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Deep Dive on Working Capital

By Dr. David M. Kohl

Previously, I outlined the importance of working capital, financial analysis, and credit analysis. In my last article, price, cost, market volatility, general income volatility, profits, and eventually cash flow were all major focuses. Additionally, many growth-oriented producers today have an increased concentration of debt and are utilizing assets through leasing instead of the old standard of ownership. Short-term and long-term sustainability depends heavily on a producer's ability to financially self-insure with working capital in order to weather abrupt economic cycles.

As previously covered, the concepts of working capital, revenue, and burn rate on working capital will be important specifically, for those industries facing economic adversity. Now, we will move to our deep dive or in-depth examination of working capital. Remember, working capital is current assets minus current liabilities or on paper, the top half of the balance sheet.

Equity doesn't pay the bills

Unfortunately, while equity is generally a good thing, it does not pay the bills. This is particularly applicable to today's economic environment. Many farmers and ranchers have strong balance sheets in the form of net worth or equity, but are challenged in the working capital area. If working capital is not available, often there are temporary difficulties in paying expenses or meeting capital expenditures in a timely manner. One solution, in this case, is for the business to refinance operating loans into term debt with an extended term utilizing equity as their negotiation leverage. However, if adequate equity is not available, at that point, working capital becomes very prominent in the lender-producer client relationship. In other words, the lender and producer both need to ensure there is enough working capital going forward to meet current obligations.

Not all working capital is equal

Even if a borrower has strong working capital at one point in time, there may still be challenges in this critical, financial area. Lenders must ask several, detailed questions to ascertain the true strength of a borrower's working capital. Such questions may be: What is the composition or the makeup of the current assets? Are the assets concentrated in cash or are they in a form that will require time before they become cash?

Additionally, examination of inventory, whether crops in the bin or livestock in the feedlot, is critical. Careful examination also requires a series of questions to assess true value. For example: Are there marketing and risk management programs on these assets? What is the makeup? What are the price floors? What percent is hedged, if any? Are crops in the field covered by insurance and at what level? Are the market contracts with a financially sound integrator? What is quality of the inventory? Is the inventory still in demand and if yes, for how much longer? How do the sales of inventories align with cash flow needs or overall cash flow conversion? Each of these critical questions necessitates accurate and complete answers in order to realistically determine the strength of available working capital.

The same questions need to be asked concerning the quality and age of receivables. For example, custom work completed three years ago for which payment still has not been received may be very questionable cash flow, in the cash conversion cycle.

Producers often pay expenses ahead of time such as feed, fertilizer, or supplies, as a means of minimizing taxes. This is particularly common if they are using a cash accounting system, as opposed to accrual. Frequently, this results in a twelve to eighteen month commitment of the producer's cash flow or more often, the operating line of credit. These prepaid expenses are often unsecured lines of credit to the vendor or agricultural business. In recent years, producers who were in a strong working capital position found that position considerably weakened when that vendor filed bankruptcy.

Historically, farms maintain little cash reserves. Many are beginning to realize that cash truly is the most attractive asset or in a phrase, "cash is king." This is especially true during financial distress. On the positive side, deep discounts can be taken when cash is available.

It is also important to assess accounts payable. Examine the amounts, the direction, and the level of payables. Accounts payable should be under 5 percent of the revenue. It is dangerous if accounts payable exceed 25 percent of the revenue. As a rule, accounts payable and lines of credit should be less than the inventory, receivables and crops growing in the field, combined.

Finally, account for deferred tax obligations. When current assets are sold, the income is categorized as ordinary income which is subject to federal, state, and other taxes. If at the end of year, cash is no longer available to employ the strategy of prepaying for inputs, tax obligations will frequently require up to 40% of the revenues.

True working capital and alignment

A producer from Minnesota recently gave me a challenge. He stated if working capital is so important, the current assets and liabilities should then be segmented into current, intermediate, and long-term categories in order to determine how they align together.

TABLE A

Months	Current Asset	Amount	Months	Current Liability	Amount
0-4 mo.	Cash	$100,000	**0-4 mo.**	A/P	$100,000
	A/R	$75,000		Operating Line	$560,000
	Inventory	$350,000		Payment	$50,000
	Subtotal	**$525,000**		**Subtotal**	**$710,000**
5-8 mo.	A/R	$75,000	**5-8 mo.**	Payment	$50,000
	Inventory	$350,000			
	Crops Growing	$200,000			
	Subtotal	**$625,000**		**Subtotal**	**$50,000**
9-12 mo.	Prepaid Expenses	$500,000	**9-12 mo.**	Payment	$100,000
	Subtotal	**$500,000**		**Subtotal**	**$100,000**
	Total Current Assets	**$1,650,000**		**Total Current Liabilities**	**$860,000**

A true working capital analysis (Table A) illustrates this concept. The producer, in this case, is projected to generate a negative profit cash flow which will require a draw on working capital. Notice the accounts payable, operating line of credit, and debt service payments are all due within four months. Meeting these obligations will present a challenge because the summation of cash, receivables, and inventory is $525,000 leaving a shortfall in liquidity of $185,000.

The other half of the receivables is five to eight months away along with the sale of inventory, which in this case is finished livestock. Crops growing in the field are valued at $200,000, but will not be ready for harvest and sale until after a five to eight month period.

As one progresses down the current portion of the balance sheet (Table A), notice that nine to twelve months out, in numbers only, you are essentially missing the total amount of prepaid expenses. As such, any prepaid expenses will become revenue and cash flow in nine to twelve months. The good news is the debt service obligations are $150,000 in the intermediate and long-term timeframes, which ensures considerable liquidity beyond four months.

At a glance, this scenario shows a nearly two to one current ratio, strong underwriting standards, and $790,000 in net working capital on $2 million in revenue. While this is not an excellent position it is certainly acceptable. However, by conducting a true working capital analysis you can establish a better representation of working capital. In order to perform a true working capital analysis, one must know what assets are in cash, at what time, the amount of cash and finally, how do those figures align with the obligations over the next twelve months.

Conducting this analysis allows lenders and producers to work side-by-side and answer critical questions. The producer can then better understand and value the importance of crop insurance, marketing and risk management programs, collection of receivables, structured debt service, and operating lines of credit. Each of these plays an essential role in the sustainability of the business, both short-term and long-term.

This deep dive on the top half the balance sheet is critical; especially, in times of economic volatility.

Lender Tip: Join Me in Kansas City

If you would like to hear more about this analysis in person, sign up for the ABA National Agricultural Bankers Conference preconference session co-sponsored by Farmer Mac and FINPACK on Sunday, October 25 in Kansas City, MO. I hope to see you there!

Global Economics

On a recent webcast, a participant asked me how I would summarize the global economy. One word came to mind, "spooky."

On the European front, the Greek situation has been pushed to the back burner. Recent data out of Europe finds very slow growth in the gross domestic product (GDP). France's growth level is neutral to slightly negative. This does not bode well for agriculture because the central bank of Europe will continue the economic stimulus which will result in the continuation of a strong dollar and a weakened Euro. On a side note, Europe dropped production price quotas on milk. The result is a floundering industry in a world flush with milk and weakened demand specifically, in emerging nations, which impacts the U.S. dairy industry also.

On the other side of the globe, China's economy is front and center in the headlines. Since November, China has reduced interest rates four times to stimulate the consumer and prop up equity markets that were recently in a bubble over 100 percent. Additionally, the devaluation of the yuan in Chinese currency creates an interesting picture of the world currency markets. This is reflected in commodity price markets. China's economy, while reported at a growth level of 7.0 percent is most likely growing at 3 to 5 percent. This will place downward pressure on all commodities.

Currently, there are several emerging issues in South America and specifically, Brazil. The Brazilian economy is in recession which represents the 7^{th} largest economy in the world. Emphasis has been placed on the development of infrastructure for the 2016 Olympics as opposed to agriculture and other production infrastructure. With a less than 8 percent approval rating, Brazilian political leaders are clearly not trusted. This bares significant impact on the economy.

Yes, global economics are spooky which impacts agriculture, energy and manufacturing. This, of course, in turn affects U.S. agriculture and rural America especially, the fly over states.

Domestic Economics

The domestic economy appears to be one of headwinds and tailwinds. The Leading Economic Index (LEI) turned negative which is a concerning sign after being positive for much of the recent past. The Purchasing Manager Index (PMI) is still above 50, showing signs of a growing economy. The LEI must be closely watched in the next few months for a possible recession in 2016.

Oil has been a top story in the news. At the time of publication, oil prices were close to $40 per barrel. Some indicators show this metric could fall to the $30 per barrel range as there is an abundance of oil on the world market along with slowing demand specifically, in China.

While factory utilization is still in the high 70s, storm clouds are on the horizon. Inventories are building up as a result of a strong dollar and slowing demand in the central part of the U.S. This will be a sector to watch closely moving forward in the domestic economy.

Housing starts had a nice bounce back and are in the 1.2 million range showing movement toward an ideal metric of 1.5 million annually.

Unemployment rate is now registering in at 5.3 percent (U-3) and 10.4 percent (U-6). Job growth is in the low 200,000 range slightly below the ideal metric of 225,000.

The growth of the economy measured by gross domestic product (GDP) is much stronger than the first quarter, but still anemic in the 2 percent range.

Finally, core inflation and headline inflation are at 1.8 and 0.2 respectively. This is well under 2 percent, the ideal metric of the Federal Reserve.

Moving forward, the U.S. economy is losing steam in the agricultural, energy and manufacturing sectors. The strong dollar and slowing global demand will be a challenge as we move to the fall and winter seasons.

Lender and Business Dashboard Economic Indicator Assessment **8/25/15**

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

Indicator	Current	Green	Yellow	Red
Leading Economic Index - LEI	123.3		✓	
LEI Diffusion Index	75%	✓		
Purchasing Manager Index - PMI	52.7	✓		
Housing Starts (millions)	1.206		✓	
Factory Capacity Utilization	78.0		✓	
Unemployment Rate	5.3%	✓		
Core Inflation	1.8	✓		
Headline Inflation	0.2	✓		
Oil Price ($/barrel)	$58.24		✓	
Yield Curve	2.14	✓		

Lender and Business Dashboard Economic Indicator Benchmarks

Indicator	Green	Yellow	Red
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%**	**2%-4%**	**>4% or <0%**
Headline Inflation[2]	**0%-4%**	**4%-5%**	**>5% or <0%**
Oil Price[3] ($/barrel)	**<$50**	**$50-$100**	**>$100**
Yield Curve[4]	**Steep**	**Flattening**	**Inverted**

[1]Ten indicators make up the LEI - measures % that are increasing; [2]Includes food & energy;
[3]Consumer's perspective; [4]3-Month Treasury Bill rate to 10-Year Bond rate