5. FCFF = 1.400 MIL.

FCFE = 1.300 MIL

WACC = 0,11

r = 0,13

g_{FCFF} = 4%

g_{FCFE} = 4,5%

$$V_{EQUITY} = \frac{1.300 \cdot (1 + 0,045)}{0,13 - 0,045} = 25.409,1$$

$$V_{FIRM} = \frac{1.400 \cdot (1 + 0,04)}{0,11 - 0,04} = 45.475$$

V_{EQUITY} = 45.475 − 15000 = 30.475

7. NI = 250 MIL

DEP = 90 MIL

CAP. EXP. = 170 MIL

Δ WC = 40 MIL

0,4 · (CAP. EXP. − DEP) = NEW DEBT

0,4 Δ WC = NEW DEBT

INT. EXP = 150 MIL

DEBT = 1.800

g_{FCFF} = 6%

g_{FCFE} = 4%

$FCFF_0$ = NI + DEP + INT. EXP. (1 − t) − CAP. EXP. − Δ WC

$FCFF_0$ = 250 + 90 + 150 · (1 − 0,3) − 170 − 40

$FCFF_0$ = 235 MIL.

$FCFE_0 = NI + DEP - CAP.EXP. - \Delta WC + NEW\ BORROWING$

$FCFE_0 = 250 + 90 - 170 - 40 + 0,4.(170-90) + 0,4.40$

$FCFE_0 = 178\ MIL$

$$VALUE\ OF\ FIRM = \frac{235.(1+0,06)}{WACC - 0,06}$$

$WACC = 0,4.9.(1-0,3) + 0,6.13$

$WACC = 10,32\%$

$$= \frac{235.(1+0,06)}{0,1032 - 0,06} = 5.766,2$$

$VALUE\ OF\ EQUITY = 5.766,2 - 1.800 = 3.966,20$

$V_0 = 396,6$

$$VALUE\ OF\ EQUITY = \frac{178.(1+0,07)}{0,13 - 0,07} = 3.174,33$$

$V_0 = 317,43$

$P_0 = 32,5$

$r_d = 7\%$ $\quad W_d = 30\%$ $\quad t = 35\%$

$r_{PS} = 6,8\%$ $\quad W_{PS} = 15\%$

$r_e = 11\%$ $\quad W_e = 55\%$

DEBT = 145 MIL.

PREFERRED EQUM = 65 MIL

$FCFF_0 = 28$

$g_{FCFF} = 4\%$

$$\text{FIRM VALUE} = \frac{28 \cdot (1+0,04)}{WACC - 0,04}$$

$$WACC = 0,3 \cdot 7 \cdot (1-0,35) + 0,15 \cdot 6,8 + 0,55 \cdot 11$$

$$WACC = 8,435\%$$

$$= \frac{28 \cdot (1+0,04)}{0,08435 - 0,04} = 656,593$$

EQUIM VALUE = $656,593 - 145 - 65 = 446,593$

$$V_0 = \frac{446,593}{8} = 55,824$$

$FCFF_0 = 0,75$

$g_1 = 10\% \rightarrow 1y$

$g_2 = 26\% \rightarrow 3y$

$g_3 = 6\%$

$\beta = 2$
$r_f = 4,5\%$
$r_p = 5\%$
$\Big\} \; r = 4,5 + 2 \cdot 5 = 14,5\%$

$$\text{FIRM VALUE} = \frac{0,75 \cdot (1+0,1)}{1+0,145} + \sum_{i=1}^{3} \frac{0,75 \cdot (1+0,1) \cdot (1+0,26)^i}{(1+0,145) \cdot (1+0,145)^i} +$$

$$+ \frac{0,75 \cdot (1+0,1) \cdot (1+0,26)^3 \cdot (1+0,06)}{(1+0,145)^4 (0,145 - 0,06)}$$

$$= 0,7205 + 2,0837 + 11,9437 = 15,319$$

13.

$g_{FCFE} = 24\% \rightarrow 2y$

$g_{FCFE} = 13\%$

CURRENT ASSETS $_{2000}$ = 203-5

CURRENT ASSETS $_{1999}$ = 326-5

CURRENT LIABILITIES $_{2000}$ = 57

CURRENT LIABILITIES = 141

$FCFE_0 = 80 + 23 - 41 - 38$

$FCFE_0 = 24$

$WC_{2000} = 180$
$WC_{1999} = 139$
$\Big\} \; \Delta WC = 41$

$$\text{FIRM VALUE} = \frac{24 \cdot (1+0,27)}{1+0,14} + \frac{24 \cdot (1+0,27)^2}{(1+0,14)^2} + \frac{24 \cdot (1+0,27)^2 \cdot (1+0,13)}{(1+0,14)^2 (0,14 - 0,13)}$$

EQUITY VALUE = 26,734 + 29,786 + 3.365,793 = 3.421,31

$$V_0 = \frac{3.422,31}{84} = 40,74$$

(9)

$Q = 1.852$

$DEBT = 3.192$

$FCFF_0 = 1,155.9$

$\beta = 0,9$

$r_p = 5.5$

$r_f = 5.5$

$r_e = 5,5 + 0,9 \cdot 5,5$

$r_e = 10,45\%$

$r_d = 7\%$

$t = 40\%$

$WACC = 0,25 \cdot 7\% \cdot (1-0,4) + 0,75 \cdot 10,45\%$

$WACC = 8,8875\%$

$$\text{FIRM VALUE} = \frac{1,1.559 \cdot (1+0,04)}{0,088875 - 0,04} = 24,6592$$

$$\text{EQUITY VALUE} = 24,6592 - 3,192 = 21,4672$$

$$V_0 = \frac{21,4672}{1,852} = 11,59$$