Corpfin mod 8 expected returns market risk premium risk-free rate practice exam questions

- The ratio of Stock XYZ’s expected return to Stock ABC’s expected return is 1.39
- Stock XYZ has a CAPM beta of 1.28
- The market risk premium is 2.68 times the annual risk-free rate.

Question 8.1: Stock XYZ’s expected return

Interest rate units are arbitrary, so assume the risk-free rate is one unit.

What is Stock XYZ’s expected return?

Answer 8.1: The risk-free rate is one unit, so the market risk premium is 2.68 units.

Stock XYZ’s expected return is 1 + 1.28 × 2.68 = 4.43 units.

Question 8.2: Stock ABC’s expected return

What is Stock ABC’s expected return?

Answer 8.2: The ratio of Stock XYZ’s expected return to Stock ABC’s expected return is 1.39, so

Stock ABC’s expected return is 4.43 / 1.39 = 3.19 units.

Question 8.3: Stock ABC’s CAPM beta

What is Stock ABC’s CAPM beta?

Answer 8.3: The CAPM beta = (the expected return – the risk-free rate) / the market risk premium

= (3.19 – 1) / 2.68 = 0.82.