No

Date

Aola Aufiyah A _ 2010601037

Problem hal 167-168

1 $T_0 = -10.200$

T_1 : (Penjualan - Biaya operasional) - Modal kerja

: (7000 - 2000) - 250 : 9750

T_2 : 5000 - 300 = 9.700

T_3 = 5000 - 200 = 9.800

T_4 = 5000 - 0 = 5000

2 Metode ~~NPV~~ NVP

$$\left[\frac{9750}{1+(0,22)^1} + \frac{9.700}{1+(0,22)^2} + \frac{9.800}{1+(0,22)^3} + \frac{5000}{1+(0,22)^4}\right] = -10.200$$

: [3.899 + 4985 + 9799 + 4988] - 10.200

= 18.116 - 10.200

= 7.916

Metode IRR

22% x 7.916 = 1.792

25% x 7.916 = 1979

IRR = $\frac{1799}{1979}$ x 25% = 0,22

$$\text{10.200} \rightarrow \left[\frac{9.750}{1+(0,22)^1} + \frac{9.700}{1+(0,22)^2} + \frac{9.800}{1+(0,22)^3} + \frac{5000}{1+(0,22)^4}\right]$$

10.200 → 18.116

3. Perusahaan A (Net Present value)

- 10% NPV : $\frac{3362.000}{(1+0,1)^1} + \frac{3.362.000}{(1+0,1)^2} + \frac{3.362.000}{(1+0,1)^3} + \frac{3.362.000}{(1+0,1)^4} - 10\,jt$

: $\frac{3.362.000}{1,1} + \frac{3.362.000}{1,21} + \frac{3.362.000}{1,331} + \frac{3.362.000}{1,4641} - 10.000.000$

: 3.056.363 + 2.778.512 + 2.527.019 + 2.269.291 - 10.000.000

: 10.631.985 - 10.000.000 = 631.985

- 12% NPV : $\frac{3.362.000}{(1+0,12)^1} + \frac{3.362.000}{(1+0,12)^2} + \frac{3.362.000}{(1+0,12)^3} + \frac{3.362.000}{(1+0,12)^4} - 10\,jt$

: $\frac{3.362.000}{1,12} + \frac{3.362.000}{1,2544} + \frac{3.362.000}{1,4049} + \frac{3.362.000}{1,573} - 10\,jt$

= 5.001.785 + 2.680.165 + 2.393.005 + 2.136.661 - 10 jt

= 10.211.616 - 10.000.000

= 211.616

- IRR : $\frac{681.985}{211.616} \times 12\%$

  = 35,8 % > 10% (Proyek dijalankan)

Perusahaan (B)

kas masuk 1 - 3 = 0

th ke 4 = 13.605.000

- 10% NPV = $\frac{13.605.000}{(1+0.1)^4} - 10.000.000$

  = 9.292.398 - 10.000.000 = -707.601

- 12% NPV = $\frac{13.605.000}{(1+0,12)^4} - 10.000.000$

  = $\frac{13.605.000}{1,5735}$

  = 8.646.225 - 10.000.000 = -1.353.776