

Question:

You are a wealth advisor at Lambda Bank's, a Swiss bank specializing in wealth management and asset management. You are responsible for monitoring:

- 5 private clients who have signed a discretionary management mandate in favor of Lambda Bank,
- 10 private clients who have signed an advisory mandate in favor of Lambda Bank.

All these clients have their assets deposited at Lambda Bank's.

a) Monday, September 25th, Mr. Weber, a client with an advisory mandate, calls you to get advice on an investment project. He considers investing DPL (currency of Dreamland) 400,000 in a bullet bond issued by Zomba, an issuer domiciled in Dreamland. The bond has the following characteristics:

- Face value : DPL 1,000
- Maturity: 5 years
- Interest (coupon) rate: 9%
- Coupon payment frequency: Annual
- Price: 103.9927%
- Yield-to-Maturity: 8%
- Macaulay Duration: 4.2559

The withholding tax rate on interests and dividends is equal to 29% in Dreamland.

- a1) Mr. Weber expects a Yield-to-Maturity (YTM) increase of 50 basis points in the following days. By using the Macaulay duration, explain to Mr. Weber what the estimated new price of this bond will be. (6 points)
- a2) Is the estimated “new” price with the Macaulay duration higher or lower than the price that will be effectively quoted for this bond after the increase of the Yield-to-Maturity (YTM)? Explain. (8 points)
- a3) If this bond was a “callable debt instrument” instead of a “bullet bond”, would the estimated price impact be higher or lower? Explain. (6 points)
- a4) What will the interest amount credited on Mr. Weber's account at the next coupon payment date be if he buys for DPL 4,000,000 of Zomba bonds? Explain. (4 points)
- b) Tuesday, September 26th, Sophie, a new trainee, would like to get some information about the possibility to create an open-ended Swiss fund that will invest in securities listed in the Stock Exchange of Dreamland.
- b1) Mention two advantages for clients to invest in investment funds instead of investing directly in the underlying securities of these funds. (2 points)

- b2) How does the Swiss Collective Investment Schemes Act (CISA) define investment funds? (4 points)
- b3) According to Swiss law, is it necessary to have a minimum number of investors for an investment fund? Explain. (4 points)
- b4) What is a “contractual investment fund”? (4 points)
- b5) Sophie tells you that investors of a contractual investment fund are shareholders of the fund. Is she right? Explain. (4 points)
- b6) What is the main difference between a passive and an active index investment fund? (4 points)