

TOPICS ON APPLIED MACRO & LABOUR

ADVANCED BLOCK 1

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SYLLABUS:

Topic 1. VAR Models in Macro (Brief overview)

- 1.1 General Framework (VAR, ECM, SVAR)
- 1.2 Estimation of VAR, ECM & SVAR Models
- 1.3 Identifying Restrictions: Short & Long-Run, Sign and Heteroskedasticity
- 1.4 Specifying the Co-integrating Rank
- 1.5 Bayesian VARs

Topic 2. Empirical Applications

- 2.1 Inflation shocks and Money Neutrality
- 2.1 Labour Market Shocks
- 2.2 Identifying Monetary Policy Switching Regimes
- 2.3 What Do VARs Mean when Shocks are Persistent?
- 2.4. Stock Prices, News Shocks & the Business Cycle
- 2.5 An Attack on RBC Models: Technology vs. Demand Shocks
- 2.6 Using DSGE Models to Check Identification in SVARs

Topic 3. Miscellanea

- 3.1 Structural Breaks
- 3.2 Modelling TS with Changes in Regime through Markov Chains
- 3.3 Marked-Point Processes
- 3.4 Estimation of Taylor Rules & NK Phillips Curves
- 3.5 Large Dimensional Factor Models (Estimation, Forecasting, Breaks, Quantiles)
- 3.6 Testing for Bubbles.
- 3.7 Calibration /Estimation of Search & Matching Models

Topic 4 (time permitting). Further Topics on Cointegrated Variables

- 4.1 The I(1) Regression Model
- 4.2 Fully- Modified Estimation & Dynamic OLS
- 4.3 Fractional Co-integration
- 4.4 Co-integration and Multi-cointegration
- 4.5 Johansen's Reduced Rank Approach
- 4.6 ML Estimation of Common Factors
- 4.7 Co-integration in Panel Data Sets

BASIC REFERENCES:

Textbooks

1. Banerjee, A.; Dolado J.; Galbraith. J. and D. Hendry (1993): **Cointegration, Error Correction and the Econometric Analysis of Non Stationary Data**, Oxford University Press.
2. Cahuc, P. and A. Zylberberg (2004): **Labor Economics**, MIT Press, chapters 9-10
2. Hamilton, J. (1994): **Time Series Analysis**, Princeton University Press, chapter 22 (*)
3. Johansen, S. (1995): **Likelihood Based Inference in Cointegrated Autoregressive Models**, Oxford University Press, chapters 1-3 (*)

Surveys

1. Dolado J, Gonzalo, J. and F. Marmol (1999): "Cointegration", in B. Baltagi (ed). **Companion in Econometric Theory**, Basil Blackwell (2001)
2. Stock, J. (1994): "Unit Roots, Structural Breaks and Trends", ch.46 in R. Engle and D. McFadden, **Handbook of Econometrics**, Elsevier.
3. Kilian, L. (2011): **Structural Vector Autoregressions**, http://www-personal.umich.edu/~lkilian/elgarhdbk_kilian.pdf

Articles

1. **Baillie, R.** (1996) "Long Memory Processes and Fractional Integration in Econometrics", *Journal of Econometrics*, 73, 5-60.
2. **Banerjee, A., Marcellino, M and C. Osbat** (2002) "Some Caution on the Use of Panel Data Methods for Integrated Series of Macro-Economic Data" (pdf.version)
3. **Balmaseda, M., Dolado, J. and D. Lopez-Salido** (2000) "The Dynamic Effects of Shocks to Labour Markets: Evidence from OECD Countries" *Oxford Economic Papers* 52, 3-23.
4. **Beaudry, P. and F. Portier** (2006): "News, Stock Prices and Economic Fluctuations", *American Economic Review*, 96, 1293-1307.
5. **Bernanke, B. and I. Mihov** (1998) "Measuring Monetary Policy" *Quarterly Journal of Economics*, 113, 869-902
6. **Blanchard, O. and D. Quah** (1989): "The Dynamic Effects of Aggregate Demand and Supply Disturbances", *American Economic Review* 79, 655-73
7. **Bullard, J. and J. Keating** (1995): "The Long-Run Relationship Between Inflation and Output in Postwar Economics", *Journal of Monetary Economics* 36, 477-96
8. **Canova, F.** (1995): "Vector Autoregressive Models: Specification, Estimation, Inference, and Forecasting" ch. 2 in Pesaran, M. H and M. Wickens (eds), *Handbook of Applied Econometrics*, Blackwell.
9. **Clarida, R., Galí, J and M. Gertler** (1998): "Monetary Policy Rules in Practice: Some International Evidence", *European Economic Review*, 42, 1033-68.
10. **Chen, L., Dolado, J. and J. Gonzalo (2011)**, "Detecting Big Structural Breaks in Large Factor Models" *Journal of Econometrics* (2014) <http://dolado.blogspot.com>

11. **Christiano, L.J., Eichenbaum, M. and C. Evans** (1998): Monetary Policy Shocks: What Have we Learned and to What End?- NBER Working Paper 6400
12. **Christiano, L.J., Eichenbaum, M. and R. Vigfusson** (2004): The Response of Hours to a Technology shock: Evidence Based on Direct Measures of technology", *Journal of the European Economic Association*, 2, 381-395.
13. **Charnavoki, V and J. Dolado** (2013), "The Effects of Global Shocks on Small Commodity-Exporting Economies. New Evidence from Canada", forthcoming *American Economic Journal –Macro* (2014).
14. **Dolado, J and J. Jimeno** (1997): "The Causes of Spanish Unemployment: a Structural VAR Approach ", *European Economic Review* 41, 1281-1307.
15. **Dolado, J. and R. Maria-Dolores** (2002) "Evaluating Changes in The Bank of Spain's Interest Rate Target: An Alternative Approach Using Marked Point Processes " *Oxford Bulletin of Economics & Statistics*, 64, 159-82.
16. **Dolado, J., Gonzalo, J. and L. Mayoral** (2002) " A Fractional Dickey-Fuller Test for Unit Roots" *Econometrica*, 70, 1963-2006.
17. **Dolado, J., R. Maria-Dolores and F.J. Ruge-Murcia** (2004) " Nonlinear Monetary Policy Rules: Some New Evidence for the U.S.". *Studies in Nonlinear Dynamics and Econometrics*, 8, (3).
18. **Dolado, J., R. Maria-Dolores and M. Naveira** (2005) "Are monetary-policy reaction functions asymmetric ? : The role of nonlinearity in the Phillips Curve" *European Economic Review*, 49, 485-503.
19. **Erceg, C. J., Guerrieri, L. and C. Gust** (2005): "Can Long-Run Restrictions Identify Technology Shocks?" *Journal of the European Economic Association*, 3.
20. **Fernández-Villaverde, J., Rubio-Ramírez, J. F, Sargent, T. and M. Watson** (2007): "A, B, C, (and D)s for Understanding VARs." *American Economic Review* 97, 1021-1026.
21. **Fernández-Villaverde, J. Guerrón-Qintana., P. and J.F. Rubio-Ramírez** (2010), Federal Reserve Board of St. Louis Review, 92, 1-28.
22. **Galí, J** (1999) "Technology, Employment and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?", *American Economic Review*, 89, 249-271.
23. **Galí, J.** (2011) "The Return of the Wage Phillips Curve", *Journal of the European Economic Association*, 9, 436-461.
24. **Galí, J.** (2013), "Notes for a New Guide to Keynes (I): Wages, Aggregate Demand, and Employment", *Journal of the European Economic Association*, forthcoming
25. **Galí, J and M. Gertler** (1999) "Inflation Dynamics: A Structural Econometric Analysis", *Journal of Monetary Economics*, 44, 195-222.
26. **Hamilton, J.** (1989): "A New Approach to the Economic Analysis of Nonstationary Time Series and the Business Cycle", *Econometrica* 57, 357-84.
27. **Jermann, U. and V. Quadrini, (2012)**, "Macroeconomic Effects of Financial Shocks", *American Economic Review*, 102, 2012.
28. **Johansen, S. and K. Juselius** (1990): "Maximum Likelihood Estimation and Inference on Cointegration: With Applications to the Demand for Money", *Oxford Bulletin of Economics & Statistics* 52, 169-210.
29. **Johansen, S. and M. O. Nielsen** (2012): "Likelihood Inference for a Fractionally Cointegrated Vector Autoregressive Model", *Econometrica*, 80, 2667-2733.

30. **Lobato, I. and C. Velasco** (2007) "Efficient Wald Tests for Fractional Unit Roots", *Econometrica*, 75, 575-589.
31. **Lubik, T.** (2009) "Estimating a Search and Matching Model of the Aggregate Labor Market", Richmond Fed *Economic Quartely*, 95,; 101-120
32. **Phillips, P.C.B and J. Pu** (2010) "Dating the Timeline of Financial Bubbles during the Subprime Crisis," *Quantitative Economics*, 1(2): 455-491.
33. **Stock, J. and M. Watson** (2002), "Forecasting Using Principal Components from a Large Number of Predictors", *Journal of the American Statistical Association*, 2002.
34. **Uhlig, H.** (2005), "What Are the Effects of Monetary Policy on Output? Results from an Agnostic Identification Procedure", *Journal of Monetary Economics*, 2005, 52(2), pp. 381-419.

EVALUATION:

HOMEWORK (20%), TAKEHOME EXAM (80%)