Asset Allocation - Questions

CAPITAL MARKET EXPECTATIONS

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 9 POINTS

Lindsey Buckingham, CFA, chief economist at World Financial Management (WFM), is being interviewed by a prominent financial reporter. Buckingham explains that the global economy is still sluggish. Short-term interest rates in the United States are significantly lower than long-term rates. The U.S. economy is still feeling the effects of a major recession, brought on by the coronavirus. The federal government is using its two primary tools to close the output gap.

Question 1 of 17

Identify the two primary tools that Buckingham refers to and **explain** what the government is doing with each tool.

Question 2 of 17

Given these two government tools, **describe** the *most likely* shape of the yield curve: flat, moderately steep, steep, or inverted.

Question 3 of 17

As the meeting is ending, the reporter asks Buckingham, "What is the best time to buy equity and sell bonds? Is it the slowdown, early expansion, or initial contraction?"

Which of the following stages of the business cycle will be relatively better for stock rather than bond returns?

A) Slowdown.

B) Early expansion.

C) Initial contraction.

Question 4 of 17

Justify your response by referring to both stock and bond performance in the stage chosen.

TOPIC: CAPITAL MARKET EXPECTATIONS

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Steve Summer works in the capital marketing forecasting unit of Global Asset Management (GAM). He has been asked to review the firm's long-term bond market return expectations for Country X. His unit has been using bond YTM (yield to maturity) as estimated return, but Summer believes the reinvestment assumptions inherent in the YTM approach are unrealistic. He decides to apply the risk premium (building block) approach.

The current 1-year government bond nominal yield is 3.10%, and Summer's projects the following risk premiums:

Estimated inflation	2.00%
Credit premium for AAA vs. govt. bonds	20 bp
Credit premium for A vs. AAA bonds	30 bp
Credit premium for BBB vs. A bonds	35 bp
Maturity premium for 20 vs. 1-year bonds	10 bp
Liquidity premium for corporate vs. govt. bonds	8 bp

GAM's investment policy committee has become concerned by recent economic and political trends. While they think each is a very low probability event, they ask Summer to consider how asset classes are most likely to behave if the economy enters either a period of increasing inflation, or a period of deflation and potentially negative interest rates. Summer focuses his analysis on four asset classes:

- Cash equivalents (CE)
- Bonds (B) in the form of default-free government bonds
- Equity (E)
- Real estate (RE) in the form of income-producing rental property

Summer is also preparing an analysis of two emerging market economies, Estan and Mstan. He has prepared data for several key variables to consider:

Variable	Estan	Mstan
Expected nominal GDP trend growth	6%	4.5%
Population growth rate	4.0%	2.5%
Court system	Well developed with relatively independent judges	Judges are appointed and removed frequently
Central bank	The central bank was just placed under direct control of the country's president and guarantees an "easy money policy"	A quasi-independent entity following a Taylor rule approach
Foreign debt to GDP	75%	40%
Foreign ST debt to foreign currency reserves	150%	80%
Capital flows approach to currency forecast	Depreciation of currency value	Appreciation of currency value

Question 5 of 17

Using only the data provided and the risk premium (building block) approach, **calculate** the return in percent for 20-year A rated corporate bonds.

Question 6 of 17

For the increasing inflation scenario, **explain** which asset classes are likely to perform well.

Question 7 of 17

For the deflation scenario, **explain** which asset class is likely to perform well.

Question 8 of 17

Explain which emerging market economy, Estan or Mstan, would *most likely* be classified as higher risk, and **justify** the classification with three reasons based on the data provided.

TOPIC: ASSET ALLOCATION

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 10 POINTS

Seth Batten, CFA, is working with two different clients. The first, Client A, is a high-net-worth individual subject to a marginal tax rate of 50% (combined federal and state) on ordinary income and a 20% capital gains tax rate. Client A has a risk aversion factor of 3. The second account, Client B, is a tax-exempt institution having a risk aversion factor of 7. Both clients have long time horizons.

Clients A and B are each considering hiring one of the separate account managers profiled in Figure 1. All three managers use the S&P 500 as their index benchmark. The S&P 500 is expected to average a 9.0% annual return over the next 10 years.

Figure 1: Manager Comparison Data

Portfolio Manager	Expected Annual Total Return	Expected Standard Deviation	Expected Annual Turnover	Management and Trading Costs
X	10.1%	15.1%	50%	0.40%
Y	10.6%	15.3%	100%	0.70%
Z	9.5%	14.9%	15%	0.20%

Question 9 of 17

Which of the following portfolio managers would Client A choose based on the certainty equivalent return?

A) Manager X.

B) Manager Y.

C) Manager Z.

Question 10 of 17

Compute your analysis for each portfolio manager.

Question 11 of 17

Based on the risk aversion factors only, **identify** which client is *more likely* to exhibit a low tolerance for shortfall risk. **Justify** your response. Consider each issue in isolation.

Question 12 of 17

Based on tax considerations only, **identify** which client is *more likely* to have higher turnover. **Justify** your response. Consider each issue in isolation.

TOPIC: ASSET ALLOCATION

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 14 POINTS

Lane Stone, CFA, and Jaynelle Spencer, CFA, are institutional portfolio managers with Global Asset Management (GAM). They recently attended a conference on modern asset allocation tools and have been doing some additional reading. They put together the following summary points:

I. An asset class with lower return and risk can, by definition, be excluded from analysis. It cannot be on the efficient frontier of portfolios made up of higher return and lower risk assets.
II. In Reverse Optimization we start with what we assume to be the optimal portfolio weights from the global market portfolio and derive the expected returns consistent with those weights.
III. Black-Litterman is another way to deal with concentrated portfolios and has the advantage of allowing short sales to profit from overvalued securities.
IV. Black-Litterman is an extension of mean-variance optimization (MVO) where implied returns are view adjusted to reflect the investor's unique views of future returns.

Question 13 of 17

Determine whether each of the comments made is correct. If it is incorrect, **explain** why it is incorrect.

Question 14 of 17

Stone and Spencer then examine a list of portfolios for inclusion in their clients' asset allocation.

Portfolio	Exp. Return	Exp. Std. Dev.
A	7.25%	8.50%
B	8.00%	8.30%
C	8.75%	14.25%

Which of the portfolios is *least likely* on the efficient frontier?

A) Portfolio A.
B) Portfolio B.
C) Portfolio C.

Question 15 of 17

Justify your choice of portfolio.

Question 16 of 17

The inclusion of which of the following portfolios would *most likely* mean that an investor's asset allocation must be rebalanced more frequently? Use only the information provided in the table.

A) Portfolio A.
B) Portfolio B.
C) Portfolio C.

Question 17 of 17

Justify your choice of portfolio.