

CHAPTER OVERVIEW

7: Risk Analysis

Learning Objectives

After completing this chapter, students should be able to

- Define the concept of risk and explain how both the probability and magnitude of outcomes impact the degree of risk.
- Identify sources of risk and differentiate between general economic risk factors and firm specific risk factors.
- Explain the concepts of probability distributions, expected return and standard deviation for a single security.
- Calculate and interpret the expected return and standard deviation of a single security given a probability distribution.
- Explain the concept of correlation.
- Explain the concept of expected return and standard deviation for portfolios.
- Calculate and interpret the expected return and standard deviation for two-stock portfolios.
- Explain/diagram the concept and implications of portfolio diversification.
- Differentiate between firm-specific (diversifiable) risk, market (non-diversifiable) risk, and total risk.
- Identify when each risk type of risk measurement is appropriate.
- Calculate and interpret beta.
- Explain, calculate, and interpret the Capital Asset Pricing Model and Security Market Line.
- Identify potential concerns regarding the viability of the Capital Asset Pricing Model and the Security Market Line

[7.1: What is Risk?](#)

[7.2: Expected Return and Standard Deviation of a Single Security](#)

[7.3: Interpreting Expected Return and Standard Deviation](#)

[7.4: Expected Return and Standard Deviation of a Portfolio](#)

[7.5: Diversifiable and Non-Diversifiable Risk](#)

[7.6: Beta](#)

[7.7: How do we Interpret Beta?](#)

[7.8: Standard Deviation vs. Beta](#)

[7.9: Beta and Required Return- Capital Asset Pricing Model \(CAPM\)](#)

[7.10: Important Implications of the CAPM/SML](#)

[7.11: Empirical Findings of the SML](#)

[7.12: Key Takeaways](#)

[7.13: Exercises](#)

[7.14: Problems](#)

[7.15: References and Attributions](#)

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