



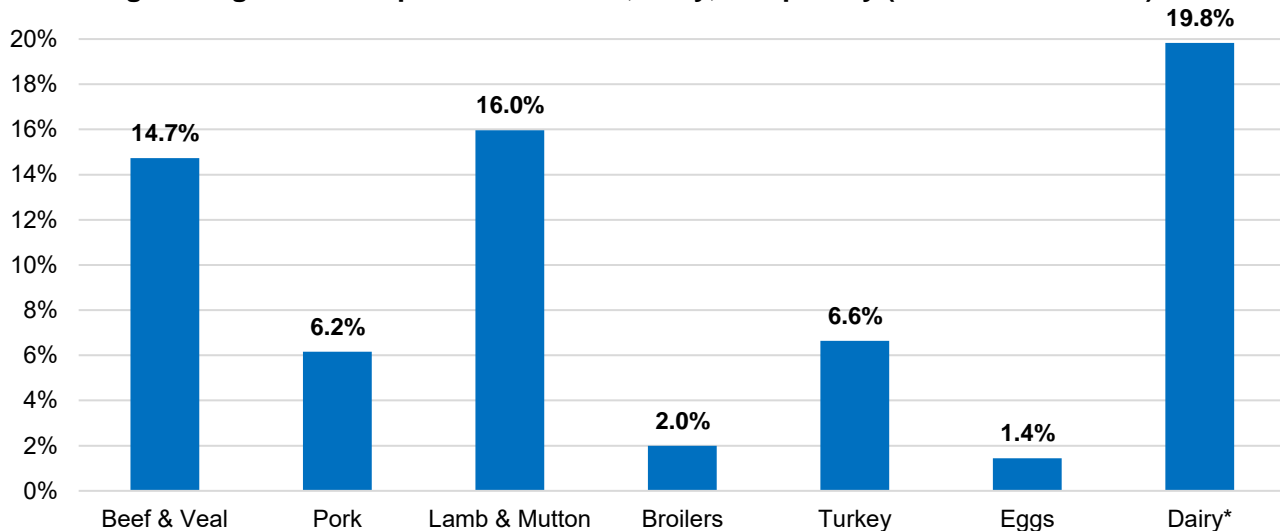
Livestock, Dairy, and Poultry Outlook

U.S. Exports of Animal Proteins Increase in First-Half 2018

Kim Ha

U.S. trade data for the first 6 months of 2018 indicate year-over-year (YOY) growth for U.S. exports of animal proteins. Dairy exports on a skim-solids milk-equivalent basis led the way, increasing by nearly 20 percent YOY, likely due to competitive prices. Lamb and mutton exports increased by 16 percent, albeit from a small base, in the first half as a result of expanded export volumes to the United Arab Emirates, Canada, Japan, and the Caribbean. Strong global demand, particularly from Asian markets, pushed beef and veal exports up 15 percent in the first half. Despite declines in May and June, turkey exports to Mexico, the largest market for U.S. turkey, increased in the first half by almost 7 percent. First-half 2018 pork exports—more than 6 percent above a year ago—were driven higher mainly by larger shipments to Mexico, South Korea, Central/South America, and the Caribbean. While shipments of broiler meat were up 2 percent for the first half, they fell slightly short of expectations. Although major U.S. egg¹ export markets demonstrated double-digit growth in the first half, declines in sales to other markets, including Mexico, South Korea, and Jamaica, weighed down growth to 1 percent YOY.

Percentage change in U.S. exports of red meat, dairy, and poultry (first-half 2018/2017)



Notes: * Skim-solids milk-equivalent basis

Source: U.S. Dept. of Agriculture, Economic Research Service calculations using data from U.S. Dept. of Commerce, Bureau of the Census.

¹ Includes table and hatching eggs.

Beef/Cattle: The July *Cattle* and *Cattle on Feed* reports indicated a year-over-year increase in the cattle herd, the calf crop, and the number of cattle on feed. However, increased cow slaughter and a lower number of heifers retained for beef cow replacement are likely signaling a slowdown in herd expansion. The 2018 beef production forecast was revised marginally lower on a slower than expected third-quarter pace of steer and heifer slaughter that was partially offset by higher anticipated cow slaughter in second-half 2018. The 2019 production forecast was raised fractionally higher on heavier carcass weights. The beef export forecasts for 2018 and 2019 were revised higher based on demand from Asia.

Dairy: Due to recent price movements and a relatively strong expected demand based on the economic outlook, forecasts have been raised for most dairy products and prices to be received by dairy farmers. The 2018 all-milk price forecast is \$16.10-\$16.30 per cwt, an increase from \$15.95-\$16.25 forecast last month. The 2019 all-milk price forecast is \$16.45-\$17.45, an increase from last month's forecast of \$16.25-\$17.25. Due to lower expected feed prices and higher milk price forecasts, the 2019 milk production forecast has been raised to 220.9 billion pounds, 0.3 billion higher than last month's forecast. With new tariffs to be imposed by China, particularly on lactose, expectations for exports have been lowered on a skim-solids milk-equivalent basis.

Pork/Hogs: Adjustments to pork production due to a slower expected pace of slaughter in second-half 2018 have lowered forecast second-half pork production slightly—by 25 million pounds—and increased forecast first-quarter 2019 production by 75 million pounds. Through much of the first half of the year, positive margin effects of lower hog prices from larger animal supplies have been offset by declines of wholesale pork prices. June pork exports were slightly higher than a year earlier. Exports to Mexico were lower, with effects of Mexico's pork tariffs likely reducing shipments of U.S frozen pork products but also reflecting increased competition in several markets.

Poultry/Eggs: The projection for third-quarter broiler production was raised on recent data, including data on placements. Lower forecast feed prices are expected to support a slightly higher 2019 production forecast. Broiler price projections were decreased for the third and fourth quarters of 2018, as well as for 2019, on recent price declines and expected greater product availability. Projections for egg production and prices were not revised, with signs that production expansion has proceeded as expected. The turkey production forecast is unchanged, while turkey exports were reduced after a second consecutive month of year-over-year declines.

Cattle / Beef

Russell Knight and Lekhnath Chalise

U.S. Cattle Herd Expands but Heifer Retention Wanes

In July, USDA National Agricultural Statistics Service (NASS) released the midyear *Cattle* report², which provided a snapshot of U.S. cattle inventory, as well as a glimpse into cow/calf producers' indications for retaining heifers. The report estimated that the U.S. cattle herd grew to 103.2 million head by July 1, almost 1 percent higher than last year, and that the number of beef cows also grew by 1 percent to 32.5 million head.

Based on the number of beef cows on July 1, ERS estimates that 12.3 percent fewer heifers entered the herd in first-half 2018 than over the same period last year. The ERS webpage *Livestock & Meat Domestic Data* has a table titled "Heifers Entering the Herd," which estimates heifers for beef cow replacement that entered the herd this year (January-June) was 2.6 million head. According to the *Cattle* report, producers intend to keep about 4.6 million beef heifers as beef cow replacements, 2 percent fewer than producers intended to keep at this time last year. This further suggests that producers' intentions are signaling that herd expansion since 2014 is nearing a peak.

Consequently, those heifers not retained for beef cow replacements are being placed into feedlots. According to the July NASS *Cattle on Feed* report, the number of cattle on feed in feedlots with capacity of 1,000 head or more totaled 11.3 million head on July 1, 2018, up 4.3 percent from 2017 levels. This is the largest number of cattle on feed for the month since the series began in 1996. The NASS report also estimated the classes of cattle on feed as 7.1 million head of steers and 4.2 million head of heifers. Compared to 2017, the number of heifers on feed increased by 8 percent, while steers increased by only 2 percent. Heifers represented 36.8 percent of the number of cattle on feed on July 1, compared to 35.6 percent last year.

Additionally, the ERS webpage *Livestock & Meat Domestic Data* has a table titled "Feeder Cattle Supplies Outside Feedlots," which estimates the number of cattle that are available to place into feedlots at 37.1 million head, 0.5 percent larger than this time last year. This suggests that even though the cattle expansion is slowing down, the combination of more cattle available outside feedlots and a larger 2018 calf crop will provide ample supply for placement into 2019.

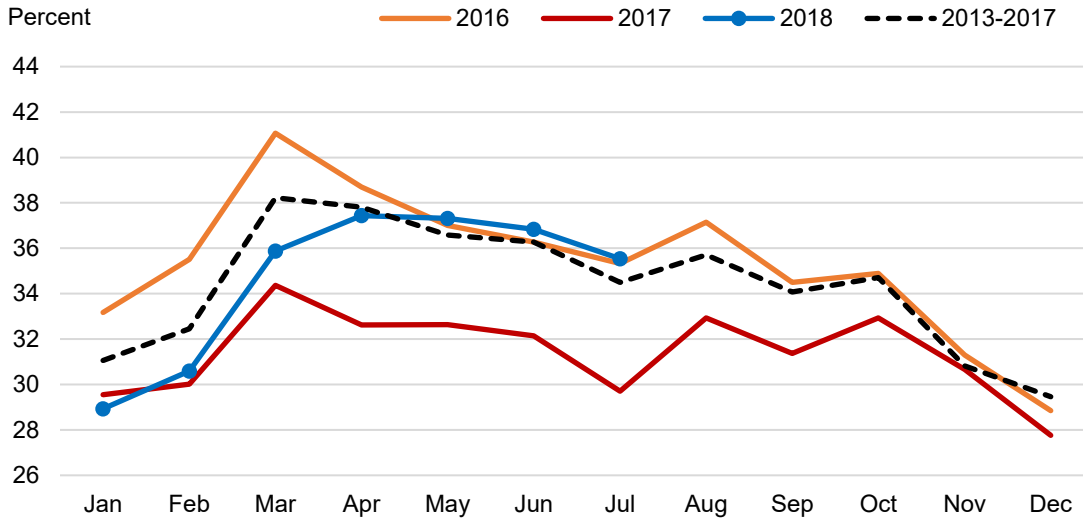
Slaughter Mix Adjustment Trims 2018 Beef Forecast

The beef production forecast for 2018 was lowered fractionally on a slower than expected pace of steer and heifer slaughter midway through the third quarter, partially offset by higher anticipated cow slaughter in second-half 2018. In addition to retaining fewer heifers, producers are also culling more of their cows than last year as cow slaughter is up about 8 percent year over year through first-half 2018. However, the greater number of cows in the slaughter mix is expected to lower average cattle dressed weights in second-half 2018. As a result, the 2018 beef production forecast was lowered 55 million pounds to 27.1 billion pounds.

² The July *Cattle* report was temporarily suspended in 2013 and 2016.

Lower projected feed costs will likely support greater cattle weight gains in feedlots in 2019. Currently, *Cattle on Feed* data indicate that the percent of cattle that have been on feed over 120 days is nearly 6 percentage points higher than this time last year but still following historical patterns (see chart below). The percent of cattle on feed is expected to remain near more historic norms through the end of the year, as feedlots appear to be responding to potentially better margins in fourth-quarter 2018 and first-quarter 2019. The forecast for 2019 was raised by 30 million pounds to 27.7 billion pounds on higher expected fed cattle weights.

Percent of cattle on feed over 120 days

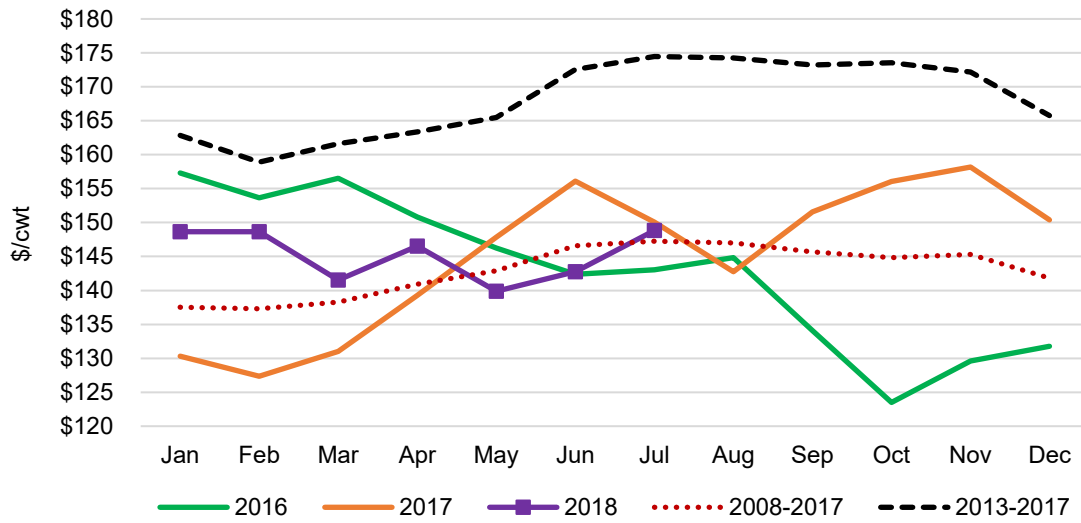


Source: U.S. Dept. of Agriculture, Economic Research Service.

Feeder Cattle Prices To Find Support From Lower Feed Inputs

Feeder calf prices are exhibiting a historic seasonal pattern of higher prices in the summer months (see chart below). The strength in prices may be supported by moderate feed costs and the prospect of higher fed cattle prices in 2019. The feeder steer price forecasts for third-quarter and fourth-quarter 2018 were revised higher from last month to \$147-\$151 per hundredweight (cwt) and \$143-\$151/cwt, respectively. The 2019 full-year price forecast was raised to \$138-\$150/cwt.

Monthly prices for feeder steers 750-800 pounds



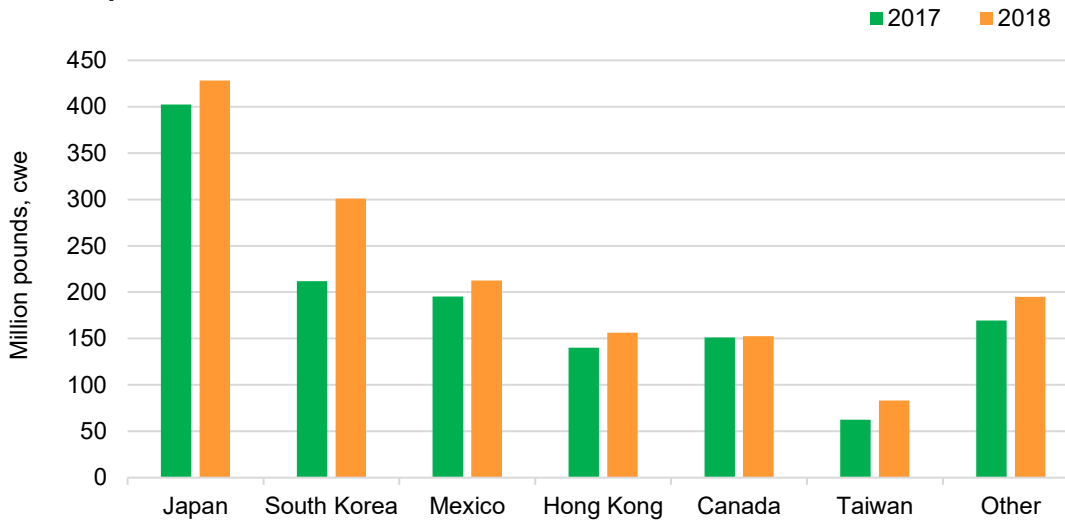
Source: U.S. Dept. of Agriculture, Agricultural Marketing Service.
 Note: cwt = hundredweight.

Fed cattle marketings appear to be a reflection of meatpackers managing slaughter cattle volumes, and feedlots responding to potentially better margins in the near future. This will likely keep pressure on fed steer prices in third-quarter 2018. The 2018 and 2019 price forecast for fed steers is unchanged from last month at \$115-\$117/cwt and \$113-\$122/cwt, respectively.

Double-Digit Export Growth in First-Half 2018

Beef exports in June totaled 272.6 million pounds, up 16 percent from year-earlier levels. Growth in each month through June resulted in a 15-percent year-over-year increase in first-half 2018 to 1.529 billion pounds. Year-to-date exports were higher for all major destinations, as well as to a number of markets outside of major destinations (see chart below). Notably higher year-over-year increases were to South Korea (+42 percent) and Taiwan (+33 percent). However, exports to Hong Kong have been declining since April. Strong demand in a number of Asian markets, coupled with greater supply availability, supported robust exports.

Beef exports flourish in first-half 2018



Source: U.S. Dept. of Agriculture, Economic Research Service.
 Note: cwe = Carcass Weight Equivalent.

USDA Foreign Agricultural Service weekly export sales reports also indicate increased July shipments to Asian markets, suggesting a continuation of strong demand from those destinations. Based on vigorous overseas demand and domestic supply available, third- and fourth-quarter 2018 U.S. beef exports were revised upward by 10 million pounds in each quarter, respectively, to 795 million pounds and 800 million pounds. This raises the 2018 export forecast to 3.124 billion pounds. Prolonged drought in Australia is likely to enhance cattle slaughter in second-half 2018, limiting the cattle available for slaughter in 2019. Anticipating the continued overseas demand and tighter exportable supplies from Oceania, U.S. beef exports for 2019 were revised upward by 40 million pounds to 3.205 billion pounds.

U.S. beef imports in June 2018 were 291.2 million pounds, more than a 1-percent decline from year-earlier levels. While less-than-expected import volume in June lowered the 2018 imports forecast to 3.037 billion pounds, forecasts for second-half 2018 were unchanged. However, first-half 2018 imports were about 1 percent higher than year-earlier levels at 1.527 billion pounds. Among major suppliers, year-over-year volumes from Canada, New Zealand, Nicaragua, and Australia increased the first half of 2018, while declines occurred for Mexico, Brazil, and Uruguay (see table below). Import forecasts for 2019 were unchanged from the previous month's forecast of 3.140 billion pounds.

Major suppliers	Beef imports, first half 2017	Beef imports, first half 2018	YOY change in volume	YOY change in percent
	< Million pounds >			
Australia	308	317	8	2.7
Canada	343	377	34	9.9
New Zealand	342	372	29	8.6
Mexico	292	249	-44	-15.0
Brazil	84	65	-19	-22.6
Uruguay	60	53	-7	-12.4
Nicaragua	65	74	10	14.8
Other	18	22	4	24.2
Total	1512	1527	15	1.0

Source: U.S Dept. of Agriculture, Economic Research Service.
Note: YOY=year-over-year.

Cattle Imports and Exports Up in June

June cattle imports were up by 27,365 head from 2017 to 154,685 head; imports from Mexico more than offset the decline from Canada. This was the third consecutive month of year-over-year increases of cattle imports, which resulted in slightly higher imports in first-half 2018 compared to year-earlier levels. The cattle import forecasts for 2018 and 2019 were unchanged from the previous month's forecast: 1.885 million and 1.960 million head, respectively.

Cattle exports in June increased about 6,000 head from year-earlier levels to 17,768 head. First-half 2018 exports are 35 percent higher than last year. U.S. cattle exports to Canada have more than offset the declines to Mexico and other destinations, mainly to Vietnam and Turkey during this period. The cattle export forecasts for 2018 and 2019 were unchanged from the previous month's forecast, respectively at 170,000 head and 160,000 head.

Dairy

Jerry Cessna and Jonathan Law

Recent Developments in Dairy Markets

From the week ending July 7 to the week ending August 4, price directions for major wholesale dairy products reported in the USDA *National Dairy Products Sales Report* (NDPSR) were mixed. While the butter price declined, prices for nonfat dry milk (NDM) and dry whey increased. For the week ending July 7, the price spread between 40-pound blocks and 500-pound barrels (adjusted to 38 percent moisture) of cheddar cheese was \$0.2165 per pound, a record for the series.³ By the week ending August 4, the price gap narrowed to \$0.1526 per pound.

Dairy wholesale product prices (dollars per pound)

	For the week ending		Change
	July 7	Aug 4	
Butter	2.2968	2.2704	-0.0264
Cheddar cheese			
40-pound blocks	1.5935	1.5725	-0.0210
500-pound barrels ¹	1.3770	1.4199	0.0429
Nonfat dry milk	0.7799	0.7976	0.0177
Dry whey	0.3366	0.3543	0.0177

¹ Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*.

For the trading week ending August 10, the Chicago Mercantile Exchange (CME) spot butter price was \$2.3240 per pound. CME spot prices for cheddar cheese blocks and barrels were \$1.6110 and \$1.5345 per pound, respectively. CME spot prices serve as price discovery mechanisms for broader U.S. dairy markets as reflected in NDPSR prices and are therefore useful for short-term forecasting. The NDPSR butter price is highly correlated with the CME butter price of the previous week, and NDPSR cheese prices are highly correlated with CME cheese prices of the previous 2 weeks.

U.S. dairy product prices continue to be competitive with foreign export prices. USDA *Dairy Market News* reported that in July, Oceania and Western Europe export prices averaged \$2.31 and \$2.96 per pound for butter, respectively, and \$0.92 and \$0.81 for skim milk powder (SMP).⁴ The Oceania export price for cheddar cheese was \$1.67 per pound in July, and the Western Europe dry whey export price was \$0.44 per pound.

USDA National Agricultural Statistics Service (NASS) reported U.S. milk production in June to be 18.270 billion pounds, 1.2 percent above June 2017. Milk cows numbered 9.404 million head in June,

³ The national wholesale dairy product price series began in March 1997. Prices were reported from the week ending March 7, 1997, through the week ending March 27, 2012, by USDA National Agricultural Statistics Service in the *Dairy Products Prices Report*. Since then, they have been reported by USDA Agricultural Marketing Service in the *National Dairy Products Sales Report*.

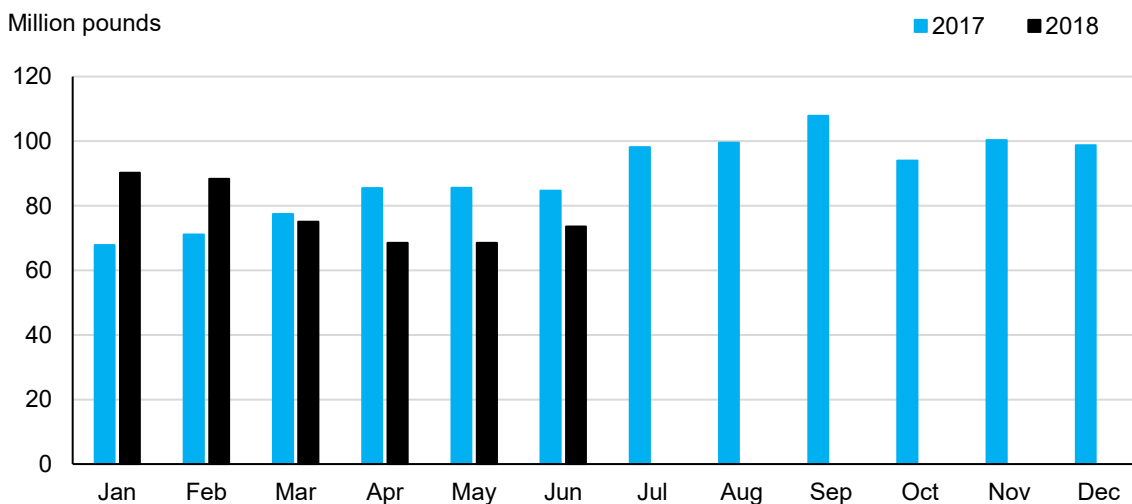
⁴ Foreign export prices are midpoints of price ranges reported free on board (f.o.b.) port of the exporting country; they are reported voluntarily and reflect prices for products that may be shipped in subsequent months.

unchanged from May. Milk per cow was 1,943 pounds in June, 23 pounds above June 2017. The July 1 inventory of milk cow replacement heifers, as reported in the NASS *Cattle* report, was 4.2 million head, matching the number from July 1, 2017.

In June, U.S. dairy product exports on a milk-fat milk-equivalent basis were 989 million pounds, 123 million more than June 2017 and 53 million more than May 2018. It is notable that exports of butterfat products (butter, anhydrous milk fat, butter oils, high-fat dairy spreads) have been relatively high in recent months. In the first half of 2018, butterfat exports were 47 million pounds, 65.1 percent more than the first half of 2017. June dairy exports on a skim-solids milk-equivalent basis were 3.772 billion pounds, 494 million less than May but 513 million more than June 2017. June exports of NDM, dry whey, and whey protein concentrate declined from May but were higher than June of 2017.

Ending stocks on a milk-fat basis were 19.1 billion pounds in June, 7.0 percent higher than June 2017. June ending stocks on a skim-solids basis were 11.6 billion pounds, 0.2 percent lower than June 2017. While June ending stocks were higher than the previous year for butter and other-than-American cheese, they were lower than the previous year for American cheese, NDM, whey products, and lactose. The market for dry whey has been relatively tight, with June ending stocks 13.1 percent below the previous year.

Dry whey stocks



Source: National Agricultural Statistics Service.

Domestic use was relatively weak in the second quarter. On a milk-fat basis, domestic use was 51.4 billion pounds, 1.4 percent below the second quarter of 2017. On a skim-solids basis, domestic use was 44.3 billion pounds, 2.0 percent below the second quarter of 2017.

U.S. macroeconomic data reported by the U.S. Bureau of Economic Analysis indicated signs of strength in the second quarter. Real gross domestic product increased from the first quarter at an annualized rate of 4.1 percent, the highest rate since the third quarter of 2014. Real disposable personal income increased 2.6 percent. These “advance” estimates are based on incomplete data, and second estimates will be released on August 29.

On August 3, 2018, the Chinese Government announced a revised list of U.S. products subject to additional tariffs in response to additional tariffs announced by the United States on August 2. The

additional tariffs will be implemented on August 23, 2018. Dairy products to be included in the new round of tariffs include lactose, milk albumin (also known as whey protein isolate (WPI)), infant formula, casein products, dairy-based food preparations, and milk-based drinks. Of these dairy products, lactose is by far the most predominant product that the United States exports to China. In 2017, 74.2 percent of China's lactose imports came from the United States. The tariff for lactose will be increased from 10 to 20 percent. At times, the United States also exports significant quantities of milk albumin to China. The tariff for milk albumin would increase from 10 to 15 percent. The United States exports relatively small quantities of the other dairy products included in China's August 3 list of products to be subject to additional tariffs.

U.S. production and export data relevant to world and China for selected products subject to additional tariffs effective August 23, 2018

(quantities in millions of pounds)

	U.S. production quantity	U.S. exports to world		U.S. exports to China		
		Quantity	Percent of U.S. production	Quantity	Percent of U.S. production	Percent of U.S. exports to world
<u>Lactose</u> ¹						
2017	1,124	796	70.8	150	13.3	18.8
2018 Jan-June	559	463	82.9	118	21.2	25.5
<u>Whey protein isolate</u> ²						
2017	117	78	66.8	16	13.6	20.4
2018 Jan-June	57	45	77.9	9	15.8	20.3

¹ Lactose includes lactose and lactose syrup exported under Harmonized Schedule (HS) Codes 1702.11 and 1702.19.

² Whey protein isolate includes milk albumin, including concentrates of two or more whey proteins, exported under HS Code 3502.20.

Sources: U.S. Dept. of Agriculture: National Agricultural Statistics Service, Foreign Agricultural Service, and Economic Research Service calculations; and U.S. Dept. of Commerce, Bureau of the Census.

The new tariffs to be implemented by China are in addition to the tariffs previously announced on June 16 and implemented on July 6, as discussed in last month's report. With the new tariffs to be implemented on August 23, all of China's dairy product imports from the United States will be subject to tariffs in addition to normal most-favored-nation tariffs. As discussed in previous reports, on June 5, 2018, Mexico issued a list of agricultural products to receive additional tariffs. Almost all cheese imported from the United States was included on the list. Canada raised tariffs on various products effective July 1. Dairy-related items included in Canada's list for additional tariffs include yogurt and pizza.

Outlook for Feed Prices

The 2017/18 feed price estimate for corn is \$3.35-\$3.45 per bushel, unchanged from last month's estimate at the midpoint. For soybean meal, the 2017/18 feed price estimate is \$350 per short ton, unchanged from last month's forecast. The alfalfa hay price in June was \$181 per short ton, \$8 lower than May but \$27 higher than June of last year. The average corn price for 2018/19 is projected to be \$3.10-\$4.10 per bushel, 20 cents lower at the midpoint than last month's forecast. The 2018/19 average soybean meal price is projected at \$295-\$335 per short ton, \$20 lower than last month's forecast at the midpoint. For more information, see the USDA Economic Research Service publication *Feed Price Outlook*.

International Dairy Outlook

In the semiannual publication *Dairy: World Markets and Trade*, USDA Foreign Agricultural Service forecasts that 2018 milk production for the top five major exporters (European Union (EU), United States, New Zealand, Argentina, and Australia) will total 652.6 billion pounds, 6.4 billion pounds higher than the December forecast and a 1.47-percent increase over 2017. Notably, the forecast for the EU has been increased by 7.7 billion pounds due in part to stronger expected domestic and export demand. The forecast for New Zealand has been decreased by 0.4 billion pounds due to a reduction in the growth rate of milk production in recent months. One uncertainty is the impact of culling in New Zealand due to the presence of *Mycoplasma Bovis*, which has been detected in a number of herds. While the disease brings about a range of infections in dairy cows, it poses no known disease risk for humans.

Dairy Forecasts for 2018

The annual forecast for the size of the milking herd in 2018 is unchanged at 9.405 million. The 2018 milk-per-cow forecast has been raised to 23,175 pounds per head, 5 pounds higher than last month's forecast, since the second-quarter number was higher than expected. However, the milk production forecast rounds to 217.9 billion pounds for the year, unchanged from last month's forecast.

The import forecast for 2018 on a milk-fat basis has been raised to 6.0 billion pounds, 0.1 billion more than last month's forecast, based on higher expected imports of butterfat products. The export forecast for the year has been raised 0.2 billion pounds to 10.4 billion, based on higher expected exports of butterfat products and whole milk powder. The forecast for ending stocks on a milk-fat basis is unchanged at 13.5 billion pounds. With a strengthening economy, the domestic use forecast on a milk-fat basis has been raised for the second half of the year. However, the annual forecast has been lowered by 0.1 billion pounds to 212.4 billion, as the lower-than-expected domestic use in the second quarter more than offsets the higher forecast for the second half of the year.

For 2018, the annual forecast for imports on a skim-solids basis is 5.6 billion pounds, unchanged from last month's projection. The export forecast on a skim-solids basis, however, has been reduced 0.6 billion pounds to 45.4 billion as exports of whey products were relatively low in June and the newly announced Chinese tariffs are expected to reduce exports of lactose. Ending stocks on a skim-solids basis are forecast at 10.5 billion pounds for 2018, unchanged from the last forecast. With a strengthening economy contributing to higher demand, the domestic use forecast on a skim-solids basis is 178.4 billion pounds, 0.6 billion pounds higher than last month's forecast.

Due to stronger expected demand and recent price strength, 2018 price forecasts for cheddar cheese, butter, and NDM have been raised to \$1.550-\$1.570, \$2.265-\$2.305, and 0.755-\$0.775 per pound, respectively. In addition to recent price strength and stronger expected demand, relatively low stock levels have contributed to a higher dry whey price forecast of \$0.295-\$0.315 per pound.

With higher dairy product price forecasts, milk price forecasts for 2018 are higher than the last forecasts as well. The Class III and IV prices are projected at \$14.50-\$14.70 and \$13.95-\$14.25 per cwt, respectively, increases of 15 cents and 25 cents at the midpoints of the ranges. The all-milk price forecast has been raised 10 cents at the midpoint of the range to \$16.10-\$16.30 per cwt for the year.

Dairy Forecasts for 2019

With higher milk price forecasts and lower feed price forecasts, the 2019 milk production forecast has been raised to 220.9 billion pounds, 0.3 billion higher than last month's forecast. The milk cow forecast for 2019 has been raised 10 thousand head to 9.405 million, and milk per cow is projected at 23,495 pounds, 20 pounds higher than projected last month.

On a milk-fat basis, the forecasts for imports and exports for the year are unchanged at 5.6 billion and 9.9 billion pounds, respectively. Ending stocks in 2019 are still expected to fall from 2018 to 12.5 billion pounds. With relatively high expected economic growth, the 2019 domestic use forecast is 216.6 billion pounds, 0.3 billion pounds higher than last month's forecast.

Imports on a skim-solids basis are forecast at 5.5 billion pounds for the year, 0.1 billion pounds less than last month's forecast. The export forecast for 2019 has been reduced 0.1 billion pounds to 44.8 billion, as lower shipments of lactose to China will persist due to the new tariffs. Domestic use on a skim-solids basis is now forecast at 180.6 billion pounds, an increase of 0.6 billion from last month, as a strengthening economy is expected to contribute to higher demand. With higher domestic use, ending stocks on a skim-solids basis are now forecast at 10.5 billion pounds, 0.3 billion less than last month.

Due to stronger expected demand, 2019 price forecasts for cheese, nonfat dry milk, and dry whey have been raised to \$1.590-\$1.690, \$0.755-0.825, and \$0.300-\$0.330 per pound, respectively. The butter price forecast for the year is unchanged at \$2.220-\$2.350 per pound.

Class III and IV price forecasts have been raised for 2019. The Class III price for the year is projected at \$14.95-\$15.95 per cwt, a 25-cent increase at the midpoint of the range. The Class IV price is now forecast at \$13.75-\$14.85 per cwt, a 10-cent increase at the midpoint of the range. The all-milk price forecast for 2019 has been raised 20 cents at the midpoint of the range to \$16.45-\$17.45 per cwt.

Pork / Hogs

Mildred Haley

Third-Quarter Slaughter Delays Likely To Have Ripple Effects until Early 2019

Although more hogs were slaughtered in July of this year than July of 2017, July pork production turned out to be less than expected, largely due to several short-lived processing plant interruptions. On that basis, the forecast for third-quarter production was trimmed back slightly. A third-quarter commercial pork production of 6.5 billion pounds, almost 4 percent higher than a year earlier, is anticipated.

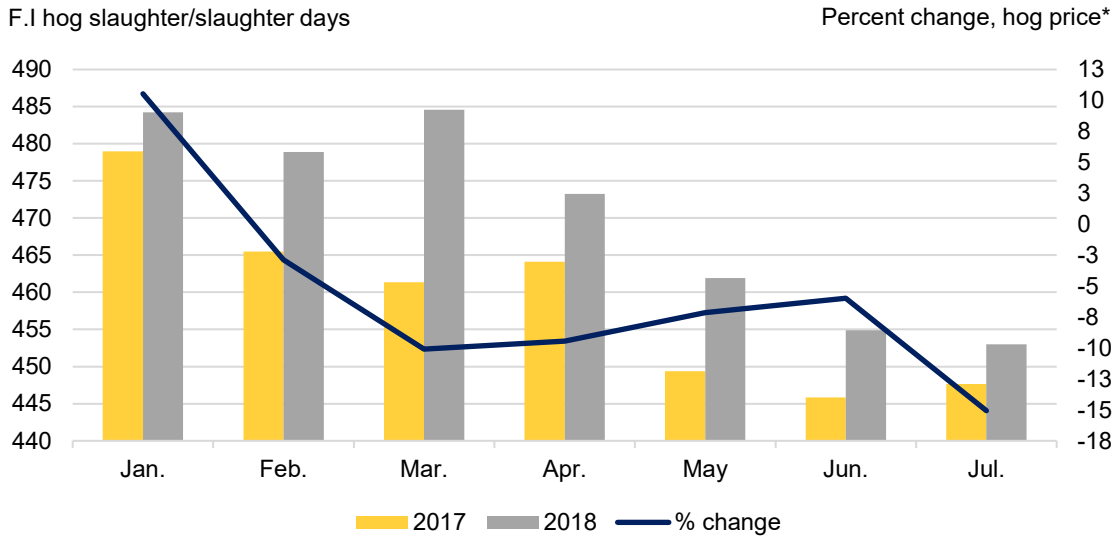
Slaughter plant discontinuities in July and those scheduled to take place in August, have likely disrupted schedules, delaying slaughter of animals scheduled for plant delivery into succeeding weeks. Large supplies of hogs are likely to persist through the fall months and into the first quarter of 2019 as packers attempt to balance pork supplies with demand. The third-quarter pork production forecast is reduced to 6.515 billion pounds and the fourth-quarter 2018 pork production forecast is reduced slightly to about 7.225 billion pounds. Although the reduction largely reflects the slower expected pace of slaughter, carcass weights are expected to reflect a slightly longer time on feed and lower feed costs. Total commercial pork production for 2018 is forecast to be 26.7 billion pounds, almost 4 percent above production in 2017.

For 2019, first-quarter hog slaughter is adjusted upwards slightly due to expected increases in slaughter-ready hogs, slaughter capacity, and heavier average dressed weights. First-quarter commercial pork production is expected to be 6.9 billion pounds, almost 4 percent higher than a year earlier. Total pork production in 2019 is expected to be about 27.8 billion pounds, almost 4 percent higher than the forecast for this year. Hog prices are expected to average \$39-\$42 per cwt in 2019, about 8 percent below prices forecast for 2018.

Larger Supplies of Hogs and Pork Are Clearing the Market at Lower Prices

Through early August, the larger availability of slaughter hogs and weak wholesale pork prices pressured hog prices to below year-earlier levels, despite competition from new packing facilities. The figure below shows increased slaughter rates (monthly federally inspected hog slaughter/number of monthly slaughter days) accompanied by negative year-over-year changes in hog prices from February to July 2018. For the balance of this year, hog prices are expected to continue to average below a year earlier: third-quarter prices are forecast to average \$45-\$47 per cwt, 17 percent lower than a year ago. For the fourth quarter of 2018, hog prices forecast—\$33-\$35 per cwt—are about 24 percent below a year earlier.

Per day slaughter rates and year-over-year percent changes in hog prices, Jan.-July 2017 and 2018

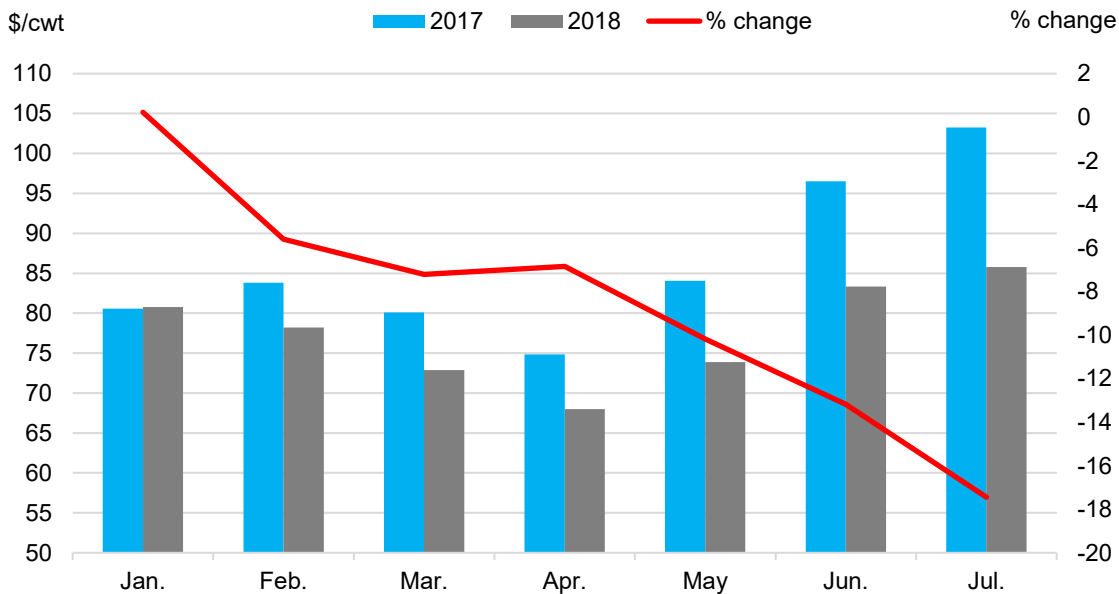


* Live equiv. 51-52 percent lean hogs.

Source: Economic Research Service, USDA.

Recent expansion in the U.S. pork industry has resulted in significantly more U.S. pork being supplied to both domestic and international markets. Through July, larger pork supplies have pressured wholesale pork prices. The figure below shows that wholesale pork carcass cutout value has averaged almost 9 percent lower than wholesale values over the same period last year.

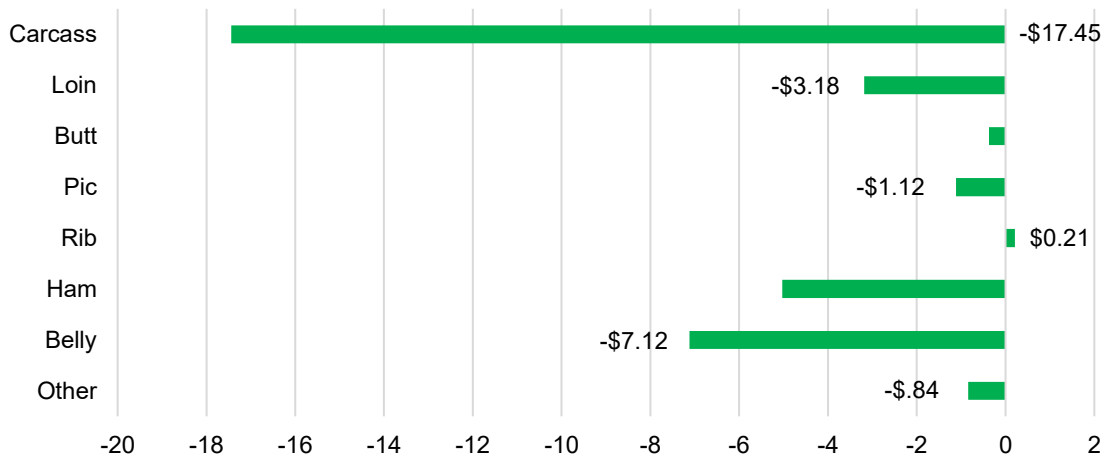
Wholesale Carcass Cutout and year-over-year percent changes, Jan.-July 2017 and 2018



Source: Economic Research Service, USDA.

The wholesale pork carcass cutout is a weighted aggregation of prices of hog carcass primals: loins, butts, picnics, ribs, hams, bellies, and other. Monthly wholesale prices of hog carcass primals, from July 2017 through July of this year, suggest that increased supplies of pork have pressured primal prices almost across the board. The figure below shows primal contributions to the \$17.45 decline in the wholesale pork carcass cutout, between July 2017 and July 2018. The lower average wholesale carcass cutout value in July 2018 shows the extent to which prices need to fall to clear the market of larger supplies of pork cuts, relative to a year earlier. At the same time, lower wholesale prices can also signal that pork supplies have increased faster than pork demand.

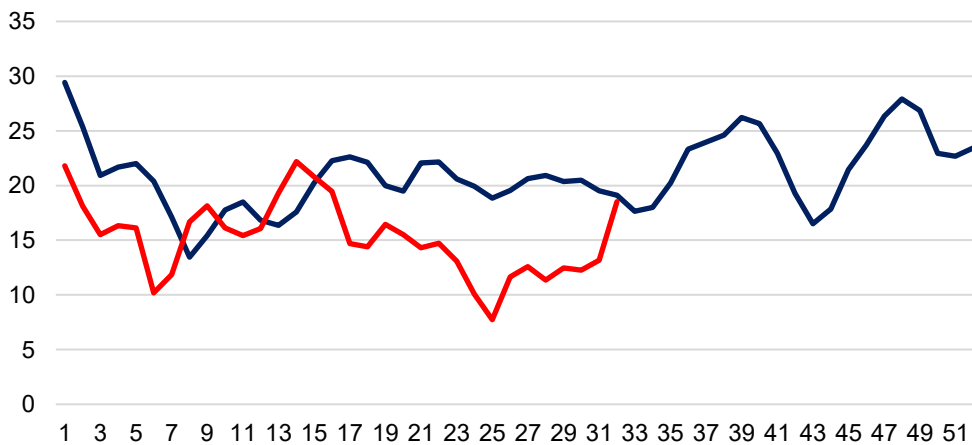
Primal contributions to July 2017-July 2018 decline in wholesale cutout value



Source: Economic Research Service, USDA.

For U.S processors, lower hog prices and lower wholesale pork prices have mostly resulted in lower gross processing margins in 2018. Compared with the same period last year, when gross processors' margin averaged \$20.15 per cwt, through early August 2018 processor margins have averaged 24 percent lower, at \$15.10 per cwt. Larger 2018 pork supplies have pressured the pork cutout to below year-earlier levels, and until just recently, the decline in hog prices has been insufficient to boost gross processor margins.

Weekly per cwt gross processor margin, drop credit included, 2017-August 10, 2018



Source: Economic Research Service, USDA.

June Pork Exports About Even With a Year Ago

June pork exports were 454 million pounds, 1.3 percent larger than a year ago. The 10 largest buyers of U.S pork in June are summarized below.

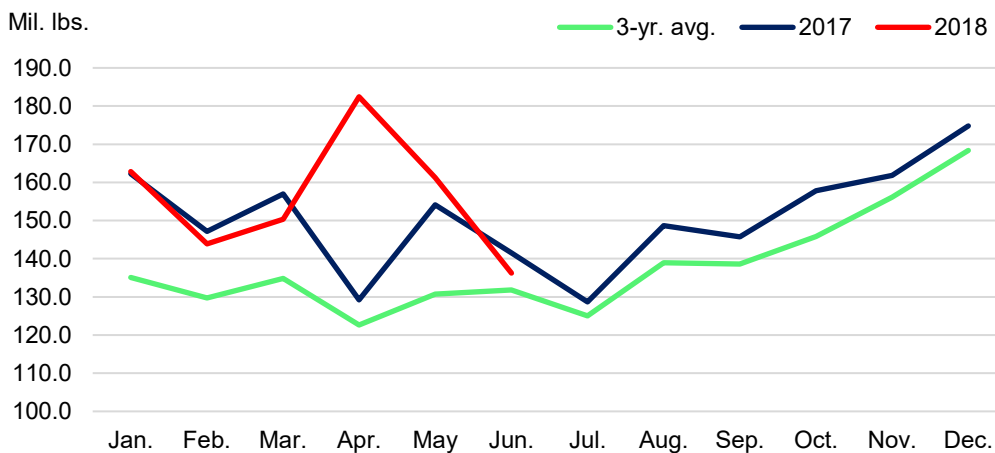
U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations, June 2017 and 2018

	Country	Exports June 2017 (mil. lbs)	Exports June 2018 (mil. lbs)	Percent change (2018/2017)	Export share June 2017 %	Export share June 2018 %
	World	448	454	1.3		
1	Mexico	142	136	-3.8	31.6	30.0
2	Japan	95	98	3.9	21.1	21.6
3	South Korea	39	50	28.4	8.7	11.1
4	Canada	40	42	5.2	8.8	9.2
5	China/Hong Kong	50	30	-40.5	11.1	6.5
6	Colombia	12	22	78.3	2.8	4.9
7	Australia	16	17	0.9	3.7	3.7
8	Dominican Republic	10	9	-8.1	2.1	1.9
9	Philippines	10	9	-12.1	2.2	1.9
10	Honduras	6	8	19.5	1.4	1.7

Source: Economic Research Service, USDA.

It is notable that although Mexico remained the largest foreign buyer of U.S pork in June, shipments to Mexico in June were almost 4 percent below those of June 2017. The last time that exports to Mexico were year-over-year lower was in February and March of this year.

Monthly U.S pork exports to Mexico



Source: Economic Research Service, USDA.

U.S. trade data indicate that the most of U.S. pork exports to Mexico consist of muscle cuts, primarily hams and shoulders. Fresh bone-in hams and shoulders typically make up more than 80 percent of monthly shipments, with frozen hams and shoulders making up between 10 and 15 percent of monthly exports, on average. Trade data for June 2018 would provide the first indication of the effects of the Mexican tariffs imposed on U.S. pork, effective June 5, 2018.

U.S. data for June exports of muscle cuts of pork to Mexico suggest that U.S. frozen pork cuts may be affected by the new Mexican import regime to a greater degree than fresh cuts. The data show that while June 2018 exports of fresh pork cuts increased 1.03 percent, shipments of frozen cuts declined 15.2 percent over volumes shipped in June 2017. Frozen cuts of U.S. pork may be more vulnerable to the Mexican trade action because frozen products can be sourced from competing exporting countries—Canada and the European Union, for example. On the other hand, finding a substitute for fresh U.S. hams and shoulders will be challenging for Mexican buyers in the short term, taking account of distances of competing exporters, along with the configuration of many Mexican processing plants to work with fresh, rather than frozen, pork products.

U.S exports of fresh and frozen muscle cuts of pork*, June 2017 and June 2018

	June 2017	June 2018	Percent chg.
	MT	MT	%
Fresh	42,375	42,813	1.03
Frozen	6,137	5,203	-15.22
Total	48,512	48,016	-1.02

*HS codes 0203.1-0203.2

Source: Economic Research Service, USDA.

Pork Export Forecasts Trimmed

For the second quarter of 2018, total pork exports were 1.518 billion pounds, 6.5 percent above a year earlier. For the second half of 2018, pork export forecasts were lowered by 40 million pounds, on anticipated increased competition in key export markets. Third-quarter exports are expected to be 1.28 billion pounds, about 4 percent above same period in 2017. Fourth-quarter exports are expected to be more than 7 percent higher than a year earlier, at 1.655 billion pounds. Total 2018 pork exports are expected to total 5.969 billion pounds this year, 6 percent above exports in 2017. In 2019, pork exports are expected to be 6.1 billion pounds, about 2 percent above exports forecast for this year.

Poultry

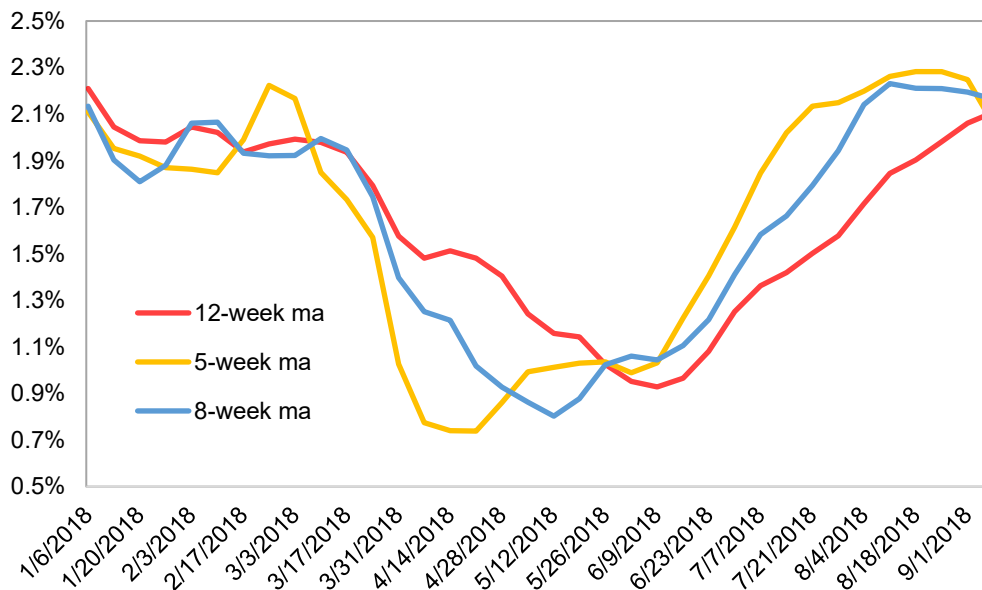
Sean Ramos, Kim Ha, and Alex Melton

Broiler Production Revised Up for Near-Term Outlook

June broiler production was 3.5 billion pounds, 3 percent higher than a year ago after adjusting for 1 less slaughter day this year. Average live weights were up 1 percent from last year, while the number of birds slaughtered was up more than 2 percent on a per-day basis. The number of chicks placed in meat-growing operations during July declined but remained strong. Based on moving placements forward 6-7 weeks (approximately the period for growing broilers to harvest weight), estimated birds available for slaughter from July through early September number 2 percent more than a year earlier. Growth in bird availability has been trending upwards, as shown by the indicators found in the chart below. Projected production for the third quarter was increased 80 million pounds to 10,850 million pounds.

Indicators for birds available for slaughter reveal upward trend

Year-over-year growth of moving averages (ma) for birds placed 6-7 weeks earlier



Source: Economic Research Service calculations using data from U.S. Dept. of Agriculture, National Agricultural Statistics Service.

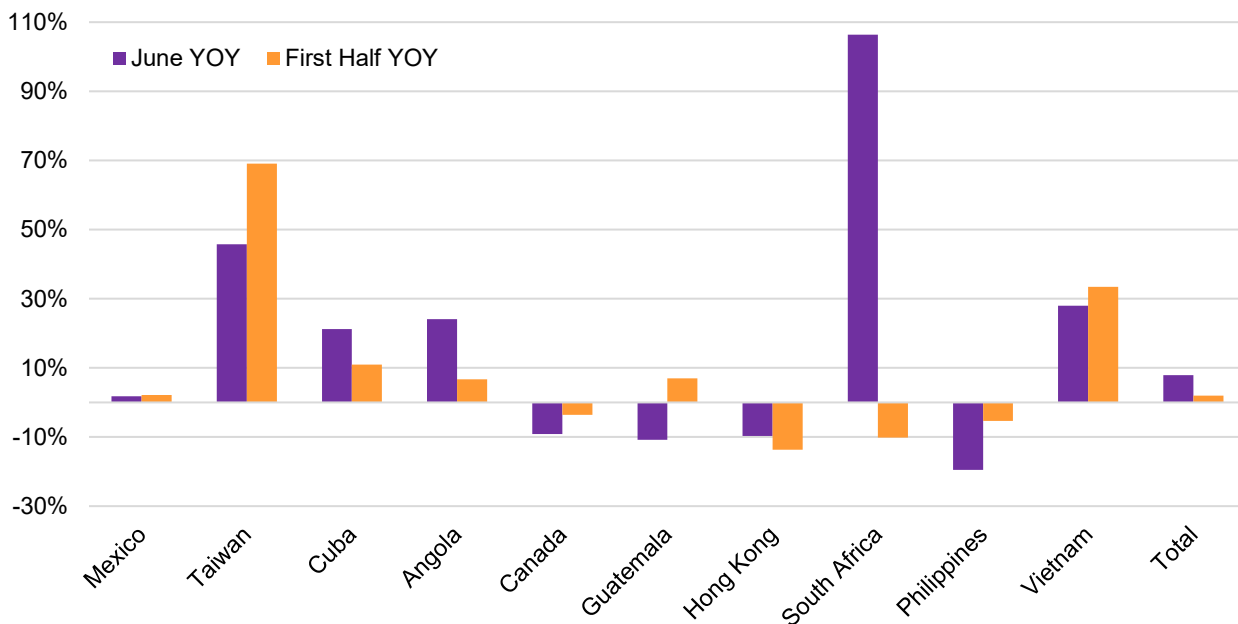
On June 1, the number of intended placements of breeder pullets increased sharply, reaching 13 percent higher than a year earlier. During the recent past, reports of pullet shortages have helped explain relatively low breeder productivity and constraints to placing birds for meat production. Going forward, more pullet placements may help refresh or alter the genetic characteristics of the breeder flock to increase its productivity, and older birds may be retired at an increased rate. Incentives to grow the breeder flock further will be limited. Although record-large red meat and poultry supplies are expected to pressure prices, corn and soybean meal price forecasts were reduced this month. To the extent this reduces feed costs, there may be incentives to continue increasing production of heavier weight birds. Forecast total 2019 production was raised 60 million pounds from last month.

First Half Export Growth Positive but Below Expectations

U.S. broiler export volumes for June totaled 570 million pounds, 7.9 percent above June 2017 and a slight rebound from the 4.3 percent year-over-year (YOY) decline in May. While broiler exports for the first half were up 2 percent compared to 2017 for the same period, they fell short of expectations, likely due in part to an appreciating dollar and weaker-than-expected demand. Forecasts for third quarter and fourth quarter were lowered by 20 million pounds and 10 million pounds, respectively. The forecast for 2019 total exports was revised down by 55 million pounds.

Year-over-year growth for the 10 largest export markets is presented in the chart below. Mexico, which represents about one-fifth of the U.S. broiler export market, had an increase in June shipments of 1.8 percent YOY, with first-half exports up 2.2 percent. It is anticipated that the Mexico broiler market will remain favorable in the near term, as Mexico's tariffs on U.S. pork products may increase substitution. Taiwan and Vietnam continue to be strong U.S. broiler markets, demonstrating double-digit YOY increases every month to date in 2018 and concluding the first half with 69.1 percent and 33.4 percent YOY growth, respectively. Other major markets exhibiting YOY growth for the first half include Cuba (+11 percent), Angola (+6.7 percent), and Guatemala (+6.9 percent). Conversely, a few important markets did not maintain 2017 volumes, including Canada, which decreased by -3.6 percent YOY in the first half, Hong Kong (-13.7 percent), and the Philippines (-5.4 percent). June shipments to South Africa more than doubled over 2017, likely due to South Africa's suspension of meat imports from Brazilian establishments suspected of food safety fraud, allowing U.S. broilers to gain market share in June. Despite this surge, year-to-date U.S. exports to South Africa were down 10 percent, and shipments in the second half of the year may face increased competition in the market pending Brazil's resolution of issues.

Percentage change in U.S. broiler exports to major markets (June 2018/2017 and first-half 2018/2017)

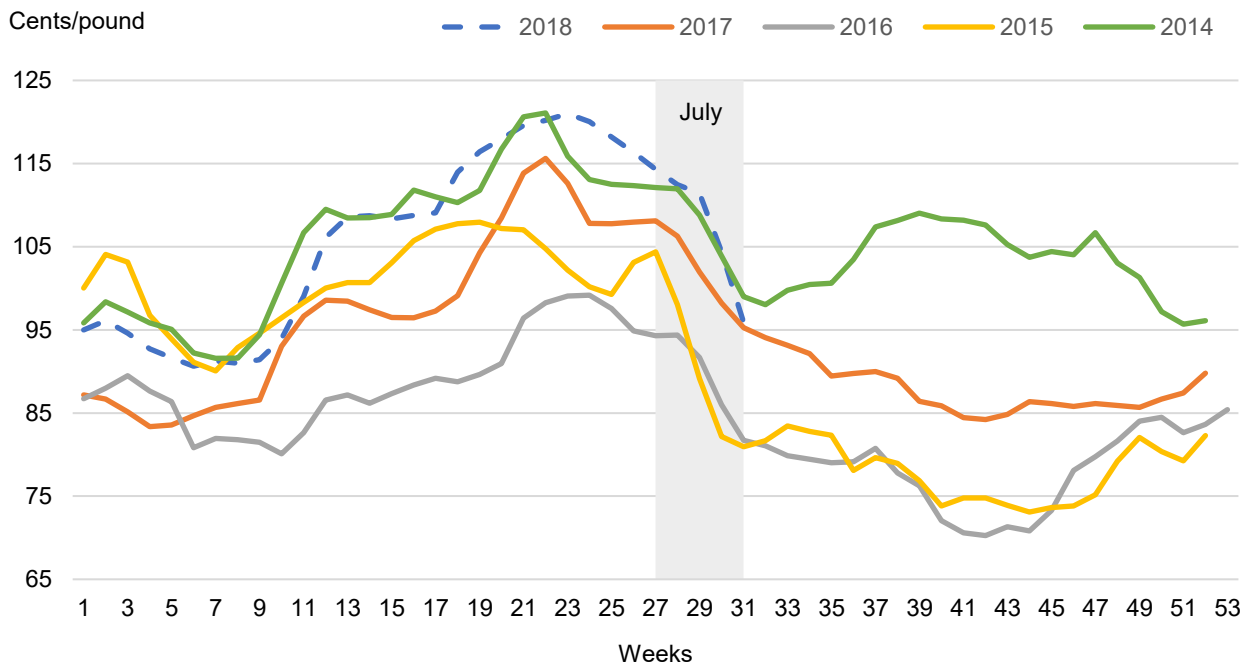


Source: U.S. Dept. of Agriculture, Economic Research Service calculations using data from U.S. Dept. of Commerce, Bureau of the Census.

Broiler Prices Exhibit Sharp Decrease, Forecasts Revised Downward

July weekly prices for whole broilers (national composite) trended downward, consistent with seasonal patterns, though more sharply than anticipated. After 8 consecutive weeks of exceeding 2014 prices – when prices were at their all-time highest – weekly prices dropped back below 2014 levels for the week ending July 27. To date, 2018 weekly prices have consistently outperformed 2017 prices, but they approached 2017 levels for the week ending August 3 at 95.9 cents per pound (see chart). This sharp decline, combined with anticipated competition from beef and pork supplies, are the basis for lowering the third and fourth quarter forecasts to 97-99 cents per pound and 89-95 cents per pound, respectively. Forecasts for 2019 were lowered to 94-102 for first quarter and 104-112 for second quarter.

Weekly broiler prices trend down in July



Source: U.S. Dept. of Agriculture, Agricultural Marketing Service

Egg Production Expectations Steady

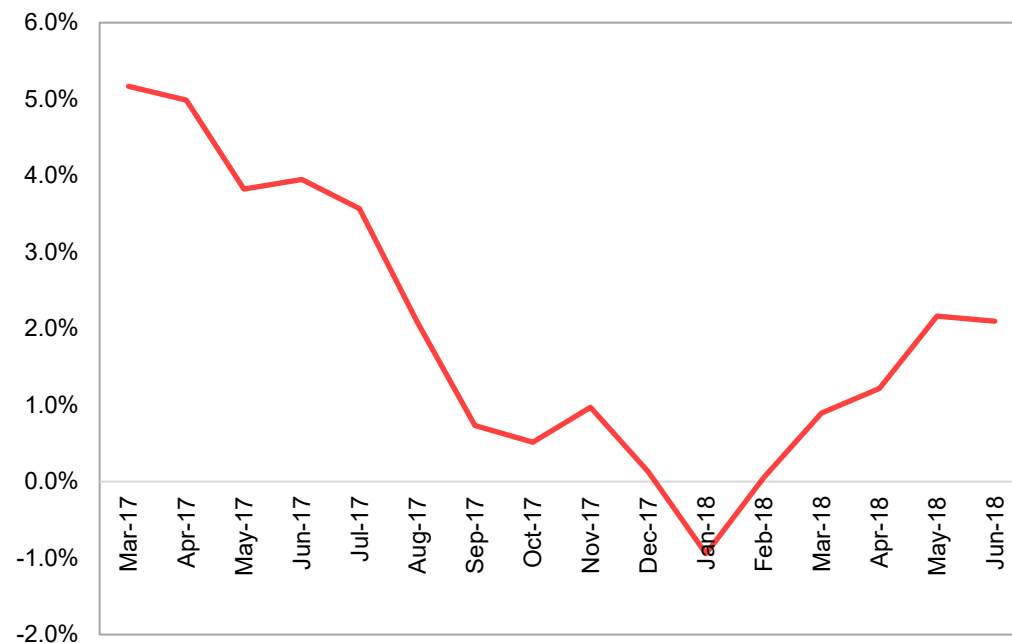
June table egg production reached 639 million dozen, a 2-percent increase year over year. This expansion was in line with expectations and reflected a return to stronger production growth than seen during much of the past year (see chart below). Projected total (table plus hatching) egg production forecasts were not revised, with expected growth at 2.9 percent for the second half of 2018 and 1.6 percent for all of 2019.

Much of the recent production increase has resulted from a slower pace of seasonal decline in the layer inventory, likely a response to strong prices. Inventory levels are often reduced during the summer months when prices see seasonal lows, but neither indicator has declined on normal seasonal patterns. As of July 1, the table egg layer inventory was 4 percent above a year earlier. Consistently high egg prices in the past year have been met by steady indications that producers seek to expand more than

they currently are able to do; January-June growth in eggs hatched for addition to egg-type chicken inventories was 9 percent on a year-over-year basis.

Egg production growth trending upwards

Year-over-year growth of table egg production



Source: Economic Research Service calculations using data from U.S. Dept. of Agriculture, National Agricultural Statistics Service.

Benchmark Egg Prices Decline and Stabilize

Wholesale egg prices (large grade A eggs, New York) declined from \$1.55 per dozen and stabilized at \$1.09 per dozen in late July. This decline brought price levels closer to more typical seasonal patterns, halting a counterseasonal surge. USDA price forecasts were not revised. Improved supply availability should dampen price volatility going forward, although prices in the second half of 2018 are expected to increase on seasonal demand.

Egg Exports Down, Imports Remain Low

June exports of eggs and egg products were 25 million dozen (shell-egg equivalent), 11 percent below last year and only the second time in 12 months that growth was negative. Higher-than-expected prices may have encouraged foreign buyers to hold off on purchases; the export unit price for shell eggs was \$0.92 per dozen, reflecting early June prices before the surge. Fewer exports to Mexico (-1.2 million dozen), Japan (-1.6 million dozen), and Jamaica (-1.1 million dozen) accounted for most of the export decline. Several countries were down a lesser amount, including United Arab Emirates, South Korea, and the Philippines. Export strength in Hong Kong (+2.5 million dozen) and Canada (+0.9 million dozen) only partly offset some of the declines in total exports.

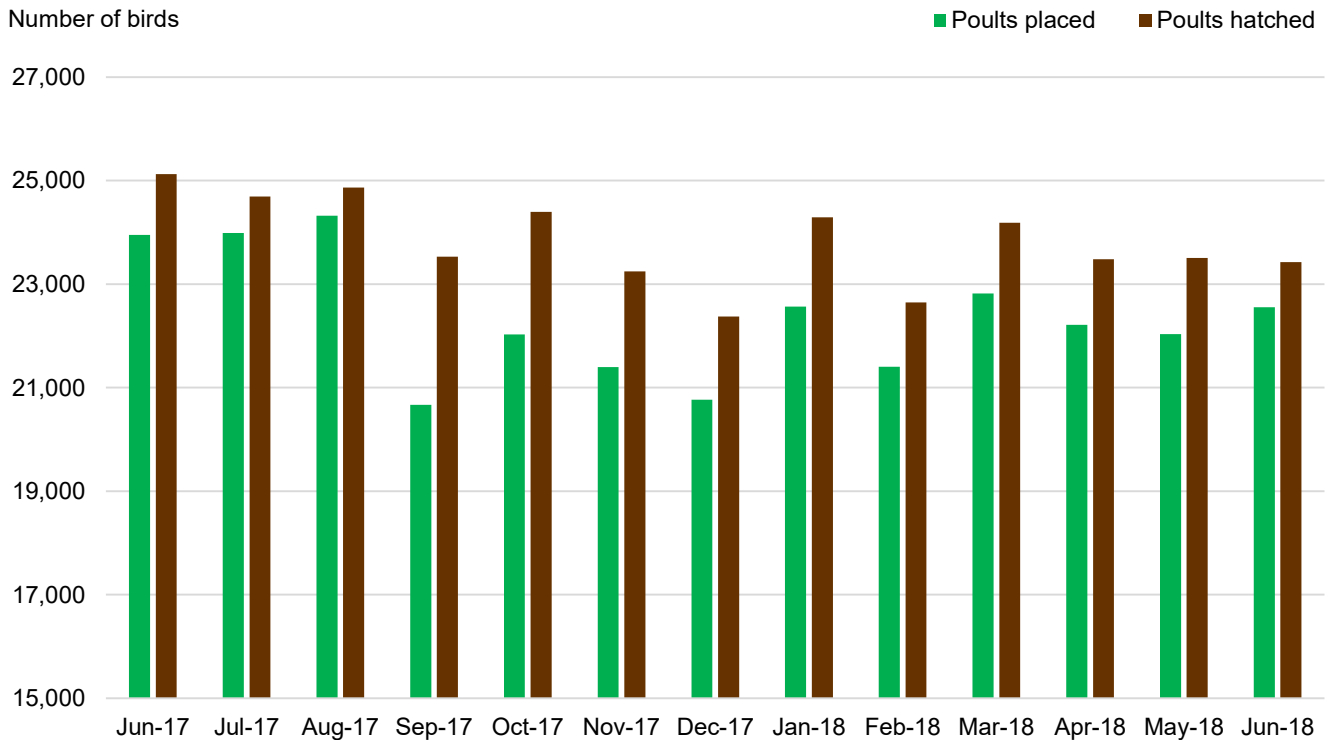
U.S. imports of eggs and products in June remained relatively low at 1.7 million dozen. More than half came from Canada, with additional contributions primarily from China, Taiwan, and Thailand. Forecast imports were reduced 5.5 million dozen for the second half of 2018 and 8 million dozen for 2019.

Despite indications of domestic demand pressure, imports have remained subdued, unlike in years past when relative price strength encouraged imports.

Turkey Production Down in June as Outlook for Growth Remains Modest

June 2018 turkey production totaled 485 million pounds, a 3-percent decrease from June 2017; however, this does reflect 1 less slaughter day this year. Hatchery report data for June were down relative to the same period in 2017. Poults hatched were down 7 percent and poults placed were down 6 percent. Eggs in incubators on the first of the month remained down 3 percent in July, marking their eighth consecutive month in the negative. The data suggest that producers are working to contain growth in the face of diminishing returns brought about by wholesale prices that have remained far below recent historical averages. The 2018 turkey production forecast is lowered to 5.939 billion pounds, 1 percent below 2017. Turkey production for 2019 is unchanged at 5.97 billion pounds, a half-percent increase over the 2018 forecast.

Turkey poults placed and hatched



Source: USDA, Economic Research Service using USDA, National Agricultural Statistics Service Turkey Hatchery report.

Whole Turkey Prices Remain Below Historical Averages in 2018

Wholesale whole-hen frozen turkey prices appear to have stabilized after their nearly 2-year fall to prices last seen in 2010. The latest price data, covering the week ending August 10, 2018, shows frozen whole hen prices at 81 cents per pound, well below early-August prices for the past several years. The low wholesale prices indicate that turkey meat demand has not kept pace with production, further supported by higher than average stocks in cold storage. Turkey price forecasts for 2018 are

expected to average \$0.81 to \$0.83 per pound for the year, at the midpoint about 14 percent below prices in 2017. In 2019, turkey prices are expected to average \$0.84 to \$0.91. If realized, prices at the midpoint of the range would be 6 percent higher than expectations for 2018.

U.S. Wholesale frozen hen turkey

Dollars per pound

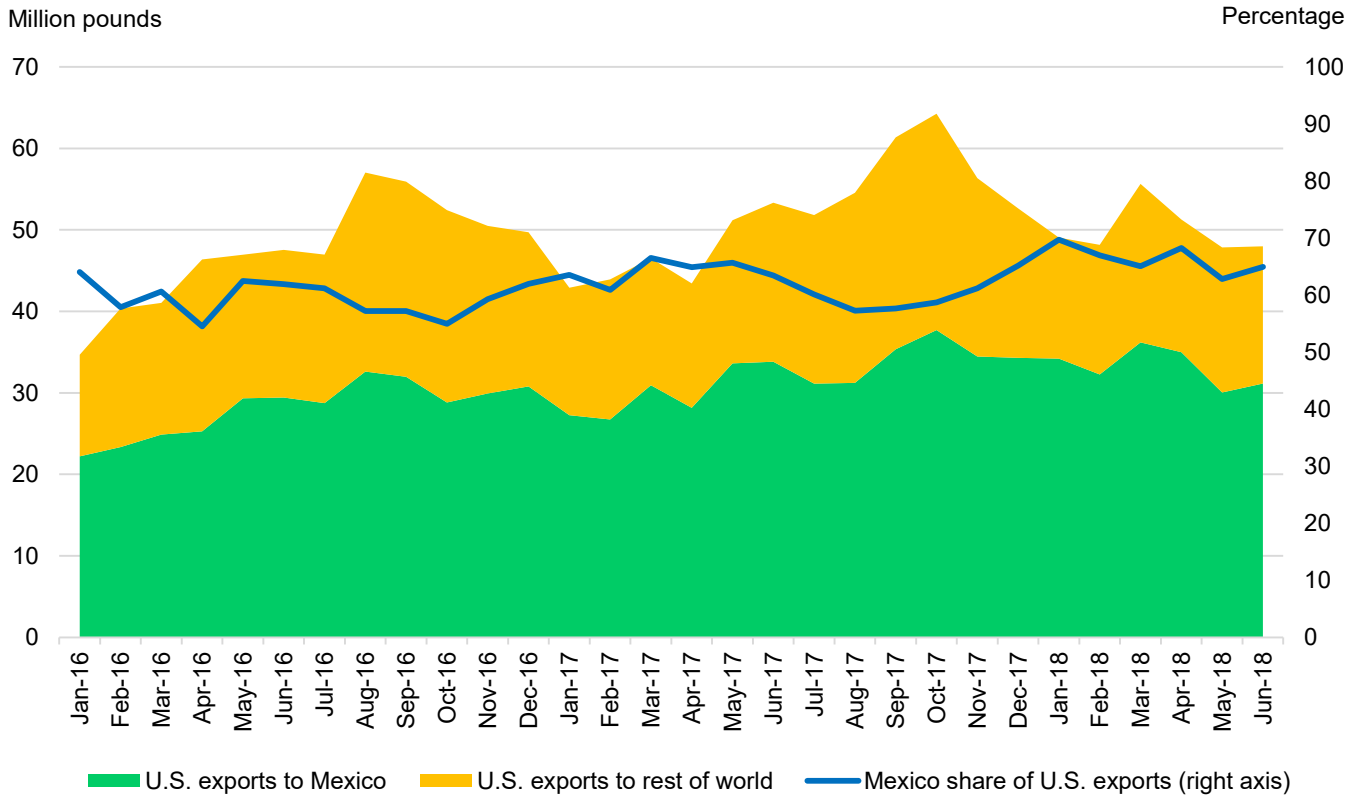


Note: Data are reported weekly through August 4, 2018.
 Source: USDA, Economic Research Service Livestock and Meat Domestic data and USDA, Agricultural Marketing Service Market News reports.

Turkey Exports Decrease Again in June

June 2018 turkey exports were 10 percent lower than a year earlier, totaling 48 million pounds. Shipments to Mexico were down 8 percent from a year earlier. Mexico remains the largest destination for U.S. turkey shipments, with 31 million pounds shipped in May, or 65 percent of all U.S. shipments. The negative growth rate in June is the second consecutive month of declines following 8 months of positive growth. Exports are expected to total 630 million pounds in 2018, a 1-percent increase over 2017. In 2019, turkey meat exports are expected to total 640 million pounds or a 2-percent increase over 2018.

U.S. monthly turkey meat exports to Mexico and rest of world



Source: USDA, Economic Research Service Livestock and Meat International Trade Data.

Suggested Citation

Livestock, Dairy, and Poultry Outlook, LDP-M-290, U.S. Department of Agriculture, Economic Research Service, August 16, 2018

U.S. red meat and poultry forecasts

	2015					2016					2017					2018					2019		
	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	Annual
Production, million lb																							
Beef	5,665	5,856	6,068	6,109	23,698	5,938	6,187	6,472	6,625	25,221	6,303	6,407	6,736	6,742	26,187	6,465	6,724	6,840	7,065	27,094	6,515	6,975	27,720
Pork	6,162	5,925	5,958	6,457	24,501	6,230	5,963	6,100	6,648	24,941	6,410	6,137	6,240	6,796	25,584	6,645	6,325	6,515	7,225	26,710	6,890	6,690	27,875
Lamb and mutton	38	39	37	37	150	38	39	36	37	150	37	36	35	37	145	39	38	35	37	149	36	38	146
Broilers	9,718	10,021	10,372	9,937	40,048	10,039	10,253	10,338	10,065	40,696	10,233	10,407	10,551	10,472	41,662	10,385	10,680	10,850	10,700	42,615	10,600	10,870	43,420
Turkeys	1,429	1,389	1,351	1,458	5,627	1,435	1,520	1,515	1,511	5,981	1,488	1,482	1,479	1,533	5,981	1,452	1,477	1,475	1,535	5,939	1,475	1,465	5,970
Total red meat & poultry	23,157	23,382	23,940	24,150	94,629	23,834	24,119	24,623	25,038	97,614	24,617	24,621	25,197	25,734	100,169	25,129	25,400	25,873	26,716	103,117	25,661	26,196	105,748
Table eggs, mil. doz.	1,820	1,726	1,664	1,728	6,938	1,793	1,827	1,876	1,940	7,436	1,906	1,904	1,916	1,950	7,677	1,906	1,939	1,970	2,020	7,835	1,955	1,975	7,970
Per capita disappearance, retail lb 1/																							
Beef	13.1	13.6	13.9	13.3	54.0	13.6	13.9	14.0	14.0	55.5	14.0	14.2	14.4	14.3	56.9	13.9	14.4	14.5	14.8	57.7	14.0	15.0	58.7
Pork	12.2	11.8	12.1	13.6	49.7	12.6	11.8	12.1	13.5	50.1	12.4	11.8	12.4	13.5	50.1	12.5	12.2	12.9	14.2	51.7	13.0	12.9	53.9
Lamb and mutton	0.2	0.3	0.2	0.3	1.0	0.3	0.3	0.2	0.3	1.0	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	1.1
Broilers	21.4	22.1	23.3	22.1	89.0	22.5	22.7	22.7	21.8	89.7	22.4	22.9	23.2	22.4	90.8	22.6	23.3	23.6	23.2	92.7	22.9	23.5	93.7
Turkeys	3.5	3.6	3.9	4.9	16.0	3.6	3.9	4.2	4.9	16.6	3.7	3.7	4.0	5.0	16.4	3.5	3.8	4.1	4.9	16.3	3.7	3.6	16.2
Total red meat & poultry	50.8	51.8	53.8	54.5	211.0	52.9	53.0	53.7	54.8	214.4	53.2	53.2	54.6	55.8	216.8	53.2	54.3	55.7	57.7	221	54.2	55.7	225.1
Eggs, number	65.6	63.0	61.5	65.6	255.8	67.4	66.3	67.3	70.6	271.6	68.5	68.6	69.3	69.9	276.3	68.2	69.0	69.5	71.8	278.4	69.3	69.1	280.7
Market prices																							
Choice steers, 5-area Direct, \$/cwt	162.43	158.11	144.22	127.71	148.12	134.81	127.68	113.26	107.69	120.86	122.96	132.76	112.46	117.88	121.52	125.60	116.72	107-111	109-115	115-117	116-126	118-128	113-122
Feeder steers, Ok City, \$/cwt	210.31	219.65	208.11	173.59	202.92	155.83	146.49	140.66	128.30	142.82	129.56	147.75	148.12	154.88	145.08	146.29	143.05	146-150	143-149	145-147	135-145	142-152	140-149
Cutter Cows, National L.E., \$/cwt	107.61	109.50	103.34	77.80	99.56	73.50	75.87	73.16	57.75	70.07	62.63	69.55	69.78	58.68	65.16	61.60	61.32	57-61	56-62	59-61	55-65	58-68	56-65
Choice slaughter lambs, St Joseph, \$/cwt	149.23	146.04	156.34	150.48	150.52	136.76	139.35	162.47	142.71	145.32	142.34	167.94	172.40	136.92	154.90	136.83	154.86	155-159	147-153	149-151	143-153	150-160	149-158
Nat'l base cost, 51-52 % lean, live equivalent, \$/cwt	48.47	53.20	54.59	44.66	50.23	44.63	53.71	49.26	37.02	46.16	49.73	51.70	55.59	44.89	50.48	49.12	47.91	45-47	33-35	44-45	37-41	41-45	39-42
Broilers, national composite, cents/lb	97.0	104.2	83.7	77.2	90.5	84.6	93.0	81.7	78.0	84.3	88.5	104.7	94.9	86.1	93.5	95.7	115.1	97-99	89-95	99-101	94-102	104-112	96-104
Turkeys, national, cents/lb	99.6	108.5	126.4	130.1	116.2	114.7	116.5	120.7	116.6	117.1	100.4	99.1	96.9	88.0	96.1	79.4	79.6	79-81	87-93	81-83	77-83	82-88	84-91
Eggs, New York, cents/doz.	146.9	170.3	235.7	174.1	181.8	121.5	67.9	71.6	81.7	85.7	80.0	74.7	102.1	147.0	100.9	179.6	124.4	130-134	131-139	141-144	115-125	110-120	119-129
U.S. trade, million lb, carcass wt. equivalent																							
Beef & veal exports	523	607	542	595	2,267	535	621	660	740	2,557	653	680	746	781	2,860	730	799	795	800	3,124	760	795	3,205
Beef & veal imports	877	989	889	613	3,368	792	831	751	638	3,012	700	812	814	668	2,993	722	805	830	680	3,037	750	840	3,140
Lamb and mutton imports	53	56	46	59	214	68	55	41	52	216	80	58	57	57	252	80	66	60	62	268	82	69	279
Pork exports	1,224	1,339	1,173	1,274	5,010	1,229	1,317	1,235	1,457	5,239	1,432	1,425	1,230	1,544	5,632	1,516	1,518	1,280	1,655	5,969	1,540	1,490	6,095
Pork imports	279	266	270	300	1,116	293	257	266	275	1,091	264	281	283	287	1,116	279	270	290	290	1,129	290	285	1,165
Broiler exports	1,624	1,713	1,487	1,496	6,321	1,585	1,605	1,734	1,721	6,645	1,720	1,622	1,661	1,788	6,791	1,708	1,701	1,740	1,720	6,869	1,750	1,745	7,045
Turkey exports	148	123	125	132	529	116	141	160	153	569	133	148	168	173	622	153	147	160	170	630	145	155	640
Live swine imports (thousand head)	1,309	1,541	1,371	1,519	5,740	1,468	1,406	1,371	1,413	5,657	1,449	1,458	1,296	1,394	5,597	1,358	1,350	1,300	1,400	5,408	1,350	1,350	5,400

Note: Forecasts are in bold.

1/ Per capita meat and egg disappearance data are calculated using the Resident Population Plus Armed Forces Overseas series from the Census Bureau of the Department of Commerce.

Source: World Agricultural Supply and Demand Estimates and Supporting Materials.

For further information, contact: Mildred M. Haley, mhaley@ers.usda.gov

Updated 8/14/2018

Dairy Forecasts

	2017			2018					2019		
	III	IV	Annual	I	II	III	IV	Annual	I	II	Annual
Milk cows (thousands)	9,402	9,398	9,392	9,406	9,403	9,405	9,400	9,405	9,400	9,400	9,405
Milk per cow (pounds)	5,687	5,649	22,941	5,780	5,933	5,735	5,725	23,175	5,855	6,030	23,495
Milk production (billion pounds)	53.5	53.1	215.5	54.4	55.8	53.9	53.8	217.9	55.0	56.7	220.9
Farm use	0.2	0.2	1.0	0.2	0.2	0.2	0.2	1.0	0.2	0.2	1.0
Milk marketings	53.2	52.8	214.5	54.1	55.5	53.7	53.6	216.9	54.8	56.4	219.9
Milk-fat (billion pounds milk equiv.)											
Milk marketings	53.2	52.8	214.5	54.1	55.5	53.7	53.6	216.9	54.8	56.4	219.9
Beginning commercial stocks	17.8	16.2	12.7	13.4	16.4	19.1	16.5	13.4	13.5	16.2	13.5
Imports	1.5	1.6	6.0	1.2	1.6	1.5	1.7	6.0	1.3	1.4	5.6
Total supply	72.5	70.6	233.2	68.8	73.5	74.3	71.7	236.3	69.6	74.0	239.0
Commercial exports	2.3	2.4	9.2	2.4	3.0	2.6	2.4	10.4	2.3	2.7	9.9
Ending commercial stocks	16.2	13.4	13.4	16.4	19.1	16.5	13.5	13.5	16.2	18.1	12.5
Net removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use	54.1	54.8	210.5	50.0	51.4	55.1	55.8	212.4	51.0	53.2	216.6
Skim solids (billion pounds milk equiv.)											
Milk marketings	53.2	52.8	214.5	54.1	55.5	53.7	53.6	216.9	54.8	56.4	219.9
Beginning commercial stocks	11.6	12.1	9.5	11.8	11.4	11.6	10.4	11.8	10.5	10.9	10.5
Imports	1.4	1.5	6.1	1.4	1.4	1.4	1.5	5.6	1.4	1.3	5.5
Total supply	66.2	66.5	230.1	67.3	68.3	66.6	65.4	234.3	66.7	68.6	235.9
Commercial exports	9.7	11.0	40.7	11.5	12.5	10.9	10.5	45.4	11.0	11.8	44.8
Ending commercial stocks	12.1	11.8	11.8	11.4	11.6	10.4	10.5	10.5	10.9	12.0	10.5
Net removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic commercial use	44.4	43.7	177.6	44.4	44.3	45.3	44.4	178.4	44.8	44.9	180.6
Milk prices (dollars/cwt) ¹											
All milk	17.73	17.83	17.65	15.67	16.10	15.80	16.80	16.10	16.55	16.10	16.45
						-16.10	-17.40	-16.30	-17.45	-17.10	-17.45
Class III	16.13	16.34	16.17	13.87	14.95	14.35	14.80	14.50	14.85	14.85	14.95
						-14.65	-15.40	-14.70	-15.75	-15.85	-15.95
Class IV	16.36	14.12	15.16	13.01	14.32	14.20	14.30	13.95	13.70	13.80	13.75
						-14.60	-15.00	-14.25	-14.70	-14.90	-14.85
Product prices (dollars/pound) ²											
Cheddar cheese	1.623	1.712	1.634	1.515	1.608	1.505	1.560	1.550	1.585	1.580	1.590
						-1.535	-1.620	-1.570	-1.675	-1.680	-1.690
Dry whey	0.434	0.347	0.444	0.260	0.280	0.330	0.315	0.295	0.295	0.295	0.300
						-0.350	-0.345	-0.315	-0.325	-0.325	-0.330
Butter	2.597	2.295	2.330	2.161	2.320	2.270	2.310	2.265	2.200	2.225	2.220
						-2.330	-2.400	-2.305	-2.320	-2.355	-2.350
Nonfat dry milk	0.874	0.763	0.867	0.700	0.774	0.780	0.770	0.755	0.755	0.755	0.755
						-0.810	-0.820	-0.775	-0.825	-0.825	-0.825

Totals may not add due to rounding.

¹ Simple averages of monthly prices. May not match reported annual averages.

² Simple averages of monthly prices calculated by the Agricultural Marketing Service for use in class price formulas. Based on weekly U.S. Dept. of Agriculture, *National Dairy Products Sales Report*.

Sources: USDA, National Agricultural Statistics Service; USDA, Agricultural Marketing Service; USDA, Foreign Agricultural Service; and USDA, World Agricultural Outlook Board.

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