

Fachprüfung
Financial Management
Dr. Florian Hauser**06/2015**

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!

1a) Explain under which conditions a technical trading strategy might result in systematic above-average returns in financial markets.

1b) Explain if you think that it is nowadays possible to systematically outperform a developed stock market (e.g. NYSE) by trading with a technical strategy.

- 2) Schredelseker-Model: Consider a market for a security with the true value being the sum of ten Laplace-coins. There are ten risk-neutral fundamental traders t_n ; every trader t_n sees the first n coins. Every trader wants to trade one unit (long or short). The sequence of the coins is 1100100001.

Trader t_n	0	1	2	3	4	5	6	7	8	9

- What is the equilibrium price for the security?
- What are the returns for buyers and sellers (partitioning is applied if needed)?
- Who has an advantage or disadvantage if the first three coins become public information?

- 3) The market is in equilibrium. The equity premium is 5%, and the expected return of the market portfolio is 8%.
- a) What is the beta of a portfolio with an expected return of 10% ?
 - b) Take a credit of 400€ and invest 1000€ in the market portfolio. What is the beta of your portfolio (consisting of credit and market portfolio)?
 - c) Can a stock with an expected return of 1% exist in the given equilibrium? If no, argue why not. If yes, characterize that stock.

- 4) Explain the Modigliani-Miller-model on capital structure. Explain:
- a) The role of arbitrage in that model.
 - b) The most important propositions (implications) of that model.
 - c) The limitations of the model.

- 5) The following text is a translation of an excerpt from a well-known mail provider, who also provides news service. Please argue in detail where and why you agree/ disagree.

Excerpt (from April 1, 2015):

“The DAX is at its all-time high of over 12.000 points ... Should I invest in the DAX now that it has proven that it is rising? No, because the rule of thumb is: Invest in shares, but do not invest in the DAX! According to experts, the DAX is overvalued, i.e. compared to the fundamentals it is simply too expensive. This insight is no guarantee that prices will fall in the future, but investors should interpret this as a warning sign. ...

Why so many people are investing only when prices have risen continuously for some time, remains an open question to experts. It is a fact that investors should invest countercyclically. That means that if a share is low and if there is hope of prices to be rising soon, then one should buy fast. ...

Experts advise to instead invest in companies on the food industry and producers of beverages, because people always need to eat and drink. ... ”

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
Ceteris paribus the composition of the minimum-variance-portfolio will remain the same when the expected returns of the according stocks change.	<input type="checkbox"/>	<input type="checkbox"/>
For a portfolio P of stocks A and B ($\rho_{AB} = -1$) holds: $\sigma_P^2 = (x_A * \sigma_a - x_B * \sigma_B)^2$.	<input type="checkbox"/>	<input type="checkbox"/>
If stock A is dominated by stock B, A cannot be part of an efficient portfolio.	<input type="checkbox"/>	<input type="checkbox"/>
Grossman / Stiglitz demonstrated that the CAPM cannot be tested.	<input type="checkbox"/>	<input type="checkbox"/>
According to the equity premium puzzle, the historical premium on bonds over equity cannot be (fully) explained by systematic risk.	<input type="checkbox"/>	<input type="checkbox"/>
According to the random-walk model, stock price changes occur randomly and cannot be driven by information.	<input type="checkbox"/>	<input type="checkbox"/>
In the bimatrix-game, private information is modeled as a situation where one player is informed about which matrix is chosen, and the other player is aware of the fact that his opponent is informed.	<input type="checkbox"/>	<input type="checkbox"/>
During the financial crisis, the majority of US-American firms had to lower dividend payments.	<input type="checkbox"/>	<input type="checkbox"/>
Financial distress can result in overinvestment, underinvestment, and cashing out.	<input type="checkbox"/>	<input type="checkbox"/>
The lower the dividend-payout-ratio, the higher the growth rate of shareholder value (ceteris paribus).	<input type="checkbox"/>	<input type="checkbox"/>

