Navigating Debt: Strategies for Farm and Ranch Families

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You should **NOT** be ashamed of the choices that you have made

- Not all debt is "bad"
- Often, we make the best choices we can with the knowledge, skills, and options that we had
- It is not productive to dwell on past choices that we can't "undo"

What is debt?

- **Debt** is an obligation to repay money that you've borrowed.
- Sometimes called: obligation or liability.
- **Examples** include credit cards, operating notes, lines of credit, accounts payable, mortgages, equipment loans, etc.



Why do we use debt?

1. Don't have enough cash to purchase an item outright

- 2. The cost of the loan is low, compared to what their money is earning in another investment.
 - For example, someone may choose a low-interest loan at 3% rather than withdrawing money from an investment account earning 8%+.



Loan Terminology



- Principal: Money borrowed
- Term: Amount of time to repay
 - Short (Less than 1 Year)
 - Intermediate (1-10 Years)
 - Long (10+ Years)
- Interest rate: agreed-upon fee sometimes called the "APR" (Annual Percentage Rate)
 - Interest charged on the balance of the principal
 - Additional fees may apply



Short Term Loans



- Credit Cards, Operating Notes & Lines of Credit
- Often offered by input suppliers (seed and chemical companies)
- Used primarily for **input purchases** during periods of inconsistent cashflows.
- Know the difference in the **APRs** Credit cards have a MUCH higher interest rate, than operating notes or lines of credit.
- **Do not use an income replacement** only put expenses on these loans that can be repaid in the future.

Credit Cards

Terminology

- **Balance** the total amount of money the cardholder (borrower) owes the credit card company.
- Minimum Payment calculation varies by card. The smallest amount of money that can be paid to avoid fees and remain in "good standing". Remaining amount is subject to interest.
- "Paid in Full" paying the full credit card balance. When paid in full, you won't accrue interest.

Credit Cards are not all "bad" when paid in full...

- Can be useful for short-term cash flow needs (less than 30 days)
- Provide superior fraud protection for online purchases, compared to debit cards
- Offer rewards





Intermediate and Long-Term Loans

- Used to purchase livestock, machinery, equipment, land, houses, etc.
- Typically have a lower APR than short-term loans
- Usually secured by the item being purchased
- Often do not cover the total cost of the item, require "owner's equity"
 - Owner's equity different between the loan amount and the value of the item being purchased. Appraisal or downpayments



Mortgage Example

- Principal: \$350,000
- **Term**: 30 Years, paid monthly (360 payments)
- Interest Rate: 3%
- Payment: \$1,475.61/month

TOTAL EXPENSE PAID \$531,221.08

- Principal: \$350,000
- Interest: \$181,221.08



Typically, as time passes the amount of interest for each payment \checkmark , and the principal \uparrow



Interest Principal



Balance Sheet

List ALL debt

- Including credit cards, and lines of credit from EVERY source.
- Determine the "current" portion of intermediate and long-term loans (principal and interest due in the next 12 months)
- May provide separate spaces for personal assets and liabilities





"Good" Debt

- Has a relatively **low** interest rate
- Item purchased is expected to appreciate
 - housing, land, etc.
- Items you have purchased or the investments you have made have long-term positive impacts or returns on investment
 - Education, machinery, equipment, etc.
- Tax Advantages
- The thing being purchased is "necessary"

"Bad" Debt

- Has a relatively **high** interest rate (over 7%)
- When the items purchased have a life shorter than it takes to pay off the debt (consumables)
- The item is expected to depreciate
- The balance of the loan, is greater than the value of the item
 - "upside down"
- When you go into debt for an item that was not "necessary"
- When you have too much "good" debt

How much debt is too much debt?

Personal Debt

Monthly Debt to Income <20%

Monthly Debt Payments Net Pay X 100

Farm/Ranch Debt

Total Debt-to-Asset Ratio <60%

Total Farm Debt Total Farm Assets X 100

- Net pay = after taxes
- Difficult for farmers/ranchers no steady monthly income. May need to consider this on an annual basis.
- Current Ratio > 1.30

Current Farm Assets

Current Farm Liabilities



Staying out of "bad" debt...

Personal Debt

- Have a family emergency fund
 - In an accessible account like a High Yield Savings Account or Money Market Account
- Budget for <u>known</u> upcoming expenses "sinking funds"
 - car replacement, birthdays, back to school, holidays, vehicle replacement, etc. Have a spending plan or waiting period for "unnecessary" items
- Know what can be financed and what cannot
 - Child's education vs. retirement
- If you are already in "bad" debt avoid taking on new debt

Farm/Ranch Debt

- Develop a realistic cash flow, including family living expenses or owner withdrawals
- List all debts on the balance sheet
- Protect/maintain an acceptable current ratio
- Have a strategic plan for large purchases – "stress test" your payments at various \$/bu or \$/head



SHOULD I PAY OFF MY DEBT?





Where does paying off debt fit in a financial plan?

1. Emergency Fund

1.5 If you have an employer who matches contributions to a 401(k) or 403 (b), invest as much as you can – up to the match.

- 2. Paying off debt above 7%
- 3. Paying off lower-interest debt AND saving for retirement
- 4. Saving/Investing for "other goals"

THE BIGGEST KEY TO LONG-TERM INVESTING SUCCESS IS TIME



Paying Off Debt

6 Questions...

- 1. Do you have a fully funded emergency fund (personal)? What is your current ratio (business)?
- 2. What are your goals?
- 3. What type of debt is it?
 - "Good" debt or "bad" debt? Personal debt or business debt?
- 4. Is it a one-time payment or can you make consistent payments?
- 5. How long will it take to pay off the debt?
- 6. What else would you do with the money?





- Losing value because of inflation
- HYSA, Money Market, 1-5 Year Treasury Bonds ≈4-5% APY
- Index Funds, ETFs, Mutual Funds ≈ 8-10%APY
- Employer 401(k) with a match



Common methods for paying off debt

Snowball

- List debts from the **smallest outstanding balance**, to the largest.
- Pay the minimum payments on all debt
- Make additional <u>principal</u> payments to the **smallest outstanding balance**.

Avalanche

- List debts from the **highest interest** rate, to the lowest.
- Pay the minimum payments on all debt
- Make additional <u>principal</u> payments to the debt with the highest interest rate.
- May pay off debt faster, will pay less in interest expense, but it is difficult to stay motivated



What about lump sum debt payments?

- It is more common for farmers/ranchers to make large single payments on debt
 - Good crop year, sell large assets, etc.
- How do you decide what to pay off first?
 - Depends on the <u>interest rate</u>, and <u>time remaining</u> on the loan. Payments earlier in the life of the loan will result in more interest savings over the long run.
 - Make large payments towards the highest interest rate and/or newest loan



Make sure "extra" payments are going toward the **principal**.





Where do I find more cash to pay off debt?

Increase Income

- Generate more farm income
- Withdraw more from the farm/ranch business to cover personal debt
- Generate more non-farm income
 - Off-farm career, freelance, parttime work, retail business, etc.
 - Selling unused/under-utilized items
 - Rent out items (make sure to understand liability of doing so).

Decrease Expenses

- Non-discretionary
 - Negotiate utilities, health care bills, etc.
 - - Make sure to maintain an
 - adequate amount of insurance

Discretionary spending

- Limit subscriptions, eating out, etc.
- May need to reduce savings and



investments – consider long-

term implications



WHAT DO I DO WITH THE MONEY THAT I HAVE?

Pay off debt or Save/invest

Paying Off Debt vs. Savings/Investing Decision Statement

- 6. What else would you do with the money?
- A. If the savings or investments options are earning <u>More</u> <u>Than</u> the debt interest <u>Save or Invest</u>.
- B. If the savings or investments options are earning <u>About</u> <u>the same as the debt interest Pay Off Debt</u>.
- C. If the savings or investments options are earning Less <u>Than</u> the debt interest <u>Pay Off Debt</u>.



Next steps

1. List out all of your debt.

 Determine if you want to pay it off, using the 6 questions on the "Paying Off Debt" slide.

3. Work with a banker or financial advisor to determine a plan that balances "present you" and "future you".

Loan Assistance



Credit Card "Balance Transfer"



- Move the outstanding balance from one credit card to another. The purpose is to simplify payments by having only one monthly payment, and potentially lower the total interest rate.
- Be cautious, as this may result in a higher total cost
 - Higher interest rates after the introductory period
 - Limited Transfer Amounts
 - Additional fees such as a transfer fee
- Be cautious, need to change your behavior.



Loan Consolidation



- New loan, used to pay off several existing loans or credit card balances. The purpose is to simplify payments by having only one monthly payment, and potentially lower the total interest rate.
- Be cautious, as this may result in a higher total cost
 - Extended loan terms
 - Higher interest rates
 - Additional fees
- Be cautious, need to change your behavior.



Refinancing

- Improve cash flow/ reduce current liabilities by lowering the annual payments by renegotiating the terms of the loan.
 - Extending the period over which the loan is repaid
 - Reducing the interest rate on the loan
- Difficult because most interest rates are currently higher than intermediate and long-term loans established in the past 5 years



Farm Bankruptcy – Chapter 12

- Not "forgiveness" repayment plan over 3-5 years
- The individual or individual and spouse must be engaged in a farming operation
- The total debts (secured and unsecured) must not exceed \$11,097,350
- At least 50% of the total debts that are fixed in amount (exclusive of debt for the debtor's principal residence unless such debt arises out of a farming) must arise out of a farming operation.
- More than 50% of the gross income of the individual or the individual and spouse for the preceding tax year (or, for family farmers only, for each of the 2nd and 3rd prior tax years) must have come from the farming.

SOURCE: https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-12-bankruptcy-basics

Loan Assistance Program Questions

- What is interest rate?
- What are the fees?
- What is this program using for collateral?
- Have I changed my behavior such that I will not exacerbate the problem?



Paying Off Debt vs. Saving/Investing



Example 1 – Low Interest Rate Loan

Mortgage Example

- Principal: \$350,000
- **Term**: 30 Years, paid monthly (360 payments)
- Interest Rate: 3%
- Payment: \$1,475.61/month

TOTAL EXPENSE PAID \$531,221.08

- Principal: \$350,000
- Interest: \$181,221.08



	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000		
Interest Rate: 3%		
Term: 30 Years		
Payment : \$1,475.61/month		
Interest PAID: <mark>\$181,221.08</mark>		
		1

	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000 Interest Rate: 3% Term: 30 Years Payment: \$1,475.61/month Interest PAID: <mark>\$181,221.08</mark>	Term: <mark>19.5 Years</mark> , paid monthly Payment: \$1,975.61 Interest PAID: \$ <mark>112,880.53</mark>	
	Result - Interest Savings: <mark>\$181,221.08</mark> - <mark>\$112,880.53</mark> = +\$68,340.55	

	A) Pay off Debt Early	B) Invest Instead
Principal: \$350,000 Interest Rate: 3% Term: 30 Years Payment: \$1,475.61/month Interest PAID: <mark>\$181,221.08</mark>	Average rate of return on S&P 500 (Long Term Investing)	Beginning Value: \$0 Term: 19.5 Years, paid monthly Expected Return: 8% Payment: \$500, at the beginning of the Month Estimated Future Value of the Investment: \$281,936
EXTENSION		Result -Investment Earnings: <mark>\$281,936</mark> - <mark>\$181,221.08</mark> = +\$100,714.92

	A) Pay off Debt Early	B) Invest Instead
Principal: \$350,000		Beginning Value: \$0
Interest Rate: 3%		Term: <mark>19.5 Years</mark>, paid
Term: 30 Years	Term: <mark>19.5 Years</mark>, paid	monthly
Payment : \$1,475.61/month	monthly	Expected Return: 8%
Interest PAID: <mark>\$181,221.08</mark>	Payment: \$1,975.61	Payment: \$500, at the
	Interest PAID: \$ <mark>112,880.53</mark>	beginning of the Month
		Estimated Future Value of
		the Investment: <mark>\$281,936</mark>
	Result - Interest Savings:	Result -Investment
	<mark>\$181,221.08</mark> - <mark>\$112,880.53</mark> =	Earnings: <mark>\$281,936</mark> -
	+\$68,340.55	<mark>\$181,221.08</mark> = +\$100,714.92

	A) Pay off Debt Early	B) Invest Instead
Principal: \$350,000 Interest Rate: 3% Term: 30 Years Payment: \$1,475.61/month	Term : 19.5 Years, paid monthly	Beginning Value: \$0 Term: 19.5 Years, paid monthly Expected Return: 8%
Interest PAID: \$181,221.08	Payment: \$1,975.61 Interest PAID: \$112,880.53	Payment: \$500, at the beginning of the Month Estimated Future Value of the Investment: \$281,936
EXTENSION	Result - Interest Savings: \$181,221.08 - \$112,880.53 = +\$68,340.55	Result -Investment Earnings: \$281,936 - \$181,221.08 = +\$100,714.92

In this example, investing \$500 per month would have a more positive outcome, than paying off the debt, assuming the expected rate of return is realized.

Paying Off Debt vs. Savings/Investing Decision Statement

- 6. What else would you do with the money?
- A. If the savings or investments options are earning <u>More</u> <u>Than</u> the debt interest <u>Save or Invest</u>.
- B. If the savings or investments options are earning <u>About</u> <u>the same as the debt interest Pay Off Debt</u>.
- C. If the savings or investments options are earning Less <u>Than</u> the debt interest <u>Pay Off Debt</u>.



Sometimes, it is a personal preference to reduce the known expense of the debt vs. the unknown rate of return on the investment





Paying Off Debt vs. Saving/Investing



Example 2 – Higher Interest Rate Loan

Mortgage Example

- Principal: \$350,000
- **Term**: 30 Years, paid monthly (360 payments)
- Interest Rate: 7%
- Payment: \$2,328.56/month

TOTAL EXPENSE PAID \$838,281.14

- Principal: \$350,000
- Interest:\$488,281.14



	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000 Interest Rate: 7% Term: 30 Years Payment: \$2.328.56/month		
Interest PAID: <mark>\$488,281.14</mark>		
EXTENSION		

	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000 Interest Rate: 7% Term: 30 Years Payment: \$2,328.56/month Interest PAID: \$488,281.14	Term: <mark>18.3 Years</mark> , paid monthly Payment: \$2,828.56 Interest PAID: <mark>\$272,198.89</mark>	
EXTENSION	RESULT - Interest Savings: <mark>\$488,281.14</mark> - <mark>\$272,198.89</mark> = +\$216,082.25	

	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000		Beginning Value: \$0
Interest Rate: 7%		Term: <mark>18.3 Years</mark>, paid
Term: 30 Years		monthly
Payment : \$2,328.56/month		Expected Return: 8%
Interest PAID: <mark>\$488,281.14</mark>		Payment: \$500, at the
		beginning of the Month
		Estimated Future Value of
		the Investment: <mark>\$281,936</mark>
		RESULT - Investment
		Earnings: <mark>\$281,936</mark> -
		<mark>\$488,281.14</mark> = -\$206,345.14

	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000 Interest Rate: 7% Term: 30 Years Payment: \$2,328.56/month Interest PAID: <mark>\$488,281.14</mark>	Term: 18.3 Years, paid monthly Payment: \$2,828.56 Interest PAID: <mark>\$272,198.89</mark>	Beginning Value: \$0 Term: 18.3 Years, paid monthly Expected Return: 8% Payment: \$500, at the beginning of the Month Estimated Future Value of the Investment: \$281,936
EXTENSION	RESULT - Interest Savings: <mark>\$488,281.14</mark> - <mark>\$272,198.89</mark> = +\$216,082.25	RESULT - Investment Earnings: <mark>\$281,936</mark> - <mark>\$488,281.14</mark> = -\$206,345.14

	A) Pay off Debt Early	B) <u>Invest</u> Instead
Principal: \$350,000 Interest Rate: 7% Term: 30 Years Payment: \$2,328.56/month Interest PAID: \$488,281.14	Term: 18.3 Years, paid monthly Payment: \$2,828.56 Interest PAID: \$272,198.89	Beginning Value: \$0 Term: 18.3 Years, paid monthly Expected Return: 8% Payment: \$500, at the beginning of the Month Estimated Future Value of the Investment: \$281,936
EXTENSION	RESULT - Interest Savings: \$488,281.14- \$272,198.89 = +\$216,082.25	RESULT - Investment Earnings: \$281,936 - \$488,281.14= -\$206,345.14

In this example, paying an additional \$500 per month would have a more positive outcome, than investing.

Paying Off Debt vs. Savings/Investing Decision Statement

- 6. What else would you do with the money?
- A. If the savings or investments options are earning <u>More</u> <u>Than</u> the debt interest <u>Save or Invest</u>.
- B. If the savings or investments options are earning <u>About</u> the same as the debt interest <u>Pay Off Debt</u>.
- C. If the savings or investments options are earning Less <u>Than</u> the debt interest <u>Pay Off Debt</u>.



The decision to pay off debt or invest depends on the interest rate of the loan and the expected rate of return on the investment





Deciding Which Loan to Pay Off



Example 3 – Lump Sum, Different Interest Rates

Two Equipment Loans Additional \$15,000 Paid in Year 2



Loan A

- Principal: \$500,000
- Term: 7 Years
- Interest Rate: 5%
- TOTAL EXPENSE PAID \$600,999.50
- Principal: \$500,000
- Interest: \$100,999.50

Loan B

- Principal: \$500,000
- Term: 7 Years
- Interest Rate: 7%
- Payment: \$86,409.91/year Payment: \$92,776.61/year
 - TOTAL EXPENSE PAID \$649,436.27
 - Principal: \$500,000
 - Interest: \$149,436.27

	Α	В
2023	1	1
2024	2	2
2025	3	3
2026	4	4
2027	5	5
2028	6	6
2029	7	7



	LOAN A	LOAN B
Additional \$15,000 Paid in Year 2		
EXTENSION		E

	LOAN A	LOAN B
Additional \$15,000 Paid in Year 2	Principal: \$500,000 Interest Rate: 5% Term: 7 Years Payment:\$86,409.91/year Original Interest DUE: \$100,999.50	
	Interest PAID: <mark>\$96,855.27</mark>	
EXTENSION	RESULT- Interest Savings: <mark>\$100,999.50</mark> - <mark>\$96,855.27</mark> = \$4,144.22	:

	LOAN A	LOAN B
Additional \$15,000 Paid in Year 2		Principal: \$500,000 Interest Rate: 7% Term: 7 Years Payment: \$92,776.61/year Original Interest DUE: \$149,436.27
		Interest PAID: <mark>\$143,397.99</mark>
EXTENSION		RESULT- Interest Savings : <mark>\$149,436.27</mark> - <mark>\$143,397.99</mark> = \$6,038.28

	LOAN A	LOAN B
Additional \$15,000 Paid in	Principal: \$500,000 Interest Rate: 5% Term: 7 Years Payment:\$86,409.91/year	Principal: \$500,000 Interest Rate: 7% Term: 7 Years Payment: \$92,776.61/year
Year 2	Original Interest DUE: <mark>\$100,999.50</mark> Interest PAID: <mark>\$96,855.27</mark>	Original Interest DUE: \$149,436.27 Interest PAID: \$143,397.99
EXTENSION	RESULT- Interest Savings: <mark>\$100,999.50</mark> - <mark>\$96,855.27</mark> = \$4,144.22	RESULT- Interest Savings : \$149,436.27 - \$143,397.99 = \$6,038.28

	LOAN A	LOAN B
Additional \$15,000 Paid in Year 2	Principal: \$500,000 Interest Rate: 5% Term: 7 Years Payment: \$86,409.91/year Original Interest DUE: \$100,999.50	Principal: \$500,000 Interest Rate: 7% Term: 7 Years Payment: \$92,776.61/year Original Interest DUE: \$149,436.27
	Interest PAID: \$96,855.27	Interest PAID: \$143,397.99
EXTENSION	RESULT- Interest Savings: \$100,999.50 - \$96,855.27= \$4,144.22	RESULT- Interest Savings : \$149,436.27 - \$143,397.99 = \$6,038.28

If interest rates on two loans are different, **paying a single lump sum payment** <u>on the</u> <u>higher interest loan</u>, will result in more interest savings.

Deciding Which Loan to Pay Off



Example 4 – Lump Sum, Different Timining

Two Equipment Loans Two equipment loans that are exactly the same except one began in 2023 (Loan A), and the other in 2020 (Loan B).

Terms

- Principal: \$500,000
- Term: 7 Years
- Interest Rate:7%
- Payment: \$92,776.61/year
- TOTAL EXPENSE PAID \$649,436.27
- Principal: \$500,000
- Interest: \$149,436.27



	A PMT	B PMT
2020		1
2021		2
2022		3
2023	1	4
2024	2	5
2025	3	6
2026	4	7
2027	5	
2028	6	
2029	7	



	A) Lump Sum, Year 2	B) Lum Sum, Year 5
Principal: \$500,000		
Interest Rate: 7%		
Term: 7 Years		
Payment : \$92,776.61/year		
Interest PAID: <mark>\$149,436.27</mark>		



	A) Lump Sum, Year 2	B) Lum Sum, Year 5
Principal: \$500,000 Interest Rate: 7% Term: 7 Years	Paid Extra \$15,000 in <mark>Year 2</mark> (2024)	
Payment: \$92,776.61/year Interest PAID: <mark>\$149,436.27</mark>	Interest PAID: <mark>\$143,397.99</mark>	
	RESULT - Interest Savings: <mark> \$149,436.27</mark> - <mark>\$143,397.99</mark> = \$6,038.28	



	A) Lump Sum, Year 2	B) Lum Sum, Year 5
Principal: \$500,000 Interest Rate: 7% Term: 7 Years		Paid Extra \$10,000 in <mark>Year 5</mark> (2024)
Payment: \$92,776.61/year Interest PAID: <mark>\$149,436.27</mark>		Interest PAID: <mark>\$147,262.77</mark>
		RESULT - Interest Savings : <mark>\$149,436.27</mark> - <mark>\$147,262.77</mark> = \$2,173.5



	A) Lump Sum, Year 2	B) Lum Sum, Year 5
Principal: \$500,000 Interest Rate: 7%	Paid Extra \$15,000 in <mark>Year 2</mark> (2024)	Paid Extra \$10,000 in Year 5 (2024)
Term: 7 Years		
Payment : \$92,776.61/year		
Interest PAID: <mark>\$149,436.27</mark>	Interest PAID: <mark>\$143,397.99</mark>	Interest PAID: <mark>\$147,262.77</mark>
	RESULT - Interest Savings: <mark>\$149,436.27</mark> - <mark>\$143,397.99</mark> = \$6,038.28	RESULT - Interest Savings : <mark>\$149,436.27</mark> - <mark>\$147,262.77</mark> = \$2,173.5



	A) Lump Sum, Year 2	B) Lum Sum, Year 5
Principal: \$500,000 Interest Rate: 7%	Paid Extra \$15,000 in <mark>Year 2</mark> (2024)	Paid Extra \$10,000 in Year 5 (2024)
Ierm: / Years Payment: \$92,776.61/year Interest PAID: \$149,436.27	Interest PAID: \$143,397.99	Interest PAID: \$147,262.77
	RESULT - Interest Savings: \$149,436.27 - \$143,397.99 = \$6,038.28	RESULT - Interest Savings : \$149,436.27- \$147,262.77= \$2,173.5

If interest rates on two loans are the same, **paying a single lump sum payment** <u>earlier</u> in a loan, will result in more interest savings.



The decision to pay a single extra "lump sum" payment will depend on the interest rate, and time remaining on the loan









Questions

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