# Nikolay Gospodinov Curriculum Vitae

### September 2021

#### **Contact Information:**

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# **Current and Previous Appointments**

- **Financial Economist and Senior Adviser**, Research Department, Federal Reserve Bank of Atlanta, January 2018 present
- Financial Economist and Adviser, Research Department, Federal Reserve Bank of Atlanta, July 2013 December 2017
- Professor, Department of Economics, Concordia University, June 2012 June 2013
- **Associate Professor**, Concordia University, June 2005 May 2012
- Assistant Professor, Concordia University, July 2000 May 2005
- Visiting Appointments:
  - Leadership Exchange Program, Federal Reserve Bank of New York, July 2018 –
     October 2018
  - o Department of Economics, Emory University, January 2016 May 2016
  - o Department of Economics, University of Montréal, August 2011 December 2011
  - Department of Finance, Desautels Faculty of Management, McGill University, June 2006 – May 2007
  - o CIREO Research Fellow, 2002 2014
  - o CIRANO Research Fellow, 2012 present

#### Education

- **Ph.D.** in Economics, Boston College, September 1996 June 2000
- B.A., M.A. in Economics, University of National and World Economy, Bulgaria
  - O Visiting student, Oxford University, 1992 1993

#### **Book**

 Methods for Estimation and Inference in Modern Econometrics (with S. Anatolyev), Chapman and Hall/CRC Press (2011)

### Journal Articles and Book Chapters

- 2021: On the Factor Structure of Bond Returns (with R. K. Crump), Econometrica, forthcoming
   MATLAB Codes
- 2021: Capital Share Risk in U.S. Asset Pricing: A Reappraisal (with C. Robotti), Journal of Finance, Replications and Comments
   Earlier Version
   MATLAB Codes
- 2021: Common Pricing across Asset Classes: Empirical Evidence Revisited (with C. Robotti), Journal of Financial Economics, 140, 292–324
   Online Appendix
- 4. **2021**: Generalized Aggregation of Misspecified Models: With an Application to Asset Pricing (with E. Maasoumi), **Journal of Econometrics**, 222, 451–467
- 2019: Too Good to Be True? Fallacies in Evaluating Risk Factor Models (with R. Kan and C. Robotti), <u>Journal of Financial Economics</u>, 132, 451–471 MATLAB Codes
- 6. **2019**: Multivariate Return Decomposition: Theory and Implications (with S. Anatolyev), **Econometric Reviews**, 38, 487–508
- 7. **2018**: Market Consistent Valuations with Financial Imperfection (with H. Assa), **Decisions** in Economics and Finance, 41, 65–90
- 8. **2018**: Asymptotic Variance Approximations for Invariant Estimators in Uncertain Asset-Pricing Models (with R. Kan and C. Robotti), **Econometric Reviews**, 37, 695–718 Online Appendix
- 9. **2018**: Monetary Policy Uncertainty, Positions of Traders and Changes in Commodity Futures Prices (with I. Jamali), European Financial Management, 24, 239–260
- 2017: Spurious Inference in Reduced-Rank Asset-Pricing Models (with R. Kan and C. Robotti), Econometrica, 85, 1613–1628
   PDF file of the paper
   Supplementary Material
   MATLAB Codes

- 11. **2017**: Foreign Exchange Predictability and the Carry Trade: A Decomposition Approach (with S. Anatolyev, I. Jamali and X. Liu), **Journal of Empirical Finance**, 42, 199–211
- 12. **2017**: A Robust Approach to Hedging and Pricing in Imperfect Markets (with H. Assa), Risks, Volume 5, Issue 3 (special issue on Quantile Regression for Risk Assessment)
- 13. 2017: <u>Simulated Minimum Distance Estimation of Dynamic Models with Errors-in-Variables</u> (with I. Komunjer and S. Ng), <u>Journal of Econometrics</u>, 200, 181–193 MATLAB Codes
- 2016: On the Properties of the Constrained Hansen-Jagannathan Distance (with R. Kan and C. Robotti), <u>Journal of Empirical Finance</u>, 36, 121–150 MATLAB Codes
- 15. **2015**: Minimum Distance Estimation of Possibly Non-Invertible Moving Average Models (with S. Ng), Journal of Business & Economic Statistics, 33, 403–417
- 16. **2015**: The Response of Stock Market Volatility to Futures-Based Measures of Monetary Shocks (with I. Jamali), **International Review of Economics and Finance**, 37, 42–54
- 17. 2014: A Moment-Matching Method for Approximating Vector Autoregressive Processes by Finite-State Markov Chains (with D. Lkhagvasuren), Journal of Applied Econometrics, 29, 843–859
   Online Appendix
   MATLAB Codes
- 18. 2014: Misspecification-Robust Inference in Linear Asset-Pricing Models with Irrelevant Risk Factors (with R. Kan and C. Robotti), Review of Financial Studies, 27, 2139–2170 Online Appendix MATLAB Codes
- 19. **2013**: <u>Unit Roots, Cointegration and Pretesting in VAR Models</u> (with A. M. Herrera and E. Pesavento), <u>Advances in Econometrics</u>, 32, 81–115
- 20. 2013: Commodity Prices, Convenience Yields, and Inflation (with S. Ng), Review of Economics and Statistics, 95, 206–219
  PDF file of the paper with Online Appendix Data and MATLAB Codes
- 2013: Chi-Squared Tests for Evaluation and Comparison of Asset Pricing Models (with R. Kan and C. Robotti), Journal of Econometrics, 173, 108–125
   Online Appendix
   MATLAB Codes
- 22. **2013**: Asset Pricing Theories, Models, and Tests (with C. Robotti), in **Portfolio Theory and Management**, H. K. Baker and M. G. Filbeck (eds.), Oxford University Press

- 23. 2012: Further Results on the Limiting Distribution of GMM Sample Moment Conditions (with R. Kan and C. Robotti), Journal of Business & Economic Statistics, 30, 494–504 Online Appendix
- 24. **2012**: Local GMM Estimation of Time Series Models with Conditional Moment Restrictions (with T. Otsu), **Journal of Econometrics**, 170, 476–490
- 25. 2012: Nonparametric Estimation of Scalar Diffusion Models of Interest Rates Using Asymmetric Kernels (with M. Hirukawa), Journal of Empirical Finance, 19, 595–609 Data and GAUSS Codes
- 26. **2012**: The Effects of Federal Funds Rate Surprises on S&P500 Volatility and Volatility Risk Premium (with I. Jamali), **Journal of Empirical Finance**, 19, 497–510
- 27. 2012: Asymptotics of Near Unit Roots (with S. Anatolyev), Quantile, 10, 57–71
- 28. **2011**: Sensitivity of Impulse Responses to Small Low Frequency Co-movements:

  Reconciling the Evidence on the Effects of Technology Shocks (with A. Maynard and E. Pesavento), Journal of Business & Economic Statistics, 29, 455–467

  Online Appendix
- 29. **2011**: Bootstrap Unit Root Tests in Models with GARCH(1,1) Errors (with Y. Tao), Econometric Reviews, 30, 379–405
  Data and GAUSS Codes
- 30. **2011**: Risk Premiums and Predictive Ability of BAX Futures (with I. Jamali), **Journal of Futures Markets**, 31, 534–561
- 31. **2011**: Specification Testing in Models with Many Instruments (with S. Anatolyev), Econometric Theory, 27, 427–441
  Additional Simulation Results
- 32. 2010: Modeling Financial Return Dynamics via Decomposition (with S. Anatolyev), Journal of Business & Economic Statistics, 28, 232–245
  Results for Quarterly Data
- 33. **2010**: Inference in Nearly Nonstationary SVAR Models with Long-Run Identifying Restrictions, **Journal of Business & Economic Statistics**, 28, 1–12
- 34. **2009**: A New Look at the Forward Premium Puzzle, **Journal of Financial Econometrics**, 7, 312–338
- 35. **2009**: <u>Tobacco Taxes and Regressivity</u> (with I. Irvine), <u>Journal of Health Economics</u>, 28, 375–384

- 36. 2008: Asymptotic and Bootstrap Tests for Linearity in a TAR-GARCH(1,1) Model with a Unit Root, Journal of Econometrics, 146, 146–161

  Data and GAUSS Codes
- 37. **2006**: Forecasting Volatility (with A. Gavala and D. Jiang), **Journal of Forecasting**, 25, 381–400
- 38. 2005: <u>Testing for Threshold Nonlinearity in Short-Term Interest Rates</u>, <u>Journal of Financial Econometrics</u>, 3, 344–371
  Data and GAUSS Codes
- 39. **2005**: A 'Long March' Perspective on Tobacco Use in Canada (with I. Irvine), **Canadian Journal of Economics**, 38, 366–393
- 40. 2005: Robust Asymptotic Inference in Autoregressive Models with Martingale Difference Errors, Econometric Reviews, 24, 59–81 Selected as Best Paper published in Econometric Reviews in 2004 and 2005
- 41. **2004**: Asymptotic Confidence Intervals for Impulse Responses of Near-Integrated Processes, Econometrics Journal, 7, 505–527

  GAUSS Codes
- 42. **2004**: Global Health Warnings on Tobacco Packaging: Evidence from the Canadian Experiment (with I. Irvine), **Topics in Economic Analysis & Policy**, 4, Issue 1, Article 30
- 43. 2002: Median Unbiased Forecasts for Highly Persistent Autoregressive Processes, Journal of Econometrics, 111, 85–101
  Data and GAUSS Codes
- 44. 2002: Improved Finite-Sample Inference in Overidentified Models with Weak Instruments, Recent Advances in Statistical Methods, Y.P. Chaubey (ed.), Imperial College Press, London, 132–146
- 45. **2002**: Bootstrap-Based Inference in Models with a Nearly Noninvertible Moving Average Component, **Journal of Business & Economic Statistics**, 20, 254–268 Data and GAUSS Codes
- 46. **2000**: An Empirical Likelihood Ratio Test for a Unit Root: Solution to Problem 99.2.1 (with V. Zinde-Walsh), Econometric Theory, 16, 143–146

## Notes and Blogs

1. May 2021: <u>Is There a Global Factor in U.S. Bond Yields?</u>, FRBA **Macroblog** see also <u>Global Factors in U.S. Yield Curve</u> see also <u>Effects of Uncertainty on the Yield Curve</u>

- 2. March 2021: <u>The Persistent Compression of the Breakeven Inflation Curve</u> (with R. K. Crump and D. Volker), FRBNY **Liberty Street Economics**
- 3. March 2019: <u>Carry Factors: Characteristics and Informational Content</u> (with I. Jamali), FRBA **Notes from the Vault**
- 4. January 2018: Good Models, Bad Models, FRBA Notes from the Vault
- 5. November 2017: Risk-On/Risk-Off in the Long Run, FRBA Notes from the Vault
- January 2016: <u>Are Long-Term Inflation Expectations Declining? Not So Fast, Says Atlanta Fed</u> (with P. Tkac and B. Wei), FRBA **Macroblog** see also <u>A Note on Extracting Inflation Expectations from Market Prices of TIPS</u>
   and Inflation Derivatives (with B. Wei)

### Working Papers

- 1. Deconstructing the Yield Curve (with R. K. Crump), FRBNY Staff Report No. 884
- 2. Elusive Stars: Robust Trend Estimation (with R. K. Crump and H. Wieman)
- 3. Specification Tests for Conditional Moment Restrictions Under Local Identification Failure (with P. Dovonon)
- 4. <u>Inference in Conditional Vector Error-Correction Models with Small Signal-to-Noise Ratio</u> (with A. Maynard and E. Pesavento)
- 5. <u>Long-Horizon Stock Valuation and Return Forecasts Conditional on Demographic Projections</u> (with C. Chen, A. Maynard and E. Pesavento)
- 6. Recent Developments in U.S. Short-Term Funding Markets
- 7. Asset Co-Movements: Features and Challenges, FRBA Working Paper 2017-11
- 8. The Role of Commodity Prices in Forecasting U.S. Core Inflation, **FRBA Working Paper** 2016-5
- 9. Forecasts of Inflation and Interest Rates in No-Arbitrage Affine Models (with B. Wei), FRBA Working Paper 2016-3

### **Research Grants**

- Social Sciences and Humanities Research Council (SSHRC) of Canada:
  - o 2017 2022 (Collaborator)
  - o 2013 2016 (CAD 123,228; Principal investigator)
  - o 2010 2013 (CAD 53,500; Principal investigator)
  - o 2005 2008 (CAD 50,703; Principal investigator)
  - o 2002 2005 (CAD 22,150; Principal investigator)
  - o 2001 2004 (CAD 26,100, Co–applicant)
- Fonds Québécois de la Recherche sur la Société et la Culture (FQRSC):
  - o 2010 2014 (CAD 376,584; Team grant)
  - o 2005 2009 (CAD 359,000; Team grant)
  - o 2002 2005 (CAD 45,000; Principal investigator)
- Institut de Finance Mathématique de Montréal (IFM2):
  - o 2010 2013 (CAD 60,000; Principal investigator)
  - o 2005 2006 (CAD 20,000; Principal investigator)

# **Refereeing Activity**

- Selected Journals: Econometrica; Econometric Reviews; Econometric Theory; Econometrics; Econometrics Journal; International Economic Review; International Journal of Central Banking; Journal of Applied Econometrics; Journal of Banking and Finance; Journal of Business and Economic Statistics; Journal of Econometrics; Journal of Economic Dynamics and Control; Journal of Empirical Finance; Journal of Finance; Journal of Finance; Journal of Financial Econometrics; Journal of Financial and Quantitative Analysis, Journal of Forecasting; Journal of Futures Markets; Journal of Money, Credit and Banking; Journal of Time Series Analysis; Macroeconomic Dynamics; Quantitative Economics; Review of Economics and Statistics; Review of Finance; Review of Financial Studies
- Granting Agencies: National Science Foundation (NSF); Natural Sciences and Engineering Research Council of Canada (NSERC); Social Sciences and Humanities Research Council (SSHRC); Research Grants Council (RGC) of Hong Kong; Italian Research Assessment VQR
- Federal Reserve System's CCAR Model Validation

#### Member of Editorial Boards

- **Econometric Reviews**, Associate Editor, 2011 present
  - o Committee Chair for Best Paper Award, 2006 2016, 2017 2018, 2019 2020
- Policy Hub (Atlanta Fed publication), 2020 present
- International Econometric Review, Associate Editor, 2006 2017

# Member of Conference Program Committees

• 2021 North American Summer Meeting of the Econometric Society, Society of Financial Econometrics conference (2020, 2021), Annual Meeting of the Federal Reserve System Committee on Econometrics (2021), Financial Market Conference (2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021); OU Energy and Commodities Finance Research Conference (2019); "The Impact of Extraordinary Monetary Policy on the Financial Sector" Conference (2016); Workshop on Nonparametric Curve Smoothing (2013); CIREQ Time Series Conference (2013, 2011, 2009, 2005); Statistics Canada (2011); Humboldt–Copenhagen Conference in Financial Econometrics (2011); Montréal Econometrics Seminar Series (2010–2011); Canadian Econometrics Study Group (2008, 2007, 2006); Canadian Economic Association Meeting (2008); GMM Conference (2007)

#### Presentations and Discussions

- Recent Invited Talks:
  - "Asset Co-movements: Features and Challenges" at the 2017 Financial Markets
     Conference "Managing Global Financial Risks: Shifting Sands and Shock Waves"
  - "Inflation Expectations: Challenges and Misperceptions" at the 2016 BNP Paribas Inflation Forum
  - o "Econometric Analysis of Low-Frequency Co-Movements" at the 2016 Workshop on Impact of Demographics on Asset Values
  - Mini-course on "The Econometrics of Misspecified Asset Pricing Models" at Western University (2016)
- Recent Seminar Presentations: McGill University (Finance), Indiana University, McGill University (Economics), Emory University, Boston University, University of California San Diego, Federal Reserve Bank of New York, ESSEC (Paris), Vanderbilt University; North Carolina State University; Queen's University; Columbia University; Carleton University; University of British Columbia; University of Montréal; HEC
- Recent Conference Presentations: 2019 North American Econometric Society Meeting, 2018 Annual Meeting of the Southern Economic Association (Washington DC), International Symposium on Financial Engineering and Risk Management (Shanghai, China), CIREQ Econometrics Conference on "Recent Advances in the Method of Moments", Conference on Financial Econometrics and Risk Management (Western University), Annual SoFiE Conference (Toronto); NBER-NSF Time Series Conference (2014, 2010, 2006); NFA Conference (Ottawa); All--Georgia Finance Conference; Metro--Atlanta Econometrics Study Group Meeting; Canadian Econometrics Study Group (2012, 2007, 2006); Mathematical Finance Days (2012, 2010); 3rd Annual CIRPÉE Applied Financial Time Series Workshop;

Humboldt--Copenhagen Conference in Financial Econometrics (Copenhagen); CIREQ Time Series Conference (2010, 2009); Joint Statistical Meeting (Washington, DC); Colloquium "Computationally-Intensive Econometrics" (McGill University); International Symposium on Forecasting (2008, 2007); International Conference of the Society for Computational Economics (2008, 2007); Conference on Generalized Method of Moments; Conference on Forecasting in Time Series (Duke University); Canadian Economic Association Meeting

Recent Conference Discussions: Recent Advances on Bootstrap Methods, Montréal (2019); Annual Meeting of the Southern Economic Association, Washington DC (2018); Workshop for Commodities and Macroeconomics, FRB Dallas (2018); Day-Ahead Conference, FRB Philadelphia (2108); MFA Conference (2016); NFA Conference (2014); CIREQ Time Series and Financial Econometrics Conference (2013); Canadian Econometrics Study Group (2012, 2007); CIREQ Time Series Conference (2011, 2009, 2006, 2005)

### University Service, Teaching and Supervision

- Graduate Program Director (Dept. of Economics, Concordia University), 2007 2011
- Teaching:
  - o **graduate level**: Econometric Theory, Time Series Econometrics, Financial Economics, Risk Management
  - o **undergraduate level**: Financial Econometrics, Econometrics, Macroeconomic Theory
- Supervision:
  - o Ph.D. students (main supervisor): 7 students
  - o M.A. research papers (main supervisor): 41 students
  - o Thesis Committee Member: Ph.D. (5 students), M.A. (44 students)
  - o External Thesis Examiner: Ph.D. (8 students), M.A. (6 students)