VITA

Name: **Houston H. Stokes**

Home Address:
Apt 3001
1700 East 56th Street
Chicago, Illinois 60637
Home telephone: (773) 643-4383
(269) 426-4740
Cell telephone (non monitored) (773) 750-3178

Business Address:
Department of Economics (M/C 144)
University of Illinois at Chicago
601 S. Morgan Street (Room 722)
Chicago, Illinois 60607-7121
Business telephone: (312) 996-2684
Office (312) 996-2683
Fax (312) 996-3344

Electronic Mail:
hhstokes@uic.edu
hhstokes@gmail.com

B34S® Web Page: www.uic.edu/~hhstokes/hhstokes/b34s.htm

HHS Web Page: www.uic.edu/~hhstokes

Birth Date: 21 November 1940

Marital Status: Married; wife, Diana A. Stokes. 2 Children
William A. Stokes 7/31/80
Houston A. Stokes 1/16/82

Academic Background:
B. A., 1962, Economics, Cornell University
M. A., 1966, Economics, U. of Chicago
Ph.D., 1969, Economics, U. of Chicago

Positions Held in Academic Departments:

1981-2017;	Professor of Economics, UIC
1982-87; 1992, 2010-11	Head Department of Economics, UIC
1974-82;	Director of Graduate Studies, Dept. of Economics, UIC
1974-81;	Associate Professor of Economics, UIC
1968-74;	Assistant Professor of Economics, UIC
1967-68;	Part-Time Instructor of Economics, UIC

Other Academic Positions:

1975 ;	Fellow, Adlai Stevenson Institute, University of Chicago
1979- 98;	Director, Lenox Institute of Water Technology
1997-98;	President Illinois Economic Association
1988-97;	Faculty Appointee with the Energy and Environmental Systems Division of Argonne National Laboratory
1990-;	Associate of RCF Economic and Financial Consulting

Fields of Specialization: Applied Econometrics
Time Series Analysis
Statistical Software Development
International Trade
Monetary Theory and Policy,

Thesis: "The Adjustment Mechanism in the Interest Arbitrage Market: A Theoretical and Empirical Study" University of Chicago August 1969.

Other Activities:

1977-89;	Vice President and Director Stokes Properties Inc.
1989- ;	President and Director Stokes Properties Inc.
1970- ;	Member Radio Club of America. Fellow since 1972.
1996-97;	President Elect and Program Chair Illinois Economic Association
1997-98;	President Illinois Economic Association

Publications List See attached sheets.

Papers Presented See attached sheets.

Special Qualifications:

Expert Fortran programmer and software design engineer. Former beta tester for Speakeasy, Lahey and Interacter. For a partial list of software developed, see attached sheets. Developed B34S Data Analysis Program, a number of SAS® procedures, Speakeasy® commands and SCA® commands. Major effort has been the B34S which is documented in # 60, # 74 and # 82 and available on-line from the B34S web page. Full B34S documentation on the web.

Military Status:

CDR USNR (retired) 2 years active duty, 20 years in reserves (7/62 - 7/84).

Thesis Chaired

1. 1980 Elder, Franklin T. "Employment and Labor Force Effects of Changes in the Federal Minimum Wage"

2. 1983 Thalassinos, Elefther "An Econometric Analysis of International Trade: The Case of Greece

3. 1983 Harris, John L. "Dynamic Relationships Among Interest Rates, Prices, Money and Output: 1954-1980

4. 1983 Pingkarawat, Nampeang "The Dynamics of Exchange Rates Adjustment to Relative Price Movements

5. 1985 Singh, Hardiner "An Integrated Econometric - Time Series (Frequency and Time Domain) Approach to the Testing of Macroeconomic Hypotheses

6. 1987 Mukhopadhyay, Chandan "Stability and Excess Variability of Ex-change Rates Under Activist Monetary Policies - A Theoretical and Empirical Study"

7. 1990 Manning, Linda M. "International Transmission of Inflation Under Fixed and Flexible Exchange Rates: A Time Series Approach"

8. 1990 Andrianacos, Dimitrios "The Domestic Term Structure of Interest Rates and their International Linkages: An Empirical Study"

9. 1992 Theodoropoulou, Soteria "Inflation and the European Monetary System: A Time Series Approach"

10. 1992 Sfondouris, John "Time Series Modeling of the Dynamic Demand for Capital: The Case of the U.S. Private Sector

11. 1993 Shin, Pyoungho "Time Series Analysis of the International Co-Movements of the Stock Markets"

12. 1995 Ni, Yen-Sen "Time Series Approaches to Testing Market Efficiency and Nonlinearity for Inter-national Financial Markets"

13. 1995 Lee, Do Hoon "Time Series Evidence of the Existence of A Credit Channel for the Transmission of Monetary Policy"

14. 1995 Tsoukalas, Dimitrios "The Determinants of Stock Prices – An Empirical Cross-Country Study"

15. 1998 Lemos, Marcos "Exchange Rate Peg, Borrowed Reputation and Price Stability"

16. 1999 Lemos, Maria "Nonlinearity in Target Zone Models with Less than Perfect Credibility"

17. 2001 Lee, Jin Man "A Monte Carlo Study of Asymmetric Time Series"

18. 2003 Ahn, Eun "International Evidence of the Relationship between Stock Returns and Real Activity: A BVAR and BGARCH Approach"

19. 2004 Tallarico, Carol "Does Simultaneity Matter? The Relationship between Economic Growth and the Socio-Political Environment"

20. 2006 Golic, Narsid " Cointegration and Dynamic Specification of Exchange Rate Movement in the Short-Run"

21. 2007 Pattanachak, Kritchaya "The Impact of Financial Crises on Output and Exchange Rates"

22. 2008 Chang, Shaoying "The Relationship between Stock Market an Macroeconomics Variables"

23. 2009 Odell, Kathleen E. "Nonlinearities and Economic Growth"

24. 2010 Prasarnsith, Wanlapawadee "Market Volatility and Volatility Transmission in International Financial Markets: Nonlinear Approaches"

25. 2010 Hsing-Chien (Cindy) "U.S. Natural Gas and its Influencing Factors"

26. 2011 Larsen, Nicholas William. "Nonlinearities in Growth, the Efficiency of Aid, and Evidence of a Poverty Trap: New Empirical Evidence."

27. 2013 Qiu, Hanqing. "An Empirical Study of Peer Effects on Firms Dividends and Stock Repurchase Policies."

28. 2013 Tu, Xinjie. "Monetary Policy and its Prediction of Stock Returns."

29. 2014 Ku, Wen-Yao (Wendy) "Foreign Currency Effects on International Equity Portfolios from a US Investor's Perspective: Evidence from Taiwan, Hong Kong, China, and Singapore."

30. 2014 Gu, Suqin. “Price Dynamics and Volatility Transmission in Cross-listed Equity Index Futures Markets.”

31. 2014 Yu, Wenpei. "An Analysis of Oil Exchange-Traded Fund and its Relationship with the Underlying Oil Price".

32. 2015 Jaberg, David. “Okun’s Law: A Non-Linear Threshold Modeling Approach”.

33. 2017 Loughlin, Colleen. “Evaluating Cartel Overcharge Models: Model Stability and Reliability of Overcharge Estimates.”

34. 2017 Batbold, Boldmaa, “Foreign Aid Effectiveness: What type of Spending Matters for what Outcome.”

PUBLICATIONS LIST

BOOKS (listed with chronological numbers from master publications list):

1. #17. *Unemployment and Adjustment in the Labor Market: A Comparison Between the Regional and National Response*, with Donald Jones and Hugh F, the University of Chicago, Department of Geography Research Series # 177, October 1975, pp. 1-125.

2. #60. *Specifying and Diagnostically Testing Econometric Models*, Quorum Books / Greenwood Press, Westport CT, 1991, pp. 1-337. For second edition see # 74 below. An electronic third edition is listed below.

3. #74. *Specifying and Diagnostically Testing Econometric Models*, Quorum Books / Greenwood Press, Westport CT, Second Edition 1997, pp. 1-446.

4. #76. *New Methods in Financial Modeling: Explorations and Applications*, with Hugh Neuburger, Quorum Books / Greenwood Press, Westport, CT, 1998, pp. 1-156. Chapters available at ftp://ftp:uic.edu/pub/depts./econ/hhstokes/book2/

5. *#90 Effective Control of Urban Smog*, with Richard Kosobud, Carol Tallarico and Brian Scott, UK Routledge Classics, 2006, pp. 1-177.

ELECTRONIC BOOKS

1. *Specifying and Diagnostically Testing Econometric Models*, As of 2010 over 1,100 pages with 17 chapters. Preliminary copy available at ftp://ftp.uic.edu/pub/depts/econ/hhstokes/book1/

2. *The Essentials of Time Series Modeling: An Applied Treatment with Emphasis on Topics Relevant to Financial Analysis* As of 2010 contains 8 chapters and over 289 pages. Preliminary copy available at ftp://ftp.uic.edu/pub/depts/econ/hhstokes/book3/

CHRONOLOGICAL LIST OF PUBLISHED WORK:

1. "Monopsony Minimum Wages and Employment," *American Economist*, Fall 1970, XIV(2), pp. 79-81.

2. "An Empirical Investigation into the Effect of Changes in the Balance of Trade on Interest Arbitrage Under Fixed and Flexible Exchange Rates," 1970 Proceedings of the American Statistical Association, Business and Economics Section, pp. 637-641.

3. "The Crisis Model: An Empirical Test of the Degree of Tension in the Foreign Exchange Market," Proceedings of the Midwest Finance Association, April 1971, pp. 123-147. A revised version was published in *Economic Notes*, 1972, 1(1), pp. 70-91.

4. "Inflation and Stability: A Study of Wage Restrictions on Real Output in a Keynesian and Classical World," *American Economist*, Fall 1971, XV(2), pp. 19-24.

5. ”Real Money Balances: An Omitted Variable From the Production Function," with Allen Sinai, *Review of Economics and Statistics*, August 1972, LIV(3), pp. 290-296.

6. "The Effect of Forward Exchange Intervention: Comment," *Southern Economic Journal*, XXXIX(2), Oct. 1972, pp, 311-316.

7. "The Relationship between Arbitrage, Spot Speculation and Forward Speculation: A Comment on Tsiang," *American Economic Review*, LXIII(5), December 1973, pp. 995-998.

8. "The Role of Money in Adjusting the Interest Arbitrage Market," *Journal of the Midwest Finance Association*, 1973, pp. 127-140.

9. "The Effect of Exchange Transactions Costs on Capital Mobility," 1973 Proceedings of the American Statistical Association, pp. 584-587.

10. "Trade Peace in the Pacific by Means of a Free Trade Area, " with Richard Kosobud, *Journal of International Affairs*, 28(1), 1974, pp. 54-66.

11. "German Banks and German Growth, 1883-1913: An Empirical View," with Hugh Neuburger, *The Journal of Economic History*, XXXIV(3), September 1974, pp. 710-731.

12. "The Economic Consequences of Secretary Kissinger: Bilateral Coalitions in the World Energy Market," with Richard Kosobud in Federal Energy Administration Project Independence Blueprint Transcript of the Fifth Public Hearings, Chicago, Illinois, September 9-13, 1974, U. S. Government Printing Office, November 1974, pp. 427-439.

13. "German Banking and Japanese Banking: A Comparative Analysis," with Hugh Neuburger, The *Journal of Economic History*, XXXV(1), March 1975, pp. 238-255.

14. "Real Money Balances: An Omitted Variable From the Production Function? Reply to Comments," with Allen Sinai, *Review of Economics and Statistics*, LVII(2), May 1975, pp. 247-252.

15. "The Effect of Forward Exchange Intervention: Reply," *The Southern Economic Journal*, XXX(1), July 1975, pp. 159-161.

16. "The Dynamics of Adjustment in the Foreign Exchange Market: A Disaggregated Analysis," with Hugh Neuburger, *Economic Notes*, Vol. 4, #2-3, May-December 1975, pp. 41-62.

17. *Unemployment and Adjustment in the Labor Market: A Comparison Between the Regional and National Response*, with Donald Jones and Hugh Neuburger, the University of Chicago, Department of Geography Research Series # 177, October 1975, pp. 1-125.

18. "The Estimation of Dynamic Economic Relations From a Time Series of Cross Sections: A Programming Modification," with Neil Henry and John McDonald, *Annals of Economic and Social Measurement*, V(1), 1976, pp. 153-155.

19. "Short Run Macroeconomic Adjustment in a Small Region," with Donald Jones and Hugh Neuburger, Geographical Aspects of the Inflationary Process, Peter Corbin and Murry Sabin ed. Part two, Redgrave Publishing Co, 1976, pp. 5-16.

20. "German Banking and German Growth: Reply to Fremdling and Tilly," with Hugh Neuburger, *Journal of Economic History*, XXXVI(2), June 1976, pp. 425-427.

21. "The Optimum Size of Hospital Health Care Modules: The Empirical Evidence," with Dianne Thomas, *Health Services Research*, Vol. 11, No. 3, Fall 1976, pp. 241-251.

22. "Real Money Balances as a Further Variable in the Production Function -- A Further Reply," with Allen Sinai in *Journal of Money and Credit*, Vol. IX, No. 2, (May 1977), pp. 372-373.

23. "The Box-Jenkins Approach -- When is it a Cost-effective Alternative?" with Hugh Neuburger, *Columbia Journal of World Business*, Vol. XI, No. 4, Winter 1976, pp. 78-86.

24. "The Stochastic Structure of the Velocity of Money: Some Reservations," with Hugh Neuburger, *American Economist*, Volume XXIII, #2, Fall 1979, pp. 62-64.

25. "Economic Analysis of OPEC Using a Markov Chain Model," with Richard Kosobud, *Journal of Energy and Development*, Vol. III, No. 2, Spring 1978, pp. 378-400.

26. "German Banks and German Growth: Reply to Komlos, " with Hugh Neuburger, *Journal of Economic History*, Vol. XXXVIII, No. 2, June 1978, pp. 480-482, see also further rejoinder, *Journal of Economic History*, Vol. XXXVIII, No. 4, December 1978, pp. 963- 964.

27. "Oil Market Share Dynamics: A Markov Chain Analysis of Consumer and Producer Adjustments," with Richard Kosobud, *Journal of Empirical Economics*, Vol. 3, #4, pp. 253-275 (1978).

28. "The Anglo-German Trade Rivalry, 1897-1913: A Counterfactual Outcome and Its Implications," with Hugh Neuburger, *Social Science History*, Vol. 3, No. 2, Winter 1979, pp. 187-201.

29. "The Relationship between Interest Rates and Gold Flows Under the Gold Standard: A New Empirical Approach," with Hugh Neuburger, *Economica*, Vol. 46, August 1979, pp. 261-279.

30. "The Effect of Monetary Changes on Interest Rates: A Box-Jenkins Approach," with Hugh Neuburger, *Review of Economics and Statistics*, Vol. LXI, No. 4, November 1979, pp. 534-548.

31. "OPEC Short Run Market Share Behavior: Implications, Theories and Facts," with Richard Kosobud, *Journal of Energy Economics*, Vol. 2, #2, April 1980, pp. 66-80.

32. "Interest Arbitrage, Forward Speculation and the Determination of the Forward Exchange Rate, with Hugh Neuburger, *Columbia Journal of World Business*, Vol. XIV, No. 4, Winter 1979, pp. 86-98.

33. "Simulation of World Oil Market shocks: A Markov Analysis of OPEC and Consumer

Behavior," with Richard Kosobud, *The Energy Journal*, Vol. # 2, 1980, pp. 55-84.

34. "Effects of Alternative Seasonal Adjustment Procedures on Monetary Policy: Comment," *Journal of Econometrics,* Vol. 4, No. 1, September 1980, pp. 137-140.

35. "Money and the Production Function - A Reply to Boyes and Kavanaugh," with Allen Sinai, *Review of Economics and Statistics*, Vol. LXIII, No. 2, May 1981, pp. 313-318.

36. "Real Money Balances and Production: A Partial Explanation of Japanese Economic Development for 1952-1968," with Allen Sinai, *Hitotsubashi Journal of Economics*, Vol. 21, No. 2, February 1981, pp. 69-81.

37. "The Relationship Between Money, Interest Rates and Prices: A Vector Autoregressive Approach," 1980 Proceedings of Illinois Economic Association, pp. 1-14. Revised version "The Relationship Between Money, Interest Rates and Prices 1867-1933: A Vector Model Approach," in *Time Series Analysis*: Theory and Practice 3, Edited by O. D. Anderson, North Holland 1983, pp. 231-250.

38. "The Effect of Monetary Variables on Relative Producer Prices," in *Applied Time Series Analysis*, Edited by. O. D. Anderson and M. R. Perryman, North Holland 1982, pp. 383-395.

39. "Applications and Extensions of the Markov Model in Modeling OPEC," *International Journal on Policy and Information,* Vol. 5, No. 2, December 1981, pp. 9-28.

40. "Matrix Operations using LINPACK: An Overview, " Chapter 24 in S. K. Chang edition *Management and Office Information Systems*, Plenum Publishing Corporation, 1984, pp. 415-434. Also published in 10th Annual SPEAKEASY Conference Proceedings, 1982, pp. 77-104.

41. "The Effect of Monetary Changes on Interest Rates: A Reply to Kang," with Hugh Neuburger, *Review of Economics and Statistics*, Vol. LXV, No. 2, May 1983, p. 362.

42. "Problems in the Specification of Forecasting Equations," 1982 Proceedings of the Illinois Economic Association, pp. 39-53. Revised version published in *IEEE Workshop on Languages for Automation*, IEEE Computer Society Press, 1983, pp. 267-273.

43. "Adjustment of Midwest Labor Markets to External Disturbances," in *The Midwest Economy: Issues and Policy*, Edited by Robert Resek and Richard Kosobud, University of Illinois Press, 1983, pp. 147-164.

44. "Output Fluctuations and Relative Price Adjustment: A Vector Model Approach," in *Time Series Analysis: Theory and Practice 4,* Edited by O. D. Anderson, North Holland 1983, pp. 171-186.

45. "Interfacing SPEAKEASY with the NBER Data Banks," 11th Annual SPEAKEASY Conference Proceedings, 1983, pp. 47-54.

46. "Dynamic Adjustment of Disaggregated Unemployment Series," in *Time Series Analysis: Theory and Practice 7*, Edited by O. D. Anderson, North Holland, 1985, pp. 293-311.

47. "A Graphical Treatment of Walrasian and Marshallian Adjustment Dynamics for Multiple Intersecting Offer Curves," 1983 Proceedings of the Illinois Economic Association, pp. 39-42.

48. "Interfacing SAS Software With SCA: the SCALINK Procedure," with Lon-Mu Liu, SUGI 10 Proceedings, 1984, pp. 70-75. See revised version published by SCA as a technical report listed as technical report # 5.

49. "Determinants of the Female Occupational Distribution: A Log-Linear Probability Analysis," with Evelyn Lehrer, *Review of Economics and Statistics*, Vol. LXVII, No. 2, August 1985, pp. 120-125.

50. "Two-way Communication Between SAS Software and the SCA Statistical System: The LINKSCA and SCALINK Procedures," with Lon-Mu Liu, SUGI 11 Proceedings, 1985, pp. 120-125. See also revised version published by SCA as a technical report listed as technical report # 9.

51. "Teaching Econometrics to Beginning Students using SPEAKEASY; Future suggested changes, strengths, limitations," 13th Annual SPEAKEASY Conference Proceedings, 1985, pp. 87-

52. "Interfacing SAS Software with the B34S System Recursive Residual Option; A Brief Look at Theory and an Example," SUGI 12 Proceedings, 1986, pp. 76-81.

53. "Recursive Residual Analysis using the SPEAKEASY SUBROUTINE Facility; An Illustration," 14th Annual SPEAKEASY Conference Proceedings, 1986, pp. 87-96.

54. "Measuring Expected Inflation; Further tests in the Frequency Domain of a Proposed New Measure," American Statistical Association 1986 Proceedings of the Business and Economics Statistics Section, 1986, pp. 473-477. A major revision and extension with the same title was published in *Eastern Economic Journal*, Vol. XVI, No. 4., October-December 1990, pp. 339-348.

55. "Nonlinear Estimation Using the SPEAKEASY SUBROUTINE Facility," 15th Annual SPEAKEASY Conference Proceedings, 1987, pp 9-40.

56. "Two-Level Parsing in B34S: A Large-Scale Econometric Package," in IEEE Workshop on Languages for Automation, IEEE Computer Society Press, 1987, pp. 235-236.

57. "Fourier Analysis Using FFTPACK: An Overview," 16th Annual SPEAKEASY Conference Proceeding, 1988, pp. 121- 144.

58. "Implementing LINPACK in SIMEQ," 17th Annual SPEAKEASY Conference Proceedings, 1989, pp. 93-118.

59. "Money Balances in the Production Function: A Retrospective Look," with Allen Sinai, Eastern *Economic Journal*, Vol. XV, No. 4, October - December 1989, pp. 349-363.

60. *Specifying and Diagnostically Testing Econometric Models,* Quorum Books / Greenwood Press, Westport CT, 1991, pp. 1-337. For second edition see # 74 below.

61. "Clues in the Error Process; A Second Round Diagnostic Procedure For Transfer Function Modeling," *Belgian Journal of Operations Research, Statistics and Computer Science,* Vol. 30, No. 1, 1990, pp. 33-51.

62. "Data Structures in SPEAKEASY; A Proposal," 18th Annual SPEAKEASY Conference Proceedings, 1990, pp. 115-120.

63. "Appropriateness of Statistical Methods in Investment Research: What Standards Apply," with Hugh Neuburger, *Financial Analysts Journal*, Vol: 47, No. 4, July/August 1991, pp. 83-88.

64. "Dynamic Econometric Model Building using SPEAKEASY® and B34S®," 19th Annual SPEAKEASY Conference Proceedings, 1991, pp. 67-102.

65. "Perspective Payment Options for Exempt Psychiatric Services," with Maqbool Dada, William White, *Journal of Health Politics*, Policy and Law, Vol. 17, No. 3, Fall 1992, pp.483-508.

66. "Experience With DOS SPEAKEASY and B34SIO," 20th Annual SPEAKEASY Conference Proceedings, 1992, pp. 189-206.

67. "Real Money Balances in the Production Function: A Comment," with Allen Sinai, *Eastern Economic Journal*, Vol. XVII, No. 4, October- December 1991, pp. 533-535.

68. "Using SPEAKEASY as a Decision Support System," 21st Annual SPEAKEASY Conference Proceedings, 1993, pp. 185-200.

69. "Econometric Capabilities in SPEAKEASY Using the B34S Interface," 22nd Annual SPEAKEASY Conference Proceedings, 1995, pp. 151-186.

70. "The Micro-Dynamics of Inflation Expectations," with Hugh Neuburger, *The Journal of Fixed Income*, Vol. 5 No. 1, June 1995, pp. 71-78.

71. "Sample Applications of Econometric Analysis Using the SPEAKEASY/B34SIO Interface into RATS," 23rd Annual SPEAKEASY Conference Proceedings, 1996, pp. 65-91.

72. "MARS Modeling in SAS® Software Using the MACRO Interface to B34S®," Proceedings of the Twenty-First Annual SAS® Users Group International Conference, 1996 pp. 1145-1149.

73. "Interacter Graphics Under SPEAKEASY Using the RUNB34S LINKULE," 24th Annual SPEAKEASY Conference Proceedings, 1996, pp. 45-68.

74. *Specifying and Diagnostically Testing Econometric Models,* Quorum Books / Greenwood Press, Westport CT, Second Edition 1997, pp. 1-446.

75. "On the Asymmetric Effects of Money Supply Shocks: International Evidence from a panel of OECD Countries," with Georgios Karras, *Applied Economics*, 1999, 31, pp. 227-235.

76. *New Methods in Financial Modeling: Explorations and Applications,* with Hugh Neuburger, Quorum Books / Greenwood Press, Westport, CT, 1998, pp. 1-156.

77. "Why are the Effects of Money-Supply Shocks Asymmetric? Evidence from Prices, Consumption and Investment," with Georgios Karras, *Journal of Macroeconomics*, 1999, 21, No. 4, pp. 713-728.

78. "Time Varying Criteria for Monetary Integration: Evidence from the EMU," with Georgios Karras, *International Review of Economics and Finance*, 10 (2001), pp. 171-185.

79. "Tradable Environmental Pollution Credits: A New Financial Asset," with Richard Kosobud and Carol Tallarico, *The Review of Accounting and Finance*, Vol. 1. Number 4, (2002) 69-88.

80. "On the Advantage of Using Two or More Econometric Software Systems to Solve the Same Problem," *Computational Econometrics: Its Impact on the Development of Quantitative Economics. Special Volume of Journal of Economic and Social Measurement* 29 No.1-3, 2004, 307-320.

81. "Does Emissions Trading Lead to Air Pollution Hot Spots? Evidence From the Chicago Ozone Control Program," with Richard Kosobud and Carol Tallarico, *International Journal of Environmental Technology and Management*, 4 No. 1-2, 2004, 137-156.

82. "The Evolution of Econometric Software Design: A Developer's view," *Computational Econometrics: Its Impact on the Development of Quantitative Economics. Special Volume of Journal of Economic and Social Measurement* 29 No.1-3, 2004, 205-260.

83. "Econometric Software as a Theoretical Research Tool," *Computational Econometrics: Its Impact on the Development of Quantitative Economics. Special Volume of Journal of Economic and Social Measurement* 29 No.1-3, 2004, 183-188.

84. "Valuing Tradable Private Rights to Pollute the Public's Air" with Richard Kosobud, Carol Tallarico and Brian Scott, *The Review of Accounting and Finance,* Vol. 4. Number 1, (2005) 50-71.

85. "Sources of Exchange Rate Volatility: Impulses or Propagation," with Georgios Karras and Jin-Man Lee, *International Review of Economics and Finance*, 14 No. 2. (2005) 213-226

86. " The Sensitivity of Econometric Results to Alternative Implementations of Least Squares," *Journal of Economic and Social Measurement*, 30, (2005) 9-38

87. "Why are Postwar Cycles Smoother? Impulses of Propagation?" with Georgios Karras and Jin-Man Lee, *Journal of Economics and Business*, 58, (2006) 392-406.

88. "Re-examining 50 Year-old OLS estimates of the Klein-Goldberger Model, with B. D. McCullough and Charles G. Renfro, *Statistia Neerlandica* 60, No. 2 (2006) 181-193.

89. Unlocking the Sources of the Apparent episodic Stationarity of the P/E Ratio: Impulses or

Propagation?" with Georgios Karras, Jin Man Lee and Hugh Neuburger, *The Review of Accounting and Finance*, 60, No. 3 (2007) 339-348.

90. *Cost-Effective Control of Urban Smog*, with Richard Kosobud, Carol Tallarico and Brian Scott, Routledge, London & New York, 2006, pp. 1-177.

91. "Regulatory Conflict in the Chicago VOC Control Program," with Richard Kosobud, Joshua Linn, and Carol Tallarico, *Journal of Environmental Planning and Management*, 51, No. 4 (July 2008) 561-579.

92. "A benchmark-free approach to access the accuracy of an OLS model calculation in an econometrically uncertain world," *Journal of Economic and Social Measurement*, 33, No. 1 (2008) 1-17.

93. "Density-dependent growth of Alaska sockeye salmon in relation to climate-oceanic regimes, population abundance, and body size," with E. C. Martinson, J. H. Helle and D. L. Scarnecchia, *Inter-Research Marine Ecology Progress Series*, Vol 370 1925-1998, (October 2008) 1-18.

94. "Growth and survival of sockeye salmon from Karluk Lake and River, Alaska, in relation to climatic and oceanic regimes and indices, 1922-2000" with E. C. Martinson, J. H. Helle and D. L. Scarnecchia, *Fishery Bulletin* Vol. 107 (2009) 488-500..

95. "Alaska Sockeye Salmon Scale Patterns as Indicators of Climatic and Oceanic Shifts in the North Pacific Ocean, 1922-2000," with E. C. Martinson, J. H. Helle and D. L. Scarnecchia, *North Pacific Anadromous Fish Commission Bulletin* No. 5 (2009) 177-182

96. "Detecting and Modeling Nonlinearity in the Gas Furnace Data," with Melvin Hinich, *Computational Statistics* Vol. 26, No. 1 (2011) 77-93.

97. "Monetary Policy and the Housing Bubble," with John McDonald, *Journal of Real Estate Finance and Economics,"* Vol. 46, No. 3 (2013) pp 437-451.

98. "Use of juvenile salmon growth and temperature change indices to predict ground post age-0 yr class strengths in the Gulf of Alaska and eastern Bearing Sea" *Fisheries Oceanography* Vol 21, No. 4 (2012) pp 307-319

99. "The Housing Price Bubble, Monetary Policy, and the Foreclosure Crisis in the United States," with John McDonald. *Applied Economic Letters*, Vol. 20. No. 11 (2013) 1104-1108

100. "Dynamics of Housing Price - Foreclosure Rate Interactions," with John McDonald. *International Scholarly Research Network Economics* Vol. 2013 Article 250459.

101. "Monetary Policy, Mortgage Rates and the Housing Bubble," with John McDonald. *Economics and Finance Research: An Open Access Journal*, Vol 1 (2013) 82-91.

102. "Money in the Production Function: Nonlinear Tests of Model Stability and Measurement Issues – Two Sides of the Same Coin." *The Journal of Economic Asymmetries*. Vol. 10, No. 2 (November 2013) 101-114

103. "Monetary Policy, Fiscal Policy, and the Housing Bubble," with John McDonald, *Modern Economy* 2015, 6, 165-178.

104 "Using Nonlinear Testing Procedures to Specify the right hand side of an aggregate production function containing financial variables in the period 1967-2011," *The Journal of Economic Asymmetries*. Vol. 14 Part B (November 2016) 147-156.

PAPERS PRESENTED

1. "An Empirical Investigation into the Effect of Changes in the Balance of Trade on Interest Arbitrage Under Fixed and Flexible Exchange Rates," presented to Business and Economics Section of the American Statistical Association, Detroit, 28 December 1970.

2. "The Crisis Model: An Empirical Test of the Degree of Tension of the Foreign Exchange Market," presented to the Midwest Finance Association, Chicago, Ill., April 23, 1971.

3. "Real Money Balances and the Production Function," presented, with Allen Sinai, to the University of Chicago Workshop in International Trade, May 10, 1971.

4. "The Effect of Forward Intervention," presented to the University of Chicago International Trade Workshop, August 2, 1971.

5. "Real Money Balances: An Omitted Variable From the Production Function," presented, with Allen Sinai, to the Econometric Society Meetings, Boulder Colorado, August 27, 1971.

6. "Real Money Balances and Production: The Japanese Case," presented, with Allen Sinai, to the University of Chicago Workshop in International Trade, March 13, 1972.

7. "German Banks and German Growth, 1883-1913," presented, with Hugh Neuburger, to the University of Chicago Workshop in Economic History, February 2, 1973.

8. "A Framework for Handling Economic Conflicts in the Pacific Basin," written jointly with Richard Kosobud and presented to the Association for Asian Studies, April 1, 1973.

9. "The Role of Monetary Policy in Adjusting the International Arbitrage Market," presented to the Midwest Finance Association, Chicago, April 6, 1973.

10. "Offer Curve Stability Problems: The Walrasian and Marshallian Conditions," presented to the Association for North American Studies, Houston Texas, November 10, 1973.

11. "The Effect of Exchange Transactions Costs on Capital Mobility," presented to the Business and Economics Section of the American Statistical Association, New York, December 27, 1973.

12. "German Banking and Japanese Banking: A Comparative Analysis," presented, with Hugh Neuburger, to the joint session of the Economic History Association, the American Finance Association and the American Economic Association, San Francisco, California, December 29, 1974.

13. "Short Run Macroeconomic Adjustment in a Small Region," presented, with Hugh Neuburger and Donald Jones, to the American Geographical Society Conference on Inflation, New York City, December 2, 1975.

14. "Purchasing Power Parity: Some Evidence from Canada: Comment, " presented at the North American Economic Association Meetings in Dallas, Texas, December 28, 1975.

15. "Inflation, Prime Rate and Stock Market Behavior: Theoretical Analysis and Recent Experience: Comment," presented at the 25th Annual Meeting of the Midwest Finance Association, St. Louis, Mo., April 3, 1976.

16. "The Effect of Monetary Changes on Interest Rates During the National Banking Period, 1875-1907: A Box-Jenkins Approach," presented, with Hugh Neuburger, the Economic History Seminar, Columbia University, New York City, May 6, 1976.

17. "Component Ratio Estimates of the Money Multiplier: Comment," presented to the Monetary Theory Section of the Southern Economic Association meetings, Atlanta Georgia, May 6, 1976.

18. "The Effect of Monetary Changes on Interest Rates During the National Banking period 1875-1907," (revised draft), presented to a joint meeting of the Money and Banking Workshop and the Economic History Workshop at the U of Chicago, January 14, 1977.

19. "Economic Analysis of OPEC Using a Markov Chain Model," presented to the Western Economic Association Meetings in Anaheim California., June 22, 1977.

20. "The Role of Interest Rates in Adjustment Under the Gold Standard: A New Empirical Approach," presented, with Hugh Neuburger, to the NBER-NSF Seminar on Time Series, Chicago, Illinois, November 19, 1977.

21. "Quebec Separation and the Theory of Optimal Regional Associations: Comment," presented to NAESA Meetings in New York, December 28, 1977.

22. "The Effect of Monetary Changes on Interest Rates During the National Banking Period 1875-1907," (revised draft), with Hugh Neuburger, presented to Monetary Workshop (Professor Cagan), Columbia University, New York, February 28, 1978.

23. "The Role of Interest Rates in Adjustment Under the Gold Standard: A New Empirical Approach," presented to the Econometric Workshop, School of Business (Professor Zellner), U. of Chicago, March 8, 1978.

24. "Foreign Direct Investment in the United States: Comment," presented to the NAESA session on Applied Macroeconomic Analysis of North America, Chicago, Illinois, August 29, 1978.

25. "How OPEC Works: An Analysis Employing a Markov Chain Model," with Richard Kosobud, presented to the Resource Analysis Seminar at the U. of Chicago, May 29, 1979.

26. "Simulation of World Oil Market Shares: A Markov Analysis of OPEC and Consumer Behavior,"

with Richard Kosobud, presented to the Econometric Society Meetings, Atlanta, Georgia, December 28, 1979.

27. "Simulation of World Oil Market Shares: A Markov Analysis of OPEC and Consumer Behavior," with Richard Kosobud, presented to the Atlantic Economic Association Meetings in Freeport, Bahamas, February 13, 1980.

28. "The Relationship Between Money, Interest Rates and Prices: A Vector Autoregressive Approach," presented to Illinois Economic Association Meetings, Chicago, Illinois, October 31, 1980.

29. "Forecasting by Econometric Models," presented to the Lenox Institute for Research, Lenox, Mass. July 10, 1981. Extensions of the same talk were given July 6, 1982, August 4, 1983, July 20, 1984.

30. "The Effect of Monetary Variables on Relative Producer Prices," presented to the Fifth International Time Series Meeting, Houston, Texas, August 6, 1981.

31. "Applications and Extensions of the Markov Model in Modeling OPEC," presented to the International Symposium on Policy Analysis and Information Systems, Taipei, Taiwan, August 21, 1981.

32. "Matrix Operations using LINPACK, An Overview," presented to the Workshop on Management and Office Information Systems, Americana Congress Hotel, Chicago, Illinois, June 29, 1982.

33. "Matrix Operations using LINPACK, An Overview," presented to the 10th SPEAKEASY Conference, Chicago, Illinois, August 12, 1982.

34. "Output Fluctuations and Relative Price Adjustment: A Vector Model Approach," presented to the 8th International Time Series Meeting, Cincinnati, Ohio, August 20, 1982.

35. "Problems in the Specification of Forecasting Equations," presented to the Illinois Economic Association Meetings, Chicago, Illinois, October 29, 1982.

36. "The Relationship Between Money, Interest Rates and Prices: A Vector Autoregressive Approach," presented to the Institute of Management Sciences and Operations Research Society Meetings, Chicago, Illinois, April 25, 1983.

37. "Interfacing SPEAKEASY with the NBER Data Banks," presented to the 11th SPEAKEASY Conference, Chicago, Illinois, August 10, 1983.

38. "Dynamic Adjustment of Disaggregated Unemployment Series," presented to the 10th International Time Series Meeting, Toronto, Canada, August 19, 1983.

39. "A Graphical Treatment of Walrasian and Marshallian Adjustment Dynamics for Multiple Intersecting Offer Curves," presented to Illinois Economic Association Meeting, Chicago, Illinois, October 28, 1983.

40. "Problems in the Specification of Forecasting Equations," presented to the Institute of Electrical

and Electronics Engineers Workshop on Languages for Automation Meeting, Chicago, Illinois, November 9, 1983.

41. "Interfacing SAS Software with SCA: the SCALINK Procedure," with Lon-Mu Liu, presented by H. H. Stokes to SUGI 10 Conference, Hollywood Beach, Florida, March 19, 1984.

42. "Determinants of the Female Occupational Distribution: A Log-Linear Probability Analysis," with Evelyn Lehrer, presented to the Applied Micro Economics session of the Midwest Economics Association Meeting, Chicago, Illinois, April 7, 1984.

43. "Two-way Communication Between SAS Software and the SCA Statistical System: The LINKSCA and SCALINK Procedures," with Lon-Mu Liu, presented by H. H. Stokes to SUGI 11 Conference, Reno, Nevada, March 13, 1985.

44. "Notes on the Use of Econometrics," presented to the Lenox, Institute for Research, Lenox, Mass., July 26, 1985.

45. "Teaching Econometrics to Beginning Students using SPEAKEASY," presented to the 13th SPEAKEASY Conference, Chicago, Illinois, August 7, 1985.

46. "Interfacing SAS Software with the B34S System Recursive Residual Option: A Brief look at Theory and an Example," presented to SUGI 12 Conference, Atlanta, Georgia, February 12, 1986.

47. "Notes on the Use of Econometrics using the SAS System," presented to the American Hospital Association May 22-23, 1986.

48. "Recursive Residual Analysis using the SPEAKEASY SUBROUTINE Facility; An Illustration," presented to the 14th SPEAKEASY Conference Chicago, Illinois, August 6, 1986.

49. "Measuring Expected Inflation; Further tests in the Frequency Domain of a Proposed New Measure," presented to the Time Series Applications Section of the Business and Economics Statistics meetings of the American Statistical Association Meetings in Chicago, Illinois, 21 August 1986.

50. A heavily modified version of "Measuring Expected Inflation: Further tests in the Frequency Domain of a Proposed New Measure," was an invited presentation to the Time Series Methods and Applications session of the TIMS/ORSA Joint National Meeting in New Orleans 4 May 1987.

51. "Nonlinear Estimation Using the SPEAKEASY SUBROUTINE Facility," presented to the 15th SPEAKEASY Conference Chicago, Illinois, 29 July 1987.

52. "Two-Level Parsing in B34S: A Large Scale Econometric Package," Presented to IEEE Workshop on Languages for Automation, Session: Computer Simulation II, Vienna Austria , 27 August 1987.

53. "Fourier Analysis Using FFTPACK: An Overview," presented to the 16th SPEAKEASY Conference Chicago, Illinois, 14 July 1988.

54. "Money Balances in the Production Function: A Retrospective Look," with Allen Sinai, invited

paper presented to the Eastern Economic Associated Baltimore MD, 3 March 1989.

55. "Measuring Expected Inflation: Further Tests in the Frequency Domain of a Proposed New Measure," presented to the Economic Measurement session of the Midwest Economic Association Meetings Chicago, Illinois, 16 March 1989.

56. "Implementing LINPACK in SIMEQ," presented to 17th Annual SPEAKEASY Conference, Chicago, Illinois, 10 August 1989.

57. "Measuring Expected Inflation: Further Tests in the Frequency Domain of a Proposed New Measure," presented to the Eastern Economics Association Meetings, 30 March 1990 in Cincinnati, Ohio.

58. "The Effect of Generating Unit Age on the Cost and Performance of U. S. Fossil-Fired Steam Units," with Marie Corio and David South, presented to Session 8 of the American Power Conference, Chicago, Illinois 23 April 1990.

59. "Data Structures in SPEAKEASY; A Proposal," presented to 18th Annual SPEAKEASY Conference, Chicago, Illinois, 27 July 1990.

60. "Production Econometric Model Specification Diagnostic Testing," presented at SHOWCASE 91 Conference, UIC, Chicago, Illinois, 20 June 1991.

61. "Dynamic Econometric Model Building using SPEAKEASY® and B34S®," presented to the 19th Annual SPEAKEASY Conference, Chicago, Illinois, 31 July 1991.

62. "Detecting and Modeling Nonlinear Returns in the United States Equity Market.," presented with Hugh Neuburger to the Society of Quantitative Analysts, Inc, New York City, New York, 16 April 1992.

63. "Experience With DOS SPEAKEASY and B34SIO," presented to the 20th Annual SPEAKEASY Conference, Chicago, Illinois, 5 August 1992.

64. "Detecting and Modeling Nonlinearity in Stock Returns," presented to Midwest Econometrics Association Meeting, Minneapolis Federal Reserve, 12 September 1992.

65. "Using SPEAKEASY as a Decision Support System," presented to the 21st Annual Speakeasy Conference, Chicago Illinois, 5 August 1993.

66. "Scientific Contributions of Richard Kosobud," present to Illinois Economic Association 1 October 1993.

67. "Detecting and Modeling Nonlinearity in Stock Returns," presented to Midwest Economic Association Meetings, Chicago, Illinois, 26 March 1994.

68. "Econometric Capabilities in SPEAKEASY Using the B34S Interface," presented to 22nd Annual Speakeasy Conference, Chicago, Illinois, 4 August 1994.

69. "Modeling Nonlinearity in Stock Returns: A Comparison of VAR, MARS, and PISPLINE Models," (written with Hugh M. Neuburger) presented to First Chicago Quantitative Alliance Conference, Chicago, Illinois, 22 September 1994.

70. "Modeling Nonlinearity in Stock Returns: A Comparison of VAR, MARS, and PISPLINE Models," (written with Hugh M. Neuburger) presented to Illinois Economic Association Meetings in Chicago, Illinois 7 October 1994.

71. "The Micro-Dynamics of Inflation Expectations," presented with Hugh Neuburger to the Society of Quantitative Analysts, Inc, New York City, New York, 16 March 1995.

72. "Sample Applications of Econometric Analysis Using the SPEAKEASY/B34SIO Interface into RATS," presented to 23rd Annual SPEAKEASY Conference, Chicago, Illinois 27 July 1995.

73. "The International Transmission of Conditional Volatility: A 21 Market Study," (written with Hugh Neuburger) presented to Fifth Midwest Econometrics Group Meetings Washington University in St. Louis, October 7, 1995.

74. "MARS Modeling in SAS® Software Using the MACRO Interface to B34S®," presented at the 21st Annual SAS® Users Group International Conference in Chicago Illinois on 12 March 1996.

75. "Interacter," presented at Lahey Computer User Meeting in Incline Village, Nevada 9 May 1996.

76. "Interacter Graphics Under SPEAKEASY Using the RUNB34S LINKULE," presented at the 24th Annual SPEAKEASY Conference, Chicago, Illinois, 7 August 1996.

77. "Why are the Effects of Money-Supply Shocks Asymmetric? Evidence from Prices, Consumption and Investment," (Written with Georgios Karras.) Presented to Sixth Midwest Econometrics Group Meetings University at Wisconsin in Madison Wisconsin, 1 November 1996.

78. "The Dynamic Relationship between the Russell 1000 and the Russell 2000: A Time Series Analysis" (with Hugh Neuburger). Presented to 27th Annual Meeting of Illinois Economic Association at UIC 25 October 1997.

79. "Diagnostically Testing Econometric Models using the B34S® Software System," (plus software demonstration). Presented to Eight Midwest Econometrics Group Meetings at University of Indiana Bloomington, Indiana 25 September 1998.

80. "Use of Computers in Instruction." Presented to 28th Annual Meeting of the Illinois Economic Association at UIC 23 October 1998 .

81. " The Relationship Between Hardware Developments, Operating System Evolution and Econometric Software Design" Presented to 29th Annual Meeting of Illinois Economic Association at UIC 23 October 1999.

82. "Time-Varying Criteria for Monetary Integration: Evidence from the EMU," (written with Georgios

Karras), Presented to the Midwest Economic Association Session 38: 1 April 2000 in Chicago Illinois.

83. "Dollarization Vs Monetary Unions: Comments on Papers by LeBarron-McCulloch and Grubel," Presented to International Finance in the New Millennium, A Conference Honoring Robert Aliber at the Gleacher Center of the Graduate School of Business University of Chicago 21 October 2000.

84. "Emissions Trading, Heterogeneity of Air Pollutants, and Spatial Environmental Equity, An Analysis of the ERMS Program. Part I." With Richard Kosobud, Carol Tallarico and Adam Kosobud. Presented to Symposium on Environmental Science and Technology, at Department of Civil and Materials Engineering UIC, 16 February 2001.

85. "Emissions Trading, Heterogeneity of Air Pollutants, and Spatial Environmental Equity, An Analysis the ERMS Program. Part I." With Richard Kosobud, Carol Tallarico and Adam Kosobud. Presented to Illinois EPA in Springfield Illinois on 6 March 2001

86. “Appraising a Pioneering Cap & Trade Market for Reducing Urban VOC Emissions,” With Richard Kosobud and Carol Tallarico. Presented to Conference on the Environment, UIC Institute for the Environment, 10 April 2003.

87. "Dual Environmental Regulation: The Puzzling Performance of the Chicago VOC Cap-and-Trade Market," With Richard Kosobud, Carol Tallarico and Brian Scott. Presented to Illinois Environmental Protection Agency 25 August 2004 in Springfield, IL.

88. "Data / Code Archives and Replicable Research: Comments on William Greene," Presented at the American Economic Associate Meetings in Philadelphia, 9 January 2005.

89. “The Sensitivity of Econometric Results to Alternative Implementations of Least Squares.” Presented to the Illinois Economics Association Meetings in Chicago, 21 October 2005.

90. “The Chicago VOC Cap and Trade Approach: Explaining Market Dysfunction,” with Richard Kosobud, Carol Tallarico and Brian Scott.” Presented to the Illinois Economics Association Meetings in Chicago, 21 October 2005.

91. “Applying the Timbergen and Mundell Rules to the Redesign of the Chicago VOC Cap-and-Trade Market.” With Richard Kosobud, Carol Tallarico and Joshua Linn, Presented to the Midwest Economics Association Meetings in Chicago, 25 March 2005.

92. "Testing the Log-Linear Augmented Solow Model for Functional Form Specification; A Pedagogic Study." With Charles G. Renfro, Kathleen Odell, Presented to the Illinois Economics Association Meetings in Chicago, 19 October 2006.

93. "Investigating the Effect of Data Precision and OLS Calculation Methods on Obtaining Residuals that are Orthogonal to the Right-Hand Side Variables." Presented to the Illinois Economics Association Meetings in Chicago, 20 October 2007.

94. "Regulatory Conflict in the Chicago VOC Control Program." With Richard Kosobud, Joshua Linn, and Carol Tallarico, Presented to the Illinois Economics Association Meetings in Chicago, 20 October 2007.

95. "Country CO2 Emission Responses to Carbon Taxes and Trading." With Richard Kosobud and Carol Tallarico, Presented to the Illinois Economics Association Meetings in Chicago, 17 October 2008.

96. "Country CO2 Emission Responses to Carbon Taxes and Trading." With Richard Kosobud and Carol Tallarico, Presented to the conference honoring Richard Kosobud in Chicago, 16 March 2009.

97. "The Effect of Ozone on Life Expectancy: An Empirical Study Using Data from 52 U. S. Cities." With Douglas Schreder and Richard Kosobud. Presented to the Illinois Economics Association Meetings in Chicago, 16 October 2009. Paper also presented by Douglas Schreder to the Midwest Economics meetings in Evanston 21 March 2010.

98. "An Annotated Discussion on the State of the US Financial System." Presented to the Illinois Economics Association Meetings in Chicago, 15 October 2010.

99. "Origins of US Financial Crisis and Thoughts about the Future." Presented to the University of Chicago Service Committee, 19 October 2011.

100. "Dynamics of Housing Price – Foreclosure Rate Interactions." With John McDonald. Presented to the Illinois Economics Association Meetings in Chicago, 28 October 2011.

101. "Monetary Policy, Mortgage Rates and the Housing Bubble," With John McDonald. Presented by Houston H. Stokes to Illinois Economics Association Meetings in Chicago 19 October 2012.

102. "Money Balances in the Production Function: Nonlinear Tests of Model Stability and Measurement Issues – Two Sides of the Same Coin?" Presented by to Illinois Economics Association Meetings in Chicago 25 October 2013.

103. "Money Balances in the Production Function: Nonlinear Tests of Model Stability and Measurement Issues – Two Sides of the Same Coin?" Presented by to the Society for Economic Measurement meeting at the Becker-Friedman Institute at the University of Chicago 20 August 2014.

104. "Using Nonlinear Testing Procedures to Specify the Right Hand Side of an Aggregate Production Function Containing Financial Variables in the Period 1967-2011" Presented to the Illinois Economics Association Meetings in Chicago, Illinois 16 October 2015.

105. "Using Nonlinear Testing Procedures to Specify the Right Hand Side of an Aggregate Production Function Containing Financial Variables in the Period 1967-2011" Presented to the Midwest Economic Association Meetings in Evanston Illinois 2 April 2016.

106. 'The 'Thin Film of Gold' – Interest Rates and Gold Flows in the Classical Gold Standard Era" With Hugh Neuburger. Presented to the Illinois Economics Association meetings in Chicago 14 October 2016.

107. "Modeling Potentially Nonlinear Systems using a Machine Learning Approach" Presented to the Illinois Economic Association Meetings in Chicago 13 October 2017

OTHER PUBLICATIONS

1. Letter dated 28 December 1987 to FORTRAN 8X committee published "Fortran Forum", ACM Press Vol. 7, Number 1, April 1988 pp. 10- 12.

2. "Radio Pioneer --- W. E. D. Stokes, Jr.," *Proceedings of the Radio Club of America*, Vol. 64, No. 1, May 1990, pp. 16-18.

3. Letter Comment on "We Need More Civil-Service Mariners," by M. Morris, *United States Naval Institute Proceeding* February 2002 Page 24.

4. Letter published 11 December 2002 on page 2822 in *Journal of the American Medical Association* Vol. 288, No. 22. commenting on Women's Health Initiative Investigators "Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principle results from the women's health initiative randomized controlled trial. See their reply pp 2823-2824.

5. Letter Comment on "Open Standards: The Alternative to Microsoft Office 2000 by J. Yarger, *United States Naval Institute Proceedings* March 2003, page 20,22.

6. "Standardizing on a One Vendor Operating System – An Unacceptable Risk to the DoD Establishment," *United States Naval Institute Proceedings* Professional Note. Accepted but withdrawn Prior to publication at the request of the USNIP.

ON LINE B34S DOCUMENTATION

- *The B34S Data Analysis Program: A Short Write-up*, Report FY 77-1 College of Business Administration Working Paper Series, University of Illinois at Chicago, 252 pages, revised annually 1979- . Currently available on-line with the B34S program and available on the B34S web page. This documents the low level B34S command language.

- *B34S On Line Help Manual*, 1000+ pages. Currently on-line under the B34S since 1987. Revised annually 1988- This manuscript documents the B34S command language and is available from the B34S help command or from the Display Manager. This file is also on line on the B34S Web page.

CIRCULATED WORKING PAPERS

1. "Statistical Techniques to Exploit Panel Data: An Empirical Investigation into the Implications of Alternative Procedures," with John McDonald, circulated as Chapter VII in Initial Findings Report of the Gary Income Maintenance Experiment, Vol. V, Technical Issues in Social Experimentation.

2. "Adjustment of Midwest Labor Markets to External Disturbances," prepared and circulated at the Midwest Governor's conference held August 31, September 2, 1981, in Milwaukee, Wisconsin.

3. "Interfacing SAS Software With the SCA System: The SCA PROCEDURE," with Lon-Mu Liu (a modified version of publication 48), reissued as Working Paper No. 104 by Scientific Computing Associates, January 1984, pp. 1-18.

4. "Description and Syntax of the X11ARIMA and XCD Paragraphs," with Lon-Mu Liu, (17 pages) Part II of "Seasonal Adjustment in the SCA System," Edited by Steven Hillmer and Lon-Mu Liu, Working Paper No. 112, Scientific Computing Associates, April 1985.

5. "Notes on the Use of Econometrics," 22 pages, 10 figures, Lenox Institute for Research, Instructional Manual No. LIR/07-85/149, July 25, 1985. Revised 1996 "Notes on Statistics," 39 pages.

6. "Interfacing the SAS Software With the B34S System Recursive Residual Option: A Brief Look at Theory and an Example," Lenox Institute for Research Instructional Manual No. LIR/07-85/150, July 25, 1985.

7. "Two-Way Communication Between SAS Software and the SCA Statistical System: The LINKSCA and SCALINK Procedures," with Lon-Mu Liu, (6 pages), (a modified version of publication 50) reissued as Working Paper No. 114 by Scientific Computing Associates Jan, 1985.

8. "Notes on the Use of Econometrics using the SAS System," 29 pages, 75 pages of appendix.

9. "Two-Level Parsing in B34S: A Large-Scale Econometric Package," 16 pages. This is an expanded version of publication 55.

10. "The Effect of Generating Unit Age on the Cost and Performance of U. S. Fossil-Fired Steam Units, Phase One Report: Estimating the Effect of Generating Unit Age on the Performance of Coal-Fired Steam Units," with Marie Corio and David South, ANL/EAIS/TM-15. Argonne, Illinois: Argonne National Laboratory, January 1990, pp. 1-66.

11. "Estimating the Effect of Generating Unit Age on EFOR and EAF for Coal-Fired Steam Units Operating Between 1964 and 1981," with Marie Corio and David South, unpublished report, Argonne National Laboratory.

12. "Scientific Contributions of Richard Kosobud"

13. "B34S ® / SAS® Quick Start," Available on web under B34S page.

14. "Preliminary History of Computing in the CBA. Available on Web. March 2000.

15. "Applying Diagnostic Tests for Improving the Fit of Apparently Correctly Specified Forecasting Models," with Melvin Hinich. Applied Research Laboratories Technical Paper No. 89-9 (ARL-TP-89-9), Applied Research Laboratories, The University of Texas at Austin, 14 December 1989.

16. "Testing the Gas Furnace Model for Nonlinear Serial Dependence," with Melvin J. Hinich. Applied Research Laboratories Technical Paper No. 88-9 (ARL-TP-88-9), Applied Research Laboratories, The University of Texas at Austin, 25 May 1988.

17. "General Autoregressive Conditional Heteroscedastic (GARCH) Modeling Using the SCAB34S-GARCH and SCA WorkBench," with Lon-Mu Liu and William Lattyak, 115 pages single spaced. 1 August 2005.

18. "Multivariate Adaptive Regression Spline (MARS) Modeling Using SCAB34S SPLINES and SCA WorkBench," with William Lattyak, 71 pages single spaced 26 January 2006

19. "Ocean-climate regime and salmon abundance effects on density dependent growth of sockeye salmon 1925-2000," with Ellen Martinson, John Helle, Dennis Scarnecchia. April 2008

20. "Generalized Additive Modeling (GAM) Using the SCAB34S SPLINES and SCA WorkBench," with William Lattyak, 88 pages single spaced. 30 April 2008

SOFTWARE CURRENTLY RUNNING

1. B34S Data Analysis Program. > 350,000 Fortran 95 Statements. Documented in Circulated Working Papers # 2, #11, #17 and publications # 60 # 74. Versions of B34S currently run on:

   - Windows 95/98/NT/2000/XP
   - Linux

   No longer supported versions have run on MVS and CMS in the 1970's and 1980's and RS/6000 and Sun in the 1990's.

2. SAS Procedures:

CB34S	-	Link SAS 5.18 with B34S.
SCALINK	-	Link SAS 5.18 with SCA.
LINKSCA	-	LINK SCA with SAS 5.18.

Note: Due to reduced demand and changes in SAS system, these SAS procedures have been replaced by SAS macros (see # 3 below).

3. SAS Macros:

CB34SM	-	Link SAS x.xx with B34S.
SCALINKM	-	Link SAS x.xx with SCA

4. SPEAKEASY LINKULES Distributed by SPEAKEASY Corporation.

SIMEQ - Solution of systems of equations using LINPACK routines to take account of matrix structure.

LINPACK Commands for SPEAKEASY

GMFAC, GMINV, GMSOLV, PDFAC, PDINV, PDSOLV, PDFACUD, PDFACDD, SMFAC, SMINV, SMSOLV, HMFAC, HMINV, HMSOLV, TRFAC, TRINV, TRSOLV, SVDCM, QRFAC, QRSOLV, ZEROL, ZEROU, PL1FORT, FORTPL1

For documentation see publication 40.

FFTPACK Commands for SPEAKEASY

FFT, FFTINV, FFTSIN, FFTCOS, FFTSINQ, FFTSINQI, FFTCOSQ, FFTCOSQI, FFTSIMP, FFTSIMPI, FFT2D, FFT2DINV, COMPLEX, L2NORM

For documentation see publication 57.

B34S/SCA interface commands for SPEAKEASY. (Currently on all SPEAKEASY platforms.)

B34SIO, MAKEB34S, MAKESCA, GETSCA, RUNB34S.

For documentation see publication 64, 66, 68.

5. SCA Commands (over 10,000 FORTRAN statements). Currently running on all SCA platforms.

X11ARIMA	-	Calls X11ARIMA from SCA.
CPLOT	-	2 or 3 dimensional exp. design box plot.
DPLOT	-	Factorial design histogram plot procedure.
DTPLOT	-	Factorial design histogram plot (with t distribution)