Selected Papers

SAEA 2010 Annual Meetings

A 2008–09 Assessment of Texas Department of Agriculture Programs to Support Rural Economic Tourism Events: How Strong Are These Economic Returns? *Olga Murova, Texas Tech University, Roger Hanagriff, Texas A&M University, and Conrad Lyford, Texas Tech University*

This paper determines the main forces that contribute to the creation of positive economic returns to the individual communities from Texas Department of Agriculture's supported rural tourism program and analyzes these economic returns.

Adoption of Cover Crops and The Effect on Nitrogen Use by Farmers *Gnel Gabrielyan, Sachin Chintawar, and John Westra, Louisiana State University, Agricultural Center*

Agronomic practices have changed to provide not only food and fiber but also public goods and other beneficial services. Cover cropping is increasingly adopted by producers of multifunctional agriculture. We identify factors affecting farmers' choice to adopt cover crops, examine the impact on nitrogen use from adopting cover crops, and determine the resultant decrease in input costs.

Adoption of Technology, Management Practices, and Production Systems in U.S. Milk Production *Aditya R. Khanal and Jeffrey Gillespie, Louisiana State University Agricultural Center, and James MacDonald, United States Department of Agriculture - Economic Research Service*

We examine U.S. dairy farmer adopter characteristics and adoption rates of 11 technologies. Except grazing, technologies were generally adopted complementarily. Four were used on higher percentages of farms in 2005 than 2000. The interaction of farm size with adoption suggests greater percentages of milk being produced under each, except grazing.

Aggregate and Farm-Level Productivity Growth in Tobacco: Before and After the Quota Buyout *Barrett E. Kirwan, University of Maryland, Kirk T. White, United States Department of Agriculture – Economic Research Service, and Shinsuke Uchida, University of Maryland*

We examine distortionary effects of agricultural policy on farm productivity by examining the response of U.S. tobacco farmers' productivity to the quota buyout of 2004. We find that aggregate productivity of Kentucky tobacco farms grew 37% during 2002–2007. Reallocation of resources among continuing tobacco farms and elimination of quota rental costs contributed to productivity growth.

Agricultural Arbitrage, Adjustment Costs, and the Intensive Margin *Jesse B. Tack, Mississippi State University, and Jeffrey T. LaFrance, Washington State University*

A dynamic econometric model of agricultural production is developed and estimated with production and consumption under risk, adjustment costs, and finance theoretic Euler equations. Land and capital are quasi-fixed. Production has constant returns to scale. Risk aversion and adjustment costs are significant drivers of the rate of return to agriculture.

Agricultural Policy and Its Impact on Labor Migration from Agriculture *Jeremy D'Antoni*

and Ashok K. Mishra, Louisiana State University Agricultural Center

Recent generations of farmers have experienced difficulties earning a living wage to support the needs of themselves and their families. Many farmers and their spouses have left agriculture to seek employment. Using an autoregressive distributed lag model and adjusting for non-stationary variables in labor migration, direct government payments were found to negatively affect labor migration from agriculture.

Agricultural Productivity, Drought, and Economic Growth in Sahel *Inoussa Boubacar, University of Wisconsin-Stout*

A standardized precipitation index is used to quantify the impact of climate change on agricultural productivity in Sahel. Precipitation variability is constraining Sahel's agricultural performance and its economic growth. War is equally detrimental to drought in explaining the economic downturn.

Alternative Livestock/Dryland Forage Systems in the Texas Panhandle *David G. Lust, Lal K. Almas, W. Arden Colette, and Leah M. Schlater, West Texas A&M University*

Optimization models are developed to determine grazing alternatives for individual dryland producers. Model alternatives include wheat, sorghum-sudan, summer perennial grass, and native range. Precipitation risk and price risk are estimated for seasonal production alternatives, and options that reduce both price risk and production risk are examined.

Analysis of Media Agenda-Setting Effects on Consumer Confidence in the Safety of the U.S. Food System *Abhshek Bhagwat and R. Wes Harrison, Louisiana State University Agricultural Center, Jean Kinsey and Dennis Degeneffe, University of Minnesota, and Gustavo Ferreira, Louisiana State University Agricultural Center*

Results from continuous tracking of consumer confidence and media coverage of food safety events over a 67-week period are reported. An ordered probit model is used to test whether media coverage of food safety events affected consumer confidence in the safety of the U.S. food system. Results show that media coverage negatively affected consumer confidence in food safety.

Analysis of Ranked Ordered Data When There Are Complete and Partial Ranking *Mahesh Pandit, Krishna P. Paudel, and Michael A. Dunn, Louisiana State University Agricultural Center*

Many methods are available to analyze rank ordered data. We used a spectral density analysis to identify most preferred options of Formosan Subterranean Termites control as ranked by Louisiana homeowners. Spectral analysis of both complete and partial ranked data indicates that the most preferred termite control choice is a relatively cheap ($0.13 per square foot) option of a liquid treatment.

Analyzing Relationships between Cash and Futures Dairy Markets Using Partially Overlapping Time Series *Marin Bozic and T. Randall Fortenbery, University of Wisconsin-Madison*

We analyze volatility dynamics in dairy futures prices using partially overlapping time series. We find that common factor explains 50–60% of market variance, with the highest fraction of contract variance explained by common factor being 80+% 8 months prior to expiry when information regarding upper bound of dairy herd size at the time of maturity is revealed.

Analyzing the Potential Water Conservation Strategies: An Application to Irrigated Agriculture in the Texas Panhandle *Rachna Tewari, Lal K. Almas, and David G. Lust, West Texas A&M University; Stephen H. Amosson, Texas AgriLife Extension; and Fran E. Bretz, Texas AgriLife Research*

This study evaluates the effectiveness of eight potential water management strategies in terms of water savings, implementation costs, as well as the regional impact of each policy on the agricultural economy of Region A, comprising

21 counties in the North Texas High Plains, over a 50-year planning horizon.

Assessing Public Preferences and Holistic Economic Value of Multifunctional Agriculture in the United States *Wanki Moon and Wayne Griffith, Southern Illinois University*

This study used contingent valuation to examine public preferences for multifunctional roles of U.S. agriculture and to present an estimate of the economic value of its nonmarket goods and services. Fishbein's model of reasoned behavior and mediation hypothesis were combined to model the relationship between willingness to pay and explanatory variables including attitudes, perceived attributes, and demographics.

At-Home Convenience Food Consumption and Body Mass Index *Jonq-Ying Lee and Richard L. Kilmer, University of Florida*

A variation of household production theory was used to select explanatory variables for the demand for convenience foods. A convenience food index measured convenience in food preparation. Results show that the presence of children in a household increases demand for convenience, especially in households with children of different age groups.

Breaking into the Cellulosic Ethanol Market: Capacity and Storage Strategies *Paul Darby, Tyler Mark, and Michael Salassi, Louisiana State University Agricultural Center*

This paper examines the possibilities of breaking into the cellulosic ethanol market in south Louisiana via strategic feedstock choices and the leveraging of the area's competitive advantages. A small plant strategy is devised whereby the first-mover problem might be solved, and several scenarios are tested using Net Present Value analysis.

Calculating Cost Savings per Acre When Harvest Days are Stochastic *Matthew Farrell and Gregory Ibendahl, Mississippi State University*

This paper seeks to measure cost per acre when harvest days are stochastic by using historic precipitation data. Cost per acre will include the cost of losses from a loss function from precipitation. Cost per acre will be adjusted for conventional versus new technology by quantifying the losses that contribute to extra costs of extended harvesting.

Can Organically Produced Foods Attract South Korean Consumers? *Wojciech J. Florkowski and Padmanand Madhavan Nambiar, University of Georgia; and Dong-Kyun Suh, Rural Development Administration, Republic of Korea*

Using survey data from female urban residents in Korea, this study identifies consumer and household characteristics influencing perception differences regarding six attributes. Results indicate the importance of household income with regard to organic food preference. Perceptions differed across locations, while the effects of other characteristics varied.

China's Soybean Imports—Price Impacts Using a Production System Approach *Wei Chen and Mary A. Marchant, Virginia Polytechnic Institute; and Andrew Muhammad, United States Department of Agriculture - Economic Research Service*

A differential production model is applied to study how soybean and soybean oil imports from the United States, Brazil, and Argentina compete on China's markets and how China's domestic prices of soybean meal and oil impact the country's imports. The results support a presumption that China's soybean imports from global markets are impacted by China's domestic soybean meal price but not by the soybean oil price.

China-United States Potential Nonfood Ethanol Exportation *Osei-Agyeman Yeboah, Victor Ofori-Boadu, and Tongzhe Li, North Carolina A&T State University*

There is an increasing trend of U.S. imports of ethanol from Brazil in response to the 2007 EIA. This study uses Distance Envelope Analysis to determine the ethanol production efficiency in Brazil relative to China. Higher

production efficiency in China can result in potential lower f.o.b. prices for U.S. imports.

A Comparative Efficiency Analysis of Wheat Farms Using Parametric and Nonparametric Methods *Lijia Mo and Allen M. Featherstone, Kansas State University*

This study examined whether cost efficiency measures were invariant to the choice of parametric and nonparametric methods for a sample of 183 wheat farms. Discrepancies occurred when different methods were used. This work also illustrated the importance of imposing curvature of the cost function for stochastic frontier.

Comparison of Factors Influencing Salaries of Agricultural Economics Professionals in Academic and Federal Employment *Jennie Popp, University of Arkansas; Doris Newton, United States Department of Agriculture – Economic Research Service; and Dianne Pittman, Diana Danforth, and Arby Abdula, University of Arkansas*

Results of two ordered probit models find differences in the major factors that influence salaries of agricultural economists employed in academia and in federal government. However some similarities were found; both sets of salaries were influenced by factors that measure job performance and neither set of salaries were significantly influenced by gender or ethnicity.

A Comparison of Technical Efficiency in Alabama's Nursery and Greenhouse Sector from 2003 to 2008 *Kenesha Reynolds-Allie, Deacue Fields, and Valentina Hartarska, Auburn University*

In 2008, a survey was conducted to determine the economic impact of the Alabama environmental horticulture industry. These survey data were used in a translog total cost function to estimate technical efficiency of nursery and greenhouse firms in Alabama. Firms were operating more efficiently in 2008 as compared with a 2003 study.

Constraints to Value-Added Management Practice Adoption for Cow-Calf Producers *Shannon R. Sand, Kellie Curry Raper, and Doug McKinney, Oklahoma State University*

A survey of Oklahoma cow-calf producers examined what producers view as constraints to implementation of value-added management practices for calf marketing. Constraints that differed by size of operation were financing, labor, and perceptions of the existence of premiums.

Consumer Demand for Ahi Poke (Raw Tuna Salad) in Hawaii *Pedro M. Fernandes da Costa and Wuyang Hu, University of Kentucky; and Miling Pan, National Oceanic and Atmospheric Administration National Marine Fisheries Service*

Ahi poke (raw tuna salad) has a significant role in Hawaii culture and economy. A consumer survey was used to examine consumers' purchasing intentions of ahi poke. A censored analysis was conducted to analyze demand. Results show that many consumers eat ahi poke frequently and different consumer profiles lead to large differences in demand.

Consumer Heterogeneity: Does It Affect Policy Responses to the Obesity Epidemic? *Conrad P. Lyford, Eric Belasco, Benaissa Chidmi, and Margil Funtanilla, Texas Tech University*

This analysis uses data from the Behavioral Risk Factor Surveillance System to evaluate the relationship between behavioral and demographic factors with body mass index. Results suggest that the effect of exercise, smoking, occupation, and race vary by body mass index quantile, indicating that consumers should be treated as heterogeneous at least for these factors in obesity policy and related analyses.

Contemporary Issues in Estimating Yield Distributions *Aude Liliana Pujula and David Isaias Maradiaga, Louisiana State University Agricultural Center; and Michael R. Dicks, Texas A&M University*

In the research area of crop yield density estimation and risk analysis, little emphasis has

been given to transformation methods and their impact on the reliability of empirical distribution functions and the resulting probability estimates. Using historical county corn yield data and nonparametric methods, this analysis sheds light on the importance of data transformation in crop risk analysis.

Cost Analysis and Water Conservation Potential of Irrigation Technologies in the Texas Panhandle Water Planning Area *Lal K. Almas, West Texas A&M University; and K. Vimlesh, J. Girase, Stephen H. Amosson, Leon L. New, Fran E. Bretz, and Thomas Marek, Texas AgriLife Research and Extension*

Six irrigation systems are analyzed considering cost and potential water savings. The investment cost of furrow and drip is $115,800 and $260,120, respectively. The cost of quarter mile pivot ranges from $59,000 to $64,000. Per ac-in variable pumping cost ranges $9.96 to $14.86 assuming natural gas price $7.00 per MCF.

Cost Analysis of Alternative Harvest and Storage Methods for Switchgrass in the Southeastern United States *James A. Larson, Daniel F. Mooney, Burton C. English, and Donald D. Tyler, University of Tennessee-Knoxville*

This study evaluated potential impacts of dry matter losses from alternative harvest and storage methods on costs of growing switchgrass for energy production. Storage losses for covered rectangular bales were greater than for covered round bales. The cost of delivered feedstock increased with longer storage times. Production costs were lowest for uncovered large round bales.

Cost and Benefit Analysis of Tomato Spotted Wilt Virus Management Technology in Georgia *Esendugue Greg Fonsah, Clarisse Myra Ferrer, David G. Riley, Stormy Sparks, and David Langston, University of Georgia*

Thrips-vectored tomato spotted wilt virus is a serious disease capable of causing damages to the plant, fruits, quality, and reducing yields. This study is aimed at providing the optimal return per unit of enterprise using cost and benefit estimates of the combination of available inputs used in the various management strategies.

Cost Efficiency of Critical Access Hospitals *I. Cristian Nedelea, J. Matthew Fannin, and James N. Barnes, Louisiana State University Agricultural Center*

This study used stochastic frontier cost models to examine efficiency of Critical Access Hospitals (CAHs) and non-CAH rural hospitals. The estimated results showed that CAHs are less efficient than non-CAH rural hospitals. However, we cannot conclude that Medicare cost-based reimbursement is the main cause of higher cost inefficiency of CAHs.

Cow-Calf Producer Interest in Retained Ownership *Jason Franken, Joe Parcell, David Patterson, Michael Smith, and Scott Poock, University of Missouri*

Increasing vertical coordination in pork and poultry allows offering convenient, consistent, and less expensive products. For vertical coordination to be effective, incentives must be properly aligned. This study demonstrates that cow-calf producers who invest in quality registered cattle and are interested in incorporating feedlot and carcass data into herd management decisions are also more interested in retained ownership.

Critical Access Hospitals and Retail Activity: An Empirical Analysis *Lara Brooks and Brian Whitacre, Oklahoma State University*

This paper takes an empirical approach to determining the effect that a critical access hospital (CAH) has on local retail activity. The empirical results provide additional evidence on the far-reaching economic development impacts of CAHs. The results also emphasize the importance of continued support for these rural institutions, including federal and state subsidies.

Critical Economic Factors for Success of a Biomass Conversion Plant for Agricultural Residue, Yard Residue and Wood Waste in Florida *Ivan R. Granja, John J. Vansickle, Lonnie Ingram, and Rick Weldon, University of Florida*

This model evaluates the potential success of a cellulosic ethanol plant in Florida. Critical economic factors of the plant were simulated to assess the ability of this project. These critical factors include the feedstock to be used, the cost of the facility, transportation costs, and the discount rate for the net present value.

Cultural Barriers and Agricultural Trade in the Western Hemisphere *Dwi Susanto and C. Parr Rosson, Texas A&M University*

This study analyzes the impacts of cultural distance on bilateral trade flows in the Western hemisphere using Fixed Effects Vector Decomposition. Four cultural dimensions of Hofstede are used to capture cultural distance. The results found a net positive effect suggesting that culturally-dissimilar countries trade more rather than less.

Decision Support System for Evaluating Rural Water Supply Infrastructure Scenarios *Art Stoecker, Dee Ann Sanders, and Brian E. Whitacre, Oklahoma State University*

This paper seeks to develop a methodology that will be useful for rural water districts in assessing the future of their water systems infrastructure. The use of free water simulation software and publicly available data present rural water systems with the opportunity to analyze their existing distribution systems and forecast where problems are likely to occur.

A Demand System Analysis of the U.S. Trout Market *Youngjae Lee, P. Lynn Kennedy, and Brian M. Hilbun, Louisiana State University Agricultural Center*

The effect of trout imports on the domestic trout industry is determined using a modified LDI-AIDS model. The study identifies the complementary or substitutionary relationship between products as well as the intensity of substitutable interaction of imported relative to domestic product. The impact of the exchange rate is also examined.

Demographic and Economic Profiling of U.S. Demand for Non-Alcoholic Beverages 1998–2003: A Household Level Two-Step Analysis *Senarath Dharmasena and Oral Capps, Jr., Texas A&M University*

Data from U.S. households over the period 1998–2003 were used in examining demographic and economic factors affecting demand for non-alcoholic beverages (NABs) using Heckman two-step procedure. Race, region, age, poverty status, presence of children, and price were significant drivers of consumption on NABs. Sample selection bias was significant for most beverages.

Designing Rainfall Insurance Contracts for Pasture, Rangeland, and Forage *Denis Nadolnyak, Auburn University; and Dmitry Vedenov, Texas A&M University*

This paper reports preliminary results of the analysis of climate forecast information in designing rainfall index insurance in the southeastern United States. Joint distributions of bi-monthly rainfall and El Nino Southern Oscillation (ENSO) indexes are estimated using copula analysis of historical data. The risk reducing effectiveness of introducing premiums conditional on ENSO forecast is evaluated.

Determining Optimal Levels of Nitrogen Fertilizer Using Random Parameter Models *Emmanuel Tumusiime and Wade Brorsen, Oklahoma State University; and Jon Biermacher, Jagadeesh Mosali, Jim Johnson, and James Locke, The Samuel Roberts Noble Foundation, Inc.*

We estimate rye-ryegrass yield functions where all parameters are random. Optimal nitrogen rates are calculated for two yield response functions: linear response plateau and quadratic. Nonstochastic models are rejected in favor of stochastic parameter models. However, the economic benefits of using fully stochastic

models are small since optimal nitrogen rates do not differ greatly between stochastic and nonstochastic models.

Direct Marketing of Specialty Crops by Producers: A Price-Comparison between Farmers' Markets and Grocery Stores
Jonathan Adam Watson and Michael A. Gunderson, University of Florida

Consumer research provides evidence that producers should receive a premium locally, organically, and/or naturally grown product. Data were collected from Florida farmers' markets and nearby grocery stores. Results indicate that producers selling at farmers' markets receive prices, on average, significantly less than those found at grocery stores.

Does Crop Insurance Reduce the Need for Cash Reserves in Savings Accounts? *J. Marc Raulston, James W. Richardson, Joe L. Outlaw, and George M. Knapek, Texas A&M University*

Cash reserves in savings provide a safety net for producers. Crop insurance, another risk management tool, likely reduces the cash reserves required to be held in savings. This study utilizes a stochastic farm level simulation model in a representative farm framework to evaluate the impacts of alternative crop insurance scenarios on levels of savings necessary to maintain target ending cash reserve numbers for producers in major production areas of the Southern United States.

Does the Law of One Price Hold for Feeder Cattle Purchased in Various Regions of the United States and Shipped to One State in the Midwest? *Matt Hirschi and Dillon M. Feuz, Utah State University*

The objective of this study was to assess the impact of farm program payments on technical efficiency using aggregate state level panel data from the U.S agricultural sector. Results indicate production increasing with increasing units of inputs. Results from this study indicate that farm program payments play an important role in technical efficiency.

Economic Analysis of Manure Harvesting Equipment in Feedyards for Dust Control
Fran Bretz, Texas AgriLife Research; Steve Amosson and Patrick Warminski, Texas AgriLife Extension; and Thomas Marek, Texas AgriLife Research

This study concentrated on one method of dust control which is harvesting manure with equipment. An economic analysis including hourly fixed and operational costs were performed on the following: tractor-pulled box scraper, front-end loader, dump truck, spreader truck, elevating scraper, and tractor-pulled end dump. The purpose of this study was to generate cost data for feedyard owners/operators to reference when making manure management and equipment purchasing decisions.

Economic Considerations for Playa Management Alternatives *DeDe Jones, Steve Amosson, and Patrick Warminski, Texas A&M University*

Several government programs are available to assist landowners with playa preservation including CP23A, the Wetlands Reserve Program, and the Wildlife Habitat Incentive Program. This study evaluates each conservation program and weighs the economic benefits and costs of program implementation.

Economic Impact of Collegiate Bass Tournaments: Experiences from Auburn University
Albert E. Myles, Mississippi State University; and Jenny Swaim, Auburn University

Recreation and tourism associated with collegiate bass tournaments can play major roles in local economic development as the dollars anglers and tournament organizers spend work their way through the economy. Spending associated with these events show the interest by participants and economic importance to the community, which hosted these events.

Economic Impacts and Implications of Foreign-Born Labor Reductions in Agriculture - Emphasis on Dairy Farms *Eric W.L. Manthei, Texas AgriLife Extension*

The objective of this study is to consider the economic impacts of reducing the availability of immigrant workers in the United States. This analysis utilizes the IMPLAN model, developed and maintained by the Minnesota IMPLAN Group, for analyzing the effects of 20%, 50%, and 100 % reductions in immigrant labor within the dairy industry.

Economic Potential of Substituting Legumes for Synthetic Nitrogen in Warm Season Perennial Grasses used for Stocker Cattle Grazing *Maru Kering, Jon T. Biermacher, Ryan Reuter, Twain Butler, Job D. Springer, James K. Rogers, John Blanton, Jr., Joe H. Bouton, The Samuel Roberts Noble Foundation, Inc.; and John A. Guretzky, University of Nebraska*

Two alternative nitrogen management systems that use annual and perennial legumes have been developed for bermudagrass pastures. The goal of the study is to determine if the legumes systems are more profitable than the conventional practice of applying synthetic sources of nitrogen. Results of the 2-year grazing study show that the legume systems could not compete economically with the common practice.

An Economic Risk Analysis of Stocker Grazing on Conservation Tillage Small Grains Forage in Arkansas *K. Bradley Watkins, Jeffrey A. Hignight, Paul A. Beck, Merle M. Anders, Donale S. Hubbell III, and Shane Gadberry, University of Arkansas*

This study evaluates both the profitability and risk efficiency of grazing stocker steers on conservation tillage winter wheat pasture using simulation and stochastic efficiency with respect to a function. Of conventional tillage, reduced tillage, and no-till winter wheat pasture, results indicate the no-till system is the most profitable and most risk efficient.

The Economics of Annual Legume and Double Legume Cover Cropping in Southern Manitoba *Ashleigh McLellan and Jared G. Carlberg, University of Manitoba*

Using historical data from crop producing farms in southern Manitoba, this study quantifies the economic savings that could be realized by using legumes to supply nitrogen in a cereal-oilseed based rotation. Including a legume cover crop in a cereal-oilseed based rotation can reduce the amount of nitrogen required by a subsequent crop and in turn increase the net returns associated with the complete crop rotation.

The Economic Value of Irrigation in the Texas Panhandle *Bridget Guerrero, Texas AgriLife Extension; Andrew Wright, Darren Hudson, and Jeff Johnson, Texas Tech University; and Stephen Amosson, Texas AgriLife Extension*

The objective of this study is to estimate the value of irrigated agriculture to the region. A hypothetical policy restriction is imposed which assumes a 100% conversion to dryland agriculture. The study estimates the economic impact of such a change on producer income and the resulting socioeconomic impacts on communities in the region.

The Effect of Traditional Practices in the Efficiency of Dairy Farms in Wisconsin *Victor E. Cabrera, University of Wisconsin-Madison; Daniel Solís, University of Miami; and Julio del Corral, University of Castilla-La Mancha, Spain*

The goal of this study was to examine the effect of intensification on the performance of dairy farms. The empirical analysis found that farm efficiency positively relates to farm intensification, family labor in the farm activities, use of a total mixed ration, and increased milking frequency.

The Effects of Climate Change Perceptions on Willingness to Fund the Prevention of Wetland Loss *Ross Moore, Daniel R. Petrolia, and Tae-Goun Kim, Mississippi State University*

Using contingent valuation, we estimate willingness to pay for prevention of wetland loss in coastal Louisiana, and identify the factors that influence respondent choice, specifically

climate change perceptions. Eighty-two percent of respondents were willing to pay for some form of wetland loss prevention.

The Effects of Drought on Crop Yields and Yield Variability in Sahel *Inoussa Boubacar, University of Wisconsin-Stout*

This paper examines the economic impacts of drought on Sahel agriculture. Maximum likelihood estimators of the Just-Pope stochastic production function indicate that the direction of the effects of climate variables is similar across crops, but their magnitudes differ. Specifically, drought as measured by a 6-month standardized precipitation index, poor rainfall spread, and degree-days have adverse effects on crop yields.

Effects of Macronutrients on Seed Quality and Profitability Analysis of Sunflower Production in Northwest Pakistan *Amanullah and Mir Wali Khan, NWFP Agricultural University, Pakistan; Lal K. Almas and Bob A. Stewart, West Texas A&M University*

Potassium (K) and phosphorus (P) application to sunflower reduced cost and increased yield and returns on K and P deficient soils in Pakistan. Six levels of K and four levels of P were used. The highest net return was obtained from a combination of 100 kg K + 45 kg P per hectare. That combination was recommended for profitable sunflower production in the region in Pakistan.

Effects of Producer-Provided Descriptions of Feeder Cattle and Conditions of Sale on Prices on a Tennessee Video Board Sale *Dan McLemore, Damon Drinnon, Emmit Rawls, and John Campbell, University of Tennessee-Knoxville*

A hedonic model was used to estimate effects on feeder cattle price of information about cattle and sale conditions specified by sellers. Specifications regarding weighing conditions, pencil shrink, weight/price slide, and feed availability were important. This study failed to find that electronic identification, Process Verification, and health programs were significant.

The Effects of Public Debt on Labor Demand in the United States *Carlos I. Garcia-Jimenez and Ashok K. Mishra, Louisiana State University Agricultural Center*

The relationship between appreciation of the exchange rate and employment is investigated for the period 1980–2008 for the United States. This study endeavors to shed some light on the role of government debt on determining the level of employment through the exchange rate. Exchange rate appreciations and increasing public debt were found to be detrimental to employment.

The Efficiency of Labor Input in the Tree Nut Growers Industry: A Stochastic Frontier Production Approach Study in Butte County, California *Kuo-Liang Chang, South Dakota State University; and Todd A. Lone, California State University, Fresno*

Using a stochastic production frontier approach, we investigate the contribution of labor to agricultural production efficiency in tree nut production, and estimate the marginal rate of technical substitution, economies of scale, and economies of scope. Results indicate the labor input is not significant in determining farm production efficiency.

The Emergent Vinifera Wine Industry in North Carolina: A Descriptive Overview *Fictor Ofori-Boadu and Osei-Agyeman Yeboah, North Carolina A&T University; Joy Bhadury, University of North Carolina-Greensboro; Kathryn Dobie, North Carolina A&T University; and Samuel P. Troy and Nicholas C. Williamson, University of North Carolina-Greensboro*

The North Carolina wine industry has grown rapidly over the past decade and is expected to grow even more as the worldwide wine consumption and export of wines rises. This study provides information that would help gain a better understanding of the business issues and needs related to the wine and grape industry in North Carolina.

Enhancing the Profitability of Horticultural Products with Market Based Information *Prince Kyei and Godfrey Ejimakor, North Carolina A&T State University*

In addition to regional variations, demand for poinsettias was shown to depend on its price. Based on state-level data for 2005, demand in the Northeastern and Midwestern United States was found to be inelastic. This suggests that the market for poinsettias in both regions could support higher prices.

Environmental Benefits from Reduced Pesticide Use and Returns to Research: An Application to the U.S. Cotton Industry *Doris Sande and Jeff Mullen, University of Georgia; and Augustus Matekole, Louisiana State University Agricultural Center*

Intensive pesticide use has resulted in the disruption of naturally occurring biological control factors that regulate other insect pest populations and "the pesticide treadmill". The result is resistance to insecticides, high control costs, and unacceptable levels of chemical insecticides in the environment. Concerns about environmental and human health effects from pesticide use thus need to be modeled in evaluation studies.

Evaluating the Competitive Effects of the Commodity Groups Originated by Class I Railroads in the United States *Albert J. Allen and Albert E. Myles, Mississippi State University; Saleem Shaik, North Dakota State University; and Osei-Agyeman Yeboah, North Carolina A&T University*

Dynamic shift-share analysis reveals that national growth effects were positive while industrial mix, competitive, and allocation effects were negative. Results also show that time (technology) was significantly and positively related to the competitive effects for coal, chemical products, food products, nonmetallic products, petroleum products, metallic ores, and other products.

An Examination of the Tradeoff between Net Return, Risk, and Water Quality for Crop Rotations in South Central Kansas *Michael Langemeier, Nathan Nelson, Prem Parajuli, and Seth Perkins, Kansas State University*

This paper determined the optimal crop rotation in South Central Kansas. The model incorporated net return, risk, and water quality. In general, water quality improved as tillage was reduced within a rotation type and by adding an alfalfa rotation. The optimal crop rotation mixes included wheat, grain sorghum, soybeans, and alfalfa.

Examining Factors Affecting Population Change in the Southern United States: An Ongoing Case Study *Anquinette Hill, Buddhi Gyawali, and Swagata "Ban" Banerjee, Alabama A&M University*

Urban sprawl and rural rebound are major foci of recent regional economic studies. Using 1980 and 2000 Census data from 11 southern states, binary logit regressions of population changes in rural and metropolitan counties and Black Belt and non-Black Belt counties reveal education, poverty, employment, and age differences are related to population changes.

Examining Students' Perceptions of Globalization and Study Abroad Programs at Historically Black Colleges and Universities *Stevon Walker and James O. Bukenya, Alabama A&M University; and Terrance Thomas, North Carolina A&T University*

We explore students' perceptions of globalization and study abroad programs at Historically Black Colleges and Universities. Survey data were analyzed using factor analysis and binary logistic regression. Results suggest that while a number of variables such as major and classification have statistically significant relationships toward globalization, demographic and information source variables are not good indicators of student perceptions of globalization.

The Exchange Rate and Inward Foreign Direct Investment in Mexico *Shanta Parajuli and P. Lynn Kennedy, Louisiana State University Agricultural Center*

We analyzed the exchange rate and inward foreign direct investment (FDI) in Mexico from the 25 developed countries comprising the Organization for Economic Co-operation and Development. Our empirical result does not support the significant relationship between exchange rate and exchange rate volatility to determine FDI in Mexico. Wages, export, and distance are found to be significant variables to determine FDI in Mexico.

Factors Influencing Basis and the Speed of Basis Adjustment in Grain Markets *John Michael Riley, Mississippi State University*

Basis for grains and other crops has widened in recent years. Many factors are attributable to basis changes. However, in the Mississippi Delta region, basis levels rose sharply in 2007 and 2008. Comparatively, although basis levels for corn and soybeans did widen in the Midwestern region, it was to a lesser extent. Much the same is true with regard to wheat when comparing the Delta region with that of Western Kansas.

Factors Influencing Private Landowner Restoration Investment Decisions in Coastal Louisiana *Cheikhna O. Dedah and Richard F. Kazmierczak, Jr., Louisiana State University Agricultural Center; and Walter R. Keithly, Jr., Louisiana State University*

Coastal wetland loss has been a major problem in Louisiana. Although federal, state, and local efforts have attempted to combat this loss from a public perspective, little has been done to encourage private landowners to maintain and protect their coastal lands. This paper investigates factors influencing private landowners to invest in coastal wetland restoration and maintenance activities.

Factors Influencing Producers' Marketing Decisions in the Louisiana Crawfish Industry *Narayan P. Nyaupane and Jeffrey M. Gillespie, Louisiana State University Agricultural Center*

Factors influencing farmer selection of a crawfish marketing outlet were analyzed using 2008 Louisiana crawfish industry survey data. Most farmers sell directly to wholesalers. Probit results show farm size, farm income, household income, age, education, and pre-market grading and washing operations significantly affecting farmer selection of an outlet.

Factor that Affects Arkansas Farm Operators' and Landowners' Decision to Participate in Agritourism *Daniel Rainey, Harjanto Djunaidi, and Stacy W. McCullough, University of Arkansas; and Biswa R. Das, Kansas State University*

This study utilizes survey data analyzed at the regional level to obtain additional insights left unnoticed in an analysis based on state level data. The current analysis reveals that farm operators' and/or landowners' decision to participate in the agritourism industry in Arkansas is affected by state government infrastructure.

Farm Income Variability and Off-Farm Diversification in Canadian Agriculture *Simon Jette-Nantel, David Freshwater, Martin Beaulieu, and Ani Katchova, University of Kentucky*

Off-farm occupations have become a major determinant of farm household well-being. Using Canadian longitudinal farm level data, we find that farm market revenue variability increases the likelihood and level of off-farm income. Our results suggest the presence of substantial interactions between off-farm income and farm income stabilization policies.

A Farm Level Analysis of the Economic Impact of the MARENA Program in Honduras *Boris Bravo-Ureta and Alexandre de Almeida, University of Connecticut; Daniel Solis, University of Miami; and Aaron Inestroza, Ministry of Agriculture, Honduras*

The impact of MARENA on the farm income of its beneficiaries is studied using a 2-period panel data set and an empirical framework, which relies on propensity score matching and a fixed effects income model. The results suggest that MARENA has had a positive and

significant effect on the farm income of its beneficiaries.

Financial Feasibility of Simultaneous Production of Pine Sawlogs, Forage, and Meat Goats on Small Farms in Alabama: A Preliminary Analysis *Brandi Broughton and James O. Bukenya, Alabama A&M University*

The objective was to conduct economic evaluations of agroforestry practices so that landowners, extension personnel, and other decision makers can correctly assess the potential of agroforestry practices among land-use options. Data were collected from a 4-year silvopastoral study conducted in the Black Belt region, on the property of the Federation of Southern Cooperatives in Epes, Alabama.

Food Retail Provisioning, Dietary Behavior, and Weight Outcomes in North Carolina *Kofi Adu-Nyako and Ralph Okafor, North Carolina A&T University*

We examine the local availability of retail food stores and their influence on risk of obesity in North Carolina. Results show that body mass index decreased with availability of supermarkets and consumption of additional servings of fruits and vegetables. Increased availability of gas and convenience type food store outlets was associated with increased body mass index.

Fundamentals and U.S. Natural Gas Price Dynamics *Xiaoyan Qin, David Bessler, David Leatham, Ximing Wu, and Li Gan, Texas A&M University*

Investigation into the relations between market fundamentals and U.S. natural gas prices is carried out in the regime-switching framework. To test the hypothesis that the U.S. natural gas market may switch between two states of market, a bullish market and a bearish market, a 2-state regime-switching model with Markov transition chain is carried out.

Grain Sorghum International Trade: U.S.-Mexico Simulation and Estimation Model *Bing Liu and Jaime Malaga, Texas Tech University*

An econometric international supply/demand/trade simulation and forecast sorghum model in a partial equilibrium framework quantifies the effects of key exogenous variables on the U.S.-Mexico sorghum trade. A forecast baseline is also established by using the validated model and values of exogenous variables provided by Food and Agricultural Policy Research Institute to project the level of endogenous variables over the period 2009–2017.

Has Country of Origin Labeling Influenced Salmon Consumption? *Shawn Wozniak, North Carolina A&T University*

Country-of-Origin Labeling (COOL) legislation for fish and shellfish was passed as part of the Farm Security and Rural Investment Act of 2002. Demand for three salmon products was estimated. COOL had no significant impact on consumer demand for three products. The products were all found to be inelastic, but uncooked fresh was more price sensitive than precooked and uncooked frozen salmon.

Health Disparities in Rural Georgia: A Case Study of Liberty, Long, and McIntosh Counties *William A. Amponsah, Whitney Fuller, and Godfrey Gibbison, Georgia Southern University*

We conduct a case study of three rural counties, Liberty, Long, and McIntosh, to explore what factors explain the incidence of health disparities manifested in high blood pressure and heart disease. We test the hypotheses that older individuals are more likely to experience illness at a higher rate than the rest of the population.

Health Risk of Heating Fuel Choice: A Simultaneity Causality Analysis *Zheng Liu, Angelos Pagoulatos, and Wuyang Hu, University of Kentucky*

This research explores the health risk associated with heating fuel choice using Kentucky rural data. We do not find strong evidence supporting a causal relationship between polluting heating use and the prevalence of asthma, allergy, and other respiratory disease. Some demographic

and lifestyle factors have significant effects on the prevalence of these diseases.

How A Cap-and-Trade Policy of Green House Gases Could Alter the Face of Agriculture in the South: A Spatial and Production Level Analysis *Lanier Nalley, Mike Popp, and Corey Fortin, University of Arkansas*

This study estimates greenhouse gas (GHG) emissions of the six largest crops produced in Arkansas using 63 different production practices. Results show that while a 5% reduction in GHG emissions would only affect crop allocations amongst certain crops while marginally reducing state net returns, a 20% reduction would cause major cropping pattern shifts.

Identifying the Range of Distance over which Open Space Affects Housing Values *Seong-Hoon Cho, Dayton M. Lambert, Seung Gyu Kim, William M. Park, and Roland K. Roberts, University of Tennessee-Knoxville*

We use a sequence of hedonic housing price regressions to estimate open space amenity values. The iterative approach identifies the range of distance over which open space affects housing values. Simple functional relationships were established between implicit prices of developed open space, forest-land open space, and agriculture-wetland open space and the buffer radius of the area surrounding a given location.

The Impact of Agricultural Growth on Rural Non-Farm Incomes and Employment in Alabama *LaTravis Brazil and James O. Bukenya, Alabama A&M University*

We examine the importance of rural-urban growth linkages with the focus on the Black Belt region and estimate agricultural growth multipliers. We use cross-sectional data to estimate indirect rural employment and income generated by agricultural growth. We examine the importance, composition, and location of nonfarm activity. We then explore the relationship between agriculture and changes in nonfarm activities.

The Impact of Foot-and-Mouth Disease Vaccination Policy in Importing Countries on U.S. Swine Meat Exports *Shang-Ho Yang, Sayed Saghaian, and Michael R. Reed, University of Kentucky*

This study proposes a gravity model with fixed-effect regressions to analyze the effects of foot-and-mouth disease (FMD) in 17 countries that import U.S. swine meat using annual trade data. Results confirm that different policies change the outcomes from FMD. FMD-affected countries, which adopted a vaccination policy, have negative impacts on U.S. swine meat exports.

The Impact of Trade Openness on Technical Efficiency in U.S. Agriculture *Dragan Miljkovic and Saleem Shaik, North Dakota State University*

This study addresses the impact of trade openness on technical efficiency in the U.S. agricultural sector. The results indicate that trade protectionism illustrated with a decrease in the share of agricultural imports in agricultural gross domestic product (GDP) led to an increase in technical efficiency. A change in the share of agricultural exports in agricultural GDP had no impact on technical efficiency.

Implications of the Sanitary and Phytosanitary regulations on the European Union – U.S. Corn Trade Sector and the Case of the 'Agenda 2000' Reforms *Sachin Chintawar and John Westra, Louisiana State University Agricultural Center*

Using data obtained from the United States Department of Agriculture and EUROSTAT, we developed a three stage simultaneous equation model to estimate the economic impact of TBTs on European Union (EU)-U.S. bilateral corn trade for specific EU countries. Further, welfare effects for producers and consumers in EU countries are also estimated.

Improving Market Access for Small and Midsized Producers through Food Industry Electronic Infrastructure MarketMaker *Khin Mar Cho and Donald Jerome Tobias, Cornell University*

In recent years, there has been a growth in the interest of consumers to buy more locally. MarketMaker is one avenue farmers across New York can utilize to make connections with their customers. This powerhouse database connects buyers, sellers, and transportation services and is easily searchable, even for the "technologically? challenged."

Incentive Policies to Promote the Use of Enhanced Stormwater BMPs in New Residential Developments *Matthew C. Huber, David B. Willis, John C. Hayes, and Charles V. Privette, III, Clemson University*

A voluntary stormwater management program that is incentive compatible between residential developers and regulators produces an outcome that simultaneously protects/enhances water quality and increases developer profits. Developers pay a participation fee that is used to retrofit ineffective stormwater management systems in older neighborhoods to improve water quality.

Incorporating State Elementary and Secondary School Funding Formulas in Community Impact Models *Arun Adhikar and J. Matthew Fannin, Louisiana State University Agricultural Center*

The paper discusses evaluating how exogenous economic changes in the labor force and the fiscal module of the Coastal Community Impact Model (CCIM) impacts state financing of local school districts. This objective will be completed by linking key revenue capacity equations from CCIM to Louisiana's Minimum Foundation Program formula.

Industry Organization and Output Size Distribution of Cotton Gins in the United States *Maria Mutuc and Darren Hudson, Texas Tech University*

This paper examines how output size distribution of cotton gins in the United States has evolved and the extent to which the passage of the Energy Policy Act in 2005 (and its subsequent revisions) has influenced this structural process. Markov transitional probability matrices are estimated for two periods: 1994–2004 and 2005–2008 to determine changes in output size distribution of gins.

Irrigated Acreage Projections in Georgia *Ruohong Cai, Jeffrey D. Mullen, and John C. Bergstrom, University of Georgia*

Three methodologies were applied in this study to project irrigated acreage of major crops in Georgia from 2010–2050 and show consistent results. Total irrigated acreage of major crops in Georgia is projected to increase for the next 40 years. The methodologies used in the study can only be used under certain assumptions. Thus, better methodologies are needed for future related research.

Is Switchgrass Yield Response to Nitrogen Fertilizer Dynamic? Implications for Profitability and Sustainability at the Farm Level *Daniel F. Mooney, Roland K. Roberts, Burton C. English, James A. Larson, and Donald D. Tyler, University of Tennessee-Knoxville*

This paper tests the hypothesis that switchgrass yield response to nitrogen fertilizer is dynamic. Yield and weather data from a 5-year experiment in western Tennessee are used. Implications of such a finding on the profitability and sustainability of switchgrass production at the farm level are discussed.

Loan Portfolio Performance and El Niño, an Intervention Analysis *Benjamin Collier, Ani L. Katchova, and Jerry R. Skees, University of Kentucky*

Natural disasters, such as those created by extreme El Niño, can significantly threaten financial institutions serving the poor. Our results indicate the 1997–1998 El Niño significantly increased problem loans (e.g., restructured loans) for an MFI in northern Peru; the magnitude of the effect is estimated using intervention analysis.

Macroeconomic Impacts of Water Use in Agriculture *Justin Weinheimer, Erin Wheeler-Cook, Don Ethridge, and Darren Hudson, Texas Tech University*

This study estimated the impacts of the 2008 recession on irrigation water use in a portion of the Southern Great Plains using Food and Agricultural Policy Research Institute projections and the Ogallala Aquifer Model. Results indicate small changes in irrigation water use, with decreases in pumping cost from lower energy prices overriding commodity price decreases.

Managerial Organization of U.S. Farms: Importance for Classifying Farms and Evaluating the Distribution of Farm Payments *Roman Keeney, Amber A. Remble, and Tamara M. Ogle, Purdue University*

A new typology of U.S. farms is constructed focusing on the managerial organization of farms. Single operator farms are distinguished from those with multiple operators, which are divided into four classes. Findings show that the managerial organization represents an important classification for understanding the distribution of farm payments.

Metro, Micro, and Non-Core: A 3-year Portrait of Broadband Supply and Demand in Oklahoma *Brian Whitacre, Oklahoma State University*

This study examines the broadband Internet setting in Oklahoma over a 3-year period, examining the diffusion of both infrastructure and access rates. A non-linear decomposition technique allows for measurement of how specific characteristics contribute to metropolitan—micropolitan or metropolitan—noncore "digital divides."

Multiple Generation Farm Households: What Determines Primacy in Management? *Amber A. Remble, Roman Keeney, and Maria I. Marshall, Purdue University*

This study identifies factors that influence primacy between generations in the management structure of U.S. family farms. Data from United States Department of Agriculture-Economic Research Services' Agricultural Resource Management Survey and a limited dependent variable model are used to explain the decision for older generation operators to retain primary farm management duties with a junior operator serving a secondary role.

Net Effect of Education on Technology Adoption by U.S. Farmers *Hiroki Uematsu and Ashok K. Mishra, Louisiana State University Agricultural Center*

The objective of this study is to estimate the net effect of education on technology adoption for U.S. farmers. Using 2006 Agricultural Resource Management Survey data, this study develops a simultaneous equations model to integrate farmers' labor allocation decision with adoption of both time saving and management intensive technologies.

Norms, Self-Sanctioning, and Contributions to the Public Good *Matthew G. Interis, Mississippi State University, and Timothy C. Haab, Ohio State University*

We develop a model in which individuals hold an injunctive norm indicating how much they believe one should contribute to the public good. From the model we derive three testable hypotheses. To test these hypotheses, we elicit stated preferences for contributions to an organization, which offsets carbon emissions and a proxy for self-sanctioning change in respondent "self-image."

North Carolina High School Dropout Rates: An Econometric Analysis *Osei-Agyeman Yeboah, Paula E. Faulkner, and Gloria Appiah-Danquah, North Carolina A&T University*

North Carolina falls in the bottom 10 states for the percentage of high school students graduating. This paper uses a county panel gravity model and pooled O.L.S. to examine the causes of higher dropout rates in the state. Dropouts are higher in counties with higher tax base and minority populations.

On the Uniqueness of Hybrids, Market Exchanges, and Vertical Integration: Evidence from Physician-Hospital Marketing Relationships *James Barnes, Matthew Fannin, Louisiana State University Agricultural*

Center; and Harvey James and Peter Klein, University of Missouri

Hospitals in the United States have contractual relationships that vary from near arm's length market arrangements to a full employment arrangement where the hospital employs the physician. We use canonical discriminant analysis to identify whether any of these arrangements can be distinctly described as hybrids.

Optimal Application of Swine Effluent Under Stochastic Weather Conditions in the Texas and Oklahoma Panhandles *Seong C. Park, Texas AgriLife Research and Extension; and Chaowana Phetcharat, Art Stoecker, and Jeffory A. Hattey, Oklahoma State University*

A target MOTAD model was used to determine optimal application strategies for swine effluent. The most efficient timing occurs at night with low wind speed and with high relative humidity. This efficient irrigation timing practice has the potential to both reduce significant nitrogen loss and increase producer income.

Optimal Switchgrass Harvest Strategies Accounting for Yield and Nitrogen Requirement Differences by Month of Harvest *Mohua Haque and Francis M. Epplin, Oklahoma State University*

Extending switchgrass harvest over many months would require a smaller investment in harvest machines, but would result in a lower average harvestable yield per acre and would require more nitrogen fertilizer, less land for storage, and more land for growing switchgrass. A model was constructed and solved to determine the optimal strategy.

A Policy Tool for Evaluating Investments in Public Boat Ramps in Florida: A Random Utility Model Approach *Michael H. Thomas, Florida A&M University; Frank Lupi, Michigan State University; and David B. Harding, Florida Fish and Wildlife Conservation Commission*

We estimated a random utility travel cost model for trailered boat trips in Lee County, Florida. In the two-level nested logit, boaters choose a combination of publicly accessible launch ramp and on-the-water destination. The resulting demand model provides managers and planners with a tool for evaluating investments in boating infrastructure.

Post-Buyout Structural Change in the Peanut and Tobacco Sectors *Erik Dohlman and Linda Foreman, United States Department of Agriculture-Economic Research Service; and Michelle Da Pra, United States Department of Agriculture-Foreign Agriculture Service*

Analysis of United States Department of Agriculture's Agricultural Resource Management Surveys on peanut and tobacco producers provides insights on, and a basis for, comparing and contrasting peanut and tobacco buyout impacts along multiple dimensions. Notable developments include a consolidation in the number and increased scale of farms, regional shifts in production regions, and increased use of contracting.

Potential for Tradable Water Allocation and Rights in Jordan *Carlos E. Carpio, Clemson University, Octavio A. Ramirez, University of Georgia; and Tullaya Boonsaeng, Clemson University*

We estimate the costs of buying water use rights from farmers located in the Mafraq-Azraq basin in Jordan. Farmers' water supply curve is estimated using data gathered from a contingent valuation survey. Estimation results indicate that a total supply of 29 million m^3 could be periodically purchased from farmers at an annual price of approximately JD 0.23/m^3 or a total cost of about JD 6.8 million per year.

Precision Agriculture Technology Adoption for Cotton Production *Kenneth W. Paxton, Ashok K. Mishra, and Sachin Chintawar, Louisiana State University Agricultural Center; James A. Larson, Roland K. Roberts, Burton C. English, and Dayton M. Lambert, University of Tennessee-Knoxville; Michele C. Marra, North Carolina State University; Sherry L. Larkin,*

University of Florida; Jeanne M. Reeves, Cotton Incorporated; and Steven W. Martin, Mississippi State University

This study investigates factors affecting the number of precision agriculture technologies adopted by cotton farmers. Attention is given to the influence of spatial yield variability on the number of precision farming technologies adopted, using count data estimation and farm-level data. Results indicate that farmers with more within-field yield variability adopted a larger number of precision agriculture technologies.

Price Determinants of Ranch Horses Sold at Auction in Texas *Kelly Lange, Jeffrey Johnson, Kris Wilson, and Wesley Johnson, Texas Tech University*

A hedonic pricing model was used to determine parameters affecting ranch horse prices at two Texas auctions. Color, sex, age-sex interaction, sale order, and consigning ranch were all found to significantly affect price. Sire analysis found that progeny performance records did not significantly affect price.

Price Transmission throughout the U.S. Food Distribution System *Hyeyoung Kim and Ronald W. Ward, University of Florida*

Vertical markets for foods are linked through pricing systems with much of the performance seen through how well price information is reflected at points of exchange. Price linkage models are estimated using recursive asymmetric methods for measuring price linkages in the U.S. food distribution system for 100 food commodities from January 1995 to June 2009.

Profitability Efficiency Analysis of Methyl Bromide Fumigants and Mulch Systems Alternatives for Pepper Production in Georgia *Myra Clarisse R. Ferrer, Esendugue Greg Fonsah, Cesar L. Escalante, and Stanley Culpepper, University of Georgia*

Examining fumigant substitutes effective to production yield, profitability, and mulching,

we used a complete factorial treatment analysis approach with seven fumigant options and four mulching alternatives. Results showed that 1,3-dichloropropene plus chloropicrin and metam sodium (TELPICVAP) and smooth low density black on black polyethylene mulch (METAL) are the most profitable fumigant and mulch option.

Profitability of Conventional versus Variable Rate Nitrogen Application in Wheat Production *Christopher N. Boyer, B. Wade Brorsen, John B. Solie, and William R. Raun, Oklahoma State University*

A variable rate nitrogen applicator based on optical reflectance measurements was developed to increase profits in wheat production by reducing the cost of production or by increasing grain yield. This paper determines if yields and profits from the variable rate treatments are significantly different from the conventional treatments.

Quantifying the Structure of Food Demand in China Using a Generalized Quadratic AIDS Specification *Vardges Hovhannisyan and Brian W. Gould, University of Wisconsin-Madison*

This study explores the food demand structure in urban China via a generalized quadratic AIDS model using full information maximum likelihood. Major focus is on the component of demand not accounted for by consumer income and demographics. Elasticity formulas are derived. Results show that the changing food structure led to an increased desire for flexibility in the Chinese diet.

Rapid Effective Trace-Back Capability Value in Reducing the Cost of a Foot and Mouth Disease Event *Amy D. Hagerman, J. Chris Looney, Bruce A. McCarl, David P. Anderson, and Michael Ward, Texas A&M University*

Integrated epinomic modeling estimates savings from traceability in the Texas High Plains, which are compared with the cost of a functional

National Animal Identification System. Time value of foot and mouth disease control benefits from rapid response capability. Benefit levels vary depending on the location of initial infection and welfare slaughter incidence.

Relationships among Prices Across Alternative Marketing Arrangements for Fed Cattle and Hogs *Yoonsuk Lee, Clement E. Ward, and B. Wade Brorsen, Oklahoma State University*

We use 7 years of weekly data from mandatory price reports to determine whether cash market prices are cointegrated with other procurement prices and then test for causality among the price series. Cash prices were cointegrated with all but one procurement price series. Cash market prices Granger cause all other procurement prices. Bidirectional causality was found in some but not all cases.

Relative Profitability of Dairy Farms in a High Feed Cost Environment *Brian K. Herbst, David P. Anderson, Joe L. Outlaw, and James W. Richardson, Texas A&M University*

Representative dairies are used to simulate the financial impacts of different dairy feeding practices and compared with those of a few years ago. Results indicate that the dairies that raise a majority of their feed saw a decrease in their cost to receipts ratio while dairies that purchase a majority of their feed saw an increase in their cost to receipt ratio.

Repeat Buying Behavior for Ornamental Plants: A Consumer Profile *Marco Palma, Alba Collart, and Charles R. Hall, Texas A&M University*

The main objective of this research was to study what stimulates repeat buying behavior for ornamental plants by segmenting consumer demographics and other important variables in the purchasing decision for ornamental plants. Behavioral and socio-demographic characteristics that influence the number of ornamental transactions were also identified.

Response of Cotton to Oil Price Shocks *Maria Mutuc, Suwen Pan, and Darren Hudson, Texas Tech University*

We show that the response of U.S. cotton prices to oil price fluctuations in the international market may differ greatly depending on whether the increase is driven by demand or supply shocks in the crude oil market. In the long run, around 3% of the variability in cotton prices can be attributed to shocks to global demand for industrial commodities.

Response to Out of Stock Produce and its Underlying Economic Considerations *Jerrod Penn, University of Florida; Aristides Matopoulos, University of Macedonia; and Lisa House, University of Florida*

This research investigates consumer response to out-of-stock product in the produce category by comparing results from a survey conducted in Greece and the United States to previous research on consumer response to out-of-stock situations for perishable and non-perishable products. We examined the underlying economic reasoning and the cultural and physical differences between the two countries.

Returns to Scale of Production Function: Pooled, Within, and between Quantile Regression Approach *Maya Reimbaeva and Saleem Shaik, North Dakota State University; and Ashok K. Mishra, Louisiana State University Agricultural Center*

Since the theory related to panel quantile regression (QR) has yet to be established, the spatial, temporal, and within QR are estimated. The spatial, temporal, and within QR are used to estimate the panel QR. The paper presents the pooled, between, and within QR returns to scale estimates of a production function.

Risk Adjusted Productivity Measures *Anna Glazyrina and Saleem Shaik, North Dakota State University*

This paper estimates risk adjusted productivity measures for U.S. agriculture sector using

graphic and directional distance functions. Specifically, risk adjusted productivity measures accounting for long-run and alternative short-run production risk is estimated using panel data. Results for panel data indicate differential effects of short- and long-run risk on productivity.

Seafood Import Demand in the Caribbean Region *Giap V. Nguyen and Curtis M. Jolly, Auburn University*

Caribbean seafood import demand is estimated using cointegration. Import demand is elastic, negatively affected by exchange rate, and positively by income and tourism. Imports cause domestic fisheries to decrease. Tariffs and subsidies reduce imports, and enhance domestic production. However, production supports are more appropriate for Caribbean small open economies.

Seasonal Price Patterns for Arkansas Soybeans *Robert Stark Jr. and Kelly J. Bryant, University of Arkansas-Monticello*

Recent years in Arkansas have seen considerable construction of on-farm storage. A study comparing cash price indices from the past 10 years with results from a 1986 Arkansas study and a recent national-level study found that Arkansas soybean prices appear to have followed a consistent and logical pattern around their national average in spite of increased variability and uncertainty.

South Korean Millers' Preferences for the Quality Characteristics of Hard White Wheat that is Used in Producing All-Purpose Flour *Jaehon Park and Shida Henneberry, Oklahoma State University*

Using the choice-based conjoint analysis and self explicated approach, we elicited South Korean millers' preferences for the quality characteristics of hard white wheat that are used in producing all-purpose flour. In specified attributes and levels, test weight, moisture, and price significantly affect South Korean millers' utility, but protein contents, ash, dockage, and falling numbers do not.

Structural Approach to Analyze the Effects of Exchange Rate on Import Demand *Youngjae Lee, P. Lynn Kennedy, and Brian M. Hilbun, Louisiana State University Agricultural Center*

The effect exchange rates have on local prices may induce a change in relative prices and import demand. This study shows that substitutability, endogeneity of foreign price, elasticity of substitution, and degree of returns to scale influence the impacts exchange rates have on relative prices and import demand.

Student Response to Transgenic Meat: An Analysis of a Fort Valley State University Survey *Mohammed Ibrahim, Alex Brewer, Filton Johnson, and Jackie Whitehead, Fort Valley State University*

The study examines the factors that influence Fort Valley State University students' willingness to purchase transgenic meat. Results show that respondents who said they read labels when shopping were more likely to purchase transgenic meat. Results also suggest that respondents who trust scientists to tell them the truth about transgenic meat were more likely to purchase transgenic meat.

Student Retention: Impacts of an Agricultural Economics First-Year Seminar Course *Dixie Watts Reaves and Mary A. Marchant, Virginia Polytechnic Institute and State University*

As universities seek to enhance student retention, a positive first-year experience is critical for student success. The objective of this research is to determine whether an agricultural economics first-year seminar course improves retention rates of its undergraduate students. Results show that retention and graduation rates improve following course implementation.

Study of Economic Impacts Derived from 2005–2009 Rural Texas Community Events and Factors that Predict Spending? *Roger*

Hanagriff, Texas A&M University; and Olga Murova and Conrad Lyford, Texas Tech University

This paper reviews the Texas Rural Economic Development program and associated economic values. Communities receiving funding collected visitor surveys to measure consumer spending. Results showed that state support represented 14% of the total event investment and created approximately $7.50 return for every $1 of state funding.

Testing the Export-Base Theory in Alabama: An Ongoing Case Study *David Brian Kimbugwe, Swagata Ban Banergee, and Buddhi Raj Gyawali, Alabama A&M University*

Bifurcation of sectoral employment into basic/non-basic components using two assignment and two location quotient procedures yields four export bases in Autauga County, Alabama. The study determines long-run/short-run applicability of export-base theory using stationarity/cointegration tests and OLS regressions and investigates possible links to bifurcation procedures.

Tractors on eBay and Farmers and Consumers Market Bulletin: An Analysis on the Determinants of Price and Price Differences *Genti Kostandini, University of Georgia; Elton Mykerezi, University of Minnesota; and Liz Holland, University of Georgia*

We investigate the determinants of price for tractor auctions on eBay and tractors listed in the Georgia's Farmers and Consumers Market Bulletin (FCMB). Seller reputation is not important while engine hours and the presence of air conditioning appear to influence price on eBay auctions. On average, prices for tractors sold on eBay are not different from those on FCMB.

Trade Factors Affecting Apple Exports from China to Thailand *Lina Cui, Auburn University*

An Error Correction Model and Cochrane-Orcutt regression are applied to examine the apple trade for 1976–2007. China apple production cost increase leads to a decrease of export quantity to Thailand. The result is consistent with the Thailand import demand function, where import quantity is negatively related to the China apple export price. The real exchange rate plays an important role.

Trade-Off between Economic Revitalization and Social Capital: Application of Structural Equation Model in Japan *Yoji Kunimitsu, National Institute for Rural Engineering, Japan*

An income inequality has expanded in Japan and policy is highly needed to revitalize rural areas. This study aims to show causative factors on regional satisfaction level by the estimation of a structural equation model with data of each town in Yamagata and Yamaguchi prefectures.

Trading Down? The Impact of Recession on Meat Consumption *J. Ross Pruitt, Louisiana State University Agricultural Center; and Kellie Curry Raper, Oklahoma State University*

Retail scanner data are used to assess the impact of recent recessions on consumer meat purchasing behavior. Results suggest there is little evidence of "trading down" within the beef category, while there is some evidence that consumers substitute pork for some cuts of beef. Results also suggest that pork chops are less of a substitute for chicken breasts in recessionary periods.

Transition to Electronic Trading of Kansas City Board of Trade Wheat Futures *Samarth Shah and B. Wade Brorsen, Oklahoma State University*

This study compares liquidity costs and other characteristics of electronic and open outcry hard red winter wheat futures contracts traded on the Kansas City Board of Trade. A new approach used to estimate liquidity costs eliminates bias resulting from splitting of orders in electronic markets.

Understanding the Connections between Consumer Motivations and Buying Behavior: The Case of the Local Food System Movement *Gretchen Nurse, Yuko Onozaka, and Dawn Thilmany McFadden, Colorado State University*

Growth in local and organic food systems may signal that values increasingly influence food market choices. This paper uses the Theory of Planned Behavior to explore how consumer perceptions about the "effectiveness" of niche food markets to address public issues affect behavioral intentions and consumer willingness to pay.

Unilateral and Exclusionary/Strategic Effects of Common Agency: Price Impacts in a Repeated Common Value English Auction *Kalyn T. Coatney, Mississippi State University; and Sherrill L. Shaffer, Dale J. Menkhaus, and Jennifer L. Scheer, University of Wyoming*

The study demonstrates that the creation of the common agent unilaterally depresses winning bids. Additionally, the common agent was not only observed to be the dominant bidder but also paid significantly lower prices than fringe competitors (price/quantity differential). The observed price/quantity differential is consistent with the almost common value English auction theory.

Use of a Producer Survey to Reconcile Differences in Experiment Station Yield Estimates *Jason Duke and Francis M. Epplin, Oklahoma State University*

Average producer practice reveals that the expected returns are greater from dual-purpose wheat grown for both forage and grain than for grain-only wheat. Variety trials report an 11 bushel per acre yield advantage and hence economic advantage for grain-only. Research was conducted to reconcile the inconsistency.

The U.S. Import of Beef: Substitute or Complement for Domestic Beef Production? *Sunil P. Dhoubhadel and Mathew C. Stockton, University of Nebraska*

This research assesses the impact of beef imports on wholesale domestic beef prices by estimating the flexibilities between domestic beef, choice and select grades, and imported beef at the wholesale level. No statistical evidence is found to support either producer or consumer view. Beef exports, however, have a statistically measurable effect on domestic beef prices, especially the select grade.

Using Land Values to Predict Future Farm Income *Cody P. Dahl, Michael A. Gunderson, and Charles B. Moss, University of Florida*

The Efficient Market Hypothesis suggests that the value of an asset should be equal to the discounted future cash flows. However, most research has used previous cash flows to explain current asset value. This paper employs a model that uses current P/E ratios to explain future cash flows.

Validation of Factors Influencing Successful Small Scale Farming in North Carolina *Anthony K. Yeboah, John Paul Owens, Jarvetta S. Bynum, and Daniel Boisson, North Carolina A&T State University*

Given the importance of small farm viability, this research project focuses on identifying ways to enhance successful small farming in North Carolina. The survey instrument was designed to solicit production and financial data, attitudes and beliefs about farming, and demographic information. Results demonstrated that successful farmers' indicators were the "love of farming" and "manageable debt".

What does the "Family Smoking Prevention and Tobacco Control Act" Mean to Tobacco Growers? *Kelly J. Tiller, Jane H. Starnes, and Shiferaw T. Feleke, University of Tennessee-Knoxville*

This paper explores the economic welfare consequences of the bill to tobacco growers. The "Family Smoking Prevention and Tobacco Control Act" was signed into law on June 22, 2009. Tobacco leaf is not subject to the regulation and its impact on growers unknown. A change in demand for cigarettes due to the United States Food and Drug Administration regulation can affect the demand for tobacco.

What Does the Introduction of Energy Crops Mean for the Crop Mix and Cellulosic Ethanol Plant Location in Louisiana? *Tyler*

Mark, Paul Darby, and Michael Salassi, Louisiana State University Agricultural Center

This paper examines the introduction of energy cane and switchgrass as available crops for production in the Louisiana Sugarcane Belt. An optimal crop mix model for net returns over variable costs is maximized. The optimal processing plant location based upon transportation of the biomass produced to one central location for processing is determined.

What is Local and for What Foods does it Matter? *Wuyang Hu, University of Kentucky; Marvin Batte, Ohio State University; Tim Woods, University of Kentucky; and Stan Ernst, Ohio State University*

This study answers two questions related to local food. Results show that consumers' accepted distance for local food to travel may be much shorter than what is generally believed. In addition, there exists a great variation in the importance rating consumers attach to "being local" for different food categories.

Will Consumers Pay a Premium for Clone-Free Labeled Meat Products? Evidence from the 2009 Sunbelt Agricultural Exposition *Ghangela Jones, Shauntez Jennings, Mohammed Ibrahim, and Jackie Whitehead, Fort Valley State University*

This paper examines consumer willingness to pay (WTP) for clone-free meat labels. Survey data were collected at the Sunbelt Agricultural Exposition in Moultrie, Georgia. Results show that the majority (59.45%) of respondents were willing to pay for clone-free labels. The bid amount, gender, and education are factors that influence WTP for clone-free labels.

Willingness-to-Pay for Red Tide Prevention, Mitigation, and Control Strategies: A Case Study of Florida Coastal Residents *Kristin M. Lucas, Sherry L. Larkin, and Charles M. Adams, University of Florida*

To evaluate alternative red tide strategies in Florida, a mail survey was sent to 14,400 households. Choice-based contingent valuation questions will be used to determine the willingness to pay for three strategies: prevention, mitigation, and control. Results can be used to help summarize public opinion and inform policy makers.