



Economic Research Service

Situation and Outlook

LDP-M-275

May 16, 2017

# Livestock, Dairy, and Poultry Outlook

Mildred Haley  
[mhaley@ers.usda.gov](mailto:mhaley@ers.usda.gov)

Keithly Jones  
[kjones@ers.usda.gov](mailto:kjones@ers.usda.gov)

## Contents

- [Cattle/Beef](#)
- [Dairy](#)
- [Pork/Hogs](#)
- [Poultry](#)
- [Contacts and Links](#)

## Tables

- [Red Meat and Poultry Dairy Forecast](#)

## Web Sites

- [Animal Production and Marketing Issues](#)
- [Cattle](#)
- [Dairy](#)
- [Hogs](#)
- [Poultry and Eggs](#)
- [WASDE](#)

Tables will be released on May 30, 2017

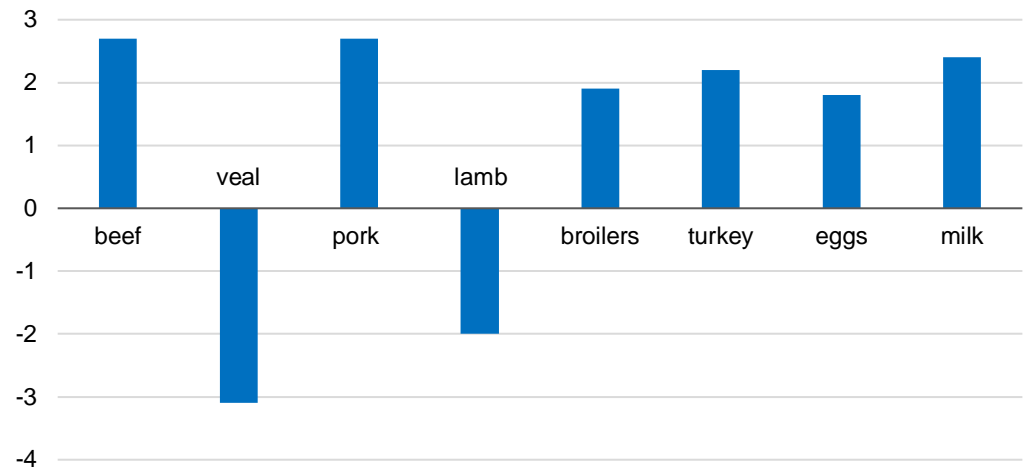
The next Outlook Report release is June 15, 2017

Approved by the World Agricultural Outlook Board.

## 2018 Forecasts for Most Animal Proteins Increase

USDA forecasts for animal protein production in 2018 show across the board increases with the exception of veal and lamb. Total red meat production in 2018 is forecast at 54 billion pounds, 2.8 percent more than expected this year. Total poultry production is expected to increase to 49 billion pounds, or 1.9 percent above the 2017 forecast. Total egg production is expected to increase by 1.8 percent and milk production by 2.4 percent.

### 2018 Animal protein production forecasts: Percent change from 2017



Source: World Agricultural Outlook Board, U.S. Dept. of Agriculture.

**Cattle/Beef:** Beef production for 2017 is revised down slightly at 26.3 billion pounds, based on lower average dressed weights for fed cattle that reflect a more rapid pace of marketing and on an increased share of cows in the total slaughter count. The decline in dressed weights is expected to moderate in the second half of 2017 as placement weights may reflect abundant spring-forage supplies and the pace of marketing is expected to slow. For 2018, production is forecast at 26.9 billion pounds as increased placements in late 2017 and early 2018 are slaughtered that year. With more production expected, USDA forecasts year-over-year declines in cattle prices and increased beef exports.

**Dairy:** The milk production forecast for 2018 is 222.0 billion pounds, 2.4 percent higher than the 2017 forecast. With higher expected domestic demand and exports, the 2018 all-milk price forecast is \$17.55-\$18.55 per cwt, an increase from \$17.35-\$17.85 per cwt forecast for 2017.

**Pork/Hogs:** Slaughter capacity expansion in Corn-Belt States, expected to begin to operate later this year, is projected to support higher pork production in 2018. Commercial pork production next year is forecast at 26.9 billion pounds, 3.3 percent higher than expected production this year. 2018 hog prices will reflect larger animal supplies, averaging \$42-\$46 per cwt, about 3 percent lower than the price forecast for this year. First-quarter 2017 exports of more than 1.4 billion pounds were 17 percent ahead of the same period a year ago.

**Poultry:** The broiler industry has continued to see weak growth in bird weights, but production growth is expected to continue into 2018 on stable producer margins. Growth in egg production is expected to continue, but at a slightly reduced pace in 2018, in part due to weak producer margins in the past year.

### **2018 Beef Production Forecast at 2.3-Percent Growth**

USDA forecasts 2.3-percent growth in U.S. beef production in 2018, based on larger 2016—and expected 2017—calf crops that are projected to support increases in cattle placements in late 2017 and early 2018. Marketings of fed cattle are expected to be higher during 2018, supporting higher slaughter during the year, while carcass weights are also expected to increase.

### **Slaughter Up, but Lighter Weights Hamper Production**

In the first quarter of 2017, commercial beef production climbed to 6.3 billion pounds, up 6 percent from the same period in 2016. Meatpackers achieved 3 consecutive months of year-over-year increases in production, and the increase is reflected in the harvesting of 526,600 more cattle than in 2016. Production was hamstrung by a 10-pound drop in the average dressed weight as fed cattle were marketed at lighter weights and the slaughter mix contained proportionally more heifers and cows. Although the magnitude of the year-over-year decline in weights is expected to moderate during the year, the average carcass weight for the year is expected to be below earlier levels. Lower expected carcass weights resulted in a reduction of the full-year's total beef production forecast to 26.3 billion lbs.

### **Cattle Prices Climb as Packers Increase Slaughter To Offset Lower Weights**

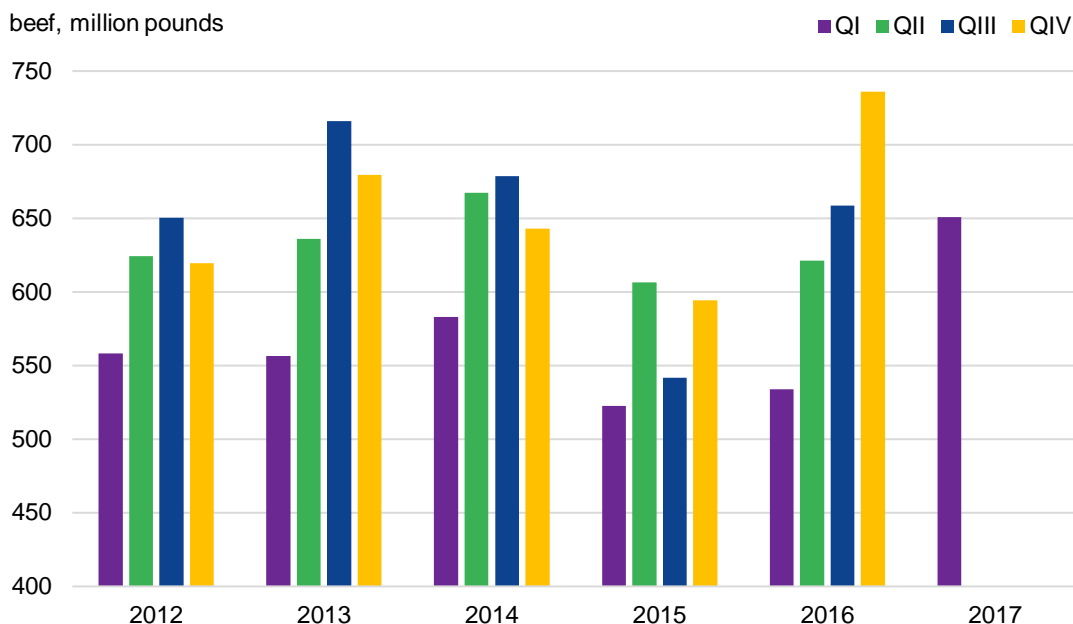
Fed steer prices showed atypical strength during April and into May. The demand for market-ready cattle boosted the 5-Area Direct steer price in April to \$131.31 per hundred weight (cwt), above the first-quarter estimate of \$122.96 per cwt. The second-quarter 5-Area Direct steer price is projected at \$127-\$133 per cwt, reflecting strong prices through early May. Expectations are that prices will remain relatively strong, despite declining from recent peaks, as packers maintain relatively high rates of cattle slaughter to mitigate the effects of lower carcass weights. Feeder steer prices have benefited nicely from increased fed cattle prices, averaging \$139.27 per cwt for April. Improved returns for feedlot operators have helped stimulate demand for calves. Currently, feedlots have seen returns strengthen on the higher fed cattle prices and relatively cheap feeders purchased two quarters earlier. However, feedlot operators could face declining returns if fed cattle prices decline with increased supplies of cattle in the second half of the year. To the extent that declining fed cattle prices squeeze feeders' margins, feedlot operators may opt to keep cattle on feed longer in an attempt to push bids higher. The result would be increasing average dressed weights.

Looking ahead, USDA forecasts increased marketings in 2018, which are expected to pressure fed cattle prices. The 5-Area Direct price is forecast to average \$116-\$124 per cwt in the first quarter of 2018 and \$113-\$123 for the year.

### **March Beef Exports Robust; Imports Tepid**

March 2017 beef and veal exports were estimated at 234 million pounds, an increase of 25 percent above March 2016. Exports to Japan, South Korea, Mexico, Canada, and Taiwan were robust, all registering double-digit percentage increases. Strong foreign demand, lower U.S. beef prices, and a relative weakening of the U.S. dollar against major trading partners are likely factors enhancing U.S. beef export competitiveness. The first quarter of 2017 ended with beef exports higher by 22 percent from the same period a year ago at 651 million pounds. Preliminary export sales data for April suggests continued export strength in the second quarter. USDA has raised its beef export forecast to 2.81 billion pounds for 2017. Exports in 2018 are forecast at 2.84 billion pounds.

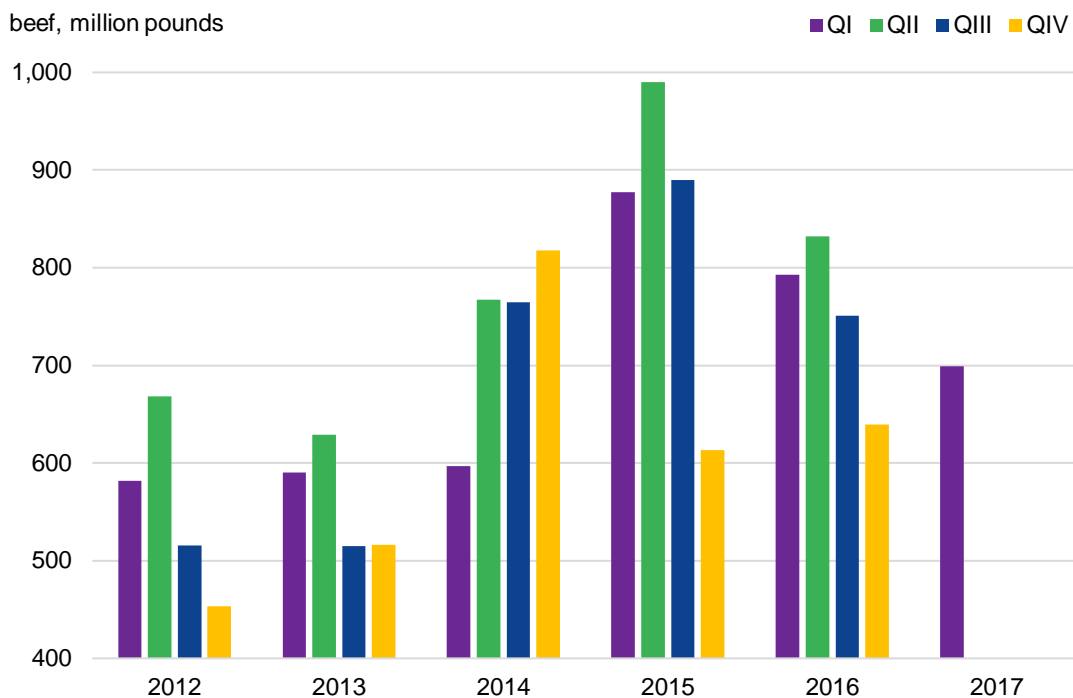
## 2017 first-quarter U.S. beef exports increase



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

Conversely, March 2017 beef imports were 271 million pounds, down 1 percent from the same period last year. The decline is mostly attributable to Oceania, as Australia continues to experience tight cattle supplies due to its herd rebuilding process. During the first quarter of 2017, U.S. beef imports were 12 percent lower than the same period a year ago at 699 million pounds. The United States is expected to import about 2.76 billion pounds of beef in 2017. A slight increase is expected next year, with total 2018 imports forecast at 2.82 billion pounds as supplies in several exporting countries expand.

## Beef imports declined in first-quarter 2017



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

## ***U.S. Cattle Trade To Increase in 2018***

Cattle imports in March 2017 were down from the same period a year ago at about 217 thousand head, with 17 percent fewer animals from Canada. However, first-quarter cattle imports were about 6 percent higher than the same period in 2016, at about 518,000 head, attributed to larger imports from Mexico. Total cattle imports for 2017 are expected to be 1.68 million head. For next year, total cattle imports are forecast slightly higher at 1.72 million head. Cattle exports in 2017 are forecast at 95,000 head, becoming higher in 2018 at 120,000 head.

Authors: Russell Knight, [Russell.H.Knight@ers.usda.gov](mailto:Russell.H.Knight@ers.usda.gov); Lekhnath Chalise, [Lekhnath.Chalise@ers.usda.gov](mailto:Lekhnath.Chalise@ers.usda.gov)

## Changes in Accounting for Aggregate Milk Supply and Use

This month, changes have been made to some of the conversion factors used for aggregate estimates of dairy stocks, trade, and commercial use. The new conversion factors are available through the link at the bottom of the ERS Dairy Data page (<https://www.ers.usda.gov/data-products/dairy-data/>). An explanation is available on the accompanying Documentation page (<https://www.ers.usda.gov/data-products/dairy-data/documentation/>).

## Recent Developments in Dairy Markets

March milk production totaled 18.7 billion pounds, 1.7 percent above March 2016. Milk cows numbered 9.380 million head, 15,000 head more than February 2017. Milk per cow was 1,995 pounds per head, 21 pounds more than March 2016. For first quarter, milk per cow was 5,715 pounds per head, 15 pounds lower than the expectation published in last month's *Livestock, Dairy, and Poultry Outlook* report. The milk cow inventory for the first quarter was about as expected.

In recent weeks, wholesale prices for dairy products, as reported in the USDA *National Dairy Products Sales Report*, have moved in mixed directions. From the week ending April 1 to the week ending May 6, the butter price fell by \$0.040 per pound, and the cheddar cheese prices for 40-pound blocks and 500-pound barrels (adjusted to 38-percent moisture) rose by \$0.074 and \$0.015 per pound, respectively. While the nonfat dry milk (NDM) price rose by \$0.035 per pound, the dry whey price fell by \$0.012 per pound.

### Dairy product prices (dollars per pound)

	For the week ending		Change
	April 1	May 6	
Butter	2.146	2.106	-0.040
Cheddar cheese			
40-pound blocks	1.451	1.525	0.074
500-pound barrels <sup>1</sup>	1.442	1.457	0.015
Nonfat dry milk	0.828	0.863	0.035
Dry whey	0.529	0.517	-0.012

<sup>1</sup>Adjusted to 38-percent moisture.

Source: U.S. Dept. of Agriculture, Agricultural Marketing Service, *National Dairy Product Sales Report*.

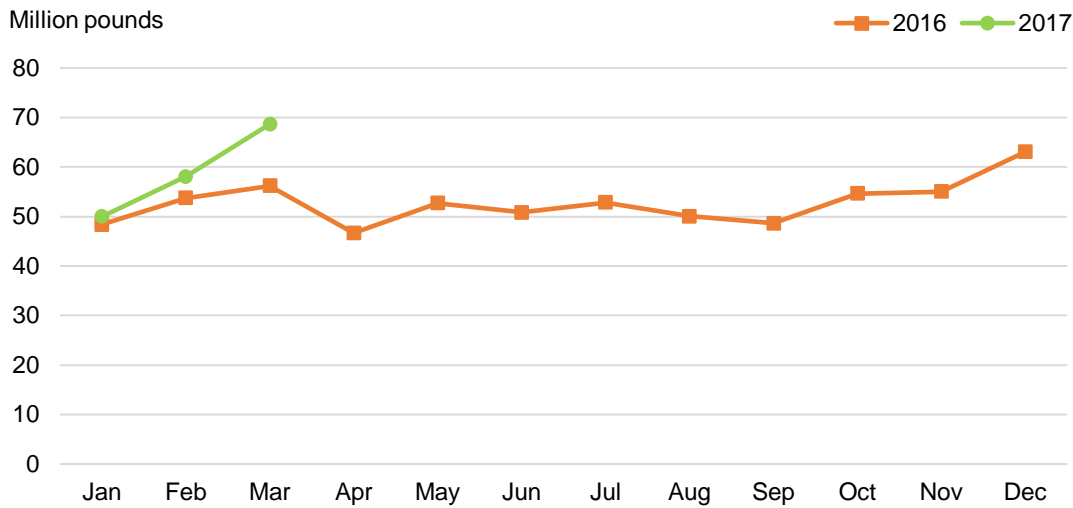
In the first quarter, U.S. wholesale prices for cheese, NDM, and dry whey were competitive with export prices for Oceania<sup>1</sup> and Europe. Competitiveness of U.S. prices has undoubtedly contributed to higher dairy exports. First-quarter cheese exports were up 11.6 percent over the first quarter of 2016, with much of the increase going to South Korea. Exports of whey products (dry whey, whey protein concentrate, and modified whey) were up 28.5 percent, with a significant increase to China. Exports of nonfat dry milk/skim milk powder (NDM/SMP) were up 18.1 percent, with much of the increase going to Mexico and China.

Changing prices for cheese have also likely had an influence on imports, as first-quarter 2017 cheese imports were 5 percent lower than the first quarter of 2016. While cheese

<sup>1</sup> Oceania includes New Zealand and Australia.

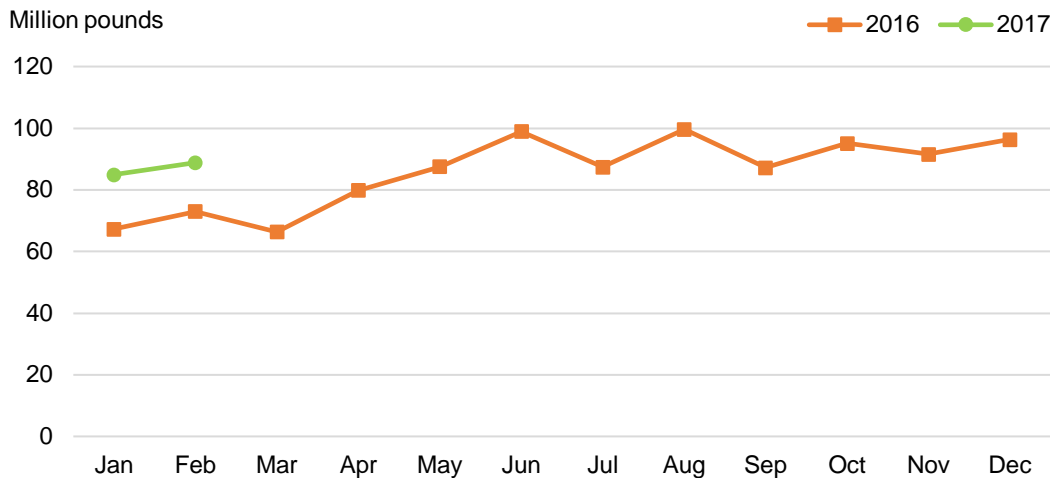
imports have declined, imports of food preparations with substantial dairy content and other miscellaneous dairy products have increased.

### U.S. cheese exports



Sources: U.S. Dept. of Agriculture, Foreign Agricultural Service; U.S. Dept. of Commerce, Bureau of the Census.

### U.S. exports of whey products <sup>1</sup>



<sup>1</sup> Includes dry whey, whey protein concentrate, and modified whey.

Sources: U.S. Dept. of Agriculture, Foreign Agricultural Service; U.S. Dept. of Commerce, Census Bureau.

In contrast to exports, domestic use has been contracting in recent months. On a milk-fat milk-equivalent basis, first-quarter domestic use was 1.7 percent below the first quarter of 2016. On a skim-solids milk-equivalent basis, it was down 1.5 percent. Note that commercial disappearance is an imperfect proxy for consumption. It is estimated using data collected from different sources that have some inconsistencies, and there is no accounting for changes in pipeline stocks.<sup>2</sup>

While the outlook for U.S. exports appears to be improving for most dairy products, this is not the case for ultrafiltered milk containing protein of 85 percent or more (UF-85 milk) or milk protein isolate (MPI, a dried high-protein product).<sup>3</sup> For years, Canada has imported

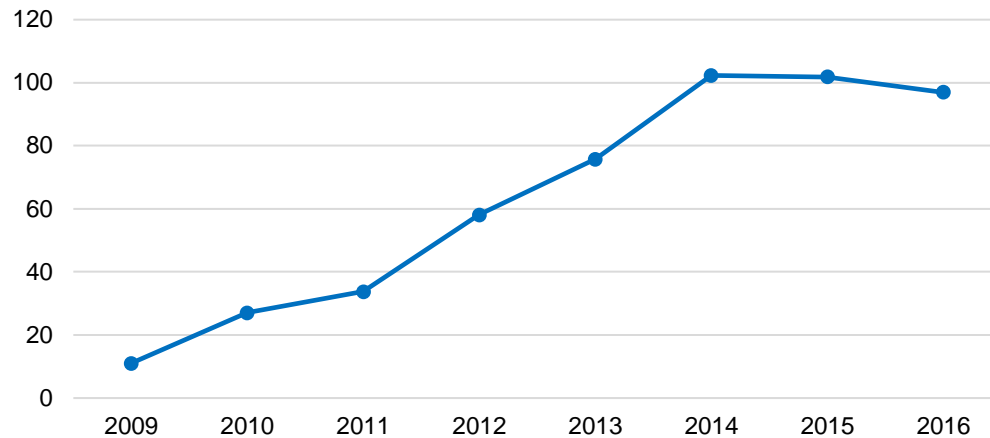
<sup>2</sup> Pipeline stocks are goods that have been shipped out of the warehouse but have not yet been bought by ultimate consumers and are, therefore, still in the distribution “pipeline.”

<sup>3</sup> The percent of protein is calculated on the dry matter in the product.

UF-85 milk and MPI from the United States. These products can be used as ingredients for a wide variety of applications. UF-85 milk is often used for manufacturing for cheese. Canada's imports of these products from the United States grew from \$11 million 2009 to \$102 million in 2014 and 2015 before falling to \$97 million in 2016. In contrast to most dairy products, tariffs are not applied to Canadian imports of UF-85 milk or MPI from the United States due to the North American Free Trade Agreement. Recently, Canada has established a domestic class of milk for ingredient use that is priced based on the prevailing global prices and is relatively low compared to other Canadian milk prices. As a result, UF-85 milk from the United States has become less attractive to Canadian processors.

### Canada's imports of UF-85 milk <sup>1</sup> and MPI <sup>2</sup> from the United States

Millions of U.S. dollars



<sup>1</sup> UF-85 milk = ultra-filtered milk with protein of 85 percent or more, calculated on the dry matter.

<sup>2</sup> MPI = dry milk protein isolate with protein of 85 percent or more, calculated on the dry matter.

Source: Global Trade Atlas.

### Outlook for Dairy Feed Prices

Feed prices for 2016/17 are still expected to be relatively low, with price forecasts for corn and soybean meal of \$3.25-\$3.55 per bushel and \$320 per short ton, respectively. The alfalfa hay price in March was \$135 per short ton, \$6 higher than February but \$4 lower than March of last year. Feed prices for 2017/18 are expected to remain relatively low, with price forecasts for corn and soybean meal of \$3.00-\$3.80 per bushel and \$295-\$335 per short ton, respectively.

### Dairy Forecasts for 2017

Based on recent milk production data, the milk cow forecast for 2017 is unchanged at 9.385 million head, but the yield forecast has been lowered to 23,110 pounds per head, 40 pounds less than last month's forecast. With higher expected exports of cheese, NDM/SMP, whey products, and lactose, 2017 export forecasts have been raised by 0.3 billion pounds on a milk-fat basis and by 0.6 billion pounds on a skim-solids basis. With lower expected imports of cheese, the 2017 import forecast on a milk-fat basis has been lowered by 0.4 billion pounds. With higher expected imports of food preparations with substantial dairy content and other miscellaneous dairy products, the 2017 import forecast on a skim-solids basis has been increased by 0.1 billion pounds.

Forecasts for domestic use and stocks are not comparable with last month's forecasts due to changes in conversion factors used for the estimates. Although commercial use was below last year for the first quarter of 2017, it is expected to rebound later in the year. Domestic use for 2017 is expected to be 213.0 million pounds on a milk-fat basis, a 1.9 percent increase over 2016. On a skim-solids basis, the 2017 forecast for domestic use is



181.4 pounds, a 1.5 percent increase over 2016. Ending year stocks for 2017 are projected at 13.2 billion pounds on a milk-fat basis and 10.0 billion pounds on a skim-solids basis.

Based on higher expected export demand, the NDM price forecast for 2017 has been raised to \$0.875-\$0.915 per pound. The butter price forecast has been lowered to \$2.115-\$2.195 per pound based upon recent price movements. The annual 2017 forecasts for cheese and dry whey prices are unchanged from last month. While the Class III milk price is unchanged from last month, the Class IV milk price has been raised to \$14.35-\$14.95 per cwt, as the higher expected NDM price more than offsets the lower expected butter price. The 2017 all-milk price forecast is \$17.35-\$17.85 per cwt.

### ***Dairy Forecasts for 2018***

With higher expected milk prices and relatively low feed prices, the milk production forecast for 2018 is 222.0 billion pounds, a 2.4-percent increase above the 2017 forecast. Milk cow numbers are forecast to average 9.425 million head for the year, and the 2017 yield forecast is 23,560 pounds per cow.

Demand is expected to grow for domestic and foreign markets. The 2018 forecasts for domestic use are 219.2 billion pounds on a milk-fat basis (2.9 percent above the 2017 forecast) and 187.0 billion pounds on a skim-solids basis (3.1 percent above 2017). The 2018 forecasts for exports are 8.7 billion pounds on a milk-fat basis (0.2 billion pounds above the 2017 forecast) and 41.1 billion pounds on a skim-solids basis (0.6 billion pounds above 2017). Imports in 2018 are expected to be little changed from 2017, at 6.1 billion pounds on a milk-fat basis (0.2 billion pounds above the 2017 forecast) and 6.4 billion pounds on a skim-solids basis (0.1 billion pounds below 2017).

Cheese and NDM prices are forecast higher than 2017 due to higher expected domestic and global demand. The 2018 price forecasts for cheese and NDM are \$1.640-\$1.740 and \$0.915-\$0.985 per pound, respectively. Due to large expected stocks at the beginning of 2018, prices for butter and dry whey are expected to be lower than 2017, at \$2.045-\$2.175 and \$0.475-\$0.505 per pound, respectively. The Class III and Class IV milk prices are both expected to be higher than 2017, at \$16.40-\$17.40 per cwt and \$14.40-\$15.50 per cwt, respectively. The all-milk price for 2018 is \$17.55-\$18.55 per cwt, an increase from \$17.35-\$17.85 per cwt forecast for 2017.

Authors: Jerry Cessna, [jgcessna@ers.usda.gov](mailto:jgcessna@ers.usda.gov), and Jonathan Law, [jonathan.law@ers.usda.gov](mailto:jonathan.law@ers.usda.gov).

### ***Expected New Packing Capacity Drives Pork Production in 2018***

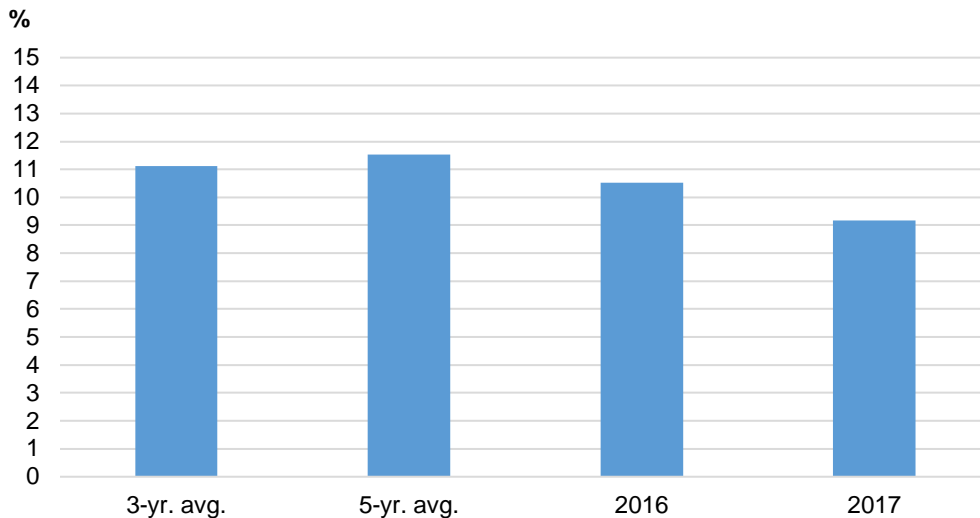
U.S. commercial pork production in 2018 is expected to increase to 26.9 billion pounds, a volume 3.3 percent above the production forecast for this year. Production increases in 2018 will derive from a larger and more productive sow base that has increased, more recently, in response to additional slaughter capacity now under construction in several Corn Belt States. Anticipated packer bidding, competing to fill the new slaughter capacity, is expected to be the key to hog prices in 2018. Despite significantly larger hog numbers, 2018 prices of live equivalent 51-52 percent lean hogs are expected to average \$42-\$46 per cwt, about 3 percent lower than the price forecast for 2017. Feed spreads calculated from this price range, together with USDA forecasts for feed grains, suggest that most hog producers should be able to cover feed costs next year.

Forecast production increases next year will result in around 900 million additional pounds of pork products to consumers. Larger product supplies are expected to pressure pork prices, incentivizing both domestic and foreign consumption. Recent robust consumer demand for pork in the United States—evidenced by current cold stocks—is expected to continue into next year, bolstered by forecasts for faster U.S. economic growth. Aggregate domestic pork disappearance next year is expected to increase more than 2 percent, the retail equivalent of 51.3 pounds per capita, compared with 50.5 pounds forecast for 2017. It is also anticipated that export volumes will accelerate next year, with lower product prices making U.S. pork more competitive and increasing foreign interest. Exports next year are expected to be almost 6 billion pounds, a volume amounting to 22.2 percent of commercial pork production versus 22.1 percent in 2017. For 2018 U.S. pork imports, lower U.S. pork prices will likely divert domestic interest from imported pork products, with total pork imports next year expected to fall 10 percent to 935 million pounds.

### ***First-Quarter 2017 Pork Markets Characterized by Production Increases and Impressive Consumer Demand***

Commercial pork production in the first quarter of 2017 wound up at slightly more than 6.4 billion pounds, 2.9 percent larger than a year earlier. It is notable that despite stronger year-over-year production, per capita pork disappearance in the first quarter of 2017 was smaller than a year ago: 12.3 pounds, compared with 12.6 pounds a year earlier. The difference is mostly attributable to very strong first-quarter exports, which accounted for 22.3 percent of commercial production compared with 19.6 percent a year ago. Also notable is the level of ending stocks that wrapped up first-quarter 2017. The figure below shows first-quarter ending stocks as a percentage of commercial pork production. In the first quarter of 2017, ending stocks were 9.2 percent of production, compared with 10.5 percent a year earlier, and more than 11 percent for 3- and 5- year averages. Reduced ending stocks signal strong demand, both domestic and foreign. Continued strong consumer demand for U.S. pork is one of the keys to the sector's well-being in 2018.

### First-quarter pork ending stocks as a percent of production



Source: National Ag. Statistics Service, U.S. Dept. of Agriculture.

### First-Quarter Pork Exports Increase at a Galloping Pace

First-quarter 2017 exports totaled 1.4 billion pounds, more than 17 percent ahead of a year ago. First-quarter exports to the United States' 10 largest foreign markets are summarized below.

#### U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations, First-quarter 2016, 2017

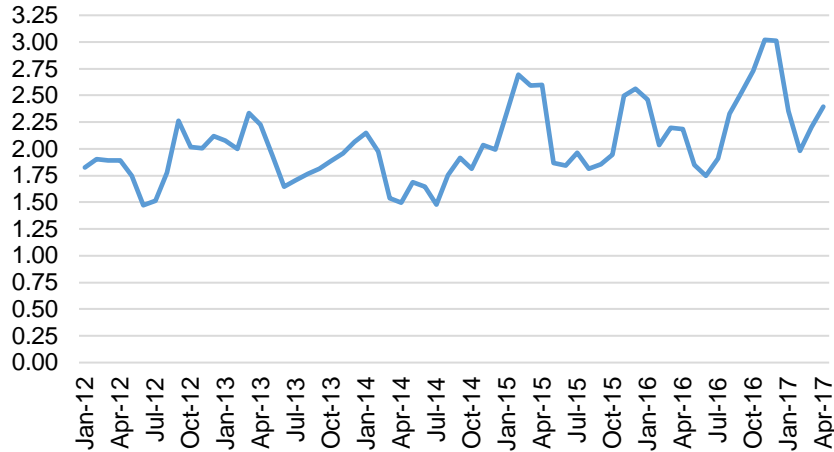
Country	Exports 1Q2016 (mil. lbs)	Exports 1Q2017 (mil. lbs)	Percent change (2017/2016)	Export share 2016 %	Export share 2017 %
<b>World</b>	1223	1432	17		
<b>1 Mexico</b>	350	466	33	29	33
<b>2 Japan</b>	298	321	8	24	22
<b>3 South Korea</b>	119	157	32	10	11
<b>4 China/Hong Kong</b>	150	131	-12	12	9
<b>5 Canada</b>	124	124	0	10	9
<b>6 Australia</b>	45	61	34	4	4
<b>7 Colombia</b>	22	44	98	2	3
<b>8 Dominican Republic</b>	18	23	28	1	2
<b>9 Honduras</b>	18	20	11	1	1
<b>10 Philippines</b>	16	16	5	1	1

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

The first-quarter data reinforce Mexico's rank as the most important export market for U.S. pork, in terms of volume. It is notable that Mexico accounted for one-third of export volume in the first quarter, compared with 29 percent a year earlier. At current and forecast U.S. hog prices, the Mexican market for U.S. pork does not appear to be

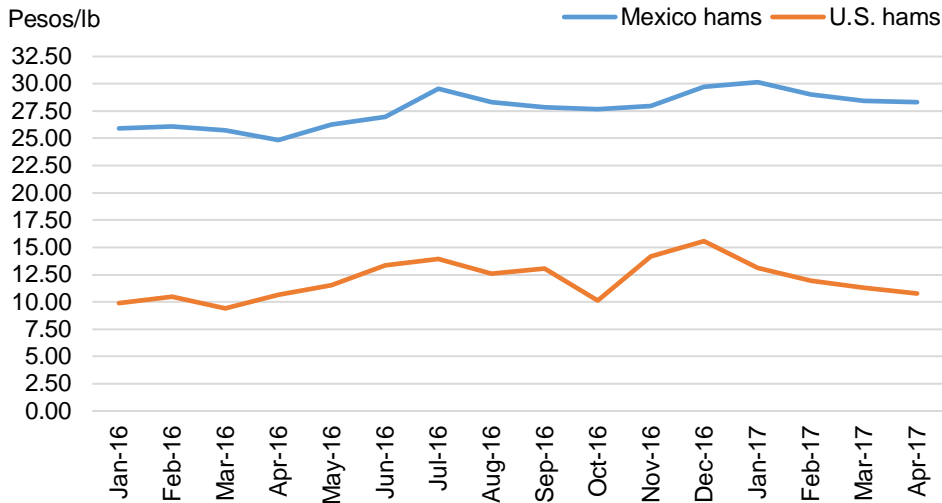
saturated. Price competitiveness of U.S pork is likely the key export driver. The two charts below show a cost advantage for U.S. hogs and pork over Mexican products. All else equal, forecasts for lower U.S. hog prices and large increases of U.S. pork production are likely to increase the Mexico-U.S. hog price ratio and the spread between the peso price of U.S. and Mexican hams. These two factors point the export needle in a bullish direction.

**Price ratio: Mexican hogs/price of U.S. hogs**



Source: Secretaría de Economía, SNIIM

**Monthly Ham prices: U.S., Mexico**

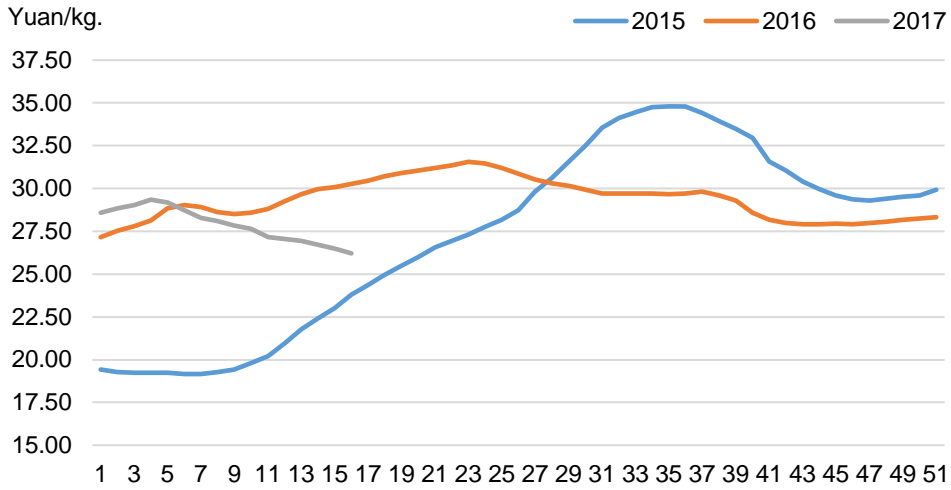


Source: Agricultural Marketing Service, U.S. Dept. of Agriculture. Secretaría de Economía, SNIIM.

**China's First-Quarter Pork Imports Accelerate**

Despite anecdotal evidence of nascent pork-sector recovery, Chinese import data indicate that first-quarter imports were significantly higher than a year ago. Firm pork prices early in the year may partly explain strong demand for imported pork in China. Weekly Chinese pork price data graphed in the figure below show a strong negative trend in recent weeks, with prices turning year-over-year lower in week number 6. Prices early in the year were close to year-earlier, likely supporting large imports in the first part of the quarter. However, despite the decline in prices later in the quarter, the unit value in RMB and the quantity of China's pork imports in March was above year earlier, indicating that the demand for foreign product remained firm.

## China: Weekly pork prices



Source: China Ministry of Agriculture.

Author: Mildred Haley, [mhaley@ers.usda.gov](mailto:mhaley@ers.usda.gov)

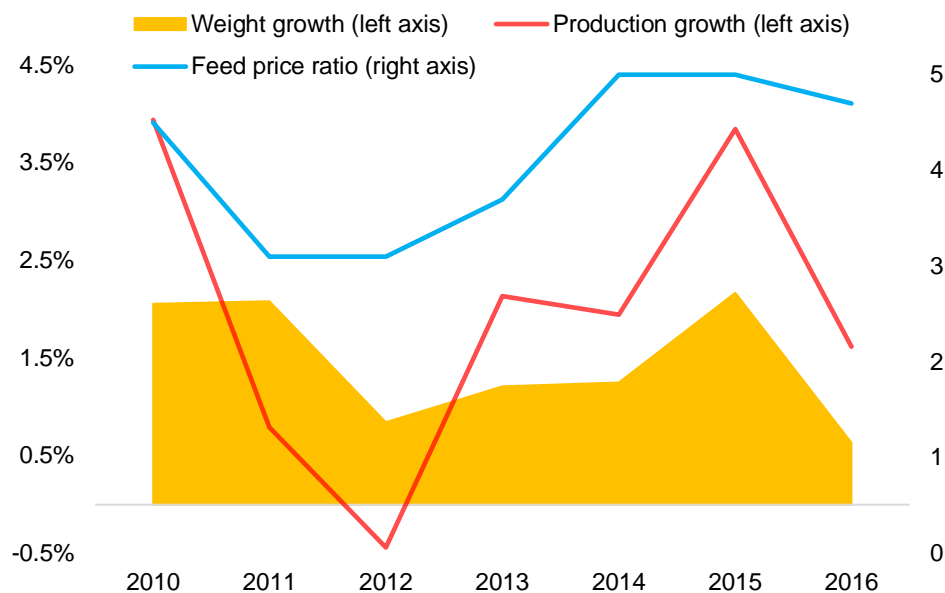
# Poultry

## Broilers

Broiler production for 2018 is forecast at nearly 42.3 billion pounds, an expected increase of about 2 percent above 2017. Exports are forecast a bit above 7 billion pounds, up only marginally above 2017, due in part to uncertain conditions for economic growth in important export markets. Whole broiler prices (national composite) are forecast at 85-92 cents per pound in 2018, down about 1 percent compared to the 2017 forecast.

The figure below includes broiler production and bird growth as well as the broiler-feed/price ratio, an indicator of industry margins that compares prices of equal quantities of whole broiler and its most costly input, feed. Industry profitability since 2014 has stabilized at a relatively high level and appears to have promoted consistent growth in production. The broiler-feed/price ratio averaged 52 percent higher in 2014-2016 than over the previous 3 years, with strong support from reduced grain and soymeal prices. These prices are expected to increase slightly in 2018 without deviating very much from either 2016 or 2017 levels, promoting stable broiler industry margins. It is uncertain, however, how much bird weights will contribute to production growth; their weak growth performance in latter 2016 appeared to slow production growth.

### Growth rates for broiler weights and meat production, and the broiler-feed/price ratio



Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service; ERS.

In March, broiler meat production was 3.6 billion pounds, approximately 1.6 percent above last year on a per day basis. Average March weights were only slightly above a year earlier, resulting in the first-quarter weights averaging marginally below last year. Preliminary data suggested that April production was a bit higher than a year earlier but was held back by relatively low bird weights. The second-quarter forecast for production was reduced 50 million pounds to 10.4 billion pounds.

Broiler exports in March were relatively strong; at 609 million pounds, exports registered 12-percent growth from last year, with growth largely accounted for by additional shipments to Angola, South Africa, and Cuba. Shipments to both Angola and Cuba were relatively weak in 2016, although they remained very important markets; economic conditions within each country will determine whether exports to these markets remain at

robust levels. Exports to South Africa reflect the country's restrictions on European broiler meat due to avian influenza; however, South Africa's quota for bone-in chicken from the United States was more than half-full as of March.

Exports to Mexico, the most important destination for U.S. broiler meat, have started this year down almost 10 percent from a year earlier for the January–March period. Through March, exports from Brazil to Mexico showed a significant increase this year and could explain a portion of the reduced U.S. shipments.

Weekly prices for whole broilers (national composite) have remained at an elevated plateau since March, reaching above 99 cents per pound for the week ending May 5. These prices appear to have increased on a seasonal pattern that arrived earlier this year than last. The second-quarter forecast is increased to 97-99 cents per pound.

### ***Eggs and Egg Products***

Table egg production for 2018 is forecast at nearly 7.8 billion dozen, amounting to an expected increase of almost 2 percent above 2017. Egg production has been robust in the past year and has contributed to abundant supplies and relatively weak prices. The 2016 egg-feed/price ratio was nearly 20 percent lower than the 2008-2014 average due to low egg prices. The hatching flock dedicated to populating the table egg laying flock has been trending down much of the past year. In March it reached its lowest level since September 2015, supporting expectations of reduced flock expansion. The forecast for a dozen large grade A eggs in 2018 is 87-94 cents on the New York market, reflecting expected higher demand in domestic and foreign markets.

March table egg production totaled 653 million dozen, approximately 4.9 percent above last year. The 2017 production forecast was reduced on slightly lower than expected first-quarter production of table eggs and fewer hatching eggs produced the remainder of the year.

February egg and egg product exports were 28 million dozen (shell-egg equivalent), up 3 percent from last year. This growth was led by larger shipments to South Korea, Italy, UAE, Germany, UK, Mexico, and Japan, which in aggregate totaled 6.7 million dozen more than a year earlier on a shell-egg equivalent basis. Many of the exports to these countries were processed products that have been stocked in abundance domestically. Total exports of processed eggs increased 87 percent year over year for March.

Export growth was restrained by shell egg shipments decreasing 27 percent from March last year. This decline was primarily due to 4.3 million dozen fewer shell eggs exported to Canada. Shell egg exports were also down to Hong Kong and Jamaica, as well as to Trinidad and Tobago, totaling 2.2 million dozen fewer eggs.

April and early May egg prices (large grade A eggs, New York) reversed course from the seasonal increase in March, averaging 69 cents per dozen for the week ending May 5. The lack of any upward price movement since mid-April has diminished the expectations for the remainder of the year; the price forecast was reduced to 83-87 cents per dozen from 88-93 cents.

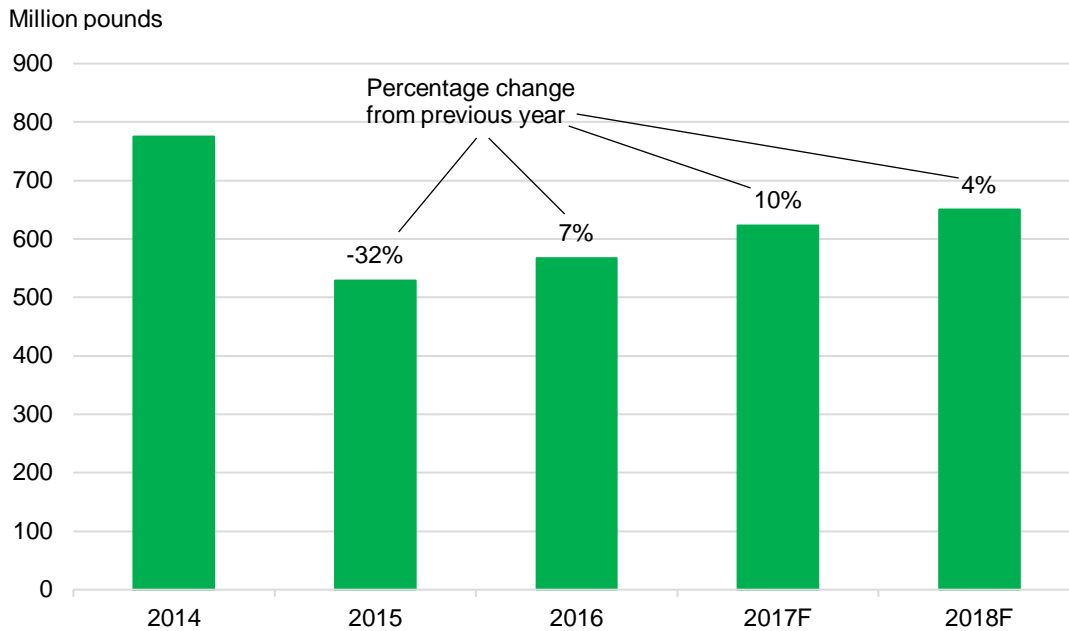
Author: Sean Ramos, [sean.ramos@ers.usda.gov](mailto:sean.ramos@ers.usda.gov)

### ***Turkey Outlook***

Turkey production is expected to continue expanding into 2018, driven by modest gains in exports and increasing domestic per capita use. The forecast for 2018 production is 6.255 billion pounds, a 2-percent increase over the current 2017 forecast of 6.122 billion pounds. The rate of growth for 2018 would mirror the current growth expectations for 2017, also forecast to grow 2 percent compared with 2016. This would mark 3 consecutive years of

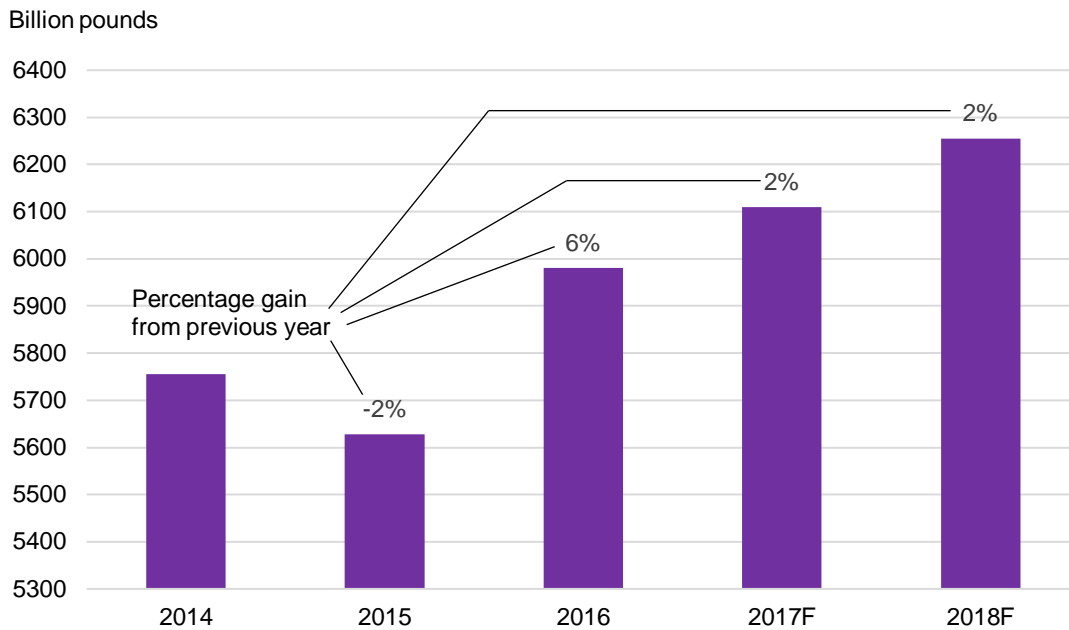
production growth following the contraction in 2015 caused by HPAI losses and trade restrictions on U.S poultry products. Per capita domestic use is expected to increase by just under 2 percent in 2018, with the remaining production increases going to export markets.

### U.S. turkey exports (historic and forecast)



Note: F= Forecast  
 Source: USDA, Economic Research Service using USDA, World Agricultural Supply and Demand Estimates (WASDE)

### U.S. turkey production (historic and forecast)



Note: F= Forecast  
 Source: USDA, Economic Research Service using USDA, World Agricultural Supply and Demand Estimates (WASDE).



Exports of turkey in 2018 are forecast to reach 650 million pounds, a 4-percent increase over current expectations for 2017. U.S. turkey exports have been recovering since the 2015 HPAI-related trade restrictions led to a 32-percent drop in shipments. In 2014, turkey exports totaled 775 million pounds. Even with 3 consecutive years of growth since 2015, turkey exports are still forecast to be 16 percent below 2014 levels in 2018.

The first quarter of 2017 ended with turkey exports of 133 million pounds, with 64 percent of total volume shipped to Mexico. Larger quantities are expected to be exported during the remaining quarters of 2017, as the first quarter is historically a low point for turkey exports. Total exports are forecast to finish the year at 623 million pounds.

Author: Alex Melton, [awmelton@ers.usda.gov](mailto:awmelton@ers.usda.gov)

## Contact Information

Mildred M. Haley (coordinator)	(202) 694-5176	<a href="mailto:mhaley@ers.usda.gov">mhaley@ers.usda.gov</a>
Keithly Jones (coordinator)	(202) 694-5172	<a href="mailto:kjones@ers.usda.gov">kjones@ers.usda.gov</a>
Keithly Jones (Cattle/beef)	(202) 694-5172	<a href="mailto:kjones@ers.usda.gov">kjones@ers.usda.gov</a>
Lekhnath Chalise (Cattle/beef)	(202) 694-5371	<a href="mailto:lekhnath.chalise@ers.usda.gov">lekhnath.chalise@ers.usda.gov</a>
Russell Knight (Cattle/beef)	(202) 694-5566	<a href="mailto:russell.h.knight@ers.usda.gov">russell.h.knight@ers.usda.gov</a>
Mildred M. Haley (hogs/pork)	(202) 694-5176	<a href="mailto:mhaley@ers.usda.gov">mhaley@ers.usda.gov</a>
Sean Ramos (poultry, poultry trade, eggs)	(202) 694-5443	<a href="mailto:sean.ramos@ers.usda.gov">sean.ramos@ers.usda.gov</a>
Alex Melton (Turkey)	(202) 694-5409	<a href="mailto:awmelton@ers.usda.gov">awmelton@ers.usda.gov</a>
Jerry Cessna (dairy)	(202) 694-5171	<a href="mailto:jcessna@ers.usda.gov">jcessna@ers.usda.gov</a>
Jonathan Law (dairy)	(202) 694-5544	<a href="mailto:jonathan.law@ers.usda.gov">jonathan.law@ers.usda.gov</a>
Keithly Jones (sheep and lamb)	(202) 694-5172	<a href="mailto:kjones@ers.usda.gov">kjones@ers.usda.gov</a>
Carolyn Liggon (web publishing)	(202) 694-5056	<a href="mailto:cvliggon@ers.usda.gov">cvliggon@ers.usda.gov</a>

## Subscription Information

Subscribe to ERS e-mail notification service at <https://www.ers.usda.gov/subscribe-to-ers-e-newletters/> to receive timely notification of newsletter availability.

## Data Products

Meat Price Spreads, <https://www.ers.usda.gov/data-products/meat-price-spreads/>, provides monthly average values at the farm, wholesale, and retail stages of the marketing chain for selected animal products.

Livestock and Meat Trade Data, <http://www.ers.usda.gov/data-products/livestock-and-meat-international-trade-data/>, contains monthly and annual data for imports and exports of live cattle and hogs, beef and veal, lamb and mutton, pork, broilers, turkey, and shell eggs.

Livestock & Meat Domestic Data, <http://www.ers.usda.gov/data-products/livestock-meat-domestic-data/>, contains domestic supply, disappearance, and price data.

Dairy Data, <https://www.ers.usda.gov/data-products/dairy-data/>, includes data from multiple sources concerning supply, demand, and prices for the dairy industry.

## Related Websites

Livestock, Dairy, and Poultry Outlook, <http://www.ers.usda.gov/publications/?page=1&topicId=0&authorId=0&seriesCode=LDPM&sort=CopyrightDate&sortDir=desc>  
Animal Production and Marketing Issues, <https://www.ers.usda.gov/topics/animal-products/animal-production-marketing-issues/>  
Cattle, <https://www.ers.usda.gov/topics/animal-products/cattle-beef/>  
Dairy, <https://www.ers.usda.gov/topics/animal-products/dairy/>  
Hogs, <https://www.ers.usda.gov/topics/animal-products/hogs-pork/>  
Poultry and Eggs, <https://www.ers.usda.gov/topics/animal-products/poultry-eggs/>  
WASDE, <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1194>

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

## E mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to <http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do> and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.

- Receive weekly notification (on Friday afternoon) via the ERS website. Go to <http://www.ers.usda.gov/subscribe-to-ers-e-newletters/> and follow the instructions to receive notices about ERS outlook reports, Amber Waves magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to <http://www.ers.usda.gov/rss/> to get started.

**U.S. red meat and poultry forecasts**

	2014					2015					2016					2017					2018		
	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	Annual	
<b>Production, million lb</b>																							
Beef	5,866	6,184	6,179	6,021	24,250	5,665	5,856	6,068	6,109	23,698	5,938	6,187	6,472	6,625	25,222	6,300	<b>6,495</b>	<b>6,820</b>	<b>6,695</b>	<b>26,310</b>	<b>6,545</b>	<b>26,910</b>	
Pork	5,784	5,504	5,424	6,131	22,843	6,162	5,925	5,958	6,457	24,501	6,230	5,963	6,100	6,648	24,941	6,409	<b>6,255</b>	<b>6,395</b>	<b>6,995</b>	<b>26,054</b>	<b>6,590</b>	<b>26,910</b>	
Lamb and mutton	37	43	38	38	156	38	39	37	37	150	38	39	36	37	150	37	<b>36</b>	<b>36</b>	<b>38</b>	<b>147</b>	<b>35</b>	<b>145</b>	
Broilers	9,299	9,618	9,835	9,814	38,565	9,718	10,021	10,372	9,937	40,048	10,039	10,253	10,338	10,065	40,695	10,232	<b>10,400</b>	<b>10,500</b>	<b>10,350</b>	<b>41,482</b>	<b>10,400</b>	<b>42,275</b>	
Turkeys	1,332	1,428	1,478	1,517	5,756	1,429	1,389	1,352	1,458	5,627	1,435	1,520	1,515	1,511	5,981	1,487	<b>1,535</b>	<b>1,525</b>	<b>1,575</b>	<b>6,122</b>	<b>1,510</b>	<b>6,255</b>	
Total red meat & poultry	22,469	22,934	23,111	23,671	92,185	23,157	23,382	23,940	24,150	94,630	23,834	24,118	24,623	25,037	97,612	24,611	<b>24,874</b>	<b>25,437</b>	<b>25,813</b>	<b>100,735</b>	<b>25,232</b>	<b>103,118</b>	
Table eggs, mil. doz.	1,794	1,823	1,852	1,896	7,366	1,820	1,726	1,664	1,728	6,938	1,793	1,827	1,876	1,939	7,435	1,902	<b>1,875</b>	<b>1,900</b>	<b>1,950</b>	<b>7,627</b>	<b>1,925</b>	<b>7,765</b>	
<b>Per capita disappearance, retail lb 1/</b>																							
Beef	13.1	14.0	13.7	13.4	54.2	13.1	13.6	13.9	13.3	54.0	13.6	13.9	14.0	14.0	55.6	14.0	<b>14.1</b>	<b>14.6</b>	<b>14.0</b>	<b>56.7</b>	<b>14.1</b>	<b>57.5</b>	
Pork	11.2	10.8	11.0	12.8	45.8	12.2	11.8	12.1	13.6	49.8	12.6	11.8	12.1	13.5	50.1	12.3	<b>11.9</b>	<b>12.5</b>	<b>13.7</b>	<b>50.5</b>	<b>12.7</b>	<b>51.3</b>	
Lamb and mutton	0.2	0.2	0.2	0.3	0.9	0.2	0.3	0.2	0.3	1.0	0.3	0.3	0.2	0.3	1.0	0.3	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>1.0</b>	<b>0.3</b>	<b>1.0</b>	
Broilers	20.3	20.8	21.2	21.1	83.4	21.4	22.1	23.3	22.1	89.0	22.5	22.7	22.7	21.8	89.8	22.4	<b>22.7</b>	<b>22.7</b>	<b>22.3</b>	<b>90.1</b>	<b>22.7</b>	<b>91.3</b>	
Turkeys	3.4	3.5	3.9	5.0	15.8	3.5	3.6	3.9	4.9	16.0	3.6	3.9	4.2	4.9	16.7	3.7	<b>3.9</b>	<b>4.2</b>	<b>5.1</b>	<b>16.9</b>	<b>3.8</b>	<b>17.2</b>	
Total red meat & poultry	48.6	49.8	50.4	53.0	201.8	50.9	51.8	53.8	54.6	211.1	53.0	53.0	53.7	54.9	214.6	53.1	<b>53.2</b>	<b>54.6</b>	<b>55.8</b>	<b>216.7</b>	<b>54.0</b>	<b>219.8</b>	
Eggs, number	65.6	66.2	67.2	68.5	267.5	65.7	62.9	61.9	65.7	256.3	67.5	67.4	68.8	71.0	274.7	68.3	<b>67.9</b>	<b>68.5</b>	<b>69.9</b>	<b>274.6</b>	<b>68.8</b>	<b>276.8</b>	
<b>Market prices</b>																							
Choice steers, 5-area Direct, \$/cwt	146.34	147.82	158.49	165.60	154.56	162.43	158.11	144.22	127.71	148.12	134.81	127.68	113.26	107.69	120.86	122.96	<b>128-132</b>	<b>115-123</b>	<b>113-123</b>	<b>120-125</b>	<b>115-125</b>	<b>113-123</b>	
Feeder steers, Ok City, \$/cwt	168.49	188.64	220.90	234.25	203.07	210.31	219.65	208.11	173.59	202.92	155.83	146.49	140.66	128.30	142.82	129.56	<b>142-146</b>	<b>135-143</b>	<b>131-141</b>	<b>135-140</b>	<b>127-137</b>	<b>131-141</b>	
Cutter Cows, National L.E., \$/cwt	89.12	98.57	111.27	109.21	102.04	107.61	109.50	103.34	77.80	99.56	73.50	75.87	73.16	57.75	70.07	62.63	<b>65-69</b>	<b>63-71</b>	<b>63-73</b>	<b>64-69</b>	<b>60-70</b>	<b>60-70</b>	
Choice slaughter lambs, San Angelo, \$/cwt	166.69	148.99	156.02	162.69	158.60	147.17	140.09	146.23	142.52	144.00	133.33	136.15	137.52	131.88	134.72	138.91	<b>141-145</b>	<b>141-149</b>	<b>140-150</b>	<b>140-145</b>	<b>138-148</b>	<b>135-145</b>	
Nat'l base cost, 51-52 % lean, live equivalent, \$/cwt	68.69	85.40	83.30	66.74	76.03	48.47	53.20	54.59	44.66	50.23	44.63	53.71	49.26	37.02	46.16	49.73	<b>46-48</b>	<b>45-47</b>	<b>36-40</b>	<b>44-46</b>	<b>44-48</b>	<b>42-46</b>	
Broilers, 12 City, cents/lb	98.40	113.70	104.60	102.80	104.90	97.00	104.20	83.70	77.20	90.50	84.60	93.00	81.7	78.00	84.30	88.50	<b>97-99</b>	<b>83-89</b>	<b>81-87</b>	<b>87-91</b>	<b>85-93</b>	<b>85-92</b>	
Turkeys, Eastern, cents/lb	100.70	105.60	110.20	113.90	107.60	99.60	108.50	126.40	130.10	116.20	114.70	116.50	120.70	116.60	117.10	100.40	<b>98-102</b>	<b>102-108</b>	<b>107-115</b>	<b>102-106</b>	<b>98-106</b>	<b>104-112</b>	
Eggs, New York, cents/doz.	142.70	134.60	129.30	162.70	142.30	146.90	170.30	235.70	174.10	181.80	121.50	67.90	71.60	81.70	85.70	80.00	<b>74-76</b>	<b>81-85</b>	<b>99-107</b>	<b>83-87</b>	<b>84-90</b>	<b>87-94</b>	
<b>U.S. trade, million lb</b>																							
Beef & veal exports	583	667	679	643	2,572	523	607	542	594	2,265	534	621	659	736	2,550	651	<b>710</b>	<b>730</b>	<b>715</b>	<b>2,806</b>	<b>660</b>	<b>2,835</b>	
Beef & veal imports	597	767	765	818	2,947	878	990	890	613	3,371	793	832	751	640	3,016	699	<b>775</b>	<b>685</b>	<b>600</b>	<b>2,759</b>	<b>700</b>	<b>2,825</b>	
Lamb and mutton imports	46	49	45	55	195	53	56	46	59	214	68	55	41	52	216	80	<b>53</b>	<b>46</b>	<b>56</b>	<b>235</b>	<b>77</b>	<b>242</b>	
Pork exports	1,399	1,342	1,146	1,205	5,092	1,223	1,338	1,173	1,274	5,009	1,223	1,320	1,236	1,454	5,233	1,432	<b>1,400</b>	<b>1,365</b>	<b>1,550</b>	<b>5,747</b>	<b>1,465</b>	<b>5,965</b>	
Pork imports	213	241	257	301	1,011	279	266	270	300	1,116	293	257	266	276	1,092	264	<b>245</b>	<b>255</b>	<b>275</b>	<b>1,039</b>	<b>250</b>	<b>935</b>	
Broiler exports	1,827	1,834	1,858	1,779	7,298	1,624	1,713	1,487	1,496	6,321	1,573	1,607	1,736	1,731	6,647	1,711	<b>1,730</b>	<b>1,765</b>	<b>1,770</b>	<b>6,976</b>	<b>1,720</b>	<b>7,030</b>	
Turkey exports	159	182	215	219	775	148	123	125	132	529	115	140	160	153	568	133	<b>150</b>	<b>165</b>	<b>175</b>	<b>623</b>	<b>145</b>	<b>650</b>	
Live swine imports (thousand head)	1,195	1,216	1,264	1,272	4,947	1,309	1,541	1,371	1,519	5,740	1,475	1,405	1,375	1,414	5,669	1,449	<b>1,425</b>	<b>1,480</b>	<b>1,470</b>	<b>5,824</b>	<b>1,475</b>	<b>5,925</b>	

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 5/10/2017

## Dairy Forecasts

	2015	2016				2017					2018	
	Annual	II	III	IV	Annual	I	II	III	IV	Annual	I	Annual
Milk cows (thousands)	9,314	9,323	9,331	9,344	9,328	9,369	9,380	9,390	9,405	9,385	9,415	9,425
Milk per cow (pounds)	22,397	5,828	5,636	5,620	22,775	5,715	5,925	5,740	5,730	23,110	5,820	23,560
<b>Milk production (billion pounds)</b>	<b>208.6</b>	<b>54.3</b>	<b>52.6</b>	<b>52.5</b>	<b>212.4</b>	<b>53.5</b>	<b>55.6</b>	<b>53.9</b>	<b>53.9</b>	<b>216.9</b>	<b>54.8</b>	<b>222.0</b>
Farm use	1.0	0.2	0.3	0.3	1.0	0.2	0.2	0.3	0.3	1.0	0.2	1.0
Milk marketings	207.6	54.1	52.3	52.3	211.4	53.3	55.3	53.6	53.6	215.9	54.5	221.0
<b>Milk-fat (billion pounds milk equiv.)</b>												
Milk marketings	207.6	54.1	52.3	52.3	211.4	53.3	55.3	53.6	53.6	215.9	54.5	221.0
Beginning commercial stocks	10.5	15.0	17.8	16.1	12.4	12.8	16.2	19.3	16.5	12.8	13.2	13.2
Imports	5.7	1.5	1.7	1.6	7.0	1.5	1.4	1.4	1.6	5.9	1.4	6.1
Total supply	223.8	70.6	71.8	70.0	230.8	67.6	73.0	74.3	71.7	234.6	69.2	240.2
Commercial exports	8.5	2.1	2.1	2.5	8.9	2.1	2.2	2.2	2.1	8.5	2.1	8.7
Ending commercial stocks	12.4	17.8	16.1	12.8	12.8	16.2	19.3	16.5	13.2	13.2	15.8	12.4
Net removals	0.0	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	203.0	50.7	53.6	54.7	209.1	49.3	51.6	55.7	56.4	213.0	51.2	219.2
<b>Skim solids (billion pounds milk equiv.)</b>												
Milk marketings	207.6	54.1	52.3	52.3	211.4	53.3	55.3	53.6	53.6	215.9	54.5	221.0
Beginning commercial stocks	9.4	10.2	10.3	9.7	9.2	9.5	10.5	11.4	10.5	9.5	10.0	10.0
Imports	6.0	1.6	1.6	1.7	6.5	1.7	1.6	1.6	1.6	6.5	1.6	6.4
Total supply	223.0	65.9	64.2	63.7	227.1	64.5	67.5	66.6	65.8	231.9	66.1	237.4
Commercial exports	37.3	9.7	10.2	10.4	38.9	9.8	10.2	10.3	10.3	40.5	9.9	41.1
Ending commercial stocks	9.2	10.3	9.7	9.5	9.5	10.5	11.4	10.5	10.0	10.0	9.7	9.4
Net removals	0.0	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	176.6	45.9	44.3	43.8	178.8	44.2	45.8	45.9	45.6	181.4	46.5	187.0
<b>Milk prices (dollars/cwt)<sup>1</sup></b>												
All milk	17.12	14.77	16.83	17.67	16.24	18.23	16.30	17.15	17.80	17.35	17.25	17.55
							-16.60	-17.75	-18.70	-17.85	-18.25	-18.55
Class III	15.80	13.20	16.18	16.33	14.87	16.49	15.30	16.30	16.40	16.10	15.95	16.40
							-15.60	-16.90	-17.30	-16.60	-16.95	-17.40
Class IV	14.35	13.18	14.58	14.13	13.77	15.37	13.95	14.25	13.95	14.35	13.65	14.40
							-14.35	-14.95	-14.95	-14.95	-14.75	-15.50
<b>Product prices (dollars/pound)<sup>2</sup></b>												
Cheddar cheese	1.645	1.454	1.735	1.714	1.605	1.648	1.505	1.615	1.635	1.600	1.600	1.640
							-1.535	-1.675	-1.725	-1.650	-1.700	-1.740
Dry whey	0.380	0.252	0.288	0.366	0.288	0.485	0.510	0.495	0.485	0.490	0.475	0.475
							-0.530	-0.525	-0.515	-0.520	-0.505	-0.505
Butter	2.067	2.080	2.206	1.958	2.078	2.200	2.090	2.125	2.060	2.115	1.955	2.045
							-2.150	-2.215	-2.180	-2.195	-2.085	-2.175
Nonfat dry milk	0.902	0.760	0.860	0.931	0.829	0.955	0.835	0.855	0.855	0.875	0.875	0.915
							-0.865	-0.905	-0.925	-0.915	-0.945	-0.985

Totals may not add due to rounding.

<sup>1</sup> Simple averages of monthly prices. May not match reported annual averages.

<sup>2</sup> 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: U.S. Dept. of Agriculture: National Agricultural Statistics Service, Agricultural Marketing Service, Foreign Agricultural Service, and World Agricultural Outlook Board.

For further information, contact Jerry Cessna, 202-694-5171, [jgcessna@ers.usda.gov](mailto:jgcessna@ers.usda.gov), or contact Jonathan Law, 202-694-5544, [jonathan.law@ers.usda.gov](mailto:jonathan.law@ers.usda.gov).

Published in Livestock, Dairy, and Poultry Outlook, <http://www.ers.usda.gov/publications/ldpm-livestock,-dairy,-and-poultry-outlook.aspx>.