**FINM3406 Tutorial Run Sheet**

**Week 6 – Real Estate Development**

**Overview**

The main aim for this session is to get students to work in groups and try to create during the tutorial session an excel spreadsheet that enables them to calculate the land value of real estate development site using the very simple residual land value method (also known as the Hypothetical Development Method).

**Tutorial Activities for Students**:

**Q1 A**

During this week's tutorial work in groups and attempt to prepare an excel spreadsheet that uses the Residual Hypothetical Development Method discussed during the Week 5 lecture to determine the purchase price (land value) that should be paid for a real estate development site with the following charteristics:

|  |  |
| --- | --- |
| No of units | 35 |
| Average sale price per unit | $690,000.00 |
| Cost of Sale | 5% |
| Profit & Risk Rate | 17% |
| Surveying fees | $50,000.00 |
| Town Planning Fees | $100,000.00 |
| Council Headworks Charges (per unit) | $5,000.00 |
| Build Project Manager Fees | $150,000.00 |
| Construction Costs (per unit) | $300,000.00 |
| Architect/Engineering/Other Fees as a percentage of construction costs | 4% |
| Mortgage Establishment Fee | $80,000.00 |
| Development Period (months) | 18 |
| Selling Period (months) | 18 |
| Debt funding Interest Rate (per annum) | 8% |
| Land Tax to be paid by the developer | $25,000.00 |
| Rates to be paid by the developer | $25,000.00 |
| Planning approval period (months) | 6 |
| Acquisition Costs (percentage of land purchase price) | 4% |

For the purposes of this exercise do not consider GST.

**Q1 B**

Assume that the developer is concerned about the development and wants to do a sensitivity analysis based upon a number of variables changing. What price should the developer pay for the land if the Average sale price per unit reduced to $650,000, the Profit & Risk rate increased to 20%, the construction costs increased to $325,000 per unit and the expected development period increased to 24 months?

**Q2**

Once you have created this spreadsheet, see if you can use it for a very simplistic and rough calculation to work out the value of development with the following characteristics:

|  |  |
| --- | --- |
| No of units | 10 |
| Average sale price per unit | $750,000.00 |
| Cost of Sale | 5% |
| Profit & Risk Rate | 15% |
| Construction Costs (per unit) including all fees and debt establishment costs | $450,000.00 |
| Development Period (months) | 12 |
| Selling Period (months) | 6 |
| Debt funding Interest Rate (per annum) | 8% |
| Land Tax to be paid by the developer | $10,000.00 |
| Rates to be paid by the developer | $10,000.00 |
| Approval period (months) | 3 |
| Acquisition Costs (percentage of land purchase price) | 4% |

If you need further guidance please refer to pages 79 - 91 of Chapter 10 of Whippple and the discussion of the residual static land value method.

Attached is an excel spreadsheet that answers these questions.

Not an overly difficult exercise, just would like the student to attempt to prepare this spreadsheet themselves so that get an understanding of this model. If they were to ever work in practice on a model like this there are quite a few very good (and complicated) off the shield models that they would use. Making one from scratch should help them understand what the models are trying to do.