

JACK E. TRIPLETT

Current Position

Nonresident Senior Fellow
The Brookings Institution
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Communications

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Other associations

Consultant on productivity, price indexes and other economic measurement issues to:
Australian Bureau of Statistics
Statistics Canada
Office for National Statistics (U.K.)
Statistics Sweden
Statistics New Zealand
Organization for Economic Cooperation and Development (OECD)
Eurostat (Statistical Office of the European Community)
Consultant/expert witness for litigation involving price indexes, escalation clauses and related issues

Education

Ph.D. University of California, Berkeley, 1966 (Economics)
M.A. University of California, Berkeley, 1961 (Economics)
A.B. University of California, Berkeley, 1958 (Industrial Relations)

Experience

1997 to present, Visiting Senior Fellow, then Non-Resident Senior Fellow, the Brookings Institution
1985-97 Chief Economist, Bureau of Economic Analysis
1996-97 Economist, National Bureau of Economic Research and Visiting Scholar, Brookings Institution
(on leave from Bureau of Economic Analysis)
1974-85 Assistant Commissioner (then Associate Commissioner) for Research and Evaluation, U.S. Bureau
of Labor Statistics (BLS)
1979 Assistant Director for Price Monitoring, Council on Wage and Price Stability
1971-74 Chief, Research Division, Office of Prices, BLS
1967-71 Assistant Professor of Economics, Washington University
1965-67 Assistant Professor of Economics and Assistant Director, Institute of Industrial and Labor Relations,
University of Oregon
1960-63 Economist, AFL-CIO, Washington, D.C.

Selected Professional Activities

American Economic Association, Committee on Economic Statistics
American Economic Association representative to Council of Professional Organizations on Federal Statistics
Chairman, Economic Classification Policy Committee (U.S. Office of Management and Budget) and head of
U.S. delegation negotiating the North American Industry Classification System, 1992-97.
Conference on Research in Income and Wealth: Executive Committee (1976-1981), Conference Program
Committee 1973, 1979, 1981 (Chairman), and 1988 (Co-chairman, 50th Anniversary Conference).
Member, National Academy of Sciences Panel on National Health Accounts (2007-2010)
Member, Statistics Canada Price Advisory Committee, 1984 to 2009.
Editorial Board, Journal of Economic and Social Measurement, 1984 to present.
Editorial Board, International Productivity Monitor, 2000 to present.
Julius Shiskin Award for Economic Statistics (1997), Washington Statistical Society-National
Association of Business Economists
Fellow, American Statistical Association (elected 1974)

Referee and Reviewer for: American Economic Review, Journal of Political Economy, Econometrica, Economica, European Economic Review, International Economic Review, Economic Inquiry, Journal of Human Resources, Business Economics, Millbank Memorial Quarterly, Quarterly Journal of Economics, Quarterly Journal of Business and Economics, Review of Income and Wealth, Empirical Economics, Economic Letters, Journal of Economic and Social Measurement, Journal of the American Statistical Association, Annales d'Economie et de Statistique, The American Statistician, Explorations in Economic History, Journal of Business and Economic Statistics, Journal of Official Statistics, Journal of Environmental Economics and Management, Growth and Change, Technological Forecasting and Social Change, Bulletin of Economic Research, Empirical Economics, Econometric Reviews, Journal of Productivity Analysis, National Science Foundation, Employment and Training Administration, National Institute on Aging, Swiss National Science Foundation, and National Council on Employment Policy.

Publications

- Health System Productivity. Chapter 31 in: Sherry Glied and Peter Smith, eds. Oxford Handbook of Health Economics, forthcoming.
- The 21st Century Productivity Expansion is Still in Services (with Barry P. Bosworth). International Productivity Monitor, 2007.
- The Boskin Commission Report after a Decade. International Productivity Monitor, Spring 2006.
- A Review of Reviews: Ninety Years of Professional Thinking About the Consumer Price Index (with Marshall Reinsdorf). In: W. Erwin Diewert, John S. Greenlees, and Charles R. Hulten, eds. Price Index Concepts and Measurement. Chicago University Press for the National Bureau of Economic Research, Studies in Income and Wealth Vol. 70. 2009.
- Zvi Griliches' Contributions to Economic Measurement. In: Ernst R. Berndt and Charles R. Hulten, eds. Hard-to-Measure Goods and Services: Essays in Honor of Zvi Griliches. University of Chicago Press, for the National Bureau of Economic Research, Studies in Income and Wealth, Vol. 67. 2007.
- Handbook on Hedonic Indexes and Quality Adjustments in Price Indexes: Special Application to Information Technology Products. Organization for Economic Co-operation and Development, Directorate for Science, Technology and Industry. 2006.
- Services Productivity in the United States: New Sources of Economic Growth (with Barry P. Bosworth). Washington, DC: Brookings Institution Press, 2004.
- Services Productivity in the United States: Griliches' Services Volume Revisited (with Barry P. Bosworth). In: Ernst R. Berndt and Charles R. Hulten, eds. Hard-to-Measure Goods and Services: Essays in Honor of Zvi Griliches. University of Chicago Press, for the National Bureau of Economic Research, Studies in Income and Wealth, Vol. 67 (2007).
- Performance Measures for Computers. In Deconstructing the Computer: A Report of a Symposium. Washington, DC: National Research Council (2006).
- Integrating Cost-of-disease Studies into Purchasing Power Parities. In A Disease-based Comparison of Health Systems. OECD, 2003.
- Using Scanner Data in the CPI: Some Neglected Conceptual Considerations. In Robert Feenstra and Matthew Shapiro, eds. Scanner Data and Price Indexes. University of Chicago Press for the National Bureau of Economic Research, 2003.
- "Baumol's Disease" Has Been Cured: IT and Multifactor Productivity in U.S. Services Industries (with Barry P. Bosworth). In Dennis W. Jansen, ed. The New Economy and Beyond: Past, Present and Future. Edward Elgar (2006).
Shortened version published as: Productivity Measurement Issues in Services Industries: "Baumol's Disease" has Been Cured. In Federal Reserve Bank of New York Economic Policy Review, September 2003, 9(3): 23-33.
Reprinted in: P.K. Bandyopadhyay and G.S. Gupta, eds. Measuring Productivity in Services: New Dimensions. Pungagutta (Hyderabad), India: The Icfai University Press (2006).
- Les Etats-Unis: ont-ils connu une nouvelle economie? (Did the U.S. Have a New Economy?) In: Edith Archambault and Michel Boeda, eds., Comptabilite Nationale: Measure de la nouvelle economie. Paris: Economica, 2003.

The Mismeasurement Hypothesis and the Productivity Slowdown. In Nathalie Greenan, Yannick L’Horty and Jacques Mairesse, eds. Productivity, Inequality and the Digital Economy: A Transatlantic Perspective. Cambridge: MIT Press, 2002.

What’s New About the New Economy? IT, Economic Growth and Productivity (with Barry P. Bosworth). In Heidemarie C. Sherman, ed. The Impact of the Internet Revolution on International Economic Relations and Society. Tokyo Club Papers, Number 14. Munich, Germany: Institut für Wirtschaftsforschung. 2001. Shortened version published (under the same title) in: International Productivity Monitor, Number Two, Spring, 2001.

Hedonic Indexes and Statistical Agencies, Revisited. Journal of Economic and Social Measurement, Vol. 27 No. 3/4, 2001.

Productivity in the Services Sector (with Barry P. Bosworth). In Robert M. Stern, editor. Services in the International Economy. Ann Arbor: The University of Michigan Press. 2001.

Should the Cost-of-Living Index Provide the Conceptual Framework for a Consumer Price Index? The Economic Journal. Vol. 111, No. 479, June 2001.

Research on price index measurement: Agendas for the next twenty years (with Zvi Griliches, Katherine G. Abraham, Erwin Diewert, and Brent R. Moulton, edited by Ernst R. Berndt). Journal of Economic and Social Measurement. Vol 27, 2001.

What’s Different About Health? Human Repair and Car Repair in National Accounts and in National Health Accounts. In David M. Cutler and Ernst R. Berndt, eds. Medical Care Output and Productivity. Studies in Income and Wealth, Vol. 62. University of Chicago Press, for the National Bureau of Economic Research. 2001.

Price Indexes for Medical Care Goods and Services: An Overview of Measurement Issues (with Ernst R. Berndt, David Cutler, Richard G. Frank, Zvi Griliches, and Joseph P. Newhouse). In David M. Cutler and Ernst R. Berndt, eds. Medical Care Output and Productivity. Studies in Income and Wealth, Vol. 62. University of Chicago Press, for the National Bureau of Economic Research. 2001.

Medical Care Prices and Output (with Ernst R. Berndt, David Cutler, Richard G. Frank, Zvi Griliches, and Joseph P. Newhouse). In Anthony J. Culyer and Joseph P. Newhouse, eds. Handbook of Health Economics. Amsterdam: Elsevier Science B.V. 2000.

Measuring the Prices of Medical Treatments (ed.), Brookings Institution Press, 1999.

New Developments in Measuring Medical Care (with Ernst R. Berndt), in Jack E. Triplett, ed., Measuring the Prices of Medical Treatments.

Accounting for Health Care: Integrating Price Index and Cost-Effectiveness Research, in Jack E. Triplett, ed., Measuring the Prices of Medical Treatments.

The Solow Productivity Paradox: What Do Computers Do to Productivity? Canadian Journal of Economics, April, 1999. Republished in French as: Le paradoxe de Solow sur la productivite: en quoi les ordinateurs contribuent-ils a la productivite? Chapter 2 in: LaSer (Lafayette Services) Cahier no. 3, La nouvelle Economie et ses Paradoxes. Paris: LaSer, 66, rue des Archives, 2000

Economic Statistics, the New Economy, and the Productivity Slowdown, Business Economics, April, 1999.

Does the SIC System Need Re-inventing for Productivity Research? (with Mark Kennet, Frank Gollop, and Ronald Jarmin). In Raymond P. Schwartz, ed., Advances in Classification Research, Volume 6 (ASIS Monograph Series). Information Today, Inc., for the American Society for Information Science (1998).

Elementary Indexes for a Consumer Price Index, in Walter Lane, ed., Proceedings of the Fourth Meeting of the International Working Group on Price Indices, Bureau of Labor Statistics, Washington, D.C., 1998.

Measuring Consumption: The Post-1973 Slowdown and the Research Issues, St.Louis Federal Reserve Bank Review, May/June, 1997.

Concepts of Capital for Production Accounts and for Wealth Accounts: The Implications for Statistical Programs, in OECD, International Conference on Capital Stock Statistics, Canberra, Australia, March, 1997

High-Tech Industry Productivity and Hedonic Price Indexes, in Industry Productivity: International Comparison and Measurement Issues. OECD Proceedings, OECD, Paris, 1996

Depreciation in Production Analysis and in Income and Wealth Accounts: Resolution of an Old Debate, Economic Inquiry, January, 1996.

Economic Concepts for Economic Classifications, American Statistical Association, Proceedings, Section on Quality and Productivity (1993).

Banking Output, in John Eatwell, Murray Milgate, and Peter Newman, eds., The New Palgrave Dictionary of Money and Finance (1992).

Perspectives on the SIC: Conceptual Issues in Economic Classification, in U.S. Bureau of the Census, 1991 International Conference on the Classification of Economic Activities. Washington, D.C.: U.S. Department of Commerce (1991).

The Federal Statistical System's Response to Emerging Data Needs, Journal of Economic and Social Measurement, Vol. 17, 1991.

The Theory of Industrial and Occupational Classifications and Related Phenomena, in U.S. Bureau of the Census, 1990 Annual Research Conference: Proceedings. U.S. Department of Commerce, Washington, D.C., August, 1990.

Reviving the Federal Statistical System: A View from Within, American Economic Review 80 (May, 1990).

Hedonic Methods in Statistical Agency Environments: An Intellectual Biopsy, in Fifty Years of Economic Measurement (below).

Fifty Years of Economic Measurement, ed. (with Ernst R. Berndt). University of Chicago Press for the National Bureau of Economic Research (1990).

Price and Technological Change in a Capital Good: A Survey of Research on Computers, in Dale W. Jorgenson and Ralph Landau, eds., Technology and Capital Formation. Cambridge, MA: MIT Press (1989).

Hedonic Functions and Hedonic Indexes, in John Eatwell, Murray Milgate, and Peter Newman, eds., The New Palgrave: A Dictionary of Economics (Vol. 2, pp. 630-634). New York: Stockton Press (1987).

The Economic Interpretation of Hedonic Methods, Survey of Current Business, January, 1986.

Can TIP-MIP-MAP Proposals Work? Lessons from the Council on Wage and Price Stability, in David C. Colander, ed., Incentive-Based Incomes Policies: Advances in TIP and MAP. Cambridge, MA: Ballinger Publishing Co. (1986).

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A Conceptual Model for Labor Market Data, Review of Public Data Use, Vol. 12, pp. 1-16 (1984). (Shortened version of An Essay on Labor Cost, below.)

An Essay on Labor Cost, in The Measurement of Labor Cost (below).

The Measurement of Labor Cost (ed.). Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. 48. University of Chicago Press for the National Bureau of Economic Research (1983).

Escalation Measures: What is the Answer? What is the Question? In W. Erwin Diewert and Claude Montmarquette, eds., Price Level Measurement: Proceedings From a Conference Sponsored by Statistics Canada. Ottawa: Minister of Supply and Services, Canada (1983).

Three Studies of Indexes and Indexing: A Review Essay, Journal of Money, Credit and Banking, Vol. 15, No. 3 (August, 1983).

Concepts of Quality in Input and Output Price Measures: A Resolution of the User-Value Resource-Cost Debate, in Murray F. Foss, ed., The U.S. National Income and Product Accounts: Selected Topics. Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. 47, University of Chicago Press for the National Bureau of Economic Research (1983).

Reconciling the CPI and the PCE Deflator, Monthly Labor Review, September, 1981.

What is a Current Equivalent to Unemployment Rates of the Past? (with Joseph Antos and Wesley Mellow), Monthly Labor Review, March, 1979.

Measuring Prices--and Wages, American Economic Review, February, 1977.

Assessing the Quality Error in Output Measures: The Case of Refrigerators (with Richard J. McDonald), Review of Income and Wealth, June, 1977.

Consumer Demand and Characteristics of Consumption Goods, in Nestor Terleckyj, ed., Household Production and Consumption. National Bureau of Economic Research, Studies in Income and Wealth, Vol. 40 (1976).

The Measurement of Inflation: A Survey of Research on the Accuracy of Price Indexes, in Paul H. Earl, ed., Analysis of Inflation. Lexington Books, D.C. Heath Co. (1975).

The CPI and the PCE Deflator: An Econometric Analysis of Two Price Measures (with Stephen M. Merchant), Annals of Economic and Social Measurement, Vol. 2, No. 3 (1973).

The Theory of Hedonic Quality Measurement and Its Use in Price Indexes, BLS Staff Paper No. 6, U.S. Department of Labor, Bureau of Labor Statistics (1971).

Quality Bias in Price Indexes and New Methods of Quality Measurement, Chapter 6, in Zvi Griliches, ed., Price Indexes and Quality Change: Studies in New Methods of Measurement. Harvard University Press (1971).
 Quality Problems and Quality Adjustments in Price Indexes, Proceedings, Business and Economic Statistics Section, American Statistical Association (1969).
 Automobiles and Hedonic Quality Measurement, Journal of Political Economy, May/June 1969.
Collective Bargaining for Public Employees (ed.). University of Oregon Press (1967).

Reviews, Shorter Notes, and Comments

The Impact of Information Technology on the U.S. Economy (with Barry P. Bosworth). Kudan Square. No. 11, March, 2001. Institute for International Economic Studies, Tokyo.

Comment on "Total Factor Productivity: A Short Biography," by Charles Hulten. In Charles R. Hulten, Edwin Dean and Michael Harper, eds. New Developments in Productivity Analysis. Studies in Income and Wealth, vol. 63. University of Chicago Press, for the National Bureau of Economic Research. 2001.

IT, Hedonic Price Indexes, and Productivity. IOAS Satellite Meeting on Statistics for the Information Society. Tokyo: Statistics Bureau and Statistics Center, Ministry of Public Management. August, 2001.

Numbers Matter (with Barry P. Bosworth). Brookings Institution Policy Brief, No. 63. July, 2000.

Testimony and Statement: Fixing the Consumer Price Index. Hearings. Congress of the United States, Committee on Government Reform and Oversight, April 29, 1998.

Comment on "A Quantitative History of the Automobile Industry, 1900-1940," by Daniel Raff and Manual Trajtenberg, in Timothy Bresnahan and Robert J. Gordon, eds., The Economics of New Products. University of Chicago Press (1997).

Comment on "Computers and Output Growth Revisited: How Big is the Puzzle?" by Steven D. Oliner and Daniel E. Sichel, Brookings Papers on Economic Activity, 1994, No. 2.

Economic Concepts for Economic Classifications--Changes for the Future. The Service Economy (publication of the Coalition of Service Industries), October, 1993.

Comment (on three papers on semiconductors, technical change, and the PPI), in Murray Foss, Marilyn E. Manser, and Allan H. Young, eds., Price Measurements and Their Uses. Studies in Income and Wealth, Vol. 57. Chicago: University of Chicago Press for the National Bureau of Economic Research, 1993.

Review of The Measurement of Durable Goods Prices, by Robert J. Gordon, Journal of Economic Literature, March 1993.

Comment (on two papers on bank output measurement), in Zvi Griliches, ed., Output Measurement in the Service Sectors. Studies in Income and Wealth, Vol. 56. Chicago: University of Chicago Press for the National Bureau of Economic Research, 1992.

Economic Theory and BEA's Alternative Quantity and Price Indexes, Survey of Current Business, Vol. 72 (April, 1992).

Discussion (on three papers on economic classifications), U.S. Bureau of the Census, 1991 International Conference on Classification of Economic Activities. Washington, D.C.: U.S. Department of Commerce (1991).

Comments on The Postwar Evolution of Computer Prices, by Robert J. Gordon (with Rosanne Cole and Ellen R. Dulberger), in Dale W. Jorgenson and Ralph Landau, eds., Technology and Capital Formation. Cambridge, MA: MIT Press (1989).

New Horizons in Data Sets: Papers from the Conference on Research in Income and Wealth (ed.), Survey of Current Business, November, 1988, March, 1989, and May, 1989.

The Consumer Price Index: National and Area Measurement Issues, in Business and Economic Research in a World of Risk and Uncertainty, Vol. 4, Bureau of Business Research, University of Wisconsin-Madison, for the Association for University Business and Economic Research (1983).

Comment on Quality Adjustment, Hedonics, and Modern Empirical Demand Analysis, by Ernst Berndt, in W. Erwin Diewert and Claude Montmarquette, eds., Price Level Measurement: Proceedings from a Conference Sponsored by Statistics Canada. Ottawa: Minister of Supply and Services, Canada (1983).

Comment on Energy Efficiency, User-Cost Change, and Measurement of Durable Goods Prices, by Robert Gordon, in Murray F. Foss, ed., The U.S. National Income and Product Accounts: Selected Topics, Conference on Research in Income and Wealth, Studies in Income and Wealth, Vol. 47. University of Chicago Press for the National Bureau of Economic Research (1983).

- Federal Statistics and Inflation--Comments on Price and Labor Market Statistics, in Society of Government Economists, Third Economic Workshop, Washington, D.C., May 28, 1982.
- Comment on The CPI and the (Mis?) Measurement of Recent Inflation, by Alan Blinder, Brookings Papers on Economic Activity, October, 1980.
- Does the CPI Exaggerate or Understate Inflation? Some Observations (comment on a note by Daniel Mitchell), Monthly Labor Review, 103 (May, 1980).
- On Estimating Import Demand Elasticities, in William G. Dewald, et al., eds., The Impact of International Trade and Investment on Employment. U.S. Government Printing Office (for the Bureau of International Affairs of the U.S. Department of Labor) (1978).
- The Impact on Economic Models of the Present Treatment of Smog and Safety Devices in Economic Statistics, in Joel Popkin, ed., Analysis of Inflation: 1965-1974. Studies in Income and Wealth, Vol. 42, National Bureau of Economic Research (1977).
- A Review of Consumer Demand: A New Approach, by Kelvin Lancaster, Journal of Economic Literature, March, 1973.
- Determining the Effects of Quality Change on the CPI, Monthly Labor Review, May, 1971.
- Discussion (on papers by Gillingham/Lund and Robert Gordon), Proceedings, Business and Economic Statistics Section, American Statistical Association (1970).

SELECTED UNPUBLISHED PAPERS AND PRESENTATIONS

- Output and Productivity Measures for Medical Care and Education. Presented at: University of Rome Workshop on Medical Care and Education Productivity, Rome, April 2009, and in a revised form at Office for National Statistics and National Institute for Economic and Social Research Conference on Non-Market Output, Cardiff, Wales, November, 2009.
- Is the 21st Century Productivity Expansion Still in Services? And What Should be Done About It? (with Barry P. Bosworth). Presented at the American Economic Association annual meeting, Chicago, January 2007; earlier version presented at National Bureau of Economic Research Summer Institute, July, 2006.
- How Countries (Other than the U.S.) Measure CPI Housing. Prepared for the Brookings Institution Economic Measurement Workshop, Software and Housing. May 23, 2003.
- Some Information on the (Nonbank, Noninsurance) Financial Services Industries (with Barry P. Bosworth). Prepared for the Brookings Institution Economic Measurement Workshop "Two Topics in Finance", November 1, 2002
- Alternative Measures of Corporate Profits. Prepared for the Brookings Institution Economic Measurement Workshop "Two Topics in Finance", November 1, 2002
- Industries, Products and Aggregations: NAICS Provision of Information for the New Economy. Presented at the International Association for Official Statistics Meetings, London, August, 2002.
- Hedonic Price Indexes and Productivity: International Comparability Issues. Presented at Statistical Society of Canada Annual Meeting, Hamilton, Ontario, May 2002.
- Medical Equipment (with David Gunter). Presented at the Brookings Workshop on the Adequacy of Data for Analyzing and Forecasting the High Tech Sector. October 12, 2001.
- International Comparisons of Hedonic Price Indexes for Computers: A Preliminary Examination (with Dietmar Moch). Presented at the National Bureau of Economic Research Summer Institute, July, 2001.
- Measuring Health Output: The Draft Eurostat Handbook on Price and Volume Measures in National Accounts. Presented at the Eurostat-CBS Seminar on National Accounts. Voorburg, Netherlands, March, 2001.
- Hedonic Valuation of "Unpriced" Banking Services: Application to National Accounts and Consumer Price Indexes. Presented at the National Bureau of Economic Research, Summer Institute, July, 2000.
- A Real Expenditure Account for Mental Health Care Services, 1972-95. Paper presented at the Brookings Workshop on Measuring the Output of Medical Care, December, 1999, and the American Economic Association, Boston, January, 2000.
- A Dictionary of Usage for Capital Measurement Issues. Second OECD Conference on Capital Stock Statistics (Paris, October 1998).
- The Treatment of Auxiliary Establishments in Industry Classification Systems (with Paula Young), presented at the International Establishment Frame conference, Quebec City, October, 1996.
- Estimating CPI Basic Components: A Review of Formula, or Basic Component, Bias, presented at the National Bureau of Economic Research, Productivity meeting, April, 1996.

The CPI: An Overview of Research Issues, presented at the National Bureau of Economic Research, Summer Institute, July, 1995.

A Preliminary Extension for A Quantitative History of the Automobile Industry, presented at the National Bureau of Economic Research, Summer Institute, Cambridge, Massachusetts, July 1994.

Economic Classifications in the New North American Industry Classification System (NAICS), presented at The Statistical Programme Committee, Statistical Office of the European Communities (Eurostat), Luxembourg, March 1994.

Economic Concepts for Economic Classifications, presented at Conference of European Statisticians, Geneva, Switzerland, June, 1993.

The Classification of Economic Activities: Data in Search of an Economic Structure, paper presented at the American Economic Association Annual Meeting, Anaheim, CA, January 1993.

Measuring the Capital Stock: A Review of Concepts and Data Needs, presented at the Workshop on the Measurement of Depreciation and Capital Stock, Washington, D.C., June, 1992 (Conference on Research in Income and Wealth); also presented at the Western Economic Association, San Francisco, CA, July, 1992, and at the National Bureau of Economic Research Summer Workshop, July, 1990.

Measuring the Output of Banks: What Do Banks Do? presented at Western Economic Association, July, 1991.

Two Views on Computer Prices and Productivity. Bureau of Economic Analysis Discussion Paper No. 45, February, 1990.

Measuring Banking Output. Unpublished BEA Discussion Paper. February, 1989, presented at the National Bureau of Economic Research Summer Workshop, July, 1989.

New Measures of Producers' Durable Equipment: The Quasi-Superlative TGFI Index Number, presented at Western Economic Association, June, 1989.

Three Comments on Measuring Agricultural (or any Sector's) Productivity, USDA Conference on Agricultural Productivity, Washington, D.C. (1988).

Superlative and Quasi-Superlative Indexes of Price and Output for Investment Goods: Office, Computing and Accounting Machinery, presented at National Bureau of Economic Research Summer Workshop, July, 1988; circulated as Bureau of Economic Analysis Discussion Paper 40.

Price Index Research and Its Influence on Data: A Historical Review, presented at the Fiftieth Anniversary meeting of the Conference on Research in Income and Wealth, Washington, D.C., May, 1988 (part of this was published as "Hedonic Methods in Statistical Agency Environments: An Intellectual Biopsy," listed above). Also presented at: National Bureau of Economic Research Summer Workshop, July, 1987.

Comments on "Economic Links Between Computer and Communications Technology" (by Kenneth Flamm), Workshop on Technology and Government Policy in Computers and Communication. Washington, D.C.: Brookings Institution, March, 1987.

Comments on "New Developments in Empirical Agricultural Production Economics," Eastern Economic Association, Washington, D.C., March, 1987.

Comments on "The State of U.S. Economic Statistics" (the Report of the American Economic Association's Committee on the Quality of Economic Statistics), presented at the Chicago, 1987 meeting of the American Economic Association.

Federal Statistical Coordination Today, August, 1983.

Producer and Consumer Constraints in Characteristics Space, presented at the Denver 1980 meetings of the American Economic Association.

Why Employment Estimates Differ: A Study of Discrepancies Between the BLS Household and Payroll Estimates (with Joseph Antos, Anthony J. Barkume, and J. Wilson Mixon), distributed as BLS Working Paper No. 65.

On the Methodology for Evaluating Economic Effects of Government Programs, presented at the ASPER-OSHA Conference on Evaluating the Effects of the Occupational Safety and Health Program, March, 1975 (distributed as BLS Working Paper No. 41).

A Quality-Adjustment Model for Determining Market Shares in Oligopoly (with Keith Cowling), read at the winter, 1971 meetings of the Econometric Society (distributed as BLS Working Paper No. 4).