

Project Appraisal Examples.

Cash in flows = PAT less dividend + depreciation

Rs'000

Year	Project A		Project B	
	P.A.	Cum.	P.A.	Cum.
0	Cash out flow-1000		Cash out flow-2000	
1	200	200	400	400
2	300	500	400	800
3	300	800	400	1200
4	400	1200	500	1700
5	400	1600	600	2300
Total outflow	1000		2000	
Total Inflow	1600		2300	
Net	600		300	

	Project A	Project B
Pay back period	3.5 years	4.5 years
Post payback profitability index	600 x 100 divided by 1000 = 60 %	300 x 100 divided by 2000 = 15 %
Return per investment	1600 divided by 1000 = 160 %	2300 divided by 2000 = 115 %
Average rate of return	320 divided by 1000 = 32 %	460 divided by 2000 = 23 %

Net Present value (NPV)					
Cost of capital say 10 %					
Year	Discounting factor @ 10 %	Cash flows	Present value	Cash flows	Present value
0	1.00000	1000	1000	2000	2000
1	0.90909	200	182	400	364
2	0.82654	300	248	400	331
3	0.75131	300	225	400	301
4	0.68301	400	273	500	341
5	0.62092	400	248	600	373
Total PV of cash inflows		1600	1176	2300	1710
Total PV of cash out flows		1000	1000	2000	2000
Net Present Value		600	176	300	(290)
Profitability Index		1176 divided by 1000 = 1.18		1710 divided by 2000 = 0.86	
Conclusion		Accept		Reject	