Module 7 Exercise: Financial ratios for personal finance

Overview

In this module, you learned how governments and nonprofit organizations use financial ratios to assess financial conditions. These ratios help measure liquidity, solvency, debt levels, operating performance, and long-term sustainability. You also learned how ratios are calculated from financial statements and how they are interpreted in financial condition analysis.

Similarly, individuals can also evaluate their own financial condition using a set of commonly recommended personal finance ratios. Many financial education sources provide guidance on the types of indicators people should monitor. Examples include:

1. US News Money: "8 Personal Finance Ratios You Should Be Tracking"

   Emergency fund ratio; Basic housing ratio; Broad housing ratio; Savings rate; Debt to total assets ratio; Net worth ratio; Return on investments; Investment assets to gross pay ratio

2. SoFi: "Guide to Understanding Different Personal Finance Ratios"

   Emergency fund ratio; Liquid Net Worth Ratio; Personal Cash Flow Ratio; Housing-to-Income Ratio; Debt-to-Income Ratio; Net Worth Ratio; Savings Ratio; 50/30/20 Budget Ratio

3. DBS: "7 financial ratios to gauge your financial health"

   Basic liquidity ratio; Liquid assets to net worth ratio; Savings ratio; Debt to assets ratio; Total debt servicing ratio (TDSR); Net invested assets to net worth ratio; Solvency ratio

Analysis

In Module 1, you built a monthly budget of your income and spending in `Personal financial management exercise.xlsx`. In this assignment, you will use those numbers to calculate several personal financial indicators for yourself. Some ratios also need a balance the budget does not show, such as your savings or the total you owe on loans. Use your best estimate for those. Your goal is to better understand your own financial condition and reflect on how these indicators compare to generally recommended benchmarks.

Privacy Note: You do not need to submit your dollar amounts. Report the ratios and how they compare to the benchmarks, and keep the detailed numbers private.

What to submit

Submit a brief self-reflection memo that addresses the following points.

1. Select five personal finance indicators (example: emergency fund ratio, savings ratio, debt-to-income ratio, etc.) that you would like to calculate. Explain what each indicator measures, why it is important for personal financial management, and how it should typically be interpreted.
2. Calculate the indicators using your own numbers from the Module 1 exercise. Discuss how your results compare to the commonly recommended benchmarks or ranges.
3. Consult a generative AI tool (ChatGPT, Claude, or another) to request an assessment of your financial ratios:
    - Share the ratios, not your dollar amounts. Remove or round any figures you would rather not share before you paste anything into the tool.
    - Ask the tool for suggestions or strategies that might help you improve these indicators.
4. Reflect on the suggestions you received. Discuss whether the advice seems realistic, appropriate, and relevant to your circumstances. If any suggestions do not make sense or do not fit your personal situation, or if you choose not to use GenAI, propose your own strategies for improving your financial condition and strengthening your financial ratios.

AI tools are permitted for this exercise, and Question 3 asks you to use one. The calculations and the reflection in Question 4 must be your own.

AI-use disclosure: At the end of your memo, note which tool you used, if any. If you used one, describe one suggestion it gave that you decided not to follow, and why.