



**Transformation**

# THE ECONOMIC STATE OF U.S. FARMING

**Fact Sheet**

By Rashmit Arora and Alexandra Bookis

Contributors: Eric Ford, Brooke Mays



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## EXECUTIVE SUMMARY

Exploitation of small farmers at the hands of agribusiness giants is an overlooked social injustice in the United States. Because animal agriculture is a leading contributor to climate change, pandemics, and profound global animal suffering, we must understand the key role that farmers—the very core of our food system—play in solving these problems. While farmers have shown **willingness to forgo profits for stewardship**, they are still driven by financial and **production-oriented factors**.

**Transfarmation's** work centers on including farmers in the global shift from factory farming to a plant-focused agricultural model. To bring about this shift, changemakers must approach small farmers with empathy for the economic hardship of being trapped in the industrial agriculture complex. They must also understand the layout of policies affecting farmers to effectively engage legislators. For all this, they need facts.

This fact sheet provides an overview of the current state of farming in the United States. Relying primarily on data from the USDA's National Agricultural Statistics Service, the 2017 Census of Agriculture, and the 2018 and 2019 Agricultural Resource Management Survey, this fact sheet highlights the following:

- U.S. land use for farming and farm production by region
- Farmer demographics across key metrics, such as race and gender
- Economic status of U.S. farmers, including income, debt, bankruptcy, and level of financial support from the federal government
- Prevalence and implications of contract farming
- Poultry, dairy, hog, and cattle farming, as well as comparative analyses of these against specialty-crop farming, which includes fresh fruits and vegetables, tree nuts, dried fruits, and nursery crops

The final section considers COVID-19's impacts on the agricultural industry. While detailed data on the pandemic's effects on the agricultural community in 2020 is not publicly available as of this writing, trends point to a deepening of inequalities.



# THE STATE OF U.S. AGRICULTURE

## Farm and Farmland Statistics

A farm is, according to the [U.S. Census Bureau](#) since 1974, “any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year.”<sup>1</sup> Since 2005, according to the United States Department of Agriculture (USDA) Economic Research Service (ERS), the definition of a [family farm](#) “is one in which the majority of the business is owned by the operator and individuals related to the operator by blood, marriage, or adoption, including relatives who do not live in the operator household.”<sup>2</sup> Small family farms have a gross cash farm income under \$350,000; midsize family farms earn between \$350,000 and \$999,999; large family farms earn over \$1 million.<sup>3</sup>

- The [2017 Census of Agriculture](#) reports that there are 2,042,220 farms in the United States, a 3.2 percent decrease from the 2,109,303 farms in the 2012 census.<sup>4</sup> Since [peaking in 1935](#), the number of farms has gradually declined.<sup>5</sup>
- Nearly half of the farms in the 2017 census are devoted to raising animals:
  - [652,289](#) beef cattle farms<sup>6</sup>
  - [164,099](#) poultry and egg farms<sup>7</sup>
  - [40,336](#) dairy farms<sup>8</sup>
  - [64,871](#) hog farms<sup>9</sup>
- More recent data from 2019 indicates that the number of farms in the United States is about [2,023,400](#).<sup>10</sup>
- In the United States, [two out of five acres of land are farmland](#), amounting to 900 million acres.<sup>11</sup> Agricultural land is concentrated in the West and Midwest.
  - Counties in Tennessee, Kentucky, and eastern Texas have the highest farm densities.<sup>12</sup>
  - Between 2012 and 2017, California, Pennsylvania, and Minnesota had the largest declines in the number of farms.<sup>13</sup>

<sup>1</sup>United States Department of Agriculture National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Farms and Farmland* (Washington, DC: USDA NASS, 2019), 1.

<sup>2</sup>“Glossary,” United States Department of Agriculture Economic Research Service, last updated November 27, 2019, <https://www.ers.usda.gov/topics/farm-economy/farm-household-well-being/glossary.aspx#:~:text=The%20current%20definition%20of%20a,live%20in%20the%20operator%20household>.

<sup>3</sup>“Farm Structure,” United States Department of Agriculture Economic Research Service, last updated January 16, 2020, <https://www.ers.usda.gov/topics/farm-economy/farm-structure-and-organization/farm-structure/>.

<sup>4</sup>USDA NASS, *Farms and Farmland*, 1.

<sup>5</sup>“Farming and Farm Income,” United States Department of Agriculture Economic Research Service, last updated November 10, 2020, <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/farming-and-farm-income/>.

<sup>6</sup>USDA NASS, *Farms and Farmland*, 2. The figure for beef cattle farms was obtained by subtracting the number of dairy farms (40,336) from that of cattle and dairy farms in total (692,625).

<sup>7</sup>United States Department of Agriculture National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Poultry and Egg Production* (Washington, DC: USDA NASS, 2020), 1.

<sup>8</sup>United States Department of Agriculture National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Dairy Cattle and Milk Production* (Washington, DC: USDA NASS, 2019), 1.

<sup>9</sup>United States Department of Agriculture, *2017 Census of Agriculture: United States, Summary and State Data, Geographic Area Series*, vol. 1, part 51 (Washington, DC: USDA, 2019), 10.

<sup>10</sup>United States Department of Agriculture National Agricultural Statistics Service, *Farms and Land in Farms: 2019 Summary* (Washington, DC: USDA NASS, 2020), 4.

<sup>11</sup>USDA NASS, *Farms and Farmland*, 1.

<sup>12</sup>USDA NASS, *Farms and Farmland*, 2.

<sup>13</sup>USDA NASS, *Farms and Farmland*, 2.

- The map below shows the distribution of farms per the **2017 census**.<sup>14</sup>

## Number of Farms in 2017

United States Total 2,042,220

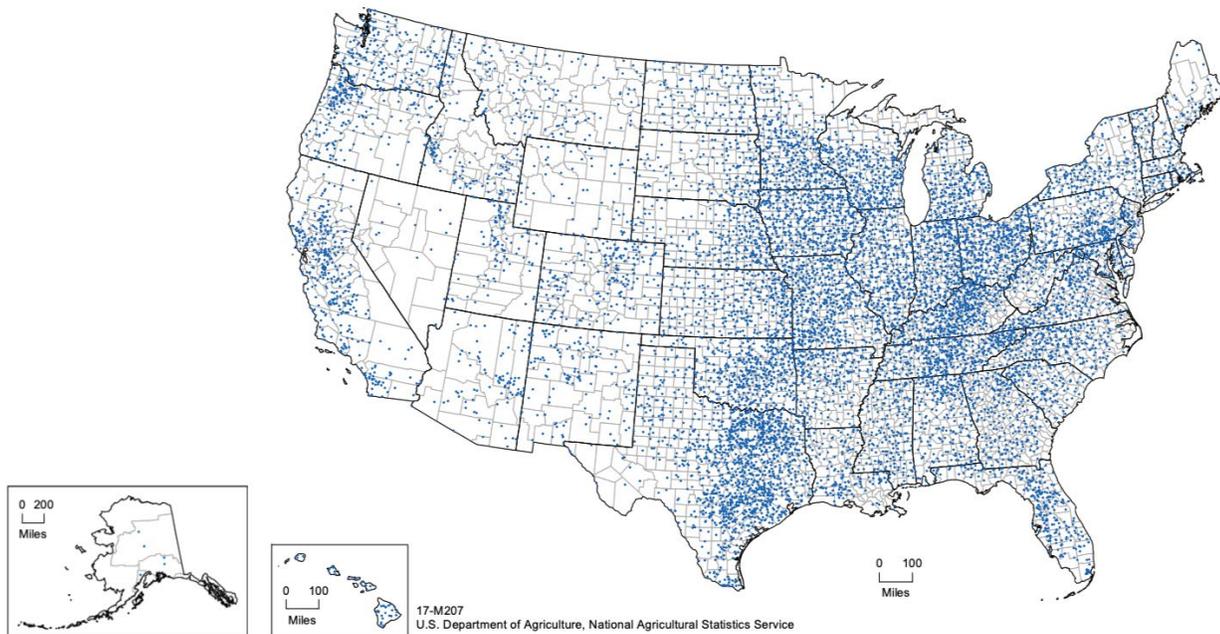


Figure 1. Map showing the distribution of farms in the United States. One dot equals 200 farms.

- In total, 54 percent of U.S. farmland is occupied by animal operations:<sup>15</sup>
  - Cattle (meat and dairy): 44 percent
  - Poultry (meat and eggs): 1 percent
  - Hogs and pigs: 1 percent
  - Other animals: 8 percent
- The distribution of farmland is **extremely unequal**. **Four percent of U.S. farms control 58 percent of all farmland, while 13 percent of U.S. farms control 0.14 percent of farmland.**<sup>16</sup>
- Forty percent of U.S. farmland is **rented**.<sup>17</sup>

### Farmer Demographics

- According to the **2017 census**, there are 3.4 million farm producers in the United States.<sup>18</sup> The census saw a 6.9 percent increase from 2012, but this is partially due to the census questionnaire and its broadening of the definition of “farm producer” to someone involved in making decisions for a farm.<sup>19</sup>
- The average **age** of farmers is 57.5 years.<sup>20</sup>
- Sixty-four percent of **farmers** are male; 36 are female.<sup>21</sup>

<sup>14</sup>United States Department of Agriculture National Agricultural Statistics Service, 2017 Census of Agriculture, Ag Census Web Maps, last modified September 30, 2019, [www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/Ag\\_Census\\_Web\\_Maps/Overview/](http://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Ag_Census_Web_Maps/Overview/).

<sup>15</sup>USDA NASS, *Farms and Farmland*, 2.

<sup>16</sup>USDA NASS, *Farms and Farmland*, 2.

<sup>17</sup>USDA NASS, *Farms and Farmland*, 2.

<sup>18</sup>United States Department of Agriculture National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Farm Producers* (Washington, DC: USDA NASS, 2019), 1.

<sup>19</sup>USDA NASS, *Farm Producers*, 1.

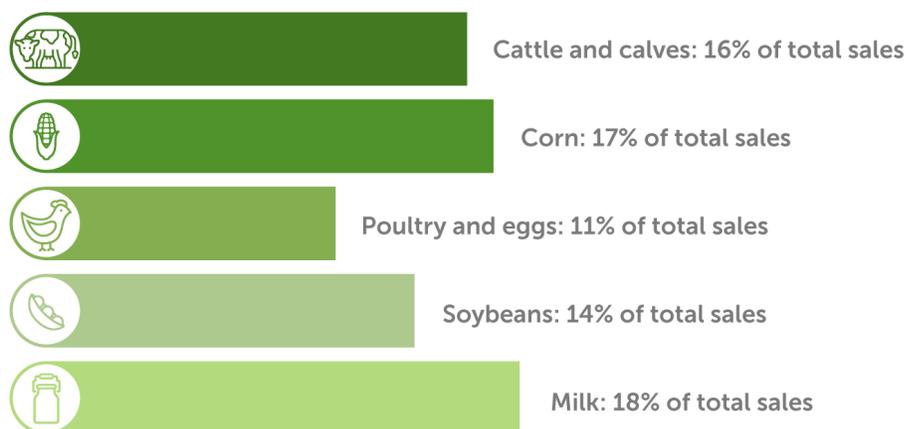
<sup>20</sup>USDA NASS, *Farm Producers*, 1.

<sup>21</sup>USDA NASS, *Farm Producers*, 2.

- Sixty-one percent of farmers **report** working off-farm; 58 percent report a primary occupation other than farming.<sup>22</sup>
- Ninety-five percent of farmers **identify** as white, 3 percent Hispanic, 1.7 percent Native American/Alaskan Native, 1.3 percent Black, 0.6 percent Asian, 0.1 percent Native Hawaiian/Pacific Islander, and 0.8 percent multiracial.<sup>23</sup>

## Top Commodities

Total U.S. agricultural sales in 2017 were **\$388.5 billion**.<sup>24</sup> The **top commodities** were as follows:<sup>25</sup>



## Contract Farming

The ERS defines a **farming contract** as “a legal agreement between a farm operator (contractee) and another person or firm (contractor) to produce a specific type, quantity, and quality of agricultural commodity” and classifies contracts as either marketing or production:<sup>26</sup>

**Marketing Contracts:** Ownership of the commodity remains with the farmer during production. The contract sets a price (or a pricing formula), product quantities and quality, and a delivery schedule. Contractor involvement in production under this contract type is minimal. For crops, the contract is finalized before harvest. For livestock, the contract is finalized before the animals are ready to be sold.

**Production Contracts:** The contractor has more involvement in the production process, often providing specific inputs and services, production guidelines, and technical advice to the grower, who receives a contract fee for raising the commodity. The contractor usually owns the commodity during production and transfers it from the contract grower’s farm upon completion of the production cycle. In livestock contracts, for example, contractors typically provide feed, veterinary services, transportation, and young animals. The contract is finalized before production of the commodity.

Vertical integration is a business structure in which a company owns or otherwise controls operations at multiple stages of the production process. Contract farming is a form of vertical integration in agriculture. Production contracts are often used for U.S. livestock farms, especially poultry and hog farms. Small farmers, also called household operators, sign a contract in which the integrator owns the animals or eggs during production, and the farmer is paid when the production process is complete. Growers are paid relative to their peers in a tournament system, not according to absolute performance.<sup>27</sup>

<sup>22</sup>USDA NASS, *Farm Producers*, 2.

<sup>23</sup>USDA NASS, *Farm Producers*, 2.

<sup>24</sup>United States Department of Agriculture National Agricultural Statistics Service, *2017 Census of Agriculture Highlights: Farm Economics* (Washington, DC: USDA NASS, 2019), 1.

<sup>25</sup>USDA NASS, *Farm Economics*, 2.

<sup>26</sup>“Contracting,” United States Department of Agriculture Economic Research Service, last updated January 16, 2020, <https://www.ers.usda.gov/topics/farm-economy/farm-structure-and-organization/contracting/>.

<sup>27</sup>James M. MacDonald, “Financial Risks and Incomes in Contract Broiler Production,” *Amber Waves*, USDA Economic Research Service, August 4, 2014, <https://www.ers.usda.gov/amber-waves/2014/august/financial-risks-and-incomes-in-contract-broiler-production/>.

In this tournament system, all growers receive a set base pay, but those who maintain lower input costs relative to the average input costs of their peer growers receive a premium over the base fee.<sup>28</sup> The premium is usually based on the size of the cost differential between the best-performing farmer and the worst-performing farmer. In other words, the farmer that produces the heaviest chickens for the least input wins. This introduces high income discrepancies between growers and inconsistent paychecks.

Contracts reward **low-cost production**, but cost is determined by factors beyond a grower's control, such as feed and chick quality. A grower who has several chickens die due to weather or illness will deliver fewer live-weight pounds to the processing plant and will, therefore, have higher cost per pound.<sup>29</sup> Additional risks and inconsistencies stem from **league composition**, which can vary considerably from round to round. A USDA **article** illustrates this risk:<sup>30</sup>

The average broiler processing plant handles about 1.12 million birds per week, and the average grower delivers about 90,000 birds at a time; at that rate, about 12 growers would be competing in a tournament in an average week. If the group delivering in one week happened to have three exceptional growers, and the group delivering in the next week had just one, then any given grower would be likely to have a much better relative performance, and better compensation, if he or she were delivering in the later week. This is a pure risk, in that the grower has no control over the identity of the other growers in the group, and the addition or subtraction of one or two exceptional (or lucky) growers can have a meaningful impact on group averages when the group is small.

Furthermore, because production contracts require heavy investment in specific assets and because the number of companies, or "integrators," in a given area is limited, small farmers often have little if any choice in the company they grow for.<sup>31</sup> **Half of U.S. poultry contractors** report having only one or two integrators,<sup>32</sup> which has been shown to result in **lower fees for growers**.<sup>33</sup> Because of the limited number of integrators, many poultry growers are **restricted and unable to explore other contracting or production options**.

- Of the \$58 billion in agricultural production that production contracts covered in 2013, **\$48 billion** was in two commodity classes—hogs and poultry.<sup>34</sup>
- In 2017, **49 percent of livestock** production was under contract, while 21 percent of crop production was under contract.<sup>35</sup>
- In animal agriculture, contracts are most prevalent in **poultry and hog farming**; 90 percent of poultry farming is under contract, while over 60 percent of hogs are raised under contract.<sup>36</sup>
- In crop farming, **tobacco production** is the most contracted, with 90 percent under contract.<sup>37</sup>

<sup>28</sup>MacDonald, "Financial Risks."

<sup>29</sup>MacDonald, "Financial Risks."

<sup>30</sup>MacDonald, "Financial Risks."

<sup>31</sup>James M. MacDonald, "Trends in Agricultural Contracts," *Choices* 30, no. 3 (2015): 5.

<sup>32</sup>MacDonald, "Trends," 5.

<sup>33</sup>James M. MacDonald and Nigel Key, "Market Power in Poultry Production Contracting? Evidence from a Farm Survey," *Journal of Agricultural and Applied Economics* 44, no. 4 (November 2012): 488.

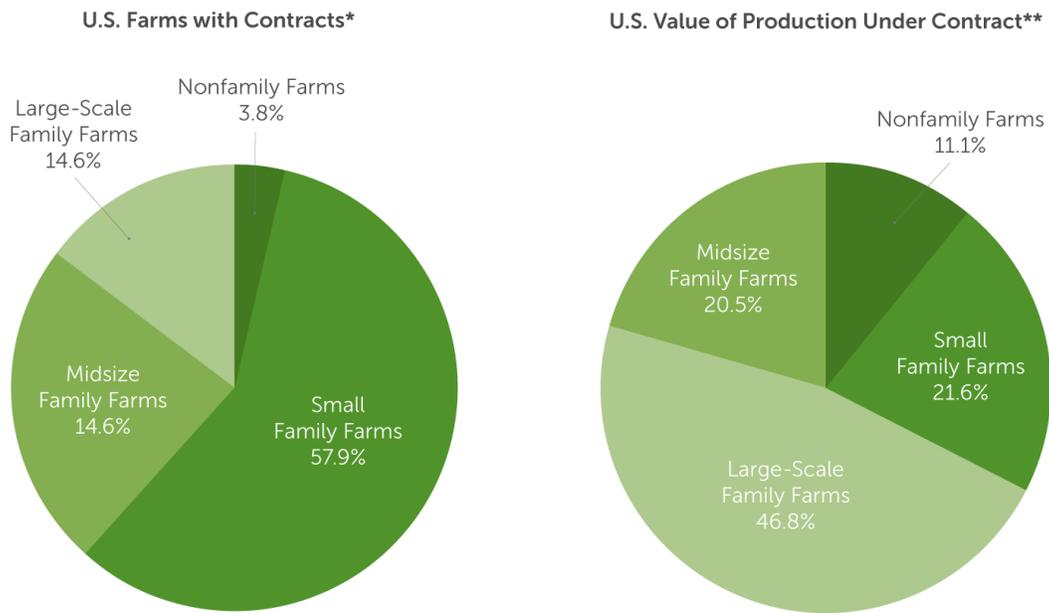
<sup>34</sup>MacDonald, "Trends," 5.

<sup>35</sup>James M. MacDonald and Christopher Burns, "Marketing and Production Contracts Are Widely Used in U.S. Agriculture," *Amber Waves*, July 1, 2019, <https://www.ers.usda.gov/amber-waves/2019/july/marketing-and-production-contracts-are-widely-used-in-us-agriculture/>.

<sup>36</sup>MacDonald and Burns, "Marketing and Production Contracts."

<sup>37</sup>MacDonald and Burns, "Marketing and Production Contracts."

- Over half (58 percent) of farms with contracts are **small family farms**,<sup>38</sup> those with less than \$350,000 in annual sales.<sup>39</sup> Of U.S. farms with contracts, about 15 percent are large family farms with over \$1 million in sales.<sup>40</sup> But the value of production is concentrated at the top, with large farms making up 46.8 percent, or nearly half, of the total value of contracted production, as shown in the charts below.<sup>41</sup>



\*Farms reporting production under production contracts, marketing contracts, or both.  
 \*\*Includes commodities under production or marketing contracts.

Figure 2. Pie charts showing the percentage of U.S. farms with contracts and the value of production under contract.

- Small family farms tend to raise **poultry and hogs**, while large family farms with contracts tend to grow crops. Nearly 40 percent of livestock production under contract is attributed to small family farms.<sup>42</sup>

<sup>38</sup>"Contracting," USDA.

<sup>39</sup>MacDonald and Burns, "Marketing and Production Contracts."

<sup>40</sup>MacDonald and Burns, "Marketing and Production Contracts."

<sup>41</sup>"Contracting," USDA.

<sup>42</sup>MacDonald and Burns, "Marketing and Production Contracts."

## Income

- The average U.S. farmer's **total income from farm-related sources** was \$21,478 in 2017.<sup>43</sup>

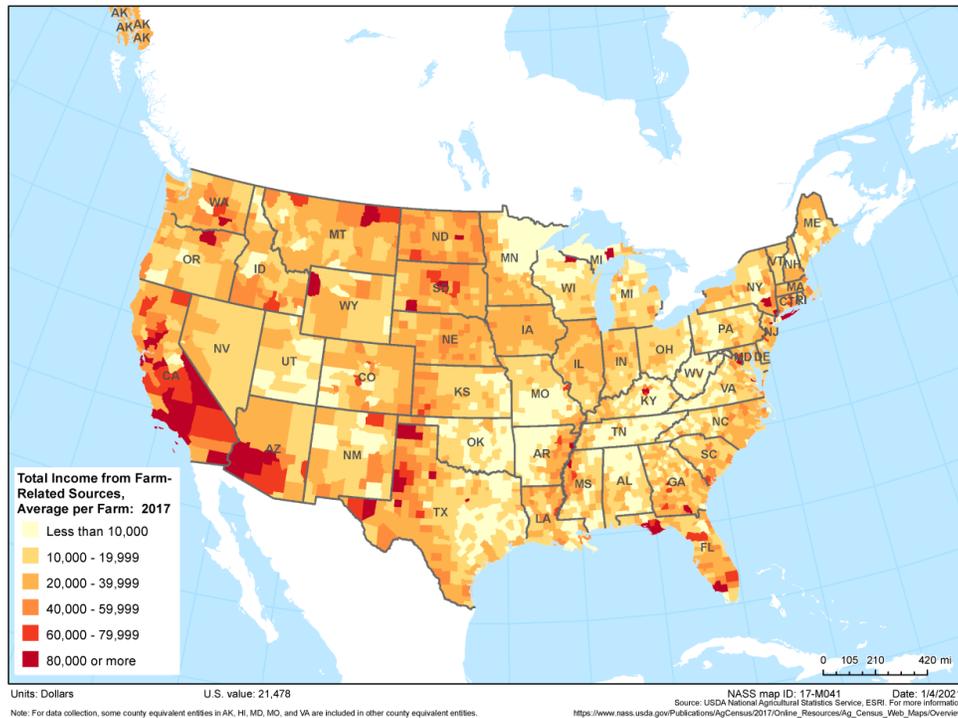


Figure 3. Map showing average U.S. farmer income from farm-related sources.

The annual **USDA Agricultural Resource Management Survey** captures nationally representative data on several financial metrics.<sup>44</sup> (Look [here](#) for information on ARMS methodology and for differences between the 2018 and 2019 surveys.<sup>45</sup> Please refer to the **2019 ARMS questionnaire** for the survey design.<sup>46</sup>)

| Median Net Farm Income | Cattle  | Dairy    | Poultry  | Hog      |
|------------------------|---------|----------|----------|----------|
| 2019                   | -\$370  | \$74,483 | \$17,862 | \$19,318 |
| 2018                   | \$1,446 | \$40,855 | \$13,140 | \$10,741 |

- As the above are median incomes, half the farmers in these industries earned less than the stated amounts.
- Most small farmers **rely** on off-farm sources of income to make ends meet.<sup>47</sup> The following statistics show the income breakdown in dollars per household between on-farm and off-farm sources according to 2019 ARMS data:<sup>48</sup>

<sup>43</sup>USDA, *2017 Census: Summary and State Data*, 17.

<sup>44</sup>"ARMS Farm Financial and Crop Production Practices," United States Department of Agriculture Economic Research Service, last updated July 7, 2020, <https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/?modal=17882>.

<sup>45</sup>"Documentation," United States Department of Agriculture Economic Research Service, last updated December 18, 2020, <https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/documentation>.

<sup>46</sup>United States Department of Agriculture Economic Research Service, *2019 Agricultural Resource Management Survey* (Washington, DC: USDA ERS, 2019).

<sup>47</sup>"Farming and Farm Income," USDA.

<sup>48</sup>United States Department of Agriculture Economic Research Service, *Tailored Reports (operator household income by production specialty, 2019)*, accessed December 29, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

|                               | Cattle    | Dairy     | Poultry   | Hog       | Specialty<br>(fruits, vegetables, nuts) |
|-------------------------------|-----------|-----------|-----------|-----------|---|
| <b>Total Household Income</b> | \$103,614 | \$186,610 | \$114,613 | \$179,322 | \$240,906                               |
| <b>On-Farm</b>                | \$100     | \$143,691 | \$40,449  | \$91,899  | \$57,244                                |
| <b>Off-Farm</b>               | \$103,514 | \$42,919  | \$74,165  | \$87,423  | \$183,662                               |

- The map below highlights the geographical distribution of producers who report a primary occupation other than farming.

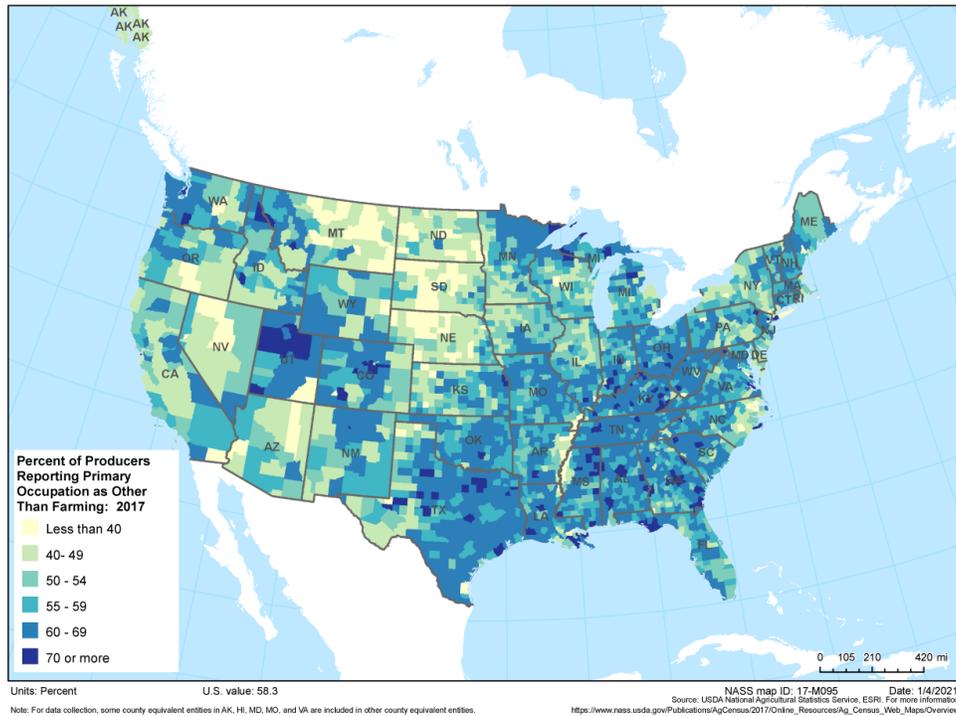


Figure 4. Map showing the percentage of U.S. farmers reporting primary occupation other than farming.

- There are deep inequalities in the distribution of U.S. farm sales. In 2017 the top 4 percent of farms accounted for 69 percent of U.S. farm sales, while the bottom 76 percent of farms made up a mere 3 percent of sales.<sup>49</sup>

| Sales Class                    | Percentage of Farms | Percentage of Sales |
|--------------------------------|---------------------|---------------------|
| <b>\$5,000,000+</b>            | 1                   | 35                  |
| <b>\$1,000,000–\$4,999,999</b> | 3                   | 34                  |
| <b>\$250,000–\$999,999</b>     | 8                   | 21                  |
| <b>\$50,000–\$249,999</b>      | 12                  | 8                   |
| <b>&lt; \$50,000</b>           | 76                  | 3                   |

<sup>49</sup>USDA NASS, *Farm Economics*, 1.

- While most farms are small (i.e., earning less than \$350,000 in annual gross cash farm income), large farms account for the bulk of production. In 2019, **large-scale family farms made up 44 percent of production value** but only 3 percent of U.S. farms.<sup>50</sup>
- **Farm-related income fell by 9 percent** between 2012 and 2017 for all U.S. farms, while production expenses decreased by only 1 percent.<sup>51</sup> Average net income dropped by 5 percent during the same period.<sup>52</sup>
- According to a **recent analysis** by Agricultural Economic Insights, trends in net farm income over the past decade vary substantially at the state level.<sup>53</sup>

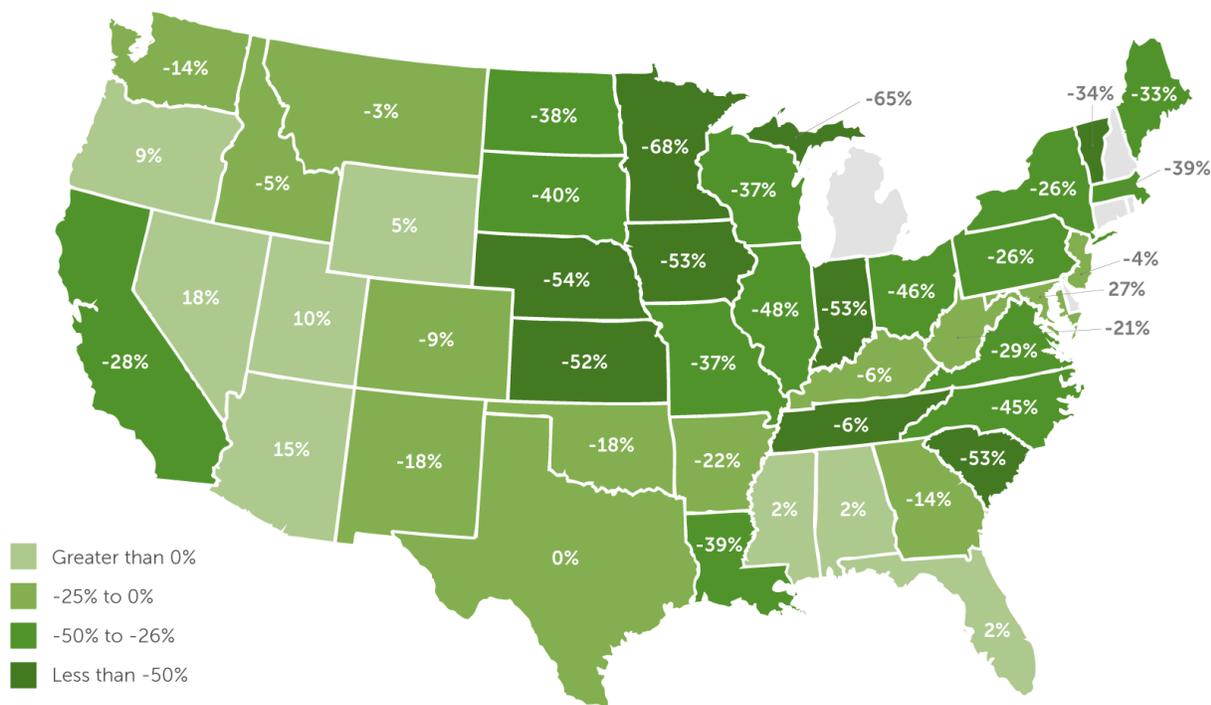


Figure 5. Map showing changes in average state-level net farm income from 2011–2013 to 2018–2019. (Agricultural Economic Insights calculations based on USDA ERS data.)

## Debt

Farmers in industrial animal agriculture face rising debt that falls into one of two categories:

**Real Estate Debt:** This is debt related to real estate expenditures. Today, more than half of farmers’ debt is real estate debt, which they may owe to banks or other owners of their property and assets. This debt is heavily concentrated in the Farm Credit system and in commercial banks rather than owed to individual owners.

**Non-real Estate Debt:** All other farm debt is classified as non-real estate debt. This might include debt on machinery and equipment and other operating expenses. Non-real estate debt is concentrated in the Farm Credit system, in commercial banks, and among individuals. High levels of such debt make farmers **especially vulnerable** to fluctuations in farmland values.<sup>54</sup>

<sup>50</sup>“Farming and Farm Income,” USDA.

<sup>51</sup>USDA NASS, *Farm Economics*, 2.

<sup>52</sup>USDA NASS, *Farm Economics*, 2.

<sup>53</sup>David Widmar, “A Geographical Look at Net Farm Income and Direct Payment Trends,” Agricultural Economic Insights, October 12, 2020, [https://aei.ag/2020/10/12/a-geographical-look-at-net-farm-income-and-direct-payment-trends/?utm\\_source=Agricultural+Economic+Insights&utm\\_campaign=5cf458af02-EMAIL\\_CAMPAIGN\\_2018\\_10\\_15\\_02\\_36\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_6f5fb3d56c-5cf458af02-451355253](https://aei.ag/2020/10/12/a-geographical-look-at-net-farm-income-and-direct-payment-trends/?utm_source=Agricultural+Economic+Insights&utm_campaign=5cf458af02-EMAIL_CAMPAIGN_2018_10_15_02_36_COPY_01&utm_medium=email&utm_term=0_6f5fb3d56c-5cf458af02-451355253).

<sup>54</sup>Brian Briggeman, “Farm Balance Sheets: The Hidden Risks of Non-real Estate Debt,” *Main Street Economist*, 2011, 1.

The type of debt and share of total farm debt **vary** by creditor.<sup>55</sup>

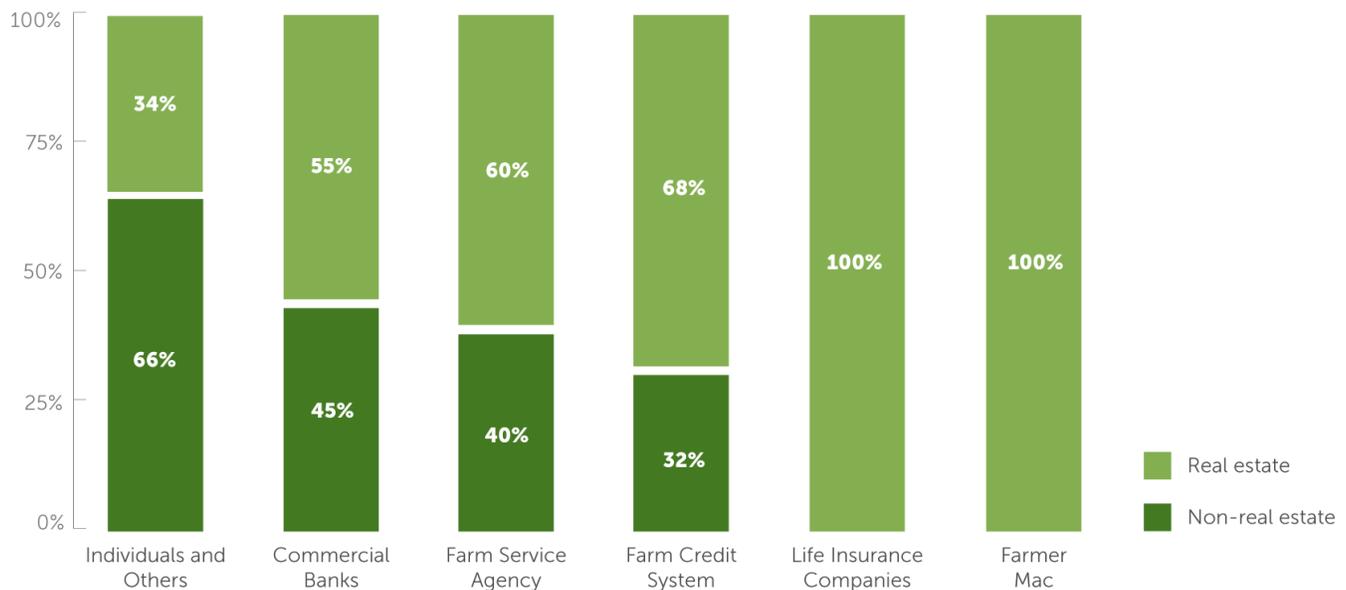


Figure 6. Bar chart showing type and share of farmer debt by creditor, end of 2017. (Farm Bureau calculations based on USDA ERS data. "Who Holds Farm Debt," American Farm Bureau Federation, January 24, 2019.)

**Credit card debt** falls under non-real estate debt and is **increasingly problematic** among smallholder farmers; some farmers report upwards of \$120,000 in operating expenses charged to credit cards.<sup>56</sup> Credit debt is largely due to widespread lack of good loan options and mostly takes the form of operating expenses. This debt is especially troubling because it worsens credit scores, which hinders farmers' access to additional funding that may be needed to sustain contracts with integrators. Producers with high non-real estate debt would be at greater risk of bankruptcy if land values fell.<sup>57</sup>

#### Some Stats:

- According to an analysis of **Small Business Administration-backed loans**, between 2010 and 2016, the average loan to a poultry grower was \$695,000.<sup>58</sup> In comparison, the average loan to a cattle rancher was \$788,000 and \$871,000 to a hog farmer. The average for all Small Business Administration loans in the same period was \$277,000.<sup>59</sup>
  - Additionally, **nearly all contract animal growers make under \$300,000 in gross annual income.**<sup>60</sup>

<sup>55</sup>Kevin Patrick and Ryan Kuhns, "Trends in Farm Sector Debt Vary by Type of Debt and Lender," *Amber Waves*, July 5, 2016, <https://www.ers.usda.gov/amber-waves/2016/july/trends-in-farm-sector-debt-vary-by-type-of-debt-and-lender/>.

<sup>56</sup>Chris Clayton, "Farms on the Margins," *Progressive Farmer*, March 19, 2019, <https://www.dtnpf.com/agriculture/web/ag/news/world-policy/article/2019/03/19/debt-figures-raise-questions-whether>.

<sup>57</sup>Briggeman, "Farm Balance Sheets," 1.

<sup>58</sup>Christopher Walljasper, "Poultry Growers, Caught Between Strict Rules and Financial Risk, Lean Heavily on Government-Backed Loans," *Midwest Center for Investigative Reporting*, December 11, 2018, <https://investigatamidwest.org/2018/12/11/poultry-growers-caught-between-strict-rules-and-financial-risk-lean-heavily-on-government-backed-loans/>.

<sup>59</sup>Walljasper, "Poultry Growers."

<sup>60</sup>MacDonald, "Financial Risks."

## Average Loan Value

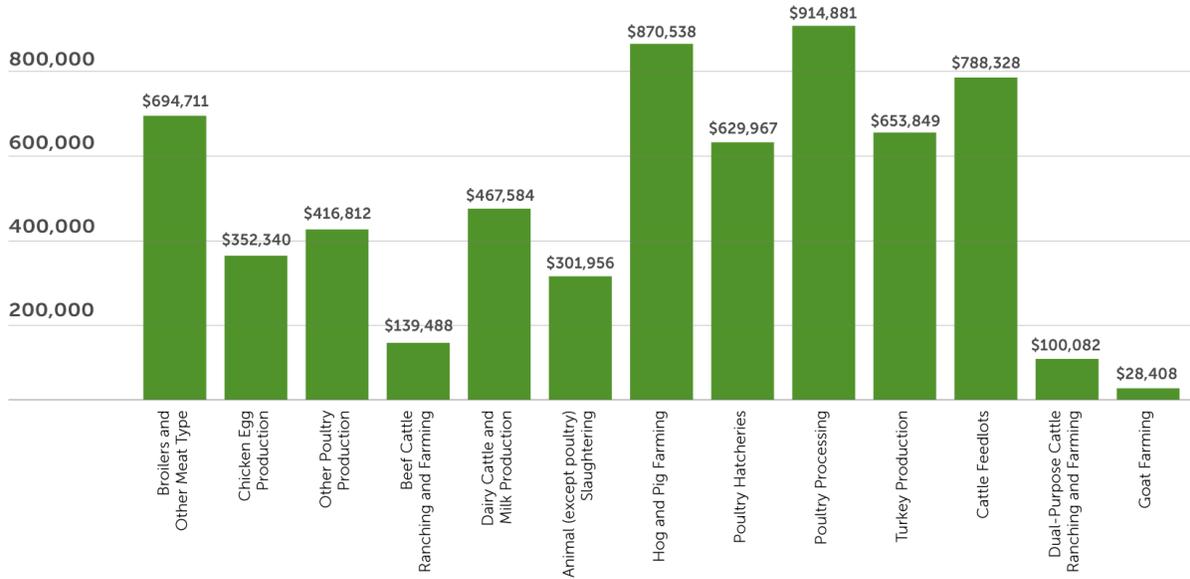


Figure 7. Bar chart showing average loan values for various operations in animal production. (Midwest Center for Investigative Reporting calculations based on Small Business Administration data.)

- Holders of farm sector **real estate debt** include the Farm Credit system, commercial banks, life insurance companies, individuals, Farmer Mac, the Farm Service Agency, and CCC storage and drying loans.<sup>61</sup> Holders of farm sector **non-real estate debt** also include the Farm Credit system, commercial banks, the Farm Service Agency, and individuals.

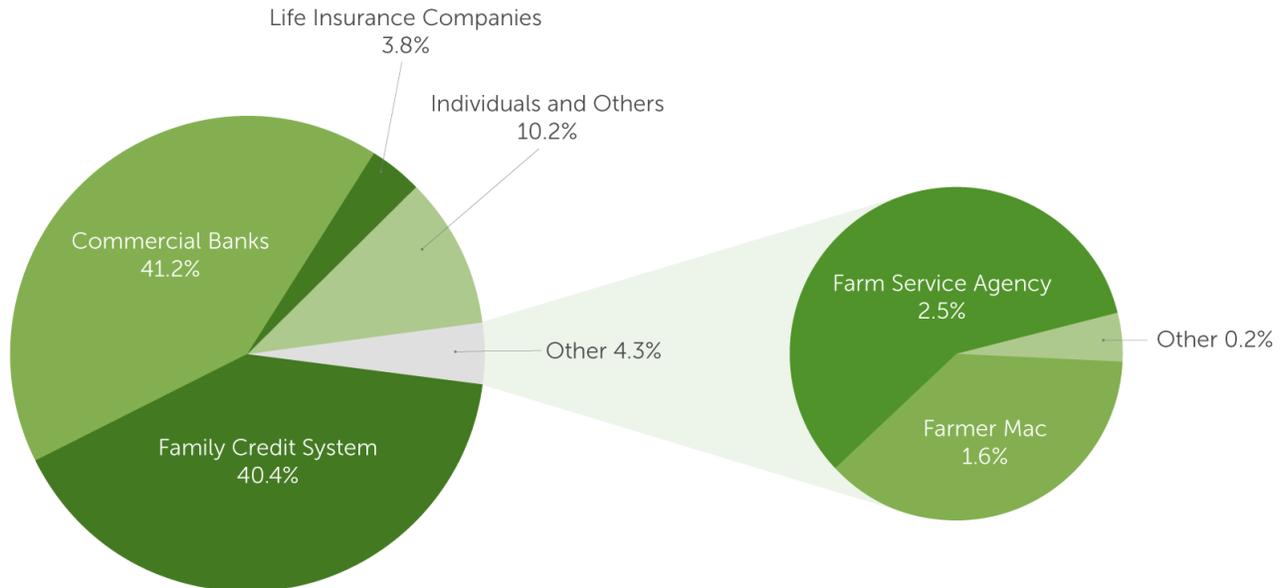


Figure 8. Pie charts showing percentage of farm-sector debt, real estate and non-real estate, by holder. (Farm Bureau calculations based on USDA ERS data.)

<sup>61</sup>"Who Holds Farm Debt," American Farm Bureau Federation, January 24, 2019, <https://www.fb.org/market-intel/who-holds-farm-debt>.

- **As of 2018, commercial banks** were the largest creditors in agriculture.<sup>62</sup> Collectively, they hold 41 percent of total farm debt: 47 percent of non-real estate debt and 37 percent of real estate debt. Customer-owned cooperative Farm Credit comprises institutions that are collectively the second-largest creditor, holding 40 percent of farm debt: 33 percent of non-real estate debt and 45 percent of real estate debt.
- **Per USDA data** and our own calculations,<sup>63</sup> the largest holders of farm debt by far are farm credit unions and commercial banks, which collectively hold 82 percent of farm debt.
- **Farmers' real estate debt is expected to reach \$281.6 billion in 2020**, a 5.5 percent annual increase and a 4.7 percent increase adjusted for inflation.<sup>64</sup> Real estate debt is expected to account for 64.9 percent of total farm debt in 2020. (Projections for 2020 were made before the coronavirus pandemic.)

## Bankruptcies

- **Chapter 12 bankruptcy** is designed for family farmers and fishermen.<sup>65</sup>
- According to **data** released by the U.S. courts in January 2020, **farm bankruptcies grew by almost 20 percent in 2019 from 2018.**<sup>66</sup>
- Family farmers filed **595 Chapter 12 bankruptcies** in 2019, which was the most in eight years.<sup>67</sup>

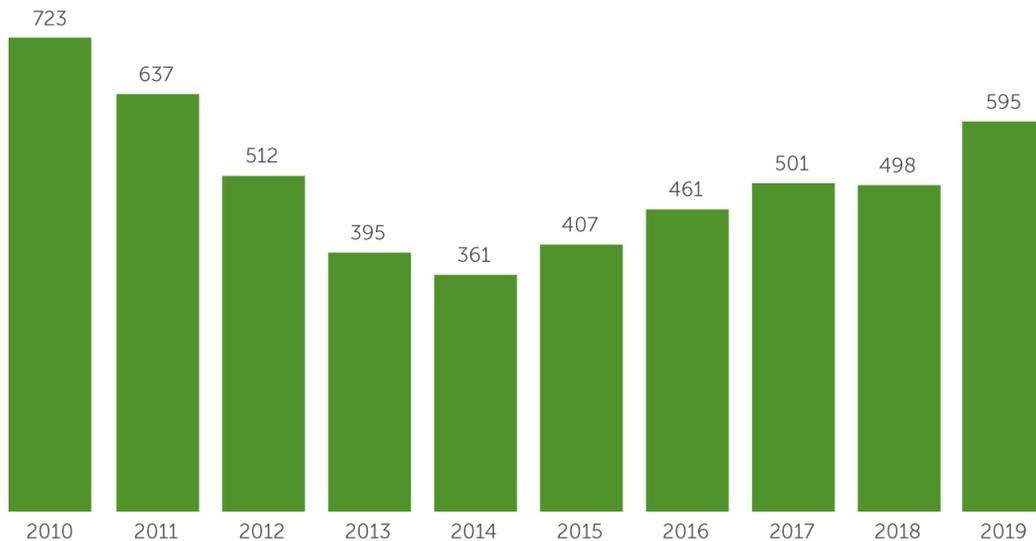


Figure 9. Bar chart showing the number of Chapter 12 bankruptcies filed in the United States by year.

<sup>62</sup>"Who Holds Farm Debt," Farm Bureau.

<sup>63</sup>"Assets, Debt, and Wealth," United States Department of Agriculture Economic Research Service, last updated September 2, 2020, <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/assets-debt-and-wealth/>.

<sup>64</sup>"Assets, Debt, and Wealth," USDA ERS.

<sup>65</sup>"Chapter 12—Bankruptcy Basics," United States Courts, accessed November 11, 2020, <https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-12-bankruptcy-basics>.

<sup>66</sup>"Bankruptcy Filings Increase Slightly," United States Courts, January 28, 2020, <https://www.uscourts.gov/news/2020/01/28/bankruptcy-filings-increase-slightly>.

<sup>67</sup>"Bankruptcy Filings Increase Slightly," U.S. Courts.

## Government Payments

### Subsidies

- In 2020, the federal government delivered the highest subsidies payment of the past 14 years.
  - ♦ Direct government payments to farmers are expected to total **\$46.5 billion in 2020, a 107 percent increase from the \$22.5 billion in 2019.**<sup>68</sup>
  - ♦ Average government payments to U.S. farms increased by **43 percent** between 2018 and 2019.<sup>69</sup>
- Agricultural Economic Insights estimates that between the 2011–2013 and 2018–2019 periods, direct payments to farmers **more than doubled.**<sup>70</sup>
- Government payments vary strongly on a state-by-state basis.

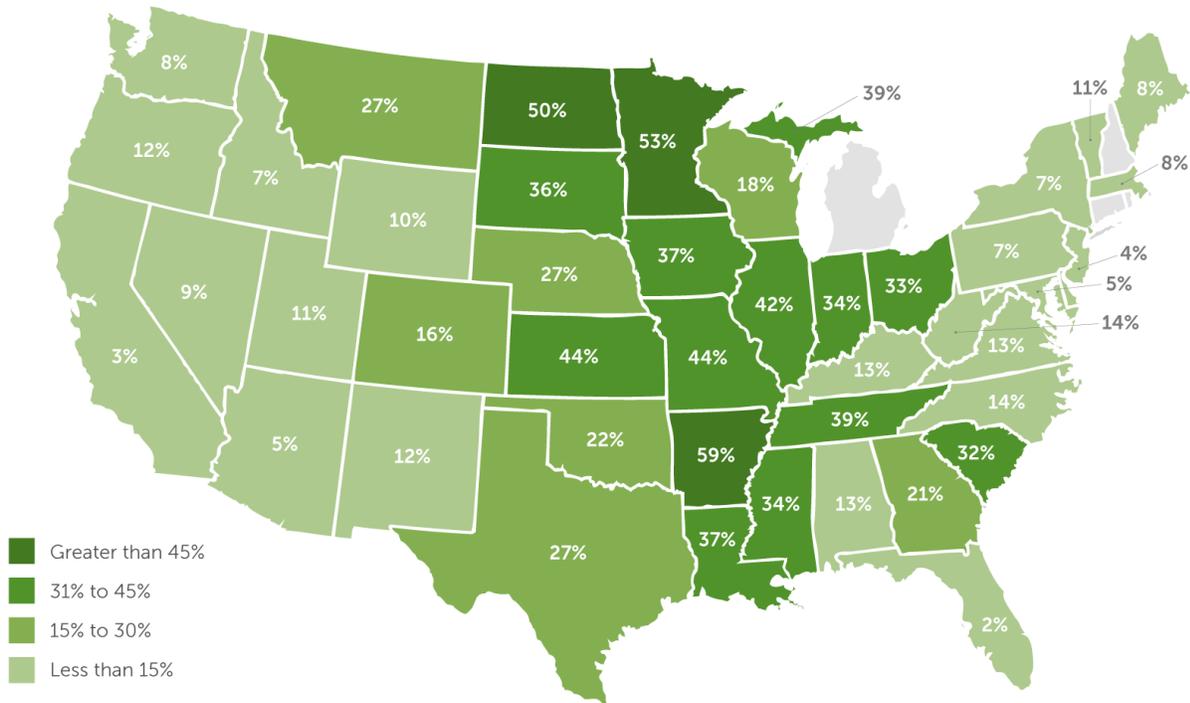


Figure 10. Map showing direct government payments as a share of net farm income, average of 2018–2019. (Agricultural Economic Insights calculations based on USDA ERS data.)

<sup>68</sup>"2020 Farm Sector Income Forecast," United States Department of Agriculture Economic Research Service, last updated December 2, 2020, <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/farm-sector-income-forecast>.

<sup>69</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (government payments, farm payment status, 2018 and 2019), accessed December 29, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>70</sup>Widmar, "Geographical Look at Net Farm Income."

Loans from the federal government through the Farm Service Agency (FSA):

- **Farm operating loans** start, maintain, or strengthen a farm or ranch.<sup>71</sup> They are available up to \$400,000.<sup>72</sup> **Microloans** support smaller and untraditional farm operations.<sup>73</sup> **Farm ownership loans** are available for a variety of purposes to improve and expand family farms, with a **maximum loan of \$600,000**.<sup>74</sup> **Guaranteed farm loans** assist farmers in their efforts to obtain loans from commercial lenders with the intention of buying farmland or financing production.<sup>75</sup> **Farmers can take out a loan of up to \$1,776,000 through commercial lenders (banks, Farm Credit institutions, or credit unions)**.<sup>76</sup> Farm loans have a **maximum repayment term of 40 years** for both direct and guaranteed loans. Farmers apply for these loans through local FSA offices. Guaranteed loans also require applications to a participating commercial lender.

#### Targeted Loans:

- **Loans for beginning farmers** focus on “beginning farmers” who are still in their first 10 years of business.<sup>77</sup>
  - ♦ Maximum loan amounts:
    - The maximum loan for direct farm ownership is \$600,000.
    - The maximum loan for direct operation is \$400,000.
    - **Microloans max out at \$50,000** each for farm ownership and operation.
  - ♦ A loan for a farm down payment requires a cash down payment that is a minimum of 5 percent of the total purchase price of the farm.
  - ♦ The loan cannot exceed 45 percent of the farm’s purchase price, the farm’s appraised value, or \$667,000.
  - ♦ The **interest rate** is between 1.5 percent and 4 percent below the direct farm ownership rate.
  - ♦ In 2019, FSA gave out \$2.7 billion in 18,354 **beginning farmer loans** across the United States.<sup>78</sup> This was up from \$2.5 billion in 19,743 loans in 2018. Accounting for all types of loans, FSA gave out 38,408 loans in 2017 and 34,628 loans in 2018.<sup>79</sup>
  - ♦ However, as of 2018, only **2.6 percent** of total U.S. farm debt was owed to FSA.<sup>80</sup>
- **Youth loans** are given to people between 10 and 20 years of age who plan to become farmers, and the loans are processed in connection with an agricultural youth organization, such as a 4-H or FFA.<sup>81</sup>
- A portion of all major loan funds are allocated for **ethnic and racial minorities and for women**.<sup>82</sup>

<sup>71</sup>“Farm Operating Loans,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/farm-operating-loans/index>.

<sup>72</sup>“Farm Operating Loans,” USDA FSA.

<sup>73</sup>“Microloan Programs,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/microloans/index>.

<sup>74</sup>“Farm Ownership Loans,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/farm-ownership-loans/index>.

<sup>75</sup>“Guaranteed Farm Loans,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/guaranteed-farm-loans/index>.

<sup>76</sup>“Guaranteed Farm Loans,” USDA FSA.

<sup>77</sup>“Beginning Farmers and Ranchers Loans,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/beginning-farmers-and-ranchers-loans/index>.

<sup>78</sup>“Program Data,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/program-data/index>.

<sup>79</sup>“Program Data,” USDA FSA.

<sup>80</sup>Jim Monke, *Agricultural Credit: Institutions and Issues* (Washington, DC: Congressional Research Service, 2018), 1.

<sup>81</sup>“Youth Loans,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/youth-loans/index>.

<sup>82</sup>“Minority and Women Farmers and Ranchers,” United States Department of Agriculture Farm Service Agency, accessed November 11, 2020, <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/minority-and-women-farmers-and-ranchers/index>.

## THE ECONOMIC STATE OF ANIMAL FARMING

### Poultry

- The combined value of **poultry production** in 2019 was \$40.4 billion, which marks a 13 percent decrease from \$46.2 billion in 2018.<sup>83</sup>
  - ♦ **Seventy percent of the value was from broilers**, 19 percent from eggs, 11 percent from turkeys, and less than 1 percent from non-broiler chickens.
  - ♦ Production value by poultry type:
    - \$28.3 billion for broilers in 2019, an 11 percent decrease from 2018
    - \$4.3 billion for turkeys in 2019, a 14 percent increase from 2018
    - \$7.7 billion for all eggs in 2019, a 28 percent decrease from 2018
    - \$37.6 million for chickens (excluding broilers) in 2019, a 24 percent decrease from 2018
- In 2017, **164,099** farms produced and sold poultry and eggs.<sup>84</sup>
  - ♦ Twenty-seven percent of these farms specialized in poultry/egg production that accounted for 98 percent of sales.
  - ♦ The number of poultry farms increased 19 percent from 137,541 in 2012.
- In 2017, **97 percent of poultry and egg farms were family farms**.<sup>85</sup>
- Total U.S. sales of poultry and eggs were **\$49.2 billion**, a 15 percent increase from 2012. This accounts for 12.7 percent of U.S. agricultural sales.<sup>86</sup>
- The **top three states** in poultry sales were Georgia, North Carolina, and Arkansas, accounting for one-third of all U.S. sales.<sup>87</sup>
  - ♦ Each state sold more than \$5 billion in poultry and eggs.
- In total, **8.9 billion** broilers and other meat chickens were sold in 2017.<sup>88</sup>
- A greater proportion of poultry and egg producers were **beginning farmers** (10 or fewer years of experience) at 37 percent compared with 27 percent of all U.S. producers.<sup>89</sup>
  - ♦ Additionally, more poultry and egg producers (52 percent) reported their primary occupation as farming compared with all U.S. producers (42 percent).
  - ♦ A higher percentage of poultry and egg producers were **women (40 percent)** compared with all U.S. producers (36 percent).
- In 2011, **97 percent of broiler chickens** were raised at contracted farms.<sup>90</sup>
- Broiler production continued to **consolidate** to larger farms. More than half of broilers in 2011 were raised at farms with at least five broiler houses.<sup>91</sup>
- Contract broiler farmers **reported** higher average annual incomes than other U.S. farmers in 2011, but the range of income in broiler farming was much wider than in other types of farming.<sup>92</sup>

<sup>83</sup>United States Department of Agriculture, *Poultry—Production and Value: 2019 Summary* (Washington, DC: USDA, April 2020), 5.

<sup>84</sup>USDA NASS, *Poultry and Egg Production*, 1.

<sup>85</sup>USDA NASS, *Poultry and Egg Production*, 2.

<sup>86</sup>USDA NASS, *Poultry and Egg Production*, 1.

<sup>87</sup>USDA NASS, *Poultry and Egg Production*, 1.

<sup>88</sup>USDA NASS, *Poultry and Egg Production*, 1.

<sup>89</sup>USDA NASS, *Poultry and Egg Production*, 2.

<sup>90</sup>James M. MacDonald, *Technology, Organization, and Financial Performance in U.S. Broiler Production* (Washington, DC: USDA Economic Research Service, June 2014), 13.

<sup>91</sup>MacDonald, *Technology*, iv.

<sup>92</sup>MacDonald, *Technology*, iv.

## Income and Debt in Poultry Production

- **Forty-five percent of U.S. poultry farmers incur a loss (negative net income).**<sup>93</sup>
- Median net income for poultry farmers in 2019 was \$17,862.<sup>94</sup>
- Of poultry farmers, 41 percent have debt.<sup>95</sup>
- In 2011, chicken farmers operated with **\$5.2 billion in combined debt.**<sup>96</sup>
- A **study** published in 2010 on the economics of U.S. contract poultry production revealed these findings:
  - ♦ Payments from contract farming are insufficient for growers to earn competitive returns.<sup>97</sup>
  - ♦ “Contract poultry growers are now living off depreciation.”<sup>98</sup>
  - ♦ The tournament pay system does not “mimic a competitive market.”<sup>99</sup>
  - ♦ Wealthy contract chicken farmers are extremely rare, and the exceptions are those who have “sweetheart deals” with corporate insiders.<sup>100</sup>
  - ♦ “Often the biggest risk of all is that of bankruptcy. Integrator acts and demands, not grower’s mismanagement, is the problem. Delayed delivery of chicks, reduced placement, or similar actions by the integrator can have a devastating effect on the profitability of the contract poultry operation. A decision by the integrator to slow delivery of chicks to a grower can mean quick bankruptcy for that grower.”<sup>101</sup>
- According to guidelines by University of Georgia’s extension department, egg farmers can expect to invest up to \$280,000 per house, while earning an annual net income between **\$10,000 and \$15,000 per house** during loan repayment.<sup>102</sup>
- Poultry farmers often get stuck on the debt treadmill of chicken farming:



Figure 11. Flow chart showing the “debt treadmill” of chicken farmers. (Adapted from Rural Advancement Foundation International, “What Debt in Chicken Farming Says About American Agriculture,” RAFI USA, July 12, 2016.)

<sup>93</sup>USDA NASS, *Poultry and Egg Production*, 2.

<sup>94</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business income statement; 2019; median; production specialty: poultry), accessed December 30, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>95</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business debt repayment capacity; 2019; median; production specialty: poultry), accessed December 30, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>96</sup>MacDonald, *Technology*, 15.

<sup>97</sup>C. Robert Taylor and David A. Domina, *Restoring Economic Health to Contract Poultry Production* (Omaha, NE: Domina Law Group, 2010), 8.

<sup>98</sup>Taylor and Domina, *Restoring Economic Health*, 15.

<sup>99</sup>Taylor and Domina, *Restoring Economic Health*, 22.

<sup>100</sup>Taylor and Domina, *Restoring Economic Health*, 18.

<sup>101</sup>Taylor and Domina, *Restoring Economic Health*, 21.

<sup>102</sup>Dan L. Cunningham, *Guidelines for Prospective Contract Hatching Egg Producers* (Athens, GA: University of Georgia Cooperative Extension, 2012), 3.

# WHO OWNS IT

Company vs. Grower



Figure 12. Illustration showing the distribution of assets and responsibilities between integrators and contract farmers. (Adapted from Foodopoly.org.)

## Dairy Farming

- In 2017, the United States was home to **40,336 dairy farms**.<sup>103</sup>
  - ♦ Eighty-nine percent of these were specialized dairy farms that accounted for 98 percent of all milk sold that year.
  - ♦ **Ninety-five percent of dairy farms were family farms.**
- The number of dairy operations has **declined sharply**, from 648,000 in 1970 to 75,000 in 2006.<sup>104</sup> In 2019, the country saw **the largest annual decline** in the number of licensed dairy operations in 15 years.<sup>105</sup> There were **3,281 fewer** U.S. dairy operations in 2019 than in 2018, totaling 34,187 farms.<sup>106</sup> **Between 1970 and 2019, the number of dairy operations decreased 95 percent.**
- **Consolidation** is active in U.S. dairy farming.
  - ♦ Of the dairy farms counted in the 2017 Census of Agriculture, 30,373 were small commercial farms with only 10–199 cows, a decrease from 47,873 farms in 2007.<sup>107</sup>
  - ♦ The midpoint for dairy herd size in 2017 was 1,300 cows, an increase from 80 cows in 1987.<sup>108</sup>
- **Forty-four percent** of U.S. farmland in 2017 was used for cattle and dairy production.<sup>109</sup> Another 30 percent was used for oilseed and grain production, a significant portion of which was used to grow feed crops for livestock.
- There were **9.5 million milk cows** in the United States in 2017, a 3.4 percent increase from the 2012 census.<sup>110</sup>
  - ♦ The number of milk cows in the United States dropped 0.7 percent from 2019 to 2020, totaling 9.33 million in 2020.<sup>111</sup>

<sup>103</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>104</sup>James M. MacDonald et al., *Profits, Costs, and the Changing Structure of Dairy Farming* (Washington, DC: USDA Economic Research Service, 2007), 2.

<sup>105</sup>"Largest Decline in U.S. Dairy Farms in 15-Plus Years in 2019," American Farm Bureau Federation, February 28, 2020, <https://www.fb.org/market-intel/largest-decline-in-u.s.-dairy-farms-in-15-plus-years-in-2019#:~:text=There%20were%203%2C281%20fewer%20licensed,2003%20to%2034%2C187%20in%202019.>

<sup>106</sup>United States Department of Agriculture National Agricultural Statistics Service, *Milk Production* (Washington, DC: USDA NASS, February 2020), 18.

<sup>107</sup>James M. MacDonald, Jonathan Law, and Roberto Mosheim, *Consolidation in U.S. Dairy Farming* (Washington DC: USDA Economic Research Service, 2020), iii.

<sup>108</sup>MacDonald, Law, and Mosheim, *Consolidation*, iii.

<sup>109</sup>USDA NASS, *Farms and Farmland*, 2.

<sup>110</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>111</sup>United States Department of Agriculture National Agricultural Statistics Service, *Cattle* (Washington, DC: USDA NASS, January 2020), 1.

- Sales of cow's milk totaled **\$36.7 billion** in 2017.<sup>112</sup>
- The **five leading states** in dairy farming are California, Wisconsin, New York, Idaho, and Texas, accounting for 50 percent of milk-cow inventory and 51 percent of milk sales.<sup>113</sup>
- Dairy cow production is **consolidating to larger farms**.<sup>114</sup>
  - ♦ The proportion of the milk herd on smaller operations (< 1,000 cows) dropped from 51 percent to 45 percent between 2012 and 2017.
  - ♦ The proportion of the milk herd on larger operations (2,500+ cows) increased from 29 percent to 35 percent.
  - ♦ Midsize dairy operations remained consistent at 20 percent of the milk herd.
- The production costs of dairy farms specializing in dairy cattle and milk production totaled **\$33.3 billion** in 2017, a 1.6 percent increase from the 2012 census.<sup>115</sup>
  - ♦ Feed for cows is the most expensive item in dairy farming, accounting for 45 percent of farmers' production expenses.

### Income and Debt in Dairy

- Sales of cow's milk totaled **\$36.7 billion** in 2017.<sup>116</sup>
  - ♦ The smallest farms with herds of one to nine milk cows made up 0.08 percent of sales, and farms with herds of 10–19 cows made up 0.29 percent of total milk sales (**combined, the two smallest farm sizes represented only 0.37 percent of sales**).
  - ♦ The **three largest farm sizes** (1,000–2,499 cows, 2,500–4,999 cows, and 5,000+ cows) combined represented **56.4 percent of total milk sales**.
- **Organic sales** by specialized dairy farms totaled \$1.5 billion, which is 21 percent of total U.S. organic agricultural sales.<sup>117</sup>
- **15 percent of U.S. dairy farms had a negative net income**.<sup>118</sup>
- Of dairy farmers, 65.6 percent have debt.<sup>119</sup>
- As to the average dairy farm, the 2017 census reports this key data:<sup>120</sup>
  - ♦ Spans 461 acres
  - ♦ Makes \$1.12 million in sales
  - ♦ Receives \$10,264 in government payments
  - ♦ Pays \$882,714 in expenses
  - ♦ Earns \$259,194 in net cash farm income
- According to Farm Journal, a 2018 **MILK survey** of 70 U.S. farmers with at least 100 cows revealed the following:<sup>121</sup>
  - ♦ Seventy-two percent of respondents reported that their businesses could survive for three years or fewer.
  - ♦ Thirty-seven percent of respondents reported that they had only a year to increase profit or go under.
- Farm Credit East's **2019 Northeast Dairy Farm Summary** provides several key financial statistics of dairy farmers in the northeastern United States, including data on earnings, costs, and liabilities. The following table from the report shows cash flow per cow over a five-year period:<sup>122</sup>

<sup>112</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>113</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>114</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>115</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>116</sup>USDA, *2017 Census: Summary and State Data*, 23.

<sup>117</sup>USDA NASS, *Dairy Cattle and Milk Production*, 1.

<sup>118</sup>USDA NASS, *Dairy Cattle and Milk Production*, 2.

<sup>119</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business debt repayment capacity; 2019; median; production specialty: dairy), accessed December 30, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>120</sup>USDA NASS, *Dairy Cattle and Milk Production*, 2.

<sup>121</sup>Anna-Lisa Laca, "Dairy Farmers Drown in Debt," *MILK*, April 2, 2018, <https://www.milkbusiness.com/article/dairy-farmers-drown-debt>.

<sup>122</sup>Farm Credit East, *2019 Northeast Dairy Farm Summary* (Enfield, CT: Farm Credit East, 2020), 20.

## Cash Sources and Use Statement

|                                       | 2015            | 2016           | 2017           | 2018           | 2019           |
|---------------------------------------|-----------------|----------------|----------------|----------------|----------------|
| <b>Sources</b>                        |                 |                |                |                |                |
|                                       | Dollars per Cow |                |                |                |                |
| Net Cash Farm Income*                 | \$432           | \$451          | \$671          | \$342          | \$811          |
| Sale of Capital Assets                | 67              | 55             | 108            | 201            | 78             |
| Paid-In Capital**                     | 40              | 59             | 51             | 58             | 31             |
| Money Borrowed                        | 906             | 730            | 515            | 787            | 257            |
| <b>TOTAL SOURCES</b>                  | <b>\$1,445</b>  | <b>\$1,295</b> | <b>\$1,345</b> | <b>\$1,388</b> | <b>\$1,177</b> |
| <b>Uses</b>                           |                 |                |                |                |                |
| Family Living                         | \$166           | \$146          | \$125          | \$123          | \$105          |
| Capital Purchases                     | 813             | 674            | 772            | 802            | 632            |
| Debt Principal Payments               | 466             | 475            | 448            | 463            | 440            |
| <b>TOTAL USES</b>                     | <b>\$1,445</b>  | <b>\$1,295</b> | <b>\$1,345</b> | <b>\$1,388</b> | <b>\$1,177</b> |
| Percent Capital Purchases Financed*** | 111%            | 108%           | 67%            | 98%            | 41%            |

\*Cash basis—no accrual adjustment to expenses

\*\*Includes savings withdrawn, gifts, inheritances, grants, debt forgiven, insurance settlements, and other extraordinary income

\*\*\*Money borrowed/capital purchases

### Beef Cattle Farming

- As of January 2020, the U.S. beef herd totaled **31.1 million cows**, a 1 percent decrease from 2019.<sup>123</sup>
- As of 2017, **U.S. beef farms totaled 729,046**.<sup>124</sup> This was the breakdown:
  - ♦ 244,836: one to nine beef cows
  - ♦ 148,259: 10–19 beef cows
  - ♦ 183,640: 20-49 beef cows
    - **Therefore, 79.1 percent of U.S. beef farms had fewer than 50 cows.**
  - ♦ Only 198 farms had at least 2,500 beef cows.
- The U.S. beef herd totaled **31.7 million cows** in 2017.<sup>125</sup>
- There were **1,140 more beef farms in 2017** than in 2012.<sup>126</sup>
  - ♦ The number of beef cattle farms with 19 or fewer animals decreased, while the number of farms with 20 or more increased.
  - ♦ The number of beef cattle farms with **2,500 or more animals increased by 17.8 percent from 2012 to 2017**.
  - ♦ The number of farms with one to nine animals decreased by 6.2 percent.
  - ♦ The number of farms with 10 to 19 animals decreased by 4.7 percent.
- Imports of live cattle increased 3.8 percent in 2020 from 2019.<sup>127</sup> About 25 percent of live cattle imported were for **“immediate slaughter.”**<sup>128</sup>
- Cattle/calf sales made up the largest portion of sales from animals or animal products, **37.6 percent**.<sup>129</sup>

<sup>123</sup>USDA NASS, Cattle, 1.

<sup>124</sup>USDA, 2017 Census: Summary and State Data, 20.

<sup>125</sup>USDA, 2017 Census: Summary and State Data, 20.

<sup>126</sup>USDA, 2017 Census: Summary and State Data, 20.

<sup>127</sup>United States Department of Agriculture Economic Research Service, *Livestock, Dairy, and Poultry Outlook* (Washington, DC: USDA ERS, October 2020), 1.

<sup>128</sup>USDA ERS, *Livestock, Dairy, and Poultry Outlook* (October 2020), 1.

<sup>129</sup>“Farming and Farm Income,” USDA.

## Income and Debt in Beef Cattle Farming

- Sales from beef cattle farms reached **\$77.2 billion in 2017**.<sup>130</sup>
- Of beef cattle farmers, **23.4 percent** have debt.<sup>131</sup>
- **Midsized herds** (200 to 499 cows) had the highest sales value at \$7.5 billion, and herd sizes of 100–199 had the second-highest sales value at \$5.9 billion.<sup>132</sup>
- The **largest herd sizes** (5,000+ cows) had the lowest sales value at \$4.2 million.<sup>133</sup>
- As of 2019, the **total capital assets for cattle** are estimated at \$1.17 million per farm, with a median of \$484,600.<sup>134</sup>
- **Cattle farm liabilities**, or monetary obligations of the farm, are estimated at \$63,316 per farm, with a median of \$800.<sup>135</sup>
- **Cattle farm equity**, the assets after liabilities are subtracted, is estimated at \$1.1 million per farm, with a median of \$445,312.<sup>136</sup>

## Hog Farming

- According to the 2017 census, **farms selling hogs and pigs totaled 64,871**, an increase of 16.1 percent from 55,882 in 2012.<sup>137</sup>
- The total value of hog sales was **\$26.3 billion**. Ninety-one percent of sales value came from farms with sales of 5,000+ hogs.<sup>138</sup>
- **Smaller farms** selling one to 24 or 25–49 hogs **accounted for only 0.16 percent and 0.07 percent of total hog sales value, respectively**.<sup>139</sup>
- As of 2020, the top hog-farming states are Iowa, Minnesota, and North Carolina, according to **inventory data**.<sup>140</sup>
- Imports of hogs decreased marginally in 2020 from 2019. About **15 percent** of live hogs imported are for “immediate slaughter.”<sup>141</sup>

## Income and Debt in Hog Farming

- In 2017, **235.3 million hogs and pigs** were sold for a total of \$26.3 billion, up \$3.8 billion from 2012.<sup>142</sup>
- Of hog farmers, **47.7 percent** have debt.<sup>143</sup>
- Farms in the 5,000+ pigs sales class had the highest sales at \$23.8 billion, followed by the 2,000–4,999 pigs sales class at \$1.8 billion.<sup>144</sup>
  - All farms with sales of fewer than 2,000 pigs made less than \$570 million combined.
  - Farms with sales of one to 24 pigs made \$43.3 million combined.
- As of 2019, **total capital assets for hog farms** are estimated at \$2.8 million per farm, with a median of \$896,500.<sup>145</sup>

<sup>130</sup>USDA, *2017 Census: Summary and State Data*, 22.

<sup>131</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business debt repayment capacity; 2019; median; production specialty: cattle), accessed December 30, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>132</sup>USDA, *2017 Census: Summary and State Data*, 22.

<sup>133</sup>USDA, *2017 Census: Summary and State Data*, 22.

<sup>134</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business balance sheet; 2019; production specialty: cattle), accessed November 11, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>135</sup>USDA ERS, Tailored Reports (balance sheet, 2019, cattle).

<sup>136</sup>USDA ERS, Tailored Reports (balance sheet, 2019, cattle).

<sup>137</sup>USDA, *2017 Census: Summary and State Data*, 24.

<sup>138</sup>USDA, *2017 Census: Summary and State Data*, 24.

<sup>139</sup>USDA, *2017 Census: Summary and State Data*, 24.

<sup>140</sup>United States Department of Agriculture National Agricultural Statistics Service, *Quarterly Hogs and Pigs* (Washington, DC: USDA NASS, September 2020), 6.

<sup>141</sup>USDA ERS, *Livestock, Dairy, and Poultry Outlook* (October 2020), 1.

<sup>142</sup>USDA, *2017 Census: Summary and State Data*, 24.

<sup>143</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business debt repayment capacity; 2019; median; production specialty: hogs), accessed December 30, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

<sup>144</sup>USDA, *2017 Census: Summary and State Data*, 24.

<sup>145</sup>United States Department of Agriculture Economic Research Service, Tailored Reports (farm business balance sheet; 2019; production specialty: hogs), accessed November 11, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

- **Hog farm liabilities**, or monetary obligations of the farm, are estimated at \$553,870 per farm, with a median of \$50,777.<sup>146</sup>
- **Hog farm equity**, the assets after liabilities are subtracted, is estimated at \$2.3 million per farm, with a median of \$640,663.<sup>147</sup>

## Comparative Analysis

This section displays comparative tables of the following metrics across poultry, dairy, hog, beef, and specialty (fruit, vegetable, and nut) farming:<sup>148</sup>

| Median Net Farm Income |         |          |          |          |   |
|------------------------|---------|----------|----------|----------|---|
|                        | Cattle  | Dairy    | Poultry  | Hog      | Specialty<br>(fruits, vegetables, nuts) |
| 2019                   | -\$370  | \$74,483 | \$17,862 | \$19,318 | \$6,427                                 |
| 2018                   | \$1,446 | \$40,855 | \$13,140 | \$10,741 | \$6,890                                 |

| Percentage of Farmers with Debt |        |       |         |       |   |
|---------------------------------|--------|-------|---------|-------|---|
|                                 | Cattle | Dairy | Poultry | Hog   | Specialty<br>(fruits, vegetables, nuts) |
| 2019                            | 23.4%  | 65.6% | 41%     | 47.6% | 27.6%                                   |
| 2018                            | 24.5%  | 67.7% | 55.5%   | 49.2% | 28.7%                                   |

| Total Liabilities (dollar per farm) / Average Net Farm Income |                |                  |                 |                  |   |
|---|----------------|------------------|-----------------|------------------|---|
|   | Cattle         | Dairy            | Poultry         | Hog              | Specialty<br>(fruits, vegetables, nuts) |
| 2019  | TL = \$63,316  | TL = \$640,370   | TL = \$277,728  | TL = \$553,870   | TL = \$149,966                          |
|   | ANFI = \$5,534 | ANFI = \$194,521 | ANFI = \$88,218 | ANFI = \$194,944 | ANFI = \$106,259                        |
| 2018  | TL = \$53,859  | TL = \$636,237   | TL = \$287,024  | TL = \$419,054   | TL = \$152,159                          |
|   | ANFI = \$8,897 | ANFI = \$154,795 | ANFI = \$47,773 | ANFI = \$88,658  | ANFI = \$98,428                         |

| Farmer Debt Repayment Capacity (ratio of actual debt to maximum debt capacity)<br>Reached as of 2018 at a 10 Percent Interest Rate |        |       |         |       |   |
|--|--------|-------|---------|-------|---|
|  | Cattle | Dairy | Poultry | Hog   | Specialty<br>(fruits, vegetables, nuts) |
| 2019   | 53%    | 53.9% | 60.2%   | 49.5% | 25.3%                                   |
| 2018   | 44.2%  | 62.2% | 85.2%   | 73.4% | 26.6%                                   |

<sup>146</sup>USDA ERS, Tailored Reports (balance sheet, 2019, hogs).

<sup>147</sup>USDA ERS, Tailored Reports (balance sheet, 2019, hogs).

<sup>148</sup>United States Department of Agriculture Economic Research Service, Tailored Reports, accessed December 28, 2020, <https://my.data.ers.usda.gov/arms/tailored-reports>.

## Government Payments Received by Each Sector as of 2018

|  | 2019                      |                                    |                                      | 2018                      |                                    |                                     |
|--|---------------------------|------------------------------------|--------------------------------------|---------------------------|------------------------------------|-------------------------------------|
|  | Total Government Payments | Number of Farms Receiving Payments | Average Government Payment per Farm* | Total Government Payments | Number of Farms Receiving Payments | Average Government Payment per Farm |
| <b>Cattle</b>                                  | \$1,308,753,000           | 108,121                            | \$12,105                             | \$1,117,461,000           | 121,384                            | \$9,206                             |
| <b>Dairy</b>                                   | \$667,150,000             | 20,075                             | \$33,233                             | \$472,827,000             | 24,538                             | \$19,269                            |
| <b>Poultry</b>                                 | \$152,008                 | 10,664                             | \$14,255                             | \$68,847,000              | 4,991                              | \$14,255                            |
| <b>Hog</b>                                     | \$340,608,000             | 5,576                              | \$61,083                             | \$227,834,000             | 5,591                              | \$40,753                            |
| <b>Specialty</b><br>(fruits, vegetables, nuts) | \$508,709,000             | 12,277                             | \$41,435                             | \$156,884,000             | 8,857                              | \$17,714                            |
| <b>All U.S. Agriculture</b>                    | \$16,003,460,000          | 628,054                            | \$25,481                             | \$10,396,014,000          | 583,328                            | \$17,822                            |

\*Note: These are averages reported by the ERS and do not exactly reflect averages calculated from above numbers due to statistical accommodations made by their models.

# IMPACT OF COVID-19 ON FARMING IN AMERICA

## Effects on Production

According to a [USDA](#) report from July 2020, COVID-19 significantly affected animal farming production:

- **Broiler prices reached historic lows—the lowest on record for June since the USDA's price series began in 2009 and 20.8 percent lower than broiler prices in 2019.** The report projected that broiler supplies would continue to be abundant for the rest of the year, keeping wholesale prices depressed.<sup>149</sup>
- **Dairy milk production saw the largest year-over-year decline for any month since March 2004.** May is usually the peak month for milk production in the United States, but in 2020 daily milk production in May was seven million pounds less than in May 2019 (down 1.1 percent). And **daily milk production decreased by 14 million pounds from April to May, a record April-to-May decline.** As milk prices discouraged production, **dairy operations increased culling rates** and likely lowered yields by changing feed rations, reducing milking frequency, or drying cows off early.<sup>150</sup>

The most recent [data](#), from December 2020, indicates varying trends in the export market, with chicken and pork export shares of production rising and beef and turkey exports declining.<sup>151</sup>

## Federal COVID-19 Relief Package

In May the [Congressional Research Service](#) reported that **coronavirus-related losses in agriculture had approached \$40 billion.**<sup>152</sup> Although the Coronavirus Food Assistance Program provided billions of dollars to the sector, many small farmers received little or no help and continue to struggle. An [NBC News analysis](#) surveys key features and problems of the relief program:<sup>153</sup>

- First 700,000 payments totaled \$16 billion.
- **Top 1 percent of recipients (largest farms) received more than 20 percent of the stimulus money, totaling \$1.2 billion.**
- **Top 10 percent of recipients received more than 60 percent of the money at average payments of \$95,000 each.**
- **Bottom 10 percent (small-scale farmers) received 0.26 percent of the money.**
  - ♦ **Payments averaged \$300 each.**
  - ♦ **Almost 7,000 farms received less than \$200.**
  - ♦ **Nearly 200 farms received less than \$20.**
  - ♦ The lowest payout was 7 cents.
- The payment limit for a single farm was set at \$250,000, but nearly 2,300 operations received more.
- Corporate farms received more money than noncorporate farms:
  - ♦ Farmers could receive up to \$750,000 if three shareholders each spent at least 400 hours working in the operation.
- The federal relief package benefited some states and industries more than others:
  - ♦ Iowa, Nebraska, Minnesota, Wisconsin, and Texas received the most money.
    - Iowa received the most at \$700 million, and Nebraska was second at \$500 million.

<sup>149</sup>United States Department of Agriculture Economic Research Service, *Livestock, Dairy, and Poultry Outlook* (Washington, DC: USDA ERS, July 2020), 19.

<sup>150</sup>USDA ERS, *Livestock, Dairy, and Poultry Outlook* (July 2020), 9–10.

<sup>151</sup>United States Department of Agriculture Economic Research Service, *Livestock, Dairy, and Poultry Outlook* (Washington, DC: USDA ERS, December 2020), 1.

<sup>152</sup>Congressional Research Service, *COVID-19, U.S. Agriculture, and USDA's Coronavirus Food Assistance Program (CFAP)* (Washington, DC: CRS, May 2020).

<sup>153</sup>Kit Ramgopal and Andrew W. Lehren, "Small Farmers Left Behind in Trump Administration's COVID-19 Relief Package," NBC News, August 9, 2020, <https://www.nbcnews.com/business/economy/small-farmers-left-behind-trump-administration-s-covid-19-relief-n1236158>.

- **Cattle, dairy, and corn farms received over 80 percent of the money.**
- “Payments are unequal because production levels are unequal; large-scale family farms, with over \$1 million in cash farm income, account for just 3 percent of farms and nearly 50 percent of agricultural production. California and Illinois aside, the top five beneficiary states are all among the top producers of agricultural products.”
- The program’s formula for assessing and compensating loss, favoring large producers and commodity crops, has left many small farmers struggling without support.

### Bankruptcies During COVID-19

- Data from March 2020 indicates an increase in farm bankruptcies from 2019.
  - ♦ In the 12-month period that ended in March 2020, family farm Chapter 12 bankruptcies totaled 627 filings.<sup>154</sup>
    - This is a 23 percent increase from the previous 12-month period.
- The map below shows those **627 filings**, with each region’s percentage increase from 2019.
  - ♦ Notable increases are in the Northwest, Midwest, West, and Southeast, all of which are major animal-farming regions.

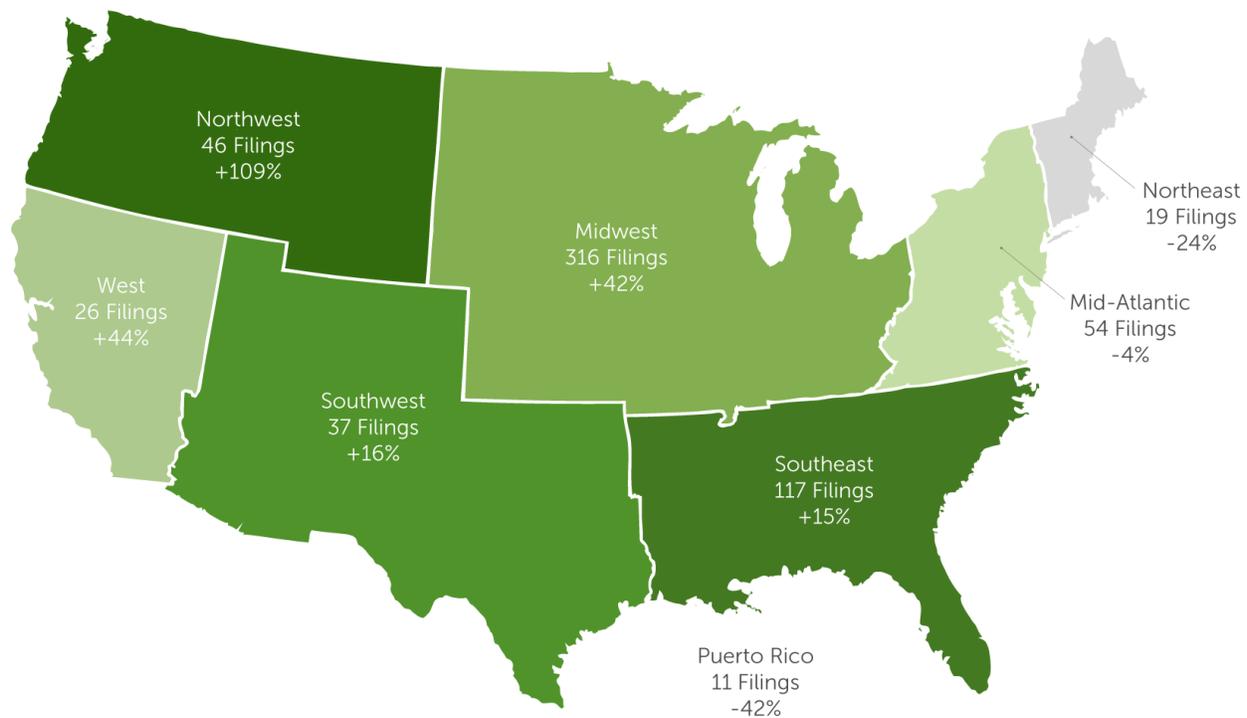


Figure 13. Map showing the number and percentage increase of Chapter 12 bankruptcy filings by region over a 12-month period ending March 2020. (Farm Bureau calculations based on U.S. Courts data.)

- Repaying debt may be harder for farmers because of COVID-19, due to high unemployment rates, low prices and demand for products after restaurant closures, and high infection rates among farmworkers. Inability to pay off existing debt may mean more bankruptcies in the future.

### Animal Product Prices and COVID-19

- Most consumer price indices point to rising animal-product prices during the pandemic, but this effect seemed strongest early in the pandemic.
- The Bureau of Labor Statistics estimated a **3.7 percent increase** in the average price of meat, poultry, fish, and eggs in May

<sup>154</sup>“COVID-19 Will Likely Push Farm Bankruptcies Higher,” Farm Bureau, May 7, 2020, <https://www.fb.org/market-intel/covid-19-will-likely-push-farm-bankruptcies-higher>.

2020.<sup>155</sup> By July, however, the index was dropping again. Over the past 12 months, meat, poultry, fish, and egg prices have increased by 8.4 percent.<sup>156</sup>

- The rise in prices may be attributable to the shutdown of several meat-processing facilities.
  - ♦ As the meat supply decreases, basic economic theory suggests that meat prices will rise, provided demand remains the same.
- Accelerating this rise in prices is the surge in demand for all groceries as a result of the pandemic.
  - ♦ Higher demand combined with lower supply is likely causing a substantial upward push on the industry's equilibrium price.
- The graph below is a simple linear representation of this hypothesis. It shows a stable quantity just for simplicity, but the equilibrium quantity is likely changing too, depending on which effect is stronger: the shift in supply (S) or the increase in demand (D). Income and substitution effects are also at play, but these are not accounted for here.

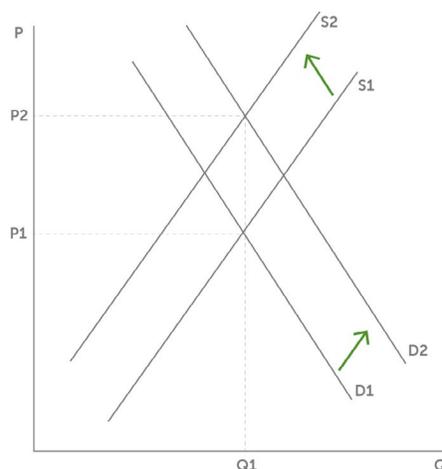


Figure 14. Graph showing upward push on meat industry equilibrium prices through changes in supply and demand.

- With rising meat prices, the impact on animal farmers is most likely negative.

### Is the meat industry using cold-storage stocks?

- USDA **data** indicates that the meat industry resorted to cold-storage stocks to meet demand earlier in the pandemic.<sup>157</sup>
- Between April 30 and May 31, 2020, total frozen stocks of red meat decreased by 18 percent.<sup>158</sup>
  - ♦ Total quantity of frozen beef went down 13 percent.
  - ♦ Frozen pork supplies went down 24 percent.
  - ♦ Frozen stocks of pork bellies went down 27 percent.
- Total frozen poultry supplies on May 31, 2020, were down 5 percent from the previous month.<sup>159</sup>
  - ♦ Total stocks of chicken went down 8 percent.
  - ♦ Total pounds of turkey in freezers were up 1 percent.
- Frozen stocks have been reviving. In **August 2020**, total red meat supplies increased by 3 percent from the previous month but were still down 13 percent from the previous year.<sup>160</sup> Similar trends were seen in pork.

<sup>155</sup>Bureau of Labor Statistics, "Consumer Price Index—July 2020," news release, August 12, 2020, [https://www.bls.gov/news.release/archives/cpi\\_08122020.htm](https://www.bls.gov/news.release/archives/cpi_08122020.htm).

<sup>154</sup>BLS, "Consumer Price Index."

<sup>157</sup>United States Department of Agriculture National Agricultural Statistics Service, *Cold Storage* (Washington, DC: USDA NASS, June 2020).

<sup>158</sup>USDA NASS, *Cold Storage*, June, 7.

<sup>159</sup>USDA NASS, *Cold Storage*, June, 4.

<sup>160</sup>United States Department of Agriculture National Agricultural Statistics Service, *Cold Storage* (Washington, DC: USDA NASS, September 2020), 1.



# Transfarmation



## CONCLUDING REMARKS

We have highlighted several problems in the U.S. agricultural system, from low median incomes and high levels of debt to problems caused by the COVID-19 pandemic. The above compilation of facts is intended to enable advocates to better bolster arguments for a more equitable, sustainable, compassionate, and plant-forward food system. For more detailed information, we encourage readers to visit the relevant references and dig deeper. For definitions, please visit the USDA ERS [glossary](#) or the Congressional Research Service [glossary](#). If you have any questions, please contact us at [Info@TransfarmationProject.org](mailto:Info@TransfarmationProject.org), or fill out the form on [our website](#).