



# AGRICULTURAL LENDER SURVEY

## FALL 2016 REPORT



*Semi-annual survey of agricultural lenders from across the nation.*

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# AGRICULTURAL LENDER SURVEY

## Executive Summary

### INTEREST RATES

No change in interest rates over the past three months. Expectations remain for interest rates to increase in both the short and long term.

### SPREAD OVER COST OF FUNDS

Spread over cost of funds decreased over the past three months indicating higher competition in the agricultural credit markets. Lenders expect this trend to reverse in the short and long term.

### FARM LOAN VOLUME

Demand for all three types of farm loans remains high, particularly for operating loans which lenders expect an increased need for due to deteriorating industry liquidity.

### NON-PERFORMING LOANS

Lenders reported an increase in non-performing loans for all loan types. Expectations continue to be that non-performing loans will increase in both the short and long term.

### LAND VALUES

Expectations for land values continue to show decreasing farmland values in both the short and long term. Lenders reported falling farmland values for the past three months.

## Survey Overview and Demographic Information

### PURPOSE

The Department of Agricultural Economics at Kansas State University conducts a semi-annual survey of Agricultural Lenders to gauge the recent, short term and long term future assessment of the credit situation for production agriculture. The results provide a measure of the health of the sector in a forward looking manner.

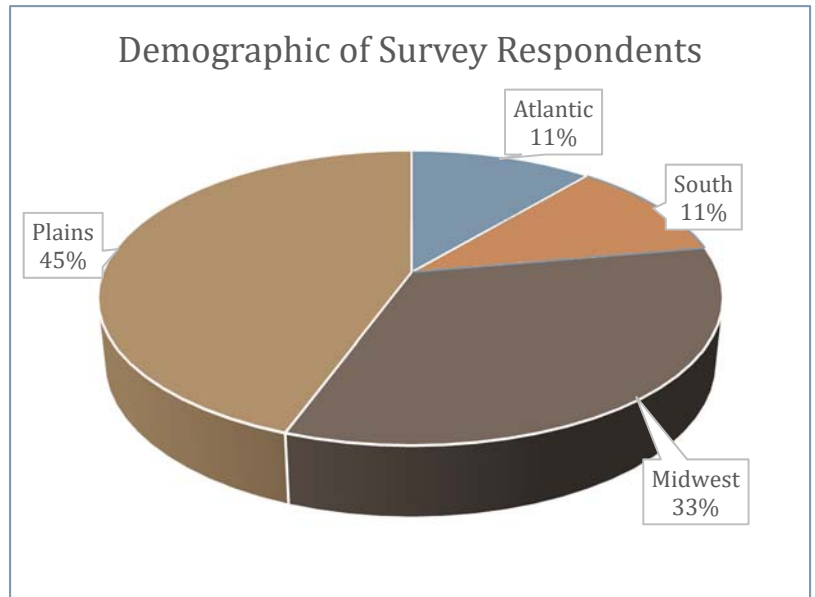
Each institution surveyed provided their sentiment on the current and expected state of four key areas: (1) farm loan interest rates; (2) spread over cost of funds; (3) farm loan volumes; (4) non-performing loan volumes; and (5) agricultural land values. Within each of these key areas, different loan types were assessed (farm real-estate, intermediate and operating loans) as well as the different agricultural sectors (corn and soybeans, wheat, beef, dairy, etc.).

The survey responses are summarized using a diffusion index. This index is calculated by taking the percentage of those indicating increase minus the percentage of those indicating decrease plus 100. Therefore, an index above (below) 100 indicates respondents expect or experienced an increase (decrease) in the measure of interest. For example, on page 4, the graph for “Farm Real Estate Loans Interest Rates” illustrates that the index for Fall 2016 expected short term farm real estate equals 153. This number represents the fact that 53 more percentage points of lenders believe that farm real estate interest rates would increase in the short run rather than those that believe rates will go down.

# AGRICULTURAL LENDER SURVEY

## SURVEY DEMOGRAPHICS

Figure 1 shows the demographics of the Fall 2016 survey respondents by primary service territory. The five territories are: Midwest, West, Atlantic, South and Plains. Table 1 has a list of the states in each region. Forty five percent of survey respondents came from the Plains region while 33%, 0%, 11% and 11% came from the Midwest, West, Atlantic, and South regions, respectively. Six percent of respondents indicated their respective lending institution was national in scope.



# AGRICULTURAL LENDER SURVEY

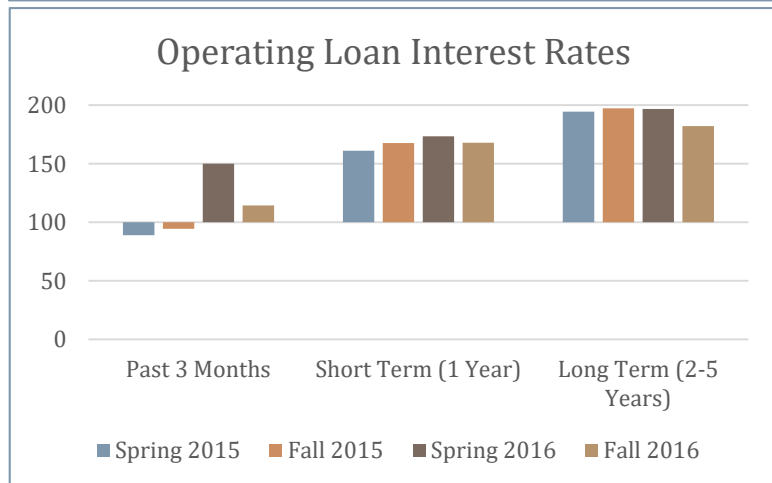
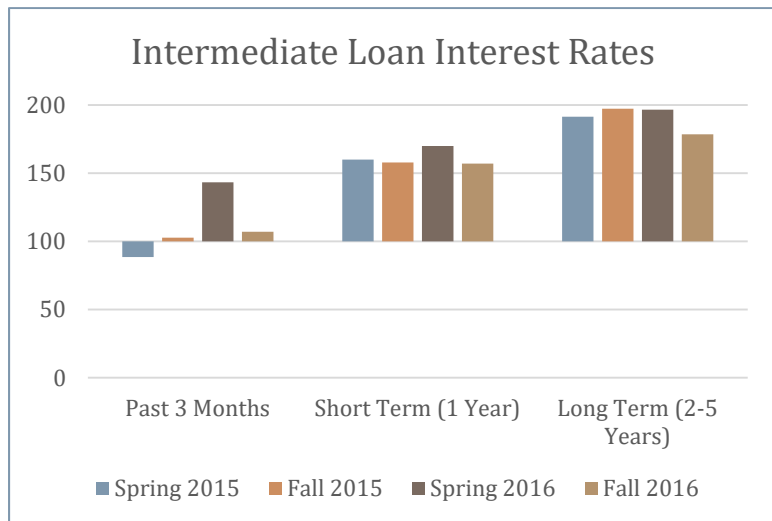
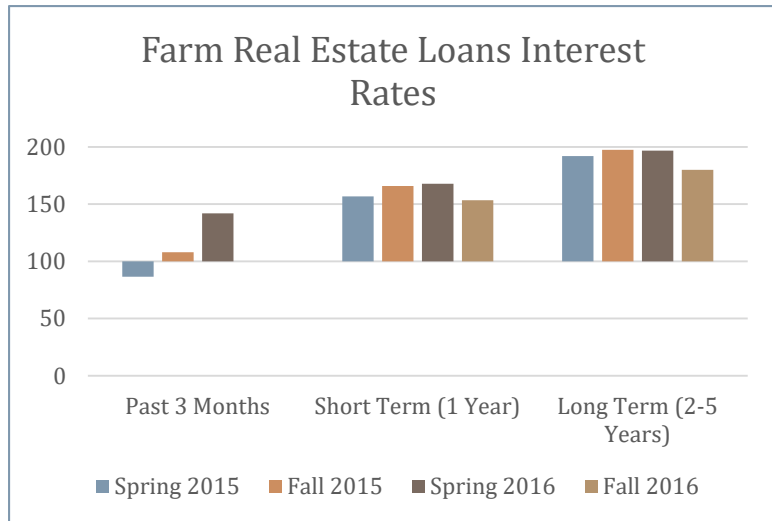
## Interest Rates

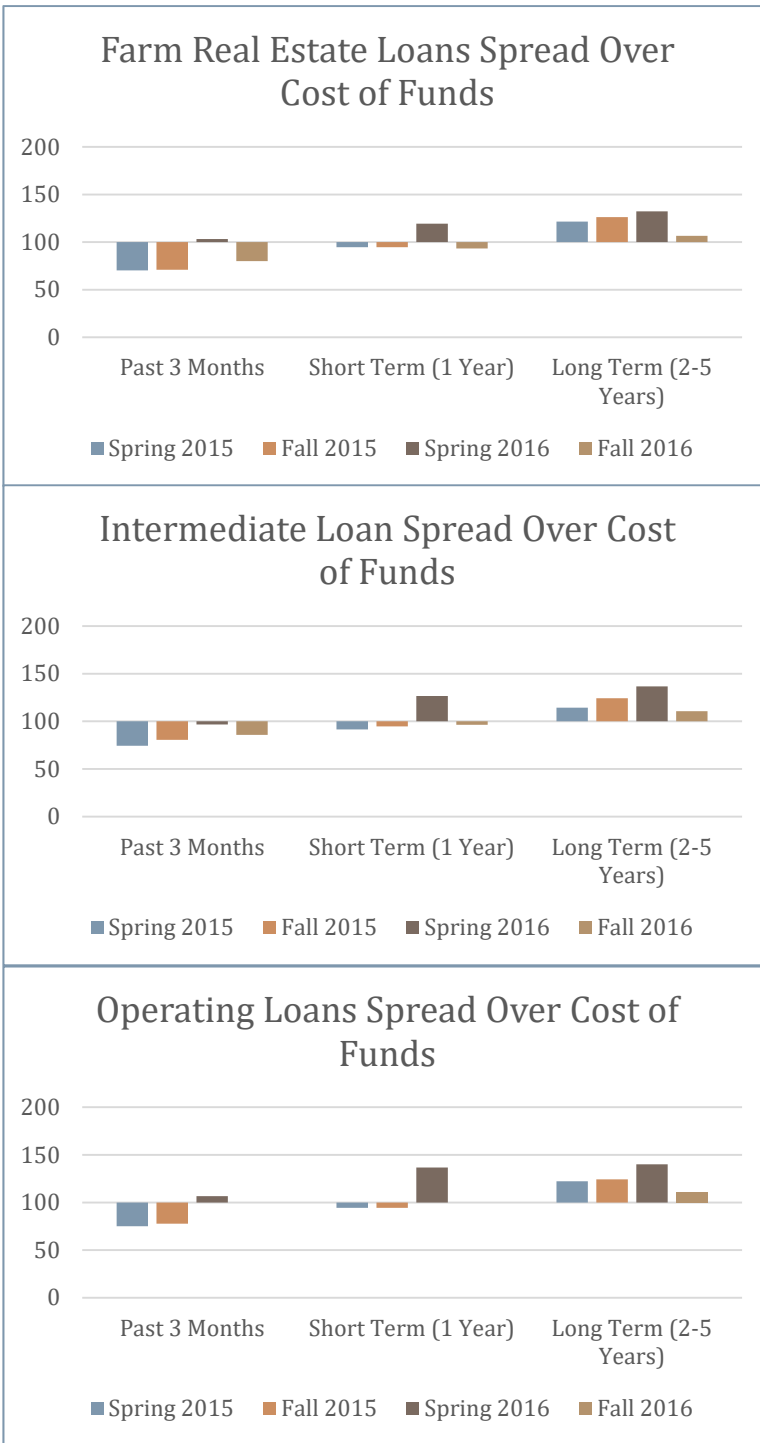
The three figures to the right show the last 4 periods of lender expectations of interest rates for farm real estate loans, intermediate loans and operating loans. All lenders are asked what they experienced over the past three months as well as his/her expectations for the short term and long term.

Over all three loan categories, lenders indicated very little change in interest rates for the time period. In fact, for farm real estate loans, only 20% of respondents indicated any change at all with 80% of respondents indicating no change (Table 2).

Lenders expectations for both the short term and long term continue to indicate an increase in interest rates. Until the FOMC announces any formal plan on raising interest rates, these expectations will likely continue.

For a complete history of the expectations lenders have had for interest rates please see Figure A1 at the back of this report.





## Spread Over Cost of Funds

The spread over cost of funds is the difference between the loan interest rates charged by the lending institution and the interest rate paid by the financial institution for the funds that they deploy in their business. The reason for obtaining information for both loan interest rates and spread over cost of funds is to gauge competition in the agricultural lending market. A decrease in the spread over cost of funds suggests competition for agricultural loans among lending institutions may be increasing.

Respondents indicated a decrease in spread over cost of funds for farm real estate loans and intermediate loans. No change was reported for operating loan spread over cost of funds. These numbers are indicative of increasing competition in the agricultural credit markets.

In the short term and long term, lenders still expect spread over cost of funds to increase meaning agricultural lending would be more profitable for lending institutions in the future.

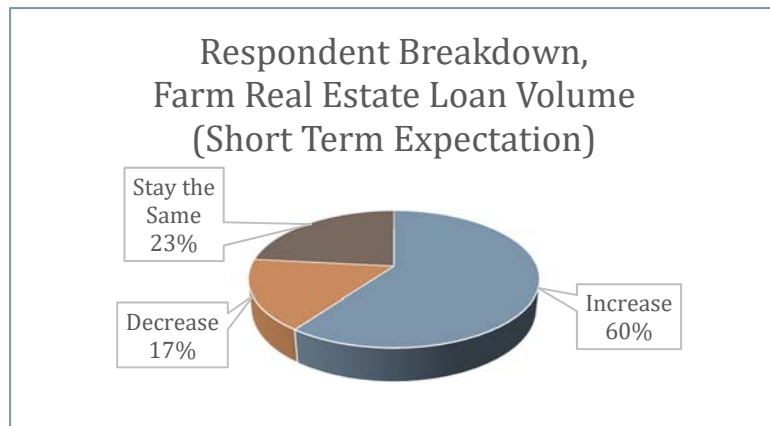
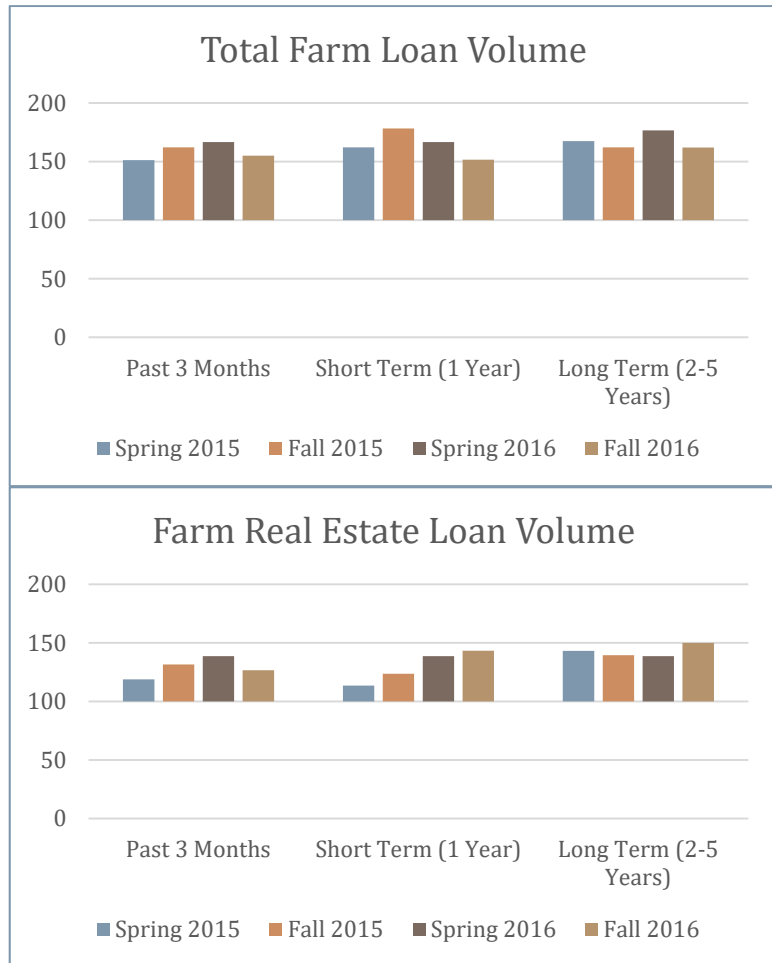
The historical responses to spread over cost of funds are at the back of this document in Figure A2.

# AGRICULTURAL LENDER SURVEY

## Farm Loan Volume

Farm loan volume measures the demand for money in production agriculture. The respondents are asked about four different categories of loans: total, farm real estate, intermediate, and operating.

Respondents indicate an increasing demand for all categories of farm loans. However, for farm real estate loans, a lower percentage of lenders reported an increase over the past three months. This is indicative of a less active agricultural real estate market. However, despite the decrease in the demand for farm real estate loans the past three months, lenders expectations of future demand continues to increase.



Agricultural lenders expect demand for total farm loans to increase in both the short term and long term. There is a particularly strong sentiment in the short term as 60% of lenders expect an increase in the next year with only 17% expecting a decrease. This increase in demand may indicate that lenders expect more farm real estate to change hands in the future.

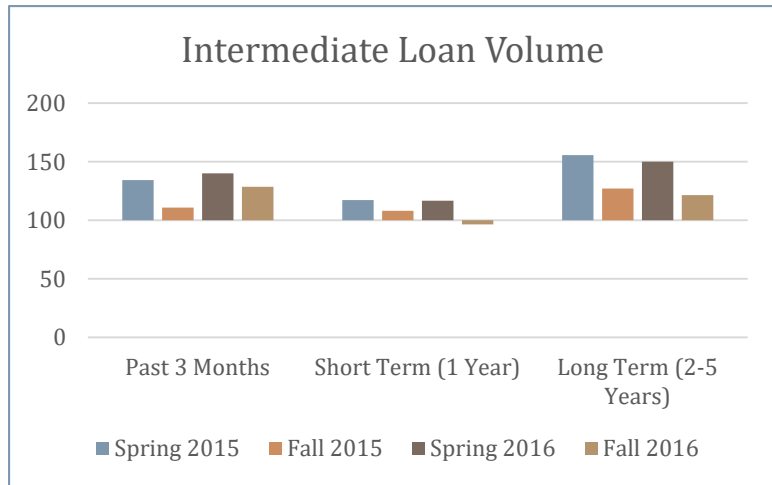


# AGRICULTURAL LENDER SURVEY

Over the past three months, lenders reported an increase in both intermediate loans and operating loans.

However, lenders indicate that they expect the intermediate loan volume to decrease in the short term. This may be due to the decline in capital expenditure purchases relating to equipment such as tractors and implements. What could push this number up

is farmers selling unused or lightly used equipment that is not vital to the farm's core functions. In this scenario, there may be farmers buying some assets at discounted prices.

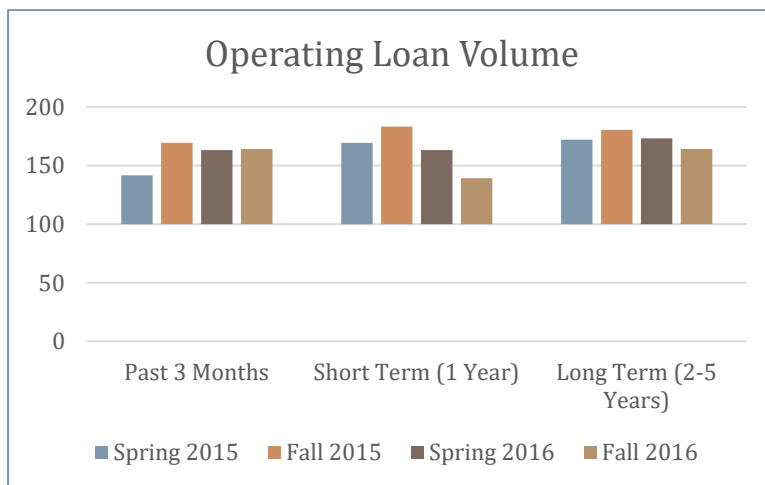


Expectations of operating loan volumes remains high. Many lenders are expecting a high

demand for operating lines of credit due to a deterioration of liquidity. One lender responded that "Most, if not all, wheat producers are short" referring to the upcoming need for operating loans.

"Most, if not all, wheat producers are short."  
 Fall 2016 Survey Respondent

The historical responses to farm loan volume are at the back of this document in Figure A3.



# AGRICULTURAL LENDER SURVEY

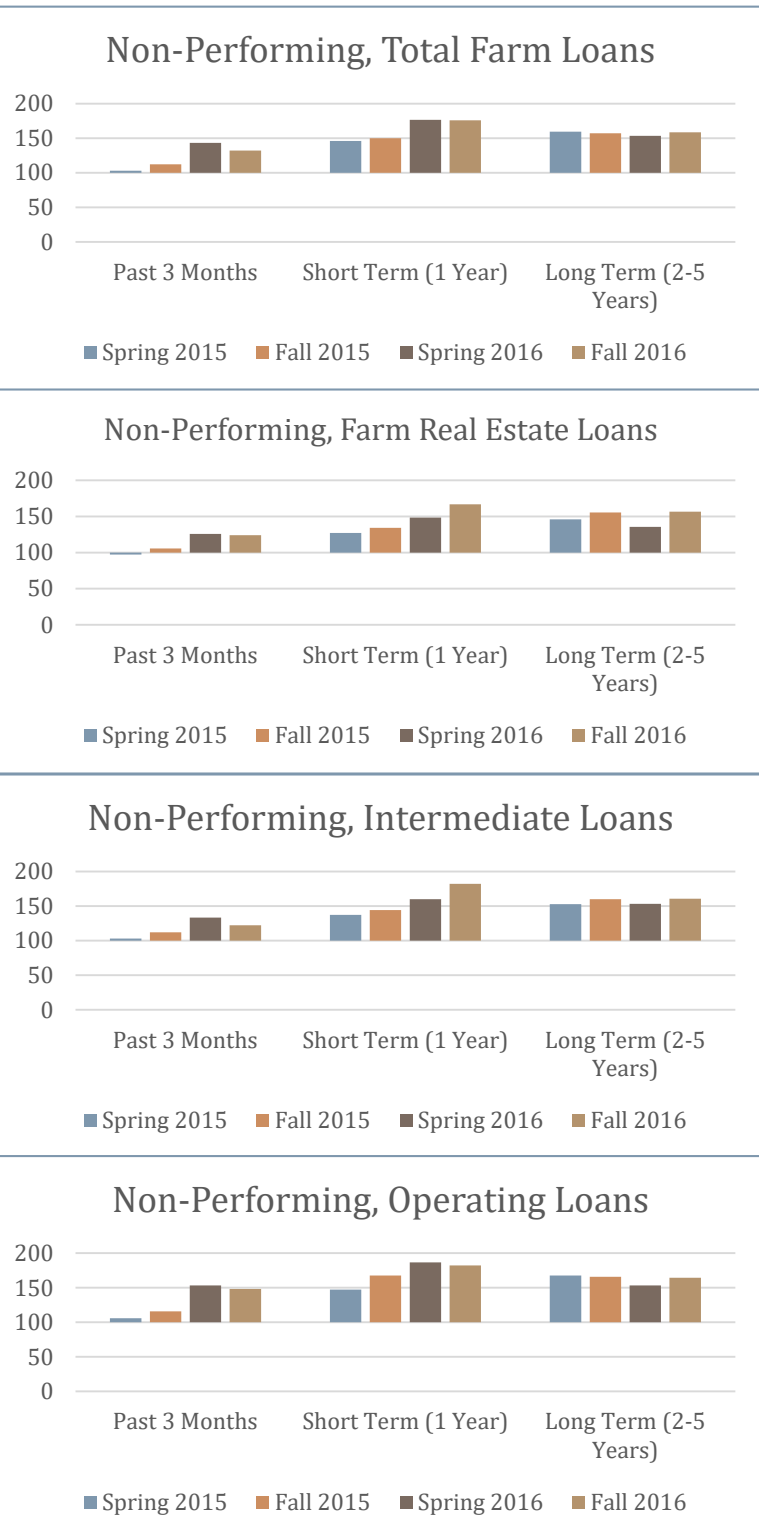
## Non-Performing Loans

Survey respondents are asked about their expectations of non-performing loans from two aspects. The first is by their expectation depending on the type of loan and the second is by the sector of the agricultural economy in which the loan was made.

### BY LOAN TYPE

Analyzing the expectations for non-performing loans by loan type, it is apparent that lenders expect an increase in non-performing loans for all types in both the short and long term. Lenders also reported an increase in non-performing loans over the past three months for all types of loans.

The historical responses to non-performing loans are at the back of this document in Figure A4.



# AGRICULTURAL LENDER SURVEY

## BY CROP SECTOR

Lender expectations for non-performing loans by crop sector are not much different than by loan type: lenders expect an increase in non-performing loans. However, this sentiment is stronger for some crops than others.

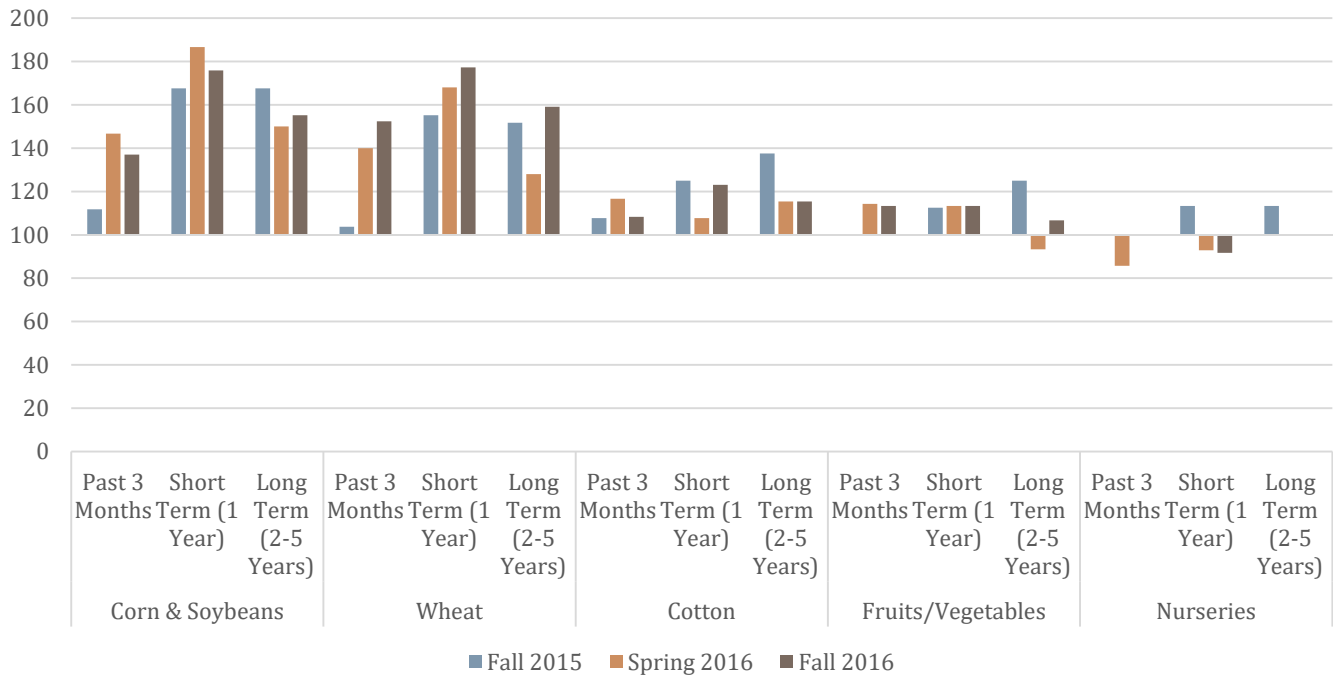
In the past three months, the largest increases for non-performing loans are attributable to corn and soybeans and wheat loans. Increases for cotton and fruit/vegetables remain low.

In the short and long term, lenders expect the highest increases in non-performing loans to be in the corn and soybean and wheat commodities. In the short term, above average crops have offset the decline in commodity prices for corn and soybeans. However, this harvest across commodities has caused stocks to increase resulting in depressed prices in the longer term.

“It appears, as we are going into harvest, that the outstanding yields for corn and soybeans may offset the decline in commodity prices.”

Fall 2016 Survey Respondent

### Non-Performing, Crop Sector



# AGRICULTURAL LENDER SURVEY

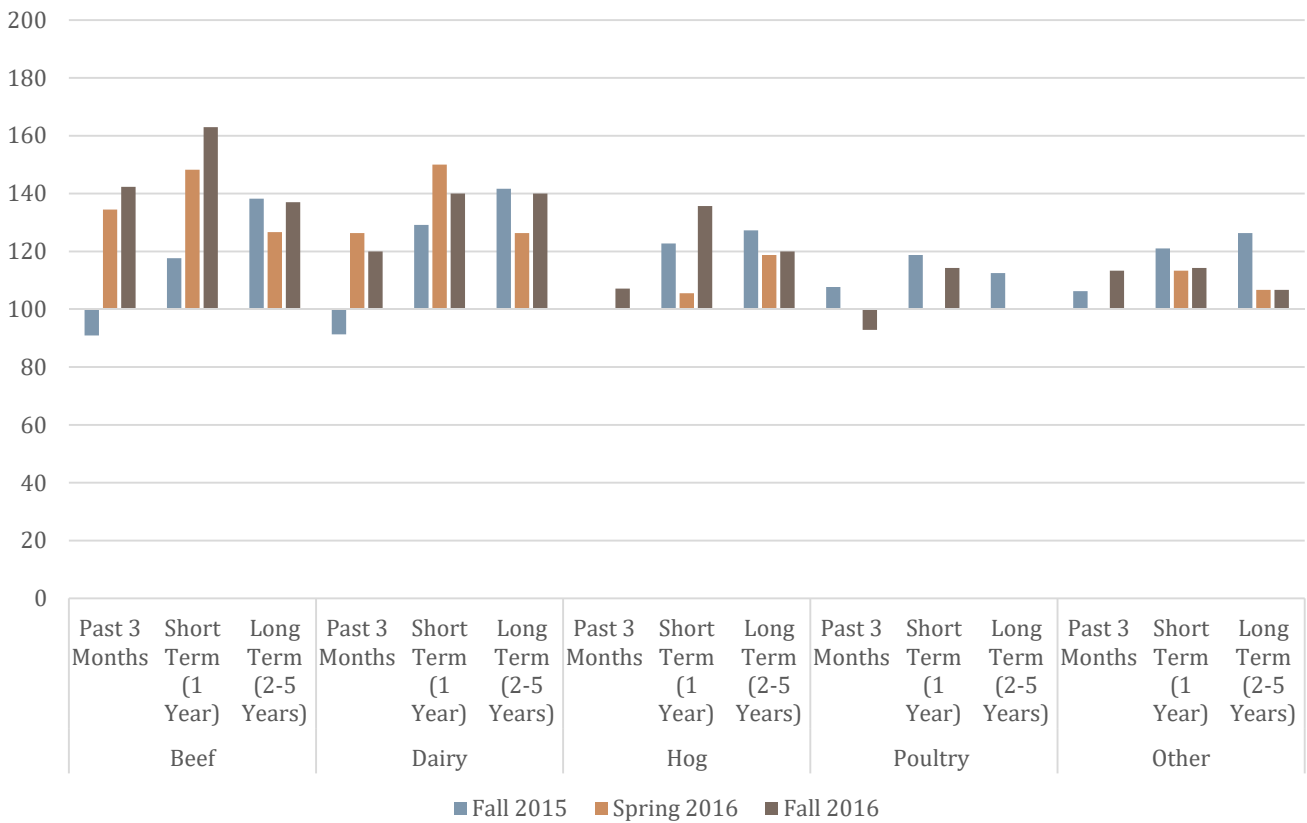
## BY LIVESTOCK SECTOR

Livestock sectors, a bright spot a year ago, are also experiencing cash flow issues this fall. Lenders reported an increase in non-performing loans for beef, dairy and hog operations. Poultry was the loan sector to not experience an increase in non-performing loans. Lender expectations for both the short and long term are for this trend of increasing non-performing loans to continue.

“Cattle feeding losses have continued to be large. Many ranchers either decided not to place cattle on video markets this summer or to no sale calves because they did not like the prices offered. We anticipate a glut of feeder calves on the market this fall. Most feeders have a weaker working capital position than they have had in many years which will temper their appetite to pay up for calves. This will put pressure on cow-calf operations this fall and we anticipate more retained ownership. More calves in rancher hands through finish will likely prolong the pain that exists in the feed yard sector.”

Fall 2016 Survey Respondent

### Non-Performing, Livestock Sectors



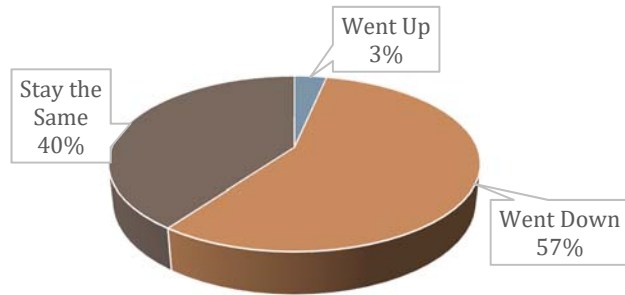
# AGRICULTURAL LENDER SURVEY

## Land Values

Over the past three months, 57% of lenders reported decreasing land values in their loan service territory while only 3% of lenders reported an increase and 40% reported no change.

The expectations of lenders are for this trend to continue in both the short and long term.

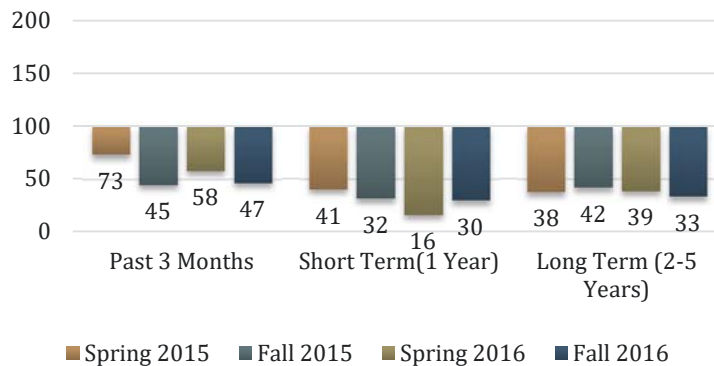
Lender Response to Land Values, Past Three Months



“Land rents are being negotiated down. More real estate is on the market now than over the last few years. Not a lot of trade yet but feels like activity will continue to pick up, particularly later in the winter and early next spring when operations have finished this year's crop cycle and making plans for the next year.”

Fall 2016 Survey Respondent

## Land Values



## Author Information

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# AGRICULTURAL LENDER SURVEY

**Table A1, States in Each Region**

<b>Atlantic</b>	CT, DE, KY, ME, MD, MA, NH, NJ, NY, NC, PA, RI, TN, VA, VT, WV
<b>South</b>	AL, AR, FL, GA, LA, MS, SC
<b>Midwest</b>	IA, IL, IN, MI, MN, MO, OH, WI
<b>Plains</b>	KS, NE, ND, OK, SD, TX
<b>West</b>	AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY

# AGRICULTURAL LENDER SURVEY

**Table A2, Respondent Responses**

		Interest Rates									Spread Over Cost of Funds								
		Farm Real Estate			Intermediate			Operating			Farm Real Estate			Intermediate			Operating		
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher
Past Three Months	Spring 2013	55%	42%	3%	52%	43%	2%	48%	50%	0%	56%	35%	10%	56%	37%	6%	58%	39%	3%
	Fall 2013	17%	44%	39%	12%	58%	30%	18%	70%	12%	36%	56%	8%	30%	61%	9%	32%	61%	7%
	Spring 2014	14%	67%	19%	13%	78%	30%	16%	50%	5%	28%	67%	5%	24%	71%	5%	23%	71%	5%
	Fall 2014	14%	74%	12%	12%	78%	7%	15%	44%	7%	30%	65%	5%	29%	68%	2%	32%	63%	5%
	Spring 2015	19%	76%	5%	11%	89%	0%	11%	89%	0%	30%	70%	0%	26%	74%	0%	25%	75%	0%
	Fall 2015	5%	79%	13%	8%	78%	11%	11%	81%	6%	32%	63%	3%	22%	72%	3%	25%	69%	3%
	Spring 2016	3%	52%	45%	0%	57%	43%	0%	50%	50%	10%	77%	13%	13%	77%	10%	13%	67%	20%
	Fall 2016	10%	80%	10%	4%	86%	11%	0%	86%	14%	27%	67%	7%	25%	64%	11%	14%	71%	14%
Short Term	Spring 2013	11%	75%	14%	14%	72%	12%	17%	73%	9%	48%	51%	3%	46%	54%	2%	43%	52%	3%
	Fall 2013	0%	44%	56%	0%	51%	49%	0%	65%	35%	22%	56%	22%	19%	58%	23%	23%	54%	23%
	Spring 2014	5%	50%	45%	5%	50%	45%	7%	53%	40%	32%	60%	9%	31%	58%	11%	27%	60%	13%
	Fall 2014	2%	44%	53%	2%	46%	51%	2%	50%	48%	23%	63%	14%	22%	66%	12%	22%	61%	17%
	Spring 2015	0%	43%	57%	0%	40%	60%	0%	39%	61%	24%	57%	19%	20%	69%	11%	22%	61%	17%
	Fall 2015	0%	34%	66%	0%	42%	58%	0%	32%	13%	24%	58%	18%	27%	51%	22%	31%	44%	25%
	Spring 2016	0%	32%	68%	0%	30%	70%	0%	27%	73%	6%	68%	26%	7%	60%	33%	3%	57%	40%
	Fall 2016	3%	40%	57%	0%	43%	57%	0%	32%	68%	20%	67%	13%	18%	68%	14%	14%	71%	14%
Long Term	Spring 2013	2%	14%	85%	2%	9%	88%	2%	8%	89%	31%	34%	38%	30%	29%	38%	27%	32%	40%
	Fall 2013	0%	19%	81%	0%	21%	79%	0%	19%	81%	14%	42%	44%	12%	42%	46%	14%	44%	42%
	Spring 2014	0%	5%	95%	0%	4%	96%	0%	7%	93%	26%	42%	32%	27%	44%	29%	25%	42%	33%
	Fall 2014	0%	5%	95%	0%	7%	93%	0%	7%	93%	16%	47%	37%	27%	46%	39%	15%	44%	41%
	Spring 2015	0%	8%	92%	0%	9%	91%	0%	6%	94%	22%	35%	43%	23%	40%	37%	22%	33%	44%
	Fall 2015	0%	3%	97%	0%	3%	97%	0%	3%	97%	16%	42%	42%	16%	43%	41%	19%	38%	43%
	Spring 2016	0%	3%	97%	0%	3%	97%	0%	3%	97%	16%	35%	48%	13%	37%	50%	13%	33%	53%
	Fall 2016	0%	20%	80%	0%	21%	79%	0%	18%	82%	23%	47%	30%	18%	54%	29%	21%	46%	32%



# AGRICULTURAL LENDER SURVEY

**Table A2 Continued, Respondent Responses**

		Farm Dollar Volume											
		Total Farm Loans			Farm Real Estate			Intermediate			Operating		
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher
Past Three Months	Spring 2013	32%	22%	45%	12%	35%	52%	28%	46%	22%	40%	26%	31%
	Fall 2013	5%	46%	49%	7%	51%	42%	9%	66%	25%	12%	54%	33%
	Spring 2014	20%	32%	48%	9%	41%	50%	16%	56%	27%	29%	35%	36%
	Fall 2014	12%	35%	53%	16%	40%	44%	20%	44%	37%	12%	29%	59%
	Spring 2015	5%	38%	57%	14%	54%	32%	11%	43%	46%	8%	42%	50%
	Fall 2015	5%	27%	68%	8%	53%	39%	8%	70%	19%	3%	22%	72%
	Spring 2016	0%	33%	67%	10%	42%	48%	7%	47%	47%	7%	23%	70%
	Fall 2016	3%	38%	59%	13%	47%	40%	7%	57%	36%	4%	29%	68%
Short Term	Spring 2013	9%	43%	46%	8%	43%	49%	9%	58%	28%	6%	50%	42%
	Fall 2013	0%	41%	59%	8%	46%	46%	5%	56%	39%	5%	40%	54%
	Spring 2014	2%	21%	77%	3%	38%	59%	22%	29%	49%	4%	24%	73%
	Fall 2014	9%	35%	56%	19%	49%	33%	17%	41%	41%	7%	24%	68%
	Spring 2015	5%	27%	68%	22%	43%	35%	20%	43%	37%	3%	25%	72%
	Fall 2015	3%	14%	81%	13%	47%	37%	24%	41%	32%	0%	14%	83%
	Spring 2016	0%	33%	67%	16%	29%	55%	20%	43%	37%	7%	23%	70%
	Fall 2016	7%	34%	59%	17%	23%	60%	29%	46%	25%	11%	39%	50%
Long Term	Spring 2013	9%	25%	65%	15%	29%	55%	19%	30%	48%	5%	28%	65%
	Fall 2013	2%	36%	63%	8%	42%	49%	5%	47%	47%	4%	33%	63%
	Spring 2014	0%	21%	79%	7%	29%	64%	7%	39%	54%	0%	29%	71%
	Fall 2014	5%	23%	72%	14%	19%	67%	15%	30%	56%	17%	17%	76%
	Spring 2015	3%	27%	70%	11%	35%	54%	8%	28%	64%	0%	28%	72%
	Fall 2015	8%	19%	70%	18%	21%	58%	14%	43%	41%	3%	11%	83%
	Spring 2016	0%	23%	77%	16%	29%	55%	10%	30%	60%	3%	20%	77%
	Fall 2016	3%	31%	66%	10%	30%	60%	18%	43%	39%	4%	29%	68%

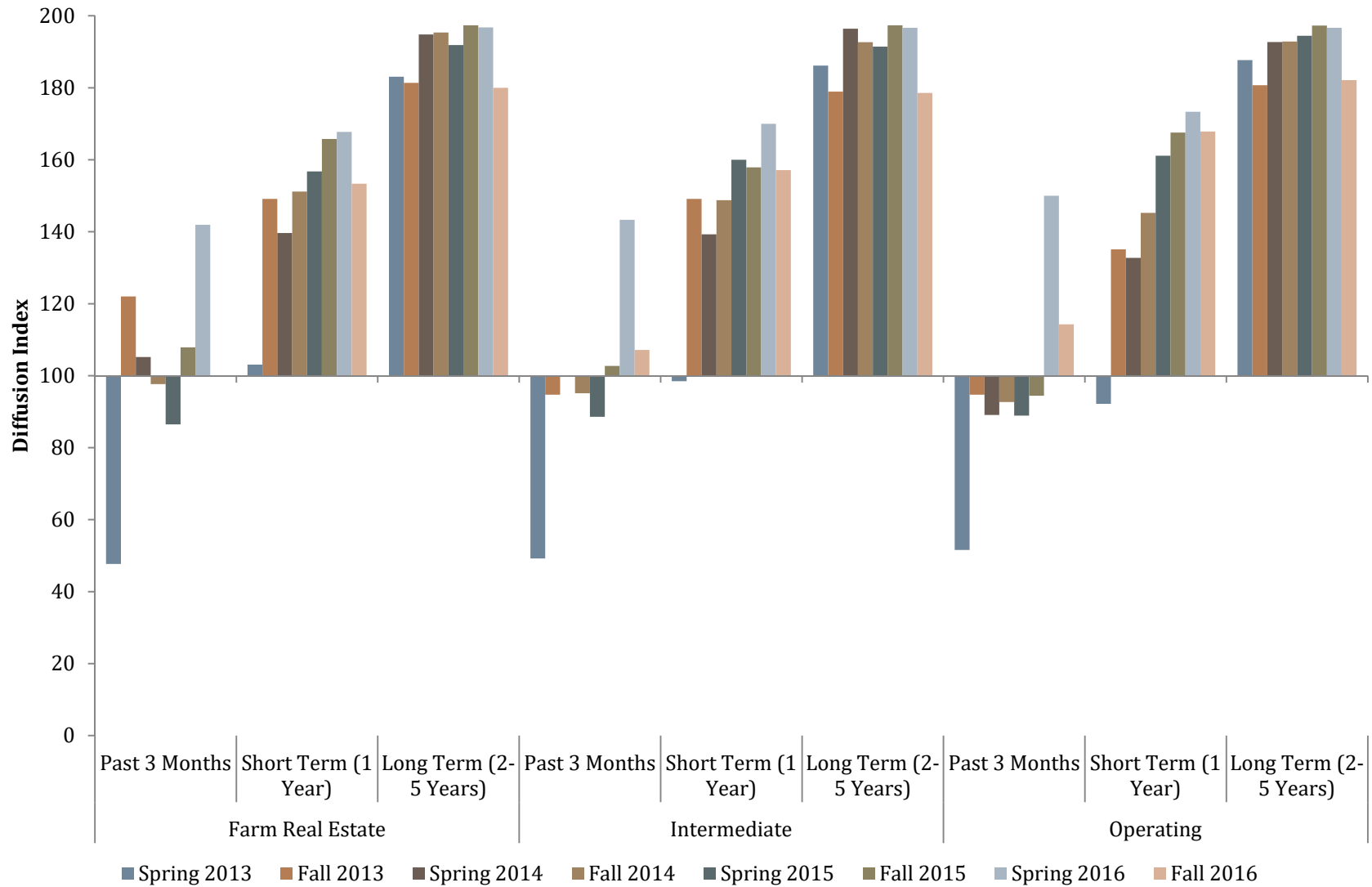
# AGRICULTURAL LENDER SURVEY

**Table A2 Continued, Respondent Responses**

		Non-Performing Loan by Loan Type												Ag Land Values		
		Total Farm Loans			Farm Real Estate			Intermediate			Operating			Lower	Same	Higher
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher			
Past Three Months	Spring 2013	28%	58%	0%	27%	63%	0%	27%	61%	0%	24%	63%	3%			
	Fall 2013	31%	67%	2%	24%	74%	2%	29%	69%	2%	27%	69%	4%	0%	61%	39%
	Spring 2014	27%	71%	2%	28%	68%	4%	20%	78%	2%	20%	76%	4%	14%	50%	36%
	Fall 2014	32%	68%	0%	29%	68%	3%	29%	71%	0%	26%	66%	9%	14%	69%	17%
	Spring 2015	3%	91%	6%	3%	97%	0%	3%	91%	6%	3%	88%	9%	35%	57%	8%
	Fall 2015	0%	85%	12%	3%	86%	9%	0%	85%	12%	0%	81%	16%	58%	37%	3%
	Spring 2016	0%	57%	43%	0%	74%	26%	0%	67%	33%	0%	47%	53%	48%	45%	6%
	Fall 2016	0%	68%	32%	0%	76%	24%	0%	78%	22%	0%	52%	48%	57%	40%	3%
Short Term	Spring 2013	28%	58%	3%	30%	64%	3%	26%	65%	3%	30%	61%	7%			
	Fall 2013	18%	70%	13%	15%	80%	5%	17%	74%	9%	13%	72%	15%	17%	61%	22%
	Spring 2014	9%	69%	22%	9%	71%	20%	9%	74%	17%	8%	63%	29%	33%	52%	16%
	Fall 2014	5%	49%	46%	5%	68%	27%	5%	67%	28%	5%	38%	56%	48%	45%	7%
	Spring 2015	3%	49%	49%	3%	68%	30%	3%	57%	40%	3%	47%	50%	59%	41%	0%
	Fall 2015	3%	41%	53%	3%	57%	37%	3%	47%	47%	3%	24%	71%	71%	24%	3%
	Spring 2016	0%	23%	77%	6%	39%	55%	3%	33%	63%	0%	13%	87%	84%	16%	0%
	Fall 2016	0%	24%	76%	0%	33%	67%	0%	18%	82%	0%	18%	82%	73%	23%	3%
Long Term	Spring 2013	19%	56%	20%	21%	62%	17%	16%	65%	18%	16%	63%	19%			
	Fall 2013	14%	46%	40%	12%	49%	39%	11%	53%	36%	11%	45%	45%	46%	44%	10%
	Spring 2014	7%	40%	53%	7%	41%	52%	6%	48%	46%	4%	42%	54%	59%	29%	12%
	Fall 2014	10%	33%	57%	10%	45%	45%	12%	44%	44%	13%	33%	55%	64%	26%	10%
	Spring 2015	3%	35%	62%	3%	49%	49%	3%	42%	56%	3%	27%	70%	65%	32%	3%
	Fall 2015	6%	29%	63%	6%	31%	61%	6%	26%	66%	6%	20%	71%	66%	24%	8%
	Spring 2016	10%	27%	63%	16%	32%	52%	10%	27%	63%	10%	27%	63%	68%	26%	6%
	Fall 2016	3%	34%	62%	3%	37%	60%	4%	32%	64%	4%	29%	68%	70%	27%	3%

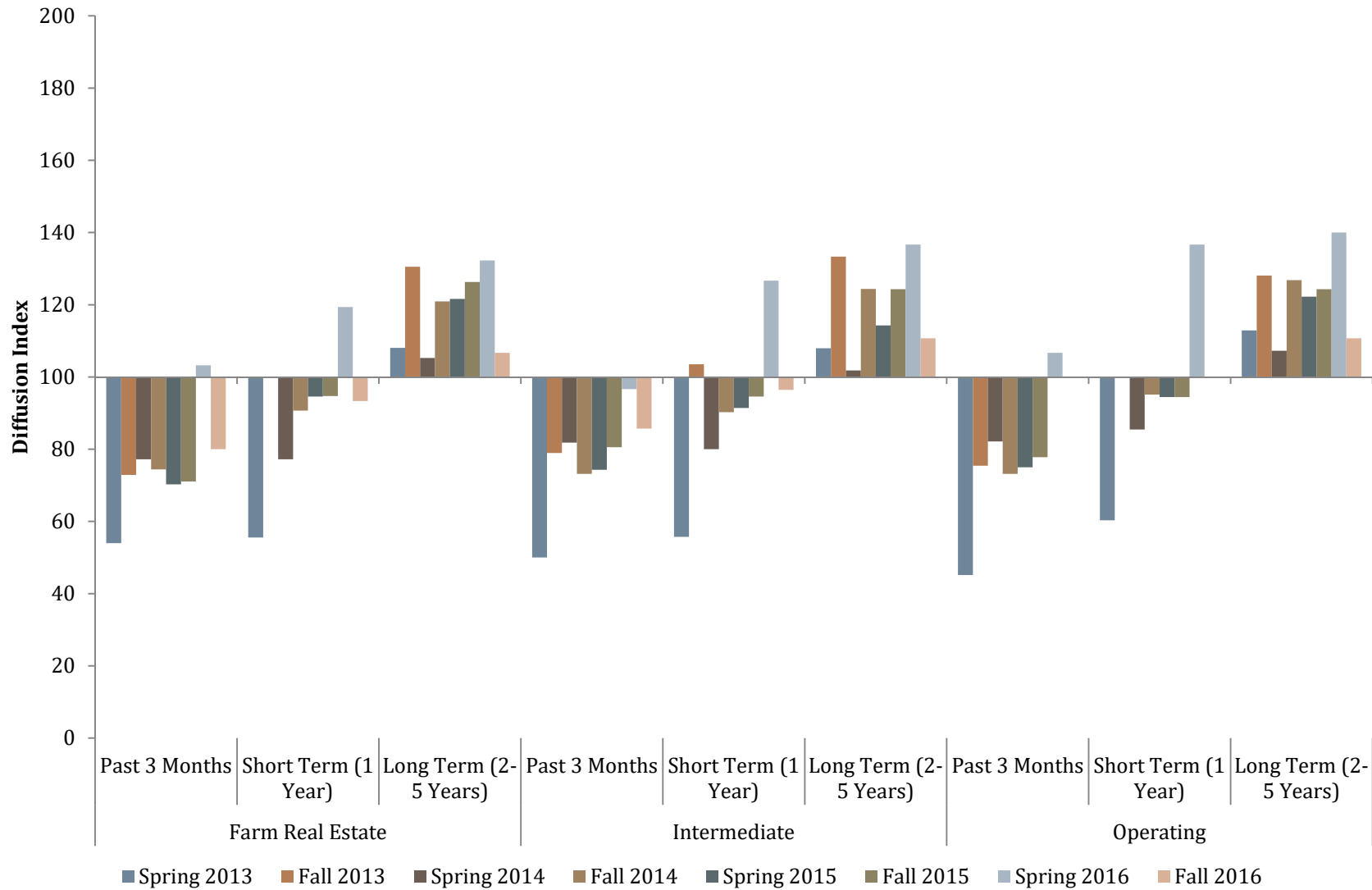
# AGRICULTURAL LENDER SURVEY

## Figure A1, Historical Responses Lender Expectation of Interest Rates



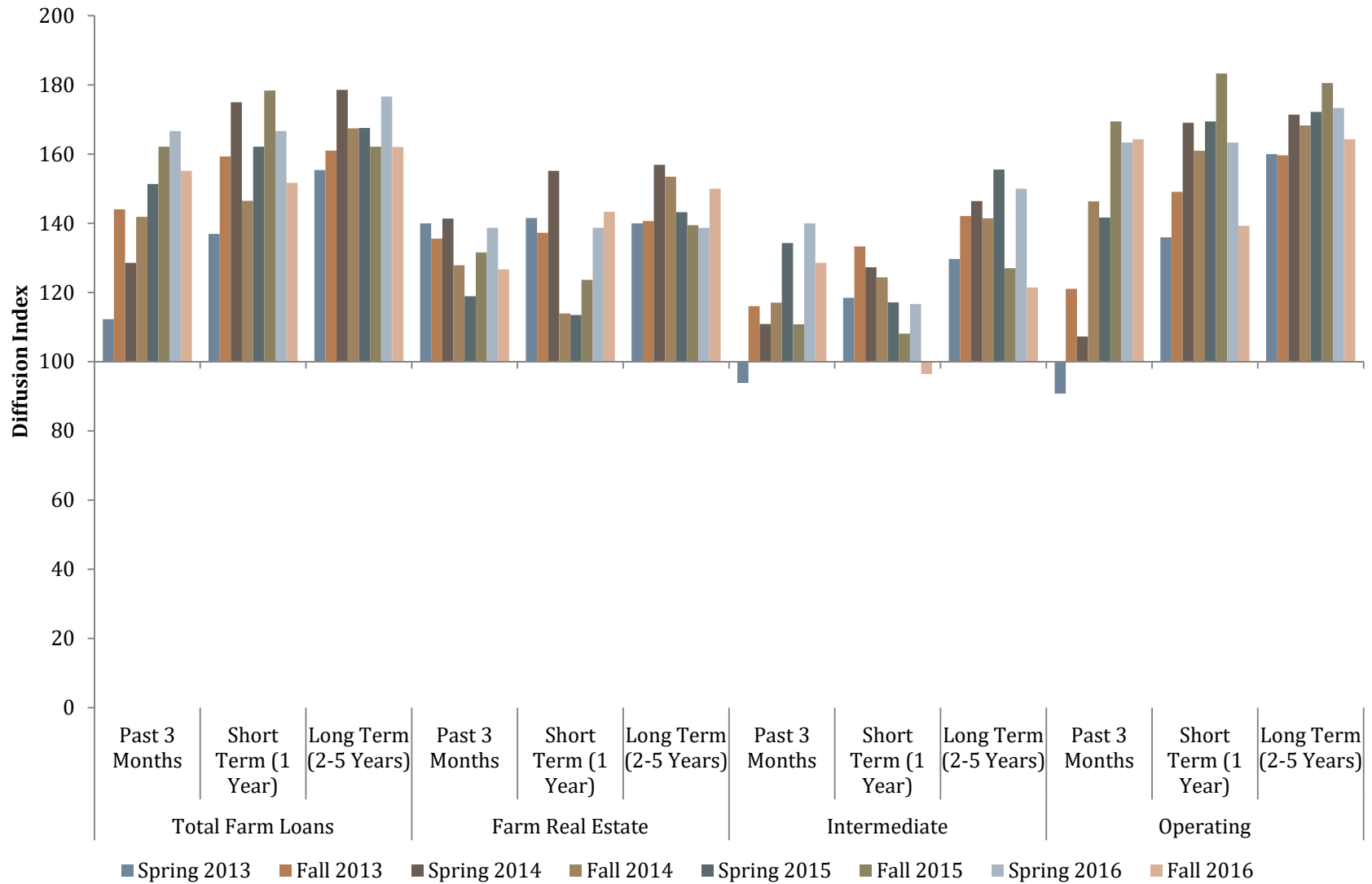
# AGRICULTURAL LENDER SURVEY

## Figure A2, Historical Responses Spread Over Cost of Funds



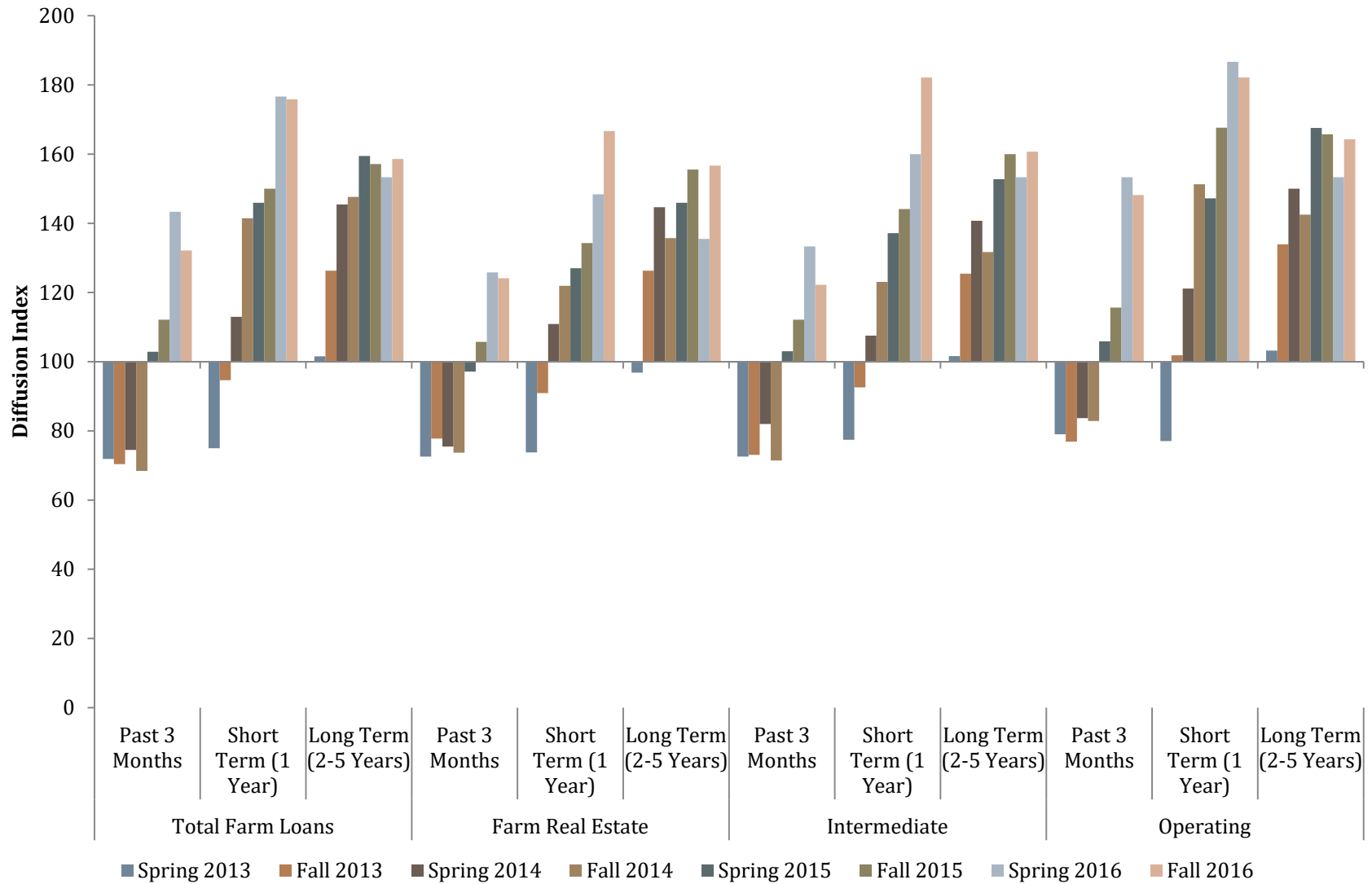
# AGRICULTURAL LENDER SURVEY

## Figure A3, Historical Responses Farm Dollar Volume



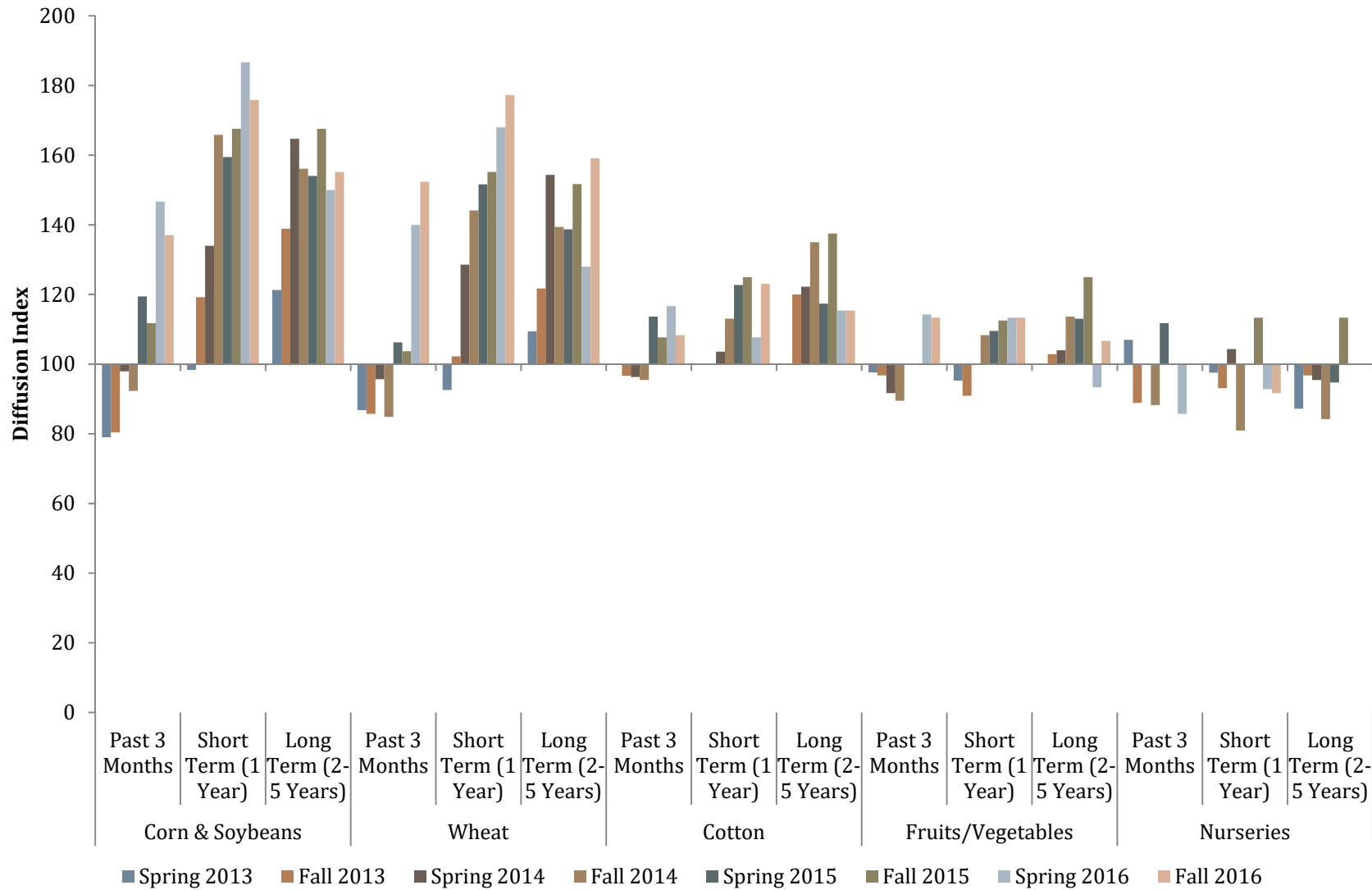
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## Figure A4, Historical Responses Non-Performing Loans by Loan Type



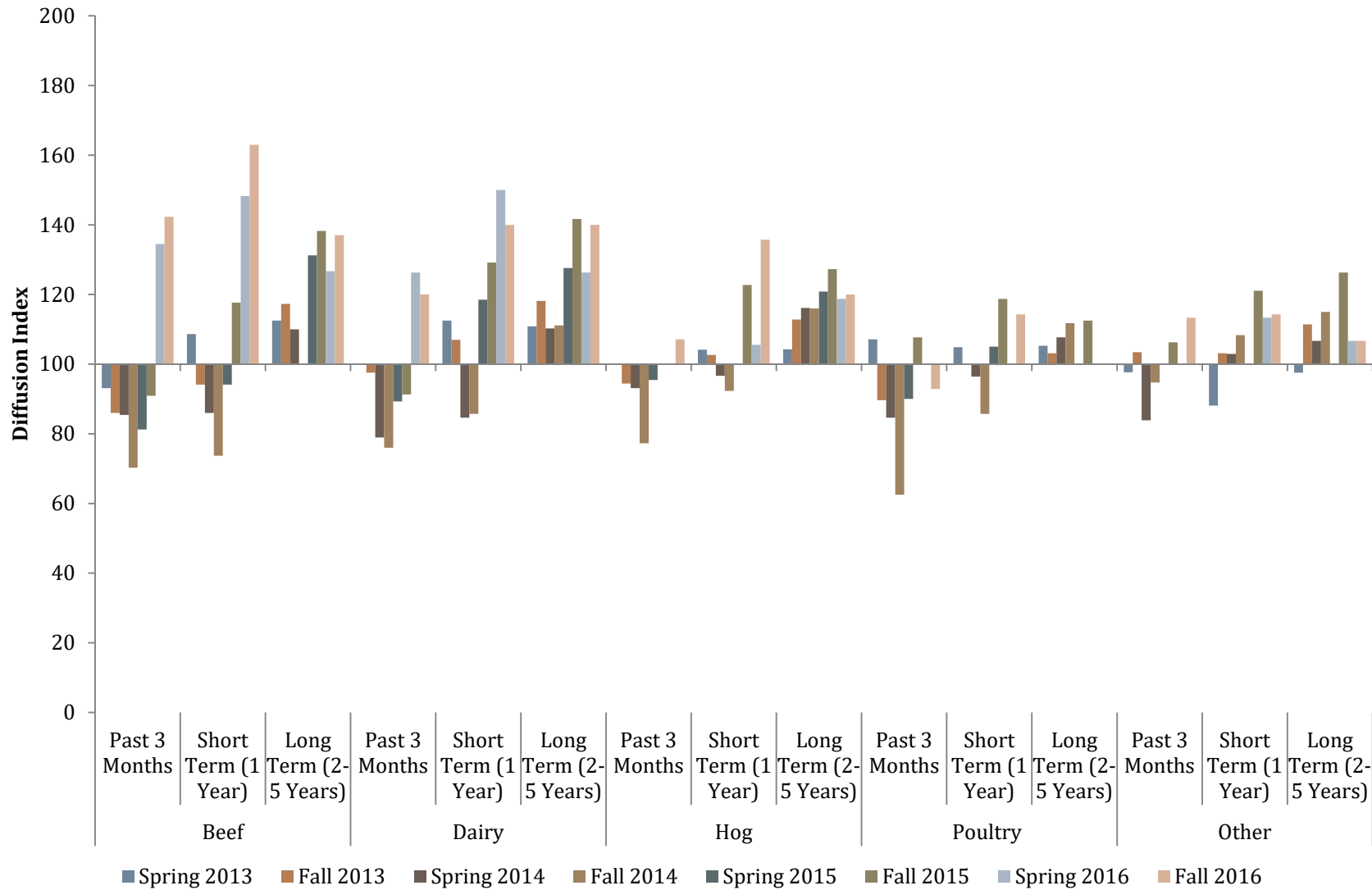
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## Figure A5, Historical Responses Non-Performing Loans by Crop Sector



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## Figure A6, Historical Responses Non-Performing Loans by Livestock Sectors





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## Figure A7, Historical Responses Land Values

