MIT SLOAN SCHOOL OF MANAGEMENT

J. Wang E52-435 Finance Theory 15.415 Spring 1999

Solution to Assignment 7: CAPM

Due: April 22 (Thursday)

1. The market betas (relative to the market portfolio) that result from the regression are shown below:

Asset	β_E
IBM	.9682
TI	1.9369
APPLE	1.7961
HP	1.8865
DEC	1.6135
Average	1.6403

2. The divisional cost of capital, assuming the division's beta is equal to the average beta of the peer companies is given by

$$\bar{r}_{\rm division} = r_f + \beta_{\rm avg}(\bar{r}_m - r_f)$$

with $\beta_{\rm avg} = 1.6403$
yields $\bar{r}_{\rm division} = 0.04 + (1.6403)(0.07) = 0.1548$