



Chair of International Economic Policy  
Prof. Frank Westermann, Ph.D.

## **Exam in “International Finance”**

Summer semester 2020

Total points: 60 points

**For all questions: Please label all graphics thoroughly and completely describe the notation of all formulas and variables!**

### **Question 1: Mundell-Fleming Model (15 points)**

- a) Write down the balance of payments identity and discuss how changes in (i) domestic and foreign output, as well as the exchange rate, have an impact on the trade balance and, how (ii) domestic and foreign interest rates have an impact on the capital balance. Give the intuition for each of the effects. (6 points)
- b) Give the intuition for the upwards sloping ZZ curve. (3 points)
- c) Discuss the effects of expansionary monetary policy (i.e. a purchase of domestic assets) in the case of fixed exchange rates and explain the results. (3 points)
- d) Discuss one shortcoming of the Mundell-Fleming Model, using the Marshall-Lerner condition. (3 points)

### **Question 2: Financial liberalisation and Boom-Bust Cycles (18 points)**

- a) Name three key assumptions of the Tornell and Schneider Model. (3 points)
- b) Explain the balance-sheet effect that is triggered in their model by a change in the real exchange rate. (5 points)

- c) Which signs do you expect for the coefficients  $\beta$ ,  $\gamma$ ,  $\delta$  in the following Barro-Regression? Also, give the intuition for the skewness term in the context of financial crises. (6 points)

$$\Delta Y_t = \alpha + \beta Y_{t0} + \gamma X_t + \delta E_t + \varepsilon_t$$

With  $Y_{t0} \hat{=}$  initial GDP per capita

$X_t \hat{=}$  Skewness of credit growth

$E_t \hat{=}$  education

- d) Discuss the endogeneity problem in this regression. (4 points)

### Question 3: Exchange rate determination (15 points)

- a) Name a key assumption of the portfolio balance model of the exchange rate (2 points)
- b) Name three explanations for the preference parameters in this model (3 points)
- c) A layman's argument is that an increased demand for foreign assets depreciates the exchange rate. Discuss why this is not necessarily true, based on the theoretical framework of the portfolio-balance model. (5 points)
- d) Discuss an empirical fact about the exchange rate that is inconsistent with the portfolio-balance-model. Which alternative model provides a solution and why? (5 points)

**Question 4: Interest rate parity and exchange rate determination (12 points)**

- a) The following two EViews-outputs display the results of an empirical test of the uncovered interest rate parity between Spain and the USA. Diff\_E is the difference of the exchange rate and Diff\_R is the difference of the interest rate between the two countries Interpret the Outputs. (8 points)

Dependent Variable: Diff\_E  
Method: Least Squares

Sample: 2015M01 2018M12  
Included observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021200	0.008348	2.539328	0.0146
Diff_R	-0.043639	0.015489	-2.817479	0.0071
R-squared	0.147172	Mean dependent var	-0.001309	
Adjusted R-squared	0.128632	S.D. dependent var	0.017993	
S.E. of regression	0.016796	Akaike info criterion	-5.294552	
Sum squared resid	0.012977	Schwarz criterion	-5.216586	
Log likelihood	129.0693	Hannan-Quinn criter.	-5.265089	
F-statistic	7.938189	Durbin-Watson stat	1.065499	
Prob(F-statistic)	0.007110			

Wald Test:

Test Statistic	Value	df	Probability
F-statistic	25016.70	(2, 46)	0.0000
Chi-square	50033.39	2	0.0000

Null Hypothesis: C(1)=0, C(2)=1

- b) Describe the regression equation of the first output. (2 points)
- c) Empirical studies often fail to confirm the validity of the uncovered interest rate parity hypothesis Discuss one possible reason. (2 points)

**The Chair of International Economic Policy wishes you best**

**success!**