

# PEPPERDINE UNIVERSITY

## Graziadio School of Business and Management

### Warren Joseph Hahn Curriculum Vitae

#### Contact Information

Graziadio School of Business & Management  
Pepperdine University  
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#### Education

- 2001-2005            The University of Texas, Austin, TX  
Ph.D. Management Science and Information Systems, 2005  
Concentration: Decision Science  
Minors: Computational Finance, Economics  
Dissertation: *A Discrete-Time Approach for Valuing Real Options with Underlying Mean-Reverting Stochastic Processes*  
Advisor: James S. Dyer
- 1999-2001            The University of Texas, Austin, TX  
MBA, 2001
- 1988-1991            The University of Texas, Austin, TX  
M.S. Civil Engineering, 1991
- 1982-1988            The University of Texas, Austin, TX  
B.S. Petroleum Engineering, 1988

#### Academic Experience

- 2006-pres.            Graziadio School of Business & Management, Pepperdine University, Malibu, CA  
  
Assistant Professor, Decision Sciences  
DESC 593 - Applied Data Analysis  
DESC 603 - Quantitative Business Analysis  
DESC 621 - Valuation of Real Options  
DESC 698 - Multi-Criteria Decision Analysis
- 2001-2004            McCombs School of Business, The University of Texas, Austin, TX  
  
Teaching Assistant, Department of MSIS  
BA 380M - Mathematical Analysis and Computer Methods  
MIS 383N - Valuation of Real Options  
MSC 371H - Management Science (Undergraduate Honors Program)

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### Research Interests:

Quantitative modeling of operational decision-making and its effect on asset value (real options), especially for innovative and/or unconventional projects. Discrete-time modeling of stochastic processes for commodity prices. Numerical techniques for solving decision analysis problems, including decision models for problems with multiple conflicting criteria.

### Professional Experience

|           |  |
|-----------|--|
| 2005-2006 | Shell Trading Gas and Power, Houston, TX<br>Market Analysis Manager                              |
| 2001-2005 | BP America, Houston, TX<br>Strategy & Planning Advisor   |
| 2000-2001 | BP America, Houston, TX<br>Commercial Team Leader  |
| 1996-2000 | Vastar Resources (now merged with BP), Houston, TX<br>Area Reservoir Engineer                    |
| 1991-1996 | ARCO Oil and Gas (now merged with BP), Bakersfield, CA and Houston, TX<br>Environmental Engineer |

### Publications

A Discrete Time Approach for Modeling Two-Factor Mean-Reverting Stochastic Processes, forthcoming in *Decision Analysis*, 2011.

Real Options: The Value Added through Optimal Decision Making, *Graziadio Business Report*, **13/2**, 2010.

Perceived Effectiveness and Implementation of Public Relations Measurement and Evaluation Tools among European Providers and Consumers of PR Services, *Public Relations Review*, **36/2**, 105-111, 2010.

The Winner's Curse and Optimal Auction Bidding Strategies, *Graziadio Business Report*, **12/2**, 2009.

Flexibility as a Source of Value in the Production of Alternative Fuels: The Ethanol Case, *Energy Economics*, **31**, 411-422, 2009.

The Role of Sugarcane-Based Ethanol in the Developing Global BioFuels Market. *Dialogue/United States Association for Energy Economics*, **16/3**, 27-30, 2008.

Discrete Time Modeling of Mean-Reverting Stochastic Processes for Real Option Valuation, *European Journal of Operations Research*, **184/2**, 534-548, 2008.

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Using Decision Analysis to Solve Real Option Valuation Problems: Building a Generalized Approach, SPE 108006, Proceedings of the 2007 Hydrocarbon Economics and Evaluation Symposium, Dallas, TX (April, 2007).

Response to Comments on Brandao et al. (2005), *Decision Analysis*, **2**, 103-109, 2005.

Using Binomial Trees to Solve Real Option Valuation Problems, *Decision Analysis*, **2**, 69-88, 2005.

### **Presentations**

A Binomial Model for Mean Reverting Stochastic Processes: Application to Ethanol Industry Expansion, presented at the 2010 INFORMS Annual Meeting, Austin, TX (November 7, 2010).

Flexibility and Uncertainty in Agribusiness Projects: Investing in a Cogeneration Plant, presented at the 33<sup>rd</sup> Annual International Association of Energy Economists Conference, Rio de Janeiro, Brazil (June 8, 2010).

The Winner's Curse and Developing Optimal Auction Bidding Strategies through Simulation, presented at the 2009 INFORMS Western Regional Meeting, Tempe, AZ (April 25, 2009).

Brazil's Energy Portfolio and the Value of Diversification, presented at the 2009 Latin American Conference on Energy Economics, Santiago, Chile (March 24, 2009).

Flexibility as a Source of Value in the Production of Alternative Fuels, presented at the 2009 Latin American Conference on Energy Economics, Santiago, Chile (March 24, 2009).

Investment Timing Under Competition: Effect of Stochastic Process Model, presented at the 2008 INFORMS Annual Meeting, Washington, D.C. (October 15, 2008).

Modeling Switching Options using Mean-Reverting Commodity Price Models, Proceedings of the Eleventh Annual International Conference on Real Options, Haas School of Business, University of California, Berkeley, CA (June, 2007).

A Discrete-Time Approach for Valuing Real Options with Underlying Mean-Reverting Stochastic Processes, presented at the Second Annual Mini-Conference on Integrated Risk Management in Operations and Global Supply Chain Management, Olin School of Business, Washington University, St. Louis, MO (June, 2005).

Incorporating Mean-Reverting Price Forecasts into Oil and Gas Exploration and Production Project Valuation, SPE 94577, presented at the 2005 Hydrocarbon Economics and Evaluation Symposium, Dallas, TX (April, 2005).

Robust Simulation Methods for Valuation of Real Options, presented at the 2003 INFORMS Annual Conference, Atlanta, GA (October, 2003).

Separation of Market-Related and Private Uncertainties in Real Option Valuation, presented at the 2003 INFORMS Annual Conference, Atlanta, GA (October, 2003).

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### **Awards**

Howard A. White Award for Teaching Excellence, Pepperdine University, 2010  
Bonham Fellowship, The University of Texas, 2005  
University Continuing Fellowship, 2004-2005  
University Preemptive Fellowship, 2001  
Student Paper Award, INFORMS Decision Analysis Society, 2004  
Kozmetsky Award for Outstanding Academic Achievement in University of Texas MBA Program, 2001  
Beta Gamma Sigma, Business Honors Society, 2001  
Chi Epsilon, Civil Engineering Honors Society, 1991

### **Affiliations**

Institute for Operations Research and Management Science (INFORMS)  
United States Association for Energy Economics (USAEE)  
Registered Professional Engineer, States of CA and TX

