## KANSAS STATE U N I V E R S I T Y

## Agricultural Lender Survey

Brady Brewer, Brian Briggeman, Allen Featherstone and Christine Wilson

Department of Agricultural Economics
Kansas State University

Results: March Survey, 2014

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 institutions who are listed with agriculture as their main specialty was obtained from the FDIC data base 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) farm 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 Spring 2014 survey had 58 lending institutions respond and the Fall 2013 survey had 59 lending institutions respond. Of the lending institutions responding to the Spring 2014 survey, 30% were from the Farm Credit System and 70% were from commercial lending institutions and insurance companies. A total of 50% of the respondents had a total agricultural loan volume above \$50 million. Please note that this is not the total loan volume of the lending institution but just agricultural loans.

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 Spring 2014 expected long term farm real estate loan interest rates equals 195. This number can be described as 95% 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

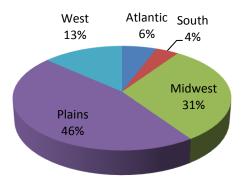


Figure 2, Loan Volume by Region

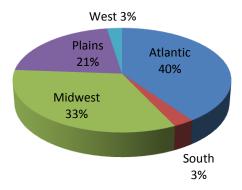


Figure 1 shows the demographics of the Spring 2014 survey respondents by primary service territory. The five territories are: Midwest, West, Atlantic, South and Plains. Table 1 has a list of the states in each region. Forty six percent of survey respondents came from the Plains region while 31%, 13%, 6% and 4% came from the Midwest, West, Atlantic, and South regions, respectively. Eight percent of respondents indicated their respective lending institution was national in scope. Total agricultural loan volume of all respondents is estimated at \$144 billion. The largest lending institution to respond had \$90 billion in commitments and the smallest had \$10 million in agricultural loans. While the Plains region had the most respondents, Figure 2 shows that it only accounted for 21% of agricultural loan volume. The survey demographics for the Spring survey were similar to that of the Fall survey, although a bit more volume was represented in the Atlantic region.

Figure 3 shows the survey results for loan interest rates from Spring 2013 to Spring 2014. Over the past three months, more respondents stated that loan interest rates increased slightly for Farm Real Estate and decreased slightly for Operating loans. Survey respondents expect that interest rates will likely increase in the short term and long term for all three types of loans. Overall, interest rates are still low with one respondent noting that "favorable interest rates are still helping (their) customers."

Survey respondents' short term expectations during the Spring 2013 survey were similar to what respondents reported happening the previous 3 months of the Spring 2014 survey. In Spring 2013, an index of 103 was reported for the short term expectation of the Farm Real Estate interest rate and in Spring 2014 an index of 105 was reported for what respondents had experienced the previous 3 months. The accuracy of the Spring 2013 survey was similar for Intermediate and Operating Loan interest rates.

200 ■ Spring 2013 ■ Fall 2013 180 ■ Spring 2014 160 140 120 100 80 60 40 20 0 Short Term Long Term Short Term Long Term Short Term Long Term Past 3 Past 3 (1 Year) (2-5 Years) Months Months (1 Year) (2-5 Years) Months (1 Year) (2-5 Years) Farm Real Estate Intermediate Operating

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 asking about 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.

Figure 4 shows that survey respondents saw a decrease in the spread over cost of funds in the past three months. However, this trend is expected to cease in the long term. On the long term outlook on spread over cost of funds, respondents were split on what this measure would do in the long term. For farm real estate loans, 32% of respondents indicated that spread over cost of funds would increase while 26% expect it to decrease. This created the overall index of 105 shown in Figure 4 below. The split in opinion also shows that overall expectations for the long term are unclear or may be changing.

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

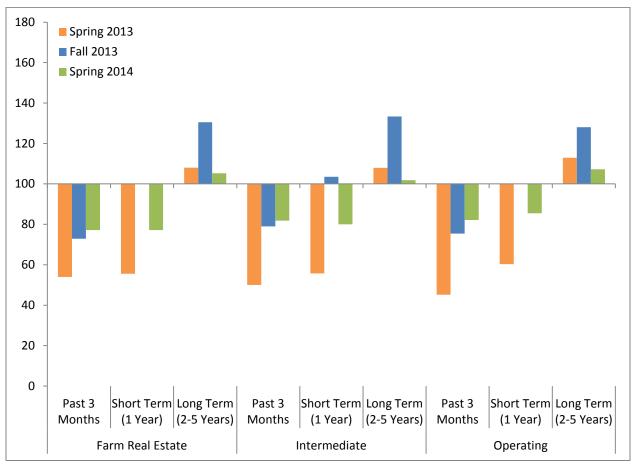


Figure 5 shows the responses for farm loan volume. This question aims to analyze the aggregate amount of agricultural lending. Over the past three months, total farm loan volume rose, which was led by strong farm real estate loan volume. Looking forward, the volume of farm loans is expected to increase for all loan categories in both the short term and long term, indicating strong expected availability and demand for agricultural loans. Operating loan volume has remained steady in the last quarter though it is expected to increase in the future. Survey responses from the 2014 Spring survey to 2013 Fall survey did not change much.

Much like the outlook for spread over cost of funds, the past three months for farm loan volume for all four categories varied among survey respondents. The overall index for the past three months for total farm loans was 129; however, 20% of survey respondents indicated their lending institution saw a decrease in the total amount of farm loans (Table 2). This shows that while the overall agricultural sector has indicated an increase in farm loan volume, not all lending institutions experienced a pickup in loan volume. One respondent indicated that, "The short term prospects for new loans and non-performing loans are being influenced by the drop in corn prices. However, this has been good for livestock and ethanol production which we have considerable volume in."

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

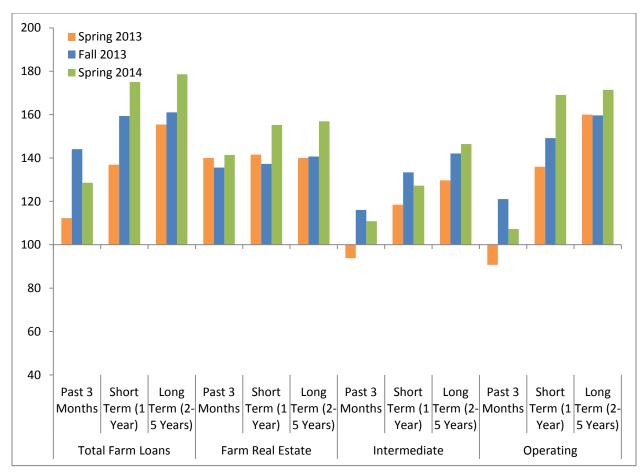


Figure 6 shows the results for non-performing loans analyzed by loan type. It illustrates that all categories of non-performing loans have decreased in the past three months. However, there is sentiment that these will begin to increase in the next year, a change from the previous surveys. In the long term, respondents believe that non-performing loans will increase for all loan categories. This shift occurred in Fall 2013 and has strengthened for the Spring 2014 survey with every loan category showing an increase. Over forty percent more survey respondents think non-performing loans will increase in the long run than those who think it will go down (Table 2).

One respondent noted that "cash flows are extremely tight for 2014, although this has been offset by the large amount of equity/liquidity built up over the past 4-5 years." If farmers are eroding their liquidity or equity to compensate for tighter cash flows, then this could be driving the expectation that non-performing loans will increase in the next two to five years.

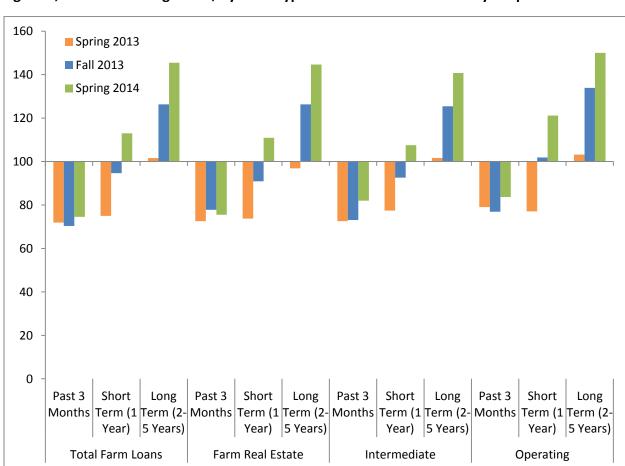


Figure 6, Non-Performing Loans, By Loan Type – Diffusion Index of Survey Respondents

Figure 7 shows the non-performing loans by crop industry sector. All crop sectors saw no change in non-performing loans the past three months; however, non-performing loans are expected to increase in the short term for corn and soybeans and wheat and in the long term for those sectors including cotton. It should be noted that one reason for the increase in non-performing loans in the long run is that currently many lending institutions have few non-performing loans.

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

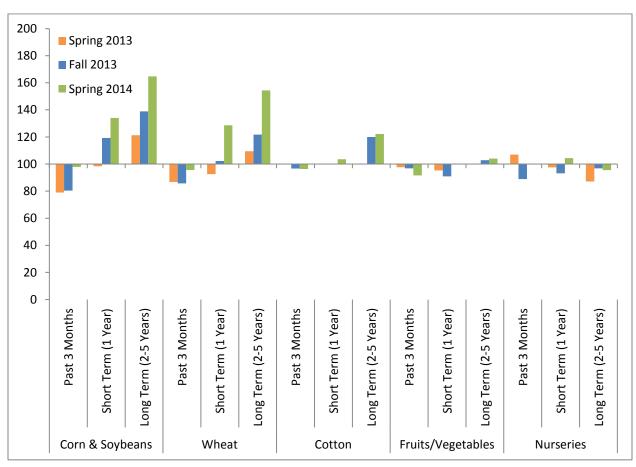


Figure 8 shows the non-performing loans by livestock industry sector. Respondents indicated that over the last three months the number of non-performing loans decreased partly due to the decline in grain prices. There is sentiment that this trend will continue over the next year for the beef, dairy, and poultry sectors.

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

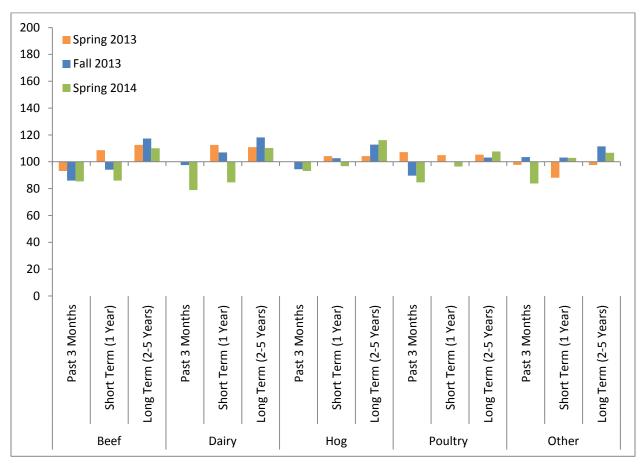
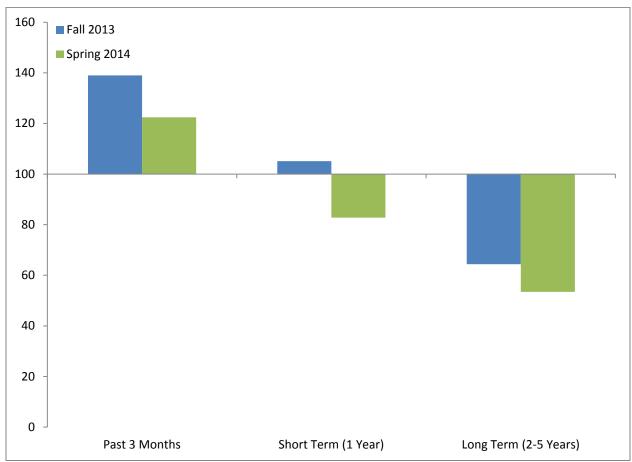


Figure 9 shows the survey responses for expectations on land values. Respondents indicated that land prices increased in the past three months though that expectation weakened since the last survey. For the Spring 2014 survey, expectations for the short and long run suggest more sentiment that land values will fall than expressed in the Fall 2013 survey. Land prices are now expected to fall in the short run and more respondents are expecting a decrease in the long term than during the Fall 2013 survey. Nearly 60% of agricultural lenders expect land values to decrease in the next 2 to 5 years, an increase from 46% during the Fall 2013 survey.

Several respondents commented on land prices in their area with one respondent saying "land prices are softening due to cash grain prices....cash rents have remained high this year and we are seeing more "flex" rental agreements" and another commenting on the affect of the drought saying "the on-going drought has had little adverse impact on land values in our area."





As was the case in Fall 2013, there continues to be less longer-term optimism among agricultural lenders. Land values are expected to decrease in the short term and long term. Interest rates are expected to increase in the short and long term while the spread over cost of funds is expected to increase in the long term. Lenders are not as optimistic as they were in the Fall of 2013. One area where lenders were optimistic is farm loan volume. Lenders indicated that they expect farm loan volume to increase for all categories. The sentiment that non-performing loans will increase also increased as lenders indicated that they expect non-performing loans to increase in the short term and long term for all types of loans.

## 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%	44%	39%	13%	78%	30%	16%	50%	12%	28%	67%	5%	24%	71%	5%	23%	71%	5%
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%	58%	9%	31%	54%	11%	27%	42%	13%
Long Term	Spring 2013	2%	14%	85%	2%	9%	88%	2%	8%	89%	31%	34%	39%	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%	44%	32%	27%	42%	29%	25%	32%	33%

		Farm Dollar Volume											
		Tota	al Farm L	oans	Fari	n Real Es	tate	In	termedia	ate	Operating		
		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%
Past Three Months	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%
	Spring 2013	9%	43%	46%	8%	43%	49%	9%	58%	28%	6%	50%	42%
Short Term	Fall 2013	0%	41%	59%	8%	46%	46%	5%	56%	39%	5%	40%	54%
	Spring 2014	2%	38%	77%	3%	29%	59%	22%	24%	49%	4%	21%	73%
	Spring 2013	9%	25%	65%	15%	29%	55%	19%	30%	48%	5%	28%	65%
Long Term	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%

		Non-Performing Loan by Loan Type													Ag Land Values		
		Total Farm Loans			Farm Real Estate			Intermediate			Operating			Ag Land Values			
		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%				
Past Three Months	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%	
	Spring 2013	28%	58%	3%	30%	64%	3%	26%	65%	3%	30%	61%	7%				
Short Term	Fall 2013	18%	18%	13%	15%	15%	5%	17%	17%	9%	13%	13%	15%	17%	61%	22%	
	Spring 2014	9%	69%	22%	9%	71%	20%	9%	74%	17%	8%	63%	29%	33%	52%	16%	
	Spring 2013	19%	56%	20%	21%	62%	17%	16%	65%	18%	16%	63%	19%				
Long Term	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%	