

CURRICULUM VITAE

Alain MONFORT

CREST-ENSAE

5 Avenue Henri Le Chatelier

91764 PALAISEAU

France

e-mail : alain.monfort@ensae.fr

EDUCATION

Ecole Polytechnique, Paris

Ecole Nationale de la Statistique et de l'Administration Economique, Paris

PRESENT ACADEMIC POSITION

Researcher at CREST, Emeritus professor at ENSAE.

HONORS AND AWARDS

Fellow of the Econometric Society (1985)

Elected member of the International Institute of Statistics

Koopmans Price in Econometrics (1988).

Econometric Theory Award 1996.

Chairman of the Fellow Nominating Committee of the Econometric Society (1995)

Cowles Commission Lecture, Yale University (1995)

Honorary Fellow of Venice University (2016)

Chevalier des Palmes Académiques

Chevalier de l'Ordre National du Mérite

PREVIOUS POSITIONS

1968-1972 Assistant Professor ENSAE, Paris

1972-1974 Economist, Ministry of Finances, Paris

1974-1975 London School of Economics (Visiting Scholar)

1975-1979 Professor at ENSAE, Paris

1979-1983 Director of studies of ENSAE, Paris

1983-1985 Researcher at the Research Department INSEE, Paris

1985-2006 Professor at Ecole Polytechnique, Paris

1985-1993 Director of the Research Department INSEE, Paris

1993-1997 and 1999-2001 Director of CREST

1999-2009 Professor at CNAM (chair "Statistical Modeling")

2009-2014 Part-time Professor at Maastricht University

2009- Researcher at CREST

2009- Emeritus professor at ENSAE Paris

BOOKS

- « Cours de probabilités », 1980, Economica, Paris (206 p), (troisième édition 1996).
- « Cours de statistique mathématique », 1982, Economica, Paris (317 p)(troisième édition 1996).
- « Cours de séries temporelles » (en collaboration avec C. Gouriéroux), 1983, Economica, Paris (380 pages)
- « Statistique et modèles économétriques » (en collaboration avec C. Gouriéroux), 1989, Economica (2 volumes 550 pages chacun) (2ème édition 1996).
- « Séries temporelles et modèles dynamiques » (en collaboration avec C. Gouriéroux), 1990, Economica (780 pages) (2ème édition 1996).
- « Introduction à la Statistique » (sixième édition 1996), 230 p., Ecole Polytechnique.
- “Handbook of Statistics” (1993), edited by C.R. RAO et G.S. MADDALA, North Holland, chapter on « Pseudo Maximum Likelihood Methods ».(with C.Gourieroux)
- “Handbook of Econometrics” (1994), edited by R. ENGLE et D.McFADDEN, North Holland, chapter on « Non nested hypotheses »(with C.Gourieroux).
- « Econometric Inference Using Simulation Techniques », (1995), co-editor (with H.K. Van Dijk et BMW. Brown », John Wiley.
- « Statistics and Econometric Models » (2 volumes), 1996, (with C. Gouriéroux), Cambridge University Press.
- « Time Series and Dynamic Models » (1996) (with C. Gouriéroux), 780 pages, Cambridge University Press.
- « Simulation Based econometric Methods », 1996 (with C. Gouriéroux), Oxford University Press.

EDITORIAL BOARDS

- Journal of Econometrics, Associate Editor (1979-1985)
- Economic Letters, Associate Editor (1980-1984)
- Econometric Theory, Associate Editor (1985-1988)
- Econometrica, Associate Editor (1983-1986)
- Annales d'Economie et de Statistique, Fondateur de la revue, rédacteur en chef 1986-1990.
- Econometrica, Co-editor, (1996-2000).
- Journal of Applied Econometrics , Advisory Board (2013-)
- Econometric Society Monograph Series, Editor, (1988-1994)
- Mélanges Economiques Essais en l'honneur d'E. MALINVAUD : Editor.
- Journal of Applied Econometrics : Co-editor of a special issue on simulation based econometric methods.
- Econometric Methods Based on Simulations, Co-editor, John Wiley.

ORGANISATION OF SCIENTIFIC MEETINGS

September 1978 : Econometric Society European Meeting, member of programme committee (**GENEVE**)

May 1979 : Journées de statistique (A.S.U., S.F.C., S.F.B., A.F.C.E.T.-B.U.R.O.), PARIS ENSAE

September 1980 : World Meeting of the Econometric Society, President of programme committee (AIX EN PROVENCE)

September 1982 : Chairman of the Econometric Society European Meeting programme committee (DUBLIN)

September 1984 : Econometric Society European Meeting, member of programme committee (MADRID)

July 1985 : President of Summer Workshop of the Econometric Society (PARIS)

May 1988 : President of «Journées d' Econométrie », A.S.U. (GRENOBLE)

September 1988 : Econometric Society European Meeting, member of programme committee (BOLOGNE)

May 1990 : President of «Journées d' Econométrie », A.S.U. (TOURS)

June 1990 : Organizer of an International Conference on ARCH (PARIS)

June 1992 : Organizer of International Conference on Simulation Based Econometrics (ROTTERDAM)

December 1992 : Chairman of (EC)2 congress (PARIS)

May 1995 : President of «Journées d' Econométrie », A.S.U. (PARIS).

September 2010 : Chairman of the Scientific Committee of the Credit Conference, (VENICE.).

September 2017. Credit Conference, Venice.

THESIS SUPERVISIONS

R. RABEMANANJARA : Modèles VAR et modèles structurels, Université Paris 9 Dauphine.

M. BILLIO : Méthodes économétriques simulées pour les modèles espace-états non linéaire, Université Paris 9.

F. PEGORARO : Modèles à facteurs en temps discret pour la valorisation d'actifs financiers, Université Paris 9.

J.P. RENNE : Risque de crédit et risque de liquidité, Université Paris 9

G. ROUSSELLET : Quadratic and Zero Lower Bound Interest Rate Models, Université Paris 9

PUBLICATIONS

« Econométrie des modèles d'équilibre avec rationnement », 1976 **Annales de l'INSEE**, n° 24, p. 4-39, (with J.J. Laffont).

« First-order identification in linear models », 1978, **Journal of Econometrics**, vol. 7, p. 333-350.

« Approche de Box-Jenkins et approche économétrique des séries temporelles », 1978, **Annales de l'I.N.S.E.E.**, n° 32, p. 33-35.

- « Disequilibrium econometrics in dynamic models », 1979, **Journal of Econometrics**, vol. 11, p. 353-361 (with J.J. Laffont).
- « On the characterization of a joint probability distribution by conditional distribution », 1979, **Journal of Econometrics**, vol. 10, p. 115-118 (with C. Gouriéroux).
- « Disequilibrium econometrics in simultaneous equations systems », 1980, **Econometrica**, vol. 48, p. 75-96 (with J.J.Laffont and C. Gouriéroux).
- « Tests of the equilibrium vs. disequilibrium hypotheses : a comment », 1980, **International Economic Review**, february, (with J.J. Laffont and C. Gouriéroux).
- « Identification of a mixed autoregressive-moving average process : the corner method », 1980, **Time Series, North Holland**, p. 423-435, (with J.M. Beguin and C. Gouriéroux)
- « Coherency conditions in simultaneous linear equations models with endogenous switching regime », 1980, **Econometrica**, Avril (with J.J. Laffont and C. Gouriéroux).
- « Sufficient linear structure : econometric applications », 1980, **Econometrica**, vol. 48, 1083-1097, (with C. Gouriéroux).
- « On the problem of missing data », 1981, **Review of Economic Studies**, XLVI-II; p. 579-586, (with C. Gouriéroux).
- « Asymptotic properties of the maximum likelihood estimators in dichotomous Logit models », 1981, **Journal of Econometrics**, 17, p. 83-97, (with C. Gouriéroux).
- « The applicability of the corner method », 1981, **Journal of the Operational Research Society**, vol. 32, n° 11, (with J.M. Beguin and C. Gouriéroux).
- « Modèles linéaires avec anticipations rationnelles : solutions et critères de sélection », 1981, (with C. Gouriéroux and J.J. Laffont), **Cahiers du Séminaire d'Econométrie**, n° 23.
- « Likelihood ratio test, Wald test and Kuhn-Tucker test in linear model with inequality constraints on the regression parameters », 1982, **Econometrica**, vol. 50, n° 1, (with A. Holly et C. Gouriéroux).
- « Rational expectations in dynamic linear models : analysis of the solutions », 1982, **Econometrica**, vol. 50, n° 2, (with C. Gouriéroux and J.J. Laffont).
- « Testing nested or non-nested hypotheses », 1983, (with C. Gouriéroux and A. Trognon, **Journal of Econometrics**, p. 83-116.
- « Révision adaptative des anticipations et convergence vers les anticipations rationnelles », 1983, (with C. Gouriéroux and J.J. Laffont), **Economie Appliquée**, n° 1, 9-26.

- « Méthode d'estimation pour les modèles avec prix planchers », 1983, (with C. Gouriéroux), **Annales de l'INSEE**, 50, p. 49-71.
- « Estimation par la méthode du pseudo-maximum de vraisemblance », 1983, (with C. Gouriéroux and A. Trognon), **Cahiers du Séminaire d'Econométrie**, (CNRS) n° 25.
- « Pseudo maximum likelihood methods : theory », 1984, (with C. Gouriéroux and A. Trognon), **Econometrica**, May pp. 681-700.
- « Pseudo maximum likelihood methods : applications to Poisson models », 1984, (with C. Gouriéroux and A. Trognon), **Econometrica**, May pp. 701-720.
- « Estimation and test in probit models with serial correlation », 1984, (with C. Gouriéroux and A. Trognon) in **Alternative Approaches to Time Series Analysis**, Publications des Facultés Saint-Louis, Bruxelles.
- « Econométrie des modèles d'équilibre avec rationnement : une mise à jour », 1984, (with C. Gouriéroux and J.J. Laffont), **Annales de l'INSEE**, 55/56, p. 5-37.
- « A General approach to serial correlation », 1985, (with C. Gouriéroux and A. Trognon), **Econometric Theory**, vol. 1, n° 3, 315-340, **Koopmans Price**.
- « Some useful equivalence properties of Hausman's test », 1985, (with A. Holly), **Economics Letters**.
- « Moindres carrés asymptotiques », 1985, (with C. Gouriéroux and A. Trognon), **Annales de l'INSEE**, n° 58.
- « Résidus généralisés et résidus simulés », 1985, (with C. Gouriéroux, E. Renault and A. Trognon), **Annales de l'INSEE** n° 59/60.
- « Résidus généralisés ou interprétations linéaires de l'économétrie non linéaire », 1986, (with C. Gouriéroux, E. Renault and A. Trognon), in **Asymptotic Theory for non i.i.d. processes**, Publications des facultés universitaires Saint-Louis, Bruxelles.
- « Generalised residuals », 1987, (with C. Gouriéroux, E. Renault and A. Trognon), **Journal of Econometrics**, 34, 5-32.
- « Simulated residuals », 1987, (with C. Gouriéroux, E. Renault and A. Trognon), **Journal of Econometrics**, 34, 201-252.
- « Kullback causality measures », 1987, (with C. Gouriéroux and E. Renault) **Annales d'Economie et de Statistique** n° 6/7.
- « Contraintes bilinéaires : estimation et test », 1988, (with C. Gouriéroux and E. Renault), dans **Mélanges Economiques, Essais en l'honneur d'E. Malinvaud**, **Economica**, Paris.
- « Testing for common roots », 1988, **Econometrica** (with C. Gouriéroux and E. Renault), 57, 171-185.

« A general framework for testing a null hypothesis in a « mixed form », 1989, (with C. Gouriéroux), **Econometric Theory**, 5, 63-82.

« From a VAR Model to a structural model, with an application to the wage-price spiral », 1990, (with R. Rabemananjara), **Journal of Applied Econometrics**, vol. 5, 203-227.

« Axes de développements de la macroéconométrie » in « La Méthodologie Théorique et Appliquée Aujourd'hui », 1990, Actes du colloque AFSE, **Nathan**.

« Simulation based inference in models with heterogeneity », 1991, (with C. Gouriéroux), **Annales d'Economie et de Statistique**, 20/21, 69-107.

« Tests sur le noyau, l'image et le rang de la matrice des coefficients d'un modèle linéaire multivarié », 1993, (with C. Gouriéroux and E. Renault), **Annales d'Economie et de Statistique**, n° 32, 81-111.

« Qualitative threshold ARCH models », 1993, (with C. Gouriéroux), **Journal of Econometrics**, 52, 159-199.

« Modèles ARCH : théorie statistique et applications dans le domaine de la finance », 1993, chapitres 5 et 6, **Economica**.

« Indirect inference », 1993, (with C. Gouriéroux and E. Renault), **Journal of Applied Econometrics**, 8, 85-118.

« Pseudo-likelihood method », 1993, (with C. Gouriéroux), **Handbook of Statistics**, vol. 11, chapter 12, North Holland (Maddala-Rao editors).

« Simulation based inference : a survey with special reference to panel data models », 1993, (with C. Gouriéroux) **Journal of Econometrics**, 59, 5-33.

« Testing non-nested hypotheses », 1994, (with C. Gouriéroux), **The Handbook of Econometrics**, vol. 4, chapitre 44, North Holland.

« Testing, encompassing and simulating dynamic econometric models », 1995, (with C. Gouriéroux), **Econometric Theory**, 11, 195-228.

« Linear factor and the term structure of interest rates », 1995, (with E. Clément and C. Gouriéroux) **Annales d'Economie et de Statistique**, 40, 37-65.

« Prepayment analysis for securitization », 1995, (with M. De Toldi and C. Gouriéroux), **Journal of Empirical Finance**, 2, 45-70.

« Inference in Factor Models », 1995, (with C. Gouriéroux and E. Renault), in **Advances in Econometrics and Quantitative Economics**, Essays in honor of Professor Rao, Maddala-Phillips - Srinivasan editors, Blackwell.

« Two-stage generalized method of moments with applications to regressions with heteroscedasticity of unknown a form », 1996, (with C. Gouriéroux and E. Renault) **Journal of Statistical Planning and Inference**, 50, 37-63.

« A reappraisal of misspecified models », 1996, **Econometric Theory**, 12, n° 4, 597-619, **Koopmans Lecture Cowles Commission**

« Switching State Space Models :likelihood function, fitting and smoothing », 1998, (with M. Billio), **Journal of Statistical Planning and Inference**, 68, 1, 65-103.

« Bayesian methods for switching ARMA models », (with M. Billio and C. Robert), 1999, **Journal of Econometrics**, 93, 229-255.

« Econometric specification of the risk neutral valuation model », 2000, (with E. Clément and C. Gouriéroux), **Journal of Econometrics**, 94, 117-143.

« Kernel M Estimators and Functional Residual Plots », 2000, (with C.Gourieroux and C.Tenreiro)in Panel Data Econometrics, Krishnakumar et Ronchetti editeurs, **North Holland**.

« Modeles de comptage semi-parametriques », 2000, (with C. Gouriéroux), volume en l'honneur de L. Bronsard, **Presses de l'Université de Montréal**.

« Kernel Based Indirect Inference », 2003, (with M. Billio), **Journal of Financial Econometrics**, 1, n°3, 297-326.

“Variables latentes et modélisation statistique en assurance”, 2003, **Journal de la Société Française de Statistique**, 144, n°3, 69-95.

« Is the Economic Activity in the G7 Synchronised?», 2003, (with J.P.Renne , R.Ruffer and G.Vitale),**Center for Economic Policy (CEPR)**.

“Infrequent extreme Risk”, 2004, (with C. Gouriéroux), **Geneva Papers : Theory**, 29, 5-22.

“The Econometrics of Efficient Portfolios”, 2005, (with C. Gouriéroux), **Journal of Empirical Finance**, 12, 1-41.

« Affine Model for Credit Risk Analysis », 2006, (with C. Gouriéroux and V. Polimenis), **Journal of Financial Econometrics**, vol. 4, 494-530.

“Pricing with Splines”, 2006, (with C. Gouriéroux), **Annales d'Economie et de Statistique**,82,3,33

“Switching VARMA Term Structure Models”, 2006, (with F. Pegoraro),**Journal of Financial Econometrics**, 5,103-151

“Econometric Specifications of Stochastic Discount Factor Models”, 2007,(with C. Gouriéroux), **Journal of Econometrics**,136,509-530

"Quadratic Intensity and Prospective Mortality Tables", 2008,(with C. Gouriéroux),**Insurance Mathematics and Economics**,43,174-184

"Econometric Asset Pricing Modelling",2008,(with H.Bertholon and F Pegoraro),**Journal of Financial Econometrics**, 4, 407-458.

"Optimal Portfolio Allocation Under Asset and Surplus VaR Constraints", 2008, **Journal of Asset Management**, 9, 3, 178-192.

"Granularity in a Qualitative Factor Model", (with C. Gouriéroux), **Journal of Credit Risk**, 2009, 5, n°4, 1-34.

"International Money and Stock Market Contingent Claims", (with C. Gouriéroux and R. Sufana), **Journal of International Money and Finance**, 2010, 29, 1727-1751.

"Bilinear Term Structure Models", (with C. Gouriéroux), **Mathematical Finance**, 2011, 21 (1), 1-19.

"Domain Restrictions on the Rates Implied by No-arbitrage" (with C. Gouriéroux), **Mathematical Finance**, 2011, 21 (2), 281-291.

"Fourth Order Pseudo Maximum Likelihood Methods" (with A. Holly and M. Rockinger), **Journal of Econometrics**, 2011, 162, 278-293.

"Microinformation, Non Linear Filtering and Granularity "(with P.Gagliardini and C. Gouriéroux)",**Journal of Financial Econometrics**,(2012),10,1,1-53

"Joint Econometric Modeling of Spot Electricity Prices, Forwards and Options", (with O. Féron),**Review of Derivative Research**,(2012),15,217-256

"The ET Interview Christian Gouriéroux , Alain Monfort", **Econometric Theory**(2012),4,889-914

"Asset Pricing and Second Order Esscher Transforms", (with F. Pegoraro),**Journal of Banking and Finance** ,(2012), 1678-1687

"Granularity Adjustment and Efficient Portfolios", (with C. Gouriéroux), **Econometric Reviews**(2013), 32,4,449-468

"Default, Liquidity and Crises: an Econometric Framework", (with J.P. Renne),**Journal of Financial Econometrics**,(2013),11,2,221-262

"Pitfalls in the Estimation of Continuous Time Interest rates Models: the Case of CIR Models", (with C.Gouriéroux),**Annals of Economics and Statistics**,(2013), 109/110,25-62

"No Arbitrage Near Cointegrated Term Structure Models, Term Premia and GDP Growth", (with C.Jardet and F. Pegoraro),**Journal of Banking and Finance**,(2013),37,389-402

“Linear Price Term Structure Models”, (with C.Gourieroux), **Journal of Empirical Finance**,(2013),24,24-4

“Allocating Systemic Risk in a Regulatory Perspective”,(with C. Gourieroux),**International Journal of Applied and Theoretical Finance**,(2013),17,07,1-20

“Liquidation Equilibrium with seniority and Hidden CDO”,(with C.Gourieroux and J.C. Heam),**Journal of Banking and Finance**,(2013),37(12),,5264-5274

“Regime Switching and Bond Pricing”,(with C.Gourieroux and J.P. Renne),**Journal of Financial Econometrics**,(2014),12,(2),37-77

“Decomposing the Euro-Area Spreads:Credit and Liquidity Risks”,(with J.P.Renne),**Review of Finance**,(2014),18,6,2103-2181

“Pricing Default Events: Surprise , Exogeneity and Contagion”,(with C. Gourieroux and J.P.Renne),**Journal of Econometrics**,(2014),182,2,397-411

“Compound Autoregressive Processes and Defaultable Bond Pricing”in Financial Econometrics”(with J.P Renne),book chapter(2015), **Cambridge University Press**

“Quadratic Kalman Filter”,(with J.P.Renne and G Roussellet),**Journal of Econometrics**(2015),187,1,43-56

« Pricing with Finite Dimensional Dependence » (with C. Gourieroux),**Journal of Econometrics**(2015),187,2,408-417

“The Double Default Value of Firm Model”, (with C. Gourieroux),**Journal of Credit Risk**(2016),12,47-76

“Credit and Liquidity in Interbank Rates :a Quadratic Approach “(with J.P. Renne and G.Roussellet),**Journal of Banking and Finance**,(2016), 68, 29-46

“Staying at Zero with Affine Processes: an Application to term Structure Models”(with F.Pegoraro, J.P.Renne, and G.Roussellet),**Journal of Econometrics**,(2017), 20&, 2, 346-368

“Statistical Inference for Independent Component Analysis: Application to Structural VAR models” (with C.Gourieroux and J.P.Renne), **Journal of Econometrics**(2017), 196, 111-126.

“Consistent Pseudo-Maximum Likelihood Estimators” (with C. Gourieroux and E. Renault), **Annals of Economics and Statistics** (2017), 125-126, 187-218.

“Composite Indirect Inference with Application to Corporate Risks” (with C. Gouriéroux), **Econometrics and Statistics** (2018), 7, 30-45

“Coherent Incurred Paid (CIP) Models for Claims Reserving”, (with G.Dupin, E. Koenig, P. Le Moine, E. Ratiarison), **ASTIN Bulletin** (2018), 48,2, 749-777

“Consistent Pseudo-Maximum Likelihood Estimator and Group Transformations” (with C. Gouriéroux and J.M. Zakoïan), **Econometrica** (2019), 87, 1, 327-345

“Identification and Estimation in Non-fundamental Structural VARMA Models” (with C. Gouriéroux and J.P. Renne), **Review of Economic Studies** (2020), 87, 4, 1915-1953

“Stationary Dynamic Equilibria in Rational Expectation Models”, (with C. Gouriéroux and J. Jasiak), **Journal of Econometrics** (2020), 218, 2, 714-755

“Affine Modeling of Credit Risk, Pricing of Credit Events and Contagion”, (with F. Pegoraro, J.P. Renne and G. Roussellet), **Management Science** (2021), 67, 3, 3674-3693

“Model Risk Management : Valuation and Governance of Pseudo-Models (with C. Gouriéroux), **Econometrics and Statistics** (2021), 17, 1-22

“Disastrous Defaults” (with C. Gouriéroux, S. Mouabbi and J.P. Renne), **Review of Finance**, (2021), 25, 6, 1727-1772

“Required Capital for Long Run Risks” (with C. Gouriéroux and J.P. Renne), **Journal of Economic Dynamics and Control**, (2022), 144, 104502.

WORKING PAPERS

“Variables latentes et modélisation statistique en assurance”

“Equidependence in Qualitative and Duration Models with Application to Credit Risk” (with C.Gourieroux)

“The Simulated Likelihood Method”(with M Billio and C.Robert)

“Age and Term Structures in Duration Models”(with C.Gourieroux)

“Pricing and Inference with Mixtures of Conditionally Normal Processes” (with H Bertholon and F Pegoraro)

“Multilag Term Structure Models with Stochastic Risk Premia”(with F.Pegoraro)

“Une modélisation séquentielle de la VaR”

“Linear Trend in Life Expectancy?”(with C.Gourieroux)

“New Information Response Functions”(with C.Jardet and F.Pegoraro)

“Persistence, Bias, Prediction and Averaging Estimators”(with C.Jardet and F.Pegoraro)

“Scenario Response Distributions” (with C. Jardet and F. Pegoraro)

“Economic Scenario Generators and Incomplete Markets”, (with C. Gourieroux)

“A Note on the Smith-Wilson Family” (with C. Gourieroux)