

# Robert G. Chambers

## Educational Background

Ph.D. 1979, University of California, Berkeley  
Agricultural and Resource Economics

M.S. 1975, University of Maryland, College Park  
Agricultural and Resource Economics

S.B.R.E. 1972, Edmund A. Walsh School of Foreign Service, Georgetown University  
International Relations

## Experience in Higher Education

1985 to present Professor of Agricultural and Resource Economics, Department of  
Agricultural and Resource Economics, University of Maryland, College Park, Maryland.

2006 to 2022 Honorary Professor, University of Queensland, Brisbane, Australia

2000 to 2006, 2009 to 2016 Adjunct Professor, School of Agricultural and Resource  
Economics, University of Western Australia, Crawley, Western Australia.

1995-2000 and 2013-15 Chairperson, Department of Agricultural and Resource  
Economics, University of Maryland, College Park, Maryland.

Summer 1982 to Summer 1985 Associate Professor, Department of Agricultural and  
Resource Economics, University of Maryland.

Winter 1983 Visiting Associate Professor, Department of Agricultural and Resource  
Economics, Oregon State University, Corvallis, Oregon.

Fall 1979 to 1982 Assistant Professor, Department of Agricultural and Resource  
Economics, University of Maryland.

Fall 1978 to August 1979 Assistant Professor, Department of Agricultural Economics and  
Rural Sociology, The Ohio State University.

Winter 1977 to Fall 1978 Postgraduate Research Agricultural Economist, Giannini  
Foundation of Agricultural Economics, Department of Agricultural and Resource  
Economics, University of California, Berkeley.

Fall 1975 to Winter 1977 Research Assistant, Department of Agricultural and Resource  
Economics, University of California, Berkeley.

Fall 1973 to Fall 1975 Research and Teaching Assistant, Department of Agricultural and Resource Economics, University of Maryland.

## **Experience Other Than Higher Education**

April 1985 to October 1986 Senior Staff Economist for Food and Agriculture, Council of Economic Advisers, Executive Office of the President, Washington, D.C.

## **2. Research, Scholarly, and Creative Activities**

### **a. Books**

#### **i. Books Authored**

1. Applied Production Analysis: A Dual Approach, Robert G. Chambers, Cambridge University Press, 1988 (reprinted 1989, 1991, 1994, and 1997). **Publication of Enduring Quality Award, American Agricultural Economics Association, 1999.**
2. Uncertainty, Production, Choice and Agency: The State-Contingent Approach, Robert G. Chambers and John Quiggin, Cambridge University Press: New York, 2000. **Quality of Research Discovery Award (Honorable Mention), American Agricultural Economics Association, 2001.**
3. Competitive Agents in Certain and Uncertain Markets. Robert G. Chambers, Oxford University Press, New York, 2021.
4. Lectures on Neoclassical Production Economics. Robert G Chambers. (unpublished book-length manuscript in preparation for submission to publisher, currently available on personal website)

#### **ii. Books Edited**

1. Macro-economics, Agriculture, and the Exchange Rate, Robert G. Chambers and Philip L. Paarlberg (eds.), Westview Press, 1988.
2. Handbook of Production Economics (Vol: I-II), Subhash Ray, Robert G Chambers, and Subal Kumbhakar (eds.). Springer: 2022 <https://doi.org/10.1007/978-981-10-3455-8>
3. "Symposium on proper modelling of production systems that produce both desirable and undesirable outputs". *Journal of Productivity Analysis* 55(3): June 2021, pp. 155-203. Robert G Chambers served as editor for this special issue.

#### **iii. Chapters in Books**

1. "The Gains from International Trade," Robert G. Chambers, John M. Letiche and Andrew Schmitz, International Trade and Agriculture: Theory and Policy, ed. Jimmie Hillman and Andrew Schmitz, Boulder: Westview Press, (1979):61-90.
2. "The Development of Gains from Trade Theory: Classical to Modern Literature," John M. Letiche, Robert G. Chambers and Andrew Schmitz, Economic Perspectives, ed. Maurice Ballabon, 1 (1979):119-149.
3. "The Future of Policy Research," Robert G. Chambers. Proceedings from Perspectives on Food and Agricultural Policy Research Workshop, ed. W. J. Armbruster, Farm Foundation, Oak Brook, Illinois, May 1982.
4. "The Development of Gains from Trade Theory: Classical to Modern Literature," J. M. Letiche, Robert G. Chambers and Andrew Schmitz, in International Economic Policies and Their Theoretical Foundation, New York: Academic Press, 1982 (reprint), 1992 (second reprint).
5. "New Developments in Theory and Empirical Applications of Agricultural Commodity Market Analysis: Qualitative Econometrics and Agriculture," Robert G. Chambers and Richard E. Just, New Directions in Econometric Modelling and Forecasting for U.S. Agriculture, ed. Gordon C. Rausser, North-Holland, Elsevier (1982).
6. "International Markets in Disequilibrium: A Case Study of Beef," Robert G. Chambers, L. Joe Moffitt, Richard E. Just and Andrew Schmitz, New Directions in Econometric Modelling and Forecasting for U.S. Agriculture, ed. G. C. Rausser, North-Holland Elsevier (1982).
7. "Conceptual Issues in the Measurement and Size and Scale Economies," Robert G. Chambers, Economies of Size Studies, ed. M. Boehlje, Center for Agricultural and Rural Development, Iowa State University, Ames, Iowa, 1984:53-103.
8. "Macroeconomics and U. S. Agricultural Policy: Commentary," in United States Agricultural Policy: The 1985 Farm Legislation, ed. Bruce L. Gardner, American Enterprise Institute, 1985.
9. "Trade and Macroeconomic Dimension of U.S. Farm Policy: Discussion," Robert G. Chambers, Alternative Agricultural and Food Policies and the 1985 Farm Bill, ed. Gordon Rausser and Kenneth Farrell, Giannini Foundation of Agricultural Economics, Berkeley, California, 1986.
10. "Effects of Natural Resource Policies on Trade," Robert G. Chambers and Katharine Reichelderfer, Agricultural Trade and Natural Resources: Discovering the Critical Linkage, ed. John D. Sutton, Lynne Rienner Publishers, Inc., 1988.
11. "An Overview of Exchange Rates, Macroeconomics, and Agriculture," Macroeconomics, Agriculture, and the Exchange Rate, ed. P. Paarlberg and R.G. Chambers, Westview Press, 1988.

12. “Management and Efficiency of Rural Businesses,” Arne Hallam and Robert G. Chambers in Rural Information Systems: New Directions in Data Collection and Retrieval, ed. R.C. Buse and J.L. Driscoll, Ames: Iowa State University Press, 1992.
13. “Share Leasing and Externalities,” Robert G. Chambers, Hyunok Lee, and John Quiggin in Land Ownership and Taxation in American Agriculture, ed. G. Wunderlich. San Francisco: Westview Press, 1992.
14. “Input and Output Indicators”, Robert G. Chambers in Index Numbers: Essays in Honor of Sten Malmquist, ed. Rolf Färe, Shawna Grosskopf, and R.R. Russell, Boston: Kluwer Academic Publishers 1998.
15. “Information, Incentives, and the Design of Agricultural Policy”, Robert G. Chambers in Handbook of Agricultural Economics, ed. B.L. Gardner and G.C. Rausser, North-Holland/Elsevier, New York, 2002.
16. “The State-contingent Approach to Risk Premiums and Comparative Statics in Generalized Expected-utility Theory”, John Quiggin and Robert G. Chambers, in FUR Proceedings, ed., M. Machina .
17. “Dual Approaches to Estimating Supply Response Systems under Price and Production Uncertainty”, Robert G. Chambers and John Quiggin, in A Comprehensive Assessment of the Role of Risk in US Agriculture eds. R.Just and R.Pope, Kluwer, 2001.
18. “The State-contingent Approach to Modeling Environmental Risk Management” John Quiggin and Robert G. Chambers, Risk Management and the Environment: Agriculture in Perspective, eds. Bruce A. Babcock, Robert W. Fraser and Joseph N. Lekakis, Kluwer, 2003.
19. “Production under Uncertainty”. Robert G. Chambers. In *Handbook of Production Economics*, eds. Subhash Ray, Robert G Chambers, and Subal Kumbhakar. Springer, Singapore [https://doi.org/10.1007/978-981-10-3450-3\\_6-1](https://doi.org/10.1007/978-981-10-3450-3_6-1) . 2020.
20. “Distance Functions”. Robert G. Chambers and Rolf Färe. *Handbook of Production Economics*, eds. Subhash Ray, Robert G Chambers, and Subal Kumbhakar, Springer, Singapore [https://doi.org/10.1007/978-981-10-3450-3\\_14-1](https://doi.org/10.1007/978-981-10-3450-3_14-1). 2020.
21. “Comparative Risk Aversion for State-Dependent Preferences”. John Quiggin and Robert G Chambers. *Mathematical Topics on Representations of Ordered Structures and Utility Theory: Essays in Honor of Professor G.B. Mehta*, Studies in Systems, Decision and Control 263, G. Bosi, M. Campion, J. C. Candeal, and E.Indurain (eds), Springer Nature, Switzerland 2020.
22. “Neoclassical Production Economics: An Introduction”. Robert G. Chambers and Subhash Ray. *Handbook of Production Economics*, eds. Subhash Ray, Robert G Chambers, and Subal Kumbhakar, Springer, Singapore 2022. [https://doi.org/10.1007/978-981-10-3455-8\\_18](https://doi.org/10.1007/978-981-10-3455-8_18).

23. “Agricultural Total Factor Productivity: Review of Methodological Approaches”. Robert G. Chambers and Dimitris Diakosavvas. *Insights into the Measurement of Agricultural Total Factor Productivity and the Environment*. Organization of Economic Cooperation and Development. Paris 2022. <https://www.oecd.org/agriculture/topics/network-agricultural-productivity-and-environment/>
24. “Incorporating the Environment in Agricultural Total Factor Productivity Accounting”. Dimitris Diakosavas, Jean-Christophe Bureau, and Robert G. Chambers. *Insights into the Measurement of Agricultural Total Factor Productivity and the Environment*. Organization of Economic Cooperation and Development. Paris 2022. <https://www.oecd.org/agriculture/topics/network-agricultural-productivity-and-environment/>
25. Annex 3A to “Incorporating the Environment in Agricultural Total Factor Productivity Accounting” entitled “Analytical Framework”. Robert G. Chambers. *Insights into the Measurement of Agricultural Total Factor Productivity and the Environment*. Organization of Economic Cooperation and Development. Paris 2022. <https://www.oecd.org/agriculture/topics/network-agricultural-productivity-and-environment/>
26. “Weather Indices for Agriculture”. Robert G. Chambers, Ariel Ortiz-Bobea, and Simone Pieralli. *Insights into the Measurement of Agricultural Total Factor Productivity and the Environment*. Organization of Economic Cooperation and Development. Paris 2022. <https://www.oecd.org/agriculture/topics/network-agricultural-productivity-and-environment/>

**b. Articles in Peer-Reviewed Journals**

1. “A Critique of Exchange Rate Treatment in Agricultural Trade Models,” Robert G. Chambers and Richard E. Just, *American Journal of Agricultural Economics* 61 (1979):249-257.
2. “A Critique of Exchange Rate Treatment in Agricultural Trade Models: Reply,” Robert G. Chambers and Richard E. Just, *American Journal of Agricultural Economics* 62 (1980):255- 259.
3. “Wheat Cartelization and Domestic Markets,” Robert G. Chambers and Michael W. Woolverton, *American Journal of Agricultural Economics* 62 (1980):629-638. (**lead article**)
4. “The Monopsonistic Firm in an Uncertain World,” Robert G. Chambers, *Atlantic Economic Journal* IX (1981):35-39.

5. "Effects of Exchange Rate Changes on U.S. Agriculture: A Dynamic Analysis," Robert G. Chambers and Richard E. Just, American Journal of Agricultural Economics 63 (1981):32-46.
6. "Interrelationships Between Monetary Instruments and Agricultural Commodity Trade," Robert G. Chambers, American Journal of Agriculture Economics 63 (1981):934-941.
7. "Estimating the Impact of Beef Import Restrictions on the U.S. Beef Import Market," Robert G. Chambers, Richard E. Just, L. Joe Moffitt and Andrew Schmitz, Australian Journal of Agricultural Economics 25 (1981):123-33.
8. "An Investigation of the Effects of Monetary Factors on U.S. Agriculture," Robert G. Chambers and Richard E. Just, Journal of Monetary Economics 9 (1982):235-47.
9. "Spectral Analysis of the Theory of Anticipatory Prices," Robert G. Chambers and Michael W. Woolverton, Journal of Agricultural Economics XXXIII (1982):71-81.
10. "Duality, the Output Effect and Applied Comparative Statics," Robert G. Chambers, American Journal of Agricultural Economics 64 (1982):152-156.
11. "A Note on Excess Demand Curves," Robert G. Chambers, Atlantic Economic Journal (1982):40-44.
12. "An Economic Analysis of Technology in the Meat Products Industry," V. Eldon Ball and Robert G. Chambers, American Journal of Agricultural Economics 64 (1982):699-709.
13. "The Relevance of Duality Theory to the Practicing Agricultural Economist: Discussion," Robert G. Chambers, Western Journal of Agricultural Economics (1982):373-78.
14. "Decomposition and Additivity for Price-Dependent Demand Systems," Robert G. Chambers and Kenneth E. McConnell, American Journal of Agricultural Economics 65 (1983):596-602.
15. "Participation in the Farmer Owned Reserved Program: A Discrete Choice Model," Robert G. Chambers and William E. Foster, American Journal of Agricultural Economics 65 (1983):120-124.
16. "International Trade, Gross Substitutability, and the Domestic Farm-Retail Price Margin," Robert G. Chambers, European Review of Agricultural Economics 10-1 (1983):33-54.
17. "Impact of Fiscal-Monetary Policy on Farm Structure: A Discussion," Southern Journal of Agricultural Economics 15 (1983):69-71.
18. "Scale and Productivity Measurement Under Risk," Robert G. Chambers, American Economic Review 73 (1983):802-805.

19. "Testing Asset Fixity for U.S. Agriculture," Robert G. Chambers and Utpal Vasavada, American Journal of Agricultural Economics 65 (1983):761-769.
20. "Risk in Agricultural Production: Discussion," Robert G. Chambers, American Journal of Agricultural Economics 65 (1983):1114-1115.
21. "Agricultural and Financial Market Interdependence in the Short Run," Robert G. Chambers, American Journal of Agricultural Economics 66 (1984):12-24. **Quality of Research Discovery Award, American Agricultural Economics Association, 1985.**
22. "Estimating the Impact of Beef Import Restrictions on the U.S. Import Market: Reply," Robert G. Chambers, Richard E. Just, L. Joe Moffitt and Andrew Schmitz, Australian Journal of Agricultural Economics (1984).
23. "A Note on Separability of the Indirect Production Function and Measures of Substitution," Robert G. Chambers, Southern Economic Journal (April 1984).
24. "Credit Constraints, Interest Rates, and Agricultural Prices," Robert G. Chambers, American Journal of Agricultural Economics 67 (1985).
25. "A General, Dynamic, Supply-Response Model," Robert G. Chambers and Ramon Lopez, Journal of Northeast Agricultural Economics Council (1985).
26. "Estimation Methods for Markets Subject to Minimum Price Regulation: The Case of California Milk," Robert G. Chambers, L. Joe Moffitt and Richard E. Just, Applied Economics 17(6) (1985):991-1002.
27. "Testing Asset Fixity for U.S. Agriculture: Reply," Robert G. Chambers and Utpal Vasavada, American Journal of Agricultural Economics 67 (1985).
28. "Least Cost Subsidization Alternatives," Robert G. Chambers, American Journal of Agricultural Economics 67 (1985):251-256.
29. "Welfare and Trade Effects of Deficiency Payments," Andrew Schmitz and Robert G. Chambers, Journal of Agricultural Economics XXXVII (1986):37-43.
30. "Estimating Parameters of a Renewable Resource Model Without Population Data," Robert G. Chambers and Ivar E. Strand, Jr., Marine Resource Economics 2(3) (1986): 263-274.
31. "Constrained-Output Maximization and U.S. Agriculture," Robert G. Chambers and Hyunok Lee, Applied Economics 18 (1986): 347-358.
32. "Testing Asset Fixity for U.S. Agriculture: Reply," Robert G. Chambers and Utpal Vasavada, American Journal of Agricultural Economics 68 (1986).

33. "Domestic and International Agricultural Policy Interfaces," Robert G. Chambers, Southern Journal of Agricultural Economics (1986).
34. "Expenditure Constraints and Profit Maximization in U.S. Agriculture," Hyunok Lee and Robert G. Chambers, American Journal of Agricultural Economics 68 (1986):857-865.
35. "Investment in U.S. Agriculture: 1947-1979," Utpal Vasavada and Robert G. Chambers, American Journal of Agricultural Economics 68 (1986):950-960.
36. "A Critique of Exchange Rate Treatment in Agricultural Trade Models: Reply," Robert G. Chambers and Richard E. Just, American Journal of Agricultural Economics 68 (1986):994-997.
37. "Microeconomic Foundations of Myrdal's Circular Causation Theory," Robert G. Chambers and Ramon E. Lopez, Proceedings of the International Association of Agricultural Economists (1986).
38. "Tax Policies and the Financially Constrained Farm Firm," Robert G. Chambers and Ramon E. Lopez, American Journal of Agricultural Economics 69 (May 1987):2:371-377.
39. "Expenditure Constraints and Profit Maximization: Reply," Hyunok Lee and Robert G. Chambers, American Journal of Agricultural Economics 70 (1988): 955-57.
40. "Accumulation and Rental Behavior in the Market for Farmland," Robert G. Chambers and Tim T. Phipps, Western Journal of Agricultural Economics 13 (1988): 294-306.
41. "Developments in Production Economics," Robert G. Chambers, Economic Record 65 (1989): 243-65.
42. "Insurability and Moral Hazard in Agricultural Insurance Markets," Robert G. Chambers, American Journal of Agricultural Economics 71 (1989): 604-616.
43. "Price Aggregation Over Price Taking Firms," Rulon Pope and Robert G. Chambers, Review of Economic Studies 56 (1989):297-310.
44. "Estimating Multioutput Technologies," Robert G. Chambers and Richard E. Just, American Journal of Agricultural Economics 71 (1989): 980-995. **Quality of Research Discovery Award, American Agricultural Economics Association, 1990.**
45. "Workfare or Welfare?" Robert G. Chambers, Journal of Public Economics 40 (1989):79-97.
46. "Concentrated Objective Functions for Nonlinear Tax Models," Robert G. Chambers, Journal of Public Economics 39 (1989):365-375.



47. “Technical Change and Applications of Dynamic Duality to Agriculture,” Utpal Vasavada and Robert G. Chambers, American Journal of Agricultural Economics 71(1989):803-4.
48. “Are More Exports Always Better?”: Comparing Cash and In-Kind Export Subsidies,” Robert G. Chambers and P.L. Paarlberg, American Journal of Agricultural Economics 73(1991):142-154.
49. “Testing for Consistent Aggregation,” with R.D. Pope, American Journal of Agricultural Economics 73 (1991):808-818.
50. “The Two-Index PIGL Demand System,” Robert G. Chambers and Rulon D. Pope, Economic Letters 38 (1992):411-416.
51. “On the Design of Agricultural Policy Mechanisms,” Robert G. Chambers, American Journal of Agricultural Economics 74 (1992):646-654.
52. “Engel’s Law and Linear-in-Moments Aggregation,” Robert G. Chambers and Rulon Pope, American Journal of Agricultural Economics 74 (1992):682-88.
53. “Revisiting Minimum-Quality Standards,” Robert G. Chambers and Michael Weiss, Economics Letters 40 (1992): 197-201.
54. “Public Investment and Real-Price Supports,” Robert G. Chambers and Ramon Lopez, Journal of Public Economics 52 (1993): 73-82.
55. “Input-Output Separability in Production Models and Its Structural Consequences,” Robert G. Chambers and Rolf Färe, Zeitschrift für Nationalökonomie 57 (1993): 197-202.
56. “Fixed-Price Controls and Ad Valorem Distortions in An Open Economy,” Robert G. Chambers and Ramon Lopez, Economics Letters 41 (1993): 287-92.
57. “Efficiency, Quantity Indexes, and Productivity Indexes” Robert G. Chambers, R. Färe and S. Grosskopf, Bulletin of Economic and Social Research 46 (January 1994):1-22.
58. “Marketing Orders as Non Tariff Trade Barriers,” Robert G. Chambers and Daniel Pick, American Journal of Agricultural Economics 76 (February 1994):47-54.
59. “A Virtually Ideal Production System: Specifying and Estimating the VIPS Model,” Robert G. Chambers and Rulon D. Pope, American Journal of Agricultural Economics 76 (February 1994):105-113.
60. “The Simple Econometrics of Pesticide Productivity”, Robert G. Chambers and Erik Lichtenberg, American Journal of Agricultural Economics 76 (August 1994):407-417 .
61. “Hicks’ Neutrality and Trade-Biased Growth: A Taxonomy,” Robert G. Chambers and Rolf Färe, Journal of Economic Theory 64 (December 1994):554-567.

62. “Tariff Reform and the Uniform Tariff”, Robert G. Chambers, Economic Studies Quarterly 45 (3) (1994).
63. “The Incidence of Agricultural Policies”, Robert G. Chambers, Journal of Public Economics 57 (1995): 317-335.
64. “Aggregable Price-Taking Firms,” Robert G. Chambers and Rulon D. Pope, European Economic Review 40 (1996): 417-428
65. “Nonpoint-Source Pollution Regulation As A Multi-Task Principal-Agent Problem,” Robert G. Chambers and John Quiggin, Journal of Public Economics 59 (1996):95-116. **Quality of Research Discovery Award (Honorable Mention), American Agricultural Economics Association, 1997.**
66. “Benefit and Distance Functions,” Robert G. Chambers, Yangho Chung, and Rolf Färe, Journal of Economic Theory 70 (August 1996):407-419. **Included in special issue of the Journal of Economic Theory 187 (May 2020) honoring top 50 papers published in first 50 years of the Journal of Economic Theory**
67. “A Nonparametric Approach to the von Liebig-Paris Technology,” Robert G. Chambers and Erik Lichtenberg, American Journal of Agricultural Economics 78 (May 1996):373-386.
68. “Productivity Growth in APEC Countries”, Robert G. Chambers, Rolf Färe, and Shawna Grosskopf, Pacific Economic Review 1 (1996):181-190.
69. “Aggregate Productivity Measures”, Robert G. Chambers and Rulon D. Pope, American Journal of Agricultural Economics 78(1996):5:1360-1365.
70. “Aggregate Homothetic Separability,” Robert G. Chambers, Economica 64 (February 1997): 173-177.
71. “Separation and Hedging Results with State-Contingent Production,” Robert G. Chambers and John Quiggin, Economica 64 (May 1997):187-210.
72. “Using Dominance in Forming DEA Models: The Case of Experimental Agricultural Data.” Robert G. Chambers, Rolf Färe, Erik Lichtenberg, and E. Jaenicke, Journal of Econometrics 85(1998): 189-203.
73. “Translation Homotheticity.” Robert G. Chambers and Rolf Färe, Economic Theory 11(1998): 629-641.
74. “Profit, Directional Distance Functions, and Nerlovian Efficiency”, Robert G. Chambers, Y. Chung and Rolf Färe, Journal of Optimization Theory and Applications 98(1998): 351-364.

75. “Cost Functions and Duality for Stochastic Technologies”, Robert G. Chambers and John Quiggin, American Journal of Agricultural Economics 80(1998): 288-295.
76. “The Structure of Multiplant Technologies”, Robert G. Chambers, American Journal of Agricultural Economics 80(1998): 839-851.
77. “A State-Contingent Production Approach to Principal-Agent Problems with an Application to Point-Source Pollution Control”, John Quiggin and Robert G. Chambers, Journal of Public Economics 70(1998): 441-472.
78. “Risk Premiums and Benefit Measures for Generalized Expected Utility Theories”, John Quiggin and Robert G. Chambers, Journal of Risk and Uncertainty 17 (1998): 121-138.
79. “Producer Organizations, Bargaining, and Asymmetric Information”, Jean-Marc Bourgeon and Robert G. Chambers, American Journal of Agricultural Economics 81 (1999): 602-609.
80. “Stop-and-Go Agricultural Policies”, Jean-Marc Bourgeon and Robert G. Chambers, American Journal of Agricultural Economics 82 (2000): 1-13.
81. “Homotheticity and Non-Radial Changes”, Robert G. Chambers and Thomas Mitchell, Journal of Productivity Analysis 15 (2000) 313-321.
82. “Consumers’ Surplus as an Exact and Superlative Welfare Indicator”, Robert G. Chambers, International Economic Review 42 (2001): 105-120.
83. "Decomposing Input Adjustments under Price and Production Uncertainty", Robert G. Chambers and John Quiggin, American Journal of Agricultural Economics 83 (2001):20-34.
84. “The Firm under Uncertainty with General Risk Averse Preferences”, Robert G. Chambers and John Quiggin, Journal of Risk and Uncertainty 22 (2001): 5-20.
85. “The State-Contingent Properties of Stochastic Production Functions”, Robert G. Chambers and John Quiggin, American Journal of Agricultural Economics 84 (2002): 513-526.
86. “Optimal Producer Behavior in the Presence of Area-Yield Crop Insurance”, Robert G. Chambers and John Quiggin, American Journal of Agricultural Economics 84 (2002): 320-334.
87. “Exact Nonradial Input, Output, and Productivity Measurement”, Robert G. Chambers, Economic Theory 20 (2002): 751-767.
88. “Price Stabilization and the Risk-Averse Firm”, Robert G. Chambers and John Quiggin, American Journal of Agricultural Economics 85 (2003): 336-347.

89. “Indirect Certainty Equivalents for the Firm Facing Price and Production Uncertainty”, Robert G. Chambers and John Quiggin, Economics Letters 78 (2003): 309-316
90. “Local Utility Functions and Local Probability Transformations”, John Quiggin and Robert G. Chambers, Journal of Risk and Uncertainty 27 (2003): 111-120 (**lead article**).
91. “Optimal Area-Yield Crop Insurance Reconsidered”, Jean-Marc Bourgeon and Robert G. Chambers, American Journal of Agricultural Economics 85 (2003): 590-604.
92. “Jointly Radial and Translation Homothetic Preferences: Generalized Constant Risk Aversion”. Robert G. Chambers, Rolf Fare, and John Quiggin. Economic Theory 23 (2004): 689-699
93. “Incentives and Standards in Agency Contracts”. Robert G. Chambers and John Quiggin. Journal of Public Economic Theory 7 (2005): 201-208.
94. “Eliciting the Core of a Supermodular Capacity”. Robert G. Chambers and Tigran Melkonyan. Economic Theory 26(2005): 203-09.
95. “Invariant Risk Attitudes”. John Quiggin and Robert G. Chambers. Journal of Economic Theory 117 (2004): 96-118.
96. “Technological and Financial Approaches to Risk Management in Agriculture: An Integrated Approach”. Robert G. Chambers and John Quiggin. Australian Journal of Agricultural and Resource Economics 48 (2004): 199-224.
97. “Additive Decomposition of Profit Efficiency”. Robert G. Chambers and Rolf Fare. Economics Letters 84 (2004): 329-334.
98. “Drought Policy: A Graphical Analysis”. John Quiggin and Robert G. Chambers. Australian Journal of Agricultural and Resource Economics 48 (2004): 225-252.
99. “Linear-Risk-Tolerant, Invariant Preferences”. Robert G. Chambers and John Quiggin. Economics Letters 86 (2005): 303-309.
100. “Output Price Subsidies in a Stochastic World”. Robert G. Chambers and John Quiggin. American Journal of Agricultural Economics 87 (2005): 501-508.
101. “On Input and Output Translation Homotheticity”. Robert G. Chambers. Journal of Economics (Zeitschrift für Nationalökonomie) 85 (2005): 197-203.
102. “Dual Approaches to the Analysis of Risk Aversion”. Robert G. Chambers and John Quiggin, Economica 74 (2007): 189-213 (**lead article**).
103. “Capital Market Equilibrium with Moral Hazard and Flexible Technology”. John Quiggin and Robert G. Chambers, Journal of Mathematical Economics 42 (2006): 358-363.

104. “The State-Contingent Approach to Production under Uncertainty.” John Quiggin and Robert G. Chambers, Australian Journal of Agricultural and Resource Economics 50 (2006): 153-169.
105. “Parallel Neutrality.” Walter Briec, Robert G. Chambers, Rolf Fare, and Nicolas Peypoch, Journal of Economics (Zeitschrift für Nationalökonomie) 88 (2006): 285-305.
106. “Degree of Imprecision: Geometric and Algorithmic Approaches.” Robert G. Chambers and Tigran Melkonyan. International Journal of Approximate Reasoning 45 (2007): 106-122.
107. “Supermodularity and Risk Aversion”. John Quiggin and Robert G. Chambers. Mathematical Social Sciences 52(2006): 1-14.
108. “Pareto Optimal Trade in an Uncertain World: GMOs and the Precautionary Principle”. Robert G. Chambers and Tigran Melkonyan. American Journal of Agricultural Economics 89 (2007): 520-532.
109. “Valuing Agricultural Insurance”. Robert G. Chambers. American Journal of Agricultural Economics 89 (2007): 596-606.
110. “Supermodularity and the Comparative Statics of Risk.” John Quiggin and Robert G. Chambers. Theory and Decision 62 (2007): 97-117.
111. “Information and the Risk-Averse Firm”. Robert G. Chambers and John Quiggin. Journal of Productivity Analysis 27(2007): 197-208.
112. “Comparative Statics for the Productive Firm under Uncertainty”, Robert G. Chambers and John Quiggin. Journal of Economics 93 (2008): 203-14.
113. “Narrowing the No-Arbitrage Bounds”. Robert G. Chambers and John Quiggin. Journal of Mathematical Economics 44 (2008): 1-14 (**lead article**).
114. “Implementable Ramsey-Boiteux Pricing in Agricultural and Environmental Policy”. Jean-Marc Bourgeon and Robert G. Chambers. American Journal of Agricultural Economics 90 (2008): 499-508
115. “Stochastic Productivity Measurement”. Robert G. Chambers. Journal of Productivity Analysis 30 (2008): 107-120.
116. “Eliciting Beliefs”. Robert G. Chambers and Tigran Melkonyan. Theory and Decision 65 (2008): 271-84 (**lead article**).
117. “A ‘Calculus’ for DEA Models”. Robert G. Chambers and Rolf Färe. Journal of Productivity Analysis 30 (2008): 169-175 (**lead article**).

118. “Bargaining Power and Efficiency in Insurance Contracts”. John Quiggin and Robert G. Chambers Geneva Risk and Insurance Review 34(2009): 47-73 **SCOR/IDEI Award for best paper published in GRIR.**
119. “Cost Minimization and the Stochastic Discount Factor”. Robert G. Chambers and John Quiggin Annals of Operations Research 176 (2010): 349-368.
120. “Smoothing Preference Kinks with Information”. Robert G. Chambers and Tigran Melkonyan, Mathematical Social Sciences 58(2009): 173-189.
121. “Separability of Stochastic Production Decisions from Producer Risk Preferences in the Presence of Financial Markets”, Robert G. Chambers and John Quiggin. Journal of Mathematical Economics 45 (2009): 730-737.
122. “Buy Low, Sell High: Price Gaps and Neoclassical Theory”. Robert G. Chambers and Tigran Melkonyan. Journal of Mathematical Economics 45 (2009): 720-29.
123. “Efficiency Analysis in the Presence of Uncertainty”. Christopher O’Donnell, Robert G. Chambers, and John Quiggin Journal of Productivity Analysis 33 (2010): 1-17. **(lead article) (Quality of Research Discovery Award, European Association of Agricultural Economists, 2011).**
124. “Regulatory Policy in an Uncertain World.” Robert G. Chambers and Tigran Melkonyan Journal of Public Economic Theory 12(2010): 1081-1107..
125. “Production Economics and Farm Management: A Century of Contributions.” Jean-Paul Chavas, Robert G. Chambers, and Rulon D. Pope American Journal of Agricultural Economics 92 (2010): 356-75.
126. “Event-specific Data Envelopment Models and Efficiency Analysis”. Robert G. Chambers, Atakelty Hailu, and John Quiggin. Australian Journal of Agricultural and Resource 55(2011): 90-106
127. “Another Look at Pesticide Productivity and Pest Damage”, Robert G. Chambers, Giannis Karagiannis, and Vangelis Tzouvelekas. American Journal of Agricultural Economics. (2010) 92(5): 1401-1419.
128. “Efficiency Analysis, Shortage Functions, Arbitrage, and Martingales”. Robert G. Chambers and Rolf Färe. European Journal of Operational Research 213 (2011): 349-358.
129. “A Luenberger Soil-Quality Indicator”. Atakelty Hailu and Robert G. Chambers. Journal of Productivity Analysis 38 (2012): 145-154.
130. “Food Scares in an Uncertain World”. Robert G. Chambers and Tigran Melkonyan, Journal of the European Economic Association 11 (2013): 1432-56.

131. “Generalized Quadratic Revenue Functions”, Robert G. Chambers, Rolf Fare, Shawna Grosskopf, and Michael Vardanyan. *Journal of Econometrics* 173 (2013): 11-21.
132. “Estimating Population Dynamics without Population Data.” Robert G. Chambers and Vangelis Tzouvelekas *Journal of Environmental Economics and Management* 66 (2013): 510-22.
133. “A Two-Parameter Model of Dispersion Aversion.” Robert G. Chambers, Simon Grant, Benjamin Polak, and John Quiggin. *Journal of Economic Theory* 150 (2014): 611-641.
134. “Productivity Accounting for Separable Technologies”. Robert G. Chambers, Giannis Karagiannis, and Vangelis Tzouvelekas. *Journal of Productivity Analysis* 41 (2014): 41-50.
135. Measuring Technical and Environmental Efficiency in a State-Contingent Technology.” Teresa Serra, Robert G. Chambers, Alfons Oude-Lansink. *European Journal of Operational Research* 236 (2014): 706-17.
136. “Uncertain Equilibria and Incomplete Preferences.” Robert G. Chambers. *Journal of Mathematical Economics* 55 (2014): 48-54. [10.1016/j.jmateco.2014.09.009](https://doi.org/10.1016/j.jmateco.2014.09.009)
137. “On the Pricing of Undesireable Outputs.” Robert G. Chambers, Teresa Serra, and Alfons Oude-Lansink. *European Review of Agricultural Economics* 41 (2014): 485-509.
138. Using Ex Ante Output Elicitation to Model State-Contingent Technologies”. Robert G. Chambers, Teresa Serra, and Spiro Stefanou. *Journal of Productivity Analysis* 43 (2015): 75-83.
139. “On Marginal-Risk Behavior”. Robert G. Chambers. *American Journal of Agricultural Economics* 98 (2016): 406-21.
140. “Marginal Values and Returns to Scale for Nonparametric Production Frontiers”. Victor Podinovski, Robert G. Chambers, Kazim Atici, Iryna Deineko. *Operations Research* 64 (2016): 236-50.
141. “”Decoupled” Farm Program Payments are Really Decoupled”. Robert G. Chambers and Daniel C. Voica. *American Journal of Agricultural Economics* 99 (2017): 773-782 [doi: 10.1093/ajae/aaw044](https://doi.org/10.1093/ajae/aaw044)
142. “The Social Dimension of Firm Performance: A DEA Approach”. Robert G. Chambers and Teresa Serra. *Empirical Economics* (2016) [doi:10.1007/s00181-016-1135-z](https://doi.org/10.1007/s00181-016-1135-z)
143. “Ambiguity, Reasoned Determination, and Climate-Change Policy”. Robert G Chambers and Tigran Melkonyan. *Journal of Environmental Economics and Management* 81 (2017): 74-92.
144. “Determining Climate Effects on US Total Agricultural Productivity”. Xin-Zhong Liang, You Wu, Robert G Chambers, Daniel Schmoldt, Wei Gao, Chaoshun Liu, Yan-An Liu,

- Chao Sun, and Jennifer A Kennedy *Proceedings of the National Academy of Sciences* (2017) March, 114 (12) E2285-E2292. <https://doi.org/10.1073/pnas.1615922114>.
145. “Estimating *Ex Ante* Cost Functions for Stochastic Technologies”. Robert G Chambers and Teresa Serra. *American Journal of Agricultural Economics* 101 (2019): 807-24, online at 10.1093/ajae/aay068
  146. “Incomplete Preferences and Equilibrium in Contingent Markets”. Robert G Chambers and Tigran Melkonyan. *Economica* 87 (2020): 108-31. <https://doi.org/10.1111/ecca.12296>
  147. “Growing climatic sensitivity of U.S. agriculture linked to technological change and regional specialization”. Ariel Ortiz-Bobea, Erwin Knippenberg, and Robert G Chambers. *Science Advances* 2018;4: eaat4343 12 December 2018.
  148. “Sub-lethal Concentrations of Neonicotinoid Pesticides at the Field Level Threaten Beekeepers’ Livelihoods”. Robert G Chambers, Kostas Chatzimichael, and Vangelis Tzouvelekas . *PLoS One*. Published: April 25, 2019 <https://doi.org/10.1371/journal.pone.0215363>
  149. “The Sources of Measured US Agricultural Productivity Growth: Weather, Technological Change, and Adaptation”. Robert G. Chambers and Simone Pieralli. *American Journal of Agricultural Economics* 102 (2020): 1198-1226 <https://doi.org/10.1002/ajae.12090>
  150. “The Millennium Droughts and Australian Agricultural Productivity Performance: A Nonparametric Analysis”. Robert G. Chambers, Yu Sheng, and Simone Pieralli. *American Journal of Agricultural Economics* 102 (2020): 1383-1403 <https://doi.org/10.1111/ajae.12098>
  151. “The Historical Impact of Anthropogenic Climate Change on Global Agricultural Productivity”. Ariel Ortiz-Bobea, Toby R. Ault, Carlos M. Carrillo, Robert G. Chambers, David B. Lobell *Nature Climate Change* 11 (2021): 306-12 <https://doi.org/10.1038/s41558-021-01000-1>
  152. “Invariant Risk Preferences and Supply Response under Price Risk”. Robert G Chambers, Margarita Genius, and Vangelis Tzouvelekas. *American Journal of Agricultural Economics*. <http://doi.org/10.1111/ajae.12228> 103 (2021): 1802-19.
  153. “Incomplete Preferences, Willingness to Pay, and Willingness to Accept”. Robert G. Chambers, Tigran Melkonyan, and John Quiggin. *Economic Theory* 74 (2022): 727-61 <http://doi.org/10.1007/s00199-021-01375-4>.
  154. “Dual Structures for the Additive DEA Model”. Robert G Chambers. *European Journal of Operational Research* 307 (2023): 984-99. <https://doi.org/10.1016/j.ejor.2022.10.026>



**c. Monographs, Reports, and Extension Publications**

1. “An Empirical Note on Various Exchange Rate Models,” Robert G. Chambers and Richard E. Just, Economics and Sociology Occasional Paper #564, Department of Agricultural Economics and Rural Sociology, The Ohio State University, November 1978.
2. “Some Evidence on a Test for Disequilibrium,” Robert G. Chambers, Richard E. Just and L. Joe Moffitt, Economics and Sociology Occasional Paper #568, Department of Agricultural Economics and Rural Sociology, The Ohio State University, November 1978.
3. “Disequilibrium Econometrics: An Agricultural Application,” Robert G. Chambers, Economics and Sociology Occasional Paper #570, Department of Economics and Rural Sociology, The Ohio State University, January 1979.
4. Economic Gains from Agricultural Trade: A Bibliographical Survey, Barry Coyle, Robert G. Chambers, and Andrew Schmitz, Bibliography Series, United States Department of Agriculture, 1986.
5. “Income Transfers to Agriculture,” Robert G. Chambers, Chapter 4, Economic Report of the President, Government Printing Office, Washington, D.C., 1986.
6. “Put Options and Commodity Programs,” Robert G. Chambers, Financial Exchange.
7. The Gains From U.S. Agricultural Trade, Barry Coyle, Robert G. Chambers and Philip Paarlberg, Foreign Agricultural Economics Report, United States Department of Agriculture .
8. Optimal Farm-Credit Pricing Under Asymmetric Information, Hyunok Lee and Robert G. Chambers, Technical Bulletin # 1739, United States Department of Agriculture, Economic Research Service, Washington, D.C., 1988.
9. “How to Wean the Farmer from Washington,” Robert G. Chambers, Heritage Foundation Backgrounder No. 657, June 1988.
10. “Debt and U.S. Agricultural Exports,” Robert G. Chambers and Ramon E. Lopez, report submitted to ATAD/USDA.
11. “Tariff Reform and the Uniform Tariff,” Robert G. Chambers, report to TPD, World Bank, 1990.
12. “A Long-Run, General-Equilibrium Cocoa Supply Response Model for Ghana,” Robert G. Chambers, report to TPD, World Bank, 1992, revised February 1994.
13. “Effects of Liberalized Trade on Agriculture in the Western Hemisphere.” Earl Brown and Robert G. Chambers, Agricultural Trade Policy Center, University of Maryland at College Park. Report on Cooperative Agreement 92-37400-8298.

14. “Economics of Sustainable Farming in the Mid-Atlantic”, Robert G. Chambers and Erik Lichtenberg, report to USDA/EPA PCE Program, 1995.
15. “Thinking About Agricultural Productivity Accounting in the Presence of By-Products”, presented at *OECD Expert Workshop: Measuring Environmentally-Adjusted TFT for Agriculture*, <http://www.oecd.org/tad/events/environmentally-adjusted-total-factor-productivity-in-agriculture.htm>
16. “Variational Economics: Lectures on Applied Economics”, Robert G. Chambers, 2020 (latest version).
17. *Lectures on Production Economics*, Robert G Chambers, July 2022 (latest version).

**d. Book Reviews, Other Articles, and Notes**

1. Reviewed Forecasting Economic Time Series by C. W. J. Granger and Paul Newbold, American Journal of Agricultural Economics 61(1979):149.
2. Reviewed The Economics of Contracts: A Primer by B. Salanie, American Journal of Agricultural Economics 83 (2002).

**e. Talks, Abstracts, and Other Professional Papers Presented**

**i. Invited Papers, Keynote Addresses, Workshops, and Seminars**

1. “Disequilibrium Econometrics: An Agricultural Application,” invited paper for ERS/USDA symposium on Econometrics Modelling and Forecasting, Washington, DC, April 10, 1978.
2. “On the Structure of Post Von Neumann Foreign Trade Theories: Ricardo and Modern Classicism Compared,” invited discussion at Sixth Atlantic Economic Conference, Washington, DC, October 11-14, 1978.
3. “New Developments in Theory and Empirical Applications of Agricultural Commodity Market Analysis: Qualitative Econometrics and Agriculture,” invited paper for ESCS/USDA symposium on New Directions for Econometric Modelling and Forecasting in U.S. Agriculture, Washington, DC, June 1979.
4. “Disequilibrium Econometrics: Implications and Applications for Agriculture,” invited presentation at symposium “Are Agricultural Markets in Disequilibrium?” at annual meetings of American Agricultural Economics Association, Pullman, Washington, August 1979.
5. “Interrelationships between Monetary Instruments and Agricultural Commodity Trade,” invited paper for “Evolving Relationships in Commodity Market,” session at annual

- meetings of American Agricultural Economics Association, Clemson, South Carolina, July 1981.
6. “The Future of Policy Research,” invited discussion at Perceptions on Food and Agricultural Policy Research Workshop, University of Maryland, October 7, 1981.
  7. “Interactions between Commodity and Financial Markets,” invited address, Minnesota Economic Association Annual Meeting, Minneapolis, October 23, 1981.
  8. “To Dual or Not to Dual: Is That the Question,” presented at Relevance of Duality Theory invited paper session, annual meeting of American Agricultural Economic Association, Logan, Utah, 1982.
  9. “Modelling Investment Decisions: A Dual Approach,” seminar presented to Department of Agricultural and Resource Economics, Oregon State University, Corvallis, Oregon, February 1983.
  10. “Optimal Government Subsidies to Agriculture,” seminar presented at Agriculture Canada, Ottawa, June 22, 1983.
  11. “Impact of Fiscal-Monetary Policy On Farm Structure,” invited discussion for annual meetings of Southern Agricultural Economics Consortium, Atlanta, Georgia, February 1983.
  12. “Incorporating Risk in Production Analysis: Discussion,” invited discussion at American Agricultural Economics Association annual meetings, Purdue, Indiana, August 1983.
  13. “Some Conceptual Issues in the Measurement of Economies of Size,” invited paper presentation at NC-117 Workshop on Size Economics, Purdue, Indiana, 1983.
  14. “A General, Dynamic, Supply-Response Model,” Robert G. Chambers and Ramon E. Lopez, invited paper presented at annual meetings of American Agricultural Economics Association, Cornell University, August 1984.
  15. “Credit-Constraints, Inflation, and Agricultural Prices,” invited paper presented at Winter Meetings of American Agricultural Economics Association, Dallas, Texas, December 1984.
  16. “International Debt and Credit Constraints,” seminar at International Economics Division, Economic Research Service, USDA, Washington, DC, November 1984.
  17. “Agriculture in a World Economy,” keynote address for University of Maryland-Oklahoma State Teleconference on Agricultural Trade, March 1985.
  18. “Domestic and International Agricultural Policy Interfaces,” invited presentation at Southern Agricultural Economics Association Annual Meeting, Orlando, Florida, February 1986.

19. "Agricultural Exports in a Dynamic World Economy," invited speech to Board of Directors of National Grain Trade Council, Scottsdale, Arizona, May 1986.
20. "Using Duality to Infer Decisionmakers' Preferences," invited seminar at the University of Delaware, October 1986.
21. "Domestic and International Agricultural Policy," invited speech at Pennsylvania State University, November 1986.
22. "Price Aggregation When Competitive Firms Prices Vary," invited seminar at the Pennsylvania State University, November 1986.
23. "On Agricultural Policy Making," invited seminar at the University of Arizona, November 1986.
24. "An Overview of Exchange Rates and Macroeconomics in U.S. Agriculture," invited presentation at Conference in Exchange Rates and Macroeconomics in U.S. Agriculture, Lake Tahoe, Nevada, Summer 1986.
25. "A Perspective on U.S. Agricultural Policy," invited presentation at workshop on U.S. Agricultural Policy, Institut de Gestion Internationale and Agro-Alimentaire, Cergy-Pontoise, France, May 1987.
26. "Designing Farm Programs," invited seminar presented at Purdue University, December 1987.
27. "Designing Producer Financed Farm Programs, or Should We Save the Cows?," seminar at the University of Chicago, Dept. of Economics, May 1987.
28. "Agricultural Conservation and Trade Policies: Inconsistent or Complementary," presented with Katharine Reichelderfer, at annual meetings of the American Agricultural Economics Association, Michigan State University, August 1987.
29. "Subsidies and Supply Control: The Case of Agricultural Policy," seminar presented at World Bank, November 1987.
30. "Inside the Black Box of Agricultural Policy," symposium presentation, American Agricultural Economic Association Annual Meeting, Knoxville, Tennessee, August 1988.
31. "Economics of Joint Production," seminar presented to Australian Bureau of Agricultural and Resource Economics, Canberra ACT, Australia, August 1988.
32. "Agricultural Insurance, Insurability, and Moral Hazard," invited seminar presented to the Faculty of Agriculture, LaTrobe University, Bundoora, Australia, August 1988.
33. "Separating Equilibria and the Rat Race in Loan Markets," invited seminar presented to Department of Agricultural Economics and Business, University of New England, Armidale, NSW Australia, August 1988.

34. "Choosing Agricultural Policies or When Should We "Save the Cows!"" invited seminar presented to Department of Agricultural Economics and Business, University of New England, Armidale, NSW Australia, August 1988.
35. "Inferring Decisionmaker Preferences," invited presentation for Sydney branch of the Australian Agricultural Economic Society, University of Sydney, Sydney, Australia, August 1988.
36. "Developments in Production Economics," invited address, 1988 Australian Economic Congress, Canberra, ACT Australia, August 1988.
37. "A U.S. View on Reducing World Agricultural Protection," invited presentation to Congress Symposium on Reducing World Agricultural Protection, 1988 Australian Economic Congress, Canberra ACT, Australia, August 1988.
38. "Agricultural Outlook under a New Administration," invited speech to Baltimore City Field Crops Day, December 1988.
39. "Economic Issues of the 1990 Farm Bill," invited speech at 70<sup>th</sup> Annual Meeting of Farm Bureau Federation, San Antonio, Texas, January 11, 1989.
40. "Recent Developments in Measuring Economics of Size," invited presentation NC-181, Tucson, Arizona, January 1989.
41. "Agriculture in a Changing World," keynote address, Delmarva Corn and Soybean Technology Conference, Salisbury, Maryland, February 8, 1989.
42. "What Do Aggregate Supply Curves Mean?" invited paper for Australian Agricultural Economics Society, Brisbane, Australia, February 1990.
43. "Tariff Reform and the Uniform Tariff," invited seminar presented at ABARE, Canberra, Australia, February 1990.
44. "The Simple Analytics of Nonjoint Production," invited seminar presented at ABARE, Canberra, Australia, February 1990.
45. "Issues in Aggregation," invited seminar presented at North Carolina State University, April 1991.
46. "Nonpoint Source Pollution as a Multi-Task Principal Agent Problem," invited seminar presented at University of California, Davis, June 1992.
47. "State-Contingent Moral Hazard," presented to Research School of Social Studies, Australian National University, Canberra, Australia, October 1994.
48. "Exploitation and Agency in Agrarian Contracts," seminar presented to Hubert Humphrey Institute, University of Minnesota, September 1995.

49. "Exploitation and Efficiency in Agrarian Contracts," seminar presented to Department of Economics, Southern Illinois University, November 1995.
50. "Exploitation and Agency in Agrarian Contracts," invited presentation, Conference on Industrial Organization and Food Processing, IDEI, Toulouse, France, April 1996.
51. "Input and Output Indicators", invited presentation, Arne Ryde Symposium on Productivity in Honor of Sten Malmquist, Lund, Sweden, May 1996.
52. "Aggregate Productivity Measures", Robert G. Chambers and Rulon D. Pope, invited paper, American Agricultural Economics Association annual meetings, 1996.
53. "Using Duality to Model the Effects of Changes in Agricultural Policy", seminar presented to the Economic Research Service, Washington, DC, December 1997.
54. "A Dual Bioeconomic Model of Short Run Fisheries Production", Robert G. Chambers and I.E. Stand, presented at the IXth Conference of the International Institute of Fisheries Economics and Trade, Tromso, Norway, July 1998.
55. "The State-Contingent Approach to Uncertain Production", seminar presented at the University of Arizona, October 1998.
56. "Supply Control and Acreage Retirement", Robert G. Chambers and Jean-Marc Bourgeon, invited paper, Conference on Industrial Organization and Food Processing, IDEI, Toulouse France, November 1998.
57. "Exploitation and Agency" Robert G. Chambers and John Quiggin, seminar presented to the Research School of Social Sciences, Australian National University, January 1999,
58. "Uncertainty, Production, Choice and Agency: The State-Contingent Approach", Robert G. Chambers and John Quiggin, workshop presented to The Economics Faculty, Australian National University, January 1999.
59. "Producer Organizations, Bargaining, and Asymmetric Information", Robert G. Chambers and Jean-Marc Bourgeon, invited paper, American Agricultural Economics Association winter meetings, 1999.
60. "Duality and Uncertainty", seminar Oregon State University, Economics Department, March 1999.
61. "Duality under Uncertainty", seminar North Carolina State University, Department of Agricultural Economics and Agribusiness, 1999.
62. "Stop-and-Go Agricultural Policies", seminar, Faculty of Agriculture, University of Western Australia, October 1999.

63. "Duality under Uncertainty", seminar, Faculty of Agriculture, University of Western Australia, October 1999.
64. "Incentives and Standards in Agency Contracts", invited paper, Conference on Industrial Organization and Food Processing, IDEI, Université de Toulouse, France, June 2000.
65. "Incentives and Standards in Agency Contracts", seminar, Faculty of Agriculture, University of Western Australia, October 2000.
66. "Dual Approaches to State-Contingent Supply Response Systems", invited presentation, Gulf Shores Regional Risk Meeting, March 2001.
67. "Standards in Agency Contracts", Université des Sciences Sociales, Toulouse, INRA, May 2001.
68. "Agency Contracts in a State-Contingent Setting", Keynote Address, Economics of Contracts in Agriculture and the Food Chain, 78<sup>th</sup> EAAE Seminar, Copenhagen, June 2001.
69. "Resource Allocation and Asset Pricing", Keynote Address, North American Productivity Workshop II, Union College, Schenectady, NY, June 2002.
70. "Implementable Ramsey-Boiteux Pricing in Agricultural and Environmental Policy", invited address, Economics of Contracts in Agriculture and the Environment, 82 EAAE Seminar, Copenhagen 2003.
71. "Superlative Productivity Measurement for Stochastic Technologies", invited seminar, University of California, Davis, Fall 2003.
72. "The Precautionary Principle and Pareto Optimality in an Uncertain World", invited seminar, ZEF, University of Bonn, March 2004.
73. "Productivity Measurement in an Uncertain World", Inaugural Address, 21eme Journées de Microéconomie Appliquée, Lille, France, May 2004.
74. "The Precautionary Principle and Pareto Optimality in an Uncertain World", seminar at GAPEM, Lille, France, May 2004.
75. "Productivity Measurement in an Uncertain World", Invited Lecture, GEREM, Université de Perpignan, France, May 2004.
76. "The Precautionary Principle and Pareto Optimality in an Uncertain World", Invited Lecture, GEREM, Université de Perpignan, France, May 2004.
77. "Productivity Measurement under Uncertainty" presented at the Social Sciences and Humanities Research Council of Canada International Conference on Index Number Theory and the Measurement of Prices and Productivity. Vancouver, Canada, July 2004.

78. “Productivity Measurement under Uncertainty” Invited Address at Asian-Pacific Productivity Conference, University of Queensland, Brisbane, Australia, July 2004.
79. “Productivity Measurement under Uncertainty” Invited Workshop at Australian Bureau of Agricultural and Resource Economics, Canberra, Australia, July 2004.
80. “A Cost-based Approach to Asset Pricing”, invited seminar, Université de Perpignan, June 2005.
81. “Some Empirical Implications of State-Contingent Production Models”, Invited Paper at Australian Agricultural and Resource Economics Society annual meetings, Manly Beach, Sydney, Australia, February 2006.
82. “The Dynamics of Food Scares”, Invited Lecture, GEREM, Université de Perpignan, June 2006.
83. “Stochastic Productivity Measurement”. Invited presentation *Trends & Forces in International Productivity Growth* workshop jointly sponsored by ERS/USDA and the Farm Foundation. Washington, DC. March 17, 2007.
84. “Generalized Invariant Preferences”, Invited Seminar, Department of Economics, Oregon State University, May 4, 2007.
85. “Generalized Invariant Preferences”, Invited Seminar, GEREM, Université de Perpignan, June 2007.
86. “Generalized Invariant Preferences”, Invited Seminar, University of Nevada, Reno, Fall 2007.
87. “Hazard Valuation in an Uncertain World”, I. W. Arthur Memorial Lecture, Iowa State University, April 28, 2008.
88. “Hazard Valuation in an Uncertain World”, Invited Seminar, Université de Perpignan, Via Domitia, October 2008.
89. “Hazard Valuation in an Uncertain World”, Invited Seminar, Sveriges Landbruksuniversitet (Swedish University of Agricultural Sciences), Uppsala, Sweden, November 5, 2008.
90. “Hazard Valuation in an Uncertain World”, Workshop Presentation, Università di Verona, Verona, Italy, November, 2008.
91. “The Equity Premium and the Aggregate Technology”, Invited Seminar, AEM, Cornell University, December 12, 2008.
92. “Decisionmaking under Uncertainty”. Invited Workshop, School of Agricultural and Resource Economics, University of Western Australia, Perth, Australia, January 15, 2009.



93. “Productivity Measurement under Uncertainty”. Invited Workshop (with John Quiggin, Massimo Marinacci, Fabio Maccheroni, and Louis Eeckhoudt), Università di Verona, September 2009.
94. “The Bureau of Agricultural Economics and the Foundations of Applied Production Analysis”. Invited seminar, Economic Research Service, United States Department of Agriculture, April 19, 2010.
95. “The Economics of Uncertainty and Decision Theory”. Invited address at *Environmental Decisions: Risks and Uncertainties* Conference sponsored by IED/ETH Zurich, at Ascona, Switzerland, 25-29 April 2010.
96. “The Sources of Measured US Agricultural Productivity Growth”. Invited presentation at *Efficiency Measurement: New Methods and Applications to the Food Sector*. Toulouse School of Economics (IDEI/INRA), Toulouse, France, June 2011.
97. “Productivity Accounting for Separable Technologies”, Plenary Address, North American Productivity Workshop VI, Houston, Texas, June 2012.
98. “Sources of Measured Agricultural Productivity Growth”, Plenary Address, International Agricultural Trade Research Consortium, Sevilla, Spain, June 2013
99. “Invariant Preferences and Supply Response”, 133 EAAE Seminar, Chania, Crete, Greece, June 2013.
100. “On the Pricing of Undesireable Outputs”, Plenary address, European Agricultural Economics Association Congress, Ljubljana, August 2014.
101. “Economic Rhetoric and Climate Change”, University of Exeter, October 2014.
102. “Crop-Insurance Fundamentals”, University of Florida, November 2015.
103. “Thinking About Agricultural Productivity Accounting in the Presence of By-Products”, presented at *OECD Expert Workshop: Measuring Environmentally-Adjusted TFT for Agriculture*, OECD, Paris, France, December 14-15, 2015
104. “Weather and Technical Change as Sources of Measured US Agricultural Productivity Growth” (with Simone Pieralli), presented at *OECD Expert Workshop: Measuring Environmentally-Adjusted TFT for Agriculture*, OECD, Paris, France, December 14-15, 2015.
105. “Integrating Weather into Agricultural Total Factor Productivity Measurement”, presented at meeting of *OECD Network on Agricultural Total Factor Productivity and the Environment*, OECD, Paris, France, May 23-24, 2017.
106. “Modeling Undesireable Outputs State-Contingent Outputs”, presented to Joint Research Commission of the European Union, Seville, Spain, June 16, 2017.

107. “Sources of Measured US Agricultural Productivity Growth. Invited Public Lecture, Peking University, October 2017.
108. “Production Uncertainty and Profit Maximization”. Invited address to AAEA Risk Section Luncheon, Washington DC, August 2018.
109. “Incomplete Preferences, Willingness to Pay and Willingness to Accept”. Seminar presented at AEM, Cornell University, September 2018
110. “Production Uncertainty and Profit Maximization”. Invited Public Lecture, Peking University, October 2018.
111. “Ambiguity and Climate Change”. Presented to Summer School, Warwick University June 2019.
112. “Climate Change and US Agriculture”. Presented to Summer School, Warwick University, June 2019.
113. “Issues in Agricultural Total Factor Productivity Measurement”, presented at meeting of *OECD Network on Agricultural Total Factor Productivity and the Environment*, University of Maryland, College Park, October 2019.
114. “The Millennium Droughts and Australian Agricultural Productivity Performance”. Nankai University, December 2019
115. “The Millennium Droughts and Australian Agricultural Productivity Performance”. Peking University, December 2019
116. “Nonlinear, but Nice, Engel Curves”. Distinguished Fellow Lecture, China Centre for Agricultural Policy, Peking University (online). November 2020
117. “Economic Analysis and Policy in Ambiguous Times”. Keynote Address. Australasian Agricultural and Resource Economics Society. February 9, 2021.
118. “GMOs and Agricultural Labor Productivity”. Plenary Address, 10<sup>th</sup> Asian Society of Agricultural Economics Conference, Beijing (online). December 8, 2021.
119. “How Important Is the Material Balance Issue and How to Deal With It?. Invited Address, 7<sup>th</sup> meeting of the OECD Network on Agricultural Total Factor Productivity and the Environment. OECD headquarters, Paris, 5-6 December 2022. (online)

**ii. Contributed Talks, etc.**

**Abstracts**

1. "Are Agricultural Markets in Disequilibrium?" American Journal of Agricultural Economics 61 (1979): 1130.
2. "International Trade, Customs Unions, Cartels and Centrally Planned Economies," American Journal of Agricultural Economics 61 (1979): 1142.
3. "Resource Stocks and Supply Estimation: An Alternative Approach," Ivar E. Strand and Robert G. Chambers, American Journal of Agricultural Economics 62 (1980):1116.
4. "Modelling Acreage Response in a Controlled But Uncertain Market," Robert G. Chambers and Richard E. Just, American Journal of Agricultural Economics 62 (1981): 1040.
5. "Theoretical and Empirical Considerations for Price Margins: An Application to Striped Bass," Ivar E. Strand and Robert G. Chambers, American Journal of Agricultural Economics 63 (1981): 1045.
6. "Wheat Cartelization and Domestic Markets," Robert G. Chambers and Michael W. Woolverton, Journal of Marketing, Summer 1981 (abstracted from American Journal of Agricultural Economics, see 2.b.3).
7. "A Test of the Putty-Clay Hypothesis for U.S. Agriculture," U. Vasavada and Robert G. Chambers, American Journal of Agricultural Economics 64 (1982).
8. "Investment in Land and Capital Markets in U.S. Agricultural," Robert G. Chambers and Utpal Vasavada, American Journal of Agricultural Economics 65 (1983).

### **Presentations**

1. "International Trade, Cartels, Customs Union and Centrally Planned Economies," presented at annual meetings of American Agricultural Economics Association, Pullman, Washington, August 1979.
2. "Are Agricultural Markets in Disequilibrium?" Symposium moderator at annual meetings of American Association of Agricultural Economics, Pullman, Washington, August 1979.
3. "Qualitative Econometrics of Agriculture," with Richard E. Just, presented at International Atlantic Economic Conference, Freeport, the Bahamas, February 1980.
4. "Resource Stocks and Supply Estimation: An Alternative Approach," with Ivar E. Strand, presented at annual meeting of American Agricultural Economics Association, Urbana, Illinois, July 1980.
5. "Estimation Methods for Markets Characterized by Threshold Price Regulations," with Richard E. Just and L. Joe Moffitt, presented at Fourth World Econometrics Congress, Aix-en-Provence, France, August 1980.

6. "Reduced Form Estimation in Seemingly Recursive Simultaneous Equation Systems," with Richard E. Just, presented at Fourth World Econometric Congress, Aix-en-Provence, France, August 1980.
7. "Investigation of the Determinants of Participation in the Farmer Owned Reserve," with William E. Foster, presented at North Central Regional Project #152 meeting, Chicago, Illinois, October 1980.
8. "Duality Approaches to Price-Dependent Demand System," with Kenneth E. McConnell, presented Northeastern Agricultural Economics Council Annual Meeting, June 1981.
9. "Estimation Methods for Markets Subject to Quota Regulations," with Richard E. Just and L. Joe Moffitt, presented at Northeastern Agricultural Economics Council Annual Meetings, June 1981.
10. "Modelling Acreage Response in a Controlled but Uncertain Market," with Richard E. Just, presented at annual meetings of American Agricultural Economics Association, Clemson, South Carolina, July 1981.
11. "Theoretical and Empirical Considerations for Price Margins: An Application to Striped Bass," with Ivar E. Strand, presented at annual meetings of American Agricultural Economics Association, Clemson, South Carolina, July 1981.
12. "Short-Run Implications of Monetary Policy for Agricultural Markets," seminar presented at Department of Agricultural and Applied Economics, University of Minnesota, St. Paul, October 23, 1981.
13. "A Characterization of Technology in the Meat Products Industry," with V. Eldon Ball, presented at winter meetings of Southern Alliance of Agricultural Scientists (Agricultural Economics Section), Orlando, Florida, February 8, 1982.
14. "The Subsidy Component of U.S. Agricultural Exports," with Otto Doering and Andrew Schmitz, presented by Schmitz at the International Trade Conference sponsored by USDA-University Consortium on International Trade, St. Louis, Missouri, June 22-25, 1982.
15. "A Test of the Putty-Clay Hypothesis for U.S. Agriculture," with Utpal Vasavada, presented at annual meeting of American Agricultural Economic Association, Logan, Utah, 1982.
16. "Discussion of Growth and Equity," contributed paper session, Eighteenth International Agricultural Economic Conference, Jakarta, Indonesia, August 1982.
17. "Are There Any Gains From Agricultural Trade?" presentation with A. Schmitz to the USDA and Universities Consortium on Agricultural Trade Research, Airlie Mansion, Airlie, Virginia, December 1982.

18. "Testing the Flexible Accelerator for U.S. Agriculture," with U. Vasavada at annual meetings of Western Agricultural Economics Association, Laramie, Wyoming, July 1983.
19. "Investment in Land and Capital Markets in U.S. Agriculture," with U. Vasavada, presented at American Agricultural Economics Association annual meetings, Purdue, Indiana, August 1983.
20. "Macroeconomic and Political Economy Research Issues A University Perspective," presented at ERS Macroeconomic and Political Economy Research Planning Meeting, Arlington, VA, August 8-9, 1983.
21. "Agricultural and Financial Market Interdependence in the Short-Run," seminar presented to International Economics Division, Economic Research Service, USDA, Washington, D.C., September 26, 1983.
22. "Why the Partial Adjustment Model Makes Sense," Robert G. Chambers and Utpal Vasavada, presented by Vasavada at annual meetings of Southern Agricultural Economics Association, Nashville, Tennessee, February 1984.
23. "Trade and Macroeconomic Economic Dimensions of Agricultural Policies: Discussion," presented at Alternative Agricultural and Food Policies and the 1985 Farm Bill conference, Berkeley, CA, June 1984.
24. "Agriculture in a World Economy," presented to Maryland Cooperative Extension Agents meeting, March 1985.
25. "Monetary Policy and Agricultural Prices," presented at annual meetings of American Agricultural Economics Association, Ames, Iowa, August 1985.
26. "Macroeconomics and Agriculture: Discussion," presented at annual meetings of the Allied Social Sciences Association, New York, December 1985.
27. "A Closer Look at the Macroeconomics of Agriculture," presented at annual meetings of Midwestern Economics Association, Chicago, Illinois, March 1986.
28. "U.S. Agricultural Policy in a Trading World," presented at American Soybean Association Leadership Development Program, St. Louis, Missouri, January 1987.
29. "The Long-Run Implications of U.S. Food Aid," International Development Conference, Washington, D.C., March 1987.
30. "Debt Contracts and Hidden Action," contributed paper to Australian Economic Society annual meeting, Canberra ACT, Australia, August 1988.
31. "Inferring Decisionmaker Preferences from Market Outcomes," seminar presented to Industries Assistance Commission, Belconnen ACT, Australia, September 1988.

32. “Are More Exports Always Better?” presented to Southern Regional Committee on International Trade, New Orleans, November 1989.
33. “Some Notes on Sharecropping and U.S. Agriculture,” presented at AAEA annual meetings, August 1990.
34. “Minimum-Quality Standards and Asymmetric Information,” seminar presented at CED/ERS/USDA, December 1990.
35. “Externalities and Sharecropping,” presented at Land, Ownership and Taxation Symposium, Sheraton Hotel, Washington, DC, October 1991.
36. “Minimum-Quality Standards are Nontariff Trade Barriers,” presented at International Agricultural Trade Research Consortium, New Orleans, December 1991.
37. “Perennial Production and NAFTA,” presented to Development Branch, RTD/ERS/USDA, Washington, DC, July 1992.
38. “Superlative Productivity Measurement for Stochastic Technologies and Stochastic Markets”, Eighth European Workshop on Productivity and Efficiency Analysis, Oviedo, Spain, September 2003.
39. “DEA and Pricing for Producer Cooperatives”, with Angelo Zago, Eighth European Workshop on Productivity and Efficiency Analysis, Oviedo, Spain, September 2003.
40. “An Empirical View of Dryland Salinity in Western Australia”, with Atakelty Hailu, Eighth European Workshop on Productivity and Efficiency Analysis, Oviedo, Spain, September 2003.
41. “A Cost-based Approach to Asset Pricing”, Ninth European Workshop on Productivity and Efficiency Analysis, Brussels, Belgium, June 2005.
42. “Stochastic Productivity Measurement”, North American Productivity Workshop, Stern School of Business, New York, Summer 2006.
43. “Efficiency Analysis in the Presence of Uncertainty”, North American Productivity Workshop, Stern School of Business, New York, Summer 2006.
44. “The Estimation of Dual Cost Functions for Stochastic Technologies”. European Workshop on Productivity and Efficiency Analysis, Lille, France, Summer 2007.
45. “The Choice of Direction”, North American Productivity Workshop, Stern School of Business, Summer 2008.
46. “Efficiency Analysis, Shortage Functions, Arbitrage, and Martingales”. European Workshop on Efficiency and Productivity Analysis, Pisa, Italy, Summer 2009.

**g. Other Creative and Scholarly Activities**

1. Organized Second Annual Joint Workshop on Agricultural Contracts, KVL and University of Maryland, held in Annapolis, MD with 90 attendees.
  2. Organized and hosted Autumn 2019 meeting of the *OECD Network on Agricultural Total Factor Productivity and the Environment*. Held in College Park MD 2019. Participants were from all of the major OECD countries
- h. Original Designs and Plans, and Patents** None
- i. Contracts and Grants**
1. University Research Grant, The Ohio State University, 1979. To develop econometric methodology for evaluating the consequences of regulations in the natural gas and other regulated markets (results reported in 2.c.6).
  2. Travel Grant, Econometric Society. Awarded on a competitive basis to an individual presenting paper at Fourth World Econometric Congress in Aix-ex-Provence, France, August 1980. Amount \$400.
  3. Travel Grant, the Graduate School of the University of Maryland to attend Fourth World Econometric Congress in Aix-en-Provence, France, August 1980.
  4. Sponsored representative to triennial conference of the International Association of Agricultural Economists, Jakarta, Indonesia, grant received from American Association of Agricultural Economics and United States Department of Agriculture, 1982.
  5. Travel Grant, the Graduate School of the University of Maryland to attend triennial conference of International Association of Agricultural Economics, 1982.
  6. Cooperative Agreement with International Economics Division, Economic Research Service, United States Department of Agriculture to investigate the magnitude and determinants of gains from agricultural trade (Robert G. Chambers, principal investigator).
  7. Cooperative Agreement with International Economic Division, ERS-USDA, “Assessing the Gains from U.S. Agricultural Trade,” (Robert G. Chambers, principal investigator).
  8. Contract with U.S. Central Intelligence Agency to investigate determinants of energy demand in developing countries (Wen Chern, principal investigator. R. Chambers’ duties included development of Latin American energy demand model).
  9. Cooperative Agreement with National Economics Division, Economic Research Service, United States Department of Agriculture “Consumer Wealth, Discretionary Income and Aggregate Food Demand” (Robert G. Chambers, principal investigator).

10. Cooperative Agreement with International Economics Division, Economic Research Service, United States Department of Agriculture, “Developing Nations and the International Debt Problem” (Robert G. Chambers, principal investigator).
11. Cooperative Agreement with CED/ERS/USDA, “Choosing Quality with Uncertainty” (Robert G. Chambers, principal investigator).
12. Cooperative Agreement with RTD/ERS/USDA, “The Conservation Reserve Program and Auction Design” (Robert Chambers, principal investigator; Rodney Smith, investigator).
13. Cooperative Agreement with RTD/ERS/USDA “Sharecropping in the United States” (Robert G. Chambers, principal investigator).
14. National Research Initiative Competitive Grant, Cooperative State Research Service, United States Department of Agriculture, “Effects of Proposed Free Trade Areas on Competitiveness of U.S. Agriculture,” (Earl Brown and Robert G. Chambers, co-principal investigators), 1992.
15. Competitive Grant, Sustainable Agriculture Economic Impacts Study, USDA/EPA Research and Education Grants Program, “Economics of Sustainable Farming Systems in the Mid-Atlantic,” (Erik Lichtenberg, Robert G. Chambers, and James Hanson, principal investigators).
16. Cooperative Agreement with ERS/USDA, “Estimating the Effects of the Farm Act on US Agricultural Supply Response”, (Robert G. Chambers, principal investigator), 1998.
17. Cooperative Agreement with ERS/USDA, “Contracting under Uncertainty”, (Robert G. Chambers, principal investigator), 2006.
18. Cooperative Agreement with ERS/USDA, “Hazard Assessment in an Uncertain World”, (Robert G. Chambers, principal investigator), 2007.
19. Competitive Grant, NIFA, USDA, "Increasing Water Productivity, Nutrient Efficiency, and Soil Health in Rainfed Food Systems of Semi-Arid Southern Great Plains", Kansas State University, Oklahoma State University, and University of Maryland (sub-award agreement # A200118S001) (Robert G. Chambers, co-investigator), 2019-2024.
20. Competitive Grant, NIFA, USDA, “Research and Development and Agricultural Productivity in a Changing Climate”. Cornell University and University of Maryland. (Ariel Ortiz-Bobea and Robert G Chambers, principal investigators), 2022-2024.

**j. Fellowships, Prizes, and Awards**

1. Charles Atwood Kofoid Eugenics Fellowship, University of California, Berkeley, 1975-76.



2. Phi Kappa Phi (elected by University of Maryland Chapter, 1975).
3. Agricultural and Life Sciences Faculty Excellence Award for Young Faculty for 1983-84, Division of Agricultural and Life Sciences, University of Maryland.
4. Nominated for Alan T. Waterman Award of the National Science Foundation, 1983.
5. Nominated for Maryland Outstanding Young Scientist Award, Maryland Academy of Science, 1983.
6. Quality of Research Discovery Award (“Agricultural and Financial Market Independence in the Short Run”), American Agricultural Economics Association, 1985.
7. Certificate of Recognition, Annual Honors Convocation, University of Maryland, 1986.
8. Quality of Research Discovery Award (“Estimating Multi-Output Technologies”), American Agricultural Economic Association, 1990.
9. Excellence in Research Award, Alumni Association, College of Agriculture, University of Maryland, College Park, 1992.
10. Faculty Excellence Award for Research, Colleges of Agriculture and Life Sciences, University of Maryland, College Park, 1993.
11. Honorable Mention AAEA Quality of Research Discovery Award, American Agricultural Economics Association, 1997.
12. Excellence in Teaching Award, College of Agriculture, Alumni Association, 1998.
13. Dean Gordon Cairns Award for Outstanding Contributions to Maryland Agriculture, College of Agriculture and Natural Resources, 1999.
14. Publication of Enduring Quality Award (Applied Production Analysis: A Dual Approach), American Agricultural Economics Association, 1999.
15. Fellow, American Agricultural Economics Association, 1999.
16. Adjunct Professor, School of Agricultural Economics, University of Western Australia, 2000-2006, and 2009 to present.
17. Quality of Research Discovery Award, Honorable Mention, (*Uncertainty, Production, Choice, and Agency: The State-Contingent Approach*), American Agricultural Economics Association, 2001.
18. Honorary Professor, University of Queensland, 2006 to 2022.

19. Excellence in Teaching Award, College of Agriculture and Natural Resources Alumni Association, 2010.
20. SCOR/IDEI Award for best paper published in Geneva Review of Insurance and Risk awarded to "Bargaining Power and Efficiency in Insurance Contracts" (joint with John Quiggin), 2010.
21. Quality of Research Discovery Award, European Association of Agricultural Economists, 2011 (joint with Christopher O'Donnell and John Quiggin).
22. "Benefit and Distance Functions," Robert G. Chambers, Yangho Chung, and Rolf Färe, *Journal of Economic Theory* 70 (August 1996): 407-419. Included in special issue of the *Journal of Economic Theory* 187 (May 2020) honoring top 50 papers published in first 50 years of the Journal of Economic Theory

**k. Editorships, Editorial Boards, and Reviewing Activities for Journals and Other Learned Publications**

1. Associate Editor for American Journal of Agricultural Economics for international trade and marketing, 1983-1985.
2. Associate Editor, Journal of Productivity Analysis, 2009-2018.
3. Editor, Journal of Productivity Analysis, 2019-2022.
4. Editor-in-Chief, Journal of Productivity Analysis, 2022-

**Referee Activity**

1. American Economic Review
2. American Journal of Agricultural Economics
3. Australian Journal of Agricultural and Resource Economics
4. Canadian Journal of Economics
5. Contemporary Policy Issues
6. Economic Inquiry
7. International Economic Review
8. Journal of Agribusiness
9. Journal of Agricultural Economics Research

10. Journal of Economics and Behavioral Organization
11. Journal of Economics and Business
12. Journal of Northeast Agricultural Economics
13. Journal of Productivity Analysis
14. Journal of Public Economics
15. North Central Journal of Agricultural Economics
16. Social Science Quarterly
17. Southern Journal of Agricultural Economics
18. Southern Journal of Economics
19. Western Journal of Agricultural Economics
20. Zeitschrift für Nationalökonomie
21. Journal of Applied Econometrics
22. Journal of Environmental Economics and Management
23. Journal of Economic Dynamics and Control
24. Journal of Development Economics
25. Management Science
26. Journal of Econometrics
27. Economic Theory
28. European Journal of Operational Research
29. Environmental Management
30. Nova Economia
31. International Journal of Economic Theory
32. B.E. Journals in Economic Analysis and Policy
33. Managerial and Decision Economics

34. World Bank Economic Review
35. Journal of Optimization Theory and Applications
36. Socio-Economic Planning Sciences
37. Annals of Operations Research
38. Journal of Risk and Uncertainty
39. Decisions in Economics and Finance
40. The Manchester School
41. The Economic Journal
42. Operations Research
43. Journal of Economic Theory

**1. Other – Manuscripts, Working Papers, and Papers in Review**

1. “Inequality Measures and Integrable Demand Systems,” Robert G. Chambers and Rulon D. Pope, Working Paper 91-08, Department of Agricultural and Resource Economics, University of Maryland, College Park.
2. “Production under Uncertainty,” Robert G. Chambers and John Quiggin, Working Paper 92-03, Department of Agricultural and Resource Economics, University of Maryland, College Park.
3. “Generalized Gorman Aggregation,” Robert G. Chambers and Rulon D. Pope.
4. “The Simple Analytics of Joint Production”, Robert G. Chambers, Working Paper 94-05, Department of Agricultural and Resource Economics, University of Maryland, College Park.
5. "National Agricultural Policies in a Free-Trade Area", Robert G. Chambers, Working Paper 94-01, Department of Agricultural and Resource Economics, University of Maryland, College Park.
6. "Testing Specifications for Pest Management Technology Abatement Functions", Robert G. Chambers and Erik Lichtenberg, Working Paper 93-04, Department of Agricultural and Resource Economics, University of Maryland, College Park.
7. “A Dual Bioeconomic Model of Fishery Supply Response”, Robert G. Chambers and Ivar E. Strand.

8. “Bargaining Power and Efficiency in Principal-Agent Contracts”, John Quiggin and Robert G. Chambers.
9. “Arbitrage, Asset Pricing, and Resource Allocation”, Robert G. Chambers and John Quiggin, working paper, February 2002.
10. “Resource Allocation and Asset Pricing”, Robert G. Chambers and John Quiggin, 2002.
11. “Production and financing decisions for the sole-proprietorship firm”. Robert G. Chambers and John Quiggin.
12. “Willingness to Pay and the Willingness to Accept”. Robert G. Chambers and Rolf Fare.
13. “Optimal Hedging?” Robert G. Chambers
14. “Input Use and Production Risk”. Robert G. Chambers
15. “Hazard Valuation in an Uncertain World”. Robert G. Chambers.
16. “Experimental Evidence on Multiple-Prior Models in the Presence of Uncertainty”. Robert G. Chambers, Tigran Melkonyan, and Daniel Pick”.
17. “Parametrized Expansion Paths”. Robert G. Chambers and Rolf Fare.
18. “The Equity Premium and the Aggregate Technology”. Robert G. Chambers and John Quiggin.
19. ““Risk, Uncertainty, and the Environmental Kuznets’ Curve” Robert G. Chambers and Tigran Melkonyan.
20. “Growth, Material Balance, and the Environmental Kuznets Curve” with Tigran Melkonyan, Sushama Murty, and Steve Levkoff
21. Decomposing the Inverse Yield-Land-Size Relationship” with Simone Pieralli
22. “Marginal Analysis for General Technologies”. Robert G Chambers and Victor Podinovski
23. “Nonlinear, but Nice, Engel Curves”. Robert G Chambers
24. “Path-Based Set Representations”. Robert G. Chambers (in review, available on personal website).
25. “GMOs and Agricultural Productivity”. Robert G Chambers and Yu Sheng. (in review, available on personal website).
26. “Overall Inefficiency Measures: A Different Perspective”. Robert G Chambers (in review, available on personal website).

27. “Precision Nitrogen Management for Winter Wheat under Price and Weather Uncertainty”. Xiangjie Chen, Robert G Chambers, Varaprasad Bandaru, Curtis Jones, Tyson Ochsner, and Travis Witt (in review).
28. “Bt Technology and Chinese Cotton Yields: Evidence from a County-level Analysis”. Robert G Chambers and Yu Sheng (in review).

### **3. Teaching and Advising**

#### **a. Courses Taught**

1. Academic Year 1978-1979 (Ohio State University) AE 806, Economics and Agricultural Production (4 students).
2. Academic Year 1979-1980 (University of Maryland) AREC 806, Economics of Agricultural Production (3 students).
3. Academic Year 1980-1981 (University of Maryland) AREC 806, Economics of Agricultural Production (2 students).
4. Academic Year 1981-1982 (University of Maryland) AREC 250, Introduction to Agricultural and Resource Economics (37 students).
5. Academic Year 1982-1983 (University of Maryland) AREC 689, International Agricultural Trade (5 students); AREC 806, Economics of Agricultural Production (3 students).
6. Spring 1983 (Oregon State University) International Agricultural Trade (15 students).
7. Fall 1983 (University of Maryland) AREC 699, Special Topics in Agricultural Economics (1 student); AREC 806, Economics of Agricultural Production (8 students).
8. Fall 1984 (University of Maryland) AREC 806, Economics of Agricultural Production (7 students).
9. Spring 1987 (University of Maryland) AREC 405, Economics of Agricultural Production (8 students).
10. Fall 1987 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (50 students).
11. Fall 1988 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (45 students).
12. Spring 1989 (University of Maryland) AREC 405, Economics of Agricultural Production (7 students).

13. Spring 1990 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (90 students).
14. Spring 1991 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (60 students).
15. Spring 1991 (University of Maryland) AREC 832/632, Agricultural Policy Analysis (6 students).
16. Spring 1992 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (62 students).
17. Spring 1993 (University of Maryland) AREC 250, Elements of Agricultural and Resource Economics (45 students); AREC 832/632, Agricultural Policy Analysis (4 students).
18. Spring 1995 (University of Maryland) AREC 610, Microeconomic Applications in Agricultural and Resource Markets (12 students).
19. Spring 1996 (University of Maryland) AREC 405, Economics of Agricultural Production (15 students); AREC 610, Microeconomic Applications in Agricultural and Resource Markets (18 students).
20. Spring 1997 (University of Maryland) AREC 405, Economics of Agricultural Production (12 students); AREC 610, Microeconomics Applications in Agricultural and Resource Markets (10 students); AREC 632/832, Advanced Agricultural Policy Analysis (6 students).
21. Spring 1998 (University of Maryland) AREC 405, Economics of Agricultural Production (21 students); AREC 610, Microeconomic Applications in Agricultural and Resource Markets (12 students).
22. Spring 1999 (University of Maryland) AREC 405, Economics of Agricultural Production (17 students); AREC 610, Microeconomic Applications in Agricultural and Resource Markets (9 students).
23. Spring 2000 (University of Maryland) AREC 405, Economics of Agricultural Production (16 students); AREC 610, Microeconomic Applications in Agricultural and Resource Markets (12 students).
24. Spring 2001, On sabbatic leave.
25. Spring 2002, (University of Maryland), AREC 405, Economics of Agricultural Production (18 students); AREC 869 (Information and Institutions in Agriculture, Natural Resources and Development).

26. Spring 2003, (University of Maryland), AREC 405, Economics of Agricultural Production (17 students); AREC 869, Information and Institutions in Agriculture, Natural Resources and Development.
27. Fall 2003, (University of Maryland), AREC 405, Economics of Agricultural Production (18 students), AREC 869, Information and Institutions in Agriculture, Natural Resources and Development (3 students).
28. Fall 2004, (University of Maryland), AREC 405 Economics of Agricultural Production (17 students); AREC 632/832, Agricultural Policy (2 students)
29. Fall 2005, (University of Maryland), AREC 405 Economics of Agricultural Production (19 students); AREC632/832, Agricultural Policy (3 students)
30. Fall 2006, (University of Maryland), AREC 405 Economics of Agricultural Production (19 students). AREC 869c (2 students).
31. Fall 2007, (University of Maryland), AREC 405 Economics of Agricultural Production (23 students). AREC 869c (5 students).
32. Spring 2009, (University of Maryland), AREC 489 Special Topics in Agricultural and Resource Economics (44 students). AREC 610 (13 students).
33. Spring 2010 (University of Maryland), AREC 869 (9 students), AREC 405 (42 students).
34. Spring 2011 (University of Maryland), AREC 610 (7 students), AREC 405 (40 students).
35. Spring 2012 (University of Maryland), AREC 610 (8 students), AREC 405 (41 students)
36. Spring 2013 (University of Maryland), AREC 610 (7 students), AREC 405 (39 students)
37. Spring 2015 (University of Maryland), AREC 610 instructional duties shared with Professors Olson, Houde, and McConnell
38. Spring 2016 (University of Maryland), AREC 610 (9 students), AREC 405 (33 students)
39. Spring 2017 (University of Maryland), AREC 610 (8 students), AREC 405 (36 students)
40. Spring 2018 (University of Maryland), AREC 610 (7 students), AREC 405 (42 students)
41. Spring 2019 (University of Maryland), AREC 610 (3 students), AREC 405 (19 students)
42. Spring 2020 (on sabbatic leave)
43. Spring 2021(University of Maryland), AREC 326 (19 students), AREC 405 (18 students)
44. Spring 2022 (University of Maryland), AREC 326 and AREC 405 (approximately 20 students in each).



**b. Lecture Series at other Universities**

1. Lectures on Production Analysis at the Royal Veterinary and Agricultural (KVL) University, Denmark, 1990. Lectured for two weeks, summer 1990.
2. Lectures on Production Analysis at University of Helsinki, Finland, Summer 1994.
3. Lectures at University of Western Australia, October 1999
4. Lectures on Production Analysis at University of Western Australia, October 2000 (as part of adjunct professorship with that University).
5. Lectures on Directional Distance Functions and Economic Theory, series of three lectures presented at Cornell University, Department of Agricultural Economics, July 1999.
6. Lectures on Uncertainty and Contracting at the Royal Veterinary and Agricultural University. Lectured for two weeks, summer 2001.
7. Lectures on Uncertainty and Contracting, Università Cattolica, Cremona, Italy, summer 2002 (20 hours of lectures).
8. Professeur Invité (Invited Professor), Université de Perpignan, France, May 2004.
9. Professeur Invité (Invited Professor), Université de Perpignan, France, May 2006.
10. Professeur Invité (Invited Professor), Université de Perpignan, Via Domitia, France, June 2007.
11. Professeur Invité (Invited Professor), Université de Perpignan, Via Domitia, France, October 2008
12. Professeur Invité (Invited Professor), Université de Perpignan, Via Domitia, France, December 2009.
13. Lectures on Uncertainty and Decisionmaking (with John Quiggin and Louis Eeckhoudt), Università di Verona, Verona, Italy, September 2009.
14. Professeur Invité (Invited Professor), Université de Perpignan, Via Domitia, France, June 2010.
15. Advanced Production Economics Summer School, SLU (Sweden) June 2010.
16. EDN Winter School (hosted by University of Queensland) on Decision Making under Uncertainty (with Professor Simon Grant), Brisbane, Australia, July 2010.
17. Lectures on Production and Efficiency Analysis (hosted by Università di Verona) (done jointly with Rolf Fare), Verona, Italy, June 2011.

18. Advanced Summer School in Economics and Econometrics, Decisionmaking under Uncertainty (hosted by University of Crete), August 2011.

**c. Manuals, Notes, and Other Contributions to Teaching**

1. *Lectures on Production Economics*. Robert G. Chambers, 2021.

**d. Teaching Awards**

1. Excellence in Teaching Award, College of Agriculture and Natural Resources Alumni Association, April 1998.
2. Excellence in Teaching Award, College of Agriculture and Natural Resources, Alumni Association, 2009.
3. Paul R. Poffenberger Excellence in Teaching and Advising Award, College of Agriculture and Natural Resources, University of Maryland, May 2010.

**e. Advising: Other Than Research** None

**f. Advising: Research Direction**

**Principal Advisor**

<u>Name</u>	<u>Program</u>	<u>Department</u>	<u>Employment</u>
V. Eldon Ball*	Ph.D.	AREC	USDA
William Foster*	M.S.	AREC	Catholic University (Chile)
Richard Nehring*	Ph.D.	AREC	USDA
Utpal Vasavada*	Ph.D.	AREC	USDA
Utpal Vasavada*	M.S.	AREC	USDA
Hyunok Lee*	Ph.D.	AREC	University of California, Davis
Rodney Smith*	Ph.D.	AREC	University of Minnesota
Edward Jaenicke*	Ph.D.	AREC	Pennsylvania State University
Brent Hueth*	Ph.D.	AREC	University of Wisconsin
Stefanie Kirchoff*	Ph.D.	AREC	ETH, Zurich
Lishu Ouyang*	Ph.D.	AREC	not known
Angelo Zago*	Ph.D.	AREC	University of Verona (Italy)
Jonathan Alevy*	Ph.D.	AREC	University of Nevada (Reno)
Sumeet Gulati*	Ph.D.	AREC	University of British Columbia
Glenn Sheriff*	Ph.D.	AREC	Columbia University
Yann Bramoullé*	Ph. D	AREC	Université de Laval
Gregmar Galinato*	Ph. D	AREC	Washington State University
Tarik Chfadi*	Ph. D	AREC	World Bank
Niti Bhutani*	Ph. D	AREC	Delhi University
Michael Taylor*	Ph. D	AREC	University of Nevada

Dimitrios Reppas*	Ph. D	AREC	University of Manchester
Simone Pieralli*	Ph.D	AREC	European Commission
Kota Minegishi*	Ph.D	AREC	University of Minnesota
Daniel Voica*	Ph.D	AREC	Massey University

\*Degree awarded

### Committee Member

<u>Name</u>	<u>Program</u>	<u>Department</u>
Abraham Bekele*	Ph.D.	AREC
Gregory Hitz*	Ph.D.	AREC
Thomas Lutton*	Ph.D.	AREC
Christopher Ndenecho*	M.S.	AREC
Howell Zee*	Ph.D.	ECON
David Lynch*	Ph.D.	ECON
Ann Marie Hilberg*	Ph.D	Agric. Econ. (Purdue Univ.)
Colin G. Brown*	Ph.D	Univ. of Queensland, Australia
Mary Barcellas*	Ph.D.	ECON
Thomas Rumbaugh *	Ph.D.	ECON
David Campbell*	Ph.D.	ECON
Oh Sang Kwon*	Ph.D.	AREC
Peter Gottlieb*	M.S.	AREC
Nadia Belhaj Hassine*	Doctorat	Université des Sciences Sociales de Toulouse
Barbara Claffey*	Ph.D.	AREC
Tsunehiro Otsuki*	Ph.D.	AREC
Lars Anwandter*	Ph.D	AREC
Khanh Linh Nguyen*	Ph.D.	AREC
Adriana Castro	Ph.D.	AREC
Nicolas Peypoch*	Doctorat	Université de Perpignan
Laurent Cavaignac*	Doctorat	Université de Perpignan
Antonio Bento*	PhD	University of Maryland
Ariel Ortiz-Bobea*	PhD	University of Maryland
Dana Andersen*	PhD	University of Maryland
Katayoun Kishi*	PhD	GVPT University of Maryland

\*Degree Awarded

#### **g. Extension (No formal extension appointment)**

1. Advisor to National Agricultural Trade Extension Task Force.
2. “Agriculture in a World Economy,” keynote address for University of Maryland - Oklahoma State University teleconference on Agricultural Trade, March 1985.

3. "Agriculture in a World Economy," presented to Maryland Cooperative Extension Agents meeting, College Park, Maryland, March 1985.
4. "Agricultural Policymaking in Washington," round table discussion at Maryland Ag Day, Wye Plantation, August 1985.
5. Interviewed by Successful Farming magazine for feature story on U.S. agricultural policy.
6. Also see presentations (e.i.25; e.ii.34, 45, 47, 48).

#### **4. Service**

##### **a. Professional Service and Memberships**

###### **i. Offices and Committee Memberships Held in Professional Organizations**

1. Participant in International Economics Division, United States Department of Agriculture planning session on future research directions for international economic research by the Economics Research Service of USDA.
2. Member, Quality of Research Discovery Subcommittee of American Agricultural Economics Association Awards Committee 1982-1984.
3. Chairman of "International Trade and Price Policies," discussion group at Eighteenth International Agricultural Economics Conference, Jakarta, Indonesia, August 1982.
4. American Agricultural Economics Association
5. American Economics Association
6. Econometric Society
7. Southern Agricultural Economics Association
8. Northeastern Agricultural Economics Council
9. Project Reviewer, Binational Agricultural Research and Development Fund, United States - Israel 1983, 1984, and 1986.
10. Project Reviewer, National Science Foundation, 1989-1991.
11. Project Reviewer, National Research Initiative Grants Program, USDA 1991-1995.
12. Productivity Analysis Research network
13. International Agricultural Trade Research Consortium

14. Member, Outstanding Ph.D. thesis review committee, AAEA, 2000-2002.
15. Chairman, Organizing Committee, 2d Annual Workshop on Contracts in Agriculture, 2001-2002.
16. Scientific Committee, European Workshop on Productivity and Efficiency Analysis, 2009-2011.
17. Advisory Board (along with Ariel Rubenstein, David Schmeidler) Centre for Risk and Ambiguity, University of Exeter, 2012-2014.
18. Scientific Committee, North American Productivity Workshop, 2017
19. Member Advisory Board, Institute of New Rural Development, Peking University, 2018-
20. International Society for Efficiency and Productivity Analysis, member
21. Secretary, International Society for Efficiency and Productivity Analysis, 2020-
22. Member, Organization for Economic Cooperation and Development (OECD) Working Group on Agricultural Total Factor Productivity and the Environment (TFPEN) 2017-

**ii. Unpaid Reviewing Activities for Agencies**

**iii. Other Unpaid Reviewing Services to Local, State, and Federal Agencies**

**iv. Other Non-University Committees, Commissions, Panels, etc.**

1. Member of sub-committee 4 of North Central Regional Research Project 152 on Food and Agricultural Act of 1977, 1978, 1979.
2. Member of Technical Committee NC-169, 1981.
3. Roughly 60-100 meetings with commodity groups, lobbyists for agricultural processors and farm groups while senior staff economist at the Council of Economic Advisers.
4. Member of Maryland Task Force on Federal Crop Insurance (Report issued February 1989).

**v. International Activities**

1. Participant and Discussion Leader during International Association of Agricultural Economics triennial conference, Jakarta, Indonesia.
2. Toured Australia visiting and presenting seminars, and discussing research programs (1982 and 1988) at:  
University of New England

Australian National University  
Bureau of Agricultural Economics  
Latrobe University  
University of Sydney

3. Invited to lecture at the Royal Veterinary and Agricultural University, Denmark, 1990. Lectured for two weeks, summer 1990.
4. Invited to lecture at University of Helsinki, Finland, Summer 1994.
5. Invited to lecture at University of Western Australia, October 1999.
6. Invited to lecture at Royal Veterinary and Agricultural University, Denmark, 2001.
7. Invited to lecture at Universita Cattolica, Italy, 2002.
8. Invited to lecture at Université de Perpignan, 2004, 2005, 2006, 2007.
9. Participant via University of Crete in TEAMPEST project for the European Union, 2008-
10. Invited to present workshops and visit University of Western Australia, 2009.
11. Comité de Sélection de recrutement d'un Professeur de sciences économiques, Université de Perpignan, Via Domitia, France, 2009. (Selection Committee for a Professorship in Economics).
12. Network on Agricultural Total Factor Productivity, coordinated by OECD, 2017-
13. Member Advisory Board, Institute of New Rural Development, Peking University, 2018-

**b. University Service**

**i. Departmental**

1. Member, Recruitment Committee 1979, The Ohio State University.
2. Member, Department Seminar Committee, 1979-1980.
3. Member, Chairman Search Committee, Department of Agricultural and Resource Economics, 1980-1982.
4. Chairman, Awards Committee, Department of Agricultural and Resource Economics, 1981-1983.
5. Member, Curriculum Committee, Department of Agricultural and Resource Economics, 1981-1983.

6. Member, ad hoc Committee on Establishment of Institute for Agricultural Policy Analysis at the University of Maryland, College Park.
7. Recruiting Committee, Department of Agricultural and Resource Economics, 1983-1984.
8. Member, Graduate Committee, Department of Agricultural and Resource Economics, 1983-1984.
9. Member, Search Committee, Department of Agricultural and Resource Economics, 1983-1984.
10. Member, Chairman Search Committee, Department of Agricultural and Resource Economics, 1983-1984.
11. Acting Coordinator of Graduate Affairs, Department of Agricultural and Resource Economics, Spring, Summer 1984.
12. Member, Awards Committee, Department of Agricultural and Resource Economics, 1989- 1992.
13. Member, Graduate Committee and Awards Committee, Department of Agricultural and Resource Economics, 1989- 1994.
14. Chair, Graduate Committee, Department of Agricultural and Resource Economics, 1993-94.
15. Chair, Recruitment Committee (2 positions), Department of Agricultural and Resource Economics, 1994-1995.
16. Chair, Department of Agricultural and Resource Economics, October 1995 to October 2000.
17. Member, Awards Committee, Department of Agricultural and Resource Economics, 2000-2002.
18. Member, Graduate Committee, Department of Agricultural and Resource Economics, 2001-2002.
19. Chair, Graduate Committee, Department of Agricultural and Resource Economics, 2002-2003.
20. Member, Human Subjects Review Committee, Department of Agricultural and Resource Economics, 2003-2007.
21. Chair, Faculty Recruitment Committee (3 positions), Department of Agricultural and Resource Economics, 2004-2005.

22. Member, Graduate Committee, Department of Agricultural and Resource Economics, 2004-2005.
23. Member, Undergraduate Committee, Department of Agricultural and Resource Economics, 2005-2006.
24. Member, Graduate Committee, Department of Agricultural and Resource Economics, 2008-
25. Chairman, First-year Paper Committee (for students entering Fall 2008), Department of Agricultural and Resource Economics, 2008-2010.
26. Graduate Coordinator, Department of Agricultural and Resource Economics, 2009-2011.
27. Member, First-year Paper Committee (for students entering Fall 2011).
28. Chair, First-year Paper Committee (for students entering Fall 2012).
29. Chair, Department of Agricultural and Resource Economics, 2013-2015.
30. Chair, Recruiting Committee, Department of Agricultural and Resource Economics, 2016-17.
31. Member, Graduate Committee, Department of Agricultural and Resource Economics, 2016-17.
32. Director of Graduate Studies, Department of Agricultural and Resource Economics, 2017-18
33. Chair, Awards Committee, Department of Agricultural and Resource Economics, 2016-2018.
34. Faculty Advisory Committee, Department of Agricultural and Resource Economics, 2017-2019
35. Member, Departmental APT subcommittee for Jorge Holzer, 2018-2019.
36. Member, Search Committee, 2019-2020
37. Chair, Departmental APT subcommittee for James MacDonald, 2019-20.
38. Member, Graduate Committee, 2021-

**ii. College**

1. Member, *Ad hoc* Salary Equity Review Committee, Division of Agricultural and Life Sciences, 1984.



2. Member, College of Agriculture Promotion and Tenure Committee, 1989.
3. Chair, Promotion and Tenure Process Review Committee, College of Agriculture and Natural Resources, 1998-99.
4. Member, Appointments, Promotion, and Tenure Committee, College of Agriculture and Natural Resources, 2006-2007.

**iii. Campus and University**

1. Member, Committee on Academic Cooperation between U.S. and USSR, University of Maryland, 1990-1992.
2. Faculty Advisor, University of Maryland Masters Swim Club, 1990 to 1998.
3. Graduate Council, University of Maryland, Spring 2009.
4. Member, Appointments, Promotion, and Tenure Committee, University of Maryland, July 2010-2012.
5. Member, Open-Access Campus Senate Task Force, University of Maryland, 2011-2012.
6. Member, APT Promotion Guidelines Campus Senate Task Force, University of Maryland, 2012-2015.
7. Member, Appointments, Promotion, and Tenure Committee, University of Maryland, 2016-2019

**iv. Special Administrative Assignments**

1. Department Chair, Agricultural and Resource Economics, 1995 to 2000.
2. Department Chair, Agricultural and Resource Economics, 2013-15

**v. Other None**