

Finance 34600 – Investment Theory

Outline for Lecture 4 Portfolio Performance Evaluation

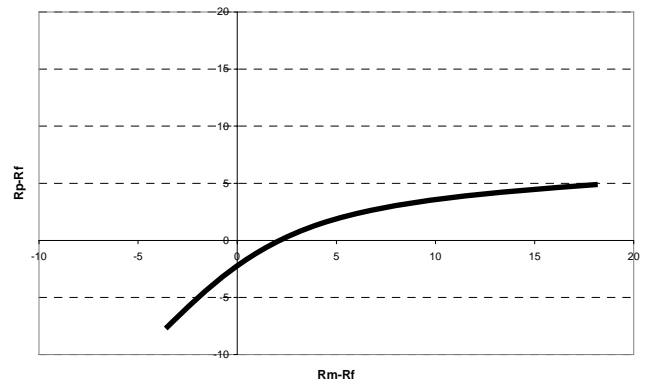
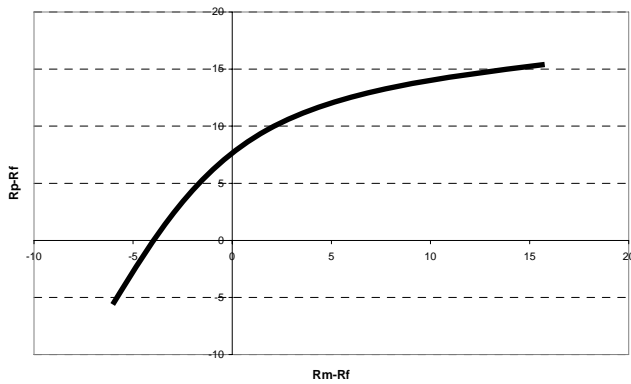
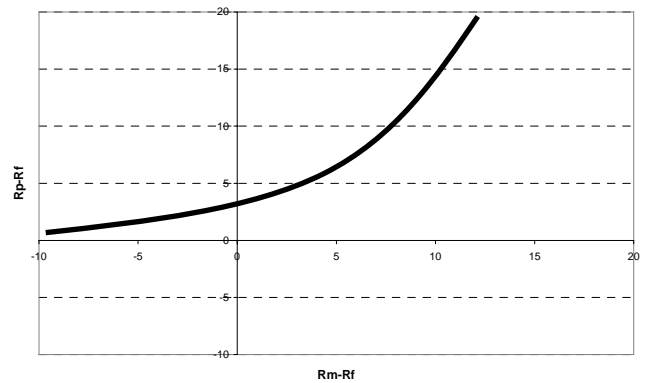
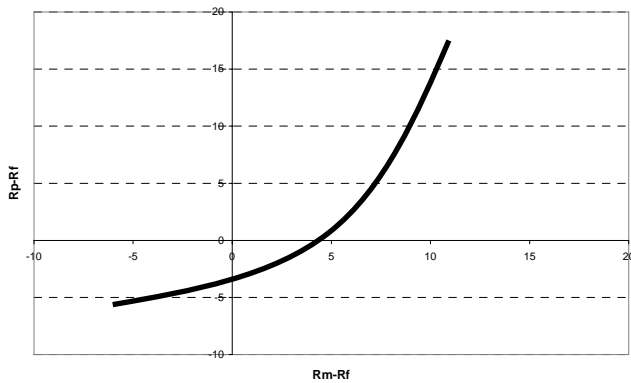
The purpose of lecture 4 is to extend what we have learned about portfolio theory and asset pricing to the framework of portfolio performance. Based on the concepts developed in lectures 2 and 3, we will define several measures of risk-adjusted portfolio performance. These measures include the Sharpe measure (or Reward-to-Variability ratio), the Jensen measure (or alpha), and the Treynor measure. We will also describe a new measure of performance called the M^2 measure and two tests for market timing ability.

Suggested Problems:

Ch. 5: 14(b) – Note that dollar-weighted average returns are discussed on page 119 in chapter 5.

Ch. 18: 5, 9, 10, and concept check 1.

5. Evaluate the timing and selection abilities of the four managers whose performances are plotted in the following four scatter diagrams.



9. During a particular year, the T-bill rate was 6%, the market return was 14%, and a portfolio manager with beta of 0.5 realized a return of 10%. Evaluate the manager's performance based on alpha.
10. The chairman of your firm provides you with the following data concerning the performance of two of the fund's equity managers (manager A and manager B) during the past year. Although the portfolios consist primarily of common stocks, cash reserves are included in the calculation of both portfolio betas and performance. By way of perspective, selected data for the financial markets are included in the table.

	Total Return	Beta
Manager A	24.0%	1.0
Manager B	30.0	1.5
S&P 500	21.0	
Lehman Bond Index	31.0	
Treasury Bills	12.0	

(a) Calculate and compare the risk-adjusted performance of the two managers relative to each other and to the S&P 500.

(b) Explain two reasons the conclusions drawn from this calculation may be misleading.