Corhig Co is a company that is listed on a major stock exchange. The company has struggled to maintain profitability in the last two years due to poor economic conditions in its home country and as a consequence it has decided not to pay a dividend in the current year. However, there are now clear signs of economic recovery and Corhig Co is optimistic that payment of dividends can be resumed in the future. Forecast financial information relating to the company is as follows:

year	**1**	**2**	**3**
earnings ($000)	3000	3600	4300
dividends ($000)	nil	500	1000

The company is optimistic that earnings and dividends will increase after Year 3 at a constant annual rate of 3% per year.

Corhig Co currently has a before-tax cost of debt of 5% per year and an equity beta of 1•6. On a market value basis, the company is currently financed 75% by equity and 25% by debt.

During the course of the last two years the company acted to reduce its gearing and was able to redeem a large amount of debt. Since there are now clear signs of economic recovery, Corhig Co plans to raise further debt in order to modernise some of its non-current assets and to support the expected growth in earnings.

This additional debt would mean that the capital structure of the company would change and it would be financed 60% by equity and 40% by debt on a market value basis. The before-tax cost of debt of Corhig Co would increase to 6% per year and the equity beta of Corhig Co would increase to 2.

The risk-free rate of return is 4% per year and the equity risk premium is 5% per year. In order to stimulate economic activity the government has reduced profit tax rate for all large companies to 20% per year.

The current average price/earnings ratio of listed companies similar to Corhig Co is 5 times.

Required:

Calculate the current cost of equity of Corhig Co and, using this value, calculate the value of the company using the dividend valuation model.

Examiners Report

This part of question 4 asked for a calculation of the current cost of equity of Corhig Co, and an estimate of the value of the company using the dividend valuation model.

Most answers correctly calculated the current cost of equity using the capital asset pricing model, although some answers confused the equity risk premium of 5% given in the question with the return on the market.

Most answers struggled to use the dividend valuation model to value the company. Simply put, the dividend valuation model holds that the value of a company is equal to the present value of its future dividend. Most answers limited their valuation attempt to using the dividend growth model, ignoring the dividend expected in year 2.

The dividend growth model can be used to provide a year 3 present value of the dividend stream expected after year 3. This year 2 present value then needed to be discounted back to year 0, and added to the present values of the dividend from years 2 and 3, to give the value of the company.

A useful point to remember with questions such as this, is that it is essential to pin down the amount and the timing of future cash flows when calculating present values.