ROBERTO CHANG

DEPARTMENT OF ECONOMICS RUTGERS UNIVERSITY NEW BRUNSWICK, NJ 08901

OFFICE (848) 932 7269 FAX (848) 932 7416 chang@econ.rutgers.edu

JULY 2019

EDUCATION

UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA PA Ph.D. in Economics, May 1989

UNIVERSIDAD CATOLICA DEL PERU, LIMA PERU Bachelor in Social Sciences, June 1983

EXPERIENCE

RUTGERS UNIVERSITY, NEW BRUNSWICK NJ

2019-Present Distinguished Professor

2003-Present Professor

2000-2003 Associate Professor (with tenure)

NATIONAL BUREAU OF ECONOMIC RESEARCH, CAMBRIDGE MA

2005-Present Research Associate

CENTER FOR RESEARCH IN INTERNATIONAL ECONOMICS (CREI),

BARCELONA, SPAIN

2015-16 Visiting Researcher

PRINCETON UNIVERSITY, PRINCETON NI

Spring 2008 Visiting Professor

Spring 2004 Visiting Associate Professor

FEDERAL RESERVE BANK OF ATLANTA, ATLANTA GA

1996-2000 Research Officer 1993-1996 Senior Economist

NEW YORK UNIVERSITY, NEW YORK NY

1989-1993 Assistant Professor of Economics

1988-1989 *Instructor*

CENTRAL BANK OF PERU, LIMA PERU 1982-1983 Economic Analyst

SHORT TERM APPOINTMENTS

Federal Reserve Bank of Cleveland, March 2019

Study Center Gerzensee, Swiss National Bank Foundation, Central Bankers Courses, May 2018, May 2016

World Bank, March 2017, August 2006, May-June 2005

International Monetary Fund, January 2017, January 2013, August 2011, January 2011, January 2004, May 2002

Columbia University, Adjunct Professor, Program in Economic Policy Management, Fall 2013

Bank of France, July 2013

Federal Reserve Bank of New York, December 2008, March 2004

Inter-American Development Bank, June-October 2008

Institute for International Integration Studies, Trinity College Dublin, July 2006

Bank of Italy, July 2003

Bank of Spain, February 2003-July 2003

European Central Bank, June 2002

Federal Reserve Bank of Atlanta, August 2001

Federal Reserve Board, April 2001

DISTINCTIONS AND AWARDS

Honorary Professor, Universidad Nacional Mayor de San Marcos, Perú, May 2019

Latin American and Caribbean Economic Association (LACEA) 25th Anniversary Associate, 2017

Board of Trustees Award for Excellence in Research, Rutgers University, 2014

Honorary Visiting Professor, Universidad Peruana de Ciencias Aplicadas, Perú, October 2012

Peter Kenen Fellow, International Economics Section and Department of Economics, Princeton University, 2004-5

Alfred P. Sloan Doctoral Dissertation Fellow, 1987-1988

Sidney Weintraub Award, Department of Economics, University of Pennsylvania, 1988

Dean's Fellow, Faculty of Arts and Sciences, University of Pennsylvania, 1986-1987 and 1987-1988

Lawrence Robbins Award, Department of Economics, University of Pennsylvania, 1984

Fulbright Fellow, 1983-1985

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Editor, Peru Section, focoeconomico.org, 2016-present

Advisor, Financial Stability Development Group, Inter-American Development Bank, 2018-9

External Reviewer, Economic Research, Central Bank of Uruguay, 2017

Research Advisor, Financial Stability and Development Research Network of Central Banks, Inter-American Development Bank and Latin American Center for Monetary Studies, 2016

Research Advisor, Project "Incorporating Financial Stability Considerations in Policy Analysis", Bank for International Settlements, 2014

External Organizer, 2014 Central Bank of Chile Annual Conference

Guest Editor, Special Issue on Unconventional Monetary Policy in Latin America, Economía, Journal of LACEA, 2013-14

Program Chair, Latin American and Caribbean Economics Association (LACEA) 2012 Meeting, Universidad del Pacífico, Lima 2012

External Advisor, Project "Towards a New Inflation Targeting Framework in Latin America and the Caribbean", Latin American and Caribbean Research Network, Inter-American Development Bank, 2012-13

Co-Organizer, International Macroeconomics and Finance Program Meetings, National Bureau of Economic Research, 2008-2011

External Organizer, 2009 Central Bank of Chile Annual Conference

Member, Advisory Board and Research Committee, Inter-American Seminar in Economics, National Bureau of Economic Research, 2005-6

Panel Member, Economics Program, National Science Foundation, 2001-2003

Economía Panel Member, LACEA, 2001-03

Associate Editor, Journal of Development Economics, 2000-2003

Associate Editor, Journal of International Economics, 1997-1999

PUBLICATIONS IN ACADEMIC JOURNALS

"Privatization and Nationalization Cycles," with Norman Loayza and Constantino Hevia, *Macroeconomic Dynamics* 22 (2018), 331-361

"Bond Finance, Bank Credit, and Aggregate Fluctuations in an Open Economy", with Andrés Fernández and Adam Gulan, *Journal of Monetary Economics* 85 (2017), 90-109

"Financial Intermediation, Exchange Rates, and Unconventional Policies in an Open Economy", with Luis Céspedes and Andrés Velasco, *Journal of International Economics*, 108, Supplement 1 (2017), S76-S86.

"Financial Frictions and Unconventional Monetary Policy in Emerging Economies", with Andrés Velasco, *IMF Economic Review*, 65, 1 (2017), 154-191

"World Food Prices and Monetary Policy," with Luis Catao, Journal of Monetary Economics, 75 (2015), 69-88

"Monetary Policy Under Commodity Price Fluctuations", Review of Development Economics, 19 (2015), 282-296

"Is Inflation Targeting Still on Target? The Recent Experience of Latin America", with Luis Céspedes and Andrés Velasco, *International Finance* 17, 2 (2014), 185-207

"On the Sources of Fluctuations in Emerging Economies," with Andrés Fernandez, *International Economic Review* 54 (2013), 1265-93

"Monetary Rules for Commodity Traders," with Luis Catao, IMF Economic Review 61 (2013), 52-91

"Elections, Capital Flows, and Politico Economic Equilibria," American Economic Review 100 (2010), 1759-77

- "Openness is Good for Growth: The Role of Policy Complementarities," with Linda Kaltani and Norman Loayza, *Journal of Development Economics* 90 (2009), 33-49
- "Financial Crises and Political Crises," Journal of Monetary Economics, 54 (2007), 2409-2420
- "Currency Mismatches and Monetary Policy: A Tale of Two Equilibria," with Andrés Velasco, *Journal of International Economics*, 69 (2006), 150-175
- "Endogenous Financial Dollarization and Exchange Rate Policy," with Andrés Velasco, *Journal of Policy Reform*, 8 (2005), 263-280
- "Balance Sheets and Exchange Rate Policy," with Luis Felipe Céspedes and Andrés Velasco, *American Economic Review*, 94 (2004), 1183-1193
- "Balance Sheet Effects and the Country Risk Premium: An Empirical Investigation," with Juan Carlos Berganza and Alicia Garcia Herrero, Review of World Economics (Weltwirtschaftliches Archiv), 140 (2004), 592-612
- "IS-LM-BP in the Pampas," with Luis Céspedes and Andrés Velasco, IMF Staff Papers, 50 (2003), 142-156
- "Fundamentals, Beliefs, and Financial Contagion," with Giovanni Majnoni, European Economic Review, 46 (2002), 801-808
- "A Model of Financial Crises in Emerging Markets," with Andrés Velasco, *Quarterly Journal of Economics*, 116 (2001), 489-517 (Reprinted in: *International Library of Critical Readings in Economics: Financial Crises*, Franklin Allen (Editor), Edward Elgar, 2008)
- "Monetary Policy in a Dollarized Economy where Balance Sheets Matter," with Andres Velasco, *Journal of Development Economics*, 66 (2001), 445-464
- "Commitment, Coordination Failures, and Delayed Reforms," Journal of Monetary Economics, 47 (2001), 123-144
- "Financial Fragility and the Exchange Rate Regime," with Andrés Velasco, *Journal of Economic Theory*, 92 (2000), 1-34
- "Exchange Rate Policy for Developing Countries," with Andrés Velasco, *American Economic Review* 90, 2 (2000), 71-75
- "Banks, Debt Maturity, and Financial Crises," with Andrés Velasco, *Journal of International Economics* 51 (2000), 169-94
- "Credible Monetary Policy in an Infinite Horizon Model: Recursive Approaches," *Journal of Economic Theory* 81 (1998), 431-61
- "Political Party Negotiations, Income Distribution, and Endogenous Growth," *Journal of Monetary Economics* 41 (1998), 227-255

- "Financial Integration With and Without International Policy Coordination," *International Economic Review* 38 (1997), 547-564
- "Bargaining a Monetary Union," Journal of Economic Theory 66 (1995), 89-112
- "Private Investment and Sovereign Debt Negotiations," International Economic Review 36 (1995), 387-406
- "Endogenous Currency Substitution, Inflationary Finance, and Welfare," Journal of Money, Credit, and Banking 26 (1994), 903-916
- "Monopolistic Competition, Overlapping Generations, and the Role of Monetary Policy," Finnish Economic Papers 4 (1991), 24-32
- "International Coordination of Fiscal Deficits," Journal of Monetary Economics 25 (1990), 347-366

OTHER PUBLICATIONS: ARTICLES

- "Foreign Exchange Intervention Redux", in: *Monetary Policy and Financial Stability,* Alvaro Aguirre, Markus Brunnermeier, and Diego Saravia, eds., Banco Central de Chile, forthcoming
- "Commodity Price Fluctuations and Monetary Policy in Small Open Economies", in: *Commodity Prices and Macroeconomic Policy*, Rodrigo Caputo and Roberto Chang, eds., Banco Central de Chile, 2016
- "Keynote Lecture: Rethinking Monetary Policy After the Crash", in Setting Up the Monetary Policy Framework: What Role for Financial Sector Considerations? Proceedings of the First Annual Conference of the Bilateral Assistance and Capacity Building for Central Banks Programme (BCC). Bern: Swiss State Secretariat for Economic Affairs, Geneva, Graduate Institute for International and Development Studies, 2014, 11-29.
- "Heterodox Monetary Policy", with Luis Céspedes and Javier García Cicco, in: *Monetary Policy Under Financial Turbulence*, Luis Cespedes, Roberto Chang, and Diego Saravia, eds., Banco Central de Chile, 2011
- "Dollarization", in *The New Palgrave Dictionary of Economics*, 2nd Edition, Steven Durlauf and Lawrence Blume eds., Palgrave Macmillan, 2008
- "Inflation Targeting, Reserves Accumulation, and Exchange Rate Management in Latin America", *Papers and Proceedings, II International FLAR Conference*, Fondo Latinoamericano de Reservas, 2007
- "Must Original Sin Bring Macroeconomic Damnation?", with Luis Felipe Céspedes and Andrés Velasco, in *Other People's Money*, Barry Eichengreen and Ricardo Hausmann eds., University of Chicago Press, 2005
- "Dollarization: Analytical Issues", with Andrés Velasco, in *Dollarization*, Federico Sturzenegger and Eduardo Levy-Yeyati eds., MIT Press, 2002

- "Dollarization of Liabilities, Net Worth Effects, and Optimal Monetary Policy", with Luis Felipe Céspedes and Andrés Velasco, in *Preventing Currency Crises in Emerging Markets*, (Sebastian Edwards and Jeffrey Frankel, editors), University of Chicago Press, 2002
- "Dollarization of Liabilities, Financial Fragility, and Exchange Rate Policy", with Luis Felipe Céspedes and Andrés Velasco, in *Currency Unions*, (Alberto Alesina and Robert Barro, editors), Hoover Institution Press, 2001
- "International Contagion: Implications for Policy", with Giovanni Majnoni, in *International Financial Contagion*, Stijn Claessens and Kristin Forbes eds., Kluwer Academic Press, 2001
- "Fostering Financial Stability: A New Case for Flexible Exchange Rates", with Andrés Velasco, in Festschrift Volume in Honor of Robert Mundell, Maurice Obstfeld ed., The MIT Press, 2000
- "Dollarization: A Scorecard", Federal Reserve Bank of Atlanta *Economic Review*, Third Quarter 2000, 1-11
- "The Asian Financial Crisis in Perspective", with Andrés Velasco, in *Private Capital Flows in the Age of Globalization* (Uri Dadush, Dipak Dasgupta, and Marc Uzan, eds.), Edward Elgar Publishing, Northampton MA, 2000
- "Liquidity Crises in Emerging Markets: Theory and Policy", with Andrés Velasco, in NBER Macroeconomics Annual 1999 (Ben Bernanke and Julio Rotemberg, eds.), The MIT Press, Cambridge, 2000
- "Understanding Recent Crises in Emerging Markets", Federal Reserve Bank of Atlanta *Economic Review*, Second Quarter 1999, 6-17
- "Policy Credibility and the Design of Central Banks", Federal Reserve Bank of Atlanta *Economic Review*, First Quarter 1998, 4-15
- "Is Low Unemployment Inflationary?", Federal Reserve Bank of Atlanta *Economic Review*, First Quarter 1997, 4-13
- "Is a Weak Dollar Inflationary?", Federal Reserve Bank of Atlanta *Economic Review*, September-October 1995, 1-14
- "Income Inequality and Economic Growth: Evidence and Recent Theories", Federal Reserve Bank of Atlanta *Economic Review*, July-August 1994, 1-10

OTHER PUBLICATIONS: MISCELLANEOUS

"Will Facebook's Libra Turn Into a Cancer?" (with Andrés Velasco), Project Syndicate, July 2019

Commodity Prices and Macroeconomic Policy, Rodrigo Caputo and Roberto Chang, eds., Central Bank of Chile Series on Central Banking, Analysis, and Economic Policies, Banco Central de Chile, 2016

Book Review on "Macroeconomics in Emerging Economies (Second Edition)" by Peter Montiel, *Journal of International Economics*, 88 (2012), 210-213

Comment on "China's Emergence in the World Economy and Business Cycles in Latin America", *Economía* 12, 2 (Spring 2012), 71-72

Monetary Policy Under Financial Turbulence, Luis Cespedes, Roberto Chang, and Diego Saravia, eds., Central Bank of Chile Series on Central Banking, Analysis, and Economic Policies, Banco Central de Chile, 2011

Book Review on "Stochastic Optimal Control, International Finance, and Debt Crises", by Jerome Stein, *Journal of International Economics*, 75 (2008), 245-47

Comment on "Financial De-Dollarization: Is It for Real?", in *Financial Dollarization: The Policy Agenda* (Adrián Armas, Alain Ize, and Eduardo Levy Yeyati eds.), International Monetary Fund, Palgrave Macmillan, 2006

Book Review on "Fiscal Aspects of European Monetary Integration", Andrew Hughes Hallett, Michael Hutchinson, and Svend Jensen eds., *Journal of International Economics* 57 (2002), 261-266

"Stabilizing Argentina" (with Michael Bordo), Financial Times, February 27th 2002

"Argentina: Throw Away the Dollar Peg" (with Michael Bordo), Financial Times, June 7th 2001

"International Capital Inflows, Domestic Financial Intermediation, and Financial Crises Under Imperfect Information: Discussion", in *Financial Crises in Emerging Markets* (Reuven Glick, Ramon Moreno, and Mark Spiegel eds.), Cambridge University Press, 2001

"Regional Monetary Arrangements for Developing Countries", Group of 24, 2000

"Origins of the Asian Crisis: Discussion", in *The Asian Financial Crisis: Origins, Implications, and Solutions* (William Hunter, George Kaufman, and Thomas Krueger, eds.), Kluwer Academic Publishers, Boston, 1999

Discussion on "Private Money", Journal of Money, Credit, and Banking 31 (1999), 492-9

WORKING PAPERS AND CURRENT PROJECTS

"Optimal Foreign Reserves and Central Bank Policy Under Financial Stress" (with Luis Céspedes), working paper, June 2019

"Incomplete Risk Sharing and International Macro Puzzles", with Luis Catao, in progress

"Electoral Uncertainty and the Volatility of International Capital Flows", working paper, February 2006

"The Asian Liquidity Crisis", with Andrés Velasco, NBER Working Paper 6796, November 1998

EXTERNAL GRANTS

"Credit Constraints, Balance Sheets, and Monetary Policy," with Andres Velasco, National Science Foundation Grant, 2001-2006

"Bargaining Macroeconomic Agreements," National Science Foundation Grant, 1992-1994

INVITED LECTURES AND PANEL ACTIVITIES (SINCE 2010)

"Optimal Foreign Reserves and Central Bank Policy Under Financial Stress", presented at:

- Bank for International Settlements, Basel June 2019
- Universidad Católica del Perú, Economics Seminar, May 2019

"La Próxima Crisis Global", Keynote Lecture, Universidad Nacional Mayor de San Marcos, Lima Perú, May 2019

Discussion of "Foreign Exchange Intervention and Inflation", Workshop on Policy Issues in an Integrated Policy Framework, International Monetary Fund, Washington DC, February 2019

"Foreign Exchange Intervention Redux", Keynote Lecture, Central Bank of Turkey Conference on Changing Global Economic Landscape and Policy Implications for Emerging Economies", Antalya, Turkey, December 2018

"Intervención y Política Cambiaria: Nuevas Perspectivas", Keynote Lecture, Annual Conference of the Peruvian Economics Association, Piura, Perú, August 2018

"Foreign Exchange Intervention Redux", presented at:

- Federal Reserve Bank of Cleveland, November 2018
- Barcelona GSE Summer Forum, June 2018
- XXI Universidad di Tella Workshop in International Economics and Finance, Mexico, March 2018
- University of Miami Economics Seminar, March 2018
- CUNY Graduate School Seminar, February 2018
- Central Bank of Chile Annual Conference, Santiago de Chile, November 2017
- Central Bank of Mexico Research Seminar, October 2017
- ITAM Macroeconomics Seminar, October 2017

Discussion of "The Expansionary Lower Bound", First Annual IMF Macro-Financial Research Conference, April 2018

"Rethinking Foreign Exchange Intervention," Keynote Lecture, Annual Conference of the Central Bank of Uruguay, November 2017

"On Foreign Exchange Intervention", Keynote Lecture, Seminar on Financial Volatility and Foreign Exchange Intervention, Inter-American Development Bank and Central Bank of Peru, Cuzco, July 2017

"Incomplete Risk Sharing and International Macro Puzzles," World Bank Research Seminar, Kuala Lumpur, March 2017

"Roberto Chang on the Impact of Low Interest Rates on Emerging Economies", AEA Poster Presenter Video, American Economic Association, 2017, at https://www.aeaweb.org/conference/videos/2017/poster/roberto_chang

"Financial Intermediation, Exchange Rates, and Unconventional Policy in an Open Economy", presented at:

- NBER International Seminar on Macroeconomics, Sofia, June 2016
- Banco de Mexico, September 2014
- ITAM, September 2014
- Federal Reserve Board, April 2014
- University of Connecticut, Economics Seminar, April 2014
- IMF-World Bank Seminar, January 2013
- Brown University, Macroeconomics Seminar, December 2012
- International Economics Seminar, University of Maryland, September 2012

"Bond Finance, Bank Credit, and Aggregate Fluctuations in an Open Economy", presented at:

- Universidad Carlos III Madrid, May 2016
- Universidad Autonoma de Barcelona Macro Seminar, April 2016
- University of Houston Macro Seminar, April 2015

"Financial Frictions and Unconventional Monetary Policy in Emerging Economies", presented at:

- Central Bank of Norway, May 2016
- Tinbergen Macro Seminar Series, Amsterdam, March 2016
- London Business School, March 2016
- Central Bank of Portugal, February 2016
- Sixteenth Jacques Polak Annual Research Conference, International Monetary Fund, Washington DC, November 2015
- Central Bank of Austria, Macroeconomics Seminar, Vienna, November 2015

"Discussion: Caselli's The Latin Efficiency Gap and Growth in Peru", World Bank Conference on Economic Growth, Lima, Peru, July 2015

"Macro Policy Responses to Commodity Prices", Panel Presentation, International Monetary Fund Conference on "Latin America: Challenges in a Rapidly Changing Global Environment," Bogota, Colombia, May 2015

"Challenges for Monetary Policy", Lead Speech, XLI Meeting of the Network of Central Banks and Finance Ministries, Inter-American Development Bank, Washington DC, April 2015

"Commodity Price Fluctuations and Monetary Policy in Small Open Economies", Central Bank of Chile Annual Conference, Santiago de Chile, October 2014

"Rethinking Monetary Objectives and Tools," Central Bank of Malaysia Monetary Conference, Kuala Lumpur, May 2014

"Rethinking Monetary Policy After the Crash", Keynote Speech, Second Workshop on "Rethinking Inflation Targeting in Latin America", Inter-American Development Bank, Central Bank of Peru, and Economía Journal, Lima, October 2013

"Rethinking Monetary Policy After the Crash", Keynote Lecture, First Annual Conference of the Bilateral Assistance and Capacity Building for Central Banks Program, Graduate Institute of International and Development Studies and Swiss Confederation State Secretariat for Economic Affairs. Geneva, October 2013

"Monetary Policy Under Commodity Price Fluctuations", Plenary Lecture, XVIII Dynamic Growth and International Trade (DEGIT) Conference, Lima, Peru, September 2013

"Reflexiones Sobre el Crecimiento Peruano" (in Spanish), IX Conferencia Internacional de Economía, Universidad Peruana de Ciencias Aplicadas, October 2012

"Monetary Rules for Commodity Traders," presented at:

- Inter-American Development Bank Macroeconomics Seminar, May 2012
- IMF Central Bank of Turkey Conference on Policy Responses to Commodity Price Movements, April 2012

"Is Inflation Targeting Still on Target?," Central Bank of Peru, March 2012

"World Food Prices and Monetary Policy," International Monetary Fund Seminar, May 2011

"The Current Crisis and the Future of Central Banking," (in Spanish), delivered at:

- Central Bank of Peru, March 2011
- Annual Conference of the Central Bank of Bolivia, July 2010

"Financial Volatility and Prospects for Inflation Targeting," BIS Panel on Monetary Policy in the Global Economy, LACEA Annual Meeting, Medellín, Colombia, November 2010

"On the Sources of Fluctuations in Emerging Economies," presented at:

- University of Texas at Austin Macroeconomics Seminar, October 2010
- Federal Reserve Bank of Cleveland, May 2010