

## **0117 Macro Econometrics: Forecasting and Macroeconometric Modelling in Theory and Practice**

**Michael Hauser, Thomas Url**

SS 2012, Monday 17:30-19:00, Seminarraum UZA 2, Floor 4

Announced for DrP in majors Volkswirtschaftslehre and Spezielle Statistik. You will find further information at: <http://vvz.wu.ac.at/cgi-bin/vvz.pl?C=S&LANG=DE&S=12&LV=3&L2=S&L3=S&T=&L=Url&I=&JOIN=AND>.

**Compulsory reading:** Diebold(1998)

### **Seasonal Adjustment and Outlier Detection in Time Series,**

Seasonal Adjustment, Outlier Detection, Calendar Effects

Ref.: Kaiser – Maravall (2000), Bell – Monsell (1992)

Software: <http://forum.europa.eu.int/irc/dsis/eurosam/info/data/demetra.htm>.

### **Time Series Forecasting, univariate**

Estimating and Forecasting Autoregressive Moving Average Models

Ref.: Harvey (1981) Ch. 2 pp. 21-53 und Ch. 5.1-5.6 pp. 120-139, Kennedy (1998) Ch. 17, p. 263-287, Brockwell and Davis (2002) Ch. 2-3,5.

### **Macroeconometric Modeling: Alternative Approaches**

Overview and Comparison of multivariate models

Ref.: Garratt et al. (2006), Ch. 1-2, p. 1-33

### **Forecasting and Policy Analysis with Bayesian Vector Autoregression Models**

Estimating and forecasting with Vector Autoregression Models

Ref.: Charemza – Deadman (1997) Ch. 6, Litterman (1984, 1986), Sims – Zha (1998).

### **Forecasting with Large Scale Macroeconometric Models,**

Properties of large scale models using either the US-model of Ray Fair or the WIFO-Macromod for Austria to do Forecasts

Ref.: Baumgartner et al. (2004), Fair (2006), Fair (2009).

Software: <http://fairmodel.econ.yale.edu/main2.htm>.

### **Dynamic General Equilibrium Models**

Modeling and forecasting with New Keynesian Real Business Cycle Models

Ref.: Smets – Wouters (2003), Garratt et al.(2006), Chp. 3, DeJong – Dave(2007)

### **A Long-run Structural Model of the UK**

Modeling and forecasting with Vector Cointegrated Autoregressive Models

Ref.: Garratt et al. (2006), p. 171-223

### **Economic Forecasting in a Changing World**

Modeling and forecasting structural breaks

Ref.: Clement – Hendry (2008), Reinhart – Rogoff(2008), Claessens et al. (2008).

## References

- Baumgartner, J., Breuss, F., Kaniowski, S., "WIFO-Macromod – An Econometric Model for the Austrian Economy", WIFO-Working Paper No. 241, 2004.
- Bell, W., R., Monsell, B., C., "X-11 Symmetric Linear Filters and their Transfer Functions", Bureau of the Census Statistical Research Division Research Report Series No. RR 9215, Bureau of the Census, Washington DC, 1992.
- Brockwell, P.J. and Davis, R.A., "Introduction to Time Series Analysis and Forecasting", Springer, 2002.
- Charemza, W., W., Deadman, D., F., "New Directions in Econometric Practice", 2nd Ed., Edward Elgar, Cheltenham, 1997.
- Claessens, S., Kose, A., Terrones, M., E., „What Happens During Recessions, Crunches, and Busts?", CEPR Discussion Paper No. 7085, Centre for Economic Policy Research, London, 2008.
- Clement, M.P., Hendry, D.F., "Economic Forecasting in a Changing World", *Capitalism and Society*, 3, 2008(2).
- Colander, D., "Economists, Incentives, Judgment, and the European CVAR Approach to Macroeconometrics", *Economics*, Vol. 3, 2009-9
- DeJong, D.N. with Dave, C., "Structural Macroeconometrics", Princeton University Press, 2007.
- Diebold, F.X., "The Past, Present, and Future of Macroeconomic Forecasting", *Journal of Economic Perspectives*, 12, 1998, 175-192.
- Fair, R., "The US-Model Workbook", mimeo Yale University, 2006, downloadable at <http://fairmodel.econ.yale.edu/main2.htm>.
- Fair, R., "Has Macro Progressed?", Cowles Foundation Discussion Paper No. 1728, Cowles Foundation for Research in Economics, Yale University, New Haven, 2009, downloadable at <http://cowles.econ.yale.edu/P/cd/cfdpmain.htm>.
- Garratt, A., Lee, K., Pesaran, H., M., Shin, Y., "Global and National Macroeconometric Modeling: A Long-Run Structural Approach"
- Harvey, A., C., "Time Series Models", Philip Allan, Hemel Hempstead, 1981.
- Kaiser, R., Maravall, A., "Notes on Time Series Analysis, ARIMA Models and Signal Extraction", Bank of Spain Working Paper No. 0012, Madrid, 2000, <http://www.bde.es/informes/be/docs/df0012e.pdf>.
- Kennedy, P., "A Guide to Econometrics", 4th Ed., Blackwell, Oxford, 1998.
- Litterman, R., B., "Forecasting and Policy Analysis with Bayesian Vector Autoregression Models", *Federal Reserve Bank of Minneapolis Quarterly Review*, 1984, 30-41.
- Litterman, R., B., "Forecasting with Bayesian Vector Autoregressions - Five Years Later", *Journal of Business and Economic Statistics*, 4, 1986, 25-38.
- Reinhart, C.M., Rogoff, K.S., "Is the 2007 US Sub-Prime Financial Crises so Different? An International Historical Comparison", *American Economic Review: Papers and Proceedings*, 98:2, 339-344.
- Sims, C., A., Zha, T., "Bayesian Methods for Dynamic Multivariate Models", *International Economic Review*, 39, 1998(4), 949-968.

Smets, F., Wouters, R., "An Estimated Dynamic Stochastic General Equilibrium Model of the Euro Area", *Journal of the European Economic Association*, 1(5), 2003, 1123-1175.