

Project Evaluation: Financial Analysis

Project Title:

Nature of the Project:

Objectives of the Project:

Proposed Investment of the Project:

(Amount in Tk)

Fixed Capital	=	
(+) Working Capital	=	
Total Investment	=	

Financing of the Project:

In Percentage (%) (Amount in Tk)

Proposed Equity (Self-Finance)	60%	
Proposed Loan	37%	
Grant and Aids	3%	
Total Investment		

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Determination of Financial Benefits:

1) Net Income and Cash Inflows:

	Years				
	2015	2016	2017	2018	2019
Total Income					
(+)Total Expenses					
Net Income					
(-)Depreciation					
Net Cash Inflows					

2) Accounting Rate of Return:

ARR of the project:

$$\text{Accounting Rate of Return} = \frac{\text{Annual Cash Flows} - \text{Depreciation}}{\text{Initial Investment}}$$

3) Pay Back Period:

$$\text{Payback Period} = \frac{\text{Cost of Project}}{\text{Annual Cash inflow}}$$

	Cost of Project	Cash Inflows
Year 1		
Year 2		
Year 3		
Year 4		
Year 5		

We know that

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$$\text{Payback Period} = \text{Years before full recovery} + \frac{\text{Unrecovered amount at start of the year}}{\text{Cashflows during the year}}$$

4) Discounted payback period:

$$\text{Discounted Cash Inflow} = \frac{\text{Actual cash inflow}}{(1+r)^n}$$

Discounted Payback Period of the Project:

Year (n)	Cash Flow (CF)	Present Value Factor PV 1=1/(1+i) ⁿ	Discounted Cash Flow CF×PV1	Cumulative Discounted Cash Flow
0				
1				
2				
3				
4				
5				

5) Net Present Value (NPV):

$$\text{NPV} = - \text{Initial Investment} + \frac{\text{CF}_1}{(1+r)^1} + \frac{\text{CF}_2}{(1+r)^2} + \dots + \frac{\text{CF}_n}{(1+r)^n}$$

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Year	Expected Cash Flows	PVIF (11%)	Discounted Cash Flows
1			
2			
3			
4			
5			
		Total=	
		(-)Initial Investment =	
		NPV=	

6) Internal Rate of return:

Year (n)	Cash Flow (CF)	Present Value Factor $PV 1=1/(1+i)^n$	Discounted Cash Flow $CF \times PV1$
0			
1			
2			
3			
4			
5			

$$NPV = - \text{Initial Investment} + \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n} = 0$$

M7-6: Project Evaluation: Financial Analysis

7) Economic Rate of Return:

ERR of the Project:

When discount rate 11%

Year (n)	Cash Flow (CF)	Present Value Factor $PV\ 1=1/(1+i)^n$	Discounted Cash Flow
0			
1			
2			
3			
4			
5			

When discount rate 20%

Year (n)	Cash Flow (CF)	Present Value Factor $PV\ 1=1/(1+i)^n$	Discounted Cash Flow
0			
1			
2			
3			
4			
5			

ERR= (Low Rate of Discount) + (Difference between both Rate of Discount) ×

$$\left(\frac{\text{Positive NPV}}{\text{Absolute difference between Positive and Negative NPV}} \right)$$