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New Insights in Credit Analysis

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A lesson can be learned from the financial crises impacting residential and commercial real estate as well as the dairy industry in agriculture. That is, changes in macroeconomic factors can turn underwriting standards upside down very quickly. Let us examine seven of the factors that will be critical in evaluating risk in this new environment of global economics that creates extremes in volatility and the bottom line.

In the agricultural lending environment, one must develop underwriting standards for the "top of the cycle," when the environment is ripe for economic profits. For example, the term debt and lease coverage ratio is considered strong at the 150 percent level. However, at the top of the cycle, many of the summaries of farm business data find that the level is 300 percent, particularly for grain and row crop producers who are in the midst of the peak of the super cycle.

With skyrocketing farm real estate prices in many areas of the country, percent equity on the market value balance sheet should be above 75 percent to be considered strong. Ratios below 50 percent will need to be carefully scrutinized. Many lenders suggest that they are lowering the loan-to-value ratio requirements on land, machinery, livestock, and other assets from the 70 to 75 percent range to the 50 to 60 percent range, as a shock absorber to farm real estate and other farm asset declines.

In analyzing available working capital positions, the standard benchmark of 15 to 30 percent of revenue is sufficient in a normal economic cycle. However, this metric should range between 25 and 50 percent of revenue at the peak of the cycle. Many lenders are requiring that the working capital assets, particularly grain and livestock inventory, have a risk management plan attached to the values to solidify the working capital.

Profits, measured by return on assets, are generally sufficient at a 6 to 8 percent return, utilizing cost value balance sheets. At the peak of the cycle, this return is frequently 10 percent for even the average producer, and 15 percent for the top 20 percent of farmers and ranchers.

Underwriting standards need to be able to withstand various degrees of macroeconomic shock. For example, if slower demand for grain reduces prices, the profit and coverage ratio will be the first metrics to decline. Sound underwriting suggests that working capital reserves are the next level of defense. If working capital reserves are drained, then equity or excess collateral can be a means of working through the macroeconomic adversity. One lesson learned from the dairy industry's financial challenges is that financial leverage is a killer if not backed up with strong working capital and a strategic risk management plan that is executed.

Of course, other non-financial factors need a close eye. Recently released data finds farm family living expenses are in the range of \$75,000 to \$80,000 plus, on average. These withdrawals can change the financial ratios very quickly, and, like concrete, once set, they are very difficult to change.

With increasingly complex business arrangements, third-party and counter-party risk are large storm clouds on the horizon. Lenders are conducting much more due diligence on contracts, business and lease arrangements, and buy-sell documents in light of this reality.

In summary, there is much opportunity in ag lending, but the stakes are higher in amount and risk, with much more stretch needed in the credit analysis waistband when it comes to underwriting financial metrics, along with due diligence in the nonfinancial factors.

From a global standpoint, China is putting the brakes on the economy by raising capital requirements at its banks eight times since last October. Some social discontent is now starting to emerge in rural China that will bear watching, along with the continuing saga of southern Europe's sovereign debt issues.

Focusing in on the United States, the leading economic indicators, including the Leading Economic Index (LEI) and the Purchasing Manager Index (PMI), have slowed their positive climb and reflect how oil prices, sovereign debt issues in Europe, and events in Japan are impacting the growth in the economy. The LEI had been showing an increasing trend since mid-2010, but it decreased in April, and then increased again in May. The PMI was down from 60.4 in April to 53.5 in May. Over the summer, a close eye on these variables must be maintained to determine if these indicators will continue on an erratic path.

Housing starts at 560,000 are still about half of the amount needed for a positive reading. Unemployment is still a major issue. The official rate is reported at 9.1 percent, but it jumps to 15.8 percent if discouraged workers, those settling for part-time employment, and marginally-attached workers who have looked for work in the past 12 months are included. The reported unemployment rate has actually been increasing slightly since March, reflecting business owners' reluctance to hire based on federal budget and regulatory uncertainty. All these are structural issues that are drags on the U.S. economy.

Factory utilization of 76.7 percent is still below the 80 percent metric. Core and headline inflation are quickly rising, which will be closely monitored by the Federal Reserve. The energy index has shown a 21.5 percent increase in the past 12 months, and the food index has increased 3.5 percent over the period, both of which contribute to rising headline inflation. Oil prices have moderated somewhat over the past month, giving relief to consumers. The Federal Debt ceiling is yet to be determined, but is on the table for August 2 and will be closely watched.

Lender and Business Dashboard Economic Indicators (for the month of May)

<u>Indicator</u>	<u>Current</u>	<u>Green</u>	<u>Yellow</u>	<u>Red</u>
Leading Economic Index - LEI	114.7	✓		
LEI Diffusion Index	85%	✓		
Purchasing Manager Index - PMI	53.5	✓		
Housing Starts (millions)	0.560			✓
Factory Capacity Utilization	76.7%		✓	
Unemployment Rate	9.1%			✓
Core Inflation	1.5%	✓		
Headline Inflation	3.6%		✓	
Oil Price (\$/barrel)	\$109.59			✓
Yield Curve	3.01		✓	

Lender and Business Dashboard Economic Indicator Benchmarks

<u>Indicator</u>	<u>Green</u>	<u>Yellow</u>	<u>Red</u>
The Conference Board Leading Economic Index® - LEI	Increasing	Flat to Decline	Decline 0.3% for 3 consecutive months AND >1% over the period
LEI Diffusion ¹	>60%	40%-60%	<40%
Purchasing Manager Index - PMI	>50	41.7-50	<41.7
Housing Starts (millions)	>1.5	1.0-1.5	<1.0
Factory Capacity Utilization	>80%	70%-80%	<70%
Unemployment Rate	5%-6%	6%-8%	>8% or <5%
Core Inflation	0%-2%	3%-4%	>4% or <0%
Headline Inflation ²	0%-3%	3%-5%	>5% or <0%
Oil Price ³ (\$/barrel)	<\$50	\$50-\$100	>\$100
Yield Curve ⁴	Steep	Flattening	Inverted

¹Ten indicators make up the LEI - measures % that are increasing; ²Includes food & energy;

³Consumer's perspective; ⁴3-Month Treasury Bill rate to 10-Year Bond rate