

**Fouad  
El Ouardighi**

**Professor,  
Department  
Operation  
Management**

Academic Director of  
the MS Logistics and  
Supply Chain  
Management -  
Academic Director of  
the MS Technological  
Projects Management



**Contact**

✉ **Mail:**  
elouardighi@essec.fr  
✉ Avenue Bernard  
Hirsch.  
BP 50105  
95021 Cergy Pontoise  
cedex  
FRANCE

## Education

- International Teacher Program (ITP), Manchester Business School, England, 2003
- Ph.D., management science, ESSEC Business School, France, 2001
- Doctorat, sciences de gestion, Université Paris X Nanterre, France, 1996
- DEA (major de promotion), sciences de gestion, ESSEC-HEC-Université Paris X Nanterre, France, 1991
- DEA, dynamique des systèmes productifs et économie mondiale, Université Paris X Nanterre, France, 1989
- Maîtrise, économie de l'entreprise, Université Paris X Nanterre, France, 1988

## Research Areas

- Supply chain management
- Operations strategy
- Cooperation
- Pollution control
- Optimal control and differential games applications

## On-going Projects

- A behavioral dynamic game of partnership (submitted)
- An empirical investigation on supply chain implementation effectiveness, with P. de Giovanni
- Exhaustible vs renewable environmental absorption capacity, with D. Grass
- Dynamic onformance and design quality in a supply chain: An assessment of contracts' coordination power, with K. Kogan (submitted)
- A dynamic game of competing, decentralized and interdependent supply chains, with S. J&oslash;rgensen and F. Pasin (submitted)
- The impact of partial information sharing in a two-level supply chain, with M. Schnaiderman (submitted)
- Technology, capacity and marketing strategy over the life cycle of a new product in a dynamic duopoly, with B. Kim, C. Park and S. Park (submitted)
- A dynamic game of pollution control and environmental absorption capacity management, with M. Schnaiderman
- The optimal life-long career path of a professor, with K. Kogan and R. Vranceanu (submitted)
- Wholesale price and revenue-sharing contracts in a one manufacturer-one retailer dynamic supply chain, with S. J&oslash;rgensen and G. Erickson
- Corporate governance requirement of trust, with A. Naciri
- Optimal academic career path over finite horizon, with K. Kogan and R. Vranceanu
- Cooperation, attachment and forgiveness
- A dynamic game of supply chains' competition, with P. de Giovanni

# Publications

## ▮ Academic Publications

### Books

*Dynamique industrielle et cycle de vie des produits*. Rabat (Maroc) : Marif El Jadida, 1994

### Articles

"A dynamic game of competing, decentralized and interdependent supply chains," (F. El Ouardighi, S. Jørgensen, F. Pasin), *OR Spectrum*

"Dynamics of technology and price in a duopoly market" (B. Kim, F. El Ouardighi, S. Park), *Applied Economic Letters*, Issue 11

"Controlling pollution and environmental absorption capacity" (F. El Ouardighi, H. Benchekroun, D. Grass), *Annals of Operations Research*, Issue à paraître

"Supply quality management with wholesale price and revenue-sharing contract under horizontal competition" (F. El Ouardighi, B. Kim), *European Journal of Operational Research*, Oct 2010, Vol. 206, Issue 2, p. 329-340

"A dynamic game of operations and marketing management in a supply chain " (F. El Ouardighi, S. Jørgensen, F. Pasin), *International Game Theory Review*, Dec 2008, Vol. 10, Issue 4, p. 373-397

"Le supply chain management : entre indépendance organisationnelle et centralisation" (F. El Ouardighi), *Revue Française de Gestion*, Sep 2008, Vol. 34, Issue 186, p. 1-10

"L'expérience Française du Supply Chain Management" (F. El Ouardighi, P. De Giovanni, JC. Tarondeau), *Revue Française de Gestion*, Sep 2008, Vol. 34, Issue 186, p. 11-39

"Contrat de prix de transfert et contrat à partage de revenu dans une supply chain" (F. El Ouardighi, S. Jørgensen, F. Pasin), *Revue Française de Gestion*, Sep 2008, Vol. 34, Issue 186, p. 59-77

"Quality improvement and goodwill accumulation in a dynamic duopoly" (F. El Ouardighi, F. Pasin), *European Journal of Operational Research*, Dec 2006, Vol. 175, Issue 2, p. 1021-1032

"The Dynamics of Cooperation" (F. El Ouardighi), *International Game Theory Review*, Jan 2002, Vol. 4, Issue 1, p. 1-16

"Quality and the Diffusion of Innovations" (F. El Ouardighi, C. Tapiero), *European Journal of Operational Research*, Jan 1998, Vol. 106, Issue 1, p. 31-38

"Modèles de diffusion en marketing" (F. El Ouardighi, C. Tapiero), *Recherche et Applications en Marketing*, Jan 1997, Vol. 12, Issue 4, p. 15-40

"Qualité et diffusion des produits" (F. El Ouardighi, C. Tapiero), *Recherche et Applications en Marketing*, Jan 1996, Vol. 11, Issue 4, p. 35-51

### Book Chapters

*Supplier Manufacturer Collaboration on New Product Development*. In: *Advances in Dynamic Game Theory* (with K. Bowom). ( ) : Steffen Jorgensen, marc Quimcampoix, Thomas L. Vincent, 2007, p. 527-546

*Dynamique des ventes et stratégies publicitaires concurrentielles*. In: *Savoir gérer. Mélanges en l'honneur de Jean-Claude Tarondeau*. Paris (France) : Vuibert, LE MOAL P., BOURGEON L.. 2003

### 📄 Working Papers

"Supply quality management and horizontal competition " (with B. Kim). ESSEC Business School, Apr 08.

"Cooperation, Trust and Players' Profile" ESSEC Business School, Oct 07.

"Advertising and Quality Decisions over Time" (F. Pasin). Essec Research Center, DR-02014 Jul 02.

"The Dynamics of Optimal Cooperation" (F. Gannon). Essec Research Center, DR-01003 Feb 01.

"The Dynamics of Cooperation" (F. El Ouardighi). Essec Research Center, DR-00010 Jan 00.

"La théorie statistique de la décision. I" (F. El Ouardighi). Essec Research Center, DR-99035 Dec 99.

"Optimal advertising and quality under imperfect information" (C. Tapiero). Essec Research Center, DR-97035 Jan 97.

"Quality, Advertising, Price and the Diffusion of Innovations" (F. El Ouardighi). Essec Research Center, DR-96072 Dec 96.

### 📄 Other Publications

#### Press Articles

"Comment gérer le secteur halieutique ?". *Vie Economique (La)*, 24 Sep 1999

#### Book Reviews

"Supply Chain Games: Operations Management and Risk Valuation". *International Game Theory Review*, 2009, vol. 11, Issue 1, p. 117-119

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## Teaching

### 📄 Teaching at ESSEC

Logistics and Supply Chain Management

Projet Management

Quality Management and Control

Supply Chain Management

Optimal Control Theory  
Continuous-Time Dynamic Games

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## Other Activities

### 📌 Awards and Distinctions

Major de promotion, DEA es-sciences de gestion, HEC-ESSEC-Université Paris X Nanterre, France, 1991

Excellence scholarship from the French Government, 1991-1994

### 📌 Scientific Activities

#### Editorial Board Membership

*International Game Theory Review*, World Scientific

*Revue Française de Gestion*, Lavoisier

*Journal of African Business*, Routledge

#### Conference Presentations

IFORS Triennial Conference (session chair), Melbourne, Australia, July 2011; Optimization Days Conference, HEC-Montreal, Montreal, Canada, May 2011; INFORMS Annual Meeting (session chair), Austin, Texas, USA, November 2010; INFORMS MSOM Annual Conference, Tel Aviv, Israël, June 2010; XIIIth International Symposium of the International Society of Dynamic Games, Banff, Canada, June 2010; XIth Viennese Workshop on Deterministic Optimal Control, Non Linear Dynamics and Differential Games, Amsterdam, Netherlands, May 2010; Optimization Days Conference, HEC-Montreal, Montreal, Canada, May 2010; INFORMS Annual Meeting, San Diego, California, USA, October 2009; VIIth International Workshop of the International Society of Dynamic Games, Djerba, Tunisia, July 2009; IInd International Workshop on Dynamic Games in Management Science, Valladolid, Espana, June 2009; CORS-INFORMS Conference, Toronto, Canada, June 2009; Optimization Days Conference, HEC-Montreal, Montreal, Canada, May 2009; Production and Operations Management Conference, Orlando, Florida, USA, Mai 2009; Workshop on the New Challenges to the Economics of Business Schools and Universities, EIASM/ESSEC, Cergy, France, December 2008; INFORMS Annual Meeting, Washington D.C., USA, October 2008; American Accounting Association Annual Meeting, Anaheim, California, USA, August 2008; IFORS Triennial Conference (session chair), Sandton, Johannesburg, South Africa, July 2008; Xth Viennese Workshop on Deterministic Optimal Control, Non Linear Dynamics and Differential Games in Honor of Pr Gustav Feichtinger, Vienna Technical University, Vienna, Austria, May 2008; Production and Operations Management Conference, La Jolla, San Diego, California, May 2008; International Workshop on Dynamic Game Theory and Applications (session chair), HEC-Montreal, Montreal, Canada, May 2008; INFORMS Annual Meeting (session chair), Seattle, Washington, USA, November 2007; VIth International Workshop of the International Society of Dynamic Games (session chair), Rabat, Morocco, September 2007; INFORMS International Meeting, San Juan, Puerto Rico, July 2007; IXth Viennese Workshop on Deterministic Optimal Control, Non Linear Dynamics and Dynamic Games,

HEC-Montreal, Montreal, Canada, May 2007; Optimization Days Conference, HEC-Montreal, Montreal, Canada, May 2007; PITTSBURGH INFORMS annual meeting, Pittsburgh, Pennsylvania, USA, November 2006; XIIIth International symposium on dynamic games and applications, Sophia-Antipolis, France, July 2006; International workshop on dynamic optimization in honor of Pr Suresh P. Sethi, Dallas, Texas, USA, May 2006; Optimization days conference (session chair), HEC-Montreal, Montreal, Canada, May 2006; SAN FRANCISCO INFORMS annual meeting, San Francisco, California, USA, November 2005; Viennese workshop on dynamic games, Vienna, Austria, October 2005; IFORS Triennial conference (session chair), Honolulu, Hawaiï, USA, July 2005; Optimization days conference, HEC-Montreal, Montreal, Canada, May 2005; XIth International symposium on dynamic games and applications (session chair), Tucson, Arizona, USA, December 2004; EURO XX, XXth European conference on operational research (session chair), Rhodos, Greece, July 2004; Optimization days conference (session chair), HEC-Montreal, Montreal, Canada, May 2004; Teaching and Learning Conference (best paper award), Orlando, Florida, USA, January 2004; ATLANTA INFORMS annual meeting (session chair), Atlanta, Georgia, USA, October 2003; ISTANBUL EURO/INFORMS joint conference, Istanbul, Turkey, July 2003; VIIIth Viennese workshop on optimal control, non linear dynamics and differential games (session chair), Vienna, Austria, May 2003; Optimization days conference, HEC-Montreal, Montreal, Canada, May 2003; SAN JOSE INFORMS annual meeting, San Jose, California, USA, November 2002; International workshop on optimal control and dynamic games in honor of Pr Steffen Jørgensen, Tunis, Tunisia, September 2002; Xth International symposium on dynamic games and applications, St-Petersburg, Russia, July 2002; Optimization days conference (session chair), HEC-Montreal, Montreal, Canada, May 2002; HEC-ESSEC-INSEAD marketing seminar, INSEAD, Fontainebleau, France, March 2002; MIAMI INFORMS annual meeting, Miami, Florida, USA, November 2001

- HAWAII INFORMS annual meeting (session chair), Maui, Hawaiï, USA, June 2001; IXth international symposium on dynamic games and applications, Adelaide, Australia, December 2000; SEOUL INFORMS/KORMS joint conference, Seoul, South Korea, June 2000; VIIth Viennese workshop on optimal control, non linear dynamics and differential games, Vienna, Austria, May 2000; HEC-ESSEC-INSEAD marketing seminar, INSEAD, Fontainebleau, France, October 1999; EURO XVI, XVIth European conference on operational research, Brussels, Belgium, July 1998; HEC-ESSEC-INSEAD marketing seminar, HEC, Jouy-En-Josas, France, May 1994; IInd Conference of International Association of Strategic Management (AIMS), Jouy-En-Josas, France, Octobre 1992

### **▣ Affiliations and Academic Responsibilities**

Member of:

- Institute for Operations Research and the Management Science (INFORMS)
- International Society of Dynamic Games (ISDG)
- Production and Operations Management Society (POMS)
- European Society for Operations Research (EURO)
- Ad hoc reviewer for European Journal of Operational Research (1998-), Production Planning and Control (2002-), International Game Theory Review (2002-), Revue Française de Gestion (2004-), Annals of Dynamic Games (2005-), Optimal Control Applications and Methods (2007-), RAIRO-RO (2008-), Journal of Economic Dynamics and Control (2008-), Management Science (2009-), Naval Research Logistics (2010-), Journal of Optimization Theory and Applications (2010-), International Journal of Production

Economics (2010-), Annals of Operations Research (2010-), Dynamic Games and Applications (2010-), Computers and Operations Research (2010-), Central European Journal of Operational Research (2010-)

### ▣ **Consulting and Other Activities**

- Expert for the Rhône-Alpes Regional Committee, France, 2000-2004
- Consultant and educator for French and foreign organizations, 1998-
- Consultant for the Ministry of fisheries and the merchant navy of the Kingdom of Morocco, Rabat, Morocco, 1996-1998

### ▣ **Professional Experience**

Professor (2009-); Coordinator of the Ph.D. program track in Operations Management and Decision Sciences (2007-2010); Associate professor (2002-2009); Designer and academic director of the Specialized Master of Technological Projects Management (2003-2009); Chairperson of the Operations Management Department (2001-2009); Academic director of the Specialized Master of Logistics and Supply Chain Management (2000-2009); Academic director of the Specialized Master of Public Services Management (2006-2007); Designer of the Ph.D. program track in Operations Management and Decision Sciences (2004-2006); Academic director of the Executive Specialized Programs of Logistics and Production (1999-2001); Academic director of the In-Company Projects Program (1999-2000); Assistant professor, Logistics, Production and Service department, ESSEC Business School (1998-2002); Assistant professor, Decision and Information Systems Department, Audencia-Ecole Supérieure de Commerce de Nantes (1997-1998); Visiting professor, Logistics and Production Department, ESSEC Business School (1996-1997); Lecturer, Faculty of Management, Paris X Nanterre University (1994-1998); Lecturer, Management Department, Ecole des Mines de Nantes (1994); Scholarship holder/assistant, Management Faculty, Paris X Nanterre University (1992-1994); Research assistant, Strategy and Management Department, ESSEC Business School (1991-1992)