Ever since 2000 Eurostat (Statistical Office of the European Communities) has organised once per year a colloquium on “Modern Tools for Business Cycle Analysis”. The first colloquium was devoted to synthetic indicators, the second one to the history of business cycle analysis and last year’s colloquium dealt with a variety of statistical methods for business cycle analysis such as detrending, turning point detection, cyclical convergence measurement, forecasting and multivariate decomposition.

Eurostat hopes that many of those interested in business cycle analysis for the Euro-zone and the European Union will attend its colloquia. The colloquium will offer the opportunity to discover innovative tools and advanced applications dealing with a difficult topic. There are a lot of challenges in the realm of business cycle analysis after the introduction of the Euro. Eurostat wants to meet them together with partners from the business cycle analysis community such as academics, researchers, journalists, official economists and statisticians. The colloquium is also a great opportunity for graduate and post-graduate students to become familiar with the most recent developments in business cycle analysis.

The 4th Eurostat colloquium on Modern Tools for Business Cycle Analysis, co-organised with DG ECFIN (Directorate General of Economic and Financial Affairs) will be held in the Hémicycle of the Schuman Building, Luxembourg, from 20 to 22 October 2003. At the centre of this year’s colloquium will be the analysis of Euro-zone growth and cycles patterns. The colloquium consists of invited presentations, several contributed sessions, one session for poster papers and one for software presentation/demonstration. More than 60 submissions have been reviewed and selected by a scientific committee chaired by Professor Lars Jonung (DG ECFIN) and Gian Luigi Mazzi (Eurostat).

The invited speakers are:

- Prof. Michael Artis, European University Institute, Florence, Italy;
- Prof. Fabio Canova, Universitat Pompeu Fabra, Madrid, Spain;
- Prof. Gianluca Cubadda, Universitat del Molise, Campobasso, Italy;
- Prof. Andrew Harvey, Cambridge University, Cambridge, United Kingdom;
- Prof. Siem Jan Koopman, Vrije Universiteit, Amsterdam, The Netherlands;
- Prof. Denise Osborn, University of Manchester, Manchester, United Kingdom;
- Prof. Tommaso Proietti, Universita di Udine, Udine, Italy;
- Prof. Domenico Sartore, Università Cafoscari, Venezia, Italy;
- Prof. Herman Van Dijk, Erasmus University, Rotterdam, The Netherlands.

The sessions with contributed papers will cover the following topics:

- Composite indicators
- Convergence and synchronisation
- Dating and detection of turning points
- Output gap estimates
- Monetary policy and business cycle analysis
- Methodology of business cycle analysis

Most papers focus on the Euro-zone behaviour. However, some of them are devoted to a comparative analysis of Member States and the impact of the enlargement process is also analysed. All papers will soon be available through the Euroindicators website at http://europa.eu.int/comm/euroindicators. The proceedings of the colloquium will later on be published in the "Monography of Official Statistics" (MOS) edited by Eurostat.

The preliminary programme and the registration form are attached, but they are also available through the Euroindicators web-site. Please note that no registration fees are required. However, since the number of places is limited, all interested persons are kindly requested to register as soon as possible by sending the attached registration form to estat-colloquium-registration@cec.eu.int or by fax to Mrs Liette EISEN (+352) 4301-34851.

For any administrative details, please contact Ms Nelly Da Silva (nelly.da-silva@cec.eu.int; (+352) 4301-34007) and for information on the conference itself contact Mr Gian Luigi Mazzi (gianluigi.mazzi@cec.eu.int; (+352) 4301-34351).
COLLOQUIUM ON MODERN TOOLS FOR BUSINESS CYCLE ANALYSIS

20 TO 22 OCTOBER 2003

Luxembourg, European Parliament
Hémicycle

Beginning 9.00 a.m.
MONDAY 20 OCTOBER 2003

08:00 - 09:00  Registration

Welcome session

Chairperson: Pedro Diaz Munoz, Eurostat

09:00 – 09:30  Welcome and presentation
To be defined

Invited session  Seasonal adjustment and business cycle analysis

Chairperson: Giovanni Savio, Eurostat

09:30 - 10:15  The extent of seasonal/business cycle interaction in European industrial production
Denise R. Osborn, University of Manchester, School of Economic Studies

10:15 - 11:00  Seasonal adjustment and business cycle features
Tommaso Proietti, Università degli Studi di Udine, Dipartimento di Scienze Statistiche

11:00 - 11:30  Coffee break

Morning session  Eurostat lecture

Chairperson: Peter Weiss, DG ECFIN

11:30 - 12:15  Statistical analysis of cyclical fluctuations: the role of official statisticians
Gian Luigi Mazzi, Giovanni Savio, Eurostat

12:15 - 13:45  Lunch

Parallel Contributed Sessions

13:45 - 15:00  A. Synchronisation and convergence (1st part)

Chairpersons: Denise R. Osborn, University of Manchester, School of Economic Studies

How does the Euro-zone respond to shocks? A common trends and common cycles analysis
Roberto Astolfi, ISTAT, Direzione Centrale di Contabilità Nazionale
How synchronized are European business cycles?
Michael U. Bergman, Lund University, Department of Economics

A nonparametric analysis of the international business cycle
Maurizio Bovi, Institute for Studies and Economic Analyses (ISAE)

B. Composite indicators (1st part)

Chairpersons: Filip Keereman, DG ECFIN

A short-term growth indicator for the Euro-zone
Françoise Charpin, Université de Paris II and Département analyse et prévision de l’OFCE

Short-run Euro area GDP forecasting with factor extraction from sorted leading indicators
Daniel Grenouilleau, DG ECFIN

Leading indicators for Euro area inflation and GDP growth
Anindya Banerjee, Igor Masten, European University Institute
Massimiliano Marcellino, IGIER, Università Bocconi and CEPR

15:00 - 15:15 Coffee break

Parallel contributed sessions

15:15 - 16:55 A. Methodology for business cycle analysis

Chairperson: Andrew Harvey, Cambridge University, Faculty of Economics and Politics

Trend-cycle decomposition though the Wavelets analysis
Marco Crivellini, Marco Gallegati, Mauro Gallegati, Antonio Palestrini
University of Ancona, Department of Economics

Business cycle indicators: the sensitivity of generalised dynamic factor models to pre-filtering methods
Gabriele Fiorentini, University of Florence, Department of Statistics
Christophe Planas, Joint Research Centre

Filtering for current analysis
Simon Van Norden, HEC Montréal, CIRANO and CIREQ
Athanasiros Orphanides, Board of Governors of the Federal Reserve System, Division of Monetary Affairs

B. Monetary policy and business cycle analysis

Chairperson: Gérard Korteweg, European Central Bank

Time-varying Nairu and real interest rates in the Euro area
Camille Logeay, Silke Tober, Deutsches Institut für Wirtschaftsforschung (DIW)

Monetary policy and the stock market in the Euro area
Nuno Cassola, European Central Bank
Claudio Morana, Università del Piemonte Orientale, Dipartimento di Scienze Economiche e Metodi Quantitativi

Credibility of EMS interest rate policies: A Markov Regime-Switching of a bivariate autoregressive model
Philip Arestis, Bard College, Levy Economics Institute
Kostas Mouratidis, National Institute of Economic and Social Research (NIESR)

Narrow money and the business cycle: theoretical aspects and Euro area evidence
Claus Brand, European Central Bank
H.-E. Reimers, University of Technology, Business and Design, Economics Department
Franz Seitz, University of Applied Sciences Amberg-Weiden, Economics Department
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| 09:30 - 10:15| **Invited session** Multivariate statistical methods and business cycle analysis  
Chairperson:  
Gian Luigi Mazzi, Eurostat  
Trend estimation, signal-noise ratios and the frequency of observations  
Andrew Harvey, Cambridge University, Faculty of Economics and Politics  
10:15 - 11:00| A reduced rank regression approach to coincident and leading indexes building  
Gianluca Cubadda, Università del Molise, Dipartimento SEGeS  
11:00 - 11:30| Coffee Break  
11:30 - 12:15| Tracking growth and the business cycle: a stochastic common cycle model for the Euro area  
Siem Jan Koopman, Vrije Universiteit Amsterdam  
12:15 - 13:45| Lunch  
|              | **Invited session** Key-note lecture  
Chairperson:  
Lars Jonung, DG ECFIN  
13:45 - 14:30| Wagenführ lectures  
Michael Artis, European University Institute  
14:30 - 15:30| Coffee Break and Poster Session  
|              | **Poster session**  
14:30 - 15:30| Dating the Euro area business cycle by means of different band-pass filters  
Roberto Astolfi, ISTAT, Direzione Centrale di Contabilità Nazionale  
Interacting two-country business fluctuations: ‘Euroland and the USA’  
Toichiro Asada, Chuo University, Faculty of Economics  
Carl Chiarella, University of Technology, School of Finance and Economics  
Peter Flaschel, University of Bielefeld, Faculty of Economics  
Reiner Franke, University of Bremen, Department of Economics  
Simultaneous determination of NAIRU, output gaps, and structural budget balances: Swedish evidence  
Göran Hjelm, National Institute of Economic Research  
Measuring the “Financing Gap” of European corporations  
Federico Galizia, European Investment Bank |
The “savings gap” of European corporations: a first look at the available data
Federico Galizia, Thomas Steinberger, European Investment Bank

VAR modelling of the Euro area GDP on the basis of principal component analysis
Nikolaos Sdrakas, DG ECFIN

Business cycle affiliations in the context of European integration
Pedro J. Perez, University of Valencia
Denise R. Osborn, Marianne Sensier, University of Manchester, School of Economic Studies

Monetary and fiscal policy transmission in the Euro-area: evidence from a structural VAR analysis
Bas van Aarle, University of Leuven, LICOS
Harry Garretsen, Utrecht University, Utrecht School of Economics
Niko Gobbin, Ghent University, SHERPPA

Parallel session

15:30 - 17:10

A. Turning points dating and detection

Chairperson: Michael Artis, European University Institute

Euro-zone business cycle analysis with multivariate Markov switching models
Jacques Anas, Laurent Ferrara, Centre d’Observation Economique
Monica Billio, Università di Venezia, Dipartimento di Scienze Economiche
Marco Lo Duca, GRETA Associati

Tracking and forecasting business cycle fluctuations
Marcelle Chauvet, Federal Reserve Bank of Atlanta, Research Department
Dennis Chwat, Raytheon Electronic Systems

A turning point chronology for the Euro-zone classical and growth cycle
Jacques Anas, Laurent Ferrara, Centre d’Observation Economique
Monica Billio, Marco Lo Duca, GRETA Associati

Basic characteristics of the Euro area business cycle
Alberto Musso, European Central Bank

B. Output gap measurement

Chairperson: Xavier Timbeau, Observatoire Français des Conjonctures Economiques (OFCE)

Assessment of multivariate measures of output gap in the Euro area: an aggregate versus disaggregate approach
Odile Chagny, Matthieu Lemoine, Observatoire Français des Conjonctures Économiques (OFCE), Département Analyse et Prévision (DAP)
Florian Pelgrin, Bank of Canada

Stability analysis in trend cycle decomposition under unobserved
component and dynamic common factor models
Juan Del Hoyo Bernat, José Luis Cendejas Bueno, Universidad de Madrid, Departamento de Análisis Económico

Business cycle uncertainty in real-time
James Mitchell, National Institute of Economic and Social Research (NIESR)

Bayesian inference of output gap models
Gabriele Fiorentini, University of Florence, Department of Statistics
Alessandro Rossi, Cristophe Planas, Joint Research Centre.
**Invited session**  
*Bayesian approaches to business cycle analysis*

Chairperson:  
*To be defined*

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| 09:30 - 10:15 | Bayesian inference in dynamic models with latent factors  
*Domenico Sartore, Universita di Venezia* |
| 10:15 - 11:00 | A Bayesian approach to trend cycle decomposition and turning points detection  
*Herman K. Van Dijk, Erasmus University* |
| 11:00 - 11:30 | Coffee Break |
| 11:30 - 12:15 | Similarities and convergence of G-7 cycles  
*Fabio Canova, Universitat Pompeu Fabra* |
| 12:15 - 13:45 | Lunch |
| 13:45 - 14:00 | Message of Eurostat’s Director General  
*Chairperson: Klaus Reeh, Eurostat*  
*Michel Vanden Abeele, Eurostat* |
| 14:00 - 14:45 | DG ECFIN lecture  
*Chairperson: Klaus Reeh, Eurostat*  
*Business cycle research in the new policy framework: a DG ECFIN perspective*  
*Peter Weiss, Juergen Kroeger, DG ECFIN* |
| 14:45 - 15:45 | Coffee Break and Software Demonstration |

**Software demonstration**

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| 14:45 - 15:45 | STAMP and SsfPack  
*Siem Jan Koopman, Vrije Universiteit Amsterdam*  
*BUSY*  
*Christophe Planas, Joint Research Centre*  
*FLASH*  
*Marco Marini, ISTAT, Direzione Centrale di Contabilita Nazionale*  
*GAP*  
*Alessandro Rossi, Joint Research Centre* |
Parallel session

15:45 - 17:25  A. Synchronisation and convergence (2nd part)

Chairpersons:  Siem Jan Koopman, Vrije Universiteit Amsterdam

Common shocks, common dynamics, and the international business cycle
Gianluca Cubadda, Marco Centoni, Università del Molise
Alain Hecq, University of Maastricht

Modelling the dynamic convergence of British and Euro-zone cycles
Matthieu Lemoine, Observatoire Français des Conjonctures Economiques (OFCE), Département Analyse et Prévision (DAP)

Convergence of candidate countries to European Union: an analysis on industrial production using dynamic factor model
Marco Marini, ISTAT, Direzione Centrale di Contabilità Nazionale

International synchronisation of national business cycles?
Gebhard Flaig, IFO Institute for Economic Research
Jan-Egbert Sturm, IFO Institute for Economic Research, University of Munich
Ulrich Woitek, University of Munich

B. Composite indicators (2nd part)

Chairperson:  To be defined

Real-time detection of economic cycles using a threshold model
Laurent Ferrara, Centre d’Observation Economique
Dominique Guégan, ENS-Cachan, IDHE-MORA

Business survey data: do they help forecasting the macro economy?
Jesper Hansson, Mårten Lõf, National Institute of Economic Research
Per Jansson, Sveriges Riksbank, Monetary Policy Department

An EU index of quarterly indicators based on monthly and quarterly time series
Filippo Moauro, ISTAT, Direzione Centrale di Contabilità Nazionale
Tommaso Proietti, Università di Udine, Facoltà di Economia