

**Apostolos Serletis**  
Professor of Economics and Finance  
Department of Economics  
University of Calgary

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2500 University Drive N.W.,  
Calgary, Alberta,  
T2N 1N4, Canada

Tel: (403) 220-4092; Fax: (403) 282-5262  
E-mail: [serletis@ucalgary.ca](mailto:serletis@ucalgary.ca)  
<http://ideas.repec.org/e/pse31.html>

## Curriculum Vitae

**DATE AND PLACE OF BIRTH:**

08-12-1954, Hellas

**NATIONALITY:**

Hellenic

**CITIZENSHIP:**

Hellenic and Canadian

**EDUCATION:**

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

**ACADEMIC POSITIONS:**

- Assistant Professor, University of Calgary, 1984-1988
- Visiting Assistant Professor, University of Texas at Austin, 1986-1987
- Associate Professor, University of Calgary, 1988-1991
- Professor, University of Calgary, 1991-present
- University Professor, University of Calgary, 2006-2011

**FIELDS OF INTEREST:**

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

## AWARDS AND HONORS:

- Associate Editor, *Energy Economics*, 2009-
- Associate Editor, *Open Economies Review*, 2016-
- Associate Editor, *Macroeconomic Dynamics*, 2004-
- Associate Editor, *Journal of Economic Asymmetries*, 2003-
- Editorial Advisory Board, *Journal of Economic Studies*, 2006-
- Board of Directors of the Athenian Policy Forum, 2012-
- Charter Fellow of the Society for Economic Measurement.
- Director, ICEMR Energy Industry program (RUDN-Moscow), 2017-
- Member of the Executive Committee of the Society for Economic Measurement, 2016-
- Charter Fellow of the Institute for Nonlinear Dynamical Inference (RUDN-Moscow), 2017-
- Associate Editor, *Econometric Reviews*, 2011-2013.
- University Professor, University of Calgary, 2006-2011.
- Editorial Board, *Canadian Journal of Economics*, 1990-1992.
- Australian Research Council, 2012-2014 (\$200,000), Partner Investigator.
- European Research Program (Thalis), 2011-2014 (euro 600,000), Partner Investigator.
- SSHRCC Research grants, 1998-2001, 2002-2005, 2006-2008, Principal Investigator.
- Faculty of Arts (University of Calgary) Research Fellowship, 2002.
- Faculty of Arts (University of Calgary) Distinguished Research Awards, 1997, 2003, and 2011.

## EDITORSHIPS:

### Books

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.
2. Editor, *Money and the Economy*. World Scientific (2006). This book has a *Foreword* by William A. Barnett.
3. 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.
  - 1st Edition, World Scientific, 2007
  - Revised Edition, World Scientific, 2013
4. Co-editor (with William A. Barnett), *Functional Structure Inference*. International Symposia in Economic Theory and Econometrics (ISETE). Amsterdam: Elsevier (2007).

## Journals

1. Co-editor (with John Elder), special issue on “Oil Price Shocks,” *Macroeconomic Dynamics* 15 (Supplement 3), November 2011.
2. Co-editor (with James Heckman), special issue on “Internally Consistent Modeling, Aggregation, Inference and Policy,” *Journal of Econometrics* Volume 183, Issue 1 (2014).
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.
4. Editor, special issue on “Complexity in Economic Systems,” *Macroeconomic Dynamics*, forthcoming (2015).
5. Co-editor (with Matteo Manera), special issue on “Dynamics of Oil and Commodities Prices,” *Macroeconomic Dynamics*, forthcoming (2016).

## PUBLICATIONS:

## Books

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

## Textbooks

1. *The Demand for Money: Theoretical and Empirical Approaches*. This book has a *Foreword* by David Laidler.
  - 1st Edition, Kluwer, 2001
  - 2nd Edition, Springer, 2007
2. *Financial Markets and Institutions*, with Frederic S. Mishkin and Stanley G. Eakins.
  - 1st Canadian Edition, Pearson: Toronto, 2004
3. *The Economics of Money, Banking, and Financial Markets*, with Frederic S. Mishkin.
  - 1st Canadian Edition, Pearson: Toronto, 2002
  - 2nd Canadian Edition, Pearson: Toronto, 2005
  - 3rd Canadian Edition, Pearson: Toronto, 2008
  - 4th Canadian Edition, Pearson: Toronto, 2011
  - 5th Canadian Edition, Pearson: Toronto, 2014
  - 6th Canadian Edition, Pearson: Toronto, 2016

4. *Instructors Manual for the Economics of Money, Banking, and Financial Markets*, with Frederic S. Mishkin.
  - 1st Canadian Edition, Pearson: Toronto, 2002
  - 2nd Canadian Edition, Pearson: Toronto, 2005
  - 3rd Canadian Edition, Pearson: Toronto, 2008
  - 4th Canadian Edition, Pearson: Toronto, 2011
  - 5th Canadian Edition, Pearson: Toronto, 2014
  - 6th Canadian Edition, Pearson: Toronto, 2016
  
5. *Macroeconomics: A Modern Approach*, with Robert J. Barro.
  - 1st Canadian Edition, Nelson: Toronto, 2010
  
6. *Instructors Manual for Macroeconomics: A Modern Approach*, with Robert J. Barro.
  - 1st Canadian Edition, Nelson: Toronto, 2010
  
7. *Principles of Economics*, with R. Glenn Hubbard, Anthony Patrick O'Brien, and Jason Childs.
  - 1st Canadian Edition, Pearson: Toronto, 2015
  - 2nd Canadian Edition, Pearson: Toronto, 2018
  
8. *Instructors Manual for Principles of Economics*, with R. Glenn Hubbard, Anthony Patrick O'Brien, and Jason Childs.
  - 1st Canadian Edition, Pearson: Toronto, 2015
  - 2nd Canadian Edition, Pearson: Toronto, 2018

## Articles

### 1986

1. "Divisia Aggregation and Substitutability Among Monetary Assets," with A. Leslie Robb. *Journal of Money, Credit and Banking* 18 (1986), 430-446.

### 1987

2. "The Demand for Divisia M1, M2, and M3 in the United States." *Journal of Macroeconomics* 9 (1987), 567-591.
3. "On the Demand for Money in the United States." *Empirical Economics* 12 (1987), 249-255.
4. "Monetary Asset Separability Tests." In William A. Barnett and Kenneth Singleton (eds.), *New Approaches to Monetary Economics* (1987), pp. 169-182. Cambridge: Cambridge University Press.

### 1988

5. "New Tests of the Theory of Optimal Seigniorage." *Economics Letters* 27 (1988), 361-365.

6. "The Empirical Relationship between Money, Prices and Income Revisited." *Journal of Business and Economic Statistics* 6 (1988), 351-358.
7. "Translog Flexible Functional Forms and Substitutability of Monetary Assets." *Journal of Business and Economic Statistics* 6 (1988), 59-67.
8. "A Financial Theory of the Financial Firm," with Subal Kumbhakar." *Journal of Quantitative Economics* 4 (1988), 201-212.
9. "The Low-Frequency Relationship between Money, Prices, and Income," with Frank J. Atkins. *Applied Economics* 20 (1988), 877-887.

## 1989

10. "Velocity and the Growth of Money in the United States: 1970-1985," with Douglas Fisher. *Journal of Macroeconomics* 11 (1989), 323-332.
11. "Long Term Trends in Canadian Economic Development," with Panos C. Afrentiou. *Economic Notes* (1989), 362-375.
12. "Money and the Economy." In *9th World Congress of the International Economic Association: Congress Proceedings* (1989) Vol. 2, pp. 261-280. The Athens Graduate School of Economics and Business Science, Athens Greece.

## 1990

13. "A Dispersion-Dependency Diagnostic Test for Aggregation Error: With Applications to Monetary Economics and Income Distribution," with William A. Barnett. *Journal of Econometrics* 43 (1990), 5-34. Reprinted in William A. Barnett and Apostolos Serletis (eds.), *The Theory of Monetary Aggregation* (2000), pp.167-194. Amsterdam: North-Holland.
14. "Market Efficiency and Cointegration: An Application to Petroleum Markets," with David Banack. *The Review of Futures Markets* 9 (1990), 372-380.
15. "KLEM Substitutability: A Dynamic Flexible Demand System," with Subal Kumbhakar. *Applied Economics* 22 (1990), 275-283.
16. "Velocity Effects of Anticipated and Unanticipated Money Growth and its Variability." *Applied Economics* 22 (1990), 775-783.

## 1991

17. "The Demand for Divisia Money in the United States: A Dynamic Flexible Demand System." *Journal of Money, Credit and Banking* 23 (1991), 35-52.
18. "Modeling the Demand for Consumption Goods and Liquid Assets." *Journal of Macroeconomics* 13 (1991), 435-457.
19. "Rational Expectations, Risk and Efficiency in Energy Futures Markets." *Energy Economics* 13 (1991), 111-115.
20. "Informational Efficiency of Commodity Futures Prices," with David Scowcroft. *Applied Financial Economics* 1 (1991), 185-192.
21. "A Time Series Analysis of the Relationship Between Government Expenditure and GDP in Canada," with Panos C. Afrentiou. *Public Finance Quarterly* 19 (1991), 316-333.
22. "Exports and GNP Causality in the Industrial Countries: 1950-1985," with Panos C. Afrentiou. *Kyklos* 44 (1991), 167-179.

23. "Exports in the Canadian Economic Development: 1926-1983," with Panos C. Afxentiou. *Economic Notes* 20 (1991), 354-366.
24. "International Evidence on Income and Government Expenditure Causality: A Test of Development Economics," with Panos C. Afxentiou. *KEIO Economic Studies* 28 (1991), 29-42.
25. "The Post-War Aggregate Production Function in Canada: 1946-1988," with Panos C. Afxentiou. *Economia Internazionale* 44 (1991), 168-175.

## 1992

26. "Consumer Theory and the Demand for Money," with William A. Barnett and Douglas Fisher. *Journal of Economic Literature* 30 (1992), 2086-2119. Reprinted in William A. Barnett and Apostolos Serletis (eds.), *The Theory of Monetary Aggregation* (2000), pp. 389-427. Amsterdam: North-Holland.
27. "The Random Walk in Canadian Output." *Canadian Journal of Economics* 25 (1992), 392-406.
28. "Export Growth and Canadian Economic Development." *Journal of Development Economics* 38 (1992), 133-145.
29. "Output Trends in EC Countries and the Implications for Transition to Monetary Union," with Thomas Krichel. *Economics Letters* 40 (1992), 211-216.
30. "Maturity Effects in Energy Futures." *Energy Economics* 14 (1992), 150-157.
31. "Unit Root Behavior in Energy Futures Prices." *The Energy Journal* 13 (1992), 119-128.
32. "Canadian Economic Growth: 1870 - 1985," with Panos C. Afxentiou. *Greek Economic Review* 14 (1992), 251-264.
33. "Openness in the Canadian Economy: 1870 - 1988," with Panos C. Afxentiou. *Applied Economics* 24 (1992), 1191-1198.
34. "Modeling the Relationship Between Output and Government Expenditures in Canada," with Panos C. Afxentiou. *KEIO Economic Studies* 29 (1992), 17-43.
35. "Commentary." In *Monetary Seminar* [a seminar sponsored by the Bank of Canada, May 7-9, 1990] 1990, pp. 115-118. Bank of Canada.

## 1993

36. "The Role of Money in Canada," with Martin King. *Journal of Macroeconomics* 15 (1993), 91-107.
37. "Money and Stock Prices in the United States." *Applied Financial Economics* 3 (1993), 51-54.
38. "International Capital Mobility and the Long Run Investment and Saving in Canada," with Panos C. Afxentiou. *Economia Internazionale* 46 (1993), 147-167.

## 1994

39. "Testing the Long-Run Implications of the Neoclassical Growth Model for Canada." *Journal of Macroeconomics* 16 (1994), 329-346.
40. "Maximum Likelihood Cointegration Tests of Purchasing Power Parity: Evidence from Seventeen OECD Countries." *Weltwirtschaftliches Archiv* 130 (1994), 476-493.
41. "A Cointegration Analysis of Petroleum Futures Prices." *Energy Economics* 16 (1994), 93-97.
42. "Business Cycles and the Behavior of Energy Prices," with Vaughn Hulleman. *The Energy Journal* 15 (1994), 125-134.

43. "International Evidence on Breaking Trend Functions in Macroeconomic Variables." *Applied Economics* 26 (1994), 175-179.
44. "Common Stochastic Trends in a System of East European Black-Market Exchange Rates." *Applied Financial Economics* 4 (1994), 23-31.
45. "Breaking Trend Functions in the Velocity of Money: Evidence from the United States and Canada." *North American Journal of Economics and Finance* 5 (1994), 201-208.
46. "Deterministic Trends and Money-Output Causality," with Martin King. *Applied Financial Economics* 4 (1994), 143-147.
47. "Economic and Monetary Union in Europe: Progress and Prospects." In Gretchen M. MacMillan (ed.), *The European Community, Canada and 1992* (1994), pp. 77-90. The Faculty of Social Sciences, University of Calgary.

## 1995

48. "Random Walks, Breaking Trend Functions, and the Chaotic Structure of the Velocity of Money." *Journal of Business and Economic Statistics* 13 (1995), 453-458.
49. "The Impact of International Indebtedness on the Import-Export Sectors of Developing Countries," with Panos C. Afrentiou. *International Economic Journal* 9 (1995), 73-87.
50. "International Evidence on the Long-Run Implications of the Neoclassical Growth Model," with Thomas Krichel. *Applied Economics* 27 (1995), 205-210.

## 1996

51. "International Evidence on the Cyclical Behavior of Inflation." *Economics Letters* 51 (1996), 205-212.
52. "Empirical Evidence on the Long-Run Neutrality Hypothesis Using Low-Frequency International Data," with David Krause. *Economics Letters* 50 (1996), 323-327.
53. "Government Activities and Tests of the Long-Run Implications of the Neoclassical Growth Model for Canada." *Canadian Journal of Economics* 29 (1996), 635-642.
54. "Is There Chaos in Economic Time Series?" *Canadian Journal of Economics* 29 (1996), S210-S212.
55. "Permanent and Temporary Components of Canadian Stock Prices," with Murray Sondergard. *Applied Financial Economics* 6 (1996), 259-269.
56. "Testing for Deterministic Nonlinear Dependence in the Australian Dollar-U.S. Dollar Exchange Rate Series," with Paul Dormaar. *Applied Economics Letters* 3 (1996), 267-269.
57. "Nominal Stylized Facts of U.S. Business Cycles," with David Krause. *The Federal Reserve Bank of St. Louis Review* 78 (1996), 49-54.
58. "The Sensitivity of Empirical Studies to Alternative Measures of the Monetary Base and Reserves," with Michael Dueker. *The Federal Reserve Bank of St. Louis Review* 78 (1996), 51-69.
59. "Some Evidence on the Neutrality of Money in Canada: A Comparison between Simple Sum and Divisia Money Measures," with James R.C. Brown. *International Review of Comparative Public Policy* 8 (1996), 179-197.
60. "Foreign Indebtedness in Low- and Middle-Income Countries," with Panos C. Afrentiou. *Social and Economic Studies* 45 (1996), 133-159.

61. "Growth and Foreign Indebtedness in Developing Countries: An Empirical Study Using Long-Term Cross-Country Data," with Panos C. Afxentiou. *The Journal of Developing Areas* 31 (1996), 25-40.
62. "Government Expenditures in the European Union: Do They Converge or Follow Wagner's Law?," with Panos C. Afxentiou. *International Economic Journal* 3 (1996), 33-47.
63. "The GNP-Indebtedness Relationship in Developing Countries," with Panos C. Afxentiou. *Rivista Internazionale di Scienze Economiche e Commerciali* 43 (1996), 175-190.
64. "Chaos and Nonlinear Dynamics in Futures Markets," with Paul Dormaar. In William A. Barnett, Alan P. Kirman, and Mark Salmon (eds.), *Nonlinear Dynamics and Economics* (1996), pp. 113-132. Cambridge: Cambridge University Press.
65. "Money Aspects of North American Economies," with David Krause. In Christos C. Paraskevopoulos, Ricardo Grinspun, and George E. Eaton (eds.), *Economic Integration in the Americas* (1996), pp. 34-39. Aldershot, U.K.: Edward Elgar.
66. "Convergence Issues in the Emerging European Economic and Monetary Union," with Panos C. Afxentiou. In Christos C. Paraskevopoulos, Ricardo Grinspun, and Theodore Georgakopoulos (eds.), *Economic Integration and Public Policy in the European Union* (1996), pp. 79-89. Aldershot, U.K.: Edward Elgar.

## 1997

67. "Resolving the Liquidity Puzzle," with Victor Chwee. *Macroeconomic Dynamics* 1 (1997), 720-739.
68. "Breaking Trend Functions in Real Exchange Rates: Evidence From Seventeen OECD Countries," with Grigorios Zimonopoulos. *Journal of Macroeconomics* 19 (1997), 781-802.
69. "Is There an East-West Split in North-American Natural Gas Markets?" *The Energy Journal* 18 (1997), 47-62.
70. "Common Stochastic Trends and Convergence in EU Stock Markets," with Martin King. *The Manchester School* (1997), 44-57.
71. "Convergence and Labour Mobility in the European Union," with Panos C. Afxentiou. *Economic Notes* 26 (1997), 11-34.
72. "Chaos in East European Black Market Exchange Rates," with Periklis Gogas. *Research in Economics* 51 (1997), 359-385.
73. "Policy Implications of Canadian Budget Deficits," with Panos C. Afxentiou. *Rivista Internazionale di Scienze Economiche e Commerciali* 44 (1997), 75-96.
74. "Index Numbers." In David Glasner (ed.), *Business Cycles and Depressions: An Encyclopedia* (1997), pp. 323-325. New York: Garland Publishing.

## 1998

75. "The Cyclical Behavior of Monthly NYMEX Energy Prices," with Todd Kemp. *Energy Economics* 20 (1998), 265-271.
76. "International Evidence on the Neutrality of Money," with Zisimos Koustas. *Journal of Money, Credit and Banking* 30 (1998), 1-25.
77. "Electoral and Partisan Cycle Regularities in Canada," with Panos C. Afxentiou. *Canadian Journal of Economics* 31 (1998), 28-46. Reprinted in Panos Afxentiou and Apostolos Serletis, *Macroeconomic Policy in the Canadian Economy* (2002), pp. 157-176. Boston; Dordrecht and London: Kluwer Academic.



78. "Convergence Across Canadian Provinces," with Panos C. Afxentiou. *Canadian Journal of Regional Science* 21 (1998), 111-126.
79. "Electoral and Partisan Cycle Regularities: A Cointegration Test," with Andreas Andrikopoulos and Kyprianos Prodromidis. *Journal of Policy Modeling* 20 (1998), 119-140.
80. "Monetary Aggregation, Rational Expectations, and the Demand for Money in the United States," with Douglas Fisher and Adrian Fleissig. *North American Journal of Economics and Finance* 9 (1998), 1-13.

## 1999

81. "On the Fisher Effect," with Zisimos Koustas. *Journal of Monetary Economics* 44 (1999), 105-130.
82. "On the Gibson Paradox," with George Zestos. *Review of International Economics* 7 (1999), 117-125.
83. "The Message in North American Energy Prices," with John Herbert. *Energy Economics* 21 (1999), 471-483.
84. "The North American Natural Gas Liquids Markets are Chaotic," with Periklis Gogas. *The Energy Journal* 20 (1999), 83-103.
85. "International Evidence on the Tax- and Revenue-Smoothing Hypotheses," with Richard Schorn. *Oxford Economic Papers* 51 (1999), 387-396.
86. "Testing for Government Spending Convergence Across Canadian Provinces," with Panos C. Afxentiou. *Public Finance Review* 27 (1999), 434-456.
87. "The Foreign Indebtedness of Moderately and Severely-Indebted Developing Countries," with Panos C. Afxentiou. *The South African Journal of Economics* 67 (1999), 95-110.

## 2000

88. "Martingales, Nonlinearity, and Chaos," with William A. Barnett. *Journal of Economic Dynamics and Control* 24 (2000), 703-724.
89. "Chaotic Analysis of U.S. Money and Velocity Measures," with Ioannis Andreadis. *International Journal of Systems Science* 31 (2000), 161-169.
90. "Purchasing Power Parity, Nonlinearity, and Chaos," with Periklis Gogas. *Applied Financial Economics* 10 (2000), 615-622.
91. "Output Growth and the Variability of Exports and Imports Growth: International Evidence from Granger Causality Tests," with Panos C. Afxentiou. *The Developing Economies* 38 (2000), 141-163.
92. "Redistribution and Stabilization Functions of the Canadian Federal Government," with Panos C. Afxentiou. *Rivista Internazionale di Scienze Economiche e Commerciali* 47 (2000), 129-144.
93. "The Maastricht Criteria: Convergence and Economic Benefits," with Panos C. Afxentiou. *Rivista Internazionale di Scienze Economiche e Commerciali* 47 (2000), 513-52.
94. "Monetary Aggregation and Monetary Policy," with Terence E. Molik [invited paper]. In *Money, Monetary Policy and Transmission Mechanisms* (2000), pp. 103-135. Bank of Canada. Reprinted in Panos Afxentiou and Apostolos Serletis, *Macroeconomic Policy in the Canadian Economy* (2002), pp. 117-142. Boston; Dordrecht and London: Kluwer Academic.

## 2001

95. "An Empirical Comparison of Flexible Demand System Functional Forms," with Douglas Fisher and Adrian Fleissig. *Journal of Applied Econometrics* 16 (2001), 59-80.
96. "Monetary Aggregation and the Neutrality of Money," with Zisimos Koustas. *Economic Inquiry* 39 (2001), 124-138.
97. "On Stochasticity and Turbulence in the Federal Funds Market," with Ioannis Andreadis. *International Journal of Systems Science* 32 (2001), 43-52.
98. "Oil Shocks in the NAFTA Countries," with Christopher Jacyk. In Christos C. Paraskevopoulos, Theodore Georgakopoulos, and Leo Michelis (eds.). *The Asymmetric Global Economy: Growth Investment, and Public Policy* (2001). Toronto: APF Press.
99. "The Cyclical Behavior of Money and Prices: Evidence from the OECD," with George Zestos. *Southwestern Economic Proceedings* 28 (2001), 107-111.
100. "Structural Characteristics of the Maastricht Convergence Criteria," with Panos C. Afxentiou. *Economia Internazionale* 54 (2001), 283-298.

## 2002

101. "Evidence of a Random Multifractal Turbulent Structure in the Dow Jones Industrial Average," with Ioannis Andreadis. *Chaos, Solitons & Fractals* 13 (2002), 1309-1315.
102. "Bounds Tests of the Theory of Purchasing Power Parity," with Patrick Coe. *Journal of Banking and Finance* 26 (2002), 179-199.
103. "Semi-Nonparametric Estimates of Substitution for Canadian Monetary Assets," with Adrian R. Fleissig. *Canadian Journal of Economics* 35 (2002), 78-91.
104. "Modeling the Maastricht Criteria," with Panos C. Afxentiou and George Zestos. In Andreas A. Kintis, Peter E. Koveos, Christos C. Paraskevopoulos, and Nicholas C. Baltas (eds.), *Money and Finance in the Global Economy: Challenges and Opportunities for the 21st Century* (2002), pp. 70-86. Toronto: APF Press.
105. "Canadian Monetary Policy Shocks," with Zisimos Koustas. In Andreas A. Kintis, Peter E. Koveos, Christos C. Paraskevopoulos, and Nicholas C. Baltas (eds.), *Money and Finance in the Global Economy: Challenges and Opportunities for the 21st Century* (2002), pp. 153-166. Toronto: APF Press.

## 2003

106. "No Evidence of Chaos But Some Evidence of Dependence in the U.S. Stock Market," with Mototsugu Shintani. *Chaos, Solitons & Fractals* 17 (2003), 449-454.
107. "Bounds Tests of the Gibson Paradox and the Fisher Effect: Evidence from Low-Frequency International Data," with Frank J. Atkins. *The Manchester School* 71 (2003), 673-679.
108. "Long-Run Phillips-Type Trade-offs in European Union Countries," with Zisimos Koustas. *Economic Modelling* 20 (2003), 679-701.
109. "Political and Economic Dimensions of the European Union Expansion," with Panos Afxentiou and Kazem Yavari. *Economia Internazionale* 56 (2003), 383-396.

## 2004

110. "The Welfare Cost of Inflation in Canada and the United States," with Kazem Yavari. *Economics Letters* 84 (2004), 199-204.

111. "Random Fractal Structures in North American Energy Markets," with Ioannis Andreadis. *Energy Economics* 26 (2004), 389-399.
112. "Testing for Common Features in North American Energy Markets," with Ricardo Rangel-Ruiz. *Energy Economics* 26 (2004), 401-414.
113. "Long-Horizon Regression Tests of the Theory of Purchasing Power Parity," with Periklis Gogas. *Journal of Banking and Finance* 28 (2004), 1961-1985.
114. "Absence of Chaos and  $1/f$  Spectra, But Evidence of TAR Nonlinearities, in the Canadian Exchange Rate," with Asghar Shahmoradi. *Macroeconomic Dynamics* 8 (2004), 543-551.
115. "External and Domestic Growth Forces in the Performance of European Union Economies," with Panos Afxentiou and Kazem Yavari. *Economia Internazionale*, 57 (2004), 41-57.
116. "Nonlinear Time Series Analysis of Alberta's Deregulated Electricity Market," with Ioannis Andreadis. In Derek W. Bunn (ed.), *Modeling Prices in Competitive Electricity Markets* (Wiley Series in Financial Economics) 2004, pp. 147-159.

## 2005

117. "Microeconometrics and Measurement Matters: Some Results from Monetary Economics for Canada," with Ricardo Rangel-Ruiz. *Journal of Macroeconomics* 27 (2005), 307-330.
118. "Rational Bubbles or Persistent Deviations from Market Fundamentals?" with Zisimos Koustas. *Journal of Banking and Finance* 29 (2005), 2523-2539.
119. "Semi-Nonparametric Estimates of the Demand for Money in the United States," with Asghar Shahmoradi. *Macroeconomic Dynamics* 9 (2005), 542-559.
120. "Business Cycles and Natural Gas Prices," with Asghar Shahmoradi. *OPEC Review* (2005), 75-84.
121. "Long Swings in the Canadian Dollar," with Karl Pinno. *Applied Financial Economics* 15 (2005), 73-76.
122. "The Welfare Cost of Inflation in Italy," with Kazem Yavari. *Applied Economics Letters* 12 (2005), 165-168.
123. "Revenue Smoothing in an ARIMA Framework: Evidence from the United States," with Periklis Gogas. In Claude Diebolt and Catherine Kyrtsov (eds.), *New Trends in Macroeconomics*, Springer (2005), pp. 79-88.

## 2006

124. "Velocity and the Variability of Money Growth: Evidence from a VARMA, GARCH-M Model," with Akbar Shahmoradi. *Macroeconomic Dynamics* 10 (2006), 652-666.
125. "Comment on 'Singularity Bifurcations,' by Yijun He and William A. Barnett," with Asghar Shahmoradi. *Journal of Macroeconomics* 28 (2006), 23-26.
126. "Chaotic Monetary Dynamics with Confidence," with Mototsugu Shintani. *Journal of Macroeconomics* 28 (2006), 228-252.
127. "Univariate Tests for Nonlinear Structure," with Catherine Kyrtsov. *Journal of Macroeconomics* 28 (2006), 154-168.
128. "Nonlinear and Complex Dynamics in Real Systems," with William A. Barnett and Demitre Serletis. *International Journal of Nonlinear Sciences and Numerical Simulation* 7 (2006), 191-196.

129. "Randomly Modulated Periodic Signals in Alberta's Electricity Market," with Melvin J. Hinich. *Studies in Nonlinear Dynamics and Econometrics* 10(3) (2006), Article 5.
130. "Measuring and Testing Natural Gas and Electricity Markets Volatility: Evidence from Alberta's Deregulated Markets," with Akbar Shahmoradi. *Studies in Nonlinear Dynamics and Econometrics* 10(3) (2006), Article 10.
131. "Monetary Aggregation, Inflation, and Welfare," with Jagat Jit Virk. *Applied Financial Economics* 16 (2006), 499-512.
132. "Futures Trading and the Storage of North American Natural Gas," with Asghar Shahmoradi. *OPEC Review* (2006), 19-26.
133. "Corporate Financing in Canada," with Karl Pinno. *Journal of Economic Asymmetries* 3 (2006), 1-20.
134. "Returns and Volatility in the NYMEX Henry Hub Natural Gas Futures Market," with Asghar Shahmoradi. *OPEC Review* 30 (2006), 171-186.
135. "Cross-Country Evidence on the Demand for Money," with Jason Vaccaro. *Economia Internazionale* 59 (2006), 199-224.
136. "Panel Data Evidence on the Demand for Money," with Jason Vaccaro. *Economia Internazionale* 59 (2006), 525-549.
137. "Productivity Trends in the United States: Evidence from a Normalized Quadratic Variable Profit Function," with Guohua Feng. *Journal of Economic Studies* 33 (2006), 320-335.

## 2007

138. "Episodic Nonlinear Event Detection in the Canadian Exchange Rate," with Melvin J. Hinich. *Journal of the American Statistical Association* 102 (2007), 68-74.
139. "Flexible Functional Forms, Curvature Conditions, and the Demand for Assets," with Asghar Shahmoradi. *Macroeconomic Dynamics* 11 (2007), 455-486.
140. "A Note on Imposing Local Curvature in Generalized Leontief Models," with Asghar Shahmoradi. *Macroeconomic Dynamics* 11 (2007), 290-294.
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## SUPERVISION OF GRADUATE STUDENTS

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## REFERENCES

William A. Barnett  
Oswald Distinguished Professor of Macroeconomics  
Editor of *Macroeconomic Dynamics*  
Department of Economics  
The University of Kansas  
1300 Sunnyside Avenue  
Summerfield Hall,  
Lawrence, KS 60045  
E-mail: barnett@ku.edu

Anastasios G. Malliaris  
Walter F. Mullady, Sr. Professor of Economics and Finance  
School of Business Administration  
Loyola University of Chicago  
1 East Pearson Street  
Chicago, Illinois 60611  
E-mail: tmallia@LUC.edu

Richard Anderson  
School of Business and Entrepreneurship  
Lindenwood University  
Harmon Hall, Room 245  
209 South Kingshighway  
St Charles, Missouri 63301  
E-mail: randerson@lindenwood.edu

W. Erwin Diewert  
Vancouver School of Economics  
The University of British Columbia  
#997-1873 East Mall  
Vancouver, BC V6T 1Z1

Frederic S. Mishkin  
Alfred Lerner Professor of Banking and Financial Institutions  
Graduate School of Business  
Columbia University  
New York, NY 10027  
E-mail: fsm3@columbia.edu