### Curriculum vita for Søren Johansen

I was born 6 November 1939 and finished Gymnasium in 1958. In 1964 I graduated from the University of Copenhagen in mathematical statistics. Since 1964 I have been working at University of Copenhagen, Institute of Mathematical Statistics and since 1989 as professor. In 1967 I obtained the Gold medal from University of Copenhagen for the thesis "An application of extreme point methods in probability" and in 1974, I became dr. phil. with the thesis "The embedding problem for Markov chains". In 1997 I received an award from Dir. Ib Henriksens Fund, for outstanding research, and in 1993-1996 I became the most cited European economist, see R. Eichenberger and B. Frey (2000), and 1990-2000 the most cited researcher in the world in economic journals, see T. Coupé (2003, JEEA, Table 10). I am a member of The Royal Danish Academy of Sciences and Letters. Honorary member of Danish Society for Theoretical Statistics and recently a member of Academia Europaea.

From 1996-2001 I was on leave from the University of Copenhagen to take up a temporary position as professor of econometrics at the Department of Economics, European University Institute, Florence.

In 2006 I retired from Department of Mathematical Sciences at University of Copenhagen, and from 2007 I have been working part time at Department of Economics University of Copenhagen, and from April 2007 part time at CREATES (Center for Research in Econometric Analysis of Time Series), Aarhus University.

# Longer stays abroad

Department of Statistics, University of California Berkeley 1965/66

Department of Statistics, Imperial College London 1971/72

Statistics Department, Oregon State University, Corvallis, summer 1975

Statistics Department, ETH, Zürich, spring 1976

Statistics Department, Stanford, summer 1984

Department of Mathematics and Economics Department, University of California San Diego, January 1985

Mathematical Sciences Department, Johns Hopkins University, Baltimore, spring 1985

Economics Department, University of California San Diego, fall 1989.

Department of Statistics, University of Helsinki, spring 1991

Department of Statistics, ANU Canberra, summer 1991

Department of Economics, UNSW Sydney and Bond University, winter 1994

Department of Economics, European University Institute, 1996-2001

# International activities

I have been a member of Institute of Mathematical Statistics (IMS) since 1964 and fellow since 1973. In 1976 I was elected member of International Statistical Institute (ISI). I am a fellow of Econometric Society.

I have worked on the Committee on Statistics in the Physical Sciences 1978-81 and on the Committee on Fellows of the IMS 1982-85 and 1990-1993. I was elected a member of the Council for the Bernoulli Society 1989-1993.

In the period 1974-1981 I was associate editor of *Annals of Statistics* and *Annals of Probability* and in 1985-1986 associate editor of *Scandinavian Journal of Statistics* and editor 1986-1990. From

1990-2005 I have been associate editor of *Econometric Theory*, and from 1997-2005 associate editor of *Econometrica*.

I have been chairman for the program committee for the 14th European Meeting of Statistics in Wroclaw 1981, chairman of the Bernoulli Society part of the program for the 45th session of the ISI in Amsterdam 1985 and have been chairman for the program committee for the 46th session of the ISI in Tokyo 1987. At various occasions I have been member of the program committee for the ESEM.

#### Research interests

I have worked with mathematical statistics and probability theory as well as medical statistics and since 1983 with econometrics, in particular the theory of cointegration.

In 1987-90 I was the director of a project on "Statistical method and their application on models for the financial sector in Denmark" with the support of the Danish Social Sciences Research Council.

In 1990-93 I have participated in a Nordic project "Monetary disequilibrium: An economic model analysis of monetary phenomena in the Nordic Countries", with Katarina Juselius as director and with the support of Nordic Research Council for the Social Sciences. The purpose was to develop and apply statistical methods for the analysis of economic time series, in particular the method of cointegration.

In 1993-1998 I have had a grant from the Research Council for Social Sciences and the Research Council for the Natural Sciences with the title "Analysis of non-stationary time series - statistical methodology and econometric applications". Since 1998 I have participated in the program "Macroeconomic transmissions mechanisms. Empirical applications and econometric methods", and "Imperfect knowledge, structural change, ppp puzzle, long swings puzzle, and exchange rate disconnect puzzle" financed by the Danish Research Council for Social Sciences. I was a member of the steering committee of the ESF network on "Econometric Methods for the Modelling of Non-stationary Data, Policy Analysis and Forecasting" 2002- 2004. Recently I have participated in the research project under the heading of Anders Rahbek "Nonlinear multivariate econometric time series analysis with applications to nonlinear cointegration and volatility".

### Lectures

I have taught statistics and probability since 1964 and since 1990 econometrics. I have given numerous lectures abroad at conferences, workshops and Ph.D. courses. I have given the following named lectures

Neyman lecture, (IMS) Boston 1992 Frank Paish lecture (Royal Economic Society) Exeter 1994 Cramer lecture (Bernoulli Society) Uppsala, 1990 Solari lecture (Geneve), 2003

## Ph.D. Students

I have supervised Philip Hougaard (Asymptotic inference), Steffen Lauritzen (Extreme point methods), Ib Skovgaard (Asymptotic expansions), David Lando (Mathematical finance), Paolo Paruolo (Cointegration analysis of I(2)), Anders Rahbek (Analysis of I(2) variables), Bent Nielsen (Bartlett Corrections).

At the EUI, I have been on the thesis committee for Jonathan Simon, Massimilliano Marcellino, Michaela Kirmaier, and Elena Cefis, and supervised or co-supervised

Joao Liborio (Financial econometrics), Mathias Hoffmann (International Macroeconomic Fluctuations, Capital Mobility And the Current Account: a cointegrated approach), Spyros Skouras, (On Decision Rules for Investors in Financial Markets), Fragiskos Archontakis (Essays on Nonstationary Time Series), Dermot M. O'Brien, (Essays on Financial Development and Banking Efficiency), Juan Toro (Essays on Business Cycle Measurement and Structural Breaks), Roger Hammersland (The degree of Independence in Goods and Capital Markets: An economic degustation), Simon Hough (Priceless or Worthless, Essays on Art and Finance), Michael Pedersen (Essays on Applications of I(1) and I(2) Cointegrated VAR Models on Issues in International Price Parities), Roel Oomen (Frequency Matters in Financial Econometrics), Panagiotis Konstantinou (Essays in Economics: What can we Infer from the Data.), Pieter Omtzigt (Model Selection and Bartlett Correction in the Cointegrated VAR), Iliyan Georgiev (The VAR Model with Large Shocks.)