Fall/Winter 2019 Report























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### **Executive Summary**

#### **INTEREST RATES**

A majority of lenders reported decreasing interest rates for all loan types over the past three months. Expectations for the short-term are mixed for expectations for the long-term indicating interest rate increases over the next two to five years.

#### SPREAD OVER COST OF FUNDS

Responses for spread over cost of funds showed indicated that the spread has decreased over the past there months. The previous expectation was for the spread over cost of funds to remain stable that shifted in this survey with lenders expecting further decreases in the short-term. Lenders are not in agreement on the long-term expectations on the spread over cost of funds with almost equal numbers indicating an increase or a decrease.

#### **FARM LOAN VOLUME**

Responses for farm loan volume remained steady from previous surveys as more lenders reported an increase in farm loan volume for all loan types over the past three months. Lenders expect increases in farm loan volume in both the short-term and long-term for all loan types.

#### NON-PERFORMING LOANS

Fewer lenders reported increases in non-performing loans than in previous survey periods; however, the index is still above 100 indicating more lenders reporting an increase than decrease by a slim margin. However, the majority of lenders reported that non-performing loans stayed the same over the past three months and expect this over the short-term. Expectations for non-performing loans are the lowest they have been since the start of the survey in 2013, meaning that lenders are optimistic over the next 2 to 5 years.

#### LAND VALUES

Land values remained stable for the latter part of 2019. Twenty-nine percent of respondents indicated land values decreased in their loan service territories, 13% indicated land values increased, and 58% indicated they stayed the same. Lenders do expect land values to decrease in the short-term with 42% indicating they expect land values to further soften over the next year.

### Survey Overview and Demographic Information

#### **PURPOSE**

The Department of Agricultural Economics at Kansas State University conducts a semiannual survey of Agricultural Lenders to gage 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 five 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.). These areas provide a comprehensive, forward looking analysis of the agricultural lending sector.

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 expecting or that have 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 2019 farm real estate interest rates for the past three months was 34. This number represents the fact that 66% more percentage points of respondents reported a decrease in farm real estate interest rates over those that indicated rates went up.

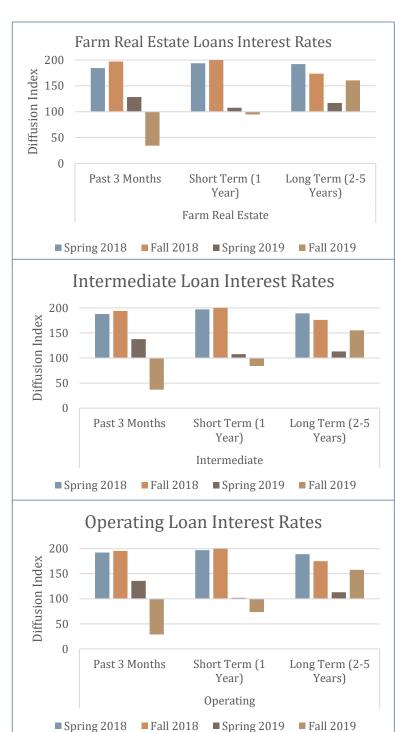
### **Interest Rates**

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.

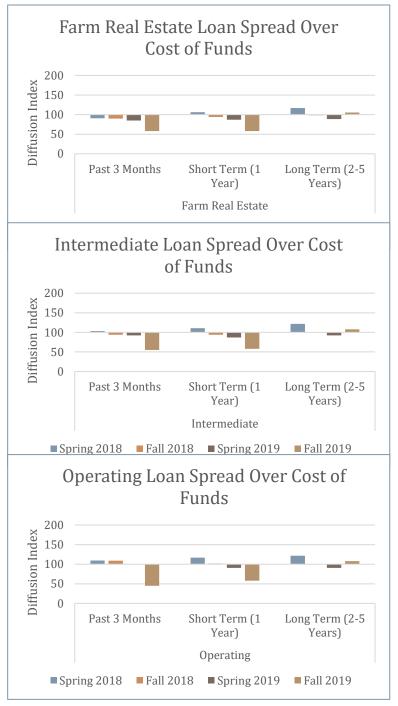
For all three loan categories, lenders indicated that interest rates declined for all three response categories. This follows the decreases in the Fed Funds Rate. This is the lowest the index has been for interest rates over the past three months and for the short term expectations since the start of this survey in 2013 (see Figures A1.1, A1.2, and A1.3 for historical survey responses).

In the short term, there is some disagreement among lenders as most think interest rates will stay the same, but the others are split between increasing and decreasing in the short-term.

This marks a turning point in the upward movement of interest rates. A majority of



lenders expect interest rates to increase in the long term.



# 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.

Lenders indicated a decrease in spread over cost of funds over the past three months and expect it to further decrease for all loan categories in the short term.

Lender expectations are slightly more optimistic in the long-term as the index for all loan categories is above 100. However, this sentiment is farily divided, 21% think spread over cost of funds for farm real estate loans will increase in the long-term, but 16% think it will decrease. A majority (63%) expect it to stay the same.

The historical responses to spread over cost of funds are at the back of this document in Figures A2.1 to A2.3.

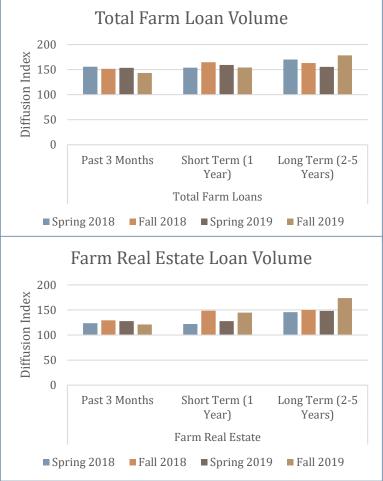
"We have seen some of the larger regional banks back off from agricultural lending."

Fall 2019 Survey Respondent

### 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.

There was little change in lender responses from the spring of 2019 to fall of 2019. The index for each category of loan remained above 100, indicating increasing demand for loans, but the level to which expectations expect increases is remaining steady for both the past three months category and the short-term category. Expectations increased slightly for the long-term for all four loan categories.



Seventy-four percent of respondent indicated that over the past three months, demand for operating loans increased. With increased concern over the working capital positions of a lot of farmers, risk assessments will need to be conducted given the tighter margins.

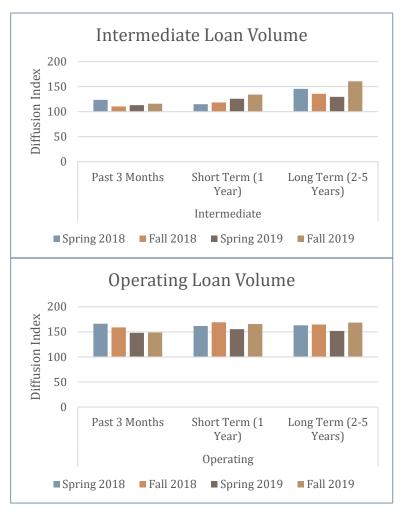
This may be driven by the decrease in working capital many farmers experienced. Lenders have reported anecdotally that farmers are have less working capital on their balance sheet.

"Borrowers are holding it together better than expected, mostly from (Market Facilitation Program) payments."

Fall 2019 Survey Respondent

"Concerns on working capital deterioration again coming from the end of 2018 to year end 2019 balance sheet comparisons."

Fall 2019 Survey Respondent



Both intermediate and operating loan volumes remained steady from the spring 2019 to fall 2019. Over half of the survey respondents indicated that intermediate loan volume stayed the same. However, 62% of respondents indicated an increased demand for operating loans.

Equipment loans make up a majority of the intermediate loan category. One survey respodent commented that farmers in their loan service territory had slowed their equipment purchases. The index for the short-term and long-term intermediate loan volume is the highest it has been since the survey started in 2013.

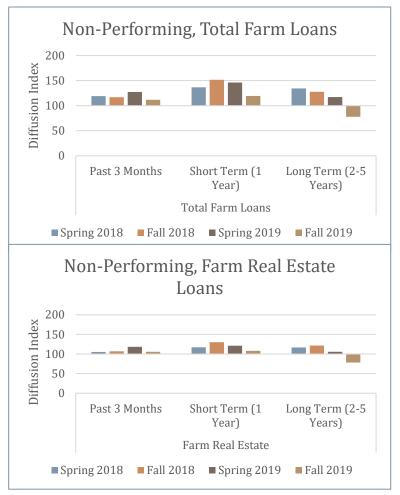
The historical responses to farm loan volume are at the back of this document in Figures A3.1 to A3.3.

"However, as they quit purchasing equipment, they will now have to start paying significant income tax obligations."

Fall 2019 Survey Respondent

"Most operators went into the year with adequate working capital and will have that to fall back on, but of course this is not universally true."

Fall 2019 Survey Respondent



### Non-Performing Loans

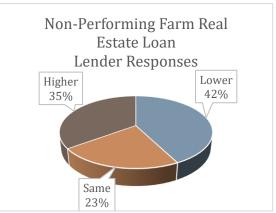
Survey respondents are asked about their expectations of non-performing loans from two aspects. The first is by their expectation depending on the type of loan and the second is by the sector of the agricultural economy in which the loan was made.

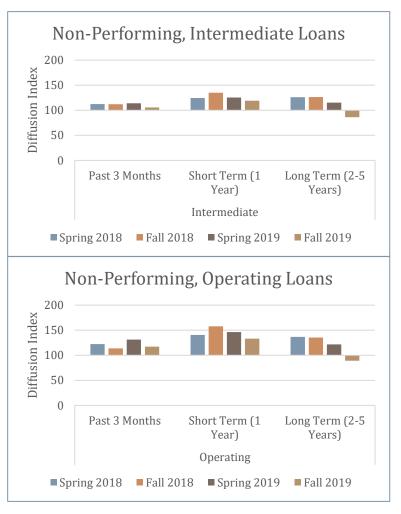
#### BY LOAN TYPE

Analyzing the expectations for non-performing loans by loan type show that lenders indicated their current level of non-performing loans did not change in their respective portfolios as responses were similar to past surveys. However, the index is still above 100 for all loan categories indicating increasing non-performing loans.

Sixty-five percent of respondents indicated that total non-performing loans stayed the same over the past three months with 24% of respondents indicating an increase and 12% indicating a decrease.

Expectations in the short-term remained steady. Expectations in the long-term were below 100, indicating respondents thing non-performing loans will decrease, for all for loan categories. However, this sentiment was divided. Forty-two percent of respondents expect non-performing loans to decrease in the long-run, while 34% expect non-performing loans to increase. Only 22% expect them to stay the same (see figure to right).





Lenders reported little change over the past three months in non-performing intermediate and operating loans with expectations slighlty higher in the short-term.

Many lenders are still reporting no non-performing agricultural loans in their portfolio. Lenders have also credited the Market Facilitation Program (MFP) payments to providing liquidity to the agriultural sector, helping to keep non-performing loans lower.

The historical responses to non-performing loans are at the back of this document in Figures A4.1 to A4.3.

"Our profitable farm customers are diversified with strong off-farm incomes. Our young farmers are looking to either niche markets organic crop production to increase net income per acre. We have noticed significant build up in farm term debt with annual payments per acre increasing around \$100 per acre."

Fall 2019 Survey Respondent

"We do not have any nonperforming agricultural loans at this time."

Fall 2019 Survey Respondent

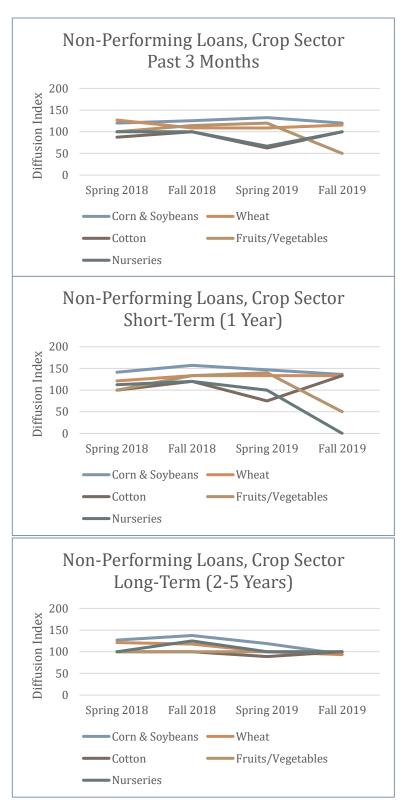
#### BY CROP SECTOR

Lenders were asked about their expectations for non-performing loans by the type of farming operations and the crops or livestock they produce. The crop types asked on the survey are corn and soybeans, wheat, cotton, fruits and vegetables, and nurseries

Lenders indicated relatively no change in non-performing loans over the past three months except for the fruit and vegetables loans, which lenders indicated a decrease in non-performing loans.

In the short-term and long-term, lenders indicated increases, although relatively small, for all loan categories except nurseries and fruits and vegetables.

Historical responses are located in Figures A5.1 to A5.3.



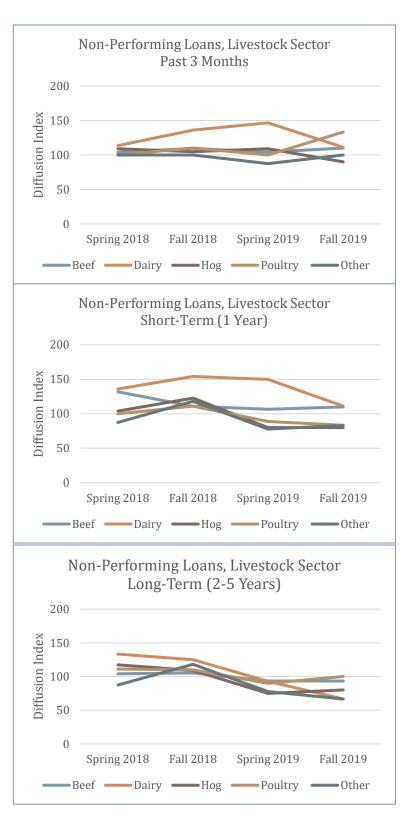
#### BY LIVESTOCK SECTOR

Lender expectations for non-performing loans by livestock sector saw little movement from spring of 2019 to the fall of 2019.

Lenders reported a lower expectation for non-performing dairy loans in both the short-term and the long term.

In the short-term, all categories remained stable with long-term expectations indicating non-performing loans will decrease in the next two to five years for all categories. The highest index number for long-term expectations for any of the livestock categories is poultry with an index of 100.

Historical responses are located in Figures A6.1 to A6.3.



### **Land Values**

Over the past three months, 29% of lenders reported decreasing land values in their loan service territory while only 13% of lenders reported an increase and 58% reported no change. This continues the trend of softer land values. Lenders continue to expect decreases in the short-term with 42% of respondents indicating that land values will decrease in the short-term compared to only 11% of lenders expecting in increase. Historical responses for this question are located in Figures A7.1 through A7.3.

"We continue to see agricultural real estate values adjust lower, and better align with current production economics."

Fall 2019 Survey Respondent

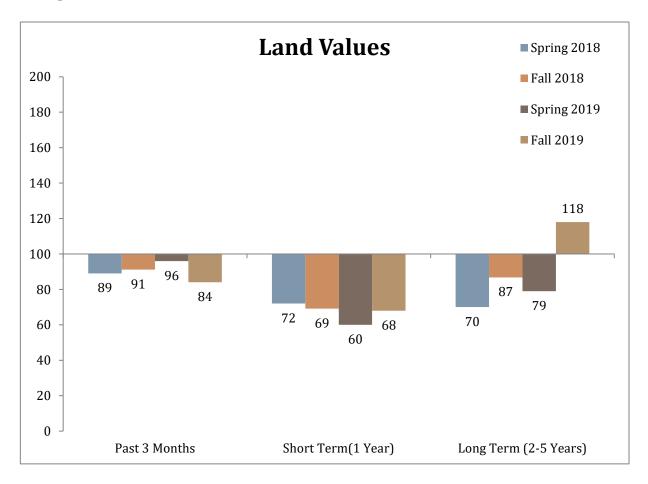


Table A1, States in Each Region										
Atlantic	CT, DE, KY, ME, MD, MA, NH, NJ, NY, NC, PA, RI, TN, VA, VT, WV									
South	AL, AR, FL, GA, LA, MS, SC									
Midwest	IA, IL, IN, MI, MN, MO, OH, WI									
Plains	KS, NE, ND, OK, SD, TX									
West	AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY									

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	
	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%	
Past Three Months	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%	
	Spring 2017	0%	28%	72%	0%	26%	74%	0%	27%	73%	20%	56%	24%	17%	48%	35%	18%	36%	45%	
	Fall 2017	0%	10%	90%	0%	10%	90%	0%	10%	90%	10%	80%	10%	0%	90%	10%	0%	80%	20%	
	Spring 2018	0%	15%	85%	0%	12%	88%	0%	8%	92%	38%	32%	29%	26%	45%	29%	26%	38%	35%	
	Fall 2018	0%	3%	97%	0%	6%	94%	0%	4%	96%	32%	46%	22%	31%	43%	25%	25%	41%	34%	
Short Term	Spring 2019	9%	53%	38%	2%	58%	40%	6%	53%	42%	30%	55%	15%	26%	55%	19%	23%	54%	23%	
	Fall 2019	71%	24%	5%	68%	26%	5%	76%	18%	5%	50%	42%	8%	53%	39%	8%	63%	29%	8%	
	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%	
Short Term	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%	
	Spring 2017	0%	8%	92%	0%	9%	91%	0%	9%	91%	24%	40%	36%	17%	43%	39%	18%	36%	45%	
	Fall 2017	0%	10%	90%	0%	10%	90%	0%	10%	90%	20%	50%	30%	10%	60%	30%	20%	40%	40%	
	Spring 2018	0%	6%	94%	0%	3%	97%	0%	3%	97%	26%	42%	32%	20%	49%	31%	20%	43%	37%	
	Fall 2018	0%	0%	100%	0%	0%	100%	0%	0%	100%	26%	53%	21%	27%	52%	21%	24%	51%	25%	
	Spring 2019	8%	77%	15%	9%	74%	17%	17%	63%	19%	26%	60%	13%	25%	64%	11%	23%	64%	13%	
	Fall 2019	16%	74%	11%	24%	68%	8%	32%	63%	5%	45%	53%	3%	45%	53%	3%	45%	53%	3%	
	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%	
Long Term	Spring 2016	0%	3%	97%	0%	3%	97%	0%	3%	97%	16%	35%	48%	13%	37%	50%	13%	33%	53%	
208	Fall 2016	0%	20%	80%	0%	21%	79%	0%	18%	82%	23%	47%	30%	18%	54%	29%	21%	46%	32%	
	Spring 2017	0%	4%	96%	0%	9%	91%	0%	9%	91%	12%	60%	28%	13%	57%	30%	14%	50%	36%	
	Fall 2017	0%	0%	100%	0%	0%	100%	0%	0%	100%	30%	40%	30%	20%	60%	20%	30%	40%	30%	
	Spring 2018	0%	8%	92%	2%	8%	91%	2%	8%	91%	12%	58%	29%	9%	60%	31%	9%	60%	31%	
	Fall 2018	4%	18%	78%	3%	18%	79%	3%	19%	78%	25%	51%	24%	24%	52%	24%	24%	52%	24%	
	Spring 2019	23%	38%	40%	28%	30%	42%	28%	30%	42%	28%	55%	17%	25%	58%	17%	25%	60%	15%	
	Fall 2019	5%	29%	66%	5%	34%	61%	5%	32%	63%	16%	63%	21%	16%	61%	24%	16%	61%	24%	

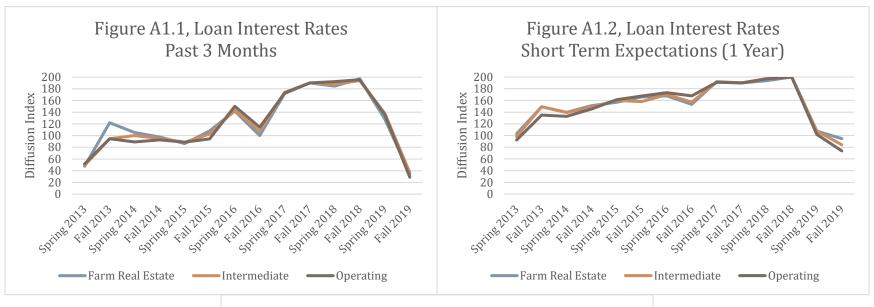
**Table A2 Continued, Respondent Responses** 

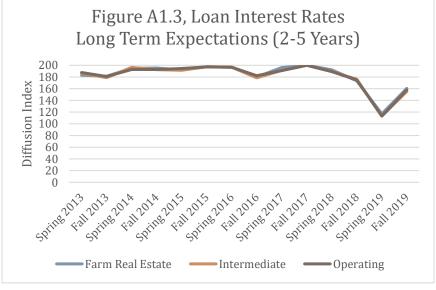
		Farm Dollar Volume											
		Tota	al Farm	Loans	Fari	m Real E	state	In	termedi	iate		Operatir	ng
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher
	Spring 2013	32%	22%	45%	12%	35%	52%	28%	46%	22%	40%	26%	31%
	Fall 2013	5%	46%	49%	7%	51%	42%	9%	66%	25%	12%	54%	33%
	Spring 2014	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%
Past Three Months	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%
	Spring 2017	17%	38%	46%	8%	40%	52%	26%	57%	17%	5%	45%	50%
	Fall 2017	30%	30%	40%	10%	30%	60%	40%	30%	30%	20%	40%	40%
	Spring 2018	4%	35%	60%	15%	47%	38%	9%	59%	32%	4%	25%	71%
	Fall 2018	6%	37%	57%	4%	62%	34%	9%	71%	20%	6%	29%	65%
	Spring 2019	7%	31%	61%	9%	54%	37%	13%	61%	26%	11%	30%	59%
	Fall 2019	16%	24%	59%	13%	53%	34%	8%	68%	24%	14%	24%	62%
	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%
Short Term	Spring 2016	0%	33%	67%	16%	29%	55%	20%	43%	37%	7%	23%	70%
Short renn	Fall 2016	7%	34%	59%	17%	23%	60%	29%	46%	25%	11%	39%	50%
	Spring 2017	8%	42%	50%	8%	44%	48%	26%	43%	30%	0%	59%	41%
	Fall 2017	10%	30%	60%	10%	20%	70%	20%	40%	40%	10%	50%	40%
	Spring 2018	7%	31%	61%	13%	51%	35%	18%	49%	33%	7%	24%	69%
	Fall 2018	6%	24%	70%	6%	40%	54%	17%	48%	35%	6%	19%	75%
	Spring 2019	6%	30%	65%	9%	54%	37%	11%	52%	37%	7%	30%	63%
	Fall 2019	11%	24%	65%	13%	29%	58%	8%	50%	42%	8%	18%	74%
	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%
Long Term	Spring 2016	0%	23%	77%	16%	29%	55%	10%	30%	60%	3%	20%	77%
roug term	Fall 2016	3%	31%	66%	10%	30%	60%	18%	43%	39%	4%	29%	68%
	Spring 2017	13%	21%	67%	12%	24%	64%	17%	30%	52%	5%	27%	68%
	Fall 2017	10%	20%	70%	10%	50%	40%	10%	30%	60%	10%	30%	60%
	Spring 2018	7%	15%	78%	13%	28%	59%	9%	37%	54%	9%	19%	72%
	Fall 2018	9%	19%	72%	9%	32%	59%	15%	34%	51%	6%	24%	71%
	Spring 2019	9%	26%	65%	9%	33%	57%	15%	41%	44%	9%	30%	61%
	Fall 2019	3%	16%	81%	3%	21%	76%	0%	39%	61%	3%	26%	71%

**Table A2 Continued, Respondent Responses** 

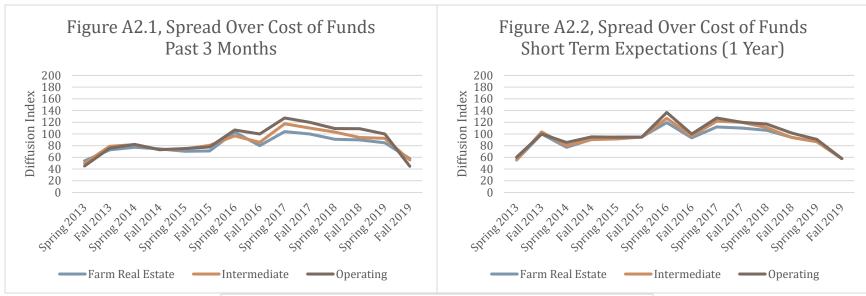
		Non-Performing Loan by Loan Type												Ι.	Ag Land Values			
		Tota	Total Farm Loans Farm Real Estate Intermediate								(	Operatir	Ag	llues				
		Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher	Lower	Same	Higher		
	Spring 2013	28%	58%	0%	27%	63%	0%	27%	61%	0%	24%	63%	3%					
	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%		
Past Three Months	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%		
rast fillee Months	Fall 2016	0%	68%	32%	0%	76%	24%	0%	78%	22%	0%	52%	48%	57%	40%	3%		
	Spring 2017	8%	33%	58%	8%	60%	32%	5%	59%	36%	5%	36%	59%	24%	68%	8%		
	Fall 2017	13%	63%	25%	13%	75%	13%	13%	75%	13%	0%	75%	25%	30%	60%	10%		
	Spring 2018	7%	67%	26%	5%	84%	11%	4%	80%	16%	7%	64%	29%	23%	64%	13%		
	Fall 2018	7%	69%	24%	9%	76%	16%	3%	81%	16%	3%	79%	17%	16%	76%	7%		
	Spring 2019	12%	49%	39%	6%	69%	24%	8%	70%	22%	10%	49%	41%	13%	77%	9%		
	Fall 2019	12%	65%	24%	9%	77%	14%	6%	83%	11%	9%	66%	26%	29%	58%	13%		
	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%		
Chart Tarre	Spring 2016	0%	23%	77%	6%	39%	55%	3%	33%	63%	0%	13%	87%	84%	16%	0%		
Short Term	Fall 2016	0%	24%	76%	0%	33%	67%	0%	18%	82%	0%	18%	82%	73%	23%	3%		
	Spring 2017	8%	25%	67%	8%	52%	40%	9%	36%	55%	9%	32%	59%	56%	40%	4%		
	Fall 2017	0%	22%	78%	0%	44%	56%	0%	33%	67%	0%	11%	89%	40%	50%	10%		
	Spring 2018	3%	57%	40%	0%	83%	17%	2%	72%	26%	3%	53%	44%	41%	47%	13%		
	Fall 2018	5%	39%	56%	5%	60%	35%	3%	59%	38%	3%	36%	61%	43%	46%	12%		
	Spring 2019	2%	50%	48%	4%	71%	25%	4%	67%	29%	4%	46%	50%	42%	56%	2%		
	Fall 2019	11%	58%	31%	8%	76%	16%	5%	70%	24%	6%	56%	39%	42%	47%	11%		
	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%		
1	Spring 2016	10%	27%	63%	16%	32%	52%	10%	27%	63%	10%	27%	63%	68%	26%	6%		
Long Term	Fall 2016	3%	34%	62%	3%	37%	60%	4%	32%	64%	4%	29%	68%	70%	27%	3%		
	Spring 2017	17%	42%	42%	16%	56%	28%	13%	52%	35%	17%	43%	39%	36%	56%	8%		
	Fall 2017	11%	22%	67%	11%	33%	56%	11%	33%	56%	11%	22%	67%	20%	70%	10%		
	Spring 2018	5%	56%	39%	2%	80%	18%	5%	64%	31%	5%	53%	42%	47%	36%	17%		
	Fall 2018	12%	48%	40%	11%	57%	32%	11%	52%	38%	12%	52%	48%	38%	37%	25%		
	Spring 2019	15%	52%	33%	15%	63%	21%	15%	54%	31%	16%	47%	37%	42%	38%	21%		
	Fall 2019	17%	11%	3%	42%	22%	34%	42%	67%	62%	16%	11%	3%	18%	45%	37%		

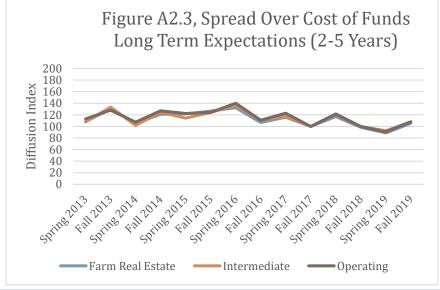
Figures A1.1 to A1.3 Historical Responses, Interest Rates



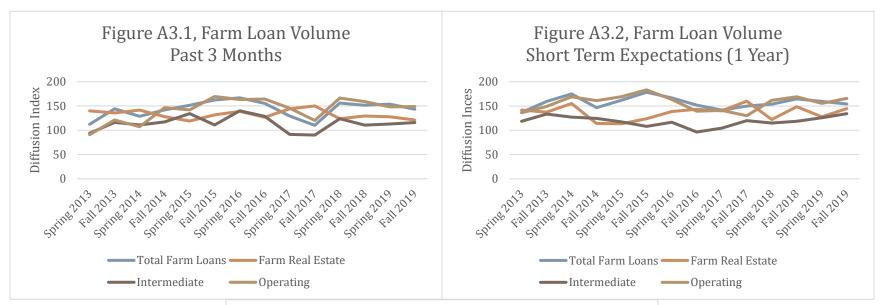


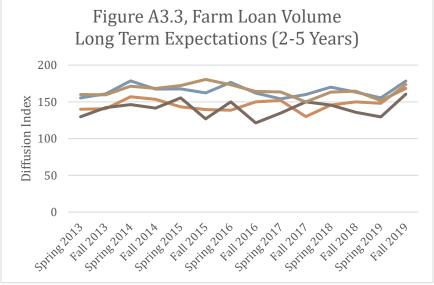
Figures A2.1 to A2.3 Historical Responses, Spread Over Cost of Funds



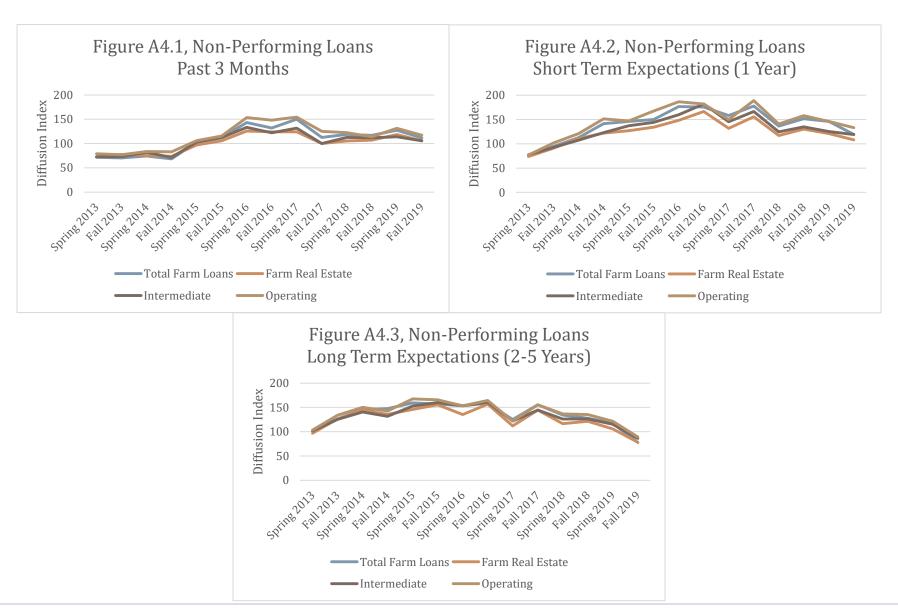


Figures A3.1 to A3.3 Historical Responses, Farm Loan Volume

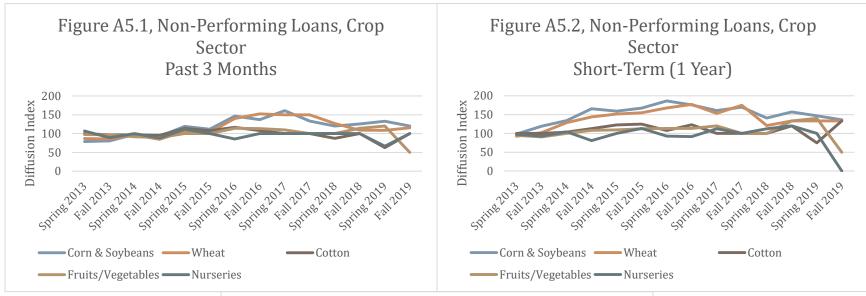


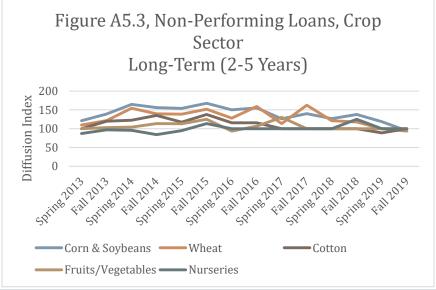


Figures A4.1 to A4.3 Historical Responses, Non-Performing Loans by Loan Type

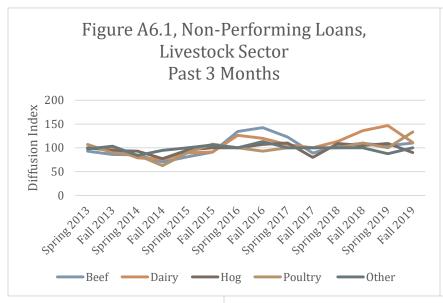


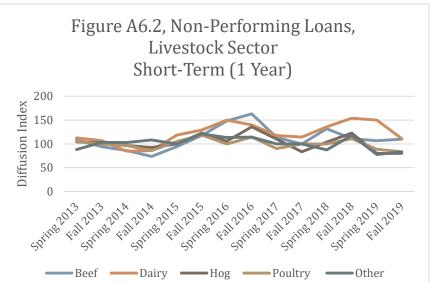
Figures A5.1 to A5.3 Historical Responses, Non-Performing Loans by Crop Sector

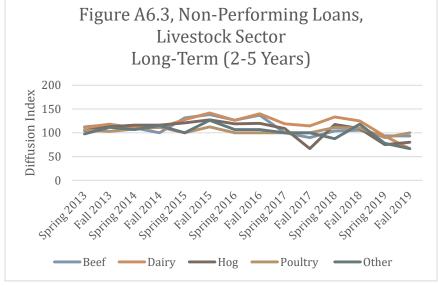




Figures A6.1 to A6.3 Historical Responses, Non-Performing Loans by Livestock Sector







Figures A7.1 to A7.3 Historical Responses, Land Values



