

PRINCIPLES OF FINANCIAL AND MANAGERIAL ACCOUNTING II

Capital Budgeting

evaluating proposed capital expenditures

What is a capital expenditure?

From Chapter 10, page 436:

“Additions and improvements are costs incurred to increase the operating efficiency, productive capacity, or expected useful life of the plant asset. These expenditures are usually material in amount and occur infrequently.

Expenditures for additions and improvements increase the company’s investment in productive facilities and are generally debited to the plant asset affected. They are often referred to as _____.”

“So you bought a new _____.”

debiting an _____ is a capital expenditure



Date	Account Title	Ref	Debit	Credit
14	Asset? or Expense?		6,900	
	Cash			6,900

Annual Rate of Return

measure of anticipated _____ of an investment alternative

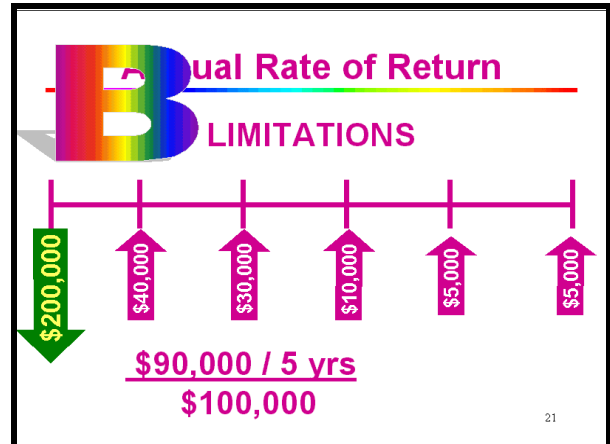
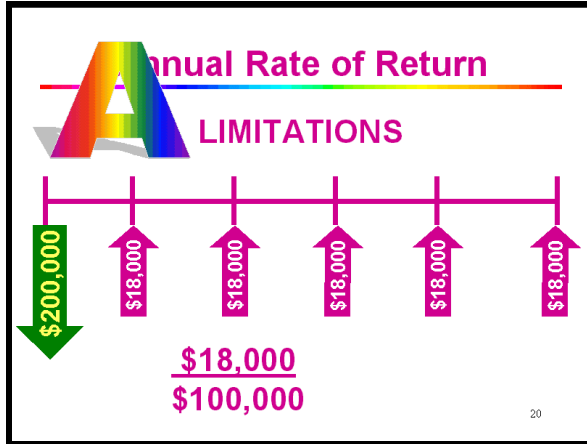


Three ways to determine “average cost”:

1. Sum book value each year and divide by number of years.
- 2.
- 3.

Limitations of Annual Rate of Return:

1. timing of _____
2. timing of _____



Cash Payback Period

time required to _____

-	Cash coming in (revenue)
-	Cash going out (expense)
=	=====

-	Revenue
-	Expense
=	

Even "Streams"

Uneven "Streams"

Limitations of Cash Payback:

ignores overall _____, cash flow _____, and cash flow beyond the payback period.

A Cash Payback Period

LIMITATIONS

Spent	Received				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
200,000	18,000	18,000	18,000	18,000	18,000
+ depr	40,000	40,000	40,000	40,000	40,000
= NCF	58,000	58,000	58,000	58,000	58,000
	200,000	=	40,000	annual SL depr	
	5				
Since EVEN streams:					
	200,000	=	3 years		
	58,000				

B Cash Payback Period

LIMITATIONS

Spent	Received				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
200,000	40,000	30,000	10,000	5,000	5,000
+ depr	40,000	40,000	40,000	40,000	40,000
= NCF	80,000	70,000	50,000	45,000	45,000
	200,000	=	40,000	annual SL depr	
	5				
Since UNEVEN streams:					
	NCF	Cumulative			
	80,000				
	70,000	150,000			
	50,000	200,000 bingo!	3 years		

Discounted Cash Flow: Net Present Value Method

compares present value of _____ with proposed outlay (already in today's dollars)

_____ is built into the computation.

When there is an _____ of future NCF over the _____, it

IS an _____ alternative.

NCF x PV factor	=	PV of NCF	
	-	<u>PV of expenditure</u>	
acceptable		+ or 0	
not acceptable		—	

(A demonstration exercise is on the next page.)

Capital Investment Analysis

Victory Company is considering the acquisition of machinery at a cost of \$750,000. The machinery has an estimated life of 5 years and no residual value. It is expected to provide yearly income of \$37,500 and yearly net cash flows of \$187,500. The company's minimum desired rate of return for discounted cash flow analysis is 6%. Compute the following:

(a) The annual rate of return.

$$\underline{\hspace{2cm}} = \frac{\$ \underline{\hspace{2cm}}}{\$ \underline{\hspace{2cm}}} = \underline{\hspace{2cm}} \%$$

(b) The cash payback period.

$$\underline{\hspace{2cm}} = \frac{\$ \underline{\hspace{2cm}}}{\$ \underline{\hspace{2cm}}} = \underline{\hspace{2cm}} \text{ years}$$

(c) The excess (deficiency) of present value over the amount to be invested using the net present value method. Use the table of "Present Value of 1" in the appendix (and use the "memory" on your calculator).

<u>Year</u>	<u>Net Cash Flow</u>	<u>Factor</u>	<u>PV of NCF</u>
1	\$ <u> </u>	<u> </u>	\$ <u> </u>
2	<u> </u>	<u> </u>	<u> </u>
3	<u> </u>	<u> </u>	<u> </u>
4	<u> </u>	<u> </u>	<u> </u>
5	<u> </u>	<u> </u>	<u> </u>
Total			\$ <u> </u>
Proposed expenditure			<u> </u>
Excess			\$ <u> </u>