

Winter 2016|2017

AGRICULTURAL LENDER SURVEY RESULTS



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Key Takeaways

- Nearly 90 percent of survey respondents report an overall decline in farm profitability in the last 12 months and 84 percent indicate higher levels of operating leverage as a result.
- Lenders note that commodity prices and availability of working capital are top concerns they believe their borrowers face.
- On average, survey respondents indicate that nearly 60 percent of their current agricultural borrowers are profitable and expect that 54 percent will remain profitable through 2017.
- Forty-seven percent of respondents report lower land values in 2016, and 56 percent of lenders expect further declines in the first half of 2017.
- Most lenders (54 percent) expect a decline in land values of between 0 and 10 percent in the next year. Nearly an additional 25 percent report an expected decline of more than 10 percent in the coming year.
- The average lender reports that 44 percent of average quality land and 33 percent of cash rents are above fair market value in their area.
- Regulation, compliance and competition are lenders' top concerns facing their own institutions.
- The majority of lenders (66 percent) expect an increase in agricultural operating loan demand in the next six months, while most lenders (51 percent) expect demand for agricultural real estate to remain unchanged.
- Many responding institutions (42 percent) have between one and three dedicated agricultural lenders on staff with an average of 19-20 years of experience.
- Respondents expect nearly a third of agricultural lending staff to turnover in the next five years.

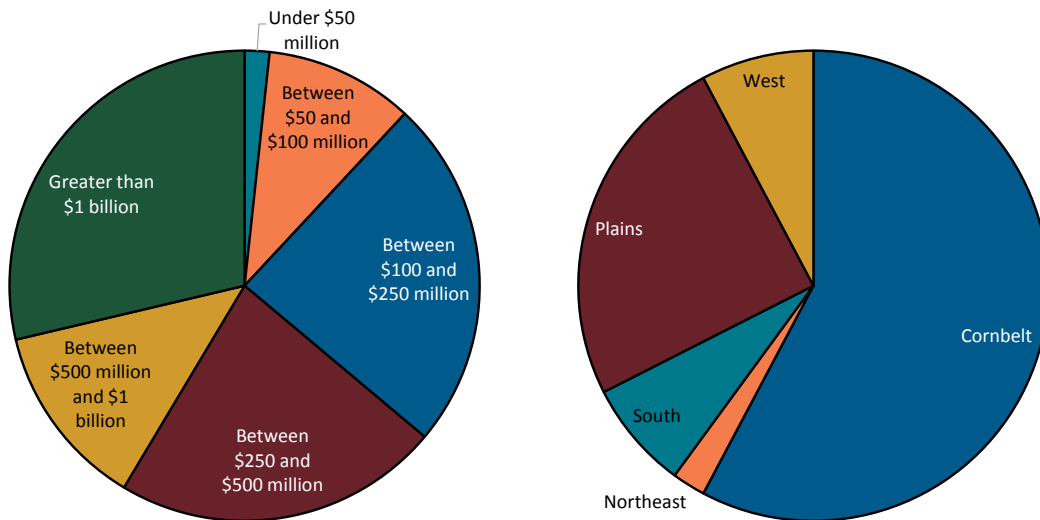
Introduction

Agricultural lenders offer a unique perspective on conditions in the agricultural economy. Producers who use short- or long-term financing are routinely required to present financial updates to their loan officers, positioning lenders with the unique opportunity to evaluate local farm economy condition. 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 a joint survey of agricultural lenders to gauge overall industry sentiment on the agricultural economy, expectations on land values, prospects for 2017 and issues facing the broader economy. The survey expands upon data collected by Farmer Mac in prior surveys.

The survey was distributed via email between December 14, 2016 and January 6, 2017. More than 350 loan officers, managers and executives responded to the questionnaire. Responses represent a range of institutions by asset size—from less than \$50 million in assets to more than \$5 billion—and geography. This analysis breaks down results by general agricultural economic insights and factors affecting lending institutions. The analysis concludes with a broader description of the respondent demographics.

Respondent Size and Primary Market Region



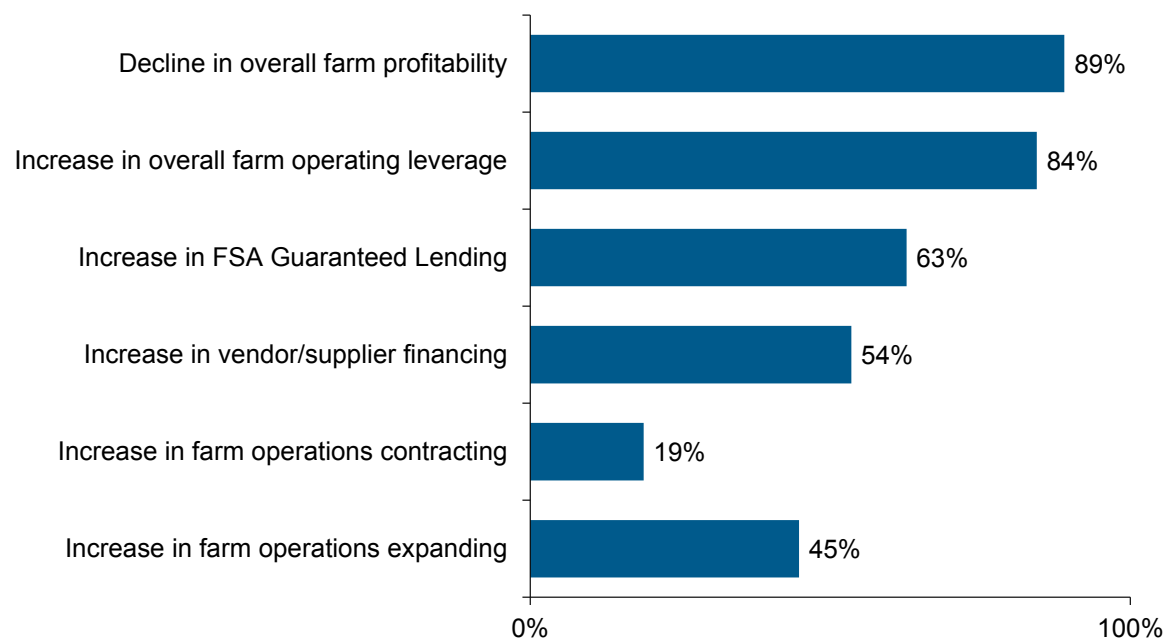
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016

Agricultural Economy

Farm Profitability and Economic Conditions

According to the survey, agricultural lenders' opinion of the agricultural economy aligns with the larger industry outlook. Nearly 90 percent of survey respondents reported an overall decline in farm profitability in the last 12 months. In response to the lower levels of profitability, agricultural lenders indicate higher levels of operating leverage (84 percent indicated an increase) and increased usage of the Farm Service Agency's (FSA) Guaranteed Loan program (63 percent reported an increase). Lenders also note that a relatively high percentage of customers are growing operations and balance sheets, while a relatively small proportion of customers have deleveraged during the last year. These findings support recent analysis released by the USDA's Economic Research Service,¹ and the Federal Reserve Bank of Kansas City's Agricultural Credit Survey and Agricultural Finance Databook products.² Looking to 2017, lenders expect 54 percent of their customers to remain profitable, a slight decline from 2016.

Agricultural Lenders' Observations



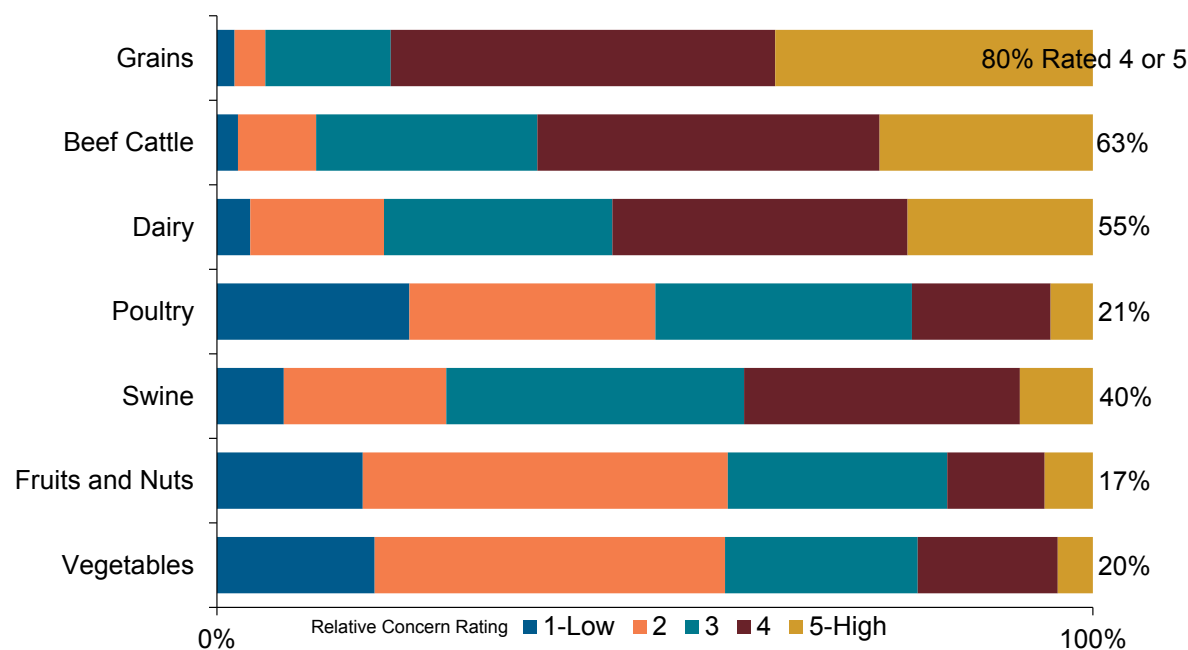
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q17: During the past 12 months, how have the following conditions changed for your area?

¹ USDA Economic Research Service. Farm Income and Wealth Outlook. <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/>
² Federal Reserve Bank of Kansas City. Agricultural Credit Survey and Agricultural Finance Databook. <https://www.kansascityfed.org/research/indicatorsdata/agcreditsurvey>; <https://www.kansascityfed.org/research/indicatorsdata/agfinancedatabook>

The outlook on farm profitability varies by region. While lenders in all of the reporting regions³ generally expect poor, persistent economic conditions on the farm, the results were regionalized. Lenders in the South and West reported that a majority of their customers were profitable in 2016 (64 and 66 percent, respectively), and that the majority will remain profitable in 2017 (59 and 64 percent, respectively). That contrasts to lenders in the Cornbelt and Plains regions where only a slim majority were profitable in 2016 (58 and 50 percent, respectively) and will remain profitable in 2017 (55 and 45 percent, respectively). The gaps are driven by the high percentage of Cornbelt and Plains lending that is concentrated in commodity crops and animal products such as corn, soybeans, cattle and hogs, among others, where market prices remain near cyclical lows. Growers in the West and South regions generally produce more specialty crops that are less subject to swings in commodity markets.

At the commodity sector level, commodity crops and animal products are a top concern for lenders. When asked to rate their level of concern on a scale of one (lowest concern) to five (highest concern) for each of the major farm sectors, respondents consistently rank grains, beef cattle and dairy among their top concerns. Just over 80 percent of all respondents rate the grain sector as a top concern, compared to just 17 and 20 percent for the fruit and nut, and vegetable sectors, respectively. The sector ratings line up with production and regions, with the Cornbelt and Plains regions registering the highest levels of concerns over the grains and beef cattle sectors.

Lender Concerns by Commodity Sector



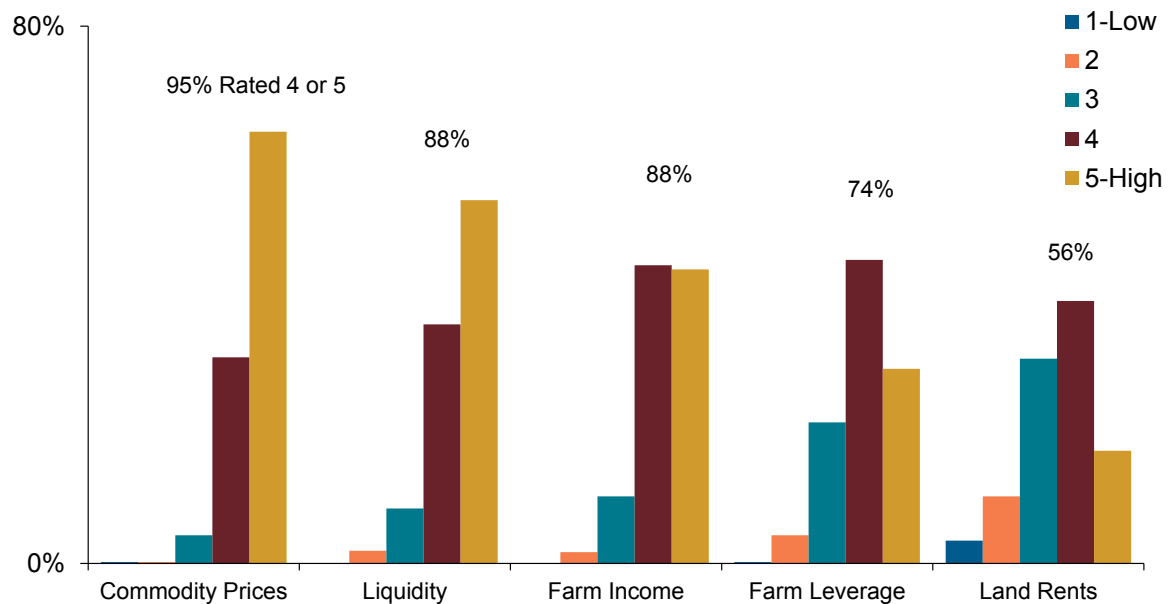
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016

Mean response to Q6: Please rate your relative concern for ____ in your area with 1 being the least concern and 5 being the highest concern.

³ There were not enough valid responses from the Northeast region to make statistically significant, region-specific statements, and thus the Northeast was excluded from region-level analysis. However, these responses were included in the overall response statistics.

The perceived drivers of the decline in the health of the agricultural economy are largely financial. Four of the top five producer-level concerns involve financial metrics: commodity prices, liquidity, farm income and leverage. The weather is also listed as a top concern, most significantly in the South region where severe drought conditions developed at the end of 2016. Farm labor and availability are not widely reported as a top concern; however, lenders in the West region display a heightened response to labor concerns with nearly a full point higher average rating than the other regions. This highlights the regional differences in labor costs by region and operation types. Land rents are more of a concern in the Plains and Cornbelt states where rent expense climbed dramatically during the agricultural expansion between 2010 and 2014.

Top 5 Lender Concerns



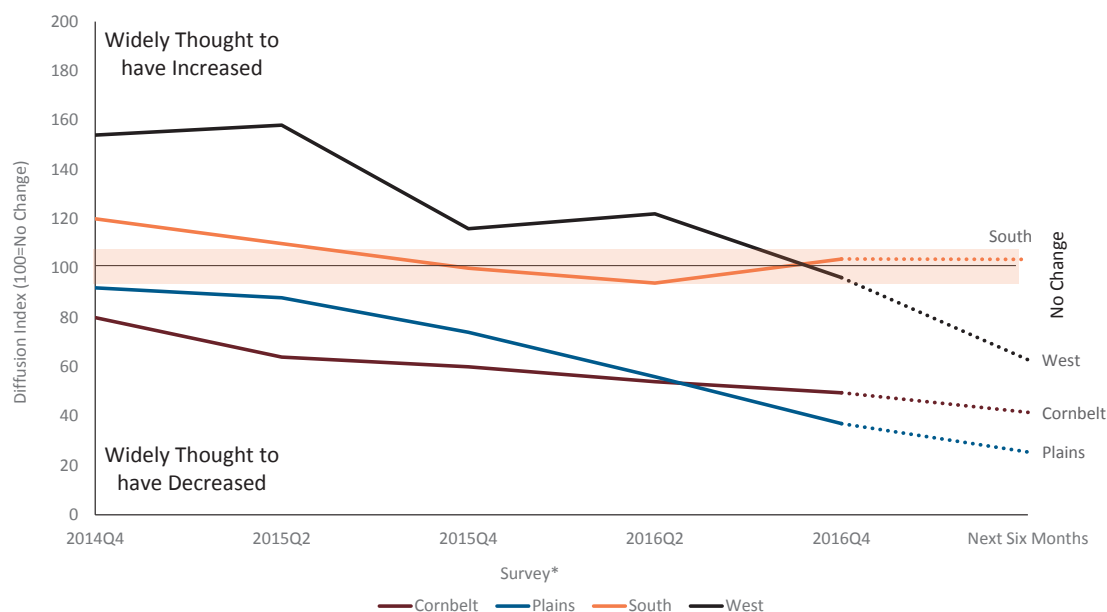
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016

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 least concern and 5 being the highest concern.

Land Values and Cash Rent Levels

Farmland represents an incredibly important component of agricultural industry wealth and borrowing capacity. Real estate represents more than 80 percent of all farm sector assets, and it secures more than \$200 billion in mortgage lending.⁴ Because many farm acres are at least partially financed through loans, agricultural lenders must be in-tune with changes in land markets. Through a prior survey, Farmer Mac tracked lender expectations of land markets since 2014, which generally showed a downward trend. The 2016 ABA-Farmer Mac survey continues this trend, with 47 percent of respondents reporting lower values in the second half of 2016, and 56 percent expecting further declines in the first half of 2017. The diffusion chart below shows the general downward trend broken out by region. A diffusion index splits the responses between increase (200), no change (100) and decline (0) and averages the scores to an index of 100. For the Plains region, nearly 75 percent of respondents expect a decline in average quality land values in 2017 with no respondents expecting an increase. Thus, the diffusion index for the next six months is extremely low at 25.5. The South was the only region reporting roughly no change in land value expectations. Respondents from the West region largely reported no change in 2016, but over 37 percent report a decline expected in 2017. This represents a sizable shift from prior surveys and the largest regional disparity from the past six months to the next six months.

Diffusion Index of Land Values by Region

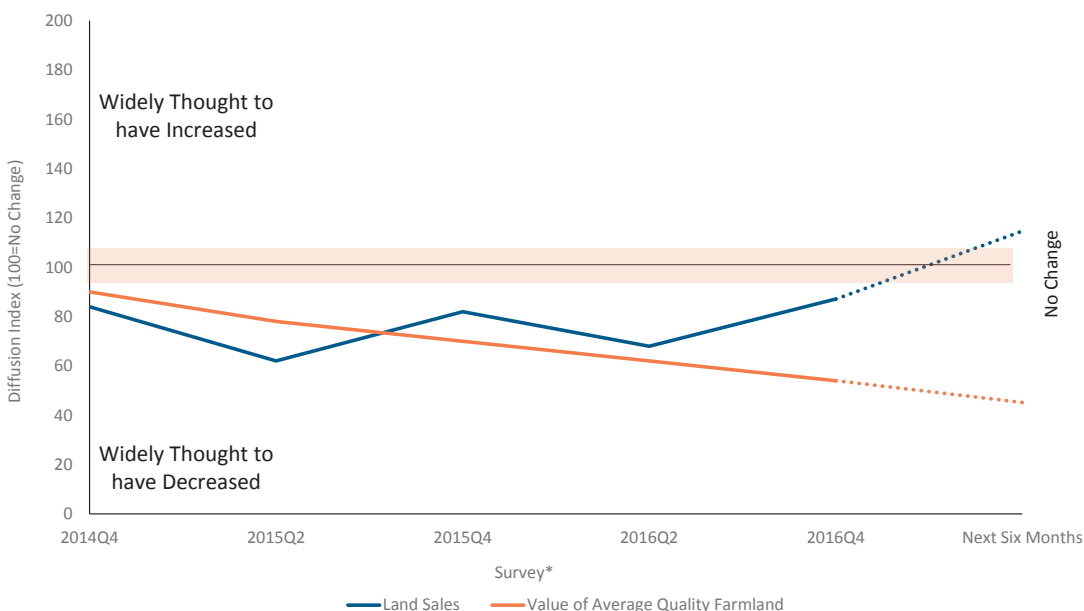


Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016. *Prior to 2016Q4, results from Farmer Mac internal surveys provided for trend. Mean response to Q1/Q2: During the past 6 months, how have the following economic conditions changed in your area? How much will they change in the next 6 months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

⁴ USDA Economic Research Service. Farm Income and Wealth Outlook. <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/>

As with land values, lenders also report lower volumes of land sales in the last few years. The diffusion index for the number of land sales has been solidly below 100 for the last two years. Many lenders expect the number of transactions to pick up in 2017 compared to recent experience, particularly those lenders in the Plains region. In total, more than 28 percent of respondents anticipate higher land sales in their areas in the first half of 2017 compared to only 14 percent that expect land sales to slow. Lower land prices, reduced profitability and an aging customer base are all likely at play in these expectations.

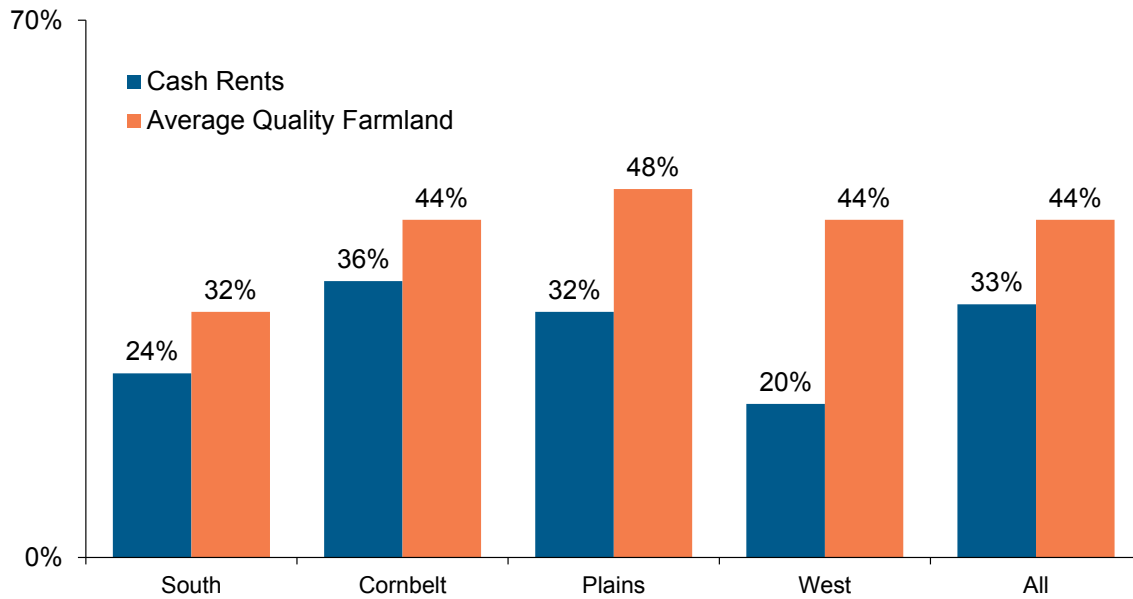
Diffusion Index of Land Sales and Values



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016. Prior to 2016Q4, results from Farmer Mac internal surveys 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 will they change in the next 6 months in your area?

To explain the forthcoming declines, most lenders reason that some land values and cash rents are currently overvalued. The average lender reports that a high percentage of average quality land (44 percent) and cash rents (33 percent) are above fair market value of their area. Land values are perceived as more widely above market values than cash rents, potentially a result of recent declines in negotiated cash rental rates. The largest discrepancies between land value and cash rent overvaluation are in the West region where lenders indicate on average only 20 percent of acres under rent are above market value but over 44 percent of land values. Lenders in the Plains region report the highest percentage of land values overvalued (48 percent); more than 17 percent of respondents feel that three or more of every five acres in their area are overvalued.

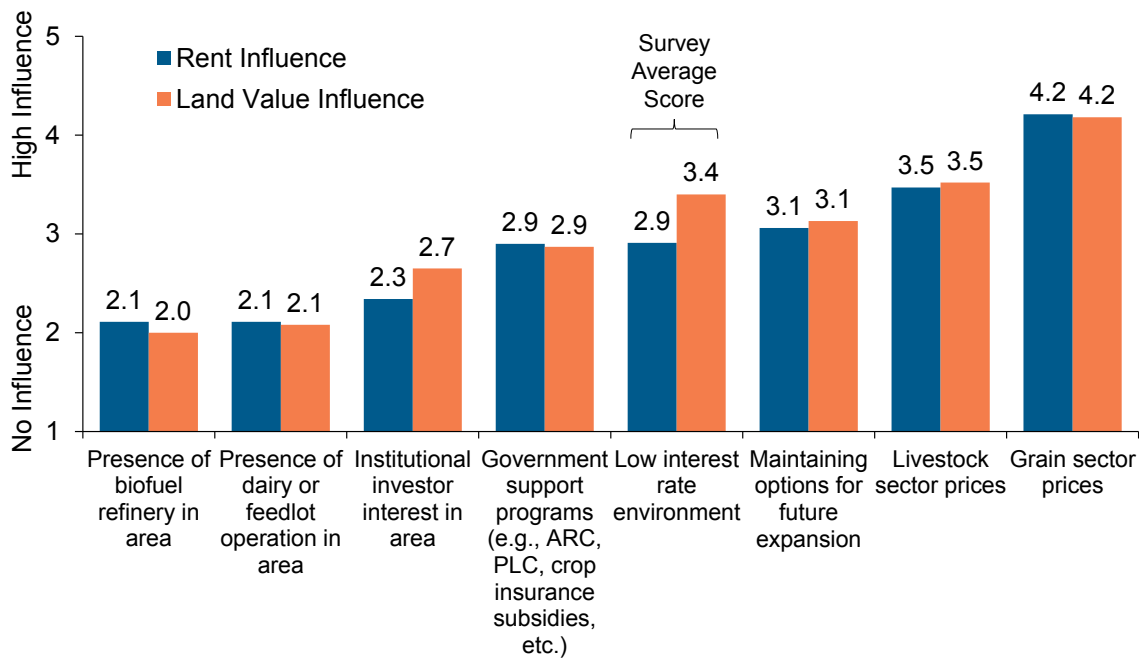
Percentage of Customers' Cash Rent and Land Owned Currently Held Above Market Value



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q10(11): What percentage of your customers' cash rents on average quality farmland (all average quality farmland) would you consider above market value?

As a part of the survey, lenders were asked to rate different economic drivers of land values and cash rents. Intuitively, respondents rated commodity prices as the most influential factor of values. The average score for lenders on both cash rents and land values was a 4.2 rating for grains and a 3.5 rating for cattle prices. The third most influential factor in propping up land values is producers maintaining options for future expansion. Respondents also note that interest rates are a more influential factor in land values than rental rates. The proximity to biofuel plants, processing facilities, or feedlots is not widely believed by lenders to significantly influence values. These demand-side drivers will likely increase values but only if they first increase localized commodity prices. Finally, investor demand is not rated as a primary driver of land values and cash rents, although lenders in the Cornbelt and the West rate the influence of institutional investors slightly higher than other regions.

Drivers of Cash Rents and Land Values



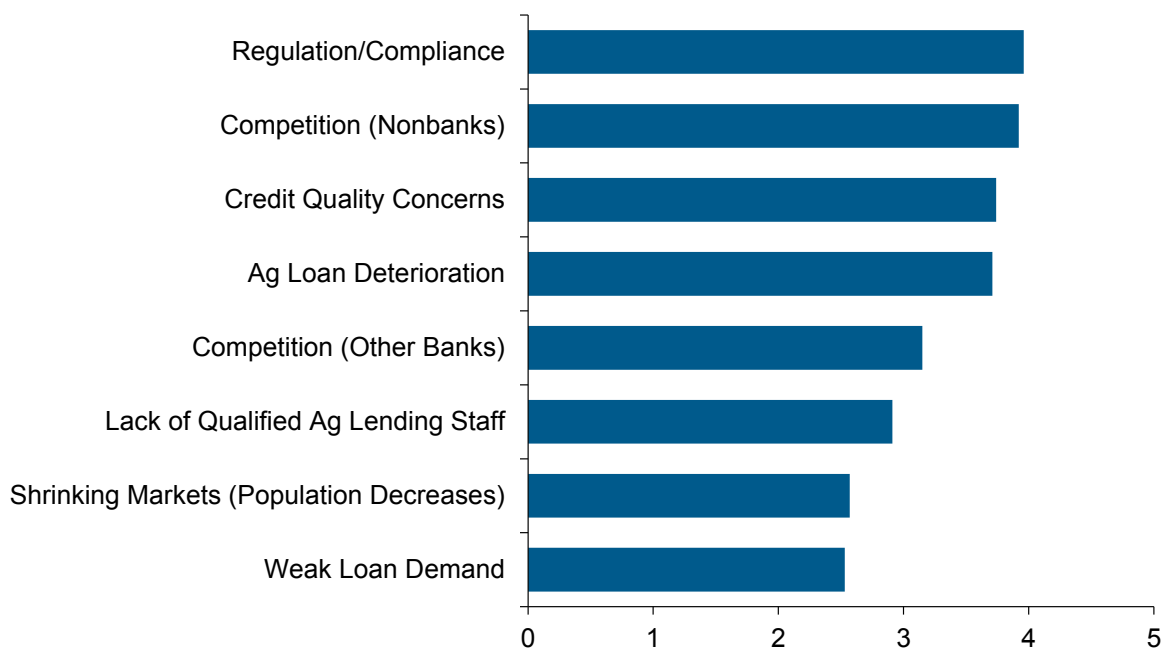
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q8(9): Please rate in terms of relative influence on cash rents (land values) in your area with 1 being no influence and 5 being the highest influence.

Weighing all the drivers of land values and the prospects for farm profitability, most lenders (54 percent) expect a decline in property values of between 0 and 10 percent in the next year. Approximately 25 percent of all respondents report an expected decline of more than 10 percent in the coming year, and the results are highly regionalized. Lenders in the Cornbelt (23 percent) and Plains (36 percent) are more likely to report a higher percentage drop, while some lenders in the West (7 percent) and South (15 percent) expect a slight increase in values. This highlights the decidedly localized nature of land values.

Lender Sentiments

Regulation, compliance and competition with nonbanks (e.g., credit unions, Farm Credit System, and vendor or supplier lending) are lenders' top concerns facing their own institutions. Lenders are less concerned about market forces, such as weak loan demand or shrinking markets due to decreases in rural populations, which have the possibility of impacting their long-term business operations. This could be interpreted as reflective of healthy loan demand despite changing demographics. Or it could be an indication that lenders have been unable to focus on market forces impacting their business due to the growing encumbrance of regulatory and compliance requirements. Smaller institutions were more likely to be more concerned about regulatory and compliance burden relative to larger peers.

Top Concerns Facing Agricultural Lenders



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
Mean response to Q4: Please indicate your level of relative concern the following conditions facing your institution at this time.

Market Forces

Agricultural Loan Demand

Nearly half of respondents note that farm operations and debt levels remained consistent over the past 12 months (48 percent). Relative to peers, lenders at larger institutions, with assets above \$500 million, were more likely to observe a shrinking in farm operations and decreasing debt levels. Lenders in the South, however, were significantly more likely to observe an increase in operation sizes and debt levels relative to other areas of the country. Overall, the majority of lenders (66 percent) expect an increase in agricultural operating loan demand over the next six months, while most lenders (51 percent) expect demand for agricultural real estate loans to remain unchanged.

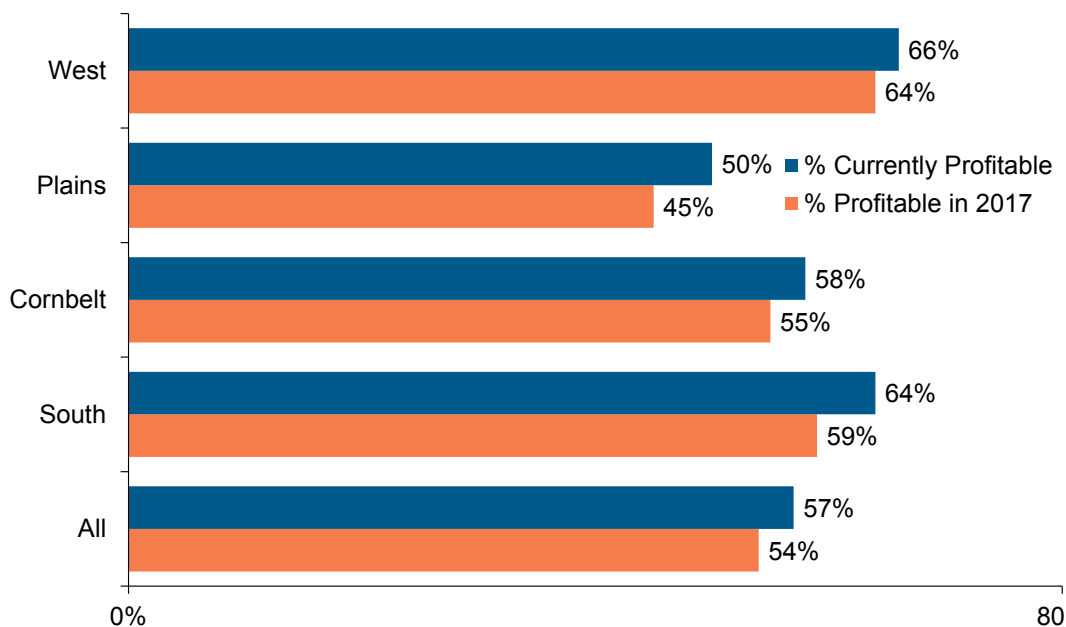
Lenders at institutions with assets under \$100 million are less likely to be concerned about weak loan demand. Smaller institutions are known to be relationship lenders, relying more heavily on the traditional banking concepts of accepting deposits and lending to its depositors. This is reflected in higher loan-to-deposit ratios at smaller intuitions. Such relationship-based lending creates a strong and consistent connection between lender and borrower, and may be indicative of the lack of concern about weak loan demand felt by lenders at smaller intuitions.

The majority of lenders indicate vendor (or supplier) lending increased over the past 12 months (54 percent). Lenders in the South are less likely to observe this shift, with 62 percent responding that vendor financing remained about the same over the past 12 months. However, excluding nonbank lenders, bankers indicate that their greatest competitor for agricultural loans is the Farm Credit System, followed by other community and regional banks. The responses indicate that credit unions and insurance companies are not the most active competitors in the agricultural lending area.

Agricultural Credit Quality

The agricultural economy has weakened, with farm sector profitability expected to decline further in 2017 for the fourth consecutive annual decline. This is an ongoing concern for agricultural lenders as repayment rates may begin to decline and the threat of asset quality deteriorations increases. Credit concerns remain manageable, well below historical norms. Agricultural lenders remain ready to assist farmers through any turbulence in the agricultural economy.

Percentage of Customers Profitable in 2016 and 2017



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q18a/b: What percentage of your ag borrowers are currently profitable? What percentage of your ag borrowers will remain profitable through 2017?

On average, survey respondents indicate that 60 percent of their current agricultural borrowers are profitable. However, lenders expect that only 54 percent of their total agricultural borrowers will remain profitable through 2017. This sentiment is less positive in the Plains; lenders expect that only 45 percent of their total agricultural borrowers will remain profitable through 2017. Industry participants have already begun to raise concerns about declining repayment rates on agricultural loans.⁵

Survey respondents in the Plains and West expressed greater concerns regarding agricultural loan deterioration relative to other regions. This may be a consequence of the poor weather conditions experienced in these regions over the past few years. Lenders in these regions also exhibit the lowest utilization of federal crop insurance programs. Crop insurance lowers the risk for the lender and allows lenders to provide the best possible terms for operating loans. While most agricultural borrowers use crop insurance (84 percent) according to survey respondents, agricultural borrowers in the West are significantly less likely to use crop insurance (44 percent). The likelihood of agricultural borrowers using crop insurance is greatest among smaller institutions. The lack of availability of crop insurance on specialty crops limits the amount of crop production protection borrowers can utilize. Lenders in the Plains and West are more concerned with future agricultural loan deterioration problems relative to other regions of the country.

Because lenders expect fewer customers to be profitable in 2017 and are increasingly concerned about loan repayment, most survey respondents noted an increase in the use of government guarantee loans (FSA loans) over the past 12 months (63 percent). This sentiment was felt more strongly as an institution increased in size. 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. It is imperative that these programs continue to receive funding and staffing to provide a foundation of credit availability to the sector.

⁵ Federal Reserve Bank of Kansas City. Agricultural Credit Survey. <https://www.kansascityfed.org/research/indicatorsdata/agcreditsurvey>

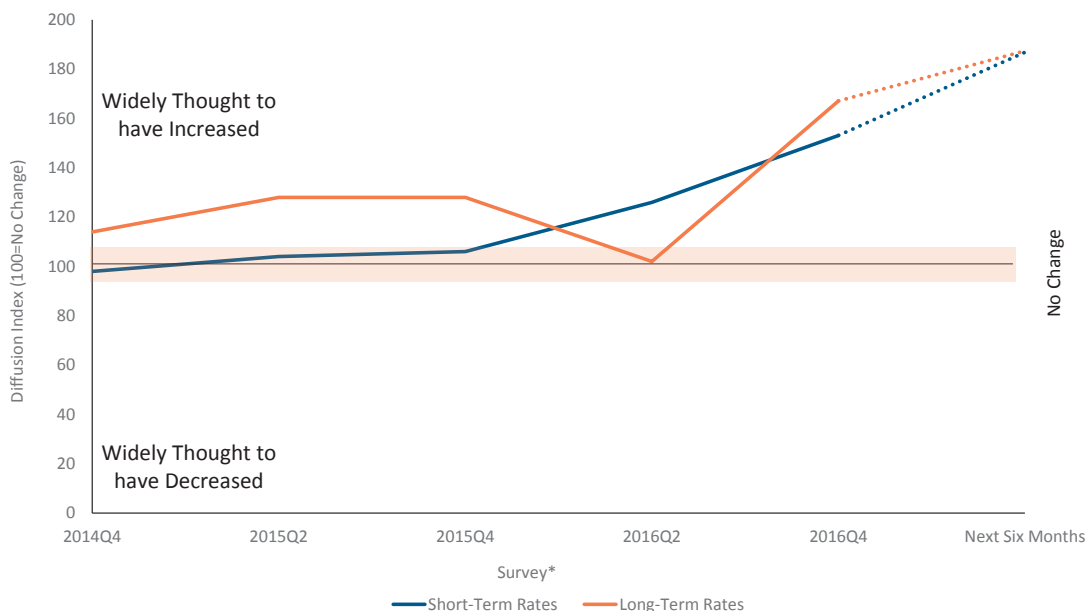
Interest Rate Environment

Persistently low interest rates and the inevitable return to a more normal rate environment is on the mind of both agricultural lenders and borrowers. Interest payments on debt equate to nearly 10-20 percent of agricultural borrowers' earnings.⁶ As rates rise and begin to return to normal levels, debt financing will become more expensive, and the portion of an agricultural borrower's earnings dedicated to interest payments will increase. Lenders must take this into consideration when determining lending lines.

Most survey respondents (55 percent) observe that short-term interest rates increased over the past six months. Lenders at larger institutions, greater than \$5 billion in assets, were more likely to report increases in short-term interest rates relative to peers. In the next six months, the clear majority of respondents (88 percent) expect short-term interest rates to increase. Furthermore, a larger majority of respondents (69 percent) observed that long-term interest rates increased over the past six months. Again, lenders at larger institutions are more likely to report increasing rates. In the next six months, a very high percentage of respondents (89 percent) expect long-term interest rates to increase. However, respondents from the South were less optimistic about the increase in long-term interest rates, with only 69 percent expecting an increase in the next six months.

The expected rise in interest rates comes after years of similar speculation. Agricultural lenders have reported little-to-no changes in agricultural interest rates since 2014, but respondents to the Farmer Mac lender survey in prior years nearly always expected rates to increase in the next six months. The December 2016 survey was delivered shortly after the Federal Reserve's Federal Open Market Committee increased the target federal funds rate, which likely played a role in expectations for future increases. The movement in interest rate expectations in the latest survey indicates lenders are more convinced of a rate increase than they have been in three years.

Diffusion Index for Interest Rates



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016. Prior to 2016Q4, results from Farmer Mac internal surveys 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 will they change in the next 6 months in your area?

6 Farmer Mac. The Feed (2016, Issue 6). "Farm Debt and Interest to EBITC". <https://www.farmermac.com/news-events/the-feed/>

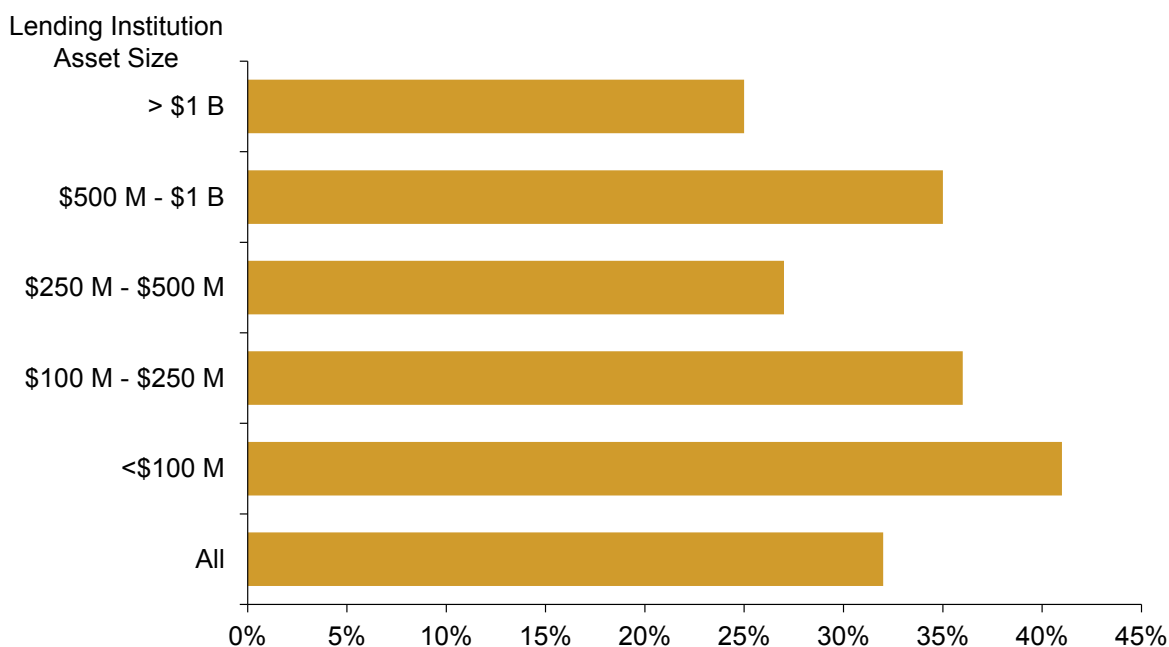
Staffing

The majority of responding institutions (42 percent) have between one and three dedicated agricultural lenders on staff with an average of 19-20 years of experience within the institution. At smaller institutions—assets under \$250 million—agricultural lenders had an average portfolio of \$10 million to \$20 million, while at larger institutions the portfolio size gradually increased reaching levels above \$30 million in some cases. Years of experience of an institution’s agricultural lenders was consistent despite size of institution. However, the years of experience of an institution’s agricultural lenders declined in the West, dropping to an average of 15 years.

Survey respondents from the West were relatively more concerned with the lack of qualified agricultural lending staff. There are a variety of specialty crops farmed in the West and lending to such crops requires specific knowledge that may be difficult to identify and recruit potential new employees. In addition, these specialty crops are less likely to have access to crop insurance, adding to the uncertainty a lender must work through and requiring additional expertise to perform the lending role.

On average, respondents anticipate that a third of the agricultural lending staff will turnover in the next five years. This sentiment is shared equally across the country, while smaller institutions anticipate greater turnover relative to their peers. Recruiting lenders with specialized experiences will remain a concern for smaller agricultural lending intuitions for some time to come.

Anticipated Agricultural Dedicated Lender Turnover in Next 5 years



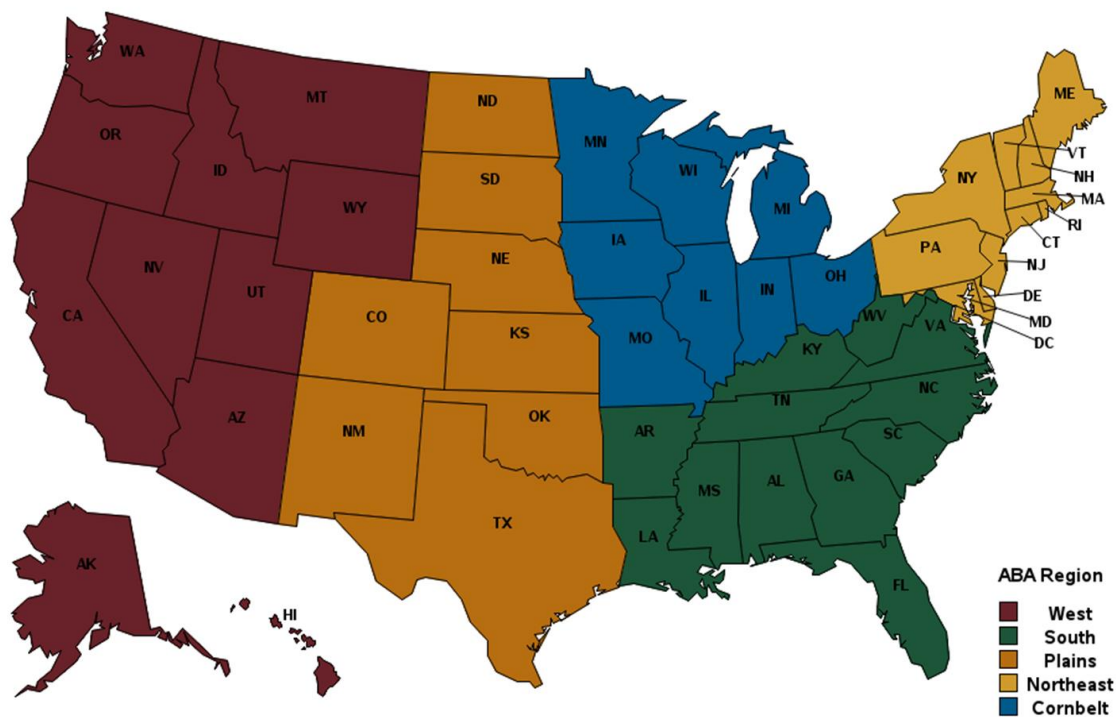
Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
Mean response to Q14: In the next five years, how much turnover within the ag dedicated lending staff do you anticipate percentage wise?

Many survey respondents feel that college graduates with agricultural business degrees are not exiting school with the expected knowledge to start an agricultural lending career. Lenders note that college graduates require significant financial industry training before beginning an agricultural lending career. This sentiment is held across respondents regardless of institutional size. This presents opportunities for lenders to work with agribusiness programs to better structure programs to meet their growing needs.

About the Survey Respondents

Of the thousands of agricultural lenders contacted, more than 350 completed the inaugural ABA-Farmer Mac Agricultural Lender Survey in December and January. The responses came from a diverse set of institutions ranging from under \$50 million in assets to more than \$5 billion in assets. More than half of the responses came from lenders at institutions with \$500 million or less in assets (58 percent). Regionally, the responses were somewhat concentrated in the Cornbelt states (57 percent), which is expected given the high proportion of agricultural production and lending that occurs in those states.

ABA Regions



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, nuts and vegetables than other regions. Lenders responding from the South note a relatively higher proportion of poultry and other crops including cotton, peanuts and hay. These portfolio weights line up well with regional productive capabilities.

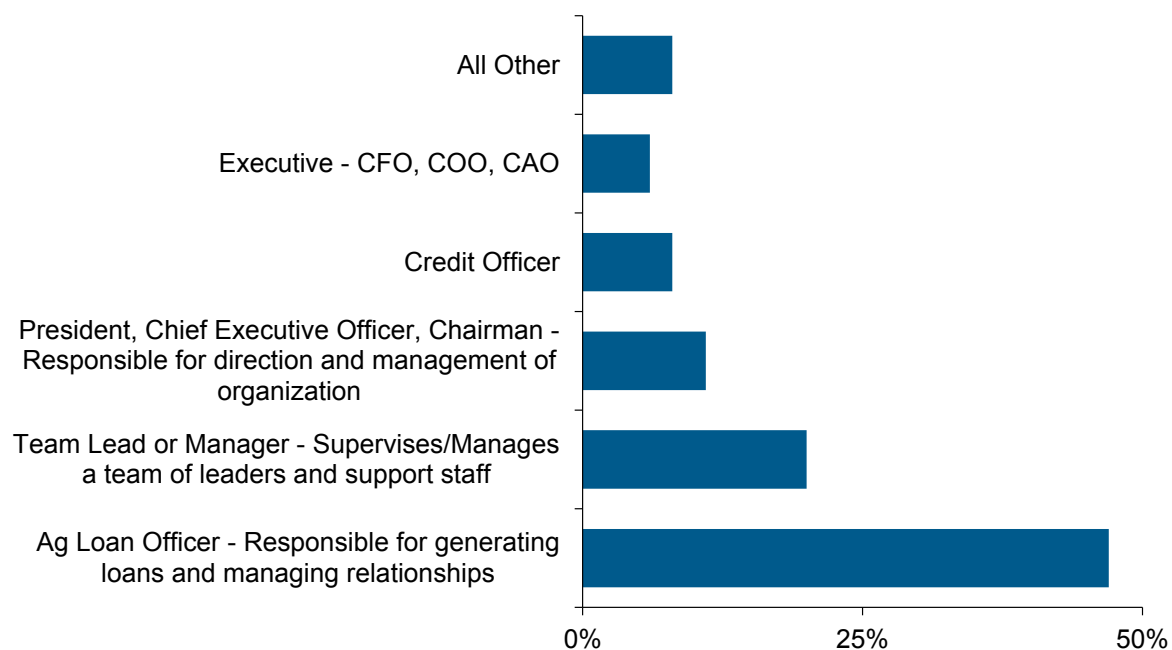
Portfolio Concentration by Region

Commodity Group	Average of Responses				
	South	Cornbelt	Plains	West	All
Grains	48%	65%	57%	19%	57%
Beef cattle	12%	12%	33%	35%	19%
Dairy	5%	11%	2%	4%	9%
Poultry and Swine	13%	7%	2%	0%	5%
Fruits, Nuts, and Vegetables	3%	0%	0%	23%	2%
Other*	19%	5%	6%	19%	8%
Total	100%	100%	100%	100%	100%

Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q5: What percentage of your agricultural credit portfolio is in the following?
 * 'Other' category used to reconcile values sum to 100%.

Survey respondents had a variety of roles at their respective institutions. The most common title or role reported was an agricultural loan officer (46 percent). Others reported team manager roles, senior executives and credit officers.

Survey Respondent Job Responsibilities



Source: ABA-Farmer Mac Agricultural Lenders Survey December 2016
 Mean response to Q28: What is your role at your institution?

About ABA and Farmer Mac

The American Bankers Association is the voice of the nation's \$17 trillion banking industry, which is composed of small, regional and large banks that together employ more than 2 million people, safeguard \$13 trillion in deposits and extend more than \$9 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 our low cost of funds, low overhead costs, and high operational efficiency. In fact, we are often able to provide the lowest cost of borrowing to agricultural and rural borrowers. For more than a quarter-century, 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.