

Problem 7-8

Goal: Determine most profitable alternative investment

Given: available funds \$1,000,000 **P**
(1) alternative A - investment = \$1,000,000 **I_{total}**
gross income = \$1,000,000
total annual costs = \$800,000
(2) alternative B - investment = \$600,000
net annual income = \$220,000
loan return interest rate = 6.0%

Approach: Determine annual cash flow for each option
Alt. A - gross income - costs
Alt. B - invest remaining capital in loan
Neglect depreciation & taxes

Calculations:

(Alt. A) Net return **\$200,000** = \$1,000,000 - \$800,000

20.0% return on investment

(Alt. B) left over funds to loan \$400,000.00 = \$1,000,000 - \$600,000

return loan interest \$24,000.00

Total return **\$244,000** = \$220,000 + \$24,000

36.67% return on Alt. B investment

24.40% overall return on investment

Answer

Option 2 is better

Discussion: Option 2 is better just from the cash flow difference on the projects
The added interest income on the loaned funds makes it even better

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