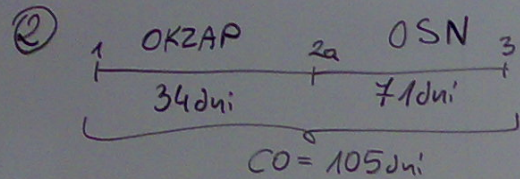


① $CR_{1..15a} = 7862$



(2 → 5)

A	L
AT = 6000	
ZAP = 743	
NAL = 1551	
SP = 87	ZwD = 546
8381	8381

④ $005ZwD = 25 \text{ dni}$
 $ZwD = 546$

⑤ $\rightarrow 7835 = \text{Kop. ausgl.}$

⑥ $\frac{D}{D+E} = 27\%$

$\frac{E}{D+E} = 73\%$

⑦ $FCF_0 = (-7835)$

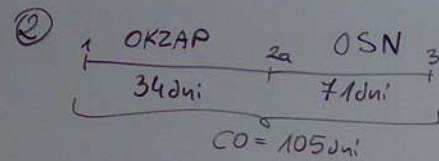
$FCF_{1..15a} = 3080$

$FCF_{15b} = 9212$

	1...15a	15b
CR	7862	7700
-CE	2860	0
-NCE	1200	6000
EBIT	3802	1700
NOPAT	3080	1377
+NCE	1200	6000
-ΔNWC	0	-1835
-Capex	1200	0
FCF	3080	9212

⑧ $IRR = 39,36\%$

① $CR_{1..15a} = 7862$



③ (2 → 5)

A	L
AT = 6000	
ZAP = 743	
NAL = 1551	
SP = 87	ZwD = 546
8381	8381

④ $00SZwD = 25 \text{ dni}$
 $ZwD = 546$

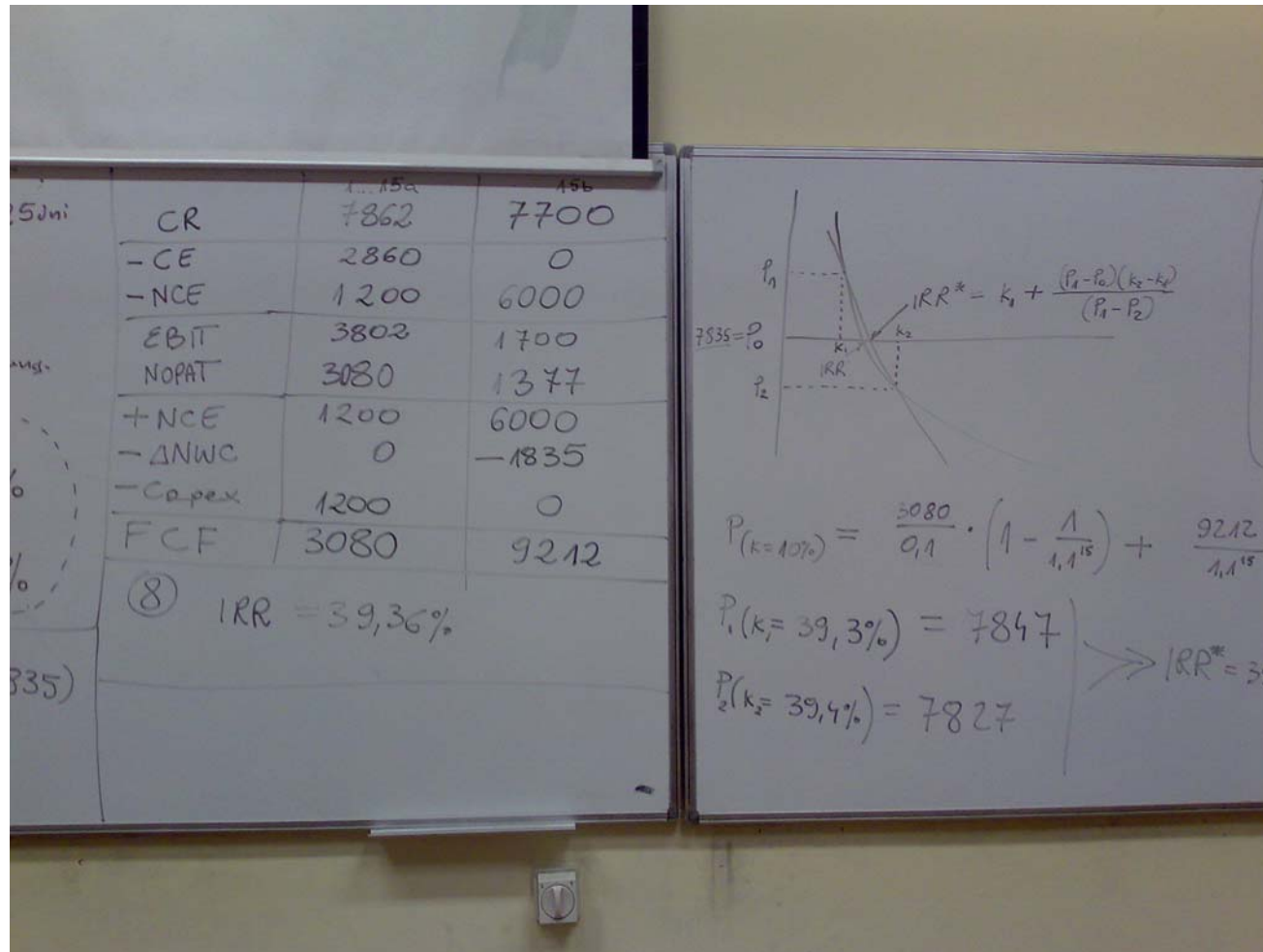
⑤ $\rightarrow 7835 = \text{Kap. wci.}$

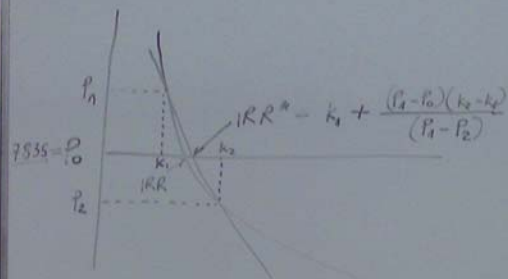
⑥ $\frac{D}{D+E} = 27\%$
 $\frac{E}{D+E} = 73\%$

⑦ $FCF_0 = (-7835)$
 $FCF_{1..15a} = 3080$
 $FCF_{15b} = 9212$

CR	7862
- CE	2000
- NCE	1200
EBIT	3800
NOPAT	3080
+ NCE	1200
- ΔNWC	
- Capex	1200
FCF	3080

⑧ IRR = 39%





9

$$18\% = k_d$$

$$48,5\% = k_e$$

$$CC = 27\% \cdot 18\% \cdot 0,81 + 73\% \cdot 48,5\% = 39,34\%$$

CC > IRR CC < IRR

$$P_{(k=10\%)} = \frac{3080}{0,1} \cdot \left(1 - \frac{1}{1,1^{15}}\right) + \frac{9212}{1,1^{15}} = 25632$$

$$P_1(k_1 = 39,3\%) = 7847$$

$$P_2(k_2 = 39,4\%) = 7827$$

$$\Rightarrow IRR^* = 39,3\% + \frac{12 \cdot 0,1\%}{20} = 39,36\%$$

$$39,36\% > 39,34\%$$

10

$$NPV = -7835 + \frac{3080}{0,1534} \left(\frac{1}{1,1534}\right) + \frac{9212}{1,1534^{15}} = 3,72 > 0$$

$$RR^* = k_f + \frac{(P_1 - P_0)(k_2 - k_f)}{(P_1 - P_2)}$$

9) $18\% = k_d$
 $48,5\% = k_e$
 $CC = 27\% \cdot 18\% \cdot 0,81 +$
 $+ 73\% \cdot 48,5\% = 39,34\%$
 $CC > IRR$ $CC < IRR$

$\frac{30}{1} \cdot \left(1 - \frac{1}{1,1^{15}}\right) + \frac{9212}{1,1^{15}} = 25632$
 $= 7847$
 7827

$\Rightarrow IRR^* = 39,3\% + \frac{12 \cdot 0,11}{20} = 39,36\%$

10) $39,36\% > 39,34\%$
 $NPV = -7835 + \frac{3080}{0,1134} \left(\frac{1}{1,1134}\right)$
 $+ \frac{9212}{1,1134^8} = 3,72 > 0$

$$IRR^* = k_1 + \frac{(P_1 - P_0)(k_2 - k_1)}{P_1 - P_0}$$

9 $18\% = k_d$
 $48.5\% = k_e$
 $CC = 27\% \cdot 18\% \cdot 0.81 + 73\% \cdot 48.5\% = 39.34\%$
 $CC > IRR \quad CC < IRR$
 $39.36\% > 39.34\%$

10 $NPV = -7835 + \frac{3080}{0.3934} + \frac{9212}{0.3934} = 372 > 0$

$P_{(k=15\%)} = \frac{3080}{0.15} \cdot \left(1 - \frac{1}{1.15^{20}}\right) + \frac{9212}{1.15^{20}} = 25632$
 $P_1(k=39.3\%) = 7847$
 $P_2(k=39.4\%) = 7827$
 $\Rightarrow IRR^* = 39.3\% + \frac{12 \cdot 0.11}{20} = 39.36\%$

$$IRR^* = k_1 + \frac{(P_1 - P_0)(k_2 - k_1)}{(P_1 - P_2)}$$

9) $18\% = k_d$
 $48,5\% = k_e$
 $CC = 27\% \cdot 18\% \cdot 0,81 +$
 $+ 73\% \cdot 48,5\% = \underline{39,34\%}$
 $CC > IRR \quad CC < IRR$

$$\frac{3080}{2,1} \cdot \left(1 - \frac{1}{1,1^{15}}\right) + \frac{9212}{1,1^{15}} = 25632$$

 $= 7847$
 7827

$$IRR^* = 39,3\% + \frac{12 \cdot 0,1\%}{20} = \underline{39,36\%}$$

$39,36\% > 39,34\%$
 10) $NPV = -7835 + \frac{3080}{0,3934} \left(\frac{1}{0,3934}\right)$
 $+ \frac{9212}{1,3934^2} = 3,72 > 0$

$$IRR^* = k_1 + \frac{(P_1 - P_0)(k_2 - k_1)}{(P_1 - P_2)}$$

9) $18\% = k_d$
 $48,5\% = k_e$
 $CC = 27\% \cdot 18\% \cdot 0,81 +$
 $+ 73\% \cdot 48,5\% = 39,34\%$
 $CC > IRR \quad CC < IRR$

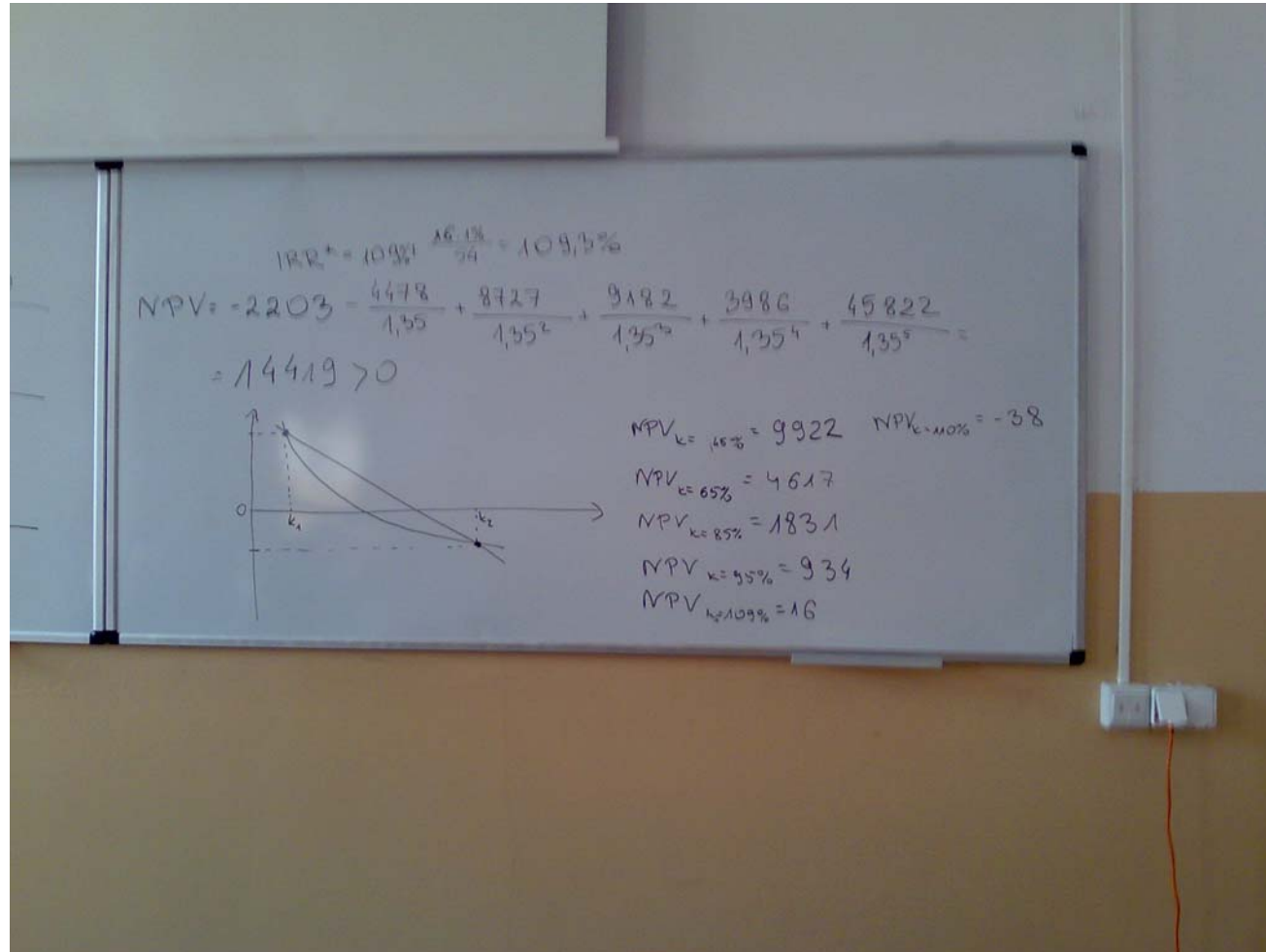
$\frac{3080}{0,1} \cdot \left(1 - \frac{1}{1,1^{15}}\right) + \frac{9212}{1,1^{15}} = 25632$

$= 7847$
 $= 7827$

$\Rightarrow IRR^* = 39,3\% + \frac{12 \cdot 0,1\%}{20} = 39,36\%$

$39,36\% > 39,34\%$

10) $NPV = -7835 + \frac{3080}{0,3934} \left(1 - \frac{1}{1,3934^{15}}\right) + \frac{9212}{1,3934^{15}} = 3,72 > 0$



	0	1	2	3	4	5
CR	0	0	21200	18600	7430	55000
-CE	0	1250	8660	7750	3841	0
-NCE	0	0	975	975	975	0
=EBIT	0	-125	11565	9875	2614	3577
-WOPR	0	-101	9368	7999	2117	51423
+NCE	0	0	975	975	975	41653
-ΔNWC	-2	82	1618	-208	-894	3577
Capex	2205	4295	0	0	0	-592
FCF	-2203	-4478	8727	9182	3986	45822
			1696	1488	594	

NPV = -28
= 14

12

	0	1	2	3	4	5a	5b
CR							
-CE	400	-2623	-2367	-2162			
-NCE							
-EBIT	-400						
-NOVA	-324						
+NCE							
-ΔNWC							
Capex	-20000						
FCF	19676						

Co będzie, jeśli zamiast W wybiorę D?

56

$$CE_{K1...4} = \overbrace{4,5 \cdot \frac{60000}{15} + 1200}^{19200} + 2400 (0,8)^n = :$$

$$CE_{D1...4} = \underbrace{3 \cdot \frac{60000}{14} + 3400}_{16257} + 2800 (0,8)^n$$

$$\Delta CE_{1,4} = \underbrace{16257 - 19200}_{-2943} + 400 \cdot 0,8^n$$