

Example from the 6th Lecture

Decide which project is preferable for investors. The initial costs of investment for the project A are \$ 90,

WACC 0.0582

Project A

t	0	1	2	3	4	5	IRR	~	
	-90000	10000	17000	34000	11000	38000			
NPV	-90000	9450.009	15181.46	28692.98	8772.465	28638.14	NPV of Project A		
PB	-90000	-80550	-65368.5	-36675.6	-27903.1	735.0496			
PB=	<u><u>4.974333 Years</u></u>						-	+	

Project B

Costs

	10000	2000	2000	2000				
NPV	10000	1890.002	1786.054	1687.822				
30%		2000	3000	7000				
NPV		1890.002	2679.08	5907.378				
50%		4000	6000	9000				
NPV		3780.004	5358.161	7595.2				
20%		5000	7000	10000				
NPV		4725.005	6251.188	8439.112				
		3402.003	4733.042	7257.636			NPV of Project B	
PB	-10000	-8488	-5541.01	28.80354			IRR	~
PB=	<u><u>2.996031 Years</u></u>				-	+		

= > A << B

000.00, and in the fourth year it is required to pay the repairing costs of \$ 30,000.00. Project implementa

			4	3	2	1
		PV				
6.08		MIRR				
	0.0582	+CF	12539.23	20144.3	38072.77	11640.2
735.0496		-CF	-90000			
		MIRR =	5.99%			

				2	1	0
			0	1	2	3
		PV				
		MIRR				
		+CF				
-15363.9		30%		2239.574	3174.6	7000
		50%		4479.149	6349.2	9000
		20%		5598.936	7407.4	10000
10476.46		-CF	-15363.9	10000	1890.002	1786.054
16733.36		MIRR =	2.56%			

19415.3 => A >> B

28.80354 => A >> B
 5.95 => A >> B

ation is planned for five years with the generation of the following cash flows after one year: \$ 10,000.00

0	
	FV
38000	120396.5

	FV
16574.66	
3724.252	
5948.505	
6901.901	

), \$ 17,000.00, \$ 34,000.00, \$ 41,000.00, \$ 38,000.00. All cash flows are definite. Furthermore, it is knowi

n, that the price of the foreign capital is 6%, and shareholders require interest at minimal rate of 7,5%. TI

he total debt is up to 70% in the capital structure. The project B has the following structure of investment

ts: \$ 10,000.00 as initial costs and \$2,000.00 as annual additional costs. Estimated life of the project is 3 .

years. Project might generate different payoff: \$ 2,000.00, \$ 3,000.00, \$ 7,000.00 with 30% probability, ;

\$ 4,000.00, \$ 6,000.00, \$ 9,000.00 with 50% probability, and \$ 5,000.00, \$7,000.00, \$ 10,000.00 with 20%

% probability. The inclusion of income tax (15%) into the calcu