

C. DETAILED OUTLINE

I. Financial Assumptions & Background

- Outline the fundamental assumptions for your financial analysis, such as current age and retirement timeline, housing and marital status, income source, and any other economic or financial assumptions such as income growth or inflation rate.

Examples:

This retirement strategy is built on key assumptions to shape a viable plan.

Starting at 22 years old, it envisions retirement at 60. Early on, I live in a one-bedroom apartment, mortgage-free. The strategy foresees a marital shift at 30, followed by starting a family with one child at 31.

Employment is the main income source, complemented by earnings from a savings and investment account, including interest and dividends.

Economic parameters include a rising salary from 20 to 100 million VND by age 60, a 3.4% yearly inflation rate, and a 4.8% annual interest rate, reflecting moderate inflation and a steady job market.

II. Living Expenses Analysis

- Detail your current living expenses by break down expenses into categories like housing, food, transportation, and healthcare.
- Overview of how different life stages or any other economic factors affect your expenses over the years (which one is the highest/lowest, which one increases/decreases over the timeframe).
- Details of changes in the expenses in different life stages.

Examples: Neoclassical Economics

- Formulating a comprehensive budget plan is crucial for predicting monthly expenses and ensuring a secure retirement. My analysis covers anticipated living costs up to the age of 85, spanning 14 categories as shown in Table 1.

Annual Expense (per annum)
Saving Expenses
Home Expenses
Daily Living
Children
Transportation
Health
Insurance
Education
Charity/Gifts
Obligations
Entertainment
Pets
Subscriptions
Vacation

Table 1: Categories of Expenses

- Life stages and significant events will modify these expenses. Generally, costs will escalate over time, particularly post-marriage and childbirth at 30 influenced by inflation. Yet, they will reduce once my child finishes education and post-retirement. Age will shift expenses, increasing healthcare and leisure while decreasing transportation and work-related costs.
- Pre-marriage, essentials like daily living, savings, and insurance dominate my expenses. Post-family formation, child-related and other financial commitments (e.g., mortgages, vehicles) surge to the forefront. In the decade leading to retirement, I'll focus on savings while managing increasing expenses. During retirement, spending will primarily focus on vacations and household expenses.

III. Retirement Income Needs (50-100 words)

- Estimate the annual income required during retirement, using the formula
Replacement income required = Total monthly expenses - Current Income

Examples:

Following retirement, my total income notably drops despite a stable inflow from interest. This is mainly because the pensions I receive amount to only 45% of my previous salaries. To calculate replacement income, the formula used is: Replacement income required = Total monthly expenses - Current Income. Accordingly, the average monthly replacement income I need amounts to 26,990,709 VND.

IV. Accumulated Retirement Funds

- Calculate the total amount you expect to accumulate by retirement, using the following formula

$$PV = A + A [1 -(1+r)^{-(n-1)}r]$$

Where

PV: The present value of the annuity

A: The cashflow received/paid under the annuity

n: the number of cash flows that form the annuity

r: the compound interest rate per period

Examples

or my retirement at 60, I've worked out the total funds needed by using the Present Value of the Annuity Due formula. This formula helps me figure out the amount to accumulate by 60.

The formula is:

$$PV = A + A [1 -(1+r)^{-(n-1)}r]$$

where PV is the present value of the annuity, A is the annuity cash flow, n is the number of cash flows, and r is the periodic compound interest rate.

Using this, the necessary fund by my 60th birthday is calculated to be 4,874,116,833 VND.

V. Investment Strategy & Asset Allocation

- After identifying your risk type and determine the weight of each asset based on the provided questionnaire, you need to research for return rate for each asset to calculate the WARR. Below are suggested source for you to select your return rate

- + Large-cap:
 - <https://vn.tradingview.com/markets/stocks-vietnam/market-movers-large-cap/>
- + Small-cap:
 - <https://vn.tradingview.com/markets/stocks-vietnam/market-movers-small-cap/>
- + International Common Stock:
 - <https://curvo.eu/backtest/en/market-index/msci-world?currency=eur>
- + Corporate Bonds:
 - https://ycharts.com/indicators/moodys_seasoned_aaa_corporate_bond_yield#:~:text=Moody's%20Seasoned%20Aaa%20Corporate%20Bond%20Yield%20is%20at%205.06%25%2C%20compared,long%20term%20average%20of%206.47%25.
- + Government Bond & Treasury Bills:
 - <https://www.worldgovernmentbonds.com/country/vietnam/>
- + Cash:
 - <https://www.publictrustee.sa.gov.au/other-services/cash-rates-and-investment-returns>
- Calculate the WARR by following formula:
 - $$\text{WARR} = w_1 \cdot R_1 + w_2 \cdot R_2 + w_3 \cdot R_3 + \dots + w_n \cdot R_n$$
 - + w: the weight of the asset
 - + R: the return of the asset.
- Calculate how much you must invest at the end of each year from now in order to reach the amount of money you must accumulate to retire using the following formula:

As $PV(\text{retirement age}) = FV(\text{current age})$

$$FV_{22} = A[(1+r)^n - 1r]$$

- r: the yearly WARR
- A: the amount of money needed to accumulate
- n: the number of cash flows = retirement age - current age

Example

My investment approach is aligned with the risk profile identified through the Charles Schwab Risk Profile Questionnaire, which classifies me as Moderately Aggressive. The composition of the portfolio suited for this risk category is shown in the corresponding figure.

To calculate the Weighted Average Rate of Return (WARR), I'll use the asset allocation and returns as outlined in the table. The WARR formula is:

$$\text{WARR} = w_1 * R_1 + w_2 * R_2 + w_3 * R_3 + \dots + w_n * R_n$$

+ w: the weight of the asset

+ R: the return of the asset.

Thus,

$$\begin{aligned} \text{WARR} &= 45\% \times 2.650\% + 15\% \times 3.28\% + 20\% \times 9.46\% + 15\% \times 4.99\% + 2.41\% + 0.65\% \times 3 + \\ &5\% \times 1.68\% \\ &= 4.06\% \end{aligned}$$

Starting from age 22 until 60, I'll save and invest with this WARR in mind. The future value at 22 years old (FV₂₂) will become the present value at 60 (PV₆₀). The future value formula is:

$$\text{FV}_{22} = A \left[\frac{(1+r)^n - 1}{r} \right]$$

- r: the yearly WARR = 4.06
- A: the amount of money needed to accumulate
- n: the number of cash flows: (60-22) = 38

$$\Rightarrow 4,874,116,833 = A \times \left[\frac{(1-4.06\%)^{38} - 1}{4.06\%} \right]$$

$$\Rightarrow A = \mathbf{249,547,766.188}$$

Therefore, I need to save and invest 249,547,766.188 VND yearly to achieve the required retirement fund.

VI. Risk Tolerance & Investment Behavior

- Deeply analyze your risk tolerance, considering factors like age, gender, education and finance knowledge, family planning.
- Discuss how your risk tolerance will shape your investment decisions and behavior, including reactions to market volatility.

Example

- Age:

- + Younger investors typically have a longer time horizon, allowing for higher risk tolerance and more aggressive investment strategies.
- + Older investors might prefer lower-risk, income-generating assets due to a shorter investment horizon.
- Gender:
 - + Studies indicate differences in risk tolerance between genders, with men often showing higher risk tolerance.
 - + However, individual preferences can vary significantly regardless of gender.
- Education and Financial Knowledge:
 - + Higher financial literacy often correlates with a willingness to engage in more diverse and potentially riskier investments.
 - + Informed investors are more likely to understand and accept the risks associated with various investment types.
- Family Planning:
 - + Anticipating future family expenses can lead to a more conservative investment approach.
 - + Investors with dependents often prioritize stability and long-term security over higher returns.

VII. Economic & Global Event Impact (400-450 words):

- Examine how different economic and global events (like recessions, geopolitical tensions, policy changes and stability and market booms) might impact your investments and retirement plans.

Example

- Recessions:
 - + May lead to reduced returns or losses in equity investments.
 - + Could necessitate shifting towards more conservative assets like bonds or high-grade securities.
- Geopolitical Tensions:

- + Can cause market volatility, affecting stock prices and foreign investments.
- + Might prompt reallocating investments to safer, domestic or less volatile markets.
- Policy Changes (Tax, Investment, Retirement Policies):
 - + New tax laws could affect the net returns from various investment vehicles.
 - + Changes in retirement policies might require adjustments in retirement savings plans.
- Economic Stability:
 - + Stable economies tend to support steady growth in investments, encouraging long-term equity investment.
 - + Economic instability may necessitate a more diversified portfolio to mitigate risks.
- Market Booms:
 - + Could lead to significant gains in equity and real estate investments.
 - + Might encourage taking some profits and rebalancing to avoid overexposure to a single asset class.

D. TIPS & TRICKS

1. Writing Tips:

- Use clear, concise language that is easy for non-finance readers to understand
- Define any technical terms/acronyms when first introduced
- Use an engaging writing style - avoid excessive passive voice
- Employ headings, bullet points, and other formatting techniques to enhance readability
- Link analysis back to key course concepts/theories when applicable

2. Data Visualization Tips:

- Use charts and graphs to summarize numerical data and illustrate trends
- Choose easy-to-read plot styles like line graphs or bar charts over pie charts or radar plots
- Make sure charts are clearly titled and axes are properly labeled

- Use colors, legible fonts, appropriate data highlighting techniques
- Keep visuals simple and clutter-free for maximum impact

3. Research Tips:

- Utilize a variety of credible sources - company reports, financial websites, industry publications
- Look beyond the company website to get an objective view of performance
- Reference source material using proper citations and attribution
- Perform thorough fact-checking and due diligence on any data used

4. Analysis Tips:

- Go beyond surface-level description - provide deeper interpretation and evaluation
- Highlight key takeaways, insights, and implications from your analyses
- Tie observations back to financial theory and best practices
- Consider alternative perspectives and acknowledge limitations

5. Overall Tips:

- Follow all instructions closely and meet page requirements
- Proofread carefully - check for errors, grammar issues, typos, inconsistencies
- Use professional formatting and design elements to enhance engagement
- Be sure to submit by the due date and time to avoid late penalties!

E. FOOD FOR HUNGRY THOUGHTS