

**Jerome Stein**  
 Visiting Professor (Research)  
 Division of Applied Mathematics  
 Eastman Professor of Political Economy  
 Brown University, Providence, Rhode Island 02912  
 (401) 863-2143  
 Jerome\_Stein@Brown.edu

### **Education**

Ph.D., Yale, 1955; Special Fellowship in the Social Sciences; M.A., Yale, 1950; B.A., Brooklyn College, 1949, *summa cum laude*

### **Honors and Awards:**

Ford Foundation Faculty Fellowship 1961-62; Social Science Research Council Faculty Fellowship 1965-66; John Simon Guggenheim Fellowship 1972-73; National Science Foundation Grants ; Ford Foundation Grants Fellow of Japan Society for the Promotion of Science 1983

Ranked #18 in list of top 50 publishers 1978-81 in S. Leibowitz and J. Palmer, "Assessing Assessments of Economics Department."

Docteur Honoris Causa, l'Université de la Méditerranée Aix- Marseille II 1997

### **Professional Journals:**

Associate Editor, Journal of Finance, Director, International Finance, American Finance Association 1965-70; Board of Editors, American Economic Review, 1974-80;; Associate Editor, Journal of International and Comparative Economics. Associate Editor, Journal of Banking and Finance (JBF), Editor special issues: "Real and Nominal Exchange Rates.", JBF (1997); "Intertemporal Optimization in a Stochastic Environment" JBF (2007); Editor, special issue of Australian Economic Papers (AEP), "Stochastic Models in Economics and Finance", (2005); "Exchange Rates in Europe and Australasia" AEP (2002); Economic Record, "Futures Markets."

Referee for: American Economic Review, Journal of Political Economy, Review of Economic Studies, Review of Economics and Statistics, Journal of Money, Credit and Banking, Journal of Monetary Economics, International Economic Review.

Consultant: Department of Commerce, 1972; National Science Foundation, site visitor; Board of Governors of the Federal Reserve System 1973, 1976; International Monetary Fund, 1994; European Central Bank, 1999

Social Science Research Council Faculty Research Grants Committee 1969-72; Chairman 1971-72

### **Visiting Professorships**

The Hebrew University, Jerusalem; 1965-66, 1972-73, 1978. Ford Foundation Research Professor, University of California at Berkeley; 1980. Sorbonne Pantheon, Paris I; 1982. Fellow of the Japan Society for the Promotion of Science, Tohoku University, Sendai, Japan 1983. Universities of Siena, Catholic University Milan, 1984. University of Bergamo, Italy; and the Swiss National Bank. Nuffield College, Oxford; Churchill College, Cambridge 1986; Haute Etudes Commerciales France 1987; Stockholm School of Economics, Sweden; 1988 Instituto Superior de Economia, Lisbon; Erasmus University, Netherlands; University of Rome; 1989 Monash University, Melbourne University, La Trobe University (Melbourne); University of New South Wales, Macquarie University, Sydney Futures Exchange, Reserve Bank of Australia (Sydney); Victoria University (Wellington, NZ), Reserve Bank of New Zealand, Treasury of New Zealand; University of Canterbury (Christchurch, NZ); 1990 Instituto Superior de Economia, Lisbon, Portugal; University of Rome, Italy; University of Bordeaux, France; Swiss National Bank; 1992, Center for Economic Studies, Munich, 1994; l'Université de la Méditerranée Aix- Marseille II 1993, 95-98.

### **Current Research:**

Stochastic Optimal Control/Dynamic Programming applied to international finance and debt crises; Currency and Debt Crises

### **Books and Monographs:**

Stochastic Optimal Control, and U.S. Debt Crises, Springer-Science ,2012.

Stochastic Optimal Control, International Finance and Debt Crises, Oxford University Press, 2006

Equilibrium Exchange Rates (with R. MacDonald), Kluwer, 1999

Fundamental Determinants of Exchange Rates. Oxford: Oxford University Press, 1995

(Jerome L Stein, Polly R Allen and associates)

International Financial Markets: Integration, Efficiency and Expectations, Oxford: Basil Blackwell, 1991.

The Economics of Futures Markets, Oxford: Basil Blackwell, 1986.

"Futures Markets and Capital Formation" in A. Peck (ed.), Futures Markets: Their Economic Role, Washington, DC: American Enterprise Institute, 1985.

Monetarist, Keynesian and New Classical Economics, Basil Blackwell, Oxford and New York University, 1982.

"Spot, Forward and Futures," in Research in Finance I (ed.), Haim Levy, JAI Press, Conn., 1979.

(with G. Borts), Economic Growth in a Free Market, Columbia University Press, 1964.

Money and Capacity Growth, Columbia University Press, 1971.

Monetarism, North-Holland, 1976 (editor and contributor).

The Nature and Efficiency of the Foreign Exchange Market, Essays in International Finance, No. 40, Princeton Press, 1962.

#### **Articles:** Scholarly Publications

"Rebuilding Tohoku: A joint geophysical and economic framework for hazard mitigation," GSA Today (2012) vol. 22, no 9 (with Seth Stein).

Contagion and optimization in financial markets, Open Applied Mathematics Journal (2012) 6.

The Diversity of Debt Crises in Europe, CESifo Forum, 4/2011.

The Diversity of Debt Crises in Europe, Cato Journal, vol. 31 (2) Spring 2011.

Greenspan, Dodd-Frank and Stochastic Optimal Control, CESifo Forum, 2011/1 Spring 2011.

A Critique of Alan Greenspan's retrospective on the crisis, Journal Financial Transformation, November 2010.

Greenspan's Retrospective of Financial Crisis and Stochastic Optimal Control, European Financial management, 2010.

The Crisis, Fed, Quants and Stochastic Optimal Control, *Economic Modelling*, 28, 2011.

United States Current Account Deficits: A Stochastic Optimal Control Analysis, *Journal of Banking and Finance*, 31 (5) May 2007.

Optimal Debt and Endogenous Growth in Models of International Finance, *Australian Economic Papers*, December 2005

Applications of Stochastic Optimal Control/Dynamic Programming to International Finance and Debt Crises, *Nonlinear Analysis*, 63 2005.

Asian Crises: Theory, Evidence, Warning Signals, *Singapore Economic Review*, Invited Eminent Paper Series, 49 (2) October 2004 (with Guay Lim)

Stochastic Optimal Control Modeling of Debt Crises, *American Mathematical Society, Contemporary Mathematics* 351, 2004

Stochastic Optimal Control, International Finance and Debt, *Journal of Banking and Finance* 2004 (with Wendell H. Fleming)

The Equilibrium Real Exchange Rate of the Euro: An Evaluation of Research, *Ifo Studien*, October 2002 3/2000

Introduction to "Exchange Rates in Europe and Australasia", *Australian Economic Papers*, December 2002 (with Guay C. Lim)

Repercussions of EU Enlargement for the equilibrium Value of the Euro, *Australian Economic Papers*, December 2002

"Country Default Risk: An Empirical Assessment", *Australian Economic Papers*, 40, 4, 2001 (with G. Paladino)

"Exchange Rate Misalignments and Crises", *Jahbuch fur Wirtschaftswissenschaften, Review of Economics*, Band 52/2001, Heft 2 , 2001, (with Giovanna Paladino)

"Stochastic Inter-Temporal Optimization in Discrete Time" in Negishi, Takashio, Rama Ramachandran and Kazuo Mino (ed) *Essays in Honor of Ryuzo Sato*, Kluwer, 2001 (with Wendell H. Fleming)

"Methodological Issues in Asset Pricing: Random Walk or Chaotic Dynamics", *Jour. Banking and Finance* ,1999 (with A.G. Malliaris)

"The Evolution of the Real Value of the US Dollar Relative to the G7 Currencies", in R. MacDonald and Jerome L. Stein, *Equilibrium Exchange Rates*, Kluwer, 1999

“Introduction: Equilibrium Exchange Rates” in R. MacDonald and Jerome L. Stein, *Equilibrium Exchange Rates*, Kluwer, 1999, (with R. MacDonald)

“Recent Developments in International Finance: A Guide to Research”, *Jour. Banking and Finance*, 21 11/12 1997 (with G. Paladino)

“Financial Modelling: From Stochastics to Chaotics and Back to Stochastics”, in M. Bertocchi, E. Cavalli, S. Komlosi (ed) *Modelling techniques for Financial Markets and bank Management*, Physica-Verlag, 1996 (with A.G. Malliaris)

“The Equilibrium Real Exchange Rate of Germany” in *The Globalization of Marketsm* Physica-Verlag, 1997 (with K. Sauernheimer)

*Real Exchange Rates and Current Accounts: The Implications of Economic Science for Policy Decisions*, *Economie Appliquée*, XLIX 1996

*Fundamental Determinants of Exchange Rates*, Oxford University Press, 1995 (with P.Allen et al)

*The Fundamental Determinants of the real Exchange Rate of the US Dollar Relative to the Other G-7 Currencies*, *International Monetary Fund W P 95-81*, July 1995

*Can A Central Bank Achieve Price Stability? Review*, Federal Reserve Bank of St Louis, March/April 1994

*The Natural Real Exchange Rate of the United States Dollar and Determinants of Capital Flows*, in John Williamson (ed) *Estimation of Equilibrium Exchnage Rates*, Institute for International Economics, Washington, DC 1994

*Fundamental Determinants of Exchange Rates*, *Journal of International and Comparative Economics*, I,2, 1992

*Price Discovery Processes*, *Economic Record*, Special Issue on Futures Markets, July, 1992

*Cobwebs, Rational Expectations and Futures Markets*, *Review of Economics and Statistics*, Feb. 1992, 74,1

*Integration et efficience des marcheés financiers internationaux*, Eric Girardin (ed.) *Finance Internationale: L`etat actuel de la theorie*. Paris: Economica, 1992

*International Financial Markets: Integration, Efficiency and Expectations*, Oxford: Basil Blackwell, 1991.

"Rational Expectations and Welfare in Financial Futures Markets," Barry A. Goss (ed.), Rational Expectations and Efficiency in Futures Markets, London: Routledge, 1990.

"Capital Market Integration," Journal of Banking and Finance, Special Issue: Real and Nominal Exchange Rates, 5, 1990, (with P. R. Allen).

"The Real Exchange Rate," Journal of Banking and Finance, Special Issue: Real and Nominal Exchange Rates, 5, 1990.

"An Evaluation of the Performance of Speculative Markets," Louis Philips (ed.), Commodity Futures and Financial Markets, Kluwer, 1990.

(with B. G. Hong), "Price Volatility and Speculation," Journal of Accounting, Auditing and Finance, 1990.

"Speculative Markets and Macroeconomic Controversy," D. Laussel, William Marois, Antoine Soubeyran (ed.), Monetary Theory and Policy, Springer-Verlag, 1989.

"Keynes, Asset Price Fluctuations and Rational Expectations," Studies in Banking and Finance, Essays in Memory of Irwin Friend, Journal of Banking and Finance, Vol. 5, 1988.

The Economics of Futures Markets, Oxford: Basil Blackwell, 1986.

"Real Effects of Futures Speculation: Asymptotically Rational Expectations," Economica, 53, 1986.

"Futures Markets and Capital Formation," in A. Peck (ed.), Futures Markets: Their Economic Role, Washington, DC: American Enterprise Institute, 1985.

"Rational, Irrational and Over-regulated Speculative Markets," in R. Lanzillotti and Y. Peles (ed.), Management Under Government Intervention, Research in Finance, JAI Press, Supplement, 1984.

"Exchange Rate Management with Rational Expectations but Diverse Precisions" in J. Bhandari (ed.), Exchange Rate Management Under Uncertainty, MIT Press, 1984.

"Real Effects of Futures Speculation," Columbia University, Center for the Study of Futures Markets, CSFM-88, 1984.

"Federal Budget Deficits Matter," Laurence H. Meyer (ed.), The Economic Consequence of Government Deficits, Kluwer-Nijhoff Publishing Co., Boston-The Hague, 1983.

"A Theoretical Explanation of the Empirical Studies of Futures Markets in Foreign Exchange and Financial Instruments: A Review Article," Financial Review, 18(1), 1983.

Monetarist, Keynesian and New Classical Economics, Oxford: Basil Blackwell, 1982.

"Realisme et Pertinence du Modele Conventiennel de la balance des paiements," Economies et Societes, ISMEA Serie MO(3), 1982.

"Speculative Price: Economic Welfare and the Idiot of Chance," Review of Economics and Statistics, LXIII (1981).

"Monetarist, Keynesian and New Classical Economics," American Economic Review, 71 (1981).

"The Dynamics of Spot and Forward Prices in an Efficient Foreign Exchange Market with Rational Expectations," American Economic Review, 70(4), September, 1980.

(with E. F. Infante), "Money Financed Fiscal Policy in a Growing Economy," Journal of Political Economy, 88(2), 1980.

"The Acceleration of Inflation," Journal of Post-Keynesian Economics, II(1), Fall, 1979.

(with Y. C. Peles), "On Regulation and Uncertainty," American Economic Review, 69(1), March, 1979.

"Inflation, Employment and Stagflation," Journal of Monetary Economics, 4, No. 2 (1978).

(with H. Hori), "International Growth with Free Trade in Equities and Goods," International Economic Review, 18, No. 1 (1977).

"Inflation and Stagflation," Journal of Banking and Finance, 2 (1978).

"Money and Growth," Economic Appliquee, xxx (1977).

"Social Welfare under Fixed and Flexible Exchange Rates," Carnegie-Rochester Series on Public Policy (ed.), Karl Brunner and Allan Meltzer, Vol. 5 (1977).

"Inflation and Stability," Carnegie-Rochester Conference Series on Public Policy (ed.), Karl Brunner and Allan Metzler, Vol. 8 (1978).

"Inside the Monetarist Black Box," J. L. Stein (ed.), Monetarism, North-Holland, 1976.

"A Keynesian can be a Monetarist," op. cit.

(with Y. Peles), "The Effect of Rate Return Regulation is Highly Sensitive to the Nature of Uncertainty," American Economic Review (1976).

(with E. Infante), "Does Fiscal Policy Matter," Journal of Monetary Economics (1976).

"Social Welfare under Fixed and Flexible Exchange Rates," Journal of Monetary Economics (1976).

"Priorities and Pollution," American Economic Review (September, 1974).

"Unemployment, Inflation and Monetarism," American Economic Review (December, 1974).

(with E. F. Infante), "Optimal Growth with Robust Feedback Control," Review of Economic Studies (1973).

(with E. F. Infante), "Optimal Stabilization Paths," Journal of Money, Credit and Banking (1973).

(with G. Borts), "Behavior of the Firm under Regulatory Constraint," American Economic Review (1972).

"The 1971 Report of the President's Council of Economic Advisors: Micro-Economic Aspects of Public Policy," American Economic Review, September, 1971.

"The Optimum Quantity of Money," Journal of Money, Credit and Banking, II, No. 4, November, 1970.

"Monetary Growth Theory in Perspective," American Economic Review, LX, No. 1, March, 1970.

"A Minimal Role of Government in Achieving Optimal Growth," Economica, 36, May, 1969.

"Stabilization Policies in a Growing Economy," (with K. Nagatani), Review of Economic Studies, 36, April, 1969.

"Neoclassical and Keynes-Wicksell Monetary Growth Models," Journal of Money, Credit and Banking, I, May, 1969.

"Rational Choice and Patterns of Growth in a Monetary Economy: Comment," American Economic Review, 58, September, 1968.

"Money and Capacity Growth," Journal of Political Economy, 74, October, 1966.

"The Short-run Stability of the Foreign Exchange Market," (with E. Tower), The Review of Economics and Statistics, 1967.

"Short-term Capital Movements: A Reply," American Economic Review, 1967.

"The Forward Rate and the Interest Parity," Review of Economic Studies, 1965.



"International Short-term Capital Movements," American Economic Review, 1965.

"Differential Growth Rates Among Open Economies: Theory and Fact," in M. J. Brennan ed.), Patterns of Market Behavior, 1965.

Economic Growth in a Free Market (with G. Borts), New York: Columbia University Press, 1964.

"The United States Balance of Payments," Materials submitted to the Joint Economic Committee, Congress of the United States, 1963.

"The Optimum Foreign Exchange Market," American Economic Review, 1963.

"Oligopoly in Risk-Bearing Industries with Free Entry," Economica, 1963.

"The Rationality of Official Intervention in the Forward Exchange Market," Quarterly Journal of Economics, 1963.

"Regional Growth and Maturity in the United States," (with G. Borts), Schweizerische Zeitschrift für Volkswirtschaft und Statistik, 1962.

The Nature and Efficiency of the Foreign Exchange Market, Essays in International Finance, No. 40, Princeton University Press, 1962.

"Forces Producing Disturbances in the Value of Output," Journal of Political Economy, 1962.

"Investment Return as a Measure of Comparative Regional Economic Advantage," (with G. Borts), in W. Hochwald (ed.), Design of Regional Accounts, 1961.

"The Simultaneous Determination of Spot and Future Prices," American Economic Review, 1961.

"Destabilizing Speculative Activity can be Profitable," Review of Economics and Statistics, 1961.

"A Method of Identifying Disturbances which Produce Changes in Money National Income," Journal of Political Economy, 1960.

"A Theory of Interstate Differences in the Rates of Growth of Manufacturing Employment in a Free Market Area," International Economic Review, 1960.

"Interregional Comparisons of the Marginal Product of Capital," Southern Economic Journal, 1958.

"The Predictive Accuracy of the Marginal Productivity Theory of Wages," The Review of Economic Studies, 1958.

Forecast of New England's Machinery Industry in 1970, (with M. Schupack), Federal Reserve Bank of Boston, 1959.