



A Checkup On Your Financial Health

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Outline

- Key performance measures
- What lenders look at?
- Tools to monitor your health and assist decision making

Questions -- Perceptions

Why do you maintain records?

Why are financial statements needed?

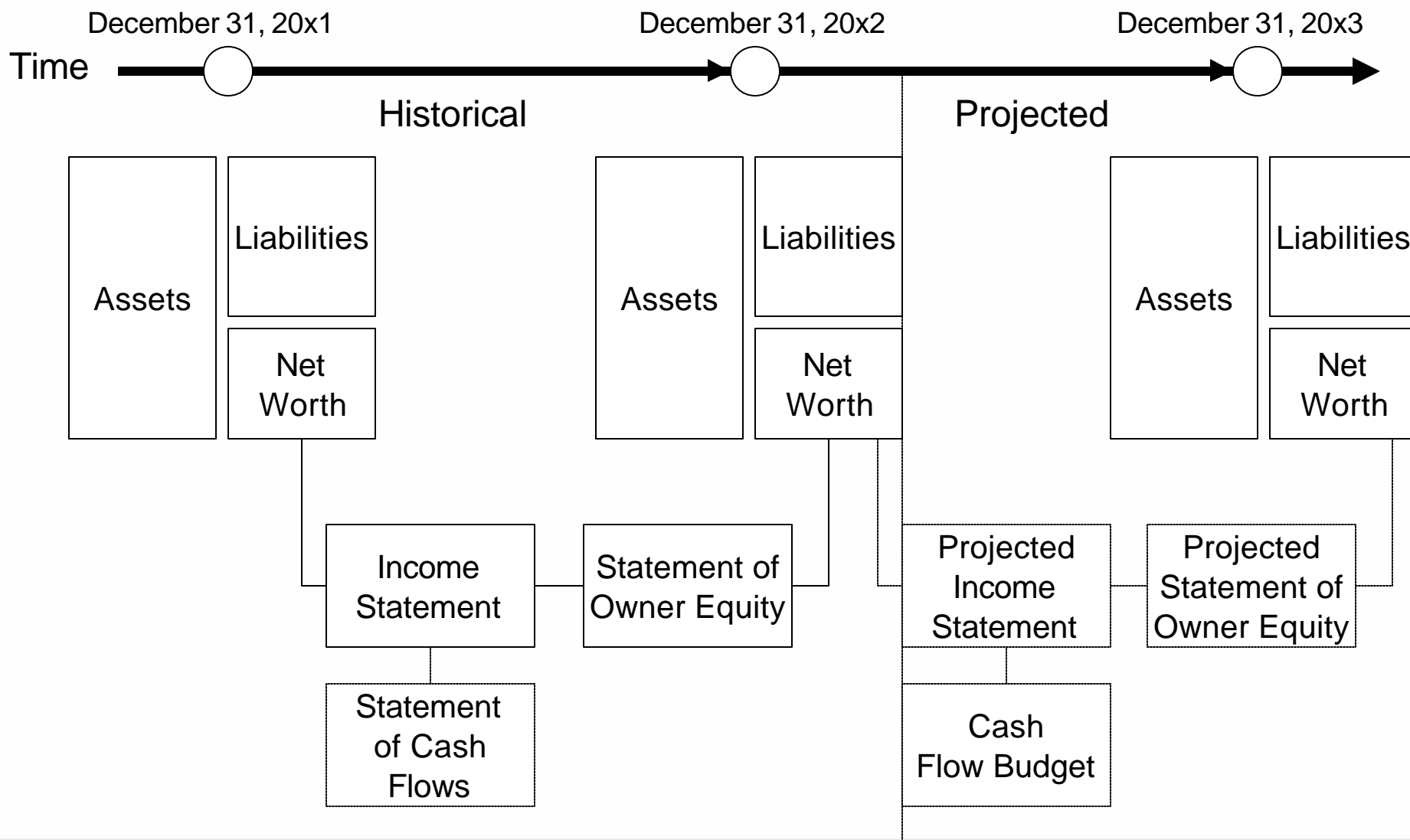
What do lenders need?

Good Records and
Financial Statements are
Critical Diagnostic Pieces of
Equipment

Terminology Primer

- Assets
 - Current
 - Noncurrent
- Liabilities
 - Current
 - Noncurrent
- Net Worth
- Accrual Income
- Cash flow budget

Interrelationships Among Financial Statements



Financial Health

- Level of debt use (leverage)
- Liquidity
- Profitability
- Ability to pay debt
- Efficiency

Debt

Asset

Leverage Financial Structure



**Relative ownership structure of your business
Level depends**

- Relationship between levels of **return** and **cost of debt**
- Risk of returns
- Variability of cost of debt

Leverage Benchmarks

Depends on land ownership

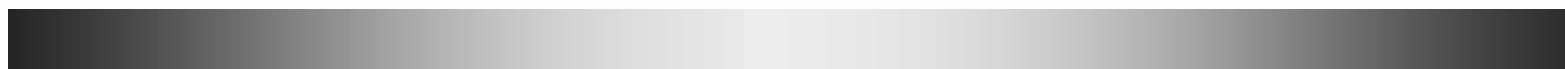
Own less than 20% acres operated

0.10

0.35

0.55

0.75



Very Strong

Stable

Vulnerable

Stressed

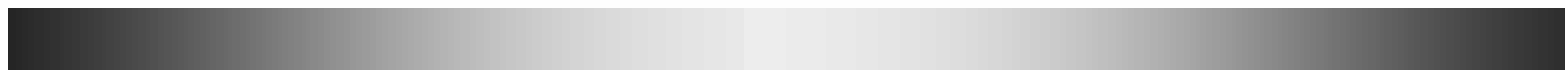
Own between 21 and 50% of acres operated

0.10

0.30

0.50

0.70



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Stressed

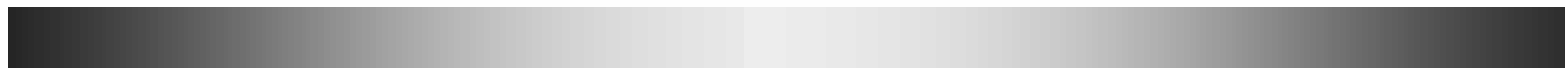
Own more than 50% of acres operated

0.10

0.25

0.45

0.65



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Liquidity – Meet Cash Flows



Three Purposes of Liquidity

1. Transactions
2. Meet uncertainties
3. Investment opportunities

Liquidity needs may vary by

- Type of farm (business)
- Risk faced by the operation
- Stage of business (age)

Measures of Liquidity

Current Assets –
Current Liabilities

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\frac{\text{Working Capital}}{\text{Gross Revenue}}$$

Current Ratio

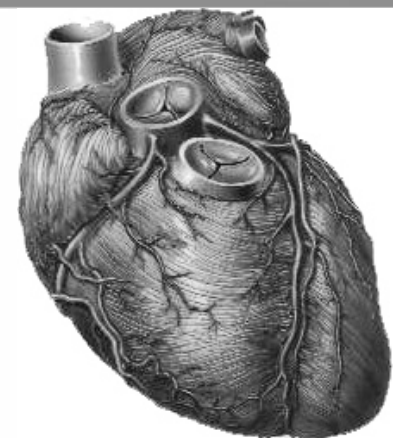


Working Capital to VFP



Profitability

Life of the Business



- Need an **Accrual**-based measure of net farm income
- **Accrual**-based measures are more than 25% different than cash-based measures

Like measuring your temperature with a room thermometer
Schedule F (cash basis) is **not** a reliable indicator of profit

Key Accrual Adjustments

Schedule F

Accrual Adjustments

Cash Sales

+/- Change in inventories
+/- Change in receivables

Cash Expenses

+/- Change in prepaid expenses
+/- Change in accounts payable
+/- Change in accrued interest

FAST Tool

Cash to Accrual Income Approximation

Uses of Net Income

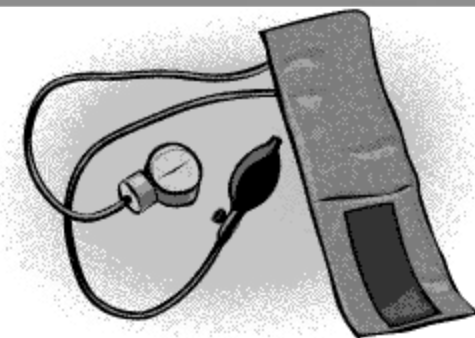
Family Living

Replace Assets

Pay Off Debt

**Invest in
Additional Assets**

Profitability Measures



- Net Farm Income
- Rate of Return on Assets

$$\frac{\text{Net Farm Income} + \text{Interest Paid} - \text{Family Withdrawals}}{\text{Average Farm Assets}}$$

- Rate of Return on Equity

$$\frac{\text{Net Farm Income} - \text{Family Living Withdrawals}}{\text{Average Farm Equity}}$$

- Profit Margin

$$\frac{\text{Net Farm Income} + \text{Interest Paid} - \text{Family Living Withdrawals}}{\text{Gross Revenue or (VFP)}}$$

Profitability Benchmarks

Return on Farm Assets (ROA)



Profitability Benchmarks

Return on Farm Equity (ROE) and Operating Profit Margin

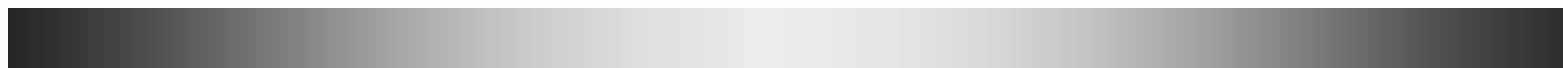
ROE

25%

10%

3%

0%



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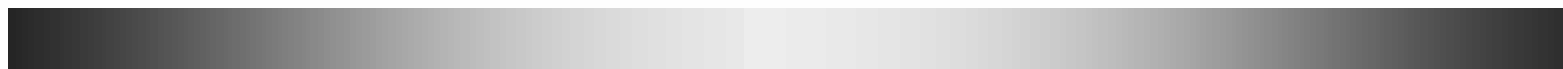
Operating Profit Margin

0.40

0.25

0.10

0.00



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Sources of Profitability Problems

Assets

Revenue

Liabilities

Expenses

Assets

Problems

Inefficient use of assets

- too many assets
- wrong mix of assets
- price of assets too high

Measures

$$\text{Asset Turnover} = \frac{\text{VFP (Gross sales)}}{\text{Total Farm Assets}}$$

Machinery Cost per Acre

Machinery Investment per Acre

Problems

- Too much leverage (debt)
- Cost of debt is too high
- Wrong mix of debt

Liabilities

Measures:

$$\frac{\text{Debt}}{\text{Assets}} \Rightarrow \frac{\text{Current Debt}}{\text{Current Assets}} \Rightarrow \frac{\text{Noncurrent Debt}}{\text{Noncurrent Assets}}$$

The allocation of debt (current & noncurrent) should be comparable to allocation of assets.

Cost of Debt : Average interest rate paid on debt

Problems

- Low production
- Poor marketing

Revenue

Measures

- Average yield per acre
- Livestock production measures
- Average price received per unit produced

Problems

- High Crop Costs
- High Machinery Costs
- High Land Rent
- High Interest Costs
- High Other Costs

Expenses

Measures

Cost as a proportion of total income = $\frac{\text{Cost Item}}{\text{Gross Revenue (VFP)}}$

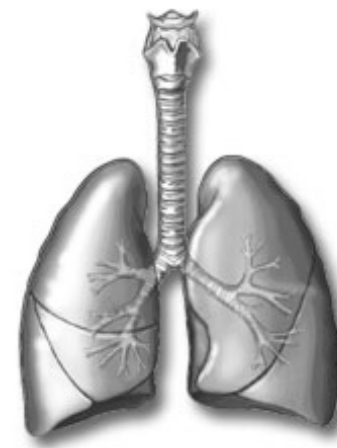
Examples: $\frac{\text{Machinery Cost}}{\text{Gross Revenue (VFP)}}$ or $\frac{\text{Interest Expense}}{\text{Gross Revenue (VFP)}}$

Cost items per acre

Examples: $\frac{\text{Machinery Cost}}{\text{Acre}}$ or $\frac{\text{Interest Expense}}{\text{Acre}}$

Repayment Capacity

- What **cushion** does your operation have after paying taxes, debt, and family living expenses?
- How sensitive is this **cushion** to changes in prices, yields or costs in the future?
- How much cushion do you have relative to the level of debt payments?



Repayment Capacity Measures



Net farm income

- + non-farm income
- + depreciation
- income taxes
- family living
- scheduled principal payments on term debt

= Capital Replacement &
Term Debt Repayment Margin (CRDRM)

Cushion

Repayment Capacity Sensitivity

- Repayment Margin/Gross Revenue
- Repayment Margin/Operating Expense
- Repayment Margin/Interest Expense

How sensitive is your
cushion to changes in the future?

Repayment Capacity Measures

Term Debt and Lease Coverage Ratio



Net farm income

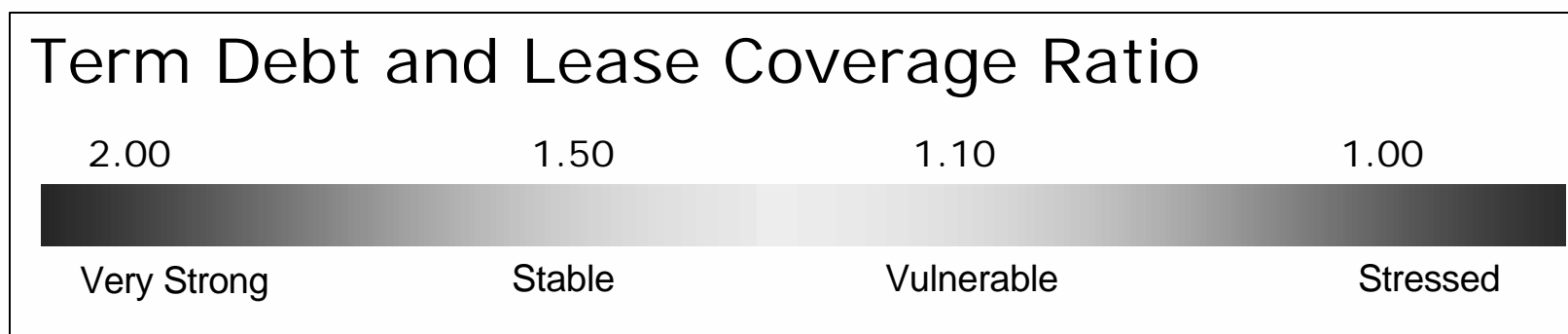
- + non-farm income
- + depreciation
- + interest on term debt
- income taxes
- family living

SUM

Divided by scheduled principal and
interest payments on term debt

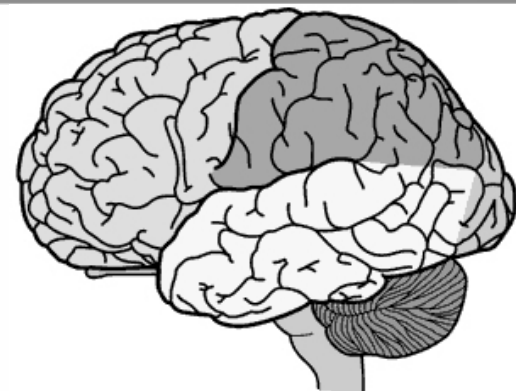
Debt with
maturities greater
than 1 year

Repayment Capacity Benchmarks



Efficiency

Get smarter about your business

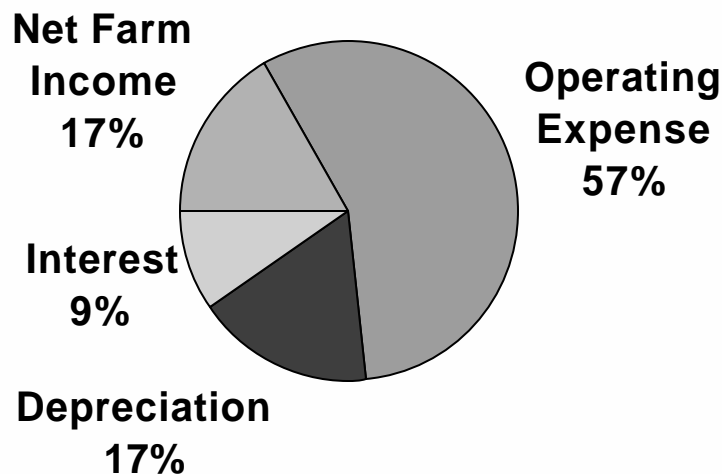


- Often broken down into
 - Financial efficiency: financial statements
 - Operations efficiency
 - Machinery cost per acre
 - Yield per acre
 - Price per bushel sold
 - Cost per cwt

Financial Efficiency Measures

$$\text{Asset Turnover} = \frac{\text{Gross Revenue (VFP)}}{\text{Assets}}$$

Components of Income Statement Per Dollar Revenue



Financial Efficiency Benchmarks

- Benchmarks depend heavily on the type of farm, farm size, and farm ownership
- Use Ratio Analysis *FAST* Tool to generate benchmarks for your farm
- Examples

Machinery Values

How much iron?

- One of the most critical areas that differentiate high performance farms is effective and efficient use of machinery
- Key questions:
 - What are your total machinery costs including repairs and fuel?
 - What is your machinery value per acre?
 - How do these values compare to benchmarks?



Machinery Costs by Performance Group

	High Cost	Average	Low Cost
Machinery hire/lease	9.46	7.93	5.82
Utilities	6.02	4.73	4.63
Machinery repairs	18.58	15.34	12.49
Fuel and oil	9.35	8.61	7.83
Light vehicle	2.65	1.95	1.64
Machinery depreciation	36.18	30.40	27.33
Total	82.24	68.96	59.74

High/low cost are the top and bottom 1/3 respectively

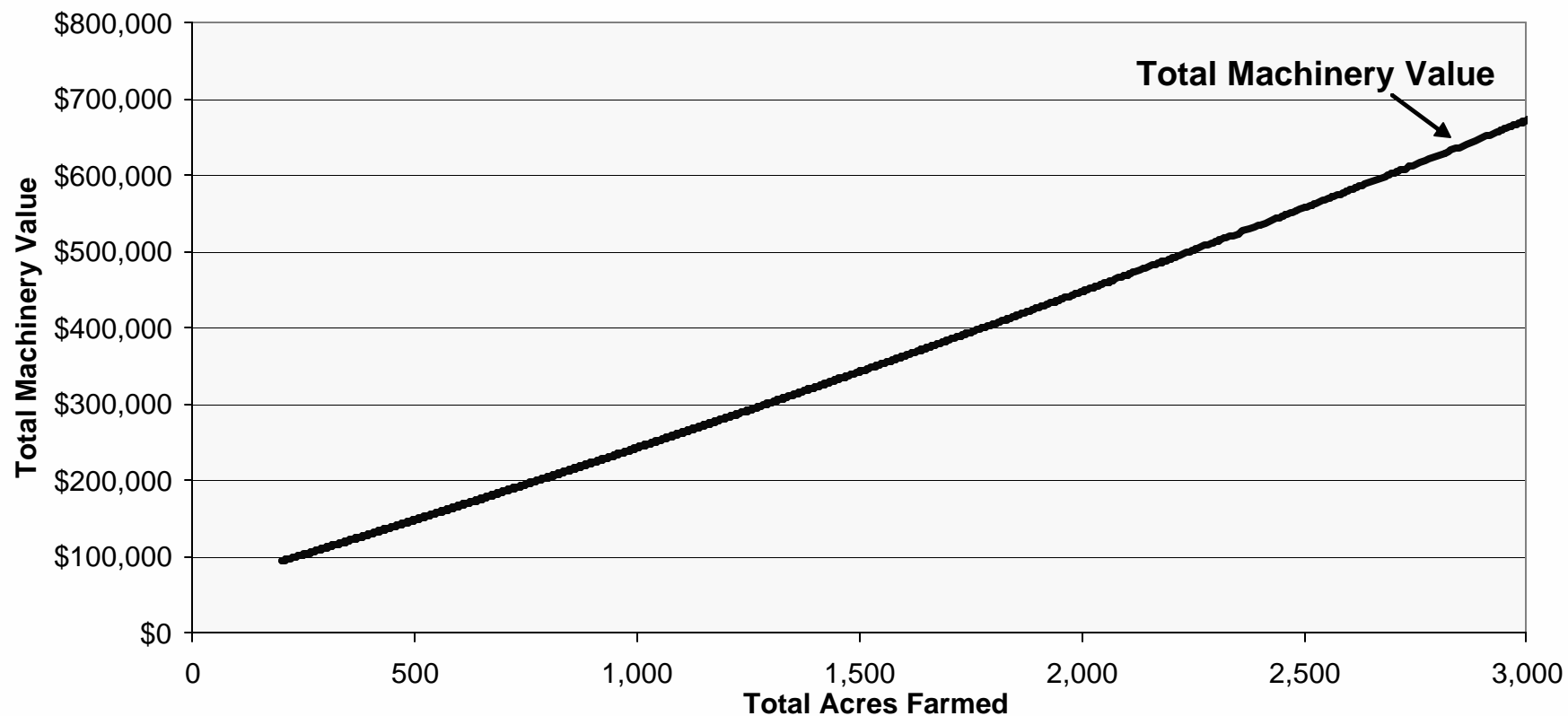
Source:

Schnitkey and Lattz

Illinois Farm Business Farm Management, 2003

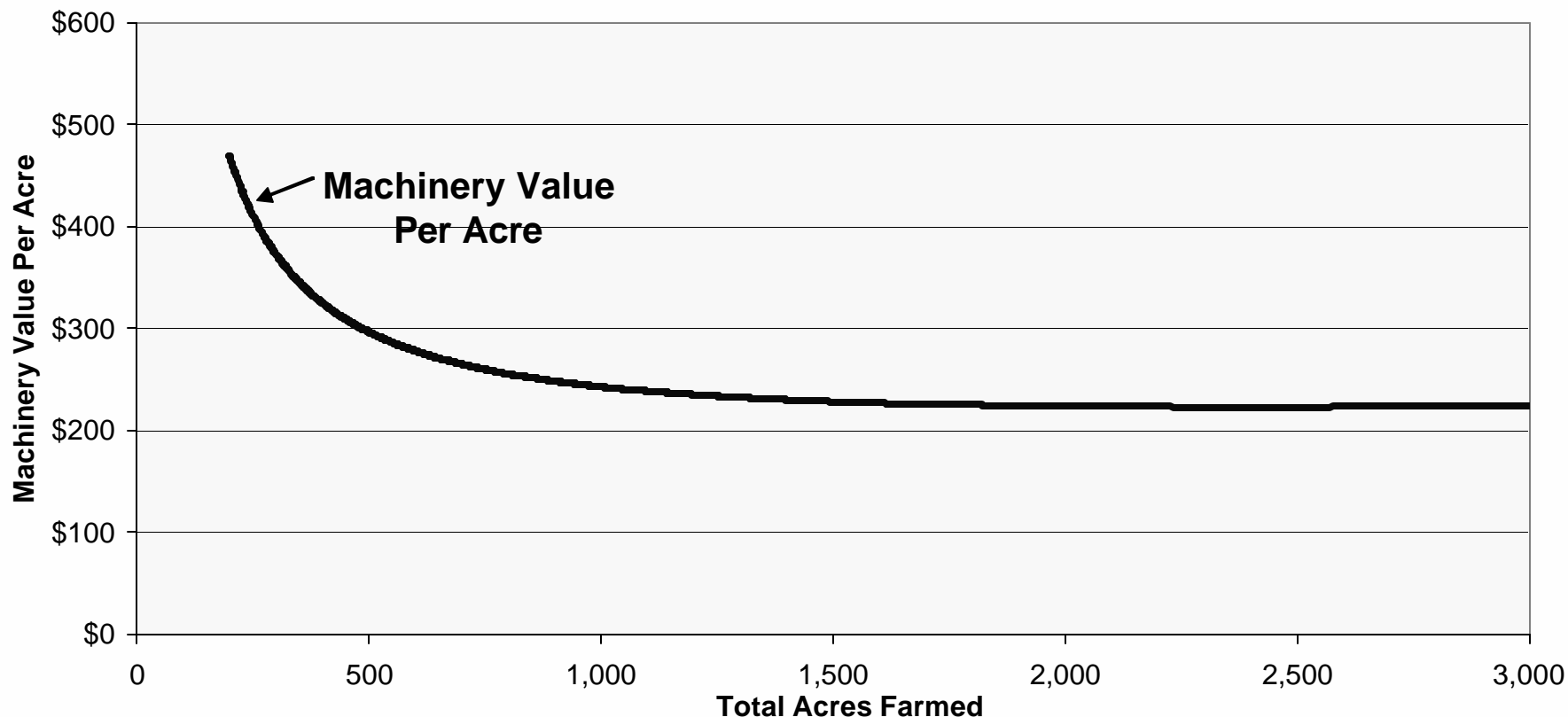
Machinery Values

Average Machinery Values
FBFM Grain Farms



Machinery Value Per Acre

Average Machinery Values
FBFM Grain Farms

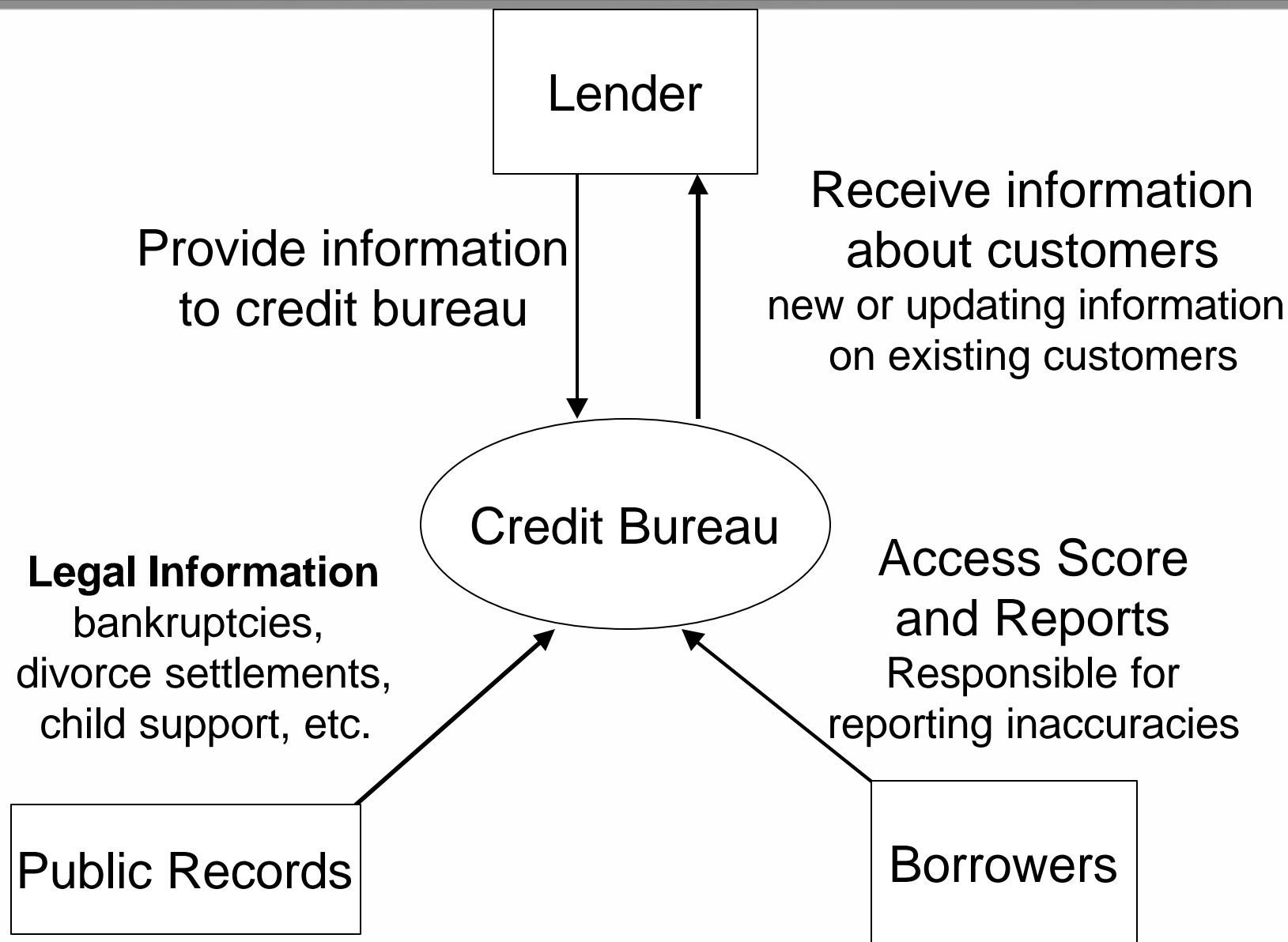


A Growing Trend in Ag Lending is the Use of Consumer Credit Information

Primer

Use of Consumer Credit Bureau

- A credit bureau is a clearinghouse for consumer credit history information.
- The credit bureau is not a government entity
- Credit providers give the bureau information on how their customers pay their bills
- Credit bureau assembles the information along with public information into a customer-specific file
- In exchange, the credit providers can access credit reports and receive information about consumers



Credit Bureau Facts

- Over 1,000 local and regional credit bureaus in the U.S.
- Most are owned by one of three private national credit reporting agencies:
 - TransUnion (www.transunion.com)
 - Equifax (www.equifax.com)
 - Experian (www.experian.com)

Products

- Credit Report
 - View of repayment history and judgments, and inquiries into your account
- Credit Score
 - Mathematical and statistical value based on proprietary models

Items on Credit Report

- Personal information
- Credit history from:
 - Retail stores
 - Banks
 - Finance companies
 - Mortgage companies
- Public records
 - Tax liens
 - Court judgments (divorce, child support)
 - Bankruptcies
- Number of previous inquiries in your credit report

Items Not Contained in a Credit Report

- Farm assets or farm income information
- Farm business or other business lending
- Wage or salary information
- Deposit or savings account information
- Medical histories
- Loans from individuals (parents, friends, etc.)
- Race, gender or national origin

Credit Score

- Most frequently used are by Fair Isaac Company (FICO) – a leader in developing models for consumers and businesses
- The score is a signal towards the ability or probability a borrower will repay a loan.
- The score is based on a proprietary mathematical equation

How Long Is The Information Kept?

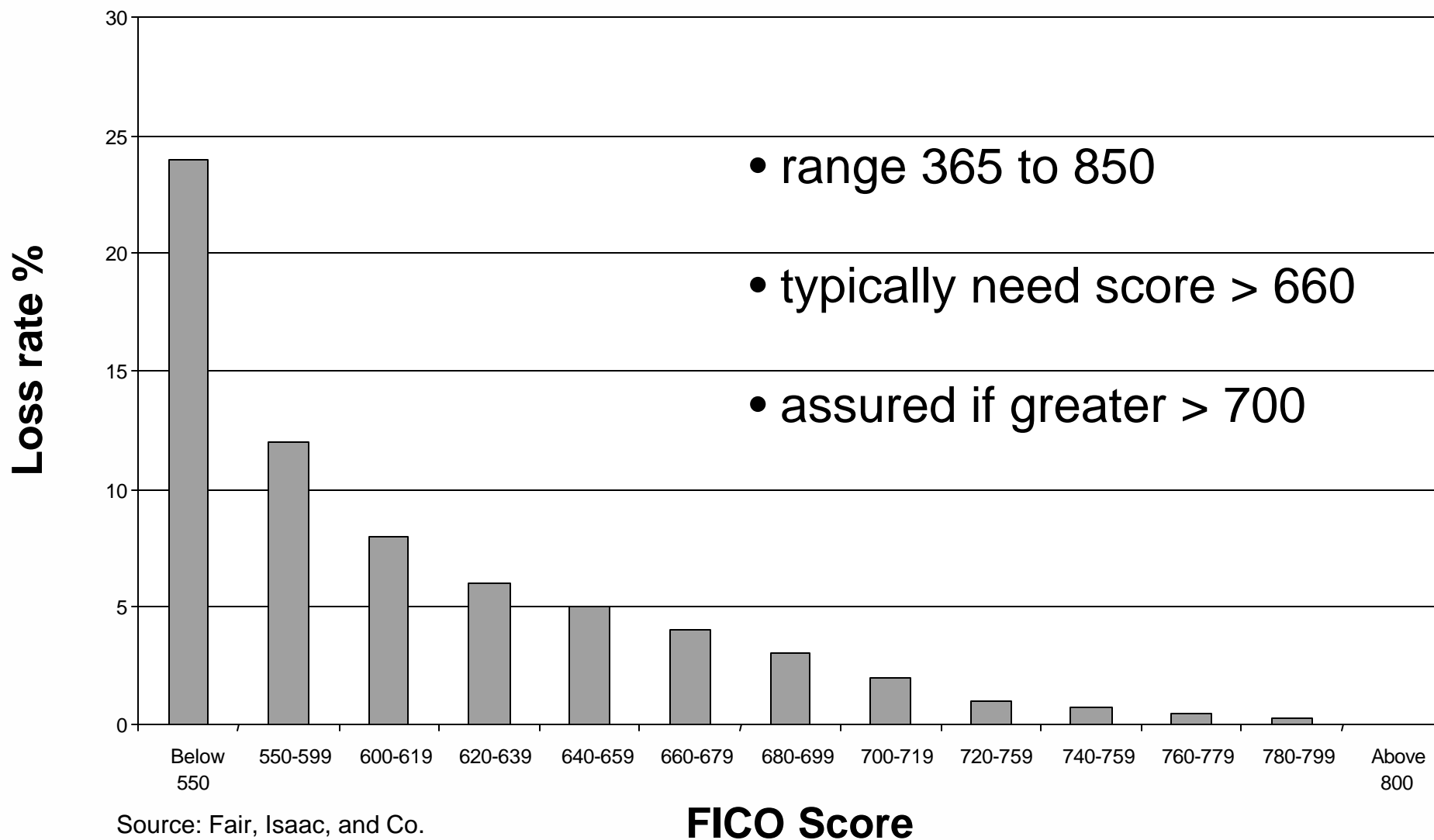
in general approximately 10 years

- Closed or inactive accounts 10 years
- Derogatory accounts 7 years
- Public records 7 years
- Bankruptcies (Chapter 7) 10 years
- May be reported indefinitely for loans,
insurance policies > \$50,000

Lenders' Uses of Credit Score

- On small loans and credit card applications, it may be the major criteria
- On home mortgages it is used as a hurdle requirement.
- Many lenders are using it as one factor in agricultural lending for loans less than \$150,000 to 250,000.
- Used to determine interest rate of loan

Loss Rates by Score

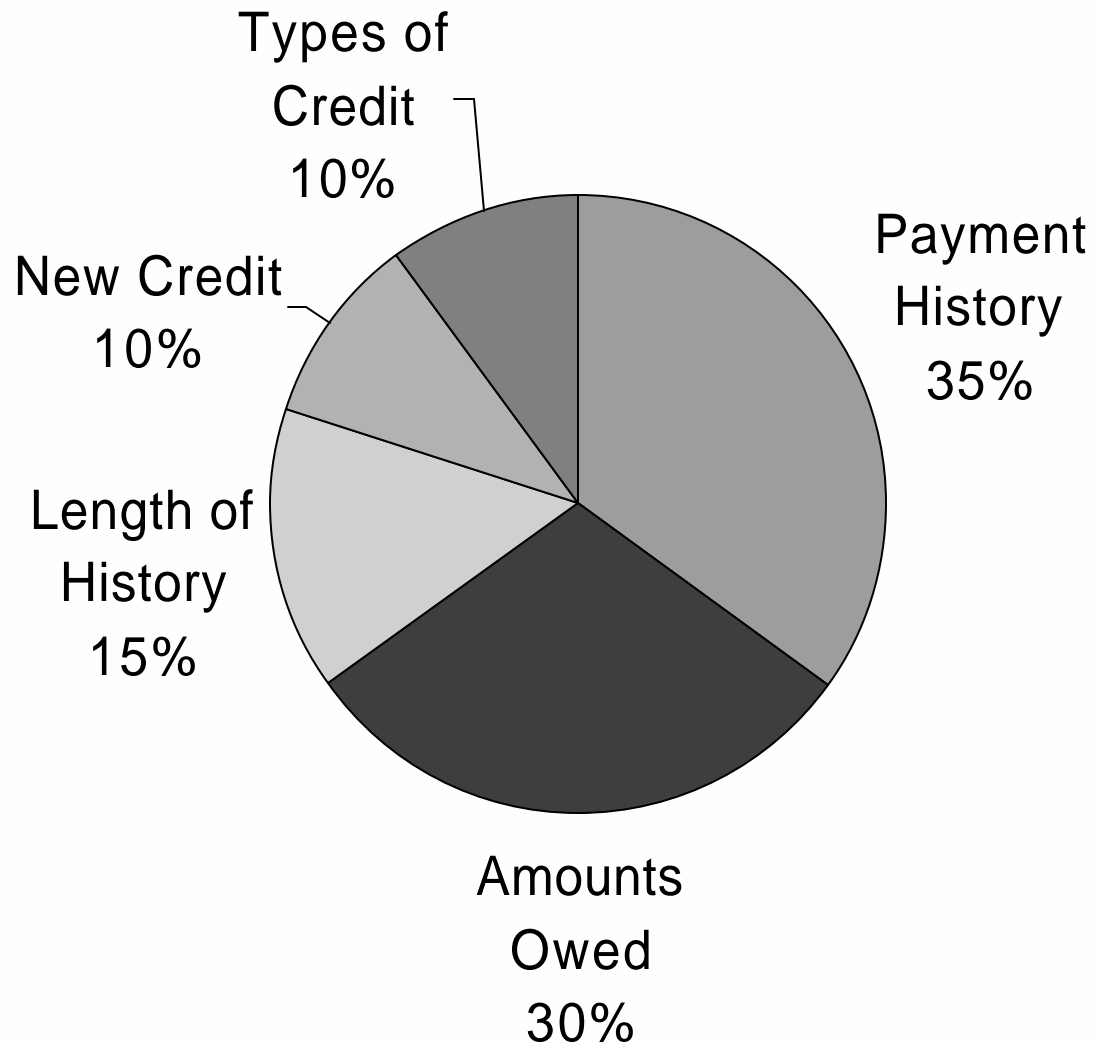


Score Can Impact Interest Rates

Example: 30 Year Home Mortgage Loans in Illinois

FICO Score	APR
720-850	5.606 %
700-719	5.730 %
675-699	6.263 %
620-674	7.402 %
560-619	8.584 %
500-559	8.996 %
Source: www.myfico.com	

Major Factors that Impact Score



Payment History

Were payments made on time?

Variables:

- Payment information on each account
- Public record information on collections
- Details on late or missed payments
- Number of accounts with late payments

Amounts Owed

How much is too much?

Variables:

- The amount owed on all accounts
- The amount owed on different types of accounts (credit card, installment, mortgage)
- A balance shown on certain types of accounts (example: balances on installment loans in good standing indicates responsible borrowing)
- The number of accounts with positive balances
- What proportion of the total credit lines are being used
- How much is still owed on installment loans vs. original balances

Length of Credit History

How established is the customer?

Variables

- Age of oldest account
- Average age of all accounts
- How long specific accounts have been established
- How long has it been since the accounts have been used

New Credit

Is the customer taking on new debt?

Variables

- The number of new accounts
- The length of time since the most recent time an account has been established
- The number of inquiries for credit that have been made and reported
- The length of time since credit report inquiries were last made

Types of Credit in Use

Does the customer have the right mix?

Variables

- proportion and use of different types of credit
 - credit card
 - installment loans
 - mortgage loans

Weaknesses -- Cautions

- The scores do not work well for people who have not borrowed in the past or borrowed under a spouse's name
- Inaccuracies that can occur in reporting
- Does not include asset or income information
- Only information on consumer loans

How can I get my FICO score?

www.myfico.com

\$12.95

myFICO®

See the Credit Score that Lenders See... Your FICO® score



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Three FICO® Scores Can Paint Your Complete Credit Picture

The "Must-Have" Snapshot

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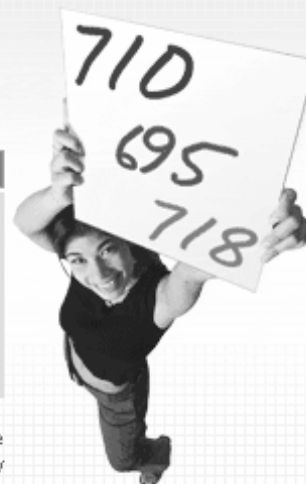
What's a FICO® score? Your FICO® score is the numeric representation of your financial responsibility, based on your credit history. Based on a scale of 300 - 850, there are three FICO® scores - one from each national credit bureau. These three FICO® scores are the measure that most lenders will look at when evaluating your credit or loan applications. [More info...](#)

Here's how your FICO®
scores could affect your
interest rate.*

FICO® Score Interest Rate

720 - 850	5.656%
700 - 719	5.781%
675 - 699	6.319%
620 - 674	7.469%
560 - 619	8.531%
500 - 559	9.289%

*Information for 30-year fixed rate mortgages, updated daily



FICO® Saver for Homebuyers

Prepare to get the best mortgage by understanding how lenders will rate your

3 Bureau Report with One FICO® Score

See your complete credit history from all three bureaus and get a single FICO®

Single Bureau FICO®-Scored Reports

Get a single [credit report](#) with FICO® score from any of the three major national credit

Working With Lenders

- Communicate: early and often
- Share financial information
- Understand your financial position
- Listen
- Explore alternatives
- Ask questions

Tips from Lenders



"Get involved in financial statement analysis:
it is your business"

"Accrual-based records
are a very important"

"Cash flow projections are required
for our decision process"

"Requirements of financial statements are simply
best-practices for us as lenders,
it is our machinery"

"Never too early to plan for the future (retirement)"

Planning for Retirement:

Keep up conditioning



- What are your estimated retirement needs?
- What does it take to get there?
- Not a good practice to rely on selling farm assets as the sole source of retirement
- If you are approaching retirement, what are the tax implications of selling farm assets?
- See blue handout

In the future ...

... you will need to be responsive to changes occurring in agriculture. Position yourself by understanding your strengths and weaknesses.

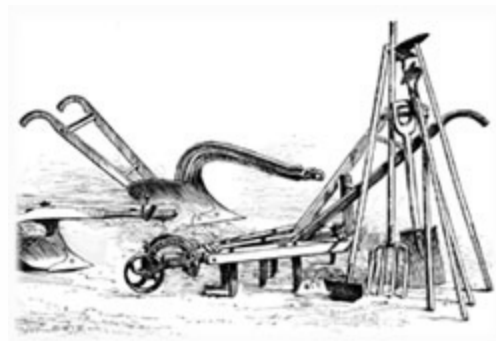
You will need to

- ❖ Run Smart
- ❖ Run Lean
- ❖ Run Fast



Upgrade your Tool Kit

- *FAST* Tools Demo
 - Ratio analysis and sensitivity
 - Cash to accrual approximation
 - Savings analysis
 - Cash flow budgeting
 - Others



Questions

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