

LAWRENCE J. CHRISTIANO

VITA

Personal Data

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2517 Thornwood Wilmette, Illinois 60091 (847) 251-5710 Citizenship: U.S.A.	Department of Economics Northwestern University Evanston, Illinois 60208 (847) 491-8231

Education

Degree	Field	Institution	Year
Ph.D.	Economics	Columbia University	1982
M.Sc.	Econometrics/Mathematical Economics	London School of Economics	1977
M.A.	Economics	University of Minnesota	1975
B.A.	History/Economics	University of Minnesota	1973

Experience

September 1, 2016 – 2018: Chairman, Department of Economics, Northwestern University.

September 2015 – September 2016: Member of Executive Committee, Faculty Senate, Northwestern University.

September 1, 2002 – present: Alfred W. Chase Chair in Business Institutions, Northwestern University.

Summers 1999, 2000, 2001: Visiting Scholar, International Monetary Fund.

Summers, 2001 and 2002: Visiting Scholar, European Central Bank.

Fall 1999 – present: Short courses on ‘Monetary Economics’ at Stockholm School of Economics; International Monetary Fund; Banca D’Italia; Central Bank of Portugal; Central Bank of Chile; European Central Bank; University of Bonn; New University of Lisbon; Humboldt University; Bocconi University; Massachusetts Institute of Technology; Study Center Gerzensee; Central Bank of Israel; Central Bank of Turkey; European Business Cycle Network; Brazilian Central Bank; Reserve

Bank of New Zealand; Swiss National Bank; University of Amsterdam; University of Toronto; American Economic Association; Central Bank of Peru; Central Bank of Colombia; Central Bank of Hungary; Central Bank of Czech Republic; Kiel Institute; Central Bank of Korea, Hanqing Advanced Institution of Economics and Finance, Renmin University of China; Shanghai Advanced Institute of Finance; Reserve Bank of India; Southwest University of Finance and Economics, Chengdu; Central Bank of Armenia; Central Bank of the Philippines; Norges Bank, Oslo.

Summer 1996 – 2007, consultant, Federal Reserve Bank of Cleveland.

Fall 2008 - present, consultant, Federal Reserve Bank of Atlanta.

July 1995: consultant, Board of Governors, Federal Reserve System.

August 1993, May-June 1998, Summers 1999, 2000, 2001: Visiting Scholar, International Monetary Fund.

Fall 1992 - present: Professor of Economics, Department of Economics, Northwestern University.

Fall 1992 - present: Consultant, Federal Reserve Bank of Chicago.

Fall 1992 - Fall 1996, Winter 2004 - present: Consultant, Federal Reserve Bank of Minneapolis.

Fall 1991 – Visiting Professor of Economics, Department of Economics, Northwestern University.

July 1991 – September 1992: Director, Institute for Empirical Macroeconomics, Federal Reserve Bank of Minneapolis.

September 1985 – September 1992: Economist, then Senior Economist, then Research Officer, Research Department, Federal Reserve Bank of Minneapolis.

September 1984 – June 1985: Visiting Assistant Professor of Economics, Carnegie-Mellon University.

October 1981 – September 1985: Assistant Professor of Business Economics, Graduate School of Business, University of Chicago.

Editorial Positions

June 2003 – 2010: Associate Editor, *Journal of Money, Credit and Banking*.

December 1996 – February 2002: Associate Editor, *Macroeconomic Dynamics*.

December 1996 - 2007: Associate Editor, *Review of Economic Dynamics*.

January 1995 – June 2005: Associate Editor, *Journal of Economic Dynamics and Control*.

January 1994 - 2007: Associate Editor, *Journal of Business and Economic Statistics*.

Fall 2000 – 2006: Associate Editor, *Journal of Economic Theory*.

August 1997 - August 1999: Associate Editor, *International Economic Review*.

April 1992 – April 1995: Associate Editor, *American Economic Review*.

Fall 1993 - January 1996: Associate Editor, *Review of Economics and Statistics*.

Principal Fields of Interest

Macroeconomics, Macro/finance

Applied Time Series Analysis

Honors

National Science Foundation Grants, 1985–1987, 1991–1993, 1993-1996, 1996-1999, 2000-2004, 2004-2007.

Research Affiliate, National Bureau of Economic Research, 1988–1989.

Research Associate, National Bureau of Economic Research, 1993-

Member, National Science Foundation Economics Panel, 1996-1998.

Fellow, Econometric Society, 2001-

Plenary lecture, ‘People Versus Institutions in Inflation Dynamics,’ Latin American Meeting, Econometric Society, Cancun, Mexico, 1999.

Plenary lecture, ‘Expectation Traps and Discretion,’ Canadian Macroeconomics Study Group, London, Ontario, 1999.

Keynote speaker, ‘The Role of Technology Shocks and Monetary Policy in Aggregate Fluctuations,’ Econometric Society Australasian Meeting, Brisbane, July, 2002.

Plenary Lecture, ‘Computing in Economics and Finance, 2005’, Conference of Society of Computational Economics, June 23-25, 2005, Washington, D.C.

Plenary Lecture, ‘Policy Relevant Modeling for Central Banks,’ Swiss National Bank Conference, September 22-23, 2005.

Keynote Speaker, Summer Workshop in Macroeconomics, University of Auckland, New Zealand, May 19, 2006.

Keynote Speaker, Economic Modeling and the Financial Crisis Workshop, Bank of Canada, May 13, 2009.

Invited Speaker, CSEF-IGIER Symposium on Economics and Institutions, Capri, Italy, June 22-26, 2009

Keynote Speaker, July 1, 2009, 17th Annual Caesarea Economic Policy Planning Forum, Eilat, Israel.

Keynote Speaker, 8th Workshop on Macroeconomic Policy Research, Central Bank of Hungary, September 3-4, 2009.

Invited Lecture, Latin American Meeting of the Econometric Society, Universidad Torcuato Di Tella, Buenos Aires, October 1-3, 2009.

Keynote Speaker, Journal of Economic Dynamics, and Control Conference on Frontiers in Structural Macroeconomic Modeling: Thirty Years after “Macroeconomics and Reality” and Five Years after “Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy”, January 23 and 24, 2010, Hitotsubashi University.

Keynote Speaker, Central Bank Macro Modeling Workshop, Central Bank of Canada, September 15-16, 2011

Invited Lecture, Latin American Meeting of the Econometric Society, Universidad Adolfo Ibanez, Santiago, Chile, November 10-12, 2011.

Keynote Speaker, Conference on Incorporating Financial Stability into Inflation Targeting, November 25-26, 2011, Central Bank of Turkey.

Plenary speaker, The Society for Computational Economics, 20th International Conference for Computing in in Economics and Finance, Oslo, June 2014.

Plenary speaker, Society for Economic Dynamics, Ottawa, June 2014.

Keynote Speaker, International Association for Applied Econometrics, University of Macedonia, Thessaloniki, Greece on June 25-27, 2015.

Keynote Speaker, Annual Conference of Romanian Economists, Babes-Bolyai University, July 29-30, 2015.

Distinguished William S. Vickrey lecture, October 14, 2016, Atlantic Economic Society, Washington, D.C.

Distinguished Associate, International Atlantic Economic Society, 2016-.

Keynote Speaker, HenU/INFER 5th Workshop on Applied Macroeconomics, March 2019.

Keynote Speaker, 13th Macro Finance Society Workshop, May 2019.

Distinguished Fellow, Macro Finance Society, 2019-.

Invited panelist to conference on occasion of 25th anniversary of the independence of the Central Bank of Mexico, November 22, 2019.

Invited presentation, *Economica* Centenary Conference 13-14 May 2021, London School of Economics.

Keynote lecture, 24th INFER Annual Conference, University of Timisoara, Romania, 8-10 June 2022.

Publications

- 2022 ‘Modeling Bank Panics: Challenges’, with Husnu Dalgic and Xiaoming Li, *Economica*, vol. 89, Issue S1, Issue to celebrate 100th anniversary of *Economica*.
- 2022 ‘Financial Frictions in Macroeconomics,’ *Journal of International Money and Finance*, publication corresponding to keynote address, HenU/INFER conference.
- 2021 ‘Involuntary Unemployment and the Business Cycle,’ *Review of Economic Dynamics*, vol. 39, January, with Mathias Trabandt and Karl Walentin.
- 2021 ‘Why is Unemployment so Countercyclical?’, *Review of Economic Dynamics*, volume 41, July, with Martin Eichenbaum and Mathias Trabandt.
- 2018 Comment on Cochrane, *NBER Macroeconomics Annual*, Volume 32, no. 1.
- 2018 On DSGE Models, *Journal of Economic Perspectives*, with Martin Eichenbaum and Mathias Trabandt.
- 2016 Bank Leverage and Social Welfare, with Daisuke Ikeda, *American Economic Association, Papers and Proceedings*, 106(5): 560–564
- 2016 Comment on Acemoglu, Akcigit and Kerr, ‘Networks and the Macroeconomy: An Empirical Exploration,’ *NBER Macroeconomics Annual 2015*.
- 2016 Unemployment and Business Cycles, with Eichenbaum and Trabandt, *Econometrica*, volume 84, issue 4, pp. 1523-1569.
- 2015 Comment on Barsky, Basu and Lee, ‘Whither News Shocks?’, *NBER Macroeconomics Annual, 2014*.
- 2015 Understanding the Great Recession, with Eichenbaum and Trabandt, *American Economic Journal: Macroeconomics*, vol. 7, no. 1, January, pp. 110-67. Winner, *AEJ Best Paper Award*, 2017.

- 2014 Leverage Restrictions in a Business Cycle Model, with Daisuke Ikeda, in *Macroeconomic and Financial Stability: Challenges for Monetary Policy*, edited by Bauducco, Christiano and Raddatz, Central Bank of Chile, Santiago.
- 2014 “Risk Shocks,” with Roberto Motto and Massimo Rostagno, *American Economic Review*, January.
- 2012 Government Policy, Credit Markets and Economic Activity, with Daisuke Ikeda, in Federal Reserve Bank of Atlanta conference volume, *A Return to Jekyll Island: the Origins, History, and Future of the Federal Reserve*, Cambridge University Press.
- 2012 Comments on "The Household Effects of Government Spending," by Francesco Giavazzi and Michael McMahon, in *Fiscal Policy after the Financial Crisis*, NBER volume edited by Alberto Alesina and Francesco Giavazzi.
- 2012 ‘Christopher A. Sims and Vector Autoregressions,’ *Scandinavian Journal of Economics*.
- 2011 Introducing Financial Frictions and Unemployment into a Small Open Economy Model, *Journal of Economic Dynamics and Control*, 35, pp. 1999–2041.
- 2011 Comment on Gali, Smets and Wouters, "Unemployment in an Estimated New Keynesian Model", *NBER Macroeconomics Annual 2011*, Vol. 26, Daron Acemoglu and Michael Woodford, editors, forthcoming.
- 2011 When is the Government Spending Multiplier Large? With Martin Eichenbaum and Sergio Rebelo, *The Journal of Political Economy*, Vol. 119, No. 1 (February 2011), pp. 78-121.
- 2011 Comment on Eggertsson, *NBER Macroeconomics Annual 2010*, Vol. 25, Daron Acemoglu and Michael Woodford, editors, pp. 113-124.
- 2011 Firm-specific capital, nominal rigidities and the business cycle, with Dave Altig, Martin Eichenbaum and Jesper Linde, *Review of Economic Dynamics, Volume 14, Issue 2, April, Pages 225-247*.
- 2011 Monetary Policy and Stock Market Booms, with Cosmin Ilut, Roberto Motto and Massimo Rostagno, in *Macroeconomic Challenges: the Decade Ahead*, Federal Reserve Bank of Kansas City (Policy Symposium, Jackson Hole Wyoming).
- 2011 DSGE Models for Monetary Policy Analysis, joint with Mathias Trabandt and Karl Walentin, in Benjamin M. Friedman, and Michael Woodford, editors: *Handbook of Monetary Economics*, Vol. 3A, The Netherlands: North-Holland.
- 2011 Remarks on Unconventional Monetary Policy, *International Journal of Central Banking*, Vol. 7, no. 1, March.

- 2009 Optimal Monetary Policy in a ‘Sudden Stop’, with Fabio Braggion and Jorge Roldos, *Journal of Monetary Economics* 56, pp. 582-595.
- 2008 Two Reasons Why Money and Credit May be Useful in Monetary Policy, with Roberto Motto and Massimo Rostagno, published in a volume by the European Central Bank, NBER working paper number 13502.
- 2007 Shocks, Structures or Monetary Policies? The Euro Area and US After 2001, with Roberto Motto and Massimo Rostagno, *Journal of Economic Dynamics and Control*.
- 2006 Alternative procedures for estimating vector autoregressions identified with long-run restrictions, *Journal of the European Economic Association*, *Journal of the European Economic Association*, Vol. 4, No. 2/3, Papers and Proceedings of the Twentieth Annual Congress of the European Economic Association (Apr. - May), pp. 475-483, joint with Martin Eichenbaum and Charles Evans.
- 2006 Assessing Structural VARs, joint with Martin Eichenbaum and Rob Vigfusson, *NBER Macroeconomics Annual*, Vol. 21, pp. 1-105.
- 2005 Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy, *Journal of Political Economy*, joint with Martin Eichenbaum and Charles Evans, reprinted in Benassy, Jean Pascal, ed. *Imperfect Competition, Non-clearing Markets and Business Cycles*. The International Library of Critical Writings in Economics series, vol. 192. An Elgar Reference Collection. Cheltenham, U.K. and Northampton, Mass.: Elgar, 2006; 514-58.
- 2004 Response of Hours to a Technology Shock: Evidence Based on Direct Measures of Technology, *Journal of the European Economic Association*, Volume 2 Issues 2-3, April-May 2004 , pp. 381-395, joint with Martin Eichenbaum and Robert Vigfusson.
- 2004 ‘Monetary Policy in a Financial Crisis,’ joint with Jorge Roldos and Christopher Gust, *Journal of Economic Theory*.
- 2003 The Great Depression and the Friedman-Schwartz Hypothesis, *Journal of Money, Credit and Banking*, vol. 35, number 6, part 2, December,
- 2003 Expectation Traps and Monetary Policy, joint with Stefania Albanesi and V.V. Chari, *Review of Economic Studies*.
- 2003 Inflation and Monetary Policy in the 20th Century, joint with Terry Fitzgerald, in Federal Reserve Bank of Chicago, *Economic Perspectives*, first quarter.
- 2003 How Severe is the Time Inconsistency Problem in Monetary Policy?, with V.V. Chari and Stefania Albanesi, Chapter 4 in *Advances in Economics and Econometrics: Theory and Applications*, Eighth World Congress of the Econometric Society, vol. 3, edited by Mathias Dewatripont, Lars Peter Hansen and Stephen J. Turnovsky, pp. 123-50,

Cambridge University Press. Reprinted with permission in Federal Reserve Bank of Minneapolis *Quarterly Review*, summer 2003, vol. 27, no. 3, pp. 17-33.

- 2002 ‘The Seasons: do They Matter for Business Cycle Analysis?’, joint with Richard Todd, *Journal of Monetary Economics*, available at <http://faculty.econ.nwu.edu/faculty/christiano/research/todd/paper.pdf>.
- 2002 ‘Maximum Likelihood in the Frequency Domain: A Time to Build Example,’ joint with Robert Vigfusson, *Journal of Monetary Economics*, with earlier draft available as National Bureau of Economic Research Working Paper number 7027.
- 2002 ‘The Band Pass Filter,’ joint with Terry Fitzgerald, *International Economic Review*.
- 2002 ‘Solving Dynamic Equilibrium Models by a Method of Undetermined Coefficients’, *Computational Economics*, October, Volume 20, Issue 1-2.
- 2001 ‘Habit Persistence, Asset Returns, and the Business Cycle,’ *American Economic Review*, joint with Michele Boldrin and Jonas Fisher.
- 2001 How Severe is the Time Consistency Problem in Monetary Policy?, with Stefania Albanesi and V.V. Chari, forthcoming in *Advances in Economic Theory and Econometrics*, edited by Lars Hansen and Stephen Turnovsky.
- 2001 Discussion of Bennett McCallum, in Heinz Herrmann, editor, *The Monetary Transmission Process: Recent Developments and Lessons for Europe*. Deutsche Bundesbank, Houndmills, U.K. and New York: Palgrave. p 44-50.
- 2000 Comment on Bennett McCallum, ‘Theoretical Analysis Regarding a Zero Lower Bound on Nominal Interest Rates,’ *Journal of Money, Credit and Banking*, November, vol. 32, no. 4, part 2, p 905-30.
- 2000 ‘Understanding the Fiscal Theory of the Price Level,’ Federal Reserve Bank of Cleveland *Economic Review*, Quarter 2, vol. 36, no. 2, joint with Terry Fitzgerald.
- 2000 ‘The Expectations Trap Hypothesis,’ joint with Christopher Gust, Federal Reserve Bank of Chicago *Economic Perspectives*, Second Quarter.
- 2000 Discussion of Cooley and Quadrini, ‘The Cost of Losing Monetary Independence: the Case of Mexico’, forthcoming.
- 2000 ‘Taylor Rules in a Limited Participation Model,’ joint with Chris Gust, in *De Economist*.
- 2000 ‘Monetary Policy Shocks: What Have We Learned and to What End?’, joint with Martin Eichenbaum and Charles Evans, in Taylor and Woodford, *Handbook of Macroeconomics*.
- 2000 ‘Algorithms for Solving Dynamic Models with Occasionally Binding Constraints,’ *Journal of Economic Dynamics and Control*, Vol. 24 (8). p 1179-1232, joint with Jonas Fisher.

- 1999 ‘Chaos, Sunspots and Automatic Stabilizers,’ joint with Sharon Harrison, in *Journal of Monetary Economics*.
- 1998 ‘The Business Cycle: It’s Still a Puzzle,’ joint with Terry Fitzgerald, Federal Reserve Bank of Chicago, *Economic Perspectives*, Fourth Quarter.
- 1998 Discussion of Andrew Levin, Volker Wieland, and John C. Williams, ‘Are Simple Monetary Policy Rules Robust to Model Uncertainty?,’ joint with Christopher Gust, in John B. Taylor, ed. *Monetary Policy Rules*, University of Chicago Press, forthcoming.
- 1998 Discussion of Christopher Sims, ‘The Role of Interest Rate Policy in the Generation and Propagation of Business Cycles: What Has Changed Since the 30s?,’ Scott Shuh and Jeffrey Fuhrer, editors, *Beyond Shocks: What Causes Business Cycles?*, Federal Reserve Bank of Boston, forthcoming.
- 1998 ‘Habit Persistence and Asset Returns in an Exchange Economy,’ joint with Michele Boldrin and Jonas Fisher, *Macroeconomic Dynamics*.
- 1998 ‘Expectation Traps and Discretion,’ joint with V.V. Chari and Martin Eichenbaum, *Journal of Economic Theory*.
- 1997 ‘Sticky Price and Limited Participation Models of Money: A Comparison,’ joint with Martin Eichenbaum and Charles Evans, *European Economic Review*, vol. 41, no. 6, June, 1201-1249.
- 1996 ‘Optimality of the Friedman Rule in Economies with Distorting Taxes,’ *Journal of Monetary Economics*, joint with V.V. Chari and Patrick Kehoe, vol. 37, issue 2, pp. 203-223.
- 1996 ‘Identification and the Effects of Monetary Policy Shocks,’ joint with Martin Eichenbaum and Charles Evans, forthcoming in Mario Blejer, Zvi Eckstein, Zvi Hercowitz and Leo Leiderman, *Financial Factors in Economic Stabilization and Growth*, Cambridge University Press.
- 1996 ‘Time to Plan and Aggregate Fluctuations,’ joint with Richard Todd, Federal Reserve Bank of Minneapolis *Quarterly Review*.
- 1996 ‘Small Sample Properties of GMM for Business Cycle Analysis,’ joint with Wouter den Haan, *Journal of Business and Economic Statistics*.
- 1996 ‘Identification and the Liquidity Effect: A Case Study,’ Federal Reserve Bank of Chicago *Economic Perspectives*; vol. 20, no. 3 May-June, pp. 2-13.
- 1996 ‘The Effects of Monetary Policy Shocks: Evidence From the Flow of Funds,’ joint with Martin Eichenbaum and Charles Evans, *Review of Economics and Statistics*.
- 1995 ‘Inside Money, Outside Money and Short Term Interest Rates,’ joint with V.V. Chari and Martin Eichenbaum, *Journal of Money, Credit and Banking*.

- 1995 'Commentary on Pagan and Robertson,' *Federal Reserve Bank of St. Louis Review*, May/June, vol. 77, no. 3.
- 1995 'Liquidity Effects, Monetary Policy, and the Business Cycle,' *Journal of Money, Credit and Banking*, joint with M. Eichenbaum.
- 1995 'Policy Analysis in a Business Cycle Model,' with V.V. Chari and P. Kehoe, in *Frontiers in Business Cycle Theory*, edited by Thomas Cooley, Princeton University Press.
- 1994 'Optimal Fiscal Policy in a Business Cycle Model,' *Journal of Political Economy*, Volume 102, Number 3, August, joint with V. V. Chari and P. Kehoe.
- 1992 'The Output, Employment, and Interest Rate Effects of Government Consumption,' joint with S. Rao Aiyagari and Martin Eichenbaum. *Journal of Monetary Economics*.
- 1992 'Liquidity Effects, the Monetary Transmission Mechanism, and Monetary Policy,' with M. Eichenbaum, *Economic Perspectives*, Federal Reserve Bank of Chicago.
- 1992 'Searching for a Break in GNP,' *Journal of Business and Economic Statistics*, July.
- 1992 'Liquidity Effects and the Monetary Transmission Mechanism,' *American Economic Review Papers and Proceedings*, January, joint with M. Eichenbaum.
- 1992 'Current Real Business Cycle Theories and Aggregate Labor Market Fluctuations,' co-authored with M. Eichenbaum. *American Economic Review*.
- 1992 'Identification and the Liquidity Effect of a Monetary Policy Shock,' with M. Eichenbaum. *Business Cycles, Political Economy, and Growth*. MIT Press, ed. Cukierman, Hercowitz, Leiderman.
- 1991 'Modeling the Liquidity Effect of a Monetary Shock,' *Federal Reserve Bank of Minneapolis Quarterly Review*. Reprinted in R. Fiorito, editor, *Inventory, Business Cycles and Monetary Transmission*, Lecture Notes in Economics and Mathematical Systems 413, Springer-Verlag, 1994. Also reprinted in P. Miller, editor, *The Rational Expectations Revolution, Readings From the Front Line*, MIT Press 1994.
- 1991 'Optimal Fiscal and Monetary Policy: Some Recent Results,' with V. V. Chari and P. Kehoe. *Journal of Money, Credit, and Banking*, reprinted in Cukierman, Hercowitz and Leiderman, *Business Cycles, Political Economy and Growth*, MIT press, 1992.
- 1991 'The Permanent Income Hypothesis Revisited,' *Econometrica* 59, no. 2, (March), joint with M. Eichenbaum and D. Marshall.
- 1990 'Linear-Quadratic Approximation and Value-Function Iteration: A Comparison,' *Journal of Business and Economic Statistics*.

- 1990 'Unit Roots in Real GNP: Do We Know, and Do We Care?' *Carnegie-Rochester Conference Series on Public Policy*, co-authored with M. Eichenbaum
- 1990 'Solving the Stochastic Growth Model by Linear-Quadratic Approximation and by Value-Function Iteration,' *Journal of Business and Economic Statistics*.
- 1989 'P*: Not the Inflation Forecaster's Holy Grail,' *Federal Reserve Bank of Minneapolis Quarterly Review*.
- 1989 'Understanding Japan's Saving Rate: The Reconstruction Hypothesis,' *Federal Reserve Bank of Minneapolis Quarterly Review*, 13(2), Spring, pages 10-25.
- 1989 'Consumption, Income, and Interest Rates: Reinterpreting the Time Series Evidence: Comment,' Presented to NBER Annual Conference on Macroeconomics, March 11. *NBER Macroeconomics Annual*.
- 1989 'Temporal Aggregation and the Stock Adjustment Model of Inventories.' In *The Rational Expectations Equilibrium Inventory Model: Theory and Applications*, ed. T. Kollintzas, Springer-Verlag Lecture Notes in Economics and Mathematical Systems, 322, co-authored with M. Eichenbaum.
- 1988 'Money Does Granger-Cause Output in the Bivariate Output-Money Relation.' *Journal of Monetary Economics*, joint with L. Ljungqvist, September.
- 1988 'Why Does Inventory Investment Fluctuate So Much?' *Journal of Monetary Economics*.
- 1987 'Is Consumption Insufficiently Sensitive to Innovations in Income?' *American Economic Review Papers and Proceedings* 77(2).
- 1987 'Why Is Consumption Less Volatile Than Income?' *Federal Reserve Bank of Minneapolis Quarterly Review*.
- 1987 'Cagan's Model of Hyperinflation Under Rational Expectations' *International Economic Review* 28(1).
- 1987 'Temporal Aggregation and Structural Inference in Macroeconomics' In *Carnegie-Rochester Series on Public Policy* 26, co-authored with M. Eichenbaum.
- 1986 'Money and the U.S. Economy in the 1980s: A Break From the Past?' *Federal Reserve Bank of Minneapolis Quarterly Review*.
- 1985 'A Method for Estimating the Timing Interval in a Linear Econometric Model, With an Application to Taylor's Model of Staggered Contracts.' *Journal of Economic Dynamics and Control* 9, 363-404.
- 1984 'A Reexamination of the Theory of Automatic Stabilizers' *Carnegie-Rochester Conference Series on Public Policy* 20.

- 1981 'A Survey of Measures of Capacity Utilization' *IMF Staff Papers* 28(1).
- 1979 'The International Comparability of Labour Market Statistics' *Bulletin of Labour Statistics*, 4th quarter, International Labour Office, Geneva Switzerland.

Unpublished Manuscripts Available for Distribution and Papers Under Review

- 2022 'Does the New Keynesian Model have a Uniqueness Problem?,' with Martin Eichenbaum and Ben Johansson, under revision.
- 2022 'Financial Dollarization in Emerging Markets: Efficient Risk Sharing or Prescription for Disaster?', with Husnu Dalgic and Armen Nurbekyan, under review.
- 2021 'Anchoring Inflation Expectations,' with Yuta Takahashi, under revision.
- 2021 'Financialization in Commodity Markets,' with V.V. Chari, under revision.
- 2008 News: Implications for Business Cycles and for Monetary Policy, with Cosmin Ilut, Roberto Motto and Massimo Rostagno.
- 2003 'What Happens After A Technology Shock?,' joint with Martin Eichenbaum and Rob Vigfusson, NBER Working Paper 9819.
- 2001 'Money Growth Monitoring and the Taylor Rule,' joint with Massimo Rostagno, NBER working paper number 8539.
- 2008 Two Flaws in Business Cycle Accounting, with Josh Davis.