Week 6 quiz

LATEST SUBMISSION GRADE

100%

1. 1 / 1 point

Read the following financial statements and calculate the firm's free cash flow over the 2014 financial year.

UBar Corp Income Statement for year ending 30th June 2014	$m
Sales	293
COGS	200
Rent expense	15
Gas expense	8
Depreciation	10
EBIT	60
Interest expense	0
Taxable income	60
Taxes	18
Net income	42

UBar Corp Balance Sheet as at 30th June	2014	2013
	$m	$m
Assets		
Cash	30	29
Accounts receivable	5	7
Pre-paid rent expense	1	0
Inventory	50	46
PPE	290	300
Total assets	376	382
Liabilities		
Trade payables	20	18
Accrued gas expense	3	2
Non-current liabilities	0	0
Contributed equity	212	212
Retained profits	136	150
Asset revaluation reserve	5	0
Total L and OE	376	382

(Note: all figures are given in millions of dollars ($m))

The firm's free cash flow over the 2014 financial year was:

- (selected) $51
- $31
- $48
- $58

Correct

Correct.

Download the calculations using the following link:

Question 1 week 6 graded upload.docx

2.

1 / 1 point

Use the below information to value a levered company with constant annual perpetual cash flows from assets. The next cash flow will be generated in one year from now, so a perpetuity can be used to value this firm. Both the cash flow from assets including and excluding interest tax shields are constant (but not equal to each other).

Data on a Levered Firm with Perpetual Cash Flows		
Item abbreviation	Value	Item full name
$\mathrm{CFFA_U}$	\$100m	Cash flow from assets excluding interest tax shields (unlevered)
$\mathrm{CFFA_L}$	\$112m	Cash flow from assets including interest tax shields (levered)
g	0% pa	Growth rate of cash flow from assets, levered and unlevered
$\mathrm{WACC_{BeforeTax}}$	7% pa	Weighted average cost of capital before tax
$\mathrm{WACC_{AfterTax}}$	6.25% pa	Weighted average cost of capital after tax
r_D	5% pa	Cost of debt
r_EL	9% pa	Cost of levered equity
D/V_L	50% pa	Debt to assets ratio, where the asset value includes tax shields
t_c	30%	Corporate tax rate

What is the value of the levered firm including interest tax shields?

- ○ \$1400 m
- ○ \$1200 m
- ○ \$1800 m
- ◉ \$1600 m

Correct

Correct.

Download the answer from the link below:

Question 2 week 6 graded.docx

3.

1 / 1 point

Use the below information to value a levered company with constant annual perpetual cash flows from assets. The next cash flow will be generated in one year from now, so a perpetuity can be used to value this firm. Both the cash flow from assets including and excluding interest tax shields are constant (but not equal to each other).

Data on a Levered Firm with Perpetual Cash Flows		
Item abbreviation	Value	Item full name
$\mathrm{CFFA_U}$	\$48.5m	Cash flow from assets excluding interest tax shields (unlevered)
$\mathrm{CFFA_L}$	\$50m	Cash flow from assets including interest tax shields (levered)
g	0% pa	Growth rate of cash flow from assets, levered and unlevered
$\mathrm{WACC_{BeforeTax}}$	10% pa	Weighted average cost of capital before tax
$\mathrm{WACC_{AfterTax}}$	9.7% pa	Weighted average cost of capital after tax
r_{D}	5% pa	Cost of debt
r_{EL}	11.25% pa	Cost of levered equity
D/V_L	20% pa	Debt to assets ratio, where the asset value includes tax shields
t_c	30%	Corporate tax rate

What is the value of the levered firm including interest tax shields?

- ○ \$800 m
- ◉ \$500 m
- ○ \$ 1200 m
- ○ \$700 m

Correct

Correct.

Download the solution from the following link:

Question 3 week 6 graded.docx

4.

1 / 1 point

Use the below information to value a levered company with annual perpetual cash flows from assets that grow. The next cash flow will be generated in one year from now, so a perpetuity can be used to value this firm. Note that ‘k’ means kilo or 1,000. So the $30k is $30,000.

Data on a Levered Firm with Perpetual Cash Flows		
Item abbreviation	Value	Item full name
CFFA_U	$30k	Cash flow from assets excluding interest tax shields (unlevered)
g	1.5% pa	Growth rate of cash flow from assets, levered and unlevered
r_D	4% pa	Cost of debt
r_EL	16.3% pa	Cost of levered equity
D/V_L	80% pa	Debt to assets ratio, where the asset value includes tax shields
t_c	30%	Corporate tax rate

Which of the following statements is NOT correct?

- The WACC before tax is 3.46% p.a.
- The WACC after tax is 5.55% p.a.
- (selected) The current value of the firm's levered assets including tax shields is $ 603.839 k
- The benefit from interest tax shields in the first year is $ 7.2 k

Correct

Correct.

Download the solution from the following link:

Question 4 week 6 graded.docx

5. Cash Flow From Assets (CFFA) can be defined as:

1 / 1 point

- (selected) Cash available to distribute to creditors and stockholders.
- Cash flow to creditors minus cash flow to stockholders.
- Net income (or earnings) plus depreciation plus interest expense.
- Net income minus the increase in net working capital.

Correct

Correct.

Cash flow from assets (CFFA), also known as free cash flow to the firm (FCFF), is the cash generated from the firm's assets. It is the income component of the total dollar return from the assets, in the same way as shares, bonds and land have income returns called dividends, coupons and rent respectively.