Lecture 1

VAR models

Topics in applied macroeconomics

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Reading list

1. Chapters to read
    - Enders, chapter 5 (main reference)
    - Lutkepohl and Kratzig, chapter 3 (useful for model diagnostics)

2. Papers to read
    - Christiano, L. J., Eichenbaum, M., & Evans, C. L. (1999). Monetary policy shocks: What have we learned and to what end? *Handbook of Macroeconomics*, *1*, 65-148. (very popular paper, chapter 4 is an example of recursive VAR)
    - Jovančević, R., Arčabić, V., & Globan, T. (2012). Prijenos poslovnih ciklusa zemalja Europske unije na Republiku Hrvatsku. *Ekonomski pregled*, *63*(1-2), 3-21. (very simple example of VAR)

3. Codes and data files
    - uncertainty.rpf (the main file)
    - var_1_2.rpf
    - var_2_2.rpf
    - var_3_4.rpf
    - varlag.rpf
    - ESG-VAR.rpf
    - Var(MoneyDemand).rpf

4. RATS Handbook for Vector Autoregressions, 2nd Edition
    - Very practical and very useful

Overview of the lecture

Motivating example

Introduction

Estimation and identification

Number of lags in a VAR (Example varlag.rpf and uncertainty.rpf)

Impulse response functions

Impulse responses in RATS

Impulse responses with Confidence intervals in RATS

Introduction to Monte Carlo simulations

Variance decomposition

Granger causality