CASE STUDY ON SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

MINICASE 1

Mr. Nitin Gupta had invested Rs.8 million each in Ashok Exports and Biswas Industries and Rs. 4 million in Cinderella Fashions, only a week before his untimely demise. As per his will this portfolio of stocks were to be inherited by his wife alone. As the partition among the family members had to wait for one year as per the terms of the will, the portfolio of shares had to be maintained as they were for the time being. The will had stipulated that the job of administering the estate for the benefit of the beneficiaries and partitioning it in due course was to be done by the reputed firm of Chartered Accountants, Talwar Brothers. Meanwhile the widow of the deceased was very eager to know certain details of the securities and had asked the senior partner of Talwar Brothers to brief her in this regard. For this purpose the senior partner has asked you to prepare a detailed note to him with calculations using CAPM, to answer the following possible doubts.

1. What is the expected return and risk (standard deviation) of the portfolio?
2. What is the scope for appreciation in market price of the three stocks-are they overvalued or undervalued?

You find that out the three stocks, your firm has already been tracking two viz. Ashok Exports (A) and Biswas Industries (B)-their betas being 1.7 and 0.8 respectively. Further, you have obtained the following historical data on the returns of Cinderella Fashions(C):

Period	Market return (%) Cinderella Fashions	Return on (%)
1	10	14
2	5	8
3	(2)	(6)
4	(1)	4
5	5	10
6	8	11
7	10	15

On the future returns of the three stocks, you are able to obtain the following forecast from a reputed firm of portfolio managers.

State of the Economy	Probability	Returns (in percentage)				
		Treasury Bills	Ashok Exports	Biswas Industries	Cinderella Fashions	Sensex
Recession	0.3	7	5	15	(10)	(2)
Normal	0.4	7	18	8	16	17
Boom	0.3	7	30	12	24	26

Required: Prepare your detailed note to the senior partner.

MINICASE 2

Mr. Pawan Garg, a wealthy businessman, has approached you for professional advice on investment. He has a surplus of Rs. 20 lakhs which he wishes to invest in share market. Being risk averse by nature and a first timer to secondary market, he makes it very clear that the risk should be minimum. Having done some research in this field, you recommend to him a portfolio of two shares - stocks of an oil exploration company ONGD and an oil marketing company BPDL. You tell him that both are reputed, government controlled companies.

You have the following market data at your disposal.

Period	Market return (%)	Return (%) on	
		ONGD	BPDL
1	10	18	8
2	12	16	10
3	8	12	14
4	-6	(12)	20
5	-4	-7	16
6	10	16	8

The current market price of a share of ONGD is Rs. 1200 and that of BPDL is Rs. 423.

On the future returns of the two stocks and the market, you are able to obtain the following forecast from a reputed firm of portfolio managers.

State of the Economy	Probability	Returns (in percentage) on			
		Treasury Bills	ONGD	BPDL	Market Index
Recession	0.3	7	9	15	(2)
Normal	0.4	7	18	10	14
Boom	0.3	7	25	6	20

The firm also informs you that they had very recently made a study of the ONGD stock and can advise that its beta is 1.65.

Mr. Garg requests you to answer the following questions:

a. What is the beta for BPDL stock?

b. What is the covariance of the returns on ONGD and BPDL? Use the forecasted returns to calculate this.

c. If the forecasted returns on ONGD and BPDL are perfectly negatively correlated ($\rho = -1$), what will be expected return from a zero risk portfolio?

d. What will be the risk and return of a portfolio consisting of ONGD and BPDL stocks in equal proportions?

e. What is the scope for appreciation for the two stocks?