

Keely L. Croxton, Ph.D.

518 Fisher Hall • 2100 Neil Ave. • The Ohio State University • Columbus, OH 43210
(614) 292-6610 • croxton.4@osu.edu

EDUCATION

Massachusetts Institute of Technology

Cambridge, MA

- Ph.D. in Operations Research, Operations Research Center, 1999.
- Dissertation Topic: Motivated by applied problems in supply chain management, the dissertation examines generalized, multi-commodity network flow problems with piecewise linear cost functions. This work was advised by Thomas L. Magnanti.
- Recipient of a three-year National Science Foundation Fellowship (1994) and a three-year Eisenhower Fellowship (1997).

Northwestern University

Evanston, IL

- Bachelor of Science, Industrial Engineering, 1992. GPA: 3.8/4.0, Major GPA: 4.0/4.0.
- Selected by Northwestern faculty as The Outstanding Industrial Engineer of the Class of 1992.

PROFESSIONAL EXPERIENCE

The Ohio State University

Columbus, OH

2005-present Associate Professor

2018-present Co-director of Full-time MBA

1999-2005 Assistant Professor

Caliber Logistics

1996 & 1997 Graduate Intern

Hudson, OH

International Paper

1993-1994 Industrial Engineer

Hawthorne, NY

Saturn Corporation

1990-1992 Co-op Engineer

Troy, MI & Spring Hill, TN

HONORS AND AWARDS

- Most cited paper of the decade (2010's) in the *Journal of Business Logistics*, "Ensuring Supply Chain Resilience: Development of a Conceptual Framework," with Timothy Pettit and Joseph Fiksel.
- Emerald Citations of Excellence Award, 2016, for "Ensuring Supply Chain Resilience: Development and Implementation of an Assessment Tool," with Timothy Pettit and Joseph Fiksel.
- Finalist for the Bernard J. LaLonde Journal of Business Logistics Best Paper Award, 2010 for "Ensuring Supply Chain Resilience: Development of a Conceptual Framework," with Timothy Pettit and Joseph Fiksel.
- Winner of the Bernard J. LaLonde Journal of Business Logistics Best Paper Award, 2006 for "Inventory Considerations in Network Design," with Walter Zinn.
- Pace Setters Research Award, Fisher College of Business, recognizing my "outstanding contributions to research," 2006.
- University Career Services Award, recognizing my "outstanding support of student career development and career services programming," 2004.
- Nominated for an Undergraduate Teaching Award, 2002, 2005.

GRANTS

- Co-PI on \$18,700 grant from the Sustainable and Resilient Economy Discovery Theme to pursue research on applying private sector business models for the delivery of water services in Tanzania, 2016.
- Co-PI on \$55,000 grant from The National Center for the Middle Market to pursue research on supply chain resilience for mid-sized firms, 2012.
- Co-PI on \$530,000 grant from the Dow Chemical Company to pursue research in supply chain resilience, 2008.

RESEARCH

Refereed Journal Publications (citation count per Google Scholar: 3258 as of June 2018)

- Schwieterman, M, T. Goldsby and K. Croxton, "Customer and Supplier Portfolios: Can Credit Risk Be Managed in the Supply Chain," *Journal of Business Logistics*, forthcoming.
- Smyth, K., K. Croxton, R. Franklin, and A. Knemeyer, "Thirsty in an Ocean of Data? Pitfalls and Practical Strategies when Partnering with Industry on Big Data Supply Chain Research." *Journal of Business Logistics*, forthcoming.
- Fiksel, J., M. Polyviou, K. Croxton, T. Pettit, "From Risk to Resilience: Learning to Deal with Disruption", *MIT Sloan Management Review*, Winter 2015. (citations: 57) Derivative pieces published in *Delivered* and *Property and Casualty* magazines.
- Pettit, T., K. Croxton and J. Fiksel, "Ensuring Supply Chain Resilience: Development and Implementation of an Assessment Tool." *Journal of Business Logistics*. Vol. 34 (1), 2013, pp. 46-76. **Winner of an Emerald Citations of Excellence Award.** (citations: 196)

- Pettit, T., J. Fiksel and K. Croxton, “Ensuring Supply Chain Resilience: Development of a Conceptual Framework.” *Journal of Business Logistics*. Vol. 31 (1), 2010, pp. 1-21. **Finalist for the Bernard J. LaLonde Best Paper Award. Most cited paper of the decade (2010s).** (citations: 448)
- Wang, P., W. Zinn and K. Croxton, “Sizing Inventory with Correlated Lead Time and Demand.” *Production and Operations Management Journal*. Vol. 19 (4), 2010, pp. 480-484. (citations: 13)
- Eroglu, C. and K. Croxton, “Biases in Judgmental Adjustments of Statistical Forecasts: The Role of Individual Differences.” *International Journal of Forecasting*. Vol. 26 (1), 2010, pp. 116-133. (citations: 73)
- Lambert, D.M., S. J. Garcia-Dastugue and K. L. Croxton, “The Role of Logistics Managers in the Cross-Functional Implementation of Supply Chain Management.” *Journal of Business Logistics*. Vol. 29, No. 1, 2008, pp. 113-132. (citations: 98)
- Croxton, K.L., B. Gendron and T.L. Magnanti, “Variable Disaggregation in Network Flow Problems with Piecewise Linear Costs.” *Operations Research*. Vol. 55, No. 1, 2007, pp. 146-157. (citations: 79)
- Lambert, D.M., S.J. Garcia-Dastugue and K.L. Croxton, “An Evaluation of Process-Oriented Supply Chain Management Frameworks.” *Journal of Business Logistics*, Vol. 26, No. 1, 2005, pp. 25-52. (citations: 465)
- Croxton, K. and W. Zinn, “Inventory Considerations in Network Design.” *Journal of Business Logistics*, Vol. 26, No. 1, 2005, pp. 149-168. **Winner of the Bernard J. LaLonde Best Paper Award.** (citations: 65)
- Croxton, K.L., B. Gendron and T.L. Magnanti, “A Comparison of Mixed-Integer Programming Models for Non-convex Piecewise Linear Cost Minimization Problems.” *Management Science*, Vol. 49, No. 9, 2003, pp. 1268-1273. (citations: 177)
- Croxton K.L., B. Gendron and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” *Transportation Science*, Vol. 37, No. 1, 2003, pp. 1-22. (citations: 91)
- Croxton, K.L., “The Order Fulfillment Process,” *The International Journal of Logistics Management*, Vol. 14, No. 1, 2003, pp. 19-32. (citations: 170)
- Zinn, W., J.T. Mentzer and K.L. Croxton, “Customer Based Measures of Inventory Availability,” *Journal of Business Logistics*, Volume 23, Number 2, 2002, pp. 19-43. (citations: 21)
- Croxton, K.L., D.M. Lambert, S. Garcia-Dastugue and D.S. Rogers, “The Demand Management Process,” *The International Journal of Logistics Management*, Vol. 13, No. 2, 2002, pp. 51-66. (citations: 190)
- Rogers, D.S., D.M. Lambert, K.L. Croxton and S. Garcia-Dastugue, “The Returns Management Process,” *The International Journal of Logistics Management*, Vol. 13, No. 2, 2002, pp. 1-18. (citations: 270)
- Croxton, K.L., S. Garcia-Dastugue, D.M. Lambert and D.S. Rogers, “The Supply Chain Management Processes,” *The International Journal of Logistics Management*, Vol. 12, No. 2, 2001, pp. 13-36. (citations: 815)

Magazine and White Paper Publications

- Croxton, K. and T. Goldsby, “Don’t Marginalize Margins,” *Inside Supply Management*”, May 2016.
- Croxton, K., A. Knemeyer, M. Polyviou, J. Fiksel, “The Resilient Supply Chain: Competing on the Ability to Come Back from Disaster,” White paper with summary appearing in *Inc. Magazine*. October 2013. Funded by a research grant from OSU’s National Center for the Middle Market.
- Croxton, K., T. Goldsby, "Margin Management in the Middle Market," White paper with presentation at 2013 CSCMP conference (most highly rated session of the conference).
- Pettit, T., J. Fiksel and K. Croxton, “Can You Measure Your Supply Chain Resilience”? *Supply Chain & Logistics Journal*, Spring/Summer 2008.

Research Under Review and in Progress

- Schwieterman, M., J. Miller, K. Croxton and A. Knemeyer, “A Strong Inference Test of Competing Predictions Regarding Dependence in Supplier Portfolios.” Under 4th round review for *Journal of Business Logistics*.
- Polyviou, M., A. Knemeyer, M. Rungtusanatham, and K. Croxton, “Toward a Schema to Describe Supply Chain Disruptions: Can We Learn from the Ancients?” Under review at *Journal of Business Logistics*.
- Polyviou, M., K. Croxton, A. Knemeyer, “The Middle Child Syndrome: Understanding the need to examine the resilience of medium-sized businesses to supply-chain risks.” Under 3rd round revision at the *International Journal of Operations and Production Management*.
- Smyth, K., A. Knemeyer, K. Croxton, R. Franklin, “Forecast Accuracy: How Good is Good Enough”. Preparing for submission to *Journal of Business Logistics*.
- Taylor, D., A. Knemeyer, K. Croxton and E. Bendoly, “Consumers Response to Stockouts: An Examination of Intended Retailer Retention and Intended Purchase Channel Retention.” Preparing for submission to *Production and Operations Management Journal*.
- Taylor, D., K. Croxton, X. Wan, A. Knemeyer, “Implications of channel correlation, channel dominance and in-store demand variation on omnichannel inventory risk pooling for retail ship-from-store.” Preparing for submission to *Journal of Business Logistics*.
- Smyth, K., R. Franklin, K. Croxton, A. Knemeyer, “The Impact of Including Forward Indicators on POS Demand Forecast Accuracy: The Case of Short-Term Weather Forecast Data”. Draft complete.
- Croxton, K. and A. Knemeyer, “Supply Chain Considerations During Due Diligence.” Refining draft.
- Zinn, W., P. Wang, K. Croxton, and X. Wan, “Accounting for Fat Tails in Inventory Decisions.” In progress.

Books

- *Supply Chain Management: Processes, Partnerships, Performance*, Editor: Lambert, D.M., 1st edition (2004), 2nd edition (2006), 3rd edition (2008), and 4th edition (2014). This book is based on the supply chain management framework developed through my research in which I am involved. I am an author on five of the chapters and have been involved in editing all the others. The book has been adopted for undergraduate and MBA courses on Supply Chain Management at many universities, including Fisher College of Business, University of Nevada, University of North Texas, Central Michigan University, University of Central Florida, University of Alabama, State University of New York, University of Arkansas, University of North Florida, California State University, Central Washington University, Ottawa University, Notre Dame, University of Rhode Island, University of Kentucky, The Air Force Institute of Technology, University de San Andres (Argentina), the Utrecht University (the Netherlands), and the University of Pretoria (South Africa).

Research Presentations

- Taylor, D., K. Croxton, and A. Knemeyer, “Channel demand characteristics and buy-online-ship-from-store performance”. CSCMP Annual Conference, 2017, Atlanta GA (presented by co-author).
- Taylor, D., K. Croxton, A. Knemeyer, “Channel demand characteristics and buy-online-ship-from-store performance”. Decision Sciences Institute Annual Conference, 2017, Washington D.C. (presented by co-author).
- Taylor, D., K. Croxton, X. Wan, A. Knemeyer, “Omnichannel demand variance risk pooling for buy-online-ship-from-store”. INFORMS, 2017 Annual Conference, Houston, TX (presented by co-author).
- Taylor, D., K. Croxton, A. Knemeyer, E. Bendoly, “Do consumers react differently when a product is out of stock when purchasing in-store than they do when purchasing online?” POMS Annual Conference, 2017, Seattle, WA (presented by co-author).
- Croxton, K., J. Fiksel and D. Zavitz, “Supply Chain Resiliency”. Fisher’s Risk Institute Risk Forum, 2017.
- Polyviou, M., A. Knemeyer, M. Rungtusanatham, K. Croxton, European Research Seminar, “Toward a Schema to Describe Supply Chain Disruptions: Can We Learn from the Ancients?”. European Research Seminar 2017, Barcelona (presented by co-author).
- Schwieterman, M., J. Miller, K. Croxton and A. Knemeyer, “A Strong Inference Test of Competing Predictions Regarding Power in Supplier Portfolios”. European Research Seminar, 2016, Vienna, Austria.
- Smyth K., K. Croxton, R. Franklin, A. Knemeyer, “Supply Chain Performance Outcomes of Franchising in the Quick Service Industry”. European Research Seminar, 2016, Vienna, Austria.
- Croxton, K. “Supply Chain Resilience”. Center for Operational Excellence, 2016.
- Croxton, K. and J. Fiksel, “Flourishing in the Face of Supply Chain Disruption.” Webinar for *Sloan Management Review*, 2015.

- Polyviou, M., K. Croxton and A. Knemeyer, “The Middle Child Syndrome: Understanding the need to Examine the Resilience of Medium-Sized Businesses to Supply Chain Risks”. European Research Seminar, 2015, Copenhagen, Denmark.
- Croxton, K. and D. Copenhaver, “Supply Chain Risk Management and Resilience”. Fisher’s Risk Institute Seminar, 2014.
- Croxton, K., “Supply Chain Risk Management: From Practice to Theory”. Fisher’s Risk Institute Launch, 2014.
- Goldsby, T. and K. Croxton, “Margin Management in the Middle Market”. Council of Supply Chain Management Professionals, 2013 Annual Conference, most highly rated session of the conference.
- Croxton, K. and J. Gaffney, “Using Processes to Drive Strategy Across the Supply Chain”. Council of Supply Chain Management Professionals, 2007 Annual Conference, Philadelphia, PA.
- Croxton, K., “Supply Chain Management”. Academy of Marketing Science, 2007 Annual Conference, Coral Gables, FL.
- “Implementing Supply Chain Management”, a 3-day track at the 2003 Council of Logistics Management Conference, track chair; the 4th most attended out of 29 tracks.
- Croxton, K., “Supplier Relationship Management in the Context of Supply Chain Management”. Keynote address at the Defense Logistics Agency’s Supplier Conference, 2003, Columbus, OH.
- Gendron, B., K. Croxton and T.L. Magnanti, “Variable Disaggregation in Network Flow Problems with Piecewise Linear Costs,” Odysseus 2003, Second International Workshop on Freight Transportation and Logistics, Sicily, Italy (presented by co-author).
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” LAMIH-ROI, Université de Valenciennes at du Hainaut-Cambrésis, France, 2001 (presented by co-author).
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,”; Département de mathématiques, École polytechnique fédérale de Lausanne, Switzerland, 2001 (presented by co-author).
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” Odysseus 2000, First International Workshop on Transportation and Logistics, Chania, Crete, Greece (presented by co-author).
- Croxton, K., B. Gendron and T.L. Magnanti, “Modeling Network Flow Problems with Piecewise Linear Costs, with an Application in Supply Chain Management”, Department of Quantitative Analysis and Operations Management Seminar Series, College of Business Administration, University of Cincinnati, 1999.
- Gendron, B., K. Croxton and T.L. Magnanti, “Network Problems with Piecewise Linear Cost Functions,” Optimization Days, Montreal, Canada, May 1999.
- Croxton, K., B. Gendron and T.L. Magnanti, “Modeling and Solving the Capacitated Merge-in-Transit Problem,” Optimization Days, Montreal, Canada, 1999.

- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” IFORS 99, Beijing, China, 1999 (presented by co-author).
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” Gansu University of Technology, Lanzhou, China, 1999 (presented by co-author).
- Croxton, K., B. Gendron and T.L. Magnanti, “Modeling Piecewise Linear Multicommodity Flows,” INFORMS, Seattle, WA, 1998.
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” TRISTAN III, Puerto Rico, 1998 (presented by co-author).
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” INFORMS, Montreal, Canada, 1998 (presented by co-author).
- Croxton, K., B. Gendron and T.L. Magnanti, “Modeling and Solving the Capacitated Merge-in-Transit Problem,” Optimization Days, Montreal, Canada, 1997.
- Croxton, K., B. Gendron and T.L. Magnanti, “Modeling and Solving the Capacitated Merge-in-Transit Problem,” INFORMS, San Diego, CA, 1997.
- Gendron, B., K. Croxton and T.L. Magnanti, “Models and Methods for Merge-in-Transit Operations,” Department of Computer Science, University of Pisa, Italy, 1997 and Department of Electrical Engineering, University of Perugia, Italy, 1997 (presented by co-author).
- Croxton, K., B. Gendron and T.L. Magnanti, “Models for Merge-in-Transit Operations,” INFORMS, Atlanta, GA, 1996.

TEACHING

Undergraduate

- *Logistics Analytics / Analysis and Design of Logistics Systems*, 1999-present. This course covers demand forecasting, modeling techniques, facility location, vehicle routing, and network design. Average evaluation: 4.5/5.0 (college average is a 4.1).
- *Supply Chain Management*, 2004-2015. This course presents a cross-functional, and process and relationship oriented framework for supply chain management. Evaluation: 4.7/5.0 (college average is a 4.3).
- *Logistics Decision Making*, 2009-2012. This course solidifies and expands on what was learned in previous courses and prepares students for implementing logistics concepts in a corporate environment. The course strongly emphasizes (1) implementation of concepts, and (2) system dynamics thinking.
- *Supply Chain Management Tools*, 2013. This course covered special topics related to the process and relationship oriented framework for supply chain management covered in the base course, including change management, project management, assessments.

Masters Level (MBA and MBL)

- *Supply Chain Management*, 2004-2009, 2013-present. This course presents a cross-

functional, and process and relationship oriented framework for supply chain management. Evaluation: 4.3/5.0 (college average is a 4.3).

- *Analysis and Design of Logistics Systems*, 1999-2008, 2011-2012. This course covers demand forecasting, modeling techniques, facility location, vehicle routing, and network design. Average evaluation: 4.4/5.0 (college average is a 4.1).
- *Advanced Supply Chain Management*, 2007, 2009-2010. This course covered special topics related to the process and relationship oriented framework for supply chain management covered in the base course. 4.75/5.0.

Ph.D.

- *Optimization Modeling in Logistics* (previously *Special Topics in Logistics*), 2003-present. This seminar covers optimization in logistics. It presents both theoretical foundations as well as application and implementation issues. Average evaluation: 5.0/5.0.
- *Special Topics in Logistics*, 2000, 2002, 2006, 2008, 2010. This seminar was team-taught with five other faculty members. I covered sessions on optimization, warehousing, and information technology.

Executive Education

Fisher College of Business

- *Supply Chain Management* (2000-present), sessions on Network Modeling, Demand Management, Order Fulfillment, Returns Management, Assessing the Supply Chain, Electronically Linking the Supply Chain, case studies and the Beer Game.
- *Kuhne Logistics University Supply Chain Management* (2013-present), sessions on Network Design, Demand Management, and Order Fulfillment.
- *Distribution Program for Rising Stars*, National Wholesalers Association (2015-present), session on The Beer Game.
- *Supply Chain Risk Management and Resilience* (2014), seminar for Fisher's Risk Institute.
- *Supply Chain Management*, Coca-Cola (2004-2007), sessions on Order Fulfillment, Demand Management, Returns Management, Supply Chain Assessments, and a supply chain simulation.
- *Management Certificate Program*, session on Logistics (Apr '00, Oct '00, Apr '01, Oct '01, May '08, May '09).
- *TMW 2 (Logistics)*, Maersk Logistics (2002-2007), facilitated group work and a supply chain simulation.
- *Logistics Management*, Colgate-Palmolive, sessions on Network Modeling (Feb '00, Oct '00, May '01, May '04), Forecasting (Feb '00) and Exchanges/Marketplaces (May '01).
- *Logistics and Supply Chain Management*, U.S. Army (2004-2005), sessions on Network Modeling, Logistics Technology, Order Fulfillment, Demand Management, Returns Management, Customer Service Management, MRP/DRP, Electronically Linking the Supply Chain, facilitated a supply chain simulation.
- *Logistics Management*, sessions on Network Modeling (Jun '00, Jun '01, Jul '02, Jul

'03), E-Commerce (Jun '01), organized facility tours (Jun '01, Jul '02), facilitated a supply chain simulation (Jun '01, Jul '02, Jul '03).

- *Recyclers Program*, session on Logistics (Jul '01).
- *Logistics Management*, Accenture / Andersen Consulting, sessions on Network Modeling (Aug '99, Oct '99, Jul '01), Warehouse Management (Oct '99, Jul '01), organized facility tours (Aug '99, Oct '99).
- *Go Bucks Athletic Program*, OSU Athletic Department, session on Logistics (Sep '00, Jun '01).
- *Business Management*, Owens-Corning, sessions on Logistics (Apr '00).
- *Manufacturing Supervisors Program*, session on Logistics (Oct '00).
- *Mason Symposium*, session on Merge-in-Transit (Oct '99).
- *Business Management*, Hancor, sessions on Inventory Management and Network Modeling (Sep '99).

CSCMP

- *Designing and Managing a Resilient Supply Chain*, 2-day seminar in Bogota, Colombia (July '15).
- *Integrating Supply Chain Network and Distribution Fulfillment*, 2-day seminar in Lima, Peru (May '13).

MIT

- *Logistics Management*, session on Merge-in-Transit (Jul '00).

University of West Indies

- *Increasing Customer Value through Logistics and Supply Chain Management*, 3-day seminar (Jun '04).
- *Forecasting and Planning in Supply Chains*, 3-day seminar (Jul '03).

PH.D. STUDENT ADVISING

- Dissertation co-advisor: Daniel Taylor, OSU 2018, “Channel Fulfillment Characteristics, Retail Network Structure and Buy-Online-Ship-From-Store Performance: Inventory Behavior and Channel Service Implications”.
- Dissertation advisor: Christian Randall, OSU 2013, “The effects of collaboration on the resilience of the enterprise : a network-analytic approach”.
- Dissertation advisor: Timothy Pettit, OSU 2008, “Supply Chain Resilience: Development of a conceptual Framework, an assessment tool and an implementation process”. Winner of the SOLE Best Dissertation Award and the CSCMP Outstanding Dissertation Award.
- Dissertation committee member: Kevin Smyth (2017), Mikaella Polyviou (2016), Esen Andic (2016), Matthew Schwieterman (2015), Matias Enz (2009), Francois Charvet (2008), Ping Wang (2007), Cuneyt Eroglu (2006), Sebastian Garcia-Dastugue (2003).

SERVICE (a sample of activities)

- Editorial review board for the *Journal of Business Logistics*, the *International Journal of Logistics Management*, and the *Journal of Supply Chain Management*.
- Member of the FT MBA Program Redesign Committee, 2017-present.
- Director of the Undergraduate Logistics Program, 2016-present.
- Member of the Athletic Council, includes membership on two sub-committees, one of which I chaired for a year, 2015-present.
- Member of the Leadership Team for the Sustainable and Resilient Economy Discovery Theme, 2015-present.
- Faculty Lead and member of the Faculty Advisory Board, Global Water Institute, 2016-present.
- Member of the Faculty Advisory Board of the Global One Health Institute, 2016-present.
- Member of the Honors and Scholars Faculty Advisory Council, 2016-present.
- Member of the Risk Institute's Academic Research Committee, 2014-present.
- Member of the University Senate and Faculty Council, 2015-2018.
- Logistics PhD Program Coordinator, 2006-2015.
- General exam committee member for 12 Logistics PhD students, 3 Operations PhD students, and 6 Industrial Engineering PhD students.
- Member of the Fisher College Semester Conversion Steering Committee, 2009-2013.
- Track chair for the 2009 Council of Supply Chain Management Professionals Educators' Conference.
- Track chair for 2003 Council of Logistics Management Conference, Chicago, IL.
- Faculty advisor to the *Transportation and Logistics Association*, a very active undergraduate student organization, 1999-2009.
- Member of the Dean's Search Committee, Fisher College of Business, 2008.
- Chair of the Logistics Recruiting Committee, 2005; Member: 1999-2000, 2002-2003.
- Faculty presenter for prospective students and incoming freshmen, 2-3 presentations per year.