2.3.4 Modcon Exercise Part 2

Unit: Unit 1 – Treasury Strategy

Module: Module 2 – Risk and return

Date: 1 March 2012

Summary: Exercise based on a proposal to build a housing project in Qatar requiring application of project appraisal techniques, specifically: identification of relevant cashflows for a geared analysis, calculation of the geared IRR and comparison to ungeared IRR, identification of relevant cashflows for a shareholder analysis, calculation and comment on the shareholder's IRR and conclusion as to whether the project is in the interests of the shareholders.

Keywords: project appraisal, cashflows, shareholder, gearing, ungeared, internal rate of return

This is a continuation of Exercise 2.2.2 where you should already have evaluated the ungeared economics for Modcon.

Question 1

a) Identify the relevant cash flows for the geared analysis, assuming the parent has access to cash flows

b) Calculate the IRR of the resultant equity cash flows. If you cannot find a solution on Excel, you may need to change the draw-down on the loan. Why did this not work in Excel?

c) Comment on the level of the geared IRR compared with ungeared project IRR of 20.36%.

Question 2

a) The project was actually structured to be hosted in an SPE company, Modcon Qatar. Bank and legal restrictions applied to the remittance of cash out of the company, generating the remittance profile set out in the Modcon investment appraisal exercise spreadsheet.

   Identify the relevant cash flow for the shareholder analysis. You will need to restore the original loan draw-down. Assume the company is wound up at the end of the 10-year period, paying out its residual cash to the shareholder.

b) Calculate the shareholders' IRR. Comment on the level of the shareholder IRR compared with the geared cash flow IRR.

c) In this case, the analysis from 2b is what really matters - is the project worth doing from the shareholders' perspective? What might be the required rate of return? Use a risk-

free rate of 6%, an equity premium of 5% and an asset beta for a housing project of say 0.9.

In this part, only consider the position for the shareholders of Modcon Qatar, the SPE., not that of the shareholders of Modcon PLC.