

## **TOMISLAV VUKINA**

Home: 1513 Shadowood Lane, Raleigh, NC 27612  
Phone: (919) 781-6902; Cell: (919) 274-4612

Office: Department of Agricultural and Resource Economics  
North Carolina State University; Raleigh, NC 27695-8109  
Phone: (919) 515-5864; FAX: (919) 515-6268  
E-mail: tom\_vukina@ncsu.edu

### **EDUCATION**

1991 UNIVERSITY OF RHODE ISLAND, USA  
Ph.D., Economics – Marine Resources.

1982 UNIVERSITY OF ZAGREB, Croatia  
M.A., Economics.

1978 UNIVERSITY OF ZAGREB, Croatia  
B.A., Economics.

### **RESEARCH FIELDS**

- Economic Organization of Agriculture
- Economics of Incentives and Information
- Health and Labor Economics

### **EMPLOYMENT HISTORY**

North Carolina State University - Department of Agricultural and Resource Economics  
2002-present Professor  
1997-2002 Associate Professor  
1993-1997 Assistant Professor

University of Zagreb - Graduate School of Economics and Business; Croatia  
Fall 2007 Visiting Professor - Fulbright scholar

Royal Veterinary and Agricultural University – Department of Economics and Natural Resources; Copenhagen, Denmark.  
Fall 1999 Visiting Professor - Lektor

University of Rhode Island - Department of Resource Economics  
1993 Visiting Assistant Professor  
1992 Postdoctoral Fellow  
1988-1991 Graduate Assistant

Institute for Developing Countries - Zagreb; Croatia  
1983-1986     Research Associate

Center for Economic Development - Zagreb; Croatia  
1978-1983     Research Assistant

## **AWARDS**

- 2019 Award for Excellence in Multistate Research. Northeastern Regional Association of State Agricultural Experiment Station Directors: Presented to the Technical Committee of NE1442 “Poultry Production Systems and Well-being: Sustainability for Tomorrow.” June 3, 2019.
- Agricultural and Applied Economics Association President’s Award. In recognition of outstanding leadership as inaugural editor of the AAEA journal: Applied Economic Perspectives and Policy. July 25, 2011.
- J. William Fulbright Lecturing/Research Award to Croatia, Fall 2007 semester.
- Outstanding Journal Article, Review of Agricultural Economics: T. Vukina. “The Relationship between Contracting and Livestock Waste Pollution. Review of Agricultural Economics, Vol. 25 (1) (2003): 66-88.
- Outstanding Journal Article, American Journal of Agricultural Economics: Tsoulouhas, T. and T. Vukina. “Integrator Contracts with Many Agents and Bankruptcy”. American Journal of Agricultural Economics, Vol. 81 (February 1999): 61-74.
- Article of the Year – 1994, Northeastern Agricultural and Resource Economics Association: Vukina, T. and J. L. Anderson. “An Adaptive Model of Perishable Inventory Dissipation in a Nonstationary Price Environment. Agricultural and Resource Economics Review, Vol.23, (April 1994):1-10.
- The University of Rhode Island 1991-92 Greg J. Lessne Award in Recognition of Excellence in the Study of Natural Resource Markets and Economics.

## **PUBLICATIONS**

### **Refereed Journal Articles:**

Oh, S. E. and T. Vukina. “Estimating Parental Demand for Children's Screen Time in a Model of Family Labor Supply.” International Advances in Economic Research (2022):  
<https://doi.org/10.1007/s11294-022-09854-7>

Oh, S. E. and T. Vukina. “The price of cage-free eggs: Social cost of Proposition 12 in California.” American Journal of Agricultural Economics 104 (4) (2022): 1293–1326.  
<https://doi.org/10.1111/ajae.12279>

Zheng, Y., T. Vukina and X. Zheng. Risk Aversion, Moral Hazard and Gender Differences in Health Care Utilization. The Geneva Risk and Insurance Review 46 (2021): 35-60. DOI:  
<https://doi.org/10.1057/s10713-020-00048-x>

Nestic, D. and T. Vukina. Examining the Prevalence of Obesity in Croatia: The Story of the Mediterranean Diet". *Economia agro-alimentare / Food Economy, An International Journal on Agricultural and Food Systems*, 22 (3) (2020): 1-32. [http://ojs.francoangeli.it/\\_ojs/index.php/ecagoa/article/view/11036](http://ojs.francoangeli.it/_ojs/index.php/ecagoa/article/view/11036)

Vukina, T. and D. Nestic. Paying for Animal Welfare? A Hedonic Analysis of Egg Prices. *Agribusiness: an International Journal*, 36 (4) (2020): 613-630. <http://dx.doi.org/10.1002/agr.21658>

Wang, Z. and T. Vukina. Sorting into Contests: Evidence from Production Contracts. *The B.E. Journal of Economic Analysis and Policy*, 19 (1) (Jan. 2019) DOI: <https://doi.org/10.1515/bejeap-2018-0049>

Zheng, Y., T. Vukina and X. Zheng. Estimating Asymmetric Information Effects in Health Care with Uninsurable Costs. *International Journal of Health Economics and Management*, 19 (1) (March 2019): 79-98.

Oh, S.E. and T. Vukina. Substitutability between Organic and Conventional Poultry Products and Organic Price Premiums. *Economia Agro-alimentare / Food Economy* 20 (1) (2018): 75-92.

Wang, Z. and T. Vukina. Welfare Effects of Payment Truncation in Piece Rate Tournaments. *Journal of Economics* 120 (2017): 219-249.

Dubois, P. and T. Vukina. Incentives to Invest in Short-term vs. Long-term Contracts: Theory and Evidence. *The B.E. Journal of Economic Analysis and Policy*, Vol. 16 (3), (2016): 1239-1272.

Zheng, Y. and T. Vukina. Using Age-Based Insurance Eligibility Criterion to Estimate Moral Hazard in Medical Care Consumption. *Financial Theory and Practice* 40 (No.3), (2016): 338-356.

Kandilov, I. and T. Vukina. Salaries or Piece Rates: On Endogenous Matching of Harvest Workers and Crops. *Economic Inquiry*, Vol. 54 (No.1), January 2016: 76-99.

Vukina, T. and D. Nestic. Do People Drive Safer when Accidents are More Expensive: Testing for Moral Hazard in Experience Rating Schemes. *Transportation Research Part A: Policy and Practice*, Vol. 71 (2015): 46-58.

Weng, T., T. Vukina and X. Zheng. Productivity or Demand: Determinants of Plant Survival and Ownership Change in the U.S. Poultry Industry. *Applied Economic Perspectives and Policy*, Vol. 37, No. 1 (2015): 151-175.

Vukina, T., K. Anderson and M.K. Muth. Proposed Changes in Living Conditions for Broilers under the National Organic Program Will Have Limited Economic Effects. *Journal of Applied Poultry Research*, Vol. 23 (2014): 233-243.

Vukina, T., K. Anderson and M.K. Muth. Economic Effects of Proposed Changes in Living Conditions for Laying Hens under the National Organic Program. *Journal of Applied Poultry Research*, Vol. 23 (2014): 80-93.

Liu, X., D. Nestić and T. Vukina. Estimating Adverse Selection and Moral Hazard Effects with Hospital Invoices Data in a Government-Controlled Health Care System. *Health Economics*, Vol. 21 (August 2012): 883-901.

Vukina, T. and X. Zheng. Homogenous and Heterogenous Contestants in Piece Rate Tournaments: Theory and Empirical Analysis. *Journal of Business and Economic Statistics*, Vol. 29 (No. 4), October 2011: 506-517.

Vukina, T. and X. Zheng. Bargaining, Search, and Price Dispersion: Evidence from the Live Hogs Market. *Agricultural and Resource Economics Review*, Vol. 39 (October 2010): 534-546.

Dubois, P. and T. Vukina. Optimal Incentives under Moral Hazard and Heterogeneous Agents: Evidence from Production Contracts Data. *International Journal of Industrial Organization*, Vol. 27 (July 2009): 489-500.

Vukina, T., C. Shin and X. Zheng. "Complementarity among Alternative Procurement Arrangements in the Pork Packing Industry," *Journal of Agricultural & Food Industrial Organization*: Vol. 7(1) (2009), Art.3. Available at: <https://www.degruyter.com/view/j/jafio.2009.7.1/jafio.2009.7.1.1252/jafio.2009.7.1.1252.xml?format=INT>

Zheng, X. and T. Vukina. Do Alternative Marketing Arrangements Increase Pork Packers' Market Power? *American Journal of Agricultural Economics*, Vol. 91 (February 2009): 250-263.

Vukina, T., X. Zheng, M. Marra and A. Levy. Do Farmers Value the Environment? Evidence from a Conservation Reserve Program Auction. *International Journal of Industrial Organization*, Vol. 26 (2008): 1323-1332.

Vukina, T. Quality Differences and Risk Shifting Associated with Alternative Marketing Arrangements in the Swine Industry. *Journal of Food Distribution Research*, Vol. 39 (2), (July 2008): 77-91.

Zheng, X., T. Vukina and C. Shin. The Role of Farmers' Risk Aversion for Contract Choice in the US Hog Industry. *Journal of Agricultural & Food Industrial Organization*, Vol. 6(1) (2008), Article 4. Available at: <https://www.degruyter.com/view/j/jafio.2008.6.1/jafio.2008.6.1.1220/jafio.2008.6.1.1220.xml?format=INT>

Vukina, T. and D. Nestić. Asymmetric Information in Health Insurance: Some Preliminary Evidence from the Croatian State-Administered Supplemental Plan. *Privredna Kretanja i Ekonomska Politika*, 115 (2008): 25-47.

Vukina, T. and X. Zheng. Structural Estimation of Rank-Order Tournament Games with Private Information. *American Journal of Agricultural Economics*, Vol.89 (August 2007): 651-664.

Zheng, X. and T. Vukina. Efficiency Gains from Organizational Innovation: Comparing Ordinal and Cardinal Tournament Games in Broiler Contracts. *International Journal of Industrial Organization*, Vol. 25 (2007): 843-859.

Inoue, A. and T. Vukina. Testing for the Principal's Monopsony Power in Agency Contracts. *Empirical Economics*, Vol. 31 (2006): 717-734.

Vukina, T. and P. Leegomonchai. Oligopsony Power, Asset Specificity and Hold-Up: Evidence from the Broiler Industry. *American Journal of Agricultural Economics*, Vol. 88 (3), (August 2006): 589-605.

Leegomonchai, P. and T. Vukina. Dynamic Incentives and Agent Discrimination in Broiler Production Tournaments. *Journal of Economics and Management Strategy*, Vol. 14 (4), 2005: 849-877.

Bontems, P., P. Dubois, and T. Vukina. Optimal Regulation of Private Production Contracts with Environmental Externalities. *Journal of Regulatory Economics*, Vol. 26 (3), 2004: 287-301.

Levy, A. and T. Vukina. The League Composition Effect in Tournaments with Heterogeneous Players: An Empirical Analysis of Broiler Contracts. *Journal of Labor Economics*, Vol. 22 (2), 2004: 353-377.

Vukina, T. The Relationship between Contracting and Livestock Waste Pollution. *Review of Agricultural Economics*, Vol. 25 (1), 2003: 66-88.

Levy, A. and T. Vukina. Optimal Linear Contracts with Heterogeneous Agents. *European Review of Agricultural Economics*, Vol. 29 (2), 2002: 205-217.

Tsoulouhas, T. and T. Vukina. Regulating Broiler Contracts: Tournaments versus Fixed Performance Standards. *American Journal of Agricultural Economics*, Vol. 83 (November), 2001: 1062-1073.

Vukina, T. C. E. Hilmer and D. Lueck. A Hotelling - Faustmann Explanation of the Structure of Christmas Tree Prices. *American Journal of Agricultural Economics*, Vol. 83 (August), 2001: 513-525.

Vukina, T. Vertical Integration and Contracting in the U.S. Poultry Sector. *Journal of Food Distribution Research*, Vol. 32 (July), 2001: 29-38.

Vukina, T. and A. Wossink. Environmental Policies and Agricultural Land Values: Evidence from the Dutch Nutrient Quota System. *Land Economics*, Vol. 76 (3), 2000: 413-429.

Vukina, T., J. C. Beghin and E.G. Solakoglu. Transition to Markets and the Environment: Effects of the Change in the Composition of Manufacturing Output. *Environment and Development Economics*, Vol. 4, 1999: 582-598.

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D.F. Li and T. Vukina. Effectiveness of Dual Hedging with Price and Yield Futures. *The Journal of Futures Markets*, Vol. 18 (5), 1998: 541-561.

Vukina, T., H.J. Barnes and M.N. Solakoglu. Intervention Decision Model to Prevent Spiking Mortality of Turkeys. *Poultry Science*, Vol. 77 (July), 1998: 950-955.

Palmquist, R. B., F. M. Roka, and T. Vukina. Hog Operations, Environmental Effects, and Residential Property Values. *Land Economics*, Vol. 73 (1), 1997: 114-124.

Vukina, T., D. F. Li, and D. Holthausen. Hedging with Crop Yield Futures: A Mean-Variance Analysis. *American Journal of Agricultural Economics*, Vol. 78 (November), 1996: 1015-1025.

Vukina, T. and W. E. Foster. Efficiency Gains in Broiler Production Through Contract Parameters Fine Tuning. *Poultry Science*, Vol. 75 (November), 1996: 1351-1358.

Casey, J. F., T. Vukina and L. E. Danielson. The Economic Value of Hiking: Further Considerations of Opportunity Cost of Time in Recreational Demand Models. *Journal of Agricultural and Applied Economics*, Vol. 27 (2), 1995: 658-668.

Vukina, T., F. Roka and T. Carter. Economic Impact of Poultry Industry: The Case Study of North Carolina. *Journal of Applied Poultry Research*, Vol. 4 (3), 1995: 319-331.

Vukina, T. and J. L. Anderson. An Adaptive Model of Perishable Inventory Dissipation in A Nonstationary Price Environment. *Agricultural and Resource Economics Review*, Vol.23 (April), 1994: 1-10. (Article of the Year 1994).

Vukina, T. and J. L. Anderson. Price Forecasting With State-Space Models of Nonstationary Time Series: Case of the Japanese Salmon Market. *Computers and Mathematics with Applications*, Vol. 27 (5), 1994: 45-62.

Vukina, T. and J. L. Anderson. A State-Space Forecasting Approach to Optimal Intertemporal Cross-Hedging. *American Journal of Agricultural Economics*, Vol. 75 (May), 1993: 416-424.

Vaccaro, R. and T. Vukina. A Solution to the Positivity Problem in the State-Space Approach to Modeling Vector-Valued Time Series. *Journal of Economic Dynamics and Control*, Vol. 17 (May), 1993: 401-421.

Vukina, T. Hedging with Forecasting: A State-Space Approach to Modeling Vector-Valued Time Series. *The Journal of Futures Markets*, Vol. 12 (3), 1992: 307-327.

Vukina, T. Sto se desava s modernom ekonomskom znanoscju? *Razvoj*, Vol. 4 (4), 1987: 491-495. English translation: What's Wrong With Modern Economics? *Development, International Volume 2* (2), 1987: 253-261.

Vukina, T. and M. Stanicic. Prema reformi medjunarodnog finansijskog i trgovinskog sistema. (Towards a Reform of International Financial and Trading System). *Razvoj*, Vol. 2 (1), 1985: 95-108.

Vukina, T. Ekonomska suradnja Jugoslavije i Australije - rezultati i mogucnosti. *Problemi spoljne trgovine i konjunktura*, Vol. 23 (1-2), 1984: 49-76.

Vukina, T. Razlike u proizvodnosti rada u poljoprivredi medju zemljama u razvoju (Agricultural Productivity Differences Among Developing Countries). *Razvoj*, Vol. 1 (1), 1984: 109-120.

Vukina, T. Aktivizacijski period investicija u industriji Jugoslavije (Gestation Period of Investment in Yugoslav Industry). *Economic Analysis and Workers' Management*, Vol. 16 (3), 1982: 273-286.

Vukina T. Analiza kapitalnih koeficijenata privrede Jugoslavije u razdoblju 1952-1977 (Capital-Output Ratios in Yugoslav Economy in 1952-1977 Period). *Economic Analysis and Workers' Management*, Vol. 16 (2), 1982: 157-172.

Vukina, T. Osnovne znacajke kretanja kapitalnih koeficijenata privrede SR Hrvatske u razdoblju 1952-1977. *Ekonomski pregled*, No.5-6, 1982: 213 - 227.

### **Books, Chapters in Books, Research Bulletins:**

Vukina, T. and X. Zheng: "Agricultural Contracts and Competition Policies." in *Agricultural Policy in Disarray* Volume II, Chapter 10, pp: 279-303. V.H. Smith, J.W. Glauber and B.K. Goodwin, editors. American Enterprise Institute, Washington D.C. 2018.

Black, S. A. and T. Vukina: "Estimating Effects of Hatchery Practices on Early Poult Mortality Using Turkey Industry Field Data." in *Performance and Economic Impacts of Hatchery and Post-Hatch Constraints on Poult Quality*, Chapter 5, pp: 121-153. R. Beckstead, P. Ferket, L. Dean, F. Edens, T. Vukina, and M. Schwartz, advisors, Ph.D. dissertation, North Carolina State University, Raleigh NC, 2018. <http://www.lib.ncsu.edu/resolver/1840.20/35505>

Vukina, T., M.K. Muth, N.E. Piggott, C. Shin, M.K. Wohlgenant, X. Zheng, S.C. Cates, M.C. Coglaiti, S.A. Karns, J. Lawrence, J.L. Taylor, and C.L. Viator. January 2007. "GIPSA Livestock and Meat Marketing Study, Volume 4. Hog and Pork Industries." Report prepared for USDA, Grain Inspection, Packers and Stockyards Administration, Washington, DC.

Bontems, P., P. Dubois, and T. Vukina. "Environmental Regulation of Livestock Production Contracts" in M. Boyer, Y. Hiriart and D. Martimort, editors. Frontiers in the Economics of Environmental Regulation and Liability. Ashgate Publishing Ltd., Aldershot, Hampshire GU113HR, England, 2006, pp.265-290.

Hayenga, M, T. Schroder, J. Lawrence, D. Hayes, T. Vukina, C. Ward and W. Purcell. "Meat Packer Vertical Integration and Contract Linkages in the Beef and Pork Industries: An Economic Perspective." American Meat Institute, Arlington, Virginia, 2000.

Vukina, T. and W.E. Foster. "Grower Response To Broiler Production Contract Design." in J.S. Royer and R. Rogers, editors. The Industrialization of Agriculture: Vertical Coordination in the U.S. Food System. Ashgate Publishing, Aldershot, U.K., 1998, pp. 133-154.

Vukina, T. Osnove trgovanja terminskim ugovorima i opcijama (Introductory Guide to Futures and Options Trading). Infoinvest, Zagreb, 1996, 131 pages.

Vukina, T., F. Roka, T. Carter, J. Brandt, and K. Zering. Impact of the Poultry Industry on the Economy of North Carolina. North Carolina Agricultural Research Service, Technical Bulletin 307, NCSU, Raleigh, August 1995.

Vukina, T. Energy and Environment: Some Key Issues. EDI Working Paper, Energy Series. The World Bank, Washington, D.C.1992.

### **Extension Publications, Business & Trade Periodicals:**

Vukina, T. "Cost of Animal Welfare Regulation, Ballot Initiatives, and the Vote-Buy Gap." NC State Economist, November-December 2022, Part 1.

Vukina, T. and M. Walden: "The Contribution of the Broiler Industry to North Carolina's Economy: Evaluating The Economic Impacts of Individual Projects." NC State Economist, May/June 2016.

Vukina, T. and X. Zheng. "The Broiler Industry: Competition and Policy Challenges." Choices, (2015) 30(2):1-6.

Vukina, T. "Conserving Our Future: How to Reform Title II of the Farm Bill." American Boondoggle: Fixing the 2012 Farm Bill. American Enterprise Institute, Washington, D.C. 2011. Available at: <https://www.aei.org/publication/conserving-our-future/>



Taylor, J.L., S.C. Cates, S.A. Karns, M.K. Muth, and T. Vukina. "Alternative Marketing Arrangements in the Pork Industry: Definition, Use, and Motives." Livestock Marketing Information Center Fact Sheet. Lakewood, CO: Livestock Marketing Information Center, January 2008.

Vukina, T. "Estimating Cost and Returns for Broilers and Turkeys." Project report prepared under the Cooperative Agreement with USDA-ERS, No. 43-3AEK-2-80123, North Carolina State University, November 2005.

Vukina, T. "Livestock Production Contracts, Waste Management and the Environment." NC State Economist, January/February 2004.

Vukina, T. "Broiler Contracts: Their Role in Industry Success." WATT Poultry USA, May 2002: 58-60.

Vukina, T. "Meaning Well, Doing Harm: Part II - Commentary: Producer Protection Act." WATT Poultry USA, March 2002: 28-30.

Brown, B. and T. Vukina. "The Emergence of Tobacco Contracts: What Should North Farmers Expect?" NC State Economist, September/October 2000.

Committee on Livestock and Poultry Farms Located in Floodplains in North Carolina. "Livestock and Poultry Farms Located in North Carolina Floodplains." A report by faculty of the College of Agriculture and Live Sciences, North Carolina State University, September 2000.

Vukina, T., R. Mowrey and F. Roka. "Horses: A \$704 Million Purse for North Carolina.", College of Agriculture and Life Sciences, North Carolina State University, August 2000.

Roka, F., T. Vukina and R. Mowrey. "Impact of the Equine Industry on the Economy of North Carolina." Animal Science Facts, No. ANS 00-404-H, North Carolina Cooperative Extension Service, NCSU, Raleigh, June 2000.

Cherry, D., L. Danielson, S. Smutko, T. Vukina, N. White and D. Line. "Framework and Methodologies for Estimating the Benefits From Erosion and Sedimentation Pollution Control: A Scoping Study of the State of the Science." Department of Agricultural and Resource Economics and Department of Biological and Agricultural Engineering, North Carolina State University, October 1998.

Vukina, T. "Broiler Contracts: Should They be Regulated?" Commentary, Broiler Industry, October 1997: 32-34.

Vukina, T. "Poultry: Engine of Regional Growth." Broiler Industry, September 1997:30-32.

Vukina, T. and J. Pasternak. "Non-Point Source Pollution and the North Carolina Agriculture Cost Share Program." NC State Economist. July/August 1997.

Vukina, T. "More Optimal Contracts." Broiler Industry, March 1997:22-24.

Vukina, T., F. Roka and R. B. Palmquist. Swine Odor Nuisance: Voluntary Negotiation, Litigation and Regulation - North Carolina's Experience. Choices, First Quarter 1996: 26-29.

Vukina, T., F. Roka, T. Carter, J. Brandt, K. Zering. "Poultry Production in North Carolina: Broilers, Turkeys, Eggs." North Carolina Agricultural Research Service, College of Agriculture and Life Sciences, NCSU, Raleigh, N.C., January 1995.

Zering, K., J. Brandt, F. Roka, T. Vukina. "Swine Industry in North Carolina: Production, Processing, Packaging." North Carolina Agricultural Research Service, College of Agriculture and Life Sciences, NCSU, Raleigh, N.C., January 1995.

Vukina, T. "The Poultry Industry and North Carolina's Economy". NC State Economist. May/June 1995.

F. Roka and T. Vukina. "Poultry Industry Multipliers." NC State Economist. May/June 1995.

Vukina T. "In Pursuit of the Optimum Level of Odor Pollution". NC State Economist, April 1994.

Vukina, T. and K. Zering. "Swine Odor as an Economic Issue". NC State Economist, April 1994.

Vukina, T. "Cross Hedging Fishmeal With Soybean Meal Contracts: Introductory Guide To Futures and Options Trading." Aquaculture and Seafood Markets: Public Policy, Consumer Behavior, and Industry Relationships, URI/OSU Research Paper Series, RI-93-104. University of Rhode Island, Kingston, Rhode Island, 1993.

### **Conference Papers Abstracts and Proceedings:**

Vukina, T. and D. Nestic: "Explaining the prevalence of obesity in Croatia: The Importance of the Mediterranean diet." 15<sup>th</sup> International Symposium on Agriculture, February 16-21, 2020, Vodic, Croatia. Book of Abstracts, pp. 88-89.

Liu, X., D. Nestic and T. Vukina. "Estimating Moral Hazard and Adverse Selection Effects with Hospital Invoices Data in a Government-Controlled Health Care System." Research Conference on Institutional Transition in the Emerging Market Economies of the Balkans and The Caucasus, Sofia, Bulgaria, June 30-July 1, 2010. University of Delaware, pp.386-419.

Dubois, P. and T. Vukina. "Mitigating Contractual Hazards: Short-Term vs. Long-Term Contracting in Animal Agriculture." The XXVII International Conference of Agricultural Economists, Beijing, China, 16-22 August, 2009. Handbook, p. 131.

Vukina, T., A. Levy and M. Marra. "Do Farmers Value the Environment? Evidence from the Conservation Reserve Program Auctions." 26<sup>th</sup> Conference of the International Association of Agricultural Economists, 12-18 August 2006: Contributions of Agricultural Economics to Critical Policy Issues. Gold Coast, Queensland, Australia. Handbook, p. 134.

Vukina, T. and P. Leegomonchai. "Political Economy of Regulation of Broiler Contracts." Proceedings from the annual meeting of the AAEA held July 2006 in Long Beach, California. American Journal of Agricultural Economics, Vol. 88 (5), 2006:1258-1265.

Dubois P. and T. Vukina. "Grower Risk Aversion and the Cost of Moral Hazard in Livestock Production Contracts." Proceedings from the ASSA 2004 Annual Convention, San Diego, CA, January 3-5, 2004. American Journal of Agricultural Economics, Vol. 86 (3), 2004: 835-841.

Vukina, T., P. Dubois, and P. Bontems. "Optimal Regulation of Private Production Contracts with Environmental Externalities." Book of Abstracts. AERE, EAERE 2002, 2<sup>nd</sup> World Congress of Environmental and Resource Economists, Monterey, CA, June 24-27, 2002: 234.

Vukina, T. C. E. Hilmer and D. Lueck. "A Hotelling - Faustmann Explanation of the Structure of Christmas Tree Prices." NAREA Meeting, Rhode Island, June 11-13, 2000. Abstracts of Selected Papers, Agricultural and Resource Economics Review, Vol. 29 (2), 2000: 253-254.

Renkow, M., T. Vukina, and J.-H. Lee. "Economic Analysis of Alternative Waste Management Technologies," in G. Havenstein (ed.), Proceedings of the 1999 Animal Waste Management Symposium, North Carolina State University, Raleigh, NC, 1999: 350-353.

Vukina, T., J. C. Beghin, and E. G. Solakoglu. Status of the Environment and Market Reforms in Eastern Europe. "Memory, History and Critique. European Identity at the Millennium." Proceedings of the 6th International ISSEI Conference, 19-24 August 1996, University of Humanist Studies, Utrecht, The Netherlands. Edited by Frank Brinkhuis and Sacha Talmor. MIT Press Journals, Cambridge, USA, 1998. ISBN 90-73022-11-8.

Li, D. F. and T. Vukina. Crop Yield Futures and Optimal Hedging Strategy for North Carolina Corn Producers. Research Symposium Proceedings, Winter 1996 - Part I. Chicago Board of Trade, 1996: 1-25.

Roka, F., R. B. Palmquist, and T. Vukina. Welfare Effects of Swine Odor: A Hedonic Study of Property Values in North Carolina. Proceedings from the Annual Meeting of the AAEA, 6-9 August 1995, Indianapolis. Selected Papers. American Journal of Agricultural Economics, Vol. 77 (December) 1995: 1374.

Vukina, T. and J. L. Anderson. Perishable Inventory Dissipation in a Nonstationary Price Environment. KOI'93, Proceedings, 3rd Conference on Operational Research, Rovinj, Croatia, October, 5-7, 1993: 257-270.

Vukina, T. and J. L. Anderson. Cross-Hedging Fishmeal With Soybean Meal Futures. Proceedings of the Sixth Conference of the International Institute of Fisheries Economics and Trade, Paris, France, 6-9 July, 1992: 1001-1014.

Vukina, T. Zasto treba privatizirati samoupravna poduzeca. In: Posljednji dani drustvenog vlasnistva. Proceedings of the Conference "Gospodarski razvoj Hrvatske u uvjetima prijelaza na trzisnu privredu - transformacija vlasnistva - mala privreda". Opatija, Croatia: September 6-8, 1990. Zagreb: Zagrebacka Poslovna škola, 1990: 51-59.

Wichelns, D. and T. Vukina. Farmland Characteristics and the Value of Development Rights in Rhode Island and Connecticut. NAREA Meetings, Nova Scotia, June 1990. Abstracts of Selected Papers. Northeastern Journal of Agricultural and Resource Economics, Vol.19 (2) 1990:149.

Vukina, T. Program SKJ i drustveno vlasnistvo. U raspravi: "Program SKJ 30 godina poslije", Zagreb: June 16, 1988. Kulturni radnik, Vol. 41 (3), 1988: 50-54.

#### **Conference Papers w/o Abstracts or Proceedings:**

Moschini, G., S.E. Oh and T. Vukina. "Animal Welfare Initiatives and the Vote-Buy Gap." 21<sup>th</sup> Journées Louis-Andre Gerard-Varet, International Conference in Public Economics; Marseille, France, June 6-8, 2022.

Oh, S.E. and T. Vukina. "Estimating Parental Demand for Children's Screen Time in a Model of Family Labor Supply." 20<sup>th</sup> Journées Louis-Andre Gerard-Varet, International Conference in Public Economics; Marseille, France, June 22-24, 2021.

Nestic, D. and T. Vukina. "Mediterranean Diet or Social Environment: Explaining Regional Differences in Obesity in Croatia." 13<sup>th</sup> International Conference "Challenges of Europe: Growth, Competitiveness, Innovation and Well-being." Bol, Croatia, May 22-24, 2019.

Vukina, T. "Organization of Large Scale Animal Agriculture: Contracting the Production of Broilers in Croatia." IAMO Forum 2018, Large Scale Agriculture – For Profit or Society? June 27-29, Halle (Saale), Germany.

T. Vukina and D. Nestic. "Paying for Animal Welfare? A Hedonic Analysis of Egg Prices." International Food Marketing Research Symposium, June 13-14, 2018; Bournemouth, UK.

Oh, S.E. and T. Vukina. "Substitutability between Organic and Conventional Poultry Products and Organic Price Premiums." International Food Marketing Research Symposium, June 14-16, 2017; Dubrovnik, Croatia.

Wang, Z. and T. Vukina. "Sorting into Contests: Evidence from Production Contracts." Society of Labor Economists Conference 2017, Raleigh, NC, May 5-6, 2017.

Vukina, T. and D. Nestic. "The Effect of Experience Rating Schemes in Insurance Contracts: Testing for Moral Hazard." Society for the Study of Emerging Markets EuroConference 2014, Budapest, Hungary 6-8 July 2014.

Vukina, T. and D. Nestic. "Do People Drive Safer When Accidents are More Expensive: Testing for Moral Hazard in Experience Rating Schemes." 17<sup>th</sup> Annual Conference of the International Society for New Institutional Economics (ISNIE), Florence, Italy, June 20-22, 2013.

Dubois, P. and T. Vukina. "Incentives to Invest in Short-term vs. Long-term Contracts: Theory and Evidence." 9<sup>th</sup> INRA-IDEI Conference on "Industrial Organization and the Food Processing Industry," Toulouse, June 21-22, 2012.

Dubois, P. and T. Vukina. "Incentives to Invest in Short-term vs. Long-term Contracts: Theory and Evidence." 34<sup>th</sup> Meeting of the Brazilian Econometric Society, Porto de Galinhas, December 11-14, 2012.

Vukina, T. "Conservation Policies in the 2008 Farm Bill: An Outline for Reform." American Enterprise Institute for Public Policy Research, Farm Bill Workshop, Washington, D.C. December 3, 2010.

Vukina, T. "Problems of Interdependent Risks and Optimal Allocation of Insurance Premium." Veterinary Services Livestock Indemnity-Compensation Symposium and Workshop, Animal Plant Health Inspection Service, Fort Collins, CO, July 23, 2010.

Li, T., T. Vukina and X. Zheng. "Positively Dependent Productivity Shocks in Tournaments: An Empirical Analysis of Production Contract Data." 8<sup>th</sup> INRA-IDEI Conference on "Industrial Organization and the Food Processing Industry," Toulouse, June 10-11, 2010.

Vukina, T. and X. Zheng. "Homogenous and Heterogeneous Contestants in Cardinal Tournament Games: Theory and Empirical Analysis." Tournaments, Contests and Relative Performance Evaluation, North Carolina State University, Raleigh, NC, March 8-9, 2008.

Zheng, X. and T. Vukina. "Efficiency Gains from Organizational Innovation: Comparing Ordinal and Cardinal Tournament Games in Broiler Contracts." Conference on the Analysis of Firms and Employees (CAFE), Nürnberg, Germany, September 29-30, 2006.

Zheng, X. and T. Vukina. "Efficiency Gains from Organizational Innovation: Comparing Ordinal and Cardinal Tournament Games in Broiler Contracts." Industrial Organization and the Food Processing Industries, Toulouse, France, June 9-10, 2006.

Dubois, P. and T. Vukina. "Optimal Incentives under Moral Hazard and Heterogeneous Agents: Evidence from Production Contracts." XI<sup>th</sup> Congress of European Association of Agricultural Economists, Copenhagen, Denmark, 24-27 August, 2005.

Dubois, P. and T. Vukina. "Optimal Incentives under Moral Hazard and Heterogeneous Agents: Evidence from Production Contracts Data." Economics of Contracts in Agriculture, INRA-IDEI, Toulouse, France, Dec. 9-10, 2004.

Leegomonchai, P. and T. Vukina. "Oligopsony Power, Asset Specificity and Hold-Up: Evidence from the Broiler Industry." Economics of Contracts in Agriculture, INRA-IDEI, Toulouse, France, Dec. 9-10, 2004.

Leegomonchai, P. and T. Vukina. "Oligopsony Power, Asset Specificity and Hold-Up: Evidence from the Broiler Industry." International Society for New Institutional Economics, 8<sup>th</sup> Annual Conference, Sep.30-Oct.3, 2004, Tucson, Arizona.

Vukina, T., A. Levy and M. Marra. "Do Farmers Value the Environment? Evidence from the Conservation Reserve Program Auctions." I Congreso AERNA (Asociacion Hispano-Portuguesa de Economia de los Recursos Naturales y Ambientales), Vigo, Spain, June 18-19, 2004.

Vukina, T., P. Dubois, and P. Bontems. "Optimal Regulation of Private Production Contracts with Environmental Externalities." First CIRANO-IDEI-LEERNA Conference on Regulation, Liability and the Management of Major Industrial/Environmental Risks, Toulouse, France, June 1-12, 2003.

Vukina, T., P. Dubois, and P. Bontems. "Optimal Regulation of Private Production Contracts with Environmental Externalities." Economics of Contracts in Agriculture, Second Annual Workshop, July 21-23, 2002, Annapolis, Maryland.

Leegomonchai, P. and T. Vukina. "Career Concerns, Ratchet Effect and Agent Discrimination in Broiler Tournaments." Economics of Contracts in Agriculture, Second Annual Workshop, July 21-23, 2002, Annapolis, Maryland.

Leegomonchai, P. and T. Vukina. "Career Concerns, Ratchet Effect and Agent Discrimination in Broiler Tournaments." The 5<sup>th</sup> Conference INRA-IDEI on "Industrial Organization and the Food Processing Industry" Toulouse, June 14-15, 2002.

Levy, A. and T. Vukina. "League Composition Risk in Tournaments with Heterogeneous Players: An Empirical Analysis of Broiler Contracts." 78<sup>th</sup> EAAE Seminar, NJF Seminar Nr.:

330: Economics of Contracts in Agriculture and the Food Supply Chain, Copenhagen, June 15-16, 2001.

Levy, A. and T. Vukina. "Optimal Linear Contracts with Heterogeneous Agents." 78<sup>th</sup> EAAE Seminar, NJF Seminar Nr.: 330: Economics of Contracts in Agriculture and the Food Supply Chain, Copenhagen, June 15-16, 2001.

Levy, A. and T. Vukina. "League Composition Risk in Tournaments with Heterogeneous Players: An Empirical Analysis of Broiler Contracts." Seminaire INRA-IDEI Industrial Organization and Agricultural Markets, Toulouse, France, June 12, 2001.

Tsoulouhas, T. and T. Vukina. "Regulating Integrator Contracts: Tournaments versus Fixed Performance Standards." AAEA Annual Meeting, July 30 – August 2, 2000, Tampa, Florida.

Vukina, T., A. Levy and M. Marra. "Auctions with Environmental Criteria: Evidence from the Conservation Reserve Program." AAEA Annual Meeting, July 30 – August 2, 2000, Tampa, Florida.

Vukina, T. C. E. Hilmer and D. Lueck. "O Tannenbaum, O Tannenbaum: A Hotelling - Faustmann Explanation Of The Structure Of Christmas Trees Pricing." The European Association of Environmental and Resource Economists (EAERE) Ninth Annual Conference, Oslo 25 - 27 June 1999.

Renkow, M., T. Vukina and H. Northrop. "Economic Analysis of Alternative Swine Waste Management Technologies." International Conference on Animal Production Systems and the Environment, July 19-22, 1998. Des Moines, Iowa.

Vukina, T. and A. Wossink. "Evolving environmental policies and asset values: nutrient trading schemes in The Netherlands." World Congress of Environmental and Resource Economists, Venice, Italy, June 24-27, 1998.

Marra, M. and T. Vukina. "The Conservation Benefit-Cost Trade-off in the Conservation Reserve Program". World Congress of Environmental and Resource Economists, Venice, Italy, June 24-27, 1998.

Vukina, T., D. F. Li, and D. Holthausen. Hedging with Crop Yield Insurance Futures. Contributed Paper, AARES 40th Annual Conference, Melbourne, 11-16 Feb. 1996.

Vukina, T. and W. E. Foster. Grower Response To Broiler Production Contract Design. NE-165 Conference: Vertical Coordination in the Food System. Washington, D.C., June 5-6, 1995.

## GRANTS

- U.S. Dept. of Agriculture (USDA) – Economic Research Service, Cooperative agreement 2017-2019: "Measuring the Effects of One-Side Exogenous Supply Shock on the Two Tier Substitutes Markets: Organic-Conventional Table Eggs Markets Example." \$15,000 (with Zheng)
- US Dept. of Agriculture (USDA) - Agriculture Research Service: "One-two Punch for Organic Poultry Processing: Knocking out Foodborne Pathogens with Plant Derived Antimicrobials and Featuring Specialized Food Safety and Processing Training." 9/1/2017-5/31/2020, \$50,000.
- U.S. Department of State, 2011 Title VIII Research Competition: "Strategic Price Discrimination in the Mandatory Insurance Markets in Transition." \$19,668.
- J. William Fulbright follow-on grant to Croatia, June 2010. \$5,000.
- U.S. Department of Agriculture, CSREES, AFRI grant, 2010-2011: Entry, Exit and Mergers in the Poultry Sector: Effects on Contract Growers Welfare and Industry Competitiveness." \$286,567 (with Zheng).
- U.S. Department of State, 2008 Title VIII Research Competition: "Health Sector Reform in Post-Socialist Croatia: Analyses of Asymmetric Information Problems." \$17,755.
- U.S. Department of Agriculture, ERS, Extramural Agreement, 2008-2009: "Dynamic Prevention and Control of Highly Pathogenic Avian Influenza." \$29,426.
- International Research and Exchanges Board (IREX), 2008-2009 Short-Term Travel Grant for Croatia: Health Insurance Reform in Post-Socialist Croatia: An Analysis of Asymmetric Information Problems."
- U.S. Department of Agriculture, CSREES, NRI grant, 2008-2009: "Quantifying the Benefits of Farm Level Utilization of Alternative Marketing Arrangements". \$210,000 (with Phaneuf and Zheng).
- U.S. Department of Agriculture, 2004-2006: Funded by Congress in the FY 2003 Omnibus Appropriations Bill. Contract to conduct an exhaustive study on livestock and meat marketing. \$4,319,373 (with Research Triangle Institute).
- United States Department of Agriculture – Economic Research Service, Cooperative Agreement 2002-2006: "Estimating Costs and Returns for Poultry and Eggs." \$41,000.
- North Carolina Attorney General – Smithfield Foods Agreement, 2001-2003: "Full Economic Feasibility of the Smithfield Foods Agreement." \$352,000 (with Wohlgenant et al.)
- United States Department of Agriculture – Grain Inspection, Packers and Stockyards Administration, Cooperative agreement 2000-2001: "Economic Effects of Regulating Broiler Contracts." \$64,756.
- College of Agriculture and Life Sciences, NCSU, Competitive Research Program, 1999: "Economic Analysis of Alternative Payment Mechanisms in Settlement of Broiler Contracts." \$14,000.
- USDA-EPA, 1998 – 2001: "National Agricultural Compliance Assistance Program – Assistance for General Agriculture" \$415,965 (with J. Spooner et al.)



- Abbott Laboratories, 1997: “Poult Enteritis Mortality Syndrom Outbreak Prediction Model” - \$4,980 (with J. Barnes).
- N.C. Department of Environment, Health and Natural Resources, 1997: “Methodologies to Estimate Benefits from Sedimentation Pollution Control” - \$24,805 (with Smutko, White, Danielson, and Line).
- Multi-State Consortium on Waste Management, 1997-1998: “Full-Scale Ozonation of Urine-Rich Swine Slurry” - \$38,000.
- Abbott Laboratories, 1996: "Intervention Decision Model to Prevent Spiking Mortality of Turkeys" - \$6,643 (with J. Barnes).
- North Carolina State University/ Iowa State University Waste Management Research Consortium, 1996: "Cost Effectiveness of Alternative Swine Waste Management Technologies" - \$13,000 (with M. Renkow).
- National Research Council, Office of International Affairs: Collaborative Research in Sectoral Policy Program Travel Grant: "Coastal Zone Pollution and its Welfare Effects on Local Communities." - \$2,200.
- Agricultural Foundation, NCSU, 1995: "Grower Response to Broiler Production Contract Design" - \$10,000 (with T. Carter and W. Foster)
- Agricultural Research Service, 1994: "Economic Impact Study of Swine and Poultry Production in North Carolina" - \$35,000 (with Zering, Brandt, Palmquist and Roka).

## **TEACHING AND ADVISING**

### **Undergraduate Courses:**

- ARE-301 (NCSU) Intermediate Microeconomics: Spring 2002, 2003, 2004, 2005, Spring 2021, Fall 2011, 2012, 2013, 2014, 2015, 2016, Fall 2020, Spring 2021.
- ARE-425 (NCSU) Contracts and Organization in Agriculture: Spring 2007, Fall 2017, Fall 2018, Fall 2019.
- ARE-336 (NCSU) Introduction to Resource and Environmental Economics: Fall 1996, 1997.
- EC-436 (NCSU) Environmental Economics: Fall 1993, 1994, Spring 1999, 2000, 2001.

### **Graduate Courses:**

- ECG 701 – NCSU: Microeconomics I, Fall 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.
- ECG 700 - NCSU: Fundamentals of Microeconomics, Fall 2006, 2011, 2012, 2013, 2014.
- ECG 706 – NCSU: Industrial Organization, Fall 2008, 2009, 2010.
- Graduate School of Economics and Business, University of Zagreb: Methodology of Economics, Fall 2007
- ECG-515 - NCSU: “Environmental and Resource Policy,” Fall 1994, 1995, 1996, 1997, Spring 2001, 2002, 2003, 2004, 2005, 2006, 2008.

- ECG-716 - NCSU: “Topics in Environmental and Resource Economics,” Spring 1998, 1999, 2000.
- 095918 - Royal Agricultural University, Copenhagen: “Natural Resource Economics” (Master’s level), Fall 1999.

**Master’s Committees:**

- Qing Chang, 2015: “Cooptation Strategy in China: Empirical Evidence from Integration of Private Sector Entrepreneurs.” (Co-chaired with Ed Kick)
- Jessica Lynn McCauley, 1997: “The Value of Hiking at the Grandfather Mountain Wilderness Preserve.” (Chair)

**Ph.D. Committees:**

- Eve Sohae Oh, 2022, Economics: “Three Essays on Demand Analysis.” (Chair)
- Casey Rozowski, 2022, Economics: “Essays in Environmental, Resource, and Agricultural Economics.” (Member), responsible for essay “Production Quotas, Competition and Farm Values: A Chronicle of the Swine Industry in North Carolina.”
- Shuyang Wang, 2019, Economics: “Essays on the Principal-Agent Problems in Agricultural Contracts.” (Co-chaired with Zheng Li) – 2020 recipient of the Gerald A. Carlson Award for Outstanding Dissertation.
- Samantha Black, 2018, Poultry Science & Animal Science: “Performance and Economic Impacts of Hatchery and Post-Hatch Constraints on Poult Quality.” (Member), responsible for essay “Estimating Effects of Hatchery Practices on Early Poult Mortality Using Turkey Industry Field Data.”
- Yan Zheng, 2015, Economics: “Demand Side Economics of Health Care Provision under a Single Payer System: The Case Study of Croatia.” (Chair)
- Zhen Wang, 2014, Economics: “On Tournaments in Agricultural Contracts: A Study of Regulation, Incentives and Sorting”. (Chair)
- Tengying Weng, 2013, Economics: “The Dynamics of the U.S. Broiler Industry.” (Co-chaired with X. Zheng)
- Mitchell R. Dudley, 2012, Economics: “Economics of the Atlantic Menhaden Fishery.” (Co-chaired with W. Thurman)
- Wu-Yueh Hu, 2010, Economics: “Quantifying the Benefits of Farm Level Utilization of Alternative Marketing Arrangements.” (Co-chaired with X. Zheng)
- Aaron, S. Hegde, 2004, Economics: “Hedging vs. Contracting: Managing Risk in the Broiler Industry.” (Co-chaired with D. Holthausen)
- Win Leegomonchai, 2003, Economics: “Three Essays on the Problem of Hold-Up in Broiler Industry.” (Chair)
- Dong-feng Li, 1998, Economics: “The Effectiveness of Hedging Strategies Using Yield Futures.” (Co-chaired with D. Holthausen). – winner of the Kenneth R. Keller Research Award, College of Agriculture and Life Sciences, NCSU.

**PROFESSIONAL SERVICE**

- Participant in the MRF project NE1942: “Enhancing Poultry Production Systems through Emerging Technologies and Husbandry Practices” for the period October 1, 2019 – September 30, 2024.
- Member of the Scientific Advisory Board: *Economia Agro-Alimentare - Food Economy*, An International Journal on Food and Agricultural Systems (2021 – present)
- Member of the NCSU Economics Graduate Program Ph.D. preliminary exam committee for microeconomics (2003-2004; 2017-2023).
- Participant in the MRF project NE 1442: “Poultry Production Systems and Well-being: Sustainability for Tomorrow” for the period October 1, 2014 - September 30, 2019.
- Invited participant, Agricultural Research Connections Workshop; Bill and Melinda Gates Foundation, Biosciences Eastern and Central Africa (BecA) and International Livestock Research Institute (ILRI), Nairobi/Naivasha, Kenya, July 21-26, 2013.
- Member of Scientific Committee, *Beeronomics 2013 - The Economics of Beer and Brewing*, The University of York, United Kingdom, September 18 -21, 2013.
- Editor, *Applied Economic Perspectives and Policy* (former *Review of Agricultural Economics*), Volumes 2009-2011.
- Member of the International Programme Committee, 2<sup>nd</sup> *Beeronomics Conference. The Economics of Beer and Brewing*, Freising, Germany, September 21-24, 2011.
- Member of the International Editorial Board, *Croatian Economic Survey*.
- Member of the Scientific Committee for the 8<sup>th</sup> and 9<sup>th</sup> INRA-IDEI Conference on “Industrial Organization and the Food Processing Industry,” Toulouse 2010, 2012.
- Conference Organizer “Tournaments, Contests and Relative Performance Evaluation,” North Carolina State University, College of Management, March 8-9, 2008.
- Member of the American Agricultural Economics Association’s (AAEA) Economics, Statistics and Information Resources Committee, 2006-2007.
- Associate Editor of the *American Journal of Agricultural Economics* (January 2002-December 2005, Volumes 84-87).
- Member of the North Carolina State University, College of Agriculture and Live Sciences Research Committee (2001-2004).
- Member of the academic evaluation team, National Council of Higher Education, Republic of Croatia (1997-1998).
- Member of the Graduate Council, Graduate School, University of Rhode Island (1989-1990).
- Associate Editor, *Kulturni Radnik, Casopis za drustvena i kulturna pitanja*. Zagreb, Croatia (1988-1989).