

# Curriculum Vitae

**Charles S. Tapiero,  
The Topfer Chair Professor in Financial Engineering  
And Technology Management  
The Polytechnic University of New York  
New York, USA**

## ***Education:***

Ph.D., in 1970, Operation Research and Management, New York University, Graduate School of Business Administration, New York, Thesis Title: A Graph Theoretic Approach to Power, Advisor Arie Lewin

MBA, 1968, New York University, Graduate School of Business Administration, New York.

B.S., Electrical Engineering 1967, Ecole Polytechnique, University of Montréal,

## ***University Positions:***

2005-Present: The Topfer Chair and Distinguished Professor in Financial Engineering And Technology Management, The Polytechnic University of New York

1991-2005 and Present, Full Professor, ESSEC (Ecole Superieure des Sciences Economiques et Commerciales), Cergy Pontoise, France, Department of Systems, Information and Decisions and Department of Logistics, Production and Services (acted as well as Chairman of the department)

1998- Present, Full Professor, Bar Ilan University, Departments of Economics, Graduate School of Business, Interdisciplinary Program, Logistics, and since 2001

2000,-Present, Full Professor, Department of Mathematics, Mathematical Finance Advanced Masters Degree Program (Academic Director and Founder of the Master Degree—with Thesis in Mathematical Finance )

2000-2002 Institute of Mathematical Finance, Montreal, Canada and Adjunct Professor, Department of Finance, Concordia University, (Prized position for 2 years, renewed for a third year)

1978-1982, Public Office, (see Service and Leadership Employment)

1987-1988, Kermit O. Hanson Chair Professor, U. of Washington, Seattle, WA.

1989-1991, Lewis Progressive (Insurance) Chair Professor of Management, Case Western Reserve University, Cleveland, OHIO

1976-1977, Member of Falk Economic Research Institute for Israel.

1976-1978, Director, Zuchan European Research Center, Hebrew University (as well Co-Founder of the Journal Common Market in Hebrew, for the advancement of the understanding of the EU and its implication to Israel's economy).

1976-1990, Graduate School of Business, Hebrew U., Jerusalem

1978-1982, On Leave for Public Office from (see Service Leadership and Employment).

1976-1990, Assistant and Associate Professor. Graduate School of Business, Hebrew U., Jerusalem

1969-1976, Graduate School of Business, Columbia University, Assistant and Associate Professor, New York..

1968-69, Research Assistant and Lecturer, GSBA, New York University, NY.

***Additional and Occasional (temporary but recurrent ) Positions:***

U. de Paris I, Adjunct Professor, 2005

Concordia University, department of finance, recurrent over 4 years, 1999-2003

Institute of Mathematical Finance Montreal, recurrent over three years, 1999-2002

Ecole des Mines de Nantes, Professor , Has set up the department of Productique, 1990-1996.

School of Business, Tours (France).

CREST (ENSAE), Research Institute member, 1995

IAE (Sorbonne), Adjunct Professor, 1995

U. Louis Pasteur (Strasbourg) (1991-1995)

Visiting Professor, University of Texas, Austin (Summers 1991-1996), Recurrent

1993 (Summer), Visiting Professor, IAE U. Aix Marseille;

1985 Professor (part-time), Tel Aviv University, Faculty of Engineering.

Recurrent (1971-1985) INRIA (Institut National de la Recherche sur l' Informatique et l'Automatisme, France.

1984: Visiting Professor, Ecole Federal Polytechnique de Lausanne,

1984 : Visiting Professor, Institut Mathematique Economique (University de Dijon)

1983 (Winter): Visiting Professor, University of Pennsylvania, The Wharton School.

1982 Visiting Professor, University of Tillburg (Netherland)

1981:The European Institute for Advanced Studies in Management (Brussels). Sponsored by a government research grant

1980-1981: Visiting Professor at the Faculte Universitaire Catholique de Mons (Belgium)

## ***PUBLICATIONS***

### **1. Authored Books and Monographs**

Tapiero C.S. **Risk and Financial Management: Mathematical and Computational Concepts**, John Wiley, February 2004

Tapiero C.S. **Applied Stochastic Models and Control in Finance and Insurance**, Kluwer Academic Press, Boston, April 1998

Daudin J.J. and C.S. Tapiero, **Les Outils et la Gestion de la Qualité**, Economica, August 1996

Tapiero Charles, S., **The Management of Quality and Its Control**, Chapman and Hall, January 1996

Tapiero Charles, S., **Applied Stochastic Models and Control in Management**, North-Holland, Amsterdam-New York, January 1988

Tapiero Charles, S., **Managerial Planning: An Optimum and Stochastic Control Approach**, Gordon Breach, 1977 - two volumes.

## 2. Edited Books

Yaron D. and C.S. Tapiero, **Operations Research in Agriculture and Water Resources**, North Holland Book Co., 1980.

A. Bensoussan and P. Kleindorfer, and C.S. Tapiero, 1978. **Applied Stochastic Control in Econometrics and Management Science**, Edited Volume with A. Bensoussan and P. Kleindorfer, North Holland Contributions to Economic Analysis, 1980.

### 2.1 Special Issues Editor

A. Grando and C.S Tapiero, Special Issue of *Internation Journal of Performance Measurement*, Under Preparation

A. Grando and C.S Tapiero, Special Issue of *Risk Measurement and Assessment*, Under Preparation

Complexity and Industrial Systems, Special Issue Editor, *RAIRO*, 1995

F. van der Duyn Schouten and C.S. Tapiero, Special Issue Co Editor on Maintenance, Reliability and Quality Control, *Euro. Journal of Operations Research*, April, vol. 82, 2, 1995

A. Bensoussan and P. Kleindorfer, and C.S. Tapiero, 1978. Applied Optimum Control, Special issue of *Management Science*, Co-edited, 1978.

C. Tapiero, Special Issue Editor, *Revue Economique*. 1978

### 3. Papers in Refereed Journals

**Reliability Design and R<sub>VaR</sub>**, *International Journal of Reliability, Quality and Safety Engineering (IJRQSE)*, Vol. 12, No.4, August 2005, 2005

Value at Risk and Inventory Control, *European Journal of Operations Research*, 2005 (available on line, official date June 2005)

Dynamic Online and Offline Channel Pricing for Heterogeneous Customers in Virtual Acceptance, G. Fruchter and C.S. Tapiero, *International Journal of Game Theory*, June 2005 (publication date)

Environmental Quality and Satisficing Games, *HAIT Journal of Science and Engineering B*, Volume 2, Issues 1-2, pp. 7-30

Modeling Environmental Queue Control: A Game Model, *Stochastic Environmental Research and Risk Assessment*, February 2005, vol 19, no.1, pp. 59-70

Environmental Quality Control and Environmental Games, *Environmental Modeling and Assessment*, (Kluwer), December 2004, vol 9, issue 4, pp. 201-206

The Economic Valuation of Logistic Investments and Air Traffic Supply Chains, *ICAO*, May 2003

The Inter-Event Range Process in Birth Death Random Walks, (Pierre Vallois and C.S. Tapiero) *Applied Stochastic Models in Business and Industry*, –2001

Yield and Control in a Supplier-Customer Relationship, *International Journal of Production Research*, vol 39, no.7, May 2001, pp. 1505-1515

Pension Funds Savings Individuation, (C.S. Tapiero and Assa Birati), *International Advances in Economic Research*, vol 6, no.4, November 2000

Pension Funds Insurance Individuation (C.S. Tapiero and A. Birati), *Math. Methods of Operations Research*, volume 52, Issue 3, 2000

The Inter-Event Range Process and Testing for Chaos in Time Series (C.S. Tapiero and Pierre Vallois), *Neural Network World*, vol 10, numbers 1-2, 2000, 89-99,

Ex-Post Inventory Control, *Int. J. of Production Research*, vol 38, no.6, April 2000, pp. 1397-1406

The NBD repeat purchase process and M/G/Infinity queues, *Int. J. of Production Economics*, 63 (2000) 141-145

Quality and the Diffusion of Innovations, *European Journal of Operations Research*, 106, 1998, 31-38 (Fouad El Ouardighi and C.S. Tapiero)

The economic effects of reliable and unreliable testing technologies, *ICJM*, 1997

Range Reliability in Random Walks, *Mathematics Methods of Operations Research* (C.S. Tapiero and Pierre Vallois), 1997, vol45, no.3

Modèles de diffusion en marketing (Fouad El Ouardighi and C.S. Tapiero), *Recherche et Applications en Marketing*, December 1997

Run length statistics and the Hurst exponent in random and birth-death random walks, *Chaos, Solitons and Fractals*, September 1996 (Tapiero C.S. and Pierre Vallois)

Qualité et diffusion des produits, (Fouad El Ouardighi and C.S. Tapiero), *Recherche et Applications and Marketing*, 11, no.4, 1996, pp. 35-51

Toujours plus de qualité, *Personnel* (France), Décembre 1995, pp. 47-48

Moments of an amplitude process in a symmetric random walk, (P. Vallois and C.S. Tapiero), *RAIRO*, 1995

The supply and the control of quality in supplier-producer contracts, (Diane J. Reyniers and C.S. Tapiero), *Management Science*, October-November, 1995, vol 41, n0.10, pp. 1581-1589

Acceptance sampling in a producer-supplier conflicting environment: Risk neutral case, *Applied Stochastic Models and Data Analysis*, 1995, vol. 11, 3-12

Contract design and the control of quality in a conflictual environment, (Diane J. Reyniers and C.S. Tapiero), *Euro. J. of Operations Research*, 82, 2, 1995, pp.373-382

The Qualities of Manufacturing and Economic Quality, *OR Insight*, 1994

Complexity and the New Industrial Management, *OR Insight*, 1994

Computational Aspects in Applied Stochastic Control (A. Sulem and C.S. Tapiero), *Computational Economics*, 1994 (52 pages)

Stochastic Modeling: Art and Science, *Int. J. of Engineering Continuing Education*, 1994

Inspection of an Unreliable Flexible Manufacturing System: with Repairable Parts and Non Negligible Inspection Times, *Production Planning and Control*, LF Hsu and C.S. Tapiero, 1994

Supply delays and the inventory stocking policy, (A. Sulem and C.S. Tapiero), *Int. J. of Production Economics*, 1993

Network of Queues Modeling in Flexible Manufacturing Systems: A Survey, *RAIRO*, with L.F. Hsu and C. Lin, and C.S. Tapiero, vol. 27, 1993, pp. 1-45

Stochastic Control: From Theory to Practice, *Euro. J. of Operations Research*, December 1993

Integrated Quality Control and Process Maintenance (L.F. Hsu and C.S. Tapiero), *International Journal of Production Research*, 1992

WIP and CSP-1 Quality Control in a Tandem Queueing Production System, *Computer & Mathematics with Applications*, 1992 (G. Tsiotras and C.S. Tapiero)

An Economic Model for Determining the Optimal Quality and Process Control Policy in a Queue Like Production System, *International J. of Prod. Res.*, vol. 28, 1990, pp. 1447-1457

Premium Allocation and Risk Avoidance in a Large Firm: A Continuous Model, *Insurance Economics and Mathematics*, L. Jacque and C.S. Tapiero, 1990

A Pooled Computer Center as a Risk Management Tool, *Computers in Operations Research*, with G. Ariav and Y. Kahane and C.S. Tapiero, 1990

Quality Control of an Unreliable FMS with Scrapping and Infinite Buffer Capacity, *International Journal of Flexible Manufacturing Systems*, (L.F. Hsu and C.S. Tapiero), 1989

Technology and the Manufacturing Process, *Production Planning and Control*, 1989

The Utility of Manufacturing Cooperatives, *Journal of Economics Dynamics and Control*, 1989 (13 pages)

The Servicing/Capacity Quality Control Problem, Chandromohan and P.R. Ritchken and C.S. Tapiero, *AIIE Transactions*, September. 1989, vol. 21, pp. 213-220

Quality Control and Product Servicing, *European Journal of Operation Research*, Hau Lee and C.S. Tapiero, vol. 39, 1989, pp. 261-273

Premium Valuation in International Insurance, *Scandinavian Actuarial Journal*, 1986, L. Jacque and C.S. Tapiero, (Received the Lauder Institute Prize, The University of Pennsylvania, Wharton, 1989)

Quality Control of the M/G/1 Queue, *European Journal of Operations Research*, Lie Fern Hsu and C.S. Tapiero, 1988

The Manufacturing Quality Density Function and Quality Control, *International Journal of Production Research*, (M. Posner and C.S. Tapiero), 1988

A Bayes Approach to the Quality Control of an M/G/1 Job Shop Queue, *Naval Research Logistics Quarterly*, Lie Fern Hsu and C.S. Tapiero, 1988, vol. 35, pp.327-343

Quality Control of an Unreliable Random FMS with Bernoulli and CSP Sampling, *International Journal of Production Research*, Lie Fern Hsu and C.S. Tapiero, vol. 26, 1988, pp. 1125-1135

Computer Backup Pools, Disaster Recovery and Default Risk, *Communications. ACM*, (with Y. Kahane, Seev Neumann and C.S. Tapiero), vol. 31, Jan. 1988, pp.78-83

Insurance Premium Allocation and Loss Prevention in a Large Firm: A Principal Agent Analysis, *Studies in Banking and Finance*, J.Laurent and C.S. Tapiero., vo l6, 1988, pp. 231-245

Joint Insurance and Capitalization Costs, *Insurance: Economics and Mathematics*, with L. Jacque, 1988

Warranty Reserving, *Naval Research Logistics Quarterly*, ( M.J. Posner and C.S. Tapiero), vol. 35, 1988, 473-479

Maintenance of the M/G/1 Queue Like Job Shop, Lie Fern Hsu and C.S. Tapiero, *Queueing Systems: Theory and Applications*, *QUESTA*, 1987

"Learning and Quality Control", *IIE Transactions* (American Institute of Industrial Engineers Journal), Dec. 1987, vol. 19, pp. 362-370

Product Failures, Manufacturing Reliability and Quality Control: A Dynamic Framework, *INFOR* (Canadian Journal of Operations Research), ( A. Reisman, P. Ritchken and C.S. Tapiero), 1987

Quality Control of the M/M/1 Queue, *International Journal of Production Research*, Lie Fern Hsu and C.S. Tapiero, 25, 1987,447-455

Brownian Model of Return Migration and the Inverse Gaussian Distribution of Sojourn Time, *Applied Stochastic Models and Data Analysis*, 1987, (Tapiero C.S. and N. Toren)

"Risk Behavior and Optimum Advertising with Stochastic Sales Response,(Tapiero C.S.. Y. Elyashberg, Y. Wind, *Optimal Control: Applications and Methods*, 1987

"Quality Control and the Sales Process, *Naval Research Logistics Quarterly*," (Hau Lee and C.S. Tapiero), 1986, 569-587

"Continuous Quality Production and Machine Maintenance", *Naval Research Logistics Quarterly*, 1986, 33, 489-499

"Quality Control by the Control of a Discrete State Stochastic Process," *International Journal of Production Research*, 1986, 24,927-937

"Contingent Claim Contracts and Inventory Control," (P. Ritchken and C.S. Tapiero). *Operations Research*, vol 34, December 1986, pp. 864-870

"Reliability, Pricing and Quality Control," *European Journal of Operations Research*, (A. Reisman, P. Ritchken and C.S. Tapiero), 1986,

Randomized-Quality Control of a Two Stage Part Machining Process with Blocking, *IEEE Transactions on Reliability* (Lie Fern Hsu and C.S. Tapiero). 1986, R-35, 455-458

Insurance Premiums and Default Risk in Mutual Insurance, *Scandinavian Actuarial Journal* (Tapiero C.S., Y. Kahane and J. Laurent). 1986, pp. 82-97

The Expected Cost of Ruin and Insurance Premiums in Mutual Insurance, *Journal of Risk and Insurance*, 1986, (Tapiero C.S and L. Jacque)

"Warranty Design Under Buyer and Seller Risk Aversion", *Naval Research Logistics Quarterly*, (P.R. Ritchken and C.S. Tapiero) , vo. 33, 1986 33, 657-671.

"Computerized Integrated Management in Knitting with the SES Industrial System", *Production Systems, AFCET*, France, 1985.

"A Dynamic Stock Insurance Firm Model and Dividend Optimization," *Journal of Large Scale Systems*, 1985.

The (N,T) Replacement Rule, *IEEE Transactions on Reliability*, (P. Ritchken and C.S. Tapiero), October 1985, R-34,NO.4, 74-761984

"Mutual Insurance, A Diffusion Stochastic Control Problem," *Journal of Economic Dynamics and Control*, 7, 1984, 241-260.

Optimal Investment-Dividend Policy of an Insurance Firm Under Regulation, (with C.S. Tapiero, D. Zuckerman and Y. Kahane). *Scandinavian Actuarial Journal*, 1983, 65-76.

Optimum Investment Policy of an Insurance Firm with a Compound Poisson Claim Process, *Insurance: Economics and Mathematics* (with C.S. Tapiero and D. Zuckerman) 2, 1983, 103-112.

"A Simple Vehicle Dispatching Policy with Non-Stationary Stochastic Arrival Rates, *Transportation Research*, Vol. 16B, 1982, 449-457. , M. Robin and C.S. Tapiero

Impulsive Control in Management: Prospects and Applications (A. Bensoussan and C.S. Tapiero), *Journal of Optimization Theory and Applications*, vo. 37, no.4, Aug. 1982, 419-442

The Israeli meat Sector: An Econometric Model, *European Review of Agricultural Economics*, vol. 9, 1982, 65-86 (A. Shmueli and C.S. Tapiero)

"Optimum Excess-loss Reinsurance, *Stochastic Processes and Applications* (S.S. Tapiero and D. Zuckerman), 12, 1982, 85-96.

"An Optimal Control of Mutual Insurance Jump Processes," *Astin Bulletin*, 13, 1982, 13-21. .

Stochastic Model of Consumer Behavior and Optimal Advertising, *Management Science*, vol. 28, Sept. 1982, pp.1054-1064

"A Stochastic Diffusion Model with Advertising and Word-of-Mouth Effects," *European Journal of Operations Research*, 12, 1982, 348-356.

"Optimal Product Quality and Advertising, *Infor*, 19, November 1981, pp. 311-318.

"Modeling Stochastic Models of Advertising," *Quartalshafte, Girozentrale*, I, 1982, pp. 63-78.

"Using an Uncertainty Model to Assess Sales Response to Advertising (J. Farley and C.S. Tapiero), *Decision Sciences*, Vol. 12, 1981, pp. 441-455.

"Random Vehicle Dispatching with Options and Optimal Fleet Size, *Transportation Research*, (C.S. Tapiero and D. Zuckerman) vol. 14B, 1980, pp. 361-368.

Cyclicity, Constancy, Homogeneity and the Categories of Qualitative Time Series, *Ecology*, vo. 61, no. 3, 1980, pp. 715-719 (A. Raveh and C.S. Tapiero)

A Probability Model for the Effects of Distance and the Demand for Multiple Facilities, *Environment and Planning*, vol. 12, 1980

Finding Common Seasonal Patterns Among Time Series: An MDS Approach, *Journal of Econometrics*, vol. 12, 1980, pp. 1-11 (A. Raveh and C.S. Tapiero)

"Optimal Capacity Expansion of a Deteriorating Facility Under Uncertainty, *RAIRO*, 1980

"Optimum Claim Truncation of an insurance firm with a Compound Poisson Claim Process. A Diffusion Approximation, *RAIRO*, May 1980 Vol. 14, 129-136 (C.S. Tapiero and D. Zuckerman).

"The Optimal Control of a Cash Balance Problem: Compound Poisson Demands, *Journal of Banking and Finance*, 4, 1980, 345-352 (C.S. Tapiero and D. Zuckerman).

Optimum Maintenance and Replacement Date of a Machine Under Uncertainty (C.S. Tapiero and I. Venezia), *Journal of Operational Research Society*, Vol. 30, 1979, pp. 457-467.

Vehicle Dispatching with Competition (C.S. Tapiero and D. Zuckerman) *Transportation Research*, Vol. 133, 1979, pp. 207-216.

"A Generalization of the Nerlove-Arrow Model to Multi Firms Advertising Under Uncertainty, *Management Science*, Sept. 1979, 25, 907-915.

"Optimal Location - Size of a facility on a Plane with Interaction Effects of Distance", *European Journal of Operations Research*, Vol. 2 1978, pp. 107-115.

"Time, Dynamics and the Process of Management Modeling", *Management Science*, Special Issue on Applied Optimum Control, 1978, pp. 4

Optimum Location-Size of a Facility on a Plane with Interaction Effects of Distance, *European Journal of Operations Research*, vol. 2, 1978, pp. 107-115

"Optimal Advertising and Goodwill Under Uncertainty, *Operations Research*, February 1978, Vol. 26, No. 3, May-June 1978, 450-463.

"A Stochastic Model of Sales Response to Advertising, *Metroeconomica*, Vol. 29, 1977, pp. 159-167.

"Optimum Shuttle Scheduling :A GPSS Simulation", *Simulation*, (John Raggazini and C.S. Tapiero), September 1976, 97-104.

"Optimization of Information Measurement and Inventory Applications", *INFOR*, Vol. 14, No. 3, 1976, pp. 50-61.

Accounting for the Probable Spatial Impact of Local Activities, *Environment and Planning*, vol. 8, 1976, pp. 917-926

"Optimal Inventory and Product Quality Control with Deterministic and Stochastic Deterioration--An Application of Distributed Parameters Control Systems", *IEEE Transactions on Automatic Control*, (with Bensoussan C.S. Tapiero and G. Nissen). June 1975, 407-412.

On the Probable Demand for Two Facilities Located on a Line, *Regional Science and Urban Economics*, Vol. 5, 1975, 335-341.

Structural Inference in Organizations, *Journal of Mathematical Sociology*, vol. 4, 1975, pp. 121-130 (with M. Capobianco and A. Y. Lewin)

Linear Breakeven Analysis Under Risk, *Operation Research Quarterly*, vol. 26, 1975, pp. 847-856 (M.K. Starr and C.S. Tapiero)

Optimal Location of a Polluting Plant on a Line Under Uncertainty, *Journal of Regional Science*, vol. 16, no.3, 1975, pp. 367-374 ( J. Paroush and C.S. Tapiero)

"Optimum Control of Sales Force Efforts Over Time", *Management Science*, (John U. Farley and C.S. Tapiero), 21, 1975, 976-985.

"Random Walk Models of Advertising, Their Diffusion Approximations and Hypothesis Testing", *Annals of Economics and Social Measurement*, 4, 1975, 293-309.

"On Line and Adaptive Optimum Advertising, Control by a Diffusion Approximation", *Operations Research*, 23, 1975, 890-907.

The Demand and Utilization for Recreational Facilities: A probability Model, *Regional and Urban Economics*, vol. 4, 1974, pp. 173-185 (Also Translated in Japanese and Publ. in Expressways and Automobiles)

Structural Inference in transportation Networks, *Environment and Planning*, vol. 6, 1974, pp. 411-418 (Barry F. Boots and C.S. Tapiero)

Estimating the Value of Contracts, (Philippe de Loze and C.S. Tapiero), *RAIRO*, Vol. 14, 1974, 33-49.

"N Machines Simultaneous Maintenance and Replacements with Technical Obsolescence, *Opsearch*, 1973, 10, 1-10.

Production Scheduling with Significant Changeover Costs, *Zeitschrift fur Operations Research*, Band 17, 1973, 33-44.

The Concept and the Measurement of Centrality, *Decision Sciences*, May 1973, pp. 314-328 (A. Y. Lewin and C.S. Tapiero)

Towards a Dynamic Urban management Science, *N.Y. Academy of Sciences*, May 1973, pp. 271-282

Optimum Price Switching, *Int. J. of Systems Science*, 1973, vol. 5, no.1, pp. 8396

Investissement, Utilisation de Capacité Productive et Dépréciation: Politiques Optimales, *Revue Economique Francaise*, 1973, 442-459, (A.R. Leinekugel Le Cocq and C.S. Tapiero)

Multi-Commodities Transportation Schedules Over Time", *Networks*, An International Journal, 1972, 2, 311-327.

"Affectation Sequentielle de Nouvelles Machines, *Rairo*, Vol. 12, 1972, No. 1, 5763.

The Theory of Graphs in Behavioral Science, *Decision Sciences*, 1972, 57-81,

"K-Class Assignments", *RAIRO*, 1972, Vol. 12, 141-144.

"Optimal Capacity Expansion with Storable Output", *Cahiers du Centre d' Etudes de Recherche Operationnelle*, 1972, 159-168.

"Optimal Simultaneous Replacement and Maintenance of a Machine with Process Discontinuities, *RIRO* , Vol. 11, 1971, No. 3, 79-86.

"Transportation-Location-Allocation Problems Over Time", *Journal of Regional Science*, 1971, 11, 377-384.

#### 4. Chapters and Papers Published in Books (Refereed)

Risks and Assets Pricing, **Handbook of Engineering Statistics**, Springer 2005, Ed. Huang Pham

Advertising and Advertising Claims Over Time, in *Optimal Control and Dynamic Games, Applications in Finance, Management science and Economics*, C. Deissenberg and R.F. Hartl (Eds.), Springer, 2005

Environmental Games and Queue Models, in J.M. Proth and E. Levner, Editors, **Marine EcoSystems and Environmental Management**, Kluwer Publ., Forth, 2005

Risk Management, John Wiley *Encyclopedia on Actuarial and Risk Management*, 2005

Towards an Expected Utility Paradigm for Foreign Exchange Risk, L.L. Jacque, P. Lang and C.S. Tapiero in Sarkis J. Khoury and Alo Gosh, **Recent Developments in International Banking and Finance**, D.C. Heath, Lexington, Mass., 1989

Concepts and Trends in the Study of Insurer's Solvency, with Y. Kahane, L. Jacque, in D. Cummins and R. Derrig (eds.) **Solvency in Insurance**., 1989

"The Systems Approach to Insurance Company Management," in **Developments of Control Theory for Economic Analysis**, Ed. C. Carraro, D. Sartore, Dordrecht, Martinus Nijhoff, 1986,

Adaptive Econometric Forecasting by an Approximate Filtering-Smoothing Algorithm: The Case of the Israeli Meat Sector, in A.H. Hollet (Ed.), **Decision and Econometric Models**, Nijhoff Publ. Co., 1984 (with A. Shmueli)

"A Simple Stochastic Control Problem of Advertising, in G. Feichtinger (Editor) **Optimal Control Theory and Economic Applications**, North Holland, 1982.

"Active Resource Management, in D. Yaron and C.S. Tapiero (Editors) **Operations Research in Agriculture and Water Resources**, North Holland Publ. Co. 1980, pp. 231-238.

Optimal Stochastic Control and Stabilization of the Israeli Meat Market, in **Applied Stochastic Models in Econometrics and Management Science**, A. Bensoussan, P. Kleindorfer and C. S. Tapiero (Ed.), North Holland, Contributions to Economic Analysis, 1980, ( A. Shmueli and C.S. Tapiero)

The Combined Location - Districting Problem: A Dynamic Clusters Analysis Approach, (with U. Hanani), in **Analyse de Donnees**, INRIA 1980, pp. 249-266.

The Israeli meat sector: An Econometric Model (in Hebrew), **Israel Economic Association**, Dec. 1977, (with A. Shmueli)

Assesing the Probable Demand for recreational Facilities: A Stochastic Process Approach, in S. Ladani (Ed.), **Management Science Applications in Leisure Time**, North Holland Publ. Co., 1975, pp. 13-24 (with I. Dayan)

## 5. Papers Published in Proceedings (Refereed)

Statistical Control and Conflict in Supply Chain Management, AMSDA (Applied Stochastic Models and Data Analysis) Meeting, May 17-21, Brest-CNST, France, Proceeding, In press 2005

Inventory Outsourcing and Risk Management, (Tapiero C.S. and A. Grando), Proceedings of the IFAC Meeting, July 4-8,2005, In Press

Risk Measurement and Supply Chains, Proceedings of the International Meeting on Performance and Risk Measurement, Milan, December 2004.

The Inverse Range Process in a Random Volatility Random Walk" with Pierre Vallois, and Trading Risk and Risk Sensitive Buy Sell of Financial Assets, 8<sup>th</sup> Vienna Workshop on Optimal Control,, Dynamic Games and Nonlinear Dynamics: Theory and Applications in Theory and OR/MS, May 14-16, 2003

R/S Analysis in a Birth-Death Random Walk and Financial Volatility, 14<sup>th</sup> World Congress of IFAC International Federation of Automatic Control (with Pierre Vallois), Beijing, Pergamon, 1999

R/S Analysis in Birth-Death Random Walks, (with Pierre Vallois), *IFAC Proceedings*, Computation in Economics, Finance and Engineering, June 29-July 1, 1998, Cambridge, Uk

Inventory Control with Supply Delays, on going orders and emergency supplies, Control Applications and Optimization, Pergamon, 1996, pp. 109-115

Manufacturing Yield, Supply and Inspection of Quality in a Producer-Supplier Relationship, Marrakech, Maroc, April 7, 1995, Proceedings (7 pages)

Stochastic optimization and simulation: An ex-post decision theory approach, SCS Proceedings European Simulation Multi-Conference, 1994, pp. 52-62

A Dynamic Production Model for a Reproducible Resource: Cattle Production and Supply Functions, Seminaires IRIA, 1976, pp. 279-296 (with M. Wilkinson)

"The Demand for Frozen Beef and an Optimum Import and Pricing Model", (with A. Shmueli), Israel Economic Association, (in Hebrew), December 1976, 162-176.

Simulation and Models: Tools for Senior management, Organization and Administration (In Hebrew), Oct. 1975, 55-64

Simulation and Models: Tools for Senior management, Organization and Administration (In Hebrew), Oct. 1975, 55-64

"Book Review, H. Theil; Statistical Decomposition Analysis," Behavioral Science, 19, 1974, 417-418.

Transportation Over Time: A System Theory Approach, Proceedings XX International Meeting, TIMS, E. Shlifer (Editor), Tel Aviv, Israel, June 24-29, 1973, 239-243.

## 6. Technical Talks at Meetings and Non Refereed Papers

The International Symposium on Stochastic Models in Reliability, Safety, security and Logistics, (Member of the Scientific Committee, Session Chair), Paper: Strategic Quality Assurance, Published in Proceedings, 346-355, February 15-17, 2005

International Meeting on Performance and Risk Measurement and Supply Chains, Milan, December 2004., Co-Chairman of Meeting. Paper: Risk and Performance Measurement in Supply Chains. (Refereed)

VaR Sensitive Buy-Hold-Sell Strategies, Eighth Viennese Workshop on Optimal Control, Dynamic Games and Nonlinear Dynamics, May 14-16, 2003 (Hartl, Chairman)

Stopping Time Optimization and Financial Assets Management, 12<sup>th</sup> IFAC Workshop on Control Applications and Optimization, Visegrad, Hungary, June 30-July 2, 2003 (Reinhard Neck, Chairman)

Milan, Italian Logistics Association, AIG Forum Logistic, The Valuation of Logistic Infrastructure Investment, October 16-19, 2002

Supply Chains and Maritime Logistics, Israeli Transport and Logistic Association, 10.5.2001, Tel Aviv

SCE (Society of Computational Economics), Annual Meeting, Yale University, June 28. 2001, paper: On the Inverse Range Process and Stochastic Volatility (Proceedings).

Meeting Organizer and Chairman, Space, Frontiers of Interdisciplinary Research and Applications, Bar Ilan University, 1999: Paper—The Hurst exponent and Chaos Detection

IFAC Beijing Conference, July 5-9, 1999, Nonlinear Economics and R/S Analysis (with Pierre Vallois) (also Published in Proceeding of Meeting)

First EURO-Japanese Workshop on Stochastic Risk Modelling for Finance, Insurance, Production and Reliability, Universite Libre de Bruxelles, September 7-10, 1998, R/S and Financial Volatility (with Pierre Vallois)

Computational Economics Workshop, Stern-New York University, January 7-8, 1999, R/S Analysis, Memory and Chaos (with Pierre Vallois)

EURO XVI, 16<sup>th</sup> European Conference in Operations Research, Brussels, Belgium, July 12-15, 1998, Optimal Advertising and Signal Reliability, (with Fouad El Ouardighi)

First Red Sea Finance Theory Conference in Sharm El Sheikh, May 8-11, 1998, R/S, Chaos and Financial Volatility (with Pierre Vallois).

Information asymmetry, conflict and the control of moral hazard through sampling as well as Detecting change through R/S analysis, Intl Conference on Transition to Advanced Market Institutions and Economies, Polish Operational and Systems Research Society (INFORMS, IFORS, IFAC and IIASA), Submitted June 18-21, 1997

Flexibility, Regret and the Control of Inventory, EFTA, 1997 (Hawaii) November

Advertising signal reliability, the repeat purchase process and M/G/Infinity queues, APORS (Association of Asian-Pacific Operational Research Societies, Nov.30 -Dec. 4, 1997, Melbourne, Victoria, Australia

Theoretical R/S analysis and the chaotic behavior of time series, (with Pierre Vallois), Sixth Viennese Workshop on Optimal Control, Dynamic Games and Nonlinear Dynamics, Vienna, May 21-23, 1997

Statistics, Conflict and Control, Plenary Lecture, ORSIS (Operations Research Society of Israel), May 22, 1996

HCM Workshop (Human Capital Mobility EURO Grant) , France, 27-28 of September, 1996: R/S analysis and the control of chaos (with Pierre Vallois)

HCM Workshop Human Capital Mobility EURO Grant), France, 27-28 of September, 1996: Statistics, Conflict and the Control of Quality

Griffith Evans and the Origins of Economic Dynamics, Computational Economics Society Conference, Geneva, June 1996

Inventory supplies with on-going orders and emergency supplies, (with Agnés Sulem), IFAC on Control, Technion, Haifa, Israel 1996

Ex-Post Stochastic Optimization, Robustness and Simulation, (with Soren Nielsen, Computational Economics Society Conference, Geneva, June 1996

EURO XIV, Jerusalem, Israel, The Control of the Range in Dynamic Processes, 1995

Industrial Systems Design, Nantes, Jan 18-20, 1995, Member of the Organizing Committee, Session Chairman and Paper Presentation

Seventh International Symposium on Applied Stochastic Models and Data Analysis, Dublin, Ireland, June 12-15, Member of the Scientific Committee and Paper presentation (with Pierre Vallois)

EFTA 95, INRIA/IEEE Conference on Emerging Technologies and Factory Automation, Paris, France, October 10-13, 1995, Member of the Scientific Committee and Paper Presentation, "The Range Process and the Control of Variability (with Pierre Vallois)

Manufacturing Yield, Supply and Inspection of Quality in a Producer-Supplier Relationship, April 1-4, Euro-Meeting, Marrakech, 1995

A Decision theoretic approach to robust water resources planning (with Soren Nielsen), INFORM National Fall Meeting, New Orleans Meeting, October 29-November 1, 1995

INRIA/IEEE Conference on Emerging Technologies and Factory Automation, ETFA, 10-13 October, 1995, Session Chairman (Monitoring and Diagnosis) and Member of the Scientific Organizing Comm.

INFORMS 95, November 1995, Ex-Post Stochastic Optimization and Water Resource Management (with Soren Nielsen), New Orleans, USA

IFAC 94, Amsterdam, Computational Aspects in Applied Stochastic Control (with A. Sulem) and also Stochastic Control, Time Delays and the Control of Inventory with Multiple On-Going Orders, June 8-12, 1994, and session Chairman

European Simulation MultiConference, June 1-3, 1994, Stochastic Optimization and Simulation: An ex-post Decision Theory Approach, Keynote Speaker, Barcelone and Session Chairman

Workshop on Reliability and Maintenance Modelling, Tinbergen Institute, Amsterdam, Invited Speaker, Human Capital Mobility Program, Paper: The Control of the Range in Random Walks (with P. Vallois), September 29-30, 1994

APMOD, Budapest, Hungarian Academy of Sciences, Hungary, January 3-6, 1993

Member of Scientific Organizing Committee, Symposium on Applied Stochastic Models and Data Analysis, Crete, Greece, May 3-6, 1993, Paper to be delivered on: A Statistical Theory of Control in Random Payoff Games

Statistical Quality Control in a Conflictual Environment, Conference on Applied Probability in Engineering, Computer and Communication Sciences, INRIA/ORSA/TIMS/SMIAI, June 16-18, 1993, Paris

Coloquio Sobre Sistemas Estocasticos Y Aplicaciones Cinvestav Y ESFM-IPN, Mexico City, 26-30 Julio 1993, Papers delivered: (1) Stochastic Modeling: The Art and the Science (2) Statistical Control and Random Payoff Games

Member Scientific Committee, Sessions Chairman and Lecturer for 2 papers, International Meeting of Industrial Engineers, Marseilles, Dec. 1993

France Coordinator, Sessions Chairman, International TIMS Meeting, Alaska, June, 1994 Papers: (1) Supplies Management with Supply Delays (with A. Sulem), (2) Logistics: An Euro/US contrast, (3) Conflict and Controls in the Supply of Quality

Co-Organizer and Co-Chairman, Colloque: Complexity and Industrial Systems, Strasbourg, September 23-24, 1993, Paper delivered: Complexity and the New Industrial Management

Chairman of Workshop, Quality, Maintenance and Reliability, September 14, 15, 1992, European Institute for Advanced Studies in Management, Brussels

The Dynamics Theory of the Investing Firm with Investment and Disinvestment Costs (with Peter Kort), Joint annual conference of the DGOR and OGOR (German Societies of Operations Research), Rheinische Westfalische Technische Hochschule, WTH, Aachen, Germany, September 9-11, 1992

The Control of Quality Incentive Contracts, Fifth International Symposium on Dynamic Games and Applications, Grimentz, Switzerland, July 15-17, 1992

Chairman, Session Factories of the Future II, Re. 8th International Conference on CAD/CAM, Robotics, and Factory of the Future, August 19, 1992, Metz, France, Also paper, The Valuation of Flexible Manufacturing.

Contractual Quality Control, TIMS-ORSA Meeting, Orlando, Florida, April, 1992

Une methode recursive de decomposition des series chronologique, avec R. Tremolieres, pp. 89-93, Actes du 23e Colloque, Structure Economique et Econometrie, Lyon, 23-24 Mai, 1991, A.R.A.E. (Association Rhodaniennne pour l'Avancement de L'Econometrie)

Before, 1992

Manufacturing Economy of Jointly Shared Resources, TIMS-ORSA Meeting, May 1987

Quality Control in Job-Shop Queueing Like Manufactory Processes (with Lie Fern Hsu), TIMS-ORSA Meeting in New Orleans, May 1987

Technology and Manufacturing Cooperatives, IFAC Meeting on Technology and International Conflict Resolution, June 3, 1986.

Quality Control and the Manufacturing Quality Density Function (with M. Posner), TIMS-ORSA New Orleans Meeting, 1987

The Systems Approach to Actuarial Science, Venice International Conference on Control Theory and Economic Policies, Jan. 29-Feb. 1, 1985 (invited paper).

Computers Integration in Job-Shop Management with Applications in Apparel Manufacturing, Production Systems Conference, INRIA, April, 23-26, 1985 (Member of the Conference Organizing Committee and Chairman).

The Theory of the Insurance Firm, Colloque "Regards sur L'Economie de L'Enterprise", U. of Paris X, Nanterre, 22-23, April 1985 (Member of Conference Organizing Committee).

Manufacturing Automation and Management Decision Support Functions, ORSIS Meeting, May 14-15, 1985.

Default Risk and the Probability of Ruin in Mutual Insurance, (with Y. Kahane), Astin Colloquium, Biarritz, France, October 6-9, 1985.

A Dynamic Stock Insurance Firm Model, and Optimization of Dividends: Theory and Computations, May 28-29, ORSIS Meeting, 1984.

Manufacturing Automation: Management and Techniques, INRIA-FNEGE-CESA Manufacturing, Strategy Conferences, Jouy en-Josas, April 24-26, 1984.

International Bidding and Foreign Risk Management, Meeting TIMS-ORSA, San Francisco, May 14-16, 1984. (with Jacques Laurent).

Quality Control and Servicing: An Economic Analysis, 1984, ORSA/TIMS Conference in Dallas, Nov. 26-28.

Diffusion of New Products in Heterogeneous Populations: Incorporating Stochastic Coefficients (with H. Elyashberg and J. Wind), TIMS/ORSA National Orlando Meeting, Nov. 7, 1983.

Quality Control and the Sales Process (with Hau Lee), TIMS/ORSA National Orlando Meeting, Nov. 7, 1983.

A Dynamic Theory of the Insurance Firm, Second Viennese Workshop on Economic Theory and Optimal Control, 1983

Mutual Insurance: A Stochastic Control Approach, Actuarial Meeting April 6-8, Tel-Aviv University, 1981.

Stochastic Models of Advertising, Workshop on Optimal Control Theory, University Wien, October 28-30, 1981.

Intensive Advanced Course on Stochastic Control Systems in Management (with A. Bensoussan), European Institute for Advanced Studies in Management, Brussels, October 12-14, 1981

The Impulsive Control Approach in Management Science: Survey and Prospect (with A. Bensoussan), International TIMS Meeting, Hawaii, 1980.

Regulation of an Insurance Firm with a Compound Poisson Claim Process, (with D. Zuckerman and Y. Kahane), Actuarial Meeting, Tel-Aviv, May 21-23, 1978.

A System Approach to Spatial Planning Under Uncertainty, International Symposium on System Theory and Regional Planning Cagliari Sardinia, Italy, Oct. 9-11, 1978.

"The Israeli Meat Sector: An Econometric Model" (with Amir Shmueli), Presented at the Third Meeting of the Israeli Economic Association, 1977

"Optimal Vehicle Dispatching with Non Stationary Stochastic Arrival Rates" (with M. Robin), XXIII International TIMS Meeting, Greece 1977.

"Optimal Control of Bifurcating Econometric Models" (with S. Sethi), XXIII International TIMS Meeting, Greece 1977.

Two-Facilities Demand Estimation and Locations Under Uncertainty with an Equity Criterion (with M. Desplas), Franco/Israeli Colloquium on Contemporaneous Urbanization and Social Justice, May 1977, Israel

"The Demand for Parks and their Location: Under Uncertainty" (with I. Dayan). International TIMS Meeting, Athens, Greece 1977.

"The Meat Sector: An Econometric Model and Structural Change (with A. Shmueli), Capital Markets and Inflation Proceedings of the Meeting, International Institute of Management, Berlin, December 3-5, 1976.

"Optimal Frozen Meat Imports and Price Support Policies" (with A. Shmueli). Presented at the Second Meeting of the Israel Economic Association, April 1976.

"The Demand for Frozen Meat Imports: An Optimum and a Multi-Commodities Simultaneous Model," Israel Local TIMS Meeting, May 1976 (with A. Shmueli).

"Distributed Parameter Models in Management Science," XX International TIMS Meeting, Japan, 1975, (with A. Bensoussan).

"Random Walk Model of Advertising and Diffusion Approximations," Joint NBER-FRB Conference on Stochastic Control, Washington, 1974.

"Transportation Over Time - A Systems Approach," Paper invited for Control Theory Session; International TIMS Meeting in Tel Aviv, June 1973.

"Simultaneous Production Scheduling and Inventory Measurement," Proceedings, of the Princeton Conference on Information Sciences and Systems, March 22-23, 1973 (1 page).

"Optimal Managerial Coefficients," Proceedings, Northeast AIDS Conference, Boston, May 1972.

"Vehicle Feedback Dispatching in Mass Transit," Paper presented at the fortysecond annual American Meeting of ORSA, TIMS AIIE Societies, Atlantic City, N.J., 1972, Transportation Science Session

"The Implementation of Optimal Control Production Schedules," Paper presented at the Summer Computer Simulation Conference, (SCSC), July 19-21, 1971 (in Proceedings).

"Optimal Implementable of Optimal Control Production Schedules, and Capacity Decisions," (with P. Jacusiel). Paper presented at the Scheduling Session of the International TIMS Meeting, Washington, 1971.

"Towards a Dynamic Urban Management Science," Invited Lecture N.Y. Academy of Sciences, May 4, 1972.

"Optimal Capital Expenditures Decisions," (with D. Mehta). Paper presented at a Joint AFCET-CORS Meeting in Montreal, October 1971.

"N-Products, M-Markets Assignment Problems with Product Mixes," (with Martin K. Starr). Paper presented at the American TIMS Meeting in Los Angeles, 1970.

"Personnel Assignment with Social Choice and Job Constraints," Proceedings of the American Institute of Decision Sciences, 1970.

"A Graph Theoretic Approach to Formal Power," Proceedings of the American Institute of Decision Sciences, 1969.

**Current Research Topics:** Risk Assessment and Analysis in Finance, Insurance, Actuarial Mathematics, Risk Externalities; Market Making, Credit Risk Valuation, Measurement of Risk, Credit Scoring, Environmental Risk-Quality and Control, Industrial Economics in Supply Chain Management; Strategy, Infrastructure Investments, Mathematical Finance, Range Process and Volatility Analysis, Value at Risk and Risk Management; Environmental Management (see also selected papers in review)

**Selected Papers in Review:** Time Value at Risk, Volatility at Risk, B2B Market Making: A Programming Model, Market Making: An Intertemporal Framework, The Valuation of Default Rated Bonds, The Inverse Range Process in a Random Volatility Random Walk, Financial Valuation and Supply Chain Operations-Logistics, Inventory Outsourcing Risk Management (with A. Grando), Strategic Quality Assurance, MSOM, **Note:** Reliability Design and RVar

## 7. Talks At Colloquia And Faculty Seminars (1969-Present):

Institut de Statistique et Recherche Operationnelle (Brussels),  
Ohio State University,  
Brandeis University,  
New York University,  
Brown University (School of Engineering and Applied Mathematics),  
Wharton School of Management,  
University of Texas, Austin  
Tel Aviv University,  
IRIA-Institut de Recherche en Informatique et Automatique, (France)  
University of Bonn (Germany),  
University of Toronto,  
IIM-International Institute of Management, (Berlin),  
Brussels Institute for Advanced Studies in Management.  
Weizmann Institute,  
University of California, Berkeley  
Ben Gurion University,  
University of Wien,  
University of Witwatersrand (Johannesburg),  
University of Tillburg,  
Erasmus University of Rotterdam,

Institut de Mathématique Economique (University of Dijon),  
Ecole Polytechnique Federal de Lausanne (EPFL),  
University of Rochester,  
Case Western Reserve University  
University of Rome  
Brown University, Dynamic Systems Center  
University of Ottawa,  
University of Montreal,  
University of Delaware,  
University of Venice,  
University of Padova,  
Bergamo University,  
University of Fribourg (Switzerland),  
Stanford University, Department of Operations Research  
Rensselaer Polytech. Institute,  
Cornell U.,  
General Motors Research Laboratories,  
UPIM (Metz),  
INRIA-NANCY,  
Louis Pasteur University (Strasbourg),  
Hospital Paul Brousse  
University of Paris I, II, XII, VI.  
Kent State University,  
Haifa University  
Technion  
University of Tours  
Ecole des Mines  
Carnegie Mellon University,  
Harvard University,  
Waterloo University,  
MacMaster University  
University of Washington (Seattle),  
HEC-Montreal,  
Stanford University, (Dept. of Operations Research),  
University of California Berkeley (Production Club),  
Ecole Normal Supérieure de Cachan,  
U. de Geneve,  
Insitute for Advanced Studies (Polytech Ins.) in Mexico City,  
UAM (department of Mathematics, Mexico),

Annahuac (Department of Actuarial Studies, Mexico),  
Concordia University,  
Institute of Mathematical Finance, Montreal,  
University of Sfax, Tunisia  
Polytech University of New York (Brooklyn)  
SDA Bocconi (Milan) and others.

## 8. Significant Citations

B.S. Engineering with distinction,  
Management thesis award (MBA), New York University  
MBA with honors, New York University  
Statistics Honor Society, New York University  
Founders Day certificate –For highest bracket of scholastic achievement in Ph.D. studies., NYU  
Wharton Lauder Prize for Insurance Paper

## 9. Editorial and Editorial Board Membership

### *Current:*

1999-Present, Area Editor (Finance and Risk Management), Applied Stochastic Models in Business and Industry  
1990-Present, Editorial Board Member, Computational Economics  
1988-Present, Editorial Board Member, Production Planning and Control  
2001-Present, Scientific Board Committee, Risques

### *Past:*

1985-1999 Applied Stochastic Models and Data Analysis Wiley. (1985-1999)  
1985-2005: Editorial Board and Associate Editor RAIRO (Revue Automatique et Recherche Operationnelle)  
1987-1996 Associate Editor, Operations Research (US),  
1975-1883: Member of the Manuscript Review Committee of Behavioral Science

**Reviewer:** Opsearch, Management Science, Journal of Banking and Finance, Decision Science, Zentralblatt fur Mathematik und ihre Grenzgebiete, New York Academy of Science, Operations Research, Econometrica. European Economic Review, Revue Economique, Applied Probability, European Journal of Operations Research, IIE Transaction, IEEE Transactions on Reliability, IEEE Transactions on Automatic Control, Computers in Operations Research and many others.

## Research Fellowships, Grants and Contracts

Proposal for the Fund for the City of New York to Test the Joint Use of Computer Data Systems in Collective Bargaining in the City of New York." (with D.B. Straus and E.S. Savas), 1973. Funded, Co-Principal Investigator (over 150,000 USD)

"Computers in Collective Bargaining and Mediation--The Adelphi Experience." (with D.B. Straus and E.S. Savas) 1973. developed a concept of CAN (Computer Aided Negotiation) as well introduced a structured approach to Data Mediation for Environmental and Arbitration Issues.

American Arbitration Association, Report to the Hudson Basin Project on the grant received for developing an experiment in conflict resolution involving environmental issues, (with D.B. Straus, President of the American

Arbitration Association and the Institute for Arbitration) under grants supported by the Lucius Eastman Foundation, and the Hudson Basin Project of the Rockefeller Foundation, 1974. Acted over a period of time as co-Investigator, Co-PI (Columbia University). Through this research grant I was involved (with Donald B. Straus) in numerous interventions with the EPA (Environmental Protection Agency in New Jersey, BLM-Bureau of Land Management in Washington, OTA-Office of Technical Assessment in the Senate and other institutions and groups in a number of issues spanning the OPS—The defunct Offshore Power System of Westinghouse). Subsequently, I acted as a Consultant to the American Arbitration Institute in a number of capacities. Noteworthy research output has included Data Mediation in Collective Negotiations, Probabilistic Environment Impact and Assessment (out of which many papers were published).

EEC Contract ERB 4050 PL 930200, on Decision Support for Maintenance Management and Quality Control (Human Mobility Program, 1993-1995, (1 Million Ecu, equivalent to 1 Million Dollars). First Network of Excellence in Europe on topics above, pulling together leading Universities from the Europe of 6. Output was meetings and Workshops Organizations, Participations to Seminars throughout Europe, Special Issue Publications and a greater awareness of risk in operations in education and research.

CERESSEC Support for Research in Optimization (yearly grants on topics spanning risks and computational finance), (approximately 15,000 Dollars per year, from 1990 to 2005). In addition, regular grants provided by the ESSEC Research program for ex-post publications (rather than research grants provided ex-ante as in the US).

Consulting Research (see consulting activities)

## **Teaching and Educational Innovations**

### **Courses Developed in Applied Risk, Insurance and Financial Mathematics**

1. Incomplete Markets Finance, Polytechnique University (FE 780)
2. Applied Corporate Finance, Polytechnique University (FE 720)
3. Computational Finance (ESSEC Masters in Technical Finance)
4. Financial Risk Management (ESSEC Masters in Technical Finance)
5. Stochastic Models and Control in Insurance/Finance (Ph.D Course delivered at Institute of mathematical Finance in Montreal for all Universities in Montreal. Together with Profesor Stylianos Perrakis)
6. Actuarial Science and Risk Mathematics (Bar Ilan University, Department of Mathematics, Mathematical Finance Masters Program).
7. Stochastic Calculus and Derivatives Finance (Ph.D Course delivered at Institute of mathematical Finance in Montreal for all Universities in Montreal. Together with Profesor Stylianos Perrakis)
8. Mathematical Modeling in Business and Applications (Case Western Reserve University, University of Washington, Business Schools at Bar Ilan and ESSEC).
9. Stochastic Dynamic Programming and Applications (Case Western Reserve University, Bar Ilan department of Mathematics and ESSEC Advanced MBA program).
10. Decision Theory Under Uncertainty and Games, ESSEC, Bar Ilan University (Business School and department of Economics).
11. Investment Finance and Pension Funds (University of Paris Sorbonne, Ph.D Program)

**12. Stochastic Models in Finance and Derivatives (Bar Ilan University, Department of Mathematics)**

Numerous workshops on options valuation, computational finance and risk mathematics and management delivered at ESSEC (Masters in Financial Techniques), Bar Ilan Departments of Economics and Mathematics, Concordia U. (Ph.D. Program in Math Finance), U. of Paris (Sorbonne) and Case Western Reserve University.

**2. Courses Developed in Applied Probability, Optimization and Operations**

1. Supply Chain Management (Full program of 40 days developed and implemented for executives-Middle Management at ESSEC)
2. Supply Chains and Operations Risk (ESSEC, Executive Education)
3. Reliability, Maintenance, Replacement and Quality Control
4. The Management of Quality and its Control (ESSEC, Case Western Reserve University, University of Washington, Seattle).
5. Risk Management in Industrial and Logistic Systems (ESSEC, Bar Ilan-Logistics)
6. Cybernetics (Columbia University, Graduate School of Business)
7. Automation and Topics in Advanced Production (Case Western Reserve University as well as Ecole des Mines, Department of Productique, Nantes)
8. Computer Models in Operations Management (Case Western Reserve University)
9. Stochastic Models in Manufacturing and Automation,
10. Strategie Productique (Ecole des Mines)
11. Strategic Issues in Logistics Bar Ilan, Masters Program in Logistics
12. Strategic Technologies and Innovation Management (Bar Ilan, Masters Program in Logistics).
13. Industrial Risk Management (Recently in many programs in ESSEC, Bar Ilan)

As well as other courses in Probability Theory and Statistics, Linear Programming, Queueing Theory and Simulation, Production and Operations Management, Systems Management and Cybernetics (Columbia University), Introduction to Operations Research Models, Systems and Models in Operations Research and Logistics, Dynamic Programming & Graphs, Stochastic Processes, Queueing Theory & Simulation (Columbia University, Hebrew University and ESSEC), Mathematical Models in Marketing, Inventory Control and Management, Manufacturing, Reliability theory and Maintenance, and numerous other courses on selected topics in industrial systems, design, control, management and business, Logistics, Strategic Technologies and Industrial Management, etc.

## Teaching Activities

### 1. *Graduate Ph.D Students* from the following institutions:

- a. Columbia University
- b. Case Western Reserve University,
- c. Hebrew University
- d. University of Tillburg (Holland)
- e. ESSEC (France)

### 2. **Current (Master) Theses under supervision:**

- \* Intra Day Data Models Estimation and Numerical Techniques using Baxter Estimation techniques.
- \* Predicting options volatility of the Maof (Essentially empirical thesis)
- \* Estimating Credit Risk in the Construction Industry--A Comparative Analysis;
- \* Genetic Algorithms to Estimate the Yield Curve of Israeli Bonds (Parametric and Stochastic Models)
- \* Structure Products Valuation in Israel's Financial Markets
- \* Demand Driven Market Making (2 Theses, one empirical, the other based on Linear Programming).
- \* Financial Valuation of Inventory Outsourcing
- \* Market Making, stock trading and intraday price behavior using statistical techniques and Copula
- \* Bank Credit cost comparisons and Scoring Techniques

## 2. CURRENT GRADUATE ACADEMIC PROGRAMS IN MANAGEMENT DEVELOPED AND ADMINISTERED

1. Supply Chain Management, ESSEC, Degree Granting in Continuing Education (40 days program), ESSEC, France (Current)
2. Mathematical Finance, Masters degree program, Bar Ilan University, Department of Mathematics (Currently under my direction with 40 Masters Students, 20 currently writing their theses under my supervision).
3. Polytechnique University, Advanced degree in Financial Engineering (under preparation)

In addition has served in numerous instances on promotion and University committees at ESSEC, Columbia, Bar Ilan, Hebrew University etc. and assumed Chairmanships of departments (Logistics, Production and Services at ESSEC, Mathematical Finance at Bar Ilan) and contributed as well as organized many sessions in international meetings.

Founded an Excellence Network (funded by the EU subsequently) on Risk, Quality and Maintenance etc. (see recent sponsored research). This network of Excellence started first by a Meeting in Brussels that I organized and has been operating under a EURO Grant of 1 Million Ecus (Dollars).

## **Boards, Service and Leadership Positions**

2007

2006

2005

2004, December, CO-CHAIRMAN AND CO-Organizer: Performance and Risk Measurement: Operations, Logistics and Supply Chains” The CRITOM - Centre for Research in Innovation, Technology and Operations Management of Bocconi University and the Risk Externality Research Project, ESSEC, December 8-10, 2004 (Following the Meeting, Co-Organizing a EURO led International Working Group on the Meeting’s topic.

1999 Organizer and Chairman of a Meeting on Space and Mathematics at Bar Ilan University, Franco-Israeli Scientific Cooperation, Joint Academic-Industry Meeting.

1998-2003, Chairman and Founder of the Foundation for the Advancement of Excellence in Development Towns and Distressed Neighborhoods, Israel (Foundation I founded with personal grants and Government Grant which I closed in 2004 following the Minister of Science adoption the Foundation’s purposes and budgeting it directly through the Ministry)

1996-1998: Ministry of Foreign Affairs: Senior Political and Economic Advisor to the Minister of Foreign Affairs of Israel, Economic Development and Peace Process. In this capacity I was involved in many economic, political and other issues relating to all facets of the Minister’s responsibility. Noteworthy project, Economic Development and the Palestinian Authority, People to People Directorate, MENA Meeting in Cairo (Middle East North Africa Economic Meetings) and others.

1991-1996: Ecole des Mines, Productique Department-Pedagogical Advisor and Professor, Nantes. Has developed the Ecole des Mines Program on Productique (Production and Automation) as well as implemented some of its key features. Subsequently, remained as Adjunct and Occasional Professor (till my assuming a position with the Minister of Foreign Affairs of Israel).

1986-1991: Member Board of Directors, KOOR INDUSTRIES, Largest Israeli Industrial Conglomerate, 18 percents of Israel’s industrial output. Member of the Executive Investment Committee, Member of the Executive Labor Committee, Member of the Long Range Planning Committee, Chairman Industry and Labor Committee (from 1989-1991).

1984-1991

Advisor to Mr. Israel Keysar , Chairman of the Federation of Labor, Histadruth as well as Member of many commissions related to the Histadruth Responsibilities (For example, planning committee for the decentralization of Kupat Holim, the Health Care Organization of the Histadruth, Economic committees and Advisor to the General Secretary of the Federation of Labour of Israel, Advisor and Active Consultant of Hevrat Ovdim—The Economic Arm of the Histadruth –at the time 31 percents of Israel’s economic activity. Contributed many ideas on Cooperative Industries, Intra-Markets Organizations etc. Served as well on numerous working and task groups.)

1985-1989 : The Institute for Social Labour Research, Tel Aviv University, Board Member.

1978-1983 (Elective Position)

Member of the Executive of the Jewish Agency and the World Zionist Organization (Ministerial Rank) and Head of Department whose responsibility focused essentially on Worldwide Oriental Origin Communities as well as the Launching and the Management of a Future Leadership from Development Towns and Discredited Neighborhoods. Essential results under my leadership—4800 Persons were financed to study in Universities in an organized and supported manner.

Member of the Presidency Board of the World Sephardi Federation,

Member of the Board of Governors, Haifa University,

Member of the Board of World Trustees Keren Hayessod (Fund Raising Arm of Jewish World outside the USA)

Member of the Board of Governors of the Jewish Agency

Co-Chairman, Management Committee of the Board of Governors of the Jewish Agency.

1982-1984: Member National Assembly for Arts and Culture

1982-1984 Member National Assembly for Social Security

1982 Senior Advisor for Research and Planning to the Minister of Work and Welfare.

1981-1983: Member Board, Shlomi Education Center, Member Board, Moadon Shalom (on Mental Health)

1978-1980: Member of the Government Committee for the Creation of a Science Based City in the Galilee (President Katzir, Chairman), Appointment by the Minister of Industry and Commerce

1977-1978: Member of the Committee for Israel-EEC Agreements (Ministry of Industry Appointment)

1976-1977: Member of Falk Economic Research Institute for Israel.

1973: TIMS (The Institute of Management Science) Council Member (Israel).

## **Consulting**

2000, 2001, 2002, The Israel Port Authority, Infrastructure Investment Valuation, (Developing financial and economic tools for the valuation of port investments in infrastructure—a 2.5 Billion dollars investment program). Essential contribution was to refine their cash valuation methods, introduce the concepts and techniques of real options and foremost provide an economic and financial approach to valuing investments in national infrastructure.

1999-2000, Ukraine: Industrial Transition and Government Restructuring (European Expert to the Government of Ukraine, EU, UEPLAC). Follows a 5 year intervention in Ukraine (financed by the Ministry of Foreign Affairs of France) in educating Professors of Ukraine to the concepts of Economic and Financial Markets. Subsequently, under contract with BCEOM—a leading consulting firm, the European Union has set up a group to support the Ukrainian Government in developing a rational government organization in the Prime Minister Office. Was involved through UEPLAC at the highest level of Ukraine (Prime Minister Office when the current President of Ukraine just moved from the the Ukraine Central Bank to being the Prime Minister).

2000-2001, SNAPSHOT (Computer and Telephony Security), (This company develops systems for secure communications through telephony, both land and WAP systems. My involvement was both on strategic orientation and direction for market penetration).

2001, Consultant to Tours-Poitiers, France, Graduate School of Business, On the construction of a Supply Chain Management Program

1999, Israel Air Force Consultant, Maintenance Project, (In particular pertaining to the use of new techniques for the maintenance of aircrafts). Extensive reports were prepared and distributed. Evaluation of proposals made to Israel's Air Force by Logistic Institutes in the US.

1995-1997- Senior Advisor to the Ministry of Foreign Affairs and could not therefore be involved in any consulting activities

1991, TOMECHANIC (France), involved in assessing their introduction of an ERP system which was contracted with a consulting firm. Tomecanic is a leader in the production of construction tools.

1992, Consultant, La Poste, France, Projet Platine, (Simulation of Mail Flows. Consulting ended in the construction of a simulation program to assess the amount of time certain mail traffic take to reach their destinations)

1990-1991, Consultant The League of Development Town Mayor in Israel, (Essentially policy and politically motivated, to help local government assume a constructive role in their economic development)

1989, 1990, Consultant Aerodan, mostly consulting relating defence systems, filtering and detection.

1990, Consultant, Imelsa Corp. (Spain), Evaluation of a plant producing computer chips using certain chemical laying processes

1989-1990, Consultant Israel Air Force, Problems related to spare parts replenishment, aircraft maintenance and the introduction of risk sensitive procedures in operations management..

1989, 1990, Consultant Tadiran Systems Division (Star War Projects), Various applied probability projects and in particular Flexible Manufacturing Systems Design and Simulations (Using Queue Networks, Closed and Open Network of Queues Modeling and dedicated software).

1988, Consultant to The AIMS Committee (Aerospace and Industry Manufacturing-- Boeing), Evaluation of Boeing's industrial development post 747-400. (Consulting while Chaired Professore at the University of Washington, Seattle

Consultant to the Boeing Military Flexible Manufacturing System Design for its Kansas Minuteman Plant (essentially on techniques for Intra-FMS quality controls).

1986, Consultant, Hasneh-- Insurance Company, (Insurance and Actuarial calculations and simulations). Extensive data analysis techniques and statistical simulation based on the data bank available at the insurance company. These projects led to a software system EIS (Executive Insurance System) for the automatic analysis of insurance price formulas. Software was used in other consulting, educational and research activities.

1985, Consultant, Tadiran Electronics, (Military Communication Systems, Starwar projects on Command and Control). My involvement required essentially the calculation of the hit probabilities as a function of the number of launches. Program was discontinued subsequently subject to US pullout from the project.

1978-1982: Officially in Public Office and would not be involved in Consulting Activities.

1984, S.E.S. Computers in Industry, (Scientific Advisor to the Board and active consultant). Involved in one of the first applications of micro computers in tracking, monitoring and data management in industrial plants. Essentially developing concepts for data collection on shop floors through small and dedicated computers and relaying the information selectively to management. Concepts of data incentives management.

1974, Chemical Bank, New York, Introduction of operational controls and techniques in Banking services. (Lock Boxes, Check Processing, Checks Flows and Transport across Branch Banking)

1972, 1973, Ministry of PTT (Post Office and Telecom), France, Launching of CESMAP –Engineers education in Post Office and Telecom Management, Contributed to its founding as well as participated on numeros research issues that were launched through the Telecom's school

NOTE: The following replicates my referred papers publications organized in two essential research activities: Risk and Finance and Risk—Environment and Operations.

## **Risk, Insurance and Finance Papers in Refereed Journals**

Value at Risk and Inventory Control, *European Journal of Operations Research*, 2005 (available on line, official date June 2005)

The Economic Valuation of Logistic Investments and Air Traffic Supply Chains, ICAO, May 2003

The Inter-Event Range Process in Birth Death Random Walks, (Pierre Vallois and C.S. Tapiero) *Applied Stochastic Models in Business and Industry*, –2001

Yield and Control in a Supplier-Customer Relationship, *International Journal of Production Research*, vol 39, no.7, May2001, pp. 1505-1515

Pension Funds Savings Individuation, (C.S. Tapiero and Assa Birati), *International Advances in Economic Research*, vol 6, no.4, November 2000

Pension Funds Insurance Individuation (C.S. Tapiero and A. Birati), *Math. Methods of Operations Research*, volume 52, Issue 3, 2000

The Inter-Event Range Process and Testing for Chaos in Time Series (C.S. Tapiero and Pierre Vallois), *Neural Network World*, vol 10, numbers 1-2, 2000, 89-99,

Range Reliability in Random Walks, *Mathematics Methods of Operations Research* (C.S. Tapiero and Pierre Vallois), 1997, vol45, no.3

Run length statistics and the Hurst exponent in random and birth-death random walks, *Chaos, Solitons and Fractals*, September 1996 (Tapiero C.S. and Pierre Vallois)

Moments of an amplitude process in a symmetric random walk, (P. Vallois and C.S. Tapiero), *RAIRO*, 1995

Computational Aspects in Applied Stochastic Control (A. Sulem and C.S. Tapiero), *Computational Economics*, 1994 (52 pages)

Stochastic Control: From Theory to Practice, *Euro. J. of Operations Research*, December 1993

Premium Allocation and Risk Avoidance in a Large Firm: A Continuous Model, *Insurance Economics and Mathematics*, L. Jacque and C.S. Tapiero, 1990

The Utility of Manufacturing Cooperatives, *Journal of Economics Dynamics and Control*, 1989 (13 pages)

Insurance Premium Allocation and Loss Prevention in a Large Firm: A Principal Agent Analysis, *Studies in Banking and Finance*, J.Laurent and C.S. Tapiero., vo 16, 1988, pp. 231-245

Joint Insurance and Capitalization Costs, *Insurance: Economics and Mathematics*, with L. Jacque, 1988

Warranty Reserving, *Naval Research Logistics Quarterly*, ( M.J. Posner and C.S. Tapiero), vol. 35, 1988, 473-479

"Contingent Claim Contracts and Inventory Control," (P. Ritchken and C.S. Tapiero). *Operations Research*, vol 34, December 1986, pp. 864-870

Insurance Premiums and Default Risk in Mutual Insurance, *Scandinavian Actuarial Journal* (Tapiero C.S., Y. Kahane and J. Laurent). 1986, pp. 82-97

The Expected Cost of Ruin and Insurance Premiums in Mutual Insurance, *Journal of Risk and Insurance*, 1986, (Tapiero C.S and L. Jacque)

"Warranty Design Under Buyer and Seller Risk Aversion", *Naval Research Logistics Quarterly*, (P.R. Ritchken and C.S. Tapiero) , vo. 33, 1986 33, 657-671.

"A Dynamic Stock Insurance Firm Model and Dividend Optimization," *Journal of Large Scale Systems*, 1985.

"Mutual Insurance, A Diffusion Stochastic Control Problem," *Journal of Economic Dynamics and Control*, 7, 1984, 241-260.

Optimal Investment-Dividend Policy of an Insurance Firm Under Regulation, (with C.S. Tapiero, D. Zuckerman and Y. Kahane). *Scandinavian Actuarial Journal*, 1983, 65-76.

Optimum Investment Policy of an Insurance Firm with a Compound Poisson Claim Process, *Insurance: Economics and Mathematics* (with C.S. Tapiero and D. Zuckerman) 2, 1983, 103-112.

Impulsive Control in Management: Prospects and Applications (A. Bensoussan and C.S. Tapiero), *Journal of Optimization Theory and Applications*, vo. 37, no.4, Aug. 1982, 419-442

The Israeli meat Sector: An Econometric Model, *European Review of Agricultural Economics*, vol. 9, 1982, 65-86 (A. Shmueli and C.S. Tapiero)

"Optimum Excess-loss Reinsurance, *Stochastic Processes and Applications* (S.S. Tapiero and D. Zuckerman), 12, 1982, 85-96.

"An Optimal Control of Mutual Insurance Jump Processes," *Astin Bulletin*, 13, 1982, 13-21. .

Finding Common Seasonal Patterns Among Time Series: An MDS Approach, *Journal of Econometrics*, vol. 12, 1980, pp. 1-11 ( A. Raveh and C.S. Tapiero)

"Optimum Claim Truncation of an insurance firm with a Compound Poisson Claim Process. A Diffusion Approximation, *Rairo*, May 1980 Vol. 14, 129-136 (C.S. Tapiero and D. Zuckerman).

"The Optimal Control of a Cash Balance Problem: Compound Poisson Demands, *Journal of Banking and Finance*, 4, 1980, 345-352 (C.S. Tapiero and D. Zuckerman).

Linear Breakeven Analysis Under Risk, *Operation Research Quarterly*, vol. 26, 1975, pp. 847-856 (M.K. Starr and C.S. Tapiero)

Estimating the Value of Contracts, (Philippe de Loze and C.S. Tapiero), *Rairo*, Vol. 14, 1974, 33-49.

Optimum Price Switching, *Int. J. of Systems Science*, 1973, vol. 5, no.1, pp. 83-96

Investissement, Utilisation de Capacité Productive et Dépréciation: Politiques Optimales, *Revue Economique Française*, 1973, 442-459, (A.R. Leinekugel Le Cocq and C.S. Tapiero)

## **Operations, Environment and Risk Papers in Refereed Journals**

Environmental Quality Control and Environmental Games, *Environmental Modeling and Assessment*, (Kluwer), January 2005, vol 9, issue 4, pp. 201-206

Modeling Environmental Queue Control: A Game Model, *Stochastic Environmental Research and Risk Assessment*, February 2005, vol 19, no.1, pp. 59-70

Value at Risk and Inventory Control, *European Journal of Operations Research*, 2005 (available on line, official date June 2005)

Dynamic Online and Offline Channel Pricing for Heterogeneous Customers in Virtual Acceptance, G. Fruchter and C.S. Tapiero, *International Journal of Game Theory*, June 2005 (publication date)

Environmental Quality and Satisficing Games, *HAIT J. of Engineering Systems*, 2005, January

Yield and Control in a Supplier-Customer Relationship, *International Journal of Production Research*, vol 39, no.7, May2001, pp. 1505-1515

Ex-Post Inventory Control, *Int. J. of Production Research*, vol 38, no.6, April 2000, pp. 1397-1406

The NBD repeat purchase process and *M/G/Infinity* queues, *Int. J. of Production Economics*, 63 (2000) 141-145

Quality and the Diffusion of Innovations, *European Journal of Operations Research*, 106, 1998, 31-38 (Fouad El Ouardighi and C.S. Tapiero)

The economic effects of reliable and unreliable testing technologies, *ICJM*, 1997

Modèles de diffusion en marketing (Fouad El Ouardighi and C.S. Tapiero) , *Recherche et Applications en Marketing*, December 1997

Qualité et diffusion des produits, (Fouad El Ouardighi and C.S. Tapiero), *Recherche et Applications and Marketing*, 11, no.4, 1996, pp. 35-51

Toujours plus de qualité, *Personnel (France)*, Décembre 1995, pp. 47-48

The supply and the control of quality in supplier-producer contracts, (Diane J. Reyniers and C.S. Tapiero), *Management Science*, October-November, 1995, vol 41, n0.10, pp. 1581-1589

Acceptance sampling in a producer-supplier conflicting environment: Risk neutral case, *Applied Stochastic Models and Data Analysis*, 1995, vol. 11, 3-12

Contract design and the control of quality in a conflictual environment, (Diane J. Reyniers and C.S. Tapiero), *Euro. J. of Operations Research*, 82, 2, 1995, pp.373-382

The Qualities of Manufacturing and Economic Quality, *OR Insight*, 1994

Complexity and the New Industrial Management, *OR Insight*, 1994

Stochastic Modeling: Art and Science, *Int. J. of Engineering Continuing Education*, 1994

Inspection of an Unreliable Flexible Manufacturing System: with Repairable Parts and Non Negligible Inspection Times, *Production Planning and Control*, LF Hsu and C.S. Tapiero, 1994

Supply delays and the inventory stocking policy, ( A. Sulem and C.S. Tapiero), *Int. J. of Production Economics*, 1993

Network of Queues Modeling in Flexible Manufacturing Systems: A Survey, *RAIRO*, with L.F. Hsu and C. Lin, and C.S. Tapiero, vol. 27, 1993, pp. 1-45

Integrated Quality Control and Process Maintenance (L.F. Hsu and C.S. Tapiero), *International Journal of Production Research*, 1992

WIP and CSP-1 Quality Control in a Tandem Queueing Production System, *Computer & Mathematics with Applications*, 1992 (G. Tsiotras and C.S. Tapiero)

An Economic Model for Determining the Optimal Quality and Process Control Policy in a Queue Like Production System, *International J. of Prod. Res.*, vol. 28, 1990, pp. 1447-1457

A Pooled Computer Center as a Risk Management Tool, *Computers in Operations Research*, with G. Ariav and Y. Kahane and C.S. Tapiero, 1990

Quality Control of an Unreliable FMS with Scrapping and Infinite Buffer Capacity, *International Journal of Flexible Manufacturing Systems*, ( L.F. Hsu and C.S. Tapiero), 1989

Technology and the Manufacturing Process, *Production Planning and Control*, 1989

The Servicing/Capacity Quality Control Problem, Chandromohan and P.R. Ritchken and C.S. Tapiero, *AIIE Transactions*, September. 1989, vol. 21, pp. 213-220

Quality Control and Product Servicing, European Journal of Operation Research, Hau Lee and C.S. Tapiero, vol. 39, 1989, pp. 261-273

Quality Control of the M/G/1 Queue, European Journal of Operations Research, Lie Fern Hsu and C.S. Tapiero, 1988

The Manufacturing Quality Density Function and Quality Control, International Journal of Production Research, (M. Posner and C.S. Tapiero), 1988

A Bayes Approach to the Quality Control of an M/G/1 Job Shop Queue, Naval Research Logistics Quarterly, Lie Fern Hsu and C.S. Tapiero, 1988, vol. 35, pp.327-343

Quality Control of an Unreliable Random FMS with Bernoulli and CSP Sampling, International Journal of Production Research, Lie Fern Hsu and C.S. Tapiero, vol. 26, 1988, pp. 1125-1135

Computer Backup Pools, Disaster Recovery and Default Risk, Communications. ACM, (with Y. Kahane, Seev Neumann and C.S. Tapiero), vol. 31, Jan. 1988, pp.78-83

Maintenance of the M/G/1 Queue Like Job Shop, Lie Fern Hsu and C.S. Tapiero, Queueing Systems: Theory and Applications, 1987

"Learning and Quality Control", IIE Transactions (American Institute of Industrial Engineers Journal), Dec. 1987, vol. 19, pp. 362-370

Product Failures, Manufacturing Reliability and Quality Control: A Dynamic Framework, INFOR (Canadian Journal of Operations Research), (A. Reisman, P. Ritchken and C.S. Tapiero), 1987

Quality Control of the M/M/1 Queue, International Journal of Production Research, Lie Fern Hsu and C.S. Tapiero, 25, 1987,447-455

Brownian Model of Return Migration and the Inverse Gaussian Distribution of Sojourn Time, Applied Stochastic Models and Data Analysis, 1987, (Tapiero C.S. and N. Toren)

"Risk Behavior and Optimum Advertising with Stochastic Sales Response,(Tapiero C.S., Y. Elyashberg, Y. Wind, *Optimal Control: Applications and Methods*, 1987

"Quality Control and the Sales Process, Naval Research Logistics Quarterly," (Hau Lee and C.S. Tapiero), 1986, 569-587

"Continuous Quality Production and Machine Maintenance", Naval Research Logistics Quarterly, 1986, 33, 489-499

"Quality Control by the Control of a Discrete State Stochastic Process," International Journal of Production Research, 1986, 24,927-937

"Reliability, Pricing and Quality Control," European Journal of Operations Research, (A. Reisman, P. Ritchken and C.S. Tapiero), 1986,

Randomized-Quality Control of a Two Stage Part Machining Process with Blocking, IEEE Transactions on Reliability (Lie Fern Hsu and C.S. Tapiero). 1986, R-35, 455-458

"Computerized Integrated Management in Knitting with the SES Industrial System", Production Systems, AFCET, France, 1985.

The (N,T) Replacement Rule, "IEEE Transactions on Reliability, (P. Ritchken and C.S. Tapiero), October 1985, R-34,NO.4, 74-761984

"A Simple Vehicle Dispatching Policy with Non-Stationary Stochastic Arrival Rates, Transportation Research, Vol. 16B, 1982, 449-457. , M. Robin and C.S. Tapiero

Stochastic Model of Consumer Behavior and Optimal Advertising, Management Science, vol. 28, Sept. 1982, pp.1054-1064

"A Stochastic Diffusion Model with Advertising and Word-of-Mouth Effects," *European Journal of Operations Research*, 12, 1982, 348-356.

"Optimal Product Quality and Advertising, *Infor*, 19, November 1981, pp. 311-318.

"Using an Uncertainty Model to Assess Sales Response to Advertising (J. Farley and C.S. Tapiero), *Decision Sciences*, Vol. 12, 1981, pp. 441-455.

"Random Vehicle Dispatching with Options and Optimal Fleet Size, *Transportation Research*, (C.S. Tapiero and D. Zuckerman) vol. 14B, 1980, pp. 361-368.

Cyclicality, Constancy, Homogeneity and the Categories of Qualitative Time Series, *Ecology*, vo. 61, no. 3, 1980, pp. 715-719 ( A. Raveh and C.S. Tapiero)

A Probability Model for the Effects of Distance and the Demand for Multiple Facilities, *Environment and Planning*, vol. 12, 1980

Finding Common Seasonal Patterns Among Time Series: An MDS Approach, *Journal of Econometrics*, vol. 12, 1980, pp. 1-11 ( A. Raveh and C.S. Tapiero)

"Optimal Capacity Expansion of a Deteriorating Facility Under Uncertainty, *RAIRO*, 1980

Optimum Maintenance and Replacement Date of a Machine Under Uncertainty (C.S. Tapiero and I. Venezia), *Journal of Operational Research Society*, Vol. 30, 1979, pp. 457-467.

Vehicle Dispatching with Competition (C.S. Tapiero and D. Zuckerman) *Transportation Research*, Vol. 133, 1979, pp. 207-216.

"A Generalization of the Nerlove-Arrow Model to Multi Firms Advertising Under Uncertainty, *Management Science*, Sept. 1979, 25, 907-915.

"Optimal Location - Size of a facility on a Plane with Interaction Effects of Distance", *European Journal of Operations Research*, Vol. 2 1978, pp. 107-115.

"Time, Dynamics and the Process of Management Modeling", *TIMS Studies in Management Science*, Special Issue on Applied Optimum Control, 1978, pp. 4

Optimum Location-Size of a Facility on a Plane with Interaction Effects of Distance, *European Journal of Operations Research*, vol. 2, 1978, pp. 107-115

"Optimal Advertising and Goodwill Under Uncertainty, *Operations Research*, February 1978, Vol. 26, No. 3, May-June 1978, 450-463.

"A Stochastic Model of Sales Response to Advertising, *Metroeconomica*, Vol. 29, 1977, pp. 159-167.

"Optimum Shuttle Scheduling :A GPSS Simulation", *Simulation*, (John Raggazini and C.S. Tapiero), September 1976, 97-104.

"Optimization of Information Measurement and Inventory Applications", *Infor*, Vol. 14, No. 3, 1976, pp. 50-61.

Accounting for the Probable Spatial Impact of Local Activities, *Environment and Planning*, vol. 8, 1976, pp. 917-926

"Optimal Inventory and Product Quality Control with Deterministic and Stochastic Deterioration--An Application of Distributed Parameters Control Systems", *IEEE Transactions on Automatic Control*, (with Bensoussan C.S. Tapiero and G. Nissen). June 1975, 407-412.

On the Probable Demand for Two Facilities Located on a Line, *Regional Science and Urban Economics*, Vol. 5, 1975, 335-341.

Structural Inference in Organizations, *Journal of Mathematical Sociology*, vol. 4, 1975, pp. 121-130 (with M. Capobianco and A. Y. Lewin)

Optimal Location of a Polluting Plant on a Line Under Uncertainty, *Journal of Regional Science*, vol. 16, no.3, 1975, pp. 367-374 ( J. Paroush and C.S. Tapiero)

"Optimum Control of Sales Force Efforts Over Time", *Management Science*, (John U. Farley and C.S. Tapiero), 21, 1975, 976-985.

"Random Walk Models of Advertising, Their Diffusion Approximations and Hypothesis Testing", *Annals of Economics and Social Measurement*, 4, 1975, 293-309.

"On Line and Adaptive Optimum Advertising, Control by a Diffusion Approximation", *Operations Research*, 23, 1975, 890-907.

The Demand and Utilization for Recreational Facilities: A probability Model, *Regional and Urban Economics*, vol. 4, 1974, pp. 173-185 (Also Translated in Japanese and Publ. in *Expressways and Automobiles*)

Structural Inference in transportation Networks, *Environment and Planning*, vol. 6, 1974, pp. 411-418 (Barry F. Boots and C.S. Tapiero)

Estimating the Value of Contracts, (Philippe de Loze and C.S. Tapiero), *Rairo*, Vol. 14, 1974, 33-49.

"N Machines Simultaneous Maintenance and Replacements with Technical Obsolescence Opsearch, 1973, 10, 1-10.

Production Scheduling with Significant Changeover Costs, *Zeitschrift fur Operations Research*, Band 17, 1973, 33-44.

The Concept and the Measurement of Centrality, *Decision Sciences*, May 1973, pp. 314-328 (A. Y. Lewin and C.S. Tapiero)

Towards a Dynamic Urban management Science, *N.Y. Academy of Sciences*, May 1973, pp. 271-282

Multi-Commodities Transportation Schedules Over Time", *Networks, An International Journal*, 1972, 2, 311-327.

"Affectation Sequentielle de Nouvelles Machines, *Rairo*, Vol. 12, 1972, No. 1, 5763.

The Theory of Graphs in Behavioral Science, *Decision Science*, 1972, 57-81,

"K-Class Assignments", *Rairo*, 1972, Vol. 12, 141-144.

"Optimal Capacity Expansion with Storable Output", *Cahiers du Centre d' Etudes de Recherche Operationnelle*, 1972, 159-168.

"Optimal Simultaneous Replacement and Maintenance of a Machine with Process Discontinuities, *Rairo* , Vol. 11, 1971, No. 3, 79-86.

"Transportation-Location-Allocation Problems Over Time", *Journal of Regional Science*, 1971, 11, 377-384.