PhD course on:

VAR models in empirical asset pricing

Time and place: CREATES, Aarhus University, September 18-20, 2012.

Lectures:

Professor Tom Engsted, CREATES, Aarhus University
Professor Carsten Tanggaard, CREATES, Aarhus University
Assistant Professor Thomas Q. Pedersen, CREATES, Aarhus University

Background:

Vector-autoregressions (VAR’s) have been used extensively in empirical finance to model the pricing of financial assets and intertemporal portfolio choice. Examples include present value models for stock prices and the term structure of interest rates, rational bubbles, short- and long-horizon return predictability, return variance decompositions, and strategic and tactical asset allocation for long-term investors. Two special features characterize much of this literature. First, the log-linear return approximation (the “Campbell-Shiller relation”) constitutes the underlying theoretical framework. Second, the VAR models employed are subject to special econometric problems, e.g. small-sample bias.

In the course students will be introduced to this literature based on a number of core articles. Some articles will be dealt with in detail. Other articles will mainly serve as relevant background and supplementary literature (see the literature list below).

Program:

**Tuesday, September 18** (in U30)

9:00 – 9:45 Lecture 1 (by Tom Engsted): Present value models with and without bubbles
9:45 – 10.00 Break
10:00 – 10:45 Lecture 1 (continued)
10:45 – 11:00  Break

11:00 – 11:45  Lecture 1 (continued)

12:00 – 12:45  Lunch

13:00 – 13:45  Lecture 2 (Carsten Tanggaard): Approximation errors in the log-linear model

13:45 – 14:00  Break

14:00 – 14:45  Lecture 2 (continued)

14:45 – 15:00  Break

15:00 – 15:45  Lecture 2 (continued)

**Wednesday, September 19** (in U30)

9:00 – 9:45  Lecture 3 (by Tom Engsted): Return predictability in VAR models

9:45 – 10:00  Break

10:00 – 10:45  Lecture 3 (continued)

10:45 – 11:00  Break

11:00 – 11:45  Lecture 3 (continued)

12:00 – 12:45  Lunch

13:00 – 13:45  Lecture 4 (Thomas Q. Pedersen): VAR based dynamic asset allocation

13:45 – 14:00  Break

14:00 – 14:45  Lecture 4 (continued)

14:45 – 15:00  Break

15:00 – 15:45  Lecture 4 (continued)

19:00 –  Dinner
Thursday, September 20 (in U115)

9:00 – 9:45         Lecture 5 (by Tom Engsted): VAR based return variance decompositions
9:45 – 10.00       Break
10:00 – 10:45     Lecture 5 (continued)
10:45 – 11:00     Break
11:00 – 11:45     Lecture 5 (continued)
12:00 – 12:45     Lunch

13:00 – Summary and wrap-up, discussions

Readings:

For Lecture 1, the main literature will be:


Additional supplementary literature to Lecture 1:


For Lecture 2, the main literature will be:


Additional supplementary literature to Lecture 2:


For Lecture 3, the main literature will be:


Additional supplementary literature to Topic 3:


For Lecture 4, the main literature will be:


Additional supplementary literature to Lecture 4:


For Lecture 5, the main literature will be:


Additional supplementary literature to Lecture 5:

