

Financial Exam Help 123™

2027 Level III Mock Exam Portfolio Management Pathway

Morning Session Sample Exam Case Scenarios

This 2027 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	Core – Portfolio Management – Economics & Asset Allocation	<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 Capital Market Expectations & Asset Allocation – Core Curriculum**Mount Wuteve Advisors Case Scenario**

Mount Wuteve Economic Advisors (MWEA) provide economic forecasting and asset allocation services to financial advisory firms worldwide. Derrick Kamara, CFA, a senior advisor at MWEA, has been discussing asset allocation with Ricardo Ferrer, CFA, a portfolio manager at Carib Investment Advisors (*Asesores de Inversión di Caribe*, AIC). Kamara has a client, Brandur Edmundsson, with particular investment requirements: he wants to maximize the return on a portfolio that has no more than 6% volatility in (expected) returns. Kamara notes that the risk-free rate is 4%, and he has compiled a list of the corner portfolios in Edmundsson's investment universe in Exhibit 1.

Exhibit 1
Corner Portfolios
Client: Brandur Edmundsson

Corner Portfolio	Expected Return	Expected σ of Returns	Sharpe Ratio
A	5.69%	13.28%	0.1273
B	6.46%	10.48%	0.2347
C	7.89%	8.42%	0.4620
D	8.88%	8.91%	0.5477
E	9.53%	9.79%	0.5649
F	10.45%	11.81%	0.5461
G	12.68%	21.89%	0.3965

Constanza Di María, CFA, the youngest advisor at MWEA, is discussing asset allocation with her newest client, Jorge Martínez, a portfolio manager at Sarstoon River Asset Management Company (*Compañía de Gestión de Activos de Río Sarstún, Río Sarstún*). Exhibit 2 shows Martínez' current portfolio allocation by asset class; Di Maria helped Martinez construct the portfolio.

Exhibit 2
Current Portfolio
Client: Jorge Martínez, Río Sarstún

Asset Class	Weight	MCTR	ACTR	ER/MCTR*
Domestic Equities	12.7%	6.6065%	0.8390%	0.9233
Foreign Developed Market Equities	10.4%	8.1171%	0.8442%	0.8624
Emerging Market Equities	9.6%	8.7091%	0.8361%	1.0564
Domestic Fixed-Rate Bonds	21.3%	4.0741%	0.8678%	0.5154
Domestic Inflation-Adjusted Bonds	24.6%	3.4144%	0.8399%	0.5272
Foreign Bonds	21.4%	4.0069%	0.8575%	0.5740

*Ratio of Excess Return to MCTR

The expected return on Martínez' current portfolio is 5.87% with a standard deviation of returns of 5.08%.

Di Maria suggests adding a commodities investment to Martínez' portfolio. She calculates that the expected return will not change, but that the standard deviation of returns will decrease to 4.91%. She typically uses one of three approaches to construct a portfolio:

- 1/N rule
- Risk parity
- Optimal risk budgeting

Di Maria is considering three possible allocations of commodities to Martínez' portfolio. She has compiled data on these allocations in Exhibit 3.

Exhibit 3
Potential Commodities Allocations
Client: Jorge Martínez, Río Sarstún

Proposed Allocation	Weight	MCTR	ACTR	ER/MCTR
A	12.6%	3.3324%	0.4199%	1.1403
B	18.4%	3.3881%	0.6234%	1.1216
C	20.5%	3.4127%	0.6996%	1.1135

Tara Čaleta-Car, CFA, a junior advisor at MWEA, recently acquired a new client: Ethan Barnett, at Gibraltar Investments. Barnett is concerned about behavioral biases that some of his clients exhibit, and has asked Čaleta-Car for help in identifying and handling these biases. The first client whom he discusses with her is Daniela Muslera. Muslera has definite opinions about the makeup of her portfolio, which she conveys to Barnett frequently. She checks the portfolio value weekly, encourages Barnett to sell investments that have generated gains, but to keep those that have declined in value.

Barnett asks Čaleta-Car whether Muslera's bias is more likely emotional or cognitive. He also asks her how she might handle the bias. Čaleta-Car suggests that Barnett determine each of Muslera's goals (which he has already done), then create dedicated subportfolios, one for each specific goal.