

Prepared Statement to U.S. House of Representatives

Committee on Agriculture

Subcommittee on Nutrition

By

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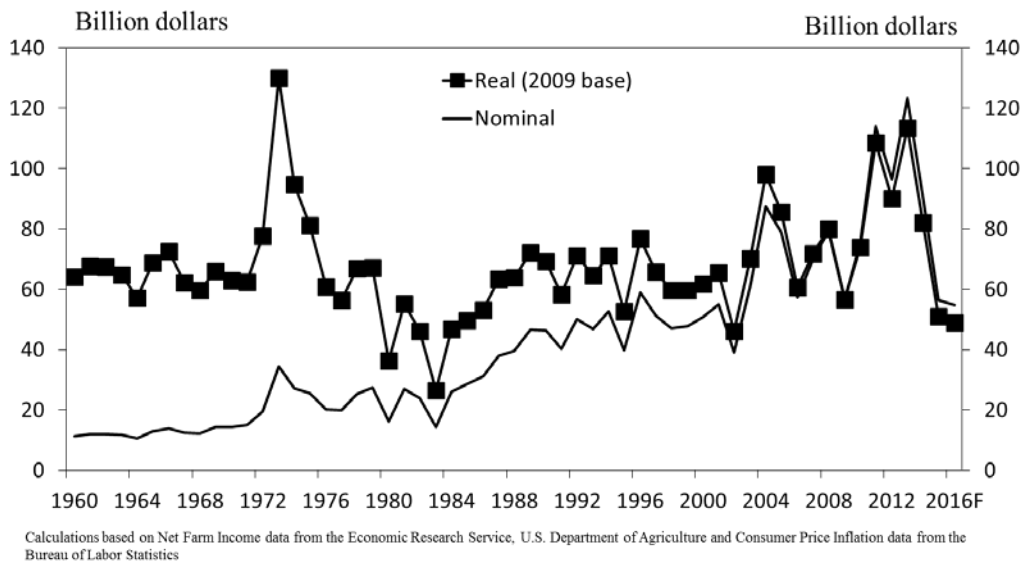
April 28, 2016

Chairwoman Walorski, Ranking Member McGovern, and members of the subcommittee, thank you for the opportunity to speak with you today. As a representative of Purdue Extension, I am privileged to work for an institution that provides research-based educational opportunities that enhance the lives and livelihoods of farmers and consumers throughout Indiana, the U.S. and the world. Our ability to provide life enhancing educational opportunities hinges on our federal, state, and local partnerships. I thank you for your support of USDA, NIFA, the land grant university system, and Cooperative Extension. Through your support, Cooperative Extension service has been able to provide educational opportunities that have kept farmers on the farm¹ and reduced food insecurity in U.S. households.² My comments today will focus on the farm economy, food prices, and the consumer.

Farm Profitability

Profitability in the U.S. farm economy has fallen sharply in recent years. In 2016, U.S. farm profitability, as measured by net farm income is expected to drop to \$49 billion, down 57 percent from 2013 highs (Chart 1). The Economic Research Service (ERS) at the U.S. Department of Agriculture (USDA) projects total US farm income to rise over the next decade with net farm income approaching \$70 billion by 2025. Yet, these income levels will remain 40 percent below the booming profit levels farmers enjoyed between 2011 and 2013.

Chart 1: U.S. Net Farm Income



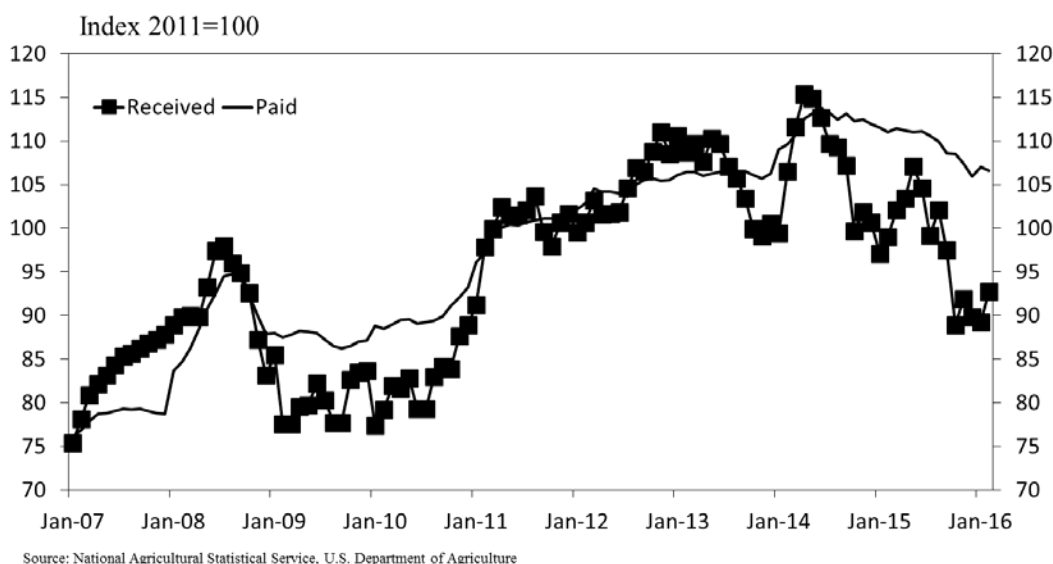
¹ Goetz, Stephan J. and Meri Davlasheridze. (2016). “State-Level Cooperative Extension Spending and Farmer Exits” *Applied Economic Perspectives and Policy*, April 19, 2016. Downloaded April 25, 2016.

² Rivera, R. L., & Eicher-Miller, H. (2015). P115 Food Security Among Households With Children Improved Following a Nutrition Education Intervention. *Journal of Nutrition Education and Behavior*, 47(4S).

The decline in farm profitability was more severe than expected. In February 2015, USDA projected farm profits to decline to \$84.2 billion in 2015.³ By the end of the year, farm profits had fallen to \$56 billion dollars.

The unexpected decline in farm profitability was driven by a drop in U.S. farm commodity prices. Farm prices received by farmers have fallen more than 10 percent from 2014 highs, with the sharpest declines for crop producers (Chart 2). By the spring of 2015, prices received for crop production plummeted more than 25 percent below recent highs in 2013, with further declines in the fall of 2015. The combination of flat global and domestic demand and burgeoning supplies slashed farm revenues and profits. The fall in revenues was driven by sluggish demand for U.S. farm exports and ethanol. Simultaneously, global agricultural production surged in response to previously high agricultural commodity prices.

Chart 2: Prices Received and Paid by Farmers



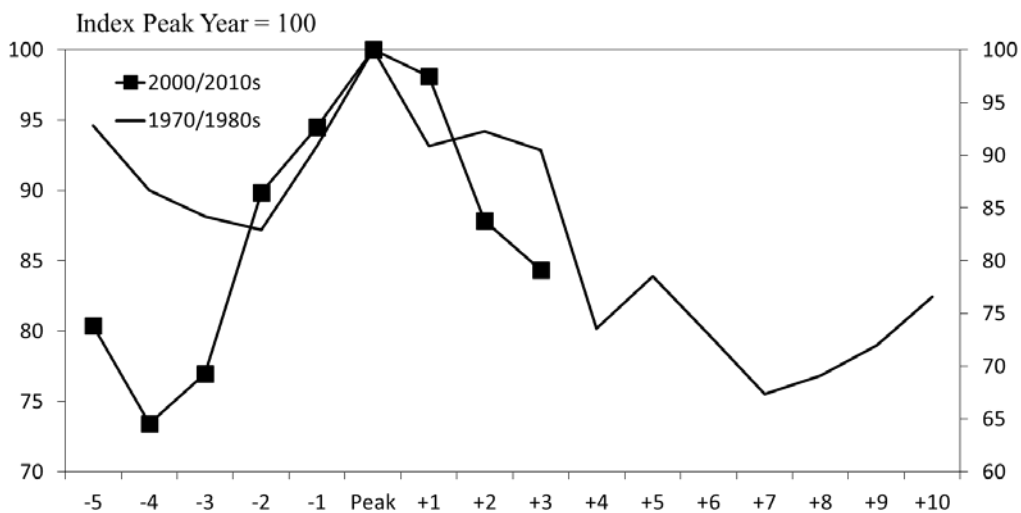
At the same time, farm production costs remained historically high. The prices paid by farmers remained elevated as input prices paid by farmers declined only 6 percent below 2014 highs (Chart 2),

³ Westcott, Paul and Janes Hansen. (2015). “USDA Agricultural Projections to 2024.” Office of the Chief Economist, World Agricultural Outlook Board, U.S. Department of Agriculture. Prepared by the Interagency Agricultural Projections Committee. Long-term Projections Report OCE-2015-1, 97 pp. Downloaded April 25, 2016. www.ers.usda.gov/publications/oce-usda-agricultural-projections/oce151.aspx

which trimmed intermediate product expenses for farmers. However, contract labor and factor payments to stakeholders, which includes landlords, hired labor, and interest expenses, continued to rise in 2015 with further increases expected in 2016. Payments to stakeholders are expected to increase by 4.8 percent. Interest expenses are projected to jump another 6.8 percent in 2016 after an 18 percent rise the previous year. Labor costs are projected to rise 5.0 percent and net rents to landlords are expected to rise 2.9 percent after declining in 2015. The combination of falling revenues and historically high expenses trimmed U.S. farm profits.

Sharp declines in U.S. farm profitability are not uncommon. Historically, farm profitability is cyclical. Since 1900, the U.S. farm economy has experienced four farm profit booms: 1910s, 1940s, 1970s, and 2010s. Two of those booms ended in farm busts. The 1910s farm boom collapsed in the 1920s after World War I with the bust extending through the Great Depression. The 1970s farm boom ended with the farm financial crisis of the 1980s. One unique feature of the current farm boom was the speed by which farm profitability disappeared. The value of agricultural production has fallen more sharply in the current farm cycle. Three years after its peak, the value of agricultural production is down more than 20 percent in the current cycle (Chart 3). In contrast, during the 1970/1980s cycle, the value of agricultural production declined a more modest 10 percent in the first three years of the farm economy downturn of the 1980s. However, during the 1980s farm bust, farm incomes continued to decline seven years after the farm income peak in 1979.

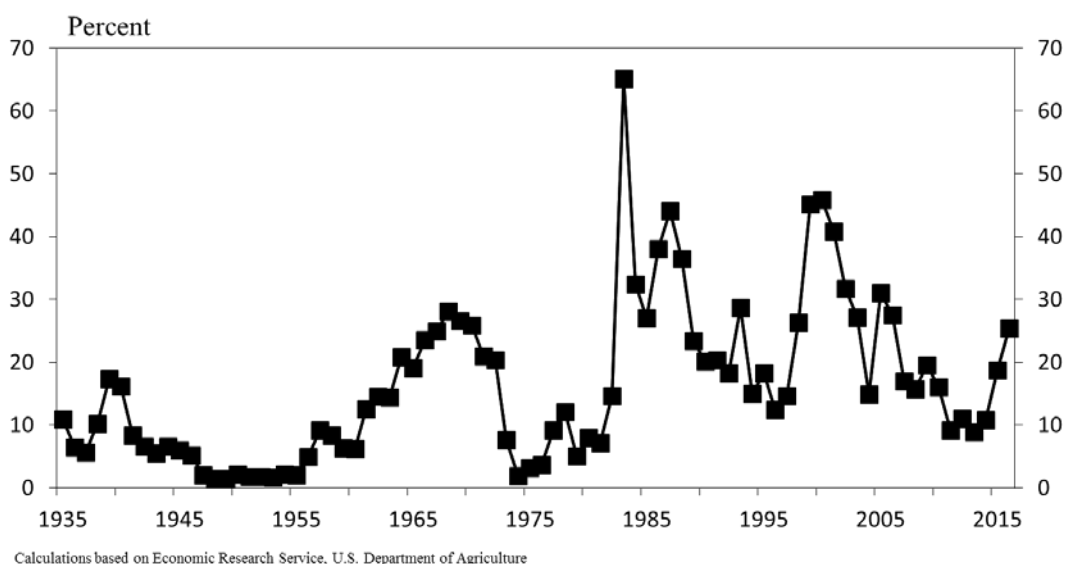
Chart 3: Value of U.S. Agricultural Production



Calculations based on Economic Research Service, U.S. Department of Agriculture
 Note: the Peak year for the 1970/1980s cycle was 1979 and the Peak year for the 2000/2010s cycle is 2013

Another unique feature of the current farm downturn is the structure of the farm safety net. Past farm downturns underpinned farm policies that often used price-related subsidies and supply management to support U.S. farm profitability. As profitability plummeted in the 1920s, farm policy incorporated price subsidies for farmers, such as the 1922 Grain Futures Act, the 1929 Agricultural Marketing Act, and the 1933 Agricultural Adjustment Act. During the farm bust of the 1980s, various farm policies were enacted that provided more government control of agricultural production through set aside acres and price related subsidies. In fact, direct government payments to farmers jumped to \$17.3 billion in 1983, up from \$6.7 billion in 1982 and \$2.8 billion in 1980.⁴ These farm subsidy programs were often criticized for their adverse impacts on restrictions on international trade and for costs for consumers and taxpayers.⁵

Chart 4: Direct Government Payments Share of Net Farm Income



By the mid-1990s, U.S. agricultural policy shifted to a more market-oriented farm safety net based in large part on crop insurance. The FAIR Act of 1996 started this transition⁶ and after twenty years and several farm bills, the share of farm income due to director government payments has diminished (Chart 4). Although farm incomes have fallen more sharply in the current cycle, direct government payments are expected to rise less dramatically. For example, direct government payments are projected

⁴ Direct government payments are measured in real 2009 dollars.

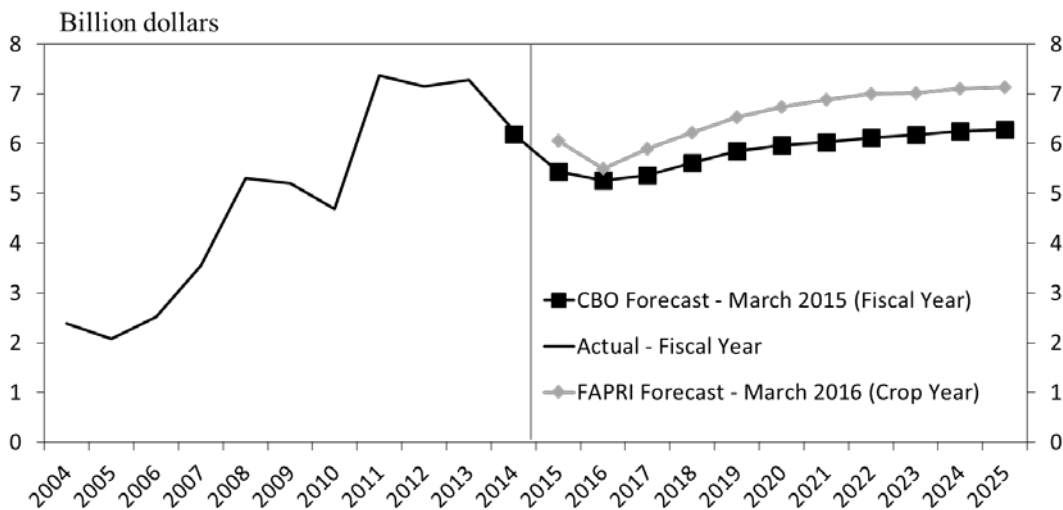
⁵ Sumner, Daniel A. (2008). "Agricultural Subsidy Programs". In David R. Henderson (ed.). *Concise Encyclopedia of Economics* (2nd ed.). Indianapolis: [Library of Economics and Liberty](#). ISBN 978-0865976658. OCLC 237794267. Downloaded, April 25, 2016.

⁶ Tweeten, Luther and Carl Zulauf. (1997). "Public Policy for Agriculture after Commodity Programs." *Review of Agricultural Economics*. (19)2, pp. 263-280.

to reach 25 percent of net farm income in 2016 compared to a spike of 65 percent in 1983 and an average of 40 percent between 1983 and 1988.

In recent years, crop insurance has emerged as a main safety net for U.S. crop producers. Crop insurance programs have existed since the Dust Bowl of the 1930s.⁷ Coverage remained limited until the Federal Crop Insurance Reform Act of 1994 required crop insurance coverage for some other disaster assistance programs. Federal crop insurance premiums are subsidized and have increased in recent years. For example, government costs for premium subsidies and operating costs have increased from \$2.8 billion in 2003 to \$7.8 billion in 2014 (Chart 5). The costs of crop insurance are projected to decline further in 2016 with lower commodity prices.^{8,9}

Chart 5: Government Costs for Crop Insurance Premiums



Source: Risk Management Association, Congressional Budget Office and Food and Agricultural Policy Research Institute

A recent study has shown that the removal of crop insurance would hurt U.S. food consumers. Based on 2013 data, eliminating crop insurance subsidies would result in lower participation rates and reduced food production that would underpin higher food prices.¹⁰ It was estimated that U.S. food

⁷ Shields, Dennis (2015) “Proposals to Reduce Premium Subsidies for Federal Crop Insurance” Congressional Research Service Report, 7-5700, R43951.

⁸ Congressional Budget Office (2015). “CBO’s March 2015 Baseline for Farm Programs”, March 9, 2015. Downloaded April 25, 2016. www.cbo.gov/sites/default/files/51317-2015-03-USDA.pdf

⁹ Food and Agricultural Policy Research Institute (2015). “U.S. Baseline Briefing Book: Projections for Agricultural and Biofuel Markets” FAPRI-MU Report #02-16, March. Downloaded April 25, 2016. www.fapri.missouri.edu/wp-content/uploads/2016/03/FAPRI-MU-Report-02-16.pdf

¹⁰ Jayson L. Lusk. 2015 “Distributional Effects of Selected Farm and Food Policies: The Effects of Crop Insurance, SNAP, and Ethanol Promotion.” Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, April 2015.

consumers would lose \$2.5 billion in welfare value if crop insurance subsidies would decline with addition welfare losses to foreign consumers. In addition, U.S. farmers and agricultural producers would lose roughly \$8 billion in welfare gains through the loss of subsidies. To be sure, U.S. taxpayers would benefit from the elimination of crop insurance premium subsidies, yet the net general welfare gains would be \$932 million. Although, there was recognition that the benefits would vary across farm commodity, consumer food prices, and U.S. states, the analysis was not able to identify the distribution of benefits.

With the focus on crop insurance and market-based safety, farmer education programs have focused on risk management issues to help farmers manage farm margins during this downturn. At Purdue Extension, the Center for Commercial Agriculture has partnered with the Indiana Soybean Alliance to produce on-line resources to help producers understand, evaluate, and manage risk.¹¹ In 2015, the Farm Service Agency partnered with the Cooperative Extension Services across the nation to provide farm bill training and educational opportunities to help farmers understand various risk management strategies. These partnerships are the continuation of long-standing educational programs that support farm profitability. Funding for the state Cooperative Extension System through the Smith-Lever Act was found to have kept almost 137,700 or 28 percent more farmers from disappearing in U.S. agriculture from 1983 to 2010.¹²

Farm and Consumer Food Prices

In addition to slashing farm incomes, weaker commodity prices will place downward pressure on U.S. consumer food prices. However, consumer prices do not fluctuate as widely as farm level prices. As a result, falling commodity prices at the farm level are more likely to translate into slower growth in consumer food prices, not lower consumer food prices.

Historically, food prices at various stages of the food system tend to move together. The correlation between farm prices and producer prices remains strong (Chart 6). Using data from 1976 to 2015, the correlation between prices received by farmers and crude foodstuffs is 0.96; and the correlation between farm prices and producer prices for intermediate and consumer foods is 0.81 and 0.79, respectively. The correlation between farm level prices and consumer price inflation (CPI) for food is weaker, 0.39.

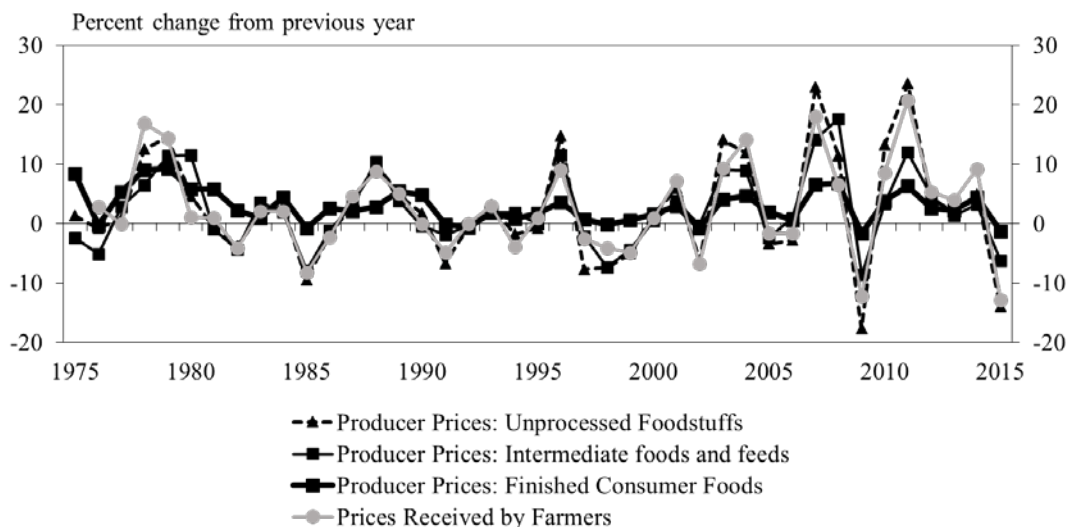
The correlations between farm and producer prices for food have strengthened over the past two decades. For example, between 1976 and 1995, the correlation between farm level prices and finished consumer foods was 0.71. Between 1995 and 2015, the correlation between farm level prices and finished

¹¹ Information on the partnership between the Center for Commercial Agriculture and Indiana Soybean Alliance is available at www.farmriskresources.com

¹² Goetz, Stephan J. and Meri Davlasheridze. (2016). "State-Level Cooperative Extension Spending and Farmer Exits" *Applied Economic Perspectives and Policy*, April 19, 2016. Downloaded April 25, 2016.

consumer food prices strengthened to 0.93. A similar trend emerged between farm level prices and other producer prices (unprocessed foods and intermediate foods).

Chart 6: U.S. Farm Prices and Producer Prices for Food



Source: Economic Research Service, U.S. Department of Agriculture

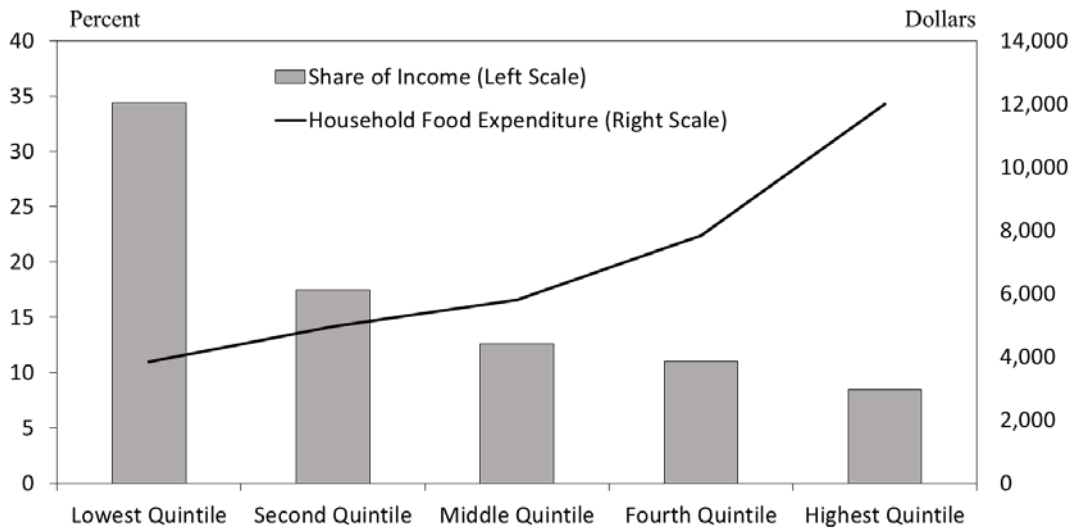
Although farm level and producer prices are highly correlated, farm level prices demonstrate more volatility than processed producer and consumer prices. Farm level prices and producer prices for unprocessed foodstuffs have fluctuated widely over the past decade increasing over 20 percent in 2007 and 2011 and plummeting almost 20 percent in 2009. At the same time, producer prices for finished consumer foods rose less than 10 percent in 2007 and 2011 and edged down slightly in 2009. Consumer prices for food (CPI-food) followed similar patterns as the producer prices for finished consumer goods, but instead of falling in 2009, the CPI-food rose more slowly.

Consumer food prices tend to have less volatility due to the stability in other processing and marketing costs. According to USDA, farmers received 14.3 percent of the U.S. food bill, with other industry segments such as food services, food processing and wholesale and retail trade accounting for larger portions of the consumer food bill. Due to less processing, consumer foods, such as fresh fruit and vegetables, meats, and dairy, tend to have stronger correlations between farm level prices and consumer prices. For example, the correlation between farm level beef prices and consumer prices for beef and veal is 0.82.

Slower growth in consumer food prices arising from stable farm commodity prices could provide benefits to low-income consumers. For low-income households, food accounts for a larger share of their incomes and household expenditures. For example, households in the lowest fifth quintile by income

spend over a third of their income on food (Chart 7). In contrast, households in the highest fifth income quintile spend less than ten percent of their income on food. Lower food prices should allow food consumers to stretch their food dollar and increase the quantity and quality of food purchases.

Chart 7: Food Spending by U.S. Household Income:
(2014:Q3 to 2015:Q2)



Source: Consumer Expenditure Survey, Bureau of Labor Statistics, April 2016

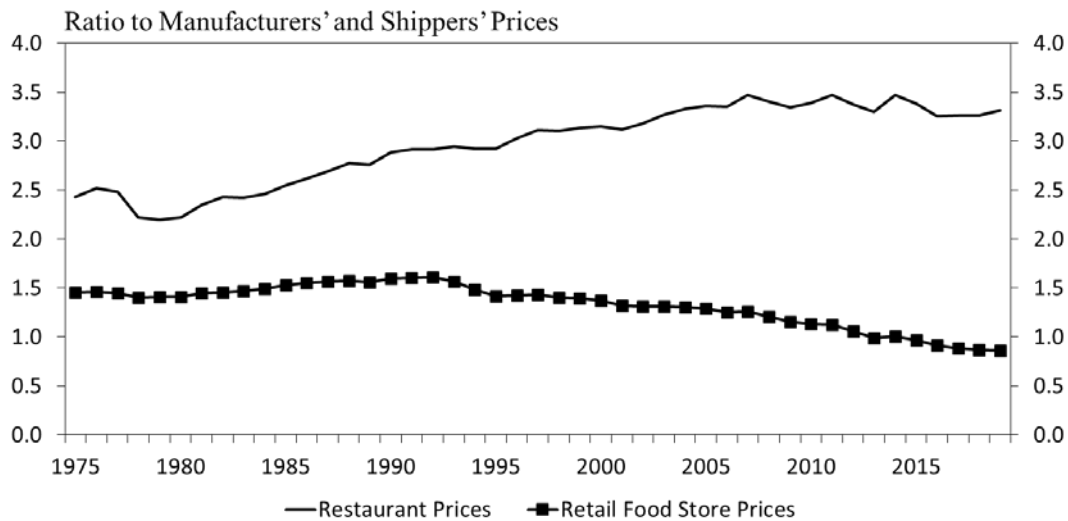
However, the benefits of lower food prices for low-income households could be muted for those households living in food deserts. Food deserts are locations where affordable and nutritious food is difficult to obtain. USDA identifies food desert tracts as those with at least 33 percent of the tracts population or a minimum of 500 people with low access to a supermarket or large grocery store.¹³ In regards to consumer food prices, retail food stores, such as grocery stores, provide food at lower prices compared to restaurant prices (Chart 8). The gap between restaurant and retail food store prices has widened over time as restaurant prices relative to manufacturing prices has increased from 2.5 to 3.5 since 1975, while retail food prices relative to manufacturing prices has fallen from 1.5 to 1.0. Low-income households in food deserts with little access to retail food stores, but access to restaurants are facing higher food costs and have additional challenges achieving better health outcomes.

Educational programs for low-income households help them overcome access to food issues and reduce food insecurity. For example, the Nutrition Education Program administered by Purdue Extension

¹³ Economic Research Service, USDA. “Definition of a Food Desert” Downloaded April 25, 2016. www.ers.usda.gov/dataFiles/Food_Access_Research_Atlas/Download_the_Data/Archived_Version/archived_documentation.pdf

has reduced food insecurity by 25 percent for low-income households participating in this program.¹⁴ In this federally funded program, participants learn how to stretch their food dollar and eat healthier foods on a limited budget. Participants learn the health benefits of the different food groups and understand food safety practices and how to conserve limited food resources.

Chart 8: Restaurant and Retail Food Store Prices



Source: Economic Research Service, U.S. Department of Agriculture

Impact on the Rural Economy

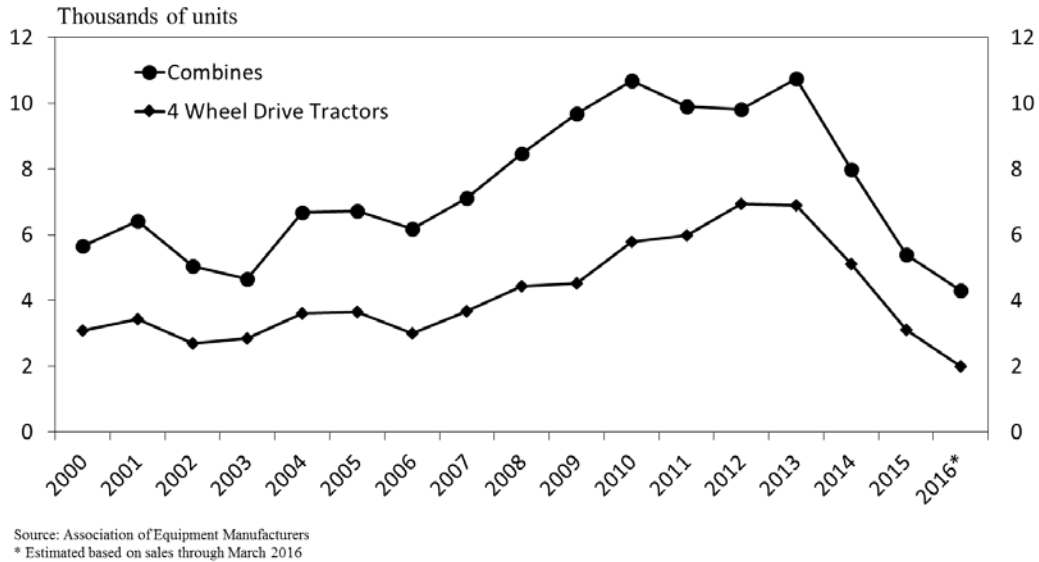
Declining profits in agriculture are also straining consumer spending, especially in rural America. According to USDA, agriculture and its related industries account for 9.3 percent of U.S. employment. According to the Bureau of Economic Analysis (BEA), farm earnings accounted for roughly 6 percent of the earnings in nonmetropolitan counties in 2014 compared to less than one-half of one percent in metropolitan counties. Lower farm incomes spillover into the rest of the rural economy by reducing spending on farm inputs and household consumption.

Falling farm incomes have led to broader economic strains in rural economic activity. Based on BEA data since 1970, nonmetropolitan county farm earnings have a strong correlation with earnings in food and kindred product manufacturing and agricultural service industry. For example, U.S. tractor and combine sales surged with farm income after 2006 peaking in 2013 (Chart 9). Since then, the sharp decline in farm incomes translated into plummeting tractor and combine sales. In fact, tractor and

¹⁴ Rivera, R. L., and Eicher-Miller, H. (2015). P115 Food Security Among Households With Children Improved Following a Nutrition Education Intervention. *Journal of Nutrition Education and Behavior*, 47(4S).

combine sales in 2016 are on pace to fall below sales posted prior to the farm income boom. Bankers reporting to Federal Reserve agricultural credit surveys indicate that farm capital spending is expected to decline further in 2016.¹⁵

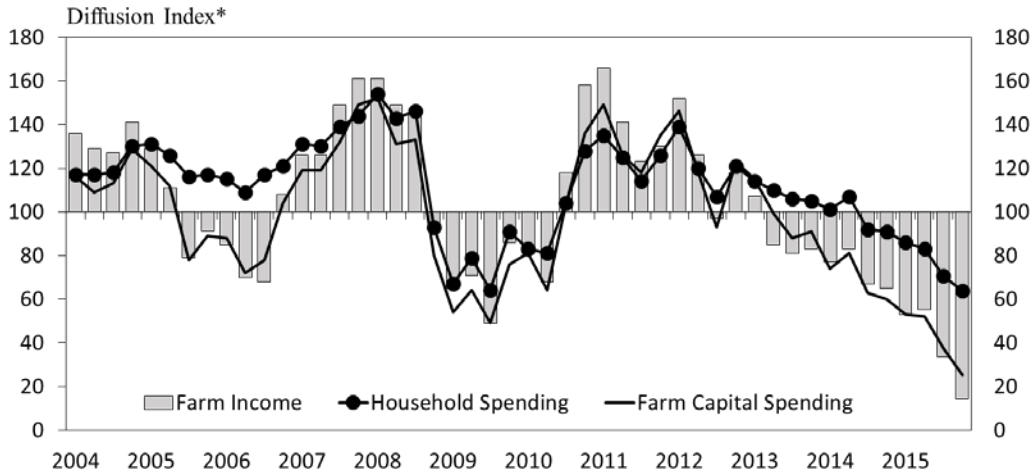
Chart 9: U.S. Tractor and Combine Sales



In addition to plummeting farm capital spending, farm household spending has collapsed with farm incomes. According to bankers in the Tenth Federal Reserve District, farm households have cut household spending along with capital spending (Chart 10). Reduced household spending will place pressure on retail businesses on rural Main Streets, rural incomes, and support for charitable organizations in rural communities. In total, sharp downturns in agricultural profitability often spillover into lower investment, capital spending, and household spending in rural communities.

¹⁵ Kauffman, Nathan and Matt Clark (2016) “Farm Economy Tightens Further” *Survey of Agricultural Credit Conditions*, Federal Reserve Bank of Kansas City, February 11.

Chart 10: Tenth Federal Reserve District Farm Income, Farm Capital Spending, and Household Spending



Source: Federal Reserve Bank of Kansas City

*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than, or the same as in the year-earlier period. The index numbers are computed by subtracting the percent of bankers that responded "lower" from the percent that responded "higher" and adding 100.

Lower farm incomes and reduced spillovers into rural consumer spending and ag-related activity could further strain rural poverty rates. Since the 1960s, nonmetropolitan poverty rates have been substantially higher than poverty rates in metropolitan areas.¹⁶ Although poverty rates are much higher in the South, rural poverty rates are higher than urban rates even in the Midwest, which enjoyed strong income gains during the recent farm boom. Based on U.S. Census Bureau data, in the North Central Extension Region, total poverty rates rose from 10.4 percent in 2003 to 14.9 percent in 2013. And, child poverty rates rose higher, increasing from 14.4 percent in 2003 to 20.4 percent in 2013. In fact between 2009 and 2013, 44 percent of nonmetropolitan counties faced child poverty rates above 20 percent compared to 31 percent of metropolitan counties. These increases in child poverty occurred during a period of boom farm profitability that underpinned economic strength in many rural communities. Shrinking farm incomes and spillovers into rural economies could place additional pressure on rural poverty rates. For example, during the last major farm downturn in the 1980s, rural poverty rates rose from 13.7 percent in 1979 to 18.3 percent in 1983.

Holistic approaches to rural economic development are needed to combat rural poverty, especially child poverty. Studies on child poverty indicate that it is multi-dimensional and programs focused on the intergenerational mobility into new economic status tend to target family issues, such as parenting or structure that affect investments in children, or community issues, such as education, safety

¹⁶ Poverty data is available from the Economic Research Service, USDA. <http://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being.aspx>

and jobs, that provide opportunity for economic advancement. For example, the National Advisory Committee on Rural Health and Human Services recommended action steps to assist rural children and families in poverty that encouraged holistic approaches focused on local coordination of community health clinics, community agencies, family support organizations, and rural community development efforts.¹⁷ At Purdue Extension, the focus on child poverty is increasingly focused on a holistic approach that addresses economic opportunities in communities and regions and families and their investments in children/youth. To strengthen local economies, Purdue Extension is partnering with federal and state government agencies to build capacity the local/regional level. Through the Strengthening Economies Together program, Purdue Extension is partnering with USDA to identify community assets that can be leveraged into seizing emerging opportunities in rural communities. Through the Hometown Collaboration Initiative, Purdue Extension is partnering with the Office of Community and Rural Affairs in the Indiana state government to build local capacity in communities with less than 25,000 people.

Reducing child poverty also means that programs need to assist families as they make investments in their children. With the high incidence of teen drug abuse in many rural communities, Purdue Extension has launched new parenting programs to strengthen teen-parent relationships that are often found to reduce teen drug use. In fact, the World Health Organization identified the Strengthening Families Program: For Parents and Youth 10-14 created by Iowa State University as the premier program reducing substance abuse among teens. For every dollar spent on this program, communities receive \$9.60 in benefits in the form of less time in treatment, less jail time, and less time off work. In addition, child and youth programs are increasingly focusing on education, career readiness and the development of leadership and life skills. Through partnerships with USDA, state and local governments and nonprofit philanthropy, Indiana 4-H has increased its focus on science education and healthy living to prepare youth for future opportunities. In 2013, 91 percent of the 4-H youth that graduated high school planned to continue their education at a college, university, trade or technical school and 26 percent of them were first-generation college students.¹⁸

Conclusion

U.S. farmers are facing substantial declines in farm profits, driven by lower commodity prices. With crop insurance as the primary safety net for U.S. agriculture, the learning and implementation of various risk management techniques are the key to helping farmers manage margins in these difficult

¹⁷ Child Poverty in Rural America. (2015) National Advisory Committee on Rural Health and Human Services, Policy Brief, December. <http://www.hrsa.gov/advisorycommittees/rural/publications/childpoverty1215.pdf>

¹⁸ Wilson, Tyler and Renee McKee (2013) *Assessing Life Skills Developed Through Participation in Indiana 4-H Program – 2013*. <https://extension.purdue.edu/4h/Pages/impact.aspx>

times. In addition to benefiting farmers, crop insurance payments provide economic welfare benefits to food consumers.

Food consumers could also benefit from lower food prices. However, consumer food prices are less volatile than farm prices, suggesting that consumer prices will not fall with farm prices, but rise at a slower pace in 2016. Low-income households spending a larger share of their income on food could benefit the most from more stable food prices. Yet, low-income households living in food deserts without access to larger grocery stores may not be able to take advantage of these opportunities as food prices at restaurants have risen more sharply than food prices at retail stores. Thus, nutrition education programs that teach low income households how to stretch their food dollar are critical to reducing food insecurity.

Finally, plummeting farm incomes will strain rural economies. Farm capital spending on items such as tractors and combines has fallen with farm incomes straining nonfarm income and employment in agricultural input companies. At the same time, farm households have reduced household spending which also limits opportunities for consumer spending on rural Main Streets. These ripple effects in the rural economy pose a challenge to reducing poverty rates, which tend to be higher in rural communities. If communities are going to address poverty, especially child poverty, holistic approaches that focus on leveraging local assets to seize emerging economic opportunities and address more social issues such as family health and wellness to strengthen the investments in children appear to offer the best opportunities. These approaches often require partnerships between government agencies at all levels, academic institutions such as land grant universities, non-profit organizations and philanthropic entities to enhance the lives and livelihoods of people across the country.