

MICHAEL KUMHOF

Senior Research Adviser, Research Hub, Bank of England
Room TS3-03-414, Threadneedle Street
London EC2R 8AH, United Kingdom
E-mail: michael.kumhof@bankofengland.co.uk
Homepage: <http://michaelkumhof.weebly.com/>

CURRENT POSITION

Senior Research Adviser, Research Hub, Bank of England, 2015 – today

Responsibility for developing, managing and carrying out parts of the research agenda of the Bank of England's Research Hub.

PREVIOUS POSITION

Deputy Division Chief, Modeling Division, Research Dept., IMF, 2010 – 2015
Senior Economist/Economist, Modeling Division, Research Dept., IMF, 2004 – 2010

Responsibility for developing the IMF's global DSGE model GIMF, which is used for IMF policy and scenario analyses in multilateral and bilateral surveillance, for the World Economic Outlook, and for G-20 work. It is also used by several central banks.

ACADEMIC POSITIONS

Assistant Professor, Stanford University, 1998 – 2004

OTHER POSITIONS

Visiting Scholar, Research Department, International Monetary Fund,
2001 – 2002

Visiting Scholar, Research Department, Inter-American Development Bank,
2002 – 2003

EDUCATION

Ph.D. Economics, University of Maryland at College Park, 1998
Associate of the Chartered Institute of Bankers, England, 1992
M.Sc. Economics, University of York, England, 1988
B.A. Economics, University of York, England, 1987

DISSERTATION

Capital Flow Sterilization in Small Open Economies

Committee Chair: Guillermo A. Calvo

Advisors: Guillermo A. Calvo, Carmen M. Reinhart, Allan Drazen, Michael Binder

RESEARCH

Fields of Interest

Monetary reform (including central bank digital currencies and narrow banking), endogenous money creation by the banking system, banking in macro models, monetary policy, fiscal policy, international finance, economics of exhaustible resources, inequality and macroeconomic performance.

Journal Publications

- “The Macroeconomics of Central Bank Digital Currencies”, *Journal of Economic Dynamics and Control*, **142**, September 2022, 1-24.
- “Banks, Money, and the Zero Lower Bound on Deposit Rates”, *Journal of Economic Dynamics and Control*, **132**, November 2021, 1-26.
- “Central Bank Digital Currencies – Design Principles for Financial Stability”, *Economic Analysis and Policy*, **71**, September 2021, 553-572.
- “On the Theory of International Currency Portfolios”, *European Economic Review*, **101**, January 2018, 376-396.
- “Government Debt Bias” (with I. Yakadina), *IMF Economic Review*, **65(4)**, 2017, 675-703.
- “Balance-of-Payments Anti-Crises” (with I. Yan), *Journal of Macroeconomics*, **48**, April 2016, 186-202.
- “Risky Bank Lending and Countercyclical Capital Buffers” (with J. Benes), *Journal of Economic Dynamics and Control*, **58**, September 2015, 58-80.
- “Inequality, Leverage and Crises” (with R. Ranciere and P. Winant), *American Economic Review*, **105(3)**, March 2015, 1217-1245.
- “Trade Openness and Exchange Rate Regimes” (with O. Kamenik), *Journal of Money, Credit and Banking*, **46(8)**, December 2014, 1657-1686.

- “The Future of Oil: Geology versus Technology” (with J. Benes et al.), *International Journal of Forecasting*, **31(1)**, January-March 2015, 207-221.
- “To Starve or not to Starve the Beast?” (with D. Leigh and D. Laxton), *Journal of Macroeconomics*, **39(A)**, March 2014, 1-23.
- “Oil and the World Economy: Some Possible Futures” (with D. Muir), *Philosophical Transactions of the Royal Society A*, 2014, **372**: 20120327.
- “Fiscal Deficits and Current Account Deficits” (with D. Laxton), *Journal of Economic Dynamics and Control*, **37(10)**, October 2013, 2062-2082.
- “Simple Fiscal Policy Rules for Small Open Economies” (with D. Laxton), *Journal of International Economics*, **91(1)**, September 2013, 113-127.
- “Pricing Policies and Inflation Dynamics” (with L. Cespedes and E. Parrado), *Macroeconomic Dynamics*, **16(4)**, September 2012, 576-604.
- “Effects of Fiscal Stimulus in Structural Models” (with Coenen et al.), *American Economic Journal: Macroeconomics*, **4(1)**, January 2012, 22-68.
- “Jointly Optimal Monetary and Fiscal Policy Rules under Liquidity Constraints” (with H. Bi), *Journal of Macroeconomics*, **33(3)**, September 2011, 373-389.
- “Chile’s Structural Fiscal Surplus Rule: A Model-Based Evaluation” (with D. Laxton), *Economia Chilena*, **13(3)**, December 2010, 5-32.
- “Global Effects of Fiscal Stimulus During the Crisis” (with C. Freedman, D. Laxton, D. Muir and S. Mursula), *Journal of Monetary Economics*, **57**, July 2010, 506-526.
- “On the Theory of Sterilized Foreign Exchange Intervention”, *Journal of Economic Dynamics and Control*, **34**, April 2010, 1403-1420.
- “Policies to Rebalance the Global Economy After the Financial Crisis” (with C. Freedman, D. Laxton and D. Muir), *International Journal of Central Banking*, **6(1)**, March 2010, 215-252.
- “Simple Monetary Rules under Fiscal Dominance” (with R. Nunes and I. Yakadina), *Journal of Money, Credit and Banking*, **42(1)**, February 2010, 63-92.
- “Budget Consolidation: Short-Term Pain and Long-Term Gain” (with K. Clinton, D. Laxton and S. Mursula), 2010, *European Economic Review*, **55(1)**, 118-139.
- “Optimal Price Setting and Inflation Inertia in a Rational Expectations Model” (with M. Juillard, O. Kamenik and D. Laxton), *Journal of Economic Dynamics and Control*, **32(8)**, August 2008, 2584-2621.

- “Inflation Inertia and Credible Disinflation” (with G. Calvo and O. Celasun), *Journal of International Economics*, **73(1)**, September 2007, 48-68.
- “Balance of Payments Crises under Inflation Targeting” (with S. Li and I. Yan), *Journal of International Economics*, **72(1)**, May 2007, 242-264.
- “Capital Inflow Sterilization: Through Lower Interest Rates?”, *Journal of International Money and Finance*, **23(7-8)**, November 2004, 1209-1221.
- “International Capital Mobility in Emerging Markets: New Evidence from Daily Data”, *Review of International Economics*, **9(4)**, November 2001, 626-640.
- “A Quantitative Exploration of The Role of Short-Term Domestic Debt in Balance of Payments Crises”, *Journal of International Economics*, **51(1)**, June 2000, 195-215.

Working Papers

- “CBDC Policies in Open Economies” (with Marco Pinchetti, Phurichai Rungcharoenkitkul and Andrej Sokol), BIS Working Paper, No. 1086, April 2023.
- “Deep Reinforcement Learning in a Monetary Model” (with Mingli Chen, Andreas Joseph, Xinlei Pan and Xuan Zhou), May 2023.
- “Post-Corona Balanced-Budget Super-Stimulus: The Case for Shifting Taxes onto Land” (with Charles Goodhart, Michael Hudson and Nicolaus Tideman), CEPR Discussion Papers, No. 16652, October 2021.
- “Central Bank Money: Liability, Asset or Equity of the Nation?” (with Jason Allen, Will Bateman, Rosa Lastra, Simon Gleeson and Saule Omarova), CEPR Discussion Papers, No. 15521, December 2020.
- “How Does International Capital Flow?” (with Phurichai Rungcharoenkitkul and Andrej Sokol), Bank of England Staff Working Papers, No. 884, August 2020.
- “Towards a New Monetary Theory of Exchange Rate Determination” (with Ambrogio Cesa-Bianchi, Andrej Sokol and Gregory Thwaites), Bank of England Staff Working Paper, No. 817, August 2019.
- “Banks Are Not Intermediaries of Loanable Funds – Facts, Theory and Evidence” (with Zoltan Jakab), Bank of England Staff Working Paper, No. 761, June 2019 update.
- “Banks Are Not Intermediaries of Loanable Funds – And Why This Matters” (with Zoltan Jakab), Bank of England Staff Working Paper, No. 529, May 2015.

- “The Chicago Plan Revisited” (with J. Benes), IMF Working Paper WP/12/202.
- “Income Inequality and Current Account Imbalances” (with C. Lebarz, R. Ranciere, A. Richter and N. Throckmorton), IMF Working Paper WP/12/08.
- “The Global Integrated Monetary and Fiscal Model – Theoretical Structure” (with D. Laxton, D. Muir and S. Mursula), IMF Working Paper WP/10/34.

Conference Volumes

- “Does the Exchange Rate Belong in Monetary Policy Rules? New Answers from a DSGE Model with Endogenous Tradability and Trade Frictions” (with D. Laxton and K. Naknoi), in R. Anderton and G. Kenny, eds., *Macroeconomic Performance in a Globalising Economy*. Cambridge and New York: Cambridge University Press, 2011.
- “Government Debt: A Key Role in Financial Intermediation” (with E. Tanner), in C. Reinhart, C. Végh and A. Velasco (ed.), *Money, Crises and Transition, Essays in Honor of Guillermo A. Calvo*, 2008.
- “Exchange Rate Regimes, International Linkages, and the Macroeconomic Performance of the New Member States” (with T. Bayoumi, D. Laxton and K. Naknoi), Chapter 5 in C. Detken, V. Gaspar, G. Noblet, eds., *The New EU Member States – Convergence and Stability, Proceedings of the Third ECB Central Banking Conference*, 2004.
- “A Theory of Rational Inflationary Inertia” (with G. Calvo and O. Celasun), in: P. Aghion, R. Frydman, J. Stiglitz and M. Woodford, eds., *Knowledge, Information and Expectations in Modern Macroeconomics: In Honor of Edmund S. Phelps*. Princeton: Princeton University Press, 2002.
- “A Critical View of Inflation Targeting: Crises, Limited Sustainability, and Aggregate Shocks”, in: N. Loayza and R. Soto, eds., *Inflation Targeting: Design, Performance, Challenges*. Santiago, Chile: Central Bank of Chile, 2002.

IMF Papers

- “Oil Scarcity, Growth and Global Imbalances”, with T. Helbling, J.S. Kang, S. Roache and A. Pescatori, Chapter 3 of April 2011 World Economic Outlook, International Monetary Fund.
- “The Case for Global Fiscal Stimulus”, with C. Freedman, D. Laxton and J. Lee, 2009, Staff Position Note 2009/03, International Monetary Fund.

- “A Simulation-Based Perspective on Fiscal Stimulus”, with D. Laxton, 2008, part of Chapter 5 of the October 2008 World Economic Outlook, International Monetary Fund.
- “South Asia: Illustrative Impact of an Abrupt Climate Shock”, with D. Laxton, 2008, Box 4.2 of Chapter 4 of the April 2008 World Economic Outlook, International Monetary Fund.
- “When Does Fiscal Stimulus Work?”, with S. Danninger and D. Laxton, 2008, Box 2.1 of Chapter 2 of the April 2008 World Economic Outlook, International Monetary Fund.
- “Decoupling the Train? Spillovers and Cycles in the Global Economy?”, with T. Helbling, P. Berezin, A. Kose, D. Laxton and N. Spatafora, 2007. Chapter 4 of the April 2007 World Economic Outlook, International Monetary Fund.
- “How Will Global Imbalances Adjust?”, with D. Laxton, 2006. Box 1.3 of Chapter 1 of the September 2006 World Economic Outlook, International Monetary Fund.

Other Research

- Visiting Scholar, Banco de la Republica / Universidad de los Andes, Colombia, June/July/August 2000, July/August 1999.
- Research Assistant, University of Maryland, 1994-1998.
- Visiting Scholar, International Monetary Fund, July 1998.
- Consultant, Deutsche Bank Securities Inc. (Emerging Markets), New York, Oct. 1998.
- Consultant, Inter-American Development Bank, Office of the Chief Economist, March-July 1997.

IMF MODELING WORK - DETAILS

I developed the IMF’s global DSGE model, the Global Integrated Monetary and Fiscal Model (GIMF), between April 2004 and January 2015. GIMF is a monetary, fiscal and macro-financial business cycle model that has been used intensively for the World Economic Outlook, Early Warning Exercises and G-20 Notes. It has also been used by a large number of IMF country desks for country related applications, and has been adopted by several central banks for policy simulations. The Modeling Division has produced a number of academic applications of this model, which have been published in leading academic journals. Recent additions to GIMF include an oil sector with an emphasis on exhaustible resource features, a financial accelerator mechanism with a key role for corporate balance sheets, and a banking sector with a key role for bank balance sheets and for macro-prudential regulation.

REFEREEING

- Econometrica.
- American Economic Review.
- Journal of Political Economy.
- Review of Economic Studies.
- Economic Theory.
- European Economic Review.
- Journal of Monetary Economics.
- Journal of Development Economics.
- Journal of Economic Dynamics and Control.
- Journal of International Economics.
- Economic Journal.

ACADEMIC ADMINISTRATIVE RESPONSIBILITIES

Assistant Director of Undergraduate Studies, Stanford Economics Department, 1999/2000.

TEACHING (Stanford University)

- International Finance, Graduate, Fall 1998/1999/2000/2004.
- International Economics, Undergraduate, Spring 1999, Winter 2000/2001, Fall 2004.
- Money and Banking, Undergraduate, Winter 2000, Winter 2001/2004.

LANGUAGES

English, German: Bilingual
Portuguese, Spanish: Fluency
French: Intermediate
Russian: Basic reading proficiency

PROFESSIONAL EXPERIENCE

Corporate Account Executive, Barclays Bank PLC, Singapore, 1991-1993
Management of US\$ 100 million corporate loan portfolio in Indonesia, Malaysia and Singapore.
Assistant Account Executive, Barclays Bank PLC, Portugal, 1990-1991
Co-management of US\$ 25 million corporate loan portfolio.
Management Trainee, Barclays Bank PLC, City of London, 1988-1990
Training in financial and general management.

CITIZENSHIP

Germany