BIA 650 A Homework W&A Chapter 2, Problem 32

Management Overview

Problem Statement:

The Objective is to calculate the yield of a bond given its cash flows and current price using Excel’s Goal seek function.

Data Sources:

* + The inputs are identified as Cash flows and Current price of the bond.
  + The key variables are Yield, Net Present Value.
  + We have a constraint that Net Present Value equals Current Price of the bond

Model Approach:

* + Separate the data into inputs, decision variables, constraints and output.
  + A dummy Rate of Interest value is added in a cell.
  + The NPV is calculated using Excel’s NPV function – The dummy rate of interest value and the cash flows are added as arguments to the function.
  + A separate cell is assigned for NPV.
  + Goal seek function:
  + The condition is set as follows. NPV = Current Price

Solution:

The NPV value is 9.1055%