Purdue Farm Policy Study Group Meeting Summary

July 12, 2022

The following members were in attendance: Brent Bible, Ken Foster, Bill Gelfius, John Hardin, David Howell, Aaron Howell, Levi Huffman, Marshall Martin, Tom McKinney, Doug Mills, Doug Morehouse, John Nidlinger, Steve Pithoud, Ken Rulon, Michael Shuter, Mark Townsend, Don Vilwock, Steve Warner, Christy Welch and Mike Yoder

Excused: Sonny Beck, JoAnn Brouillette, Ty Brown, Isabella Chism, Pete Clark, Natasha Cox, Kendall Culp, Sarah Delbecq, Otto Doering, Tim Foltz, Joe Kelsay, Bryan Kirkpatrick, Randy Krone, Mark Legan, Jayson Lusk, Danita Rodibaugh, Norman Voyles, Rick Ward

NOTE: Please visit https://purdue.ag/fpsg to access presentation documents.

Agenda Items

1. Remembrances

The group took a moment of silent remembrance for two individuals who passed away during the past six months. David Miers was a long-standing member of the group whose contributions to Indiana agriculture and his community were many and significant. Several members of the group cited David's impact on them, the community, and our Farm Policy Study Group. David's obituary can be viewed at https://www.popfuneralhome.com/obituary/david-miers . Professor Philip Abbott also passed away recently. He presented to the Purdue Farm Policy Group on a number of past occasions as well as sharing his insights about agricultural trade and the general economy in various venues. He taught at all levels in the Department of Agricultural Economics during his illustrious career and retired in 2017. His obituary can be viewed at https://www.jconline.com/obituaries/ljc058423 . The group also took a moment of thoughtful support for Pete Clark and his family in view of the recent loss of Pete's wife, Jane. Jane's obituary can be viewed at https://www.legacy.com/us/obituaries/ftimes/name/jane-clark-obituary?id=35764237 . Please continue to keep these families in your thoughts and prayers.

1. Student Attendees

Two Department of Agricultural Economics graduate students were our student guests for this meeting. Carlos Zurita is a PhD student studying trade facilitation and economics of international trade. Carlos is originally from Ecuador and plans to complete his degree in May 2023. Alex Robinson is a MS student originally from Indianapolis. His research is focused on observing what factors have the most significant impact on a farmer's decision to use online banking services for capital and expendable goods.

We will continue to host student attendees. These will likely be undergraduate students at December meetings and graduate students at July meetings.

2. Expanding Membership

We continue to seek increased diversify in the membership of the group across age, ethnicity, gender, and types of farming enterprises. Please forward names and contact information to Ken Foster (kfoster@purdue.edu) if you would like nominate an individual for membership. We also encourage you to invite such individuals as your guest to a future meeting.

2. Crop updates and go around

With a few exceptions, most of the state is struggling for sufficient rain and crops are beginning to show the stress. Since our meeting a few of the drier parts of Indiana have received some very welcomed rain. Other issues expressed related to increasing land values and rents, farm labor shortages, rising input costs and concerns over availability. Some members shared experiences with alternative enterprises such as organic grain and yellow peas.

3. Indiana Property Taxes in 2022 and Beyond - [Download PDF]

Emeritus Professor of Agricultural Economics, Dr. Larry DeBoer, graciously agreed to present some of his recent finds, insights, and alternative policy evaluations related to Indiana property taxes. Larry first walked the group through the process of setting property tax rates and determining tax bills for individual parcels. The taxing authority first determines the total tax levy to meet the area's demands for services and divides that by the total net assessed value of land and improvements to determine a tax rate. Individual parcel tax bills are the result of this tax rate times the net assessed value of the parcel. Tax bills in Indiana are subject to tax caps and if the computed tax bill is above the cap then the taxpayer gets a credits, and the local taxing authority comes up short of its total levy.

Larry pointed out that lower crop prices led to a decline in the share of property taxes paid by farmers compared to homeowners and commercial property owners. In addition, Indiana home prices have been rising by double-digit percentages in 2021 and into the first quarter of 2022. Because of the lag in available data and decision making these increases will first appear in homeowner's next tax bill. Larry foresees pressure from homeowners on the state legislature to institute reform. Similarly, increasing crop prices will begin to impact the 2023 tax bills for farmland. The impact on farmland tax bills has been somewhat delayed due to the formula for computing the base rate that is computed using the past six years of cash rents and net farm income but omits the highest of the six. 2015 was a particularly low year for farm net operating income and thus we are now in a situation where even the buffer of omitting the highest market value year does not prevent an estimated 16.3% increase in the Base Rate for computing farmland assessed value.

Larry also provided an analysis of tax cap credits across tax district tax rates and across property types. As expected, tax cap credits are higher for tax districts with higher rates. In addition, tax cap credits have been increasing as a share of the levy for homesteads because a greater share of these homes qualified as home prices rose.

Larry presented some historical (2017-21) changes in property tax liabilities by property class as well as projections for 2021-26 under current regulations. The historical perspective shows a 2.3% average annual decline for farmland but projects a 6.6% average annual increase. Residential property saw an historical increase of 6.3% annually on average, whereas a 6.6% increase is projected.

In examining policy options, Larry pointed out that the 1998 Indiana Supreme Court ruling requires that assessments be based on objective measures of property wealth. Thus, the state legislature cannot intercede to reduce assessments for any or all property uses. However, under the state constitution it is likely that the General Assembly can use deductions and credits to lower the property taxes of homeowners.

Larry first examined the impact of an increase in the standard homestead deduction. Such a policy change would reduce the total net assessed value of property in the tax district and thus increase the tax rate. The result would be tax relief for qualified homeowners and an increase in the tax bills of other property owners. Local government tax revenues would remain approximately the same depending the impact of tax cap credits in the tax district.

A second policy option Larry presented was a new Homestead Credit applied not to the assessed value but to the tax bill. The example he presented was a 10% credit. Larry showed that for a home with a gross assessed value of $150,000 in a district with a 2% tax rate, there would be a drop in local tax revenue and decline in the homeowner's tax bill. For homes that already qualify for a tax cap credit under the 1% of gross assessed value limit, such as a home with $150,000 value in a district with a 3% tax rate, there would be no tax relief and no change in local government tax revenue. Likewise, a higher-valued home even in a lower tax rate district may already qualify for a tax cap credit and thus receive no additional relief from a new Homestead Credit toward their tax bill unless the new credit is sufficiently large to lower the next tax bill below the 1% gross assessed value cap. Because of circuit breaker tax caps, new tax credits are likely to benefit owners of lower-valued homesteads in areas with lower tax rates (mostly rural).

Related podcasts from Dr. DeBoer on Indiana property tax issues:
Farmland assessment, January 2022: https://ag.purdue.edu/stories/podcast/farmland-assessments-will-increase-for-taxes-in-2023/
Rising residential liability, March 2022: https://ag.purdue.edu/stories/podcast/the-residential-share-of-property-taxes-is-on-the-rise/
Assessments and policy options, May 2022: https://ag.purdue.edu/stories/podcast/shocked-and-not-shocked-by-home-assessments/

4. Economic and Agricultural Impacts of the Russian Invasion of Ukraine – Download PDF

Dr. Maksym Chepeliev is a Research Economist with the Center for Global Trade Analysis in the Department of Agricultural Economics. Maksym is originally from Ukraine and has been examining the impacts of the Russian invasion. He has presented some of his finding to the EU Parliament and has been them published in some top journals.

Maksym began by reviewing economic importance of the Black Sea region as a major producer and exporter of barley, corn, wheat, sunflower, sunflower oil, and fertilizer. Ukraine's share of global exports during 2018-22 of these were 12.6, 15.3, 10, 4.3, and 49.6 percent, respectively. Export of existing stocks (~20 million tons of grain) has been completely halted by the war due to mines that were placed in the Black Sea. Differences in railroad gauge between Ukraine and surrounding countries and destruction of road infrastructure impedes shipment by other means. Russia is also an important exporter of grain, fertilizer and energy. In the 2018-22 period, Russia's shares of global exports for barley, wheat, sunflower, and sunflower oil were 14.2, 24.1, 19.6, and 23.1 percent, respectively. In 2017, Russia accounted for 18% of global natural gas production and 13% of global crude oil production. Russia and its ally Belarus were the second and third largest producers of potash fertilizer after Canada in 2021. Sanctions against Russia and Belarus have halted or greatly restricted imports of these commodities into the US and other strong supporters of Ukraine. Russia has responded to sanctions and domestic economic stability concerns by restricting exports of commodities such as grain and sugar and other countries around the globe that are concerned with domestic food security are doing likewise. Maksym pointed out that, although commodity prices were already rising before the war, the direct and indirect impacts of the war in Ukraine are contributing to a more rapid rise in global commodity prices. Maksym pointed out that harvesting and seeding of current and future crops is being disrupted in the south and east of the country due to the war and is a challenge in the rest of the country due to damaged infrastructure and labor shortages as individuals have either fled or are balancing time on farms with time fighting at the war front. In addition, if the existing stored grain cannot be exported then there may be insufficient capacity to store the crop that is about to be harvested.

Maksym shared results of his research concerning the impact of the war on the global economy. He finds that large energy and agricultural exporting countries will likely gain in terms of real income while net energy and agricultural importing countries are likely to see declining real income. The former includes areas like the Middle East, parts of Central Asia, Nigeria, Rwanda, and Mexico while the latter includes China, India, Western Europe, Thailand, Turkey, and South Africa. The estimated impact on the United States is small (less than 0.5%) but negative.

Maksym also presented projected shifts in US production and exports of key agricultural commodities in response to the international trade disruptions from the war in Ukraine. His models project increases in US exports of wheat exports of 10 to 12 percent and increases in US other grain (includes corn) exports between 7 and 17%. The increases are larger than projected increases in production suggesting some shifts in domestic use in order to accommodate increase trade. Maksym also pointed out that climate change and associated extreme temperature and drought impacts this summer are also exacerbating the concerns about high prices and food insecurity.

The last item in Maksym's presentation focused on potential economic impacts of an EU ban or substantial reduction in Russian energy imports. He examined three scenarios: 80% reduction, 90% reduction, and 99% reduction. The research suggests that real income in Central Asia countries would rise by between 4.9 and 6.5% as those countries export more oil and petroleum products to the EU. The Middle East and North Africa would also gain in real income by between 1.7 and 2.5%. Russia is the larger loser by farm with projected declines in real income of between 10.4 and 11.7%. The US is unchanged while the EU would be expected to see declines in real of income of between 0.7 and 1.7% with some EU countries that are more dependent on Russian energy experiencing larger impacts.

Maksym pointed out that there is renewed pressure for such energy sanctions or price caps on energy from Russia because the surge in energy prices during the first half of 2022 has led to dramatic increases in Russian revenue from fossil fuel exports. It is projected that Russia will earn 30% more from energy imports in 2022 than it did in 2021. In sum, we should not expect substantial declines in energy prices from their currently levels in the near future and should renew efforts to decarbonize economies for energy security.

5. Farmland Market Update – [Download PDF]

Dr. Todd Kuethe, Associate Professor and *Schrader Chair in Farmland Economics* in the Department of Agricultural Economics provided and overview of farmland value and its drivers as well as information and analyses from the most recent *Purdue Land Value and Cash Rent Survey*.
Todd began his presentation by emphasizing the importance examining farmland and its value. According to the most recent data from USDA's Economic Research Service, real estate accounts for about 80% of Indiana farm assets and real estate debt accounts for about half of the total debt of Indiana farms. Todd also provided some historical perspectives on US farm real estate values highlighting the declines in the early 1980's and briefly during the recent Great Recession, but that generally farmland values have steadily risen and even more rapidly during the post-corn-ethanol-mandate era. Corn Belt state comparisons of farm real estate prices show that Indiana is slightly below Illinois and Iowa but above Ohio; a likely reflection of average productivity differences.

Todd presented that respondents to the 2022 *Purdue Land Value and Cash Rent Survey*, indicate that Indiana farmland value has increased by 30 or more percent from already record nominal highs in 2021. The statewide average increases over 2021 values by land quality (top, average, poor) were 30.9, 30.1, and 34 percent, respectively. The average values Todd reported from the 2022 survey were 12,808, 10,598, and 8,631 $/acre for the three land quality categories. Survey respondents indicated that a host of factors were contributing to this strong increase in farmland values such as net farm income, growth retention, crop and livestock prices, investment potential, commodity export potential, inflation, farm business liquidity, and agricultural policy. The only factor weighing negatively on survey respondents' assessments was interest rates. Respondents also indicated strong increases in cash rents compared to 2021 of 11.5, 11, and 13.1 percent by land quality category (top, average, poor) with 2022 values of 300, 252, and 207 $/per acre, respectively.

Todd also used a simple model of capitalized returns to land ownership to demonstrate how a wide range of prices might be rational to different prospective buyers depending on their outlook for farm returns, discount rate and expected growth rate in farmland value.

Todd completed his presentation with a reminder that with high rates of inflation, the Federal Reserve is signaling and likely to take aggressive action by increasing interest rates. The data suggest that there is imperfect pass through between the Prime Rate to Farm Mortgage Rates but that increases in the Prime Rate are generally matched with increases in the Farm Mortgage Rate.

6. Future meeting dates

Barring unforeseen circumstances, the following will be the dates for the group's next two meetings: December 6, 2022 and July 11, 2023.

7. Future Topics
The following topics were suggested for future meetings:
- What does a Green America look like?

- Idle urban-fringe land: Amount, impacts, “optimal” land use planning
- Labor Markets and Trade to facilitate growth
- Indiana’s lagging education and training attainment: causes, implications, potential remedies

Carry-over topic suggestions from December 2021 meeting:

- Local Planning – Values and Goals
- Political Tribalism and its impacts and amelioration
- Farm implications of changing nutrition and food product trends

If you have thoughts on these or other topics of interest, then please forward those to Ken Foster (kfoster@purdue.edu).

5. Adjournment at 3 pm

Respectfully Submitted,

Ken Foster
Professor – Agricultural Economics
Executive Secretary – Purdue Farm Policy Study Group