Selected Paper Abstracts

Annual Meetings

TITLE: International Agriculture and Trade (Moderator: Allen Featherstone, Kansas State University)

U.S. Cotton Subsidies: Are Brazil's Accusations True? *Kilungu Nzaku, Matt Vining, and Jack E. Houston, University of Georgia*

The U.S. cotton farm support programs, especially subsidies to cotton growers, has drawn a lot of debate and resistance from other cotton-producing countries, especially developing countries. This paper establishes that these arguments are not necessarily true using a simple linear model that determines the effect of the U.S. cotton loans on cotton exports of Mali, Brazil, and the United States.

Impacts of Exchange Rate Volatility on U.S. Cotton Exports *Siddharth Bajpai and Samarendu Mohanty, Texas Tech University*

A structural time-series approach utilizing the state space model is used to analyze the impact of exchange rate volatility on the bilateral U.S. cotton exports to major export destinations. Monthly data from 1995 to 2006 are utilized for the analysis. The results indicate a negative relationship between exchange rate volatility and U.S. cotton exports for most countries.

Impacts of Atlantic Bonito Rush and Avian Influenza on Meat Products in Turkey *Sayed Saghaian, University of Kentucky, Gokhan Ozertan, Bogazici University, and Aslihan Spaulding, Illinois State University*

The Atlantic bonito rush experienced in Turkey in the fall of 2005 coincides with the avian influenza food scare that happened at exactly the same time period in the country. In this research using time-series techniques, we investigate how the food scare and the excess fish caught jointly influence the demand for meat products in Turkey.

Nonparametric Efficiency Analysis for Coffee Farms in Puerto Rico *Alexandra Gregory and Allen M. Featherstone, Kansas State University*

Coffee production in Puerto Rico is labor intensive since harvest is done by hand for quality and topography conditions. Färe's nonparametric approach was used to estimate technical, allocative, scale, and overall efficiency measures for coffee farms in Puerto Rico during the 2000 to 2004 period. On average Puerto Rican coffee farms were 46% technically efficient, 79% scale efficient, and 74% allocatively efficient.

Production and Price Effects of New Diseases and Other Challenges Confronting the Processed Orange Industry *Thomas Spreen, Mark G. Brown, and Carlos Jauregui, University of Florida*

Sao Paulo, Brazil and Florida account for most of the orange juice supplied to the world market. Both regions are facing production challenges from diseases and other issues. In this paper, the impact of citrus greening and high sugarcane prices in Sao Paulo on orange juice production and price is projected.

TITLE: Food Consumption, Safety, and Policy (Moderator: Jonathan Shepherd, University of Kentucky)

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Consumer Response to Food Safety Events: An Interaction Between Risk Perception and Trust of Information in the Chicken and Beef Markets *Jonathan D. Shepherd and Sayed Saghaian, University of Kentucky*

Recent food safety events have captured substantial media attention, increased consumers' awareness, and further complicated marketing aspects of agricultural products today. This study uses the SPARTA model developed by Lobb, Mazzocchi, and Traill (2007) under the theory of planned behavior (Ajzen 1991) to determine what influences consumers' purchasing decisions after a food safety event.

An Analysis of Consumer Preferences for Information Sources on Food Safety by Using Fuzzy Pair-Wise Comparison *Cihat Gunden, Bulent Miran, Ozlem Karahan Uysal, and Zerrin Kenanog, Ege University, Turkey*

The main objective of this study is to measure consumer preferences for information sources on food safety along with the factors influencing the degree of consumer preferences in Turkey. The results show that the most important information sources of consumers are "doctors/experts" and "television programs." The preferences for information sources are mainly influenced by education and level of income.

Valuation of Temp-Time's Fresh-Check® Indicator on Perishable Food Products in Belgium *Corey Fortin and H.L. Goodwin, University of Arkansas*

Consumers are becoming acutely attentive to the factors that influence food safety and food wholesomeness. The Temp-Time Corporation is a leading international manufacturer in time–temperature-sensitive indicators for fresh food products. This paper focuses on consumer perceptions of the Fresh-Check® indicator in Belgium. We used the contingent valuation survey method to capture Belgian consumer's overall perception, willingness to pay, preference, and acceptance for Temp-Time's Fresh-Check indicator on fresh food products.

TITLE: Rural and Community Development (Moderator: Valentina Hatarska, Auburn University)

Efficiency in Community Development Loan Funds *Cephas Naanwaab and Valentina Hartarska, Auburn University*

We study the efficiency of community development loan funds (CDLFs) in the United States between 2002 and 2005. We find that the largest CDLFs tend to be most efficient and that efficiency decreases with age and the proportion of minority representation on the board, whereas board size does not affect efficiency.

Return on Investments for Community Infrastructure Projects? A Foundation for Rural Development Strategy *Vincent Amanor-Boadu and Michael Burns, Kansas State University*

With decreasing populations and declining resources, rural governments are finding it challenging to determine how to make investments in their infrastructure. This paper defines the problem confronting rural governments and develops a process for making infrastructure decisions to maximize community welfare.

Entrepreneurial Communities in Rural Oklahoma *Lara Brooks, Brian Whitacre, Glenn Muske, and Mike Woods, Oklahoma State University*

This paper studies "entrepreneurial communities" using both quantitative and qualitative data from the state of Oklahoma. Household-level survey data and community-specific characteristics are used to determine what factors affect whether a rural community operates in an entrepreneurial manner. Case studies from successful rural communities provide a more qualitative viewpoint of the factors that lead to entrepreneurial activity.

TITLE: Resource and Environmental Economics (Moderator: Denis Nadolnyak, Auburn University)

Determinants of Agricultural Disaster Payments in the Southeastern United States: County Level Analysis *Denis Nadolnyak, Auburn University*

This paper evaluates the relevance of weather and climate data in explaining county-level crop disaster payments in Georgia. Following previous research, regional socioeconomic and community data are also used to control for factors other than weather. Although weather and El Niño Southern Oscillation (ENSO) data explain the payments well, available economic variables do not.

Valuing the Changes in Herbicide Risks Resulting from Adoption of Roundup-Ready Soybeans by U.S. Farmers: An Empirical Analysis of Revealed Value Estimates *Olha Sydorovych and Michelle Marra, North Carolina State University*

A revealed-preference approach is proposed for the evaluation of the impact of changed patterns of herbicide use on Roundup-Ready soybeans. The results indicate that farmers consider herbicide safety in their herbicide choices and associate positive values with safety improvements. The aggregate welfare impact of reduced risk for U.S. soybean farmers was estimated to be $90.3 million in 2001.

An Accounting Trade-Off Between WRP and Government Payments *Gregory Ibendahl, Mississippi State University*

This paper examines two issues: first, do farmers benefit from Wetland Reserve Program (WRP) enrollment, and second, does the government save money with WRP enrollment? With WRP the government no longer has to pay yearly direct, countercyclical loan deficiency payments (LDP), or crop insurance payments. Results from three Mississippi counties show that for certain crops that have been historically paid a lot in government payments, WRP can be cheaper for the government. For farmers, the decision likely depends upon other revenue sources that can take the place of lost crop production.

Contribution of Nonmarket Valuation to Policy: The Case of Nonfederal Hydropower Relicensing *Kurt Stephenson and Leonard Shabman, Virginia Tech University*

The contribution of nonmarket valuation studies to decisions about the operation of nonfederal hydroelectric facilities is examined. Hydropower licensing reforms by the Federal Energy Regulatory Commission to better weigh market and nonmarket trade-offs did not require or use nonmarket valuation. License negotiation processes are interpreted as a substitute for valuation.

TITLE: International Agriculture and Trade (Moderator: P. Lynn Kennedy, Louisiana State University)

Demand System Analysis of the South Korean Beef Market with the Free Trade Demand Model *Youngjae Lee and P. Lynn Kennedy, Louisiana State University*

In this study a demand system analysis for beef in South Korea is constructed. A free trade demand system was used in which the economic welfare of market participants is maximized. Recognizing implicit discrimination about nonlocally sourced beef products, this study deduces market demand equations with respect to consumer preference to identify the marginal effect of change consumer preference has on market demand.

Effect of the U.S. Foreign Market Development Program on Import Demand for Shelled Peanuts in the European Union *Tullaya Boonsaeng and Stanley M. Fletcher, University of Georgia*

The main objective of this research is to evaluate the effectiveness of the U.S. Foreign

Market Development (FMD) program on the European Union (EU) imported demand for shelled peanuts. We find that the FMD program had a positive effect on the EU demand for U.S. shelled peanuts. This result suggests that the information provided to manufacturers through the FMD has helped to maintain U.S. peanuts in the EU markets.

Role of Imports for Re-Exports Program in Determining Canadian Demand for Imported Cheese: Implications for U.S. Exports *Andrew Muhammad, Mississippi State University*

Given the importance of the Imports for Re-Exports Program in (IREP) in Canada, this study assessed the impact of per unit export returns on Canadian demand for imported cheese. If Canadian importers increase utilization of IREP, U.S. exports to Canada will remain unchanged, whereas imports from the Economic Union will increase.

Analysis of U.S. and European Union Import Demand for Shrimp *Pawan Poudel and Walter Keithly, Jr., Louisiana State University*

On the basis of 1990–2004 quarterly data, U.S. and European Union (EU) demand for imported shrimp by alternative supply sources was examined within an almost ideal demand system framework. All own-price elasticities for the U.S. system were found to be elastic, whereas all own-price elasticities associated with the EU system were found to be inelastic. With few notable exceptions, estimated cross-price elasticities suggest substitution among import sources.

TITLE: Quantitative Methods (Moderator: Ashok Mishra, Louisiana State University)

Mixed Unit Roots and Deterministic Trends in Noncausality Tests *Tao Ran and Hector Zapata, Louisiana State University*

Using Japanese economic data and a Monte Carlo simulation, this study analyzes the consequences of ignoring deterministic trends in mixed unit–root data for Granger noncausality tests. Results from an augmented vector autoregression (VAR) suggest over-rejection in certain empirically relevant cases at various sample sizes.

A Sequential Rationality and Efficiency Test of U.S. Department of Agriculture Program Crop Price Estimates: Rice, Wheat, and Soybeans *Sung Chul No, Southern University, and Michael E. Salassi, Louisiana State University.*

This paper examines the U.S. Department of Agriculture (USDA) price estimates of rice, wheat, and soybeans and whether spot commodity prices reflect price information embodied in USDA estimates. Results indicate that the monthly USDA estimates failed to meet a rationality condition. Rice and wheat actual prices marginally incorporate the information embodied in USDA past price estimates.

TITLE: Marketing and Industrial Organization (Moderator: Sanjoy Bhattacharjee, Mississippi State University)

Estimating Willingness to Pay for E10 fuel: A Contingent Valuation Study *Sanjoy Bhattacharjee, Daniel Petrolia, and Cary W. "Bill" Herndon, Jr., Mississippi State University*

In this study, we measure willingness to pay for E10 fuel by U.S. consumers using a contingent valuation technique in a simultaneous latent variable equation framework. The simultaneous equation framework helps us to understand the way consumers' perceptions about ethanol are developed and influence their respective buying behavior.

Impact of Corn-Based Ethanol Production on the U.S. High-Fructose Corn Syrup (HFCS) and Sugar Markets *Hassan Marzoughi, P. Lynn Kennedy, and Brian Hilburn, Louisiana State University*

The objective of this paper is to determine the impact of ethanol production on the

sweetener market in the United States. It was found that ethanol production has increased corn demand and prices, and therefore may have a negative impact on HFCS production and increase the demand for sugar.

TITLE: Production Economics and Farm Management (Moderator: Brian Briggeman, Oklahoma State University)

Construction Cost Sensitivity of a Lignocellulosic Ethanol Biorefinery *David P. Busby, Andrew L. Phillips, and Cary W. Herndon, Jr., Mississippi State University*

The technology has been developed to convert feedstock with cellulose content into ethanol. However, ethanol produced from cellulosic feedstock is the same as ethanol distilled from grain. The objective of this research is to determine the price per gallon of ethanol needed so that producing lignocellulosic-based ethanol becomes economically feasible.

Assessing Economic and Environmental Impacts of Ethanol Production on Fertilizer Use in Corn Production *Richard Nehring, Alexandre Vialou, Kenneth Erickson, and Carmen Sandretto, Economic Research Service, USDA*

The share of corn used in ethanol production has been growing rapidly. Expanded corn acreage contributes to the application of more fertilizer and is likely to introduce a larger volume of nutrients into the environment. This study found that an increase in ethanol production is consistent with a significant increase in quality-adjusted fertilizer use in selected corn states.

Risk and Return for Bioenergy Crops under Alternative Contracting Arrangements *James A. Larson, Burton C. English, and Lixia He, University of Tennessee, Knoxville*

This study evaluated the potential to supply biomass feedstocks under alternative contract arrangements for a northwest Tennessee 2,400-acre grain farm. The four potential types of contracts analyzed in this study offer different levels of biomass price, yield, and production cost risk sharing between the representative farm and the processor.

Farming and the Internet: Factors Affecting Input Purchases On-Line and Reasons for Nonadoption *Brian C. Briggeman and Brian E. Whitacre, Oklahoma State University*

Using the 2005 Agricultural Resource Management Survey (ARMS) data, significant factors are identified that influence the decision to purchase farm inputs over the Internet and reasons for not adopting the Internet. Internet input-purchasing farmers tend to be younger and more educated. Nonadopters that are more educated most likely cite Internet security concerns as their primary reason for not adopting.

TITLE: Agribusiness and Consumption (Moderator: Jennifer Dennis, Purdue University)

An Evaluation of Market Characteristics of Indiana Farmers' Markets *Christa Hofmann, University of Kentucky, and Jennifer H. Dennis and Maria Marshall, Purdue University*

Nationally, the number of operating farmers' markets has increased 111% in the past 10 years from 1,755 markets to 3,706 from 1994 to 2004 (AMS, 2006). A two-stage least-squares model was estimated for the vendor and customer model. The presence of women infant and children (WIC), number of products available, live music, and cooking demonstrations were significant for the customer model at the 0.01 level.

Economic Impact of Repealing Mississippi's Grocery Tax *Albert E. Myles, Albert J. Allen, Mississippi State University, and Saleem Shaik, North Dakota State University*

Results from the analyses indicate that repealing the 7% grocery tax would produce

modest gains in grocery sales but major increases in the purchases of other goods and services. Revenues from the sale of additional groceries would be exempt from taxes, thus producing only employment and labor income. With the state losing almost $202 million in tax revenues, it is not clear if the gains in employment would be enough to offset the revenue losses.

U.S. Consumers' Willingness to Pay for Wool Product Attributes *Hikaru Hanawa Peterson, Gwendolyn Hustvedt, and Yun-Ju Chen, Kansas State University*

Choice experiments were conducted to assess U.S. consumer demand for wool product attributes. The average consumer's willingness to pay (WTP) was higher for U.S. wool gloves compared with acrylic gloves. For Australian wool gloves, WTP was lower if consumers read information on husbandry practices. Demand for attributes varied across socioeconomic and psychographic characteristics.

TITLE: Resource and Environmental Economics (Moderator: Krishna P. Paudel, Louisiana State University)

Economic Analysis of Management Practices to Reduce Phosphorus Load to Lake Eucha and Spavinaw Sierra Howry *Arthur Stoecker, Daniel Storm, and Michael White, Oklahoma State University*

Changes in management practices are often proposed to reduce phosphorus loading from a watershed because of overapplication of poultry litter. This study determines the choice, location, and level of each best management practice in the watershed to meet a total maximum daily load and margins of safety at least cost.

Cost Effectiveness of On-Farm Conservation Practices to Protect Playa Lake Hydroperiod in the Texas High Plains *David Willis, Clemson University*

This study estimates the agricultural cost of using buffer strips or furrow dikes (or both) as on-farm control measures to reduce sedimentation runoff from agricultural cropland into the playa wetlands of the Texas High Plains (THP) for the purpose of increasing/preserving playa hydroperiod and protecting the unique playa lake wetland systems in the THP.

Point/Nonpoint Source Pollution Trading in the Dairy Production Region of Louisiana *Larry M. Hall, Krishna P. Paudel, and Wayne M. Gauthier, Louisiana State University*

A study is conducted to understand the cost efficiency of point/nonpoint sources trading when there is an uncertainty about weather conditions, when there exists a small number of point sources in a given trading area. Point/nonpoint source trading ratios are calculated under alternative trading ratios and with the involvement of third party in a trading mechanism.

Valuing Recreational Benefits of a National Park in Andean Colombia *Sergio Avarez and Sherry L. Larkin, University of Florida*

Protected undeveloped areas are an important tool for land conservation in developing nations. Efficient land allocation decisions and resource management requires knowledge of nonmarket benefits. Using travel cost and contingent valuation data from on-site interviews and secondary data on visitation, this study will value a national park in Columbia.

TITLE: Teaching Issues (Moderator: Robert Nelson, Auburn University)

Evaluating Teaching Methods: Is It Worth Doing Right? *Robert G. Nelson and Norbert L. Wilson, Auburn University*

Reviewers of manuscripts on classroom experiments often ask the authors to provide evidence of the effectiveness of the method,

presumably to justify substituting experiments for lectures. After reviewing the current state of evaluation methodology, we argue that such evidence may be neither sufficient nor even necessary for the purpose.

Determinants of Students' First Impressions of Instructors and Courses *Michael R. Dicks, J. Ross Pruitt, and Daniel S. Tilley, Oklahoma State University*

Students evaluated instructors and courses in the first 2 weeks of the fall semester to determine the factors that form impressions in the early stages of the semester. Results indicate that differences exist between upper- and lower-division courses with presentation of material and perceived workload as key factors that students use to form first impressions.

Attitudes of College Students toward Agriculture, Food, and the Role of Government *R.I. Carreira, R. Mane, D.M. Danforth, and E.J. Wailes, University of Arkansas*

In 2002 and 2007 we surveyed Agribusiness students' attitudes about agriculture, farming, food, and agricultural policies. Responses were analyzed by year and student characteristics including farm background, citizenship, and gender. Citizenship was a significant variable explaining differences in agreement with statements. Year and interactions with year were not significant.

TITLE: Production Economics (Moderator: Loren Tauer, Cornell University)

Empirical Analysis of Stanchion and Parlor Milking Cost on New York Dairy Farms *Kentaro Katsumata, Policy Research Institute of the Ministry of Agriculture, Forestry, and Fisheries of Japan, and Loren Tauer, Cornell University*

Cost functions were estimated for stanchion and parlor dairy farms. Economies of scale were found to exist over the entire range of sample output. Stanchion technology cost was lower than that of parlor over the sample range of output levels of stanchion technology, but parlor farms eventually experienced lower costs.

What a Difference a Year Makes in the Dairy Industry *Brian K. Herbst, James W. Richardson, Joe L. Outlaw, and David P. Anderson, Texas A&M University*

The projections for feed and milk prices have changed over the last year. This study looks at how the changes affect the dairy industry. The high feed prices have been trumped by higher milk prices and the economic viability of the dairy industry has improved across the board.

An Economic Analysis of Replacing Existing Bermudagrass Stands with Tifton 85 Bermudagrass for Beef Cow–Calf, Stocker, and Hay Production *R. Curt Lacy and Gary M. Hill, University of Georgia*

Using experimental data, current input prices and historical hay and feeder cattle prices indicate that many producers would benefit by adopting this new cultivar. Cow–calf producers would benefit the most, followed by stocker/replacement heifer producers, and, finally, hay producers. When risk aversion is introduced into the model, all cow–calf and stocker producers regardless of the level of risk aversion should consider adopting T85.

Does the MILC Program Affect Milk Supply Response in Individual States of the United States? *Cary W. "Bill" Herndon, Jr. and John Mark Looney, Jr., Mississippi State University*

The 2002 Farm Bill instituted a first-ever countercyclical milk price support program known as Milk Income Loss Contract (MILC) program. Analyzing variables (cattle numbers, milk price, etc.) using regression analysis, this study found that MILC was statistically

significant, but often had negative impacts, on milk supply response in individual states.

TITLE: Extension (Moderator: Dean McCorkle, Texas Cooperative Extension)

PDA and Handheld GPS Adoption in Precision Cotton Production *Jonathan C. Walton, James A. Larson, Roland K. Roberts, Dayton M. Lambert, Burton C. English, University of Tennessee, Sherry L. Larkin, University of Florida, Knoxville, and Michele C. Marra, North Carolina State University*

This research analyzed the adoption of personal digital assistants and handheld global positioning system devices in cotton production. Analysis using a logit model found that younger farmers who used a crop consultant, remote sensing, variable-rate fertilizer, and reported greater yield variability had a higher probability of adopting.

Economic Impact of Boll Weevil Eradication in Texas *Dean McCorkle, John R.C. Robinson, Thomas W. Fuchs, Dan Hanselka, and Michelle Niemeyer, Texas A&M University*

Substantial progress has been made in eradicating the boll weevil from the majority of the cotton-producing regions in Texas. Although the full economic benefits will not be realized until eradication is achieved statewide, economic benefits approaching $1 billion have already been realized.

Spatial Shift–Share Analysis of the Leisure and Hospitality Sector on the Gulf Coast after Hurricane Katrina *Garen Evans, Mississippi State University*

Using a spatial weights matrix that incorporated relative employment and distance measures relative to the track of the storm, we calculated classical and spatial shift–share components. These results suggest that spatial interaction between employment centers as well as with the storm track was a relevant aspect of the employment shifts that occurred after Hurricane Katrina.

Research Faculty, Entrepreneurship, and Commercialization: The Case of Kansas State University *Vincent Amanor-Boadu, Chandra Mohan, and Reddy Metla, Kansas State University*

In this study, we assess the relationships between the demographic characteristics of researchers and their perspectives on entrepreneurship and the commercialization of their inventions, and analyze the relationship between faculty perceptions of university commercialization policies and their entrepreneurial orientation. We conclude that there is a need for effective educational programs to address each of the issues and increase awareness among faculty and researchers.

Spatial Analysis of Precision Agriculture Data: Role for Extension *Terry W. Griffin, University of Arkansas, and Jess Lowenberg-DeBoer, Purdue University*

The role of Extension in assisting farmers conducting on-farm trials with yield monitors was assessed by direct casual observation and a formal interview during a 3-year case study. Results indicate that Extension has a role in assisting farmers when selecting treatments to test, designing experiments, and interpreting statistical results.

TITLE: International Agriculture and Trade (Moderator: Carlos Caprio, Clemson University)

Biodiesel Mandate Laws in Argentina and Brazil: An Estimation of Soybean Oil Foregone Export Revenues *Matias G. Nardi, Carlos E. Carpio, Todd D. Davis, and William A. Ward, Clemson University*

Soybean oil foregone export revenues from the adoption of biodiesel incentive policies in Argentina and Brazil are estimated using a partial equilibrium displacement model. Two scenarios are modeled for each country, one

based on the mandate laws and one based on phased biodiesel capacities according to planned investments.

Examining the Impact of World Crude Oil Price on China's Agricultural Commodity Prices: The Case of Corn, Soybean, and Pork *Qiang Zhang and Michael Reed, University of Kentucky*

This study investigates effects of the world crude oil price on feed grain prices and pork prices in China. The results from time-series techniques show that the influences of crude oil price are not significant over the study period. The pork demand and supply result in the skyrocketing pork price.

Increased Cocoa Bean Exports under Trade Liberalization: A Gravity Model Approach *Osei-Agyeman Yeboah, North Carolina A&T University, Saleem Shaik, North Dakota Sate University, and Shawn Wozniak and Albert J. Allen, North Carolina A&T University*

Gravity models were developed to estimate the potential bilateral exports of cocoa under trade liberalization by the 16 major cocoa-producing countries to the United States using panel data from 1989 to 2003. The results indicate that differences between resource endowment, relative size of economies, and the sum of bilateral gross domestic product of the United States and exporting countries are the major determinants.

Assessing the Impact of the Bean/Cowpea Collaborative Research Support Program (B/C CRSP) Graduate Degree Training *Nelissa Jamora, Richard Bernsten, and Mywish Maredia, Michigan State University*

The study evaluated the impacts of the graduate degree training (GDT) component of the B/C CRSP. In their enhanced capacity, trainees have been playing important roles in strengthening teaching and research capacity in bean and cowpea sectors, both in the United States and in host countries. The study recommends the continued commitment and increased financial support to GDT.

TITLE: Food Consumption, Safety, and Policy (Moderator: James Bukenya, Alabama A&M University)

Consumers and the Evolution of New Markets: The Case of the Ethical Foods *Vincent Amanor-Boadu and Casey Schnitz, Kansas State University*

Changes in consumer preferences have frequently created new markets for new products. This paper explores the antecedents of the changes in consumer preferences and the factors influencing the evolution of niche markets into commodity markets and its speed. The results show that the more embedded characteristics products have and more consumption is driven by attitude, the longer products are able to maintain their uniqueness and the slower their evolution to commodities.

Structure of U.S. Red Meat and Livestock Imports *Dwi Susanto, C. Parr Rosson, Texas A&M University, and Shida Henneberry, Oklahoma State University*

The flexible nonlinear almost ideal demand systems are estimated for U.S. import demand for red meat and livestock (live cattle and hogs). In estimating the model, expenditure endogeneity is imposed. The study also finds that frozen beef and sheep meat, both mainly supplied by Australia and New Zealand, are expenditure elastic.

Consumers' Perceptions about Genetically Modified Foods and Their Stated Willingness to Pay for Genetically Modified Food Labeling: Evidences from Turkey *Bahri Karli, Abdulbaki Bilgic, and Bulent Miran, Harran University*

We applied a multinomial logit model to determine consumer characteristics affecting three possible policy regulations that could be

implemented for genetically modified foods in Turkey. The study reveals that many household characteristics, including food spending amount, education, gender, marital status, knowledge about food-related policies, and regional variables, are key policy factors in choosing regulation programs for genetically modified foods.

Consumer Purchasing Behavior in Response to Media Coverage of Avian Influenza *Robert Beach and Chen Zhen, Food and Agricultural Policy Research Program, RTI International*

Understanding consumer response to food safety information is important for quantifying consumer response to food safety events, predicting market impacts, and developing appropriate risk communication strategies. In this study, we present a methodology for analysis of consumer response to media coverage of avian influenza and an application using Italian data.

Changes in Soy-Based Food Consumption, 2001 and 2007 *Arbindra Rimal, Missouri State University, and Wanki Moon and Siva K. Balasubramanian, Southern Illinois University*

Two-stage regression models were used to estimate the effects of the perceived attributes of soy food and socioeconomic variables on participation decision and consumption frequency decision for soy products. Although households consuming soy products increased from 2001 to 2007 by nearly two percentage points, the frequency of consumption declined considerably.

Market Segmentation Analysis of Grocery Shoppers in Alabama *Michael Mukiibi and James O. Bukenya, Alabama A&M University*

Using survey responses from over 500 responses, this paper conducts a market segmentation of grocery shoppers in Alabama. By using cluster analysis technique, Alabama grocery shoppers are segmented into three different groups on the basis of the relative importance of factors that describe their shopping experiences.

TITLE: Rural and Community Development (Moderator: Brian Whitacre, Oklahoma State University)

Factors Influencing the Temporal Diffusion of Broadband Adoption: Evidence from Oklahoma *Brian Whitacre, Oklahoma State University*

This paper examines the shifting influence of household characteristics and telecommunications infrastructure on the residential broadband adoption decision for Oklahoma residents between 2003 and 2006. The data indicate that the gap in broadband access rates between rural and urban areas has remained relatively constant over this period despite increased levels of cable and Digital Subscribers line (DSL) throughout the state.

Assessment of Homeownership and Asset Poverty in the Alabama Black Belt and Non-Black Belt Counties *Peter M. Kanyi, Ntam Baharanyi, Mudiayi Ngandu, and Robert Zabawa, Tuskegee University*

This study assessed homeownership and how it is affected by race, residency in or out of Alabama Black Belt, family status, poverty, and other variables. All variables showed significant relationship to Alabama homeownership, with single parenthood showing a negative impact on white homeownership but insignificant to black homeownership in the region.

Spatial Variability of Tourism Demand and Differences in Economic Impact in a Rural Economic Development Context *Biswa R. Das and Daniel V. Rainey, University of Arkansas*

Statistically predicted future tourism demand is used to conduct an economic impact analysis in 12 tourism zones in the state of Arkansas. The analysis reveals spatial variability in employment, and output growth that

will continue into the future. Tourism has the potential as an economic growth engine for the state, especially in economically disadvantaged regions with long-term benefits.

Economic Impacts of Direct Produce Marketing: A Case Study of Oklahoma's Famers' Markets *Shida Rastegari Henneberry, Merritt Taylor, Brian Whitacre, Haerani N. Agustini, Joao E. Mutondo, and Warren Roberts, Oklahoma State University*

The IMPLAN model is used to estimate total (direct and secondary) economic impacts of farmers' markets in Oklahoma's economy. The results show that Oklahoma farmers' markets generate a total gross sale of $3.3 million, with a total economic impact of $7.8 million.

TITLE: Agribusiness and Finance III (Moderator: Larry Falconer, Texas Cooperative Service)

Analysis of Irrigated Corn Production Adoption Decisions in Alabama *James L. Novak, Denis Nadolnyak, and Richard McNider, Auburn University*

Expanding ethanol markets, abundance of water resources, and predominance of rainfed corn production in Alabama suggest the possibility of irrigating cornfields. Numerical analysis shows that irrigated production becomes more preferable with higher corn prices and risk aversion. Adoption threshold is estimated at the price below its current level.

Impact of Drought on Grain-Handling Firms *Taeyoon Kim and Phil Kenkel, Oklahoma State University*

Drought affects both producers and agribusinesses. This study investigates the impacts of the 2004–2007 droughts on Oklahoma grain-handling and fertilizer-supply firms. The results indicated an average decline in firm revenues of 30%. Individual firms had single-year revenue declines of 85% and drought period declines of 75%.

Economic Value of Groundwater Resources and Irrigated Agriculture in the Oklahoma Panhandle *Lal K. Almas, W. Arden Colette, and Naveen C. Adusumilli, West Texas A&M University*

An economic optimization model was developed using available groundwater resources in the Oklahoma Panhandle to estimate value of water for irrigated agriculture in the area. The model will serve as a policy tool to analyze alternative water management strategies and conservation programs to assess the economic impact of depleting Ogallala Aquifer.

Use of Weather Data and Evapotranspiration Requirements to Estimate the Marginal Value Product of Irrigation and the Profit-Maximizing Irrigation Level for Corn in the Texas Panhandle *W. Arden Colette, Lal K. Almas, and Clay Robinson, West Texas A&M University*

The declining availability of irrigation water from the Ogallala Aquifer combined with increasing energy costs make irrigation strategies much more critical. Maximizing yield reduces profit by between $22 and $158 per acre depending on the combination of corn and natural gas prices.

TITLE: Food Consumption, Safety, and Policy (Moderator: Ashok K. Mishra, Louisiana State University)

Consumers and the Evolution of New Markets: The Case of the Ethical Foods *Vincent Amanor-Boadu and Casey Schnitz, Kansas State University*

Changes in consumer preferences have frequently created new markets for new products. This paper explores the antecedents of the changes in consumer preferences and the factors influencing the evolution of niche markets into commodity markets and its speed. The results show that the more

embedded characteristics products have and more consumption is driven by attitude, the longer products are able to maintain their uniqueness, and the slower their evolution to commodities.

TITLE: Marketing and Industrial Organization (Moderator: Benaissa Chidmi, Texas Tech University)

Efficacy of the Grid Marketing Channel for Fed Cattle *Scott W. Fausti, Bashir A. Qasmi, and Matthew A. Diersen, South Dakota State University*

Beef industry data suggest that carcass yield and quality grades have shown little improvement over the last 6 years. Trend analysis of grid market share and carcass quality suggest that grid pricing has not made sufficient progress in achieving the goals envisioned for it as a value-based marketing system.

Price Competition with Particle Swarm Optimization: An Agent-Based Artificial Model *Tong Zhang and B. Wade Brorsen, Oklahoma State University*

This study instructs an artificial price competition market to examine the impact of capacity constraints on the behavior of packers. Results show that when there are cattle left for the lowest bidder after all other packers finish their procurement, the capacity constraints make the price lower than the perfect competition level.

Conjoint Analysis of Breaded Catfish Nuggets: Consumer Preferences for Price, Product Color, Cooking Method, and Country of Origin *Jessica I. Hill, Robert G. Nelson, Kristin L. Woods-Williams, Sondra J. Weese, and Gregory N. Whitis, Auburn University*

A new product, marinated, breaded catfish nuggets, was developed. This conjoint study was designed to evaluate consumers' preferences for certain attributes of the nuggets. An in-store survey was conducted to collect data. The data collected will be used to determine the market potential for the catfish nuggets.

Duopoly Competition in Supermarket Industry: The Case of Seattle–Tacoma Milk Market *Benaissa Chidmi and Olga Murova, Texas Tech University*

The present study attempts to analyze the pricing conduct of supermarket chains in a duopoly setting using a structural model of consumers' and firms' behavior. In this paper, we examine the pricing conduct of two supermarket chains using retail supermarket-level data on sales and prices from the Seattle–Tacoma market area.

An Assessment of the India Soy Protein Market *Adam Brinker, Joe Parcell, and Chris Boessen, Pioneer Hi-Bred International, Inc.*

The objective of this study is to determine India's protein demand over the next 10 years. Then, using the per capita protein demand derived from this study, along with income, population, and dietary information, per capita soy protein consumption was estimated for the same time period. It was found that income growth has a large positive effect on protein consumption.

TITLE: Resource and Environmental Economics II (Moderator: Ronald Lacewell, Texas A&M University)

Economic Implications of Conventional Water Treatment vs. Desalination: A Dual Case Study *Callie Rogers, Allen Sturdivant, M. Edward Rister, Ronald Lacewell, and Bill Harris, Texas A&M University*

Most municipalities use conventional treatment to produce potable water. Historically, desalination has not been economically feasible, but technological advancements warrant a new analysis. This study analyzes the costs of two Texas municipal facilities producing water using the above technologies on the basis of

capital budgeting–NPV (net present value) analysis combined with annuity equivalents.

Factors Influencing Artisanal Fisherfolks' Level of Support for Fishery Regulations: An Approach Using Alternative Ordered Logit Models *Alexis Arthur B. Garcia, Roderick M. Rejesus, and Emmanuel L. Genio, Jr., Texas Tech University*

This article examines factors influencing fishers' decision to support fishery regulations in coastal communities in the Philippines. Using the partial proportional odds variant of the ordered logit model, we show that higher education levels, implementation of regulatory ordinances, and the effectiveness of law enforcement significantly affect the likelihood of supporting fishery regulations in coastal communities.

Identifying Economies of Size in Conventional Surface Water Treatment and Brackish Groundwater Desalination: Case Study in the Rio Grande Valley of Texas *Chris Boyer, M. Edward Rister, Allen W. Sturdivant, Ronald D. Lacewell, and Bill Harris, Texas A&M University*

Two primary potable water-treatment technologies used in South Texas include conventional surface-water and reverse-osmosis desalination of brackish groundwater. As the region's population continues to grow, municipalities are searching for economical means to expand their water supplies. Economies of size for both technologies are an important consideration for future expansion decisions.

Economic Analysis of a Water Truck for Feedyard Dust Suppression *Steve Amosson, Fran Bretz, Patrick Warminski, and Thomas Marek, Texas A&M University*

Dust created in feedyards can adversely affect cattle performance. Dust suppression can be accomplished by moistening pen surfaces with traveling gun(s) sprinklers, solid-set sprinklers, and water trucks. This study specifically addresses the fixed and operational costs associated with a water truck for various-sized feedyards.

TITLE: Production Economics and Farm Management (Moderator: Francis Epplin, Oklahoma State University)

Nitrogen Fertilizer Value of Baled Broiler Litter for Cotton Production in the Arkansas Delta *Nathan Kemper, H.L. Goodwin, Jr., and Morteza Mozaffari, University of Arkansas*

The export of poultry litter by baling efficiently packages litter for long-term storage and transportation. Use of baled poultry litter to supply the recommended rates of P and K and a portion of the N rate appears to be a feasible nutrient management strategy for cotton.

Alternative Cropping Systems for Traditional Monoculture Wheat Acres in the Southern Plains for Two Farm Sizes *JonAnn E. Decker, Francis M. Epplin, Deena L. Morley, and Thomas F. Peeper, Oklahoma State University*

The economics of five alternative crop production systems for the Southern Plains winter wheat production region for both conventional tillage and no-till for two farm sizes was determined. Yield data were obtained from a 3-year experiment conducted on three farm fields in the region. Tillage costs differ across farm size.

Cost to Produce Cellulosic Biomass Feedstock: Four Perennial Grass Species Compared *Mohua Haque, Francis M. Epplin, Sijesh Aravindhakshan, and Charles Taliaferro, Oklahoma State University*

Switchgrass has been proposed as a dedicated energy crop to fulfill long-term policy goals. Production costs were determined for switchgrass and three alternative perennial grass species for four levels of nitrogen fertilizer and two harvest systems. For the alternatives evaluated, biomass production cost per ton was lowest for switchgrass.

Economic Potential of Conservation Farming Annual Winter Forages for the Stocker Cattle Grazing Enterprise *Jon T. Biermacher, Chuck Coffey, Billy Cook, and Devlon Ford, Agricultural Division, Samuel Roberts Noble Foundation, Inc., Ardmore, Oklahoma*

The objective was to determine the expected net value of a no-till forage production and grazing system. Reduction in fuel and machinery costs offset the costs of herbicide application. The net value of the no-till system is $31 per acre, and is quite sensitive to relative differences in cattle performance.

TITLE: Agribusiness and Finance V (Moderator: Ashok K. Mishra, Louisiana State University)

Financing Constraints and the Family Farm: How Do Families React? *Valentina Hartarska and Mai Le Phuong Chi, Auburn University*

This paper explores the idea that off-farm income is used for investment in farm assets. Using Alabama farm data for the 1997–2004 period, we find that farm investment is more sensitive to off-farm than to on-farm income, and that this sensitivity is stronger for farms with sales less than $250,000.

Policy Reform and Off-Farm Labor Supply by Operators in the Delta Region: A Semiparametric Approach *Ashok K. Mishra and Krishna P. Paudel, Louisiana State University*

The objective of this investigation was to evaluate the determinants of off-farm labor supply for farm operators in the Delta states. Results show that various factors affect off-farm work and decoupled and coupled farm program payments have a negative and significant impact on off-farm labor supply by farm operators. The semiparametreic functional formulation of the farm size and household wealth variables were found to perform better than the linear functional form.

Effect of Land Tenancy on Total Factor Productivity and Total Resource Productivity: A Semiparametric Approach *Krishna P. Paudel and Ashok K. Mishra, Louisiana State University*

The repercussion of lower input application by tenant farmers compared with full-time/part-time or cash renter operators could be higher total resource productivity (lower total factor productivity) in the regions where tenant farmers dominate the land proprietorships. Semiparametric models are developed to address functional form specification issues using parish/watershed level data from Louisiana.

Labor Cost and Technology Adoption: Real Options Approach for the Case of Sugarcane Mechanization in Florida *Nobuyuki Iwai, Robert D. Emerson, and Lurleen M. Walters, University of Florida*

Specialty crop farmers have expressed concern about labor shortages and cost increases that may arise with immigration reform. The large-scale mechanization of the Florida sugarcane harvest during the 1970s/1980s serves as an historical example of how technologies evolved because of changes in local labor market conditions.

TITLE: Agricultural Policy (Moderator: David Anderson, Texas A&M University)

Impact of Land Fragmentation on Beef Cattle Inventory *Philip Mervish, David Anderson, James W. Richardson, and Joe L. Outlaw, Texas A&M University*

Many groups have discussed with alarm the impact of agricultural land conversion to nonagricultural uses. This research indicates little evidence that beef cow inventory has been negatively affected by land fragmentation. Average acres per transaction, total transactions, or a fragmentation index did not have an important effect on cattle inventory.

Discerning Differences between Producer Groups and Organic Adoption Barriers in Texas *Michael Lau, Roger Hanagriff, Douglass Constance, and Mary York, Sam Houston State University*

The number of certified organic operations in Texas has remained relatively stagnant, whereas nationally the organic food sector has experienced double-digit growth. To understand why this is occurring, a survey was distributed to a random sample of 4,006 Texas producers. The results will assist in developing strategies to promote the growth of organic production in Texas.

Effect of Publicly Released Quality Information for U.S. Hard Red Winter Wheat on Mexican Millers' Welfare *R. Karina Gallardo, Jayson L. Lusk, and Rodney B. Holcomb, Oklahoma State University*

Entities have been providing quality-related information to overseas wheat buyers as a response to the increased requests for this information. This study measures the value of information to Mexican millers. The value to Mexican millers is measured by the difference of the flour mill surplus and compensating variation.

Antidumping Investigation in Agriculture *Nandini Banerjee and Walter R. Keithly, Louisiana State University*

Using the yearly trade data from the period of 1994–2004, our analysis has shown that there has been significant decline in the level of imports when affirmative decision has been taken for antidumping investigation. Although not directly tested, these results show no indications that there is any significant trade diversion from named to unnamed countries.

TITLE: Rural and Community Development II (Moderator: Albert Allen, Mississippi State University)

Assessment of the Dynamics of Value-Added Production in Alabama *Danyelle N. Starks and James O. Bukenya, Alabama A&M University*

This paper examines the dynamics of value-added industry in Alabama. The focus is on producers that are seeking to distinguish or "decommodity" their products through value-added practices. Direct marketing channels for value-added products in the state are identified, as are their related benefits and challenges.

Wine Grape Production: A Promising Enterprise for Small-Scale Enterprises in North Carolina? *Kenrett Y. Jefferson-Moore, Jarvetta S. Bynum, and Jannety M. Mosley, North Carolina A&T University*

We investigate wine grape production as a promising enterprise for small-scale enterprises in North Carolina. Although results indicate that wine grape production is an ideal alternative enterprise for small-scale producers, growers will have to wait at least 15 years to receive a complete return on the initial investment.

Economic Feasibility of Producing Pasture Poultry for Limited-Resource Farmers in Southeastern North Carolina *Kelli N. Ennis, Kenrett Y. Jefferson-Moore, and Jarvetta S. Bynum, North Carolina A&T University*

This study examines the economic feasibility of two pasture poultry production operations (pasture pen and net range) by limited-resource farmers using the net present value (NPV) method of analysis. Results of the NPV method illustrated unacceptable investments for both production operations.

Development and Initial Application of an Integrated Linear Programming/Social Accounting Model: Rangeland Livestock Application *Thomas Harris, Jonathan Alvey, Man-Keun Kim, and Betsy Fadali, University of Nevada, Reno*

Changes in allocation of federal grazing permits to ranchers can affect not only local

ranchers but the entire county economy itself. Regional impacts of changing grazing rights and grazing fees are measured by linking cattle production through a linear programming framework with a county-level social accounting matrix model.

TITLE: Farm Management I (Moderator: Bradley Watkins, University of Arkansas)

Theoretical Examination of the Conditions of Best Management Practices Adoption and the Easing of Trade Distortion for Sugar *Youngjae Lee, Louisiana State University*

In this study we examine if government subsidy compensating for the additional cost of adopting best management practices (BMP) is equal to marginal net benefit, will farmers then try to adopt BMP at every level of tariff rated quota (TRQ) and market allotment (MA) without exhibiting concerns over the form of their production function and, also, will this then imply an ability on the part of the government to lighten importing and market restrictions on sugar?

Adoption of Best Management Practices in Stocker Cattle Production *Rachel J. Johnson, Damona Doye, David L. Lalman, Derrell S. Peel, and Kellie Curry Raper, Oklahoma State University*

This study identifies current production and management practices of Oklahoma stocker cattle producers and analyzes factors affecting the adoption of best management practices (BMPs) using chi-square analysis. Results reveal that factors influencing the adoption of BMPs are operation size, dependency upon income from the operation, and specialization in stocker production.

Impacts of Observation-Deleting Standards on Profitability Analysis of Precision Agriculture *Baohui Song, Carl Dillon, and Tom Mueller, California State University, Chico/College of Agriculture*

This research explores a possible reason for the inconsistent results from previous studies on the profitability analysis in precision agriculture (PA)—different standards of identifying possible erroneous observations for PA data sets. By comparing the results from the different standards of identifying possible erroneous observations, this research raises concerns about the negative impacts of different standards of identifying possible erroneous observations on the profitability analysis of PA, and provides some suggestions for the standard that could be used in the future profitability analysis of PA.

Value of Information in Precision Farming *Xuanli Liu, Macon Nelson, and Mohammed Ibrahim, Fort Valley State University*

This study examines how the value of information is measured and its role in precision farming. Two types of precision farming are discussed regarding information in use and ways of information collection. Analytical equations have been derived to link the estimation of the value of information to limited parameters available.

Economic Risk Analysis of No-Till Rice Management from the Landlord's Perspective *K. Bradley Watkins, Jason L. Hill, and Merle M. Anders, University of Arkansas*

Rice production generally involves intensive cultivation. The profitability of no-till rice has been investigated but solely from the producer's perspective. Most farmed cropland is owned by someone else. This study evaluates the risk efficiency of no-till rice from the landlord's perspective using stochastic efficiency with respect to a function (SERF).

TITLE: Agribusiness and Finance II (Moderator: Samuel Funk, Kansas State University)

Hedging Effectiveness around USDA Crop Reports *Navinderpal Singh and Andrew McKenzie, University of Arkansas*

This paper addresses this question by simulating daily futures returns, daily cash returns, and daily hedged returns around report release dates for two storable commodities (corn and soybeans) in two market settings (North Central Illinois and Memphis, Tennessee). Various risk measures, including value at risk, are used to determine hedging effectiveness, and analysis of variance is used to uncover the underlying factors that contribute to hedging effectiveness.

Chicago Board of Trade Ethanol Contract Efficiency *Samuel Funk, James Zook, and Allen Featherstone, Kansas State University*

Firms producing ethanol may find management of the price risk associated with production of this leading alternative fuel a key factor to continued success. As with other agricultural commodities, the influence and ability of futures contracts to serve as a risk management tool deserves attention.

Examining the CRB Index as an Indicator for U.S Inflation *Ram N. Acharya, Arizona State University, and Paul F. Gentle, Ashok K. Mishra, and Krishna P. Paudel, Louisiana State University*

This paper analyzes the relationship between the Commodity Research Board (CRB) index and U.S. inflation. It was found that the relationship between the CRB index and the U.S. inflation rate was greater in the past than in more recent times. This is probably due to a change in the composition of the U.S. economy, as the service sector has grown as a larger proportion of the economy.

Cross-Hedging Fish Meal: Exploring Corn and Soybean Meal Futures Contracts *Joe Parcell, Chris Boessen, Ira Altman, and Dwight Sander, University of Missouri*

During 2006 the fish-meal price nearly doubled from $500MT to over $900MT. The objective of this research is to determine the optimal cross-hedge ratio between fish meal and soybean meal and corn, and corresponding hedging weight between corn and soybean. Results indicate that all hedging weight should be placed on the corn futures contract. This is an interesting result since prior fish-meal cross-hedging research has not analyzed the corn futures contract as a risk management mechanism.

TITLE: Resource and Environmental Economics III (Moderator: James Barnes, Louisiana State University)

Organizational Evolution of Markets for Wood Products in the Southern United States *James Barnes and Michael Dunn, Louisiana State University*

We use transaction cost theory to explain the coevolution of markets for wood products, noting that variation in the level and type of investments made in physical and human capital assets needed to manage paper and lumber miller operations had a significant influence on the use of wood dealer systems compared with more vertically organized business arrangements.

Stunted Growth: Natural Resource Concentration, Economic Growth, and Dutch Disease in the Southeastern United States *Vaughn Elliot, Valentina Hartarska, and Conner Bailey, Auburn University*

We study the link between economic growth and resource endowment in the southeastern United States and find signs of Dutch disease as traditional economic growth-enhancing mechanisms do not work, whereas forest concentration is associated with slower growth. We suggest policies that may help reverse the effects of the resource curse.

TITLE: Marketing and Industrial Organization IV (Moderator: Michael Gunderson, University of Florida)

Consumer Willingness to Pay for Locally Grown Products: The Case of South Carolina

Carlos E. Caprio and Olga Isengildina-Massa, Clemson University

The objective of this study is to evaluate South Carolina (SC) consumers' willingness to pay for "SC grown" products. Results indicate that consumers in SC are willing to pay an average premium of 27% for local produce and 23% for local animal products. Premiums for local products are influenced by age, gender, and income.

Effect Demographics Have on the Demand for Orange Juice *Andrew Davis, Michael Gunderson, Mark Brown, and Lisa House, University of Florida*

This paper investigates how the demand for orange juice is affected by the demographics of consumers. Demographic variables are important in determining the tastes and preferences of different regions. The seemingly unrelated regression method will be used to examine the data. This project will be beneficial to orange juice advertising firms and companies that sell orange juice.

Analysis of the Impact and Importance of Rewholesalers in the Ornamental Market *Marco Velastegui and Roger Hinson, Louisiana State University*

Ornamental growers face a challenge regarding the best market channel for their products. Using data from a 2003 survey, this study analyzes the impact of nursery characteristics on channel choice for large and small nurseries. We conclude that choice by both sizes was influenced by region, kind of plant, and advertising expenditure.

TITLE: Production Economics and Farm Management (Moderator: Cary Herndon, Mississippi State University)

Simulation of Alternative Marketing Strategies for U.S. Cotton *Christopher P. Elrod, John R.C. Robinson, and James W. Richardson, Texas A&M University*

Three marketing strategies (selling a put option, cash sale at harvest, and cash sale in June) are simulated on the basis of historical values and ranked on the basis of certainty equivalents for a representative irrigated and dryland cotton farm scenario. Analysis is also used to compare varying yield values.

Farm-Level Economic Impacts of Increased Cash Lease Rates *J. Marc Raulston, George M. Knapek, James W. Richardson, Joe L. Outlaw, and David P. Anderson, Texas A&M University*

Higher commodity price expectations have led to increases in cash lease rates nationwide. This study evaluates the farm-level impacts of higher cash lease rates. Current levels of cash rents along with land tenure arrangements of specific farms are instrumental in determining the impacts of increases in lease rates.

Financial Analysis of Implementing an Anaerobic Digester and Free-Stall Barn System on a Mississippi Dairy Farm *Jonathan Denley and Cary W. Herndon, Jr., Mississippi State University*

The installation of an anaerobic digestion system and a free-stall barn on a Mississippi dairy farm is only feasible with the presence of a cost–share plan. A 60% cost–share plan is the minimum amount of support a farmer must receive to install both facilities.

Factors Affecting Hay Supply and Demand in Tennessee *Ernest Bazen, Roland Roberts, Jon Travis, and James Larson, University of Tennessee*

Understanding the hay market is important because of hay's significance to the agriculture sector and economy. Results from a recursive model of the Tennessee hay market indicate that acreage and yield are price inelastic and the hay price is inflexible with respect to the quantity produced. These findings can be used to help hay and livestock

producers and policy makers better anticipate the market for hay in Tennessee.

Impact of the CIMMYT Wheat Breeding Program on Mexican Wheat Producers and Consumers: An Economic Welfare Analysis *Andrew Barkley, Lawton Lanier Nalley, and John Crespi, Kansas State University*

The increase in wheat production in Mexico's Yaqui Valley from the breeding and development of semidwarf wheat varieties released by Centro Internacional de Majoramiento de Maíz y Trigo (CIMMYT) is quantified for the period 1990–2002, and the costs and benefits of the wheat research program are estimated and evaluated using a two-region model of the world wheat market.

TITLE: Agribusiness and Finance I (Moderator: Anetra Harbor, USDA)

Analysis of the Soybean-to-Corn Price Ratio and its Impact on Farmers' Planting Decision Making in Indiana *David Ubilava, Purdue University*

In Indiana, agricultural land is used mostly for corn and soybean harvesting. Rotated corn is a common practice, but in recent years, essentially because of the "ethanol boom" and increased profitability of corn production, many farmers have switched to continuous corn. Results suggest that exogenous shocks will not have a permanent effect on the soybean-to-corn price ratio, but will require, however, a reasonably long time to die out.

Investigation of the Costs of an Increased Shipping Standard for Cotton Warehouses *Phil Kenkel and Taeyoon Kim, Oklahoma State University*

The speed of shipping cotton from warehouses has become an important issue for the cotton industry. This paper examines issues relating to costs and benefits of an increased cotton shipping standard. The value chain model is used to identify improvements in incentives, information flow, and warehouse filling and management strategies.

Location Patterns of Confectionery Manufacturers in a Post-NAFTA Environment *J. Ross Pruitt and Daniel S. Tilley, Oklahoma State University*

Changes in international trade agreements while retaining protectionist sugar policies have led to the opportunity for confectionery manufacturers to relocate to take advantage of favorable international trade policies. Results suggest that the North American Free Trade Agreement did not have a significant impact on location decisions of confectionery manufacturers in the United States.

Importance of Financial Variables on Efficiency of Class I Railroads in the United States *Saleem Shaik, Albert J. Allen, Albert E. Myles, and Osei-Agyeman Yeboah, North Dakota State University*

This study evaluates the consequences of financial variables on the efficiency of class I railroads in the United States for the period 1996–2006. Using a panel stochastic frontier analysis shows the average efficiency measures was 83% across six major class I railroads. The Burlington Northern–Santa Fe was most efficient and Norfolk Southern the least efficient for the period, 1996–2006.

TITLE: International Agriculture and Trade IV (Moderator: Bulent Miran, Ege University)

Impact of Agricultural Aid on Agricultural Sector Growth *Ozgur Kaya, Ilker Kaya, and Lewell Gunter, University of Georgia*

The primary objective of this study is to asses the impact of agricultural foreign aid on agricultural output in developing countries. To examine this effect, we will use a cross-section time-series econometric model where we use annual data from 1974 through 2005

for 112 developing countries that are aid recipients.

Awareness to Environmental Pollution in Turkey *Murat Cankurt, Bulent Miran, Cihat Gunden, and Ahmet Sahin, Ege University*

The main purposes of the study were to clarify the conceptual reference of environmental awareness and to investigate the relationship between some individual socio-economic factors and awareness to environmental issues. The models were estimated by the ordered logistic regression. Among the pollution categories, people were mostly aware of the pollution in air.

Willingness to Pay for Potable Water in Southeastern Turkey: An Application of Both Stated and Revealed Preferences Valuation Method *Abdulbaki Bilgic, Gunes Eren, and Wojciech J. Florkowski, Harran University*

We estimate both averting behavior and stated preferences about water quality improvements in the southeastern Anatolian region using reduced form equations. The model reveals that income, education, perception about water features, household living conditions, and regional variables are only statistically significant in both the revealed preference and stated preference data models. The willingness-to-pay estimate was around 6.43 new Turkish liras.

TITLE: Agribusiness and Finance IV (Moderator: Christian Boessen, University of Missouri)

Comparative Assessment of the Broiler: Corn Ratio and Its Impact on Broiler Processors' Profitability *H.L. Goodwin, Jr., Sandra Hamm, and Andrew McKenzie, University of Arkansas*

Input prices for broiler production, particularly corn, are becoming increasingly volatile because of increasing competition for corn from ethanol and biofuels production. Utilizing a distributed lag model, 17 years of data for three broiler:corn ratios, broiler exports, egg set, chick placements, cold storage stocks, and ready-to-cook broiler production were utilized to estimate stock share price for four major broiler producers.

Invasive Diseases and Fruit Tree Production: Economic Trade-Offs of Citrus Greening Control on Florida's Citrus Industry *Ronald P. Muraro, Allen Morris, and Thomas H. Spreen, University of Florida*

An investment model of Florida oranges was used to compare present values of various strategies for controlling huanglongbing, or citrus greening, a highly destructive disease. The analysis showed that following recommended control measures yields financial returns that enable the industry to survive citrus greening with existing groves and new plantings.

Risk, Research, and Returns: Valuation of the Potential of Improved Citrus Cultivars *Robert G. Brummett and James W. Richardson, Texas A&M University*

Hypothetical disease-resistant citrus cultivars and forecasted tree losses, fruit prices, and costs are presented and risk ranking is used to identify the potential economic benefit of adopting improved citrus cultivars. Returns to the grower are the primary focus. Returns to organizations producing disease-resistant cultivars are also evaluated.

Spatial Price Discovery, Dynamics, and Leadership in Evolving Distiller's Grain Markets *Tyler W. Van Winkle and Ted C. Schroeder, Kansas State University*

Distiller's grains are rapidly becoming important livestock feed ingredient sources. However, little public market information is available on distiller's grain. This study determines spatial and temporal price relationships among distiller's grain markets. Results indicate that spatial distiller's grain markets operate somewhat independently, suggesting potential arbitrage opportunities.

TITLE: Production Economics II (Moderator: Justin Gardner, Middle Tennessee State University)

Organic and Conventional Vegetable Production in Oklahoma *Kalpana Khanal, Shida Henneberry, Merritt Taylor, R. Joe Schatzer, Francis M. Epplin, B. Warren Roberts, Jonathan Edelson, and Jim Shrefler, Oklahoma State University*

This study compares the profitability and risk related to conventional and organic vegetable production systems. A linear programming model was used to find the optimal mix of vegetables in both production systems. A target MOTAD (minimization of total absolute deviation) model was used to perform risk analysis in both organic and conventional production systems.

Economic Impact of Deer Breeding Operations in Texas *Brian J. Frosch, David P. Anderson, and Joe L. Outlaw, Texas A&M University*

The deer breeding industry is a growing industry in the Texas economy, particularly the rural economy. Industry participants were surveyed to provide estimates of economic activity, which was then input into the IMPLAN model. The industry generates an estimated $652 million in economic activity, while supporting 7,335 jobs.

Plan for Economic Evaluation of Organic Blueberry Production in Georgia *Kristy Platter, Esendugue Greg Fonsah, Cesar Escalante, Gerard Krewer, Peter C. Anderson, Oscar Liburd, and Moukaram Tertuliano, University of Georgia*

Blueberry consumption is increasing across the United States. Georgia's production value of conventional blueberries has exceeded that of peaches to reach a farm-gate value of $75 million. Demand for organic food products is increasing, with United States gross sales at $16.9 billion in 2006. Economic feasibility of organic blueberries is uncertain, creating risk in transitioning from conventional to organic production. The principal objective is to utilize field data to determine the costs of various production methods by developing several enterprise budgets for each adopted technique.

Genetically Modified Crops, an Input Distance Function Approach *Justin Gardner, Richard Nehring, and Carl Nelson, Middle Tennessee State University*

Our initial findings indicate that genetically modified crops do not contribute to the decline of traditional family farms. We make a significant methodological impact by using the within transformation to remove unobserved individual effects and demonstrate that the within transformation results in maximum likelihood (ML) estimates that are identical to ordinary least squares (OLS) estimates.

Economics of Growing and Delivering Cellulosic Feedstocks in the Beaumont, TX Area *Roland J. Fumasi, James W. Richardson, and Joe L. Outlaw, Texas A&M University*

We estimate the contract prices that must be paid to grow cellulosic energy crops, and the costs of harvesting and transporting those crops in the Beaumont, TX area. Results indicate that the delivered price would range between $54 and $101 per ton of dry matter depending on the specific crop.