## Bruce D. McNevin 495 Anlee Road Bridgewater, NJ 08807

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#### **EXPERIENCE**

## Unlimited Funds, Inc. Chief Data Scientist & Co-founder

**Present** 

Home - Unlimited Funds

"Bringing the indexing revolution to alternative investments."

#### Bank of America/Merrill Lynch

2016-2022

#### Director, Senior Quantitative Strategist in Quantitative Modelling Group

 Manage a small team of quantative researchers responsible for the development and maintenance of Agency Credit Risk Transfer models, Non-agency credit and prepayment models, HECM reverse mortgage models, home price appreciation models, unemployment rate models, ABS auto credit models, primary-secondary spred models.

# The Midway Group Director of Mortgage Research

2005-2016

- Responsible for the design, development and implementation of all prepayment models for the residential mortgage backed securities market.
- Currently building loan level models for Ginnie Mae reperformer loans, and multi-family loans.
- Designed and implemented a desktop application to create custom agency cohorts (Winforms application with SQL).
- Designed, estimated, implemented and maintain loan level prepayment models for fixed rate Jumbo- Prime and Alt-A markets.
- Designed and maintain a system of models to estimate and forecast home prices at the MSA level.
- Estimated and implemented a non-agency mortgage rate surface to capture the incremental premiums associated with various loan characteristics. This has been incorporated into the non-agency simulation process.
- Responsible for providing macroeconomic analysis to internal management.
- Co-Author of monthly newsletter to investors.

BlackRock 2004

#### Vice President, Financial Modeling Group

• Responsible for development and maintenance of GNMA fixed rate, ALT-A fixed rate and ALT-A hybrid prepayment models.

Clinton Group 1999-2004

### Researcher/Econometrician

- Equity/Stat. Arb. Modeling:
  - Designed and implemented an equity pair's model based on the principle of cointegration.
  - Developed an industry level model of expected returns based on fundamental economic and financial information.
- Mortgage Modeling:
  - Developed, implemented and maintained several generations of prepayment models including FNMA and GNMA fixed rate, 30 and 15 year and GNMA ARM.

## **Ernst & Young LLP**

1997-1999

## Senior Manager, Economic Analysis Group

- Provided quantitative economic analysis to clients as part of a strategic advisory team within the Economic Analysis Group.
- Designed and developed using mixture distribution models for use in customer segmentation strategies.
- Additional projects included transfer pricing analysis for international corporations, survey design and response analysis, and pricing studies.

AT&T 1993-1997

## District Manager, Market Analysis & Forecasting

- Strategic Pricing responsible for analyzing price change impacts, and developing pricing strategies for consumer long distance pricing plans.
- Demand Analysis responsible for demand analysis and forecasting for the Consumer Services division.
- Managed a team of 35 economists, and oversaw the development of forecasting models used for business planning, network construction, and regulatory purposes.

AT&T 1991-1993

#### Staff Manager, Market Analysis & Forecasting

• Responsibilities included forecasting calling card revenue, and business investment analysis using cashflow models.

## State of NJ, Office of Economic Policy

1989-1991

#### Staff Economist

• This position primarily provided research support for the governor's Economic Policy Council. Developed an econometric model of the NJ State economy.

AT&T 1986-1989

#### Staff Supervisor, Market Analysis & Forecasting

• Developed and maintained models for the demand of long distance consumer and business services.

#### **EDUCATION**

## City University of New York, Graduate Center

1986

Doctor of Philosophy in Economics

• Thesis: The Sample Path Properties of Asymmetric Time Series

## **New School for Social Research**

1983

Master of Arts in Economics

• Areas of Concentration: Quantitative Methods, Industrial Organization

Queens College
Bachelor of Arts in Economics

1979

### **Scholarly Activity**

#### **Publications**

- Bruce D. McNevin, Joan Nix, "The beta heuristic from a time/frequency perspective: A wavelet analysis of the market risk of sectors", Economic Modelling, Vol. 68, January 2018, pp 570-585.
- Bruce D. McNevin, Joan Nix, "Applications in Finance: A Wavelet Analysis of the Fama-French 3 Factor Model", forthcoming in Wavelet Theory and its Applications. Ed. S. Radhakrishnan. InTech Press, 2018.
- Bruce D. McNevin, "The Evolution of the Market for Mortgage Backed Securities", in <u>Financial Engineering: The Evolution of a Profession</u>, T. Beder and C. Marshall, eds. John Wiley & Sons. 2011.
- McNevin, Bruce and Neftci, Salih. "Some Evidence on the Nonlinearity of Economic Time Series." in Cycles and Chaos in Economic Equilibrium. Ed. Jess Benhabib. Princeton: Princeton University Press, 1992.

#### **Working Papers**

- B. McNevin and J. Nix, "Is Bitcoin a Viable Portfolio Asset?", May 2022.
- B. McNevin, D. Gable, J. Nix, "The Impact of Net Neutrality on Telecommunications Company Returns: An Event Study ", August 2017.

#### **Current Areas of Research**

- Markov switching regimes and portfolio returns.
- Functional data analysis and business cycles

#### **Recent Presentations**

- Uncertainty and Sector Returns, Society for Economic Measurement, 4<sup>th</sup> Conference, July 2017, MIT.
- A Wavelet Analysis of Sector Returns, International Conference on Applied Financial Economics, July 2016, Shanghai University.

#### RECENT TEACHING

## **New York University**

2007-Present

### Dept. of Economics, Graduate School of Arts & Sciences (MA Program)

#### Adjunct Assistant Professor

- Currently teaching: Financial Econometrics (Fall), and "Topics in Advanced Econometrics II: Bayesian Statistics." (Spring).
- Previously taught: "Topics in Advanced Econometrics I: Micro-econometrics"
   Applied Econometrics and Statistics I & II

## College of Staten Island, City University of New York

2009-2010

## Assistant Professor of Finance

• Courses taught: Investment Analysis, Introduction to Managerial Finance, Intermediate Managerial Finance.

## **Queens College**

2006-2009

## Adjunct Assistant Professor

• Course taught: Investment Management, Econometrics.

#### STATISTICAL AND COMPUTER SKILLS

- Experienced in panel data analysis, nonlinear least squares, mixture distributions, switching regimes, non-parametric methods, time series analysis, Bayesian statistics, quantile regression analysis, wavelets, and Monte Carlo methods.
- Proficient in R, SAS, STATA MatLab, C++, Winforms, and RATS.
- Extensive experience with very large data sets, including Loan Performance, Freddie Mac Loan Level files, and Agency Pool files.
- Extensive experience with MSA and county level economic data sets.