
CORPORATE FINANCE

SUPPLEMENTARY EXAM

College of Business and Economics (CBE)

SCHOOL OF ECONOMICS (SOE)

AUCKLAND PARK CAMPUS

AUGUST 2019

2H00

TOTAL MARKS: 60

Assessor: Q . M. Mabe

Instructions:

- Answer all the questions
 - Write neatly and legibly
 - Use pen, not pencil
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Question 1

1. (4 Pts) What is the required return and what is the expected return ?
2. (3 Pts). What is the common approach used to value any assets, including bonds and common stocks ?
3. (4 Pts). What is interest risk? How is interest risk related to the maturity of a bond and to the coupon rate of a bond ?

Total Points : 11

Question 2

1. (5 Pts). Show that $P_0 = \sum_{t=1}^{\infty} \frac{D_1(1+g)^{t-1}}{(1+r)^t} = \frac{D_1}{r-g}$
2. Consider the cash flows given below for mutually exclusive projects, A and B.

Year	0	1	2
Project A	-R 150	R 110	R 100
Project B	-R 100	R 120	R 130

- (a) (4 Pts). If the cost of capital is 10% , what is the NPV of the investment ?
- (b) (2 Pts). What is the IRR of the investment ?
- (c) (2 Pt). Which investment should you accept ?
3. (8 Pts). Radisson Blue recently take a major expansion of further opening a chain of hotels in Durban. This project is expected to provide growth in earnings of 400% within the coming year , and 75% growth in each of the subsequent three years. After that that time, normal growth of 3% per year forever is expected. The cash dividend was 10 cents per share this last year and is expected to be that amount for each of the next five years. In the sixth year it is expected that the payout ratio will be 80% of the earnings per share, and the payout ratio is expected to remain at that level forever. If the required return of Radisson Blue common stock is 32% per year and the latest earnings per share were 25 cents, at what price should Radisson Blue stock be selling in the market ?.
4. (4 Pts). Briefly discuss the pitfalls of using valuation techniques that we have studied in this course, and give a technique that you would recommend.

TOTAL POINTS: 25

Question 3

1. Adapt IT has 10,000 bonds and 400,000 shares outstanding. The bonds have 10% annual coupon, R 1,000 face value, R 1,050 market value, and 10 year maturity. The beta on the stock is 1.30 and its price per share is R40. The risk free rate is 6% , the expected market return is 14%, and the firm tax rate is 40%.
 - (a) (4 Pts). What is the after tax cost of debt financing ?
 - (b) (4 Pts). What is the after tax cost of equity financing ?
 - (c) (4 Pts). What is the WACC ?
2. (6 Pts). Avis is thinking of embarking on a project with capital assets that will be depreciated to a book-value of R 100,000, with a salvage value of R 180,000. The marginal tax rate is 40%. Clean up and removal expenses are expected to be R11,000, and there will be a R20,000 return of working capital. What is the net salvage value?
3. (6 Pts). The cost of a new machine is R 50,000 plus an additional R 8,000 for freight and set up costs. The old machine that is being replaced has a book value of R15,000 and can be sold for R 5000. An investment of R 12,000 in working capital is also required. The marginal tax rate is 30%. What is the net investment outlay ?

TOTAL POINTS: 24

Formulae Sheet

1. $r = \frac{D_1}{P_0} + g$
 2. $g = (1 - POR)i$
 3. $r = POR(\frac{EPS_1}{P_0}) + (1 - POR)i$
 4. $WACC = \frac{E}{D+E}r_e + \frac{D}{D+E}r_d(1 - T)$
 5. $WACC = r_f + \beta_A(r_M - r_f)$
 6. Net Cash flow for initial investment $= -I - \Delta W + S - T(S - B)$
 7. $CFAT = (\Delta R - \Delta E)(1 - T) + T\Delta D$
 8. $CFAT = (\Delta R - \Delta E - \Delta D)(1 - T) + \Delta D$
 9. Net Salvage Value $= S - T(S - B) - (1 - T)REX + \Delta W$
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