

Gérard BALLOT

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Emeritus Professor of Economics

University Panthéon-Assas Paris II

Born June 1, 1946, Paris

One child

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CURRENT RESEARCH ACTIVITIES

A. Current work related to the labor market and employment policy with a calibrated agent-based model:

Project WorkSim (with Jean-Daniel Kant and Olivier Goudet): <http://worksim.lip6.fr/>

1/ The project is an Agent-Based model (ABM) of the French Labor Market, which aims to understand how such a complex system works. It is the largest existing labor market ABM model to our knowledge. It offers at least 4 contributions to labor market analysis.

a: it uses calibration techniques never applied yet in economic ABM models, which seem the only one to date to calibrate more than 63 parameters to fit 67 targets (the CMA-ES algorithm).

b: it is a theoretical project as well since introduces new contracts and institutions, and new types of decisions by employers and workers, based on rational behavior, in this context (for instance taking into account the proportion of short-term contracts (as a buffer) in order to recruit on open-ended contracts (source of dismissals costs but also productivity rise through experience).

c: modeling the interactions between heterogenous firms and individuals decisions, within the rules given by the institutions, create aggregate relations not known neither studied in so far, such as the effects of fixed-term contracts existence on unemployment. The model can be modified to study non-French labor markets.

d: it is also a tool for policy making. It has already assessed a labor market reform : the creation of the « generation contract » which is a subsidy to the hiring in Open Ended Contracts of young workers while simultaneously maintaining seniors in their job with a part-time tutoring. (see “Un modèle multi-agents du marché du travail français, outil d'évaluation des politiques de l'emploi. L'exemple du contrat de génération”, *Revue Economique*, 67 (4) 831-869, co-authored with Jean-Daniel Kant and Olivier Goudet).

The two last developments are:

A/ Modelling the expected impact of the economic dismissals facilitation in the 2016 El-Khomri law (also called Work Law) on the French labor market.

The papers in the print media, video interviews and material are available on the website of the project :

<http://worksim.lip6.fr/>

B/ Introducing a Temporary Agency in the model with temporary help jobs (see presentations below)

The project is an academic research not funded by any institution, besides the academic salaries and pensions, and former Ph.D fellowships. It is then free of any external influence.

2/Current research on innovation and competences

2.1/ building an Agent-Based Model of quality and new sector innovation, competition and long-run future structure of employment based on competences and alliances (with Than Thuan Huynh, Paris II)

Competences is a much invoked concept but not yet a founding stone of the industrial and labor economics. We build a formal framework based on the “resource based approach to the firm” which however have not been included in a rational decision based and quantitative modelling in economics. We have first built a co-opetition model. This model is based on a coherent framework of cooperation in R&D in order to innovate in final product quality and process, with the emphasis on building and sharing (or not) competences, and price competition on the market for the differentiated good. It shows that under certain conditions, the firms do not converge to the same competences (a curse of the other models if other exogenous factors of alliances are not introduced in an ad hoc way). A stable number of alliances persist in time. The model has a macro loop through the personal distribution of incomes, and the economy grows in value with a continuous quality improvement and demand for the new and highest qualities by the highest income groups, and an increase in quality demand by other groups as productivity and wages rise.

Ref: “Competences and persistence of alliances in vertical co-opetition: An agent-based model” with Than Thuan Huynh, presented at WEHIA 2016, June 22_24, Castellon de la Plana, Spain, and 16th IJSS 2016, Montréal, July 6-8, Strasbourg, June 2017

The present second step is an endogenous SFC-ABM growth model by adding new final products and the labor market, leading to the modelling the competition for competences, with

two aims. First the model models new product (or sector) innovation, meaning goods which satisfy new “wants” (U.Witt) such as mobile communication. Both the supply and demand are modelled, and the model is new in that sense. Two major consequences are studied. First the respective sources of growth that are product quality and new product, and personal income distribution. The second is the structure of the labor market with the possible emergence of polarization of work on high competences, yet the model takes explicitly into account the job creation contribution of new final products, an as yet unexplored and fundamental issue. The competence wall (supply obstacle) can be studied, and training in firms is introduced.

2.2/ Building a macro endogenous growth Agent Based Model in which the innovation is based on networks

No macro ABM as yet has included networks of firms as the standard basis of innovation. We extend the MOSES model which is a complete endogenous growth model to study the effects of endogenous and evolving network structures on long run growth. It shows that networks have indeed a major effect on growth.

Ref: “Innovation networks and technological paradigms” with Erol Taymaz, presented at the 16th International Schumpeter Society Conference, July 6-8, Montréal, Canada

2.3/ Current work on the effects of strategies of use of the different innovation forms (product, process, organizational) in sequence or simultaneously on performance.

It is econometric work which is based on a sequence of CIS surveys, with F.Fakhfakh and F.Galia, an extension of our research on the complementarity in the use of the different forms of innovation and its effect on performance, using the supermodularity approach.

See also my page on Researchgate

Education

1983 French National Contest for Full Professorship (Agrégation de Sciences Economiques)

1981 Ph.D. Thesis in Economics: Labour Market and Dynamics of the distribution of wage incomes” (Marché du travail et dynamique de la repartition des revenus salariaux). University Paris 10 Nanterre. Prize of the French Economic association in 1983.

1971-72 visiting graduate student with a Fulbright scholarship, department of Economics, MIT, Cambridge, Mass.,USA

1970 Master in Economics (Paris)

1968 Bsc in Economics (Paris)

1968 BA Political Science (Institut d’Etudes Politiques de Paris).

1964 Baccalauréat in Philosophy

1963 Baccalauréat in Maths & Sciences

1962 Baccalauréat (first part) A' (Sciences, Latin, Greek)

Positions held

Professor Emeritus, University Paris 2, 2010- present

Professor of Economics, University Paris 2, 1987-2010

Professor of Economics, University of Amiens, 1984-1987

Assistant Professor, University Paris 2, 1981-1983

Short term invitations

Simon Fraser University (one week, 2007)

Industrial Institute for Economic and Social research (IUI), Stockholm,

One week, most years (1991-2000)

Teaching

Economics and Management of Competences, Master 2, Paris 2 (2008-2017),

Industrial organization (Master 1, Engineering economics), Paris 2 (2009-2010)

Organization of the firm, frontiers, structures, cooperation, Master 2, Paris 2 (2008-2010)

Imperfect competition, Bc. 3 Econometrics, Paris 2 (2008-2009)

Complex dynamic systems and organization of markets, Master 2, Paris 2 (1999-2010)

Organization of the firm and human resources policy, Master 2, Paris 2 (1999-2008)

Industrial Organization, Bc. 3 Managerial and Industrial Economics, Paris 2 (2006-2007)

Economics of the organization of the firm, Master 1 in Economics, Paris 2, (2001-2010)

General equilibrium Bc.3 Econometrics, Paris 2 (2005-2007)

Organization of the firm and personnel economics, Master 1 economics, Paris 2 (2000-2001)

Imperfect competition and Industrial Organization, Master 1 Econometrics (1991-2004)

Asymmetric information, Master 2 in Mathematical Economics and econometrics, Paris 2 (1985-99)

Microeconomic models of the labour markets, Master 2 in Mathematical Economics and econometrics, Paris 2 (1984-99)

Labour Economics, Master 1 Economics, Paris 2 (1990-1998)

Microeconomic Analysis, Bc 1 Economics, Paris 2 (1984-1987)

Contemporary social problems, Bc 1 Economics, Paris 2 (1984-87)

Economics of employment, Master 2, Amiens (1984-1987)

Labour Economics, Master 1, Amiens (1984-1987)

Microeconomics, Bc 1 Economics, Amiens (1984-1987)

Contemporary economic problems, Bc 1, Paris 2 (1981-1983)

Present Academic responsibilities

Co-organization (with J.-D.Kant) of the network MAGECO.

The network has the objective to connect the French junior and senior researchers in Agent-Based computation Economics or ACE, in order to initiate and help the junior researchers, as well as discuss the progress in the state of the art. It holds one or more workshops each year since 2013.

It has been started by Gérard Ballot, Jean-Daniel Kant, Didier Beaufils, and Murat Yildizoglu. It received the financial support of the RSNC 2013.

Next meeting is in Lille, Université Catholique, December 15, 2017

Main past Academic responsibilities

1/ Creation and direction of ERMES CNRS Research Center , University Paris 2 (1983-2000)

In French, ERMES is the acronym for: Equipe de recherche sur l'Emploi, les Marchés et la Simulation (Research Team on Employment, Markets and Simulation)

2/ Creation and direction of the master 2 "Strategies of the firm and industrial organization", University Paris 2 (1999-2010)

Purpose: both a research cursus and a professional cursus (the latter to train students in economics to become managers with an up to date training in economic analysis to understand a modern economy and a quantitative training), and joint courses.

3/ Creation and coordination of the Bs 3 and master 1 in “managerial and Industrial economics”, University Paris 2 (2000-2010)

Purpose: to train student Economists to become managers with an up to date training in economic analysis to understand a modern economy and with a quantitative training with a compulsory and graded training period during the summer holidays.

4/ Creation and direction of the French network (GDR) CNRS 995 “Quantitative analysis of individual data in Labour economics (1991-1995) with M.Sollogoub.

Other past Academic responsibilities

- Organization of the seminar “ Complex systems: firms, networks, markets”, (2009-2011)
- Member of the Board of the International Joseph Schumpeter Society (1995-96,2006-2010)
- Member of the recruitment committee in Computer Science, Paris 2 (2009)
- Member of the Board of the Cujas Library (2000-2010)
- Member of the Board of the University Paris 2 (2006-2008)
- Member of the managing committee of the French economic association (2000-2006)
- Member of the Scientific Council of the University Paris 2 (1993-2005)
- Member of the recruitment committee in economics, University Paris 2 2004-2008)
- President of the recruitment committee in Economics, University Paris 2 (1998-2004)
- Member of the Board of the “Centre d’Etudes de l’Emploi” (1994-2003)
- Coordinator for the ERASMUS exchanges with Nordic countries and UK (1990-1998)
- Member of the National committee for the publication of dissertations in Economics (1995-1996)
- Member of CNRS National Committee, Economics section, (1987-1991).
- Director of Studies, department of economics, university of Amiens, 1984-1987).

Expertise

- Expert at the EC (DGXII) on firms training (presentations at workshops in Brussels December 17, 2003), Athens (February 13, 2003), Brussels (September 19, 2003).
- Member of the work group “professional training”, Council of economic Analysis, for the preparation of the report by A.Gauron “training over the life cycle”, May-October 1999.
- Expert at the EC for project selection, 1995
- Member of the EUROSTAT group for reforming european statistics on wages, May-July 1991
- Member of the group “Renovation of wage structure enquiry”, INSEE, 1991-1992
- Member of the technical group “ Structure of the labor market and employment policies” of the French Planning Agency, 1985.

RESEARCH ACTIVITIES

Conferences organization

- Co-Organizer (with J.D.Kant) of the workshop network MAGECO December 9, 2016, Paris
- Organizer of the workshop network MAGECO April 10, 2015,Paris

- Co-organizer (with J.-D.Kant) of the workshops, network MAGECO, June 14 2013, October 11 2013, February 7, 2014, November 28, 2014, Paris
- Member of the local organizing committee, WEHIA, Workshop on Economic Science with Interacting Agents, university Paris 1 and 2, June 21-22, 2012
- Organizer of the workshop “ Organization of the firm, knowledge and innovation”, Université Paris 2, Marche 9, 2007.
- Member of the program committee, Artificial Economics, Palerma,2005
- Member of program committee, French Economic association Congress, 2004
- Member of the scientific committee, “workshop of the French economic association Economics of Human resources”, Lyon, May 2002.
- Co-organizer (with G.Weisbuch) of the ICCS&SS II, International Computer Simulation and Social Sciences, Université Paris 2, September 18-20, 2000.
- Session organizer, Congress for the 20th anniversary of the Human Resources firms accounts (“bilans sociaux”), LIRHE, Toulouse, June 5-6, 1997
- Member of organizing committee, international Joseph Schumpeter society, Stockholm June 1996
- Session organizer, French economic association, Paris, 1995 and 1996
- Organizer of the International Summer school of the “Quantitative analysis of individual data in Labour economics”, Sorbonne University, September 19-22, 1994.

Referee for

- Journal of economic Behavior and Organization
- Labour economics
- Journal of evolutionary economics
- JASSS, Journal of Artificial Societies and Social simulation
- Journal of Economic Interactions and Coordination
- Revue d'Economie Politique
- Revue économique
- European Management Journal
- Research Policy

Ph D. Students

- ZENOU Yves : Marché du travail et analyse spatiale : 19.12.1991, Prix Vouters
- GAUMONT Damien : Marché interne du travail, effort et information asymétrique : 18.12.1993, Prix Vouters
- MAILLARD Martial : Essai sur les marchés locaux du travail : 22.06.1994
- HUYNH Kim Van : Apprentissage organisationnel des entreprises. Choix sectoriels et utilisation des compétences spécifiques de la main d'oeuvre : 29.06.1994

- FAKHFAKH Fathi : Partage du profit et productivité des entreprises : 06.06.1994, mention au prix de thèse, Université Paris 2.
- MERLATEAU Marie-Pierre : Capital humain hétérogène, progrès technique et croissance endogène : 18.11.1994, Prix de l'université Paris 2
- LANFRANCHI Joseph : Sélection, promotion et tournois : 29.11.1994, Prix Nogaro
- HALOUES Sonia : Formation continue, innovation technologique et rentabilité : 26 Mai 1999
- ROEBBEN Jean-Dominique : « Gestion des ressources humaines et Brevets : Une analyse économétrique sur données françaises », 23 Septembre 2005, mention Très honorable et Félicitations du jury
- GALIA Fabrice : « Compétences des entreprises, Gestion des Ressources humaines et innovation », 6 Décembre 2005, mention Très Honorable et Félicitations du jury, proposition pour prix et subvention.
- NARCY Mathieu : « Motivation intrinsèque et équité salariale : une comparaison entre le secteur associatif et le secteur privé », 26 Janvier 2007, mention Très Honorable et Félicitations du jury, Prix de thèse de l'université Paris II.
- MAS David : « Compétence et organisation du capital risque » 7 Octobre 2008, mention Très Honorable et Félicitations du jury. Prix de thèse de l'université Paris II.
- VIALFONT Arnold : « Analyse économique des procédures négociées en droit de la concurrence », 10 décembre 2009. mention Très honorable et félicitations du jury. Prix de thèse de l'université Paris II. Prix André Isaure.
- BEN JABALLAH Ghazi : « Compétences, architecture organisationnelle, et capacité d'absorption de la technologie ». 22 Janvier 2010. Mention Très honorable.
- El WADDI Sanaa : « marchés intermédiaires et différenciation des produits dans les filières agro-alimentaires » , 14 Octobre 2010. Mention Très honorable et félicitations du jury.
- NGUYEN Huong Hue « Investissements industriels, concurrence et diversification de l'offre alimentaire » ; 22 Septembre 2011 ; mention Très honorable.
- HAMZA Oualid, « Sécurité sanitaire des aliments, commerce et développement : approche par l'économie industrielle », 5 Juin 2012, mention très honorable et félicitations du jury, prix de l'université Paris 2, prix Vouters.
- DUMAS Nicolas, « Primes, partage du capital et suggestions des salariés, une analyse à la lumière de la théorie des contrats », 28 Septembre 2016, mention Très honorable et Félicitations du jury.

- NGUYEN Thanh Thuan, “Compétences, réseaux d’innovation et institutions”, in progress

Master Thesis supervision (recent)

NGUYEN Thanh Thuan, « Dynamique de création et de rupture des alliances en R&D ». Master 2 Stratégies d’entreprise et économie industrielle, Université Paris 2 11.09.2014, « lauréate » and « mention Bien ».

HDR (Habilitation à diriger des recherches) past supervision

- Monsieur Damien GAUMONT, (2003)
- Madame Annick VIGNES, (7 Juin 2005)
- Madame Dominique MEURS (13 Juillet 2006)
- Monsieur Fathi FAKHFAKH (16 Juin 2009)
- Monsieur Abdelhakim HAMMOUDI (13 Avril 2010).

Member of Ph D.committees since 1997

1997 : Guillemette De LARCQUIER, Vanessa OLTRA, Patrick SCHEMBRI ; 1998 :DROUHIN, Arnaud DUPRAY, Antoine HAAG ,Guillaume ROCHETEAU ; 1999 : Alexandre LENE, 2000: Thierry DEBRAND, Michel PAUL, 2001 : S.RICHARD, J.HANG-LEE, 2002 : Maïder SAINT JEAN, 2004 : Pascal GABRIEL, 2005 : Sofia SANDGREN (Stockholm), Diego LEGROS, 2006 : Pascale BAZOCHE, 2007 : Mohamed Ali Ben Halima (Lyon) , 2008 : Houda Soltani (Paris II), El Mahdi (Paris II), 2009 : Oussamah BEN ABDELKARIM (Paris II), Makram LARGUEM, Myriam ABDEMOULA ; 2010 Zach LEWKOVICZ (Paris 6) ; 2012 : Sylvain MIGOT, Emmanuel VALAT(Paris 2).2015: Olivier GOUDET (Paris 6).

Member of HDR (Habilitation à Diriger des Recherches) committees

2010 : Michael VISSER (Paris 2).
2015: Jean-Daniel Kant (Paris 6)

Publications

Refereed journals

2017- (with Jean-Daniel Kant and Olivier Goudet), “ WorkSim, a calibrated agent-based model of the labor market accounting for stocks and gross flows”, *Computational Economics*, vol 50 , 21-68 (on line in June 2016). Available under WP format at <http://worksim.lip6.fr/>

2016- (with Jean-Daniel Kant and Olivier Goudet), “Un modèle multi-agents du marché du travail français, outil d’évaluation des politiques de l’emploi. L’exemple du contrat de génération”, *Revue Economique*, 67 (4) 831-869. Available under WP format at <http://worksim.lip6.fr/>

- 2015- (with F Fakhfakh., F. Galia and A.Salter), “The Fateful Triangle: Complementarities-in-Performance between Product, Process and Organizational Innovation in France and the UK”, *Research Policy*, 44, February : 217-232. Nominated for the Academic Prize of Management Research, Consult' in France (2016).
- 2015- (with A. Mandel and A. Vignes), “Agent-based modeling and economic theory: where do we stand? *Journal of Economic Interactions and Coordination*, vol 10, issue 2, 199-220.
- 2006- (with F.Fakhfakh et E.Taymaz) “Who benefits from training and R&D, the firm or the workers?”, *British Journal of Industrial Relations*, 44(3) Septembre 473-495.
- 2002- “Modeling the labour market as an evolving institution : model ARTEMIS”, *Journal of Economic Behavior and Organization*, 49(1), Septembre, 51-77
- 2001- (with E.Taymaz) : “Training policies and economic growth in an evolutionary world”, *Structural Change and Economic Dynamics*, 12(3), 311-329.
- 2001- (with F.Fakhfakh et E.Taymaz): "Firms human capital, R&D and performance : A study on French and Swedish firms", *Labour Economics* 8(4), 443 et s
- 1999- (with E. Taymaz) « Technological change, organizational learning and macroeconomic coordination : an evolutionary model », *Journal of Artificial Societies and Social Simulation (JASSS)*
- 1998- (with F. Fakhfakh et E.Taymaz), « Formation continue, Recherche et Développement, et performance des entreprises", *Formation et Emploi* ,64, Octobre-Décembre, pp.43-55
- 1997- (with E. Taymaz) « The Dynamics of Firms in a Micro-Macro Model with Training, Learning and Innovation », *Journal of Evolutionary Economics*, 7(4), 435-457
- 1996- (with M. Araï and A. Skalli) « Rendements de l'ancienneté et taille des Etablissements », *Revue Economique*, mai, vol. 47 (3), pp 623-32.
- 1996- (with M. Araï and A. Skalli) « Différentiels intersectoriels de salaire et caractéristiques des employeurs en France », *Economie et Statistique*, n° 299, pp 37-57.
- 1992- (with Y. Zenou) « Appariement et Rotation de la Main d'Oeuvre : une Analyse Théorique et Econométrique sur Données de Panel » *Economie et Prévision*, 1992, n° 102-103, 1-2, 129-142.
- 1986- (with C. Piatecki) « Turnover, Productivité et Hiérarchie dans le Marché Interne du Travail », *Revue Economique*, 37 (2), March : 258-306.

Books (editor)

1996- *Les marchés internes du travail. De la microéconomie à la macroéconomie.*
Presses Universitaires de France, Collection Economie

2000- (with Weisbuch G.), *Applications of Simulation to Social Sciences*, HERMES Science, Oxford.

Chapters in books (since 1986)

2014- (with Goudet O., Kant), "Forbidding fixed duration contracts. Unfolding the opposing consequences with a multi-agent model of the French labor market" in Amblard D., Miguel F.J., Blanchet A., Gaudou B. (eds.), *Advances in Artificial Economics*, Springer Verlag, coll. Lecture notes in Economics and Mathematical systems, 2014.

2001- « *Economie du travail* », dans Dictionnaire de Sciences Economiques, PUF 2000- "Capital humain des entreprises et compétences", in Université Panthéon-Assas Paris II, "*Clés pour le siècle*", Dalloz.

2000- (with E.Taymaz) "Competition, training, heterogeneity persistence, and aggregate growth in a multi-agent evolutionary model", in: Ballot G et Weisbuch G. (eds), *Applications of Simulation to Social Sciences*, HERMES Science, Oxford.

2000- (with G.Weisbuch) "Introduction : why simulation in social sciences? in :Ballot G. et Weisbuch G. (eds), *Applications of Simulation to Social Sciences*, HERMES Science, Oxford.

1998- (with E. Taymaz) « Règles d'allocation des ressources aux investissements immatériels par les entreprises et coordination macroéconomique : un modèle d'apprentissage », in *Mélanges Jean Vincens* ».Presses Universitaires de Toulouse. Toulouse.

1998- (with E. Taymaz) « Human Capital, Technological Lock-in and Evolutionary Dynamics ». in G. Eliasson and C. Green (eds), *Microfoundations of Economic Growth. A Schumpeterian perspective*, The University of Michigan Press, Ann Arbor.

1997-(with M.P. Merlateau et D. Meurs) « Personnel policies, long term unemployment and Growth. An evolutionary model », in R. Conte, R. Hegselmann, P. Terna (Eds.) *Simulating Social Phenomena*. Springer.

1996- « Turnover flows by type in France. Analysis of a Panel of Large Firms, dans R. Schettkat (ed), *The Flows Approach to the Labor Market*, Routledge, pp 169-194.

1996- (with E. Taymaz) « Firm sponsored training, technical progress and aggregate performances in a micro-macro model » in A. Harding (ed), *Microsimulation and Public Policy*, North Holland, Amsterdam, pp 421-449.

1996- (with F. Fakhfakh) « Les compétences des entreprises favorisent-elles leur croissance ? Les enseignements d'un panel des grandes entreprises », in A.M. Ferlicelli et B. Sire (eds), *performance et ressources humaines*. Economica, Paris, pp 117-129.

1994- « Continuing Education and Schumpeterian competition. Elements for a Theoretical Framework » in R. ASPLUND (ed), *Human Creation in an Economic Perspective*, Physica-Verlag Heidelberg, pp.160-171.

1990- « La modélisation par la Simulation Microanalytique : une Nouvelle Méthode pour l'Analyse Economique » in AFSE, *la Méthodologie Economique Théorique et Appliquée Aujourd'hui*, colloque AFSE 1990, Paris : Nathan 1990, 123-134.

1988- « Concurrence entre Catégories de Main-d'Oeuvre et Fonctionnement du Marché du Travail : l'expérience du Modèle ARTEMIS » in : Ministère d'Etat chargé du Plan et de l'Aménagement du Territoire et Ministère du Travail, de l'Emploi et de la Formation professionnelle, *Structures du marché de travail et politiques*, Paris : Syros : 224-240.

1988- « Changement de Régulation dans un modèle du Marché du Travail » in D. KESSLER (ed), *Economie Sociale*, Paris CNRS Press : 15-35.

1986- (avec P. Gutman) « Political Economy of East-West-South Industrial Cooperation » dans J.P. Hart (ed), *East European Economies : Slow growth in the 1980's, vol. 2, Foreign Trade and International Finance*, Joint Economic Committee, US Congress, March 28, Washington D.C., USGPO : 115-46.

Newspaper articles

2016 -

Ballot G., Goudet O. & Kant J.-D., « Le projet de loi El Khomri modifie profondément le marché du travail sans améliorer l'emploi global » *La Matinale du journal Le Monde (internet)*, April 5.

Ballot G., Goudet O. & Kant J.-D., « Le projet de loi El Khomri est au mieux inefficace, au pire dangereux. La simulation des effets de la réforme à partir d'un modèle économétrique donne des résultats positifs pour les jeunes, mais globalement négatifs pour l'emploi », *Le Monde*, April 6.

Kant J.-D., Ballot G. & Goudet O., « Comment la Loi El Khomri change profondément le marché du travail... mais n'améliore pas l'emploi global », *The Conversation*, April 28. Reproduit par *La Tribune, Marianne, Sud-Ouest*

Press interviews

2016-

Gérard Ballot, Jean-Daniel Kant & Olivier Goudet interviewed by Rémy Demichelis, « Worksim : le logiciel qui simule les conséquences de la loi travail », *L'Obs et rue 89*, April 10.

<http://rue89.nouvelobs.com/2016/04/10/worksim-logiciel-simule-les-consequences-loi-travail-263714>

Gérard Ballot interviewed by Laurent Fargues « Pourquoi la loi El Khomri va bouleverser le marché du travail », *Challenges*, May 31.

<http://www.challenges.fr/challenges-soir/20160531.CHA9871/pourquoi-la-loi-el-khomri-va-bouleverser-le-marche-du-travail.html>

Video

G.Ballot & J.-D.Kant, « Deux chercheurs testent virtuellement la loi El Khomri sur le marché du travail » *Mediapart*, June 8.

<https://www.youtube.com/watch?v=VuymUdVHheE>

Other publications

2003 – article « Economie du travail », Les Echos, 26 Mai 2003

2001 – « *Investissement en capital humain et R&D, formes de l'innovation, et exportations* ». Commissariat Général du Plan, Mars.

1998 – « *Le Capital Humain des Entreprises* ». Rapport final, subvention 25/95. Commissariat Général du Plan, Mars.

1997 – (Coordination scientifique) : « *Nouveaux modes de l'organisation du travail et pratiques salariales : une comparaison France-Suède* », rapport final, subvention 10/95, Commissariat Général du Plan, Décembre.

1995- « *Règles de gestion de la main-d'oeuvre et politiques de l'emploi* », rapport de recherche, appel d'offres « Règles, signaux, contrôles » Ministère de l'Education Nationale, Ronéoté, DRED, 86 p.

1993- « *Formation Continue, Compétitivité des Entreprises et Croissance. Pour un Renouveau de la Problématique* ». Convention d'étude et de recherche 92-123 avec le Ministère de l'Education Nationale, Direction de l'Evaluation et de la Prévision (appel d'offres « L'investissement éducatif et son efficacité ». Ronéoté. 91 p.

1991- « *Marché du travail et Analyse Spatiale : La Picardie face à l'ouverture de 1992* », rapport de fin de convention, Ministère de la Recherche et de l'Enseignement Supérieur, Mai, 121 p.

1989- « *Analyse Economique de la Gestion de la Main-d'Oeuvre : une Etude des Bilans Sociaux et Comptables des Grandes Entreprises Industrielles* », Compte-rendu de fin d'études d'une recherche financée par le Ministère de la Recherche et de l'Enseignement Supérieur, Mai, 121 p.

1987- *Rapport sur la modélisation Micro-analytique* - Etude pour le Commissariat Général du Plan, juin, Ronéoté, 149 p.

Working papers

2017 (avec Olivier Goudet and Jean-Daniel Kant) – WorkSim, an agent-based model to study labor markets <http://worksim.lip6.fr/>

2014 – (with J.-D. Kant & O.Goudet), « *Un modèle multi-agents du marché du travail français, outil d'évaluation des politiques de l'emploi. L'exemple du contrat de génération* », working paper CRED. published in *Revue Economique*, June 2016 .

2014 – (with O. Goudet & J.-D. Kant), “*WorkSim– a multi-agent framework to model the French labor market*”, mimeo, published in *Computational Economics* (2017) .

2013 – (with E.Taymaz) “ *Love thy neighbour. A firm based multi-country model with international technology spillovers and growth regimes*” (CRED wp)

2011 – (with F.Galia, F.Fakhfakh et A.Salter) « *The fateful triangle. Complementarities between product, process and management innovation in the UK and France*”, ERMES w.p. 11-05, on **complementarities-in-use, a companion paper** with a different content from Ballot G., F Fakhfakh., F. Galia and A.Salter, “The Fateful Triangle: **Complementarities-in-Performance** between Product, Process and Organizational Innovation in France and the UK”, *Research Policy*, 44, February : 217-232 , 2015

2006 - (with J.Arifovic et M.-K. Maschek) « *Learning Organization and competition* », Juin. document mimeo.

2006 – (with G.Eliasson et E.Taymaz) “ *The role of commercialization competence in endogenous economic growth*”,KTO wp., June.

Presentations at Conferences (since 2000)

2000 - “*Trainers and poachers: friends or foes?*”, (with E.Taymaz), International J.Schumpeter Conference, Manchester, June 28, July 1.

2000 - “*Competition, training, heterogeneity persistence, and aggregate growth in a multi-agent evolutionary model*”, (with E.Taymaz) International Conference on Simulation and the social sciences II, Université Paris II, 18-20 Septembre, Paris

2001 - “*Who benefits from training and R&D? The firm or the workers? A study on panels of French and Swedish firms*” (with F.Fakhfakh et E.Taymaz), *EALE*, Septembre 2001.

2002 - “*Mobilité des travailleurs, diffusion du savoir technologique et concurrence internationale*”(with H.Hammoudi), Journées de l'Association Française de Sciences Economiques, Lyon, 16-17 Mai 2002.

2002 - « *Firms human capital* » , Conference on human and social capital and economic growth in the knowledge based economy, Bruxelles, Commission européenne, 17 Décembre.

2003 - “ *Firms investment in human capital : sponsoring and effects on performance*”, Conférence “ the future of work : key challenges for the European employment strategy”, Athènes, 13-14 Février.

2003 - “*Enterprise training, productivity and competitiveness*”, Communication invitée Conférence “Human capital, employment, productivity and growth”, organisée conjointement par la Commission européenne et la Banque d’investissement européenne, Bruxelles, 19 Septembre.

2005 - « Learning Organization and competition » (with J.Arifovic et M.-K. Maschek), colloque ACSEG, “Connectionnist approaches in economics and managment”, Aix-en-Provence, La Baume les Aix, 17-18 Novembre , document mimeo.

2006 - « Learning Organization and competition » (with J.Arifovic et M.-K. Maschek), International Joseph Schumpeter Society 11th Conference, Sophia Antipolis 21-24 Juin.document mimeo.

2006 -“ The role of commercialization competence in endogeneous economic growth” (with G.Eliasson and E.Taymaz) , International Joseph Schumpeter Society 11th Conference, Sophia Antipolis 21-24 Juin. KTO w.p..

2007- « Learning Organization and competition » (with J.Arifovic et M.-K. Maschek, revised version, DIME workshop, GREDEG-CNRS, Nice, 15-16 Novembre 2007

2008 - “Love thy neighbour, A simulation study on international technology spillovers and growth regimes” (with E.Taymaz), European Social Simulation Association (ESSA) 5th annual meeting, 1er-5 Septembre.

2009 - “ Love thy neighbour. A firm based simulation study on international technology spillovers and growth regimes”, with E.Taymaz), DIME workshop “markets and firms dynamics: from micro patterns to aggregate behaviors”, Pointe à Pitre, Guadeloupe, France, 2-4 Décembre.

2009 - “ Love thy neighbour. A firm based simulation study on international technology spillovers and growth regimes”, (revised) (with E.Taymaz), 13th International Schumpeter Society Conference, Aalborg, Danemark, 21-24 Juillet.

2011 - “ Love thy neighbour. (extended version), (with E.Taymaz), 16th Annual workshop on Economic Heterogeneous Interacting Agents, Ancone (Italie), 23-25 Juin.

2011 - “ Love thy neighbour. A firm based multi-country model with international technology spillovers and growth regimes”, (extended version), SIGMA PHI, International Conference on Statistical Physics, 11-15 Juillet 2011, Larnaca (Chypre).

2011 - “The Fateful Triangle: Complementarities between Product, Process and Organizational Innovation in France and the UK”(in collaboration with Fathi Fakhfakh, Fabrice Galia, and Ammon Salter)

- Seminar Meeting, Oxford Brookes University Business School,28 March, Oxford, UK.

- DIME Final Conference,6-8 April, Maastricht, NL.

2012 - “The Fateful Triangle: Complementarities-in-Performance between Product, Process and Organizational Innovation in France and the UK” (in collaboration, Fathi Fakhfakh, Fabrice Galia and Ammon Salter)

-DRUID Society Conference 2012“Innovation and Competitiveness: Dynamics of Organizations, Industries, Systems and Regions”, 19-21 Juin, Copenhagen, Denmark.

-14th International J. A. Schumpeter Society (ISS) Conference, “Entrepreneurship, Innovation and Competitive Processes in Complex Economic Systems”, 2-5 July, Brisbane, Australia.

2012 « The fateful triangle. Complementarities between product, process and management innovation in the UK and France”, (in collaboration, Fathi Fakhfakh, Fabrice Galia and Ammon Salter) WEHIA,21-23 Juin, Paris

2013, “The Fateful Triangle: Complementarities-in-Performance between Product, Process and Organizational Innovation in France and the UK” (in collaboration, Fathi Fakhfakh, Fabrice Galia and Ammon Salter),-Workshop “Organizational Innovation” - Organizational Innovation and its Antecedents, Performance Consequences and Technological Complementarities: Towards a Research Agenda, 21st February, Universidad Politecnica de Valencia, Spain.

2013-WorkSim, « un simulateur multi-agents du marché du travail français » (avec Jean-Daniel Kant et Olivier Goudet), Journée Expériences et perspectives de la micro-simulation, organisé par ACOSS, INSEE, ERUDITE, Montreuil - Jeudi 23 mai 2013

2013-“A multi-agent model of the French Labor Market : WORKSIM”, (with Jean-Daniel Kant et Olivier Goudet), WEHIA, 18th Annual Workshop on Economic Science with Heterogeneous Interacting Agents - Reykjavik University, Islande - June 20-22.

2013- "Modeling both sides of the French labour market with adaptive agents under bounded rationality", (with Jean-Daniel Kant, and Olivier Goudet), The 25th Annual Conference of the EAEPE (European Association for Evolutionary Political Economy), 2013 - “Beyond Deindustrialisation: The Future of Industries” - Université Paris 13, Bobigny - 7,9 Novembre 2013

2014- "WorkSim, a multi-agent approach for labor market simulation", (with Jean Daniel Kant and O. Goudet), workshop on "Linking Agent Based, Micro and Macro/CGE Simulation Analyses and methods", organized by J.Mercenier, University Paris 2, January 24.

2014- « Un modèle multi-agents du marché du travail français, outil d'évaluation des politiques de l'emploi. L'exemple du contrat de génération », (with J.-D. Kant et O. Goudet), 63th meeting of the French Economic association (AFSE), ENS Lyon, 16-18 June.

2014- « Co-evolution of innovation networks and technological change », (with E.Taymaz) 15th International Schumpeter Society Conference, , Jena, Germany, July 27-30.

2014 - "Forbidding fixed duration contracts. Unfolding the opposing effects with a multiagent model of the French labour market", (with Olivier Goudet et Jean-Daniel Kant), AE 2014 - 10th Artificial Economics Conference - Social Simulation 2014, Barcelona, Spain - September 1st-2nd, 2014.

2015 - "Endogenous choices of contract types in an agent-based model of the labor market", with Olivier Goudet et Jean-Daniel Kant), WEHIA 2015 conference, SKEMA, Sophia-Antipolis, May 21-23.

2015 – "How to choose a contract type in the French Labor market: an agent-based model", with O.Goudet and J.-D.Kant, 11th Artificial Economics conference, Porto, September 3-4.

2015 - "Endogenous choices of contract types in an agent-based model of the labor market" with Olivier Goudet et Jean-Daniel Kant, TEPP 2015 12th annual conference, CRED, Université Paris 2, September 21-22.

2016 - "Competences and persistence of alliances in vertical co-opetition: An agent-based model" with Thanh Thuan Huynh, WEHIA 2016, June 22_24, Castellon de la Plana, Spain.

2016 - "Competences and persistence of alliances in vertical co-opetition: An agent-based model" with Thanh Thuan Huynh, 16th International Schumpeter Society Conference, July 6-8, Montréal, Canada

2016- "Innovation networks and technological paradigms" with Erol Taymaz, 16th International Schumpeter Society Conference, July 6-8, Montréal, Canada

2016 – "An ex ante evaluation of economic dismissals facilitation on the French labor market: An agent-based model" with Jean-Daniel Kant & Olivier Goudet, 12th Artificial Economics conference, Rome, CNR, sept 20-21.

2016 – "An agent-based approach to evaluate the impact of economic dismissals facilitation on the French labor market" with Jean-Daniel Kant & Olivier Goudet, TEPP - CNRS workshop, October 18-19, Université de la Réunion, Saint-Denis.

2016 – "WorkSim, an agent-based framework to study labor Markets" with Jean-Daniel Kant & Olivier Goudet, International Congress on Agent Computing, 29-30 November, George Mason University, Fairfax, Virginia USA

2016 - "Competences and persistence of alliances in vertical co-opetition: An agent-based model" with Than Thuan Huynh, MAGECO, December 9, Université Paris VI, Paris.

2017 – "Introducing a temporary help agency in a labor market: a multiagent model, with Olivier Goudet and Jean-Daniel Kant", WEHIA, Milan, June 12-14, Università Cattolica.

2017- "Micro insights on the labour markets using ABM" with Jean-Daniel Kant, NAEC innovation Lab workshop, OECD, September 29,

2017 - "Introducing a temporary help agency in a labor market: a multiagent model, with Olivier Goudet and Jean-Daniel Kant", TEPP 14th annual conference, Angers, October 16-18.

2017 - “Introducing a temporary help agency in a labor market: a multiagent model, with Olivier Goudet and Jean-Daniel Kant”, MACME IV (Modeling and analysis of complex monetary economics) workshop, November 24, CEPN, Université Paris 13.

Recent seminars given

2017 “WorkSim, an agent-based model to study labor markets”, (avec Jean-Daniel Kant), INET, Oxford University, UK, June 7.

2017 “WorkSim, an agent-based model to study labor markets”, (avec Jean-Daniel Kant), University of Kingston, UK, June 6.

2014.” “An evaluation of the “Generation Contract” based on an agent based model of the French labor market”, CRED seminar, University Paris 2, Décembre 15.

2012.« The fateful triangle. Complementarities between product, process and organizational innovation in the UK and France” (with F.Fakhfakh), ERMES seminar, Université Paris 2, February 23.

2011. « The fateful triangle. Complementarities between product, process and management innovation in the UK and France”, CERNseminar, ESC Dijon, May 12

Varia

Prize of the French Economic association for the best Ph. D. Dissertation 1981

Palmes Académiques :Chevalier (1997), Officier (2007)

