Question: Solving for the Z-Score in Altman's Credit Scoring Model.

Consider the information for PQR Corporation in the next exhibit, Financial Information of PQR Corporation. Financial Information of PQR Corporation Assets Current Assets: €10,000,000 Fixed Assets: €20,000,000 Total Assets: €30,000,000 Sales: €60,000,000 Cost and Expenses: €55,000,000 Income before Taxes and Interest: €5,000,000 Liabilities and Equity Current Liabilities: €5,000,000 Long-Term Liabilities: €10,000,000 Retained Earnings: €3,000,000 Common Stocks: €12,000,000 Total Liabilities and Equity: €30,000,000 Market Value of Equity: €18,000,000

Answer: Given the definitions of X1 through X5, their values can be calculated as shown:

X1 = 5,000,000/30,000,000 = 0.167

X2 = 3,000,000/30,000,000 = 0.1

X3 = 5,000,000/30,000,000 = 0.167

X4 = 18,000,000/(5,000,000 + 10,000,000) = 1.2

 X5 = 60,000,000/30,000,000 = 2

Finally, the Z-score can be calculated as 3.61 using these five values and the coefficients in Equation 1.

Interpreting Z-Scores in Altman's Credit Scoring Model:

Z < 1.81: Default group

1.81 ≤ Z ≤ 2.99: Gray zone

 Z > 2.99: Nondefault group