

YUNPENG (DENNIS) ZHANG

Ph.D. Candidate in Economics
Department of Economics, Boston University

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EDUCATION:

Boston University, Boston, MA

Ph.D. in Economics

09/2003 ~ 12/2008 (Expected)

Concentration : Financial Economics & Econometrics.

Dissertation: The Closed-End Fund Puzzle: Theory and Evidence from Equity Closed-End Funds.

GPA: 3.75/4.00

London School of Economics, London, UK

Msc in Finance & Economics

09/2002 ~ 07/2003

GPA: Merit

Shandong University, Jinan, P. R. China

B.A. in Finance

09/1997 ~ 07/2001

GPA: 3.90/4.00

HIGHLIGHTS & SKILLS:

- ◆ Asset pricing, portfolio choices, & numerical methods in financial engineering.
- ◆ C/C++, SQL, SAS, Excel, Matlab, Gauss, Mathematica.
- ◆ Vector error correction models (*VECM*), state space models, & regime switching models.
- ◆ Database experiences with Bloomberg, Datastream, Compustat, & CRSP.
- ◆ CFA Level II candidate.
- ◆ English (Fluent) & Chinese (Native).

WORKING EXPERIENCES:

BLACK & VEATCH, ENTERPRISE MANAGEMENT SOLUTIONS, HOUSTON, TX

06/2008 ~ PRESENT

- ◆ Priced spread options & exchange options using Monte Carlo simulations & 3D trinomial tree methods.
- ◆ Priced transportation & storage contract values of natural gas using real option methods.
- ◆ Developed US demand analysis & forecast models for both natural gas & electricity at national & regional levels.

BOSTON UNIVERSITY, BOSTON, MA

09/2003 ~ 05/2008

- ◆ Teaching Assistant to various courses in Economics & Finance.
- ◆ Research Assistant to Prof. Robert G. King, Prof. Pierre Perron & Prof. Jerome Detemple.

PROGRAMMING EXPERIENCE IN FINANCE WITH C/C++:

- ◆ **Equity Derivatives Valuation (Lookback, Barrier and Asian Options).**
Applied control variates, antithetic variates & importance sampling methods in Monte Carlo simulations.
Estimated Greeks of Asian options using pathwise differentiation & density differentiation.
Priced various options using constant elasticity of variance (*CEV*) models & jump diffusion models.
- ◆ **Fixed Income Derivatives Valuation.**
Priced synthetic CDOs using the Gauss one factor copula model.
Priced CDSs using the CIR process of default density, & CMOs using Monte Carlo simulations.
Priced zero-coupon-bond options using exact Monte Carlo simulations of CIR process.
- ◆ **Applications in Risk Management.**
Calculated the VaR of investment portfolios.
Estimated the ruin probability of reserves for insurance companies using importance sampling.
- ◆ **Financial Recipes in C++.**
Debugged various valuation algorithms for warrants, American options & term structure models.

WORKING PAPERS:

- ◆ "Convenience Yield and Liquidity Risk in the Global Closed-End Fund," October 2007.
- ◆ "The Closed-End Fund on the Open-End Announcement," (joint with Paolo Guasoni) March 2008.
- ◆ "An Equilibrium Asset Pricing Model for the Global Closed-End Fund," (joint with Jerome Detemple) May 2008.

RELATED READINGS & COURSES:

- ◆ Paul Glasserman, 2003, "Monte Carlo Methods in Financial Engineering," *Springer*.
- ◆ Mark Joshi, 2003, "The Concepts and Practice of Mathematical Finance," *Cambridge University Press*.
- ◆ Mark Joshi, 2008, "C++ Design Patterns and Derivatives Pricing," 2nd edition, *Cambridge University Press*.
- ◆ EC745 Asset Pricing, FE919 Derivative Securities, & FE920 Advanced Capital Markets.
- ◆ FE828 Fixed Income Derivatives & MF796 Computational Methods in Math Finance.
- ◆ EC708 Econometrics & EC712 Time Series Econometrics.