

Apostolos Serletis

Professor of Economics and Finance

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Curriculum Vitae

DATE AND PLACE OF BIRTH:

08-12-1954, Hellas

NATIONALITY:

Hellenic

CITIZENSHIP:

Hellenic and Canadian

EDUCATION:

- Ph.D., McMaster University, 1984, Economics
- M.A., University of Windsor, 1979, Economics
- B.A., University of Piraeus, 1976, Economics

ACADEMIC POSITIONS:

- Professor, University of Calgary, 1991-present
- Adjunct Professor, Indian Institute of Management (IIM) Bodh Gaya, India, 2021-2023
- University Professor, University of Calgary, 2006-2011
- Associate Professor, University of Calgary, 1988-1991
- Visiting Assistant Professor, University of Texas at Austin, 1986-1987
- Assistant Professor, University of Calgary, 1984-1988

FIELDS OF INTEREST:

- Macroeconometrics
- Monetary and Financial Economics
- Nonlinear and Complex Dynamics

AWARDS AND HONOURS:

- Dunfield Research Fellowship, 2022-2023
- Fellow of the Royal Society of Canada, 2021
- President, Society for Economic Measurement (<https://sem-society.org/>), 2019-2023
- Senior Fellow of the Rimini Centre for Economic Analysis, 2017-
- Director, ICEMR Energy Industry program (RUDN-Moscow), 2017-
- Charter Fellow of the Center for Financial Stability (New York City), 2017-
- Charter Fellow of the Institute for Nonlinear Dynamical Inference (RUDN-Moscow), 2017-
- GREAT Supervisor Award, University of Calgary, Faculty of Graduate Studies and My SupervisorSkills, 2017
- Member of the Executive Committee of the Society for Economic Measurement, 2016-
- Board of Directors of the Athenian Policy Forum, 2012-
- Charter Fellow of the Society for Economic Measurement, 2012-
- Australian Research Council, 2012-2014 (\$200,000), Partner Investigator
- European Research Program (Thalis), 2011-2014 (euro 600,000), Partner Investigator
- Social Sciences and Humanities Research Council (SSHRC) of Canada:
 - Individual Connection Grant 2021
 - Standard Research Grant 2006
 - Standard Research Grant 2002
 - Standard Research Grant 1998
- Faculty of Arts, University of Calgary:
 - Distinguished Research Award 2011
 - Distinguished Research Award 2003
 - Research Fellowship, 2002
 - Distinguished Research Award 1997

EDITORIAL RESPONSIBILITIES:

- Editor-in-Chief, *Open Economies Review*, 2022-
- Editorial Board, RUDN *Journal of Economics*, 2022-
- Coeditor, *Macroeconomic Dynamics*, 2018-
- Coeditor, *Journal of Economic Asymmetries*, 2017-
- Associate Editor, *Open Economies Review*, 2016-2022
- Associate Editor, *Energy Economics*, 2009-
- Editorial Advisory Board, *Journal of Economic Studies*, 2006-
- Associate Editor, *Econometric Reviews*, 2011-2013
- Associate Editor, *Macroeconomic Dynamics*, 2004-2018.
- Associate Editor, *Journal of Economic Asymmetries*, 2003-2016

EDITORSHIPS:

Books

4. Editor, *Quantitative and Empirical Analysis of Energy Markets*, World Scientific Series on Energy and Resource Economics. This book has a *Foreword* by Melvin J. Hinich.
 - Revised Edition, World Scientific, 2013
 - 1st Edition, World Scientific, 2007
3. Co-editor (with William A. Barnett), *Functional Structure Inference*. International Symposia in Economic Theory and Econometrics (ISETE). Amsterdam: Elsevier (2007).
2. Editor, *Money and the Economy*. World Scientific (2006). This book has a *Foreword* by William A. Barnett.
1. Co-editor (with William A. Barnett), *The Theory of Monetary Aggregation*. Contributions to Economic Analysis 245. Amsterdam: North-Holland (2000). This book has a *Preface* by Erwin Diewert.

Journals

7. Co-editor (with Svetlana Balashova and Natalia Volgina), special issue on “New Realities for Emerging Markets,” *International Journal of Economic Policy in Emerging Economies*, Volume 12, Issue 4, 2019.
6. Co-editor (with Fredj Jawadi), special issue on “Uncertainty and Recent Challenges in Oil and Commodity Markets,” *The Energy Journal* 40, SI2, (2019).

5. Co-editor (with Matteo Manera), special issue on “Dynamics of Oil and Commodities Prices,” *Macroeconomic Dynamics*, Volume 22, Number 3, April 2018.
4. Editor, special issue on “Complexity in Economic Systems,” *Macroeconomic Dynamics*, Volume 20, Number 2, March, 2016.
3. Co-editor (with James Heckman), special issue on “Econometrics with Theory: A Special Issue Honoring William A. Barnett,” *Econometric Reviews* Volume 34, Issues 1-2, 2015.
2. Co-editor (with James Heckman), special issue on “Internally Consistent Modeling, Aggregation, Inference and Policy,” *Journal of Econometrics* Volume 183, Issue 1 (2014).
1. Co-editor (with John Elder), special issue on “Oil Price Shocks,” *Macroeconomic Dynamics* 15 (Supplement 3), November 2011.

PUBLICATIONS:

Books

3. *Oil Price Uncertainty*. World Scientific, 2012.
2. *Interfuel Substitution*. World Scientific, 2012.
1. *Macroeconomic Policy in the Canadian Economy*, with Panos Afentis. Kluwer, 2002.

Textbooks

8. *The Economics of Money, Banking, and Financial Markets*, with Frederic S. Mishkin.
 - 8th Canadian Edition, Pearson: Toronto, 2023
 - 7th Canadian Edition, Pearson: Toronto, 2020
 - 6th Canadian Edition, Pearson: Toronto, 2017
 - 5th Canadian Edition, Pearson: Toronto, 2014
 - 4th Canadian Edition, Pearson: Toronto, 2011
 - 3rd Canadian Edition, Pearson: Toronto, 2008
 - 2nd Canadian Edition, Pearson: Toronto, 2005
 - 1st Canadian Edition, Pearson: Toronto, 2002
7. *Instructors Manual for the Economics of Money, Banking, and Financial Markets*, with Frederic S. Mishkin.
 - 8th Canadian Edition, Pearson: Toronto, 2023
 - 7th Canadian Edition, Pearson: Toronto, 2020

- 6th Canadian Edition, Pearson: Toronto, 2017
 - 5th Canadian Edition, Pearson: Toronto, 2014
 - 4th Canadian Edition, Pearson: Toronto, 2011
 - 3rd Canadian Edition, Pearson: Toronto, 2008
 - 2nd Canadian Edition, Pearson: Toronto, 2005
 - 1st Canadian Edition, Pearson: Toronto, 2002
6. *Principles of Economics*, with R. Glenn Hubbard, Anthony Patrick O'Brien, and Jason Childs.
- 4th Canadian Edition, Pearson: Toronto, 2024 (forthcoming)
 - 3rd Canadian Edition, Pearson: Toronto, 2021
 - 2nd Canadian Edition, Pearson: Toronto, 2018
 - 1st Canadian Edition, Pearson: Toronto, 2015
5. *Instructors Manual for Principles of Economics*, with R. Glenn Hubbard, Anthony Patrick O'Brien, and Jason Childs.
- 4th Canadian Edition, Pearson: Toronto, 2024 (forthcoming)
 - 3rd Canadian Edition, Pearson: Toronto, 2021
 - 2nd Canadian Edition, Pearson: Toronto, 2018
 - 1st Canadian Edition, Pearson: Toronto, 2015
4. *Macroeconomics: A Modern Approach*, with Robert J. Barro.
- 1st Canadian Edition, Nelson: Toronto, 2010
3. *Instructors Manual for Macroeconomics: A Modern Approach*, with Robert J. Barro.
- 1st Canadian Edition, Nelson: Toronto, 2010
2. *The Demand for Money: Theoretical and Empirical Approaches*. This book has a *Foreword* by David Laidler.
- 1st Edition, Kluwer, 2001
 - 2nd Edition, Springer, 2007
1. *Financial Markets and Institutions*, with Frederic S. Mishkin and Stanley G. Eakins.
- 1st Canadian Edition, Pearson: Toronto, 2004

Articles

Forthcoming

- “Volatility and Dependence in Cryptocurrency and Financial Markets: A Copula Approach,” with Jinan Liu. *Studies in Nonlinear Dynamics and Econometrics*.
- “Monetary Policy and Economic Fluctuations,” with Cosmas Dery. *Macroeconomic Dynamics*.
- “Macroeconomic Fluctuations in the United States: The Role of Monetary and Fiscal Policy Shocks,” with Cosmas Dery. *Open Economies Review*.
- “Oil Price Uncertainty and Climate Risks,” with Libo Xu. *Journal of Economics and Finance*.
- “Interactive Effects between Input and Output Technical Inefficiencies,” with Muna Esheba. *Macroeconomic Dynamics*.
- “Volatility and Dependence in Energy Markets,” with Jinan Liu. *Journal of Economics and Finance*.
- “Nonlinear Dynamics in the Divisia Monetary Aggregates: An Application of Recurrence Quantification Analysis,” with Ioannis Andreadis, Athanasios D. Fragkou, and Theodoros E. Karakasidis. *Financial Innovation*.
- “Oil Price Uncertainty: Panel Evidence form the G7 and BRICS Countries,” with Libo Xu. In David Bourghelle, Pascal Grandin, Fredj Jawadi, and Philippe Rozin (eds.), *Behavioral Finance and Asset Prices: The Influence of Investors’ Emotions*. Contributions to Finance and Accounting. Springer Nature.

2023

303. “Consumer Preferences, the Demand for Divisia Money, and the Welfare Costs of Inflation,” with Libo Xu. *Journal of Macroeconomics* 75 (2023), 103490.

2022

302. “The Demand for Assets: Evidence form the Markov Switching Normalized Quadratic Model,” with Libo Xu. *Journal of Money, Credit and Banking* 54 (2022), 989-1025.
301. “Inflation and Economic Activity in Advanced and Emerging Economies,” with Jinan Liu. *International Journal of Finance and Economics* 27 (2022), 4196-4223.
300. “Spillovers of U.S. Monetary Policy Uncertainty on Inflation Targeting Emerging Economies,” with Nahiyen Azad. *Emerging Markets Review* 51 (2022), 100875.
299. “Interfuel Substitution: A Copula Approach,” with Libo Xu. *Journal of Commodity Markets* 28 (2022), 100247.
298. “Credit Cards, the Demand for Money, and Monetary Aggregation,” with Jinan Liu. *Macroeconomic Dynamics* 26 (2022), 2161-2203.

297. “Dependence Structure between Money and Economic Activity: A Markov Switching Copula VEC Approach,” with Libo Xu. *Macroeconomic Dynamics* 26 (2022), 2141-2160.
296. “The Bank of Canada’s own Policy is the Reason why Inflation is so High,” *The Conversation* September 12, 2022.
295. “Oil Price Shocks in Major Emerging Economies,” with Nahiyian Azad. *The Energy Journal* 43 (2022), 199-213.
294. “Oil Prices and the Natural Gas Liquids Markets,” with Ali Jadidzadeh. *Green Finance* 4 (2022), 207-230.
293. “Oil Prices and the Hydrocarbon Markets: A Review,” with Ali Jadidzadeh and Mobin Mirzababaei. *Energies* 15 (2022), 6192.
292. “A Century and a Half of the Monetary Base-Stock Market Relationship,” with Nahiyian Azad. *Quarterly Review of Economics and Finance* 85 (2022), 118-124.
291. “World Commodity Prices and Economic Activity in Advanced and Emerging Economies,” with Jinan Liu. *Open Economies Review* 33 (2022), 347-374.
290. “Market Shocks in the G7 Countries,” with Nahiyian Azad. *Open Economies Review* 33 (2022), 33-60.
289. “The Complex Relationship between Inflation and Equity Returns,” with Jinan Liu. *Journal of Economic Studies* 49 (2022), 159-184.
288. “What is Stopping Energy Efficiency in Russia? Exploring the Confluence of Knowledge, Negligence, and Other Social Barriers in the Krasnodar Region,” with Andrey Berezin, Konstantin Gomonov, Svetlana Ratner, and Bruno S. Sergi. *Energy Research and Social Science* 85 (2022), 102412.

2021

287. “The Welfare Cost of Inflation,” with Libo Xu. *Journal of Economic Dynamics and Control* 128 (2021), 104144.
286. “Disentangling the Effects of Uncertainty, Monetary Policy, and Leverage Shocks on the Economy,” with Cosmas Dery. *Oxford Bulletin of Economics and Statistics* 83 (2021), 1029-1065.
285. “Covid-19 and Monetary-Fiscal Policy Interactions in Canada,” with Nahiyian Azad and Libo Xu. *Quarterly Review of Economics and Finance* 81 (2021), 376-384.
284. “Oil Price Uncertainty, Globalization, and Total Factor Productivity: Evidence from the European Union,” with Svetlana Balashova. *Energies* 14 (2021), 3429.
283. “The Relative Importance of Monetary Policy, Uncertainty, and Financial Shocks,” with Cosmas Dery. *Open Economies Review* 32 (2021), 311-333.
282. “Consumption, Leisure, and Money,” with Libo Xu. *Macroeconomic Dynamics* 25 (2021), 1412-1441.

281. "Interest Rates, Money, and Economic Activity," with Cosmas Dery. *Macroeconomic Dynamics* 25 (2021), 1842-1891.
280. "Cryptocurrency Shocks," with Jinan Liu and Sajjadur Rahman. *The Manchester School* 89 (2021), 190–202.
279. "Foreword to *Modeling Economic Growth in Contemporary Greece*." In Vasileios Vlachos, Aristidis Bitzenis and Bruno Sergi (eds.), *Modeling Economic Growth in Contemporary Greece: The Role of Changing Economic, Institutional and Industrial Contexts*. Emerald series in *Entrepreneurship and Global Economic Growth* (2021).

2020

278. "Money Growth Variability and Output: Evidence with Credit Card-Augmented Divisia Monetary Aggregates," with Jinan Liu. *Studies in Nonlinear Dynamics & Econometrics* 24 (2020) 20190106.
277. "Recent Monetary Policy and the Credit Card-Augmented Divisia Monetary Aggregates," with Jinan Liu and Cosmas Dery. *Journal of Macroeconomics* 64 (2020), 103203.
276. "Functional Monetary Aggregates, Monetary Policy, and Business Cycles," with Libo Xu. *Journal of Economic Dynamics and Control* 121 (2020), 103994.
275. "Monetary Policy Spillovers in Emerging Economies," with Nahiyah Azad. *International Journal of Finance and Economics* 25 (2020), 664-683.
274. "User Costs, the Financial Firm, and Monetary and Regulatory Policy," with Maksim Isakin. *Macroeconomic Dynamics* 24 (2020), 1547-1573.
273. "Biofuel Substitution in the U.S. Transportation Sector," with Nurul Hossain. *Journal of Economic Asymmetries* 22 (2020), e00161.
272. "Oil Price Shocks and the Russian Economy," with Svetlana Balashova. *Journal of Economic Asymmetries* 21 (2020), e00148.
271. "Monetary Policy Uncertainty and Interest Rate Spreads," with Dennis Nsafoah. *Open Economies Review* 31 (2020), 707-727.
270. "Money Supply Volatility and the Macroeconomy," with Libo Xu. *Macroeconomic Dynamics* 24 (2020), 1392-1402.
269. "Demand Systems with Heteroscedastic Disturbances," with Libo Xu. *Empirical Economics* 58 (2020), 1913-1921.
268. "Conditional Correlation Demand Systems," with Libo Xu. *Computational Economics* 56 (2020), 77-86.
267. "Emerging Market Volatility Spillovers," with Nahiyah Azad. *American Economist* 65 (2020), 78-87.
266. "Technical Change in U.S. Industries," with Nurul Hossain. *Economic Modelling* 91 (2020), 579-600.

265. "Risk, Uncertainty, and Leverage," with Khandokar Istiak. *Economic Modelling* 91 (2020), 257-273.

2019

264. "The Demand for Banking and Shadow Banking Services," with Libo Xu. *North American Journal of Economics and Finance* 47 (2019), 132-146.
263. "Introduction to *International Journal of Economic Policy in Emerging Economies* Special Issue on *New Realities for Emerging Markets*," with Svetlana Balashova and Natalia Volgina. *International Journal of Economic Policy in Emerging Economies* 12, SI4 (2019), 315-317.
262. "Introduction to *Uncertainty and Recent Challenges in Oil and Commodity Markets*," with Fredj Jawadi. *The Energy Journal* 40 SI2 (2019), 15-18.
261. "The Demand for Liquid Assets: Evidence from the Minflex Laurent Demand System with Conditionally Heteroscedastic Errors," with Dongfeng Chang. *Macroeconomic Dynamics* 23 (2019), 2941-2958.
260. "Introduction to *The Energy Journal* Special Issue on *Uncertainty and Recent Challenges in Oil and Commodity Markets*," with Fredj Jawadi. *The Energy Journal* 40, SI2 (2019), 15-18.
259. "Interfuel Substitution: Evidence from the Markov Switching Minflex Laurent Demand System with BEKK Errors," with Libo Xu. *The Energy Journal* 40 (2019), 111-128.
258. "The Ethanol Mandate and Crude Oil and Biofuel Agricultural Commodity Price Dynamics," with Libo Xu. *Journal of Commodity Markets* 15 (2019) 100068.
257. "Communication Frictions, Sentiments, and Nonlinear Business Cycles," with Libo Xu. *International Journal of Economic Theory* 15 (2019), 137-152.
256. "The Demand for Assets and Optimal Monetary Aggregation," with Ali Jadidzadeh. *Journal of Money, Credit and Banking* 51 (2019), 929-952.
255. "150 Years of the Oil Price-Macroeconomy Relationship," with Elaheh Asadi Mehmandosti. *Macroeconomic Dynamics* 23 (2019), 1302-1311.
254. "Oil Prices and the Stock Markets: Evidence from High Frequency Data," with Sajjadur Rahman. *The Energy Journal* 40, SI2 (2019), 101-130.
253. "Business Cycles and Hydrocarbon Gas Liquids Prices," with Sayeeda Jahan. *The Journal of Economic Asymmetries* 19 (2019), e00115.
252. "On the Markov Switching Welfare Cost of Inflation," with Wei Dai. *Journal of Economic Dynamics and Control* 108 (2019), 103748.
251. "Banking Technology in Markov Switching Economies," with Maksim Isakin. *Journal of Macroeconomics* 59 (2019), 154-168.
250. "Markov Switching Oil Price Uncertainty," with Libo Xu. *Oxford Bulletin of Economics and Statistics* 81 (2019), 1045-1064.

249. "Oil Prices and the Renewable Energy Sector," with Evangelos Kyritsis. *The Energy Journal* 40 (2019), 337-363.
248. "International Monetary Policy Spillovers," with Dennis Nsafoah. *Open Economies Review* 30 (2019), 87-104.
247. "Volatility in the Cryptocurrency Market," with Jinan Liu. *Open Economies Review* 30 (2019), 779-811.
246. "Monetary Neutrality," with Zisimos Koustas. *Macroeconomic Dynamics* 23 (2019), 2133-2149.

2018

245. "Crude Oil and Biofuel Agricultural Commodity Prices," with Semei Coronado, Omar Rojas, Rafael Romero-Meza, and Leslie Verteramo Chiu. In Fredj Jawadi (Ed.), *Uncertainty, Expectations and Asset Price Dynamics: Essays in Honor of Georges Prat*. Springer series on Dynamic Modeling and Econometrics in Economics and Finance, Volume 24. Springer (2018), pp. 107-123.
244. "The Global Crude Oil Market and Biofuel Agricultural Commodity Prices," with Ali Jaidzadeh. *Journal of Economic Asymmetries* 18 (2018), ?-?.
243. "Economic Policy Uncertainty and Real Output: Evidence from the G7 Countries," with Khandokar Istiak. *Applied Economics* 50 (2018), 4222-4233.
242. "Shadow Prices of CO₂ Emissions at U.S. Electric Utilities: A Random-Coefficient, Random-Directional-Vector Directional Output Distance Function Approach," with Guohua Feng and Chuan Wang. *Empirical Economics* 54 (2018), 231-258.
241. "The Zero Lower Bound and Market Spillovers: Evidence from the G7 and Norway," with Evangelos Kyritsis. *Research in International Business and Finance* 44 (2018), 100-123.
240. "Introduction to *Macroeconomic Dynamics* Special Issue on *Dynamics of Oil and Commodity Prices*, with Matteo Manera. *Macroeconomic Dynamics* 22 (2018), 541-545.
239. "The Zero Lower Bound and Crude Oil and Financial Markets Spillovers," with Libo Xu. *Macroeconomic Dynamics* 22 (2018), 654-665.
238. "Broker-Dealer Leverage and the Stock Market," with Khandokar Istiak. *Open Economies Review* 29 (2018), 215-222.
237. "Oil Price Shocks and the Credit Default Swap Market," with Wei Dai. *Open Economies Review* 29 (2018), 283-293.
236. "Oil, Uncertainty, and Gasoline Prices," with Dongfeng Chang. *Macroeconomic Dynamics* 22 (2018), 546-561.

2017

235. "Electricity Prices, Large-Scale Renewable Integration, and Policy Implications," with Evangelos Kyritsis and Jonas Andersson. *Energy Policy* 101 (2017), 550-560.

234. "How Does the U.S. Natural Gas Market React to Demand and Supply Shocks in the Crude Oil Market?" with Ali Jadidzadeh. *Energy Economics* 63 (2017), 66-74.
233. "Financial Intermediary Leverage Spillovers," with Khandokar Istiak. *Research in International Business and Finance* 39 (2017), 1000-1007.
232. "Monetary Policy and Leverage Shocks," with Khandokar Istiak. *International Journal of Finance and Economics* 22 (2017), 115-128. <https://doi.org/10.1002/ijfe.1571>
231. "Financial Frictions and the Fiscal Theory of Price Level Determination," with Libo Xu. *Open Economies Review* 28 (2017), 251-272.
230. "A Century of Interfuel Substitution," with Nurul Hossain. *Journal of Commodity Markets* 8 (2017), 28-42.
229. "Stochastic Volatility Demand Systems," with Maksim Isakin. *Econometric Reviews* 36 (2017), 1111-1122.
228. "An Interview with William A. Barnett." *Econometrics* 5 (2017), 1-32.

2016

227. "Are the Responses of the U.S. Economy Asymmetric to Positive and Negative Money Supply Shocks?" with Khandokar Istiak. *Open Economies Review* 27 (2016), 303-316.
226. "Sectoral Interfuel Substitution in Canada: An Application of NQ Flexible Functional Forms," with Ali Jadidzadeh. *The Energy Journal* 37 (2016), 181-199.
225. "Introduction to *Macroeconomic Dynamics* Special Issue on *Complexity in Economic Systems*." *Macroeconomic Dynamics* 20 (2016), 461-465.
224. "Monetary and Fiscal Policy Switching with Time-Varying Volatilities," with Libo Xu. *Economics Letters* 145 (2016), 202-205.
223. "A Note on Leverage and the Macroeconomy," with Khandokar Istiak. *Macroeconomic Dynamics* 20 (2016), 429-445.
222. "Volatility and a Century of Energy Markets Dynamics," with Libo Xu. *Energy Economics* 55 (2016), 1-9.
221. "Money, Velocity, and the Stock Market," with Karl Pinno. *Open Economies Review* 27 (2016), 671-695.

2015

220. "Nonlinearities and Financial Contagion in Latin American Stock Markets," with Rafael Romero-Meza, Claudio Bonilla, and Hugo Benedetti. *Economic Modelling* 51 (2015), 653-656.
219. "Introduction to *Econometrics with Theory: A Special Issue Honoring William A. Barnett*," with James J. Heckman. *Econometric Reviews* 34 (2015), 1-5.

218. “Nonlinear and Complex Dynamics in Economics,” with William A. Barnett and Demitre Serletis. *Macroeconomic Dynamics* 19 (2015), 1749-1779.
217. “Imposing Theoretical Regularity on Flexible Functional Forms,” with Guohua Feng. *Econometric Reviews* 34 (2015), 198–227.
216. “On the Output Effects of Monetary Variability,” with Sajjadur Rahman. *Open Economies Review* 26 (2015), 225-236.

2014

215. “Oil and the Economy: A Cross Bicorrelation Perspective,” with Rafael Romero-Meza and Semei Coronado. *Journal of Economic Asymmetries* 11 (2014), 91-95.
214. “Energy Markets Volatility Modelling using GARCH,” with Olga Efimova. *Energy Economics* 43 (2014), 264-273.
213. “Divisia Monetary Aggregates, the Great Ratios, and Classical Money Demand Functions,” with Periklis Gogas. *Journal of Money, Credit and Banking* 46 (2014), 229-241.
212. “The Demand for Gasoline: Evidence from Household Survey Data,” with Dongfeng Chang. *Journal of Applied Econometrics* 29 (2014), 291-313.
211. “Undesirable Outputs and a Primal Divisia Productivity Growth Index Based on the Directional Output Distance Function,” with Guohua Feng. *Journal of Econometrics* 183 (2014), 135–146.
210. “Introduction to *Internally Consistent Modeling, Aggregation, Inference, and Policy*,” with James J. Heckman. *Journal of Econometrics* 183 (2014), 1-4.

2013

209. “Public Infrastructure and Externalities in U.S. Manufacturing: Evidence from the Price Augmenting AIM Cost Function,” with Guohua Feng. *Macroeconomic Dynamics* 17 (2013), 1367-1410.
208. “Is the Oil Price-Output Relation Asymmetric?” with Khandokar Istiak. *The Journal of Economic Asymmetries* 10 (2013), 10-20.
207. “Interest Rates, Leverage, and Money,” with Khandokar Istiak and Periklis Gogas. *Open Economies Review* 24 (2013), 51-78.
206. “The Case for Divisia Money Targeting,” with Sajjadur Rahman. *Macroeconomic Dynamics* 17 (2013), 1638-1658.
205. “Oil Price Uncertainty and Industrial Production,” with Karl Pinno. *The Energy Journal* 34 (2013), 191-216.

2012

204. “A Statistical Test of Chaotic Purchasing Power Parity Dynamics,” with Asghar Shahmoradi. In Catherine Kyrtosu and Costas Vorlow (eds.), *Progress in Financial Markets Research*. New York: Nova Science Publishers (2012), pp. 103-120.

203. "Macroeconomics as a Science: *Foreword to William A. Barnett, Getting it Wrong: How Faulty Monetary Statistics Undermine the Fed, the Financial System, and the Economy.*" In William A. Barnett, *Getting it Wrong: How Faulty Monetary Statistics Undermine the Fed, the Financial System, and the Economy.* Cambridge MA: The MIT Press (2012).
202. "Oil Price Uncertainty and the Canadian Economy: Evidence from a VARMA, GARCH-in-Mean, Asymmetric BEKK Model," with Sajjadur Rahman. *Energy Economics* 34 (2012), 603-610.
201. "Episodic Nonlinearity in Leading Global Currencies," with Anastasios G. Malliaris, Melvin J. Hinich, and Periklis Gogas. *Open Economies Review* 23 (2012), 337-357.
200. "Imposing Local Curvature in the QUAIDS," with Dongfeng Chang. *Economics Letters* 115 (2012), 41-43.

2011

199. "Inflation and Welfare in Latin America," with Kazem Yavari. *Open Economies Review* 22 (2011), 39-52.
198. "International Evidence on Aggregate Short-Run and Long-Run Interfuel Substitution," with Govinda Timilsina and Olexandr Vasetsky. *Energy Economics* 33 (2011), 209-216.
197. "Volatility in Oil Prices and Manufacturing Activity: An Investigation of Real Options," with John Elder. *Macroeconomic Dynamics* 15 (Supplement 3) (2011), 379-395.
196. "The Asymmetric Effects of Oil Price Shocks," with Sajjadur Rahman. *Macroeconomic Dynamics* 15 (Supplement 3) (2011), 437-471.
195. "Introduction to *Macroeconomic Dynamics* Special Issue on *Oil Price Shocks*," with John Elder. *Macroeconomic Dynamics* 15 (Supplement 3) (2011), 327-336.

2010

194. "Forecast Evaluation in Daily Commodities Futures Markets," with Periklis Gogas. *International Journal of Financial Markets and Derivatives* 1 (2010), 155-168.
193. "Purchasing Power Parity Over a Century," with Yevheniya Hyrina. *Journal of Economic Studies* 117 (2010), 117-144.
192. "The Asymmetric Effects of Oil Price and Monetary Policy Shocks: A Nonlinear VAR Approach," with Sajjadur Rahman. *Energy Economics* 32 (2010), 1460-1466.
191. "International Evidence on Sectoral Interfuel Substitution," with Govinda Timilsina and Olexandr Vasetsky. *The Energy Journal* 31 (2010), 1-29.
190. "Interfuel Substitution in the United States," with Govinda Timilsina and Olexandr Vasetsky. *Energy Economics* 32 (2010), 737-745.
189. "Consumption Effects of Government Purchases," with Asghar Shahmoradi. *Journal of Macroeconomics* 32 (2010), 892-905.

188. "Efficiency, Technical Change, and Returns to Scale in Large U.S. Banks: Panel Data Evidence from an Output Distance Function Satisfying Theoretical Regularity," with Guohua Feng. *Journal of Banking and Finance* 34 (2010), 127-138.
187. "Semi-Nonparametric Estimates of Currency Substitution Between the Canadian Dollar and the U.S. Dollar," with Guohua Feng. *Macroeconomic Dynamics* 14 (2010), 29-55.
186. "A Primal Divisia Technical Change Index Based on the Output Distance Function," with Guohua Feng. *Journal of Econometrics* 159 (2010), 320-330.
185. "Oil Price Uncertainty," with John Elder. *Journal of Money, Credit and Banking* 42 (2010), 1137-1159.

2009

184. "The Differential Approach to Demand Analysis and the Rotterdam Model," with William A. Barnett. In Daniel Slottje (ed.), *Quantifying Consumer Preferences* (2009), pp. 61-81. Contributions to Economic Analysis. Emerald.
183. "Measuring Consumer Preferences and Estimating Demand Systems," with William A. Barnett. In Daniel Slottje (ed.), *Quantifying Consumer Preferences* (2009), pp. 1-35. Contributions to Economic Analysis. Emerald.
182. "The Effects of Inflation Uncertainty: Some International Evidence," with Sajjadur Rahman. *Journal of Economic Studies* 36 (2009), 541-550.
181. "Testing for Causality in the Transmission of Eurodollar and U.S. Interest Rates," with Richard A. Ajayi. *Applied Financial Economics* 19 (2009), 439-443.
180. "The Output Effects of Money Growth Uncertainty: Evidence from a Multivariate GARCH-in-Mean VAR," with Sajjadur Rahman. *Open Economies Review* 20 (2009), 607-630.
179. "Energy Sector Pricing: On the Role of Neglected Nonlinearity," with Catherine Kyrtsov and Anastasios G. Malliaris. *Energy Economics* 31 (2009), 492-502.
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1. "Divisia Aggregation and Substitutability Among Monetary Assets," with A. Leslie Robb. *Journal of Money, Credit and Banking* 18 (1986), 430-446.

LECTURES, SEMINARS, AND PRESENTATIONS:

(A list of recent presentations, seminars, and keynote addresses)

2021

- *Monetary Policy in Good and Bad Times*, Keynote Speech, Macroeconomics Workshop, University of Tasmania, Australia, December 2021.

2019

- *On the Many Kinds of Money*, Presidential Address, 6th annual conference of the Society for Economic Measurement, Goethe University Frankfurt (with co-sponsorship of the European Central Bank), Frankfurt, Germany, August 2019.
- *On the Markov Switching Welfare Cost of Inflation*, 6th annual conference of the Society for Economic Measurement, Goethe University Frankfurt (with co-sponsorship of the European Central Bank), Frankfurt, Germany, August 2019.

2018

- *Monetary Policy in Advanced and Emerging Market Economies*, VII International Scientific Conference at People's Friendship University of Russia (RUDN), Moscow, Russia, May 2018.
- *Monetary Policy in Advanced and Emerging Market Economies*, President-elect Address, 5th annual conference of the Society for Economic Measurement, Xiamen, China, June 2018.

2017

- *Interest Rates, Leverage, and Money*, 5th International Ph.D. Meeting of Thessaloniki, University of Macedonia, Thessaloniki, Greece, July 2017.

2016

- *Volatility and a Century of Energy Markets Dynamics*. Norwegian School of Economics, Norway, February 2016.
- *The Dynamics of Investment Projects*. Bank for International Settlements CCA Research Network, Mexico City, Mexico, August 2016.
- *Monetary Policy and Leverage Shocks*, 3rd annual conference of the Society for Economic Measurement, Aristotle University, Thessaloniki, Greece, July 2016.

2015

- *Volatility and a Century of Energy Markets Dynamics*, China Agricultural University, Beijing, China, May 2015.
- *Volatility and a Century of Energy Markets Dynamics*, Beijing Institute of Technology, Beijing, China, May 2015.
- *Money and the Economy*, Shandong University, Jinan, China, May 2015.
- *Volatility and a Century of Energy Markets Dynamics*, Fondazione Eni Enrico Mattei, Milan, Italy, June 2015.
- *The Demand for Liquid Assets and Optimal Monetary Aggregation*, 2st annual conference of the Society for Economic Measurement, OECD, Paris, France, June 2015.

2014

- *Interest Rate and Leverage Shocks*, Memorial University, St. Johns, Newfoundland, Canada, March 2014.
- *Interest Rate and Leverage Shocks*, University of Lethbridge, Alberta, Canada, April 2014.
- *Leverage and the Macroeconomy*, 2nd International Ph.D. Meeting of Thessaloniki, University of Macedonia, Thessaloniki, Greece, June 2014.
- *Discussion of the Presidential Address (by William A. Barnett)*, 1st annual conference of the Society for Economic Measurement, University of Chicago, USA, August 2014.

SUPERVISION OF GRADUATE STUDENTS:

Doctoral Dissertations Supervised

18. Azad, Nahiyah. “Spillovers to Emerging Market Economies,” 2022. (Placement: University of Wisconsin — Parkside)
17. Dery, Cosmas. “Divisia Monetary Aggregate, Macroeconomic Shocks, and Economic Fluctuations,” 2022. (Placement: Sam Houston State University)
16. Liu, Jinan. “Contributions to Monetary Aggregation,” 2021. (Placement: University of Nebraska at Omaha)
15. Nsafoah, Dennis. “Essays in Monetary Economics,” 2021. (Placement: Niagara University)
14. Dai, Wei. “Essays in Monetary Economics,” 2020. (Placement: University of British Columbia — Okanagan Campus)
13. Hossain, Nurul. “Essays on Applied Econometrics,” 2019. (Placement: Smart Prosperity Institute, Ottawa, Canada)
12. Esheba, Muna. “Essays on Distance Functions and Inefficiency Measurement,” 2018.
11. Kyritsis, Evangelos. “Energy Markets in Transition: Renewables, Bounds and Uncertainty — An Econometric Approach,” 2018. Co-supervisor (with Jonas Andersson), Norwegian School of Economics. (Placement: Government Institute for Economic Research, Helsinki, Finland)
10. Xu, Libo. “Three Essays in Macroeconomics and Monetary Economics,” 2017. (Placement: University of San Francisco)
9. Pinno, Karl. “Three Essays in Macroeconometrics,” 2016. (Placement: University of British Columbia — Okanagan Campus)
8. Isakin, Maksim. “Three Essays in Financial Economics,” 2016. (Placement: Cleveland State University)
7. Jadidzadeh, Ali. “Essays on Micro- and Macro-Econometrics,” 2015. (Placement: School of Public Policy, University of Calgary)
6. Istiak, Khandokar. “Leverage and the Macroeconomy,” 2015. (Placement: University of South Alabama)
5. Chang, Dongfeng. “Essays on Applied Econometrics,” 2013. (Placement: Shandong University, China)
4. Rahman, Sajjadur. “Volatility and Assymetry in Macroeconomics,” 2009. (Placement: Texas A&M University — San Antonio)
3. Feng, Guohua. “Three Essays in Productivity and Efficiency,” 2008. (Placement: Monash University and University of North Texas)
2. Shahmoradi, Asghar. “Flexible Functional Forms and the Demand for Assets,” 2006. (Placement: International Monetary Fund, Washington, D.C.)

1. Gogas, Periklis. "Purchasing Power Parity, Balanced Growth, and Volatility Forecasting: An Application of Recent Developments in Time Series Analysis," 2000. (Placement: Democritus University, Greece)

M.A. Theses Supervised

29. Jahan, Sayeeda. "Business Cycles and Hydrocarbon Gas Liquids Prices," 2018.
28. Efimova, Olga. "Energy Commodity Volatility Modelling using GARCH," 2012.
27. Wyllie, Kenneth. "Wind Power and Its Effects on the Alberta Wholesale Electricity Market," 2012.
26. Vasetsky, Olexandr. "Interfuel and Interfactor Substitution in Different Sectors of the U.S. Economy," 2009.
25. Hyrina, Genya. "The Validity of Purchasing Power Parity over the Last Century," 2007.
24. Rosenberg, Aryeh A. "Oil Price Volatility and the Canadian Macroeconomy," 2006.
23. Leung, Benny. "The Duration of Bull and Bear Markets in the Dow Jones Industrial Average," 2006.
22. Vaccaro, Jason. "Cross-Country Evidence on the Demand for Money," 2005.
21. Chan, Patrick. "European Union and European Monetary Union," 2004.
20. Anderson, Carmen. "An Analysis of the Bayesian Classification of Monetary Assets in the United States," 2003.
19. Chiew, Robert. "Business Cycles Synchronicity and the Fixed Exchange Rate," 2003.
18. Stokl, Richard. "On Chaos and Self-Organized Criticality," 2003.
17. Virk, Jagat Jit, "Inflation, Welfare, and Monetary Aggregation Issues," 2002.
16. Rangel-Ruiz, Ricardo. "Nonparametric and Semi-Nonparametric Approaches to the Demand for Liquid Assets in Canada," 2000.
15. Joncic, John. "An Empirical Review of Monetary Aggregates in Canada: Substitution, Separability and Time Series Characteristics," 2000.
14. Molik, Terence. "The Construction of Aggregation-Theoretic Money Measures for Canada," 1999.
13. Hutton, Correy. "The Term Structure of Canadian Interest Rates," 1998.
12. McGrath, Sean. "Predictability of Energy Prices," 1998.
11. Jacyk, Chris. "The Effects of Oil Price Shocks," 1997.
10. Schorn, Richard. "Determination of Efficient Inflationary Levels Under Various Government Policy Perspectives," 1996.

9. Chwee, Victor. "The Dynamic Effects of Monetary Policy Shocks," 1996.
8. Sharma, Faizal. "Canadian Monetary Policy Shocks," 1996.
7. Beg, Sarena. "Determinants of Velocity," 1996.
6. Kemp, Todd. "The Behavior of Natural Gas Prices," 1995.
5. Krause, David. "Does Money Matter?" 1995.
4. Shamji, Mebz. "Tests of Purchasing Power Parity in OECD Countries," 1993.
3. Dormaar, Paul. "Chaotic Dynamics in Futures Markets," 1993.
2. King, Martin. "A Perspective on Money and Monetary Mechanisms in Canada," 1990.
1. Banack, David. "The Message in Petroleum Futures Prices," 1990.

M.Sc. Theses Supervised

1. Bianchi, Mattia. "Power Systems as Open Markets: The Case of Alberta's Deregulated Electricity Market," Dipartimento di Ingegneria Gestionale, Politecnico di Milano, Milano, Italy, 2006. (Placement: Assistant Professor of Business Administration, Stockholm School of Economics)

M.Ec. Projects Supervised

5. Thibeault, Kirby. "Financial Variables and Forecasting Recessions in Canada," 2000.
4. Olivier, Gabriele. "Forecasting Energy Prices with Univariate Models," 1997.
3. Yadav, Kumar. "Maturity and Length Effects in Currency Futures," 1994.
2. Hulleman, Vaughn. "The Theory of Storage and Petroleum Futures," 1993.
1. Sondergard, Murray. "An Examination of the Efficient Markets Hypothesis for the Toronto Stock Exchange," 1992.

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