

Illustrative example

h_1	0	1	2	3	4		h_2
	-12000	3000	5000	4000	2000		0
0.06	-12000	2830.189	4449.982	3358.477	1584.187		0.07
	222.8353						-12000
							-12000
							-38.0861
cumCF	-12000	-9169.81	-4719.83	-1361.35	222.8353		

0.140662 50.63841

$$IQR = h_1 + \frac{NPV_1}{NPV_1 - NPV_2} \times (h_2 - h_1)$$

	0
0.068515	-12000
0.06854	-12000
0.090135	
3	2
3573.048	5618

→ K_{IR}

1	2	3	4
3000	5000	4000	2000
2803.738	4367.194	3265.192	1525.79

$$K_{IR} = \sqrt[4]{\frac{154144}{12000}} = 1$$

1	2	3	4
3000	5000	4000	2000
2807.635	4379.341	3278.824	1534.29

0.064887

1	0
4240	2000
15431.05	

Example from slides

Project A	0	1	2	3	4	5
	-90000				-30000	
		10000	17000	34000	41000	38000
	-90000	10000	17000	34000	11000	38000
DCF	-90000	9450.009	15181.46	28692.98	8772.465	28638.14
NPV	735.0496					
WACC	0.0582					
Paypack Period	-90000	-80550	-65368.5	-36675.6	-27903.1	735.0496
4years+10days						0.025667
IRR						
r_2	0.065					
DCF	-90000	9389.671	14988.21	28146.87	8550.554	27735.47
NPV_2	-1189.23					
irr	0.060798					
MIRR						
	0	1	2	3	4	5
		4	3	2	1	0
	-90000				-30000	
		10000	17000	34000	41000	38000
use WACC D(-CF)	-90000	0	0	0	-23924.9	0
	-113925					
FV(+CF)		12539.23	20144.3	38072.77	43386.2	38000
	152142.5					
MIRR	0.059562					

Project B	0	1	2	3
(-CF)	-10000	-2000	-2000	-2000
	-10000	-1890	-1786.05	-1687.82
(+CF)				
0.3	2000	3000	7000	
	600	900	2100	
0.5	4000	6000	9000	
	2000	3000	4500	
0.2	5000	7000	10000	
	1000	1400	2000	
	3600	5300	8600	
	3402.003	4733.042	7257.636	

9.24005

	-10000	1512.002	2946.988	5569.814
NPV	28.80354			

PB	-10000	-8488	-5541.01	28.80354	0.005171
2years+ 2days					1.861691

IRR

r_2	0.059			
	-10000	1427.763	2627.765	4689.783
NPV_2	-1254.69			

IRR 0.058218

MIRR	0	1	2	3
(-CF)	-10000	-2000	-2000	-2000
	-10000	-1890	-1786.05	-1687.82
	-15363.9			
(+CF)		3600	5300	8600
		4031.234	5608.46	8600
	18239.69			

MIRR 0.058861