

Faculty of Business and Law
Higher Education Division
FIN20014 Financial Management

Semester 1 2018

The objective of this assignment is to encourage the students to use excel spreadsheets to aid in problem solving. Students are asked to solve a capital budgeting problem using an excel spreadsheet.

Weighting: 20% of total assessment.

Due Date: **Tutorial in week beginning Monday 07 May.** Submit hard copy of your assignment **either** to your tutor in corresponding tutorial class **or** drop it in the assignment submission box on Level-11 BA Building on or before 11 May (Friday) 5:00 pm. Submit soft copy via 'turnitin' through Blackboard by this due time.

Late Submissions: You must contact your Tutor directly and make alternative arrangement should you not be able to submit hard copy of your assignment in your tutorial. **Assignments will not be accepted after 5:00 pm on Friday 11 May** unless an arrangement has been made directly with your Tutor.

Format: The assignment is a problem solving exercise using an excel spreadsheet with additional discussion on findings considering both quantitative measures and qualitative issues.

Documents: Students should submit the following documents **IN HARD COPY SUBMISSION:**

- an assignment COVER sheet **<Student will forfeit assignment mark if cover sheet is not correctly submitted>**
- a copy of the FORMAL report
- a copy of the EXCEL spreadsheet displaying VALUES
- a copy of the EXCEL spreadsheet displaying excel FORMULAS

Online Submission: Link and details will be available on BB.

For online submission on BB via Turnitin, submit **ONLY ONE FILE** including **ONLY the Assignment Cover Page along with the copy of Formal Report.**

Details of Assignment

PENTAG Company produces small powerboats and faces the challenge to build and market environment-friendly green powerboat. Dr Pascal Goulpie, the director of *PlanetSolar*, stated that building an environment-friendly boat is possible for sure, but the market and demand are still niche right now. Many experts believe that *resin-infusion technology* will lead the industry for cleaner powerboats in future; however, that will take long time. However, PENTAG is not relying on that new technology to build greener powerboats. Rather, the company is now evaluating a new project to produce *Q-powerboats* that will leave excessive carbon footprint in the water.

PENTAG invested \$500,000 in the last year for designing its *Q-powerboat*. Additional \$100,000 was incurred to promote the boat to a number of distributors. However, considering a few major changes in the previous estimates, the Chief Financial Officer (CFO) of PENTAG Company

has instructed to re-evaluate the project. The following further revised estimates are provided relating to this *Q-powerboat* project.

The company requires additional plant for building the *Q-powerboat* and the plant can be procured from a local importer at a cost of \$20,000,000. Additional transportation and installation cost would be \$800,000. The plant would have economic life of six years and will be depreciated using straight line rate of 12 per cent for tax purposes. At the end of the project life of six years, the plant is estimated to be sold for \$3,000,000.

In addition to the plant, the project will require an initial investment in stock (inventory) of \$500,000. Furthermore, projected tied up amount with debtors (accounts receivable) would be \$380,000 and it would be partially offset by \$180,000 increase in creditors (accounts payable). There will be no further investment in net working capital (NWC) until its final recovery at the end of project life.

Considering positive responses received during promotional programs, and the economy price of \$30,000 per boat only, sales manager of PENTAG is very optimistic to sell 650 *Q-powerboats* in the first year. Due to competition and water pollution issues, annual sales will decrease by 50 boats every year during remaining life of the project. Within the range of producing 300 to 700 boats per year, variable cost of production is estimated to be 40% of sales revenue. The company will produce boats equal to the number of sales units estimated in a year. Head office of the company will allocate \$200,000 for fixed factory overhead per year to this production plant.

PENTAG company is planning to finance this project by issuing 10% debenture of \$10 million and the remaining required investment would be financed by equity. Selling *Q-Powerboat* will also increase annual sales of powerboat parts for \$500,000. Cost of production for these parts would be 40 per cent of sales revenue from parts. Starting the *Q-powerboat* project will stop other monthly earnings of \$10,000 from the production facility of the PENTAG Company.

The company uses required rate of return considering its weighted average cost of capital (WACC) that varies from 20 to 25 per cent in recent time. Management has decided to use 20 per cent required rate to evaluate this project. Corporate tax rate is 30%. The required discounted payback period is 4 years.

A new environment protection group, *Save the Waterways*, is trying to negotiate with the management of PENTAG Company to stop the *Q-Powerboat* project due to its excessive carbon emission. In this context, company managers have identified another *S-Powerboat* project that would be relatively more environment friendly. Initial investment for this *S-Powerboat* project would be the same as *Q-Powerboat* project and projected future cash flows would be as follows:

Year-1: \$6,400,000; Year-2: \$7,400,000; Year-3: \$7,900,000;
Year-4: \$8,600,000; Year-5: \$9,300,000; Year-6: \$11,100,000;

Before taking final decision in the upcoming meeting, the CFO of PENTAG Company requires a clear explanation of all relevant issues relating to the *Q-Powerboat* project. Particularly a FORMAL REPORT is enquired by the CFO to include a detail analysis of cash flows and explanations of results of capital budgeting methods that are commonly used in evaluating projects.

Furthermore, in a separate section in the report, CFO is interested to review the details of the comparison between *Q-Powerboat* and *S-Powerboat* projects with respect to the results of capital budgeting methods using both 20 and 25 per cent required rates, crossover rate and all relevant factors that can assist in taking final decision.

Required

Using Excel Spreadsheet, prepare a full analysis to be presented to the CFO of PENTAG Company in evaluating whether either project should be started or not. Your analysis should include the following

- Table of cash flows
- Use of excel formulae where appropriate (refer eLearning video of Week-6)
- A written report (1500 words, +/- 10%) outlining your recommendation as to whether PENTAG Company should proceed with either project. Justify your recommendations using *quantitative* and *qualitative* issues and your analysis of probable risks and benefits relating to the project. Comparison statement is to be presented in a separate section in the report.

Marks will be awarded for:

- Set out of spreadsheet (watch eLearning video of week-6)
 - i. Ease of reading spreadsheet
 - ii. Use of excel formulae in organised spreadsheet
 - iii. Correct application of theoretical model
- Overall presentation of answer including the written report.

** Carefully read the Report Format Guide (on page-4) and Marking Rubric (on page-5) for required components and presentation of formal report.*

Guidelines for Marking and Submission of Excel Assignment FIN20014 Financial Management Semester 1 2018

Total Marks for the assignment = 20 marks

Organised Excel Spreadsheet = 10 marks and

*Concise **Formal** Business Report (1500 +/- 10% words) = 10 marks*

The attached marking rubric (Excel Assignment Information Page-5) should be considered by students when preparing their assignment for submission.

Students are asked to solve a capital budgeting problem using an excel spreadsheet.

HARD COPY SUBMISSION:

Submit a hard copy of your assignment

- Containing **(i)** assignment cover sheet; **(ii)** a copy of the formal report; **(iii)** a copy of the excel spreadsheet displaying values; and **(iv)** a copy of the excel spreadsheet displaying excel formulas.
- EITHER directly to your tutor in tutes in the WEEK BEGINNING Monday the 9th of May,
- **OR** into the assignment drop box on Level-11 BA Building, **clearly indicating the name of your tutor and tutorial time**. All assignments will then be forwarded directly to the respective tutors for marking. Assignment box will remain open from 7 May to 11 May (to be closed at 5:00pm on 11 May).

SOFT COPY SUBMISSION:

Submit soft copy of your assignment via Blackboard TURNITIN submission under ASSESSMENT folder:

- By FRIDAY the 11th of May 5:00 pm AEST.
- Submit **ONLY ONE FILE** containing the cover sheet and required Report only.
- Submit final assignment by using the FINAL SUBMIT option.

Late assignments will be determined based on the SOFT COPY SUBMISSION time as recorded in TURNITIN. Late Assignments will not be accepted unless an arrangement has been made directly with the convenor.

Should you be unable to submit your assignment due to ill health then you will need to contact Miraj Ahmmod on sahmmod@swin.edu.au (indicating who your tutor is) to make alternative arrangements.

SUGGESTED FORMAT FOR ASSIGNMENT REPORT

Components of a FORMAL report are expected in the assignment structure. Following table shows one example of major sections: (other sections may be added, if needed)

Structure Example
<p>COVER PAGE [Must be correctly filled in; otherwise, you will forfeit marks]</p> <p>Executive Summary</p> <p>Table of Contents</p> <p>Body</p> <ol style="list-style-type: none"> 1. Introduction 2. Findings <ol style="list-style-type: none"> 2.1 Quantitative (with explanation of results) 2.2 Qualitative 3. Recommendations and Justifications 4. Detail Comparison and Further Recommendations 5. Conclusion <p>References</p> <p>Appendix</p> <p>Workings</p> <p><i>Exact Copy of Excel Spreadsheet displaying values (not edited in Word doc)*</i></p> <p><i>Exact Copy of Excel Spreadsheet displaying Excel formulas (not edited in Word doc)*</i></p>

** Only the sizes of font and columns of the Excel Spreadsheet can be edited in Word Doc.*

Carefully read the following Marking Rubric for required components and presentation of formal report.

Marking Rubric

NAME:

ID:

Marking Rubric for Assignment for FIN20014 Financial Management Sem1 2018

Weight	TRAITS	0	1	2	3	4	5	Total Marks
		No Attempt	Inadequate attempt	Less than Adequate	Acceptable	Very Good	Exemplary	
Excel Spreadsheet – Max 10 Marks	Knowledge and understanding of spreadsheet application	No evidence of understanding of use of spreadsheet and its application in the context of this question	Less than adequate spreadsheet - no use of formulas	Less than adequate spreadsheet - very limited use of formulas	Competent spreadsheet - reasonable use of formulas	Very good spreadsheet - reasonable use of formulas but some incorrect figures	Excellent answer – with correct figures	/10.00
Report -								
Max 10 marks								
30%	Structure and Presentation of Entire Report	No evidence of structure or thought of presentation	Inadequate attention to structure and presentation of entire report	Few headings. Weak flow. No table of contents or page numbers	Evidence of limited structure. Presentation of entire report is acceptable	Appropriate structure and a well presented report including a table of contents, page numbers etc	Professional structure, guiding reader through logical analysis. Superior	/3.00
50%	Conclusions/ recommendations	No conclusion or recommendations provided	Less than adequate conclusion given with no final recommendation	Less than adequate conclusion given with illogical final recommendation	Weak connection between analysis and conclusions or recommendations.	Good connection between analysis and conclusions	Superior conclusions drawn using all relevant analysis.	/5.00
20%	Style and grammar	No evidence of checking for style and grammar	Inadequate attention to grammar, spelling and expression	Poor use of grammar, spelling and expression	Appropriate use of expression with several spelling errors. Shows some evidence of editing.	Appropriate use of expression and minimal spelling errors. Shows clear evidence of editing.	Fully edited with no easily discernible errors in expression, spelling or grammar	/2.00

TOTAL
Comments

/20.00

FREQUENTLY ASKED QUESTIONS and SUGGESTIONS:

- Q1. Do I have to upload the soft copy of the same file as I submit for hard copy?**
A. NO. Soft copy submission requires ONLY ONE FILE including the Cover Page and the Report only.
- Q2. Can I upload more than one file via Turnitin?**
A. NO. You can upload ONLY ONE FILE via Turnitin. You cannot change the file once uploaded.
- Q3. Can I get any help in understanding the assignment question?**
A. Whilst we (the members of the Finance teaching panel) understand your concern, we cannot answer to any direct query you may ask relating to the assignment. The problem has specifically been included in the assignment for students to ponder and respond. It is expected that you have clarified all assumptions you may have made in your assignment report.
- Q4. Are there specific resources that can help me understand the assignment questions?**
A. YES. Issues relating to assignment are discussed in relevant lectures (Week-5 & 6) for multiple times and/or in different ways. To assist you with understanding the concepts of finding Net Cash Flows, it is suggested that you review the lecture illustrations discussed on relevant topics (4a & 4B). You can also check relevant past exam questions and solutions, Sunburst Case and solutions, as well as your text and lecture materials for that topic. All these resources, included recorded lectures and notes written in lectures, are available on BB. eLearning video of week-6 will guide about the way to prepare cash flow table using Excel.
- Q5. I don't know how to take print out of Excel spreadsheet displaying Formulas only.**
A. Google it! For different versions of Excel, different ways are there. All you can find in Google and Youtube.
- Q6. Can I send my works on assignment to any teaching staff for having any comment and/or guidance?**
A. NO. Assignment is an individual assessment item and members of the Finance teaching panel can neither view the spreadsheet nor make comments on it before submission.
- Q7. What would be the content and structure of my report?**
A. A sample of format is provided on page-4 and that is followed by a marking rubric on page-5. If you go through these documents, it will give you the idea about the structure and content expected in your report. You are required to provide necessary calculations, results, logical explanations of findings and justifications to convince the manager of the firm to support your recommendations.
- Q8. Can I submit hard copy of assignment in the drop box?**
A. YES. If you don't submit hard copy of your assignment to you tutor, you can submit it in the drop box on Level-11 BA Building by 5:00 pm 11 May. **If you do not mention your TUTOR's NAME and Tutorial Time correctly on the cover page, you will forfeit the marks of assignment.**
- Q9. How do I know the name of my tutor?**
A. Tutorial timetable with tutor's name and contact email are available on BB site for this unit.
- Q10. What will happen if my assignment is similar to another submission?**
A. Both of the similar assignments will be sent to a review committee for identifying the probable case of plagiarism. In the case of identified plagiarism, further steps would follow the University Policies.