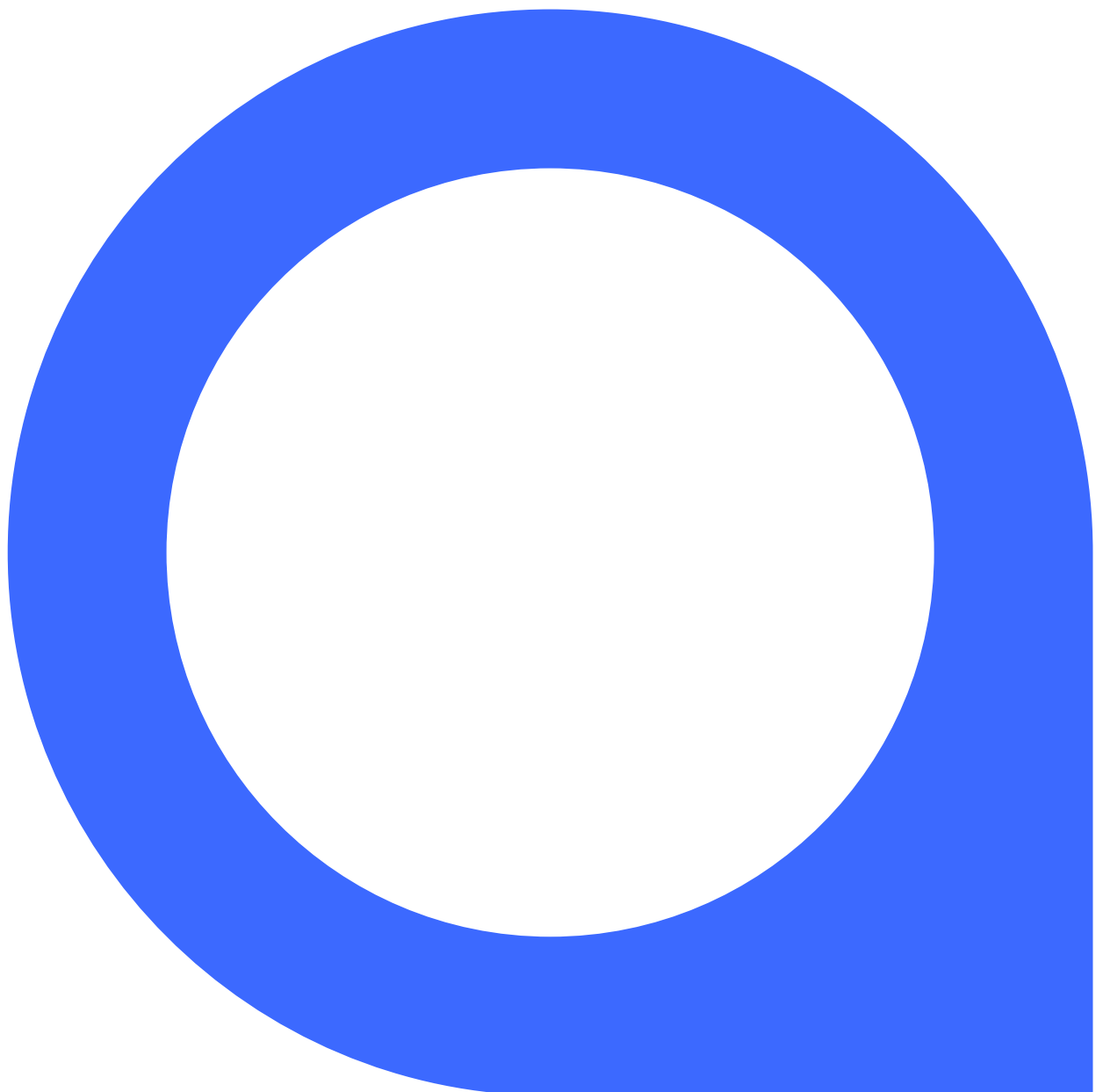


# Investment

Exam Semester 2 2025





**Subject Title:** Investment

**Date:** Friday 17 October 2025

**Time:** 15 minutes  
(Planning Time)

3 hours  
(Examination)

## Instructions:

You will have 3 hours and 15 minutes to complete your examination with an additional 10 minutes for submission.

You may commence typing during the planning time and remember to save your work regularly.

Type your answers using Microsoft Word and ensure that there are no links to spreadsheets.

Candidates are required to answer all questions.

Include your member ID in the header and footer on each page of the Microsoft Word document.

Question	Marks
1	20
2	20
3	20
4	20
Total	80

This paper has **SEVEN (7)** pages (including the title page).



**QUESTION 1**

**(20 Marks)**

The government of a country which produces large volumes of oil and gas revenue relative to its GDP has decided to set up a sovereign wealth fund (SWF) to invest taxes collected on oil and gas revenue to support government spending on infrastructure, health and social welfare programmes, and defence over the next 50 years or more.

- a) Discuss why an investment policy statement (IPS) is needed for the SWF. **(6 marks)**
- b) Explain six components of an IPS for the SWF and what they are intended to achieve **(6 marks)**
- c) Explain the process that should be used to develop the investment philosophy which will be communicated in the IPS of the SWF **(8 marks)**

**END OF QUESTION 1**



## QUESTION 2

**(20 Marks)**

The Board of a retirement fund is considering appointing active equity managers to manage part of the fund's asset allocation to global equities. The Board is aware that there is evidence of active equity managers failing to exceed the returns of relevant benchmarks. For example each year S&P Dow Jones Indices (S&P) publishes its SPIVA scorecards which show the proportion of active investment managers that have outperformed their relevant benchmarks and have added value as a result of their investment process. S&P has observed that:

- most active equity managers underperform most of the time;
  - consistent outperformance relative to peers or the benchmark is typically hard to find;
  - among the top quartile funds within all US domestic equity managers as of December 2020 not a single fund remained in the top quartile over the next five years; and
  - the percentage of US domestic equity funds remaining in the top half over the next five years to the 31st of December 2024 was as follows:
    - all US equity funds 4.2%
    - all large cap equity funds 2.4%
    - all midcap funds 0.8%
    - all small cap funds 2.8%
- a) Consider the possible impacts of any evidence, of which you are aware, of the relative performance of active equity managers on the Board's decision to employ active equity managers for part of the equity allocation of the fund **(6 marks)**
- b) Explain how various quantitative and qualitative methods can be used by the Board of the fund to assess and select active equity managers given the difficulty of identifying skill in active investment management **(8 marks)**
- c) Suggest the proportion of the global equities allocation that should be allocated to active equity managers **(6 marks)**

**END OF QUESTION 2**



**QUESTION 3**

**(20 Marks)**

A major US university has been funded over the last 30 years by a combination of student fees (40%), government research grants (30%), and investment earnings on its endowment fund (30%). During that time, in addition to 20% allocated to public listed equities, it has allocated 50% of its endowment fund to private equity with the aim of achieving higher returns in the long term and lower volatility of reported annual returns.

The university now expects to lose all of its government grants as a result of a change in government policy.

- a) Explain the similarities in the return and risk characteristics and what drives them, of public listed equity investments and private equity investments and how they relate to the aim of achieving higher returns for the endowment fund. **(6 marks)**
- b) Explain the differences between the return and risk characteristics of private equity investments and public listed equities and how they relate to increased proportion of the university's funding that will need to be supported by the endowment fund. **(6 marks)**
- c) Discuss the risk management limits relating to private equity investments that could be included in an investment policy statement for the endowment and how they may be changed due to the change in government policy. **(8 marks)**

**END OF QUESTION 3**

**QUESTION 4****(20 Marks)**

A sovereign wealth fund (SWF) has an investment objective of earning inflation plus 4% p.a. over rolling ten year periods. It has an investment policy statement (IPS) that sets out its strategic asset allocation (SAA), which is reviewable every year. The IPS currently says that over the next ten years the SAA of the fund is expected to average: 40% in US public (listed) equities, diversified across all industry sectors of the market such that no single sector dominates; 20% in US Treasury with maturities ranging from 3 months to 30 years; and 40% in other assets.

When setting its SAA, the Board has in recent years used inputs such as Capital Market Assumptions (CMA) prepared and published by major investment management firms. The Board may also decide to depart from the SAA over shorter periods so that the actual asset allocation may differ from the SAA to allow for potential volatility in returns in various asset classes and to increase the probability of meeting its investment objective. This is called the Tactical Asset Allocation or TAA. The current asset allocation position and significant inputs considered by the Board are set out in the table below:

Asset class:	US public equities	US Treasury Bonds	Other assets Private equity and non-US public equities	Other assets Other debt securities	Other assets Cash
<b>SAA % of total</b>	40	20	20	15	5
<b>TAA % of total</b>	35	15	20	20	10
<b>Capital market assumptions: Total return forecasts in percentage per annum US Dollar terms over 10 years unless indicated otherwise considered for SAA as at December 2024</b>					
<b>State Street Global Advisors</b>	6.0	1.4	7.4	1.2	2.8
<b>Capital Group</b>	6.1	3.7	6.3	2.3	2.7
<b>PineBridge (5 years)</b>	11.0	3.5	11.0	3.0	3.0



- a) Discuss the capital market assumptions provided by the investment management firms and how the Board may have taken them into consideration when setting the current strategic asset allocation of the SWF. **(4 marks)**
- b) Discuss other sources of input on capital market assumptions which the Board could have considered **(4 marks)**
- c) Discuss other factors that may affect asset returns and may have influenced the Board in its consideration of the current strategic asset allocation **(4 marks)**
- d) Justify why the current TAA differs from the SAA in each of the four asset classes where there is a difference. **(8 marks)**

**END OF QUESTION 4**

**END OF EXAMINATION**