

Equity Analysis of a Project

INPUT SHEET: USER ENTERS ALL BOLD NUMBERS

INITIAL INVESTMENT	
Initial Investment=	\$50,000
Opportunity cost (if any)=	\$7,484
Lifetime of the investment	10
Salvage Value at end of project=	10,000
Deprec. method(1:Sl.line;2:DDb)=	2
Tax Credit (if any)=	10%
Other invest.(non-depreciable)=	0

WORKING CAPITAL	
Initial Investment in Work. Cap=	\$10,000
Working Capital as % of Rev=	25%
Salvageable fraction at end=	100%

CASHFLOW DETAILS	
Revenues in year 1=	\$40,000
Var. Expenses as % of Rev=	50%
Fixed expenses in year 1=	0
Tax rate on net income=	40%

If you do not have the breakdown of fixed and variable expenses, input the entire expense as a % of revenues.

DISCOUNT RATE	
Approach(1:Direct;2:CAPM)=	2
1. Discount rate =	10%
2a. Beta	0.9
b. Riskless rate=	8.00%
c. Market risk premium =	5.50%
d. Debt Ratio =	30.00%
e. Cost of Borrowing =	9.00%
Discount rate used=	10.69%

GROWTH RATES

	1	2	3	4	5	6	7	8	9	10
Revenues	Do not enter	10.00%	10.00%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fixed Expenses	Do not enter	10.00%	10.00%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Default: The fixed expense growth rate is set equal to the growth rate in revenues by default.

	YEAR										
	0	1	2	3	4	5	6	7	8	9	10
INITIAL INVESTMENT											
Investment	\$50,000										
- Tax Credit	\$5,000										
Net Investment	\$45,000										
+ Working Cap	\$10,000										
+ Opp. Cost	\$7,484										
+ Other invest.	80										
Initial Investment	\$62,484										

SALVAGE VALUE

Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
Working Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,641

OPERATING CASHFLOWS

	1	1	1	1	1	1	1	1	1	1
Lifetime Index										
Revenues	\$40,000	\$44,000	\$48,400	\$53,240	\$58,564	\$58,564	\$58,564	\$58,564	\$58,564	\$58,564
- Var. Expenses	\$20,000	\$22,000	\$24,200	\$26,620	\$29,282	\$29,282	\$29,282	\$29,282	\$29,282	\$29,282
- Fixed Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EBITDA	\$20,000	\$22,000	\$24,200	\$26,620	\$29,282	\$29,282	\$29,282	\$29,282	\$29,282	\$29,282
- Depreciation	\$10,000	\$8,000	\$6,400	\$5,120	\$4,096	\$3,277	\$2,621	\$486	\$0	\$0
EBIT	\$10,000	\$14,000	\$17,800	\$21,500	\$25,186	\$26,005	\$26,661	\$28,796	\$29,282	\$29,282
- Tax	\$4,000	\$5,600	\$7,120	\$8,600	\$10,074	\$10,402	\$10,664	\$11,518	\$11,713	\$11,713
EBIT(1-t)	\$6,000	\$8,400	\$10,680	\$12,900	\$15,112	\$15,603	\$15,996	\$17,278	\$17,569	\$17,569
+ Depreciation	\$10,000	\$8,000	\$6,400	\$5,120	\$4,096	\$3,277	\$2,621	\$486	\$0	\$0
+/- Work. Cap	\$0	\$1,000	\$1,100	\$1,210	\$1,331	\$0	\$0	\$0	\$0	\$0
NATCF	(\$62,484)	\$16,000	\$15,400	\$15,980	\$16,810	\$17,877	\$18,880	\$18,618	\$17,764	\$17,569
Discount Factor	1	1.10685	1.2251169225	1.356020665669	1.500911473796	1.661283864771	1.838792045722	2.035260975807	2.252735252172	2.493440013867
Discounted CF	(\$62,484)	\$14,455	\$12,570	\$11,784	\$11,200	\$10,761	\$10,268	\$9,148	\$7,885	\$7,046
										\$15,294

Investment Measures	
NPV =	\$47,928
IRR =	23.55%
ROC =	60.12%

BOOK VALUE & DEPRECIATION

Book Value (beginning)	\$50,000	\$40,000	\$32,000	\$25,600	\$20,480	\$16,384	\$13,107	\$10,486	\$10,000	\$10,000
Depreciation		\$10,000	\$8,000	\$6,400	\$5,120	\$4,096	\$3,277	\$2,621	\$486	\$0
BV(ending)	\$50,000	\$40,000	\$32,000	\$25,600	\$20,480	\$16,384	\$13,107	\$10,486	\$10,000	\$10,000