

Financial Exam Help 123™

2025 Level III Mock Exam Portfolio Management Pathway

Morning Session Sample Exam Case Scenarios

This 2025 Morning Session sample mock exam has 3 questions for a total of 36 points. For grading purposes, the maximum point value for each question is equal to the number of minutes allocated to that question.

Question	Topic	Minutes
1	Core – Portfolio Management – Derivatives	12
2	Pathway – Portfolio Management – Equity	12
3	Pathway – Portfolio Management – Fixed Income	<u>12</u>
	Total:	36

Question 1 relates to Derivative Securities – Core Curriculum**AJBWU Case Scenario**

Mathew Degenek manages the equity portfolio for the Australian Jelly Bean Workers Union (AJBWU). The portfolio is valued at AUD 200 million, and is allocated 70% to large-cap equities and 30% to small-cap equities. Degenek believes that large-cap equity returns are going to fall over the next 6 months while small-cap equity returns will rise; therefore, he wants to implement a temporary change in the AJBWU equity portfolio. Exhibit 1 shows the existing portfolio details and the target values.

Exhibit 1
AJBWU Equity Portfolio
Current & Target Values

Current portfolio value	AUD 200,000,000
Large-Cap Equities	
Current allocation	70%
Current beta	1.15
Target allocation	40%
Target beta	0.85
Small-Cap Equities	
Current allocation	30%
Current beta	0.90
Target allocation	60%
Target beta	1.25

To avoid the cost of selling and buying equities, Degenek will implement the change using futures contracts. He has gathered data on large-cap and small-cap equity futures contracts in Exhibit 2.

Exhibit 2
Futures Contract Information

Large-Cap Equity Index Futures	
Price	AUD 97,000
Beta	1.02
Small-Cap Equity Index Futures	
Price	AUD 104,000
Beta	1.30

Question 2 relates to Equity Investments – Portfolio Management Pathway**SGIA Case Scenario**

Alpine Investment Management Company (Société de Gestion d'Investissement Alpine SA, SGIA) manage a variety of investment portfolios, both pooled funds and separately managed accounts. Ruben Garcia, managing director for equity funds at SGIA, has proposed the development of quantitative active investment strategies for their equity fund portfolios. Having developed a set of factors that he believes influence performance, Garcia directs Hannah Chirwa, SGIA's senior equity analyst, to compute the correlation of factor exposures with their subsequent holding period returns across all equity securities that SGIA owns.

Narender Edathodika, CFA, manages a European small-cap mutual fund at SGIA. The fund recently received a large cash inflow, giving the fund a cash position amounting to 10.8% of its total assets and consequently reducing its beta versus its benchmark index. Edathodika wants to restore the fund's beta to its mandated range as quickly as possible, so he has chosen to take a long position in futures on the benchmark index, until he can effect all of the necessary stock purchases.

Raheem Benjamin, CFA, manages separate accounts at SGIA, including the equity portfolio for the Trevor and Addison Kendall Foundation (Kendall) and Geneva Life Insurance Company (Geneva). The Kendall board of trustees are generally skeptical about market efficiency. They promote social welfare, wanting to avoid any association with military technology, alcohol, tobacco, and gaming. Their benchmark is a broad market equity index comprising 2,000 actively traded stocks. The management at Geneva prefer breaking up their equity portfolio into sector-specific subportfolios (each with its own sector-specific benchmark), and don't entertain any specific ESG goals.

Rafaella Álvarez and Andy Mandouki, portfolio managers at SGIA, are discussing active management approaches over a particularly enjoyable dinner (Álvarez chose the kibbeh nayyeh, while Mandouki opted for lobster paella). The conversation turned to Active Share and active risk, and they made these statements:

Álvarez: It's possible to have a portfolio with a high Active Share and a low active risk, and it's also possible to have a portfolio with a low Active Share and a high active risk.

Mandouki: Neither Active Share nor active risk is controllable by the manager. You make your decisions about your holdings, then cross your fingers and hope that they work.

Question 3 relates to Fixed Income Investments – Portfolio Management Pathway**Korab Mountains Investments Case Scenario**

Korab Mountains Investment Management (Menaxhimi i Investimeve në Malet e Korabit, MIMK) manage fixed income portfolios for institutional investors and ultra-high net worth individuals. Berat Strakosha, CFA, manages the portfolio for the Albanian Investment Authority (Autoriteti Shqiptar i Investimeve, ASI), a sovereign wealth fund whose home currency is the Albanian lek (ALL). She meets with Gyulya Ergashev, one of the ASI trustees, to discuss the fund's investments. During the discussion, Strakosha describes an emerging market bond that she would like Ergashev to consider for a one-year investment:

It is a sovereign bond denominated in the country's home currency (UZA). The ALL/UZA exchange rate is trading at a forward discount across all maturities, but Strakosha believes that interest rate parity underestimates the amount of change that it will experience over the next year. The government's foreign currency reserves (including ALL) are a greater percentage of GDP than those of similar countries. Their debt-to-GDP ratio is lower than that of similar countries, as is their budget-surplus-to-GDP ratio.

Sumanya Kesarat, CFA, a colleague of Strakosha, manages the portfolio for the Ethan and Domaria Banda Memorial Educational Endowment (the Endowment). The Endowment have liabilities coming due over the next ten years totaling GBP 50 million. Kesarat has compiled data on the Endowment's liabilities in Exhibit 1.

Exhibit 1
Ethan and Domaria Banda
Memorial Educational Endowment
Liability Characteristics

Characteristic	Value
Macaulay duration, years	5.16
YTM	3.59%
Modified duration, years	4.98
Convexity, years ²	35.15

The GBP yield curve is upward sloping. Kesarat expects that over the next year the 1-year to 10-year portion of the curve will flatten. He is considering three candidate portfolios for the Endowment, and has compiled data on the holdings of those portfolios, as well as other statistics, in Exhibit 2. The portfolio that is selected will have the same market value as the present value of the Endowment's liabilities. All of the bonds are coupon-paying, par bonds.

Exhibit 2
Ethan and Domaria Banda
Memorial Educational Endowment
Candidate Portfolio Holdings & Characteristics

Bond Maturity	Weight of Each Bond		
	Portfolio A	Portfolio B	Portfolio C
2 years	51.0%		23.0%
4 years		20.0%	21.0%
6 years		80.0%	20.0%
8 years			19.0%
10 years	49.0%		17.0%
Characteristic	Portfolio A	Portfolio B	Portfolio C
Macaulay duration, years	5.17	5.16	5.14
YTM	3.17%	3.55%	3.37%
Modified duration, years	4.99	4.98	4.96
Convexity, years ²	42.92	31.35	36.56

Two other managers at MIMK, Abdülkadir Ayhan, CFA and Dejan Davies, CFA, are discussing immunization of a single liability. During the discussion, they make these remarks:

Ayhan: When there is a parallel shift in the yield curve, the bonds in the immunizing portfolio will experience two effects: a price effect and a reinvestment rate effect. Initially, the price effect will have a greater magnitude than the reinvestment rate effect, but over time that will reverse. The time when the crossover occurs is the portfolio's Macaulay duration when the shift occurred.

Davies: A properly designed duration matching immunization strategy will continue to work when a parallel shift (up or down) occurs in the yield curve, but may not work when there is a change in slope or curvature (a structural change). When a structural change occurs, the portfolio will likely have to be rebalanced, but when the shifts are parallel, the original portfolio can remain intact without requiring rebalancing.