

Ümmühan Akbay

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ACADEMIC POSITIONS

Işık University, 17/8/2020 – Present	Management Assistant Professor	Istanbul, Turkey
Özyeğin University, 1/9/2017 – 31/8/2020	Industrial Engineering Visiting Assistant Professor	Istanbul, Turkey
Sabancı University, 1/3/2017 – 31/8/2017	School of Management Postdoctoral Fellow Dept. of Operations and Information Systems Management Advisor: Prof. Dr. Füsün Ülengin	Istanbul, Turkey
Sabancı University, 1/9/2016 – 1/3/2017	School of Management Visiting Researcher Dept. of Operations and Information Systems Management Advisor: Prof. Dr. Füsün Ülengin	Istanbul, Turkey

EDUCATION

Sabancı University, 9/2011 – 8/2016	Faculty of Engineering and Natural Sciences Ph.D. in Industrial Engineering Thesis Title: <i>Behavioral Experiments on Supply Chain Contracting</i> Advisor: Asst. Prof. Dr. Murat Kaya	Istanbul, Turkey
Columbia University, 9/2004 – 10/2006	Graduate School of Business M.Phil. in Decision, Risk, and Operations	New York, NY, USA
Bilkent University, 9/2000 – 6/2004	Faculty of Engineering B.S. in Industrial Engineering	Ankara, Turkey

RESEARCH

Research Interests: Behavioral Operations, Behavioral and Experimental Economics, Supply Chain Management, Game Theory, Energy Markets, Healthcare Operations Management, Revenue Management, Bayesian Inference.

Conference Proceedings

1. Ü. Gürler, E. Berk, Ü. Akbay. (2008) Bayesian Updating of Demand and Backorder Distributions in a Newsvendor Inventory Problem. AIP Conference Proceedings 1067 (1), 483-490.

Manuscripts under Preparation

1. Ü. Akbay, N. A. Çavdaroğlu (2018) Pricing Decisions in Revenue Management: An Experimental Investigation.
2. Ü. Akbay, M. Kaya. (2020) A Closer Look at Contract Differences: Effect of Contract Type on Supply Chain Behavior. Prepared for *European Journal of Operational Research*.
3. Ü. Akbay, M. Kaya. (2019) Power of Commitment and Fairness Priming on Supply Chain Decisions. Prepared for *International Journal of Production Economics*.
4. Ü. Akbay, M. Kaya. (2019) Gender Differences in Newsvendor Behavior. Prepared for *Decision Analysis*.

Working Papers

1. Gender Differences in Contracting.
2. Asymmetry and Sharing of Sales Information.

Work in Progress

1. Fairness Concerns under Information Asymmetry.
2. Group Decision Making in Supply Chain Contracting – joint work with A. Kocabıyıköğlü and C. I., Göğüş.
3. Experimental Investigation of Operating Room Scheduling Behavior – joint work with E. Kayış.
4. Information Sharing in Logistics Firms – joint work with F. Ülengin and A. Kocabıyıköğlü.
5. Effects of Queue Length on Server Behavior – joint work with A. Kocabıyıköğlü and R. Akhavan Tabatabaei.
6. Contracting under Demand Information Asymmetry.
7. Impact of Incentives on Supply Chain Decisions.
8. Personality Traits Affecting Supply Chain Decisions.

CONFERENCE PRESENTATIONS

1. Ü. Akbay, M. Kaya. Effects of Gender in Newsvendor Behavior. YAEM, June 20-22, 2012. Istanbul, Turkey.
2. Ü. Akbay, M. Kaya. Experiments on Newsvendor Contracting. IIE-YAEM, June 26-28, 2013. Istanbul, Turkey.
3. Ü. Akbay, M. Kaya. Experiments on Newsvendor Contracting. INFORMS Annual Meeting, October 6-9, 2013. Minneapolis, Minnesota, USA.
4. Ü. Akbay, M. Kaya, G. Şahin. Contracts on Coordination of Wind and Thermal Power Producers. ICEM, June 5-7, 2014. Istanbul, Turkey.
5. Ü. Akbay, M. Kaya. Explaining Retailer and Manufacturer Behavior in Supply Chain Experiments. Behavioral Operations Conference – Young Scholars Workshop, June 12-14, 2014. Cologne, Germany.
6. Ü. Akbay, M. Kaya. Explaining Retailer and Manufacturer Behavior in Supply Chain Experiments. YAEM, June 25-27, 2014. Bursa, Turkey.
7. Ü. Akbay, M. Kaya. Tedarik Zinciri Sözleşmeleri Üzerine Davranışsal Deneyler. YAEM Doctoral Colloquium, October 24-25, 2014. Ankara, Turkey.
8. Ü. Akbay, M. Kaya. Tedarik Zinciri İlişkilerinde Davranışsal Faktörler: Deneyler ve Yeni Modeller. YAEM, September 9-11, 2015. Ankara, Turkey.
9. Ü. Akbay, M. Kaya. Gazeteci Çocuk Modeli: Evdeki Hesap Çarşıya Uyuyor Mu? YAEM, September 9-11, 2015. Ankara, Turkey.
10. Ü. Akbay, M. Kaya. Tedarik Zinciri Kararlarında Cinsiyet Farkları. YAEM, July 13-15, 2016. Izmir, Turkey.
11. Ü. Akbay. Tedarik Zinciri İlişkilerinde Satış Bilgisi Asimetrisi. YAEM, July 5-7, 2017. Istanbul, Turkey. (*Session Chair*)
12. Ü. Akbay. Asymmetry And Sharing Of Sales Information Under Revenue Sharing Contract. Behavioral Operations Conference – Young Scholars Workshop, July 12-14, 2017. Boston, Massachusetts, USA.
13. Ü. Akbay. Asymmetry And Sharing Of Sales Information Under Revenue Sharing Contract. INFORMS Annual Meeting, October 22-25 2017. Houston, Texas, USA.
14. Ü. Akbay. Tedarik Zinciri Sözleşme Kararlarında Cinsiyet Farkı. YAEM, June 26-28 2018. Eskişehir, Turkey.
15. Ü. Akbay, N. Çavdaroğlu. Pricing Decisions in Revenue Management: An Experimental Investigation. YAEM, June 12-14 2019. Ankara, Turkey.
16. Ü. Akbay. Gender Differences in Supply Chain Contracting Decisions. Behavioral Operations Conference – Young Scholars Workshop, July 8-10 2019 Eindhoven, Netherlands

PROJECTS

1. TÜBİTAK 3501 Project #111K454 Behavioral Experiments on Supply Chain Contracts (Tedarik Zinciri Sözleşmeleri Üzerine Davranışsal Deneyler)

Principal Investigator: Asst. Prof. Dr. Murat Kaya

Project Involvement Duration: 01.04.2012- 01.10.2014

2. TÜBİTAK 1001 Project #216M026 An Analysis of the Service Quality and Efficiency Metrics at Emergency Units of Hospitals (Hastanelerin Acil Birimleri için Etkinlik ve Hizmet Kalitesi Ölçütlerinin Analizi)

Principal Investigator: Prof. Dr. Füsün Ülengin

Project Involvement duration: 01.03.2017- 01.09.2017

3. Kadir Has University 2017-BAP-08 Behavioral Studies in Revenue Management (Gelir Yönetimi Alanında Davranışsal Çalışmalar)

Principal Investigator: Asst. Prof. Dr. Nur Çavdaroğlu

Project Involvement Duration: 24.04.2017- 23.04.2018

4. Özyeğin University Individual Research Project - Effects of Information Asymmetry on Supply Chain Contracting Behavior.

Project Duration: 01.09.2017 – 31.08.2020

TEACHING EXPERIENCE

Instructor, Işık University:

LOGI3504 Distribution Systems and Supply Chain Management: Fall 2020

LOGI4553 Inventory Management: Fall 2020

LOGI4558 Warehouse and Distribution Systems: Fall 2020

BUS604 Operations Research: Fall 2020

Instructor, Özyeğin University:

-IE301 Operations Research II: Fall 2017, 2018, 2019; Spring 2018, 2019, 2020; Summer 2018, 2019, 2020

-IE382 Decision Analysis: Spring 2018, 2019, 2020

-IE401 Senior Design Project I: Fall 2017

-IE402 Senior Design Project II: Spring 2018

Instructor, Sabancı University:

- IE 681 Behavioral and Experimental Methods in Operations Management (M.Sc., Ph.D.): Fall 2013, Spring 2015 (co-instructor of the course with Asst. Prof. Dr. Murat Kaya)
- MS 301 Deterministic Models in OR: Summer 2015 (co-instructor of the course with visiting scholar Prof. Dr. Ami Arbel)

Teaching Assistant, Sabancı University:

- MS 412 Financial Engineering: Fall 2011
- MS 401 Production and Service Systems Operations: Spring 2012
- MS 301 Deterministic Models in OR: Fall 2012, 2013, 2014; Spring 2013, 2014
- MS 405 Decision Analysis: Spring 2015
- IE 454 Supply Chain Analysis: Fall 2015
- IE 302 Stochastic Models in OR: Spring 2016

Teaching Assistant, Columbia University:

- Decision Models (MBA -EMBA Core) Summer 2006, 2007, 2008, 2009; Spring 2008, 2009
- Managerial Statistics (MBA - EMBA Core). Spring 2006, 2007; Fall 2008.
- Operations Management (MBA -EMBA Core) Fall, Summer 2008
- Service Operations Management (MBA-EMBA Elective) Fall 2007, 2009.
- Modeling with Stochastic Processes and Stochastic Optimization Models (Ph.D.) Spring 2008.

Undergraduate Tutor, Bilkent University

- Calculus II: Spring 2004.

AWARDS/ HONORS/ FELLOWSHIPS

- Thesis-status graduate scholarship awarded by Sabancı University (2015-2016)
- Graduate scholarship awarded by Sabancı University (2011-2015)
- Graduate research fellowship awarded by Columbia Business School (2004-2008)
- Full scholarship awarded by Bilkent University for undergraduate study (2000-2004)
- Ranked 29th in the nationwide university entrance examination (2000)

SELECTED GRADUATE COURSEWORK

Sabancı University

Behavioral Operations Management, Econometrics, Multivariate Statistics, Data Mining, Stochastic Processes, Linear Programming and Extensions, Graph Theory and Network Flows, Energy Markets.

Columbia University

Optimization I-II, Stochastic Modelling I-II, Game Theoretic Models, Stochastic Inventory, Competition and Coordination in Supply Chains, Dynamic Programming, Applied Management Science.

SKILLS

Programming: Matlab, Visual Basic, z-tree

Statistics/Econometrics: Minitab, SPSS, Stata, R

Optimization: IBM ILOG Optimization Studio (CPLEX – OPL)

Productivity: LATEX, MS Office Applications

Languages: Turkish (native), English (fluent), German (basic), French (basic), Japanese (basic)