

Led the development of Tower's internal fund accounting system used to check the administrators' monthly accounting, to provide intra-month performance estimates, and to estimate future cash flow requirements.

Quantitative Analyst

Introduced risk allocation to Tower's portfolio construction process. Wrote the risk management portions of Tower's Investment Process. Extended and enhanced the Tower database.

Independent Research, Greenwich, CT

2003 - 2004

Tested alternative trading methodologies and lessons learned over the prior 15 years.

Ferrell Capital Management, Greenwich, CT

1994 - 2002

Director of Research & Product Development

Designed, implemented, and launched absolute return and long short funds featuring a variety of equity, fixed income, currency strategies. Designed rated structured products tailoring the risk and return characteristics, providing leverage, or guaranteeing a return of capital. Secured guarantees and credit enhancement on Ferrell Funds as written by NatWest, BNP, CDC, and Zurich Capital.

Responsible for portfolio management within Ferrell's investment vehicles; developing investment policies and compliance procedures, identifying recruiting and qualifying new asset managers, quantifying and assigning risk allocations within portfolios, actively managing the asset managers to meet the risk targets, and monitoring their performance.

Responsible for quantitative research, including the evolution of Ferrell's Dynamic Risk Allocation process and continuing enhancements to the underlying risk management methodologies. Introduced Tracking Risk as an asset class at the strategic allocation level. Developed the Marginal Sharpe Ratio and the Forecasting Ratio to facilitate ex-ante portfolio optimization.

Head of Research

Developed new risk analytics; handling non-linear characteristics within the conventional Variance/Covariance approach, quantifying risk graphically with vectors, measuring extreme conditions, stress testing, deriving Heat Maps and Key Drivers, and using alternative distributions and chaos theory.

Advised consulting clients, pension funds, endowments, foundations, banks, and other funds, on strategic allocations, quantified overall volatility targets, and integrated liabilities into the asset management strategy. Provided independent risk measurement and monitoring, and quantified sub-managers' added value and style.

Information Systems Manager

Upgraded Ferrell's proprietary risk management system, then extended the system to support Ferrell's risk consulting services to outside clientele.

Trading Technology Co., Greenwich CT 1989 - 1994
Senior Consultant - Trading Systems and Analytics

Developed proprietary trading systems and customized third-party systems for the following financial institutions:

Liberty Brokerage, Inc.

Developed analytics and utilities for fixed-income instruments. Designed real-time information retrieval and presentation systems.

ABN AMRO Bank

Lead the team installing IBM's DR-One front office trading system. Adapted the system to meet the specific needs of the different trading desks. Trained the traders.

International Business Machines Corporation

Managed the team installing the DR-one front office trading systems at the IBM Retirement Fund. Configured the systems to handle stocks, bonds, and foreign exchange, and provided training.

Bank of America NT&SA

Supplied options and derivative instruments analytics and expertise to IBM's group handling front and back office systems supporting Bank of America's currency option trading desk.

Clifford Drake & Company, Inc., New York NY 1985 - 1989
Subsidiary of **Security Pacific Corporation**, now **J. J. Kenny Co., Inc.**

Vice President - Development

Designed, implemented, and operated the Drake/KMS bond trading system, (became the Kenny-Drake System). Provided an interactive bid/offer and ticket entry system serving three Drake offices and 300 clients nationwide. Added a query facility for 2 million fixed income securities.

Assistant Vice President

Developed analytics and real-time analysis. Created a bond index to track the active market. Developed a real-time pricing system for municipal bonds. Developed bond calculation utilities.

EARLIER EXPERIENCE :

Naval Architect, Mobil Oil Company, New York NY

Prepared detailed financial analyses. Optimized transportation economics by simulating the transportation systems. Modeled vessel motions in the time domain with six degrees of freedom and non-linear response parameters, and in the frequency domain using applied energy spectra and response amplitude operators.

Shipbroker, Decker Chartering Corporation, New York NY

Project Engineer, John J. McMullen Associates Inc., New York NY

EDUCATION :

WEBB INSTITUTE, Glen Cove, NY

Graduated first in class