# 2.2.2 Modcon Exercise Part 1

# Background and Questions

**Unit:** Unit 1 – Treasury Strategy

**Module:** Module 2 – Risk and return

**Date:** 1 September 2014

**Summary:** A project evaluation case study requiring the identification of operating and investment cash flows, NPV, PI and IRR followed by comment on the attractiveness of the proposal and identification of major risks for a given scenario.

**Keywords:** project finance, project appraisal, project risk, net present value, internal rate of return, profitability index

**Background information**

You work in Modcon Group plc central treasury and you have asked regional treasury for details of the "Ttarrab project". They have misunderstood the request and have forwarded the funding application rather than the business case. Due to lack of time you can't ask them to resend the material, but you need to check that the proposal does in fact meet the Group's overall investment criteria.

**Ttarrab - Investment appraisal case study**

You should concern yourself primarily with the cash flow projections - see accompanying exercise spreadsheet. The rest of the document provides supporting background information, relevant to the risk assessment.

The project is a proposal for a housing project in the Middle East. The following summary was put to the bank for approval of the banking finance.

**Outline proposal**

The following financing plan has been tentatively agreed with a syndicate of banks:

| | |
|---|---|
| Borrower: | Modcon (Qatar) Ltd |
| Amount: | US$ 8,000,000 loan from banking syndicate, US$ 1,000,000 equity contribution (see notes below) |
| Purpose: | To finance the construction of 40 executive houses in Qatar, together with associated engineering and site works. Total capital cost US$ 7,608,512. |
| Availability Period: | One year from date of loan agreement. (The project appraisal model assumes half a full year's interest is payable in project year 1.) |
| Repayment: | 5 equal annual instalments of US$ 1,600,000 commencing 12 months from date of loan agreement (total syndication). |
| Security offered: | Guarantee of Modcon (International) Ltd and legal charge over the project. |
| Interest rate: | 8% |

**Details of project and borrower**

Modcon (International) Ltd, the international arm of the Modcon Group plc, has formed a new joint venture, Modcon (Qatar) Ltd (the borrower) for the purpose of the above project, in which it has a 50% shareholding, the balance being held by Qatari nationals under local regulations about foreign ownership of Qatari businesses.

The borrower has entered into a form of agreement to lease a plot of land at Ttarrab in Qatar and will enter into further contracts with Modcon (Homes) Ltd., UK, for the supply and erection of 40 prefabricated houses. The civil engineering, ancillary site works, etc. will be carried out by local subcontractors, who are connected to the lessor. The company advises that the demand for houses of this nature from international companies operating in Qatar for their expatriate staff is strong and in view of the serious shortage of accommodation in the area, no difficulty is foreseen in letting the houses; in fact a number of Letters of Intent to lease the houses are already being negotiated. Repayment of the loan will come from the rental income, after deduction of overheads, payments under the Head Lease etc. The Modcon Group is a good customer of the syndicate lead bank but the Credit Committee of the bank has recommended that this exposure should be on a secured basis.

For working purposes, the Qatari tax rate can be taken as Nil%.

A legal opinion is provided below; note that the legal opinion mainly relates to the project risks.

**Extract from legal opinion**

The 'Head Lease' of the land constitutes an agreement whereby the use of the land and all proceeds there from are granted by the lessor (the ruler of Qatar) to Modcon (Qatar) Ltd for a period of 10 years. Modcon (Qatar) Ltd have an obligation under the agreement to complete the housing project, up to local building standards, within a period of two years at a cost of not less than US$ 8 million. If it does not comply with this obligation within the specified two years, the lessor has the right to terminate the agreement and reclaim the land. At the end of the ten year lease period ownership of the land, the housing and all proceeds there from revert to the lessor.

***Required:***

You have the projected cash flows for the project (see accompanying exercise spreadsheet). Unfortunately these have been prepared for the loan application and are not in an ideal format for appraisal of the project. Assume that the cash flows are in "money of the day" terms i.e. inflated. Assume that all flows take place at the end of the calendar year.

1. Identify the operating and investment cash flows preparatory to carrying out a DCF analysis.
2. Calculate the NPV and the Profitability Index using a 15% discount rate, plus the IRR.
3. What is your summary of the financial attractiveness of the project?
4. Identify the major risks of the project, to do with:
   a) cash flow assumptions;
   b) other risk factors; and
   c) summarise the attractiveness of the deal to the various parties.