Amy Puelz, Ph.D.

Information Technology and Operations Management Department
Cox School of Business **apuelz@cox.smu.edu**
Southern Methodist University, Dallas, TX 75275

Education

Ph.D. University of Nebraska, Lincoln
Summer 1983 to Spring 1988
Major Field: Management Science
Minor Fields: Management Information Systems, Investments, Banking, Computer Science.

B.A. The Colorado College, Colorado Springs
Fall 1976 to Spring 1980
Major Field: Mathematics

Academic Experience

Fall 2006 to Present

Clinical Professor, Southern Methodist University
Courses Taught:
- <u>Statistics</u> - Executive MBA, BBA, Graduate Business Analytics Certificate Program, Graduate Finance Certificate Program
- <u>Decision Modeling</u>, MS Business Analytics, MBA
- <u>Advanced Decision Modeling</u>, MS Business Analytics, MBA and BBA
- <u>Informations Systems Management</u>, BBA
- <u>Advanced Business Programming</u>, BBA
- <u>Decision analysis</u>, Graduate Business Analytics Certificate Program

Fall 1992 to Spring 2001

Assistant Professor, Southern Methodist University
Courses Taught:
- <u>Quantitative Modeling</u>, MBA
- <u>Statistics</u>, MBA
- <u>Advanced Business Programming</u>, BBA
- <u>Operations Management</u>, BBA

Other Responsibilities: Course coordinator – Statistics, Faculty Senate Representative for E.L. Cox School of Business, University Committee on Tenure and Ethics, University Committee on Committees, Faculty Advisor for Women in Business, MBA Policy Committee, Women's Study Council, Faculty Senate Subcommittee on Libraries, Course Coordinator - Operations Management (BBA)

Fall 1990 to Summer 1992

Assistant Professor, University of Memphis
Courses Taught:
- <u>Statistics</u>, Executive MBA, MBA and BBA

Other Responsibilities: Graduate coordinator - MBA program; Chairperson Research Seminars; Network Administration Committee, Credit by Exam Committee

Academic Experience (continued)

Fall 1987 to Summer 1990

Assistant Professor - Emory University

Courses Taught:

Statistics, MBA and BBA

Management Science, MBA

Quantitative Analysis, MBA

Fall 1984 to Summer 1987

Graduate Teaching Assistant, University of Nebraska, Lincoln

Courses Taught:

Quantitative Methods, BBA

Production Operations Management, BBA

Professional Experience

Fall 2010 to May 2011

Consultant, Reliant Rehabilitation, Dallas

Statistical analysis to support managerial business decisions in the long-term care market

Fall 1996 to Fall 2011

Associate, Robert Hughes Associates, Inc., Dallas

Most recent projects: Risk retention review and analysis for the University of Texas System and the University of Miami.

Fall 2000 to Fall 2005

Technical Consultant, Ignite Sales, Inc., Dallas

Financial software design, Data mining analysis, Report design, Marketing analysis.

Fall 1999

Advanced Risk Management Consulting Group, Willis, PLC, Nashville

Technical advisor to Dr. Ken Rusko for enterprise risk management initiative.

Summer 1999

Instructor, JPI, Inc., Dallas

Developed and taught statistics refresher course for real estate analysts.

F**all 1980 - Spring 1983**

Systems Engineer, Electronic Data Systems, Dallas, Texas and Lincoln, Nebraska

Responsibilities: Maintained and upgraded automated loan accounting system; Prepared and presented new database banking system at American Bankers Association National Convention in Los Angeles 1982

Fall 1980

Assistant Instructor, Electronic Data Systems, Dallas, Texas

Responsibilities: Assisted in IBM Assembler instruction and directed Assembler lab at system engineer training school

Grants/Awards

EMBA program top teaching award "Most Valuable Professor", 2015
Faculty Service Award, Delta Sigma Pi a professional business fraternity organization, 2007
Provost's Instructional Technology Grant, Podcasting Studio in Cox's Busniness Information Center, 2006.
Spencer Foundation Summer Research Grant, 1998.
Dorothy Cullum Junior Faculty Research Fellowship, E.L. Cox School of Business, 1997-1998.
Research Grant, Risk and Insurance Management Society, 1995 and 1996.
Teaching Innovation Award, Southern Methodist University, E.L. Cox School of Business, 1995.
University Research Grant, Southern Methodist University, Summer 1995.
E.L. Cox School of Business Research Grant, Southern Methodist University, Summer 1995, 1996, 1998 and 1999.

Published Papers

A Stochastic Convergence Model for Portfolio Selection, sole author, *Operations Research*, 50,3 (2002), 462-476.

Value-at-Risk Based Portfolio Optimization, sole author, *Stochastic Optimization: Algorithms and Applications,* S. Uryasev and P. M. Pardalos, Eds., Kluwer Academic Publishers, 2001, 279-302.

Managerial Use of Debt to Fund Municipal Government Risks, with Robert Puelz, *Decision Sciences,* 28,3 (1997), 745-761.

Bond Issue Structuring, sole author, *The Handbook of Debt Management* G. J. Miller, ed., Marcel Dekker, New York, 1996, 401-432.

The Accuracy of Cross-Validation Results in Forecasting, with Marion G. Sobol, *Decision Sciences*, 26,6 (1995), 803-818.

The Tax-Exempt Portfolio Decision Under Income Uncertainty, sole author, *Financial Services Review* 3,1 (1993), 59-73.

Personal Financial Planning and the Allocation of Disposable Wealth, with Robert Puelz, *Financial Services Review,* 1, 2 (1992), 87-99. The abstract of this article has been published in *The CFA Digest*, Winter 1993, p. 98.

A Multiple-Objective Programming Technique for Structuring Tax-Exempt Serial Revenue Debt Issues, with Sang M. Lee, *Management Science,* 38, 8 (1992), 1186-1200.

Call Provisions and the Cost Effectiveness of Debt Insurance, sole author, *Municipal Finance Journal*, 12, 4 (1991), 23-34. Summaries of this article have appeared in *The Bond Buyer*, February 21, 1992, p. 1; and *Global Guaranty*, March 2, 1992, p. 3.

A Multiple-Objective Decision Support System Framework for Structuring Tax-Exempt Serial Revenue Bonds, with Sang M. Lee, *Municipal Finance Journal*, 10, 2 (1989), 153-172.

Published Proceedings

A Stochastic Risk-Adjusted Return Model for Asset/Liability Portfolio Management, sole author, *Proceedings of the IEEE/IAFE Conference on Computational Intelligence for Financial Engineering*, March, 1997, 36-42.

The Decision to Self-Insure in the Public Sector: An Examination of Cost Tradeoffs, with Robert Puelz, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1996, 199-201.

Statistical Cross-Validation: A Simulation Study with Marion G. Sobol, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1995, 1042-1044.

The Decision to Self-Insure and the Issuance of Municipal Debt, with Robert Puelz, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1993, 267-269.

A Model of Debt Insurance Benefit Given the Inclusion of Call Provisions, sole author, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1992, 240-242.

Direct Estimation of Term Structure and Pricing in the Municipal Bond Market: A Linear Programming Model, sole author, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1991, 129-131.

The Effect of Alternative Minimum Tax Bonds on Optimal Bond Portfolio Choice, with Robert Puelz, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1991, 138-140.

Personal Financial Planning: An Interactive Goal Programming Model Using U-Shaped Penalty Functions, with Robert Puelz, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1989, 327-239.

Business Computer System Maintenance: Some Ideas for a Structured Approach to Project Evaluation, sole author, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1988, 633-635.

Bank Portfolio Gap management - A Dynamic Approach, sole author, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1985, 919-921.

Published Abstracts

Value-at-Risk Based Portfolio Optimization, sole author, Stochastic Optimization: Algorithms and Applications Conference Proceedings, February 2000.

A Decision Model Framework for Enterprise Risk Management, with Robert Puelz, American Risk and Insurance Association (ARIA) 1999 Annual Meeting, August, 1999.

A Stochastic Convergence Model for Portfolio Selection, sole author, Capital Markets: Asset Pricing and Valuation (WPS) Vol.2 No.5 February 4, 1999.

Use of Stepwise Approximation for Investor Utility in Portfolio Selection: Comparison of Alternative Model Forms, sole author, INFORMS National Meeting, October, 1998.

A Stochastic Model for Portfolio Selection Using Stepwise Approximations of Utility, sole author, CSTS-INFORMS National Meeting Program, January, 1998.

Published Abstracts (continued)

Asset and Liability Management: A Stochastic Model for Portfolio Selection, sole author, INFORMS National Meeting Program, Atlanta, November, 1996.

Intergovernmental Risk Pools: Decision Model Frameworks, with Robert Puelz, INFORMS National Meeting Program, October, 1995.

The Debt Financing Process: An Efficiency Evaluation Using DEA, with Brian Downs, ORSA/TIMS National Meeting Program, October, 1994.

Effects of Population Distribution and Sample Size on Cross Validation, with Marion Sobol, ORSA/TIMS National Meeting Program, May, 1994.

Personal Financial Planning and the Allocation of Disposable Wealth, with Robert Puelz, *The CFA Digest*, Winter 1993.

Required Returns on Alternative Minimum Tax Bonds Given Uncertain Taxable Income, sole author, ORSA/TIMS National Meeting, May, 1991, 37.

A Branch and Bound Algorithm for Decision Variable Dependent Integer Variables, sole author, *Proceedings of the Decision Sciences Institute Annual Meeting*, November, 1990, 846.

Other Publications

Value Added with Quantitative Analysis, sole author, *Robert Hughes and Associates Newsletter*, (2001).

Analysis of the Risk Funding Decision, sole author, *Robert Hughes and Associates Newsletter*, (1996).

Paper Presentations

Value at Risk Based Portfolio Optimization, Stochastic Optimization: Algorithms and Applications Conference, sole author, invited paper at the University of Florida's Center for Applied Optimization, Gainsville, February, 2000.

A Decision Model Framework for Enterprise Risk Management, with Robert Puelz, American Risk and Insurance Association (ARIA) 1999 Annual Meeting, Vancouver, August, 1999.

Use of Stepwise Approximation for Investor Utility in Portfolio Selection: Comparison of Alternative Model Forms, sole author, INFORMS National Meeting, Seattle, October, 1998.

A Stochastic Model for Portfolio Selection Using Stepwise Approximations of Utility, sole author, CSTS-INFORMS National Meeting, Carmel CA, January, 1998.

A Stochastic Risk-Adjusted Return Model for Asset/Liability Portfolio Management, sole author, IEEE/IAFE Conference on Computational Intelligence for Financial Engineering, New York, March, 1997.

Asset and Liability Management: A Stochastic Model for Portfolio Selection, sole author, INFORMS National Meeting Program, Atlanta, November, 1996.

Paper Presentations (continued)

The Decision to Self-Insure in the Public Sector: An Examination of Cost Tradeoffs, with Robert Puelz, Decision Sciences Institute Annual Meeting, Orlando, November, 1996.

Intergovernmental Risk Pools: Decision Model Frameworks, with Robert Puelz, INFORMS National Meeting, New Orleans, 1995.

The Debt Financing Process: An Efficiency Evaluation Using DEA, with Brian Downs, ORSA/TIMS National Meeting, Detroit, 1994.

The Use of Municipal Debt to Self-Insure, sole author, Edwin L. Cox Executive Board Meeting, Dallas, January 1994.

The Decision to Self-Insure and the Issuance of Municipal Debt, with Robert Puelz, Decision Sciences Institute Annual Meeting, Washington D.C., 1993.

A Model of Debt Insurance Benefit Given the Inclusion of Call Provisions, sole author, Decision Sciences Institute Annual Meeting, San Francisco, California, 1992.

Direct Estimation of Term Structure and Pricing in the Municipal Bond Market: A Linear Programming Model, sole author, Decision Sciences Institute Annual Meeting, Miami Beach, Florida, 1991.

The Effect of Alternative Minimum Tax Bonds on Optimal Bond Portfolio Choice, sole author, Decision Sciences Institute Annual Meeting, Miami Beach, Florida, 1991.

Required Returns on Alternative Minimum Tax Bonds Given Uncertain Taxable Income, sole author, ORSA/TIMS National Meeting, Nashville, Tennessee, 1991.

A Branch and Bond Algorithm for Decision Variable Dependent Integer Variables, sole author, Decision Sciences Institute, Annual Meeting, San Diego, California, 1990.

Personal Financial Planning: An Interactive Goal Programming Model Using U-Shaped Penalty Functions, sole author, Decision Sciences Institute, Annual Meeting, New Orleans, Louisiana, 1989.

Business Computer System Maintenance: Some Ideas for a Structured Approach to Project Evaluation, Decision Sciences Institute, sole author, Annual Meeting, Las Vegas, Nevada, 1988.

Professional Service

Track Chair – Financial Management: Decision Sciences Institute 2000 annual meeting.

Invited Panel Member: Doctoral Consortium, INFORMS National Meeting, Dallas 1997; Graduate Student Workshop, Southwest Decision Sciences Institute annual meeting, 1995.

Paper Referee: *Interfaces*, 1999, 2000, 2001, 2002; National Science Foundation, 1998; *Decision Sciences*, 1989, 1996, 1997, 1998, 2000; *Proceedings of the Decision Sciences Institute Annual Meeting*, 1990, 1991, 1997, 1998, 1999; Information Resource Management Association, 1991, *Journal of Risk and Insurance*, 1991; *MIS Quarterly*, 1993. *Communications of the AMC*, 1995, *Proceedings of the Decision Sciences Institute Annual Meeting - Southwest Region*. 1995, *Information Systems Research*, 1996.

Paper Discussant/Session Chair: INFORMS Computer Science Technical Section Conference, 1996; Decision Sciences Institute Annual Meeting, 1988, 1989, 1990, 1991, 1992, 1993; ORSA/TIMS National Meeting, 1998, 1991.