

Scenario -1

You have recently been promoted to head your division which is considering investments in the eight projects listed in **Exhibit 1**. The CFO of your company has asked you to rank the projects and recommend the “four best” that the company should accept. Management has determined that projects 7 & 8 and Projects 2 & 3 are mutually exclusive (respectively) to each other.

All the projects require the same initial investment, \$10 million. Moreover, all are believed to be of the same risk class. The firm’s weighted average cost of capital has never been estimated. In the past, analysts have simply assumed that 10% was an appropriate discount rate (although certain officers of the company have recently asserted that the discount rate should be much higher).

To stimulate your analysis, consider the following questions:

1. Can you rank the projects simply by inspecting the cash flows?
2. What criteria might you use to rank the projects? Which quantitative ranking methods are better? Why?
3. What is the ranking you found by using quantitative methods? Does this ranking differ from the ranking obtained by simple inspection of the cash flows?
4. What happens to your choice if the lender changes the risk grading of Project 8 to HIGH that escalates the cost of capital to 12%?

Exhibit 1

Project	#1	#2	#3	#4	#5	#6	#7	#8
Initial Investment	-	-	-	-	-	-	-	-
Year								
1	1,500	7,000	0	800	1,400	11,000	6,000	-1,750
2	1,500	5,000	0	1,000	1,400		4,500	-300
3	1,500	100	0	1,000	1,400		1,500	300
4	1,500		0	1,000	1,400		450	1,750
5	1,500		0	2,000	1,400		350	3,500
6	1,500		0	2,000	1,400			6,000
7	1,500		0	2,000	1,400			11,250
8	8,000		0	3,000	1,400			
9			0	3,000	1,400			
10			29000	3,000	1,400			
11				2,000	1,400			
12				2,000	1,400			
13				-1,000	1,400			
14					1,400			
15					1,400			
Sum of Cash	18,500	12,100	29,000	21,800	21,000	11,000	12,800	20,750
Excess Cash Flow	8,500	2,100	19,000	11,800	11,000	1,000	2,800	10,750

Scenario-2

There are two project proposals from a state which is going into election next year. Under the present (NDA) government's policy outlook, the risk profile for both the projects looks to be same and the cooperative bank mandated to give subsidized loan would extend the required capital for the project @ of 3% p.a.

In case the other political faction wins the elections, they may change the risk profiling of the second project from current LOW to HIGH resulting in change of cost of capital for the project #2 from current 3% to 6%.

Does your decision to invest in one of these projects change after the change of regime in the state capital?

The respective project expected cash flows are outlined in **Exhibit 2** below. Pl. Note that Project #A & #B are mutually exclusive projects.

Exhibit 2

Project	#A	#B
Initial Investment	-3,500	-5,000
Year		
1	5,000	5,000
2	5,000	5,000
3	5,000	5,000
4		5,000
5		5,000