Johann Wolfgang Goethe-Universität
Fachbereich Wirtschaftswissenschaften

Professor Michael Binder, Ph.D. / Dipl.-Vw. Susanne Bröck
Wintersemester 2006/2007

Syllabus – Version November 22nd, 2006

International Macroeconomics II

Course Language:

While the language of instruction for the course will be English, course participants may satisfy all course requirements either in English or in German.

Class Time and Location:

Tuesday, 12:15 pm – 1:45 pm, Room: 120B (weekly); Thursday, 10:15 am – 11:45 am, Room: 120B (bi-weekly). Some of the classes will be held in the PC laboratory and some will be used for discussion sessions.

Course Description:

This course provides (i) a thorough yet accessible presentation of the methods that econometrics currently has to offer to analyze time series and panel data in international money and finance and (ii) a discussion of models of exchange rate determination that are at the core of the open economy macroeconomics literature. The course emphasizes the hands-on application of the methods and models discussed to empirically study the dynamics and determination of exchange rates.
A number of classes will therefore take place in the PC laboratory (using *STATA*), and course participants are expected to complete assignments in *STATA*. At the end of the course participants should feel comfortable to do independent, economic theory based empirical work using time series and panel data as arising in many areas of macroeconomics and finance.

Course Website:

http://www.wiwi.uni-frankfurt.de/binder/teaching/im206

The course website will contain further updates of this syllabus, course news/administrative announcements, class notes and *STATA* files, assignments, help for your work with *STATA* and data sets. We encourage you to check the website regularly. Some material on the website will be password protected. The password will be announced in class, and must not be passed on to anybody not attending the course this semester.
A word of caution regarding the web site: Do ***not*** view the course website as a substitute for attending class. In particular, the class notes are not meant for self study, but are rather distributed to make it easier to follow the classes. On occasion we will discuss additional material in class that is not covered in the class notes.

Course Requirements:

Grading will be based on two empirical take-home projects (20%) and a course final examination (80%). The date and time of the final examination will be set by the board of examinations. You will need to register for the final exam following the procedure set out by the board of examinations.

Course Prerequisites:

Knowledge of the linear regression model as covered, for example, in

- D.N. Gujarati (2002): *Basic Econometrics*, Fourth Edition, New York: McGraw Hill

or in

- C. Heij, P. De Boer, P.H. Franses, T. Kloek and H.K. Van Dijk (2004): *Econometric Methods with Applications in Business and Economics*, Oxford: Oxford University Press

or in

- J.M. Wooldridge (2006): *Introductory Econometrics*, Third Edition, Mason: Thomson South Western

will be very helpful for this course. Nevertheless, a compact review of this material will be provided as part of the course.

Course Logistics:

First Class: Tuesday, October 17th, 2006.

Office Hours: Michael Binder, 115B, Tuesday, 3:00 pm – 4:00 pm
Susanne Bröck, 102B, Tuesday, 9:00 am – 10:00 am

Texts:

Econometrics:

- Tsay, R.S. (2005), *Analysis of Financial Time Series*, Second Edition, New York: John Wiley.

- Brooks, C. (2002), *Introductory Econometrics for Finance*, Cambridge: Cambridge University Press.
- Enders, W. (2004), *Applied Econometric Time Series*, Second Edition, Chichester: John Wiley.
- Verbeek, M. (2004), *A Guide to Modern Econometrics*, Second Edition, Chichester: John Wiley.

STATA:

- Acock, A.C. (2006), *A Gentle Introduction to STATA*, STATA Press.
- Baum, C.F. (2006), *An Introduction to Modern Econometrics Using STATA*, STATA Press.
- Kohler, U. and F. Kreuter (2005), *Data Analysis Using STATA*, STATA Press.

International Money and Finance:

- Cuthbertson, K. (2005), *Quantitative Financial Economics: Stocks, Bonds and Foreign Exchange*, Second Edition, Chichester: John Wiley.
- Mark, N.C. (2001), *International Macroeconomics and Finance*, Oxford: Basil Blackwell.
- Sarno, L. and M.P. Taylor (2002), *The Economics of Exchange Rates*, Cambridge: Cambridge University Press.

Course Outline:

1. Characteristics of Foreign Exchange Log Return Distributions
Applications: Log Returns on Foreign Exchange

2. Linear Regression

- Ordinary Least Squares
- Model Selection
- Non-Spherical Disturbances
- Instrumental Variables
- Introduction to *STATA*

Applications: Equity Parity
Risk Premia in Foreign Exchange Markets
Fundamental Determinants of Foreign Exchange Rates: Monetary Theory and Purchasing Power Parity

3. Single Equation Time Series Models

- ARMA Models
- Conditional Heteroskedasticity
- Unit Root Tests
- ARDL Models and Cointegration

Applications: Forecasting Nominal and Real Exchange Rate Dynamics
Interest, Equity and Purchasing Power Parities

4. Multi Equation Time Series Models

- Vector Autoregressions
- Cointegrated Vector Autoregressions/Error Correction Models

Applications: International Capital Flows and Their Determinants
Interest, Equity and Purchasing Power Parities

5. Panel Data Models

- Static Homogenous Slope Panel Models
- Dynamic Homogenous Slope Panel Models
- Dynamic Heterogeneous Slope Panel Models

Applications: Forecasting Nominal and Real Exchange Rate Dynamics
Interest, Equity and Purchasing Power Parities