

STRUCTURAL VAR MODELS

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Course Description

This reading group aims at presenting and discussing the main econometric techniques used to identify structural shocks in VAR models, from the origins to the state of the art. The most important papers in this literature will be analysed both from an economic and an econometric point of view.

The softwares used are Matlab and Eviews. Codes and data will be provided and commented on during the class.

Prerequisites for this course are a good knowledge of time-series econometrics and a basic knowledge of programming techniques.

Syllabus

1. Introduction to SVARs
2. Short-Run and Long-Run Restrictions
3. Narrative Identification
4. Sign and Magnitude Restrictions
5. VAR versus VEC model specifications
6. Global VARs

References

General references

- Amisano G., Giannini C., *“Topics in Structural VAR Econometrics”*, Springer (2nd Ed.).
- Lutz K., Lütkepohl H., *“Structural Vector Autoregressive Analysis”*, Cambridge University Press, 2017 (preliminary chapters can be freely downloaded on Kilian’s webpage: <http://www-personal.umich.edu/~lkilian/book.html>)
- Canova F., *“Methods for applied macroeconomic research”*, Princeton University Press, 2007.
- Bayesian Estimation, Analysis and Regression (BEAR) toolbox and technical guide (the toolbox and the documentation can be downloaded from here: <https://www.ecb.europa.eu/pub/research/working-papers/html/bear-toolbox.en.html>)
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Short- and long-run restrictions

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Narrative identification

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Sign and magnitude restrictions

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VEC models

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