KANSAS STATE UNIVERSITY

Agricultural Lender Survey

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Results:
Fall Survey, 2015

Survey Summary and Highlights

- More lenders reported farmland values decreasing in their service territories.
- There is an increase in expectations of non-performing loans for all loan types.
- Lenders continue to report decreases in spread over cost of funds but remain optimistic that the spread will increase in the long term.
- Operating loans saw biggest increase in loan volume signaling deteriorating liquidity across the agricultural sector.
- Respondents reported a lag of cash rental rates that have been slow to adjust with the decline in commodity prices.

The Department of Agricultural Economics at Kansas State University conducts a semi-annual 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.

Kansas State University has worked with the National Agricultural Credit Committee (NACC) and the Federal Reserve Bank of Kansas City in developing the questions and assessing the need for this information.

A list of 1,500 commercial lending with agriculture listed as their main specialty was obtained from the FDIC database as well as 92 Farm Credit institutions. This list was then internet searched for the emails of each of the lending institutions. The survey was sent to 500 lending institutions including the Farm Credit System, commercial lending institutions who have a specialty in agriculture according to the FDIC, vendor finance companies and insurance companies.

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 Fall 2015 survey had 41 lending institutions respond and the Spring 2015 survey had 39 lending institutions respond.

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, Figure 3 illustrates that the index for the Fall 2015 expected long-term farm real estate loan interest rates equals 197. This number can be described as 97% more respondents felt farm real estate loan interest rates will go up in the long run than those who felt interest rates would go down.

Figure 1, Demographics of Survey Respondents

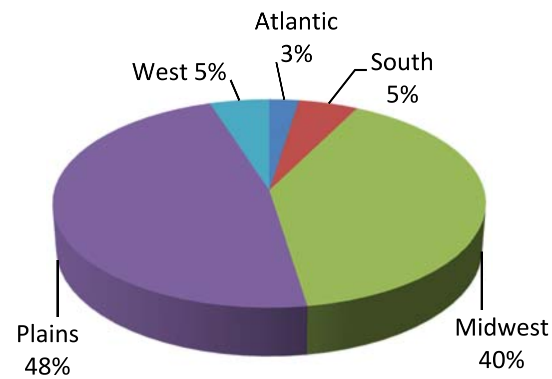


Figure 1 shows the demographics of the Fall 2015 survey respondents by primary service territory. The five territories are: Midwest, West, Atlantic, South and Plains. Table 1 has a list of the states in each region. Forty eight percent of survey respondents came from the Plains region while 40%, 5%, 3% and 5% came from the Midwest, West, Atlantic, and South regions, respectively. Nine percent of respondents indicated their respective lending institution was national in scope. Total agricultural loan volume of all respondents is estimated at $122 billion. The largest lending institution to respond had $107 billion in commitments and the smallest had $7 million in agricultural loans. The Plains region had the most respondents, (Figure 2) and accounted for 45% of agricultural loan volume.

Figure 2, Loan Volume by Region

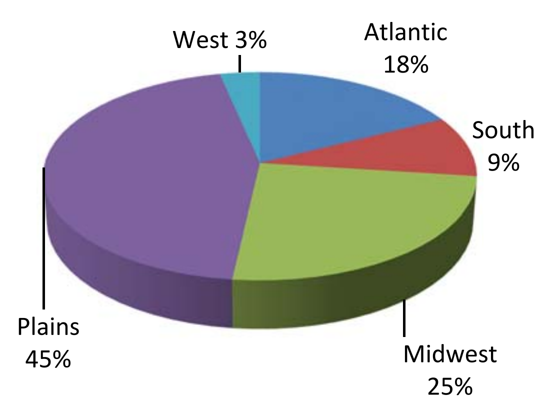
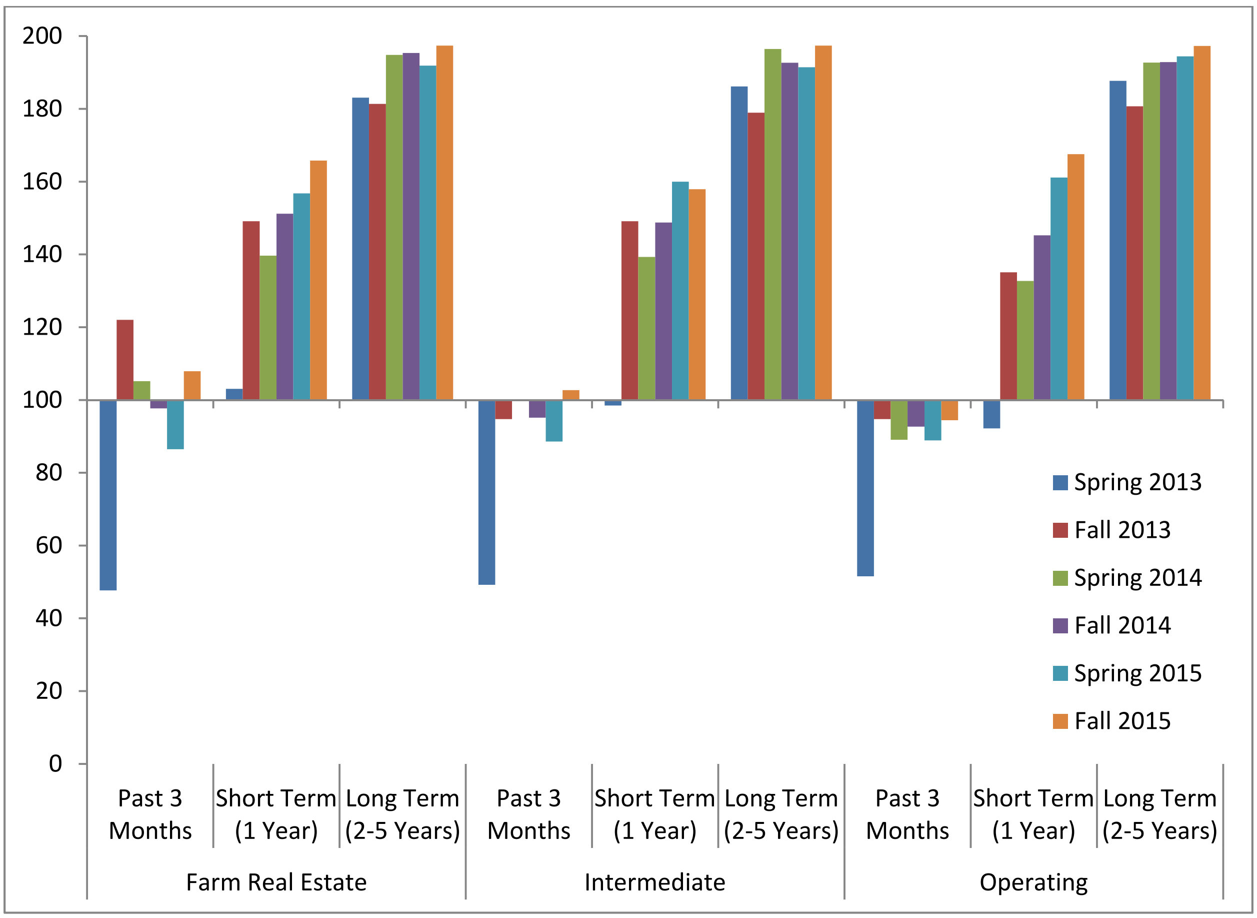


Figure 3 shows the survey results for loan interest rates from Spring 2013 to Fall 2015. Figure 3 shows the continued expectation of higher interest rates in the future. With the Federal Reserve System yet to announce future policy future policy to increase the federal funds, past expectations for an increase in interest rates has yet to be realized. No respondent to the survey indicated that interest rates would decrease in the short term or the long term for the second consecutive occurrence (Table 2). However, there is more uncertainty in the short-term as 34% of respondents expect interest rates to stay the same over the next year.

Figure 3, Loan Interest Rates – Diffusion Index of Survey Respondents



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.

Changes did not occur since the Spring 2015 survey for the expectations of the spread over cost of funds. Figure 4 shows that survey respondents reported a decrease in the spread over cost of funds in the past three months similar to that seen in Spring 2015 with the trend expected to cease in the long term as spread over cost of funds is expected to increase. The long term expectation of spread over cost of funds is one of the most divided responses on the survey. For farm real estate loans 42% of respondents indicated spread over cost of funds would increase in the long term, 42% indicated it would stay the same, and 16% indicated it would decrease (Table 2). This uncertainty may be affected by uncertainty on timing of interest rate increases and uncertainty about competition in the agricultural lending sector.

Figure 4, Spread Over Cost of Funds – Diffusion Index of Survey Respondents

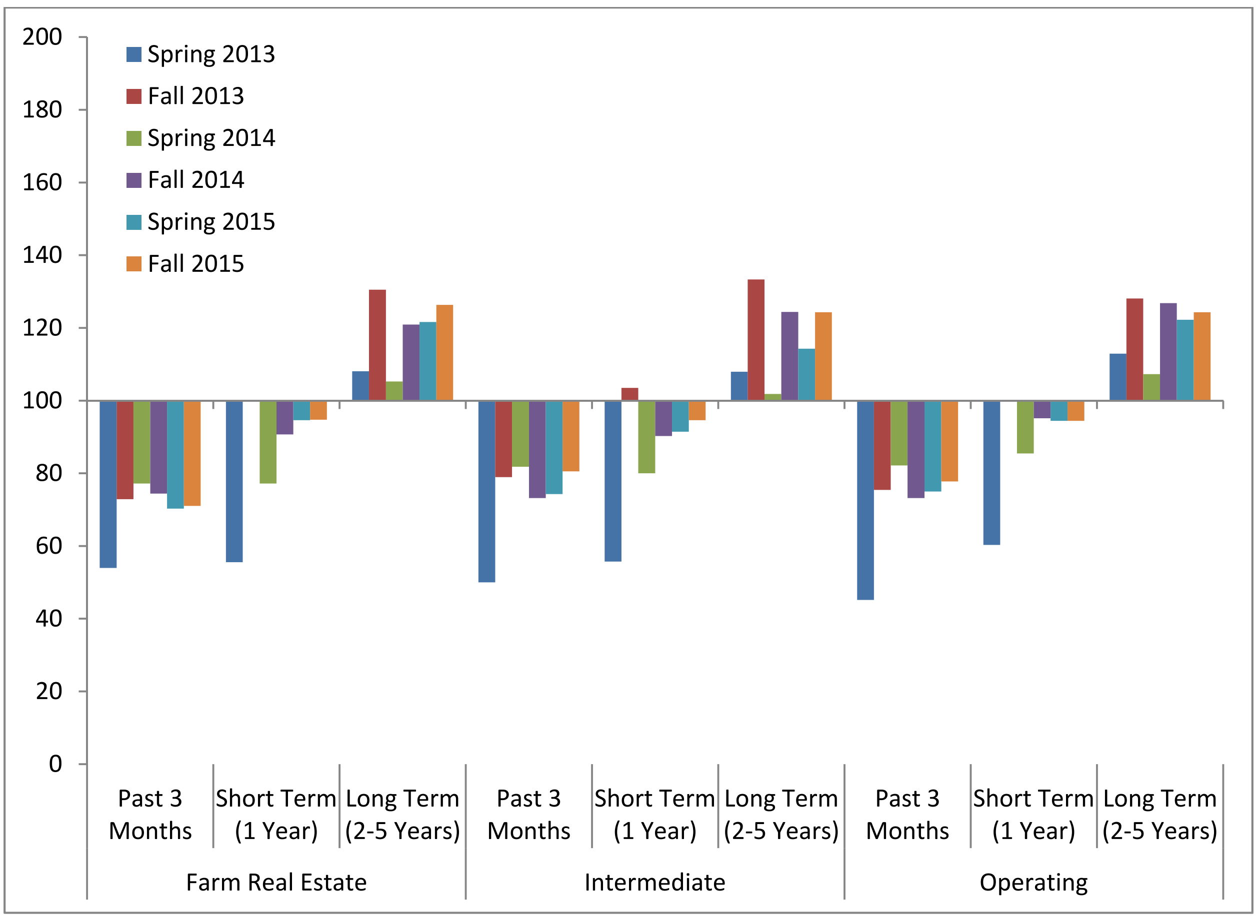


Figure 5 shows the responses for farm loan volume. This question analyzes the aggregate amount of agricultural lending that is expected. Over the past three months, total farm loan volume rose and is expected to increase in the short- and long-term for all categories.

However, the sentiment for farm real estate loans continues on a downward trend in the long term. This downward trend of farm real estate loan expectations is likely caused by decreasing farmland values. Expectations for operating loans remains strong for both the short- and long-term. This indicates a decrease in the liquidity position of farmers due to lower cash receipts.

Figure 5, Farm Loan Volume – Diffusion Index of Survey Respondents

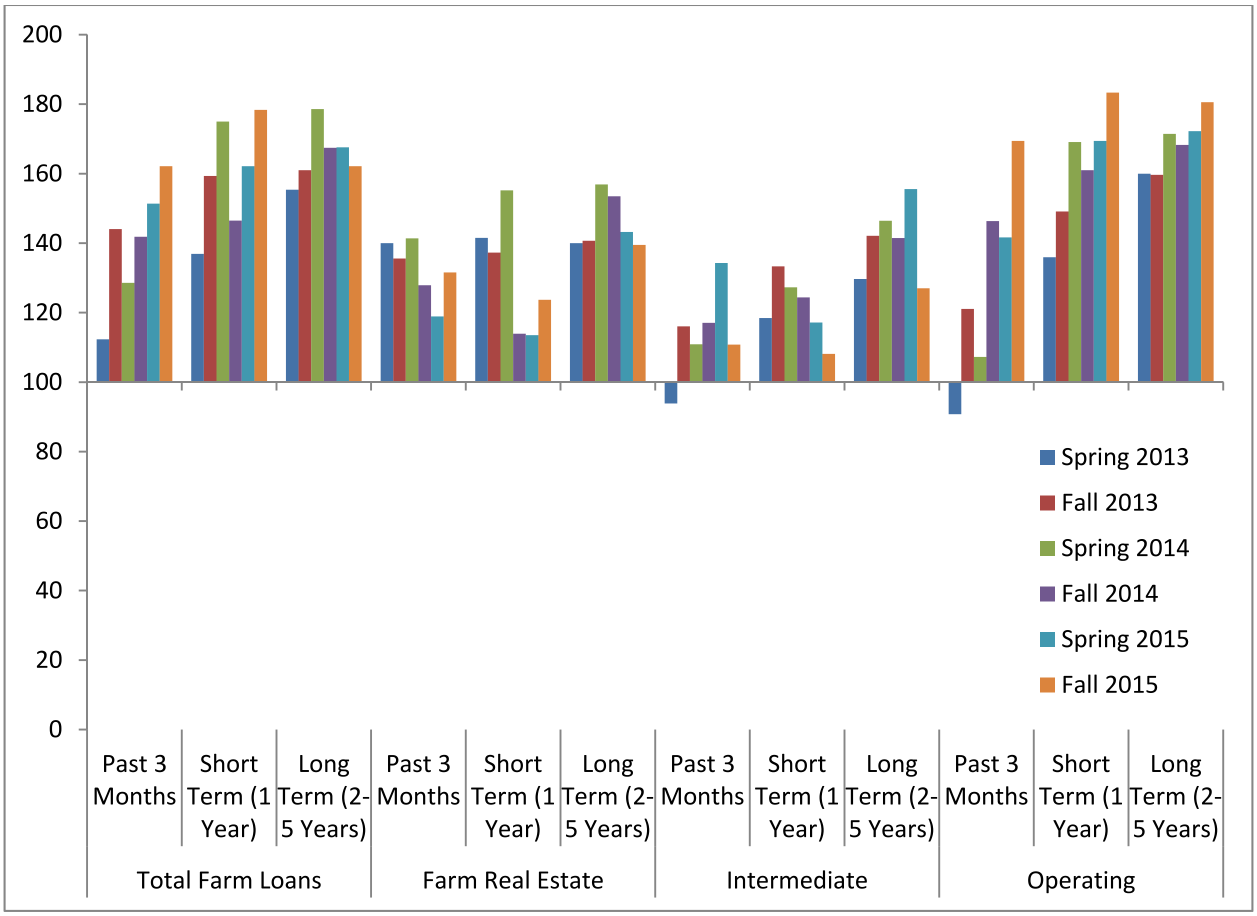


Figure 6 shows the results for non-performing loans analyzed by loan type. For the second consecutive survey, respondents indicated an increase in non-performing loans with 12% of respondents indicating an increase (Table 2). Expectations for non-performing loans continue to increase in both the short- and long-term for all categories.

"HRSW is at $4.10 this morning for 14% protein. This is below cost of production. Quality of credit will slip unless costs are driven down. Nitrogen prices and other inputs so far have not declined. Looks like farmers will have significantly less returns this year."

This sentiment is shared by many respondents. However, some respondents expressed that farmers have enough equity to weather the pending downturn.

"Lower net farm receipts due to declining commodity prices are likely to impact producers heavily reliant on rented acreage. Many are still sitting on adequate liquidity (due to past strong results) to manage through the next 6-12 months but at the back end of this timeframe will start to see increase in financial stress in certain segments, absent unexpected rally in grain prices."

If operating expenses do not decline then the current expectation of an increase in non-performing loans will be realized.

Figure 6, Non-Performing Loans, By Loan Type – Diffusion Index of Survey Respondents

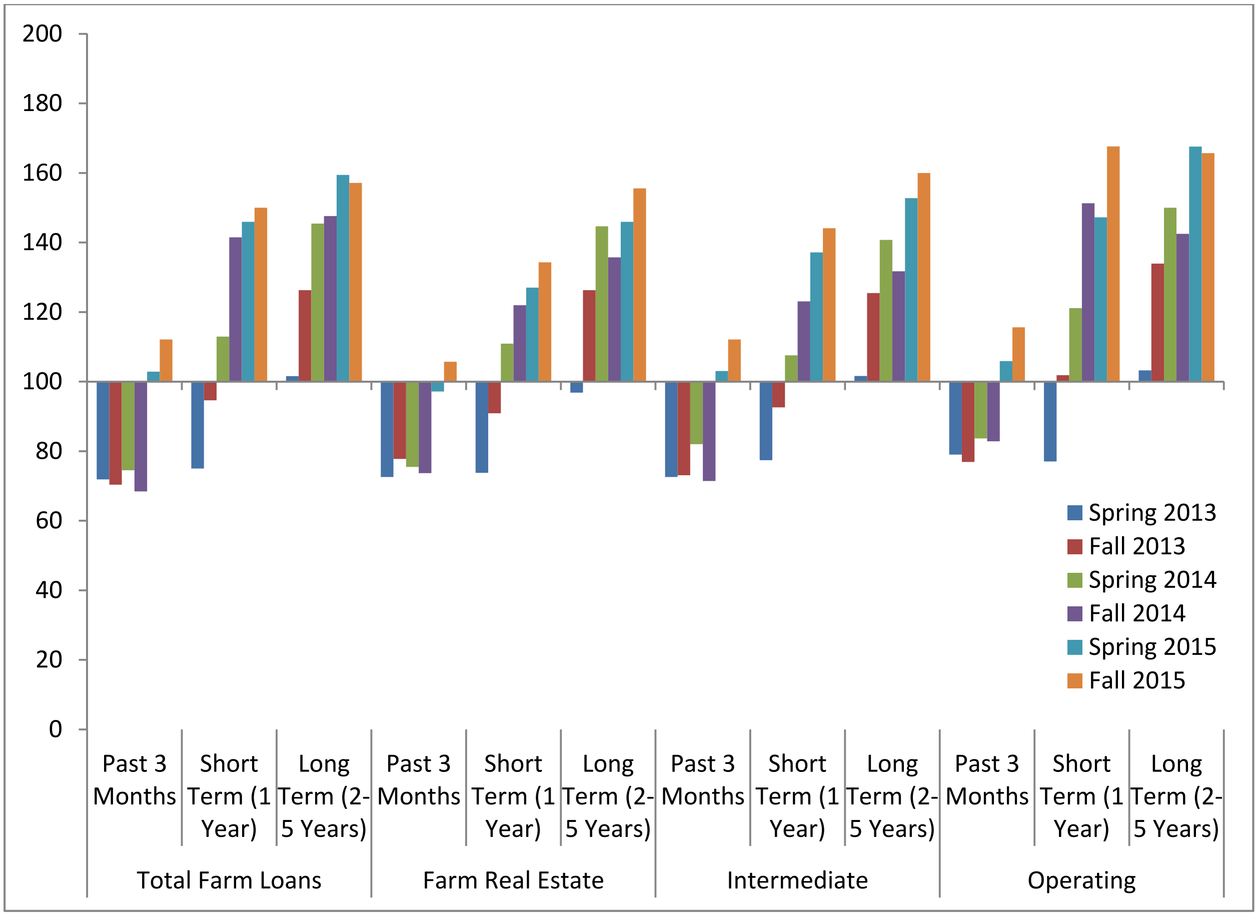


Figure 7 shows the non-performing loans by crop industry sector. Expectations for non-performing loans in the crop sector stayed at fairly high levels. Corn and Soybeans and the wheat categories have the highest expectations for increases in non-performing loans among respondents.

Figure 7, Non-Performing Loans, By Crop Industry Sector – Diffusion Index of Survey Respondents

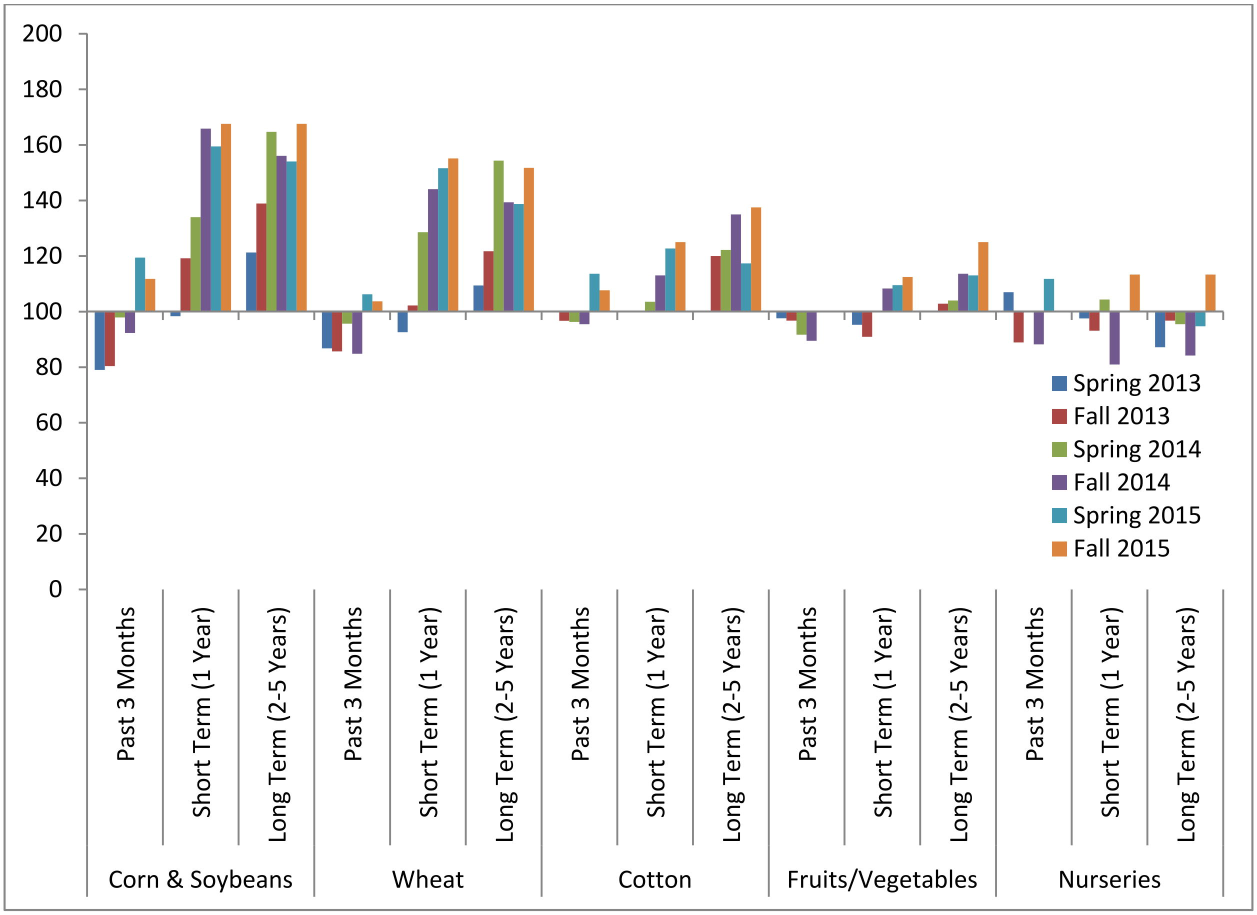


Figure 8 shows the non-performing loans by livestock industry sector. Respondents indicated an increase in expectations for non-performing loans in the long-term for the beef, dairy, and hog sectors. The livestock sector has been bolstered by high output prices in recent years and is reflected in the previous non-performing loans across respondent's loan territories. However, commodity prices for livestock have recently fallen and are reflected in the short term expectations for non-performing loans as respondents indicated an increase in non-performing loans for Beef, Dairy, Hogs, and Poultry in the short term. Poultry also experienced an increase in non-performing loans for the first time in two years which may be due to the avian flu.

Figure 8, Non-Performing Loans, By Livestock Industry Sector – Diffusion Index of Survey Respondents

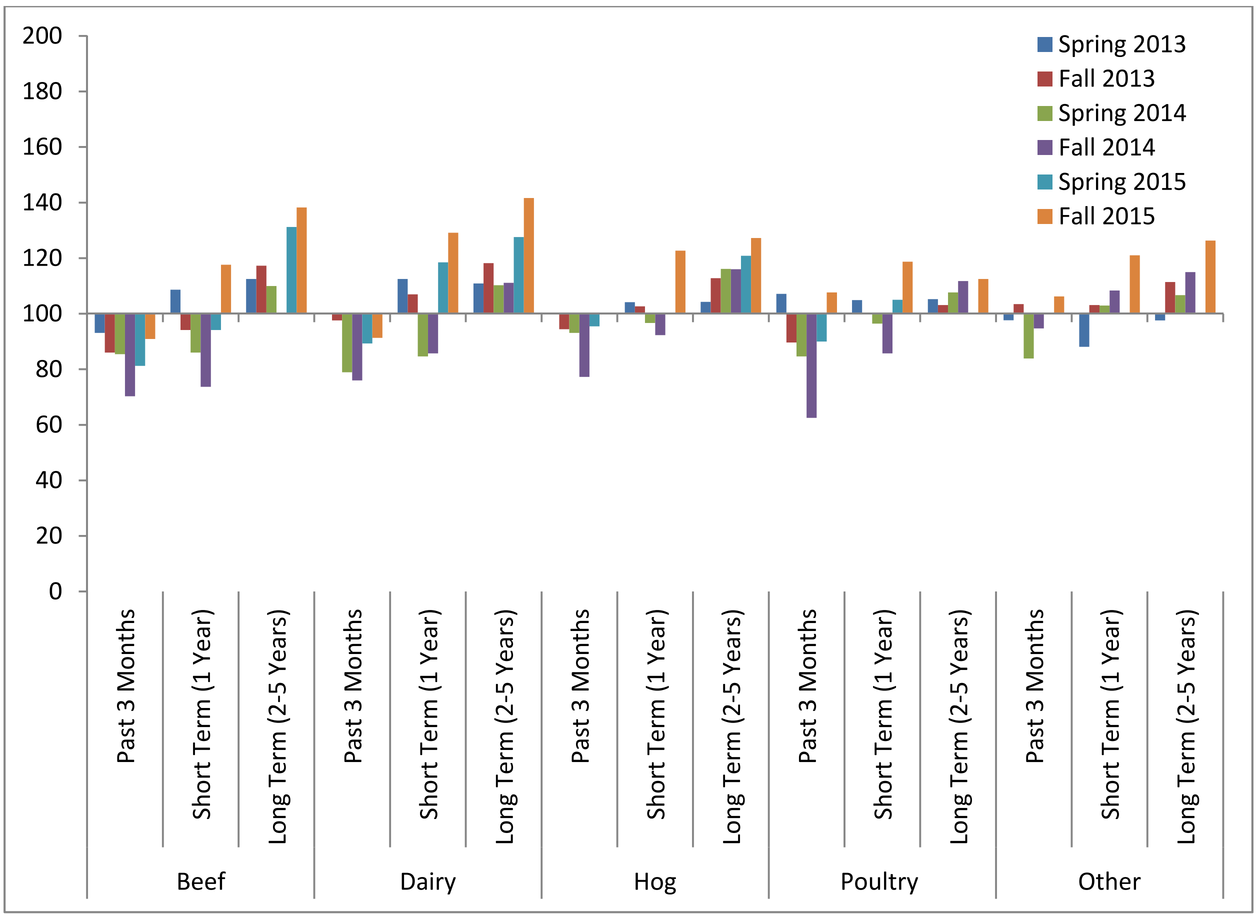


Figure 9 shows the survey responses for expectations on land values. Expectations for land values continue to decline for the short- and long-term.

"Cash rental rates will need to come down to reflect commodity markets, which will soften land values. Probably a 2 to 3 year timeline."

While expectations of land values still indicate continued decreases, respondents were slightly more optimistic in the long run than the previous Spring 2015 survey.

Figure 9, Land Values – Diffusion Index of Survey Respondents

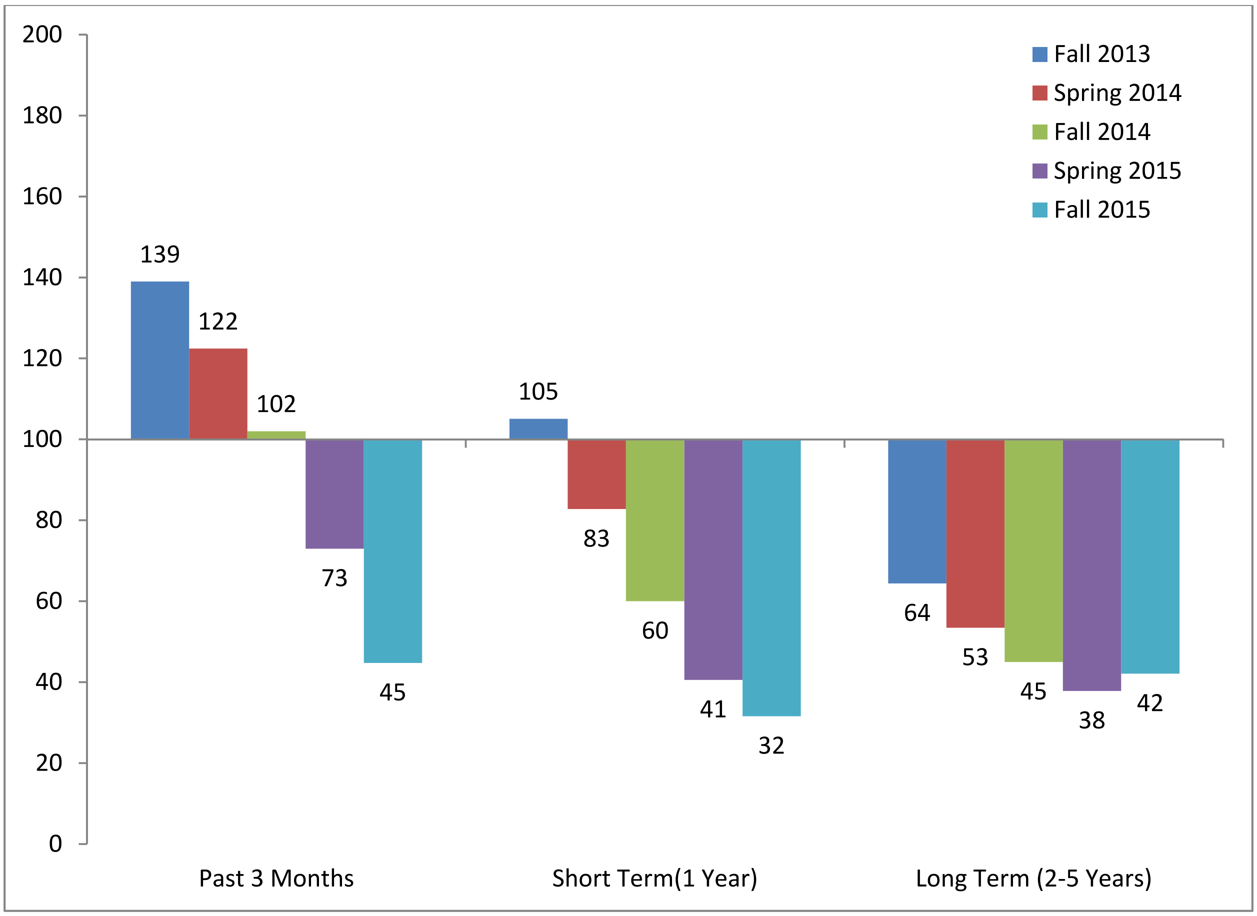


Table 1, States in Each Region

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 2, 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%
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%
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%

Table 2 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%
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%
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%	0%	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%

Table 2 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%
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%
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%