

---

Eitan Zemel  
*W. Edwards Deming Professor of Quality and Productivity*  
*Vice Dean for Global Initiatives*

Leonard N. Stern School of Business  
New York University  
44 West 4 Street, Suite 8-69  
New York, NY, 10012  
Tel : (212) 998-0292  
Fax: (212) 995-4227  
E-mail: zemel@stern.nyu.edu



---

### Education

- 1970                    B.Sc. (Mathematics and Physics), The Hebrew University, Israel (with distinction).
- 1972                    M.Sc. (Applied Physics), The Weizmann Institute of Science, Israel.
- 1976                    Ph.D. (Operations Research), Carnegie-Mellon University.

### Academic Positions

- 1976                    Assistant Professor of Decision Sciences, Graduate School of Management, Northwestern University.
- 1978                    Associate Professor of Decision Sciences, Kellogg Graduate School of Management, Northwestern University.
- 1981                    Professor of Decision Sciences, Kellogg Graduate School of Management, Northwestern University.
- 1988-1992            IBM Research Professor, Kellogg Graduate School of Management, Northwestern University.  
  
                          and
- 1990-1992            Professor of Operation Research, The Faculty of Management- The Leon Recanati Graduate School of Business Administration
- 1992-1998            Harold L. Stuart Professor of Operations Research, Kellogg Graduate School of Management  
  
                          and  
  
                          Professor of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Sciences, Northwestern University.
- 1998- present        W. Edwards Deming Professor of Quality and Productivity, Stern School of Business, New York University

2009 (Fall term) Visiting Scholar, Graduate School of Business, Stanford University

Administrative Positions

1985-1987 Chairman, Department of Managerial Economics and Decision Sciences, Kellogg Graduate School of Management, Northwestern University

1988-1998 Founding Director, The Masters of Management in Manufacturing Program, Kellogg Graduate School of Management and McCormick School of Engineering and Applied Sciences, Northwestern University

1998-1999 Founding Chairperson, Department of Operations Management, New York University

1999-2001 Vice Dean for MBA Programs, Stern School of Business, Stern School of Business, New York University

2001 Co Chair: The Stern 2001 Strategic Planning Committee, Stern School of Business, New York University

2001-2005 Founding Chairperson, Department of Information, Operation and Management Sciences, Stern School of Business, New York University

2004: Member, Search Committee, Dean of the undergraduate College, Stern Business School, New York University

2005-2009 Vice Dean for Strategic Initiatives, Stern School of Business, New York University.

Responsibilities include: Executive Programs, Executive MBA, TRIUM Global Executive Program (with LSE and HEC), Stern Global Initiatives, Stern NY Initiatives

2007: Chair: The Stern 2007 Strategic Planning Committee, Stern School of Business, New York University.

2009: Chair, Search Committee, Dean of the Stern Business School

2009-present Member, Academic Priorities Committee, New York University

2011-present Vice Dean for Global Initiatives, Stern School of Business, New York University.

Publications

- E. Balas and E. Zemel, "Facets of the Knapsack Polytope from Minimal Covers," SIAM Journal on Applied Mathematics, 34 (1978), 119-148.
- A. Raviv and E. Zemel, "Durability of Capital Goods: Market Structure and Taxes," Econometrica, 45 (1977), 703-717.
- E. Balas and E. Zemel, "Graph Substitution and Set Packing Polytopes," Networks, 7 (1977), 267-284.
- E. Zemel, "Lifting the Facets of 0-1 Polytopes," Mathematical Programming, 15 (1978), 268-277.
- E. Balas and E. Zemel, "An Algorithm for Large Knapsack Problems," Operations Research, 28 (1980), 1412-1423.
- N. Megiddo, A. Tamir, E. Zemel, and R. Chandrasekaran, "An  $(n \log^2 n)$  Algorithm for the  $k$ th Longest Path in a Tree with Applications to Location Problems," SIAM Journal on Computing, 13 (1981), 328-338.
- E. Zemel, "Measuring the Quality of Approximate Solutions to Zero-One Programming Problems," Mathematics of Operations Research, 13 (1981), 319-332.
- A. A. Mitchell, T. E. Morton and E. Zemel, "A Discrete Maximum Principle Approach to General Advertising Expenditure Model," TIMS Studies in Management Science: Marketing, Planning Models (A. Zoltners, ed.), Amsterdam North-Holland Publishing (1981).
- E. Kalai and E. Zemel, "On Totally Balanced Games and Games of Flow," Mathematics of Operations Research, 7 (1982), 476-478.
- A. Tamir and E. Zemel, "Locating Centers on a Tree with Discontinuous Supply and Demand Regions," Mathematics of Operations Research, 7 (2), 1982, 183-198.
- E. Zemel, "On Search Over Rationals," Operations Research Letters, 1 (1), 1981, 34-38.
- E. Kalai and E. Zemel, "Generalized Network Problems Yielding Totally Balanced Games," Operations Research, 30 (4), 1982, 998-1008.
- E. Zemel, "Polynomial Algorithms for Estimating Best Possible Bounds on Network Reliability," Networks, 12 (1982), 439-452.
- D. Samet and E. Zemel, "On the Core and Dual Set of Linear Programming Games," Mathematics of Operations Research, 9 (1984), 309-316.
- E. Zemel, "An  $O(n)$  Algorithm for the Multiple Choice Knapsack and Related Problems," Information Processing Letters, 18 (1984), 439-452.
- E. Balas and E. Zemel, "Lifting and Complementing Yields all the Facets of Positive Zero-one Polytopes," in: R. W. Cottle, H. L. Kelmanson, and B. Korte (eds.), Mathematical Programming, (Amsterdam: North Holland, 1984, pp. 13-24).

- L. Hakimi, N. Megiddo and E. Zemel, "The Maximum Coverage Location Problem," SIAM Journal on Discrete and Algebraic Methods, 6 (1984), 189-200.
- R. Hassin and E. Zemel, "On Shortest Paths in Graphs with Random Weights," Mathematics of Operations Research, 10 (1984), 557-564.
- E. Zemel, "Probabilistic Analysis of Geometric Location Problems," Annals of Operations Research, 1 (1984), 215-238.
- E. Zemel, "Probabilistic Analysis of Geometric Location Problems (Revised)," SIAM Journal of Discrete and Algebraic Methods, 6 (1986), 189-200.
- N. Megiddo and E. Zemel, "An  $O(n \log n)$  Randomized Algorithm for the Weighted Euclidean One Center Problem in the Plane," Journal of Algorithms, 7 (1986), 358-368.
- E. Zemel, "Random Binary Search: A Randomized Algorithm for Optimization in  $R^1$ ," Mathematics of Operations Research, 11 (1986), 651-662.
- E. Zemel, "A Linear Time Randomizing Algorithm for Searching Ranked Functions," Algorithmica, 2 (1987), 81-90.
- R. Hassin and E. Zemel, "Probabilistic Analysis of the Capacitated Transportation Problem," Mathematics of Operations Research, 13 (1988), 80-90.
- E. Balas, R. Naus and E. Zemel, "A Comment on Some Computational Results on Real 0-1 Knapsack Problems," Operations Research Letters, 6 (1987), 139-141.
- E. Zemel, "Small Talk and Cooperation: A Note on Bounded Rationality," Journal of Economic Theory, 49 (1989), 1-9.
- E. Zemel, "Easily Computable Facets of the Knapsack Problem," Mathematics of Operations Research, 14 (1989), 760-774.
- D. Hartvigsen and E. Zemel, "Is Every Cycle Basis Fundamental?," Journal of Graph Theory, 13 (1989), 117-137.
- I. Gilboa and E. Zemel, "Nash and Correlated Equilibria: Some Complexity Results," Games and Economic Behavior, 1 (1989), 80-93.
- I. Gilboa, E. Kalai and E. Zemel, "On the Order of Eliminating Dominated Strategies," Operations Research Letters, 9 (1990), 85-89.
- T. Kuno, H. Konno and E. Zemel, "A Linear Time Algorithm for Solving Continuous Maximin Knapsack Problems," O.R. Letters, 10 (1991), 23-27.
- Z. Drezner and E. Zemel, "Competitive Location in the Plane," Annals of Operations Research, 1992.
- D. Hartvigsen and E. Zemel, "On the Computational Complexity of Facets and Valid Inequalities for the Knapsack Problem," Discrete Applied Math., 39 (1992), 113-123.

I. Gilboa, E. Kalai and E. Zemel, "On the Computation Complexity of Eliminating Dominated Strategies" Math. of O.R., 18, (1993), 553-565.

Woodruff, D. and E. Zemel, "Hashing Vectors for Tabu Search," Annals of O.R., 41 (1993), 123-137.

C. Ocana and E. Zemel, "Learning From Mistakes: The JIT Principle," Operations Research, 49 (1996), 206-215.

M. Kamien and E. Zemel, "Tangled Webs: A Note on the Complexity of Compound Lying," 1994, Northwestern University

Y. Bassok, R. Anupindi and E. Zemel, "A General framework for the Study of Decentralized Distribution Systems" MSOR, Vol 3, No 4 (2001), 349-368

Y.-J. Chen, S. Seshadri, and E. Zemel, "Sourcing through auctions and audits," Production and Operations Management, 10, (2009) (Lead Article March April issue)

A. Sheopuri and E. Zemel, "A Note on the Greed and Regret Problem", EJOR, to appear, 2010

#### Books:

R. Anupindi, S. Chopra, S. Deshmukh, Y. Van Mieghem, E. Zemel, "Managing Business Flows", 1996, Northwestern University. Third revision due 2011

#### Chapters in Books:

Viral V. Acharya, Jennifer Carpenter, Xavier Gabaix, Kose John, Matthew Richardson, Marti Subrahmanyam, Rangarajan Sundaram and Eitan Zemel, "Corporate Governance in the Modern Financial Sector" Chapter 7 in "**Restoring Financial Stability: Recommendations From NYU Stern**", Eds. Viral Acharia and Matthew Richardson, Wiley, 2009

Viral Acharya, Thomas Cooley, Kose John, Charles Murphy, Matthew Richardson, Anthony Saunders, Anjolein Schmeits, Roy Smith, Ingo Walter and Eitan Zemel, "Is Breaking Up the Big Financial Companies a Good Idea?" Chapter 8 in "**Real-time Recommendations for Financial Reform**" Eds. Viral Acharia and Matthew Richardson, E-book, 2009

#### Software:

"BeerNet" (with Y. Bassok and R. Anupindi), 1997.

#### Management Simulations:

"JDZ Production", 1992, (The Toyota Production System, The Work Cell concept, Synchronization of production systems)

#### Cases:

“The Universal Printing Company”, 1994, Revised 2009, (Process Re-engineering)

“The Ford – Firestone Case”, with Michael Pinedo and Sridhar Seshadri, 2002

“The Toyota Recall” 2010

Numerous short teaching cases, (Capacity Management, Cycle Time Management, Quality Management, Operational Focus, Optimization, Process Improvement), 1990-current

### Professional Activities

Served as Associate Editor for: Manufacturing Review, Production and Operations Management, Management Science, Journal of Operations Management, M&SOM

Member, Lancaster Prize Committee, 1990.

Member, Conference advisory Board, The Utah Operations conference, 2007-present

### Executive Education Activities

1990- current: Instructor and academic director in numerous executive education programs. Specialties include: Process view of the firm, operations management, quality management, customer satisfaction, operations strategy and R&D management.

Currently interested in risk management for financial institutions, focus, and managing complexity

2005-2009: As Vice Dean of Strategic Initiatives, led a major re-structuring of , and supervised the operations of , Stern’s Executive Programs, including the launching of two global joint programs.

2005-2009: As Vice Dean of Strategic Initiatives , led a major restructuring of the governance structure of the TRIUM Global Executive Program, and served as a member of its Supervisory Board.

### Consulting Activities

PPG; Miller Fluid Power; Peat Marwick; Dequesne Light and Power; Danley Machine; Danaley Die Set; Galaxy Carpet Mills; Utili-Corp.; Allan Bradley; NCR; Northwestern Memorial Hospital; SPSS; Grupo Catho; American Medical Association, Household Finance Corp., Kraft Foods, GE Strategic Rail Management, Boise Cascade, Menasha Corp., USG Corp, WRBerkley Corp, NYU Joint Disease Hospital.