

4. Based on the CAPM, the project's hurdle rate = $0.10 + 2.0 \times (0.15 - 0.10) = 20\%$.
The project's net present value is:

$$NPV = ((\$60,000 \times .833) + (\$80,000 \times .694) + (\$80,000 \times .579) + (\$80,000 \times .482)) - \$200,000 = -\$9620.00$$

Since the *NPV* is negative the project should be rejected.

5. The project's payback period = $2 + 60/80 = 2.75$ years.
Based on the threshold payback period that the firm uses it would accept the project because the firm recovers its initial investment in less than 3 years.
6. The project should be rejected because it has a negative NPV. The payback period leads to a sub-optimal decision because it ignores the time value of money. The payback period also ignores the cash flows in later years but in this case even with year 4's net cash flows the project's NPV remains negative.