COVID-19 Working Paper: A Timely Tool for Evaluating Financial Conditions in Agriculture: USDA Forecasts of the Value of Production in the Face of COVID-19

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Summary

The USDA Economic Research Service (ERS) releases farm income forecasts 3 times per year. At times when conditions in the farm sector are changing rapidly, as with the COVID-19 outbreak, it can be useful to assess the likely impacts of recent events on U.S. farm sector income in between scheduled ERS data releases. This paper demonstrates how to use data that is available monthly to evaluate changes in the ERS forecasts of crop value and animal/animal products production—a major driver of farm income. The study found that between February and June 2020, the value of production forecasts for 8 crops in the 2019/20 and 2020/21 crop marketing years—and the value of production forecasts for the 6 animal products for calendar year 2020—were revised down a combined \$28.9 billion. These forecasts, based on data from the June World Agricultural Supply and Demand Estimates (WASDE), were effective in anticipating the downward revision to the value of production forecasts in the ERS farm income forecasts released in September 2020.

What is the Issue?

The USDA Economic Research Service (ERS) releases farm income forecasts and updated estimates three times per year—typically in early February, late August, and late November. Each release incorporates additional data into the forecasts and estimates from various sources as they become available. The three farm income release dates are chosen to best utilize the most recent data available and provide the most accurate estimates and forecasts. The longest interval between scheduled releases is approximately 6 months. The COVID-19 outbreak in the United States occurred at the beginning of this 6-month interval, soon after the February 5, 2020, release, and is an example of an unexpected

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event that can significantly impact farm income. Some important data utilized in the farm income forecasts are available monthly and can be used to anticipate some of the changes in the forecast prior to the next data release. In particular, the World Agricultural Supply and Demand Estimates (WASDE) report is released monthly. The report provides projections of annual production and prices for select agricultural commodities, which together account for more than 50 percent of the total value of agricultural commodity production. Since agricultural production occurs in a risky environment for a variety of factors, examining trends in the value of production more frequently than three times per year can provide useful information on the impact of unexpected events on the farm income forecasts. This paper explores how to use the available monthly data to evaluate changes in the ERS forecasts of crop value and animal/animal products production—a major driver of farm income.

What did the study find?

The usefulness of using monthly data to evaluate changes in the short-run outlook for the value of production was demonstrated using data from June 2020, approximately 4 months after the first forecast for 2020 value of production was released by ERS in early February 2020.

- Monthly data from the WASDE reports provided timely information on the value of agricultural production during periods when conditions in the farm sector are changing rapidly.
- Between February and June 2020, the value of production forecasts for the 8 selected crops in the 2019/20 and 2020/21 crop marketing years and the value of production forecasts for the 6 animal products for calendar year 2020 were revised down a combined \$28.9 billion.
- When the revisions to both the 2019/20 and 2020/21 marketing years were combined, the value of production forecast for the 8 crops was revised down \$11 billion (5.2 percent).
- The forecast for the value of production of animal products in calendar year 2020 was revised down \$17.9 billion (12.4 percent) between January and June 2020. Forecasts for production of most animal product commodities have been lowered since the onset of the COVID-19 pandemic, due in most cases to lower processing and/or slaughter capacity.

These forecasts, based on the June WASDE data, were effective in anticipating a
downward revision to the value of production forecasts in the farm income forecasts
released in September.

How was the study conducted?

The study drew on data available monthly to compare forecasts for the value of production for eight crops and six animal products before and after the COVID-19 outbreak. Value of production forecasts based on production and price projections from the January 2020 USDA Baseline Projections and WASDE were compared against the forecasts using the June 2020 WASDE projections. The revisions to these forecasts were then compared to the forecasts from the ERS farm income release on September 2, 2020.

This paper is published through USDA, Economic Research Service's (ERS) COVID-19 Working Paper series. This temporary Working Paper series is designed to publicly release preliminary analyses relevant to the impacts of the COVID-19 pandemic on agriculture, food, the environment, and rural America in a timely manner. ERS' COVID-19 Working Papers have not undergone the review and editorial process generally accorded official ERS publications, but ERS economists and social scientists reviewed them through an expedited process. The findings and conclusions in this COVID-19 Working Paper are those of the author(s) and should not be construed to represent any official USDA or U.S. Government determination or policy.

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Introduction

A U.S. Department of Agriculture farm income forecast from the Economic Research Service (ERS) was released February 5, 2020, just prior to the outbreak of COVID-19 in the United States. At that time, farm income was forecast to increase by 3.3 percent (\$3.1 billion) in 2020 from 2019 levels, with the value of agricultural sector production forecast at \$436 billion. The pandemic is likely to affect farm income, as farmers face supply chain disruptions and changes in demand for certain commodities. Additional factors have also affected the market outlook since February—such as unexpected domestic and international pest and disease pressures, weather, and government policies. The full effects of these factors on 2020 farm income will not be known for some time, and a more complete assessment will be available when the first estimates for 2020 are released in August 2021. However, insights into the likely impacts of recent events on farm income can be gained by examining the value of agricultural production.

Unlike other data inputs used in deriving the forecasts of farm income, forecasts of commodity production and prices are routinely made available for various purposes. These monthly forecasts can be used to update ERS' value of production forecasts in between scheduled data releases. This paper presents an interim evaluation of the changes in the value of production forecasts for select crops and animal products from February to June 2020. The changes to the value of production forecasts from June 2020 forecasts were then compared to the forecasts from the ERS farm income release on September 2, 2020.

This analysis is presented as an example of an approach that can be used to more frequently assess the value of agricultural production during periods when conditions in the farm sector change rapidly. It is important to note that this example is not intended to quantify the impacts of COVID-19 on farm income. Although the value of production is a key determinant of farm income, other factors affect income, such as production expenditures and direct government payments from farm programs, for which monthly data are not available.

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¹ In August 2021, the 2020 farm income forecasts will be updated and labeled as estimates. The forecasts will incorporate National Agricultural Statistics Service estimates of State and U.S. commodity production and data on production expenses collected in the 2020 Agricultural Resource Management Survey.

How Value of Production Forecasts Inform Cash Receipts Forecasts

USDA farm income forecasts are released 3 times a year² and rely on the most up-to-date commodity analyst forecasts of production quantities and prices. The forecasts for net farm income include forecasts of the monetary value of crop and animal/animal products production, which represents most of the farm sector's output.³ Cash receipts are the major gross income component in the farm income estimates and forecasts. While there are important differences between cash receipts and the value of production, production levels and prices are the principal components of both. The value of production for a commodity can be calculated as the forecast quantity produced, multiplied by the forecast price received by the farmer in a given calendar or marketing year. Cash receipts represent the cash income the farm sector receives from commodity sales. Development of cash receipts forecasts from the value of production forecasts requires additional data—such as data on monthly marketing patterns and share of crops used on the farm—which are forecast internally as the data may only be available once a year.

Methods and Data

We compared the 2020 agricultural sector value of production forecasts in January 2020 to our calculations based on the June 2020 USDA forecasts on production and prices. Because the farm income forecast model released on February 5, 2020, relies on data that are not typically published, we instead used published data from the World Agricultural Supply and Demand Estimates and USDA Baseline Projections as the January 2020 (pre-COVID) forecast. Specifically, the January production and price projections for the 2019/20 marketing year for crops and 2020 calendar year for animal/animal products are from the January 10, 2020, World Agricultural Supply and Demand Estimates (WASDE) report. The January 2020 WASDE report did not include crop projections for the 2020/21 marketing year, so those were obtained from the USDA Agricultural Projections to 2029 report (USDA-ERS, 2020a), released in

² Typically, forecasts are released in February, August, and November. The 2020 forecast release dates are February 5, September 2, and December 2.

³ Value of production estimates and forecasts are included in the table "Value added to the U.S. economy by the agricultural sector." This table is included in the Farm Income and Wealth Statistics data product on the ERS website.

February 2020.⁴ Further, note that the forecasts used in the February farm income model match or are very similar to the baseline and January 2020 WASDE projections. The June 2020 forecasts were calculated using production and price projections obtained from the June 11, 2020, WASDE report. Price projections represent marketing-year weighted average prices received by farmers (all the production and price projections that underlie the value of production forecasts are presented in appendix A.).

Our forecasts of agricultural value of production are not inclusive of all commodities. This is because WASDE projections are not exhaustive. ERS analysis is restricted to 8 crop and 6 animal/animal product commodities, representing roughly 50 and 75 percent of total value of production for crops and animal/animal products, respectively. Major crop commodities not covered by WASDE projections include fruits, vegetables, nuts, and hay. Major animal/animal products not covered by WASDE include aquaculture, honey, and sheep and lambs. Additionally, our data cover only a portion of the total value of production of cattle/calves and hogs in that the data only includes beef and pork production and excludes animals marketed for feeding or breeding purposes.

The revisions to the value of production forecasts between January and June reflected more than just the impacts of the COVID-19 pandemic. For example, the June forecasts also reflected changes in the global marketplace and trade policies and incorporated newly available and observed data on prices, planting decisions, crop progress (including crop conditions and harvesting status), and weather patterns. That is why this analysis is not intended to quantify the impacts of the pandemic on agricultural production. Rather, the analysis demonstrates the evolution of the value of production forecasts from January to June 2020, a period in which there were sector-wide impacts from the pandemic. Appendix B shows how the forecasts continued to evolve through September 2020. Additionally, we compared the revisions to the value of production forecasts through June to what was included in the ERS farm income forecast released September 2, 2020.

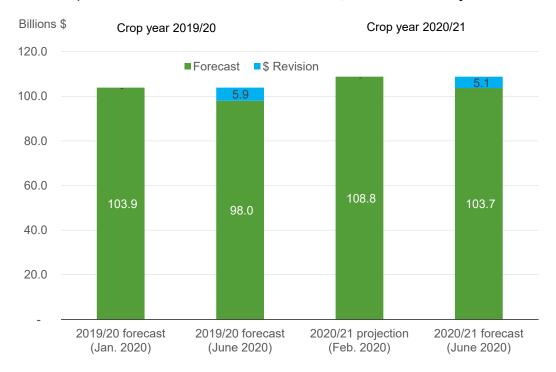
⁴ The USDA baseline projections for crops published in February 2020 were based on the 2019/20 projections from the October

2020 WASDE report.

Changes in Crop Value of Production Forecasts from January to June

Between January and June 2020, the value of production forecasts for crops for both the 2019/20 and 2020/21 marketing years were revised. Some crops harvested in 2019 are sold in calendar year 2020. As a result, declining prices in the first half of 2020 depressed the production values for those crops still on hand that were not yet sold. Furthermore, expectations in June for continued lower prices in 2020 lowered the forecast value of crops to be harvested in 2020 and sold in both 2020 and 2021. From January 2020 to June 2020, the combined forecast value of production for 8 crops was revised down \$5.9 billion (5.7 percent) for crop year 2019-20 and \$5.1 billion (4.7 percent) for crop year 2020-21 (figure 1).

Figure 1
Combined value of production forecasts (for corn, upland cotton, oats, rice, sorghum, soybeans, and wheat) for 2019/20 and 2020/21 fell in June 2020, relative to January 2020 forecasts



Source: USDA, Economic Research Service calculations based on World Agricultural Supply and Demand Estimates (WASDE) farm price and production forecasts, and the USDA baseline projections.

Table 1 shows the January 2020 and June 2020 value of production forecasts by crop and marketing year. Of the eight crops, the forecasts for corn and soybeans were revised down the most. Corn value of production was revised down \$3.7 billion (7 percent) for 2019/20 due to lower price forecasts. For 2020/21, forecasted corn production quantities were revised up nearly 3 percent. However, the forecast season average price was revised down \$0.20 per bushel, resulting in a \$1.7 billion (3.2 percent) downward revision to the value of production. Soybean value of production was revised down \$1.8 billion (5.7 percent) for 2019/20 and \$3.3 billion (9.0 percent) for 2020/21. Because the expectations of total production changed very little from 2019/20 and 2020/21, the downward revision in value of production was due to lower price forecasts.

Table 1
Crop value of production forecasts for 2019/20 and 2020/21

		2019/20)		2020/21			
	Jan. 2020 WASDE	June 2020 WASDE	Dollar revision	Percent revision	Feb. 2020 Baseline	June 2020 WASDE	Dollar revision	Percent revision
	(Millions \$)				(Millions \$)			
Barley	782	799	17	2.2%	718	783	65	9.0%
Corn	52,714	49,021	-3,693	-7.0%	52,853	51,184	-1,669	-3.2%
Cotton, upland	5,861	5,445	-415	-7.1%	5,416	5,153	-263	-4.9%
Oats	156	151	-5	-3.4%	168	183	15	9.0%
Rice	2,438	2,420	-18	-0.8%	2,589	2,789	200	7.7%
Sorghum	1,159	1,108	-51	-4.4%	1,032	1,123	91	8.8%
Soybeans	32,022	30,192	-1,830	-5.7%	37,170	33,825	-3,345	-9.0%
Wheat	8,736	8,832	96	1.1%	8,813	8,634	-179	-2.0%
Total	103,869	97,968	-5,900	-5.7%	108,759	103,674	-5,085	-4.7%

Note: WASDE = World Agricultural Supply and Demand Estimates.

Source: USDA, Economic Research Service calculations based on USDA's January 10, 2020, and June 11, 2020, WASDE reports, and February 2020 Baseline Projections.

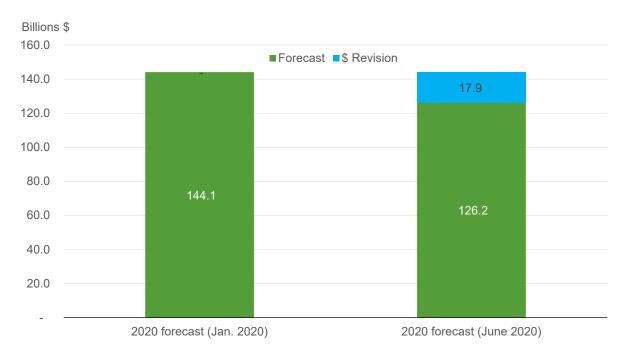
For 2019/20, the value of production forecasts for most crops were revised downwards from January to June. The exception to this was for barley and wheat (up 2.2 and 1.1 percent, respectively), due to higher forecast prices. The higher value of production was more pronounced, however, for 2020/21 as the forecasts for barley, oats, rice, and sorghum were revised up 8-9 percent each. Compared to the Agricultural Baseline forecast from January, June forecasts for production quantities were higher for barley, oats, and sorghum—while price forecasts were higher for rice and sorghum.

When the revisions to both the 2019/20 and 2020/21 marketing years are combined, the value of production forecast for the 8 crops has been revised down \$11 billion (5.2 percent).

Changes in Animal and Animal Products Production Forecasts from January to June 2020

The forecast for the value of production of animal/animal products in calendar year 2020 was revised down \$17.9 billion (12.4 percent) between January and June 2020 (figure 2). Forecasts for production of most animal product commodities have been lowered since the onset of the COVID-19 pandemic, due in most cases to lower processing and/or slaughter capacity. For example, pork processing facilities were using only 54 percent of their capacity by late April (USDA-ERS, 2020b). Although the utilization has largely rebounded since then, shifts in price forecasts for these commodities for 2020 were generally larger than shifts in production forecasts.

Figure 2
Combined value of production forecast (for beef, pork, broilers, eggs and milk) in 2020 fell in June 2020, relative to January 2020 forecast



Source: USDA, Economic Research Service calculations based on World Agricultural Supply and Demand Estimates (WASDE) farm price and production forecasts.

As shown in table 2, the largest percent reduction in the value of production forecasts among animal commodities was for pork. Total pork value of production for 2020 was forecasted 24.6 percent (\$3.8 billion) lower than in January, as the price forecast for pork was lowered 22.2 percent. Additionally, the 2020 broiler value of production forecast was lowered 21.6 percent (\$8.4 billion, the largest drop among commodities in terms of dollar amount). Milk value of production was forecasted 13.3 percent lower for the year than was forecasted in January, due entirely to a reduction in the 2020 milk price forecast (the production forecast was increased slightly). Beef value of production was forecasted \$3.3 billion lower in June than it was in January, a reduction of 10.1 percent.

Table 2
Animal/Animal products value of production forecasts for 2020

	2020							
	Jan. 2020 WASDE	June 2020 WASDE	Dollar revision	Percent revision				
		(Milli	ons \$)					
Beef	32,320	29,040	-3,280	-10.1%				
Pork	15,619	11,779	-3,840	-24.6%				
Broilers	38,851	30,453	-8,398	-21.6%				
Turkeys	5,467	6,052	585	10.7%				
Eggs	9,087	11,783	2,696	29.7%				
Milk	42,735	37,046	-5,689	-13.3%				
Total	144,078	126,152	-17,926	-12.4%				

Note: WASDE = World Agricultural Supply and Demand Estimates.

Source: USDA, Economic Research Service calculations based on USDA's January 10, 2020, and June 11, 2020, WASDE reports.

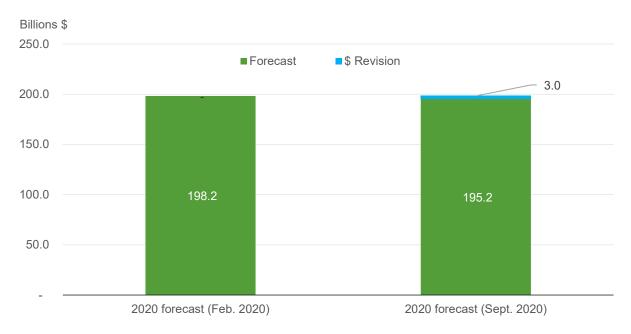
Price forecasts for 2020 for 2 animal/animal product commodities, turkey and eggs, were raised between January and June (13.4 percent for turkeys and 31.4 percent for eggs). As a result, value of production forecasts for these two commodities were raised, despite lower expected production for both. The turkey value of production forecast was raised 10.7 percent, while the egg value of production forecast was raised 29.7 percent.

September Revisions to the 2020 USDA Farm Income Forecast

On September 2, 2020, ERS released an updated farm income forecast for 2020 that incorporated new information that became available since the February 5 release. The crop and animal/animal products value of production forecasts in the September 2 release were largely based on price and production forecasts from the August 12, 2020, WASDE report. For commodities not published in the WASDE

report, forecasts came from ERS subject matter experts. While the value of production forecasts in the September 2020 release do not match the forecasts based on the June WASDE data, both forecasts showed the value of production falling relative to forecasts from the beginning of the year. Thus, the June WASDE data was effective, in this instance, in anticipating a downward revision to the value of production forecasts in the farm income forecasts.

Figure 3
The total production value of crops for 2020 from the September farm income forecast declined relative to the February forecast

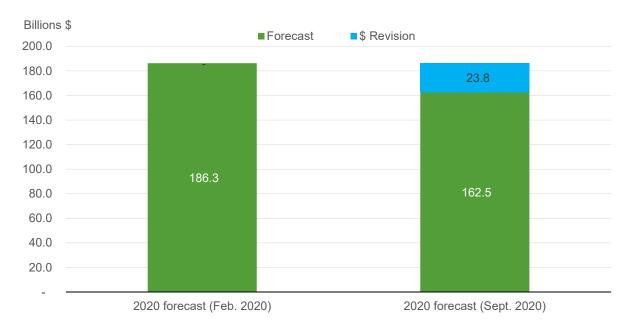


Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of February 5, 2020 and September 2, 2020.

In the September release, the value of crop production forecast for calendar year 2020 was revised down \$3.0 billion (1.5 percent) from the February release (figure 3). This reduction was less than the \$11 billion (5.2 percent) downward revision in the June forecasts for crop production covered by WASDE data for both the 2019/20 and 2020/21 marketing years combined. Aside from using more current information than the June data, there were a number of other differences between the two projections of 2020 value of production. First, the value of production forecasts in the September release represented the value of what was produced or harvested in calendar 2020 only. Revisions to the 2019/20 marketing year forecasts were largely reflected in the 2019 farm income estimates. Additionally, the value of crop production forecasts

in the September USDA farm income forecasts covered all crops, while the June WASDE did not. In particular, the WASDE reports did not have projections for fruits and nuts or vegetables and melons, which account for roughly 25 percent of the value of crop production. In the September release, an upward revision of \$2.6 billion (8.5 percent) for fruit and nut cash receipts partially offset the downward revisions to the value of production for corn, cotton, hay, and some other crops compared to February.⁵

Figure 4
The total production value of animal/animal products for 2020 from the September farm income forecast declined relative to the February forecast



Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of February 5, 2020 and September 2, 2020.

The 2020 forecast for the value of animal/animal products production was revised down \$23.8 billion (12.8 percent) from the February to September release (figure 4). This revision was similar to the \$17.9

⁵ Since most fruits and nuts are not storable for long periods of time, it is assumed they are generally sold in the same year in which they are produced (or harvested). So, cash receipts from the sale of fruits and nuts also represent their value of production.

billion (12.4 percent) revision in the June forecasts for the portion of animal production covered by the WASDE data. The larger dollar revision in the September release reflects that more commodities were covered in the farm income forecast. Revisions to the WASDE data between June and August were minimal in terms of their effect on the total value of production forecast for animals/animal products. The forecast, based on the August WASDE data, was 1 percent below the June forecast. In some years, there may be larger revisions to the WASDE data from month-to-month, which could limit the ability to use the data to anticipate changes in the next farm income release.

Conclusion

It is typical for WASDE price and production projections to be revised throughout the year and for conditions that might affect the underlying assumptions used in developing the baseline projections to change. The 2019/20 and 2020/21 marketing year forecasts are no different, as changing expectations affect the market. However, the revisions to crop and animal production forecasts between January and June were larger than typical in 2020. The January WASDE projections, when compared to the final estimates, were typically revised less than 1 percent for corn and no more than 3.5 percent for animal products (USDA-WAOB, 2020). This year was different in that projections for meat animal production, in particular, were revised more than average. Also, the revisions to price projections for the agricultural commodities contributed more to the changes in the value of production forecasts than revisions in quantity projections.

USDA's frequent releases of price and production projections provide the opportunity to forecast the value of production for selected commodities between the ERS farm income data releases. This paper found that from the January 2020 to the June 2020 forecast releases, the available crop value of production forecasts for both the 2019/20 and 2020/21 crop marketing years—and the animal/animal production forecasts for calendar year 2020—were revised down a combined \$28.9 billion. The largest declines across all commodities were for broilers, milk, soybeans, corn, beef, and pork. In the September farm income release, the value of production forecasts were similarly revised down, with differences largely due to a more complete accounting of all commodities in the farm income forecasts. The sector forecasts will continue to evolve as more information becomes available.

The value of agricultural production is a key determinant of farm income. Thus, the value influences the ability of farmers to provide for family living expenses, expand their operations, and accelerate the repayment of debt. During interim periods between USDA farm income releases, a review of changes in the value of production forecasts (based on WASDE projections) can provide more timely insights on changes in the short-run outlook for the value of agricultural production and the potential impact on cash receipts and farm income. Changes in the value of production tend to drive much of the trends in farm income, although in both 2019 and 2020, higher direct government payments from farm programs have helped to offset declines in the value of production and support farm income.

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Appendix A

Table A1

Price and quantity projections underlying value of production forecasts for crops from January and June 2020

	Season average price					Marketing year production				
	2019/20		2020/21			2019/20		2020/21		
	Jan. 2020	June 2020	Feb. 2020	June 2020		Jan. 2020	June 2020	Feb. 2020	June 2020	
	WASDE	WASDE	Baseline	WASDE	Unit	WASDE	WASDE	Baseline	WASDE	Unit
Barley	4.6	4.7	4.3	4.3	\$/bu	170	170	167	182	Million bu
Corn	3.85	3.6	3.4	3.2	\$/bu	13,692	13,617	15,545	15,995	Million bu
Cotton, upland	0.63	0.59	0.62	0.57	\$/lb	19,380	19,227	18,200	18,835	Thousand Bales
Oats	2.95	2.85	2.5	2.5	\$/bu	53	53	67	73	Million bu
Rice	13.2	13.1	11.7	12.9	\$/cwt	185	185	221	216	Million cwt
Sorghum	3.4	3.25	3	3.2	\$/bu	341	341	344	351	Million bu
Soybeans	9	8.5	8.85	8.2	\$/bu	3,558	3,552	4,200	4,125	Million bu
Wheat	4.55	4.6	4.8	4.6	\$/bu	1,920	1,920	1,836	1,877	Million bu

Note: WASDE = World Agricultural Supply and Demand Estimates. bu = bushel, lb = pound, cwt = hundredweight.

Source: USDA, Economic Research Service using USDA's January 10, 2020, and June 11, 2020, WASDE reports, and February 2020 Baseline Projections.

Table A2
Price and quantity forecasts underlying value of production forecasts for animal/animal products from January and June 2020

	2020 Calendar Year							
		Annı	ual price	Production				
	Jan. 2020 WASDE	June 2020 WASDE	Unit	Jan. 2020 WASDE	June 2020 WASDE	Unit		
Beef	117.5	108.6	Steers, \$/cwt	27,506	26,740	Beef, million lbs		
Pork	54.5	42.4	Barrows-gilts, \$/cwt	28,659	27,780	Pork, million lbs		
Broilers	86.5	69.9	Broilers, cents/lb	44,914	43,566	Broilers, million lbs		
Turkeys	92.5	104.9	Turkeys, cents/lb	5,910	5,769	Turkey, million lbs		
Eggs	95.5	125.5	Eggs, cent/dozen	9,515	9,389	Eggs, million dozen		
Milk	19.25	16.65	Milk, \$/cwt	222	223	Milk, billion lbs		

Note: WASDE = World Agricultural Supply and Demand Estimates. cwt = hundredweight, lb = pound, lbs = pounds.

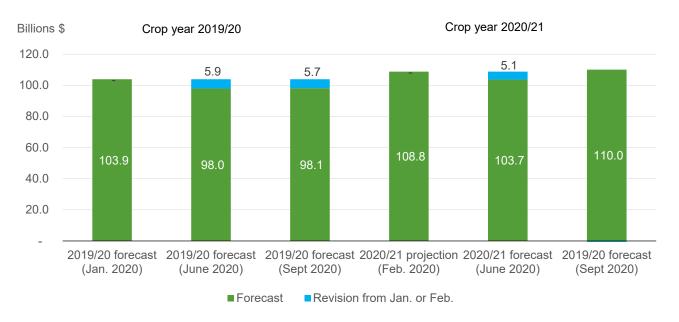
Source: USDA, Economic Research Service calculations using USDA's January 10, 2020, and June 11, 2020, WASDE reports.

Appendix B

While this paper focuses on revisions to the value of production forecasts from January to June 2020, the price and production forecasts continue to evolve. The tables and figures in appendix B show how forecasts were revised in September 2020 relative to the January 2020 forecasts. The September 2020 forecasts were calculated using production and price projections obtained from the September 11, 2020, World Agricultural Supply and Demand Estimates (WASDE) report.

Figure B1

Combined value of production forecasts (for corn, upland cotton, oats, rice, sorghum, soybeans, and wheat) in 2020 continued to be revised in September



Source: USDA, Economic Research Service calculations. 2019/20 forecasts are based on World Agricultural Supply and Demand Estimates (WASDE) farm price and production forecasts. 2020/21 projections are based on USDA baseline projections (February 2020) and WASDE forecasts (June 2020 and September 2020).

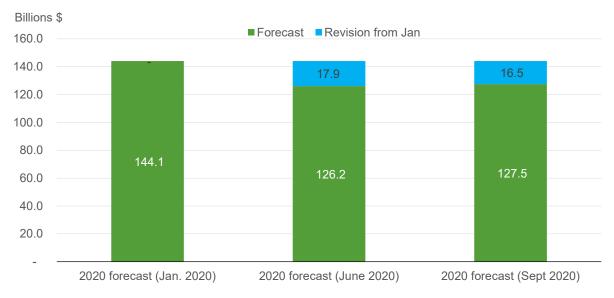
Table B1
Crop value of production forecasts for 2019/20 and 2020/21 through September 2020

	2019/20				2020/21			
	Jan.	Sept			Feb.	Sept		
	2020	2020	Dollar	Percent	2020	2020	Dollar	Percent
	WASDE	WASDE	revision	revision	Baseline	WASDE	revision	revision
		(Millions of	dollars)			(Millions o	f dollars)	
Barley	782	797	15	2.0%	718	783	65	9.1%
Corn	52,714	49,021	-3,693	-7.0%	52,853	52,150	-703	-1.3%
Cotton,								
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Oats	156	149	-7	-4.4%	168	176	8	4.8%
Rice	2,438	2,438	0	0.0%	2,589	2,835	246	9.5%
Sorghum	1,159	1,125	-34	-2.9%	1,032	1,253	221	21.4%
Soybeans	32,022	30,370	-1,652	-5.2%	37,170	39,895	2,725	7.3%
Wheat	8,736	8,794	58	0.7%	8,813	8,271	-542	-6.1%
Total	103,869	98,140	-5,729	-5.5%	108,759	110,037	1,278	1.2%

Note: WASDE = World Agricultural Supply and Demand Estimates.

Source: USDA, Economic Research Service calculations based on data from USDA's January 10, 2020, and September 11, 2020, WASDE reports, and February 2020 Baseline Projections.

Figure B2
Combined value of production forecast (for beef, pork, broilers, eggs, and milk) in 2020 continued to be revised in September 2020



Source: USDA, Economic Research Service calculations based on World Agricultural Supply and Demand Estimates (WASDE) farm price and production forecasts.

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Table B2
Value of production forecasts for animal/animal products for 2020 through September 2020

		2020								
	Jan 2020 WASDE	Sept 2020 WASDE	Dollar revision	Percent revision						
		•	s of dollars)							
Cattle	32,320	29,097	-3,223	-10.0%						
Hogs	15,619	11,131	-4,488	-28.7%						
Broilers	38,851	31,249	-7,601	-19.6%						
Turkeys	5,467	6,039	572	10.5%						
Eggs	9,087	10,626	1,539	16.9%						
Milk	42,735	39,405	-3,330	-7.8%						
Total	144,078	127,547	-16,531	-11.5%						

Note: WASDE = World Agricultural Supply and Demand Estimates

Source: USDA, Economic Research Service calculations based on data from USDA's January 10, 2020, and September 11, 2020, WASDE reports.