

# RENÉ A. CALDENTÉY

## RESEARCH

### Research Interests:

- Revenue Management and Dynamic Pricing.
- Operations Management in the Retail Industry.
- Stochastic Models in Manufacturing and Service Systems.
- The Role of Financial Markets in Operations.
- Production Systems in the Copper Industry.
- Market Microstructure.

### Publications:

- Hu, Xing, R. Caldentey, G. Vulcano (2013). Revenue Sharing in Airline Alliances. *Management Science*, **59**(5), 1177-1195. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., X. Chen (2011). The Role of Financial Services in Procurement Contracts. In *Handbook of Integrated Risk Management in Global Supply Chains*, co-edited by Panos Kouvelis, Onur Boyabatli, Lingxiu Dong, and Rong Li, John Wiley & Sons, Inc. [[Abstract](#)], [[Full Text](#)]
- Araman, V., R. Caldentey (2010). Revenue Management with Incomplete Demand Information. *Encyclopedia of Operations Research*, Wiley. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., E. Stacchetti (2010). Insider Trading with Random Deadline. *Econometrica* **78**(1), 245-283. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., E. Kaplan, G. Weiss (2009). FCFS Infinite Bipartite Matching of Servers and Customers. *Advances in Applied Probability*, **41**, 695-730. [[Abstract](#)], [[Full Text](#)]
- Araman, V., R. Caldentey (2009). Dynamic Pricing for Non-Perishable Products with Demand Learning. *Operations Research* **57**(5), 1169-1188. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., M. Haugh (2009). Supply Contracts with Financial Hedging. *Operations Research* **57**, 47-65. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., G. Vulcano (2007). Online Auction and Revenue Management. *Management Science* vol. **53**(5), 795-813. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., L. Wein (2006). Revenue Management of a Make-to-Stock Queue. *Operations Research* **54**, 859-875. This paper was awarded the second prize in the *M&SOM Student Paper Competition* (2001). [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., M. Haugh (2006). Optimal Control and Hedging of Operations in the Presence of Financial Markets. *Mathematics of Operations Research* vol. **31**, 285-304. [[Abstract](#)], [[Full Text](#)]
- Bitran, G., R. Caldentey (2003). An Overview of Pricing Models and Revenue Management. *M&SOM* vol. **5**, 203-229. [[Abstract](#)], [[Full Text](#)]

- Caldentey, R., L. Wein (2003). Analysis of a Decentralized Production-Inventory System. *M&SOM* vol. **5**, 1-17. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., S. Mondschein (2003). Policy Model for Pollution Control in the Copper Industry, Including a Model for the Sulfuric Acid Market. *Operations Research* vol. **51**, 1-16. [[Abstract](#)], [[Full Text](#)]
- Bitran, G., R. Caldentey (2002). Two-Class Priority Queueing System with State-Dependent Arrivals. *Queueing Systems* vol. **40**, 355-382. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R. (2001). Approximations for Multi-Class Departure Processes. *Queueing Systems* vol. **38**, 205-212. [[Abstract](#)], [[Full Text](#)]
- Caldentey, R., S. Mondschein (2000). Control de la Contaminación Atmosférica de las Fundiciones Estatales de Cobre Mediante un Sistema de Apoyo a las Decisiones. *Rev. Ing. Syst.*, vol. **XIV**, 79-101. (In Spanish)
- Bitran, G., R. Caldentey, S. Mondschein (1998). Coordinating Clearance Markdown Sales of Seasonal Products in Retail Chains. *Operations Research* vol. **46**, 609-624. [[Abstract](#)], [[Full Text](#)]

#### **Papers under Review and in Preparation:**

- Caldentey, R., I. Y. Liu, Lobel. *Dynamic Pricing without Priors*. [[Abstract](#)]
- Araman, V., R. Caldentey. *Crowdvoting the Timing of New Product Introduction*. [[Abstract](#)]
- Caldentey, R., R. Epstein, D. Sauré. Optimal Exploitation of a Mineral Resource under Stochastic Market Prices. [[Abstract](#)]
- R. Caldentey, P. Oliveira. *Dynamic Pricing and Customer Relationships: Learning by Selling*. [[Abstract](#)]
- Caldentey R., M. Haugh. *A Cournot-Stackelberg Model of Supply Contracts with Financial Hedging*. [[Abstract](#)]
- Bitran, G., R. Caldentey, R. Vial. *Pricing Policies for a Family of Products under Demand Correlation*. [[Abstract](#)]
- R. Caldentey, Hu, Xu. *Trust and Reciprocity in Business Alliances*. [[Abstract](#)]
- Caldentey, R., L. Valdés. *Operational Models with Risk Hedging Constraints*. [[Abstract](#)]
- R, Caldentey, E, Stacchetti. *Insider Trading with Incomplete Information*. [[Abstract](#)]
- Caldentey R., G. Gallego, Y. Liu. *Dynamic Pricing with BuyBacks*. [[Abstract](#)]
- Caldentey R., S. Jagabathula, A. Patel. *Incorporating Buyer's Paralysis into the MNL Choice Model*. [[Abstract](#)]
- Caldentey, R., D. Sauré. *Network Exploitation of a Nonrenewable Resource*. [[Abstract](#)]
- Caldentey, R., F. Ordoñez. *Robust Network Revenue Management*. [[Abstract](#)]
- Caldentey, R., C. Correa, C. Dai. *Optimal Operating Control and Dividend Distribution Policies*. [[Abstract](#)]

## Working Papers

- Caldentey R., A. Torzhkov. (2007). *A Finite-Population Heavy-Traffic Queueing Model with Arrivals Modulated by Observed Delays*.
- Caldentey R., E. Kaplan. (2007). *A Heavy Traffic Approximation for Queues with Restricted Customer-Server Matchings*.
- Caldentey R., M. Mondschein. (2002). *The Rental Problem*.

## Other Publications and Technical Reports:

- Ronnqvist, M. F. Bernstein, R. Caldentey, S. D'Amours. (2012). Special issue on supply chain management and collaborative logistics. *Intl. Trans. in Op. Res.* **19**, 631-632.
- Caldentey, R., J.C. Ferrer, I. Haddad, G. Parada, D. Pérez, R. Vial. (2003). *Políticas Dinámicas de Precio y Revenue Management en Falabella*. Technical Report. University of Chile. (In Spanish)
- Caldentey, R., L. Wein (2002). Revenue Management of a Make-to-Stock Queue. *M&SOM* **4**, 4-6.
- Caldentey, R. (2001). *Analyzing the Make-to-Stock Queue in the Supply Chain and eBusiness Settings*. Ph.D. Thesis, Sloan School of Management, MIT.
- Bitran, G., R. Caldentey, J.C., Ferrer, V. Tang. (1999) *Value Pricing of IT Services*. Technical Report. Sloan School of Management.
- Caldentey, R. (1995). *Políticas de Precio para Productos Perecibles*. Civil Industrial Engineering Thesis, Department of Industrial Engineering, University of Industrial Engineering Chile. (In Spanish)
- Caldentey, R., E. Jadresic, A. López (1995). "Indicadores de Competitividad de Exportaciones y Sustituidores de Importaciones", Chilean Central Bank Review. (In Spanish)