

# Learning outcomes:

## Lesson 5

### Benefits and risks of investing in the sharemarket and the importance of diversification

#### Students

**Explain** the importance of diversification and other factors, to reduce risk when investing.

**Recommend** role play being an advisor, recommending investment options, taking into account the financial circumstances of investors.

**Analyse** table and graphs with financial information to make informed decisions.

This lesson has a strong numeracy focus with students learning about the benefits of investing in the sharemarket and the importance of diversification to minimise risk and maximise return. Students explore the ideas of risk and return, using scenarios, various graphs, research and their knowledge to make investment decisions based on different life stages and their appetite for risk while taking into account other considerations such as liquidity, diversification, and the importance of investment goals when making decisions.

#### General capabilities related to this lesson

- Numeracy
- Critical and Creative Thinking
- Personal and Social Capability

#### Terminology (skill directives)

**Calculate:** Ascertain/determine from given facts, figures or information.

**Identify:** Recognise and name; establish or indicate who or what someone or something is.

**Explain:** Relate cause and effect; make the relationships between things evident; provide why and/or how.

**Recommend:** Provide reasons in favour.

**Analyse:** Identify components and the relationship between them; draw out and relate implications.

#### Links to curriculum

##### Australian Curriculum

**Subject:** Economics and Business

- Year 7
- Year 8
- Year 9
- Year 10

**Subject:** Mathematics

- Year 7
- Year 8
- Year 9
- Year 10

##### NSW

**Subject:** Commerce

- Core 1: Consumer and Financial Decisions
- Core 2: Economic and Business Environment
- Option 1: Our Economy
- Option 2: Investing
- Option 7: Towards Independence

**Subject:** Stage 5 Mathematics

- 5.1: Financial Mathematics
- 5.2: Financial Mathematics

#### Glossary

**Investing:** Using money to buy something that has the potential to make more money.

**Saving:** Putting money away and not spending it.

**Market volatility:** A high possibility that shares will move up and down dramatically in value.

**Realised loss:** When an asset is sold for a price below the price it was paid for initially.

**Speculative stocks:** Shares which have a high potential for dramatic success or failure.

**Risk:** The possibility of losing money on an investment.

**Diversification:** A strategy that mixes a wide variety of investments within a portfolio for the purpose of minimising risk.

**Return:** The amount of money made on an investment relative to how much the initial investment was worth.

**Capital Gains Tax:** The tax collected by government when selling an asset that has increased in value.

# Learning outcomes:

## Lesson 5

### Solutions

#### Activity 1: Diversifying risk – industry

Analyse the above charts and fill in the below table:

**Example:**

	Top performing industry 2020/21	Percentage change
1	Telecommunications	28.46%
2	Financials	20.20%
3	Industrials	11.24%

	Top performing industry 2020/21	Percentage change
1	Energy	39.71%
2	Utilities	24.19%
3	Materials	4.79%

Using your knowledge and research skills, explain why there was a change in top performing industry from year to year?

**Example:** There could be many reasons why there could a change in the top performing industry for the year. It may be that the return to work after COVID has led to fuels being more in demand, leading to an increase in demand and therefore prices in the energy sector.

#### Activity 2:

**Experiment A:** Starting cash \$10,000 (invested on only one company)

**Example:**

Company	No. of shares	Day 1 price	Day 2 price	Day 3 price	Day 4 price	Day 5 price	No. of shares X Day 5 price = \$
ZZZ	238 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	\$39.17 x 238 = \$9,322.46

**Experiment B:** Starting cash \$10,000 (invested over five companies within the one industry)

**Example:**

Company	No. of shares	Day 1 price	Day 2 price	Day 3 price	Day 4 price	Day 5 price	No. of shares X Day 5 price = \$
ZZZ	47 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	\$1,840.99
TTT	2,002 shares	\$0.91	\$0.92	\$0.96	\$0.98	\$1.03	\$2,062.06
BBB	116 shares	\$17.18	\$17.76	\$18.01	\$18.32	\$18.28	\$2,120.48
CCC	166	\$11.81	\$11.78	\$11.87	\$12.01	\$12.04	\$1,998.64
DDD	16	\$124.54	\$123.77	\$122.14	\$122.16	\$118.99	\$1,903.84

# Learning outcomes:

## Lesson 5

### Solutions

**Experiment C:** Starting cash \$10,000 (invested over five companies from five different industries)

**Example:**

Company	No. of shares	Day 1 price	Day 2 price	Day 3 price	Day 4 price	Day 5 price	No. of shares X Day 5 price = \$
ZZZ (Energy)	47 shares	\$42.00	\$39.18	\$39.64	\$38.99	\$39.17	\$1,840.99
XYZ (Telecommunications)	88 shares	\$22.65	\$22.68	\$22.81	\$22.61	\$22.79	\$2,005.52
PQR (Financial)	873 shares	\$1.98	\$2.05	\$2.07	\$1.99	\$1.97	\$1,719.81
STU (Healthcare)	920 shares	\$2.15	\$2.18	\$2.54	\$3.11	\$3.13	\$2,879.60
VWX (Consumer Staples)	200 shares	\$9.77	\$9.65	\$9.67	\$9.44	\$9.72	\$1,944.00

**Identify** Identify the experiment that performed the best over the one week period.

**Example:** Experiment C was the most successful as there was a total of \$10,389.92 made for the week compared to Experiment A which produced \$9,322.46 and Experiment B \$9,926.01.

**Experiments A & B** may have increased in value at a greater rate than Experiment C over the period of a week. If an investor had a longer period of time to invest, possibly over years, explain how this result may differ and why.

**Example:** There are many factors impacting on share price. Short term capital growth is not an indicator of long-term capital growth. Short term a business may have had positive news to the market causing its share price to increase overnight, or an industry may be performing very well over one year but then poorly the next year. It is important that an investor regularly researches what is happening in the market and in the economy, has a clear strategy for their portfolio (eg. High risk or low risk, capital growth or dividend growth) and understands financial information such as financial reports while following what is happening in the market and to companies invested in via the media.

### Activity 3

#### Scenario examples

- 1 Alec should invest in XYZ Ltd, ABC Ltd, and DEF Ltd as these companies are relatively newer to the market but have a lot of potential as they have discovered new minerals/ have found a cure for diseases/have designed new technologies which have a lot of potential to make a lot of money. Their share price is also quite low, meaning Alec can purchase more shares.
- 2 Maya should invest in GHI Ltd, JKL Ltd, and MNO Ltd as these companies have been around for many decades and have not really fluctuated in price when looking at the graphs over a period of 10 years. Their return on invest is high though, paying dividends at over \$1 each for the last few years. They have had solid profit results over the last 5 years despite instability in the economy.
- 3 Serene should invest in PQR Ltd, STU Ltd, and VWX Ltd as these are stable companies who have shown steady growth when reviewing their graphs and looking at their financial reports. They are focussed on growth, retaining much of their profits and reinvesting them into the company to continue their expansion globally. They are industries that are known to be relatively stable and have shown continuous capital growth.

# Learning outcomes:

## Lesson 5

### Solutions

#### Activity 4: Personal goal setting

Example:

	Short-term financial goals	Long-term financial goals
Age 15 years	Eg. To buy a skateboard	Eg. To buy a new phone
Age 18 years	Eg. Buy a dress for my formal	Eg. Buy my first car
Age 21 years	Eg. Buy a new desk	Eg. Overseas holiday
Age 30 years	Eg. New furniture for home office	Eg. Deposit for my new home
Age 40 years	Eg. Pay school fees for children	Eg. Buy brand new mini-van
Age 50 years	Eg. Pay someone to repaint the house	Eg. Buy caravan to tour Australia
Age 67 years (retirement)	Eg. Pay for medical treatments	Eg. Enough money saved for retirement