

Note: tauira answers may be quite varied for this statement. An example of a correct answer is as follows:

The PE ratio can be used to help guide you when deciding what companies you will buy shares in. If a company has a very high PE ratio, it means that the price of shares is high relative to its profits. This may indicate (but not necessarily) that the shares are overpriced. It is therefore riskier to invest in a company which has a higher PE ratio.

9. The 'sell' price of a share is the price which you pay to buy the share, whereas the 'buy' price is the price you receive if you sell a share. The difference between the 'sell' and 'buy' prices is referred to as the 'spread'. If you buy shares and then sell them straight away, you are likely to make a loss. The size of this loss will depend on the size of the spread and on the amount of fees that you have to pay your sharebroker.

True or False? ***True***

10. If you want to buy and sell shares, then you need to open an account with a shareholder. This person will then buy shares on your behalf. If it is your first time buying shares, you will be given what is termed a 'PIN' number. You will need this PIN number if you later want to sell your shares.

True or False? ***False***

Re-written statement, if needed:

If you want to buy and sell shares, then you need to open an account with a sharebroker (not a shareholder), who will then buy shares on your behalf. If it is your first time buying shares, you will be given what is termed a 'FIN' number, which acts like a PIN number for an EFTPOS transaction. You will need your FIN number if you later want to sell your shares.

Part Two

Aromatawai Hua Akomanga (Learning Outcome Assessed)

- Learning Outcome 2: Demonstrate an understanding of how managed fund investments operate and of key factors to consider when utilising this type of investment

Case Study: Hamiora and Rahera

Hamiora and Rahera, who are in their early 30s, have worked hard to build up their savings account. They plan to continue to build their savings, as they have a long-term goal to build and operate a backpackers business in their favourite holiday destination (Natewa Bay, Fiji) in about 20 years' time.

The couple has decided that they want to invest part of their money in the sharemarket, but are not sure how to do this. In addition, they have no idea about which companies they should invest in. They classify themselves as 'low to medium risk takers' and, in general, prefer a conservative approach to their money matters. They are therefore concerned about taking the risk of deciding what they should invest in. Recently, a friend of theirs suggested they consider managed fund investments.

11. Explain to Hamiora and Rahera what a managed fund is AND what the role of a fund manager is.

It is acceptable for tauira to copy the definition from the Module:

A managed fund is a professionally-managed investment which involves pooling money from many investors and investing this money on their behalf. Individual investors are allocated units or shares in the fund. The fund manager decides which investments (shares, bonds, etc.) to buy and sell for the fund, with the intention of increasing the value of the fund for its investors. The fund manager is also responsible for collecting the dividend or interest income for the investment and ensuring it is correct.

12. What are two benefits to Hamiora and Rahera of using a managed fund instead of actively managing their own investment portfolio? *Relate your answers to details in the case study about Hamiora and Rahera.*

Examples of benefits include:

- ***Hamiora and Rahera do not need to have specialist knowledge as the fund manager decides which shares (etc.) to purchase and when to do so. This is important given they do not have knowledge in this area.***
- ***It would take less time to look after their investment – Hamiora and Rahera are busy working and saving money and thus may not have much time to devote to this.***
- ***They can gain access to a broader range of investments, which allows them to diversify more than if they managed their own portfolio. This is advantageous to them given they are low to medium risk investors, because diversification reduces risk.***
- ***They will be able to continually invest small amounts of money as they save.***

13. Hamiora and Rahera are confused because they have heard the term 'mutual funds' associated with 'managed funds' but they do not know what this means.

a) Explain to the couple what a 'mutual fund' is.

As a minimum, tauira should identify that a mutual fund is a type of managed fund.

b) Identify one key feature of a mutual fund.

Key features could include any of the facts given in the Module – e.g.:

- ***In New Zealand, a mutual fund / unit trust is governed by the Unit Trusts Act 1960.***
- ***Every unit has a Trust Deed that sets out the rules by which the trust must abide.***
- ***When you invest in a unit trust, you buy 'units'.***
- ***The price of units moves up and down to reflect the value of investments in the fund.***
- ***The three main parties to a Unit Trust include the Trustee, the Manager and the Unit Holders.***

c) What is a 'mutual fund' known as in New Zealand?

A unit trust

14. Hamiora and Rahera have been informed that, in order to select a managed fund, they should have some idea about what type of investments they want the fund to invest in.

Given Hamiora and Rahera's financial goals, life stage and attitude to risk:

- What type of investments would you suggest to them?
- Give at least **two reasons** for your choice of investments.

E.g. would you suggest fixed-income securities, sector funds, global funds, balanced funds?

Note: in answering this question, the most important factor is the rationale for your choice – not the type of investment you choose. Therefore, make sure you provide clear reasons which are relevant to the case study.

In regards to the type of investment you choose, the marking schedule states that it must not be ***obviously incompatible*** *with the case study. This means that it must, at least, be reasonably suitable (although it does not have to be 'perfect').*

Tauira may provide a range of answers. Although the main point is that they are able to justify their response with relevant facts from the case study, they should not choose obviously high risk investments such as sector funds or purely shares.

A common choice is likely to be balanced funds as:

- ***they provide for more diversification, which reduces risk. This is important as Hamiora and Rahera are low to medium risk investors.***
- ***given that Hamiora and Rahera have a long time frame over which they are investing, they can afford some risk associated with having shares in their portfolio, instead of just (for example) fixed interest securities.***
- ***Hamiora and Rahera's goal of building in Fiji may require quite a bit of money, therefore they may need an investment that is likely to provide them with a somewhat higher return than they would receive by investing only in low risk investments such as fixed interest securities.***

15. Hamiora and Rahera's friend has told them that, when selecting a managed fund, it is best to invest in a 'PIE'.

    a) What does 'PIE' stand for? ***Portfolio Investment Entity***

    b) What is a benefit of investing in a PIE instead of other types of managed funds? Give an example to support your answer.

    A benefit of investing in a PIE is that there are tax advantages. The fund does not pay tax at the company tax rate, but instead deducts tax on behalf of investors. The rate that applies depends on the individual investor's income, with the top rate being 28%. Therefore, even if you earn $100,000 and have a personal marginal tax rate of 33%, you will only be taxed 28% on income from a PIE.

Part Three

Scenario One: Hinerangi

Hinerangi has received an inheritance from her Grandfather of $50,000. She is aware that there are four key types of investments:

- Cash
- Bonds
- Property
- Shares

Hinerangi is now making a decision as to how she will invest her inheritance across these four types of investments.

Hinerangi would like to invest over a long time period and is willing to take a moderate to high (but not very high) amount of risk. It is more important to her that her investment grows over time, than it is that she receives a regular income from her investment.

16. How would you suggest that Hinerangi invests the $50,000? Remember that Hinerangi wants her investment to grow over time, but is not willing to take on a very high amount of risk. **Cleary explain all parts of your suggestion.**

    Note: in answering this question, the most important factor is the rationale for your suggestion – not the suggested asset allocation you choose.

    In regards to the asset allocation you choose, the marking schedule states that it must not be ***obviously incompatible*** *with the case study. This means that it must, at least, be reasonably suitable (although it does not have to be 'perfect').*

    Although tauira may provide a range of answers, it is expected that they suggest some type of balanced portfolio. They need to identify a portfolio that would be likely to involve moderate to high risk - not low risk and not very high risk AS WELL as one that would have a reasonable potential for capital growth.

    It is therefore not acceptable to suggest all money be invested in low risk options that do not produce much in the way of capital growth (such as cash and bonds), nor is it acceptable to suggest all money be invested in only shares, as this is very high risk. They may choose to invest all money in property - even though it is quite risky to put all money in one investment, this could be considered a 'moderate to high risk' strategy.

17. One investment option that Hinerangi is keen to consider putting some of her money into is bonds. She has been told that interest rates can have a big impact on the value of a bond.

a) If Hinerangi buys some bonds, and the interest rate decreases, what impact will this have on the value of the bonds? Why?

The value of the bond will increase. Tauira may explain this in several ways. For example:

- ***The difference between the bond price and the par value is the return that they will be getting (in addition to any coupons). If interest rates have fallen, the rate of return they can get elsewhere will fall, they will therefore be willing to pay a higher amount for the bond because the rate of return is higher. This will push the price of the bond up until the rate of return they get is on par with the rate of interest they would get from other similar investments.***

It would be sufficient for tauira to write something basic such as:

- ***The higher the price of the bond, the lower the return. Therefore if interest rates decrease, the price of the bond needs to increase.***

b) Hinerangi decides to buy some bonds, which she plans to hold until maturity. After she buys them, the interest rate starts changing a lot – moving up and down. What impact will these interest rate changes have on the return that Hinerangi can expect to get from her bonds? Why?

They will have no impact because, although the price of the bond will change, Hinerangi does not intend to sell them. If she just waits until maturity, she will receive the 'par value' (lump sum amount) that she agreed to when she bought the bond.

18. What are two types of risk (**not including interest rate risk**) that may affect the value of Hinerangi's investment in bonds? For each type of risk identified, explain how the value of an investment in bonds can be affected.

Examples of acceptable answers are given below (remember, tauira are not to give an answer relating to interest rate risk). Note that tauira should not identify types of risk that do not really apply much to bonds, such as systematic risk, legislative risk and liquidity risk, for example.

- ***Inflation Risk: If inflation increases, the value of the coupon payment reduces. Inflation could increase so much that the***

amount of the coupon payment plus the par value, when received, is worth less than the original amount invested.

- ***Reinvestment Risk: You do not know what rate of return you will be able to receive on coupon payments. If, for example, you choose a bond with high coupon payments instead of a zero-coupon bond, you may end up having to re-invest the coupon payments at a rate lower than you would have received had you just bought a zero-coupon bond. E.g. a zero-coupon bond with a par value of $1000 may have cost you $950, giving you a definite $50 return. If you instead bought a bond that had coupons attached for $1000, that had a par value of $1000, how much money you get overall is dependent on how you invest your income from the coupon payments.***

- ***Opportunity Risk: If you buy bonds and another opportunity comes up that offers a better rate of return, you may miss out on this opportunity because your money is already tied up in bonds. However, you can sell your bonds to get your money back, but if interest rates have increased, the value of your bonds will have decreased, meaning that you may end up with less money than you originally had to invest in the new opportunity. If you had instead waited, you could have invested all of your money in the better opportunity.***

- ***Default Risk (or Credit Risk): This is the risk that the company will not be able to pay the coupon payments or pay back the principal amount at the maturity date.***

- ***Currency Risk: If you buy bonds in other currencies, the return you get is dependent on the exchange rate. If the NZ dollar increases in value, it will cost more to exchange your coupon payments and final principal payment back into NZ dollars, thus leaving you with less.***

19. Several of Hinerangi's aunties have Bonus Bonds and recommend that Hinerangi get these. What is the main difference between Bonus Bonds and most other types of bonds?

It is sufficient for tauira to copy the following explanation from the Module:

"The key feature of Bonus Bonds is that investment income from this trust is not distributed to bondholders in proportion to the number of bonds they have. Instead, investment returns are put into a 'prize pool' and are distributed monthly in the form of randomly selected (tax-paid) cash prizes."

20. Hinerangi has decided that she will use the services of a financial adviser to help invest the rest of her money in a way that will enable her to reach her goals. There is an adviser in her town (who is apparently an Authorised Financial Adviser) that she has thought about using. She has not yet contacted this adviser because she is concerned about trusting someone else with her money.

    a. What is the name of the document that Hinerangi must receive from a potential adviser that she can use to help her decide whether or not she will engage their services?

    A Disclosure Statement

    It is ok for tauira to be more specific and identify either a Primary Disclosure Statement or a Secondary Disclosure Statement.

    b. What are two details that Hinerangi can expect to find in this document that will help her decide whether or not she wants to use this adviser?

    Examples of details include:

- ***What sort of adviser they are (i.e. are they really an authorised financial adviser?)***
- ***What type of services they are authorised to provide.***
- ***How they make their money – e.g. does the amount of money they make depend on what investments I choose?***
- ***Whether or not they have been bankrupt within the past five years.***
- ***Criminal convictions of the adviser.***
- ***If they have been part of the No Assets Procedure within the past five years.***
- ***If they have been the subject of disciplinary proceedings before the disciplinary committee, and this committee has made a recommendation or order in relation to them (within the past five years).***
- ***If they have been expelled from another professional body within the past five years.***

It is also ok if tauira identify that the statement may include specific details concerning the investments about which the adviser is recommending (even though this applies to the Secondary Disclosure Statement).

Scenario Two: Neihana

Neihana has a well-diversified investment portfolio and is in a good position financially. He has saved a further $15,000 and is ready to invest it. He has decided that, when investing it, he is willing to take on a bit more risk than he has done with his existing range of investments. Some investment tools he is keen to consider include derivatives such as futures and options.

21. When hearing about Neihana's approach to using derivatives, Neihana's investment adviser has referred to him as a 'speculator'. Explain what a speculator is (in relation to investments).

    A speculator is someone who chooses to expose themselves to risk. They are 'taking a bet' on an outcome.

22. Neihana is considering taking a 'short position on a futures contract' on copper.

    a) What does this mean?

    A futures contract is an agreement to either 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. Neihana is therefore agreeing to sell a certain amount (and quality) of copper at a particular time in the future.

    b) Neihana does not own any copper and has no intention of buying any. Therefore, how could he manage his obligations under the futures contract?

    He can 'close the contract out' by taking the opposite position. I.e. he can take a 'long position' on a futures contract on copper which means he agrees to buy the specific amount of copper. This cancels out the need to buy the copper as he would only be selling it to himself.

23. Neihana is also considering allocating some of his money to investing in options. In particular, he is looking at buying or selling options on some company shares that are currently priced at $2.00. Neihana thinks these shares are very overpriced and therefore expects the price to fall a lot. Note that it costs $0.10 to buy an option.

    a) Given that Neihana expects the share price to fall, which one of these two strategies would Neihana be most likely to select?
    - Buy a put option
    - Buy a call option

Strategy: ***Buy a put option***

b) If Neihana was to follow the strategy you chose in part (a), how much money could he lose? *Remember, the price of an option is $0.10.*

$0.10 (per option). Note that tauira do not have to say 'per option'. Alternatively, tauira can answer 'the price of the option'.

c) Neihana has been told that, instead of choosing the strategy you identified above, if he expects the share price to go down, he could *sell a call option*. *Remember, the price of an option is $0.10.*

How much money could Neihana potentially earn if he was to sell a call option?

$0.10 (per option). Note that tauira do not have to say 'per option'. Alternatively, tauira can answer 'the price of the option'.

d) How much money could Neihana potentially lose if he was to sell a call option? *You may wish to do this by giving an example, however, this is optional.*

Neihana's losses would be potentially unlimited. Tauira may want to explain this by giving an example where the price of the shares notably increases, however, they do not have to do this.

e) Which of the following two strategies is riskier for Neihana?

a. Buying an option? or
b. Selling an option?

Strategy: ***Selling an option***.

Part Four

Statement	Investment Term
Example: The lowest price shares have traded at over the last year.	*The 52 Week Low*
The lowest price at which someone was offering to sell their shares in a company at the close of the market.	***Sell***
If these are attached to dividends, the shareholder does not have to pay tax on the entire portion of the profit they receive as the company has already paid some tax.	***Imputation Credits***
A figure which represents what every shareholder received in dividends (after tax) for every share they owned in a company.	***Dividend Cents Per Share (or just Div CPS)***
Spreading money across a range of investments in order to lower risk.	***Diversification***
The return you receive from selling shares at a higher price than what you paid for them.	***Capital Gain***
The part of the profit of the company paid out to its shareholders.	***Dividends***
When the sharemarket is experiencing an upward trend and people are optimistic about share prices, it is referred to as a:	***Bull Market***
A type of risk associated with not being able to sell an investment when you want to.	***Liquidity Risk***
When you buy New Zealand shares for the first time, you will be given this type of number. Share registries use this number to keep a record of all of the shares you hold.	***Common Shareholder Number (or CSN)***
The name given to a financial investment tool, for which the value depends on the value of something else.	***Derivative***
This figure indicates how much a company would be worth, per share, if it was to cease trading. It is the value of physical assets, per share, left after paying all debts in the company.	***Net Tangible Asset Backing (or NTA)***
The term that refers to the way in which you spread your investment income across the various types of assets available.	***Asset Allocation***

Statement	Investment Term
A type of risk that cannot be diversified away.	***Market Risk (also known as Systematic Risk)***
When a company offers shares for sale to the general public for the first time.	***Initial Public Offering***
The interest paid by a bond.	***Coupon***