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COVID-19 Impacts on Arkansas' Agricultural and Rural Economies

July 2020

John D. Anderson, Editor

Foreword

In response to the COVID-19 pandemic in 2020 and the unprecedented economic disruptions that it caused, faculty in the Agricultural Economics & Agribusiness Department (AEAB) at the University of Arkansas (UA) produced a series of regular economic updates for distribution by the UA Division of Agriculture, Cooperative Extension Service. These updates were originally posted to a COVID-19 resources page on the UA Division of Agriculture website (https://www.uaex.edu/life-skills-wellness/health/covid19/COVID-Economic_Impacts_in_Arkansas.aspx).

In order to preserve the information in these publications as well as to provide an easily referenced format for future research, outreach, and educational purposes, these publications are being reproduced as a series of AEAB Staff Papers. The table of contents on the following page individually lists each article compiled in this volume along with its original date of posting. The articles in this volume were all produced in the month of July 2020.

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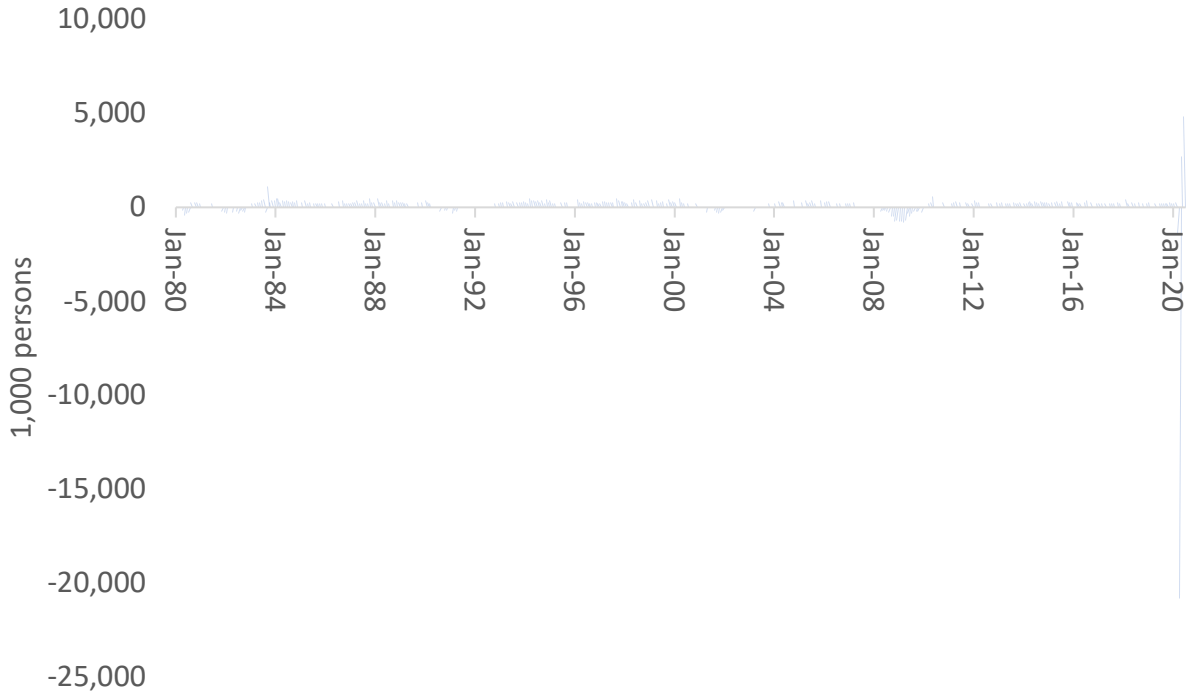
June Employment Report

John D. Anderson

July 2, 2020

On Thursday, the U.S. Bureau of Labor Statistics released the latest monthly Employment Situation Summary, covering employment figures for the month of June. The report was considerably more positive than most pre-report estimates anticipated, suggesting that the recovery in June from COVID-related shutdowns was stronger than expected.

The headline number from the report was an increase in total non-farm payroll employment of 4.8 million persons. This follows an increase of 2.7 million in May. This two-month gain in employment of 7.5 million people is unprecedented in the employment data for the entire post-war period. Unfortunately, it follows a two-month March-April period in which an-also-unprecedented 22.2 million people lost their jobs. Thus, employment remains well below its pre-COVID level; but it has, nonetheless, recovered considerably more rapidly than most observers expected. Figure 1 shows the month-to-month changes in non-farm payroll employment for the past 50 years, illustrating just how dramatic the events of 2020 have been in terms of their impact on the job market.



Data Source: USDA Bureau of Labor Statistics through St. Louis Federal Reserve Bank, FRED Database

Figure 1. Monthly Change in Employment: Total Non-Farm Payroll

Basically, a monthly swing in employment of more than a quarter million or so people is a big deal. For the last four months, employment has gyrated by the millions. Given the employment ground remaining to be made up, the next few months are likely to also include historically large

employment gains. In fact, if that is not the case, it will suggest that the recovery from COVID impacts is stalling out.

The gain in employment for June translated into a drop of 2.2 percentage points in the unemployment rate, which stands now at 11.1%. While this represents an unexpectedly significant improvement over April and May, it is still a historically high rate of unemployment – higher than any normal recession-induced unemployment rate of the post-war period. For the record, the closest unemployment rate to the current one in the post-war record was in December 1982 at 10.8%.

The unemployment rate only considers people who are actively looking for work. When someone drops out of the job market entirely, they are no longer considered unemployed. Thus, it is helpful to consider the labor force participation rate in order to identify what proportion of the eligible work force (i.e., the non-institutionalized, working-age population) is actually working or trying to work. Here, again, the employment report has some positive news. The labor force participation rate for June increased by 0.7 percentage points from the prior month to 61.5%. While moving in a positive direction, this is still almost 2% lower than in February, before the effects of the COVID pandemic hit the market.

In summary, the June Employment Report included some genuinely encouraging news about the pace of economic recovery from COVID. On the other hand, it also highlighted the fact that a return to pre-COVID normal is still a considerable way off. Looking ahead, it will be interesting to see if the pace of the employment recovery holds up in the face of the recent proliferation of COVID cases in a number of large states. If it does, this will bode very well for the overall economic recovery. If not, it will diminish hopes for the best-case-scenario V-shaped recovery.

Coronavirus Food Assistance Program Payments in Arkansas

Scott Stiles, Brad Watkins, C. Robert Stark, Jr., Alvaro Durand-Morat

July 13, 2020

Created through the Coronavirus Assistance, Relief and Economic Security Act (CARES) and coordinated by the USDA Farm Service Agency, the Coronavirus Food Assistance Program (CFAP) direct payments are designed to provide relief to eligible farmers and ranchers facing financial losses due to the impacts of the COVID-19 pandemic. Through CFAP, USDA is making available $16 billion in financial assistance to farmers.

Over $86 million in direct payments have been approved for Arkansas farmers and ranchers through CFAP as of Monday, July 13 according to USDA reporting. Payments to livestock producers comprise nearly 75 percent of the approved CFAP payments for Arkansas. Non-specialty crops account for 23 percent of the total to date. Non-specialty crops eligible for CFAP payments include malting barley, canola, corn, upland cotton, millet, oats, soybeans, sorghum, sunflowers, durum wheat, and hard red spring wheat. Rice and soft red winter wheat were excluded from the CFAP program.

Table 1. Coronavirus Food Assistance Program Payments, Arkansas (as of July 13, 2020)

	Payments	Payments (percent of Total)	Applications
Non-specialty	$19,609,342	23 percent	2,782
Specialty	$1,278,707	1 percent	43
Livestock	$64,668,341	75 percent	11,058
Dairy	$807,587	1 percent	38
Total	**$86,363,977**		**13,921**

Source: USDA, Farm Service Agency.

Table 2 below provides a comparison of cumulative CFAP payments to U.S and Arkansas producers. USDA Farm Service Agency (FSA) has already approved over $5.8 billion in payments to U.S. producers who have applied for the program. FSA began taking applications May 26, and the agency has received 409,423 applications for this program. Arkansas' share of CFAP payments is relatively small at 1.5 percent of the total. Iowa, for example, leads all states in payments for both non-specialty crops (17.8 percent) and livestock (10.3 percent). California leads in specialty crop payments (44 percent). Wisconsin is the top recipient of dairy payments (21 percent).

Table 2. Coronavirus Food Assistance Program Payments, U.S. and Arkansas (as of July 13, 2020).

Commodity	U.S. Payments ($)	Arkansas Payments ($)	Arkansas percent of U.S. Total	Arkansas Ranking
Non-specialty	$1,541,886,148	$19,609,342	1.3 percent	18
Specialty	$158,483,152	$1,278,707	0.8 percent	14
Livestock	$2,973,638,485	$64,668,341	2.2 percent	13
Dairy	$1,198,508,454	$807,587	0.1 percent	45
Total	**$5,872,516,239**	**$86,363,977**	**1.5 percent**	**22**

Source: USDA, Farm Service Agency.

Eligible farmers and ranchers may apply for CFAP direct payments through county USDA Farm Service Agency offices until August 28, 2020. More information on the CFAP program and the application process may be found at farmers.gov/cfap. CFAP payment data will be updated and released by the USDA each Monday at 1 p.m. central time at CFAP Payment Report.

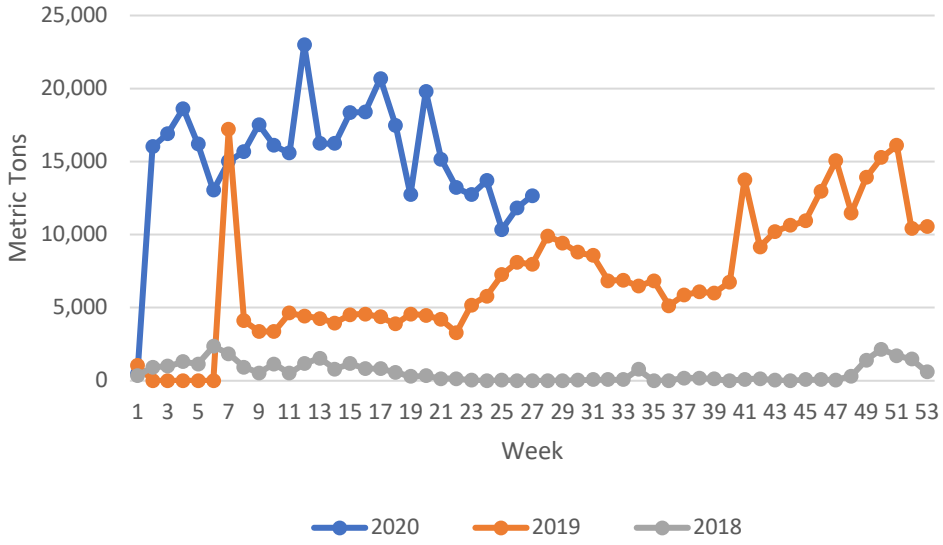
Beef, Pork, and Chicken Exports

John D. Anderson

July 14, 2020

Exports represent a significant component of meat demand. In 2019, 22.9%, 16.4%, and 11.1% of pork, chicken, and beef production, respectively, was exported.[1] A major source of uncertainty in livestock and poultry markets has thus been the extent to which COVID-19 would affect meat and chicken exports. So far, the impact of COVID-19 on exports has been remarkably small for pork and chicken, considerably more significant for beef.

Beef and pork export data are available on a weekly basis. With respect to pork, 2020 weekly exports have exceeded the prior year level for just about every week of the year. The primary reason for this has been strong growth in exports to China. Figure 1 shows weekly pork exports to China for 2018 through 2020 year-to-date.



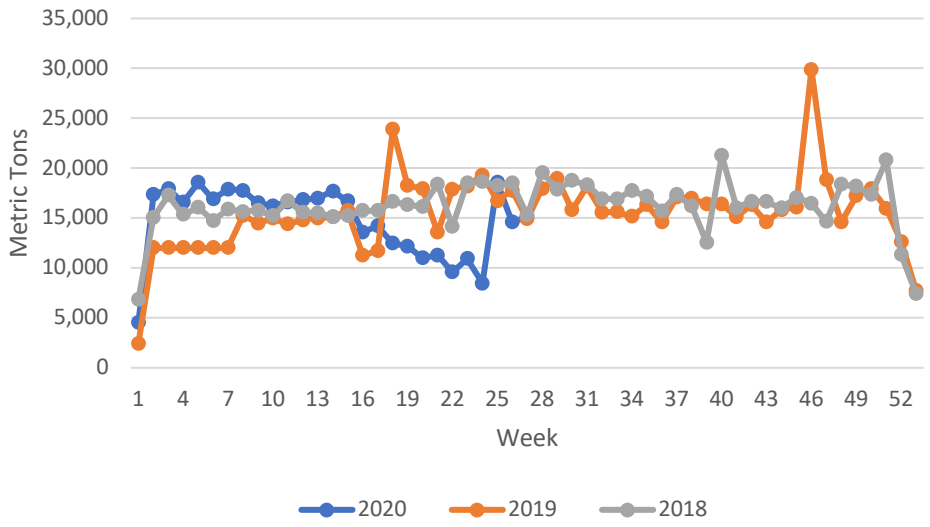
Data Source: USDA Foreign Agricultural Service, Export Reporting System

Figure 1. Weekly U.S. Pork Exports to China

China pork production has been severely hampered by African Swine Fever (ASF). According to USDA estimates, domestic pork production in China in 2020 will amount to about 36 million metric tons (mmt). This is down from over 54 mmt just two years ago and will be, if realized, the smallest domestic pork production in China since about 1997. In short, the reduction in pork production in China has, so far, outweighed any negative effects on pork demand such that U.S. pork exports to China remain quite strong, year-over-year.

[1] These figures are based on annual export and production estimates in the most recent *World Agricultural Supply and Demand Estimates* report from USDA World Agricultural Outlook Board.

On the other hand, beef exports have fallen considerably as a result of COVID-19. This is not likely primarily due to demand effects but rather to the supply constraints that occurred over the last couple of months as a result of COVID-related packing plant disruptions. Figure 2 shows weekly U.S. beef exports to all destinations for 2018 through 2020 year-to-date.

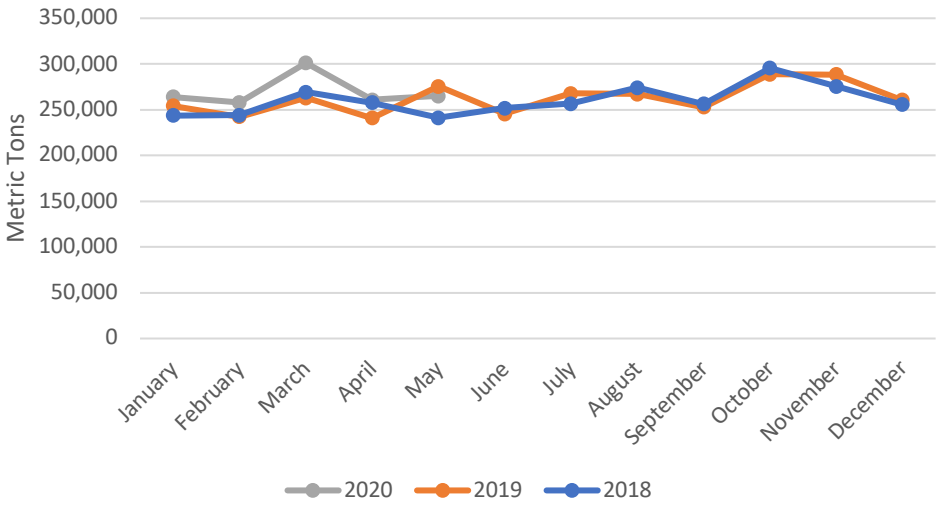


Data Source: USDA Foreign Agricultural Service, Export Reporting System

Figure 2. Weekly U.S. Beef Exports to All Destinations

For much of May and June, exports were obviously lower than over the past couple of years. In fact, monthly data reveal that beef exports for May, at just over 62,000 metric ton, were the lowest for the month of May since 2009. In the most recent three weeks, though, beef exports have largely recovered and are back to about even with the last couple of years.

Data on chicken exports is available on a monthly basis. It is likely that COVID-related disruptions had some adverse impact on chicken exports in May (most recent data available) but that impact does not appear to be too dramatic in historical context. Figure 3 shows monthly chicken exports to all destinations for 2018 through 2020 year-to-date.



Data Source: USDA Foreign Agricultural Service, Global Agricultural Trade System

Figure 3. Monthly U.S. Chicken Exports to All Destinations

Exports were up from year-earlier levels in each of the first four months of 2020 – by as much as nearly 15% in March. After March, chicken exports fell significantly into April, while remaining above the level of the last couple of years. May exports were basically in-line with April. The fact that exports did not fall substantially between April and May (as did beef exports) suggests that COVID-related disruptions were largely manageable in terms of their impact on exports.

Of course, it is impossible to discern from this data what exports might have been in the absence of COVID. Certainly, foreign demand is historically strong, and year-over-year export growth was widely anticipated in the market. These expectations largely had to do with (what else?) China. After several years of avian-influenza-induced market closure, China opened back up to U.S. chicken late last year. With the phase I trade deal in place and with ASF reducing protein supplies in that country generally, the table was set in 2020 for robust growth in chicken exports to China. So far, China has, in fact, been a big customer – including in May. U.S. chicken exports to China have increased every month for the first five months of the year, even at April and May exports to the rest of the world fell sharply. In May, China accounted for over 14% of all foreign sales – the largest share of U.S. chicken exports for that country since 2009. In short, chicken exports probably have suffered some from COVID-19 disruptions, but with strong fundamentals in China, exports have held up well in recent historical context.

Cattle on Feed Update

John D. Anderson

July 24, 2020

USDA National Agricultural Statistics Service (NASS) released the latest *Cattle on Feed* (*COF*) inventory report on Friday afternoon. Key numbers in the report are summarized in table 1.

Table 1. *Cattle on Feed* Inventory Summary: July Report

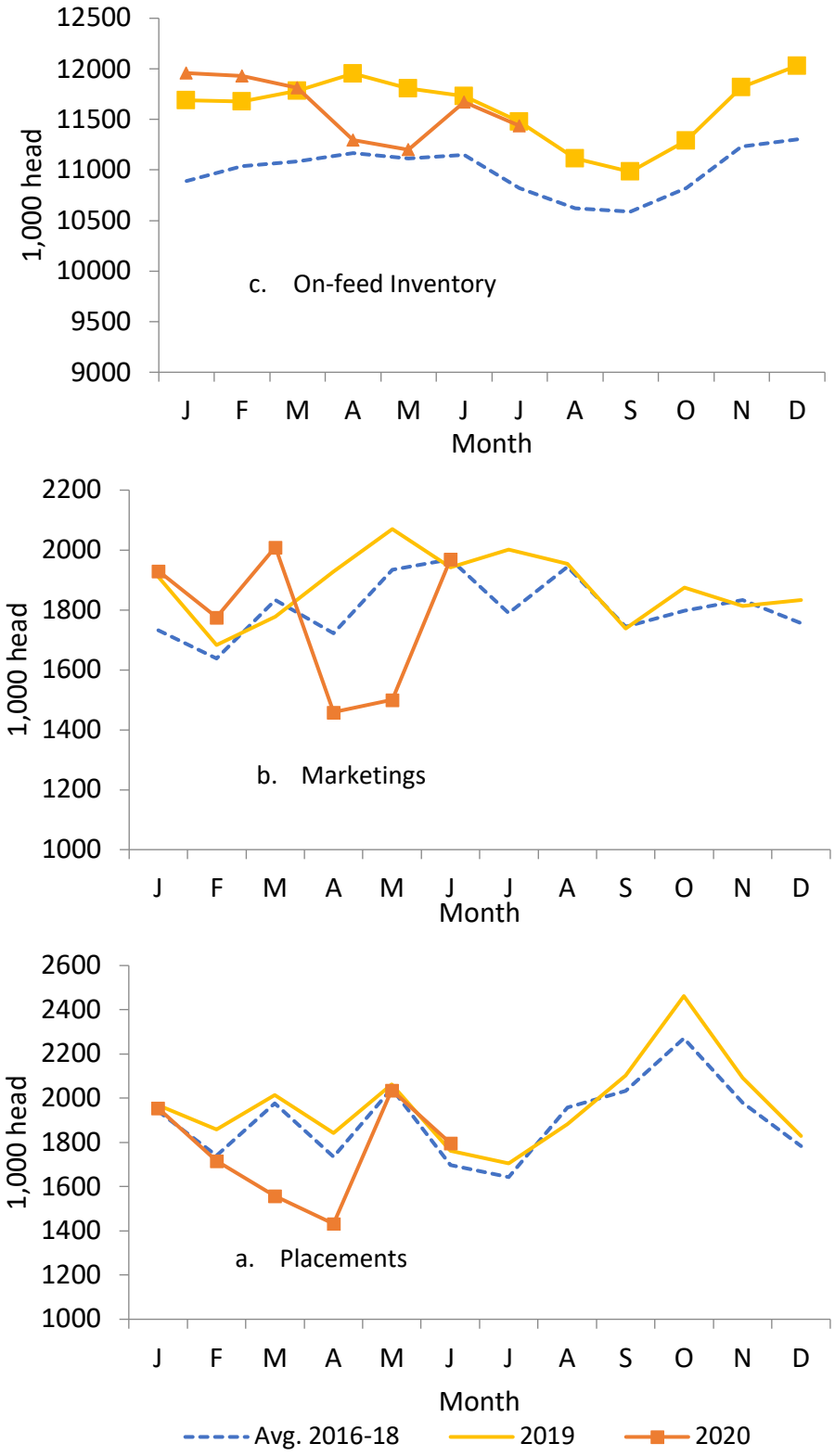
	1,000 head	% of 2019	Pre-Report Estimate*
On Feed June 1	11,671		
Placements in June	1,798	102.1	104.9
Marketings in June	1,969	101.3	100.7
On Feed July 1	11,438	99.6	100.2

*Source: Livestock Marketing Information Center.

This month's report may be thought of as a return to something like normalcy in terms of feedlot inventories and operation. On balance, the July 1 on-feed inventory is about even with last year's figure (figure 1a). Overall, after dropping sharply in April and May due to a sharp slow-down in placements, the total on-feed inventory has returned to a fairly normal seasonal pattern at a level close to the previous year. Front-end inventories (i.e., cattle that have been on feed for long enough to be considered essentially market ready) remain large. The number of cattle on feed for 120 days or more dropped in June as marketings rebounded, but they remain almost 20% larger than they were a year ago.

Marketings were up a bit from a year ago but were sharply higher than the past two months (figure 1b). With slaughter levels returning to about even with last year's pace, feedlots were able to get back to a normal pace of marketings as well.

The biggest discrepancy from a year ago was in the placements figure, and that was a relatively small year-over-year deviation at that (figure 1c). For what it's worth, COVID seemed to have had little to do with placements in June. The bigger factor was that deteriorating pasture conditions due to a widening western drought were pushing cattle off of rangeland and pasture and into feedlots. This effect was smaller than many pre-report analysts anticipated, as the figures in table 1 suggest.



Data Source: USDA National Agricultural Statistics Service

Figure 1a-c. Cattle on Feed Inventory, Monthly Marketings, and Monthly Placements

USDA National Agricultural Statistics Service also released the July 1 *Cattle* inventory report on Friday. This mid-year update of cattle inventories is not generally as highly-anticipated as the January inventory report, which is considerably more comprehensive in that it includes state-level inventory figures. This year's mid-year inventory report is potentially of interest for providing on early read on COVID impacts on cattle numbers. Going into the year, the beef industry was in the contraction phase of the normal cattle cycle. That likely has not changed. Indeed, the July 1 beef cow inventory was down by almost 1% from a year ago.

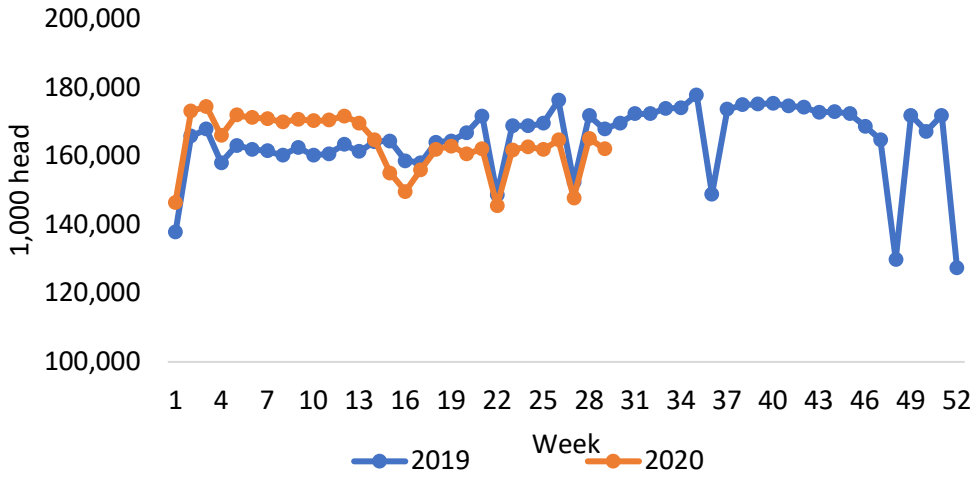
It may well be, though, that COVID slowed the pace of contraction by making it more difficult to get cows slaughtered. Similarly, the number of heifers reported in inventory for beef replacement was even with last year. This represents a smaller decline in beef replacement heifers from January to July than has been the case in the last three or four years. It may be that uncertainty in the feeding sector that massively disrupted placements encouraged producers to hold onto a few more heifers than they otherwise would have, at least temporarily. It seems unlikely, based on 2020 price signals, that cattle producers would be all that interested in shifting back into expansion mode yet.

Chicken Production and Wholesale Prices

John D. Anderson

July 24, 2020

Data on broiler processing volumes suggest that, while the sector has recovered from the worst of the massive shock from COVID-19, the effects of the pandemic are still being felt. Figure 1 shows weekly broiler slaughter for 2019 through the week ending July 18, 2020 (most recent available).

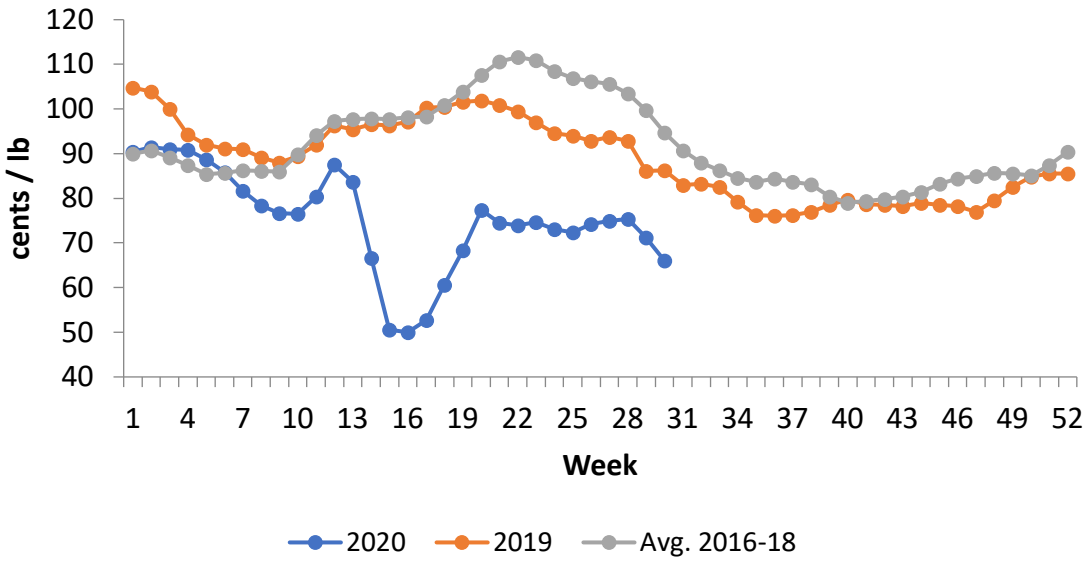


Data Source: USDA Agricultural Marketing Service through Livestock Marketing Information Center

Figure 1. Weekly Federally Inspected Young Chicken Slaughter

Processing volumes have bounced back from the sharp declines posted at the end of April; but those volumes remain consistently below 2019 levels – despite the fact that the industry was on pace for a substantial year-over-year increase in production at the beginning of 2020. Since the beginning of April, young chicken slaughter has averaged about 3.5% below the prior year level. For much of that time, as integrators worked through significant processing plant disruptions, bird weights were quite a bit higher than normal. For example, for the five weeks from the middle of May through the middle of June, the federally-inspected young chicken live weight averaged 6.42 pounds. This was nearly 5% higher than the average weight for this five-week period over the previous five years. This increase in bird weights kept broiler production close to or above year-ago levels for most of May and the first part of June despite reduced slaughter volumes. For about the past month, though, bird weights have returned to more normal levels while, as noted, slaughter volumes continue to lag. Thus, total broiler production in recent weeks has been significantly below the prior year. Since mid-June, broiler production is averaging almost 4% below 2019. Given the magnitude of the supply and demand side shocks that the industry has received so far in 2020, this is a remarkable performance. Still, it represents a significant loss for an industry that started the year expected growth of greater than 3%.

In fact, the continuing lag in broiler production most likely understates the negative effects of COVID on the industry, capturing primarily the supply-side effects of processing plant disruptions. Despite the reduced availability of product, broiler prices are mostly lower than year-ago levels. Figure 2 shows the national average broiler composite price (a weighted average of whole bird prices).



Data Source: USDA Agricultural Marketing Service through Livestock Marketing Information Center

Figure 2. Weekly Average National Broiler Composite Price

Most individual cut prices are also significantly lower over the past month or so. For example, boneless/skinless breast and leg quarter prices are down 6% and 13%, respectively, since mid-June.

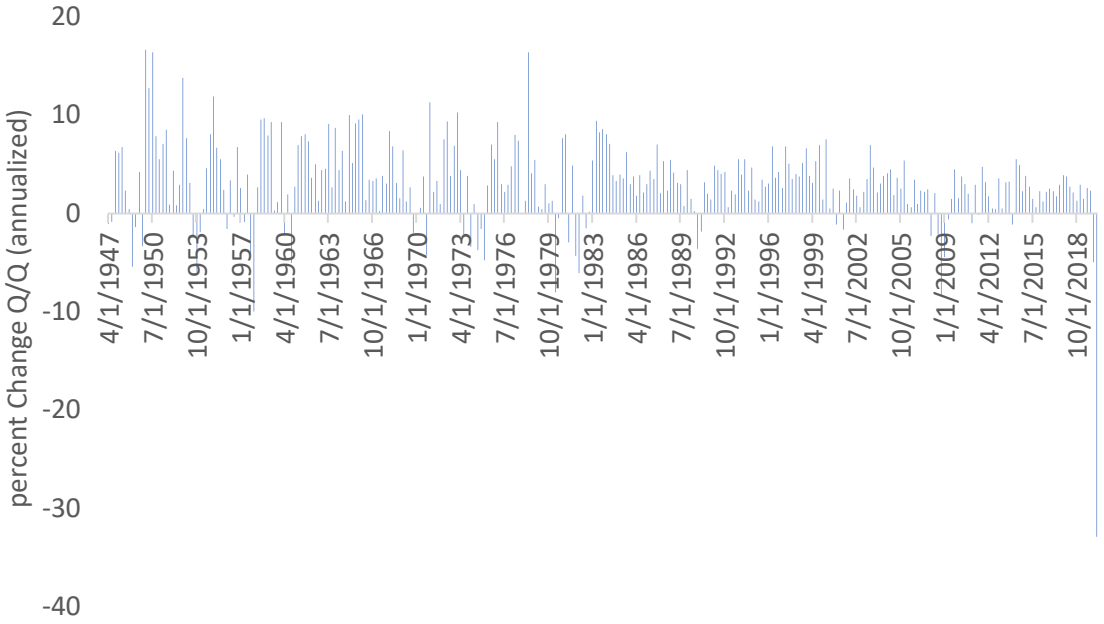
With steady demand, a down shift in supply would result in an increase in prices. The current lower prices accompanying a lower supply suggest a decline in demand – not too surprising given the negative impact of COVID on the general economy and particularly on the food service sector. Lower prices and production ultimately mean lower value in the sector. As noted, this is a relatively dramatic swing for an industry that was anticipating robust growth before the pandemic hit.

Second Quarter Gross Domestic Product

John D. Anderson

July 30, 2020

On July 30, the U.S. Department of Commerce Bureau of Economic Analysis released the first estimate of second quarter gross domestic product (GDP). This is arguably the most comprehensive look yet at the impact of COVID-19 and the response to it on the nation's economy. Not surprisingly, that impact has been severely negative. In the second quarter of this year, real (i.e., inflation-adjusted) GDP declined by about 9.5 percent compared to the first quarter. Quarter-to-quarter change in GDP is generally reported as a seasonally-adjusted annualized rate. On that basis, the decline in GDP amounts to just under 33 percent in comparison to the previous quarter. As figure 1 shows, that is an historic decline. Quarterly GDP data go back to 1947, and there is no comparable quarter-to-quarter decline over this entire period.



Data Source: St. Louis Federal Reserve Bank, FRED Economic Data

Figure 1. Gross Domestic Product: Annualize Percentage Change from Previous Quarter

To review, briefly, GDP is the value of all the goods and services produced in the United States. While GDP is essentially just the aggregation of spending on a huge array of individual items, it is simpler to think of it as the sum of only four major categories of spending: consumer spending on goods and services, government spending and investment, private investment, and net exports. This allows a bit closer scrutiny of the broad sources of any gains or losses in GDP. Clearly, in 2020.Q2, the primary source of the decline in GDP was consumer spending.

Table 1 shows GDP and its major components for the first two quarters of 2020. Note that personal consumption expenditures are by far the largest component of GDP, accounting for just under 70 percent of the total. Thus, the relatively large decline in consumer spending accounts for most of

the drop in GDP. Private investment accounts for the remainder of the GDP decline. Both government spending/investment and net exports actually represented positive contributions to the GDP change in the second quarter.

Table 1. Real Gross Domestic Product and Major Components: 2020.Q1 and 2020.Q2 (billions of dollars)

	2020.Q1	2020.Q2	Change
Gross Domestic Product	19,010.8	17,205.8	-1,805.0
Personal Consumption Expenditures	13,118.4	11,796.6	-1,321.8
Gross Private Domestic Investment	3,334.0	2,817.7	-516.3
Net Exports of Goods & Services	(788.0)	(780.7)	7.3
Government Consumption Expenditures and Gross Investment	3,347.9	3,369.9	22.0

Notes: totals may not add up due to rounding.
Data Source: U.S. Department of Commerce, Bureau of Economic Analysis

It is important to note that government transfer payments don't show up directly in GDP figures because they don't represent the purchase of goods or services. Any goods or services purchased by the recipients of those transfers do show up in GDP. Thus, the big surge in government transfers occasioned by the implementation of the Coronavirus Aid, Relief, and Economic Security (CARES) Act is not the cause of the increase in government spending. That increase reflects increased direct expenditure by the government to purchase goods and services and on investments (e.g., durable equipment). This growth in government spending took place almost exclusively at the federal level. On net, state and local government spending fell rather sharply in 2020.Q2, offsetting over half of the increase in federal spending. This should not be too surprising. State and local government revenue depends heavily on sales taxes, which obviously declined along with personal consumption expenditures. Also, many state governments operate on a balanced budget principle and so must match expenditures to revenues much more quickly than does the federal government.

Personal consumption expenditures fell for both goods and services, but the decline was far more significant in services. Total spending on services fell by a little over 13 percent from the first to the second quarter. The largest declines were in spending on health care, food services and accommodations, and recreation services. It is mildly ironic that one of the largest overall declines in spending during a pandemic occurred with respect to health care. That demonstrates the extent to which non-COVID health services were displaced by COVID-19, either directly because of facility shutdowns or indirectly because people avoided health care facilities for fear of COVID exposure.

Spending on goods was only down about 3 percent, and that was due almost entirely to a decline in spending on non-durable goods. Durable goods spending was down by less than half-a-percent in 2020.Q2. The non-durable goods posting the largest declines in 2020.Q2 were clothing/footwear, gasoline, and food. Again, given the massive runs on grocery stores during the height of the pandemic, it may seem odd that spending on food went down at all. Note, though, that GDP figures

account for value and not quantity. Much of the stockpiling that occurred was focused on staple items, which tend to be relatively lower-valued items.

With large transfers from the federal government and an overall slowdown in spending, consumer saving was quite high in the second quarter. For the entire quarter, the personal savings rate worked out to 25.7 percent. This is about three times higher than normal. Such a high savings rate is indicative of the level of uncertainty that consumers were feeling in the second quarter.

In summary, the COVID-19 pandemic delivered a tremendous blow to the U.S. economy in the second quarter of 2020. We certainly have good reason to hope that this will represent the deepest part of the COVID-19 recession. Most state restrictions on businesses began to ease in late-May or early-June. Thus, third quarter figures will reflect a more economically active time period and should be considerably improved from the second quarter. Still, real recovery will require a return of consumer confidence that appears to yet be lacking, particularly as COVID-19 continues to spread actively in many parts of the country, including in Arkansas. These most recent GDP data show the severe economic consequences of COVID-related business shutdowns and thus highlight the urgency of finding effective ways to manage the COVID threat.

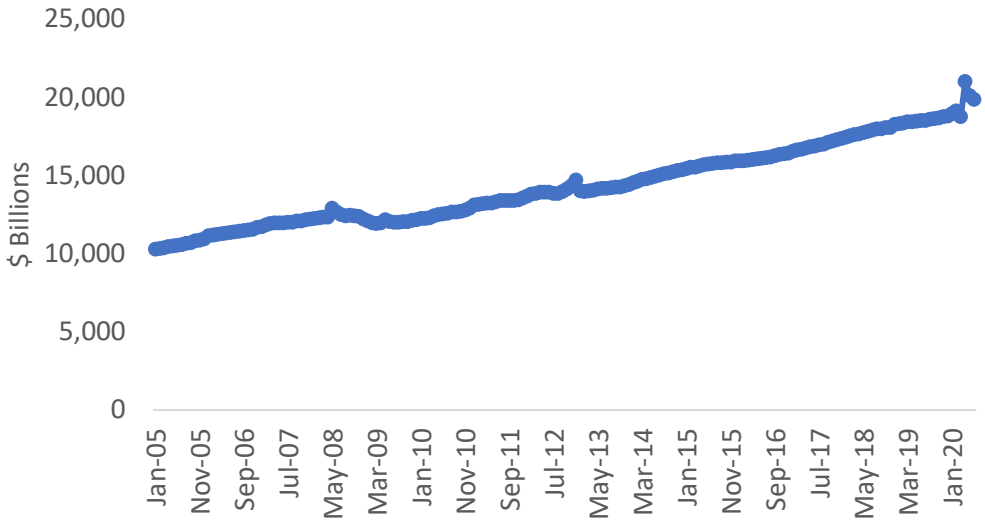
June Personal Consumption Expenditures

John D. Anderson

July 31, 2020

On July 31, the U.S. Department of Commerce Bureau of Economic Analysis released the June update on personal income and expenditures. This report provides a useful summary of the impact of COVID-19 and the response to it on consumer behavior.

Personal income fell in June for the second straight month; however, personal income remains historically high. Figure 3 shows monthly aggregate personal income since 2005.



Data Source: St. Louis Federal Reserve Bank, FRED Economic Data

Figure 1. Monthly Personal Income

Employee compensation and proprietor's income were both higher in June compared to both May and April. The month-to-month drop in personal income was due to a reduction in government transfers. This was mostly due to a slowdown in direct payments under the provision of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Despite a recovery of economic activity in June, compensation from unemployment insurance was higher in June than in May.

Personal consumption expenditures also increased in June as state economies began opening up. Expenditures were up across all major spending categories: durable goods, non-durable goods, and services. With income down and expenditure up, month-over-month, the personal savings rate declined significantly from May to June. Still, the personal savings rate for June came in at 19 percent. This is a historically high rate of savings, and it suggests that consumers are still engaging in considerable precautionary savings.