University of Innsbruck, Department of Banking and Finance, Dr. Florian Hauser

Fachprüfung Financial Management 11/2016

Q1	Q2	Q3	Q4	Q5	Q6	Sum	Grade
6	6	6	6	6	10	max. 40	PS:

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Name Matrikel Studienkennzahl

You can answer in English and German language!

Question 1: CAPM

The CAPM is a neoclassical equilibrium model.

a) Explain what "equilibrium" means in the context of CAPM.

b) Assume that there is one asset which is not in equilibrium, i.e. its expected return is too low with respect to the CAPM. Explain the mechanisms that would drive the asset towards its equilibrium again.

Question 2: Market efficiency / random walks

Explain the differences, similarities and connections of random walks theory and the efficient-markets-hypothesis.

Question 3: Fundamental analysis with Gordon's formula.

a) Firm "$frst$" pays no dividends at the moment. You assume that the first dividend of 1 Euro is payed in 5 years, and that dividends grow at a rate of 4% in the following years. The risk-adjusted discount rate for stock $frst$ is 7%. What is the fair market price P_0 of $frst$?

b) The risk-adjusted discount rate for stock "*scnd*" is 10%. You assume that earnings and dividends of *scnd* grow indefinitely at a rate of 6%, and you find that the market price of *scnd* is fair. What is the dividend yield of *scnd*?

Question 4: Schredelseker model

The Schredelseker model can be used to analyze what happens in a market that is populated by fundamental agents when agents successively change their trading strategis to passive (random) trading.

a) Explain the resulting effects on the performance of the passive agents, and the performance of the remainig fundamental agents.

b) Explain the resulting effect on market efficiency.

Question 5: Modigliani-Miller

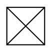
Spam Corp. is financed entirely by common stock and has a beta of 1. The firm is expected to generate a level, perpetual stream of earnings and dividends. The stock has a price-earnings ratio of 8 and a cost of equity of 12.5%. The company's stock is selling for \$50. Now the firm decides to repurchase half of its shares and substitute an equal value of debt. The debt is risk-free, with a 5% interest rate. The company is exempt from corporate income taxes. Assuming MM are correct, calculate the following items after the refinancing:

a) The cost of equity.
b) The overall cost of capital (WACC).
c) The price-earnings ratio.
d) The stock price.
e) The stock's beta.

Question 6: Multiple Choice

Correct answers will bring 1 point; incorrect answers count -1 point. If a question is not answered, no points are assigned. Even with wrong answers, the total points for the multiple choice questions cannot be below 0. Comments will be ignored.

How to tick / untick multiple choice questions: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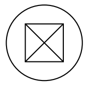
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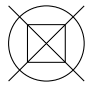
tick a box again

	true	false
In the traditional view on capital structure, the weighted average costs of capital are independend of leverage.	☐	☐
In a strong-form efficient market, the expected return on all stocks must be 0.	☐	☐
The biggest profiteers of insider regulation are the least-informed traders.	☐	☐
One of the basic assumtions of the Makrovitz model on portfolio theory is that investors are risk-averse.	☐	☐
The maxime of shareholder value maximization is especially pronounced in Japan.	☐	☐
When stock A is efficient, and stock B is inefficient, then stock A must dominate stock B.	☐	☐
In CAPM equilibrium, the security-market-line also covers inefficient stocks.	☐	☐
According to the two-funds-theorem, a linear combinations of two efficient portfolios will result in another efficient portfolio.	☐	☐
The El-Farol bar game is a minority game without solution in pure strategies.	☐	☐
In the last years, world market capitalization of equity was higher than 10 trillion US$.	☐	☐