

CURRICULUM VITAE
MATTHEW TODD HOLT

ADDRESS

Work:

Department of Agricultural and
Applied Economics
208A Hutcheson Hall
Virginia Tech
Blacksburg, VA 24061

Home:

2902 Tall Oaks Drive
Blacksburg, VA 24060-8108

Phone (cell): 205-764-8369
e-mail: matt.holt.personal@gmail.com

[Virginia Tech website](#); [LinkedIn](#); [Google Scholar](#)

EDUCATION AND CERTIFICATIONS:

University of Missouri-Columbia, Ph.D., Agricultural Economics
Purdue University, M.S., Agricultural Economics
Purdue University, B.S., Agricultural Economics
Purdue University, Certificate, Eight-Week Winter Short Course in Agriculture
Cornell University, eCornell Certificate in Change Management, Leadership

- Courses in Navigating Power Relationships, Leading Organizational Change, Negotiation Skills, Leading Strategic Change Initiatives, Leading for Creativity and Innovation, Strategic Decision Making

PROFESSIONAL EXPERIENCE:

Professor and Head, Department of Agricultural and Applied Economics, Virginia Tech, 2017-present.

Professor and Dwight Harrigan Endowed Faculty Fellow in Natural Resource Economics, Department of Economics, Finance, and Legal Studies, University of Alabama, 2010-2017.

Head, Department of Economics, Finance, and Legal Studies, University of Alabama, 2013-2016.

Adjunct Professor, Department of Agricultural Economics, Mississippi State University, 2014-2016.

Visiting Professor, Center for Research in Econometric Analysis of Time Series, School of Economics and Management, Aarhus University, 2011.

Professor and Wickersham Chair of Excellence in Agricultural Research, Department of Agricultural Economics and courtesy Professor appointment, Economics, Purdue University, 2006-2010.

Professor, Departments of Agricultural and Resource Economics and Economics, North Carolina State University, 2001-2005.

Visiting Professor, Department of Economic Statistics, Stockholm School of Economics, 2004, 2006.

Professor and Bartley P. Cardon Chair, Department of Agricultural and Resource Economics and Professor, Department of Economics, University of Arizona, 1999-2000.

Professor (1998-1999) and **Associate Professor** (1994-1998), Department of Agricultural and Resource Economics, North Carolina State University.

Associate Professor (1992-1994) and **Assistant Professor** (1988-1992), Department of Agricultural Economics, University of Wisconsin-Madison.

Postdoctoral Research Associate (1987-1988), Department of Economics, Iowa State University.

Predoctoral Research Associate (1985-1988), Department of Economics, Iowa State University.

SUMMARY AND BIO:

Matthew T. Holt has considerable experience as an innovative academic leader, an engaged faculty member, and a lifelong learner. Since 2017 he has served as Head of the Department of Agricultural and Applied Economics. Previously, Dr. Holt served as Head of the Department of Economics, Finance, and Legal Studies at the University of Alabama. In addition, he has held faculty positions at Purdue University, North Carolina State University, the University of Arizona, and the University of Wisconsin, Madison. He has held visiting positions at the Stockholm School of Economics and at Aarhus University. From 2005-2008 he served on the AAEA Executive Board. He currently serves as one of two Virginia Tech Delegates working with President Timothy Sands on the McKinsey-led [Taskforce on Higher Education and Opportunity](#). This effort resulted in Virginia Tech receiving a \$250,000 [Strada Beyond Completion Challenge Grant](#), which was matched by President Sands. This effort expands the number of Presidential Scholar recipients at Virginia Tech that targets underserved students. His research interest encompasses a set of topics relating to markets for food and natural resources. His more recent research has explored the role of nonlinear dynamics and structural breaks in econometric time series models for natural resource markets and climate-related relationships. Dr. Holt has received numerous awards for his research from the Agricultural and Applied Economics Association and the Western Agricultural Economics Association (WAEA). In 2009, he was named a Fellow by AAEA. His current work integrates elements of data science, Cooperative Extension, and experiential learning in Virginia Tech's Data Science for the Public Good project.

LEADERSHIP AND ADMINISTRATIVE ACCOMPLISHMENTS:

1. 2017 – present Head, Dept. of Agricultural and Applied Economics, Virginia Tech

Virginia Tech is a land-grant university with over 36,000 students and according to U.S. News and World Reports is ranked 74th among all national universities. 29th among all public universities, and 35th in Most Innovative Schools.

Responsibilities and Reporting Structure: According to [IDEAS](#), ranked 20th globally among all departments and units in agricultural economics, and 15th in North America. The department currently has 24 tenure-track faculty members, 6 non-tenure-track faculty members and 5 support staff members. The department's annual budget is approximately \$6 million. Annual research expenditures typically range between \$2.5-\$2.9 million. Report to the Dean of the College of Agriculture and Life Sciences.

Curricular and Program Innovation:

- [Transitioned](#) the professional version of our M.S. program to a fully asynchronous [online format](#). Now [ranked 4th](#) by Online Master's Degree among all online economics Master's programs.
- Reoriented our M.S. curriculum to have a stronger, R-centered focus on computational methods, econometrics, forecasting, and data analytics.
- Coordinate and led all internal and external governance process to accommodate online offerings as well as cross-campus efforts to obtain resources for instructional design and content creation.
 - Since the fall of 2020, eight new Master's courses have gone through governance
 - And a four-course, 12 credit graduate-level certificate in Applied Economic Analytics has gone through university governance.
 - A second, 12-credit graduate-level certificate in Agribusiness Fundamentals is going through university governance.
- Led the effort to create and launch asynchronous, non-credit, professionally oriented, online certificate programs in Agricultural and Applied Economics and Policy, Agribusiness Statistics and Analytics, and Agribusiness Financial and Risk Management.
- Restructured and reorganized the [Virginia Land Use-Value Assessment program](#).
- Led the effort to have the department included in Virginia Tech's [Bridge Experience Program](#).

Hiring and Retention:

- Hired and mentored 9 tenure-track assistant professors
- Hired and mentored 6 non-tenure-track teaching and research faculty members (4 female 1 URM).
- Hired 1 AP faculty member (student advisor) and 1 research analyst.
- Worked to retain 8 individuals (several multiple times) with 5 efforts being successful.

Diversity and Inclusion:

- Hired 5 female and 2 URM tenure-track/tenured faculty (7 of 9).
- Hired 4 female and 1 URM in non-tenure-track positions (4 of 6).
- Hired/appointed 3 teaching/research faculty members and 1 Virginia Cooperative Extension specialist with URM status.
- Formed and chaired our department's Diversity, Equity, and Inclusion Committee.
- Chaired department head searches for HNFE and ALCE. Both resulted in female hires.

Faculty Promotion and Awards:

- Restructured the department's awards committee including the addition of a dedicated staff member.
- Results include:
 - 2 faculty members named AAEA Fellow, 1 AERE Fellow, and 1 SAEA Fellow.
 - 1 faculty member named to Virginia Tech's Academy of Faculty Service.
 - 2 Faculty members named to Virginia Tech's Academy of Faculty Leadership.
 - 1 Faculty member given Virginia Tech's Award for Excellence in Career Advising.
 - 1 AAEA Award for Outstanding Teacher, Less than 10 years of experience.
 - 2 SAEA Emerging Scholars Awards.
 - 1 CALS Diversity and Inclusion Service Award.
 - 3 graduates named as Distinguished Alumni of the Corps, including 2 retired U.S. Army generals and a retired U.S. Ambassador and Trade Representative.
- Managed the successful promotion to professor of 3 candidates and promotion and tenure of 2 candidate2. No promotion has been denied during my tenure.

Advancement, Development, and External Partnerships:

- Procured \$3 million to endow 2 faculty positions, including the first [named collegiate faculty position](#) on campus.
- Procured \$250 thousand to support the department's Kohl Agribusiness Centre.
- [Partnered with Farm Credit Administration](#) to offer its employees graduate-level and professional training. Resulted in two contracts covering five years valued at \$1.35 million.
- Led the initiative to remodel our graduate computer lab and other shared department facilities.

Data Science for the Public Good:

- Led the Virginia Tech effort to relaunch the Data Science for the Public Good (DSPG) initiative.
- Co-PI on a \$1 million AFRI-FACT grant "Three-State Data Science for the Public Good Coordinated Innovation Network."
 - Included faculty and students from University of Virginia, Virginia State University (HBCU), Iowa State University, and Oregon State University.
- Serve as Co-PI on a recently awarded \$749,000 AFRI REEU grant to support the data science for the public program for the next five years. Co-led the effort to obtain \$325,000 in internal matching funds from Virginia Tech's Fralin Life Sciences Institute.
- Obtained \$120,000 in internal funding from Virginia Tech's College of the Agriculture and Life Sciences and Fralin Life Sciences Institute for a 2nd year of operation.
- A partnership between Cooperative Extension and research faculty to provide hands-on, experiential training in data sciences, public policy analysis, and team-based research for students.

2. 2013 – 2016 Head, Dept. of Economics, Finance, and Legal Studies, University of Alabama

Responsibilities and Reporting Structure: A sprawling department with 32.5 faculty FTEs, 15 adjunct and part-time faculty, 1950 undergraduate majors (in 2015-16), 70 graduate students, and 8 support staff. The department had specializations in economics, finance, real estate, insurance, and quantitative finance and risk management including actuarial sciences. The department's annual budget was approximately \$6.5 million, representing a mix of state and federal funds. Report to the Dean of the Culverhouse College of Commerce.

Major Accomplishments:

- Hired 14 new faculty members including 8 tenure-track faculty members.
- Increased diversity by hiring 5 women and the first female URM faculty member.
- Obtained over \$5 million in philanthropic support including three named professorships.
- Oversaw the creation of a unique and highly visible undergraduate program in value investing.
- Led the effort to secure funding for and create the value investing research library.

UNIVERSITY AND PROFESSIONAL SERVICE:

1. Virginia Tech

<u>Name</u>	<u>Years</u>	<u>Assignment</u>
Provost's Workgroup on Online/Flexible Learning	2021-present	Member
Diversity and Innovation Think Tank	2021	Member
White Allies as Transformational Leaders	2020-present	Member
VT Delegate (1 of 2) to the McKinsey Taskforce on Higher Education and Opportunity, Presidential Appointee	2020-present	Member
Provost's Tech Talent Implementation Steering Committee	2021-present	Member
University Council, University Commission on Research, Presidential Appointee	2019-22	Member
Provost's Enrollment Management Advisory Committee	2019-present	Member
Department Head Council:	2020-21 2019-20	Tri-chair Co-chair
Five-year Review Committee for the Executive Director of Virginia Tech's Institute for Society, Culture, and Environment	2020	Member
Five-year Review Committee for the Associate Provost for Faculty Affairs	2020	Member
Five-year Review Committee for the Pamplin Business College Apex Systems Center for Innovation and Entrepreneurship	2020	Member
College of Science Dean Search Committee	2021	Member
University Vice President for Research and Innovation Search Committee	2019-20	Member
University Ombuds Search Committee	2018-19	Member
Human Nutrition, Foods, and Exercise Dept. Head Search Committee	2019-20	Chair
Agriculture, Leadership, and Community Education Dept. Head Search Committee	2018	Chair
Center for Economic and Community Engagement Advisory Committee	2021-present	Member
Center for International Research, Education, and Development (CIRED) Advisory Committee	2020-present	Member
Center for Humanities Advisory Committee	2017-present	Member
Program for Real Estate Advisory Committee	2017-present	Member
University Strategic Planning Advisory Committee	2018-19	Member
University Strategic Planning Steering Committee	2018-19	Member
University Research Strategic Planning Subcommittee	2018-19	Co-chair
University Strategic Planning Vision-Mission Statement and Continuous Planning Taskforces	2018-19	Member

2. University of Alabama

ACIIR Director and Associate Director Search	2014-15	Member
College Strategic Planning Committee	2012-14	Member
College Strategic Planning Scholarship Sub Committee	2012-14	Chair
College Promotion and Tenure Committee	2013	Member
Departmental Faculty Search Committee	2012-13	Chair
Departmental Promotion and Tenure Committee	2010-12	Member
Departmental Faculty Search Committee	2010-11	Chair

3. Agricultural and Applied Economics Association (AAEA)

<u>Name</u>	<u>Years</u>	<u>Assignment</u>
Executive Board Member	2005-08	Member
Publication of Enduring Quality Committee	2005-07	Member (2005) Chair (2006-07)
Foundation Committee (Board rep.)	2006-08	Member
Nominations Committee	2008-2010	Member
Econometrics Section, Chair and Co-founder	2008-present	Member and Chair

Ad-Hoc Service:

2018. Presentation to select U.S. Senate and Congressional Staff Members on the Impact of Summer Pell on SREB Student Enrollments.

2020-present. Board Member, Council on Food, Agricultural, and Resource Economics.

2008 Member of the College of Agriculture Dean's Search Committee, Purdue University.

Occasional ad-hoc reviewer for USDA/NRI grants.

Additional Professional Service:

I have served as external promotion and tenure reviewer and/or outside evaluator for Chair/Professorship renewals for: Michigan State University; The Ohio State University; NC State University; Purdue University; Texas A&M University; the University of Georgia; the University of Illinois; Iowa State University; the University of Minnesota; the University of California, Davis; the University of California, Berkeley; Oregon State University; the University of Tennessee; Mississippi State University, Cornell University; Virginia Tech University; Washington State University, New Mexico Tech.

I have served as external departmental review teams for the Department of Agricultural and Resource Economics, University of Arizona, and the Department of Applied Economics and Management, Cornell University.

Community Service:

2011-13. Parish Treasurer, Saint Matthias Episcopal Church, Tuscaloosa, Alabama.

2007-08. Parish Treasurer, Chapel of the Good Shepherd Episcopal Church, West Lafayette, Indiana.

2006-07. Vestry Council, Alternate and Member, Chapel of the Good Shepherd Episcopal Church, West Lafayette, Indiana.

2006-2008. Tippecanoe Child Care Wabash Landing, Parent Advisory Council.

2001-2005. Volunteer, UNC Hospitals Health Care and Blood Donation Center.

LEADERSHIP AND LEADERSHIP DEVELOPMENT:

- 2020-present. Member of Virginia Tech's inaugural group of "White Allies as Transformational Leaders" program (first cohort).
- 2020-present. Special assignment with Associate Vice Provost Catherine Amelink on Virginia Tech's component of the McKinsey-led Taskforce on Higher Education and Opportunity. Meet routinely with President Timothy Sands to discuss strategies surrounding student access and opportunity. Meet routinely with internal and external experts and stakeholder groups.

- 2020. eCornell Certificate in Change Management. Courses in Leading Organization Change, Negotiation Skills, Leading Strategic Change Initiatives, Navigating Power Relationships, Leading for Creativity and Innovation, and Strategic Decision Making.
- 2019-20. ACC Academic Leaders Network, 2019-20. Leadership development and training for aspiring academic leaders from Atlantic Coast Conference Schools.
- 2017-18. Virginia Tech Academic Leaders Program
- 2015-16. Leadership U at the University of Alabama. Spots in each class are competitive. To be selected you must pass through a rigorous screening process including a formal interview.
- 2015-16. A Fellow in the SEC Academic Leadership Development Program (ALDP).

MEMBERSHIPS:

Agricultural and Applied Economics Association
Western Agricultural Economics Association

HONORS AND RECOGNITION:

Fellow, Education Policy Center, University of Alabama, 2016-2017

Fellows Selection Committee, Agricultural and Applied Economics Association, 2012-2017

Tippecanoe Valley High School **Distinguished Alumni Award**, 2012

Who's Who in America

Fellow, Agricultural and Applied Economics Association, 2009

Associate Editor, *Journal of Agricultural and Resource Economics*, 2009-2013

Chair, Past Chair, and Charter Member, Econometrics Section, American Agricultural Economics Association, 2007-2009

Board of Directors (elected), American Agricultural Economics Association, 2005-2008

The **Havlicek Memorial Lecture** in Applied Econometrics, The Ohio State University, 2006

Publication of Enduring Quality, American Agricultural Economics Association, 2002

Quality of Research Discovery Award, American Agricultural Economics Association, 1999

Associate Editor, *Journal of Business and Economic Statistics*, 1998-2004

Associate Editor, *American Journal of Agricultural Economics*, 1994-1997

Editorial Review Board, *Review of Agricultural Economics*, 1993-1994

Outstanding Journal Article, *Journal of Agricultural and Resource Economics*, 1993

Taylor-Hibbard Club **Outstanding Graduate Instructor**, 1991

Outstanding Ph.D. Dissertation, American Agricultural Economics Association, 1988

Superior Graduate Student, Dept. of Agricultural Economics, University of Missouri-Columbia, 1985

Frank Miller Graduate Fellowship Award, Department of Agricultural Economics, University of Missouri-Columbia, 1983-1984

Outstanding Graduate Teaching Assistant, School of Agriculture, Purdue University, 1982

Graduation with Distinction Purdue University, 1981

Phi Kappa Phi Honorary, 1981

Gamma Sigma Delta, Agricultural Honorary, 1980

Phi Eta Sigma, Freshman-Sophomore Honorary, 1978

PUBLICATIONS: JOURNAL ARTICLES AND BOOK CHAPTERS:

Note: * indicates publication in a refereed journal. ** indicates senior authorship is shared.

1. B.K. Goodwin, M.T. Holt, and J.P. Prestemon. “Semiparametric Models of Spatial Market Integration.” *Empirical Economics*, forthcoming.
2. ** M.T. Holt and T. Teräsvirta. “Global Hemispheric Temperatures and Co-Shifting: A Vector Shifting-Mean Autoregressive Analysis.” *Journal of Econometrics*, 214(2020):198-215.
3. ** B.K. Goodwin, M.T. Holt, and J.P. Prestemon. “Nonlinear Exchange Rate Pass-Through in Timber Products: The Case of Oriented Strand Board in Canada and the United States.” *The North American Journal of Economics and Finance*, 50(2019): 100989-.
<https://doi.org/10.1016/j.najef.2019.100989>.
4. * B.K. Goodwin, M.T. Holt, G. Önel, and J.P. Prestemon. “Copula-Based Nonlinear Modeling of the Law of One Price for Lumber Products.” *Empirical Economics*, 54(2018):1237-1265.
5. * L.A. Craig and M.T. Holt. “The Role of Mechanical Refrigeration in Spatial and Temporal Price Dynamics for Regional U.S. Egg Markets, 1880–1911.” *Explorations in Economic History*, 66(2017):85-105.
6. * J.B. Tack and M.T. Holt. “The Influence of Weather Extremes on the Spatial Correlation of Corn Yields.” *Climatic Change*, 134(2016):299-309.
7. * W. Enders and M.T. Holt. “The Evolving Relationships between Agricultural and Energy Commodity Prices: A Shifting-Mean Vector Autoregressive Analysis.” Chapter 4 in Jean-Paul Chavas, David Hummels, and Brian Wright, eds., *The Economics of Food Price Volatility*, Chicago: The University of Chicago Press, NBER Research Series, 2014.
8. * D. Ubilava and M. Holt. “El Nino Southern Oscillation and its Effects on World Vegetable Oil Prices: Assessing Asymmetries Using Smooth Transition Models.” *The Australian Journal of Agricultural and Resource Economics*, 57(2013):273-297.
9. * W. Enders and M.T. Holt. “Sharp Breaks or Smooth Shifts? An Investigation of the Evolution of Primary Commodity Prices.” *American Journal of Agricultural Economics*, 94(2012):659-673.
10. * B.K. Goodwin, M.T. Holt, and J.P. Prestemon. “North American Oriented Strand Board Markets, Arbitrage Activity, and Market Price Dynamics: A Smooth Transition Approach.” *American Journal of Agricultural Economics*, 93(2011):993-1014.
11. * C.E. Hilmer, M.T. Holt, and R.C. Bishop. “Bootstrapping Your Fish or Fishing for Bootstraps? Precision of Welfare Loss Estimates from a Globally Concave Inverse Demand Model of Commercial Fish Landings in the U.S. Great Lakes.” *American Journal of Agricultural Economics*, 93(2011):98-112.
12. D.A. Bessler, J.H. Dorfman, M.T. Holt and J.T. LaFrance. “Econometric Developments in Agricultural and Resource Economics: The First 100 Years.” *American Journal of Agricultural Economics*. 92(2010):571-589. (Invited Paper)
13. * H.A. Klaiber and M.T. Holt. “The Role of Theoretical Restrictions in Price Forecasting with Inverse Demand Models.” *American Journal of Agricultural Economics*. 92(2010):70-85.
14. M.T. Holt and J.V. Balagtas. “Estimating Structural Change with Smooth Transition Regressions: an Application to Meat Demand.” *American Journal of Agricultural Economics*. 91(2009):1424-1431. (Invited Paper).

15. M.T. Holt and B.K. Goodwin. "The Almost Ideal and Translog Demand Systems." Chapter 2 in Daniel Slottje, ed., *Contributions to Economic Analysis, Quantifying Consumer Preferences*, Bingley, UK: Emerald Group Publishing Limited: 37–57, 2009.
16. * J.V. Balagtas and M.T. Holt. "The Commodity Terms of Trade, Unit Roots, and Nonlinear Alternatives: A Smooth Transition Approach." *American Journal of Agricultural Economics*. 91(2009):87-105.
17. Craig, L.A. and M.T. Holt. "Did Refrigeration Kill the Hog-Corn Cycle?," in *The Good of Counting: Essays in Honor of Thomas Weiss*. ed. Joshua Rosenbloom. London: Routledge, 2008.
18. * L.A. Craig and M.T. Holt. "Mechanical Refrigeration, Seasonality, and the Hog-Corn Cycle in the United States, 1870-1940." *Explorations in Economic History*. 45(2008):30-80.
19. * M.T. Holt and L.A. Craig. "Nonlinear Dynamics and Structural Change in U.S. Hog-Corn Cycle: A Time-Varying STAR Approach." *American Journal of Agricultural Economics*. 88(2006):215-233.
20. M.T. Holt and L.A. Craig. "A Nonlinear Model of the U.S. Hog-Corn Cycle." *Essays in Honor of Stanley R. Johnson*, eds. M.T. Holt and J.-P. Chavas, Berkeley: Berkeley Electronic Press, 2006.
21. * C.E. Hilmer and M.T. Holt. "Estimating Indirect Production Functions Using a More General Specification: An Application of the Lewbel Model." *Journal of Agricultural and Applied Economics*. 37(2005):225-234.
22. * M.T. Holt** and A.M. McKenzie**. "Quasi-Rational and Ex Ante Price Expectations in Commodity Supply Models: An Empirical Analysis of the U.S. Broiler Market." *Journal of Applied Econometrics*. 18(2003):407-426.
23. * M.S. Haigh and M.T. Holt. "Combining Time-Varying and Dynamic Multi-Period Optimal Hedging Models." *European Review of Agricultural Economics*. 29(2002):471-500.
24. * M.S. Haigh and M.T. Holt. "Hedging Foreign Currency, Freight and Commodity Portfolios – a Note." *Journal of Futures Markets*. 22(2002):1205-1221.
25. * A.M. McKenzie and M.T. Holt. "Market Efficiency in Agricultural Futures Markets." *Applied Economics*. 34(2002):1519-1532.
26. * M.S. Haigh and M.T. Holt. "Crack-Spread Hedging: Accounting for Time-Varying Volatility Spillovers in Energy Futures Markets." *Journal of Applied Econometrics* 17(2002):269-289.
27. * B.R. Beattie, M.T. Holt, and M.J. Watts. "On the Function Coefficient, Euler's Theorem, and Homogeneity in Production Theory." *Review of Agricultural Economics*. 24(2002):240-249.
28. * M.T. Holt and R.C. Bishop. "A Semiflexible Normalized Quadratic Inverse Demand System: An Application to the Price Formation of Fish." *Empirical Economics*. 27(2002):23-47/
29. * M.T. Holt. "Inverse Demand Systems and Choice of Functional Form." *European Economic Review*. 46(2002):117-142.
30. * B.K. Goodwin and M.T. Holt. "Parametric and Semiparametric Modeling of the Off-Farm Labor Supply of Agrarian Households in Transition Bulgaria." *American Journal of Agricultural Economics*. 84(2002):184-209.

31. M.T. Holt and J.-P. Chavas. "The Econometrics of Risk." *A Comprehensive Assessment of the Role of Risk in Agriculture*, eds. R. Just and R. Pope. Dordrecht, the Netherlands: Kluwer Academic Publishers, 2002.
32. * R.H. Beach and M.T. Holt. "Incorporating Quadratic Scale Curves in Inverse Demand Systems." *American Journal of Agricultural Economics*. 83(2001):230-245.
33. * M.S. Haigh and M.T. Holt. "Hedging Multiple Price Uncertainty in International Grain Trade." *American Journal of Agricultural Economics*. 82(2000):881-896.
34. * M.W. Suh, E.K. Lee, and M.T. Holt. "Estimation of Consumer Demands: An Application to U.S. Apparel Expenditures." *Journal of Textile Appraisal, Technology and Management*. 1(2000):1-9.
35. * M.T. Holt. "A Linear Approximate Acreage Allocation Model." *Journal of Agricultural and Resource Economics*. 24(1999):383-397.
36. * B.K. Goodwin and M.T. Holt. "Price Transmission and Asymmetric Adjustment in the U.S. Beef Sector." *American Journal of Agricultural Economics*, 81(1999):630-637.
37. * M.T. Holt and S.V. Aradhyula. "Endogenous Risk in Rational Expectations Commodity Models: A Multivariate GARCH-M Approach." *Journal of Empirical Finance*, 5(1998):99-129.
38. * M.T. Holt. "Autocorrelation Specification in Singular Equation Systems: A Further Look." *Economics Letters*, 58(1998):135-141.
39. * M.T. Holt and B.K. Goodwin. "Generalized Habit Formation in Inverse Almost Ideal Demand Systems: An Application to Meat Expenditures in the U.S." *Empirical Economics*, 22(1997):293-320.
40. S.R. Johnson and M.T. Holt. "The Value of Weather Information," *Economic Value of Weather and Climate Forecasts*, eds. Richard W. Katz and Alan H. Murphy, Cambridge: Cambridge University Press, 1997.
41. J.-P. Chavas and M.T. Holt. "On Nonlinear Dynamics: The Case of the Pork Cycle," in *Chaos Theory in Economics: Methods, Models and Evidence*, ed. W. D. Dechert. Collection. International Library of Critical Writings in Economics, no. 66. Cheltenham, U.K.: Elgar; distributed by Ashgate, Brookfield, Vt., 1996.
42. J.-P. Chavas and M.T. Holt. "Market Instability and Nonlinear Dynamics," in *Chaos Theory in Economics: Methods, Models and Evidence*, ed. W. D. Dechert. Collection. International Library of Critical Writings in Economics, no. 66. Cheltenham, U.K.: Elgar; distributed by Ashgate, Brookfield, Vt., 1996.
43. * J.-P. Chavas and M.T. Holt. "Economic Behavior Under Uncertainty: A Joint Analysis of Risk Preferences and Technology." *Review of Economics and Statistics*, 78(1996):329-335.
44. * J.-P. Chavas and M.T. Holt. "Nonlinear Dynamics and Economic Instability: The Optimum Management of a Biological Population." *Journal of Agricultural and Resource Economics*, 20(1995):231-246.
45. * M.T. Holt** and S.V. Aradhyula**. "Total Response Measures in Systems of Nonlinear Equations: An Application to the U.S. Dairy Sector." *Canadian Journal of Agricultural Economics*, 43(1995):285-304.
46. * M.T. Holt. "Price-Band Stabilization Programs and Risk: An Application to the U.S. Corn Market." *Journal of Agricultural and Resource Economics*, 19(1994):239-254.

47. * M.T. Holt. "Modelling Risk Response in the Beef Marketing Channel: A Multivariate Generalized ARCH-M Approach." *American Journal of Agricultural Economics*, 75(1993):559-571.
48. * J.-P. Chavas and M.T. Holt. "Market Instability and Nonlinear Dynamics," *American Journal of Agricultural Economics*, 75(1993):113-120.
49. * M.T. Holt and G. Moschini. "Alternative Measures of Risk in Commodity Supply Models: An Analysis of Sow Farrowing Decisions in the United States." *Journal of Agricultural and Resource Economics*, 17(1992):1-12.
50. * M.T. Holt. "A Multi-Market Bounded Prices Model under Rational Expectations: The Case of Corn and Soybeans in the U.S." *American Journal of Agricultural Economics*, 74(1992):10-20.
51. * J.-P. Chavas and M.T. Holt. "On Non-Linear Dynamics: The Case of the Pork Cycle." *American Journal of Agricultural Economics*, 73(1991):819-828.
52. * J.-P. Chavas** and M.T. Holt**. "An Analysis of Acreage Decisions Under Risk: The Case of Corn and Soybeans." *American Journal of Agricultural Economics*, 72(1990):529-538.
53. * M.T. Holt and S.V. Aradhyula. "Price Risk in Supply Equations: An Application of GARCH Time-Series Models to the U.S. Broiler Market," *Southern Economic Journal*, 57(1990):230-242.
54. * M.T. Holt. "Bounded Price Variation Models with Rational Expectations and Price Risk." *Economics Letters*, 31(1989):313-317.
55. * M.T. Holt** and K.D. Skold**. "Dynamic Elasticities and Flexibilities in a Quarterly Model of the U.S. Pork Sector." *Applied Economics*, 21(1989):1683-1700.
56. * M.T. Holt and S.R. Johnson. "Bounded Price Variation and Rational Expectations in an Endogenous Switching Model of the U.S. Corn Market." *Review of Economics and Statistics*, 71(1989):605-613.
57. * S.V. Aradhyula and M.T. Holt. "Risk Behavior and Rational Expectations in the U.S. Broiler Market." *American Journal of Agricultural Economics*, 71(1989):892-902.
58. * S.V. Aradhyula and M.T. Holt. "GARCH Time Series Models, an Application to Retail Livestock Prices." *Western Journal of Agricultural Economics*, 13(1988):365-374.
59. * M.T. Holt and S.R. Johnson. "Supply Dynamics in the U.S. Hog Industry." *Canadian Journal of Agricultural Economics*, 36(1988):313-335.
60. S.R. Johnson and M.T. Holt, 1986. "The Value of Climate Information," in Richard Krasnow, ed., *Policy Aspects of Climate Forecasting* (Washington, D.C., Resources for the Future).
61. * M.T. Holt, J.A. Brandt, C.A. Hurt. "Managing Risk with Forecasts and the Futures Market: An Application to Hog Production." *Journal of the American Society of Farm Managers and Rural Appraisers*, 49(1985):6-11.
62. * M.T. Holt and J.A. Brandt. "Combining Price Forecasting with Hedging of Hogs: An Evaluation Using Alternative Measures of Risk." *The Journal of Futures Markets*, 5(1985):297-309.

PUBLICATIONS: BOOKS EDITED

Essays in Honor of Stanley R. Johnson, eds. M.T. Holt and J.-P. Chavas, Berkeley: Berkeley Electronic Press, 2006.

RECENT PROFESSIONAL PRESENTATIONS AND INVITED LECTURES

In the past ten years I made over fifteen professional presentations, including recent talks at the Social Decisions and Analytics Laboratory (Biocomplexity Institute) and at the Network Dynamics and Simulation Science Laboratory (Biocomplexity Institute), Virginia Tech, and a talk at the 2012 NBER conference on Food Price Volatility; seven at other leading institutions/departments in the United States including Mississippi State, NC State, Brigham Young University, the University of Georgia, and the University of Wisconsin, among others; and five at international meetings and conferences including the 6th Annual Nordic Econometrics Meetings and the XVIth World History Congress. The remaining presentations were made at the meetings of various domestic professional societies and associations including the Agricultural and Applied Economics Association and the Society for Nonlinear Dynamics and Econometrics.

FUNDED RESEARCH AND EDUCATIONAL INITIATIVES:

Strada Education Network Grant, Phase 1, 2021, \$250,000 plus \$250,000 of Virginia Tech internal matching funds authorized by President Sands. CO-PI on “Presidential Scholars: Addressing Unmet Financial Need and Workforce Preparation.” (funded)

USDA/NIFA, CO-PI on 2021 Research and Extension Experiences for Undergraduates, 2021, 2022-2027, \$749,000 plus \$325,000 internal matching from Virginia Tech’s Fralin Life Sciences Institute, “Internship in Data Analytics in Agriculture, Community, and Rural Economics (DATA-ACRE).”

College of Agriculture and Life Sciences and Fralin Life Sciences Institute, 2021, \$120,000. CO-PI on “The VT Data Science for the Public Good and Community Learning Through Data Driven Discovery: A CALS-VCE Collaboration.”

USDA/NIFA, CO-PI on NIFA COVID-19 Rapid Response: Coronavirus Disease 2019, 2020-2022, \$293,524. “Price Transmission, and the Farm-Retail Price Spread in U.S. Beef and Pork.”

USDA/NIFA, CO-PI on AFRI FACT Grant, 2019-2021, \$1,000,000 total, \$239,096 Virginia Tech share. “Three-State Data Science for the Public Good Coordinated Innovation Network.” (Virginia Tech Lead)

USFS/USDA Cooperative Agreement, 2012-14, \$30,000, with Barry Goodwin, for Additional Objective for “Price Fixing in North American Oriented Strand Board Markets: A Time-Varying Conditional Correlation Multivariate GARCH Approach.”

USFS/USDA Cooperative Agreement, 2011-13, \$50,000, with Barry Goodwin, for Development and Testing of Alternative Nonlinear, Regime-Switching Forecasting Approaches for Intentional Fire Processes on Public and Private Ownerships.

ERS/USDA Cooperative Agreement, 2010-12, \$35,000, with Walter Enders, for modeling structural breaks in agricultural prices and import demands.

USFS/USDA Cooperative Agreement, 2010-12, \$56,000, with Barry Goodwin, for modeling Price Fixing in North America Oriented Strand Board markets: A Time-Varying Conditional Correlation Multivariate GARCH Approach

USFS/USDA Cooperative Agreement, 2009-10, \$35,000, with Barry Goodwin, for modeling private property risk from fires and natural disasters.

USFS/USDA Cooperative Agreement, 2009-10, \$53,000, with Barry Goodwin, for modeling nonlinear adjustment and exchange rate pass-through in U.S. and international forest products markets.

USFS/USDA Cooperative Agreement, 2005-08, \$41,256.17, with Barry Goodwin, for evaluating the role of nonlinearity and transactions costs in southern timber and regional forest product markets.

North Carolina Sea Grant, 2004-2006, \$66,672 plus one half-time RA (\$15,000 per year) for measuring demands for commercially caught fish in the U.S.

Research Institute on Livestock Pricing, 1998, \$18,000, with Barry Goodwin (Ag, & Res. Economics, NC State) for an economic analysis of price linkages and price transmissions in the beef and pork sectors.

NCSU National Textile Center, 1998-01, \$104,500, with Moon Suh (Textiles School, NC State) for research on a demand systems approach to prediction of textile and apparel demands under dynamic social trends.

USDA Cooperative Agreement, 1998-99, \$39,915, for research on the effects of risk on acreage response under the 1996 Farm Act.

North Carolina Sea Grant, 1997-99, \$57,044, with James A. Easley (Ag, & Res. Economics, NC State) for research on demand of finfish species in the mid and south Atlantic and Gulf regions for improved policy analysis and design.

N.C. Tobacco Foundation, Inc., 1997-1999, \$24,500 with A. Blake Brown (Ag, & Res. Economics, NC State) for research on the role of exchange rates and exchange rate risk in U.S. tobacco trade.

USDA Cooperative Agreement, 1992-93, \$17,500, for research on crop-livestock commodity farm policy linkages in the U.S.

TEACHING AND ADVISING:

University Instruction

I have extensive experience offering numerous courses in economics, agricultural economics, and resource and environmental economics, including but not limited to: introductory microeconomic principles; intermediate microeconomic theory; M.S.-level microeconomic theory; Ph.D.-level microeconomic theory; undergraduate, M.S.-level, and Ph.D.-level econometric methods; M.S.-level mathematical economics; M.S.-level introductory analytics; M.S.- and undergraduate-level environmental and resource economics; and undergraduate-level economic and business forecasting.

Graduate Advising

1. Ph.D. – Major Professor

I have served as advisor or co-advisor to eleven Ph.D. students in economics, agricultural and resource economics, and statistics during the course of my career. In addition, I have served as a committee member for over 30 Ph.D. candidates in economics, agricultural and resource economics, statistics, and finance.

2. M.S. – Major Professor/Co-Advisor

I have served as advisor or co-advisor for a number of Masters students in economics and in agricultural and resource economics. I have served on numerous Masters committees during my twenty-eight year professional career.