

Fachprüfung
Financial Management
Prof. Dr. Klaus Schredelseker

07/2014

N° 1	N° 2	N° 3	N° 4	N° 5	N° 6	N° 7	Total	Note
5	5	5	5	5	5	10	max. 40	PS:

Name:

Studienkennzahl:

Matrikel:

Die Bearbeitung kann in deutsch oder in englisch erfolgen!

(1) There are three stocks A, B, and C: $\mu_A = 8\%$ $\mu_B = 12\%$ $\mu_C = 16\%$
 $\sigma_A = 8\%$ $\sigma_B = 15\%$ $\sigma_C = 20\%$
 $\mu_{\text{Market}} = 10\%$ riskfree rate = 2% $\rho_{AB} = 0,2$ $\rho_{AC} = -0,3$ $\rho_{BC} = 0,4$

- Calculate the risk in a portfolio ABC (weighted 2:1:1)
- You have 40.000€ Take a loan of 20.000€ and invest all in an equally weighted ABC-portfolio. What is your expected return?
- Calculate Beta of stock A

2) The expected next dividend of a stock is 12 Euro. The risk-adjusted return for its risk-class is 9% and the stock quotes at 200 Euro.

a) What is the implied growth rate of dividends?

b) What is the stock price if the risk-adjusted return is 8%?

- 3) Explain why the Bayesian updating-technique should not be practised when trading on financial markets.

4) What are the economic differences between cash dividends and stock repurchases?

- 5) Trader A makes more precise estimations than trader B. Explain why A's performance in the market may be worse than B's performance?

- 6) There are two securities A and B with expected returns $\mu_A=8$ and $\mu_B=6$ and the variances $\sigma_A^2=6$ and $\sigma_B^2=4,5$. Investors with the utility function $u(x) = \mu_x - \frac{1}{2}\sigma_x^2$ calculate the values $V_A=5,00$ and $V_B=3,75$. An equally weighted portfolio with A and B is valued (with the same utility function) at $P_{AB}=6,00$.
- a) Which arbitrage possibilities do exist if prices equal the valuations?
 - b) What should happen in order to eliminate arbitrage possibilities?

7) 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
A credit assessment procedure in which more than nine out of ten rejected credit applicants are good debtors should not be implemented.	0	0
A rational credit portfolio policy requires that the graduation of credit rating classes is quite fine (many rating classes are present).	0	0
If we forbid insider trading, the informational efficiency of the market should increase.	0	0
In an efficient market there might be situations where the price of stock X is rather expected to go up than to go down.	0	0
If the average performance of actively managed funds equals the index, there should be no indexfunds among the best performing mutual funds.	0	0
Stocks of small-capitalization companies usually have higher returns (risk-adjusted).	0	0
The information conveyed in the market price can be better than the average information of all traders in the market.	0	0
Even in a strong-form-efficient market there may be winners and losers.	0	0
The capital market line is always positively sloped.	0	0
Portfolio theory is normative economics.	0	0