

<b>HOCHSCHULE PFORZHEIM</b> – <b>Faculty of Economics and Law</b> –  <b>- Written Examination -</b>	
<b>Department: Economics</b>	
<b>Subject: International Financial Markets</b>	<b>Semester:</b>
	<b>Date:</b>
<b>Examinant:</b>	<b>Prof. Dr. Rainer Maurer</b>
<b>Time:</b>	<b>60 Minutes</b>
<b>Auxiliary Means:</b>	<b>Non-Programmable Calculator</b>

**Notes:**

(1) Please check the number of sheets and questions for completeness. You should find 5 questions and 5 sheets (inclusive this front page).

(2) Please use these sheets to answer the questions. If you need more space, use the back of the preceding page. Should these not be sufficient, use additional sheets and staple them at the end. Please take care for a correct numbering of all additional sheets.

(3) A correct answer yields the number of points noticed in the side column of each question. To pass the examination 50% of all available points have to be reached (= 30 points).

(4) Please give complete and comprehensible answers. Illegible answers cannot be accepted.

(5) If you use charts, please take care for a complete labeling.

**Name:** \_\_\_\_\_

**Matriculation-Number:** \_\_\_\_\_

**Result:** \_\_\_\_\_

<p>1. Explain the characteristics two asset must have to be “hedges”.</p> <p>According to the principle of hedging, the risk of an investment can be lowered, if several assets are held in a portfolio instead of holding one asset only. A necessary condition for two assets to be hedges is that their returns are less than perfectly positive correlated. If two assets are perfectly negatively correlated, the return of one asset goes up when the return of the other asset goes down such that the variance of the portfolio return is zero. If two assets display a perfect positive correlation of their returns, there will be no hedging effect.</p>	<p>6</p>
<p>2. (a) How is the “fair value” of a stock defined?          (b) What are the difficulties in calculating the “fair value” of a stock?</p> <p>(a) Discounted cash flow of all future dividend payments.          (b) All numbers used to calculate the fair value must be forecasted and are therefore uncertain estimates:</p> <ul style="list-style-type: none"> <li>• The theoretically correct discount rate equals the future percentage return of a risk free asset plus a risk premium that depends on the future market price for risk and the correlation between the asset return and the return of the market portfolio.</li> <li>• The future dividend payments equal the future sales of the company minus future payments for costs to suppliers of goods and services and to labor minus future payment of interest on outside capital minus future payment of tax on profit minus future Retained Earnings.</li> </ul>	<p>8</p>

3. Explain how monetary policy affects the exchange rate between two countries via the “purchasing power parity channel”.

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➤ *The Purchasing Power Channel :*

■ *Increase of Domestic Money Supply*

=> *Decrease of Domestic Interest Rate:  $i \downarrow$*

=> *Increase of Domestic Investment:  $I(i \downarrow) \uparrow$*

=> *Increase of Domestic Consumption:  $C(i \downarrow) \uparrow$*

=> *Devaluation of Domestic Currency:  $P\text{€} * e\text{\$€} \downarrow < P\text{\$}$*

=> *Increase of Domestic Exports:  $X(e\text{\$€} \downarrow) \uparrow$*

=> *Decrease of Domestic Imports:  $M(e\text{\$€} \downarrow) \downarrow$*

// => *Increase of Demand for Domestic Goods:  $YD \uparrow = C \uparrow + I \uparrow + X \uparrow - M \downarrow$*

=> *Domestic Excess Demand:  $YD > YS$*

=> *Increase of The Domestic Price Level:  $P\text{€} \uparrow$*

=> *Tendency towards a Reestablishment of Purchasing Power Parity:  $P\text{€} \uparrow * e\text{\$€} \downarrow = P\text{\$}$*

<p>4. Calculate the price of the buying position in a forward contract one year before maturity, if the current market price of the underlying asset is 100 € and the delivery price is 200 € and the market interest rate for a maturity of one year is 4%.</p> $F_t = P_t - K / (1+i)$ $-92,3 = 100 - 200 / (1,04)$	10
<p>5. Explain the basic “ingredients” of a financial market crisis based on the example of the Subprime Crisis 2008-09.</p> <ul style="list-style-type: none"> <li>➤ Initial Shock: <ul style="list-style-type: none"> <li>■ Monetary policy &amp; financial market innovations: <ul style="list-style-type: none"> <li>◆ Expansionary monetary policy in response to the Dot.com crash at the beginning of the year 2000.</li> <li>◆ Development of CDOs as “modern” instruments of “high-tech” risk management.</li> </ul> </li> </ul> </li> <li>➤ Positive Feedback Mechanism: <ul style="list-style-type: none"> <li>■ Credit induced increase of housing demand by private households led to an increase of housing prices. Increase of housing prices led to a higher value of mortgage collaterals. Higher collateral prices led to increased market prices for securitized mortgage debt instruments and CDOs. This induced even more credit supply to the housing market. This led to even higher housing prices...</li> </ul> </li> <li>➤ Fuel Reservoir: <ul style="list-style-type: none"> <li>■ Restructuring of portfolios: Commercial banks, private and institutional investors reallocated money withdrawn from the stock market to the real estate credit market.</li> <li>■ Increased money supply by the Fed.</li> </ul> </li> <li>➤ Negative Shock: <ul style="list-style-type: none"> <li>■ Turnaround of monetary policy in the years 2005 - 06.</li> <li>■ Bankruptcy of the first US mortgage bank in 2007.</li> </ul> </li> </ul>	16