Written Exam at the Department of Economics summer 2018

Economics of Exchange Rates

Final Exam

June 6, 2018

(3-hour closed book exam)

Answers only in English.

This exam question consists of 3 pages in total

NB: If you fall ill during an examination at Peter Bangsvej, you must contact an invigilator in order to be registered as having fallen ill. In this connection, you must complete a form. Then you submit a blank exam paper and leave the examination. When you arrive home, you must contact your GP and submit a medical report to the Faculty of Social Sciences no later than seven (7) days from the date of the exam.

Be careful not to cheat at exams!

- You cheat at an exam, if during the exam, you:
- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

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Written exam for the M. Sc in Economics
Economics of Exchange Rates

June 6, 2018

Number of questions: This exam consists of 2 questions.

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1. **Exchange rate determination in classical macro models**

   (a) Explain the underlying assumptions and predictions of the flexible-price monetary model, the sticky-price monetary model and the real interest rate differential model. Clearly point out the main differences between these models.

   (b) What is the empirical evidence on these three models?

   (c) Explain carefully what is meant by the disconnect puzzle and outline possible attempts to solve this puzzle.

   (d) Consider the following flexible-price monetary model where the money demand functions in the two countries are given by

   $$m_t = p_t + \kappa y_t - \theta i_t \tag{1}$$

   and

   $$m_t^* = p_t^* + \kappa y_t^* - \theta i_t^*. \tag{2}$$

   We also assume that PPP holds continuously

   $$s_t = p_t - p_t^*. \tag{3}$$

   Notation is standard. Use these relations and solve for the spot exchange rate. Interpret your result carefully. What are the predictions of the model?

   (e) Assume now that UIP holds

   $$i_t - i_t^* = \Delta s_{t+1}^e.$$

   Show that this implies that

   $$s_t = (1+\theta)^{-1}(m_t - m_t^*) - (1+\theta)^{-1}\kappa(y_t - y_t^*) + \theta(1+\theta)^{-1} s_{t+1}^e \tag{4}$$

   (f) Solve this difference equation. Interpret your result. How is the spot exchange rate determined?

2. **FX market micro structure**

   (a) Explain how the FX market is organized and who the main market participants are?

   (b) The Portfolio Shift Model attempts to model the main features of the FX market. This model identifies two main drivers of spot exchange rates. Discuss these drivers.

   (c) Outline the Portfolio Shift Model and explain how the spot exchange rate is determined.

   (d) Summarize the empirical evidence on the Portfolio Shift Model.