Private Wealth: Mock Exam 1 - Session 1 - Answer

Passage for Questions 1.1–1.4

TOPIC: ASSET ALLOCATION
TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Sarah Holt is a Senior Analyst with Quantum Economics Insights, a boutique consultancy that provides economic forecasting services to institutional investors. One of Holt's clients has asked her to produce a short-term forecast of equity market returns in Terrania and Verdentina, two countries with emerging markets that have become increasingly integrated into the global economy over the last three decades.

Holt's projections are based on several inputs, including those shown in Exhibit 1.

Exhibit 1
Holt's annualized forecasts of key metrics

	Terrania	Verdentina
Inflation	2.1%	1.8%
Population growth	1.6%	2.2%
Capital stock growth	1.1%	1.3%
Labor input growth	2.1%	2.4%
Total factor productivity growth	1.1%	1.0%

In the report that she prepares for her client, Holt notes that she does not anticipate that corporate earnings will change as a share of GDP in either country over the client's investment horizon. However, she is forecasting increases of 0.4% and 0.1% in the price-to-earnings ratios in Terrania and Verdentina, respectively.

After accounting for dividend yields, Holt forecasts annualized equity market returns of 9.8% in Terrania and 9.4% in Verdentina. She cautions her client that these expectations are based on several assumptions and that there are several factors that could impact the capital appreciation and/or dividend yield components of equity returns. Holt expresses particular concern about the volatility of the aggregate earnings multiple in both countries.

Holt also points to empirical evidence documenting that higher economic growth rates are not necessarily reliable indicators of higher equity returns.

Question 1.1

1 points

Determine, based on Holt's forecasts, which country is offering the highest dividend yield component of expected equity returns.

(You will be asked to show your calculations in the next question.)

A. Terrania

B. Verdentina

Written Solution

Justification is provided in the solution for the next question.

Question 1.2

4 points

Show your calculations for the previous question.

Model Solution

An equity market's return is the sum of capital appreciation and the dividend yield. The capital appreciation component is approximated by nominal GDP growth with adjustments for changes in the P/E ratio and earnings as a share of GDP.

Holt's forecasts of capital appreciation can be calculated by summing the following inputs:

	Terrania	**Verdentina**
Labor input growth	2.1%	2.4%
Capital stock growth	1.1%	1.3%
Total factor productivity growth	1.1%	1.0%
Inflation	2.1%	1.8%
P/E ratio increase	0.4%	0.1%
Capital appreciation	*6.8%*	*6.6%*

The dividend yield can then be inferred by subtracting the capital appreciation component from the overall expected return on equity:

- Terrania: $9.8\% - 6.8\% = 3.0\%$
- Verdentina: $9.4\% - 6.6\% = 2.8\%$

Grading Guide

- 2 points for calculating the capital appreciation component
- 2 points for calculating the dividend yield component (any errors carried forward from the previous step should not be penalized twice)

Question 1.3

3 points

All else equal, a higher earnings multiple will *most likely* produce a:

A. lower dividend yield.

B. higher dividend yield.

Written Solution

The dividend yield component of equity returns can be calculated as follows:

$$\text{Dividend yield} = \frac{\text{D}}{\text{V}}$$

where D represents dividends and V represents market value.

Dividing both the numerator and the denominator by earnings (E), the above equation becomes:

$$\text{Dividend yield} = \frac{\text{D}/\text{E}}{\text{V}/\text{E}} = \frac{\text{Dividend payout ratio}}{\text{Earnings multiple}}$$

All else equal, a higher earnings multiple will produce a lower dividend yield.

Question 1.4

4 points

Discuss *two* reasons why higher rates of economic growth may not produce higher equity returns.

Note: Each reason should be given in a separate paragraph.

Model Solution

There are two possible reasons why higher economic growth does not necessarily translate into higher equity returns:

1. Current equity prices may already fully reflect economic growth expectations.
2. If economic growth is primarily driven by increases in capital stock without accompanying increases in productivity, there will be diminishing rates of return on invested capital.

Grading Guide

- 2 points for each reason (maximum 4 points)

Passage for Questions 2.1–2.4

TOPIC: ETHICAL AND PROFESSIONAL STANDARDS
TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Isabel Matto, CFA is an equity analyst specializing in the travel and leisure sector. She works for Lakeland and Company, a large and diversified financial services firm. Matto is a well-respected analyst with unparalleled access to executives at the companies that she covers and her recommendations have been known to affect stock prices and trading volumes.

A significant portion of Matto's time is spent serving Lakeland's larger clients, which include several mutual fund managers and other institutional clients. These clients may buy and sell millions of shares daily and pay more for a higher level of service from Lakeland. Matto also serves Lakeland's smaller clients, who are typically satisfied with Lakeland's standard level of service. When issuing a new report, Matto emails it to all clients simultaneously before following up with phone calls to larger clients to discuss her recommendations in greater detail.

One of the travel firms that Matto covers, Travelnet, has posted disappointing sales growth in recent quarters. After receiving unconfirmed but, in her opinion, credible information that the company will be replacing its CEO, Matto immediately orders that the release of a report that she has prepared on the company be delayed pending further investigation. Many of Lakeland's large institutional clients have significant holdings of Travelnet stock and the value of these positions could be significantly affected by a change at the top level of the company's management. None of Lakeland's smaller clients own this company's stock.

The majority of Lakeland's revenues are generated by its investment banking division and, unknown to anyone outside Lakeland, a significant portion of Matto's compensation is tied to the performance of this division. Since hiring Matto, Lakeland's underwriting of security offerings by travel and leisure companies has dramatically increased. Matto often accompanies the investment banking team on road shows that promote clients to prospective investors. Her role on such trips is to provide factual information in response to investor's questions. Of the 10 companies for which Matto has issued a buy recommendation, 8 have used Lakeland as the lead underwriter for the initial public offering. All investment banking relationships, including the nature of Matto's participation in any road shows, are disclosed in the notes that appear at the end of her research reports.

HotelFinder, which Matto has covered for several years and knows very well, has persistently underperformed its peers since completing a large acquisition that has failed

so far to generate the synergies that the company's managers had expected. Lakeland executives recently directed the firm's sales staff to reduce its excessive inventory of HotelFinder shares by aggressively selling these securities to clients. Matto, who discloses Lakeland's holdings of HotelFinder stock in her research reports, believes that the company has properly addressed the difficulties associated with its recent acquisition and issues a buy recommendation for the company's stock, which she believes to be attractively priced.

Question 2.1

3 points

Has Matto *most likely* violated the Standards by following up with larger clients after issuing recommendations?

A. No

B. Yes, by providing additional service to the larger clients

C. Yes, by giving larger clients a better opportunity to act on her recommendations

---

Written Solution

Because Matto notified all clients in advance of different levels of service available, there is no violation of Standard is III(B) - Fair Dealing, which requires members and candidates to treat all clients "fairly," but not necessarily "equally."

Matto must be careful to not give preferential treatment to large clients that is detrimental to smaller clients. Members and Candidates must make every effort to treat all clients in a fair and impartial manner regardless of size of the account. However, in this example, all clients have received the same opinion at the same time and the higher level of service provided to larger clients is available to all clients and prospective clients who are willing to pay for it.

Question 2.2

3 points

By delaying the release of her report on Travelnet, has Matto *most likely* violated the Standards?

A. No

B. Yes, with respect to independence and objectivity

C. Yes, with respect to material non-public information

Written Solution

Matto's decision to delay the release of her report on Travelnet is not a violation of the Standards.

Because the non-public information that Matto has received about a possible change in CEO at Travelnet is material because she believes it to be credible and would cause investors to trade the company's stock, she is taking the prudent course by delaying her report in order to investigate this information. In order to adhere to Standard II(A) - Material Nonpublic Information, it is recommended that Matto "make all reasonable efforts to achieve public dissemination of the information." However, immediately delaying the release of her report pending further investigation does not constitute a violation of this Standard.

Despite the fact that Lakeland's larger buy-side clients have significant exposure to Travelnet stock, Matto's actions in this example do not appear to be influenced by implicit or explicit pressure. Standard I(B) - Independence and Objectivity requires members and candidates to "use reasonable care and judgment to achieve and maintain independence and objectivity in their professional activities." Matto's decision to delay her report on Travelnet pending further investigation of the information she has received is justifiable on the basis of prudence and consistent with the actions of an analyst seeking to provide an objective opinion based on diligent research.

Question 2.3

3 points

Regarding her relationship with Lakeland's investment banking department, has Matto *most likely* violated the Standards?

A. No

B. Yes, with respect to disclosure of conflicts

C. Yes, with respect to additional compensation arrangements

Written Solution

In failing to disclose the nature of her compensation arrangement, Matto violates Standard VI(A) - Disclosure of Conflicts, which requires members and candidates to "make full and fair disclosure of all matters that could reasonably be expected to impair their independence and objectivity." The fact that a large portion of her compensation is determined by the performance of Lakeland's investment banking division could reasonably be expected to impair her objectivity. Despite the fact that her role on road shows is limited to providing factual information and this is disclosed in her reports, her failure to disclose the nature of her compensation arrangement constitutes a violation of this Standard.

Matto has not violated Standard IV(B) - Additional Compensation Arrangements, which prohibits members and candidates from accepting "gifts, compensation, or consideration that competes with or might reasonably be expected to created a conflict of interest with their employer's interest unless they have obtained written consent from all parties involved." In this example, Matto is not being compensated by any party other than Lakeland and is not competing with the firm's interests.

Question 2.4

3 points

Which of the following statements *most likely* accurately characterizes the situation in which Matto issued a buy recommendation for HotelFinder at a time when her firm is liquidating its position in this stock?

A. Both Lakeland and Matto have violated the Standards

B. Lakeland has violated the Standards, but Matto has not

C. Neither Lakeland nor Matto have violated the Standards

Written Solution

The Standards apply to individual members and candidates, not firms. Although the request to aggressively sell HotelFinder shares may be an unethical sales practice and it is possible that certain Lakeland executives and sales staff have violated the Standards, it is not possible for Lakeland itself to do so.

Matto has not violated the Standards by issuing a buy recommendation for HotelFinder because she believes that the company has addressed its challenges and its stock is attractively priced. There is no evidence that the content of her recommendation has been influenced by the directive given to Lakeland's sales staff or even that she is aware that such a directive has been issued. In this example, Matto has adhered to Standard III(A) - Loyalty, Prudence, and Care by acting in the interests of her clients - specifically, the clients and prospective clients who will read her report and are seeking the most accurate analysis to assist them in making investment decisions.