

SURAT PERNYATAAN KEJUJURAN AKADEMIK

Dalam ujian mata kuliah Manajemen Keuangan ini,

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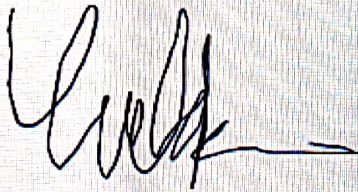
NPM : 1906360491

Saya menyatakan dengan sejujurnya bahwa:

1. Saya tidak menerima dan atau tidak memberikan bantuan dalam bentuk apapun kepada mahasiswa lain dalam mengerjakan soal ujian.
2. Saya tidak melakukan plagiasi atas pekerjaan orang lain dan mengakui nya sebagai pekerjaan saya.
3. Saya memahami bahwa segala tindakan kecurangan akan mendapatkan hukuman sesuai dengan aturan akademik yang berlaku pada Fakultas Ekonomi dan Bisnis Universitas Indonesia

Depok, 7 November 2020

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Yudhistira Gowo Samiaji

Soal 1.

$$a. CFFA = OCF - NCS - \text{Changes in NWC}$$

$$= 8,539 - (-77,542) - 3,369$$

$$= 82,722$$

$$b. CFTC = \text{Interest} - (\text{End Longterm debt} - \text{Beg Longterm debt})$$

$$= 2,564 - (31,300 - 109,600)$$

$$= 2,564 - (-78,300)$$

$$= 80,864$$

$$CFTS = CFFA - CFTC$$

$$= 82,722 - 80,864$$

$$= 1,858$$

$$\# OCF = EBIT + \text{Depre} + \text{Tax}$$

$$= 6,792 + 3,222 - 1,480$$

$$= 8,534$$

$$\# NCS = \text{End NFA} - \text{Beg NFA} + \text{Depre}$$

$$= (34,214 + [Y \times 10,000]) - (34,978 + [X \times 10,000]) + 3,222$$

$$= -77,542$$

$$\# \text{Changes in NWC} = \text{Ending NWC} - \text{Beginning NWC}$$

$$= 5,864 - 2,530$$

$$= 3,334$$

Soal 2.

a. PT.A:

$$ROE = \frac{NI}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Total Ea}}$$

$$= \frac{20}{760} \times \frac{760}{520} \times \frac{520}{520-359}$$

$$= 12,42\%$$

PT.B:

$$ROE = \frac{NI}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Total Ea}}$$

$$= \frac{80}{880} \times \frac{880}{620} \times \frac{620}{620-99}$$

$$= 15,36\%$$

b. PT.B memiliki kinerja yang lebih baik

ROE (Return on Equity) menunjukkan seberapa besar persentase pendapatan dibandingkan Debt-Equity ratio

Soal 3.

a.

Timmy Turner Inc.
Laporan Laba Rugi Proforma 2020

	Current	% of Sales	Proforma
Sales	215,500	100%	288,770
Costs	125,000	58%	167,500
EBIT	90,500	42%	121,270
Interest	7,500	-	7,500
EBT	83,000	39%	113,770
Taxes (28%)	23,240	-	31,855.60
Net Income	59,760	28%	89,404.40
Dividend	32,868	-	49,177.92
R/E	26,892	-	40,226.48

$$\text{Projected Growth} = 39\%$$

$$\text{Current Capacity Level} = 94\%$$

$$\text{Full Capacity} = 229,255.32$$

$$\text{FA to Full Cap} = 328\%$$

$$\text{New FA} = 948,478.80$$

$$b. EFN = TAn - TLn$$

$$= 159,018.80 - 1,304,826.48$$

$$= 288,182.32$$

Timmy Turner Inc.
Balance Sheet Proforma 2020

	2019	% of Sales	2020
Assets			
CA			
Cash	136,000	64%	184,920
AR	89,000	41%	119,260
Inventory	256,000	118%	340,360
Total	481,000	223%	644,540
FA			
PPE	757,000	-	948,478.80
Total Assets	1,238,000		1,593,018.80
Liab & Eq			
CL			
AP	72,000	34%	97,820
NP	17,000	8%	22,780
Total	90,000	42%	120,600
Long Term Debt	298,000	-	298,000
Equity			
Ordinary share	225,000	-	225,000
R/E	671,000	-	661,278.48
Total	946,000	-	986,278.48
Total Liab & Eq	1,238,000		1,704,826.48

$$x = 9$$

$$y = 1$$

Soal 4.

a. Par = \$100,000,000
 $t = 18$ years
 Coupon Rate = 4.91%
 Bond Price = \$110,145,246.91

Semi annually:
 Coupon Rate = 4.455%
 $t = 36$ semester
 Par = \$9,455,000

Interpolation:

$$\frac{4.455\% - x}{4.455\% - 2\%} = \frac{100,000,000 - 110,145,246.91}{100,000,000 - 162,575,108.30}$$

$$\frac{4.455\% - x}{2.455\%} = 16.213\%$$

$$4.455\% - x = 0.398\%$$

$$x = 4.057\%$$

YTM	Bond Price
4.46%	100,000,000
x	110,145,246.91
2%	BP2

YTM is annual, so x will need to be doubled

$$\boxed{\text{YTM} = 8.114\%}$$

$$\begin{aligned} \text{BP2} &= \text{PV}_{\text{coupon}} + \text{PV}_{\text{par}} \\ &= C \left(\frac{1 - \frac{1}{(1+r)^t}}{r} \right) + \frac{\text{FV}}{(1+r)^t} \\ &= 113,552,793.26 + 49,022,315.04 \\ &= 162,575,108.30 \end{aligned}$$

b. $P_0 = \$3$

$$g_1 = 20\%$$

$$g_p = 9.91\%$$

$$R = 8\%$$

$$\begin{aligned} P_0 &= \frac{D_1}{R - g_1} \times \left(1 - \left(\frac{1+g_1}{1+R} \right)^t \right) + \frac{P_t}{(1+R)^t} \\ &= \frac{\$3.60}{8\% - 20\%} \cdot \left(1 - \left(\frac{1+20\%}{1+8\%} \right)^2 \right) + \frac{\$109.75}{(1+8\%)^2} \end{aligned}$$

$$\boxed{P_0 = \$101.13}$$

$$\begin{aligned} P_t &= \frac{D_0 (1+g_1)^t \cdot (1+g_p)}{R - g_p} \\ &= \frac{\$3 (1+20\%)^2 \cdot (1+3.91\%)}{8\% - 3.91\%} \end{aligned}$$

$$\boxed{P_t = \$109.75}$$

Soal 5.

Item	1	2	3
Sales	60,000,000	80,000,000	105,324,000
Fixed cost	16,500,000	16,500,000	16,500,000
Var Cost	40,000,000	56,260,000	73,724,000
Depreciation	2,400,000	2,400,000	2,400,000
EBIT	(9,000,000)	5,220,000	12,697,200
Taxes	—	1,305,000	3,174,300
Net Income	(9,000,000)	3,915,000	9,522,900
Depreciation	2,400,000	2,400,000	2,400,000
OCF	1,500,000	6,315,000	11,922,900

NCF	0	1	2	3
OCF	—	1,500,000	6,315,000	11,922,900
TNWC	8,000,000	9,000,000	12,060,000	15,755,600
NCS				