

OPTIMIZING PORTFOLIO PERFORMANCE DURING ECONOMIC DOWNTURNS OR RECESSIONS



Timeline



CheckPoint 1

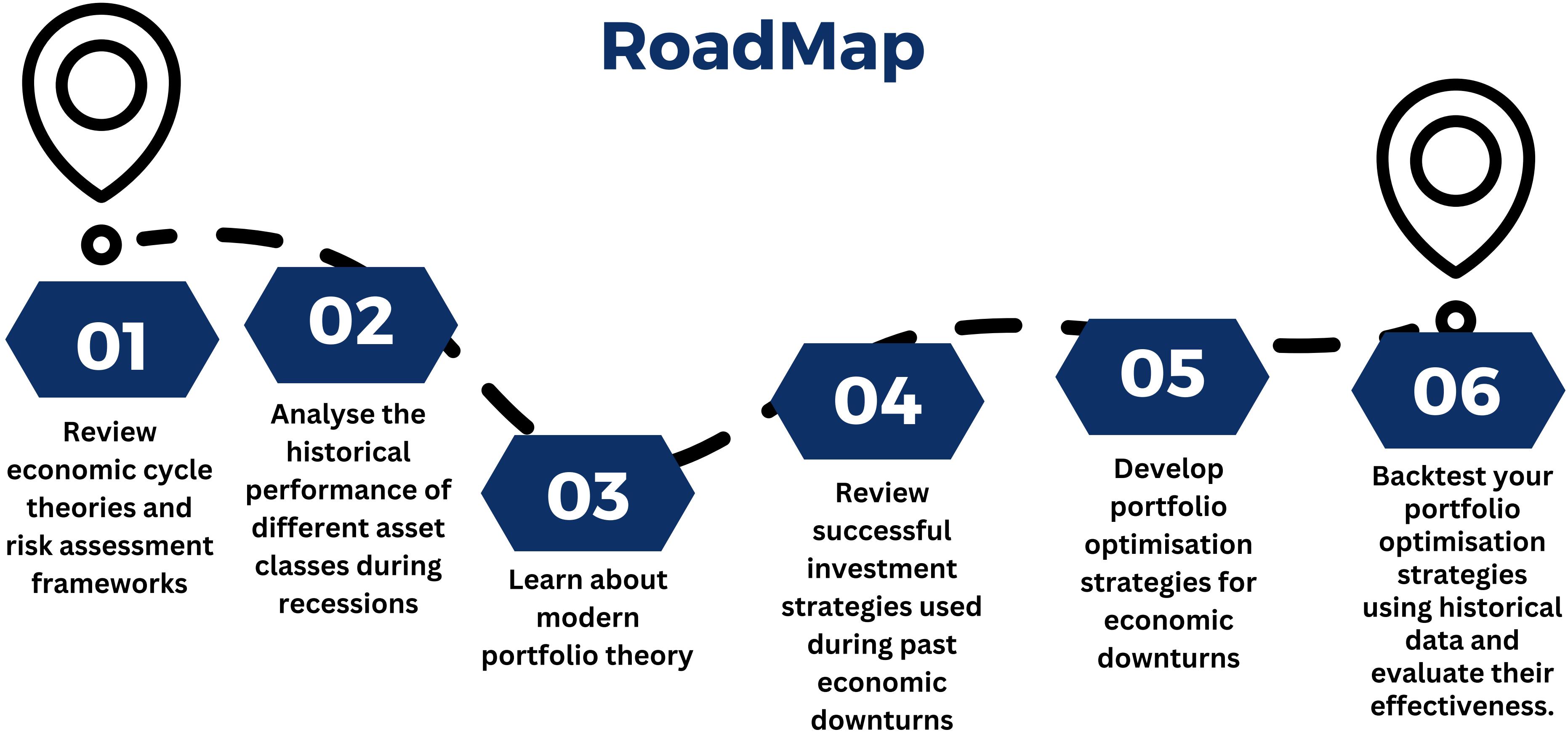
25th June 2024



Final Report Submission
2nd week of August 2024



RoadMap



01

REVIEW ECONOMIC CYCLE THEORIES AND RISK ASSESSMENT FRAMEWORKS



Checkpoint 1

Economic Cycles:

Learn about economic recessions, their causes, and different phases (expansion, peak, contraction, trough).

<https://www.investopedia.com/terms/e/economic-cycle.asp#toc-stages-of-the-economic-cycle>

<https://www.investopedia.com/articles/08/recession.asp#toc-investing-for-recovery>

Risk Tolerance & Asset Allocation:

Understand risk tolerance assessment and how it affects asset allocation in your portfolio.

<https://groww.in/p/risk-tolerance>



02

**ANALYSE THE
HISTORICAL
PERFORMANCE
OF DIFFERENT
ASSET CLASSES
DURING
RECESSIONS**



Checkpoint 2

Asset Classes:

Grasp the concept of asset classes and their historical performance during recessions. .

<https://www.forbes.com/sites/qai/2023/03/28/recession-proof-investments-to-buff-your-portfolio/>

Defensive Assets: Research asset classes that tend to perform well during downturns.

<https://www.trendscoutuk.com/blog/11-best-investments-to-recession-proof-your-investment-portfolio/>

Capital Asset Pricing Model (CAPM):

Learn the CAPM framework for asset pricing and understand how it explains the relationship between risk and expected return.

<https://www.slideshare.net/slideshow/what-is-capm-and-why-is-it-important-understanding-capmpdf/263665291>



03

MODERN PORTFOLIO THEORY AND MEAN-VARIANCE OPTIMIZATION



Checkpoint 3

Modern Portfolio Theory (MPT): Learn the basics of MPT, portfolio diversification, and how it helps manage risk.

<https://corporatefinanceinstitute.com/resources/career-map/sell-side/capital-markets/modern-portfolio-theory-mpt/>

Mean-Variance Optimization: Explore the mathematical methods used for portfolio optimization based on minimizing risk (variance) for a given expected return (mean). Understand the Sharpe ratio as well.

<https://analystprep.com/study-notes/actuarial-exams/soa/ifm-investment-and-financial-markets/mean-variance-portfolio-theory/>



04

REVIEW SUCCESSFUL INVESTMENT STRATEGIES USED DURING PAST ECONOMIC DOWNTURNS



Checkpoint 4

Dollar-Cost Averaging (DCA): Learn this investment strategy for buying into investments at regular intervals, regardless of price.

<https://www.investopedia.com/terms/d/dollarcostaveraging.asp>

Dividend Investing: Study dividend-paying stocks and their potential as a source of income during market downturns.

All Weather Portfolio: Study Ray Dalio's All Weather Portfolio and how to construct one. Study other portfolios as well that have performed well in recessions.

<https://portfoliocharts.com/2019/08/20/the-top-4-portfolios-to-recession-proof-your-investments/>



Read case studies of investing during recessions such as Covid-19 and the Great Recession.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7995012/>

<https://www.investopedia.com/financial-edge/0411/5-investors-that-are-both-rich-and-smart.aspx>



05

DEVELOP PORTFOLIO OPTIMISATION STRATEGIES FOR ECONOMIC DOWNTURNS



Checkpoint 5

Develop portfolio optimisation strategies:

Diversify across assets and sectors, prioritize defensive stocks and high-quality assets, use options for hedging, maintain cash or short-term investments for liquidity, and focus on income generation.

<https://www.jaroeducation.com/blog/portfolio-management-insights-and-strategies/>

Dynamic Portfolio Rebalancing Strategies:

Analyze theoretical models for rebalancing portfolios during changing market conditions

<https://www.commonwealth.com/insights/3-rebalancing-strategies-for-reducing-risk>



06

**BACKTEST YOUR
PORTFOLIO
OPTIMISATION
STRATEGIES
USING
HISTORICAL
DATA AND
EVALUATE THEIR
EFFECTIVENESS.**



Checkpoint 6

Backtest your portfolio optimisation strategies:

Key steps include downloading historical financial data, defining optimization algorithms, simulating portfolio returns based on historical data, and finally, evaluating performance metrics such as Sharpe ratio, cumulative returns, and drawdowns.

<https://blog.quantinsti.com/backtesting/>

<https://tradewithpython.com/a-rookie-guide-to-getting-started-with-backtesting-in-python>



THANK YOU

