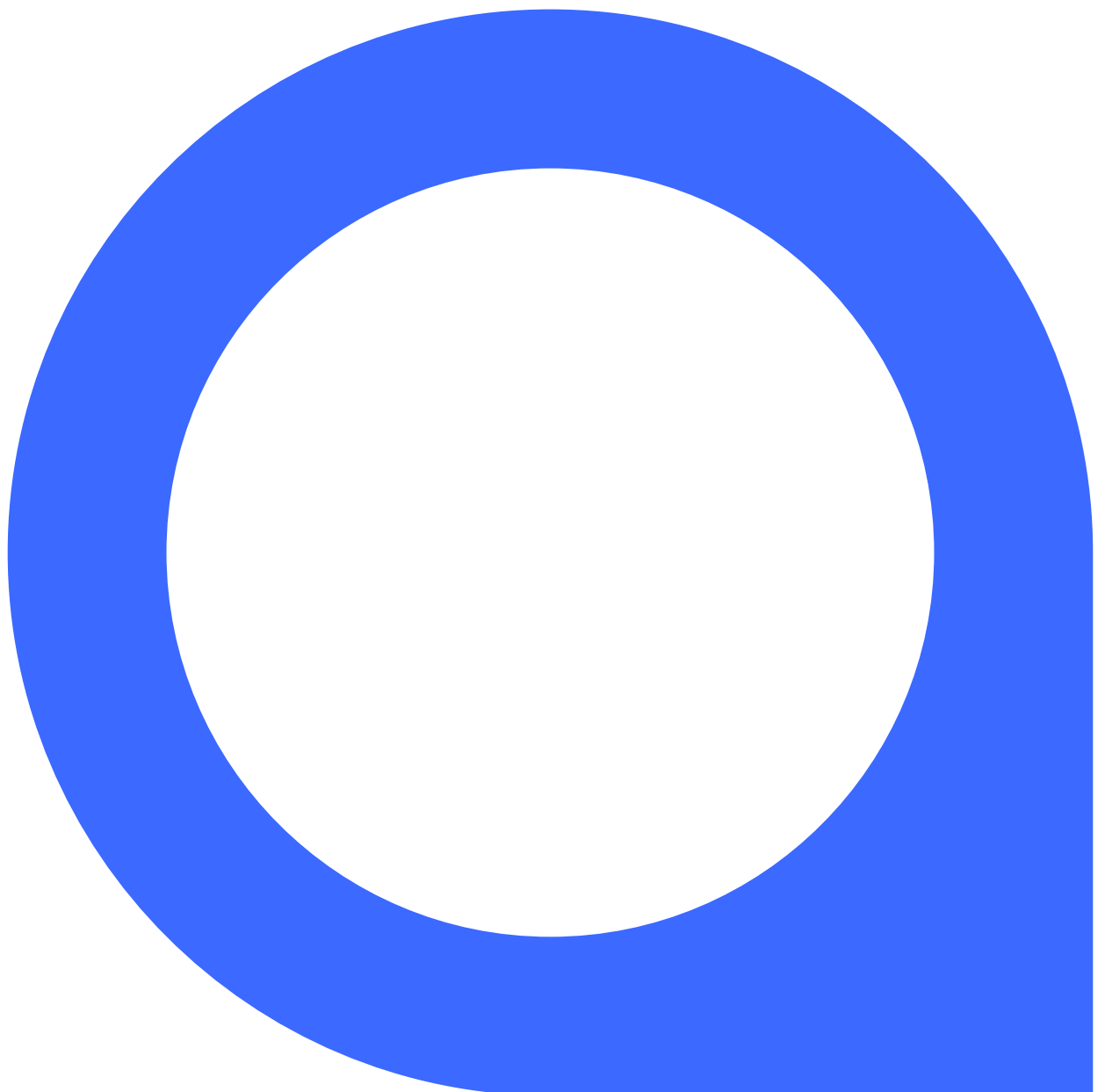


Asset Liability Management

**Assignment Semester 1 2025 –
Feedback for students**





Feedback materials

- Assignment purpose
- Assignment overview
- Results summary
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- Results and feedback by question
- Example of assignment

Assignment purpose

The main purpose of the assignment from your perspective was to help you to develop your skills in matching assets to liabilities. In particular to:

- determine likely long-term investment returns;
- apply a framework for selecting assets to match liabilities;
- set return objectives to support liabilities but within constraints; and
- build and use a simple asset liability model.

These skills will also help you pass the end of semester assessment and perform well in the workplace.

The specific skills that were being developed and assessed in the assignment were the ability to:

- apply subject material in an unfamiliar context;
- plan;
- build and manipulate a spreadsheet model;
- determine appropriate assumptions;
- analyse results;
- communicate relevant points in language appropriate to the audience, in a logical and coherent manner; and
- meet business standards for presentation of written materials.

This assignment provided an opportunity for you to think deeply, spend time preparing a detailed answer and self-reflect on your **writing** skills. Whilst there was ample time to write your assignment answers, you should ask yourself if you need to spend more time improving your writing skills to help you pass time-limited examinations.



The assignment required you to create a set of sensible **assumptions** or parameters. You needed to demonstrate *how* you derived your assumptions or model parameters. It is important that you described what you did as the marker(s) needed to understand if you are able to apply knowledge to the specific situation described in this assignment. We were also looking for you to demonstrate that you can deal with uncertainty in a reasonable way.

The assignment required you to build and/or use a **model**. A key actuarial skill is to obtain a grasp of the qualitative nature of outputs from models and describe them. This assignment was designed to test your ability to explain your model methodology and its outputs to a non-technical audience.

There may not be a single correct answer to the question(s) posed. You should have ensured that you adequately demonstrated your steps, assumptions, and reasoning to the marker(s) so that your answer can be considered in context.

Overview of assignment content

The assignment required students to prepare a business report to an aged care provider recommending a specific asset allocation for its asset portfolio such that it will provide the cash flows to meet the liabilities over the next 30 years. The assignment comprised 5 questions as summarised in Table 1 Assignment questions. Marks were also awarded for Report Writing.

Table 1 Assignment questions

Marks		Summary
A	3 (15% of total)	Explain the Aged Care liabilities.
B	3 (15% of total)	Summarise observations on the data provided and the relevance of these observations to the task of projecting the asset and liability cashflows.
C	3 (15% of total)	Explain the methodology used to determine an asset allocation for the asset portfolio that provides for the liabilities.
D	4 (20% of total)	Justify each assumption required to project both the liabilities and the assets over the next 30 years, drawing on the observations derived from the data.
E	4 (20% of total)	Recommend a specific asset allocation across four asset classes (30-day bank bills, 90-day bank bills, 10-year government bonds and Australian equities) for the asset portfolio including the reasons for that asset allocation.
F	3 (15% of total)	Report writing



Results summary

Overall, students performed well on the assignment with a pass rate of 71% with an average score of 64%. A summary of the results is presented in Table 2 Overall results.

Table 2 Overall results

Grade	Number of students	Percentage of students
Significantly above pass	22	11.0%
Above pass	49	24.5%
Pass	71	35.5%
Below pass	53	26.5%
Significantly below pass	2	1.0%
No attempt	3	1.5%
Total	200	100%

Overall feedback

We expect most students to pass the assignment because of their prior academic history, guidance provided (including via tutorials and the discussion boards in the Learning Management System) and the time allowed to complete the assignment in a non-examination environment. We also expect that students will closely follow the directions we provide in the rubric.

The average candidate (i.e. achieving a pass grade overall) was able to mostly demonstrate the following to the markers:

- Question A: Clearly explain each element of the liabilities with one or two comments on asset portfolio requirements
- Question B: Present observations on the data provided in summary form that were relevant to the task with comments that were logical



- Question C: Explains most of the methodology developing the recommended asset allocation
- Question D: Justify the assumptions that were used for both liabilities and assets in terms that were plausible and consistent with the data.
- Question E: Made recommendation for the asset allocation that was clear and specific with supporting reasons that were clear and adequate, with some evidence of modelling carried out to test the effects of uncertainty in the assumptions on the asset allocation.

Stronger candidates achieving an above pass grade or better were able to provide better and more complete answers to most of the questions, in terms as set out in the Rubric.

Weaker candidates were unable to reach the standard set out above in enough of the questions to achieve an overall pass grade. Please see the commentary below on the shortcomings observed on particular questions.

General tips

The following feedback from the assignment has been provided to help you to prepare for the exam.

Fully answer questions

Make sure you answer all parts of the questions. It is important to go back to the questions after you have started writing to ensure you are answering the question asked. Similarly, apply the information provided in the questions.

After you have drafted your answer, it is always a good idea to re-read the question and physically tick off that you have answered all parts of it. You should also make sure you have addressed all areas described in the marking rubric.

Review your work

Given that this assignment is worth 20% of your final grade and you did not have the time pressure of exams, you were expected to spend some time reviewing your work and making sure your assignment was easy to read. A lot of issues around clarity of explanations could have been avoided by proof reading and spending time “getting the easy marks” for report writing.



Use structure

Remember that each paragraph should cover a single topic. Each paragraph should have a clear beginning, middle and end which relate to this single topic.

Write concisely and clearly

Keep your answers concise and use dot points where appropriate.

Results and feedback by question

The table below provides the results by question.

Each part of the assignment was marked out of 5, in line with the rubric grading. For example, a student who achieved a “pass” standard for Question A was awarded a 3 out of 5 and this contributed 15% towards their overall grade.

Table 3 Results by question

Rubric Grade by Question	A	B	C	D	E	F Report Writing
Weighting	15%	15%	15%	20%	20%	15%
Average	3.3	3.1	3.1	3.3	3.2	3.3
Min	0.0	0.0	0.0	0.0	0.0	0.0
Max	5.0	5.0	5.0	5.0	5.0	5.0
St Dev	0.9	0.9	0.9	0.9	0.8	0.9



Observations by question

- Question A (Explain the Aged Care liabilities): Most candidates covered most of the key elements of the liabilities, and their relevance to the asset portfolio requirements (as indicated by the Rubric). Weaker answers did not adequately or clearly explain the liabilities, or in some cases make any comments relevant to the asset portfolio requirements. In some cases, aspects such as the duration of the liabilities, or the uncertainty of the amount of the liabilities due to inflation in the long term, were not adequately explained. These were awarded a grade of 3/5 or 2/5 depending on how deficient their explanation was. While 83% of candidates achieved a passing grade of 3 or better, 38% scored above grade 3.
- Question B (Summarise observations on the data provided and the relevance of these observations to the task of projecting the asset and liability cashflows.): This should have been one of the questions where the candidates' education to date would have made it easier to score a grade of 4/5. The average grade was 3.1 and only 29.5% of candidates achieved a grade better than 3/5. While most candidates made observations that were mostly logical and relevant to the task, many did not. Weaker answers either lacked conclusions (as indicated in the Rubric, to which all candidates had access) or failed to link their observations to the conclusions that were stated or did not establish a link to the task of projecting the cash flows. In many cases there was little evidence of sound analysis of the data provided, which was surprising given the education to date that candidates have received. There were also cases of inadequate discussion of the data provided on listed or public equities, which may have impacted the quality of later answers to questions D and E.
- Question C (Explain the methodology used to determine an asset allocation for the asset portfolio that provides for the liabilities.) This question was a test of the candidates' ability to find a solution over the six weeks available for the assignment. The average grade achieved was 3.1/5 and 31% of candidates achieved a grade above 3 out of 5. Most candidates explained their asset allocation methodology and satisfied the markers that it was likely to generate usable results (as described in the Rubric). Weaker answers were either not clear, difficult to follow, or lacking in sufficient detail to demonstrate how the asset allocation recommended (in Question E) would follow from the methodology proposed. Some particularly weak answers did not explain any methodology, indicating that the question had not been understood.



- Question D (Justify each assumption required to project both the liabilities and the assets over the next 30 years, drawing on the observations derived from the data.) A detailed review of the markers' comments for all candidates for this higher order question and several assignments showed that most candidates were able to identify and justify the assumptions need to project the cash flows for both the liabilities and the assets in a way that assisted the task of recommending the asset allocation. 43.5% of candidates achieved a grade above 3/5 for this question and 82% achieved a passing grade of 3 or better. The 18% of candidates that did not do so either did not provide sufficient justification for important assumptions or had not identified some important assumptions. This was particularly the case in relation to assumptions about future inflation of aged care costs and the uncertainty around any projection of the rate of inflation. Some weaker answers appeared to:
 - deal with inflation of the liability cash flows but merely made a simplistic assumption that future inflation rates can be projected by effectively extrapolating the past 20 years inflation data which was provided to forecast over the next 30 years, without providing any justification or allowance for uncertainty in the forecast; and /or
 - allow for returns on listed equities making assumptions that future returns can be projected by effectively extrapolating the past 20 years equity market data which was provided to forecast equity returns over the next 30 years, without providing any justification or allowance for uncertainty in the forecast via sensitivity or scenario testing.
- Question E (Recommend a specific asset allocation across four asset classes (30-day bank bills, 90-day bank bills, 10-year government bonds and Australian equities) for the asset portfolio including the reasons for that asset allocation.) This question was well done by the 41.0% of candidates achieved a grade above 3/5 for this question. 76.5% achieved a passing grade of 3 or better. A review of the markers' comments for all candidates for this higher order question and several assignments showed that most candidates were able to make a recommendation about the asset allocation together with an adequate rationale based on the work that they had done for questions A through D. Most of candidates The 23.5% of candidates that did not do so did not provide a clear rationale for their recommendation. Some of these also provided their answer to the question in a form which was difficult for markers to follow or understand, making it very difficult to award a grade above 2/5. A small proportion also failed to make a recommendation with a justification that covered all available asset classes.



- Report writing. A minority of candidates made it difficult for markers to understand their answers or how they related to the questions by not clearly responding to each question. This is an avoidable method of losing marks, but it requires candidates to know how to read and understand each question, then write a clear answer to each question. There is a clear case that some candidates need to practice this more.

Areas for improvement

Some candidates need to learn and practice how to:

- Read and understand the questions and the context in which the questions are set;
- Analyse relevant data and draw conclusions;
- Explain their analysis and methodology more clearly; and
- Answer the questions completely.

Key learning points for candidates

- Make the report readable as a standalone without having to refer to a spreadsheet (candidates were specifically asked not to submit a spreadsheet).
- Explaining rationale is more important than the spreadsheet analysis so spend more time focusing on explaining input, methodology and outcomes or results.
- Practice writing skills in order to be able to summarise information, be concise and to the point. More words is not always better.
- Rather than providing generic points, students should tailor their responses to the scenario and context given.

Will we get feedback on our assessment?

Our approach to feedback is for students to receive general feedback, a sample assignment marked as 'significantly above pass level' and the marking guide for the exam.

You should review the feedback that is provided as well as the sample assignment and exam marking guide. For the assignment, you should use the general feedback and marking rubric to grade the sample assignment and your submission. This will help you to compare the assignments and identify areas where your submission could have been improved. For the exam, you should use the general feedback and the marking guide to identify areas where you could improve your future exam performance.



Our belief is that this active approach to studying will provide you with a deeper understanding of where you need to improve. This is the best way for you to learn about your areas of strength and weakness in your understanding. We do not provide students with individual feedback on their assessments.

At the end of the semester, you will receive:

- a letter to indicate whether you have passed or failed the subject;
- if you have failed the subject, a breakdown of your grade for each assessment;
- general feedback to all students about assignment and exam performance;
- a sample assignment that was graded as 'significantly above pass level'; and
- the exam marking guide.

EXAMPLE OF ASSIGNMENT

A model answer to the assignment which was one of the assignments achieving a significantly above pass grade will be posted to LMS.