FNCE20005 Corporate Financial Decision Making 2021

TUTORIAL 4: ISSUES with WACC and CAPITAL STRUCTURE POLICY

SECTION A - SOLUTIONS

Question 1

Business risk is the risk inherent in a company's operations, and will depend largely on the industries in which the company operates.

Financial risk is the additional risk to which shareholders are exposed due to a company's use of debt finance.

Default risk is the risk that a borrower may fail to make the repayments that are due to lenders.

Both financial risk and default risk are associated with debt finance, but the two risks can be distinguished. In particular, any borrowing by a company will cause financial risk, even if the risk that the borrower may default is zero.

Question 2

The main reason for expecting the debt–equity ratio of companies in the same industry to be similar is that they have similar business risk. As noted in Section 13.1.1, there is some support for this view. However, companies in the same industry (for example, retailing) also operate with very different debt–equity ratios, which suggests that factors other than business risk are important in determining a company's debt–equity ratio. For example, since cash inflows are often used to repay debt, a more profitable company is likely to have a lower debt–equity ratio than other less-profitable companies in the same industry.

Question 3

The policy of maintaining a portfolio of projects at various stages of development has advantages for mining companies. Each individual ore body will eventually be exhausted and unless they are replaced by new discoveries, the company will have a limited life, or at best, experience disruption of its activities and large fluctuations in the size of its workforce if there are periods when an old mine has been worked out but no new ones have been developed. One advantage of the policy is that it avoids the costs inherent in labour redundancy and rehiring programs.
However, in this case, there are signs that the policy has been taken too far. Shareholders are interested in the amount and timing of the company's net cash flows, but are unlikely to benefit from mining low-grade ore simply to smooth its cash flows—that is, if the low-grade ore is uneconomic, mining it has a negative net present value and will decrease shareholders' wealth. In summary, the policy has obvious advantages for employees and managers, but can be harmful to shareholders.

Question 4

The marginal cost of capital is the cost of capital for a specific investment and depends on the features of that investment. The relevant features are the risk of the investment and the period during which capital will be committed to the investment. A company's weighted average cost of capital (WACC) will reflect the risk and duration of its 'average' investments. Therefore, a company's WACC is a measure of the marginal cost of capital for new investments, provided that their risk and duration are the same as the risk and duration of the company's 'average' investments. In other words, while the WACC does have important limitations, it is a valid approach that is appropriate for estimating the marginal cost of capital.