

2. Does the borrower have good prospects for continued employment?
Because the loan is long term the bank must have reasonable assurance the borrower can service a long-term loan.
3. Is the current market value of the home to be purchased sufficiently larger than the amount of the loan to give the bank adequate cushion if local real estate values decline?

20-13. What is home equity lending and what are its advantages and disadvantages for banks?

Home-equity loans use the residual market value of a home (over and above the amount of any outstanding liens against the home) as a borrowing base. Banks often lend a fraction of this residual value, which subjects them to the risk that the market value of a home will fall, significantly eroding the cushion of protection for a loan of this type. If the customer fails to make any promised loan payments, the bank or other lender could foreclose and take over the home to sell it and recover at least a portion of loaned funds.

20-14. How is the changing age structure of the population likely to affect bank consumer loan programs?

As people grow older, especially beyond the age of 40 or 45, they tend to make less use of credit and to pay down outstanding debt obligations. This suggests that the total demand for consumer credit per capita may fall, forcing banks and other consumer lenders to fight hard for profitable consumer loan accounts.

20-15. What impact have recent changes in U.S. bankruptcy laws had on consumer lending by banks?

Recent changes in U.S. bankruptcy laws present serious challenges to consumer lending institutions. Congress passed the Bankruptcy Reform Act in 1978, amending a federal bankruptcy code that had stood since the turn of the century. While amendments in 1984 tightened up some of the loopholes in the 1978 law, the most recent reforms tipped the legal scales substantially in favor of individuals filing bankruptcy petitions and more severely limited the amount and kinds of debtors' assets that could be converted into cash for distribution to banks and other creditors. However, there is legislation making its way through Congress at the current time that may tip the scales back some. There is proposed legislation which will make it more difficult for businesses and consumers to discharge their debt.

Problems

20-1. The Childress family has applied for a \$5,000 loan to make home improvements - a new roof and carpeting. The principal breadwinners are employed by Ford Motor Company as a welder (first year) and by Wal-Mart as a clothing saleswoman. The family

has 3 children and an average credit rating with some late payments. The Childress family has no bank savings account; instead their savings are invested in a few bonds and they have a small cash value in a life insurance policy.

The credit-scoring system presented in Chapter 20 is assumed here to have a cut off point of 36 with denials of credit requests imposed when applicants score below 36. The Childress family would score approximately as follows under the scoring system in the chapter:

| | |
|--|-------------------------|
| Occupation (for skilled or clerical workers) | 7.5(average of 7 and 8) |
| Housing Status (own home) | 6 |
| Credit Rating | 5 |
| Time in Job (one year or less) | 2 |
| Time at Current Address (one year or less) | 1 |
| Telephone (years) | 2 |
| Number of Dependents (3) | 4 |
| Bank Accounts Held (checking only) Total | <u>2</u> |
| | 29.5 points |

This credit request, in the absence of other mitigating factors, would be denied.

20-2. Mr. and Mrs. Napper are interested in funding their children's college education by taking out a home equity loan in the amount of about \$24,000. Eldridge National Bank is willing to extend a loan, using the Nappers home as collateral. Their home has been appraised at \$110,000, and the bank has a policy of allowing a customer to use no more than 70 percent of the appraised value of the home as a borrowing base. The Nappers still owe \$60,000 on the first mortgage against their home. Is there enough residual value left in the Nappers home to support their loan request? How could the bank help them meet their credit needs?

Solution:

The maximum credit line available to the Nappers under the bank's current home-equity loan policy is:

$$\$110,000 \times 0.70 - \$60,000 = \$77,000 - \$60,000 = \$17,000.$$

This would clearly not result in a large enough borrowing base to cover the \$24,000 loan requested. Many banks make adjustments in the permissible loan amount if the customer has an above-average level of income, other assets to pledge, relatively low mortgage debt obligations, and an excellent credit rating. Thus, the Nappers may be able to qualify for an additional \$7,000 in loanable funds (perhaps by pledging other collateral) to make up the \$24,000 they need.

Alternative Scenario 1:

Suppose the bank agrees to raise the Nappers borrowing base to 75 percent of the appraised value. Would this help them meet their educational goals?

Solution:

The maximum credit line available under this policy is:

$$\$110,000 \times 0.75 - \$60,000 = \$82,500 - \$60,000 = \$22,500.$$

This policy adjustment would help, leaving them only \$1,500 short of their goal. The bank might well consider making a loan for this \$1,500 on an unsecured basis or secured by other collateral. Or, the Nappers may be able to make up this difference from savings or other sources.

Alternative Scenario 2:

If the Nappers could reduce the balance still owed on their first mortgage to \$50,000, would this make them eligible for a loan that fully meets their needs?

Solution:

The maximum credit line available, assuming a 70 percent policy, is:

$$\$110,000 \times 0.70 - \$50,000 = \$77,000 - \$50,000 = \$27,000.$$

They would now be eligible for a loan that meets their needs.

Alternative Scenario 3:

Suppose the resale market for homes in the Nappers' local community appears to be headed downward. There are many unsold residences on the market and the average home is taking about nine months to sell. How would this new information affect the bank's decision on this loan? How could the bank adjust the loan's terms to deal with this latest news from the local housing market? Please be specific.

Solution:

A common practice in residential real estate appraisal is to use comparable sales data. A declining market may well lead to the appraised value of the Nappers' home being adjusted downward. This, of course, would reduce the maximum credit line availability and make the bank less likely to approve the loan request.

If the Nappers are considered to be very good customers of the bank, the bank may consider a few different options, including:

Continue to use the existing appraised value of \$110,000, viewing the current market conditions as temporary.

Adjusting their policy to allow for a larger borrowing base, i.e., allowing the Nappers to borrow 75 percent rather than 70 percent.

Agree to refinance the Nappers' home under a new first mortgage arrangement that would include the outstanding balance of the existing first mortgage and the additional amount needed for the children's education.

Loan the maximum amount on the basis of a new, presumably lower, appraised value and make another loan, possibly secured by other assets, for the difference.

20-3. Arthur Renfro has been granted a maximum \$28,000 credit line based upon the equity value in his home. He currently has outstanding mortgage claims against the home of \$30,500+ \$11,500 = \$42,000. The appraised value of the home is \$95,000. Then we can determine the percentage of the home's estimated market value Renfro's bank is using to calculate the maximum credit line available to Mr. Renfro from the formula:

$$\begin{aligned} \text{Maximum Credit Line Available} &= \text{Appraised Value} * \text{Allowable Percentage of Market Value} \\ &\quad - \text{Mortgage Loans Outstanding} \end{aligned}$$

Substituting in what we know:

$$\begin{aligned} \$28,000 &= \$95,000 * \text{Allowable Percentage of Market Value} - \$42,000 \\ \text{or} \\ \$70,000 &= \$95,000 * \text{Allowable percentage of Market Value} \\ 0.737 &= \text{Allowable Percentage of Market Value} \\ &\quad \text{or about 74\%.} \end{aligned}$$

20-4. The following federal laws apply to each situation described:

- A. A loan officer asks an individual requesting a loan about his or her race - prohibited by the Equal Credit Opportunity Act.
- B. A bill collector calls Jim James three times yesterday at the latter's work number without permission - prohibited by the Fair Debt Collection Practices Act.
- C. Sixton National Bank has developed a special form to tell its customers the finance charges they must pay to secure a loan - disclosure of all charges required by Truth in Lending legislation (Consumer Credit Protection Act).

- D. Consumer Savings Bank receives an outstanding rating from bank examiners for its efforts to serve all segments of its trade territory - ratings required by the Community Reinvestment Act.
- E. Presage State Bank must disclose the areas within its local community where it has made home mortgages and home improvement loans - required by the Home Mortgage Disclosure Act.
- F. Reliance Credit Card Company is contacted by one of its customers in a dispute over amounts charged on a credit card - the Fair Credit Billing Act applies.
- G. Amy Imed finds several errors in her credit bureau report and demands that they be corrected - the Fair Credit Reporting Act applies.

20-5. James Smithern has asked for a \$3,500 loan from Beard Center National Bank to repay some personal expenses. The bank's credit scoring system considers the following factors:

| | |
|--|----------|
| Credit rating: average, | 2 points |
| Time in current job: one to five years, | 3 points |
| Time in current residence: one to two years, | 2 points |
| Telephone: yes, | 1 point |
| Holds Bank Account: No, | 0 points |

Smithern's point total is 8. If the bank grants loans to applicants with credit scores of 9 or more points, then Smithern is not likely to receive a loan under this scoring system.

20-6. Singleton Merchants Bank finds that among those credit-card customers scoring 40 points or less on its credit-scoring system, 35 percent or 10,615 borrowing customers generate total losses that average \$1200 in size per account. This means the total loss to the bank from these customers is \$12.74 million or 10,615 customers * \$1200. On the other hand, paying credit-card customers (amounting to 3640 customers) averaged a score of 40 points or less, but successfully generated about \$1500 a piece in revenues, resulting in aggregate revenues of \$5.46 million or \$1500 * 3640 customers. By adopting a decision rule to grant credit-card privileges only to customers scoring more than 40 points (and assuming about the same average revenues and losses) the bank will save about \$7.28 million.

20-7. The T. Williams' family purchased its 3-bedroom home for \$97,000 on the outskirts of San Francisco 10 years ago. The initial mortgage loan on the house was for \$70,500, but has now been paid down to \$53,800 . Currently comparable homes are selling for \$185,000. The family's borrowing base must be:

$$\begin{aligned}
 \text{Borrowing Base} &= \text{Current Market Value of Home} - \text{Current Mortgage Loan} \\
 \text{Balance} &= \$185,000 - \$53,000 \\
 &= \$131,200.
 \end{aligned}$$

The Williams' family is being offered a credit line based on two-thirds of their home's current market value. Then the maximum credit line available would be $\$185,000 \times 0.67 - \$53,800$ or $\$123,950 - \$53,800$ or $\$70,150$.

20-8 The Vaud family needs some extra funds to put their two children through college starting this coming fall and to buy a new computer system for a part-time home business. They are not sure of the current market value of their home, though comparable 4-bedroom homes are selling for about \$210,000 in the neighborhood. Nuys Federal and Merchants Bank will loan 80 percent of the property's appraised value, but the Vauds still owe \$142,000 on their home mortgage and home improvement loan combined. What maximum amount of credit is available to this family should it elect to seek a home equity credit line?

Maximum credit available = Current Market Value of Home * Allowable Percentage of Market Value Mortgage Loans Outstanding

$$= \$210,000 * 0.80 - \$142,000 = \$26,000$$

is the amount available for their needs.

20-9 The Mulvaney family want to borrow \$4500 from San Carlos Bank and Trust to purchase a used car and some furniture. The credit scoring system considers the following factors?

| | |
|---|----------|
| Length of Employment: More than one year – | 6 points |
| Length of time at Current Address: One to Two Years – | 4 points |
| Current Home Situation: Rents Home – | 4 points |
| Credit Bureau Report: Excellent – | 8 points |
| Credit Cards Currently Active: 2 Cards – | 4 points |
| Deposit Accounts with Bank: Yes – | 5 points |

The Mulvaney family has a point total of 31. San Carlos Bank and Trust has a cutoff score of 30 points so the Mulvaney's are likely to receive their loan.

Web Site Problems

1. What is credit scoring? How does the world wide web help consumer and home mortgage lenders use credit scoring to help make statistically reliable, faster consumer loans?

After searching the web for information about the basics of credit scoring models, one web site that I found was <http://www.ivillage.com/money/>. On this web site you can search for information about credit scoring and they do a good job of explaining what a credit scoring model is and how it works. There are many others that discuss this important topic as well. As they say, credit scoring is a way for a banker to determine whether you would be a good loan risk or not. They use a number of factors (usually 7 to 10) to determine your "score" and based on this score will decide whether to make a loan

to you or not. Some of the factors that they look at are obvious, such as your income, others may not seem to be as obvious, such as the age of your car. However, as long as the model does not discriminate based on age, sex, etc. they can use whatever factors they wish to make their decision.

2. How does the web help a consumer loan officer determine a customer's credit rating and credit history?

Loan officers can go to web sites such as http://www.experian.com/experian_us.html and get a consumer's credit report on line. Consumers can also do this and can get their own credit score on some web pages such as <http://www.creditscoring.com/>. This way consumers will have a better idea of whether they qualify for a loan before they go looking for one. If all of this can be done on line it can greatly speed up the process.

3. Where could you go on the web to find out the meaning of such real estate lending terms as adjustable-rate mortgages, points and home equity credit?

As usual there are a number of web sites that you can find that can provide definitions of common terms in real estate. One web site that I found is <http://www.realtor.com/> that has a