Lesson 7

Chapter 3: How to invest

Subtopic: Monitoring portfolio performance

Grade level: 9–12

Duration: 60 minutes

Learning objectives

- Explain the importance of monitoring an investment portfolio
- Describe how monitoring supports long-term financial goals and risk management
- Define and identify common investment benchmarks
- Recognize benchmarks, such as the TSX, S&P 500, NASDAQ, and Dow Jones Industrial Average
- Explain how benchmarks are used to evaluate portfolio performance
- Calculate basic portfolio returns using a simplified example
- Use a formula to determine returns based on asset value changes and income (dividends/interest)
- Differentiate between price appreciation and income in investing
- Understand how investments grow through both value increases and earned income
- Describe the concept of volatility and how it is measured
- Define standard deviation and beta as tools for measuring risk and volatility
- Interpret risk-adjusted return using the Sharpe ratio
- Explain how the Sharpe ratio helps assess whether an investment's return justifies its risk
- Understand the purpose and process of portfolio rebalancing
- List the steps involved in rebalancing a portfolio and explain why it helps manage risk

Cross-Curricular Connections

MATH (GRADE 9: FINANCIAL LITERACY)

- Demonstrate an understanding of the value of money and the use of financial strategies.
- Identify and compare various ways to manage money (e.g., investing, saving, budgeting).
- Use numerical reasoning to interpret and compare investments, including returns and risks.
- Calculate percent change and use formulas (e.g., return on investment).

LITERACY (GRADE 9-12)

- Media literacy: analyze how media texts (like a financial video) convey information and influence understanding.
- Media literacy: evaluate how effectively information is presented to support comprehension.
- Reading: summarize and explain the main ideas in complex informational texts.
- Reading: extend understanding by making inferences and drawing conclusions.

CAREERS (GRADE 10)

- Use a variety of strategies to identify and manage potential challenges in career/life planning.
- Demonstrate an understanding of personal financial literacy as it applies to career and life planning.
- Describe how effective budgeting, saving, and investing contribute to financial well-being.
- Analyze and compare different types of investments and risk levels.

BUSINESS (GRADE 10)

- Identify different types of investments (e.g., mutual funds, stocks, ETFs).
- Explain the concept of risk and return in investing.
- Describe how investments can grow over time through interest and capital appreciation.
- Understand portfolio diversification, benchmarks, and financial planning.

ACCOUNTING (GRADES 11 AND 12)

- Demonstrate an understanding of the value and use of financial information in business decision making.
- Demonstrate an understanding of accounting procedures and principles related to financial statement analysis.
- Analyze and interpret financial data to make decisions.
- Explain the purpose of various financial ratios and performance indicators.
- Use financial data to assess the performance and financial condition of a business.

21st-century skills

COLLABORATION

- Collaborating effectively in teams to build and manage portfolios, share responsibilities, and reach consensus on investment strategies.

CRITICAL THINKING

- Analyzing investment options, comparing risk and return, and making data-informed decisions based on evolving market conditions.

COMMUNICATION

- Communicating financial reasoning clearly with peers, using appropriate vocabulary and participating in structured discussions.

Materials

- Fidelity Video: Monitoring the performance of your portfolio
- Projector
- Fidelity PowerPoint
- Minds On Case Study (printed, one per student)
- Video Handout (printed, one per student)
- Portfolio Tracker Sheets (printed, one per group)
- Asset Cards (printed, one set per group)
- Market Year Summary Sheets (printed, one set per group)

MINDS ON

Activity: Case study

Duration: 10 minutes

Materials: Case study sheets (printed or digital, one per group)

INSTRUCTIONS:

1. Review the case study yourself and review the answer key to anticipate key missteps students might identify.
2. Decide whether students will work individually, in pairs or in small groups (recommended for richer discussion).
3. Set the scene: "Before we get into today's lesson on monitoring your investments, let's take a look at a short story about someone who did all the right things at first... but still didn't reach their financial goals. Your job is to figure out: what went wrong?"
4. Distribute the Case Study (3 minutes) and have students read it individually first. Encourage students to underline or highlight parts they think are important.
5. Group students together to discuss at least three reasons for failure.
6. Ask a few groups to share one idea they came up with. Use the slideshow for the answer key following the discussion.

MAIN LESSON AND ACTIVITY

Activity: Build and balance your portfolio

Video duration: 7 minutes

Slideshow duration: 10 minutes

Activity duration: 23 minutes

Total duration: 40 minutes

MATERIALS:

- Portfolio tracker sheets (printable or digital, one per group)
- Asset cards (cut out individually or printed on single sheets, or digital; one set per group)
- Optional: Market Year Cards (printed, one per group for easy reading)
- Calculators (minimum one per group)
- Fidelity slideshow

1. Video and handout: distribute the handout to each student for them to fill in while they watch the Fidelity video. You may pause the video where necessary to allow students to fill in the blanks.
2. Slideshow lesson: share the slideshow which goes over key concepts. Have students take up the handout before presenting the slide with its respective information.
3. Portfolio simulation instructions: use slideshow as a guide.
    1. Arrange students into small groups of three or four. Provide each group with $5,000 starting value and a set of 11 asset cards (either cut out individually or printed on single sheets).
    2. Each group will build a mock investment portfolio and monitor it over three simulated years, making decisions about rebalancing to grow their portfolio while managing risk. Have each group select three assets to create a diversified portfolio with their starting $5,000. Encourage them to consider risk balance and diversification. Students will record their initial allocations on the portfolio tracker sheet (5 minutes).
    3. Present Year 1 Market Year Card to all groups using the slideshow, and/or distribute the Year 1 printed sheet to each group. Groups calculate the new value of each asset and their total portfolio after applying the returns, record results on their tracker sheet. After calculations, groups decide whether to rebalance their portfolio to the original allocation, adjust their asset mix, or leave it as is. Repeat for Years 2 and 3 (10-12 minutes).

TEACHER TIPS:

A well-balanced portfolio in this simulation would likely include:

- **Diversification across asset types:** includes a mix of equities, bonds, and perhaps one higher-risk asset. For example:
    - 30% Government Bonds (low risk)
    - 40% Balanced Mutual Fund or S&P 500 ETF (medium risk)
    - 20% Tech or International Equity (higher potential return)
    - 10% High-Yield Savings or REIT for stability
- **Alignment with long-term strategy:** The team resists reacting emotionally to single-year dips (e.g., not overreacting to a tech loss in Year 2), and rebalances based on goals, not panic.
- **Rebalancing when appropriate:** The team monitors shifts and rebalances to maintain their original allocation or adjust wisely based on market outlook.
- **Moderate risk with consistent returns:** These portfolios may not "win big" but tend to perform steadily across the three years, avoiding major losses.

Less successful portfolios usually include:

- **Over-concentration in high-risk assets:** For example, 50% or more in Crypto, Tech, or Emerging Markets. This may look good in Year 3, but likely crashes in Year 2.
- **No rebalancing at all:** Students who "set it and forget it" might experience huge swings, especially if certain assets drop drastically.
- **Too conservative:** A portfolio made up only of bonds or savings accounts may feel "safe" but it will struggle to grow meaningfully over time.
- **Ignoring diversification:** All equity or all fixed income makes the portfolio vulnerable to sector-specific swings.

CONSOLIDATION

Activity: Wrap-up and discussion

Duration: 10+ minutes

MATERIALS:

- Portfolio tracker sheet (continued)
- Fidelity slideshow

Instructions: Have students remain in their groups using the Reflection section of the portfolio tracker sheet. Time permitting (>60 minutes), ask for groups to share their answers. Alternatively, these questions can be asked to the whole group for a discussion (use the slideshow as a guide).

POSSIBLE STUDENT RESPONSES BELOW:

1. **How did your portfolio perform over the three simulated years? Which assets contributed most to your gains or losses?**
   - "Our portfolio grew by 18% overall. The S&P 500 ETF gave us steady returns each year, which helped us build value steadily."
   - "We lost money in Year 2 because we were heavily invested in Tech and Crypto, which both had big negative returns that year."
   - "The Government Bond didn't make us much money, but it helped cushion the losses from our risky investments."
   - "Our Crypto fund doubled in Year 1, which gave us a big early boost — but it dropped hard in Year 2, so we gave most of it back."
2. **How often did you rebalance your portfolio? What factors influenced your decision to rebalance or not?**
   - "We rebalanced after every year to return to a 50/50 mix of bonds and equities to stay close to our benchmark."
   - "We only rebalanced once — after Year 2 — because our portfolio got too risky after a bad year in Tech. We wanted to play it safer in Year 3."
   - "We didn't rebalance at all because we didn't want to pay the rebalancing fee, and we hoped our risky assets would bounce back."
   - "We decided to rebalance when our Tech Stock losses were too big. We shifted money into the Balanced Mutual Fund for more stability."
3. **How did the different market conditions each year impact your portfolio? Were there any surprises?**
   - "Year 1 was great for Crypto and Tech, which helped our portfolio grow quickly. But we were surprised how fast it dropped in Year 2."
   - "We expected the S&P 500 ETF to do better in Year 3, but it only returned 4%, which was lower than we hoped."
   - "The bond returns were super steady, which was a good reminder that low-risk doesn't mean no return."
   - "We were surprised how much rebalancing helped in the long run — we would have lost more if we had stayed too aggressive."

MONEY GAINS MAKING IT COUNT

Citations

Ontario Ministry of Education. (2013). The Ontario curriculum, grade 10: Career studies (GLC2O). Queen's Printer for Ontario. https://www.ontario.ca/document/ontario-curriculum-grade-10-career-studies-glc2o-2013

Ontario Ministry of Education. (2006). The Ontario curriculum, grades 11 and 12: Business studies. Queen's Printer for Ontario. https://www.dcp.edu.gov.on.ca/en/curriculum/secondary-business-studies/courses/bif3c

Ontario Ministry of Education. (2007). The Ontario curriculum, grades 9 and 10: English. Queen's Printer for Ontario. https://www.dcp.edu.gov.on.ca/en/curriculum/secondary-english/courses/eng1d

Ontario Ministry of Education. (2007). The Ontario curriculum, grades 11 and 12: English. Queen's Printer for Ontario. https://www.dcp.edu.gov.on.ca/en/curriculum/secondary-english/courses/eng3u

Ontario Ministry of Education. (2021). The Ontario curriculum, grade 9: Mathematics. Queen's Printer for Ontario. https://www.dcp.edu.gov.on.ca/en/curriculum/secondary-mathematics/courses/mth1w

Ontario Ministry of Education. (2024). Business studies curriculum. The Ontario Curriculum. https://www.dcp.edu.gov.on.ca/en/curriculum/business-studies

Fidelity INVESTMENTS

FIC-2891658 11/25 3469420-v2025123