## CATHERINE L. MANN March 2021

## References for the Bank of England

- Kristin J. Forbes, Lemelson Professor of Management and Global Economics, MIT Sloan School of Management; former External Member, MPC.
- Peter Praet, Former Executive Board Member and Chief Economist, European Central Bank.

#### **EDUCATION**

## Massachusetts Institute of Technology, PhD Economics (1984).

Dissertation title: "Trade and Finance Relations Between the Developed and the Developing Countries." Thesis committee: Rudiger Dornbusch and Paul Krugman.

Harvard University, BA Economics, Magna cum Laude (1977).

Thesis title: "Internationalizing the Yen: Toward a New World Currency?"

#### ACADEMIC, POLICY, PRIVATE SECTOR EXPERIENCE

<u>Citibank.</u> (2/2018-6/2021) *Managing Director and Global Chief Economist*. Responsible for thought leadership, research guidance of global team of economists, monthly global projections, extensive client meetings, cross-fertilization of research across macroeconomics, fixed-income, credit, and equities to integrate economic research into the core mission of the institution. Mentoring of younger economists. Internal CEO, CFO, risk briefings. Extensive external conferences, communication, and media outreach.

Organization for Economic Cooperation and Development (OECD). (10/2014-11/2017) Chief Economist and Head of Economics Department, G20 Finance Deputy. Thought leadership for the institution, integrating across departments, and communicating findings so as to achieve the organization's goal of 'Better Policies for Better Lives". Responsible for quarterly global projections and commentary, research guidance and management of 175 staff economists with a budget of 20 million euro. Extensive work with the G7 and G20.

<u>Brandeis University</u> (5/2006-9/2014). *Barbara '54 and Richard M. Rosenberg Professor of Global Finance* and Director of the Rosenberg Institute of Global Finance. (2010-2014) Dissertation advisor for 5 PhDs. Courses: Global Economic Environment (Masters), Advanced

International Macro (Masters), Offshoring and Outsourcing: Globalization, Technology, and the Multinational Firm (Masters), International Macroeconomics and Finance (undergraduate); Topics in International Macroeconomics and Finance (PhD).

<u>Federal Reserve Bank of Boston</u> (09-6/13). *Visiting Scholar*. Participated in intellectual discourse, wrote policy memos on international dynamics, co-authored research with staff economists, mentored young staff members.

<u>Peterson Institute for International Economics</u> (2/97- 12/09) *Visiting Fellow and Senior Fellow*; Economic and policy issues of US external imbalances, exchange value of the dollar; information technology, services trade, productivity, and offshoring. Wrote three books and numerous articles.

<u>Johns Hopkins University</u> (2001-2002). *Adjunct Professor*, The Paul H. Nitze School for Advanced International Studies. Course: Economic and Policy Implications of Global Internet Commerce.

<u>Vanderbilt University</u> (1991-2000). *Adjunct Professor*, Owen School of Management, Executive MBA program. Voted co-winner of the Outstanding Professor of the Executive Program by the class of 1995; one of top three in voting by class of 1997 and class of 1999. Course: Macroeconomics.

<u>Federal Reserve Board</u>. International Finance Division (1984-1997). Assistant Director and special assistant to the Staff Director (7/92-8/94) Senior Economist; (1989-1991, Economist (1984-1987). Coordinated and prepared material for Chairman and Governors' attendance at international meetings (BIS, G-7, G-10, APEC). Special topics research: Exchange rates, traded-goods prices, and domestic inflation; evolution of the US current account; trade and direct investment in the computer industry; globalization, productivity growth, and labor markets. Special Achievement Award (1986).

<u>President's Council of Economic Advisers</u> (1991-1992). *Senior Staff Economist* for International Macroeconomics and Finance. Policy recommendations and analysis of reforms and technical assistance efforts in Latin America, East and Central Europe, and the former Soviet Union. Policy analysis on effect of Economic and Monetary Union on Europe and implications for the United States. Wrote parts of <u>Economic Report of the President</u>. Extensive work with the OECD.

<u>The World Bank</u> (1/88-4/89). Research Economist and special assistant to Vice-President for Development Economics and Chief Economist (Stanley Fischer). Analyzed economic foundations and conceptual consistency of the Bank's country lending programs, Bank policy

papers, and coordination with IMF programs. Contributed to <u>World Development Report 1989</u>, <u>Financial Systems and Development.</u>

<u>Chase Manhattan Bank</u> (8/77-6/79). Credit Analyst, International Portfolio Department. <u>Data Resources/predecessor of IHS Markit</u> (summers 1972-76) Econometric model building.

#### **PUBLICATIONS**

## **Books and Monographs**

"Closing the Racial Inequality Gaps: The Economic Cost of Racial Inequality in the U.S." Citi GPS\_ (co-authored with Dana Peterson) September 2020. https://www.citivelocity.com/citigps/closing-the-racial-inequality-gaps/

"Negative Interest Rates: Where is the Real Limit to Cheap Money?" Citi GPS (Co-authored with Matt King), July 2020. <a href="https://www.citivelocity.com/citigps/negative-interest-rates/">https://www.citivelocity.com/citigps/negative-interest-rates/</a>

"For Better or Worse, Has Globalization Peaked?" Citi GPS, August 2019. https://www.citivelocity.com/citigps/catherine-mann-globalization-peak/

"Investing in Climate, Investing in Growth" OECD May 2017, prepared for the G20. <a href="http://www.oecd.org/environment/investing-in-climate-investing-in-growth-9789264273528-en.htm">http://www.oecd.org/environment/investing-in-climate-investing-in-growth-9789264273528-en.htm</a>

<u>Accelerating the Globalization of America: The Role for Information Technology,</u> Institute for International Economics: Washington DC, 2006 (assisted by Jacob Funk Kirkegaard).

"Analyzing the U.S. Content of Imports and the Foreign Content of Exports," National Research Council, The National Academies Press: Washington, 2006. (Member of the Committee).

"Trade Facilitation: A Development Perspective in the Asia Pacific," APEC Secretariat and World Bank, October 2002. (Co-authored with John S. Wilson, Yuen Pau Woo, Nizar Assanie, Inbom Choi).

<u>The New Economy and APEC</u>, APEC Secretariat, Singapore, October 2001; reprinted by the Institute for International Economics, August 2002. (Co-authored with Daniel H. Rosen).

Global Electronic Commerce: A Policy Primer, Institute for International Economics: Washington DC, July 2000. (co-authored with Sue E. Eckert and Sarah Cleeland Knight).

<u>Is the US Trade Deficit Sustainable?</u>, Institute for International Economics: Washington DC, September 1999.

<u>Evaluating Policy Regimes, New Research in Empirical Macroeconomics</u>, contributor and editor with Ralph C. Bryant and Peter Hooper. The Brookings Institution Press: Washington, 1993.

#### Peer Reviewed Journals

- "Has Quantitative Easing Affected the U.S. Treasury Auction Market,?" (with Oren Klachkin) *Atlantic Economic Journal*, vol 43, issue 1, 2015, pp 135-146.
- "Supply Chain Logistics, Trade Facilitation, and International Trade: A Macroeconomic View," *Journal of Supply Chain Management*, vol 48, issue 3, July 2012, pp 7-14.
- "Aid for Trade Facilitation," (with Matthias Helble and John S. Wilson), *Review of World Economics*, 2011. DOI 10.1007/s10290-011-0115-9
- "Assessing the Potential Benefit of Trade Facilitation: A Global Perspective," (with John S. Wilson and Tsunehiro Otsuki), *World Economy*, p 841-871, 2005.
- "Managing Exchange Rates: Achievement of Global Re-balancing or Evidence of Global Co-Dependency?" *Business Economics*, June 2004. (Awarded the Abramson Award by the Editorial Board for the best article for the year.)
- "The US Current Account, New Economy Services, and Implications for Sustainability," *Review of International Economics*, May Vol 12:2, 2004.
- "Trade Facilitation and Economic Development: A New Approach to Measuring the Impact" (with John S. Wilson and Tsunehiro Otsuki), *World Bank Economic Review*, vol 17 no.3, 2003
- "Information Technologies and International Development: Conceptual Clarity in the Search for Commonality and Diversity," in *Information Technologies and International Development*, 1:2 (Winter 2003)
- "Perspectives on the US Current Account Deficit and Sustainability," *Journal of Economic Perspectives*, Summer 2002.
- "Balance and Overlap in the Global Electronic Marketplace: the UCITA Example," *Washington University Journal of Law & Policy*, Summer 2002.

"International Internet Governance: Oh, What A Tangled Web We Could Weave!," *Georgetown Journal of International Affairs*, Summer/Fall 2001.

"Determinants of Japanese Direct Investment in U.S. Manufacturing Industries", *Journal of International Money and Finance*, October, 1993.

"Industry Restructuring in East-Central Europe: The Challenge and the Role for Foreign Investment". *American Economic Review*, May 1991.

"Structural Change and Prospects for Sustained Improvement in U.S. External Balance", *Contemporary Policy Issues*, April 1991.

"Exchange Rate Pass-through in the 1980s: The Case of U.S. Imports of Manufactures". *Brookings Papers on Economic Activity*, 1989:1. (with Peter Hooper).

"The Emergence and Persistence of the U.S. External Imbalance: 1980-1987". <u>Princeton Study</u> in International Finance no. 64, October 1989. (with Peter Hooper).

"The Effects of Exchange Rate Trend and Volatility on Export Prices: Industry Examples from Japan, Germany, and the United States". *Weltwirtschaftliches Archiv*, vol 125:3, 1989.

"The Effect of Competition in Prices and Quantities on Employment in Import Sensitive U.S. Industries". *International Trade Journal*, Sept. 1988.

"Protection and Retaliation: Changing the Rules of the Game". *Brookings Papers on Economic Activity*, 1987:1

"Prices, Profit Margins, and Exchange Rates". Federal Reserve Bulletin, June 1986.

#### Contributions in books

"Financing a Greener Planet: Catalyzing Private Capital for a Net Zero Emissions World' contributor, Citi GPS, February 2021. <a href="https://www.citivelocity.com/citigps/financing-a-greener-planet/">https://www.citivelocity.com/citigps/financing-a-greener-planet/</a>

"U.S. Treasury Auction Yields Before and During Quantitative Easing: Market Factors vs. Auction-Specific Factors," (with Oren Klachkin) in <u>Globalization Strategies and Effects</u>, Carsten Kowalczyk and Bent Jesper Christensen, eds. Springer. 2017.

- "Information Lost" in <u>The Economics of Digitization</u>, Avi Goldfarb, Shane Greenstein, and Catherine Tucker, eds. University of Chicago Press, 2014.
- "Information and communication technologies," <u>The Wiley-Blackwell Encyclopedia of</u> Globalization First Edition, George Ritzer (ed). Blackwell Publishing, 2012
- "Information Technology, Globalization, and Growth: Role for Scale Economies, Terms of Trade, and Variety," in <u>Ascent After Decline: Re-Growing Global Economies After the Great</u> Recession, Danny Leipziger and Otaviano Canuto, eds. The World Bank, 2012
- "External Imbalances: Costs and Consequences of Unsustainable Trajectories" in <u>Rebalancing</u> the Global Economy: A Primer for Policymaking", Stijn Claessens, Simon Evenett, Bernard Hoekman eds. A VoxEU.org publication, CEPR, 2010
- "International Capital Flows and the Sustainability of the Current Account Deficit" Chapter 3, in <u>The Long Term International Economic Position of the United States</u>, Special Report 20, C. Fred Bergsten, ed. Peterson Institute for International Economics: Washington, May 2009.
- "The Information Technology Agreement: Sui Generis or Model Stepping Stone?" (with Xiupeng Liu) in <u>Multilateralizing Regionalism</u>, Richard Baldwin and Patrick Low eds. Cambridge University Press: Cambridge, 2009.
- "Gobalization of Venture Capital: A Vernon-Dunning Synthesis with deal-by-deal data for information technology" in <u>Entrepreneurship and Openness</u>, David Audretsch, Robert Litan, Carl Strom eds. Kaufmann Foundation, Edward Elgar: Northampton, 2009.
- "Prices for International Services Transactions: Issues and a Framework for Development," in <u>Price and Productivity Measurement</u>, W. Erwin Diewert, Bert Balk, Dennis Fixler, Kevin Fox, and Alice Nakamura, eds. Trafford Press: Victoria, B.C., 2009.
- "Adjustment and the four 'C's" Comment on "Interest Rates, Exchange Rates, and International Adjustment" by Michael P. Dooley, David Folkerts-Landau, and Peter M. Garber in <u>Global Imbalances and the Evolving World Economy</u>, Jane Sneddon Little ed. Federal Reserve Bank of Boston Annual Conference June 2006, published 2008.
- "Globalization of Services: Friend or Foe?," in <u>Global Capitalism Unbound: Winners and Losers from Offshore Outsourcing</u>, Eva Paus, ed. Palgrave, 2007.

"Understanding the US Trade Deficit: A Disaggregated Perspective," (with Katharina Plück) in G-7 Current Account Sustainability and Adjustment, Richard Clarida ed.. MIT Press: Cambridge, 2007.

"International Trade," (with Katharina Plück) in <u>Encyclopedia of Globalization</u>, Roland Robertson and Jan Aart Scholte, eds. Routledge: New York, 2006.

"The United States as Net Debtor: How much longer the 'Exorbitant Privilege'?". (with Katharina Plück) in <u>Sharing the Growing Burden of World Order</u>, Jens van Scherpenberg and Katharina Plück eds. SWP: Berlin, September 2006.

"Commentary: The End of Large Current Account Deficits 1970-2002: Are there lessons for the United States?" in <u>The Greenspan Era: Lessons for the Future A Symposium Sponsored by</u> the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August, 2005.

"The Current Account and the Budget Deficit: A Disaggregated Perspective," in <u>The Macroeconomics of Fiscal Policy</u>, Richard W. Kopcke, Geoffrey M. B. Tootell, and Robert K. Triest eds., Cambridge: MIT Press, 2006.

"Macroeconomic Adjustment and Technological Change: The International Context for Economic Policy," in <u>Macroeconomic Policy and Structural Change in East Asia</u>, Government of Australia Treasury, Commonwealth of Australia: Sydney, 2005.

"Offshore Outsourcing and the Globalization of U.S. Services: Why Now, How Important, and What Policy Implications?" in <u>Foreign Economic Policy for the Next Decade</u>, C. Fred Bergsten, ed. Institute for International Economics: Washington, 2005.

"Achieving the APEC Shanghai Objective: A Methodology to Quantify and Benchmark Trade Facilitation Efforts," (October 2004) in <u>Trade Facilitation and Trade Liberalization: From Shanghai to Bogor, Asia-Pacific Economic Cooperation: Singapore, 2004.</u>

"Policy Issues and the New Economy for Developing and Transition Economies," chapter 40 prepared for The New Economy Handbook, Academic Press of Elsevier Science, 2003.

"Can the NAFTA Partners Forge a Global Approach to Internet Governance?," (with Diana Orejas) in North-American Linkages, Richard G. Harris, ed. Ottawa: Industry Canada, 2003.

"How Long the Strong Dollar?" in <u>Dollar Overvaluation and the World Economy</u>, C. Fred Bergsten and John Williamson, eds. Institute for International Economics: Washington, 2003.

- "The New Economy and Korea: Productivity Growth and the Challenges of Trade Competitiveness, and the Digital Divide," (with Younei Soe) in <u>Raising the Bar: Korea as a Global Player</u> Joint US-Korea Academic Studies, vol 13, 2003.
- "Home Bias, Transactions Costs, and Prospects for the Euro," (with Ellen E. Meade) in <u>Asset Price Bubbles: Implications for Monetary, Regulatory and International Policies,</u> W. C Hunter ed, MIT Press: Cambridge, 2003.
- "Electronic Commerce, Networked Readiness, and Trade Competitiveness," in <u>Global IT Readiness Report</u>, Geoffrey Kirkman et al, ed., Harvard University and World Economic Forum, February 2002.
- "The New Economy: End of the Welfare State?" in <u>Economic Policy Issues in the New Economy</u>, Horst Siebert, ed. Springer: Berlin, 2002.
- "Electronic Commerce, the WTO, and Developing Countries," Chapter 31 in <u>Development</u>, <u>Trade</u>, and the WTO: A Handbook, Bernard Hoekman, Aaditya Mattoo, and Philip English, eds. The World Bank: Washington DC, 2002.
- "Oil in the New Global Economy: International Capital Market Integration and the Economic Effects of Oil Price Extremes," in <u>Global Markets and National Interests Defending the US Home The New Geopolitics of Energy, Capital, and Information.</u> Lincoln P. Bloomfield, Jr. ed. The CSIS Press: Washington, 2002.
- "Transatlantic Issues in E-Commerce," in "Beyond Seattle: A New Strategic Approach in the WTO 2000," (in Italian) edited by Isabella Falautano and Paolo Guerrieri, "IAI Quaderni" no. 11, Rome, October 2000. An English version is available as IIE Working Paper no. 007, October 2000.
- "Electronic Commerce in Developing Countries: Issues for Domestic Policy and WTO Negotiations," in Robert Stern, ed. Services in the International Economy: Measurement, Modeling, Sectoral and Country Studies, and Issues in the World Services Negotiations, University of Michigan Press, 2000. Reprinted in The WTO, Intellectual Property, E-Commerce and the Internet edited by Rohan Kariyawasam, Cardiff Law School, University of Cardiff, UK, Cambridge: Edward Elgar, 2009.
- "Electronic Commerce in the World Trade Organization," in Jeffrey Schott, ed. <u>The WTO After Seattle</u>, Institute for International Economics, July 2000. (with Sarah Cleeland Knight).

"Korea and the Brave New World of Finance," in <u>The Korean Economy in an Era of Global Competition</u>, (Joint U.S.-Korea Academic Studies, vol.10), February 2000, pp55-68.

"U.S. International Competitiveness: Macromanagement, Trade Strategies, and Productivity Growth" in Candace Howes and Ajit Singh, eds. <u>Competitiveness Matters: Industry and Economic Performance in the US</u>, University of Michigan Press, April 2000.

"Korea and the International Financial System," in <u>Korea's Economy 1998</u>, Korea Economic Institute: Washington DC, 1998.

"Globalization and Productivity in the United States and Germany," in <u>Globalization</u>, <u>Technological Change</u>, and the <u>Welfare State</u>, Stanley W. Black, ed. American Institute for Contemporary German Studies: Johns Hopkins University, 1998.

"Computers and Semiconductors in the United States: Linking the World in Global Trade," in Korea's Economy 1997, Korea Economic Institute: Washington DC, 1997.

"Managed Trade, Direct Investment, and External Balance" in <u>The US-Korea Economic Partnership: Policy Directions for Trade and Economic Cooperation</u>, Youn-Suk Kim and Kap-Soo Oh, eds. Brookfield, Vermont: Ashgate Publishing Company, 1995.

"Small and Midsize Enterprises in the United States and East-Central Europe: Common Challenges in the 1990s", in <u>Small Firms in Global Competition</u>, Tamir Agmon and Richard L. Drobnick, eds. New York: Oxford University Press, 1994.

"Prospects for Sustained Improvement in U.S. External Balance: Structural Change versus Policy Change", <u>International Trade and Finance Association Proceedings 1989</u>, December 1989.

"The U.S. External Deficit: Its Causes and Persistence," (with Peter Hooper) in <u>The U.S. Trade Deficit: Causes, Consequences, and Cures</u>, Albert E. Burger, ed. Boston: Kluwer Academic Publishers, 1989.

## **Testimony**

'International Trade in the Digital Age' *testimony* before the Subcommittee on International Trade, Customs, and Global Competitiveness of the Senate Finance Committee, November 18, 2010.

"Globalization and the US Trade Deficit: Domestic Sources, Foreign Sources, and Policy Challenges" *testimony* before the U.S.-China Economic and Security Review Commission

May 19, 2005.

"Liberalizing Services: Key to Faster Global Growth and the Sustainability of the US Trade Deficit," *testimony* before the Subcommittee on International Trade of the Senate Finance Committee, October 21, 1999.

"On the Causes of the US Current Account Deficit," *testimony* before the Trade Deficit Review Commission, August 19, 1999.

"Dollarization as Diet," *testimony* before the Joint Hearing of the Subcommittee on Economic Policy and the Subcommittee on International Trade and Finance Committee on Banking, Housing, and Urban Affairs, United States Senate, April 22, 1999.

"Progress and Prospects: A Simple Framework and Review of the IMF Programs of Brazil, Indonesia, Republic of Korea, Thailand," *testimony* before the Subcommittee on International Trade and Finance of the US Senate Banking Committee, March 9, 1999.

"An International Lender of Last Resort and the International Financial Markets," *testimony* before The Standing Senate Committee on Foreign Affairs (Canada), April 29, 1998.

## Short Articles and Popular Press

"New Money Versus Old Money for Europe: The Provision of Credit Enhancements Through a Collateral Fund" (with Fabià Gumbau-Brisa), CESifo DICE Report 11 (3), 2013, 21-27

"China Trade in IT Products: Variety, Scale, and Economic Gains," *China Research Linnaeus University*, February 6, 2013.

"Disciplined Borrowing Needed to Fix Euro Crisis," Op-Ed, *Boston Globe* "http://www.bostonglobe.com/business/2012/07/21/euro-crisis-impact-and-strategies-for-resolution/P3X2yTWKsGv9lGePVjPj3N/story.html.

"Start-up Firms in the Financial Crisis," *Communities and Banking*, Federal Reserve Bank of Boston, Fall 2011.

"The Rapid Rise in Metals Prices: The Dollar or Trade?" *Forward Global Perspective from MSCI*, September/October 2008.

"How to East the Pain of Globalization," Keynote, CIO Magazine, February 1, 2006.

"The Globalization of Venture Finance," in <u>Understanding Entrepreneurship: A Research and Policy Report,</u> Kauffman Foundation, 2006.

"When the Dollar Bill Comes Due," Op-Ed *The New York Times*, April 27, 2005 (with Katharina Plück).

"Breaking Up Is Hard To Do: Global Co-Dependency, Collective Action, and the Challenges of Global Adjustment," *CESIfo Forum*, Spring 2005.

"This is Bangalore Calling: Hang Up or Speed Dial? What Technology-Enabled International Trade in Services Means for the U.S. Economy and Workforce," *Economic Commentary* Federal Reserve Bank of Cleveland, January 15, 2005.

"What Outsourcing Means for U.S. IT Workers and the U.S. Economy," *Communications of the ACM*, July 2004, Vol 47:7.

"Dancing with the Dollar," Milken Institute Review, 2<sup>nd</sup> Quarter, 2004.

"Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth," *International Economics Policy Brief*, Washington: IIE, December 2003.

The US Current Account Deficit: Market Risks and Policy Responses, CSIS Conference Report, June 2002.

"E-Government in Developing Countries: Galvanizing the sense of urgency about global electronic commerce," in <u>e-government: Modernizing Commonwealth Governments,</u> The Commonwealth Business Council, KPL and the Commonwealth Secretariat, Kensington Publications, 2001.

"Technology, Policy, and the Digital Divide in APEC," Asia Inc., May 4, 2001.

"Global Electronic Commerce: Challenge and Opportunity for Government Policy" in *Company Secretary, the Official Publication of the Hong Kong Institute of Company Secretaries,* August 2000.

"Global Electronic Commerce: Macroeconomic Benefits and Policy Choices", Invited Op-Ed, *Nikkei Journal* (Tokyo). July 17, 2000.

"Is the United States Current Account Deficit Sustainable?" Finance and Development, March 2000.

"Market Mechanisms to Reduce the Need for IMF Bailouts," *International Economics Policy Briefs*", no. 99-4, Institute for International Economics, February 1999.

"Market-oriented solutions to crises," *Invited contribution*, Nikko Capital Trends vol. 3 no. 10, Nikko Research Center, September 1998.

"Lender(s) of Last Resort: National and International," Guest Spotlight in Merrill Lynch *Emerging Markets Debt Monthly*, April 23, 1998, page 48-54.

"Women in International Economics: Research Scholarship and Policy Debate," *Invited contribution*, AEA/CSWEP Newsletter, October 1996.

"U.S. External Balance in 1993," Federal Reserve Bulletin, May 1994.

"Lift off: The Next Generation of NICs", International Economy, Nov/Dec 1988.

"U.S. External Balance in 1984 Federal Reserve Bulletin, May 1985.

#### Comments and Book Reviews

Book Review: "Global Financial Crisis Through the Lens of a New Institution-based Trilemma" a review of Joseph P. Joyce's <u>The IMF and Global Financial Crises Phoenix Rising</u>, in *Journal of International Economics*, forthcoming 2014.

Comment on "Interest Rates, Exchange Rates, and International Adjustment" by Michael P. Dooley, David Folkerts-Landau, and Peter M. Garber in <u>Global Imbalances and the Evolving World Economy</u> ed. Jane Sneddon Little, Federal Reserve Bank of Boston, June 2006.

Comment on "Trends in Employment at U.S. Multinational Companies: Evidence from Firm-Level Data" by Maria Borga and "Potential Offshoring: Evidence from Selected OECD Countries" by Desiree Van Welsum and Xavier Rief in Susan M. Collins and S. Lael Brainard eds. <u>Offshoring White-Collar Work: Brookings Trade Forum 2005</u>, Brookings Institution Press: Washington DC, 2006.

Book Review: "Racing to the top" a review of <u>The World is Flat: A Brief History of the Twenty-First Century</u> by Thomas Friedman in *Issues in Science and Technology*, The National Academies The University of Texas at Dallas, Winter 2006.

Comment on "International Lender of Last Resort" by Fredric Mishkin in Kiel World Institute Annual Conference 2000.

Comment on "Exchange Rate Regimes" by Richard N. Cooper in <u>Rethinking the International</u> Monetary System, Federal Reserve Bank of Boston Annual Conference 1999, February 2000.

Comment on "Internationalization, Firm Conduct, and Productivity" by Henry Ergas and Mark Wright in <u>International Integration of the Australian Economy</u>, Reserve Bank of Australia, 1994.

Book Review of <u>International Adjustment and Financing</u>: <u>The Lessons of 1985-1991</u>, edited by C. Fred Bergsten in Journal of International Economics, February 1993.

Comment on "Cross-Country Patterns of Change in Relative Wages" by Steve Davis in Olivier Blanchard and Stanley Fischer, eds. <u>NBER Macroeconomics Annual</u>, 1993.

Comment on "Integrating Eastern Europe and the Soviet Union into the World Trading System" by Jozef Brada in Robert Baldwin and J. David Richardson, eds. <u>The Uruguay Round and Beyond: Problems and Prospects</u>, NBER Conference Report, 1992.

Comment on "Measures of Price and Price Competitiveness in International Trade in Manufactured Goods" by Irving B. Kravis, Robert E. Lipsey, and Linda Molinari in Peter Hooper and J. David Richardson, eds. <u>International Economic Transactions: Issues in Measurement and Empirical Research</u>, Chicago: University of Chicago Press, 1992.

Comment on "Price Behavior in Japanese and U.S. Manufacturing" by Richard Marston in Paul Krugman, ed. <u>Trade With Japan: Has the Door Opened Wider?</u>, Chicago: University of Chicago Press, 1991.

Comment on "The Law of One Price: Two Levels of Aggregation" by Lawrence Officer, in Thomas Grennes, ed. <u>International Financial Markets and Agricultural Trade</u>, Boulder: Westview Press, 1990.

Book Review of Sven Arndt and J. David Richardson, <u>Real-Financial Linkages Among Open Economies</u> in <u>Journal of Economic Literature</u>, December, 1989.

Comment on "Industrial Policy and International Competition in Wide-bodied Jet Aircraft" by Richard Baldwin and Paul Krugman, in Robert E. Baldwin, ed. <u>Trade Policy Issues and Empirical Analysis</u>. Cambridge: MIT Press, 1988.

#### Selected Presentations

<u>Adapting to Survive Climate Change and Finance</u>, conference, Banque de France, December 2019.

"The changing landscape of global trade" (Kansas City Fed Symposium at Jackson Hole, 2017).

"Quantitative Easing 2014: Role for the Foreign Investor?" (Boston Society of Security Analysts January 2014).

"Unconventional Monetary Policy and International Capital Flows" (National Association for Business Economics Annual Meeting, San Francisco, October 2013).

"Globalization in Retreat? A perspective on liquidity and risk appetite from US data" (SNS Business Summit, Tylosland Sweden, August 2013).

"Economic Growth and Risk Appetite: Observations from International Data" (Boston Economic Club March 2013).

"Globalization of Information Technology Services: Challenges and Opportunities for Massachusetts," (MassEcon June 2012).

"Trade Facilitation, Single Window, and the Doha Development Agenda: The Key Link is Aidfor-Trade Facilitation" (Seoul Symposium, Korea, November 2012)

"Economic Outlook and Three Challenges Facing the Next President *and Congress* (Middlesex Bank Annual Economic Breakfast, Nov 13. 2012.

"Dollar Risk: Inflection Point or Continued Trend,? Global Interdependence Center Third Annual Rocky Mountain Summit, July 29, 2011.

"ICT, Trade, and Innovation: The Channels of Contribution", OECD Working Party of the Trade Committee, June 2009.

- "Globalization and Prices of IT Software and Services: Measurement and Implications", Conference on Measurement Issues Arising from the Growth of Globalization, sponsored by W.E. Upjohn Institute and the National Academy of Public Administration (NAPA), 2009.
- "The United States and International Capital Markets: Who will finance the stimulus package and what are the implications?" TDPE Public Lecture, Syracuse University, April 2009.
- "Technology & Globalization of Services: Promise, Perils, and Policy" Xiaokai Yang Memorial Lecture, Economic Society of Australia, Hobart, September 25, 2007.
- "Accelerating the Globalization of America: The Role for Information Technology," The 16<sup>th</sup> Annual Self Graduate-Fellowship Symposium, University of Kansas, April 9, 2007.
- "Information Technology, Global Sourcing, and the National Interest: Measuring and Quantifying the Nexus and Implications," Technology CEO Council, June 28, 2006.
- "Information Technology: Accelerating the Globalization of America," 2005 Engineering Executive Summit, Madison Wisconsin, December 3, 2005.
- "The U. S. Trade Deficit: Crisis or Co-Dependency?" James C. Kautz Lecture in Political Economy, University of Cincinnati, October 27, 2005.
- "Trade and Technology: The Economic Gains & Policy Challenges," Alice Conner Gorlin Memorial Lecture, Oakland University, March 31, 2005.
- "Key Issues in International Trade and Finance: Sustainability of the External Accounts, Global Co-dependence, and the Role for Exchange Rates," Global Interdependence Center and MacroEconomic Advisers conference, Philadelphia, April 2004
- "Globalization of Services: Opportunities and Challenges for both North and South," UNCTAD Commission on Investment, Technology and Related Financial Issues, January 2004.
- "ICTs and Globalization," *OECD Global Forum on the Knowledge-Based Economy*: ICTs, Innovation and Human Resources, Brasilia Brazil (September 2002).
- "Globalization and Shared Prosperity: Opportunities and Challenges of the New Economy," UNCTAD Experts Meeting, Geneva, July 2002 and APEC Senior Official Meeting, Mexico, April 2002.

"The Internet and the Global Economy," and "Achieving the Benefits of the Network Economy: What Role for Government?" International Symposium on Network Economy and Economic Governance (United Nations, State Development Planning Commission of China, Ministry of Finance of China, Ministry of Information Industry of China, State Statistics Bureau of China, Beijing Municipal People's Government and the People's Bank of China), Beijing and Ningbo, China, April 2001.

"Business Opportunities from Global E-Commerce Policies," *Northern Virginia Technology Council*, January 2001.

"Global Electronic Commerce: Readiness and Policy Strategy," keynote *Fifth Annual Meeting of the Joint Thailand-US US-Thailand Business Council*, Bangkok, May 2000.

"The Future of the Internet in China," keynote *Seminar on the Internet in China* at Peking University sponsored by the China Centre for Economic Research, November 15, 1999.

"Electronic Commerce in the Americas," *Multilateral and Regional Trade Issues in the Americas, Training Course*, sponsored by Georgetown University, Organization of American States, and the World Trade Organization, July 1, 1999.

"Towards the Next Generation of Newly Industrializing Countries: The Roles for Macroeconomic Policy and the Manufacturing Sector," Invited lecture, *Center for Applied Studies in International Negotiations*, Geneva, November 1989.

"The Effects of Aggregate Demand Shocks and of Exchange Rate Shocks on the Prices of Internationally Traded Goods," *Invited lecture* at the <u>Batelle Institute</u>, Geneva, November 1986.

# Working Papers

"Monetary Policy in the Next Recession," (with Stephen G. Cecchetti, Michael Feroli, Anil K. Kashyap, and Kermit Schoenholtz), CEPR working paper DP15365, October 2020.

"Information Technology Intensity, Diffusion, and Job Creation," Brandeis Economics Department Working Paper, March 2012.

"The Financial Structure of Startup Firms: The Role for Asset, Information, and Owner Characteristics" (with Paroma Sanyal) Research Department Working Paper 10-17, Federal Reserve Bank of Boston.

"Reviving Mortgage Securitization: Lessons from Brady Bond and Duration Analysis" with Fabià Gumbau-Brisa, Public Policy Discussion Paper 09-03, Federal Reserve Bank of Boston, 2009

"Home Bias, Transaction Costs, and Prospects for the Euro: A More Detailed Analysis," (with Ellen E. Meade), IIE working paper no. 02-03 June 2002. (Reprinted as Deutsche Bank Research Note, October 2002).

"Political and Economic Consequences of Alternative Privatization Strategies in East and Central Europe," International Finance Discussion Paper #455, September 1993, (with Stefanie Lenway and Derek Utter).

"Industry Restructuring and Export Performance: Evidence from Hungary," with Valerie Chang. International Finance Discussion Paper #445, May 1993,

"Issues in the Fiscal Transition from Planned to Market Economy," with Sean Craig, International Finance Discussion Paper #424, January 1992,

"A Framework of Analyzing the Process of Financial Innovation," with Allen Frankel, International Finance Discussion Paper #283, June 1986,

"Trade Policy for the Multiple-product Declining Industry," International Finance Discussion Paper #259, July 1985.

# Foundation Funded Research, Institutional Experience, Committees and Consulting (selected)

American Economic Association Committee on Statistics, Report on the State of Available Data for the Study of International Trade and Investment, in draft 2010. (member of the committee)

OECD, Working Party of the Trade Committee, "ICT, Trade, and Innovation: The Channels of Contribution", 2009.

"Trade Facilitation Benchmarks and Priorities for Action: A Product-Specific and Supply-Chain Focused Tool (Template Analysis for Argentina, Brazil, Colombia, Dominican Republic, and Peru)" prepared for the US-Latin America Business Council, November 2008.

National Research Council, *Analyzing the U.S. Content of Imports and The Foreign Content of Exports*, Washington D.C.: National Academies Press, 2006. (Member of the committee)

Council on Competitiveness, The National Innovation Initiative Final Report, *Innovate America: Thriving in a World of Challenge and Change,* "December 2004. (Co-chair of the international markets group)

Bureau of Labor Statistics, "Prices for International Services Transactions: Issues and a Framework for Development," BLS requisition number 137540, Solicitation number BLS-03-15, BLS document number 1000017034 DOL PO# B9J30588,September 2004.

Ford Foundation, "Latin-Asian Dialogue on Effective Use of Information Technology". Organized and led a research team comprised of four pairs of one each Asian and Latin researchers to compare country policy and performance in four areas (one each pair) of adoption of information technology: Government; Human capacity and skill-building; Entrepreneurship; Financial sector. Research papers available at Social Science Research Council <a href="http://programs.ssrc.org/itic/itst/mann\_main/">http://programs.ssrc.org/itic/itst/mann\_main/</a>

"Information Technology and E-Commerce in Tunisia: Domestic and international challenges and the role for the financial system," funded by The Commercial Law Democratic Program, US Department of Commerce and The Association of Professional Bankers, Tunisia, May 2004

"The World-Wide Business Model and the US Economy: Ensuring Continued Success," funded by the Business Round Table, December 2003.

"Toolkit For E-Commerce And ICT Policy For Development", prepared under contract for the United States Agency for International Development by IRIS Center of the University Research Corporation International, University of Maryland, January 2003. (Co-author)

"Globalization of Information Technology Firms and the Impact on Economic Performance," funded by the Computer Systems Policy Project, May 2003.

Under contract to various consulting firms: Assessment of policy and business challenges of effective use of information technology in Bangladesh, China, Morocco, Sri Lanka, Taiwan, Thailand, Tunisia, Vietnam.

Asia Pacific Economic Cooperation forum. Presentations at Senior Officials meetings in China, Mexico, Chile. Publications include: <u>The New Economy and APEC</u> (2001) and <u>Trade</u> <u>Facilitation:</u> A <u>Development Perspective in the Asia Pacific</u> (2003).

HONORS, FELLOWSHIPS, MEMBERSHIPS

- Distinguished Fellow—CEPR inaugural cohort, 2019.
- NABE Fellow, in recognition of outstanding service and contribution to business economics, 2017.
- Fredrick Heldring Award for Global Leadership, Global Interdependence Center, 2016.
- Among the top 10 think-tank scholars cited by the media in 2004; ranked 34 for 1997-March 2005. *The International Economy* (Summer 2005).
- Profiled in the *National Journal* (May 22, 2004) as one of the people 'whose ideas will help shape the debates over 10 important issues of the day.'
- Abramson Award (best article of the year) *Business Economics* (2004)
- Outstanding Professor of the Program (co-winner), Executive MBA, Owen School Vanderbilt University (1995, one of three finalists in 1997, 1998, 1999).
- Special Achievement Award, Federal Reserve Board (1986).
- Ford Foundation Fellowship (1987).
- MIT Graduate Student Fellowship (1983-4).
- Chair, Economic Advisory Committee, American Bankers Association, 2020; member to present.
- Science Advisor, European Investment Bank (2019- present).
- Vice-Chair Economics, Business@OECD (2019-present).
- Executive Board, Committee on the Status Women in the Economics Profession (2002-06).
- Executive Board, National Economists Club, (2004-2006)
- Executive Board, National Association for Business Economics, (2005-08); International Roundtable Chair (2004-5) Vice-Chair (2003-4).
- Editorial Board, Contemporary Policy Issues (1996-2003).
- Editorial Board, Information Technology for International Development (1999-2002)
- Council on Foreign Relations (2019- present).
- Economic Club of New York (2019-present).
- US Monetary Policy Forum (2018-2021).
- Community of Chief Economists, World Economic Forum (2019-present).
- Economic Advisory Panel, Federal Reserve Bank of Chicago (2019-present)
- Academic Advisory Panel, Federal Reserve Bank of Boston (2006-2013)
- Economic Advisory Council, Federal Reserve Bank of New York (2002-2013)
- American Economics Association, (1979—present)
- Conference on Research in Income and Wealth (1988-present)
- Western Economics Association (1988-1996) Executive, Nominating, Program Committees.
- International Trade and Finance Association, Executive Board (1988-91)

- National Association for Business Economics (2001-present) Board (2002-2004)
  National Business Economics Issues Council (2002-present)