

Fachprüfung
Financial Management
Dr. Florian Hauser**02/2015**

N° 1	N° 2	N° 3	N° 4	N° 5	N° 6	Total	Note
6	6	6	6	6	10	max. 40	PS:

Name:

Studienkennzahl:

Matrikel:

You can answer in English and German language!

- 1) Explain the Trade-Off theory. More specific, describe the mechanisms and implications of that theory. What advises can you give an exchange-traded firm based on that theory?

- 2) There are two stocks A and B ($\mu_A = 0.08$, $\sigma_A = 0.03$, $\mu_B = 0.1$, $\sigma_B = 0.02$, $\rho_{AB} = 0.2$) and a risk-free investment opportunity ($r_f = 0.2\%$).
- a) Take a credit of 200 Euro and go long with 1000 Euro in stock A and long with 200 Euro in stock B. Calculate the expected return of that portfolio (in Euro).
 - b) Go long with 700 Euro in stock A and with 500 Euro short in stock B. Calculate the relative expected return of that portfolio (in percent).
 - c) You have 1500 Euro. Take a credit to raise additional 500 Euro and invest 2000 Euro in an equally weighted portfolio of A and B. What is the risk of that position?
 - d) Assume the market to be CAPM-efficient. Argue, which asset (A or B) will have the higher systematic risk.

3) Discuss Random Walks. More specific, please explain

- a) what a Random Walk is (you might want to use mathematical formulae to clarify).
- b) what Random Walks have to do with stock prices.
- c) the relationship between Random Walks and Market Efficiency.

- 4) Explain the difference between systematic risk and unsystematic risk in the CAPM. Explain why, according to the CAPM, unsystematic risk can be ignored when reasoning about the expected return of a stock.

5a) When doing fundamental analysis on firm X (risk-adjusted discount rate is 10%), you assume that earnings and dividends of X grow indefinitely by a rate of 6%, and you find that the market price of X is fair. What is the dividend yield of X?

5b) Company Y's earnings and dividends per share are expected to grow indefinitely by 6% a year. If next year's dividend is 10 Euro and the market capitalization rate is 8%, what is the current stock price of Y?

5c) Company Z is like Y in all respects except one: Its growth will stop after year 4. In year 5 and afterwards, it will pay out all earnings as dividends. What is Z's stock price? Assume next year's EPS is 40 Euro.

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 a box in the multiple choice section:

tick a box



untick a box



tick a box (again)



	true	false
When the correlation of two stocks changes, the composition of the minimum-variance-portfolio (of those two stocks) is likely to change as well.	<input type="checkbox"/>	<input type="checkbox"/>
A portfolio that is located exactly on the security market line must be efficient.	<input type="checkbox"/>	<input type="checkbox"/>
In a game-theoretic context, private information may be harmful even if the receiver of the information ignores it.	<input type="checkbox"/>	<input type="checkbox"/>
In efficient markets the expected return on each stock is the same.	<input type="checkbox"/>	<input type="checkbox"/>
Malkiel's and Jensen's results on the performance of mutual funds clearly shows that markets are not semi-strong form efficient.	<input type="checkbox"/>	<input type="checkbox"/>
Both Modigliani/Miller models (the one on capital structure, and the one on dividend policy) are based on the same mechanism: investors who exploit arbitrage opportunities.	<input type="checkbox"/>	<input type="checkbox"/>
When an insider joins the market and buys stocks, sellers of those stock are harmed by the presence of the insider.	<input type="checkbox"/>	<input type="checkbox"/>
Firms with high leverage on average have a higher beta than firms with low leverage.	<input type="checkbox"/>	<input type="checkbox"/>
Schredelseker's Coin Model demonstrates that market efficiency may improve when traders implement a technical (chartist) trading strategy.	<input type="checkbox"/>	<input type="checkbox"/>
In Schredelseker's Coin Model a passive trading strategy is always more rational than a fundamental trading strategy.	<input type="checkbox"/>	<input type="checkbox"/>