VITA Troy G. Schmitz

School Director and Professor

Morrison School of Agribusiness

W. P. Carey School of Business

Arizona State University – Polytechnic Campus

Mesa, AZ 85212

Tel: (480) 727-1566

E-mail: troy.schmitz@asu.edu

BIOGRAPHY

Troy G. Schmitz is School Director and Professor in the Morrison School of Agribusiness, W. P. Carey School of Business at Arizona State University. He is also a Senior Global Futures Scholar in the ASU Global Institute of Sustainability and Innovation and is also affiliated faculty in the ASU Center for Environmental Economics and Sustainability Policy.

Professor Schmitz currently teaches a BA course titled "Global Food and Agricultural Trade" and is co-instructor for an MS course titled "American Agriculture in the Global Context". He has taught Ph.D. courses in advanced agribusiness analysis, advanced agribusiness seminar, applied econometrics and microeconomic theory. He has taught MBA courses in managerial economics and the global business environment. He has also taught MS courses in international agricultural trade policy, applied econometrics, mathematical agricultural economics, managerial economics for agribusiness, and the agribusiness capstone. He has also taught BS and/or BA courses on food and agribusiness policy issues, problem solving and actionable analytics, economics of biofuels and biotechnology, agribusiness analysis, applied microeconomics, applied statistics, principles of microeconomics, and computer applications for agribusiness industries.

Professor Schmitz is co-author of a textbook titled "Agricultural Policy, Agribusiness, and Rent-Seeking Behaviour" (third edition 2023), three edited volumes on global food security, an edited volume titled "International Agricultural Trade Disputes: Case Studies in North America", and an edited volume on agribusiness e-commerce. He was guest editor of a 2019 virtual issue on International Trade in the *American Journal of Agricultural Economics* and is a member of the editorial review board for the *Journal of International and Global Economic Studies*. He has published over 60 peer-reviewed journal articles in over 25 different academic journals ranging from the *American Journal of Agricultural Economics* to the *Journal of Political Economy*. Professor Schmitz has published 30 book chapters appearing in 19 different edited volumes. He is also a member of the Board of Directors of the Arizona Food Marketing Alliance.

He has been an investigator on over \$25 million worth of grant proposals and has secured \$2 million in externally funded grants. He performs research on a wide variety of subjects, including: global agricultural trade, food and agricultural policy analysis, food security, agricultural risk preferences, forensic economics, regulation of biotechnology, benefit-cost analysis, and economic analysis of corn, sugar, ethanol, cattle, hogs, tomatoes, cotton, coffee, barley, wheat, tobacco, soybeans, canola, and poultry markets. Portions of his work have been translated into French, Turkish, German, and Spanish.

I. EDUCATION

- Ph.D., Agricultural and Resource Economics, University of California, Berkeley, 1995
- M.S., Agricultural and Resource Economics, University of California, Berkeley, 1991
- B.S., Mathematics (high honours), University of Saskatchewan, Canada, 1990
- B.S., Computer Science (honours), University of Saskatchewan, Canada, 1990

II. EXPERIENCE

A. Academic Positions

- School Director and Professor, Morrison School of Agribusiness, W. P. Carey School of Business Arizona State University, 2020 present
- Professor, Morrison School of Agribusiness, W. P. Carey School of Business Arizona State University 2019 – present
- Associate Professor (with tenure), Arizona State University, 2004 2019

Morrison School of Agribusiness, W. P. Carey School of Business, 2013 – 2019

Morrison School of Agribusiness and Resource Management (MSARM), College of Technology and Innovation (CTI), 2011 – 2013

Morrison School of Management and Agribusiness (MSMA), W. P. Carey School of Business, 2007 – 2011

Morrison School of Agribusiness and Resource Management (MSABR), 2004 – 2007

- Assistant Professor, Arizona State University, 1998 2004

 Morrison School of Agribusiness and Resource Management (MSABR), 1999 2004

 School of Agribusiness and Resource Management (SABR), 1998 1999
- Visiting Assistant Professor and Research Coordinator, Department of Agricultural Economics, Washington State University, 1996 1998
- Visiting Assistant Professor, Food and Resource Economics Department, Institute of Food and Agricultural Sciences, University of Florida, 1996
- Post-Doctoral Research Associate, Department of Agribusiness and Applied Economics, North Dakota State University, 1995

B. Other Positions

Board of Directors, Arizona Food Marketing Alliance, Phoenix, 2021 – present

Senior Global Futures Scholar, ASU Global Institute of Sustainability and Innovation, 2016 – present

Affiliated Faculty, ASU Center for Environmental Economics and Sustainability Policy, 2010 – present

Visiting Professor on Sabbatical Leave, Department of Agricultural and Resource Economics, University of Tennessee Institute of Agriculture, Knoxville, 2017

Visiting Professor on Sabbatical Leave, Economics and Finance Department, Cameron School of Business, University of North Carolina, Wilmington, 2008

III. RESEARCH

A. Peer-Reviewed Journal Articles

- *Indicates student co-authors for research begun prior to graduation
- (IF = JCR Impact Factor)
- 63. *Gao, S., C. Grebitus, and T.G. Schmitz (2023): "Communication in Times of Crises: Information Flow among Chinese Hog Producers during the African Swine Fever Outbreak." 39(4), 1279-1299. *Agribusiness: An International Journal*; IF 3.9,https://doi.org/10.1002/agr.21819
- 62. Schmitz, A., C.B. Moss, and T.G. Schmitz (2023): "The Impact of COVID-19 on World Oil Producers: Time is Important." *Journal of Agricultural and Food Industrial Organization*. 21(1), 35-52. https://doi.org/10.1515/jafio-2022-0020
- 61. Voica, D.C and T.G. Schmitz (2022): "Trading Risk for Ambiguity: Production versus Health under Pesticide Application." <u>American Journal of Agricultural Economics</u>. 104(4), 1327-1342. IF 4.2. https://doi.org/10.1111/ajae.12266
- 60. *Fuller, K., C. Grebitus, and T.G. Schmitz (2022): "The Effects of Values and Information on the Willingness to Pay for Sustainability Credence Attributes for Coffee." <u>Agricultural</u> Economics. 53, 775-791; IF 4.5. https://doi.org/10.1111/agec.12706
- 59. *Gao, S., C. Grebitus, and T.G. Schmitz (2022): "Effects of Risk Preferences and Peer Influence on Adoption of Genomics by Chinese Hog Farmers." *Journal of Rural Studies*, 94, 111-127. IF 5.2. https://doi.org/10.1016/j.jrurstud.2022.05.018
- 58. Zhang, L., J.L. Seale, Jr., M.S. Paggi, T.G. Schmitz (2020): "The Food Safety Modernization Act and Differential Revenues to Differently Sized U.S. and Foreign Fresh Tomato Producers."

 <u>Journal of Agricultural and Resource Economics</u>. 45(3), 571-588. IF 1.8.

 https://doi.org/10.22004/ag.econ.303603
- 57. Schmitz, A., C.B. Moss, and T.G. Schmitz (2020): "The Economic Effects of COVID-19 on the Producers of Ethanol, Corn, Gasoline, and Oil." <u>Journal of Agricultural and Food Industrial Organization</u>. 18(2), 1-25. https://doi.org/10.1515/jafio-2020-0025
- 56. Schmitz, T.G., M. Z. Smith (2020): "Spinning the facts against Genetically Engineered Foods?" <u>Theoretical Economics Letters.</u> 10(3), 458-480. https://doi.org/10.4236/tel.2020.103029
- 55. *Valdez-LaFarga, O., T.G. Schmitz, and J.E. Englin (2019): "The Role of Exchange Rates on Country-Differentiated Demand: The Case of United States Tomatoes." <u>Journal of Agricultural and Resource Economics</u>. 44(1), 62-79; IF 1.8.
- 54. Schmitz, T.G (2018): "Impact of the Chinese Embargo against MIR162 Corn on Canadian Corn Producers." *Canadian Journal of Agricultural Economics*. 66, 571-586; IF 9.0.
- 53. Schmitz, T.G. (2018): "Impact of the 2014 Suspension Agreement on Sugar between the United States and Mexico." *Agricultural Economics*. 49(1), 55-69; IF 4.5.
- 52. Brewin, D.G., T.G. Schmitz, J.F. Nolan, and R.S. Gray (2017): "Grain Transportation Policy Reform in Western Canada." *Canadian Journal of Agricultural Economics*. 65, 643-665; IF 9.0.
- 51. Brewin, D.G., J.F. Nolan, R.S. Gray, and T.G. Schmitz (2017): "Bringing in the Sheaves: Changes in Canada's Grain Supply Chain through the Post Canadian Wheat Board Era." *Journal of the Transportation Research Forum.* 56(3), Article 5.

- 50. Schmitz, A., D.J. Haynes, and T.G. Schmitz (2016): "Alternative Approaches to Compensation and Producer Rights." *Canadian Journal of Agricultural Economics*. 64(3), 439-454; IF 9.0.
- 49. Schmitz, A., D.J. Haynes, and T.G. Schmitz (2016): "The Not-So-Simple Economics of Production Quota Buyouts." *Journal of Agricultural and Applied Economics*. 48(2), 119-147.
- 48. Schmitz, T.G. and K.E. Lewis* (2015): "Impact of NAFTA on U.S. and Mexican Sugar Markets." <u>Journal of Agricultural and Resource Economics</u>. 40(3), 387-404; IF 1.73.
- 47. *Lewis, K.E. and T.G. Schmitz (2015): "Measuring the Impact of Mexican Domestic Subsidies on the Trade of Sugar between the U.S. and Mexico." *Journal of Agribusiness*. 33(1), 17-38.
- 46. Schmitz, A., D.J. Haynes, T.G. Schmitz, and E.D. Schmitz (2015): "Negative Externalities, Healthcare Costs, and E-Cigarettes: Terminating the Ontario Tobacco Quota Program." *International Journal of Heath, Wellness, and Society.* 5(3), 99-108.
- 45. Moss, C.B., A. Schmitz, and T.G. Schmitz (2014): "Decoupling under U.S. Farm Programs." *Natural Resources*. 5(1), 10-14.
- 44. Haynes, D.J., A. Schmitz, and T.G. Schmitz (2014): "Smoking and environmental pollution. Why there could be a free lunch?" *Environmental Economics*. 5(2), 55-60.
- 43. Schmitz, A., D.J. Haynes, T.G. Schmitz, and E.D. Schmitz (2013): "The U.S. Tobacco Buyout: A Partial and General Equilibrium Analysis." *Journal of Agricultural and Applied Economics*. 45(3), 411-419.
- 42. Schmitz, A., D.J. Haynes, and T.G. Schmitz (2013): "Benefit-cost analysis: government compensation vs. consumer tax model." *Journal of Benefit-Cost Analysis*. 4(3), 375-389; IF 3.45.
- 41. Haynes, D.J., T.G. Schmitz, and A. Schmitz (2013): "Consumer Tax Production Quota Buyouts and Negative Compensation: Producers' Dilemma." <u>Theoretical Economics Letters</u>. 3(3), 156-158.
- 40. Schmitz, T.G. and A. Schmitz (2012): "The Complexities of the Interface between Agricultural Policy and Trade." *Estey Centre Journal of International Law and Trade Policy*. 13(1), 14-25.
- 39. Schmitz, T.G., A. Schmitz, and D.J. Haynes. (2012): "Inflated Production Quota Gains Paid for by a Compensation Tax." *Theoretical Economics Letters*. 2(1), 67-68.
- 38. Schmitz, A., C.B. Moss, T.G. Schmitz, and G. Greene (2012): "Markets for used oil in California under a controversial deposit-refund system." *Environmental Economics*. 3(4), 23-34.
- 37. Schmitz, T.G. and A. Schmitz (2011): "Compensation and the Twin Producer Gains from Production Quotas." <u>Theoretical Economics Letters</u>. 1(3), 70-72.
- 36. Schmitz, A. and T.G. Schmitz (2010): "Benefit-Cost Analysis: Distributional Considerations under Producer Quota Buyouts." *Journal of Benefit-Cost Analysis*. 1(1), 1-15; IF 3.45.
- 35. Schmitz, T.G., A. Schmitz, and J.L. Seale Jr. (2009): "The Optimal Byrd Tariff in Vertical Markets." <u>International Journal of Applied Economics</u>. 6(1), 1-10; IF 1.24.
- 34. Schmitz, A., H. Furtan, and T.G. Schmitz (2009): "Agricultural Policy: High Commodity and Input Prices." *Agricultural and Resource Economics Review*. 38(1), 18-35.

- 33. Schmitz, T.G., C.R. Giese*, and C.J. Shultz II (2008): "Welfare Implications of EU Enlargement under the CAP." *Canadian Journal of Agricultural Economics*. 56(4), 555–562; IF 11.35.
- 32. Schmitz, A., T.G. Schmitz, and P. Shure (2008): "High Commodity Prices and the EU's Single Payment Scheme: Some Consequences of Double-Dipping." *Canadian Journal of Agricultural Economics*. 56(4), 523-531; IF 11.35.
- 31. Moss, C.B., A. Schmitz, and T.G. Schmitz (2008): "Segregating Genetically Modified and Nongenetically Modified Corn in a Marketing Channel." <u>Applied Economics</u>. 40(21), 2765-2774; IF 1.92.
- 30. Schmitz, A., C.B. Moss, and T.G. Schmitz (2007): "Ethanol: No Free Lunch." <u>Journal of Agricultural</u> & Food Industrial Organization. 5(2): Article 3; IF 0.64.
- 29. Schmitz, A. and T.G. Schmitz. (2007): "Agricultural Subsidies under Decoupling." <u>Research in Law and Economics: A Journal of Policy</u>. 23 131-148.
- 28. Schmitz, A., F.A. Rossi, and T.G. Schmitz (2007): "U.S. Cotton Subsidies: Drawing a Fine Line on the Degree of Decoupling." *Journal of Agricultural and Applied Economics*. 38(21): 135-149.
- 27. Schmitz, A., J.L. Seale, Jr., and T.G. Schmitz (2006): "The Optimal Processor Tariff under the Byrd Amendment." *International Journal of Applied Economics*. 3(2), 9-20.
- 26. Moss, C.B., and T.G. Schmitz (2006): "A Semiparametric Estimator of the Zellner Production Function for Corn: Fitting the Univariate Primal." <u>Applied Economics Letters</u>. 13(13), 863-867; IF 1.29.
- 25. Moss, C.B., A. Schmitz, and T.G. Schmitz (2006): "First-Generation Genetically Modified Organisms in Agriculture." *Journal of Public Affairs*. 6(1), 46-57.
- 24. Schmitz, A., T.G. Schmitz, and F.A. Rossi (2006): "Agricultural Subsidies in Developed Countries: Impact on Global Welfare." *Review of Agricultural Economics currently <u>Applied Economic Perspectives and Policy</u>. 28(1), 416-425.; IF 4.89.*
- 23. Acharya, R., P.M. Patterson, E.P. Hill, T.G. Schmitz, and E. Bohm (2006): "An Evaluation of the TrEAT Yourself Well Restaurant Nutrition Campaign." *Health Education and Behavior*. 33(3), 309-324; IF 4.44.
- 22. Schmitz, T.G., A. Schmitz, and C.B. Moss (2005): "The Economic Impact of StarLink Corn." <u>Agribusiness: An International Journal</u>. 21(3), 391-407; IF 2.84.
- 21. Schmitz, A., T.G. Schmitz, and J.L. Seale, Jr. (2005): "Prospects for Bilateral and Regional Free Trade Agreements and the Economics of Sugar." *International Sugar Journal*. 107(1278), 328-340; IF 0.12.
- 20. Rossi, F.A., A. Schmitz, and T.G. Schmitz (2005): "The Multiplicative Effect of Water Subsidies and Price Support Payments: The Case of U.S. Cotton." *Journal of International Agricultural Trade and Development*. 1(1), 55-70.
- 19. Schmitz, A., J.L. Seale, Jr., and T.G. Schmitz (2004): "Determinants of Brazil's Ethanol Sugar Blend Ratios." *International Sugar Journal*. 106(1271), 586-596; IF 0.12.

- 18. Schmitz, T.G. and J.L. Seale, Jr. (2004): "Countervailing Duties, Antidumping Tariffs, and the Byrd Amendment: A Welfare Analysis." *International Journal of Applied Economics*. 1(1), 65-80; IF 0.44.
- 17. Moss, C.B., T.G. Schmitz, and A. Schmitz (2004): "The Brave New World: Imperfect Information, Segregation Costs, and Genetically Modified Organisms." "Schöne neue Welt: Unvollkommene Information, Kosten der Markttrennung und gentechnisch veränderte Organismen Agrarwirtschaft." <u>German Journal of Agricultural Economics</u>. 53(8), 303-308; IF 0.54.
- 16. Schmitz, T.G., A. Schmitz, C.B. Moss (2004): "Did StarLink Reduce Import Demand for Corn?" Journal of Agriculture & Food Industrial Organization. 2,2; IF 0.79.
- 15. Schmitz, T.G., C.B. Moss, and A. Schmitz (2003): "Marketing Channels Compete for U.S. Stocker Cattle." *Journal of Agribusiness*. 21(2), 131-148.
- 14. Schmitz, A., J.L. Seale, Jr., and T.G. Schmitz (2003): "Sweetener-ethanol complex in Brazil, the United States and Mexico: Do prices matter?" *International Sugar Journal*. 105(1254), 505-514; IF 0.12.
- 13. Moss, C.B., T.G. Schmitz, A. Kagan, and A. Schmitz (2003): "Institutional Economics and the Emergence of E-Commerce in Agribusiness." *Journal of Agribusiness.* 21(1), 83-101.
- 12. Schmitz, T.G., A. Schmitz, and J.L. Seale, Jr. (2003): "Brazil's Ethanol Program: The Case of Hidden Sugar Subsidies." *International Sugar Journal*. 105(1254), 254-265; IF 0.12.
- 11. Schmitz, T.G. and A. Schmitz (2002): "Food Supply Management and Tariffication: A Game Theoretic Approach." *Journal of Agriculture & Food Industrial Organization*. 1(1), 1-19.
- 10. Schmitz, T.G. and J.L. Seale, Jr. (2002): "Import Demand for Disaggregated Fresh Fruits in Japan." <u>Journal of Agricultural and Applied Economics</u>. 34(3), 585-602.
- Schmitz, T.G., T. Highmoor, and A. Schmitz (2002): "Termination of the WGTA: An Examination of Factor Market Distortions, Input Subsidies, and Compensation." <u>Canadian Journal of</u> <u>Agricultural Economics</u>. 50(3), 333-347; IF 11.35.
- 8. Schmitz, T.G. (2002): "Measuring Inefficiency in the Presence of an Export Tax, an Import Tariff, and a State Trading Enterprise." *Journal of Agricultural and Applied Economics*. 34(1), 81-93.
- 7. Post, G.V., A. Kagan, T. J. Burkink, and T.G. Schmitz (2002): "Analyzing Consumers' Preferences on Commercial Web Site Attributes." *Quarterly Journal of Electronic Commerce*. 3(2), 112-123; IF 5.0.
- Schmitz, T.G. and R. Gray (2000): "State Trading Enterprises and Revenue Gains from Market Power: The Case of Barley Marketing and the Canadian Wheat Board." <u>Journal of Agricultural and Resource Economics</u>. 25(2), 596-615; IF 1.8.
- 5. Brooks, H. and T.G. Schmitz (1999): "Price Discrimination in the International Grain Trade: The Case of Canadian Wheat Board Feed Barley Exports." <u>Agribusiness: An International Journal</u>. 15(3), 313-322; IF 3.9.
- 4. Schmitz, T.G., A. Schmitz, and C. Dumas (1997): "Gains from Trade, Inefficiency of Government Programs and the Net Economic Effects of Trading." *Journal of Political Economy*. 105(3), 637-647; IF 9.1.

- 3. Dumas, C., and T.G. Schmitz (1995): "Measuring the Impact of Environmental Regulations." <u>American Journal of Agricultural Economics</u>. 77(5), 1172-1179; IF 4.2.
- 2. Schmitz, A., and T.G. Schmitz (1994): "Supply Management: The Past and the Future." <u>Canadian Journal of Agricultural Economics</u>. 42(2), 125-148; IF 9.0.
- 1. Picketts, V., A. Schmitz, and T.G. Schmitz (1991): "Rent Seeking: The Potash Dispute between Canada and the United States." *American Journal of Agricultural Economics*. 73(2), 255-265; IF 4.2.

B. Peer-Reviewed Books and Edited Volumes

- 7. Schmitz, A., C.B. Moss, T.G. Schmitz, G.C. Van Kooten, and H.C. Schmitz (2023): <u>Agricultural Policy, Agribusiness, and Rent-Seeking Behaviour</u>. Third Edition. University of Toronto Press. ISBN 978-1-48752-280-3.
- 6. Schmitz, A., P.L. Kennedy, and T.G. Schmitz (2017): World Agricultural Resources and Food
 Security: International Food Security. Volume 17 in the series "Frontiers of Economics and Globalization." Emerald Group Publishing Ltd. Bingley, UK. ISBN 978-1-78714-516-0.
 Edited Volume.
- Schmitz, A., P.L. Kennedy, and T.G. Schmitz (2016): <u>Food Security in a Food Abundant World: An Individual Country Perspective</u>. Volume 16 in the series "Frontiers of Economics and Globalization." Emerald Group Publishing Ltd., Bingley, UK. ISBN 978-1-78560-215-3. Edited Volume.
- 4. Schmitz, A., P.L. Kennedy, and T.G. Schmitz (2015): Food Security in an Uncertain World: An International Perspective. Volume 15 in the series "Frontiers of Economics and Globalization." Emerald Group Publishing Ltd. Bingley. ISBN 978-1-78560-213-9. Edited Volume.
- 3. Schmitz, A., C.B. Moss, T.G. Schmitz, H.W. Furtan, and H.C. Schmitz (2010): <u>Agricultural Policy, Agribusiness, and Rent-Seeking Behaviour</u>. Second Edition. University of Toronto Press. ISBN 978-0-8020-9547-3.
- Schmitz, T.G., C.B. Moss, A. Schmitz, A. Kagan, and B. Babcock (2005): <u>E-Commerce in Agribusiness</u>. Florida Science Source, Inc. Longboat Key, Florida. ISBN 0-944961-07-X. Edited Volume.
- Schmitz, A., C.B. Moss, T.G. Schmitz, and W.W. Koo (2005): <u>International Agricultural Trade Disputes: Case Studies in North America</u>. University of Calgary Press. ISBN 1-55238-152-8. Edited Volume.

C. Chapters Appearing in Peer-Reviewed Edited Volumes

- *Indicates student co-authors for research begun prior to graduation
- 30. McFadden, B.R. and T.G. Schmitz (2017): "The Nexus of Dietary Guidelines and Food Security."

 World Agricultural Resources and Food Security: International Food Security. Volume 17 in the series "Frontiers of Economics and Globalization." Emerald Group Publishing Ltd. Bingley, UK. ISBN 978-1-78714-516-0. (2): 19-31.
- 29. Lakkakula, P., D.J. Haynes, and T.G. Schmitz (2015): "Genetic Engineering and Food Security: A Welfare Economics Perspective." Food Security in an Uncertain World: An International

- <u>Perspective</u>. Volume 15 in the series "Frontiers of Economics and Globalization." Emerald Group Publishing Ltd. Bingley, UK. ISBN 978-1-78560-213-9. (12): 179-191.
- 28. Moss, C.B., A. Schmitz and T.G. Schmitz (2015): "The Economics of Ethanol: Use of Indirect Policy Instruments." <u>Mathematics of Energy and Climate Change</u>. CIM Series in Mathematical Sciences 2. ISBN 978-3-319-16121-1. (9): 215-227.
- 27. Schmitz, T.G. (2014): "Bureau of Consumer Protection." <u>Consumer Survival: An Encyclopedia of Consumer Rights, Safety, and Protection</u>. ABC-CLIO. ISBN 978-1-59884-936-3. 81-89.
- 26. Schmitz, T.G. (2014): "Food and Drug Administration." <u>Consumer Survival: An Encyclopedia of Consumer Rights, Safety, and Protection</u>. ABC-CLIO. ISBN 978-1-59884-936-3. 438-448.
- 25. Schmitz, T.G. and A. Schmitz (2014): "International Trade." Encyclopedia of Agriculture and Food Systems. Elsevier, San Diego. ISBN 978-0-444-52512-3. (4): 49-57.
- 24. Moss, C.B., A. Schmitz and T.G. Schmitz (2014): "Ethanol and Distiller's Grain: Implications of the Multiproduct Firm on United States Bioenergy Policy." <u>Modeling Dynamics, Optimization and Bioeconomics I</u>. ISBN 978-3-319-04849-9. (29): 497-510.
- 23. Moss, C.B. and T.G. Schmitz (2011): "The Potential Effect of Ethanol on the U.S. Economy: A General Equilibrium Approach." <u>The Economics of Alternative Energy Sources and Globalization</u>. Bentham Science Publishers Ltd. Danvers, MA. ISBN 978-1-60806-233-2. (4): 35-48.
- 22. Schmitz, T.G. and J.L. Seale, Jr. (2011): "Hidden Ethanol Subsidies in Brazil Revisited." The Economics of Alternative Energy Sources and Globalization. Bentham Science Publishers Ltd. Danvers, MA. ISBN 978-1-60806-233-2. (6): 65-75.
- 21. Schmitz, A. and T.G. Schmitz (2010): "US and EU Agricultural Policy: Divergence or Convergence?"

 The Economic Impact of Public Support for Agriculture: An International Perspective.

 Volume 7 in a series titled "Studies in Productivity and Efficiency." Springer. New York.

 ISBN 978-1-4419-6384-0. (3): 41-66.
- Schmitz, T.G., A. Schmitz, and C. Dumas (2008): "Gains from Trade, Inefficiency of Government Programs, and the Net Economic Effects of Trading." <u>Applied Benefit-Cost Analysis</u>. (originally appeared in *Journal of Political Economy*). Edward Elgar Publishing Ltd., Camberley, Surrey, UK. ISBN 978-1-84720-951-1. (3): 23-33.
- 19. Schmitz, A., F. Rossi, and T.G. Schmitz (2008): "Agricultural Subsidies under Decoupling." <u>Applied Benefit-Cost Analysis</u>. (originally appeared in *Research in Law and Economics*). Edward Elgar Publishing Ltd., Camberley, Surrey, UK. ISBN 978-1-84720-951-1. (4): 34-51.
- 18. Schmitz, T.G., T. Highmoor, and A. Schmitz (2008): "Termination of the WGTA: An Examination of Factor Market Distortions, Input Subsidies and Compensation." <u>Applied Benefit-Cost Analysis</u>. (originally appeared in *Canadian Journal of Agricultural Economics*). Edward Elgar Publishing Ltd., Camberley, Surrey, UK. ISBN 978-1-84720-951-1. (21): 362-376.
- 17. Schmitz, A., C.B. Moss, and T.G. Schmitz (2008): "Ethanol: No Free Lunch." <u>Applied Benefit-Cost Analysis</u>. (originally appeared in *Journal of Agricultural and Food Industrial Organization*). Edward Elgar Publishing Ltd., Camberley, Surrey, UK. ISBN 978-1-84720-951-1. (36): 536-561.

- 16. Rossi, F., A. Schmitz, and T.G. Schmitz (2006): "The Multiplicative Effect of Water Subsidies and Price Support Payments: The Case of U.S. Cotton." New Topics in International Agricultural Trade and Development. Nova Publishers. ISBN 1-60021-083-X. (4): 55-69.
- 15. Moss, C.B., T.G. Schmitz, and A. Schmitz (2005): "The New Institutional Economics, Schumpeter and E-Commerce." <u>E-Commerce in Agribusiness</u>. Florida Science Source, Inc. Longboat Key, Florida. ISBN 0-944961-07-X. (1): 3-23.
- 14. Schmitz, T.G., A. Schmitz, and C.B. Moss (2005): "E-Commerce and other Marketing Channel Outlets in Florida's Cattle Markets." <u>E-Commerce in Agribusiness</u>. Florida Science Source, Inc. Longboat Key, Florida. ISBN 0-944961-07-X. (6): 121-149.
- 13. Schmitz, T.G. and D.E. Hansen* (2005): "Lessons Learned from the Failure of Rooster.com."

 <u>E-Commerce in Agribusiness.</u> Florida Science Source, Inc. Longboat Key, Florida. ISBN 0-944961-07-X. (11): 225-235
- 12. Schmitz, T.G. (2005): "The Welfare Effects of Internet Auctions on U.S. Cattle Producers."

 <u>E-Commerce in Agribusiness.</u> Florida Science Source, Inc. Longboat Key. ISBN 0-944961-07-X. (13): 259-273.
- 11. Schmitz, T.G. and J.L. Seale, Jr. (2005): "Welfare Implications of the Byrd Amendment." <u>International Agricultural Trade Disputes: Case Studies in North America</u>. University of Calgary Press. Calgary, Canada. ISBN 1-55238-152-8. (6): 87-98.
- Moss, C.B., T.G. Schmitz, and A. Schmitz (2004): "Segmentation of GMO and non-GMO Soybean Markets under Identity Preservation Costs and Government Price Supports." <u>The Regulation of Agricultural Biotechnology</u>. CABI Publishing, Wallingford, UK. ISBN 0-85199-742-2. (19): 201-210.
- 9. Schmitz, T.G., J.L. Seale, Jr., and Peter Buzzanell (2002): "Brazil's Domination of the World Sugar Market." <u>Sugar and Related Sweetener Markets: International Perspectives</u>. CABI Publishing, Wallingford, UK. ISBN 0-85199-644-2. (10): 123-140.
- 8. Dumas, C.F. and T.G. Schmitz (2002): "Ex Ante Assessment of the FAIR Act." <u>Agricultural Globalization, Trade and the Environment</u>. Kluwer Publishing, Norwell, Massachusetts. ISBN 978-1-4613-5606-6. (10): 213-238.
- 7. Schmitz, A. and T.G. Schmitz (1999): "State Trading Enterprises, Price Discrimination, and the World Trade Organization." Globalization and Agricultural Trade Policy. Lynne Rienner Publishers, Boulder, Colorado. ISBN 1-55587-951-9. (6): 111-131.
- 6. Schmitz, A., H. De Gorter, and T.G. Schmitz (1996): "Consequences of Tariffication." Regulation and Protectionism Under GATT: Case Studies in North American Agriculture. Westview Press, Boulder, Colorado. ISBN 0-8133-8956-9. (3): 37-50.
- 5. Schmitz, T.G. and J. Skinner. (1996): "Supply Management: Will the Cartel Stand?" Regulation and Protectionism Under GATT: Case Studies in North American Agriculture. Westview Press, Boulder, Colorado. ISBN 0-8133-8956-9. (19): 314-331.
- 4. Dumas, C.F., T.G. Schmitz, and A. Schmitz (1996): "Water Subsidies: Effects of Pesticide Regulation in Distorted Trade Markets." <u>Water Marketing and Water Policy</u>. D. Parker and Y. Tsur eds., Kluwer Publishers (1996).

- Schmitz, A. and T.G. Schmitz (1995): "Tariffication and Canadian Supply Management." World
 <u>Agriculture in a Post-GATT Environment</u>. University Extension Press, University of
 Saskatchewan, Canada. ISBN 0-88880-332-X. 225-235.
- Schmitz, T.G. and J. Skinner. (1995): "GATT and Structural Change in the Canadian Broiler Industry." World Agriculture in a Post-GATT Environment. University Extension Press, University of Saskatchewan, Canada. ISBN 0-88880-332-X. 266-279.
- 1. Schmitz, A., and T.G. Schmitz (1994): "Tariffs and Trade." <u>Encyclopedia of Agricultural Sciences</u>. Vol. 4, Academic Press Inc. 269-279.

D. Conference Proceedings, Selected Paper Abstracts, and Posters

- Voica, D.C., and T.G. Schmitz (2020): "Trading Risk for Ambiguity: Consumption versus Health under Pesticide Application." Agricultural and Applied Economics Association (AAEA). Kansas City, MO – Virtual Conference. Selected Paper.
- 12. Schmitz, T.G., and J.L. Seale, Jr. (2019): "USMCA, Supply Management, Suspension Agreements, and Retaliatory Tariffs." Invited paper presented at the 2019 Annual Meeting of the Allied Social Sciences Association (ASSA). Atlanta, Georgia. IDEAS. RePEc. Extended Abstract.
- 11. Schmitz, T.G., J.L. Seale, Jr., and A. Schmitz (2009): "Ethanol and Hidden Subsidies in Brazil Revisited." The Economics of Alternative Energy Sources and Globalization: The Road Ahead (Biofuels). Orlando, Florida. Proceedings.
- Schmitz, T.G., J.L. Seale, Jr., and A. Schmitz (2009): "Ethanol and Hidden Subsidies in Brazil Revisited." The Economics of Alternative Energy Sources and Globalization: The Road Ahead (Biofuels). Orlando, Florida. Proceedings.
- Moss, C.B., T.G. Schmitz, and A. Schmitz. J.L. Seale, Jr., and A. Schmitz (2009): "Under What Conditions Would Ethanol Be in Society's Best Interest?" The Economics of Alternative Energy Sources and Globalization: The Road Ahead (Biofuels) Conference. Orlando, Florida. Proceedings.
- 8. Moss, C.B., T.G. Schmitz, and A. Schmitz (2007): "Intellectual Property Rights in the Multinational firm: The case of high valued Agriculture." NC-1034 Conference. Berkeley, California. Proceedings.
- 7. Schmitz, A., T.G. Schmitz, and F.A. Rossi (2006): "Agricultural Subsidies in Developed Countries: Impact on Global Welfare." Allied Social Sciences Association Annual Meeting. Proceedings.
- 6. Kagan, A., A. Schmitz, T.G. Schmitz, and C.B. Moss (2003): "E-Commerce in Agribusiness." American Farm Bureau Annual Meeting. Tampa, Florida. Selected poster.
- 5. Schmitz, A., J.L. Seale, Jr., and T.G. Schmitz (2003): "Brazil as a Dominant Player in the World Sweetener Market: Do Prices Matter?" Sugar and Development in Africa and the World: Sustainability, Diversification and Trade Conference. Mozambique, Africa. Sponsored by the Food and Agricultural Organization of the United Nations. Proceedings.
- 4. Acharya, Ram, P.M. Patterson, T.G. Schmitz, S.B. Foerster, E. Hill, A. Jones, and E. Bohm (2002): "Restaurant Diners' Attitudes and Responses to a Healthy Dining Campaign." American Agricultural Economics Association Annual Meetings. Selected paper abstract.

- 3. Patterson, P.M., R. Acharya, T.G. Schmitz, S.B. Foerster, E. Hill, A. Jones, and E. Bohm (2002): "Analysis of the Effects of a Healthy Dining Campaign on Sales of Healthy Menu Items." American Agricultural Economics Association Annual Meetings. Selected paper abstract.
- 2. Schmitz, T.G., C.B. Moss, and A. Schmitz (2002): "The Impact of the Export Enhancement Program on International Feed and Malting Barley Markets." *American Journal of Agricultural Economics*. 80(5), 1177-1177. American Agricultural Economics Association Annual Meetings. Selected paper abstract.
- Schmitz, T.G., C.B. Moss, and A. Schmitz (2002): "Differentiating GMOs and Non-GMOs in a Marketing Channel." Free Trade Area of the Americas, the WTO, and New Farm Legislation: Responding to Opportunities and Challenges. Conference. San Antonio. Texas A&M University. Proceedings.

E. Professional Papers and Industry Publications

- *Indicates student co-authors for research begun prior to graduation
- 27. Schmitz, T.G. (2022): "Economic Impact and Resiliency of Arizona's Agricultural and Food Industries in the first year of the COVID-19 Pandemic." Prepared for the Arizona Department of Agriculture, Specialty Crop Block Grant Program.
- 26. Schmitz, T.G. (2021): "Canned Beverage Shortage during the COVID-19 Pandemic." *Arizona Food Industry Journal*. February 2021 edition, p7. Arizona Food Marketing Alliance. Phoenix, AZ.
- 25. Schmitz, T.G. (2019): "Trade Wars and Retaliatory Agricultural Tariffs." *Arizona Food Industry Journal*. September 2019 edition, p7. Arizona Food Marketing Alliance. Phoenix, AZ.
- 24. Schmitz, A. and T.G. Schmitz (2011): "The Canadian Wheat Board and Marketing of Western Canadian Barley." Prepared for the Canadian Wheat Board. Corporate Policy Group, Canadian Wheat Board Published Report. Winnipeg, Manitoba, Canada.
- 23. Dumas, C.F., T.G. Schmitz, C.R. Giese*, and M. Sligh (2008): "Economic Implications of Plant-made Pharmaceutical Production in North Carolina." Prepared for the Rural Advancement Foundation International (RAFI-USA). Pittsboro, NC.
- 22. Schmitz, T.G. (2007): "The Economic Contribution of the Golf Industry to the Oklahoma Economy, 2006." Prepared for the National Golf Foundation. Jupiter, FL.
- 21. Schmitz, T.G. (2006): "Economic Impacts and Environmental Aspects of the Arizona Golf Course Industry." Prepared for the Arizona Golf Industry Association. Scottsdale, AZ.
- 20. Schmitz, A., T.G. Schmitz, and R. Gray (2005): "The Canadian Wheat Board and Barley Marketing." University of Saskatchewan, Department of Agricultural Economics Publication. Saskatoon, Saskatchewan, Canada.
- Seale, J.L., J.Y. Lee, A. Schmitz, and T.G. Schmitz (2005): "Import Demand for Fresh Fruit in Japan and Uniform Substitution for Products from Different Sources." International Agricultural Trade and Policy Center. University of Florida. Monograph Series MGTC 05-02.
- 18. Schmitz, A., and T.G. Schmitz (2004): "Potential Bilateral and Regional Free Trade Agreements: The Economic Viability of the Florida Sugar Industry." Prepared for Sugarcane Growers Cooperative of Florida.

- 17. Schmitz, T.G., A. Schmitz, and C.B. Moss (2002): "The Potential Role of E-Commerce in Florida's Cattle Market: Theory and Application." Prepared for the Center for Agricultural and Rural Development, Iowa State University in conjunction with the Midwest Agribusiness Trade Research Information Center, University of Minnesota.
- Schmitz, T.G. and J.L Seale (2002): "Import Demand for Disaggregated Fresh Fruits in Japan."
 International Agricultural Trade and Policy Center. University of Florida. Technical Paper Series TPTC 02-1.
- 15. Richards, T.J., T.G. Schmitz, and T. Burkink (2001): "National Potato Promotion Board: Program Evaluation: 1995-1999." Prepared for the National Potato Promotion Board, Denver, CO.
- 14. Schmitz, T.G., A. Schmitz, and C.B. Moss (2001): "The Economic Impact of StarLink Corn on U.S. Corn Producers." Prepared for law firm Cohen, Milstein, Hausfeld & Toll.
- 13. Schmitz, T.G. (2001): "Benchmarks to Measure Canadian Wheat Board Performance. Report 3: Measuring Potential Impacts of the CWB on U.S. Wheat Prices." Prepared for the Canadian Wheat Board. Corporate Policy Group, Canadian Wheat Board Published Report, Winnipeg, Manitoba, Canada.
- 12. Schmitz, T.G. and H. Zhang* (2000): "Implications of the Asian Financial Crisis for U.S. Cotton Exports." Prepared for Arizona State University, FGIA Seed Grant NRR-L035.
- 11. Schmitz, A., E. Cakmak, T.G. Schmitz, and R. Gray (1999): "Policy, State Trading, and Cooperatives in Turkish Agriculture." (Turkish) "Türk Tariminda Ekonomik Politika, Devlet Ticareti ve Kooperatifler." Agricultural Economics Research Institute, Middle East Technical University, Turkey. Prepared for the World Bank and USAID.
- 10. Seale, J., T.G. Schmitz, J.Y. Lee, and M. Brown (1998): "Import Demand for Fresh Fruits in Japan and Uniform Substitution for Products from Different Sources." Prepared for National Research Initiative Competitive Grants Program. Grant number 93-02858.
- 9. Schmitz, A., R. Gray, T. Schmitz, and G. Storey (1997): "The CWB and Barley Marketing: Price Pooling and Single-Desk Selling." Prepared for the Canadian Wheat Board, Corporate Policy Group, Canadian Wheat Board Published Report, Winnipeg, Manitoba, Canada.
- 8. Schmitz, T.G., and W.W. Koo (1996): "An Economic Analysis of International Feed and Malting Barley Markets: An Econometric Spatial Oligopolistic Approach." Agricultural Economics Report No. 357. Dept. of Agricultural Economics, Agricultural Experiment Station, North Dakota State University, Fargo, ND.
- 7. Schmitz, T.G. (1996): "The Economic Impact of Different Policy Regimes on Canadian Barley Producers." Prepared for Brian Hay, Head, Civil Litigation, Department of Justice, Canada. Case: Archibald et al v. Canadian Wheat Board & Her Majesty the Queen.
- Schmitz, T.G. (1995): "The Economic Effects of GATT on Supply Management in Canadian Agriculture - Spatial Models of the Canadian Broiler Industry." Dissertation performed as partial requirement for the Ph.D. in Agricultural and Resource Economics, University of California, Berkeley.
- Rosaasen, K., A. Schmitz, D. Eurich, J. Lokken, and T.G. Schmitz (1994): "Supply-Managed Sectors in Saskatchewan: Adapting to Change." Prepared for the Saskatchewan Agricultural Development Fund & Dairy Producers Cooperative.

- 4. Schmitz, T.G. (1993): "California Citrus Crops: Geography, Biology, Management, Maladies, and Remedies." Prepared for Dr. David Sunding, Dept. of Agricultural and Resource Economics, University of California, Berkeley.
- 3. Schmitz, T.G., and A. Schmitz (1993): "Florida Sugar: Program Benefits and the Environment." Prepared for the United States Environmental Protection Agency.
- 2. Schmitz, A., D. Christian, and T.G. Schmitz (1993): "The U.S. Sugar Program: Benefits to Florida Sugarcane Growers." Prepared for the American Sugar Alliance.
- 1. Weisensel, W.P., and T.G. Schmitz (1989): "Including Risk in Partial Budgeting Analysis of Specialty Crops: Some Implications." University Extension Press, University of Saskatchewan, Saskaton, Saskatchewan, Canada.

F. Invited Talks

- 34. "United States-Mexico-Canada Agreement, Supply Management, Suspension Agreements, and Retaliatory Tariffs." Invited paper presented at the 2019 Annual Meeting of the Allied Social Sciences Association (ASSA). Atlanta, Georgia (January 2019).
- 33. "Implications of the 2013/14 Chinese Embargo against MIR162 Corn for North America."

 Department of Agricultural Economics. University of Nebraska. Lincoln, NE (October 2018).
- 32. "Regional Trade Agreements and the World Trade Organization." Guest lecture in WPC 301, Student Success in Business. W. P. Carey School of Business. Arizona State University (November 2015).
- 31. "Regional Trade Agreements and the World Trade Organization." Guest lecture in SOS 107. Julie Ann Wrigley Global Institute of Sustainability. Arizona State University. Tempe, AZ (October 2015).
- 30. "Ex-post Welfare Analysis of full Implementation of NAFTA with respect to Mexican Sugar: 2008 2013." Department of Agricultural and Resource Economics. University of Saskatchewan. Saskatchewan, Canada (March 2015).
- 29. "Ethanol: A Tale of Two Countries." Guest lecture in WPC 101, Student Success in Business. W. P. Carey School of Business. Arizona State University (October 2013).
- 28. "The Welfare Implications of Production Quota Buyouts." Department of Agribusiness & Agricultural Economics. University of Manitoba. Winnipeg, Manitoba, Canada (February 2011).
- 27. "Estimating the Benefits of Market Power accruing to Western Canadian Barley Producers." Board of Directors, Canadian Wheat Board. Winnipeg, Canada. (February 2011).
- 26. "Current Issues in Food, Biofuels, and Agricultural Policy." Invited Seminar. Richard Ivey School of Business. University of Western Ontario. London, Ontario. Canada (November 2008).
- 25. "Global Welfare Implications of U.S. Cotton Subsidies." Symposium on American-Greek-Romanian Initiatives to Enhance Understanding of Multicultural Market Opportunities, Trade, and Development. ASU Polytechnic Campus (November 2006).
- 24. "Economic Impacts and Environmental Aspects of the Arizona Golf Course Industry." Agribusiness and Water Council of Arizona. Phoenix, AZ (May 2006).

- 23. "Economic Impacts and Environmental Aspects of the Arizona Golf Course Industry." Arizona State Legislature at the Capitol. Phoenix, AZ (March 2006).
- 22. "Economic Impacts and Environmental Aspects of the Arizona Golf Course Industry." Arizona Golf Association Annual Meeting. Scottsdale, AZ (November 2005).
- 21. "NAFTA Issues Related to Southwest Agricultural Cooperatives." Workshop on Southwest Cooperatives Looking Forward. Arizona State University East (April 2002).
- 20. "The Potential Role of E-Commerce in Florida's Cattle Market: Theory and Application." Workshop Sponsored by the Center for Agriculture and Rural Development (CARD), Iowa State University and the Midwest Agribusiness Trade Research Information Center, University of Minnesota. San Diego, CA (February 2002).
- 19. "The Implications of NAFTA for the United States and Mexico in Five Agricultural Products."

 International Congress on Agribusiness. Universidad de Autonomous San Luis Potosi. San Luis Potosi, Mexico (May 2002).
- 18. "The Economic Impact of StarLink on U.S. Corn Producers." University of Arizona. Department of Agricultural Economics. Tucson, AZ (November 2001).
- 17. "Research Priorities, Policy Issues and Data Needs." Symposium titled "Impacts of E-Commerce and Information Technology on Global Agricultural Markets." Sponsored by Economic Research Service, Farm Foundation, and University of Minnesota. Waugh Auditorium. Washington, D.C. (May 2001).
- 16. "Benchmarks to Measure Canadian Wheat Board Performance: Measuring Potential Impacts of the CWB on U.S. Wheat Prices." Canadian Wheat Board Directors, Industry Representatives, and Agricultural Economists. Saskatoon, Saskatchewan, Canada (December 2000).
- "Impact of the World Trade Organization on the structure of the Canadian Broiler Industry"
 Department of Applied Economics. University of Minnesota. St. Paul, MN (April 1998).
- 14. "Links in the Marketing Chain: The Case of the Canadian Broiler Industry." School of Agribusiness and Resource Management. Arizona State University East. Mesa, AZ (April 1998).
- 13. "Devising a Global Import Demand System: The Case of Japanese Wheat Imports." Guest Lecture.

 Department of Agricultural Economics. Washington State University. Pullman, WA

 (March 1998).
- 12. "Topics in Agricultural Economics: From the Farm Level to the Global Market Place." Agricultural Economics Seminar Series. Washington State University. Pullman, WA (December 1997).
- "Links in the Marketing Chain: A Spatial Oligopoly Model of the Canadian Broiler Industry."
 Department of Agriculture and Applied Economics. Texas Tech University. Lubbock, TX (December 1997).
- 10. "International Agricultural Policies that affect Grain Marketing in the United States." Washington Association of Wheat Growers. Washington State (December 1997).
- 9. "Implications of the Canadian Wheat Board Marketing system for US barley producers." Washington Barley Commission. Washington State (November 1997).
- 8. "An Application of Precision Agriculture to the Production of Field Crops." Director of Agricultural Research and Development. Motorola Corporation. Pullman, Washington (August 1997).

- 7. "The Economic Future of the U.S. Poultry Industry." Center for Excellence in Poultry Science. University of Arkansas. Fayetteville, AR (March 1997).
- "The effects of CUSTA, NAFTA, and GATT on the Market Structure of the Canadian Broiler Industry." Department of Agricultural Economics. University of Arkansas. Fayetteville, AR (March 1997).
- 5. "The Impact of the 1996 Farm Bill on the Net Economic Effects of Trading U.S. Cotton." United States Department of Agriculture. Economic Research Service. Washington, D.C. (December 1996).
- 4. "The Economic Impacts of Changes in Agricultural Policies on International Barley Markets."

 Department of Agricultural Economics. University of Guelph. Ontario, Canada (May 1996).
- 3. "An Analysis of the effects of the Export Enhancement Program on International Barley Markets."

 International and Development Economics Workshop. University of Florida. Gainesville, FL (April 1996).
- "A Cross-country Comparison of U.S. and Canadian Broiler Markets." Seminar Series. Department of Agribusiness and Applied Economics. North Dakota State University. Fargo, ND (October 1995).
- "The Economics of Withdrawing from a Real Cartel: Case of the Canadian Broiler Industry."
 International Trade and Development Economics Workshop. University of Florida.
 Gainesville, FL (November 1994).

G. Conference Presentations

*Indicates student co-authors for research begun prior to graduation

- 47. DeLong, K.L, S. Gao, C. Grebitus, and T.G. Schmitz (2024): "German and British Consumer Preferences for Country of Origin Labeled Beef throughout the Decade." *Agricultural and Applied Economics Association Congress*. New Orleans, LA (August 2024).
- 46. Schmitz, T.G. (2022): "Inflation, Energy, and Input Costs in the Agricultural Supply Chain." *Farming for Profit? Congress.* Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University.
- 45. *Fuller, C., C. Grebitus, and T.G. Schmitz (2021): "Fair Trade versus Direct Label Coffee." track session "Trends in Consumer Demand Back to the 4Ps in a Global Market." *Agricultural and Applied Economics Association Congress*. Austin, TX (August 2021).
- 44. *Gao, S., C. Grebitus, and T.G. Schmitz (2020): "Effect of Risk Preferences on Willingness to Adopt Genomics The Case of Chinese Hog Farmers during African Swine Fever." FAMPS/FSN track session "The Economics of New Technologies in Livestock Innovation, Regulation and Return on Investment." *Agricultural and Applied Economics Association Congress*. Kansas City, MO (October 2020) Virtual Conference.
- 43. Voica, D.C., and T.G. Schmitz (2020): "Trading Risk for Ambiguity: Consumption versus Health under Pesticide Application." Selected paper session "Risk and Uncertainty: New Topics and Methods." *Agricultural and Applied Economics Association Congress*. Kansas City, MO (August 2020) Virtual Conference.

- 42. *Gao, S., C. Grebitus, and T.G. Schmitz (2020): "Effects of African Swine Fever on Chinese Hog Farmers' Communication Patterns: Insights from Social Network Analysis." FAMPS/FSN track session "Tackling Food Safety and Quality Challenges along the Food Supply Chain." Agricultural and Applied Economics Association Congress. Kansas City, MO (August 2020) Virtual Conference.
- 41. DeLong, K.L., C. Grebitus, and T.G. Schmitz (2019): "British and German Consumer Preferences for Beef with no added Growth Hormones." *Agricultural and Applied Economics Association Congress*. Atlanta, GA (July 2019).
- 40. Schmitz, T.G. (2018): "Trade Wars for Profit?" *Farming for Profit? Congress*. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University.
- 39. Zhu, M., A. Schmitz, and T.G. Schmitz (2017): "What are the Culprits Causing Obesity? A Machine Learning Approach in Variable Selection and Parameter Inference." *Agricultural and Applied Economics Association Congress*. Selected Paper. Chicago, IL (August 2017).
- 38. Schmitz, T.G. (2017): "Maximum Revenue Entitlement and Grain Transportation Policy Reform in Canada." *Farming for Profit? Congress*. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2017).
- 37. *Valdez-LaFarga, O. and T.G. Schmitz (2016): "A Country-Differentiated Import Demand Model for Fresh Tomatoes in the United States: Estimation of Price and Income Elasticities for 1991 through 2014." *Agricultural and Applied Economics Association Congress*. Selected Paper. Boston, MA (August 2016).
- 36. McFadden, B.R. and T.G. Schmitz (2016): "The New Food Guidelines: What are Farmers to Produce?" *Farming for Profit? Congress*. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2016).
- 35. Schmitz, A., T.G. Schmitz, P.L. Kennedy, and D.J. Haynes (2015): "Benefit Cost Analysis Distributional Welfare Weights and Food Security." *Agricultural and Applied Economics Association Congress*. San Francisco. (July 2015).
- 34. Schmitz, T.G. (2015): "Consumer Welfare and Agricultural Policy." Farming for Profit? Congress. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2015).
- 33. Schmitz, T.G. and D.J. Haynes (2015): "Multi-Period Benefit Cost Analysis." *Society for Benefit-Cost Analysis Congress*. Washington, D.C. (March 2015).
- 32. Haynes, D.J., A. Schmitz, and T.G. Schmitz (2015): "Producer Compensation Under Government Programs: What Should the Magnitude Be?" *Southern Agricultural Economics Association Congress*. Atlanta, GA (February 2015).
- 31. Schmitz, A., D.J. Haynes, T.G. Schmitz, and E.D. Schmitz (2014): "The Ontario Tobacco Quota Program Buyout: Public Policy Implications of Smoking and Healthcare Costs." *International Conference on Health, Wellness, and Society Congress.* University of British Columbia. Vancouver, Canada (March 2014).
- 30. Schmitz, T.G. and A. Schmitz (2014): "Production Quota Buyouts: Choosing an Approach to Compensation." *American Association of Behavioral and Social Sciences Congress*. Las Vegas, Nevada (February 2014).

- 29. Schmitz, T.G. (2013): "The Impact of Agricultural Policy on Healthcare and the Environment." Farming for Profit? Congress. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2013).
- 28. Schmitz, A., D.J. Haynes, T.G. Schmitz, and E.D. Schmitz (2013): "Benefit-Cost Analysis with Negative Externalities: The Case of Cigarette Smoking." *Southern Agricultural Economics Association Congress*. Orlando, Florida (February 2013).
- 27. Schmitz, T.G., J.L. Seale, Jr., and A. Schmitz (2009): "Ethanol and Hidden Subsidies in Brazil Revisited." The Economics of Alternative Energy Sources and Globalization: The Road Ahead (Biofuels). Orlando, Florida (November 2009).
- 26. Schmitz, A., T.G. Schmitz, and P. Shure (2008): "Agricultural Policy: High Commodity and Input Prices." *Canadian Agricultural Economics Society Congress*. Quebec City, Canada. (July 2008).
- 25. Schmitz A., and T.G. Schmitz (2008): "U.S. and EU Agricultural Policy: Divergence or Convergence?" The Economic Impact of Public Support to Agriculture. AIEA2-USDA International Conference. Bologna, Italy (June 2008).
- 24. Schmitz, T.G. (2007): "U.S. Agricultural Policy and Energy." Domestic and Trade Impacts of U.S. Farm Policy: Future Directions and Challenges. Selected Paper. Washington, D.C. (November 2007).
- 23. Moss, C.B., T.G. Schmitz, and A. Schmitz (2007): "Intellectual Property Rights and the Multinational Firm: The Case of High Valued Agriculture." Selected paper. USDA NC-1034 Symposium and Jenny Lanjouw Memorial Conference on Agricultural Research, Intellectual Property, and Incentives for Innovation. Berkeley, California (March 2007).
- 22. Schmitz, T.G. (2007): "Can Bio-fuels save agriculture?" *Farming for Profit? Congress*. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2007).
- 21. Schmitz, A., C.B. Moss, and T.G. Schmitz (2005): "A Differential Examination of the Effect of Mandatory Country of Origin Labeling on the Beef Sector." *American Agricultural Economics Association Congress*. Selected paper. Providence, RI (July 2005).
- 20. Acharya, R. and T.G. Schmitz (2004): "A System-Wide Approach for Analyzing the Effects of Exchange Rates on Fresh Apple Import Demand." *American Agricultural Economics Association Congress*. Selected Long Paper. Denver, CO (July 2004).
- 19. Schmitz, T.G., A. Schmitz, and C.B. Moss (2004): "Two Approaches to Measuring the Economic Impact of StarLink Corn on U.S. Producers." *American Agricultural Economics Association Congress*. Selected Long Paper. Denver, CO (July 2004).
- 18. Schmitz, T.G. and J.L. Seale, Jr. (2004): "Countervailing Duties, Antidumping Tariffs, and the Byrd Amendment: A Welfare Analysis." *American Agricultural Economics Association Congress*. Selected long paper. Denver, CO (July 2004).
- 17. Schmitz, A., J.L. Seale, Jr., and T.G. Schmitz (2003): "Brazil as a Dominant Player in the World Sweetener Market: Do Prices Matter?" Sugar and Development in Africa and the World: Sustainability, Diversification and Trade. Sponsored by the Food and Agricultural Organization of the United Nations. Maputo, Mozambique, Africa (October 2003).

- 16. Schmitz, T.G. (2003): "Lessons Learned from StarLink Corn." *Farming for Profit? Congress*. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2003).
- 15. Schmitz, T.G., and J.L. Seale, Jr. (2003): "Welfare Implications of the Byrd Amendment." International Agricultural Trade Disputes: Case studies in North America. Gainesville, Florida. (March 2003).
- 14. Moss, C.B., T.G. Schmitz, and A. Schmitz (2002): "Differentiating GMOs and Non-GMOs in a Marketing Channel." *International Consortium on Agricultural Biotechnology Research Congress*. Ravello, Italy (July 2002).
- 13. Moss, C.B., and T.G. Schmitz (2002): "Contract Enforcement under Alternative Marketing Channels." (2002): Farming for Profit? Congress. Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2002).
- 12. Schmitz, T.G., C.B. Moss, and Schmitz (2002): "Differentiating GMOs and Non-GMOs in a Marketing Channel." Free Trade Area of the Americas, the WTO, and New Farm Legislation: Responding to Opportunities and Challenges. Sponsored by Texas A&M University. San Antonio, TX (May 2002).
- 11. Moss, C.B., T.G. Schmitz, and A. Schmitz. (2001): "Segregating GM and non-GM Corn in a Marketing Channel." *International Agricultural Trade Research Consortium Congress*. Tucson, AZ (December 2001).
- 10. Moss, C.B., and T.G. Schmitz (2001): "Where is the Walrasian Auctioneer for Agricultural Markets? An Examination of the Marketing Institution." *American Agricultural Economics Association Congress*. Selected Paper. Chicago, IL (August 2001).
- 9. Schmitz, T.G. (2000): "International Trade: Keeping the Borders Open." *Farming for Profit? Congress.* Sponsored by University of Saskatchewan, University of Florida, and Texas A&M University (June 2000).
- 8. Schmitz, T.G. (1999): "Turkish Trade Policy and the Efficiency of Turkish Cotton Markets." *American Agricultural Economics Association Congress*. Selected Paper. Nashville, TN (August 1999).
- 7. Dumas, C.F. and T.G. Schmitz (1999): "The Effect of the FAIR Act: A Case of Overcompensation for Cotton Producers?" Agricultural Globalization, Trade and the Environment Conference. University of California, Berkeley, CA (March 1999).
- 6. Schmitz, T.G., and T.I. Wahl (1998): "A System-Wide Approach for Analyzing Japanese Wheat Import Allocation Decisions." *American Agricultural Economics Association Congress*. Selected Paper. Salt Lake City, Utah (August 1998).
- 5. Schmitz, T.G., T.I. Wahl, and W.W. Koo (1998): "The Impact of the Export Enhancement Program on International Feed and Malting Barley Markets." *American Agricultural Economics Association Congress*. Selected Paper. Salt Lake City, Utah (August 1998).
- 4. Schmitz, T.G. (1995): "The Economic Impacts of the General Agreement on Tariffs and Trade on the North American Broiler Industry." *International Agricultural Trade Research Consortium Congress*. Tucson, AZ (December 1995).

- Dumas, C.F. L. Lynch, T.G. Schmitz, and A. Schmitz (1994): "The Welfare Effects of Pesticide Bans in Distorted Markets: An Empirical Investigation." Conference in Honor of Carolyn Harper (May 1994).
- Schmitz, T.G. (1994): "Will the Supply Management Cartel Stand?" Supply Management in Transition Towards the 21st Century. McGill University. Ste-Anne-de-Bellevue, Quebec, Canada (July 1994).
- 1. Schmitz, T.G. (1993): "From Private to Government Rent-Seeking." Western Economics Association Congress. Lake Tahoe, California (June 1993).

H. Funded Research Grants

Participation in funded research grants – total volume: \$1,295,326

- 12. <u>Arizona Department of Agriculture, Specialty Crop Block Grant Program-Farm Bill</u>: Economic Impact and Resiliency of Arizona's Agricultural and Food Industries. PI with S. Vickner (Co-PI); 2020 2022, \$78,832 (recognition \$39,416).
- 11. <u>Institute for Social Science Research (ISSR), Arizona State University</u>: European Consumers' Demand for U.S. Beef: The Role of Country-of-Origin and food safety labeling. Co-PI with C. Grebitus; 2018 2019, \$8000 (seed grant for AFRI-NIFA proposal).
- 10. <u>W. P. Carey School of Business Dean's Award for Excellence Summer Research Grant Program:</u>
 "GMO Trade Disruptions: The Impact of the Chinese Embargo against U.S. exports of Viptera Corn." Sole-Investigator; 2017, \$20,000 (resulting paper was published in *Canadian Journal of Agricultural Economics*).
- 9. <u>Cultivating New Frontiers in Agriculture (CNFA USAID)</u>: Feed the Future Egypt Food Security and Agribusiness Support. Co-PI with Buch (PI) et al.; 2015 2016, \$3,909,038 requested, \$542,385 awarded.
- 8. W. P. Carey School of Business Dean's Award for Excellence Summer Research Grant Program: "Game-Theoretic Welfare Analysis of the 2014 U.S.-Mexican Agreement on Sugar." Sole-Investigator; 2015, \$20,000 (resulting paper was published in *Agricultural Economics*).
- 7. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: Southwest Cooperative and Producer Development Project. Co-PI with E.P. Thor (Co-PI); 2008, \$199,467 (recognition \$69,813).
- 6. <u>USDA AFRI-NIFA:</u> The Balkans & Black Sea Project: American Greek-Romanian Initiatives to Enhance Understanding of Multicultural Market Opportunities, Trade and Development. Co-PI with C.J. Shultz (PI); 2006 2007, \$99,969.
- 5. <u>Arizona Golf Industry Association</u>: Economic Impact of the Arizona Golf Industry. Sole-Investigator; 2004, \$57,000.
- 4. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: FY2001 Cooperatives and Rural Business Development Project for America's Southwest. Co-PI with E.P. Thor et al.; 2000 2001, \$189,984 (recognition \$75,994).
- 3. <u>National Potato Promotion Board</u>: Proposal for Real-Time Evaluation System. Co-Pl with T.J. Richards (Pl) et al.; 2000, \$62,697 (recognition \$31,299).

- 2. <u>Center for Agriculture and Rural Development (CARD), Iowa State University in conjunction with the Midwest Agribusiness Trade Research Information Center, University of Minnesota:</u> The Effects on Agriculture of E-Commerce and Information Technologies. Sub-contract PI; 2000, \$10,000.
- 1. Council for Research and Creative Activities Faculty Grant-In-Aid Program, Arizona State University: Implications of the Asian Financial Crisis for U.S. Cotton Exports; Sole-Investigator; 1998 1999, \$6,992.

I. Grant Proposals—Not Funded (yet)

Total volume: \$24,367,365 (includes partially unfunded from above)

- 24. <u>Arizona Department of Agriculture, Specialty Crop Block Grant Program-Farm Bill</u>: Increasing Demand for Arizona-Grown Pecans. Co-PI with C. Grebitus (PI); 2020, \$98,128 (recognition \$49,064). Pending.
- 23. <u>Arizona Department of Agriculture, Specialty Crop Block Grant Program-Farm Bill</u>: Increasing Demand for Arizona-Grown Pecans. PI with C. Grebitus (Co-PI); 2019, \$89,824 (recognition \$44,912).
- 22. <u>Arizona Department of Agriculture, Specialty Crop Block Grant Program-Farm Bill</u>: Increasing Demand for Arizona-Grown Tomatoes. PI with C. Grebitus (Co-PI); 2018, \$97,169 (recognition \$48,555).
- 21. <u>Sonneteck, Guangdong Province of China: China-USA Hydroponics Project</u>. Co-PI with R. Halden et al., Arizona State University; 5 yrs., 2016, \$14,232,526 (recognition \$426,976).
- 20. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: Attacking Global Barriers to North American Agribusiness. PI with E.P. Thor (Co-PI); 2008, \$199,922 (recognition \$69,813).
- 19. <u>Goldman Sachs & Company</u>: Agribusiness Education for Women Entrepreneurs in Africa. Co-PI with W.E. Nganje (PI) and R. Hughner (Co-PI); 2008, \$225,340 (recognition \$45,068).
- 18. <u>Arizona State University Foundation</u>: Competitiveness Analysis of the Karsten Golf Course with respect to the Phoenix Valley. PI with J. Bravo (Co-PI) and W. Scott (Co-PI); 2008, \$71,170 (recognition \$24,198).
- 17. <u>Arizona Golf Industry Association</u>: Economic Impacts and Environmental Aspects of the Arizona Golf Course Industry. Sole-Investigator; 2008, \$20,298 (recognition \$20,298).
- 16. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: Southwest Cooperative and Producer Development Project: Empowering America's Rural Cooperatives in the Southwest. Co-PI with E.P. Thor (PI) et al.; 2007, \$188,222 (recognition \$65,878).
- 15. <u>USDA AFRI-NIFA National Needs Graduate and Postgraduate Fellowship Grants Program (NNF)</u>:

 Doctoral Fellowship Program in Agribusiness and International Trade. Co-PI with T.J.

 Richards (PI) et al.; 2006, \$229,500 (recognition \$57,375).
- USAID US Agency for International Development: Cotton Export Promotion Project: Creating a
 Network to Grow American and Cambodian Markets. Co-PI with C.J. Shultz (PI) et al.;
 2005, \$190,422.

- 13. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: New Agribusiness Products and Teaching Materials, through Cross Disciplinary Learning, Consumer Research, and Industry Partnership. Co-PI with C.J. Shultz (PI); 2005, \$149,135 (recognition \$14,914).
- 12. <u>USDA AFRI-NIFA Cooperative State Research, Education and Extension Service</u>: U.S. Food Export Development: Market, Product, and Consumer Research. Co-PI; 2004, \$482,453 (recognition \$96,491).
- 11. <u>Association Liaison Office for University Cooperation in Development, US-Mexico Training, Internships, Exchanges, and Scholarships Initiative</u>: Agribusiness: The Bridge for Economic Development. Co-PI with G.J. Seperich (PI) et al.; 2004, \$296,465 (recognition \$29,665).
- USDA Risk Management Agency, Research Partnerships for Risk Management Initiatives: Multi-Period Input Risk Management with Satellite Imaging. Co-PI with T.J. Richards (PI); 2004, \$293,832 (recognition \$146,916).
- 9. <u>Mid-America International Agri-Trade Council</u>. Food Export Promotion Project: Creating a Global Communication Network to Grow American Food Markets. In conjunction with Deer Valley Unified School District. Co-PI with C.J. Shultz; 2004, \$1,394,046 (recognition \$69,702).
- 8. <u>USAID US Agency for International Development</u>: Partnership for Food Industry Development: Linking Universities and Food Marketing Organizations in Bosnia and Herzegovina, Croatia, and the United States. Co-PI with C.J. Shultz; 2004, \$1,990,112 (recognition \$199,011).
- 7. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: Water Demand in Agriculture: When Water is No Longer Free. Sub-contract with University of Florida. PI; 2004, (recognition \$55,024).
- 6. <u>Cactus and Pine Golf Course</u>: Economic Impact of the Arizona Golf Industry. Sole-Investigator; 2004, \$73,195 (recognition \$73,195).
- 5. <u>USDA AFRI-NIFA Cooperative State Research, Education, and Extension Service</u>: FY2001 Southwest Rural Business and Cooperatives Development Project. Co-PI with E.P. Thor (PI) et al.; 2000, \$223,423 (recognition \$44,685).
- 4. <u>USDA AFRI-NIFA Agricultural Economics and Rural Communities: Markets and Trade Program:</u> Exante and Ex-post Analysis of the FAIR Act of 1996: The Case of Cotton. Sub-contract with University of Florida. PI; 2000, \$65,972.
- 3. <u>USDA AFRI-NIFA Agricultural Economics and Rural Communities: Markets and Trade Program:</u> The Impact of the 1996 FAIR Act on the Net Economic Effects of Trading Cotton in the United States. Sub-contract with University of Florida. PI; 1998, \$26,124.
- USDA AFRI-NIFA Agricultural Economics and Rural Communities: Markets and Trade Program: Chinese Import Demand for High Valued Food Products: The Generalized Uniform Substitutes Trade Model. Co-PI with T.I. Wahl (PI) et al.; 1996, \$139,151.
- 1. <u>USDA AFRI-NIFA Agricultural Economics and Rural Communities: Markets and Trade Program:</u>
 Trade in Processed Foods and Gains to Producers of Agricultural Inputs. Co-PI with T.I. Wahl (PI) et al.; 1996, \$79,435.

IV. TEACHING

A. Courses Taught

| AGB 452 | Global Food and Agricultural Trade, B.A., 2019 – present |
|---------|--|
| SFS 564 | American Agriculture in the Global Context (co-instructor), M.Sc., 2020 – present |
| AGB 791 | Advanced Agribusiness Seminar, Ph.D., 2020 |
| WPC 300 | Problem Solving and Actionable Analytics, B.S. 2020 |
| AGB 414 | Food and Agribusiness Policy Issues, B.A., 2017 – 2020 |
| AGB 493 | Honors Thesis, Barrett Honors College, 2014 – 2020 |
| AGB 492 | Honors Directed Study, Barrett Honors College, 2013 – 2020 |
| AGB 701 | Advanced Agribusiness I: Advanced Agribusiness Analysis, Ph.D., 2015 – 2019 |
| AGB 452 | Global Food and Agricultural Policy, B.A., 2016 – 2018 |
| AGB 414 | Agribusiness Analysis, B.A., 2015 – 2016 |
| AGB 452 | International Agricultural Policy, B.Sc. and B.A., 1998 – 2016 |
| AGB 703 | Advanced Agribusiness III, Agribusiness Research Methods, Ph.D., 2009 – 2014 |
| AGB 589 | Agribusiness Capstone, M.Sc., Morrison School, 2009 – 2014 |
| AGB 552 | International Agricultural Policy, M.Sc., 1998 – 2014 |
| AGB 590 | Reading and Conference, 2009 – 2014 |
| AGB 494 | Economics of Biofuels and Biotechnology, B.Sc., 2011 |
| ECN 503 | Global Business Environment, Online MBA, 2009 – 2011 |
| ECN 212 | Microeconomic Principles, B.Sc., 2007 – 2008 |
| ECN 502 | Managerial Economics, Corporate MBA, 2008 |
| AGB 598 | Mathematical Agricultural Economics, M.Sc., 2008 |
| AGB 481 | Applied Microeconomics, B.Sc., 2005 – 2007 |
| AGB 360 | Applied Statistics (also cross-listed as APM 301), B.Sc., 2003 – 2008 |
| AGB 561 | Applied Econometrics, M.Sc., 1998 – 2007 |
| AGB 570 | Managerial Economics for Agribusiness, M.Sc., 2005 – 2007 |
| AGB 161 | Computer Applications for Agribusiness Industries, B.Sc., 1998 – 2004 |
| AGC 453 | International Marketing of Agricultural Products, M.Sc., Washington State University, 1997 |
| FRE 530 | Advanced Micro-Economic Theory (co-Instructor), Ph.D., University of Florida, 1996 |
| ARE 212 | Econometrics II (Lab Lecturer), Ph.D., University of California, Berkeley, 1993 |

B. Advisory Committees

1. Ph.D. Dissertation Committees

- 8. Member, Ekaterina Stoliarova (expected 2025): Essays on Marketing Strategies for Imperfect Produce.
- 7. Member, Shijun Gao (2022): Decision Making in the Livestock Supply Chain. Best Paper Award, China Section, AAEA Annual Meetings, New Orleans, 2024. [Friedman School of Nutrition Science and Policy, Tufts University]
- Member/Chair, Katherine Fuller (2022): The Market for Coffee: An Analysis of the Effects of Sustainability Labels on Consumers' choice and U.S. Import Demand. [Dept. of Applied Economics, Oregon State University]

- Member, Iryna Printezis (2018): Consumer Demand for Local Food from Direct-to-Consumer versus Intermediated Marketing Channels [Dept. of Supply Chain Management, W. P. Carey School of Business, Arizona State University, Tempe]
- Member, Octavio Valdez-LaFarga (2017): Three Essays on Demand System Estimation for Agricultural and Natural Resource Economics. [Universidad Autónoma de Occidente, Sinaloa, Mexico]
- 3. Member, Daniel Lewis (2015): The Role of Futures Markets for the Design and Performance of Incentive Based Environmental Policy: A Study of the Sulfur Financial Instrument and European Union Allowance. [PriceWaterhouseCoopers, Atlanta]
- 2. Chair, Karen Lewis DeLong (2014): Analysis of the United States Sweetener Industry's Characteristics and Federal Policies. [Dept. of Agricultural and Resource Economics, University of Tennessee, Knoxville]
- Member, Claudia Dumitrescu (2013): An Attributional Explanation of Consumers' Responses to Government Regulations and Corporate Social Responsibility, with Implications for Childhood Obesity. [College of Business, Central Washington University]

2. M.S. Thesis Committees

- 26. Member, Deepak Janke (2011): Economic Analysis of Implementing an Electronic Traceability System for Fresh Produce Importers
- 25. Member, Philip Manno (2010): Water markets in Almeria, Spain: Understanding the Attitudes and Opinions of the Region's Greenhouse Growers Towards Water Trading
- 24. Chair, Ya-Hui Kuo (2010): Is Removing Cotton Subsidies A Win-win Policy For Developed Countries?
- 23. Member, William Allender (2009): Brand Loyalty and Equilibrium Promotion Strategies
- 22. Member, Jodi Smith (2009): Can Green Marketing Play a Role in Purchase Intentions? A Study of Australian Cask Wine Consumers
- 21. Member, Claudia Dumitrescu (2008): A study of the opportunities for American Durum Wheat to be exported to Greece and Romania
- 20. Member, Daniel Voica (2008): Is there Evidence of Dominant Offsetting Behavior in Food Safety?
- 19. Member, Lingham Srinivasa (2006): Performance Aspects of Community Banks Implementing Electronic Commerce with Internet Banking
- 18. Member, Eric Carlson (2006): Survival of Salmonella muenchen in Orange Juice
- 17. Member, Sheldon Jones (2005): Policy Advocacy Beyond Legislative Mandate: A Case Study of the Arizona Department of Agriculture
- 16. Chair, Jim McDonald (2005): Economics: A Mesa Distance Learning Course: A Case Study
- 15. Member, An Van Khanh (2004): Consumers' Perspectives on Vietnam's Coffee Value Chain, with Implications for Appropriate Management of that Chain

- 14. Chair, Dana Hansen (2004): Feasibility of and Opportunities for Traceability or Identity Preservation in Grain Production
- 13. Chair, Rodica Evtuhovici (2004): The Effects of Sugar Support Programs in the European Union and the United States on the World Sugar Market
- 12. Member, Samuel Cardona (2004): Agricultural Cooperatives in Puerto Rico
- 11. Member, Vijay Gannamani (2004): Analysis of the Cooperative Banking System in India
- 10. Member, Christian Ramirez (2003): A Feasibility Study for a Fresh Salsa Processing Facility in Arizona: Opportunities and Risks
- 9. Member, Udayasri Addala (2003): Microfinance: Improving the Lives of Rural People
- 8. Member, Aphiradee lamphunghorn (2002): Agribusiness Issues in the Thailand Movie Industry
- 7. Member, Natalia Usmanova (2002): Nutritional Information in Service Sizes
- 6. Member, Erin Ruecklies (2001): Customer Service in Floral Distribution: A Market Research Approach
- 5. Member, Taek-Ryun Kwon (2001): The Global Beef Trade and South Korean beef Markets after the Asian Financial Crisis
- 4. Member, Boonyapak Sirrirat (2000): Natural Rubber Production and Trade Policy in Thailand
- 3. Member, Jingjuan Xia (2000): An Econometric Analysis of the Chinese Apple Industry
- 2. Member, Thitiya Nithipitigan (2000): World Trade Organization's Agreements Affecting Thailand's Fishing Industry
- 1. Member, Maximillian Goldberg (2000): Regulations with Regard to Bee Pollen for use as an Avian Food Additive

3. Barrett Honor's College Thesis Committees

- 5. Director, Luke Whelan-Gonzales (2020): Measuring the effects of Tailored Communication Styles
- 4. Member, Yann Raymond and Mary Curtiss (2018): Working towards Garden of Eden: Developing practical solutions to combat food insecurity in food deserts. Raymond placed second and Curtiss finished third in the 2017 Cactus Section of the Institute of Food Technologists Poster Competition
- 3. Member, Haley Cooley (2016): It's all in the genes: Designing and administering a brief survey to local dairymen in order to gauge their interest in genomics
- 2. Director, John Shriver (2015): The Initial Feasibility of a Small Hydroponic Farm Startup in Austin, Texas
- 1. Director, Nile Kristol (2014): It's all in the genes: An Analysis of Consumer Preference in Food Production: Consumer Preferences for Natural Processes

C. Funded Instructional Grants

Participation in funded instructional grants – total volume: \$630,500

- 3. <u>USDA AFRI-NIFA National Needs Graduate and Postgraduate Fellowship Grants Program (NNF)</u>: International Agribusiness Fellows Program: Master's Studies in Agribusiness and Agricultural Trade Policy. T.J. Richards (PI) et al; 2006 2010, \$217,500 (recognition \$130,500). Inherited duties as PI when Dean Patterson left ASU in 2009.
- 2. <u>U.S. Department of Education Fund for the Improvement of Postsecondary Education (FIPSE) and the Program for North American Mobility in Higher Education</u>: Attacking Global Barriers to North American Agribusiness and establishing partnerships; PI and Consortium Leader. Established formal connections, wrote the agreement on academic cooperation, and had several students and faculty participate in exchanges among Arizona State University, University of Florida, University of Guelph, University of Saskatchewan, Universidad de Guadalajara, and Autonomous Universidad de San Luis Potosi; 2001 2005; \$403,000 combined over 6 universities in U.S, Canada, and Mexico (contribution: \$99,961).
- 1. <u>Tri-State Agricultural Distance Delivery Alliance (Washington, Idaho, Oregon)</u>. Distance education course development grant for undergraduate degree in general agriculture for course titled "International Marketing of Agricultural Products"; Co-PI; 1998, \$10,000. Did not actually develop the course because I accepted the position at ASU in 1998.

V. INSTITUTIONAL SERVICE

A. Internal Service

1. Arizona State University

Member, Personnel Sub-Committee (ASU Senate), 2019 – 2020

Member, ASU Senate, 2019 – 2020

Member, Famine Early Warning System Network (FEWSNet). Six University Consortium led by Palladium and sponsored by USAID, 2017 – present.

Member, Food Systems Transformation Initiative (FSTI), 2014 – 2018

Member, ASU Senate, 2006 – 2007

Member, Graduate Council, 2005 – 2007

Member, Canadian Studies Steering Committee, 2005 – 2006

Faculty Fellow, ASU Freshman Year Experience, 2002 – 2003

2. Polytechnic Campus

Member, ASU Polytechnic Campus Leaders Group, 2020 – current

Executive Committee, Sustainable Technologies, Agribusiness, and Resources (STAR) Center, 1999 – 2006

Member, Researcher and Teacher of the Year Award Committee, 2005

Member, Web Advisory Group, 2004 – 2005

3. W. P. Carey School of Business

Member, Graduate Academic Standards Committee, 2014 – 2020

Member, Master's Program Committee, 2013 – 2020

Faculty Mentor, W. P. Carey Leaders Academy, 2013 – 2020

4. Barrett Honors College

Faculty Honors Advisor, all W. P. Carey Degree Programs @ Polytechnic Campus, 2013 – 2020

5. College of Technology and Innovation

Member, Leadership Plus Council, 2011 – 2012

Chair, Search Committee, Resource Economics Tenure-Track Position, 2011 – 2012

6. Morrison School of Agribusiness

School Director and Professor, Morrison School of Agribusiness, 2020 – present

Chair, Promotion and Tenure Committee, 2019 – 2020

Member, Faculty Performance Review Committee, 2015, 2018, 2020

Faculty Advisor, "Business of Food Club," Undergraduate Student Organization, 2018 – 2020

AACSB Assessment Coordinator, 2017 - 2020

Member, Promotion and Tenure Committee, 2004 – 2019

Chair, Undergraduate Curriculum Committee, 2016 – 2017

Member, Undergraduate Curriculum Committee, 2013 – 2016

Advisor, all students, Master's Degree Program, 2013 – 2016

Class Scheduler, Undergraduate and Graduate Courses, 2013 – 2016

Member, Search Committee, Kemper and Ethel Marley Foundation Chair Hire, 2001, 2016

Member, Graduate Curriculum Committee, 2013 – 2015

Graduate Program Chair, 2011 – 2012

Chair/Co-Chair, Graduate Curriculum Committee, 2004 – 2011

Member, Vision and Curriculum Committee, 1998 – 2011

Chair, Computerization Committee, 1999 – 2006

Faculty Advisor, Alpha Zeta Agricultural Fraternity, 2001 – 2004

Faculty Advisor, ASU Rodeo Club, 1999 – 2002

Faculty Advisor, National Agri-Marketing Association (NAMA), 1999 – 2001

B. Professional Service

1. Editorial Activities

Guest Editor, with Ian Sheldon, International Trade (virtual issue), <u>American Journal of Agricultural</u> <u>Economics</u>, 2019

Editorial Review Board, Journal of International and Global Economic Studies, 2008 – 2019

Associate Editor, International Journal of Golf Science, 2012 – 2019

2. Reviewer Activities for Competitive External Grant Proposals

- External Reviewer, "Cal Poly, San Luis Obispo, State Faculty Support Grants." Twice, 2005, 2006.
- Member, Review Panel, California Department of Health Services, <u>California Cancer Research Program</u>. Administered through the Department of Epidemiology and Preventative Medicine at the University of California, Davis. Proposals included food policy issues related to health economics, multimedia healthy food promotion, and epidemiology (\$86 million funded for gender-based cancer prevention research). Cycle I and Cycle II Reviewer, 1998 2001.
- Manager, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA, Agricultural Economics and Rural Communities, <u>Economics, Markets and Trade Program</u>. Various years, five different times over the period 2015–2021. (\$35 million in competitive research grants).
- Manager, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA, Agricultural Economics and Rural Communities, <u>Environmental and Natural Resource Economics</u>

 <u>Program.</u> Various years, two different times over the period from 2019–2021. (\$10 million in competitive research grants).
- Manager, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA and USDA Economic Research Service. Joint effort to support the FACT initiative. Agricultural Economics and Rural Communities: Economic Implications and Applications of Big Data in Food and Agriculture (\$2 million in competitive research grants), 2018.
- Manager, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA and USDA Economic Research Service. Jointly funded pilot research program, <u>Behavioral and Experimental Economic Applications for Agri-environmental Policy Design</u>, (\$1 million in competitive research grants), 2016.
- Peer Reviewer, S_Temp1072 U.S. Agricultural Trade and Policy in An Uncertain Global Market Environment, USDA National Institute of Food and Agriculture AFRI-NIFA. Southern Association of Agricultural Experiment Station Directors. 2023-2028 Multistate Research Project. 2023.
- Reviewer, U.S./Israel Agricultural Bilateral Research & Development Fund (BARD). Grant Proposal Reviewer, 2018.
- Member, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA, Agricultural Economics and Rural Communities: <u>Economics, Markets and Trade Program</u>, 2014.
- Member, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA, <u>Small Business Innovation Research Program</u>. Phase I (currently limited to \$100,000 per proposal) and Phase II (currently limited to \$600,000 per proposal). 2004.
- Member, Review Panel, USDA National Institute of Food and Agriculture AFRI-NIFA, <u>Agricultural Economics and Rural Communities: Markets and Trade Program.</u> 2003.

3. Leadership Activities for Professional Organizations

- Session Moderator, "Trade Model Applications to Policy Analysis." International Agricultural Trade Research Consortium (IATRC) Meetings. Clearwater, FL (December 2023).
- Lightning Session Moderator, "Trends in Consumer Demand Back to the 4Ps in a Global Market."

 Agricultural and Applied Economics Association (AAEA) Meetings. Austin, TX

 (August 2021).
- Organized Symposium Moderator, "The Importance of Global Trade Policies/Disputes and Macroeconomic Conditions to Southern U.S. Agriculture." Southern Association of Agricultural Scientists 116th Annual Meeting. Birmingham, Alabama (February 2019).
- Symposium Organizer, "Renegotiating Trade Agreements: Implications for Agriculture." Organized Symposium held at the Annual Agricultural and Applied Economics Association (AAEA) Meetings. Washington, D.C. (August 2018).
- Session Discussant, "Curse or Blessing: The role of European Geographical Indications in Stabilizing Farm Income and Trade and Easing Consumer's Choice." 30th International Conference of Agricultural Economists. Vancouver, B.C. Canada (July 2018).
- Session Moderator, "Agricultural Trade and Policy along the Silk Road: Roles of Multilateral and Regional Agreements." International Agricultural Trade Research Consortium Meetings. Scottsdale, Arizona (December 2016).
- Selected Paper Reviewer, "Food Safety and Nutrition." Agricultural and Applied Economics Association Meetings. Boston, MA (August 2016).
- Selected Paper Reviewer, "Food Safety and Nutrition." Agricultural and Applied Economics Association Meetings. San Francisco, CA (August 2015).
- Member, "Outstanding Thesis Award Committee." Western Agricultural Economics Association (2013).
- Chair, "Outstanding Published Research Award Committee." Western Agricultural Economics Association (2005).
- Session Moderator, "Market Structure and Product Differentiation." American Agricultural Economics Association Meetings. Providence, RI (August 2005).
- Member, "Outstanding Published Research Award Committee." Western Agricultural Economics Association (2004).
- Session Moderator, "Agricultural Price Analysis." American Agricultural Economics Association Meetings. Denver, CO (August 2004).
- Session Moderator, "International Agricultural Trade Policy." American Agricultural Economics Association Meetings. Montreal, Quebec, Canada (August 2003).
- Selected Paper Reviewer, "International Trade." American Agricultural Economics Association Meetings. Montreal, Quebec, Canada (August 2003).
- Selected Paper Reviewer, "Agricultural Policy." American Agricultural Economics Association Meetings. Montreal, Quebec, Canada (August 2003).

- Selected Paper Reviewer, "Demand and Price Analysis." American Agricultural Economics Association Meetings. Montreal, Quebec, Canada (August 2003).
- Reviewer, "Selected Posters." American Agricultural Economics Association Meetings. Long Beach, CA (August 2002).
- Selected Paper Reviewer, "International Trade." American Agricultural Economics Association Meetings. Nashville, TN (August 1999).
- Session Discussant, "Contract, Bargaining and Selection Models." American Agricultural Economics Association Meetings. Salt Lake City, UT (August 1998).
- Selected Paper Reviewer, "Agricultural Marketing." American Agricultural Economics Association Meetings. Salt Lake City, UT (August 1998).

4. Consultancies and Depositions

- <u>Lykes Bros. Inc.</u> v. Aaction Mulch Inc. (Case #2:08-CV-399-FTM 99 SPC). Devine Goodman Rasco & Wells. Expert Witness. Expert rebuttal report and deposition. Antitrust economics, market power, vertical markets, applied welfare analysis, essential facilities doctrine.
- E.I. DuPont de Nemours and Company, Inc. and Leon J. DeLeon v. Super Helechos S.A., et al. (case #01-6932 CA 23). Bartlit Beck Herman, Palenchar & Scott; and Shook, Hardy & Bacon. Consulting Witness. Potential damages of Benlate affecting leatherleaf fern production in Costa Rica: (1) Link between yields in Costa Rica and other countries; (2) Economic damages; and (3) International supply and demand factors affecting leatherleaf ferns.
- Hartford Fire Insurance Company "The Hartford" v. United States court number 09-00058. Barnes Richardson & Colburn. Consulting Witness. Economic impact of disbursements made pursuant to the Continued Dumping and Subsidy Offset Act to U.S. producers and processors who participated in U.S. antidumping or countervailing duty actions.
- U.S. Corn Producers in seven states v. Aventis CropScience USA Holding, Inc. Co-Lead Counsel Cohen, Milstein, Hausfeld & Toll; Levin, Papantonio, Thomas, Mitchell, Echsner, and Proctor; Milberg, Weiss, Bershad, Hynes, and Lerach; Wolf, Haldenstein, Adler, Freeman, and Herz. Consulting Witness. Economic implications of the introduction of Starlink corn into the U.S. grain handling system: (1) Economic damages from the increased cost of identity preservation; (2) Reduction in the import demand for U.S. corn, and (3) Adjustments for the Loan Deficiency Payment Program.
- <u>Deloitte Touche Tohmatsu Limited</u>. Economic analysis of inquiry into Canadian chicken broiler import quota allocations. Submitted to the Canadian International Trade Tribunal (CITT).
- World Bank and USAID. Policy, State Trading, and Cooperatives in Turkish Agriculture. In conjunction with the Agricultural Economics Research Institute in Ankara, Turkey.
 (1) Efficiency of Turkish cotton, raisin, olive oil, and fig markets; and (2) Investigating possible state-trading activity conducted by Turkish agricultural cooperatives related to the World Trade Organization.
- <u>U.S. Environmental Protection Agency</u>. Potential costs and benefits of the U.S. Sugar Program and estimating the cost of cleaning up the Florida Everglades.

- Canadian Wheat Board (CWB). (1) Impact of removing domestic malting barley from control of the CWB; (2) Annual benchmarking of CWB marketing strategies on U.S. wheat prices; (3) Costs and benefits of single-desk selling for durum producers; (4) Market power in international durum markets; (5) Costs and benefits of single-desk selling for feed and malting barley producers; and (6) Price pooling. Multiple projects.
- <u>Sugar Cane Growers Cooperative of Florida</u>. Economic viability of the Florida Sugar Industry with respect to potential bilateral and regional free trade agreements, Central American Dominican Republic Free Trade Agreement (CAFTA-DR).
- Rural Advancement Foundation International (RAFI-USA). Economic and Environmental Implications of Plant-made Pharmaceuticals (PMP) for Small and Medium-Sized Farmers in North Carolina: (1) U.S. regulatory framework for GM and PMP crops; (2) Potential costs and benefits of PMPs; (3) Government subsidies to biotech; (4) PMP health risks and intended uses; and (5) Potential containment loss.
- <u>Juarez and Associates</u>. "Restaurant Nutrition Program." San Diego, California. (1) Aided in the development of pre and post-test surveys of healthy dining customers in San Diego and Los Angeles counties; and (2) Effectiveness of advertising on the consumption of healthy meals.
- Agriculture and Agri-Food Canada. "Canada-US Cattle Antidumping Dispute." (1) Measured market power exhibited by the Canadian Wheat Board on international feed barley markets; and (2) Economic impact of the U.S. Export Enhancement Program on feed barley market prices and trade flows between the U.S. and Canada.
- Canadian Department of Justice. Archibald et al v. Canadian Wheat Board & Her Majesty the Queen. Prepared background research pertaining to the pricing strategies of the CWB within the context of the international grain trade.
- <u>National Golf Foundation</u>. Developed the national input/output framework for empirically estimating the direct, indirect, and induced effects of golf related businesses, and the economic effects of golf tourism and real estate at the state level.

5. Reviews for Peer-Reviewed Academic Journals

Nature Food, American Journal of Agricultural Economics, Canadian Journal of Agricultural Economics, Food Policy, Applied Economic Policies and Perspectives (formerly Review of Agricultural Economics), Agricultural Economics, Agribusiness: An International Journal, Journal of Agricultural and Resource Economics, Sustainability, Agricultural and Resource Economics Review, International Economic Review, Review of International Economics, Journal of Empirical Finance, International Journal of Applied Economics, Journal of International and Global Economic Studies, Journal of Agricultural and Applied Economics, Journal of Benefit-Cost Analysis, Journal of Food Distribution Research, CHOICES Magazine, Journal of Agribusiness, Economic Inquiry, Contemporary Economic Policy, Journal of International Agricultural Trade and Development, Journal of Agricultural & Food Industrial Organization, Business and Politics, UK Bulletin of Economic Research, International Economics and Economic Policy, International Journal of Applied Economics.

6. Professional Memberships

Agricultural & Applied Economics Association (AAEA)

Canadian Agricultural Economics Society (CAES)

International Association of Agricultural Economists (IAAE)

International Agricultural Trade Research Consortium (IATRC)

Western Agricultural Economics Association (WAEA)

Southern Agricultural Economics Association (SAEA)

S-1072 HATCH Multistate Research Fund, National Institute for Food and Agriculture (NIFA): "U.S. Agricultural Trade and Policy in a Dynamic Global Market Environment"

VI. AWARDS AND COMMUNITY SERVICE

A. Awards

- Exemplary Dedication and service to Barrett, the Honors College students as Faculty Honors Advisor for Business. Arizona State University, 2019
- Outstanding Ph.D. Dissertation Advisor: Karen Elizabeth Lewis "Analysis of the United States Sweetener Industry's Characteristics and Federal Policies." International Agricultural Trade Research Consortium, 2014
- Researcher of the Year: Polytechnic Campus, Arizona State University, 2004
- <u>Faculty/Staff Appreciation Game (selected):</u> One of 12 faculty and staff chosen to appear on field at Faculty/Staff Appreciation Game, Arizona State University Sun-Devils Football, 2004
- Outstanding Journal Article of the Year (finalist): Canadian Agricultural Economics Society, 2003
- Outstanding Contribution to Student Activities: Morrison School of Agribusiness and Resource Management, Arizona State University, 1999
- Outstanding Ph.D. Dissertation: "The Economic Effects of the General Agreement on Tariffs and Trade on Supply Management in Canadian Agriculture: Spatial Models of the Canadian Broiler Industry." International Agricultural Trade Research Consortium, 1995

B. Community Service

- Judge, Future Farmers of America (FFA) Arizona Mid-Winter Career Development State Competition, 2013–2016, 2021
- Maintained a contact database and analyzed issues affecting Southwest Agricultural Cooperatives (mostly small local businesses). Held several workshops at ASU Polytechnic Campus on Southwest Cooperatives to help local startups form small cooperatives and to help existing cooperatives with business strategies, 1999 2010
- Estimated the economic impacts and environmental aspects of the Arizona golf industry for the Arizona Golf Association, Arizona Golf Industry Association, and Southwest PGA section. Results were presented to the Arizona State Legislature and the Agribusiness & Water Council of Arizona.

C. Popular Press Articles, and Press Releases

- Beach, E. (2023): "ASU Morrison School of Agribusiness celebrates 25 years." ASU NEWS. https://news.asu.edu/20231207-asu-morrison-school-agribusiness-celebrates-25-years 12/07/23.
- 9. Woolson, J.D. (2023): "Drilling Down the World Oil Market." W.P. Carey School of Business Magazine, 20th Anniversary Issue, pp. 52-53. Arizona State University. https://wpcareymagazine.com/issue/autumn-2023/. Autumn 2023.
- 8. Ludden, N. (2019): "Arizona Democrats' claim about GOP trade policy and rising grocery prices doesn't add up." *Arizona Republic*. 11/24/2019.

 https://www.azcentral.com/story/news/politics/fact-check/2019/11/24/arizona-democrats-wrongly-blame-gop-trade-policy-rising-food-costs-fact-check/4075212002/
- 7. Jones, C. (2019): "Supply squeeze for tomatoes? Some fear new border checks could cause delays, higher prices." *USA Today. MONEY*. 09/24/2019.

 https://www.usatoday.com/story/money/2019/09/24/tomato-prices-inspections-mexican-border-make-them-pricier/2418243001/
- 6. Scheetz, A. (2018): "NAFTA 2.0: The Wins and Losses in the USMCA." *Agricultural and Applied Economics Association* (AAEA). CISION PRWeb. 12/18/2018.

 https://www.prweb.com/releases/nafta_2_0_the_wins_and_losses_in_the_new_trade_agreement_usmca/prweb15978262.htm
- 5. Faller, M.B. (2018): "Retaliation over tariffs affecting agricultural producers as deals are renegotiated." *ASU NOW*. 9/5/2018. https://asunow.asu.edu/20180904-arizona-impact-effects-us-trade-war-could-hit-consumers-wallets-asu-expert-says
- 4. Harker, V. (2018): "Arizona Farmers Jittery as Aid Replaces Trade." *Chamber Business News*. 8/2/2018. http://chamberbusinessnews.com/2018/08/02/arizona-farmers-jittery-as-aid-replaces-trade/
- 3. Scheetz, A. (2018): "Effects of Renegotiating U.S. Trade Agreements." *Agricultural and Applied Economics Association* (AAEA). 7/12/2018. CISION PRWeb. https://www.prweb.com/releases/2018/07/prweb15622318.htm
- 2. Goodykoontz, B. (2006): "FORE! Golf Industry brings a stroke of prosperity to Valley and ASU." *ASU NOW.* 11(4), 27–33. https://asunow.asu.edu/sites/default/files/june_2008_0_0.pdf
- Aspinwall, C. and L. Nicita (2005): "Arizona Golf Seeing Green." The Arizona Republic. 11/17/2005, A1 and A17; front-page article. Also involved a Q&A session on KTAR NEWS (92.3 FM).