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**B. Ravikumar**

Senior Vice President and Deputy Director of Research

**Joined the Bank**      May 2011

**Education**

1989	Ph.D. Economics, The University of Iowa
1985	M.S. Economics, Carnegie Mellon University
1983	M.S. Industrial Engineering, National Institute for Training in Industrial Engineering
1981	B.E. Electrical Engineering, Indian Institute of Science, India
1978	B.S. Physics, University of Bombay, India

**Areas of Interest**      Macroeconomics, Economic development, Income distribution, Public finance

**Previous Experience**

2018-present	Senior Vice President, Research Division, Federal Reserve Bank of St. Louis
2015-2016	Professor of Economics, Arizona State University (on leave from the Federal Reserve Bank of St. Louis)
2011-2018	Vice President, Research Division, Federal Reserve Bank of St. Louis
2011-present	Visiting Professor of Economics, Washington University in St. Louis
2002-2011	Henry B. Tippie Research Professor of Economics, University of Iowa
2000-2001	Professor of Economics, Pennsylvania State University
1996-2000	Associate Professor of Economics, University of Iowa
1995-1996	Associate Professor of Economics, University of Virginia
1995-1996	Visiting Associate Professor of Economics, University of Iowa
1989-1995	Assistant Professor of Economics, University of Virginia

## Journal Publications

"Trade Liberalization versus Protectionism: Dynamic Welfare Asymmetries," with Ana Maria Santacreu and Michael J. Spasi, *European Economic Review*, 2024, Vol. 163, pp. 104692. Publisher DOI: <https://www.sciencedirect.com/science/article/abs/pii/S0014292124000217>Citation

"Majority Voting in a Model of Means Testing," with Buly A. Cardak and Gerhard Glomm, *European Economic Review*, February 2020, Vol. 122, Article 103351. Publisher DOI: <https://doi.org/10.1016/j.euroecorev.2019.103351>

"Capital Accumulation and Dynamic Gains from Trade," with Ana Maria Santacreu and Michael J. Spasi, *Journal of International Economics*, July 2019, Vol. 119, pp. 93-110. Publisher DOI: <https://doi.org/10.1016/j.jinteco.2019.04.009>Citation

"Explaining Cross-Cohort Differences in Life Cycle Earnings," with Yu-Chien Kong and Guillaume Vandenbroucke, *European Economic Review*, August 2018, Vol. 107, pp. 157-184. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0014292118300916#bib001>Citation

"Capital Goods Trade, Relative Prices, and Economic Development," with Piyusha Mutreja and Michael J. Spasi, *Review of Economic Dynamics*, January 2018, Vol. 27, pp. 101-122. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S1094202517300923?via%3Dihub>

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"Talent, Labor Quality, and Economic Development," with German Cubas and Gustavo Ventura, *Review of Economic Dynamics*, July 2016, Vol. 21, pp. 160-181. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S109420251500040X?via%3Dihub>

"The Quantitative Importance of Openness in Development," with Wenbiao Cai and Raymond Riezman, *Economic Inquiry*, October 2015, Vol. 53, No. 4, pp. 1839-1849. Publisher DOI: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.12216>

"Unemployment Insurance Fraud and Optimal Monitoring," with David L. Fuller and Yuzhe Zhang, *American Economic Journal-Macroeconomics*, April 2015, Vol. 7, No. 2, pp. 249-290. Publisher DOI: <https://www.aeaweb.org/articles?id=10.1257/mac.20130255>

"Price Equalization, Trade Flows, and Barriers to Trade," with Piyusha Mutreja, Raymond Riezman, and Michael J. Spasi, *European Economic Review*, August 2014, Vol. 70, pp. 383-398.2 Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0014292114000907?via%3Dihub>

"Why do Education Vouchers Fail at the Ballot Box?" with Peter Bearse, Buly A. Cardak, and Gerhard Glomm, *European Journal of Political Economy*, December 2013, Vol. 32, pp. 26-37. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0176268013000384?via%3Dihub>

"Optimal Auditing and Insurance in a Dynamic Model of Tax Compliance," with Yuzhe Zhang, *Theoretical Economics*, May 2012, Vol. 7, No. 2, pp. 241-282. Publisher DOI: <https://onlinelibrary.wiley.com/doi/abs/10.3982/TE737>

"The Return to Capital and the Business Cycle," with Paul Gomme and Peter Rupert, *Review of Economic Dynamics*, April 2011, Vol. 14, No. 2, pp. 262-78. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S1094202510000591>

"A Generalized Volatility Bound for Dynamic Economies," with Christopher Otrok and Charles Whiteman, *Journal of Monetary Economics*, November 2007, Vol. 54, No. 8, pp. 2269-90. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0304393207000803>

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"Habit Formation: A Resolution of the Equity Premium Puzzle?" with Christopher Otrok and Charles Whiteman, *Journal of Monetary Economics*, September 2002, Vol. 49(6), pp. 1261-88. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0304393202001472>

"Costly Technology Adoption and Capital Accumulation," with Aubhik Khan, *Review of Economic Dynamics*, April 2002, Vol. 5, No. 2, pp. 489-502. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S1094202502901675>

"Evaluating Asset-Pricing Models using the Hansen-Jagannathan Bound: A Monte Carlo Investigation," with Christopher Otrok and Charles Whiteman, *Journal of Applied Econometrics*, April-March 2002, Vol. 17, No. 2, pp. 149-74. Publisher DOI: <https://onlinelibrary.wiley.com/doi/abs/10.1002/jae.640>

"Human Capital Accumulation and Endogenous Public Expenditures," with Gerhard Glomm, *Canadian Journal of Economics-Revue Canadienne d'Economique*, August 2001, Vol. 34, No. 3, pp. 807-26. Publisher DOI: <https://onlinelibrary.wiley.com/doi/abs/10.1111/0008-4085.00100>

"Growth and Risk-Sharing with Private Information," with Aubhik Khan, *Journal of Monetary Economics*, June 2001, Vol. 47, No. 3, pp. 499-521. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0304393201000538>

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"On the Political Economy of Means-Tested Education Vouchers," with Peter Bearse and Gerhard Glomm, *European Economic Review*, May 2000, Vol. 44(4-6), pp. 904-15. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0014292199000458>

"Robust Wald Tests in SUR Systems with Adding-up Restrictions," with Surajit Ray and Eugene Savin, *Econometrica*, May 2000, Vol. 68(3), pp. 715-719. Publisher DOI: <https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-0262.00129>

"Minimum Consumption Requirements: Theoretical and Quantitative Implications for Growth and Distribution," with Satyajit Chatterjee, *Macroeconomic Dynamics*, December 1999, Vol. 3 (4), pp. 482-505. Publisher DOI: <https://www.cambridge.org/core/journals/macroeconomic-dynamics/article/minimumconsumption-requirements-theoretical-and-quantitative-implications-for-growth-anddistribution/656B5F53D79086093E632EF952ACB74B>

"Competitive Equilibrium and Public Investment Plans," with Gerhard Glomm, *Journal of Economic Dynamics & Control*, August 1999, Vol. 23, No. 8, pp. 1207-24. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S016518899800061X>

"Chaotic Dynamics in a Cash-in-Advance Economy," with Ronald Michener, *Journal of Economic Dynamics & Control*, July 1998, Vol. 22, No. 7, pp. 1117-37. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/S0165188997000961>

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"Strategic Complementarity in Business Formation: Aggregate Fluctuations and Sunspot Equilibria", " with Satyajit Chatterjee and Russell Cooper, *Review of Economic Studies*, October 1993, Vol. 60, No. 4, pp. 795-811. Publisher DOI: <https://academic.oup.com/restud/article-abstract/60/4/795/1573092>

"Public versus Private Investment in Human Capital: Endogenous Growth and Income Inequality," with Gerhard Glomm, *Journal of Political Economy*, August 1992, Vol. 100, No. 4, pp. 818-34. Publisher DOI: <https://www.journals.uchicago.edu/doi/10.1086/261841>

"A Neoclassical Model of Seasonal Fluctuations," with Satyajit Chatterjee, *Journal of Monetary Economics*, February 1992, Vol. 29(1), pp. 59-86. Publisher DOI: <https://www.sciencedirect.com/science/article/pii/030439329290023U>

## Working Papers

"Technology adoption, mortality, and population dynamics," with John Hejkal and Guillaume Vandenbroucke, Federal Reserve Bank of St. Louis Working Paper 2020-039J, August 2024.

"Trade and Inequality in an Overlapping Generations Model with Capital Accumulation," with Jun Nie and Michael J. Sposi, Federal Reserve Bank of St. Louis Working Paper 2024-018A, July 2024.

"On the Transition to Modern Growth: Lessons from Recent Agricultural Employment," with Guillaume Vandenbroucke, Federal Reserve Bank of St. Louis Working Paper 2023-026C, May 2024.

"Private Information and Optimal Infant Industry Protection," with Raymond Riezman and Yuzhe Zhang, Federal Reserve Bank of St. Louis Working Paper 20225-013C, April 2024.

"TFP, Capital Deepening, and Gains from trade," with Ana Maria Santacreu and Michael J. Spasi, Federal Reserve Bank of St. Louis Working Paper 2022-034A, September 2022.

"Convergence to Rational Expectations in Learning Models: A Note of Caution," with YiLi Chien and In-Koo Cho, Federal Reserve Bank of St. Louis Working Paper 2020-027B, September 2020.

"Enduring Relationships in an Economy with Capital and Private Information," with Aubhik Khan and Latchezar Popov, Federal Reserve Bank of St. Louis Working Paper 2020-034C, September 2020.

"Capital Goods Trade and Economic Development," with Piyusha Mutreja and Michael J. Spasi, Federal Reserve Bank of St. Louis Working Paper 2014-012A, May 2014.

"Price Equalization Does Not Imply Free Trade," with Piyusha Mutreja, Raymond Riezman, and Michael J. Spasi, Federal Reserve Bank of St. Louis Working Paper 2012-010B, June 2012.

### **Articles in Federal Reserve Bank of St. Louis Publications**

"The Role of Infant Mortality in Closing the Life Expectancy Gap," Federal Reserve Bank of St. Louis *Economic Synopses*, 2024, No. 3.

"TFP, Capital Deepening, and Gains from Trade," Federal Reserve Bank of St. Louis *Review*, Third Quarter 2023, Vol. 105, No. 3, pp. 150-76.

"Who's Driving a Recent Decline in Life Expectancy?" Federal Reserve Bank of St. Louis *Regional Economist*, Third Quarter 2023.

"How the Death Rate Affects the Aging of the US Population," Federal Reserve Bank of St. Louis *Economic Synopses*, 2023, No. 8.

"World Population: What Helps Explain the Explosion?" Federal Reserve Bank of St. Louis *Regional Economist*, Third Quarter 2022.

"Long-Term Trends in Gasoline Prices," Federal Reserve Bank of St. Louis *Economic Synopses*, 2022, No. 14.

"Geographic Dispersion in U.S. Employment," Federal Reserve Bank of St. Louis *Economic Synopses*, 2022, No. 9.

"Stability and Equilibrium Selection in Learning Models: A Note of Caution," Federal Reserve Bank of St. Louis *Review*, Fourth Quarter 2021, Vol. 103, No. 4, pp. 477-88.

"Convergence to Rational Expectations in Learning Models: A Note of Caution," Federal Reserve Bank of St. Louis *Review*, Third Quarter 2021, Vol. 103, No. 3, pp. 351-65.

"Asset Pricing Through the Lens of the Hansen-Jagannathan Bound," Federal Reserve Bank of St. Louis *Review*, Third Quarter 2020, Vol. 102, No. 3, pp. 255-69.

"Geographic Dispersion in COVID-19 Death Rates across the United States," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 36.

"COVID-19 Cases and Deaths: Comparing the Eighth Federal Reserve District and the U.S.," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 28.

"Geographic Disparity in the U.S. Population," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 27.

"The Lost Weeks of COVID-19 Testing in the United States: Part II," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 25.

"The Lost Weeks of COVID-19 Testing in the United States: Part I," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 24.

"Geographic Disparity in U.S. Output," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 5.

"Value-Added Trade vs. Gross Trade," Federal Reserve Bank of St. Louis *Economic Synopses*, 2020, No. 3.

"The Housing Supply Puzzle: Part 3, Price Gaps," Federal Reserve Bank of St. Louis *Economic Synopses*, 2018, No. 11.

"The Housing Supply Puzzle: Part 2, Rental Demand," Federal Reserve Bank of St. Louis *Economic Synopses*, 2018, No. 10.

"The Housing Supply Puzzle: Part 1, Divergent Markets," Federal Reserve Bank of St. Louis *Economic Synopses*, 2018, No. 9.

"Return to Capital in a Real Business Cycle Model," Federal Reserve Bank of St. Louis *Review*, Fourth Quarter 2017, Vol. 99, No. 4, pp. 337-50.

"Why Are Life-Cycle Earnings Profiles Getting Flatter?" Federal Reserve Bank of St. Louis *Review*, Third Quarter 2017, Vol. 99, No. 3, pp. 245-57

"Labor Compensation and Labor Productivity: Recent Recoveries and the Long-Term Trend," Federal Reserve Bank of St. Louis *Economic Synopses*, 2016, No. 16.

"Have Labor Costs Slowed the Recovery?" Federal Reserve Bank of St. Louis *Economic Synopses*, 2016, No.14.

"Price Equalization Does Not Imply Free Trade," Federal Reserve Bank of St. Louis *Review*, Fourth Quarter 2015, Vol. 97, No. 4, pp. 323-39.

"Secular Stagnation and Returns on Capital," Federal Reserve Bank of St. Louis *Economic Synopses*, 2015, No.19.

"Accounting for Discouraged Workers in the Unemployment Rate," Federal Reserve Bank of St. Louis *Economic Synopses*, 2014, No. 9.

"Discouraged Workers: What Do We Know?" Federal Reserve Bank of St. Louis *Economic Synopses*, 2014, No.6.

"Why Was the Decline in U.S. Trade Larger This Time? A Global View," Federal Reserve Bank of St. Louis *Regional Economist*, Fourth Quarter 2013, Vol. 21, No. 4.

"Who Is Concealing Earnings and Still Collecting Unemployment Benefits?" Federal Reserve Bank of St. Louis *Regional Economist*, Second Quarter 2013, Vol. 21, No. 2.

"Who Is Concealing Earnings and Still Collecting Unemployment Benefits?" Federal Reserve Bank of St. Louis *Regional Economist*, Second Quarter 2013, Vol. 21, No. 2.

"Unemployment Benefits: How Much Money Goes Unclaimed?" Federal Reserve Bank of St. Louis *Economic Synopses*, 2013, No. 18.

"What Flattened the Earnings Profile of Recent College Graduates?" Federal Reserve Bank of St. Louis *Economic Synopses*, 2013, No. 14.

"Unemployment Insurance: Payments, Overpayments and Unclaimed Benefits," Federal Reserve Bank of St. Louis *Regional Economist*, Fourth Quarter 2012, Vol. 20, No. 4.

"Bouncing Back from the Great Recession: The United States Versus Europe," Federal Reserve Bank of St. Louis *Economic Synopses*, 2012, No. 32.

"Unemployment Insurance Fraud," Federal Reserve Bank of St. Louis *Economic Synopses*, 2012, No. 28.

"Earnings Growth Over a Lifetime: Not What It Used To Be," Federal Reserve Bank of St. Louis *Regional Economist*, Second Quarter 2012, Vol. 20, No. 2.

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