



COVID-19 Impacts on Arkansas' Agricultural and Rural Economies

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Issue Overview and Executive Summary

The COVID-19 virus pandemic has led to unprecedented interruptions in economic activity around the world. With over 600 cases in Arkansas and over 950,000 worldwide (and growing), actual and potential impacts to Arkansas' agricultural and rural economies are mounting. The \$2T Coronavirus Aid, Relief and Economic Security (CARES) Act promises roughly \$49B in aid to farmers and ranchers and for programs that support access to healthy and affordable food. In addition, an extension of the Small Business Administration (SBA) payroll protection loan program could make an additional \$349 billion available to the production agriculture sector – though, at this point, it is not clear if that extension will be forthcoming. At any rate, the full extent of the pandemic and the ability of this aid to mitigate damages, remains unknown. This document presents a first discussion of the impacts (both realized and potential) of the COVID-19 pandemic, with particular focus on five areas important to the economic health of our agricultural and rural communities.

Overview The designation of agriculture and related processing and retailing businesses as essential recognizes the central role that this sector plays in daily meeting society's most vital needs. It also provides important protection against unnecessary disruptions in the service that the sector provides. Still, the potential for significant interruption in the activities of the sector cannot be ignored. A brief discussion of issues affecting the agriculture and food sector as a whole is thus in order.

At the outset, it is worth emphasizing that COVID-19 is not a foodborne illness. This outbreak does not imply any direct food safety issues for consumers. Thus, disruptions in the sector – should they occur – will not stem from issues related to agricultural and food products, per se, but rather from COVID-19-related challenges to supply chains.

The availability of labor represents one potential source of disruption that could affect multiple sectors of the agricultural economy. Labor issues may affect both farm-level production (e.g., specialty crops farms, broiler operations) but also key downstream supply chain partners such as the transportation industry, processors, and retailers. Interruption of processing activities could be particularly disruptive, with effects spreading back upstream to commodity producers as well as downstream to final consumers. For example, a disruption in poultry processing would directly affect farm operations tied to the plant; it could indirectly affect farm-level prices across the protein sector; and it could also impact (at least locally/regionally) the availability of meat in retail outlets.

At this early stage, some of the broad-based effects of COVID-19 are becoming apparent. For example, the sharp economic slowdown has immediately reduced energy prices and interest rates. In the short run, this benefits a broad segment of the agricultural economy by reducing production costs. However, it also almost certainly presages a broader decline in commodity (and financial) markets as the global economic downturn reduces demand across the board. Understanding the implications of this downturn for specific commodity sectors will be key to formulating an effective policy response. The following represents a preliminary attempt to assist in that important process.

A recession resulting from COVID-19 would result in additional adjustments to a functional food supply system. Changes in consumer incomes could impact food demand across all product lines. Global changes in demand and exchange rates could alter agricultural trade flows. Credit availability could impact participants throughout the supply chain, including at the farm level. These and other implications of a recession would bear close monitoring and evaluation to ensure timely and effective policy responses.

The Protein (Beef, Pork and Chicken) Sector Live cattle futures have experienced declines and volatility similar to those in the stock market, as disposable income and uncertainty have strong linkages to beef demand. Recent panic buying has affected the entire sector; wholesale prices for beef and pork have spiked. However, these gains are expected to be short lived. Widespread unemployment and general economic uncertainty are expected to cause consumers to reduce future expenditures, favoring cheaper protein cuts. A likely result is a drop in total expenditures for all meats and more so for higher end beef cuts. Globally, US protein export volumes and value could fall, particularly for pork as it: i) depends more heavily on exports compared to other proteins; and ii) hard-hit China is its principal market. Chicken seems best positioned given its relatively low domestic price point and its diverse portfolio of export customers.

The Crop Sector The impact of the COVID-19 crisis on grain and cotton prices has been mixed. Global rice prices remain strong as key importing and exporting countries stockpile supplies. U.S. retail rice sales in early March jumped 50% relative to previous years suggesting growth in short run domestic demand. Year to date, corn futures prices are down 14% as ethanol demand decreases due to shrinking fuel demand and low fossil fuel prices. Biofuel demand is expected to fall 20 to 25% in the near term, which is likely to impact corn as 38% of the U.S. corn goes to ethanol production. Year to date soybean futures prices are down 11%, but have recently recovered modestly, likely due to strong feed demand and better than expected export numbers. The derived demand for meal is expected to increase as a result of increase demand for animal protein and adjustments in livestock rations to include more meal over dry distiller grains (DDG). Measures taken by Argentina and Brazil are affecting exports and creating opportunities for U.S. soybeans, primarily in China. Cotton prices are down 25% year to date. Operational shutdowns in Asia suggests a looming reduction in U.S. cotton exports and lower mill use. Expected increases in unemployment globally will reduce short-term demand for cotton-based products. The 2020 Arkansas acreage projections for impacted crops are also mixed. Compared to 2019, rice acreage could increase 21%, corn by 4% and cotton could fall by as much as 5%. On a positive note, steep declines in energy prices and easing access to capital can benefit energy and capital intensive crops such as rice and cotton. Many producers have found opportunities to refinance term debt and thus improve liquidity.

The Specialty Crop Sector Disruptions caused by both weather and COVID-19 can lead to financial stress, supply disruptions, closed and/or restricted markets and altered marketing strategies for specialty crop producers. Disaster relief programs exist, but some (such as market facilitation payments) are available for only select commodities, thus severely limiting financial relief for most specialty crop producers. COVID-19 and a 1-3 week predicted early season start has created confusion regarding farm worker availability including domestic and H2A labor, likely resulting in a lower supply of skilled workers for both planting and harvest. Further, action plans are still lacking regarding what to do if a worker contracts the virus. Such labor disruptions will lead to crop losses. Arkansas school and restaurant closures have eliminated many existing direct markets for farmers and ranchers. Arkansas state authorities have allowed farmer markets (which launch in spring as the state's fruit crops hit full production) to open. However the outlined operational guidance creates logistical challenges which will make it difficult for markets to remain open. A number of markets have gone to online ordering only with selected pick up locations and times for customers. Tools exist that can help producers in marketing their products, but training is needed to enhance marketing effectiveness. New resources are needed to help farmers understand targeted online

marketing strategies and tactics—branding, product differentiation, market segmentation, relationship marketing—to engage customers.

The Local Governments Sector The COVID-19 Pandemic is expected to lead to a recession resulting from a decline in consumer spending associated with an increase in unemployment. Counties and municipalities will lose county, municipality and even some state sales tax revenue associated with slowed economic activity in those locations. Losses in tax revenue will impact those counties that rely heavily on them to pay for the services they provide to residents and businesses. As a county's reliance on the local sales tax to generate revenue varies greatly (from 0% to 61%); therefore, the short-term impacts of COVID-19 will vary greatly among counties. However, there are two mitigating factors that will reduce the effect of the COVID-19 led recession on local government revenue: i) the ability (as of January 2020) to collect sales tax revenue from remote sellers and ii) portions of CARES that provides some funding for families, unemployed workers, and state & local governments. While these factors are expected to slow and limit the extent of the recession, they are not expected to provide enough assistance to help local governments avoid making budget cuts in 2020. Local governments that will need to cut their 2020 budgets may delay upgrading and maintaining their local infrastructure; such delays will likely increase the future cost. Finally, as many rural counties were struggling, even before COVID-19, to generate enough revenue to provide needed infrastructure and services, it will be even more difficult for them to maintain and upgrade their infrastructure and services in the future.

The Tourism Sector Restricted business and personal travel and other shelter in place policies leave airlines, hotels, and restaurants with limited access to customers. In 2018, Arkansas employed over 114,000 people in the Accommodation and Food Service sector and an additional 22,000 in Arts, Entertainment, and Recreation. These sectors represented roughly 7 and 1.4 percent of the state's total direct employment. Some estimates put lay-offs in these sectors between 80-90% for April and May. Many fast food chains (with drive through windows) have seen an increase in activity over the past few weeks as dine-in services have been curtailed. However, if more people fill the unemployment lines these increases are not likely to last for long. Some recovery may be possible in June with only employment being down roughly 50%. In the longer term (late summer and fall), these sectors could see a slight pick-up in activity (year over year) if the economy gets back to full strength. This is based on national surveys in which households have indicated they will spend more time vacationing at locations where they can drive to easily and reduced their trips that require airline travel (particularly international travel).

The (Beef, Pork and Chicken) Protein Sector

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The beef, pork, and chicken sectors have all been affected by the COVID-19 outbreak and the market-disrupting response to it by both consumers and policy makers. It is instructive to work through both short-run and long-run implications of the still-unfolding event because supply and, especially, demand responses are likely to change over time.

Immediate COVID-19 Impacts

Perhaps the two most obvious short-run phenomena stemming from COVID-19 that have impacted the protein sector have been the massive sell-off in the stock market (and general financial market unrest) and panic buying of all types of meat products by consumers. These phenomena have had opposing impacts on the market.

The sharp decline in stock market value appeared to spill over directly into commodity futures markets. Live cattle futures, especially, seemed to follow the daily swings in broad stock indexes almost in lockstep from mid-February through about mid-March. This decline (and volatility) in futures prices kept pressure on the cash market, almost certainly accounting for some portion of the decline in cash fed and feeder cattle prices in February and March. However, cash prices held up relatively well relative to futures, resulting in extremely strong basis (the difference between cash and futures prices) in the cattle sector.

Panic buying on the part of consumers has affected the entire protein sector. Anecdotal evidence abounds of empty meat cases in grocery stores around the country. Panic buying didn't really get underway until the latter half of March. Since then, its effects have shown up in wholesale market data.

The pork cutout value (a weighted average of wholesale pork prices) increased from just over \$67/cwt in early March to over \$83/cwt during the last week of March (a 25% increase). The boxed beef cutout value rose by a similar percent, reaching its highest price point in nearly 5 years. Cash cattle prices have responded to the dramatic jump in wholesale beef prices, with fed cattle prices rebounding as much as \$10/cwt in the last week of March. Price behavior in the beef sector has been more dramatic than in the pork and chicken sectors, likely due to the fact that coordination between the various segments of the beef industry still relies on market prices to a greater extent than in the more tightly integrated poultry and pork industries. Chicken price behavior has been less dramatic. Wholesale prices on major cuts have recently posted highs for the year; however, to this point, price behavior has been consistent with normal seasonality in that market.

Beef, pork, and poultry production have been growing, year-over-year, since well before the COVID-19 outbreak. If production remains high even as cattle and hog prices increase (which has been happening in the most recent couple of weeks) it will suggest that retailers and processors are actively working to refill the supply chain following the wave of COVID-19-related panic buying. It is possible that processors are also attempting to build up inventories of product in anticipation of possible future production disruptions. It would make sense for processors to pay a premium for livestock now in order to stockpile product against the risk of a later COVID-19 plant shutdown. It is unclear how likely this might be; but with major geographic areas being given shelter-in-place orders, it would be prudent for processing plant managers to be planning for the worst.

Longer-Term COVID-19 Impacts

Looking a bit further down the road, the apparent positive market impacts of COVID-19 panic buying are almost certain to fade quickly. Panic buying does not represent an increase in product demand. Rather, it represents future demand being pulled ahead into the current period. There is no reason to expect that the recent surge in buying represents any durable change in longer-term demand in the protein sector. In fact, there are good reasons that think that the COVID-19 situation may result in significant demand destruction, particularly for beef and pork.

The recent spate of panic-buying helps to obscure the fact that restaurant trade has, without question, fallen sharply. Many food service outlets are completely closed; others are operating as carryout-only only. US Bureau of Labor Statistics data indicate that about 44% of food expenditures are for food consumed away from home. For beef, away-from-home consumption likely accounts for a much larger share of higher-valued cuts. Thus, the loss of restaurant trade will potentially curtail demand for all meats to some extent but should be expected to have a more significant impact on beef demand.

Effects of COVID-19 on the broader economy are also likely to affect the relative market positions of the three major meat species. Widespread unemployment and the general economic uncertainty of the present situation should be expected to cause consumers to reduce household expenditures as much as possible. In the wake of the 2008 financial crisis and through the subsequent recession, consumers significantly reduced household spending on food – both at home and away from home. This is a likely outcome from the present crisis, which may, based on very preliminary data, have an even larger impact on employment than the 2008 financial crisis. Of course, people will not stop eating – they may not even eat any less. They will, however, select food items at a lower price point in order to save money. This is a normal response to uncertainty, particularly open-ended uncertainty of the type the market now faces. All species are likely to see a drop in total expenditures for their product as consumers shift toward lower-valued cuts. Chicken and pork are likely to gain market share from beef over the next several months due to their considerably lower average price point.

Exports also represent an important component of demand for all of the major meats. It is likely that COVID-19 effects on the global economy could impact export volumes and value. Pork seems particularly vulnerable to export disruptions for two reasons. First, a larger share of pork production is exported than for the other major meats. Second, China represents a key export market for U.S. pork, accounting for 17% of total pork exports in 2019. China has been particularly hard-hit by COVID-19. Economic disruptions there certainly have the potential to reduce aggregate meat demand. Again, chicken seems well-positioned in the market: its portfolio of significant export customers is more diverse than for the other major species and its relatively lower price point will make it an attractive option for potential export customers.

The Crop Sector

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Arkansas' row crop producers currently face a number of economic challenges. For now, weather issues are seen as the main challenge to 2020 production. Corn and rice planting are underway on a very limited basis. Like 2019, above normal spring rains have delayed field operations. Input and output supply chains may also be affected by the COVID-19 pandemic.

This report focuses on the operational challenges in the short and long run as a result of the COVID-19 crisis. We intend to highlight current challenges reported by the state's Ag sector and measures being taken by agents in the U.S. and overseas.

Input and Output Markets

A Federal determination by the Department of Homeland Security that food production, processing, transport, and delivery are essential activities and must be maintained during the pandemic is being respected and reinforced at the state level. So far there are no apparent disruptions on input markets in the short run, and farmers seem to have most of their inputs on hand. Comments from growers and others in agribusiness indicate concern about future supply chain disruptions, and the sluggish start to 2020 field work may be overshadowing potential supply disruptions. Many input suppliers are moving shipments of crop supplies earlier and faster, and asking retailers to hold larger input stocks.

Operations at major U.S. ports continue without major disruptions, but there are growing concerns as COVID-19 spreads in the U.S. To illustrate, the Port of Houston shut down two container terminals that handle beef, pork, seafood, fruits, vegetables, processed food, beer, wine and other beverages that are leaving and coming to the U.S. for about a day and a half after testing confirmed that a dock worker contracted the coronavirus.

There are concerns also about the ability of the trucking industry to continue operating in the midst of COVID-19. The Federal Motor Carrier Safety Administration (FMCSA) issued an updated national emergency declaration to provide hours-of-service relief for certain agricultural products, which facilitates their near-term supply. Several farm organizations are requesting an extension of such relief to include all food and agricultural critical infrastructure operations to ensure the viability of the food distribution system.

Commodity Markets

Overall, COVID-19 is injecting additional uncertainty into already volatile markets. The impact the COVID-19 crisis has had on grain and cotton prices has been mixed.

Rice

Prices in the global rice market remain strong (Thai and Viet 5% above \$430/ton) despite ample supplies as key importing and exporting countries move to secure their rice supplies in what can be called panic-induced stockpiling. Vietnam banned exports on March 24, despite having plenty of supplies to cover domestic demand. India is in complete lockdown and ramping up its Public Distribution System to deliver wheat and rice at highly subsidized prices to around 800 million

people, which can limit India's ability to export rice. Cambodia, a top-10 rice exporter, is also considering banning exports in the face of COVID-19.

The U.S. rice S&D balance was tight before the pandemic due to a short 2019 crop and a strong export demand. The U.S. Rice Federation reports retail rice sales in early March jumped over 50% relative to previous years, more than any other food item, which indicates we should expect some growth in domestic demand in the short run. New rice crop (September) traded between \$11.80 and \$12.00 last week, lower than the values observed in early March as planting intentions suggest a large increase in rice acreage in 2020. USDA projects 1.395 million acres or 21% increase in rice acreage in Arkansas relative to 2019, but experts believe that acreage can reach 1.5 million acres. It is important to notice that USDA prospective plantings do not fully account for COVID-19 given the timing of the survey.

Corn

Year to date, futures prices for corn are down 14%. May corn prices averaged \$3.40 per bushel last week, a 10% lower than in early March, as ethanol demand decreases as a result of shrinking fuel demand and low fossil fuel prices. The Renewable Fuels Association expects a drop in biofuel demand 20 to 25% in the near term, which will likely have an important impact given that the biofuel sector consumes around 38% of the U.S. corn production. On the bright side, USDA reports that China purchased 750,000 tons of corn in mid-March, but these sales won't be enough to offset the pain caused by the drop in ethanol production.

USDA projects an increase of 4% in corn acreage in the state, reaching 800 thousand acres. The slight increase in corn acres in the state can be supported by acres switched from cotton, and also by the positive corn basis due to the strong demand from the local poultry sector.

Soybeans

Year to date, futures prices for soybeans are down 11%, but since mid-March have recovered modestly—about 40 cents per bushel, likely on account of strong feed demand and better than expected export numbers, including new sales to China. The derived demand for soybean meal is expected to increase as a result of increase demand for animal protein and adjustments in livestock rations due to lower availability of dry distiller grains (DDG) from the ethanol sector. Also, the measures taken by Argentina and Brazil are affecting agricultural exports and creating opportunities for U.S. soybeans, primarily in China.

Cotton

Cotton prices are 25% lower year to date. With cotton prices falling sharply from early year highs, some acreage switching to corn or soybeans is expected. USDA projects 2020 cotton acreage in Arkansas to decline 5% from a year ago to 590,000 acres. The price environment facing cotton is likely the most negatively affected by COVID-19. Operational shutdowns in China, India and Southeast Asia portends a reduction in U.S. cotton exports and lower mill use. Expected increases in unemployment in the U.S. and globally will decrease consumer discretionary spending in 2020, reducing short-term demand for cotton-based products.

Steep declines in energy prices and easing access to capital have been positive aspects of the COVID-19 pandemic, which can benefit energy and capital intensive crops such as rice and cotton. Farm diesel prices have declined by roughly \$1 per gallon since early January due to the fossil fuel price

war and the drop in demand due to COVID-19. The turbulence in global financial markets due to the COVID-19 crisis has led to further quantitative easing and reduction in interest rates. For instance, USDA's Farm Service Agency is relaxing the loan-making process and adding flexibilities for servicing direct and guaranteed loans to provide credit to producers in need. Moreover, the Small Business Administration has created a Small Business Guidance and Loan Resources webpage, including resources and information on how to apply for a COVID-19 Economic Injury Disaster Loan. Many producers have found opportunities to refinance term debt and thus improve liquidity.

Others comments

Grain merchandisers, agricultural lenders, and farm input suppliers report a series of measures have been put in place to increase protection of employees and customers against the possible spread of COVID-19. Administrative and managerial staff are working at home where possible, and operations are continuing as normal but with a high degree of safety precautions.

Most row crop operations are naturally fairly isolated and tend to have relatively few employees, the majority of whom live in rural areas. Still yet, farm businesses are being encouraged to raise awareness about COVID-19 with employees to minimize health risks. With field operations close to 100% mechanized, this issue may not receive adequate consideration.

The greatest risk to farm employees will likely occur during transport to and from work, at mealtimes and periods of shop work. To minimize impacts on farm productivity, operations may need to provide more vehicles for transporting labor, practice social distancing during mealtimes, and adopting new cleaning routines for equipment and work areas. It's unlikely, but also unknown at this time if additional equipment (boots, gloves, glasses, and masks) and operational changes for protection of workers will add significant costs at the farm level.

The economic relief package includes \$23.5 billion in farm aid. The bill earmarks \$9.5 billion in COVID-19 relief for livestock producers, specialty crops and local ag markets. Another \$14 billion replenishes the USDA Commodity Credit Corporation (CCC) account from which Market Facilitation Program (MFP) payments were administered to producers in 2019.

The USDA Risk Management Agency (RMA) is now authorizing additional flexibilities due to COVID-19, including extended time and interest deferred on premium payments, and extended production reporting dates. The IRS has officially announced that tax day will be delayed from April 15 to July 15.

The Specialty Crop Sector

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The immediate consequence of COVID-19 required most residents to stay at home, reduced options for away-from-home food purchases and mandated social distancing. As the crisis continues there are a number of areas across agriculture that must be monitored with respect to specialty crops sector in the both short and long term. These impacts include heightened financial stress, increased potential for supply disruptions, closed and/or restricted markets and altered marketing strategies utilizing innovation in product delivery options and customer engagement.

Financial Stress: The crisis has heightened the level of financial stress across agriculture. Agricultural Resource Management Survey (USDA-ERS, 2018) revealed a distribution of farm household income with half of all farms operating with a negative income. In term of recent government financial support, the specialty crop sector has participated in some of the disaster assistance benefits. However, market facilitation payments only went to a few specialty crop commodities. It can be argued that the majority of financial support for changing weather patterns and export disruptions have not provided relief to specialty crop producers. However, debt-to-asset ratio for farmers remain low (13.59% for 2020) and debt financing cost falling despite total debt at historic levels (\$425.3B). While the CARES act will provide some specific relief for families and small businesses, it remains to be seen what the financial impacts of COVID-19 will be on farm profitability and business viability.

Supply Disruptions: Weather continually plays a critical role in determining whether a crop's harvest is successful or not. According to a Division of Agriculture horticulturalist, Arkansas' specialty crop season is advancing earlier than normal; as a result of a mild winter and warmer than normal temperatures over the last 2-3 weeks. Specialists indicate that the season will be advanced by 1-3 weeks, if the warmer temperatures continue. Warm season crops going in earlier due to warm temperatures, can result in a shift in the demands for field labor to earlier than normal. COVID-19 has created a great deal of confusion among farm worker availability including domestic and H2A¹. U.S. government has stepped up to facilitate H2A workers to travel into the U.S. through enhanced collaboration with some foreign countries. The H2A labor stakeholders and government entities are processing *returning* workers² only, which means that farmer requests for 2020 *new* workers will likely not to be approved. Additionally, workers originating from non-contiguous countries (Eastern Europe, Africa, etc.) face additional hurdles in the near term due to international travel restrictions. Even though there currently exists a number of unemployed workers, the specialization and expertise required for effective farm workers leads to vast concerns from farmers seeking labor for pre-harvest, harvest, post-harvest and planting needs. Additionally, farmers are expressing concerns for some of the labor supply alternatives—hiring domestic inexperienced agricultural labor, H2B and prisoners—as not being practical because of the skill-set and knowledge needed for either in-field product grading, expertise for operating specialty equipment or the strenuous environment that agriculture labor requires. Regardless of the labor source, an unresolved issue generating a lot of

¹ It should be noted that H2A labor impacts large scale commercial row-crop farmers whom utilize specialized labor to operative specialty equipment.

² Returning workers refer to guest workers whom have had a work visa for U.S. within the last 48 months. New workers will require an interview and the consulates have decided not to conduct interviews at the time of this writing.

stress among farmers is what is the action plan and available options if a worker becomes sick with the coronavirus. Bottom line is that labor disruptions result in crop losses from either reduced plantings or limited harvests.

Local and Regional Foods Markets: The National Restaurant Association predicts restaurant sales will decline by \$225 billion through July 2020, leading to a loss of 5 to 7 million jobs as consumers shift purchases from restaurants to grocery stores. The closure of schools and restaurants has adversely impacted farmers marketing their products locally. A national study led by Colorado State University regarding the economic impact of COVID-19 on farms that sell into these local markets predicted a \$689 million decline in sales from March to May 2020, resulting in a payroll decline of up to \$103 million and a total loss to the economy of up to \$1.3 billion.

Across Arkansas school and restaurant closures have eliminated existing markets that many of the direct marketing farmers and ranchers had worked to develop over the last decade. Farmers' markets typically begin to open in March with most opened by mid-May as our state's fruit crops hit full production. Recent guidance from the Arkansas Agriculture Department and the Department of Health has classified agriculture as essential which means farmers markets can open. However, the outlined guidance on markets that restricts activities as a result of social distancing will create a number of logistical challenges for market managers, farmers and consumers to manage to remain open. The guidance includes allowing only food products to be sold, restricting the number of customers in the market, and an adequate spacing between farm vendors. AEAB is currently leading an effort with the Arkansas Farmers' Market Association to assess the statewide impact of COVID-19 on farmers' markets.

Customer Engagement: As families shelter in place, online engagement has dramatically increased. This presents an opportunity for farms and markets to innovate their online efforts. A number of markets have gone to online ordering only with selected pick up locations and times for customers. I have personally fielded numerous calls from agents and farmers seeking ways to develop and/or enhance their online presence. A number of resources already exist to aid farmers in promoting their product availability or consumers seeking local products (the Division of Agriculture's MarketMaker, Agriculture Department's Arkansas Grown and other local food directories). While these tools will aid farmers and ranchers in marketing their products, training is needed to enhance the effectiveness of the producer activities. Resources need to be developed and disseminated to help farmers understand targeted online marketing strategies and tactics—branding, product differentiation, market segmentation, relationship marketing—in order to engage customers. A few areas of focus include:

- Online sales (platforms, strategies, building their brand and linking other online tools),
- Delivery and or pick-up options for customers (Community Supported Agriculture (CSA),
- Innovations in food delivery strategies,
- Accepting Supplemental Nutrition Assistance Program (SNAP) benefits to expand farmer/market customer base and sales,
- Leveraging social media and online tools to promote available markets and products.

The Local Governments Sector

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The COVID-19 Pandemic is expected to lead to a recession resulting from a decline in consumer spending associated with an increase in unemployment. Economic forecasts suggest that some of the hardest hit sectors include retail trade, arts, entertainment and recreation, and accommodation and food services.

Because the retail trade and services sectors are expected to lose revenue, counties and municipalities will lose sales and use tax³ revenue as a result of the COVID-19 pandemic. Counties will lose sales tax revenue from the statewide 0.5% sales tax for state and local roads and from their county sales tax. Municipalities will lose revenue from these two sources in addition to any municipal sales tax in their community. Also, municipalities and counties with a hamburger tax will lose revenue resulting from a decline in the travel and tourism business and a temporary restriction on dine-in restaurants.

This decline in sales tax revenue will have a substantial impact on the many counties that rely heavily on their local sales tax to generate revenue to pay for the services they provide to residents and businesses. In 2017, the sales tax generated more revenue for county governments statewide than any other single revenue source. County governments statewide received one-fourth of their total revenue from the sales tax in 2017. Therefore, a decline in sales tax revenue will affect their ability to provide needed infrastructure and services.

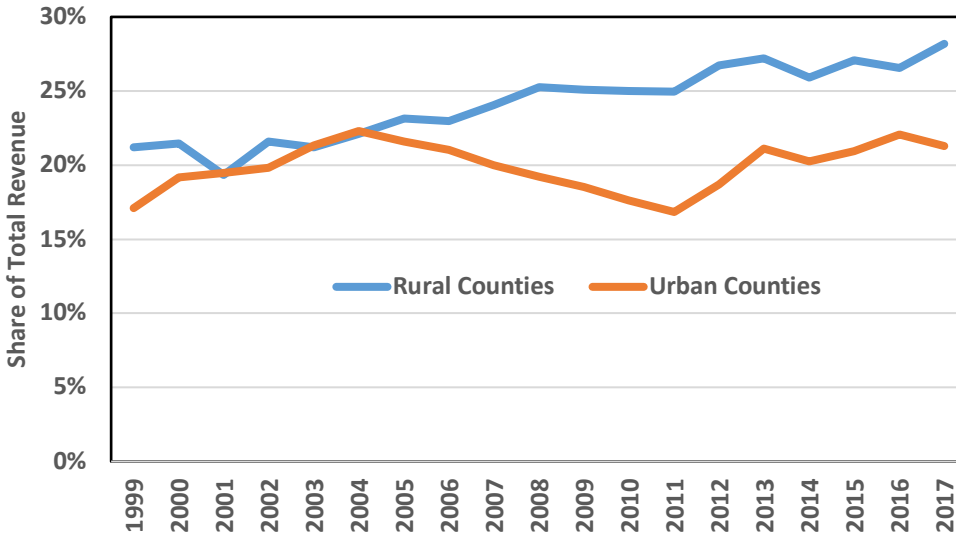
In addition to the importance of local sales tax revenue, counties and municipalities receive funding from the state, which in part is some of the revenue collected from the state general sales tax and other state use taxes. Examples of some state use taxes shared in part with counties and municipalities are the taxes on liquefied gas special fuels, motor fuel tax, motor vehicle registration and license fees, title transfer fees and others.

Rural counties are more dependent on sales tax revenue and state revenue transfers than urban counties.⁴ In 2017 rural counties received approximately 28% of their revenue from the sales tax (Figure 1) and 23% from state transfers. Conversely, urban counties obtain a larger share of their revenue from the property tax, approximately 26% in 2017. Since sales tax revenue fluctuates with the state of the economy, and since rural county governments are more dependent on sales tax revenue, the COVID-19 led recession will greatly impact the ability of rural counties to generate revenue to pay for infrastructure and services. Counties vary greatly in their reliance on the local sales tax to generate revenue, ranging from 0% in one county to 61% in another. Therefore, the short-term impact of COVID will vary greatly among counties.

³ In this document the sales and use tax will be referred to as the sales tax.

⁴ Sources: Revenue Trends of Arkansas County Governments, 1999 to 2017, UA System Division of Agriculture, In Press.; State and Federal Revenue Received by County Governments in Arkansas, 1999-2017, UA System Division of Agriculture, In Press.

Figure 1. Arkansas County Governments' Sales Tax Revenue as Share of Total Revenue



Source: Computed from County Legislative Audit Reports, Arkansas Legislative Audit.

However, there are two mitigating factors that will reduce the effect of the COVID-19 led recession on local government revenue. First, as of January 1, 2020 counties and municipalities began collecting sales tax revenue from remote sellers due to legislation passed by the Arkansas Legislature in 2019. Second, the Coronavirus Aid, Relief and Economic Security (CARES) Act passed by the U.S. Congress provides some additional funding for families, unemployed workers, and state & local governments.

While these mitigating factors are expected to slow and limit the extent of the recession, they are not expected to provide enough assistance to help local governments avoid making budget cuts in 2020.

Long-Term Impacts

Long-term impacts are even harder to predict as we cannot with any accuracy predict how long the recession will last. Local governments that are required to cut their 2020 budgets may delay upgrading and maintaining their infrastructure of roads, bridges, water & sewer systems, solid waste facilities, etc. Delaying the maintenance and upgrading of infrastructure will likely increase the future cost.

Many rural counties were struggling, even before COVID-19, to generate enough revenue to provide needed infrastructure and services. Since these same counties will likely be under pressure to reduce their FY20 budgets, it will be even more difficult for them to maintain and upgrade their infrastructure and services in the future.

The Tourism Sector

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Arkansas like the rest of the USA (and world) is struggling to keep up with the devastating impact of COVID-19. Several states and cities have instituted shelter in place policies. Even before those policies were enacted, many businesses had stopped sending their employees on business trips unless the trip could not be avoided. As more states and cities are instituting shelter in place orders, and the federal government has just extended its social distancing recommendations through the end of April. Airlines, hotels, and restaurants are finding it very hard to find customers.

The tourism industry in the state will find it very difficult to generate revenue and thus maintain employment for the foreseeable future. In 2018, Arkansas employed over 114k people in the Accommodation and Food Service sector and an additional 22k+ in Arts, Entertainment, and Recreation (BEA). These sectors represented roughly 7 and 1.4 percent of the state's total employment (not accounting for indirect and induced employment from these workers spending income on goods and services as they live in the state). Some estimates put lay-offs in these sectors between 80-90% for April and May. Some recovery may be possible in June with only employment being down roughly 50%. All of these estimates are very preliminary.

Many fast food chains (with drive through windows) have seen an increase in activity over the past few weeks as dine-in services have been curtailed. However, if more people fill the unemployment lines these increases are not likely to last for long.

In the longer term (late summer and fall), these sectors could see a slight pick-up in activity (year over year) if the economy gets back to full strength. This is based on national surveys in which households have indicated they will spend more time vacationing at locations where they can drive to easily and reduced their trips that require airline travel (particularly international travel).

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