

Two stage -growth model problems

Problem01:

BrightFuture Ltd. is a rapidly growing company whose earnings and dividends are expected to grow at different rates over time. You are required to determine the intrinsic value of the company's share using the **Two-Stage Growth Model**.

Information Provided:

1. Market price Rs. 30
2. The **most recent dividend (D_0)**: ₹1.25 per share
3. The company's dividends are expected to grow at a high growth rate of **12% per year** for the next **3 years** (Stage 1).
4. After 3 years, the dividend growth rate is expected to stabilize at a constant **3% per year** indefinitely (Stage 2).
5. The required rate of return on equity (k_e): **9%**.

Requirements:

1. Compute the expected dividends for the high-growth phase (Stage 1: Years 1 to 3).
2. Calculate the terminal value at the end of Year 3 (the start of Stage 2) when the growth stabilizes.
3. Determine the present value of all future dividends and calculate the intrinsic value of the share.

Problem:

SteadyRise Ltd. is a growing company whose earnings and dividends are expected to grow at different rates over time. You are required to determine the intrinsic value of the company's share using the **Two-Stage Growth Model**.

Information Provided:

1. The **most recent dividend (D_0)**: ₹2.20 per share
2. The company's dividends are expected to grow at a high growth rate of **8% per year** for the next **3 years** (Stage 1).
3. After 3 years, the dividend growth rate is expected to stabilize at a constant **3.75% per year** indefinitely (Stage 2).
4. The required rate of return on equity (k_e): **11%**.

Requirements:

1. Compute the expected dividends for the high-growth phase (Stage 1: Years 1 to 3).
2. Calculate the terminal value at the end of Year 3 (the start of Stage 2) when the growth stabilizes.

3. Determine the present value of all future dividends and calculate the intrinsic value of the share.

Problem:

GrowthPlus Ltd. is a steadily growing company whose earnings and dividends are expected to grow at different rates over time. You are required to determine the intrinsic value of the company's share using the **Two-Stage Growth Model**.

Information Provided:

1. The **most recent dividend (D_0)**: ₹10.00 per share
2. The company's dividends are expected to grow at a high rate of **6.25% per year** for the next **4 years** (Stage 1).
3. After 4 years, the dividend growth rate is expected to stabilize at a constant **3.25% per year** indefinitely (Stage 2).
4. The required rate of return on equity (k_e): **13%**.

Requirements:

1. Compute the expected dividends for the high-growth phase (Stage 1: Years 1 to 4).
2. Calculate the terminal value at the end of Year 4 (the start of Stage 2) when the growth stabilizes.
3. Determine the present value of all future dividends and calculate the intrinsic value of the share.

Problem

EliteGrowth Ltd. is a high-performing company whose earnings and dividends are expected to grow at different rates over time. You are required to determine the intrinsic value of the company's share using the **Two-Stage Growth Model**.

Information Provided:

1. The **most recent dividend (D_0)**: ₹65.00 per share
2. The company's dividends are expected to grow at a high growth rate of **7.50% per year** for the next **4 years** (Stage 1).
3. After 4 years, the dividend growth rate is expected to stabilize at a constant **4.25% per year** indefinitely (Stage 2).
4. The required rate of return on equity (k_e): **11%**.

Requirements:

1. Compute the expected dividends for the high-growth phase (Stage 1: Years 1 to 4).

2. Calculate the terminal value at the end of Year 4 (the start of Stage 2) when the growth stabilizes.
3. Determine the present value of all future dividends and calculate the intrinsic value of the share.