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COVID-19 Impacts on Arkansas' Agricultural and Rural Economies

October 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 October 2020.

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September Personal Income and Outlays Report

John D. Anderson

October 1, 2020

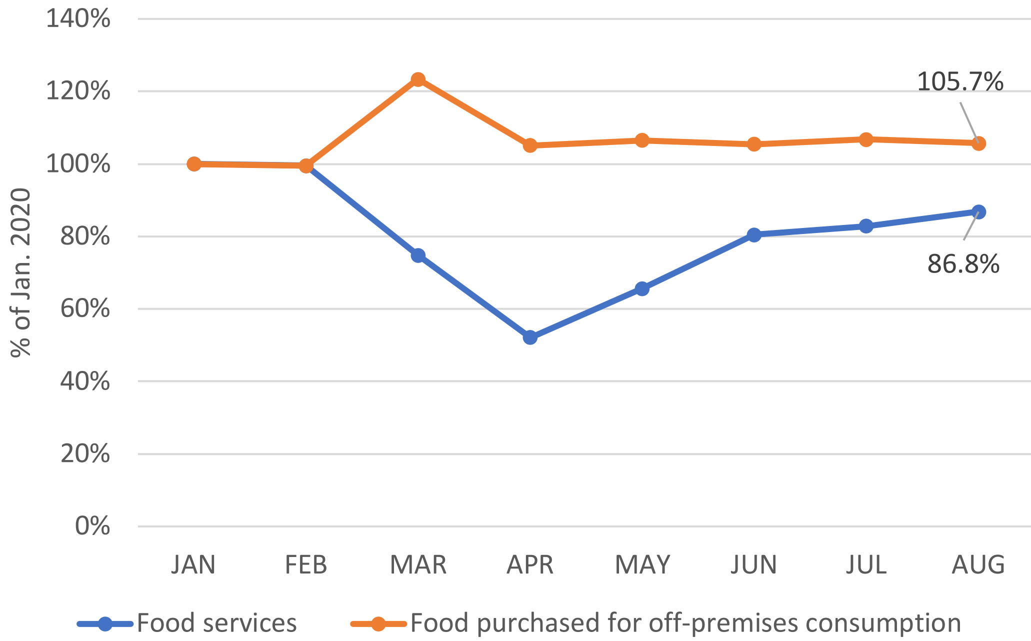
On October 1, the U.S. Department of Commerce Bureau of Economic Analysis (BEA) released their monthly update of personal income and expenditures through August. This was a highly-anticipated report, as it is the first look at consumer incomes and spending since the expiration of enhanced unemployment benefits at the end of July. In light of this fact, expectations were for a significant drop in personal income. The consensus pre-report estimate was for a decline in personal income of just under 2.5% from July to August. The actual figure came in just a bit worse than that: personal income declined by 2.7% (or $543.5 billion) from July to August.

The decline in personal income was more than accounted for by a decline in unemployment benefits. Unemployment insurance payments declined, in aggregate, by $687 billion in August. Other current transfers from the government, which accounts for most other ad hoc COVID assistance, was down by almost $57 billion. This decline in transfers was partially offset by increases in employee compensation ($136.4 billion), proprietors' income ($43.7 billion), rental income ($9.6 billion), and income on assets ($5.3 billion).

Wages and salaries increased for the fourth straight month in both goods-producing and service-producing industries. Since the beginning of re-opening in May, the pace of recovery in wages and salaries in goods-producing industries has progressively slowed. By contrast, wages and salaries in service-producing industries rose by more in August than in July, almost certainly reflecting a bit more robust recovery in travel and hospitality industries in the more recent month. Personal consumption expenditure data support this notion. Food services and accommodations spending increased by almost 7% from July to August; that's about double the pace of increase over the preceding month. Recreation services spending dipped just a bit overall from the prior month, but there were a couple of individual categories of spending in that broader class that are worth a mention. Spending at movie theaters increased by 239% in August over the prior month. Amusement parks and campgrounds marked a third consecutive month of 20% growth in spending; and museums and libraries posted a healthy 13% growth in spending. While spending in all of these categories remains far below pre-COVID levels, this surge in growth does offer some evidence that – either out of COVID fatigue or genuine gains in confidence – consumers are at least tentatively moving back toward more normal behavior.

Looking specifically at spending on food, consumer decisions are still being affected by COVID-related disruptions. Spending on food for at-home consumption, despite a 1% drop from July to August, remains almost 6% above pre-COVID (i.e., January 2020) levels. On the other hand, despite rising by almost 5% in August, spending on food away from home remains almost 13% below pre-COVID levels. Combined spending on food for at home consumption and food services is still about 3.5% lower than it was in January. That spending is skewed far more toward at-home consumption as well. In January, spending on food services amounted to about 96% of spending on food for at-home consumption ($715.5 billion vs. $745.6 billion). In August, that proportion was less than 80%. This data makes clear that the food service sector, while definitely recovering, continues to face significant challenges and remains a weak spot for demand for agricultural products.

Figure 1 shows how monthly spending on food and food services have been affected by COVID-related disruptions.



Data Source: U.S. Department of Commerce, Bureau of Economic Analysis

Figure 1. Monthly Personal Consumption Expenditure on Food for at home and Food Services as a Percent of January 2020

In aggregate terms, the decline in food service spending has been quite large. For example, August spending on meals at limited service restaurants (fast food) and other eating places (including fast/casual) was almost $60 billion lower than in January. The decline in food service spending is clearly a negative demand-side factor for meat, particularly for beef and chicken, which count on food service demand for a relatively high proportion of their product. Chicken would seem to be particularly vulnerable to this effect since so much of the chicken that goes to food service channels is relatively high-valued product: boneless/skinless breasts, breast tenders, wings. It is difficult to clearly quantify these effects, though, since we can't decompose food service spending into its component parts. Worth noting, though, the national broiler composite wholesale price as of the last week of September was almost 20% lower than a year ago – despite the fact that on the supply side of the market, weekly production has been running consistently below year-ago levels since before the middle of the year.

Employment Situation Report for September

John D. Anderson

October 2, 2020

On October 2, the U.S. Department of Labor's Bureau of Labor Statistics (BLS) released the *Employment Situation* report for September 2020. The report documents the ongoing challenges facing the labor market as a result of the COVID-19 pandemic.

Job gains in September continued at a reasonably firm pace, with 661,000 total nonfarm payroll jobs added during the month. Under normal circumstances, this would be an astronomical rate of job growth. These are not, of course, normal circumstances.

September's job growth was actually the slowest since the jobs recovery began in May. It was less than half of August's employment gain of 1.489 million jobs. To be fair, the slowing pace of job recovery was expected: the massive spike in re-employment associated with widespread state re-openings has largely passed. The economy is now back to the mode of trying to manage more incremental growth as consumer behavior slowly inches back toward normal. The 661,000 jobs added was a bit to the low side of pre-report expectations but was not wholly unanticipated by the market.

On balance, unemployment remains fairly high in historic terms. Since May, the economy has added back 11.4 million jobs against the 22.2 million that were lost in March and April. The unemployment rate in September clocked in at 7.9%, edging down from August's 8.4%. At this point, the unemployment rate is lower than it was coming out of the Great Recession in 2010. Figure 1 shows the unemployment rate (seasonally adjusted) since January 2005.

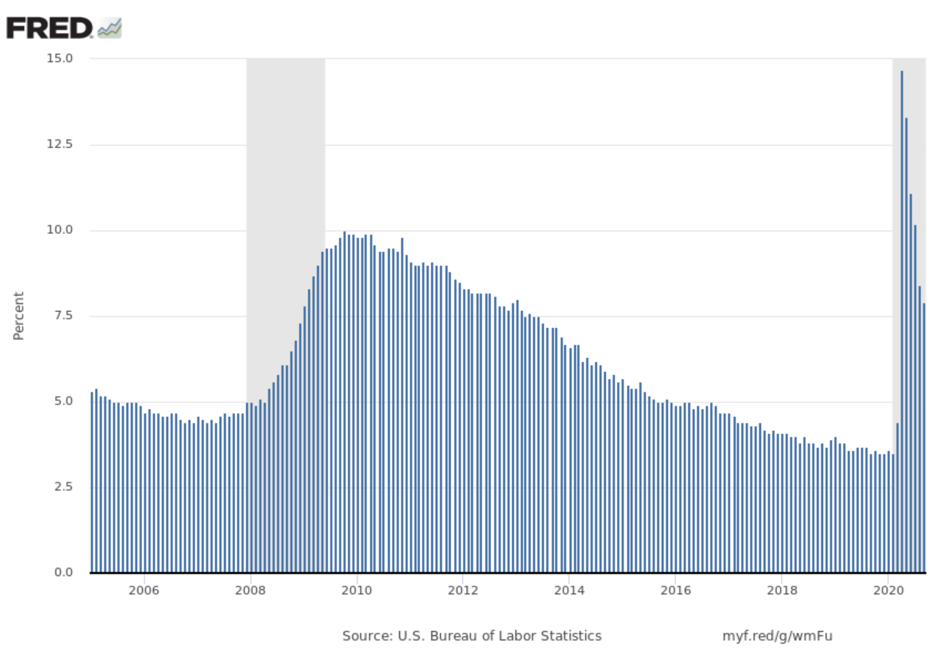


Figure 1. U.S. Unemployment Rate: Monthly, Seasonally Adjusted

The largest gains in employment in the September report were, not surprisingly, in the service-providing sector, reflecting the ongoing recovery in food service and travel- and leisure-related industries. Total gains in the service-providing category amounted to 784,000 jobs. This compares with gains of 93,000 jobs in the goods-producing sector.

The biggest drag on employment in September was from the public sector. Government jobs declined by 216,000 in September. Much of this was expected by the market, as these losses included the anticipated termination of temporary census workers. These were part of the almost 34,000 federal jobs cut in September. The largest losses, though, were at the local level, with a net of 134,000 local government jobs cut. This included just over 231,000 local government jobs cut in education, partially offset by 96,400 local government jobs added in other areas.

Looking ahead, the job market has quite a bit of remaining ground to recover. As figure 1 shows, we are still quite a ways from the pre-COVID unemployment rate of just 3.5%. The proportion of the population that is working also remains well below pre-COVID levels. Figure 2 show the Employment-Population Ratio (i.e., number of employed persons as a percent of the total population).

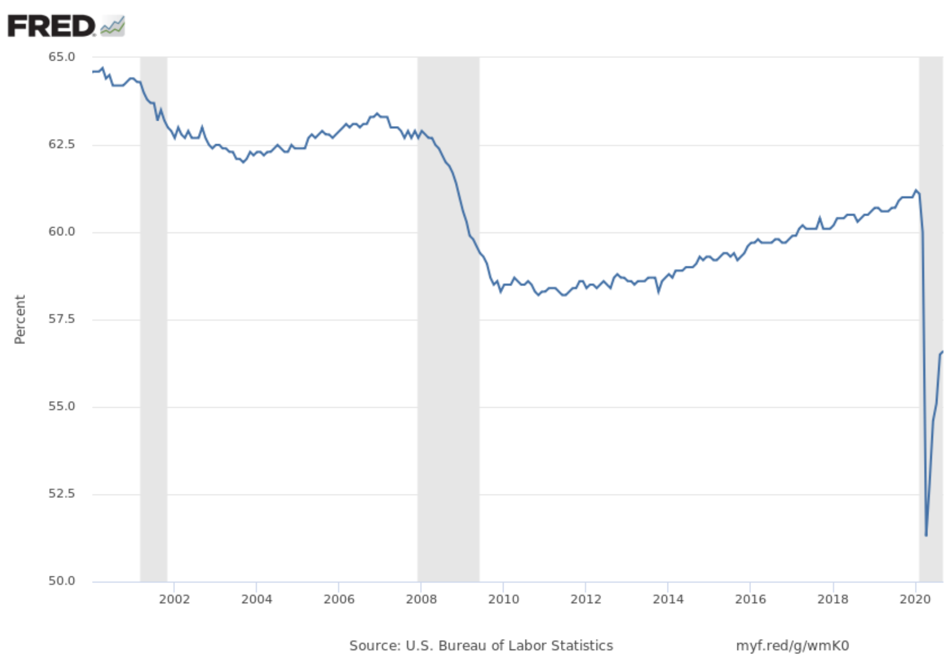


Figure 2. U.S. Employment-Population Ratio: Monthly, Seasonally Adjusted

As this figure shows, the labor market has only recovered about half of COVID-related losses in this metric. As with the unemployment rate, further gains will be harder to come by as the pace of COVID recovery slows. This will likely be the case until consumers regain the confidence to fully resume their normal, pre-COVID patterns of behavior.

Beef Trade

James Mitchell

October 8, 2020

Yesterday, USDA's Economic Research Service released its latest monthly trade data for meat and livestock. You can find livestock and meat trade data and documentation at https://www.ers.usda.gov/data-products/livestock-and-meat-international-trade-data/. COVID-19 has impacted U.S. commodity markets in several ways, one of which is international trade. For this report, we will focus on U.S. beef trade.

U.S. Beef and Veal Exports

Figure 1 plots monthly U.S. beef and veal exports, where volume is measured on a carcass weight basis. Year-to-date totals for beef and veal exports are currently running 6.4% below 2019 levels for the Jan-Aug period. August's most recent data has the U.S. exported 267.7 million pounds, which is 2.4% above August 2019 levels and 12.6% above the 2014-2018 August average. August marks the second consecutive of increased beef and veal exports. June exports were down 38.5% relative to June 2019 and 21.9% below the 2014-2018 June average. The U.S. is forecasted to export 2.916 billion pounds of beef in 2020, which is a 3.6% decline from 2019 total beef and veal exports.

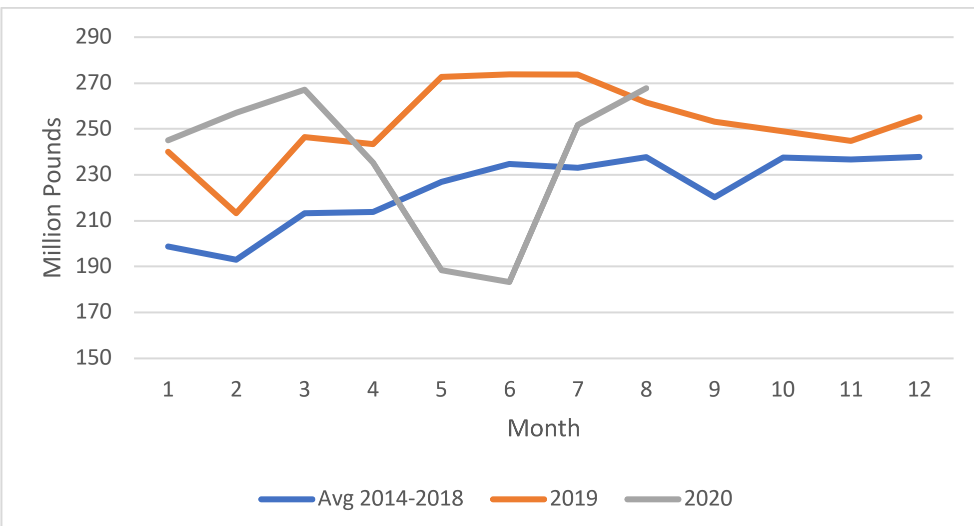


Figure 1. Monthly U.S. Beef and Veal Exports (Carcass Weight)
Source: USDA ERS

Figure 2 breaks out U.S. beef and veal exports for the top four destinations for U.S. beef. We have started to see some export numbers recover for each of the top four markets for U.S. beef. In 2019, Japan accounted for 26.4% of total U.S. beef and veal exports. Year-to-date totals show exports to Japan up 3.6% relative to the same period for 2019. Currently, August 2020 exports to Japan are down 1.7% relative to August 2019. Thus far, May was the lowest for beef and veal exports to Japan. May 2020 exports to Japan were down 26.3% relative to May 2019 and represents a 35% decline from April 2020. In 2019 beef and veal exports to Canada accounted for 8.9% of total U.S. beef and veal exports. Year-to-date totals show U.S. beef and veal exports to Canada are up 11.2%

relative to the same period in 2019. Much of this is attributed to the increase in exports to Canada that were experienced pre-COVID-19 in 2020. Through the summer, exports to Canada remained well below historical levels when exports are usually highest. At their lowest, beef and veal exports to Canada were down 17.6% in May relative to 2019.

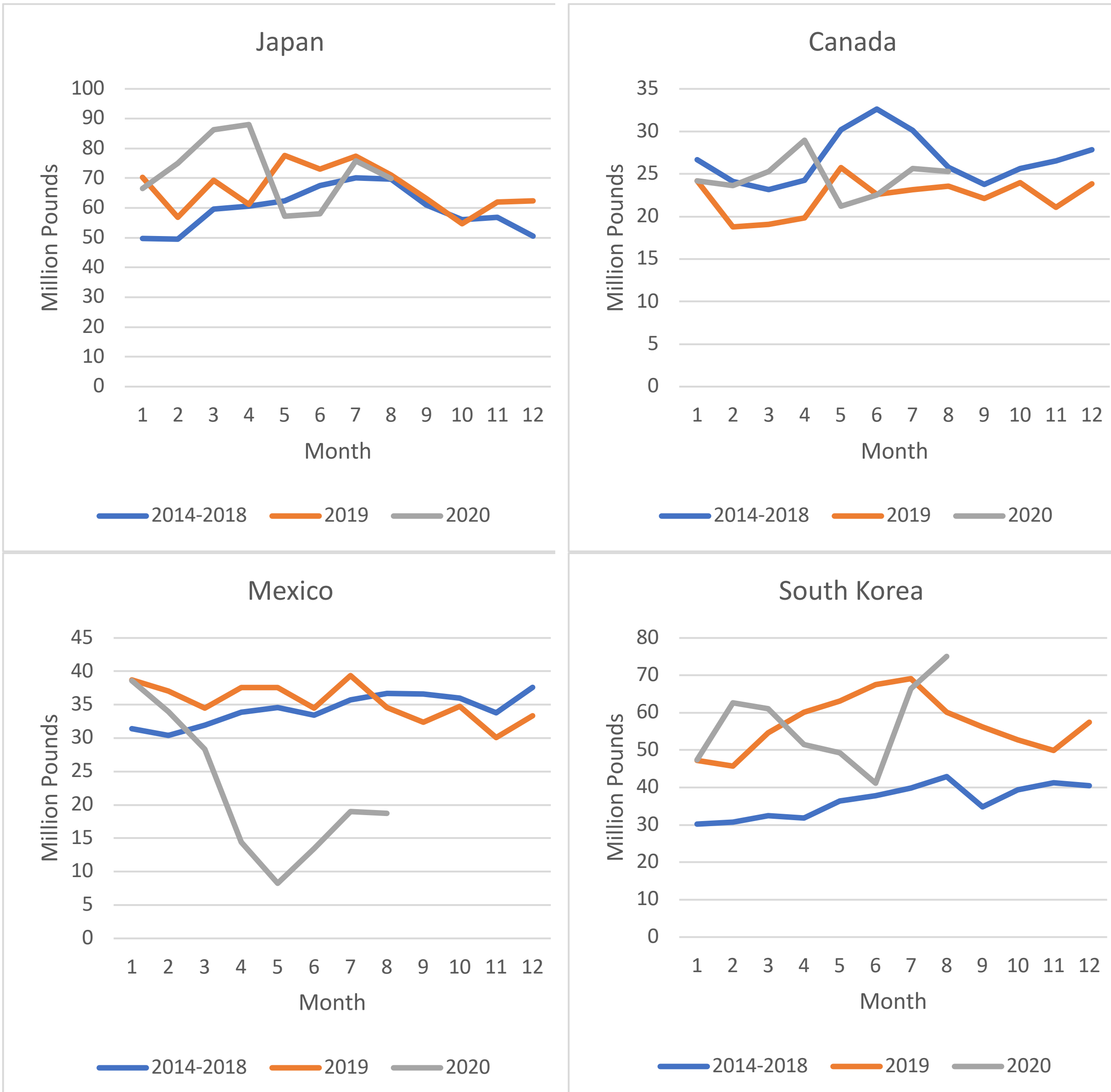


Figure 2. Monthly U.S. Beef and Veal Exports to Japan, Canada, Mexico, and South Korea (Carcass Weight)
Source: USDA ERS

In percentage terms, the U.S. has experienced massive declines in beef and veal exports to Mexico and South Korea, accounting for 14% and 22.6% of total U.S. beef and veal exports in 2019. However, recent data shows improvements in exports to South Korea. Beef and veal exports to Mexico remain well below historical levels. Year-to-date beef and veal export totals for 2020 are down 2.8% to South Korea and 40.5% to Mexico relative to the same period in 2019. Beef and veal exports to South Korea and Mexico were at their lowest in June and May, respectively, relative to the same month in 2019. The most recent data shows that exports to South Korea were up 24.7% in August relative to the same month in 2019. August Beef and veal exports to Mexico remained well below 2019 levels for the same month. Specifically, in August, exports to Mexico were 45.9% below August 2019 levels

There are two primary reasons behind the decline the U.S. has experienced in beef and veal exports. The first is a domestic supply problem, and the second highlights the global nature of COVID-19 and its macroeconomic effects. Through April and May of this year, the U.S. experienced significant strain on its meat processing capacity as plants began to close following clusters of COVID-19 outbreaks in the meat processing labor pool. Processing plants that remained open experienced several logistical and worker safety and health challenges that likely kept plants from operating at optimal capacity. Simply put, it is hard to maintain export numbers when beef production is down and supplies are tight. COVID-19 has had a significant impact on the global economy and the economies of many importing countries of U.S. beef. Sharp declines in a country's GDP and fluctuating exchange rates influence international trade.

U.S. Beef and Veal Imports

Figure 3 plots monthly U.S. beef and veal exports where volume is measure on a carcass weight basis. Year-to-date totals for beef and veal imports are currently running 11.5% above 2019 levels for the Jan-Aug period. August's most recent data shows the U.S. imported 350.8 million pounds, which is 32% above August 2019 levels and 27.6% above the 2014-2018 August average. However, beef imports have declined by 6.9% since July. The U.S. is forecasted to import 3.122 billion pounds of beef in 2020, which is a 2.1% increase from 2019 total beef and veal imports.

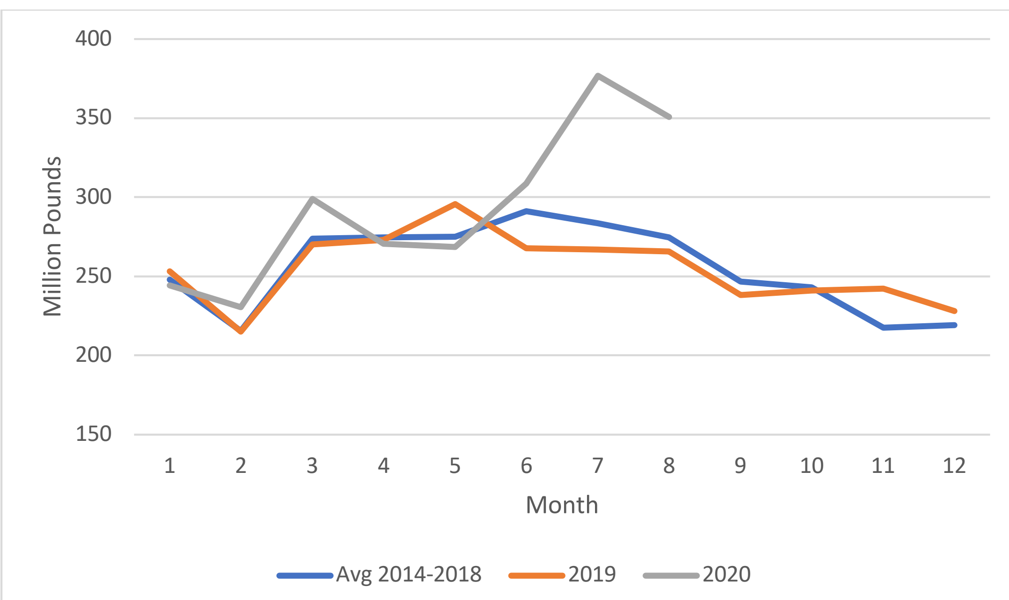


Figure 3. Monthly U.S. Beef and Veal Imports (Carcass Weight)
Source: USDA ERS

Figure 4 breaks out U.S. beef and veal imports for the top four sources. In 2019, Canada accounted for 27.7% of total U.S. beef and veal imports. Year-to-date totals have beef imports from Canada down 4.3% relative to the same period for 2019. Currently, August 2020 beef and veal imports from Canada are 4.7% above August 2019 levels. August marks the third consecutive month for beef imports from Canada being above 2019 levels. In percentage terms, the largest increase in beef imports has come from Mexico. In 2019, Mexico accounted for 19% of total U.S. beef and veal imports, and year-to-date totals have 2020 beef and veal imports 26% above 2019 levels for the Jan-Aug period. Year-to-date totals for beef imports from Australia and New Zealand are down 1.3% and up 18.2%, respectively. It is essential to recognize that imported beef types complement the U.S. beef production system and support an important domestic beef market. Higher U.S. beef imports this year relative to historical levels is a function of U.S. ground beef demand.

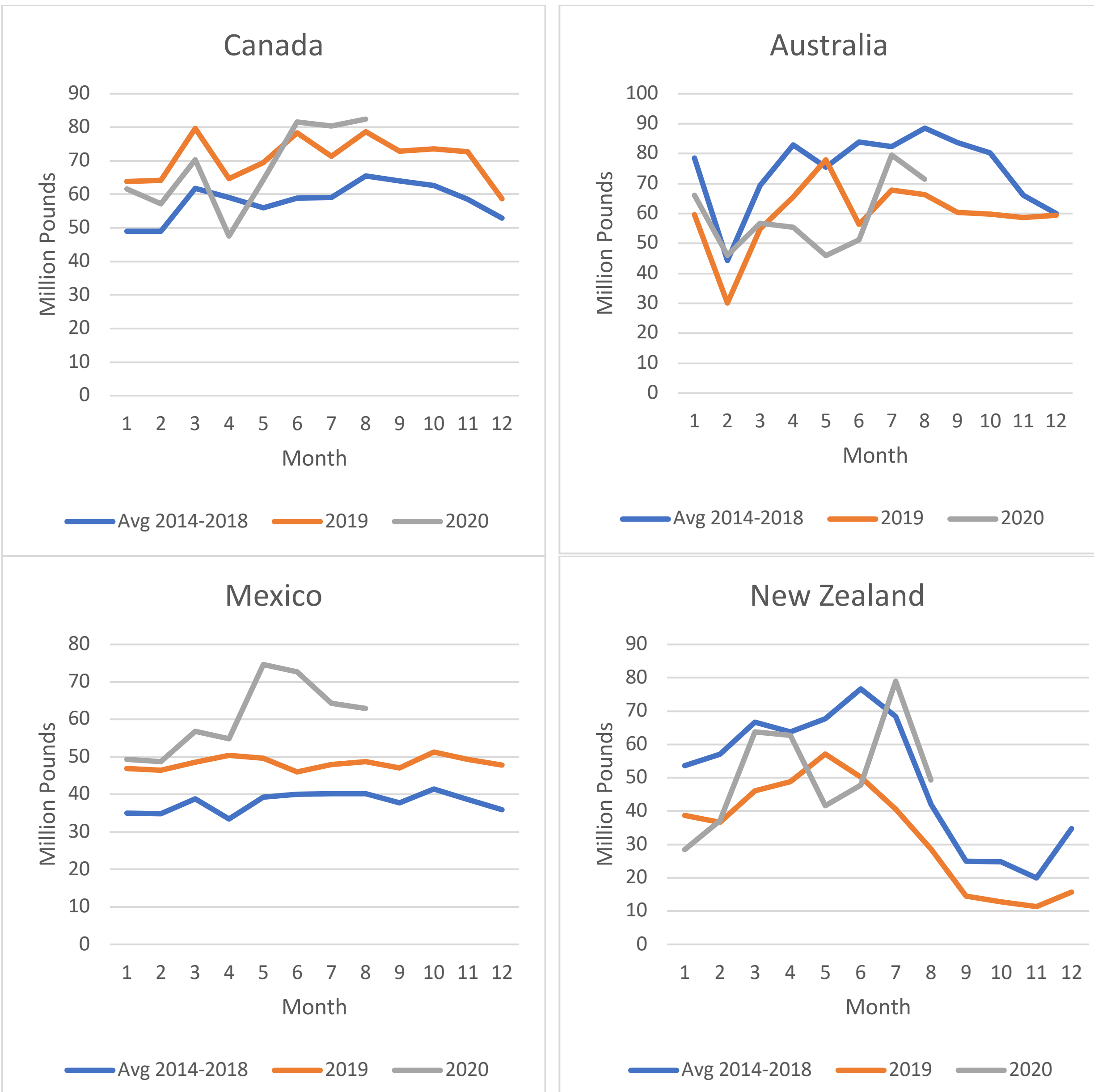


Figure 2. Monthly U.S. Beef and Veal Imports to from Canada, Australia, Mexico (Carcass Weight)
Source: USDA ERS

Beef Supply and Demand Estimates from the October WASDE Report

James Mitchell

October 9, 2020

Today, USDA published the October 2020 World Agricultural Supply and Demand Estimates. The report, in its entirety, is available at https://www.usda.gov/oce/commodity/wasde/wasde1020.pdf. This article covers beef production and prices from the October WASDE report.

In the September WASDE report, USDA had 2020 third quarter beef production forecasted at 7,065 million pounds. Having concluded September, the October WASDE reports third-quarter beef production at 7,105 million pounds, a 0.6% increase over the September forecast. Fourth-quarter beef production is forecasted to be 7,050 million pounds, a 0.7% increase relative to the September forecast. Total 2020 beef production is projected to be 27,138 million pounds, a 0.3% increase over the September forecast. If realized, the October forecast places 2020 beef production 0.06% below 2019 beef production. The report attributes the increase in beef production forecasts in this month's report to higher expected cattle slaughter through the second half of the year. In addition to higher slaughter, average dressed weights continue to be above 2019 levels. Together, higher than expected slaughter and continued higher average dressed weights would explain higher forecasted beef production.

September's WASDE report forecasted third-quarter 5-area steer prices at $101.00/cwt. Realized third quarter 5-area steer prices were slightly above September's forecast with a price of $101.74/cwt. In October's WASDE, fourth-quarter steer prices are forecasted to be $109.00/cwt, a $5.00/cwt increase from the September forecast. The October report predicts 2020 5-area steer prices at $108.71/cwt. Beef demand continues to support prices by reopening restaurants in many states and increasing consumer spending at quick food service establishments.

The October report forecasts U.S. beef exports at 2,896 million pounds, which is unchanged from last month's forecast. If the forecast is realized, 2,896 million pounds of beef exports would be 4.3% below 2019 exports. The WASDE report increased their forecast for U.S. beef imports by 5.3% relative to their September estimates. Total U.S. beef imports are forecasted at 3,447 million pounds. You can find a recent analysis of the 2020 beef trade in "Oct. 8, 2020 – Beef Trade Updates," available at https://www.uaex.edu/life-skills-wellness/health/covid19/COVID-Economic_Impacts_in_Arkansas.aspx.

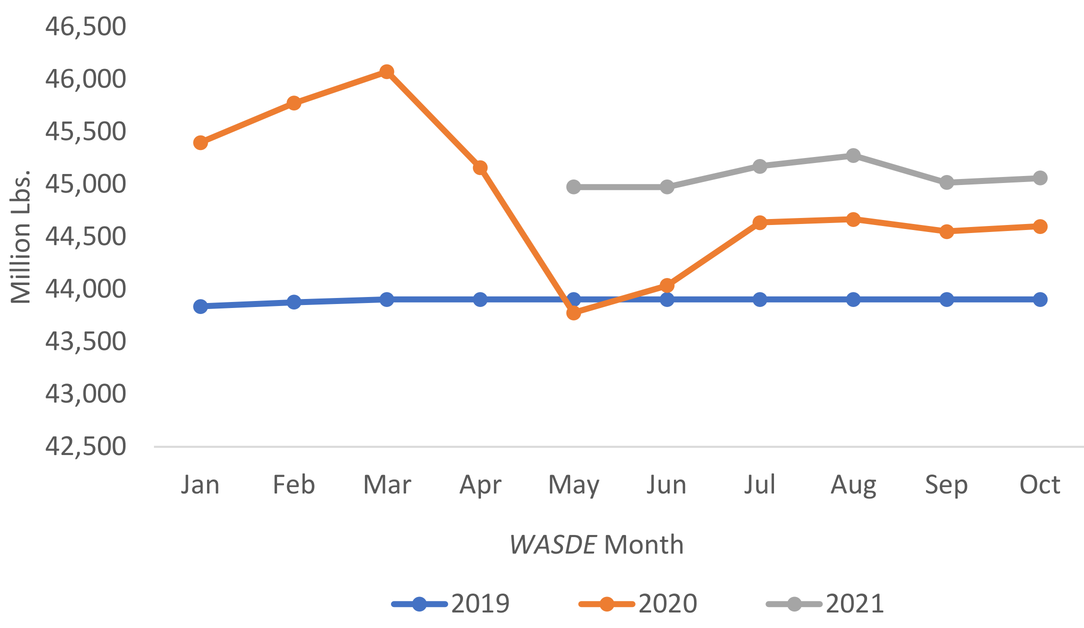
World Agricultural Supply and Demand Estimates Projections for the Broiler Industry

John D. Anderson

October 14, 2020

On October 9, USDA World Agricultural Outlook Board released the *World Agricultural Supply and Demand Estimates* (*WASDE*) report for October. With three quarters of relatively complete data now available, the impact of COVID on agricultural markets in 2020 is coming into sharper focus. Also, the report continues to refine projections for 2021, providing a prospective look at how COVID effects may linger in key markets.

The impact of COVID-19 on the broiler industry has been significant, of course; and it appears increasingly unlikely that the industry will fully recover even next year. The impacts of COVID-19 on chicken production have been widely discussed. Processing plant disruptions in the second quarter of the year sharply reduced production in the short run. Beyond those short-term disruptions, though, more complex factors related to COVID-19 have altered longer-term production expectations. These factors include the supply-side effects of changes in production and processing operations in response to COVID-19 as well as demand-side effects related to the economic disruptions resulting from COVID-19 (including continued sluggish demand from the food service sector). Monthly *WASDE* projections allow us to trace the evolution of expectations in the market as the pandemic has unfolded. Figure 1 shows estimates of annual broiler (chicken) production for 2019, 2020, and 2021 (beginning in May) from each of this year's monthly *WASDE* reports.



Data Source: USDA Office of the Chief Economist, World Agricultural Outlook Board.

Figure 1. Annual Broiler Production Estimates for 2019-2021 from Monthly *World Agricultural Supply and Demand Estimates* (*WASDE*) Reports in 2020

Expectations for 2020's production peaked in March following several weeks of strong production during the stockpiling/panic buying phase of the pandemic. To be sure, even before the pandemic had begun to affect markets (going back into late-2019), expectations were for robust growth in chicken production due to favorable market conditions. By March, the *WASDE* report was projecting 4.9% year-over-year growth in broiler production. That collapsed to expectations for a slight (<1%) decline in production by May as processing plant disruptions led to unprecedented uncertainty about production plans for the second half of 2020. As broiler production has rebounded since June, expectations for 2020 production have stabilized at about 1.5% above 2019's production. It is remarkable that the industry appears set to manage a modest increase in production given the magnitude of the 2020 market shock. Still, current expectations are over 3% lower than in March, illustrating the significant negative impact of the pandemic on the supply side of the market.

The price impacts of the pandemic are probably even more significant for the broiler industry than the production disruptions. In 2019, broiler wholesale prices averaged 88.6 cents/pound according to the *WASDE* report. At the beginning of 2020, expectations were for prices to slip just a bit (around 2% or so) in the face of increasing production. As the pandemic unfolded, though, price expectations deteriorated dramatically. The latest *WASDE* report projects a 2020 average broiler price of 70.8 cents/pound, a decline of about 20% compared to the prior year.

This sharp decline in price along with a modest annual increase in production represents a significant decline in value for the broiler sector. The October *WASDE* projects 2020 annual broiler production of 44.6 billion pounds (up 1.6% from 2019) and an average annual wholesale broiler price of 70.8 cents/pound. This implies a wholesale value of production of $31.6 billion – down almost 19% from 2019's wholesale value of production of $38.9 billion.

Current expectations as reflected in October *WASDE* projections are for a relatively slow recovery for the sector. The current projection for 2021 production is 45.06 billion pounds (up 1% from 2020) and average wholesale price of 79 cents/pound (up 12% from last year). This works out to an expected wholesale value of production of $35.6 billion: a significant recovery from 2020 but still 8.5% below 2019.

It is worth pointing out that the year-over-year gain in production for 2020 and 2021 of 1.6% and 1.0%, respectively, represent historically rather small changes in production for the broiler sector. Over the past twenty years, the broiler industry has averaged about 2% annual growth in production. If current projections hold, 2020-2021 will witness the slowest two-year growth in broiler production since 2012-2013, when the industry faced record-breaking corn prices.

October Cattle on Feed

James Mitchell

October 23, 2020

Last Friday, USDA NASS published October's Cattle on Feed (COF) report. This article documents some of the findings in that report and the relation to bigger picture market dynamics as we move through the fall. Result from the latest COF report are in Table 1.

Table 1 October Cattle on Feed Report Summary

	1,000 head	% 0f 2019	Pre-Report Estimate
On Feed Sep 1	11,394	104	
Placements in Sep	2,227	106	102.2
Marketings in Sep	1,846	106	105.8
On Feed Oct 1	11,717	104	103.3

Source: USDA NASS

According to the October report, September feedlot placements totaled 2.23 million head of 6% above year-ago placements and larger relative to pre-report expectations. September marks the fourth consecutive month of feedlot placements above year-ago levels (Figure 1). However, total placements through September are 3% below 2019 levels for the same period. As we move towards the seasonal peak, it appears that we might start to observe placements more in line with historical levels. However, the drought situation in the southern plains will likely play a role in determining the destination of calves sold this fall. Specifically, the number of lightweight feeders placed in feedlots this fall relative to those going to a winter backgrounding or grazing program. As of October 19, 35% of pasture was in poor or very poor conditions in the southern plains.

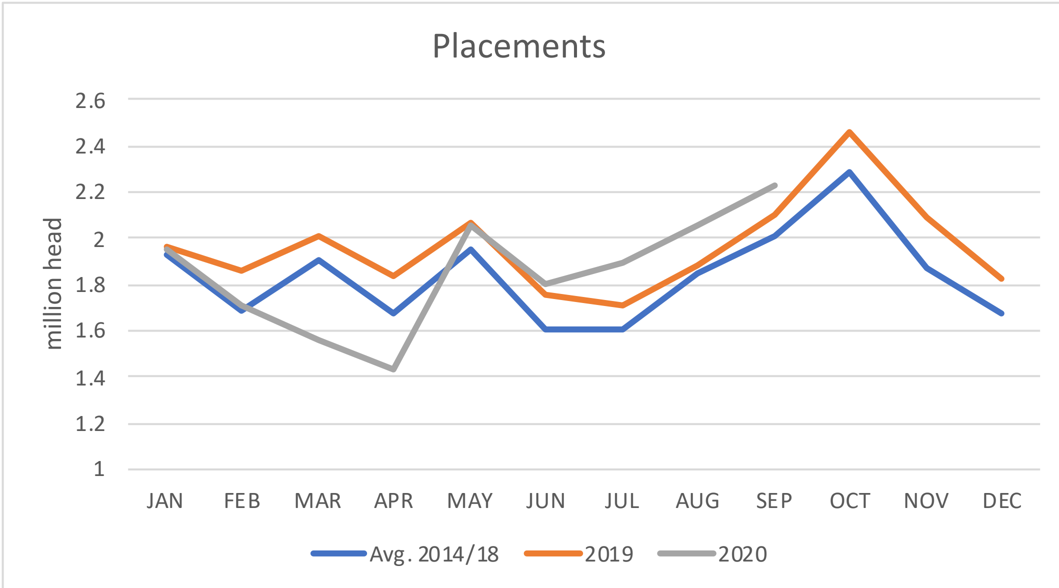


Figure 1. Monthly Feedlot placements.
Source: USDA NASS, LMIC.

Among the states recorded in the report, placements in parts of the southern plains continue to be well above 2019 levels. For September, Oklahoma placements were 35% higher than September 2019 placements and 7% above August 2020 placements. In Kansas, September placements were 13% above September 2019 placements and 9% below August 2020 placements. Texas September placements were 3% below year-ago levels and 2% above August 2020 placements. Year-to-date feedlot placement totals are +2.2%, -10.3%, and -6.6% relative to 2019 for Kansas, Oklahoma, and Texas, respectively. Much of the decline in year-to-date placement totals is a result of the COVID-19 disruptions. More recently, we continue to see improvements in placements across the southern plains.

According to the report, October 1, feedlot inventory was 11.72 million head, which was 4% above a year ago and slightly higher than pre-report expectations. October marks the third consecutive month of on feed inventories above year-ago levels (Figure 2). Each quarter includes a COF report that breaks out feedlot inventory by class, which indicates heifer retention. Of the cattle on feed, 38% are heifers and heifer calves, while 62% are steers and steer calves. Heifers on feed are flat relative to a year ago, while steers on feed are 6% above a year ago. The January COF and Cattle Inventory reports will provide further guidance on heifer retention for beef replacements.

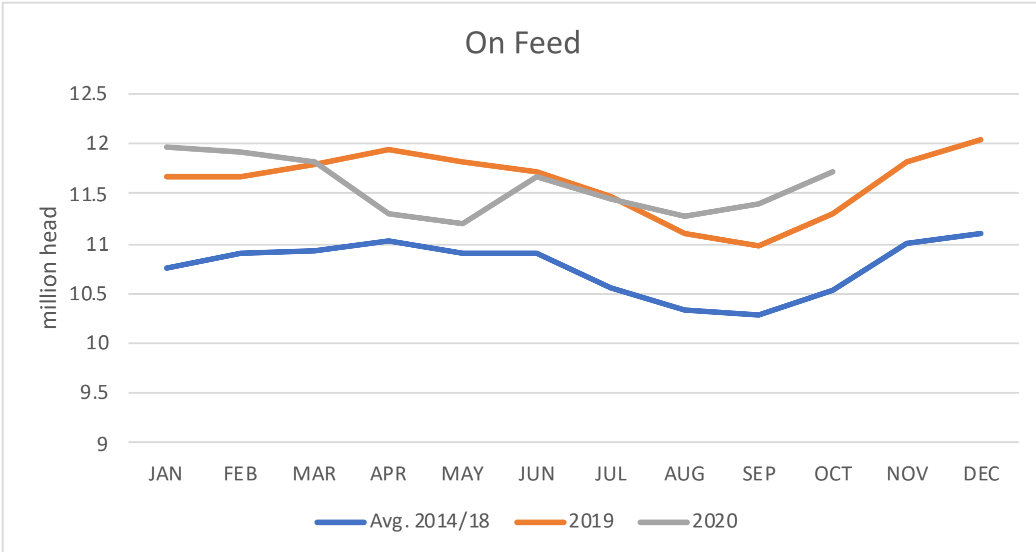


Figure 2. Monthly Cattle on Feed.
Source: USDA NASS, LMIC

September marketings of fed cattle were 6% above a year ago and slightly higher than pre-report expectations. September posted one additional business day relative to September 2019, which added to the observed higher marketings. Figure 3 points towards continued progress in working through the COVID-19 disruptions that we experienced in the second quarter of the year.

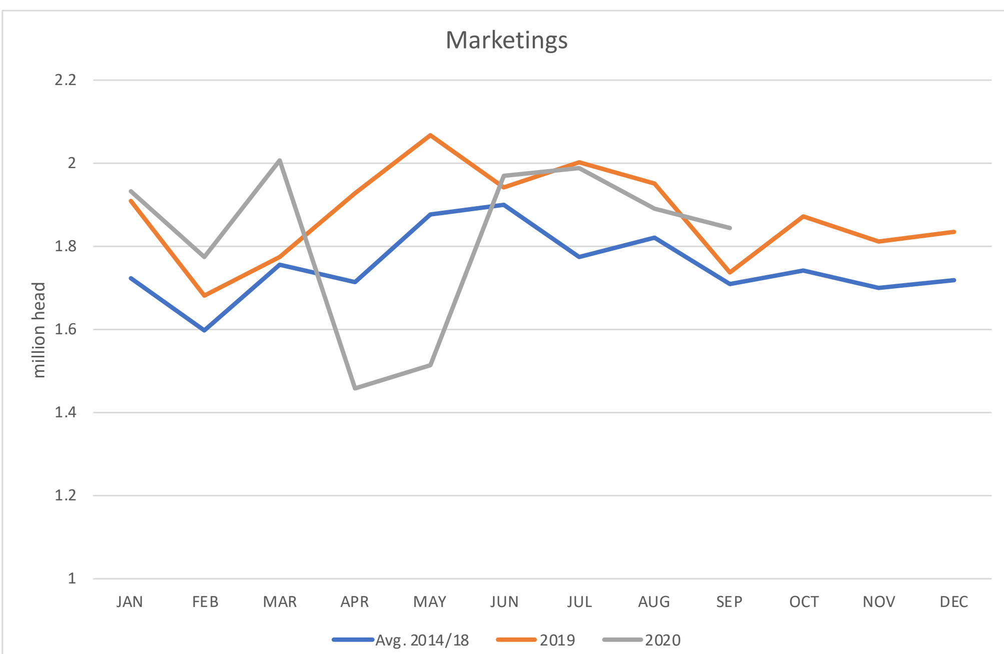


Figure 3. Monthly fed cattle marketings.
Source: USDA NASS, LMIC