FALL 2019

AGRICULTURAL LENDER SURVEY RESULTS



Contents

Key Takeaways	1
Introduction	2
Agricultural Economy	3
Farm Income and Profitability	3
Land Values and Cash Rents	6
Agricultural Lenders	9
Lender Sentiments	9
Lending Conditions	10
Credit Quality	12
Interest Rate Environment	14
About the Survey Respondents	15
About ABA and Farmer Mac	17

Key Takeaways

- **Profitability expectations** The agricultural economy and farm income remained stressed in 2019 with limited signs of improvement in 2020. The majority of agricultural lenders surveyed noted compression in farm profitability this year (82.5%), and there was consensus in profitability declines across all reporting regions.
- **Top concerns for producers** Liquidity, income and leverage were top lender concerns for producers, but trade, tariffs and weather edged up on the list.
- Top concerns for lenders Credit quality, competition for loans and weaker loan demand were the top concerns. Lender sentiment remained cautious between August 2018 and August 2019, mirroring the similar percentage of respondents reporting farm profitability declines, increases in farm leverage and increases in default rates.
- Sector concerns Dairy, grains and cattle were the sectors that concerned lenders the most, while lenders reported less concern for the swine, poultry and vegetable sectors. Hemp and alternative energy financing are hot topics this year. Nearly half of ag lenders reported farmers asking about financing hemp production (49.9%) and over one-third reported more inquiries about alternative energy project financing (36.8%).
- Credit quality Survey respondents generally expect higher ag loan delinquency rates heading into 2020 for both production (51.6%) and real estate (39.5%). However, the majority do not expect higher loan charge-off rates in the coming year (65.8% and 74.7%, respectively).
- Loan Demand While over half of lenders reported that demand for agricultural production loans was flat over the last 12 months, a significant share (45.3%) of lenders with assets between \$50 million and \$250 million reported increased demand. A similar sentiment was reported for loan demand over the next 12 months.
- Land value and cash rent expectations Nearly half of lenders expect a decline in land values in 2020 (49.6%), supporting the assertion that there is some above-market valued land in farmers' balance sheets. Lenders report that an average of 37.8% of land in their markets are above market value, yet the vast majority expect only small changes to land values in 2019 and 2020. Lenders also expect compression in cash rents, but fewer lenders reported above-market value rents compared to 2018.
- Approval rate In spite of the credit quality concerns, lenders still remain positive about approvals. Lenders reported a new average agricultural loan application approval rate of 75.1% in the 12 months leading up to August 2019 and expect the approval rate for renewal requests will be close to 90% in the following 12 months.
- Farm retirements The continued stress on profitability is resulting in rising trends in farm exits. Nearly half of lenders reported an increase in farm retirements in 2019 (47.7%) and nearly two-thirds expect the pace to pick up over the next 12 months.

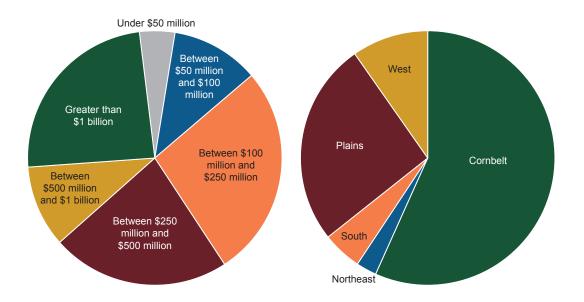
Introduction

Agricultural lenders can provide a unique outlook on circumstances in the farm economy. Farmers and farm businesses that use short- or long-term financing are routinely required to present financial updates to their loan officers, giving lenders a distinct opportunity to evaluate local farm economy conditions. These insights are particularly valuable during times of transition when the agriculture sector is cycling through economic troughs and peaks.

In December 2016, the American Bankers Association (ABA) and Farmer Mac collaborated on their first joint survey of agricultural lenders to gauge overall industry sentiment on the farm economy, expectations on land values, prospects for the coming year and issues facing the broader economy. This collaboration has continued every year since its inception. These joint studies expand upon data collected by Farmer Mac from 2014 through 2016.

The survey was distributed via email between Aug. 5 and Sept. 6, 2019. Over 450 loan officers, managers and executives responded to the questionnaire. Responses represent a range of institutions by size—from less than \$50 million in assets to more than \$5 billion—and by geography. This analysis breaks down results by general agricultural economic insights and by factors affecting lending institutions. The report concludes with a broader description of the respondent demographics.

Respondent Size and Primary Market Region



Source: ABA-Farmer Mac Agricultural Lenders Survey, August 2019

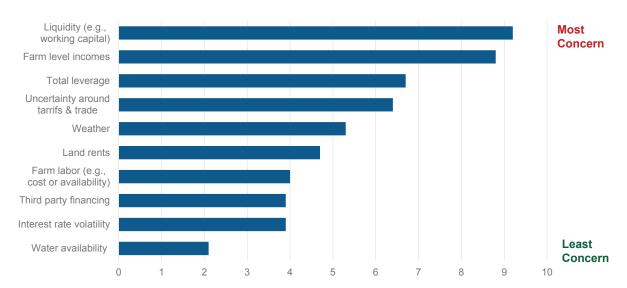
Agricultural Economy

Farm Income and Profitability

The agricultural economy and farm income remain stressed in 2019 with limited signs of improvement in 2020. The majority of agricultural lenders surveyed noted compression in farm profitability this year (82.5%), and there was consensus in profitability declines across all reporting regions.

Farm income and liquidity were consistently the top two lender concerns for producers (rated as top or second-highest concern in 68.2% and 81.5%, respectively). There was a range of other issues ranked among the concerns for producers, but primary concerns rated as a top or second-highest concern were tariffs and trade (20.9%), total leverage (14.9%) and weather uncertainty (7.6%). Looking ahead, fewer than 10% of respondents expect profitability to increase in the next 12 months (9.1%), with the majority expecting profitability to continue to fall (55.1%).

Lenders' Top Concerns for Producers



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019.

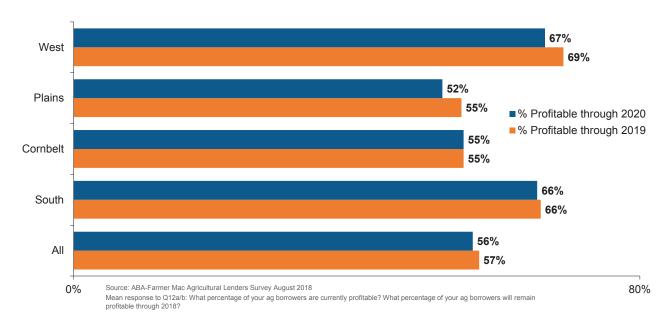
Mean Response to Q3: Please indicate your relative level of concern for the following conditions facing your ag borrowers at this time with 1 being the highest concern and 10 being the least concern (to improve readability of the chart, we have converted 1=10, 2=9, 3=8, etc., so that larger bars correspond with higher concern).

While about half of the respondents reported that farm family expenses stayed the same in 2019, a significant share (41.5%) observed an increase. The majority of lenders in the Northeast and Western regions reported an increase in farm family expenses. Similar expectations were reported for the next 12 months. In particular, lenders reported an increase in health care expenses. Three in four lenders reported that health care costs increased in the last 12 months, a trend reflected across all respondent groups. Lenders expect health care costs to continue to increase in 2020.

On average, lenders reported that just over 57% of their agricultural borrowers were profitable in 2019—up six percentage points year-over-year. Lenders also expect that 56% will remain profitable through 2020. Profitability was weakest in the Cornbelt (55.1%) and Plains (54.8%) regions where commodity prices have seen the most compression over the last three years.

Lenders in the South, Northeast and West were more likely to report a higher percentage of profitable agricultural borrowers in 2019 and moving into 2020. Weather also played a role in some regions—lenders from the Cornbelt and Plains regions reported that more than half of their agricultural borrowers were impacted by extreme weather in 2019, such as flooding that delayed their ability to plant.

Percentage of Customers Profitable through 2019 and 2020



The changing farm profitability landscape is leading many producers to alter operating behavior. Roughly one-third of lenders noted an increase in ag technology investment in their areas in the last 12 months (32.0%), and a similar percentage expect the investment in ag technology to continue to increase in the coming year (33.4%). Investment in technology can be an opportunity for operations to improve efficiency and lower the overall cost of production over time.

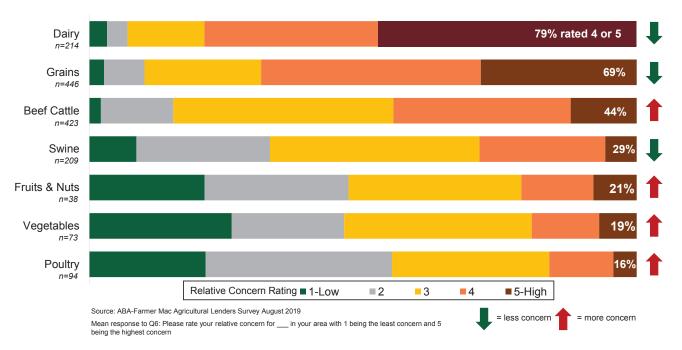
Producers are also asking about alternative sources of income or cost mitigation. Industrial hemp is often a topic of conversation between producers and lenders, as nearly half of survey respondents reported borrower interest in hemp financing (49.9%). Hemp only recently reentered the USDA's list of covered commodities after program modification authorized by the Agriculture Improvement Act of 2018, and many producers are exploring the profitability potential of commercial hemp production. However, the USDA will only begin regulation of industrial hemp in 2020, so the legal and market implications of hemp production are complex in 2019.

Finally, over one-third of respondents reported an increase in requests for alternative energy project financing (36.8%). Whether the investments are for energy cost reduction, environmental preference, or income generation, producers are looking for ways to think differently about energy.

Lender concern varied by commodity sector. While the dairy sector remained atop lenders' concerns in the 2019 survey, the percent of respondents rating it as a high concern level dropped slightly from the 2018 survey, indicating an improvement in lender sentiment (85% to 79%). Similarly, the grains sector showed improvement year-over-year, dropping from 79% high-concern in 2018 to 69% high-concern in 2019. The swine sector also saw improvements in 2019, with only 29% of respondents listing the commodity as a high concern.

All of these commodity sectors experienced some price improvements in 2019, which likely helped lift lender sentiment during the year. Conversely, prices in the cattle, fruits and nuts, and poultry sectors experience increased volatility in 2019, likely contributing to slightly higher levels of lender concern.

Lender Concerns by Commodity Sector

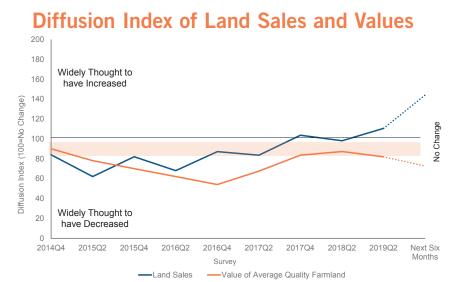


As a result of the continued stress on profitability, agricultural lenders observed rising trends in farm exits and financial strain. Nearly half of respondents reported rising farmer retirements (47.7%), and nearly two-thirds expect the increasing trend in retirements to pick up over the next 12 months (63.3%). A high percentage of lenders also reported higher levels of Chapter 12 bankruptcy filings in the past year (24.7%). Chapter 12 is the chapter of the U.S. bankruptcy code specifically designed to protect farmers and fishers. More lenders expect Chapter 12 filings in their areas to increase again in the coming year (38.6%). While the survey does not measure the magnitude of the increase in farm exits, the overall increases were experienced uniformly across growing regions.

Land Values and Cash Rents

Since the downturn in the agricultural cycle began in 2014, farmland values have been a bright spot in the ag economy. While the USDA reports a decline in farm income between 20% and 30% between 2013 and 2019,¹ the total value of farm real estate has increased.² Lenders reported that land listings and sales were largely unchanged in the last 12 months (65.3% and 67.3%, respectively), indicating a lack of supply supporting the land market values. However, roughly a quarter of respondents recorded a decline in the value of average quality farmland in the last year, driven by lenders in the Cornbelt (26.5%) and the Plains (37.1%).

The diffusion chart below shows the general sentiment for land sales and the value of average quality land. A diffusion index splits the responses between increase (200), no change (100), and decline (0) and averages the scores to an index of 100. The diffusion index for the value of average quality land has been below 100 since the inception of the survey in 2014, indicating more ag lenders are reporting declines in land values than increases in land values. Looking toward 2020, survey respondents expect a pickup in land listed for sale, sales closing, and a subsequent decline in farmland values.



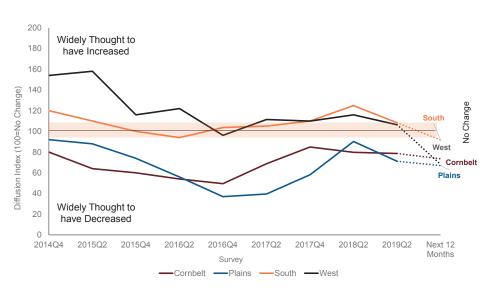
Source: ABA-Farmer Mac Agricultural Lenders Survey, August 2019. Prior to 2016Q4, results from Farmer Mac internal surveys provided for trend. Mean response to Q1/Q2: During the past 12 months, how have the following economic conditions changed in your area? How much will they change in the next 12 months in your area?

¹ USDA Economic Research Service. Farm Income and Wealth Outlook. https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/

² USDA NASS Agricultural Land Values (August 2019) http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1446

Land value expectations vary by region. Respondents in the Cornbelt and Plains have consistently reported declines in farmland values since 2014. More ag lenders in the West and South reported decreasing values of average quality farmland, driving down the land value diffusion index for 2019. Looking forward to the next 12 months, 35% of lenders expect land values to decline, with double-digit percentages in all regions. The 2019 survey marks the first time since 2016 that all regional forward-looking land value diffusion indices dropped below 100.

Diffusion Index of Land Values by Region

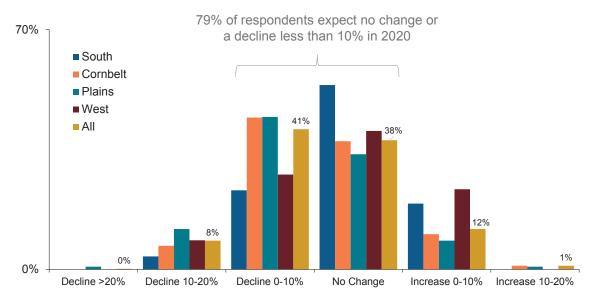


Source: ABA-Farmer Mac Agricultural Lenders Survey, August 2019. Prior to 2016Q4, results from Farmer Mac internal surveys provided for trend. Mean response to Q1/Q2: During the past 12 months, how have the following economic conditions changed in your area? How much will they change in the next 12 months in your area?

Despite the expectations for continued pressure on farm profitability and increases in the supply of farmland listed for sale, the vast majority of lenders expect only small changes to land values in 2019 and 2020. Only 5.6% of respondents reported a drop of more than 10% in 2019, and only 8.2% reported an expected drop of more than 10% in 2020. The percentages were slightly higher for lenders in the Plains region (9.2 and 12.6%, respectively). A slight majority of lenders reported no change in land values in 2019 (50.8%), while the plurality of respondents expects a decline of less than 10% in 2020 (41.3%). A higher percentage of lenders in the West region reported an expected increase in land values in 2020 (24.4%), likely related to the diverse usage of farmland in western agriculture.

These levels support the assertion that there is some above-market valued land in farmers' balance sheets; lenders report an average of 37.8% of land in their markets above market value. That is comparable to the level reported in the 2018 Ag Lender Survey (41.0%).

Range of Expected Land Value Declines in 2020



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019.

Mean response to Q7: In your local service area, how much do you expect the value of average quality farmland will change in 2020?

Agricultural lenders also expect cash rents to feel continued pressure into 2020. Nearly one-third of respondents reported a decline in cash rental rates on average-quality farmland in the last 12 months (30.4%). Nearly half of lenders reported that rental rates either fell in 2019 or will fall in 2020 (47.6%), with more than half of Cornbelt respondents (54.8%) expecting a decline in one year or the other. On average, lenders report 30% of the cash rents in their area above market value, a number virtually unchanged from the 2018 Ag Lender Survey.

Agricultural Lenders

Lender Sentiments

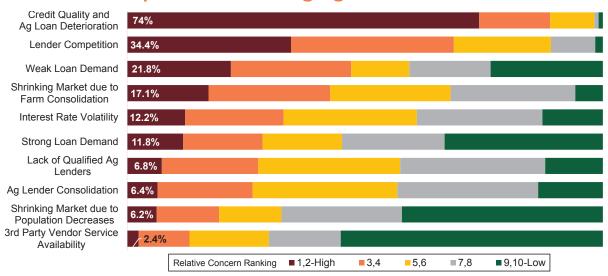
Credit quality and the deterioration of agricultural loans remained the primary concern facing agricultural lenders in 2019, as the farm economy continues to work through a prolonged downturn. This sentiment was expressed by respondents from institutions of all sizes and most regions. Lenders in the South, though, indicated concern for competition with other lenders as their top concern for the second year in a row.

Competition for lending opportunities was the second-highest ranked concern overall among lenders. The majority of survey respondents (73.5%) ranked the Farm Credit System (FCS) as their number one competitor for agricultural loans. Nearly 63% of lenders ranked community banks within their top two competitors, followed by vendor financing (19.7%), credit unions (9.7%), and regional banks (7.7%). Lenders from institutions with assets under \$100 million were less likely to worry about competition than their larger peers.

Shrinking markets due to farm consolidation and weak loan demand were prominent concerns of lenders as well. Nearly a third of respondents (30.2%) listed shrinking markets due to farm consolidation among their top three concerns. This concern was shared across all asset classes and regions, except lenders in the South. Over a third of lenders (36.7%) listed weak loan demand among their top three concerns. Weak loan demand was most concerning in the South (59.1% among top 3 concerns), Northeast (58.3%), and at institutions with assets under \$50 million (60%).

Interest rate volatility concerns declined year-over-year, although one in five lenders still ranked it among their top three concerns. As rates rise and begin to return to normal levels, debt financing becomes more expensive, and the portion of an agricultural borrower's earnings dedicated to interest payments increases. At the same time, lower rates compress bank net interest income and can present challenges to earnings growth.

Top Concerns Facing Agricultural Lenders



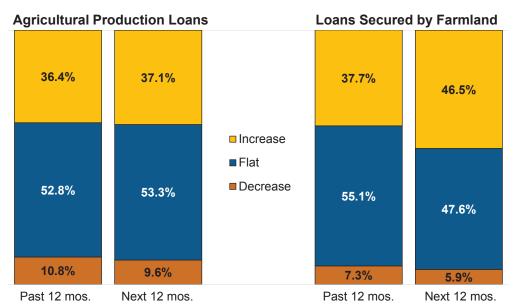
Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019.

Mean response to Q4: Please rank your level of relative concern for the following conditions facing your institution at this time with 1 being the highest concern and 10 being the lowest concern

Lending Conditions

During the past 12 months, a plurality of lenders (48.4%) reported that farmers were growing operations or debt levels, while 44.9% indicated they were holding operations and debt levels steady (only 6.7% said that farmers slowed their growth). The Cornbelt region was the most pessimistic about growth and 47.3% of lenders said that operation and debt levels stayed about the same. Other regions were more likely to say farmers were increasing operations or debt levels (51.9%). Lenders' predictions for the coming year were more mixed across regions, with 46% overall expecting farmers to grow operations or debt levels and 45% expecting them to stay the same.

Agricultural Loan Demand



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019. Mean response to Q1/2: During the last (Looking forward) 12 months, how have (do you expect) the following economic conditions changed (to change) in your area?

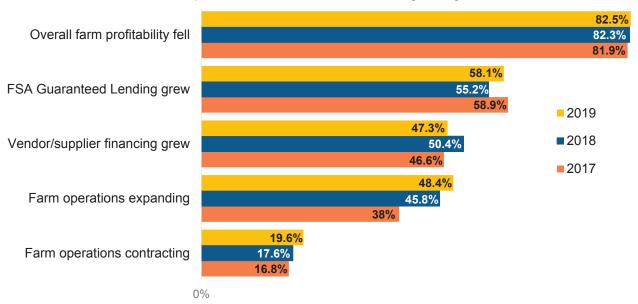
Just over half of lenders reported that demand for agricultural production loans was flat over the last 12 months. However, a significant share (45.3%) of lenders from institutions with assets between \$50 million and \$250 million reported increased demand. Likewise, more than half of respondents said that the demand for loans secured by farmland stayed about the same. The variability of lender responses regarding farm real estate loans generally matched the responses about agricultural production loans. However, lenders from the West were split (45.5% each) between reporting increased and flat demand.

Lenders' expectations for agricultural production loan demand in the next 12 months were similarly mixed. While a majority of lenders expect demand to stay about the same in the next 12 months, a significant share of lenders from institutions with assets below \$250 million (44.5%) expect demand to increase. A large share of lenders across regions and institution sizes (46.5%) also expect demand for loans secured by farmland to increase in 2020, though a plurality (47.6%) expect demand to stay about the same.

A plurality of lenders (47.3%) also noted that vendor financing had increased in the last 12 months, while 46.7% indicated it stayed about the same. The increase was much stronger in the Northeast region, with three in four lenders saying vendor financing increased in the last year. Lenders were equally split on whether vendor financing would expand or stay the same in the next 12 months. This sentiment was reflected across all regions, including lenders from the Northeast.

Agricultural Lenders' Observations

Percent of Respondents that Observed the Following Changes in their Area:



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2018/August 2019

Mean response to Q10: During the past 6 / 12 months, how have the following conditions changed for your area?

Lenders continue to meet the credit needs of farmers and ranchers. On average, lenders approved approximately 75% of agricultural loan applications received over the last 12 months. Lenders from institutions below \$1 billion approved more than their large counterparts, who approved an average of 70% of borrowers. Over the next 12 months, lenders expect to approve nearly 90% of renewal requests. Regarding competition, lenders estimate about 37% of the loans they deny are being approved by competing institutions.

90%

Credit Quality

Given the tightness in farm profitability, credit quality is a top concern for lenders. The majority of respondents reported that the credit quality (i.e., delinquency rate) of outstanding agricultural loans (both production and real estate) remained about the same over the last 12 months, 61% and 75%, respectively. A notable share of respondents (35.9%), however, saw an increase in agricultural production loan delinquencies—a trend generally reflected across regions and institution sizes. Only one out of five lenders reported a similar increase in delinquencies for loans secured by farmland.

This year, ABA and Farmer Mac asked respondents about charge-off rates for agricultural loans. The vast majority of lenders reported that charge-offs stayed about the same for both production loans (81.2%) and loans secured by farmland (86.3%). However, a third of lenders in the Northeast region observed increased charge-offs on both loans secured by farmland (30.8%) and agricultural production loans (38.5%).

Diffusion Index for Delinquency Trends 200 Widely Thought to have 180 Increased 160 Cornbelt West 140 Diffusion Index (100=No Change) **Plains** South 120 Change 100 Š 80 60 40 Widely Thought to have Decreased 20 0 2014Q4 201502 2015Q4 2016Q2 2016Q4 201702 201704 2018Q2 201902 Next Twelve Survey Months —Cornbelt —Plains —South —West

Source: ABA-Farmer Mac Agricultural Lenders Survey August 2018. Prior to 2016Q4, results from Farmer Mac internal provided for trend. Mean response to Q1/Q2: During the past 6 months, how have the following economic conditions changed in your area? How much ill they change in the next 6 months in your area?

In the next 12 months, just over half of lenders expect delinquencies to increase for agricultural production loans. Lenders from institutions below \$50 million in assets and those in the Northeast region were more optimistic, with the majority believing credit quality for production loans would stay about the same. While the majority of lenders expect delinquencies for loans secured by farmland to stay the same in the next 12 months, nearly two out of five respondents expect agricultural real estate delinquencies to increase in 2020. The majority of lenders expect charge-offs on both loans secured by farmland (74.7%) and agricultural production loans (65.8%) to stay the same in the next 12 months.

Government-guaranteed loans for the agricultural sector have allowed a variety of lenders to ensure credit access for agricultural borrowers across the country who may not have qualified for conventional credit. Over half of lenders (58.1%) noted an increase in the use of government-guaranteed loans (USDA FSA and Rural Development loans) over the past 12 months in their area (nearly 39% of lenders said that use stayed about the same and only 3% said it declined). Just over half of lenders in the South, however, reported that levels remained the same. Lenders from all regions and institution sizes expect (67.1%) the use of government guarantee loans to continue to increase in the next 12 months.

Crop insurance is another important risk management tool used by farmers across the country. Weather conditions in 2019 are a great example of the importance of crop insurance to farmers and lenders alike. Lenders reported, on average, 88% of all agricultural borrowers have some form of crop insurance—down slightly from last year—with a median response of 95%. Traditional crop insurance, however, does not cover all products in storage (e.g., grain bins). Given the impact of flooding in 2019, ABA and Farmer Mac inquired whether lenders require borrowers to get insurance that covers such losses. Only 29% of lenders require their borrowers to get insurance on crops that are in storage beyond normal crop insurance. As producers can now hold grain for longer periods to improve marketing conditions, greater access to insurance products between harvest and sale could be useful to manage risk more effectively.

Despite turbulence in the farm economy, lenders remain ready to assist farmers and responsibly fulfill their credit needs. Given the volatile conditions, lenders and their institutions must maintain healthy, amicable relationships with their primary regulators. Healthy regulatory relationships are an important factor when considering the impact of credit quality on lenders' performance. Fortunately, lenders report positive relationships with their regulators. Seventy-six percent of lenders rated their relationship with their primary regulator either a four or a five on a five-point scale.

While regulators and lenders have a positive relationship overall, regulators received lower marks on their comprehension of the agricultural sector. On average, respondents rated regulators' understanding of agriculture a 3.1 out of five, with 26% of respondents saying their regulator had little to no understanding of the sector. These ratings were consistent across all regions and institution sizes. A healthy, knowledgeable, respectful regulatory relationship is beneficial to both lending institutions and the agricultural sector as a whole.

Interest Rate Environment

Concerns regarding the interest rate environment have fallen since last year. About one in five lenders included interest rate volatility among their top three concerns, down from 47% in 2018.

Lenders expressed mixed experiences regarding the direction of short-term interest rates in the last 12 months. Respondents were nearly evenly split between reporting that short-term rates increased (34.7%), stayed the same (31.1%), and decreased (34.2%). Respondents from institutions with assets above \$1 billion (42.7%) and those in the Northeast (58.3%) and Southern (45.5%) regions were more likely to report a decrease in short-term rates over the last year. There was more consensus on the direction of long-term rates in the last 12 months with half of lenders saying long-term rates decreased. The remainder reported that they either stayed the same (27.2%) or increased (21%).

The majority of respondents indicated they thought short-term and long-term interest rates would decrease in the next 12 months, 67.5% and 53.4%, respectively.

Diffusion Index for Interest Rates



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2018. Prior to 2016Q4, results from Farmer Mac internal provided for trend. Mean response to Q1/Q2: During the past 6/12 months, how have the following economic conditions changed in your area? How much will they change in the next 6/12 months in your area?

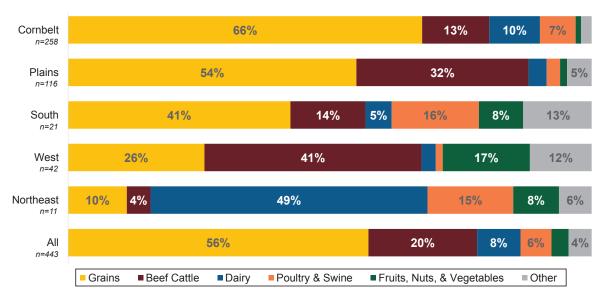
About the Survey Respondents

Over 450 agricultural lenders completed the ABA-Farmer Mac Agricultural Lender Survey in August. The responses came from a diverse set of institutions, ranging from those with under \$50 million in assets to those with more than \$5 billion in assets. Approximately two-thirds of the responses came from lenders at institutions with \$500 million or less in assets (66%). Regionally, the responses were somewhat concentrated in the Cornbelt and Plains (57% and 26%, respectively), which is expected given the high proportion of agricultural production and lending that occurs in those states.



Lender portfolios tended to be highly concentrated in grains and cattle, but there was some diversity by region. Respondents in the West reported a higher percentage of cattle, fruits and nuts, and vegetables than other regions. Lenders responding from the South noted a relatively higher proportion of poultry and swine and other crops. These portfolio weights line up well with regional productive capabilities.

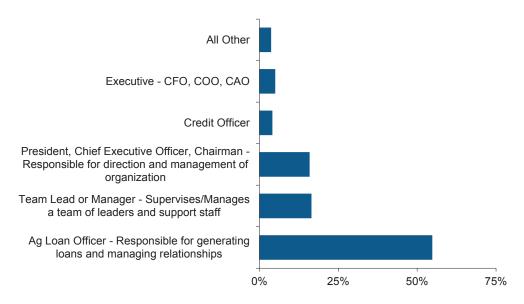
Lender Portfolios Vary by Region



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019. Mean response to Q5: What percentage of your agricultural credit portfolio is in the following?

Survey respondents had a variety of roles at their respective institutions. The most common title or role reported was an agricultural loan officer (55.5%). Others reported team manager roles, senior executives and credit officers.

Survey Respondent Job Responsibilities



Source: ABA-Farmer Mac Agricultural Lenders Survey August 2019. Mean response to Q20: What is your role at your institution?

About ABA and Farmer Mac

The American Bankers Association is the voice of the nation's \$18 trillion banking industry, which is composed of small, regional, and large banks. Together, America's banks employ more than 2 million men and women, safeguard \$14 trillion in deposits and extend more than \$10 trillion in loans.

Farmer Mac is a vital part of the agricultural credit markets and was created to increase access to and reduce the cost of capital for the benefit of American agricultural and rural communities. As the nation's premier secondary market for agricultural credit, we provide financial solutions to a broad spectrum of the agricultural community, including agricultural lenders, agribusinesses, and other institutions that can benefit from access to flexible, low-cost financing and risk management tools. Farmer Mac's customers benefit from their low cost of funds, low overhead costs and high operational efficiency. They are often able to provide the lowest cost of borrowing to agricultural and rural borrowers. For more than three decades, Farmer Mac has been delivering the capital and commitment rural America deserves. Additional information about Farmer Mac is available on Farmer Mac's website at www.farmermac.com.

ABA and Farmer Mac have been working together for more than a decade to offer the financial and educational tools bankers need to serve their agricultural customers.





