

Assignment 11

100 Points (Due: 3:00PM Tuesday May 10th)

Assessment Goals: (Before and after tax analysis, depreciation, inflation, cash flow analysis, and compounding; EXCEL use, Report quality). Show your work. Use formulas, tables, and EXCEL as you wish.

PROBLEM

A major investment firm is purchasing a 70-unit apartment complex for 40 million dollars in a very high demand downtown area of a major city. It is estimated that due to the high demands, all units will be rented throughout the year for the next 10 years. Company projects to sell the building after 10 years for 30 million dollars. Company's estimates for operations and maintenance of the building is \$300,000 a year increasing by 5% each year. Overhead costs are expected to be \$150,000 per year and will remain fixed throughout the next 10 years. Each unit is rented for \$3,000 a month. Rents automatically increase \$100 per year for the next 10 years. The building is fully occupied now and all rental agreements transfer to the new owner. It is estimated that the inflation rate for the next 10 years remain steady at 3.3%. For the tax calculation use Table 17-1 of your textbook (Page 447). Company uses an MARR of 20% before taxes and 15% after taxes and whichever is satisfied the investment is approved. Compounding is monthly and every 5 years the company has to replace some of the older appliances in the building. The current owners have already made the replacements before they sell the building at a cost of \$1,000,000. This expense is impacted by the inflation rate and if the company buys the building they need to do the same before they sell the building. State taxes are flat and remain fixed at 10% on net profit per year for the next 10 years.

1. What is the rate of return before and after taxes? Should the company buy the building?
2. What if the government allowed the company to use sum-of-the-years-digit depreciation, then would it make a difference in the recommendation?
3. The State has an incentive program that if the company rent 10% of their units to targeted group of residents (disabled, low income, veterans, etc.) at \$1,000 a month, then the company can pay 8% instead of 10% state taxes. Would accepting such an offer change the recommendations?