GEORGES R. COURTADON

E-mail: gcourtadon@stern.nyu.edu

SUMMARY

Successful record producing financial research as a financial engineer in a business environment or as a finance faculty member. Adept at managing technical staff, including building extremely strong research teams at Citibank, First Chicago, Bankers Trust and Morgan Stanley. These teams have always contributed at the frontier of financial knowledge on Wall Street while keeping a strong practical bent in their effort. Strong experience in teaching graduate and undergraduate courses in Finance as a full time faculty member or adjunct. Academic accomplishments include publication of several papers in refereed journals and technical books. Business accomplishments include development of key risk management systems at Citibank and First Chicago, significant product and strategy innovations at Lehman Brothers and Bankers Trust, trading desk and business development at CIBC and improvements in the VaR system and the counterparty risk management system of Morgan Stanley.

EDUCATION

NORTHWESTERN UNIVERSITY, GRADUATE SCHOOL, Evanston, IL KELLOGG SCHOOL OF BUSINESS: Ph.D. in Finance, 1980 Dissertation: "Valuation of Options and Corporate Liabilities with Interest Rate Uncertainty"

□ ESSEC (Ecole Superieure des Sciences Economiques et Commerciales), Cergy, France Essec Diploma (French business degree similar to a joint BS/MS in Finance/Economics), 1975

EXPERIENCE

□ WESTLB, New York, NY

INVESTMENT BANK NORTH AMERICA, Managing Director and Head of Product Development Provide analytical support to IBNA sales and trading desks. Manage a team of three research analysts. Vet the analytics used by the desks. Coordinate the trading desks' interaction with Risk Management, Trade Control and IT on analytical and pricing issues.

DEVONSHIRE WARWICK PARTNERS, Englewood Cliffs, NJ

RISK MANAGEMENT, Chief Risk Officer

Responsible for advising Chief Executive Officer on the appropriate risk infrastructure for a startup hedge fund, DWP Volatility Arbitrage Fund Ltd. Designed and implemented the basic trading strategy of the fund with two other professionals. Implemented straight through processing from trade entry (Redi), risk management system (Imagine) and back office (GlobeOp). Designed a daily risk attribution methodology for the fund. Monitored position risks, VaR and daily stress scenarios on the fund.

CDC IXIS, New York, NY

RISK CONTROL, Managing Director & Head of Risk Control

Responsible for monitoring market risk of the trading desks of CDC IXIS Capital Markets in North America. Managed a group of five professionals. Monitored risk against limits on a daily basis. Implemented procedures to increase limits and bring market risk back under limit in coordination with the trading desks. Coordinated with CDC IXIS in Paris regarding the development of market risk and Potential Exposure measurement systems. Proposed and reviewed market risk reserves. Validated pricing of trading book positions through a monthly mark review process. Explained P&L of the desks as a function of its major risk drivers on a monthly basis. Reviewed models used to value positions or to measure position risks.

2001-2003

2004-Present

2003-2004

□ MORGAN STANLEY, New York, NY

FIRM RISK MANAGEMENT, Principal & Head of Research: 1999-2001

Provided market risk and credit risk measurement methodologies and directed model review at the firm level. Monitored the market risk of the Asset Management Division from April 2000. Built and managed a group of nine research professionals and two market risk monitors.

- Directed and participated in model and business reviews of equity derivatives, commodity derivatives and credit derivatives.
- Directed implementation of significant improvements to the VaR methodology, including development of appropriate volatility benchmarks for equity options, inclusion of credit derivatives in VaR as well as marginal and conditional VaR.
- Directed implementation of a consistent credit risk methodology for the computation of liquidity adjusted current exposure, potential exposure, capital and credit valuation adjustments.
- Restructured market risk monitoring for Asset Management. Worked as an adviser to the portfolio managers regarding market risk measurement. Set up monthly risk reports for senior management and monthly risk discussions with the portfolio managers.

INSTITUTIONAL EQUITY DIVISION, Principal & Head of Quantitative Research: 1998-1999

Organized quantitative support for the derivatives traders of the Institutional Equity Division and for the division risk manager. Managed a group of seven research professionals.

- Directed implementation of a model based mark to market methodology for all equity options books.
- Directed valuation work for volatility swaps, convertible bonds and other equity exotic products.
- Supported pricing requests from the trading desks.

CANADIAN IMPERIAL BANK OF COMMERCE, New York, NY 1994-1998

RISK MANAGEMENT DIVISION, CORPORATE TREASURY, Corporate Vice President: 1996-1998 Organized and directed the risk management and hedging of the options risk embedded in the firm balance sheet (mortgage commitments, flex CD's). Hired and managed a group of three traders and three systems developers. Was also an adjunct faculty member at the New York University Stern School of Business in 1997.

- Built the necessary infrastructure of databases, pricing models, risk measures and risk systems.
- Was instrumental in upgrading Treasury's back office environment (Frustrum Opics).
- Helped the consumer bank reduce its cost of hedging and its P&L variability.

EQUITY DIVISION, Managing Director and Head of U.S. Equity Arbitrage: 1994-1996

Created the equity arbitrage trading desk in New York. Hired and managed a group of six traders/developers.

- Set up the original business plan and trading strategies of the desk.
- Led the development of models and pricing tools for convertible bonds.
- Led the development of the desk P&L system and P&L attribution system.
- Built a profitable business for CIBC.

BANKERS TRUST, New York, NY

GLOBAL EQUITY DERIVATIVES, Vice President and Head of Equity Derivative Research Organized the pricing support of new structured products. Built and managed a group of seven professionals in London and New York.

- Structured products for the sales force: Protected Equity Notes (Synthetic Convertibles), Reverse Convertibles, Range Option Notes (double knockout).
- Supported pricing and risk management needs of the trading desks.

1992-1994

1998-2001

FIRST CHICAGO, Chicago, IL

CAPITAL MARKETS GROUP, Vice President and Head of Quantitative Research

Built a quantitative support group for the option trading desks of the Capital Markets Group. Hired and managed a group of twelve research and systems professionals.

- Managed the introduction of Next computers (200+ machines worldwide).
- Managed the development of FX and IR risk management systems.
- Structured interest rate derivatives for the sales force.
- Provided analytical support to the FX and IR derivatives trading desks.

CITICORP. New York, NY

NORTH AMERICAN INVESTMENT BANK, Vice President & Head of Derivative Products Research Directed the analytical support of the trading desks of the Exposure Management Division: interest rate derivatives, foreign currency options, gold options and equity index options. Built and managed a group of eight professionals.

- Built an integrated risk management platform for interest rate derivatives and interest rate products.
- Built the appropriate valuation models. In particular, fitted MBS in the integrated platform.

□ SHEARSON LEHMAN HUTTON, New York, NY

FUTURES DIVISION, First Vice President & Head of the Quantitative Strategies Group Provided analytical support to the institutional financial futures sales force and the FX options trading desk. Managed a group of five analysts.

- Proposed profitable trading strategies to the sales force and the firm's customers.
- Did extensive trading strategy work on the pricing of the Treasury bond Futures basis.
- Examined and built tools to monitor arbitrage opportunities between the Eurodollar Futures market, the swap market and the government bond market.
- Built appropriate pricing models to support the foreign currency options trading desk.

□ NEW YORK UNIVERSITY, New York, NY

STERN SCHOOL OF BUSINESS, Assistant Professor of Finance Research and teaching position. Several publications in finance journals. Took a leave of absence in 1984-1985 to work in Bond Portfolio Analysis at Salomon Brothers.

NORTHWESTERN UNIVERSITY, Evanston, IL

KELLOGG GRADUATE SCHOOL OF MANAGEMENT, Visiting Assistant Professor of Finance

1988-1990

1986-1988

1981-1986

1980-1981

1990-1992

PAPERS PRESENTED AT PROFESSIONAL MEETINGS

"Exotic Equity Structures," at the Seminar on Frontiers of Derivatives, Stern School of Business, New York, November 3, 1995.

"Exotic Options: Some Examples and Potential Uses," at the 15th Options and Derivatives Colloquium organized by the American Stock Exchange in New York, March 23, 1995.

"The pricing and Risk Management of Exotic Derivatives: Some Examples," at Derivatives: State of the Art, Stern School of Business, New York, November 3, 1994.

"Latest Developments in Pricing and Trading Exotic Options," at the 10th Canadian International Futures and Options Conference in Montreal, October 3, 1994.

"Managing the Risks of Structured Derivative Products," at the Conference on Risk Management Strategies for Derivatives in Toronto, June 14, 1994.

"New Structured Products," at the 14th Options and Derivatives Colloquium organized by the American Stock Exchange in New York, March 24, 1994.

"The Valuation of Index Caps," at the 12th Annual Options Colloquium organized by the American Stock Exchange in New York in March, 1992.

"Foreign Currency Option Valuation: Where We Stand," at the 5th European Options Colloquium organized by the American Stock Exchange and the Tel Aviv Stock Exchange in Jerusalem, December 9, 1991, and at the 3rd European Options Colloquium organized by the American Stock Exchange and DTB in Frankfurt, November 13, 1989.

"A Survey of Bond Options Pricing Models," at the 4th International Options and Futures Colloquium organized by the Swedish futures and options exchange OM and by the American Stock Exchange in Stockholm, December 4, 1990.

"Modelling Interest Rate Risk," at the Advanced Risk Management Conference organized by SimCorp in Copenhagen, May 9, 1990.

"Pricing and Hedging Interest Rate Sensitive Derivative Products," at the 10th Options Colloquium organized by the American Stock Exchange in New York, March 30, 1990 and at the 2nd European Options Colloquium organized by the American Stock Exchange and the MATIF in Paris, October 1988.

"Options Valuation: Methods and Models," at the 8th Annual Conference of the National Option and Futures Society in New York, November 28, 1989.

"An Arbitrage Free Debt Option Pricing Model Based on Lognormally Distributed Forward Rates," with K. Weintraub, at the 28th ORSA/TIMS Meetings in New York, October 18, 1989 and at the Meetings of the Operations Research Society of Switzerland in Zurich, October 27, 1989.

"Recent Trends in Foreign Currency Option Valuation," at the 1st European Options Colloquium organized by the American Stock Exchange and the Swiss Options and Financial Futures Exchange in Zurich, September 8, 1987 and the 1st Option Colloquium of the University of Warwick, England, July 1988.

"The Valuation of Index Options," with Menachem Brenner and Marti Subrahmanyam, American Finance Association Meetings, December 29, 1986 and the 7th Annual Options Colloquium organized by the American Stock Exchange, March 26, 1987.

"Relative Pricing of Foreign Currency Options and Foreign Currency Futures Options," with James N. Bodurtha Jr., Western Finance Association Meetings, June 17, 1986.

"Tests of an American Option Pricing Model on the Foreign Currency Options Market, with James N. Bodurtha Jr., Western Finance Association Meetings, June 1985 and Academy of International Business Meetings, October 1985.

"Options on Stock Indices and on Stock Index Futures," with Menachem Brenner and Marti Subrahmanyam, Fourth Annual Options Colloquium, American Stock Exchange, March 23, 1984.

"Empirical Tests of the Philadelphia Stock Exchange Foreign Currency Options Market," with James N. Bodurtha Jr., 4thAnnual Options Colloquium, American Stock Exchange, March 23, 1984 and the European Finance Association Meetings, September 1984.

"Pricing Put Options with Interest Rate Uncertainty," Western Finance Association Meetings, June 17, 1983.

"Options on Default Free Bonds and Options on Default Free Bond Futures: A Comparison," 3rd Annual Options Colloquium, American Stock Exchange, March 23, 1983 and the European Finance Association Meetings, September 1983.

"The Pricing of Options on Default Free Bonds," Conference on Option Pricing, Salomon Brothers Center for the Study of Financial Institutions, January 18, 1982.

PUBLICATIONS

"The Effect of Model Risk on the Valuation of Barrier Options," with Ali Hirsa and Dilip B. Madan, <u>Journal of Risk</u> <u>Finance</u>, Winter, 2003

"Probabilities and Values of Early Exercise: Spot and Futures Foreign Currency Options," with James N. Bodurtha Jr., Journal of Derivatives, Fall, 1995.

"Numerical Methods of Option Valuation," in Financial Options: From Theory to Practice, Dow Jones Irwin, 1990.

"Recent Trends in Foreign Currency Option Valuation," in <u>Options: Recent Advances in Theory and Practice</u>, Manchester University Press, 1990.

"Using Eurodollar Strips to Hedge and Trade Treasury Notes," with Daniel Nadler, in <u>U.S. Treasury and Government Agency Securities</u>, Probus, 1990.

"Options on Stock Indices and Options on Futures," with Menachem Brenner and Marti Subrahmanyam, in the Journal of Banking and Finance, 13, 1989.

<u>The Pricing of Foreign Currency Options</u>, with James N. Bodurtha Jr., Monograph Series in Finance and Economics, Salomon Brothers Center for the Study of Financial Institutions, Stern School of Business, New York University, Monograph 1987-4/5.

"Tests of an American Option Pricing Model on the Foreign Currency Options Market," with James N. Bodurtha Jr., Journal of Financial and Quantitative Analysis, June 1987.

"Efficiency Tests of the Foreign Currency Options Market," with James N. Bodurtha Jr., Journal of Finance, March 1986.

"A Survey of Bond Option Pricing Models," <u>Finance</u> (Revue de l'Association Francaise de Finance), December 1985 (written in French).

"Options on the Spot and Options on Futures," with Menachem Brenner and Marti Subrahmanyam, Journal of Finance, December 1985.

"The Option Pricing Model and the Valuation of Corporate Securities," with John J. Merrick Jr., <u>Midland Journal of</u> <u>Corporate Finance</u>, October 1983.

"A Note on the Premium Market of the Paris Stock Exchange," Journal of Banking and Finance, Vol. 6, No. 4, 1983.

"A More Accurate Finite Difference Approximation for the Valuation of Options," <u>Journal of Financial and Quantitative</u> <u>Analysis</u>, December 1982.

"The Pricing of Options on Default Free Bonds," Journal of Financial and Quantitative Analysis, March 1982.

COMPUTER SKILLS

Programming experience: Excel, Visual Basic for Excel, Fortran, C.

COMMUNICATION SKILLS

Ability to synthesize and clearly communicate technical concepts to a non technical audience. *Languages:* French (fluent).