# Lending Team Analysis

Agribusiness Finance

LESE 306

Fall 2009

# Factors to Consider

- ✓ Credit scores assessing the borrower's existing credit history.
- ✓ Business plan and purpose of the loan.
- ✓ Economic conditions in the borrower's industry (i.e., livestock, crops, input supply and other area of agribusiness).
- ✓ Stress testing the assumptions made by the borrowers in their baseline scenario.

# What is a Credit Score?

# Credit Scoring Fundamentals

A credit score is a numerical expression based on a statistical analysis of a borrower's credit history to represent his/her ***creditworthiness***, which is the likelihood that the borrower will pay his/her debts in a timely manner.

A credit score is primarily based on credit report information obtained from credit bureaus and credit reference agencies.

# Credit Scoring Fundamentals

Lenders use credit scores to evaluate the ***potential risk*** posed by lending money and to mitigate losses due to bad debt.  Lenders also use credit scores to determine ***who qualifies for a loan, at what interest, and what credit limits***.

Credit scoring is not limited to lending.  Other organizations, such as mobile phone companies, insurance companies, and ***potential employers*** are examples of other users of credit scoring.

# Fundamentals Credit Scoring

A credit score is primarily based on credit report information typically from the three credit bureaus: Experian, TransUnion and Equifax.

There are differing approaches to calculating credit scores.  The FICO is a credit score developed by Fair Issac & Company.  It is used by many mortgage lenders that use a risk-based system to determine the ***possibility that the borrower may default*** on financial obligations to the lender.

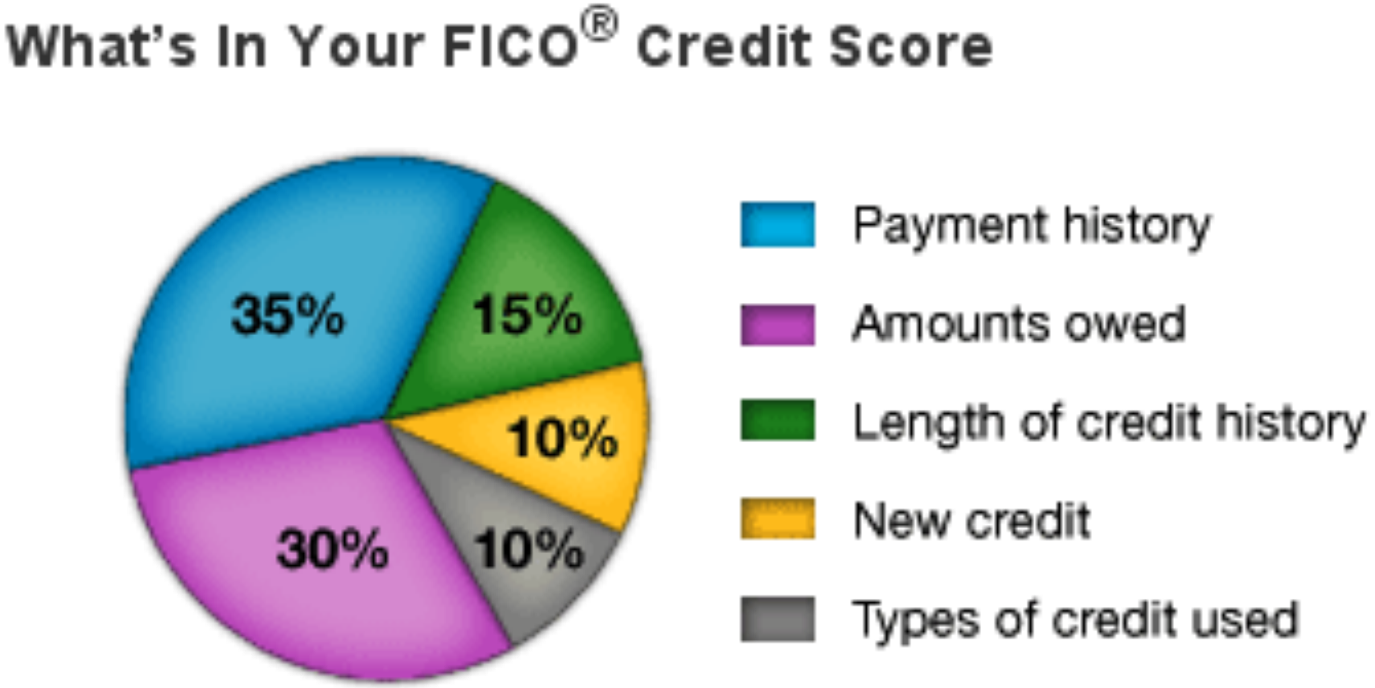
# What is in a Credit Score?

1. Borrower's payment history – past due payments and adverse records (i.e., bankruptcy, wage attachments, suits).
2. Amounts owed.
3. Length of credit history.
4. New credit undertaken.
5. Types of credit (i.e., credit cards mortgages).

# What is Not Included?

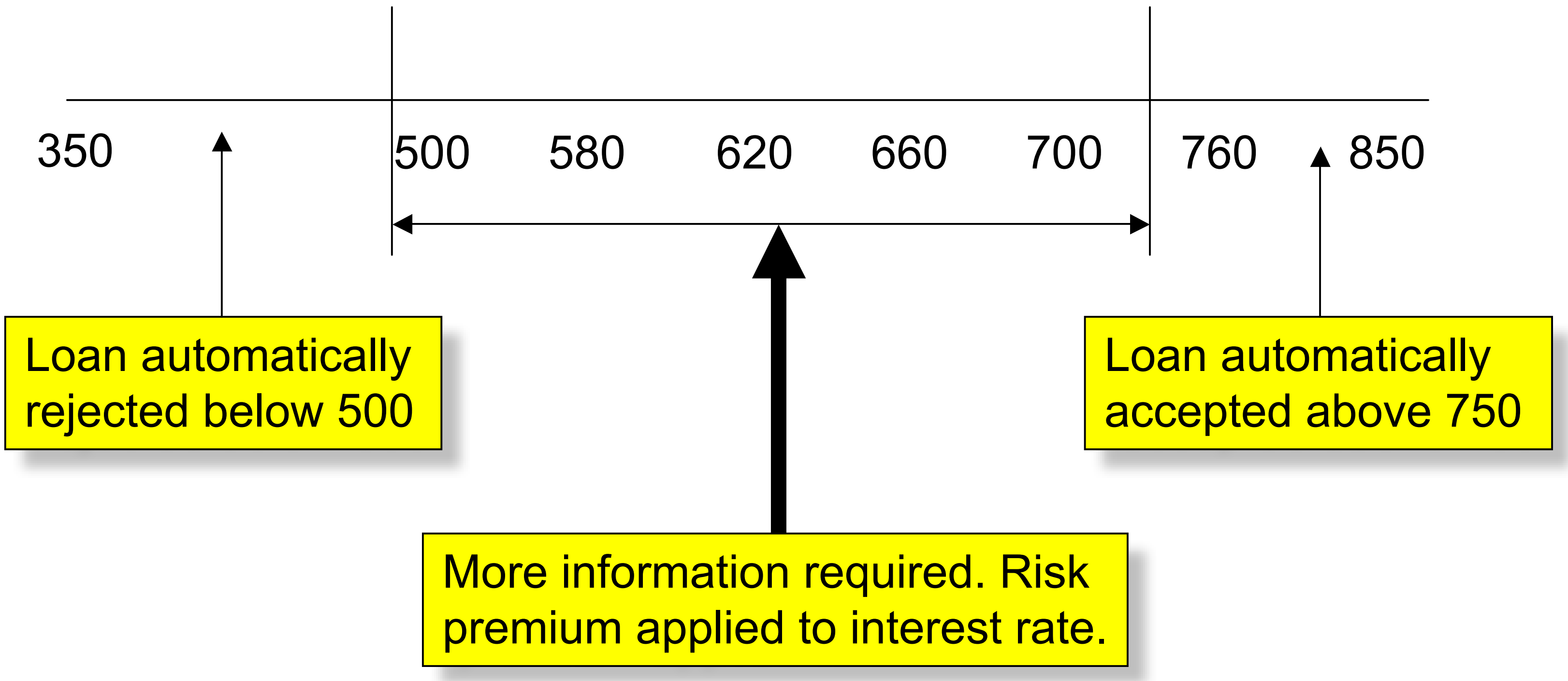
1. Race, religion, national origin, sex and marital status of borrower.
2. Age of borrower.
3. Salary, occupation, employment history.
4. Where you live.
5. Interest charged on loans outstanding.
6. Child/family support obligations and rental agreements.

Widely-used FICO credit scores are calculated based on information from credit bureaus that collect information on borrower's use of credit.  The weights and factors captured in this score are shown below:



# Consumer Credit Decisions

Many retail firms offer credit cards, trade credit lines and even home mortgage loans to individuals based upon FICO credit scores, which range from 350 to a perfect score of 850.  Assume a hypothetical retail firm makes the following decisions in extending credit:



Assume you are applying for a 30 year home mortgage loan for $300,000 fixed interest rate loan at a commercial bank. Based upon your FICO credit score in the first column below, the lender has decided to charge annual percentage rates (APR) shown in the second column below. This has a significant effect on your monthly loan payment as shown in the third column.

30 Yr fixed mortgage | 15 Yr home equity loan | 36 month auto loan

| FICO® score | APR [?] | Monthly payment |
|---|---|---|
| 760-850 | 5.727% | $1,746 |
| 700-759 | 5.949% | $1,789 |
| 660-699 | 6.233% | $1,844 |
| 620-659 | 7.043% | $2,005 |
| 580-619 | 9.165% | $2,449 |
| 500-579 | 10.194% | $2,676 |

Location: National Avg.

Loan amount: $300,000

Recalculate

4.467 %
risk premium

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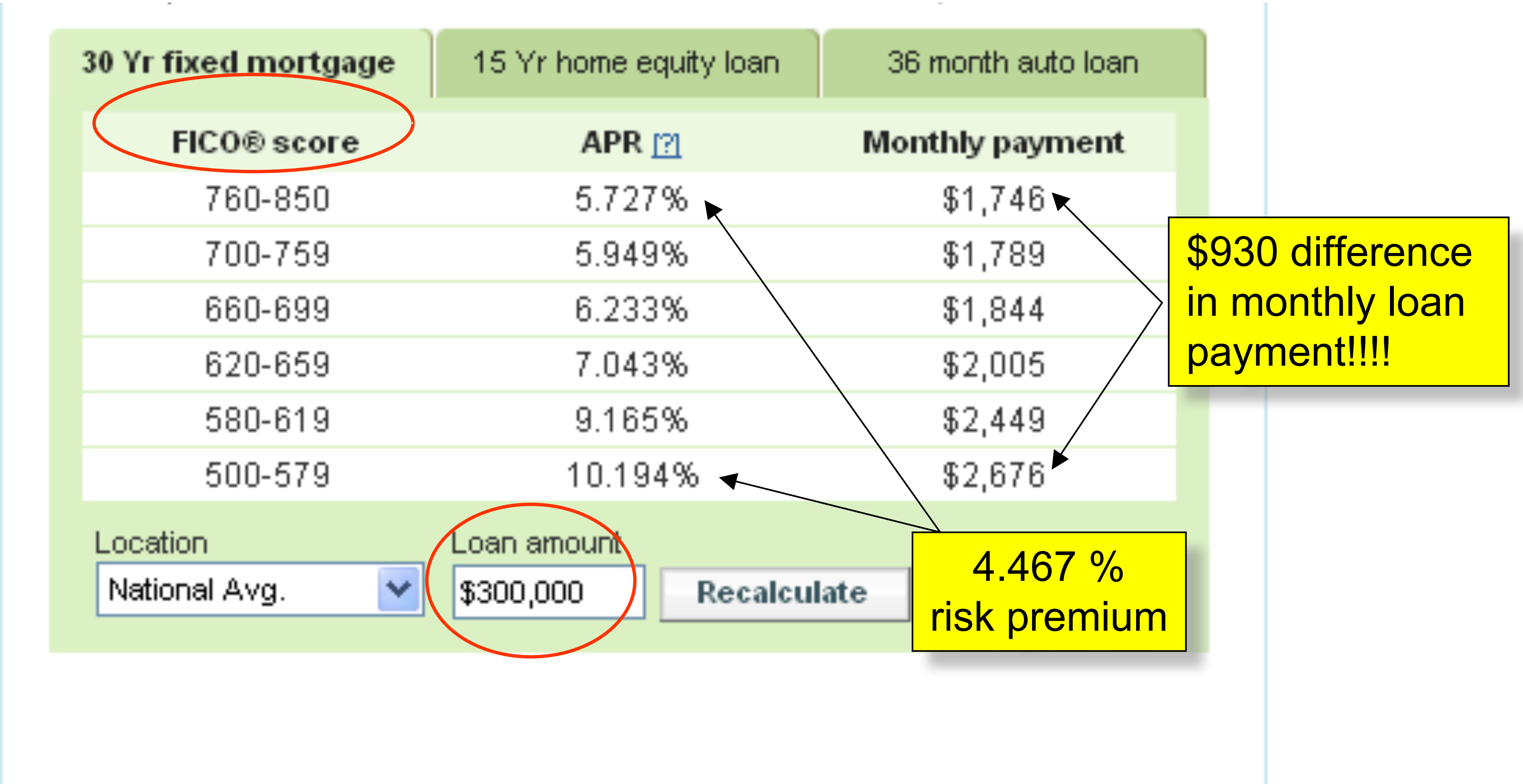

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# Scorecard Lending

# Credit Standards

- Many agricultural lenders use credit scores as *only one* of several standards when evaluating loan applications.
- They will also include standards related to liquidity, solvency and debt repayment capacity (minimum current ratio of 1.50, maximum debt ratio of 0.50, minimum term debt and capital lease coverage ratio of 1.0).
- Lenders also focus on the "Six C's" when assessing a borrower's creditworthiness.

# The Six C's

**Character** – assess intention to repay loan. Responsibility, truthfulness, serious purpose, and serious intention to repay all funds owed make up what a lender calls character.

**Capacity** – has legal authority to request a loan and legal standing to sign contract.

**Cash** – customer has the ability to generate enough cash or cash flow to repay the loan.

**Collateral** – adequate net worth or own enough quality assets to provide adequate support for the loan

**Conditions** – economic conditions in the customer's industry

**Control** – whether changes in the law and regulation would adversely affect the customer

There are others if international lending is involved, including **currency** fluctuations between a foreign currency and the dollar as well as **customs** of doing business in a particular country.

# Actual Scorecard Used to Underwrite loans

# Standards Employed

**Agricultural dependent loans:**

1. Current ratio standard (weight 20%)
   - 4 CR > 2.0
   - 5 CR between 1.50 – 2.00
   - 6 CR between 1.25 – 1.50
   - 7 CR between 1.10 – 1.25
   - 8 CR between 0.90 – 1.10
   - 9 CR between 0.80 – 0.90
   - 10 CR between 0.70 – 0.80
   - 11 CR < 0.70
2. Debt coverage ratio standard (weight 35%)
   - 4 DCR > 1.50
   - 5 DCR between 1.40 – 1.50
   - 6 DCR between 1.25 – 1.40
   - 7 DCR between 1.20 – 1.25
   - 8 DCR between 1.15 – 1.20
   - 9 DCR between 1.05 – 1.15
   - 10 DCR < 1.05

# Standards Employed

**Agricultural dependent loans:**

3. Management/character standard (weight 10%)
   - 4 MC very strong
   - 5 MC strong
   - 6 MC above average
   - 7 MC average
   - 8 MC minor weaknesses
   - 9 MC some weaknesses
   - 10 MC serious weaknesses
   - 11 MC major weaknesses
4. Equity/asset ratio (weight 35%)
   - 4 ER > 0.90
   - 5 ER between 80 - 90
   - 6 ER between 70 - 80
   - 7 ER between 65 - 70
   - 8 ER between 50 - 65
   - 9 ER between 40 - 50
   - 10 ER < 40

# Standards Employed

**Agricultural dependent loans:**

The total score is then calculated by a weighted average of the borrowers average:

| | |
|---|---|
| • Current ratio standard | 20% |
| • Debt coverage ratio standard | 35% |
| • Management/character standard | 10% |
| • Equity/asset ratio standard | 35% |
| Total | 100% |

**Non-agricultural dependent loans:**

The total score is then calculated by a weighted average of the borrowers average:

| | |
|---|---|
| Current ratio standard | 10% |
| Debt coverage ratio standard | 30% |
| Management/character standard | 10% |
| On line credit bureau score | 20% |
| Equity/asset ratio standard | 30% |
| Total | 100% |

# Extension to Pricing Loans

# Hypothetical Scorecard

| | Weight | Points achieved |
|---|---|---|
| 1. Credit score from credit bureau | 15% | ________ |
| 2. Current ratio | 15% | ________ |
| 3. Debt ratio | 20% | ________ |
| 4. Debt coverage ratio | 30% | ________ |
| 5. Other factors | 10% | ________ |
| a. Continuing customer | | |
| b. Primary commodity | | |
| c. External control factors | | |
| TOTAL SCORE → | | ________ |

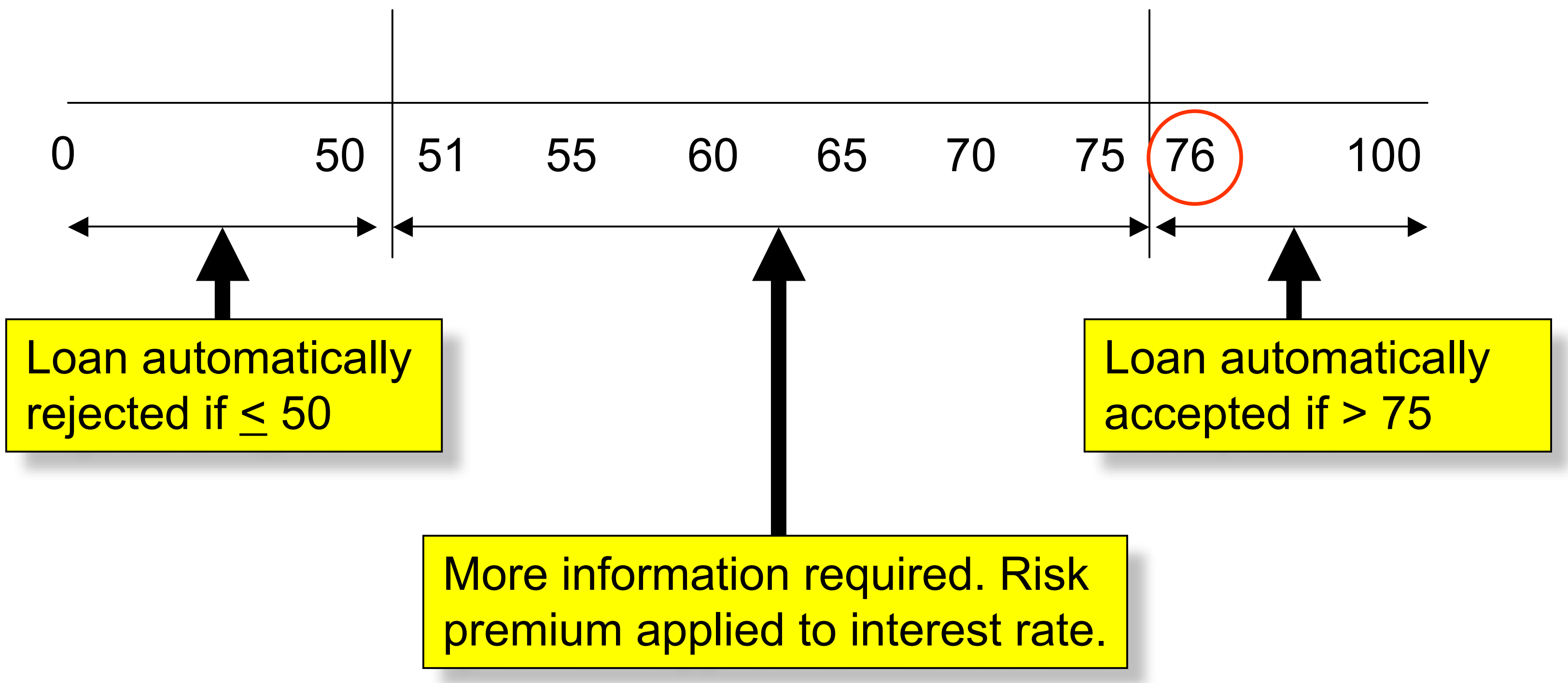
The lender then decides the minimum score for automatic approval, automatic rejection, and range over which additional conditions must be met (risk premium, additional collateral, compensating balances, etc.

# Hypothetical Scorecard

| | Weight | Points achieved |
|---|---|---|
| 1. Credit score from credit bureau | 15% | __12____ |
| 2. Current ratio | 15% | __13____ |
| 3. Debt ratio | 20% | __17____ |
| 4. Debt coverage ratio | 30% | __25____ |
| 5. Other factors | 10% | ___9____ |
| a. Continuing customer | | |
| b. Primary commodity | | |
| c. External control factors | | |
| TOTAL SCORE → | | __76____ |

The lender then decides the minimum score for automatic approval, automatic rejection, and range over which additional conditions must be met (risk premium, additional collateral, compensating balances, etc.

# Score Card Lending Ruler



# Hypothetical Loan Rates

| | |
|---|---|
| Bank cost of funds | 4.0% |
| Score > 75 | 6.0% |
| Score = 71 – 75 | 7.0% |
| Score = 66 – 70 | 7.5% |
| Score = 61 – 65 | 8.0% |
| Score = 56 – 60 | 8.5% |
| Score = 51 – 55 | 9.0% |

# Your Decisions

- ✓ You must decide upon your bank's credit standards and weights associated with each of these standards.
- ✓ You must decide on your credit score card ruler cutoffs.
- ✓ You must decide on the rates of interest you will charge based upon these scores.
- ✓ You must decide how much to stress test the lending team's baseline scenario.