A FARMER'S GUIDE TO AGRICULTURAL CREDIT

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INTRODUCTION

This guide is designed to help you better understand credit. In the current risky economic environment, credit should be managed as closely and as carefully as other production inputs. Like seeds and chemicals, agricultural credit options are changing and expanding with new and innovative products, and can be complicated by legal concerns. Many agribusinesses now extend credit, while traditional lenders are working harder for your business. Borrowers are offered more alternatives and need to develop procedures to evaluate those choices. These alternatives give borrowers the opportunity to better manage their financial affairs.

This guide outlines a practical approach to evaluating loans. A borrower begins by establishing short-and longterm financial objectives for his or her farm operation. To evaluate credit options, the borrower must understand *all* provisions and obligations, and be aware that the interest rate is not the only issue. A borrower must be comfortable with the levels of uncertainty or have provisions that reduce uncertainty to match his or her risk tolerance. A borrower should be confident that the arrangement will meet his or her objectives and should periodically review lending arrangements to stay on track with the objectives.

Many terms used by lenders and others offering credit are defined in the glossary of this guide and are illustrated in the following sections. Learning the language of credit will be important as you manage your finances. Before entering any formal loan agreement, consult with an attorney, tax advisor and accountant.

TYPES OF AGRICULTURAL LOANS

In this guide, agricultural loans are categorized as short-term, intermediate-term or long-term, depending on their maturity. Lenders often describe loans by the purpose or terms of the loan. For example **short-term** loans are often used for operating expenses. Loan maturity usually matches the length of the agricultural production cycle (e.g., 3 to 18 months), hence a short-term loan. However, this may be described as **line-of-credit** financing under a credit commitment, which specifies the amount and timing of the disbursements and payments of the loan. The line-of-credit may be a single disbursement due at a specified future date or a **revolving** line-of-credit in which the borrower may borrow and repay as needed during a specified time period, usually subject to a maximum borrowing level. On a **nonrevolving** line-of-credit, a borrower is entitled to a specified amount of funds, and repayment does not allow the borrower to draw those funds again. A nonrevolving line-of-credit is sometimes referred to as a draw note.

Intermediate-term loans are used to finance depreciable assets such as machinery, equipment, breeding livestock and improvements. In addition, intermediate-term loans are sometimes used to restructure a borrower's balance sheet to provided additional working capital. Lenders often describe them as capital, or **installment**, loans. Loans usually range from 18 months to 10 years.

Long-term loans are used to acquire, construct and develop land and buildings, and usually are amortized over periods longer than 10 years. Lenders may describe them as **real estate mortgages** because they are usually secured by real estate. Long-term loans are sometimes referred to as **contract financing**, in which

case a seller provides financing directly to a buyer.

LOAN DOCUMENTS

Loan transactions typically include several documents for the borrower to sign, depending upon the type of loan. The **note** or **promissory note** is a document in which the borrower agrees to repay a loan at a stipulated interest rate within a specified period of time. The note may specify a variable, fixed or adjustable rate, and whether line-of-credit financing is being used. A **loan agreement** is a written agreement between a lender and a borrower stipulating the terms and conditions associated with a financing transaction, and the expectations and rights of the parties involved. The loan agreement may indicate reporting requirements, possible sanctions for lack of borrower performance and any restrictions placed on a borrower.

A **security agreement** is a legal document signed by a borrower granting a security interest to a lender in specified personal property pledged as collateral to secure a loan. Essentially, a security agreement states what happens to the collateral if a borrower fails to perform as promised. A **financing statement** is a document filed by a lender with public official. The statement reports the security interest or lien on the borrower's non-real estate assets. The **mortgage** serves the same purpose in financing real estate.

TERMS AND CONDITIONS OF THE LOAN

As discussed earlier, a borrower needs to understand the note and loan agreement completely. This section outlines the primary loan terms and conditions included inmost notes and loan agreements.

Disbursement of Funds

Disbursements for intermediate- and long-term loans are usually a single payment advanced at a specified time. Some short-term operating loans may be single disbursements, but the trend in the lending industry is to establish lines-of-credit. This feature allows the borrower to reduce interest costs by using funds when needed and repaying funds as surplus cash is available.

Disbursement of funds on lines-of-credit is handled many ways. Many commercial banks allow the customer to phone or electronically submit a request for a specified amount to be deposited into the borrower's checking account. The borrower's loan balance is increased and funds are added to the borrower's account. Or, the lender may provide the borrower a book of drafts. A draft can be used instead of a check to pay bills. The borrower's loan balance increases when the draft clears the financial system and returns to the borrower's financial institution. Lenders usually restrict drafts to business-related expenses.

Payment Type

Payment type refers to the method of repayment. Payments on line-of-credit financing generally occur when the borrower has surplus funds. The lender usually establishes a payment schedule for intermediate- and long-term loans. A borrower should ask the lender to produce a copy of a payment schedule that specifies principal and interest payments over the life of the loan. The borrower can then compare payment patterns on different loans.

A borrower should be aware of any **demand clauses** in a note or loan agreement. A demand clause is a provision that allows the lender to demand payment at *any* time. Even though the demand provisions are seldom carried out, a borrower should be *comfortable* with paying the loan upon demand, especially in times of economic uncertainty.

There are three common payment types. One payment type for intermediate- or long-term loans is the **fixed payment method**. This method requires a fixed payment (interest plus principal), which repays a loan over a specified period of time at a specified interest rate. This repayment process if often referred to as equal amortization. Part of each payment is allocated to principal and part to interest, with successive payments retiring more and more principal.

Another way to calculate the payment on an intermediate- or long-term loan is **fixed principal payment** with interest due on the unpaid balance. The fixed principal amount is usually calculated by dividing the loan amount by the total number of payments. Under this method, the initial payments of principal and interest are the largest, and the ability to cash flow these payments must be considered. This method of payment requires less total interest over the life of the loan because more of the principal is repaid earlier in the loan.

Table 1 shows a comparison between the fixed payment method and the fixed principal method. The loan is for \$100,000, to be repaid over five years at 10% interest. The payment remains constant (\$26,380) with the fixed payment method. With the fixed principal method, the annual payment ranges from \$30,000 in year 1 to \$22,000 in year 5. Total interest payments are \$1,898 higher with the fixed payment method.

A third payment type is a **balloon payment loan**. Balloon payment loans are relatively shorter-term loans (e.g., five years). At the end of the period, the entire unpaid balance of the loan is due; the principal must either be paid in full or new loan terms must be negotiated. The initial payments are usually based on a longer amortization period (e.g., 10 to 30 years) under the assumption that the loan will be paid off, renewed or financed at maturity. If interest rates fall and credit conditions improve, a borrower could negotiate more favorable loan terms at renewal. On the other hand, if interest rates rise or credit tightens, the loan terms may become less favorable. In addition, the borrower's risk is considerably higher since the lender may decide not to renew the loan at maturity. Borrowers considering balloon payment loans need to inquire about the fees added each time the loan is renewed.

Table 1. Fixed payment vs. fixed principal.

Loan Terms: \$100,000, five years, 10% interest, one payment per year.

Fixed Payment Method					Fixed Principal Method					
Year	Beginning	Principal	Interest	Total	Ending	Beginning	Principal	Interest	Total	Ending
	Balance	Payment	Payment	Payment	Balance	Balance	Balance	Payment	Payment	Balance
1	100,000	16,380	10,000	26,380	83,620	100,000	20,000	10,000	30,000	80,000
2	83,620	18,018	8,362	26,380	65,602	80,000	20,000	8,000	28,000	60,000
3	65,602	19,820	6,560	26,380	45,782	60,000	20,000	6,000	26,000	40,000
4	45,782	21,802	4,578	26,380	23,980	40,000	20,000	4,000	24,000	20,000
5	23,980	23,980	2,398	26,378	0	20,000	20,000	2,000	22,000	0
Total		100,000	31,898	131,898	NA	NA	100,000	30,000	130,000	NA

Table 2 illustrates a balloon payment loan. Payments in the first four years are identical to a 20-year

amortized Ioan. After the fifth payment, \$10,660 of the Ioan has been paid off, leaving an outstanding Ioan balance of \$89,340. This amount must be paid in full or refinanced at interest rates prevailing in year 5. Although the lender may refinance the balloon payment Ioan, there is *no* legal obligation to do so. The decision to renew will be based on the lender's consideration of credit and economic factors as they apply at the time of renewal. A borrower selecting a balloon payment Ioan should be comfortable with risks associated with balloon payment Ioans. If a borrower is considering refinancing with a different lender upon maturity, additional administrative and closing costs may be incurred.

Table 2. Payment pattern of a balloon payment loan.

Loan Terms: \$100,000, five years, 10% interest, one payment per year based on a 20-year amortization.								
Year	Beginning	Principal	Interest Payment	Total Payment	Ending Balance			
	Balance	Payment						
1	100,000	1,746	10,000	11,746	98,254			
2	98,254	1,921	9,825	11,746	96,333			
3	96,333	2,113	9,633	11,746	94,220			
4	94,220	2,324	9,422	11,746	91,898			
5	91,896	2,556	9,190	11,746	89,340			
5 (Balloon Payment)	89,340	89,340	0	89,340	0			

Interest Rate

Since it is the visible "price tag" of a loan, the interest rate is often used to compare loans. Loans carry fixed, adjustable or variable interest rates. A **fixed** rate loan carries the same interest rate until the loan is paid off. A variable or adjustable rate loan has provisions to change the interest rate based on changes in market rates of interest, a specified index or other factors determined by a lender. Interest rates on **adjustable** rate loans or mortgages can *only* change at intervals specified in a not or loan agreement. For example, the interest rate on a five-year adjustable rate mortgage can change once every five years.

A **variable** rate loan may also designate intervals in which interest rates may change, but in some variable rate loans a change in the interest may be at the *discretion* of the lender. If a borrower has a variable or adjustable rate loan, he or she should know how often and how much the interest rate may change. The borrower should also be able to calculate how changes in interest rates affect the loan payment. A borrower should ask the lender to estimate the scheduled payment at various rates of interest. The borrower should be comfortable with the uncertainty involved with potential interest rate changes. If not, the borrower may request loan terms that reduce the interest rate risk.

If the interest rate on a variable or adjustable rate loan is linked to a specified index rate, a lender typically adds a margin above the index rate to determine the interest rate. For example, if the index rate is 9% and the margin is 2%, the interest rate on a variable rate or adjustable rate loan is 11%. If the index rate changes to 11% in the next adjustment period, the interest rate charged will be 13%.

Many characteristics of variable and adjustable rate loan differ among lenders. The interest rate index (if any), margin, length of adjustment period and caps (upper limits) are the major distinguishing features. These features may be negotiable.

Interest rate index: The variable of adjustable interest rate is sometimes linked to an interest rate index. Many lending institutions use their average cost of funds or another internal rate as the basis to price loans. Other common indices include 1-year Treasury securities rates, 90-day Treasury bills, prime rate charged at money center banks, federal funds rate and the London Interbank Offer Rate (LIBOR). Differences between the indices can be substantial. Federal funds rates and 90-day Treasury bill rates can change every day, while the prime rate changes less frequently. A borrower should ask the lender about historical patterns of the index rate. In addition, if the lender is using the institution's internal rate, a borrower should ask how often the lender changes this rate.

Margin: The margin refers to the percentage points that the lender adds to the rate index to determine the

rate charged to the borrower. The margin covers the costs of administering the loan, a risk premium, and a profit margin for the lender. The note or loan agreement will state if the margin is to remain constant over the maturity of the loan.

Length of adjustment period: The adjustment period is the length of time before the lender can change the borrower's interest rate. At the end of each adjustment period, the interest rate may be adjusted to reflect changes in the index (if an index is used). The note *may* allow for other terms of the loan to change at each adjustment period.

Caps: Rate caps may be associated with variable or adjustable rate loans. They limit how much the interest rate can change at each adjustment period. Many loans also have life-of-loan rate caps which limit interest rate movements over the entire life of the loan. Often a cap may be purchased as an optimal feature of the loan.

A borrower should be aware of each of these factors affecting a variable or adjustable rate loan. Moreover, the combination of the factors and the resulting implications must be considered. For example, if a lender has a volatile interest rate index, a borrower should consider some type of cap. Lenders will negotiate on the different variable and adjustable rate features. For example, a lender may lengthen the adjustment period in exchange for a higher margin. A borrower should feel comfortable with the variable or adjustable rate features and be willing to discuss changes in a loan package.

Fees and Service Charges

As a general rule, loan fees or "points" are charged at a the time the loan is made. A point is 1% of the amount loaned. In addition, there may be other service charges for which the lender will require reimbursement. Service charges and fees are typically charged for:

- real estate appraisals,
- credit searches,
- legal costs,
- recording mortgages and deeds,
- mortgage title insurance premiums and
- title searches.

Fees and service charges increase the borrower's cost. **Figure 1** shows the estimated increased cost over the life of a loan for one point paid at origination on a 10% loan with annual payments. For example, the effective interest rate on a 7-year loan increases about 0.30% (30 basis points) for one point paid at origination. In other words, if the stated interest rate on a 7-year loan is 10% and the lender charges a one-point origination fee, the effective interest rate to the borrower would be approximately 10.30%. Using this technique, a borrower could compare the effective interest rates on various loan products. A loan comparison FAST tool can also be used to estimate more precisely the impact of fees on the costs of loans.

Some lenders will reduce the interest rate in exchange for a fee at origination. This is called a **rate buydown**. A borrower could also use Figure 1 to estimate the potential benefit from a rate buy down. For example, suppose a lender offers to reduce a borrower's interest rate on a fixed-rate loan by 0.20% (20 basis point) for 1 point at origination. The cost is the same if the loan is expected to be paid off in 12 to 13 years (intersection of 0.20% and line). If the loan is expected to be paid off in more than 13 years, a borrower should benefit by the **rate buydown**, while a borrower's anticipated return would be less if the loan is expected to be paid off in less than 12 years. This graph is only an approximation of a 10% fixed payment loan. The break-even point would be different if the loan were to be paid before maturity. A borrower should ask the lender to estimate the break-even points for each loan alternative.

Stock Purchases and Compensating Deposit Balances

Farm Credit System lenders usually require a stock purchase. The stock requirement may be as low as 2% of

the loan amount or a maximum of \$1,000. A stock purchase increases the effective interest rate on the loan. The effect of the stock purchase on the effective interest rate diminishes as the loan maturity lengthens and/or loan size increases. The purchase of stock is a financial investment in the issuing institution which is typically paid back at loan maturity, but the lender is not obligated to do so.

A compensating deposit balance is aminimum deposit balance that is sometimes required by a bank from a borrower. The balance is usually expressed as a percentage of the total loan commitment and/or a stipulated percentage of the amount of commitment actually used by the customer. In some cases, compensating balances can be used as a negotiating device by the borrower.

Payment Frequency

The frequency of payments differs among loans. Typically, intermediate- and long-term loans are structured with monthly, quarterly, semiannual or annual payments. More frequent principal payments generally reduce the total interest paid over the life of the loan. A similar factor to consider is the timing of the payments. Obviously, it is preferable to have payments which correspond with high cash inflows. A borrower should establish a payment pattern with a lender that coincides with his or her cash flow.

Figure 1. Increased cost of loan per point origination fee.



Note: Figure 1 will shift upward if interest rates are higher than 10%, while the graph will be slightly lower if interest rates are less than 10%. Figure 1 does not account for the time value of the tax difference between points paid at origination and interest paid over the life of the loan.

Maturity

Loan maturity is simply the time until the loan is fully due and payable. A borrower should evaluate his or her ability to generate cash to repay debt when comparing loans with different maturities. As a rule of thumb, a borrower should not select a loan maturity that is longer than the anticipated life of the asset being financed. Shorter maturities result in lower total interest payments over the life of the loan and more rapid accumulation of equity in the asset being financed. In contrast, loans with longer maturities will have lower loan payments

and, therefore, free up cash for other uses. Thus, tradeoffs between shorter and longer loan maturities should be carefully evaluated.

Table 3 shows annual payments among loans of different maturities and interest rates. For example, the annual payments on a \$100,000, 20-year loan at 10% would be \$11,746. The payments on a similar 30-year loan would be \$10,608. A borrower could also use Table 3 to estimate the change in annual payments as interest rates changed.

Annual Payments								
	Interest Rate							
Years to Maturity	8%	10%	12%	14%	16%	18%		
5	25,046	36,380	27,741	29,128	30,541	31,978		
10	14,903	16,275	17,698	19,171	20,690	22,251		
20	10,185	11,746	13,388	15,099	16,867	18,682		
30	8,883	10,608	12,414	14,280	16,189	18,126		

Table 3. Annual loan payments for \$100,000 loan, fixed-payment method.

Collateral Requirements

Collateral refers to the assets pledged as security in a loan transaction. The legal documents representing a lender's interest in collateral include a **mortgage** or **deed of trust** in the case of farm real estate loans and a **security agreement** for operating and intermediate-term loans. Nearly all farm real estate loans are secured by a mortgage or deed of trust on a tract of land. Operating loans and intermediate-term loans may be secured or unsecured, although secured loans are more common. Unsecured loans generally involve smaller loans to financially strong borrowers who usually are long-term customers of the lending institution.

Intermediate-term loans generally are secured by the asset being purchased. Examples are tractors, combines, equipment, facilities and breeding livestock. Operating loans usually are secured by current assets and sometimes by intermediate assets as well. Examples of collateral for operating loans are farm supplies, crop and livestock inventories, growing crops, government payments and deposit accounts. A blanket filing may be used on a line-of-credit financing so that the security agreement applies to essentially all of the current and intermediate assets and, if stipulated, to property acquired in the future as well.

A security agreement usually includes covenants about selling, insuring and/or maintaining collateral. Many security agreements for real estate purposes now include provisions regarding the storage and disposal of hazardous wastes. A borrower should be aware of the procedures and notifications that need to be made upon selling or modifying assets used as collateral.

A borrower should also be aware of the lender's right to collateral upon default. A security agreement or mortgage will specifically outline the lender's and borrower's rights upon default.

Prepayment Penalties

A borrower should be aware of prepayment penalties. A prepayment penalty is a fee charged by a lender when a loan is paid prior to its maturity. Prepayment penalties vary significantly among lenders. Prepayment penalties will *increase* the cost of refinancing a mortgage and *reduce* the flexibility of changing loan alternatives, such as refinancing if interest rates decline.

Refinancing

As interest rates fall, refinancing may become more attractive. Better service, lengthening of maturity, more

favorable noninterest lending terms, and customer dissatisfaction may also motivate a borrower to refinance. In addition to the interest rate reduction, a borrower should estimate fees and penalties that would result from refinancing the loan. These fees and penalties may overcome any interest rate savings. Furthermore, if the borrower is switching from a fixed-rate loan to a variable- or adjustable-rate loan, he or she should evaluate the differences in risk associated with these loans.

Loan Conversion

A conversion option provides the ability to convert from one type of loan to another (e.g., from fixed rate to variable, and visa versa) at any time or at the end of an adjustment period. This option may require a fee.

Reporting Requirements

The detail and frequency of financial reports required from a borrower will differ from lender to lender and by type and size of loan. Many real estate lenders require annual financial statements. Others only require statements when originating or renegotiating a loan. The borrower should feel comfortable with the financial statement requirements, but choosing a lender that requires the fewest reports may not be in the borrower's best interest. Most borrowers are already preparing periodic financial reports for management purposes. Thus, reasonable reporting requirement should not be a significant factor in the borrower's choice of lender.

The financial statements include a balance sheet formulated at the same time each year and an income statement. A cash flow budget may also be helpful. Using accurate and verifiable data is important.

Credit Evaluation Procedures

Many agricultural lenders analyze the creditworthiness of agricultural borrowers using a combination of judgement and formal credit scoring models or risk assessment worksheets. This approach seeks to combine various measures of business performance (e.g., profitability, solvency, liquidity, repayment history and collateral) with other information about the borrower to reach an overall credit score. This credit score may be used in making loan decisions, determining the borrower's interest rate, deciding about loan supervision and monitoring business performance. Borrowers can aid in the evaluation process by keeping comprehensive financial records (e.g., balance sheets, income statements, flow of funds summaries) and presenting this information to the lender in a timely, well-organized and thoroughly documented fashion. Annual statements should be prepared at the same time each year to allow for more appropriate comparisons over time. In turn, the borrower can ask a lender to review the results of the credit evaluation process so that both parties clearly understand the strengths and weaknesses of the farm business, and thus develop more effective financial plans in the future.

Risk Management

Practices by borrowers that help to stabilize farm income and improve the liklihood of successful loan repayment. Examples include enterprise diversification, resistant seed varieties, crop insurance, holding financial reserves, limits on borrowing, crop share leases, off farm work, and marketing practices sucgh as forward contracting, frequency of sales, futures and option contracts and others. Lenders may respond to these practices with more favorable financing terms, lower interest rates, and access to credit.

Late-Payment Penalties and Foreclosure Provisions

Even though most borrowers plan to make timely loan payments, unforeseen circumstances sometimes results in late payments. A borrower should compare the penalties associated with late payments and grace periods that are specifically written in loan documents. A borrower should also be aware of the conditions under which the loan is considered in default.

Other Considerations

It is beyond the scope of this guide to describe rating techniques for lenders or their institutions; however, a borrower should seek to develop *confidence* and *trust* with both lenders and lending institutions.

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