

CONSUMER CREDIT-- A COMMODITY

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Do You Shop for Credit?

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CONSUMER CREDIT-- A COMMODITY

Do You Shop for Credit?

by
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The phenomenal growth of consumer credit in the United States during recent years has led many people and institutions to re-evaluate their philosophies concerning credit. In 1960, the outstanding consumer credit reached an all-time peak of \$54 billion. This figure exceeded the total amount of currency in circulation by some \$22 billion. Or, the total outstanding consumer debt could not be paid by all of the money in circulation at any given time! Of this \$54 billion debt, approximately \$42 billion is divided among automobile loans, personal loans, loans for the purchase of consumer goods other than cars, and loans for repair and modernization of housing. The remaining \$12 billion represents non-installment credit such as open charge accounts.²

It has been estimated that approximately 60 percent of the spending units of the United States are in debt. By far the heaviest concentration of debt is in the middle income groups or the groups with incomes ranging from \$4,000 to \$7,500 a year. Sixty-one percent of this group has debt. Only 16 percent of the family spending units in the lower income brackets used installment credit. Fifty-five percent of the families in the \$7,500 to \$10,000 range used credit and 35 percent of those families having income over \$10,000 per year used consumer credit. It follows that those families using credit the most are the younger families who expect their incomes to increase and who are most impatient to improve their standard of living. Feber estimated that these young families have borrowed amounts equal to approximately 15 percent of their disposable income. He found that 75 percent of such families had bought their houses on credit, 61 percent their automobiles, 44 percent their appliances, 38 percent their furniture, and 23 percent their clothing.³

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²Material for this section was drawn from the various issues of the "Federal Reserve Bulletin", Board of Governors, Federal Reserve System, Washington, D.C.

³Robert Feber, "Factors Influencing Durable Goods Purchases," *Consumer Behavior*, New York: New York University Press, 1955, II, 81.

To be a debtor is no longer a situation to be shunned. The word "debtor" is no longer a disparaging term. In fact, consumers are encouraged to "buy now and pay later." Especially is this true during times of national recession when one is led to believe that it is his patriotic duty to spend in order to speed recovery. A generation which has known nothing but booms and inflation has created increasing numbers of consumer borrowers. These borrowers having never known depression, are optimists, confident that their incomes will increase so that they can repay their loans: they are realists in that they know that the value of a dollar may depreciate.

It is a matter of record that families having made the plunge into their first or initial debt, are better sales prospects than the non-debt families.⁴

In recent years, the use of consumer credit has become generally accepted. The cost of consumer credit actually is a part of the cost of commodities purchased with consumer credit. Therefore, shopping or otherwise investigating to obtain consumer credit at a good price is just as important as shopping to find any other commodity at a good price. Of course, the larger or the more expensive the item being purchased the more important it is to do a good job of selecting the source of consumer credit.

SOURCES OF CREDIT

The sources of credit are numerous and only the more common ones will be listed here.

Commercial Banks. Perhaps the most common and possibly the most overlooked source of credit is the commercial bank. Most banks now have personal loan departments which make approximately three-fourths of all loans made for repair and modernization of houses, two-fifths of all those for automobile purchases, and 28 percent of those for other goods.

Sales Finance Companies. These are financial institutions which buy installment credit from retail merchants. To name a few, the General Motors Acceptance Corporation (GMAC), the Commercial Credit Corporation (CCC), and others. Sales finance companies are the leading suppliers of retail automobile credit, accounting for 48 percent of such credit. For the purchase of other consumer goods they supply one-sixth of the credit.

Credit Unions. These are cooperative consumer lending agencies. Credit unions extend about 7 percent of all consumer installment credit and make about 15 percent of personal cash loans.

Consumer Finance Companies. Perhaps you are more familiar with the terms personal finance companies or small loan companies which are other names for con-

⁴Sidney Rolfe, "Installment Credit: The \$28 Billion Question," *Harvard Business Review*, 34:55.

sumer finance companies. These companies operate under regulatory laws in 37 states. In Missouri, regulations are imposed, by law, on the structure, and capital formation of the company as well as on the amount of the loan and charges that can be assessed on the loan. Consumer finance companies are the largest suppliers of personal installment cash loans, which are loans incurred for purposes other than the purchase of durable goods. Through their 11,000 licensed offices, they do about 35 percent of all business in the personal loan field. The largest of these companies, the Household Finance Corporation, has over 1,000 offices in 37 states and in all Canadian provinces. Their annual volume is approximately two million loans amounting to \$870 million dollars.

Other Financial Institutions and Retailers. The firms of this grouping supply about 18 percent of all consumer credit. These financial institutions operate mostly in the extension of credit for home repair and modernization (16 percent) and personal loans (12 percent). Retailers themselves supply about half the credit for the purchase of consumer durables other than automobiles. This grouping includes department stores, mail order stores, furniture, and appliance stores.⁵

GIMMICKS IN CREDIT

There are many gimmicks used in arranging for credit terms which frequently tend to confuse the customer. For example, a large manufacturer of sewing machines gives a discount ranging from 20 to 40 percent on the cash price of their machine if the purchaser will finance it through their (the manufacturing) organization. Of course, to some extent, purchasers are aware of the fact that this difference may be made up somewhere in the service charges.

Another gimmick commonly used in their credit arrangements is the statement of the interest rate by methods which the customer does not understand. An example of this might be the statement of interest rates in terms of as "one-half of one percent monthly on the remaining balance". Consumers might not be aware of the fact that this would be approximately the same as an interest rate of 6 percent per annum on a monthly declining balance method. However, had the first statement been "one-half of one percent monthly" the true interest rate would be approximately 11 percent as opposed to approximately 6 percent in the first two examples.

Time payment plans which indicate only the amount of the monthly payment appear to be gimmicks designed to hide the real cost of the consumer credit, since the length of time for repayment and/or the exact service charges are not obvious. A large mail order house in ad-

vertising its service charges, aside from having numerous plans which tend to confuse the individuals concerned, makes its credit costs and the amount of monthly payments obvious but not the total number of months that individuals will be paying. This again is simply an attempt to confuse borrowers in calculating an annual interest rate on money which they are borrowing.

In many instances, the persons who shop around for credit are able to reduce their credit charges from 18 to 24 percent to a mere 6 to 8 percent. The table provided in this booklet has been calculated so that you as consumers can easily compare the costs of different finance plans.

THE SOURCE OF INFORMATION CONTAINED IN TABLE

The information contained in this table was calculated with the use of the basic formula:

$$R = \frac{2MF}{P(N + 1)}$$

R = annual interest rate

M = number of payments in year (12 if you repay monthly; 52 if weekly)

P = unpaid balance (cash price—down payment or trade in)

F = total finance charges (dollars)

N = number of installment payments called for in the contract.

From the formula then, interest rate, R, can be determined once you know the other factors. The number of payments in a year, M, becomes fixed once you know the payment interval. Thus, if payments are to be made weekly, M becomes 52, while monthly payments would be represented by an M of 12. It is important to remember, when using the formula, that M does not vary with length of payment period but is a constant equal to the number of payments made in a year. The unpaid balance, P, is really the amount borrowed and can be found by subtracting the down payment or trade in value from the cash price. The total finance charges, F, if not given, can be found by multiplying the amount of each installment payment by the number of payments and subtracting the unpaid balance from this amount. This leaves only the number of installment payments, N, to complete the items needed for the formula.

⁵Material for this section was drawn from the various issues of the "Federal Reserve Bulletin," Board of Governors, Federal Reserve System, Washington, D. C.

Using the formula, the annual interest rate of a credit transaction in which the unpaid balance was \$156 to be repaid in 13 equal monthly installments of \$13 each, is about 14.31. This was found by substituting values into the formula and solving.

$$\begin{aligned}
 P &= \$156 \\
 M &= \$12 \\
 F &= \$13 \\
 N &= 13 \\
 R &= \frac{2(12)(13)}{156(14)} \\
 &= \frac{312}{2184} \\
 &= 14.3 + \text{percent}
 \end{aligned}$$

F was the only item needed in the formula that was not given. It was found by multiplying the number of payments, 13, by the amount of each payment, \$13, and subtracting the unpaid balance, P or \$156, ($13 \times \$13 = \$169 - \$156 = \13)

Calculating the annual rate of interest using the formula requires a number of mathematical calculations. Therefore, in an attempt to simplify the calculation of the annual rate of interest the following table has been provided so most of the mathematical computations are not required. The only mathematical calculation that need be made with this procedure is simply to divide the total finance cost by the amount of money borrowed. The rest of the determination of the annual interest rate is straight forward and simply a matter of looking up items in the table.

COMPUTING ANNUAL INTEREST RATES USING TABLE

To compute the annual interest rate on loans and installment purchases payable in equal installments it is necessary to know the following:

1. *Financing Cost in Dollars and Cents.*

Get the total of all payments including the down payment, if any, and subtract the cash price or the amount borrowed. The difference is the Financing Cost.

2. *Total Amount Borrowed to be Re-paid in Installments.*

The total amount paid in equal installment payments minus the Financing Cost is the Total Amount Borrowed to be Re-paid in Installments.

3. *The Cost Ratio.*

Divide the Financing Cost by the Total Amount Borrowed to get the Cost Ratio.⁶

4. *The Interest Rate.*

Once the Cost Ratio has been computed, locate the column in the table headed with this figure. If the Cost Ratio comes out exactly in hundredths the task is simple if not see footnote below. In the column headed with the figure representing the Cost Ratio, move down until you are opposite the appropriate number of payments and you will find *the interest rate per installment period* (week, month, etc.).

5. *Annual Interest Rates.*

The Annual Interest Rate is found by multiplying the Interest Rate per Installment Period by the number of installment periods in a year (12 if payments are monthly; 52 if payments are weekly, etc.).

If the object is to compare the costs of credit from different sources, then it is not necessary to have the annual interest rate charged by either. Rather, the readings directly from the table give this comparison. For example, if one is borrowing \$210 to be repaid in 24 monthly payments of \$10 each from one source and calculates the cost ratio to be .14 he simply looks in the table under the column .14 until he comes to the 24th line. Here he finds that the cost of credit on this basis would be 1.12 percent. As an alternative to this borrowing, the debtor could borrow the \$210 to be paid \$10 per month in 23 months. Then again calculating the cost ratio it would be obvious that with the cost ratio of approximately .10 to be paid in 23 months the cost of credit would be .83. Thus, .83 is less than 1.12, or the costs of credit from one source is much cheaper than from the other source.

Example. You want to borrow \$10,350 on a home loan to be repaid in 30 years. The stated rate is 5¾ percent interest amortized. Your payment will be \$57.22 per month. Thirty years or 360 months times \$57.22 gives \$20,600 the total amount you will pay. The financing costs are \$10,250 (\$20,600 - \$10,350). Thus, your cost

⁶If the Cost Ratio does not calculate to be exact in hundredths, then the annual interest rate may be more accurately determined as follows: Drop all figures beyond the second decimal place. Find the column headed with the remaining number. Follow down this column to the entry opposite the proper number of installment payments. The rate of interest lies between this figure and the figure next to it on the right.

As an example, with a Cost Ratio of .1125 for 12 monthly installments, the rate of interest is equal to the rate of .11 plus .25 times the difference between the ratio of .11 and .12. The interest rate can be computed as follows:

Rate for .12 Cost Ratio (from table)	1.85
Rate for .11 Cost Ratio (from table)	1.69
Difference	.16

.25 X .16% = .04% 1.69 + .04 = 1.73% the interest rate per month.
1.73% X 12 = 20.76% interest per year.

TABLE OF INTEREST RATES CORRESPONDING TO VARIOUS COST RATIOS AND NUMBER OF INSTALLMENTS

Figures in table are interest rates in percent, per installment period

Number of Installment Payments	Cost Ratio																
	.02	.03	.04	.05	.06	.07	.08	.09	.10	.11	.12	.13	.14	.15	.16	.17	
1.	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	
2.	1.33	2.00	2.67	3.33	4.00	4.67	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00	10.67	11.33	
3.	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	
4.	.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80	
5.	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00	5.33	5.67	
6.	.57	.86	1.14	1.43	1.71	2.00	2.29	2.57	2.86	3.14	3.43	3.71	4.00	4.29	4.57	4.86	
7.	.50	.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	
8.	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33	3.56	3.78	
9.	.40	.60	.80	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	
10.	.36	.55	.73	.91	1.09	1.27	1.45	1.64	1.82	2.00	2.18	2.36	2.55	2.73	2.91	3.09	
11.	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50	2.67	2.83	
12.	.31	.46	.62	.77	.92	1.08	1.23	1.38	1.54	1.69	1.85	2.00	2.15	2.31	2.46	2.61	
13.	.29	.43	.57	.71	.86	1.00	1.14	1.29	1.43	1.57	1.71	1.86	2.00	2.14	2.29	2.43	
14.	.27	.40	.53	.67	.80	.93	1.07	1.20	1.33	1.47	1.60	1.73	1.87	2.00	2.13	2.27	
15.	.25	.38	.50	.63	.75	.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	
16.	.24	.35	.47	.59	.71	.82	.94	1.06	1.18	1.29	1.41	1.53	1.65	1.76	1.88	2.00	
17.	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.56	1.67	1.78	1.89	
18.	.21	.32	.42	.53	.63	.74	.84	.95	1.05	1.16	1.26	1.37	1.47	1.58	1.68	1.79	
19.	.20	.30	.40	.50	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	
20.	.19	.29	.38	.48	.57	.67	.76	.86	.95	1.05	1.14	1.24	1.33	1.43	1.52	1.62	
21.	.18	.27	.36	.45	.55	.64	.73	.82	.91	1.00	1.09	1.18	1.27	1.36	1.45	1.55	
22.	.17	.26	.35	.44	.52	.61	.70	.78	.87	.96	1.04	1.13	1.22	1.31	1.39	1.48	
23.	.17	.25	.33	.42	.50	.58	.67	.75	.83	.92	1.00	1.08	1.17	1.25	1.33	1.42	
24.	.16	.24	.32	.40	.48	.56	.64	.72	.80	.88	.96	1.04	1.12	1.20	1.28	1.36	
25.	.15	.23	.31	.38	.46	.54	.62	.69	.77	.85	.92	1.00	1.08	1.15	1.23	1.31	
26.	.15	.22	.30	.37	.44	.52	.59	.67	.74	.82	.89	.96	1.04	1.11	1.19	1.26	
27.	.14	.21	.29	.36	.43	.50	.57	.64	.71	.79	.86	.93	1.00	1.07	1.14	1.21	
28.	.14	.21	.28	.35	.41	.48	.55	.62	.69	.76	.83	.90	.97	1.04	1.10	1.17	
29.	.13	.20	.27	.33	.40	.47	.53	.60	.67	.73	.80	.87	.93	1.00	1.07	1.13	
30.	.13	.19	.26	.32	.39	.45	.52	.58	.65	.71	.77	.84	.90	.97	1.03	1.10	
31.	.13	.19	.25	.31	.38	.44	.50	.56	.63	.69	.75	.81	.88	.94	1.00	1.06	
32.	.12	.18	.24	.30	.36	.42	.48	.55	.61	.67	.73	.79	.85	.91	.97	1.03	
33.	.12	.18	.24	.29	.35	.41	.47	.53	.59	.65	.71	.76	.82	.88	.94	1.00	
34.	.11	.17	.23	.29	.34	.40	.46	.51	.57	.63	.69	.74	.80	.86	.91	.97	
35.	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83	.89	.95	
36.	.11	.16	.22	.27	.32	.38	.43	.49	.54	.60	.65	.70	.76	.81	.87	.92	

TABLE OF INTEREST RATES (CONTINUED)

Number of Installment Payments	Cost Ratio													Constants for Calculating Interest Rate*
	.18	.19	.20	.21	.22	.23	.24	.25	.26	.27	.28	.29	.30	
1.	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00	1.0000
2.	12.00	12.67	13.33	14.00	14.67	15.33	16.00	16.67	17.33	18.00	18.66	19.33	20.00	.6666
3.	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.50	15.00	.5000
4.	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80	11.20	11.60	12.00	.4000
5.	6.00	6.33	6.67	7.00	7.33	7.67	8.00	8.33	8.67	9.00	9.33	9.67	10.00	.3333
6.	5.14	5.43	5.71	6.00	6.29	6.57	6.86	7.14	7.43	7.71	8.00	8.29	8.57	.2857
7.	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	.2500
8.	4.00	4.22	4.44	4.67	4.89	5.11	5.33	5.56	5.78	6.00	6.22	6.44	6.67	.2222
9.	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	.2000
10.	3.27	3.45	3.64	3.82	4.00	4.18	4.36	4.55	4.73	4.91	5.09	5.27	5.45	.1818
11.	3.00	3.17	3.33	3.50	3.67	3.83	4.00	4.17	4.33	4.50	4.67	4.83	5.00	.1667
12.	2.77	2.92	3.08	3.23	3.38	3.54	3.69	3.85	4.00	4.15	4.31	4.46	4.61	.1538
13.	2.57	2.72	2.86	3.00	3.14	3.29	3.43	3.57	3.72	3.86	4.00	4.14	4.29	.1429
14.	2.40	2.53	2.67	2.80	2.93	3.07	3.20	3.33	3.47	3.60	3.73	3.87	4.00	.1333
15.	2.25	2.38	2.50	2.63	2.75	2.88	3.00	3.13	3.25	3.38	3.50	3.63	3.75	.1250
16.	2.12	2.23	2.35	2.47	2.59	2.70	2.82	2.94	3.06	3.18	3.29	3.41	3.53	.1176
17.	2.00	2.11	2.22	2.33	2.44	2.56	2.67	2.78	2.89	3.00	3.11	3.22	3.33	.1111
18.	1.90	2.00	2.11	2.21	2.32	2.42	2.53	2.63	2.74	2.84	2.95	3.05	3.16	.1053
19.	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	.1000
20.	1.71	1.81	1.90	2.00	2.09	2.19	2.28	2.38	2.48	2.57	2.67	2.76	2.86	.0952
21.	1.64	1.73	1.82	1.91	2.00	2.09	2.18	2.27	2.36	2.45	2.55	2.64	2.73	.0909
22.	1.57	1.65	1.74	1.83	1.91	2.00	2.09	2.18	2.26	2.35	2.44	2.52	2.61	.0870
23.	1.50	1.58	1.67	1.75	1.83	1.92	2.00	2.08	2.17	2.25	2.33	2.42	2.50	.0833
24.	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2.08	2.16	2.24	2.32	2.40	.0800
25.	1.38	1.46	1.54	1.61	1.69	1.77	1.85	1.92	2.00	2.08	2.15	2.23	2.31	.0769
26.	1.33	1.41	1.48	1.56	1.63	1.70	1.78	1.85	1.93	2.00	2.07	2.15	2.22	.0741
27.	1.29	1.36	1.43	1.50	1.57	1.64	1.71	1.79	1.86	1.93	2.00	2.07	2.14	.0714
28.	1.24	1.31	1.38	1.45	1.52	1.59	1.66	1.73	1.79	1.86	1.93	2.00	2.07	.0690
29.	1.20	1.27	1.33	1.40	1.47	1.53	1.60	1.67	1.73	1.80	1.87	1.93	2.00	.0667
30.	1.16	1.23	1.29	1.35	1.42	1.48	1.55	1.61	1.68	1.74	1.81	1.87	1.94	.0645
31.	1.13	1.19	1.25	1.31	1.38	1.44	1.50	1.56	1.63	1.69	1.75	1.81	1.88	.0625
32.	1.09	1.15	1.21	1.27	1.33	1.39	1.45	1.52	1.58	1.64	1.70	1.76	1.82	.0606
33.	1.06	1.12	1.18	1.23	1.29	1.35	1.41	1.47	1.53	1.59	1.65	1.71	1.76	.0588
34.	1.03	1.08	1.14	1.20	1.26	1.31	1.37	1.43	1.48	1.54	1.60	1.66	1.71	.0571
35.	1.00	1.06	1.11	1.17	1.22	1.28	1.33	1.39	1.45	1.50	1.56	1.61	1.67	.0556
36.	.97	1.03	1.08	1.14	1.19	1.24	1.30	1.35	1.41	1.46	1.51	1.57	1.62	.0541

*The last column in the table entitled "Constants for Calculating Interest Rates" is included for your use should your Cost Ratio be greater than those given in the table. Should your Cost Ratio be greater than those given herein, then follow down the "Constant" column to the appropriate line for the number of payments and multiply the constant found on that line by the Cost Ratio.

ratio calculates to be .99 ($\$10,250 \div \$10,350$). Follow down the "constant" column to the line of 30 payments, the constant is .0645. The cost ratio .99, times the constant, .0645, gives 6.39 percent interest per year on the annual basis.

EXAMPLE--USING THE TABLE

1. You seek an automobile loan for \$2,000. For such a loan, the repayment period is 36 months and payments will run \$65.56 per month. The contract rate of interest is 6 percent.

$$65.56 \times 36 = \$2,360 \text{ total amount repaid}$$

2,000 cash price	
360 financing cost	

$$\frac{360}{2,000} = .18 \text{ cost ratio}$$

Follow down the column in the table headed .18 to the line opposite 36. The interest rate per month is .97 percent. The annual interest rate is then 12 (the number of monthly payments per year) times .97 percent or $12 \times .97 = 11.64$ percent.

2. You borrow \$500 personal loan from the bank to be repaid in 12 equal payments of \$41.67. The loan is discounted at the rate of 8 percent so you get \$460 cash and repay \$500.

$$\$41.67 \times 12 = \$500.00 \text{ total amount repaid}$$

460.00 cash	
40.00 financing cost	

$$\frac{40}{460} = .087$$

In the column headed .08 opposite the 12 payments it is found that the monthly rate of interest is 1.23 percent. The difference in this figure and the one to the right of it, 1.38, is .15. As the cost ratio did not come out to even hundredths, the difference .7 times .15 gives $.105 + 1.23 = 1.34$ percent interest per month. Or, 1.34 percent times

$12 = 16.08$ percent per year.

3. You seek a loan to purchase a sewing machine which sells for \$192.00. The merchant will "finance" the purchase for 12 months and service charges will be \$13.50. Or, you can borrow from an investment company for 8 percent interest. Your problem is to compare the two.

From the merchant the \$192.00 sales price plus the \$13.50 service charge gives a total of \$205.00 to be repaid. The service charges from the investment company would be \$15.36 with \$207.36 to be repaid. It is obvious that total cost including financing cost is less from the dealer by \$2.36 but the difference in percent interest charges remains to be shown.

Merchant:

$$\frac{13.50}{192.00} = .07 = 1.08\%$$

Investment Company:

$$\frac{15.36}{192.00} = .08 = 1.23\%$$

Therefore, the credit obtained from the merchant costs .15 percent per month less than that obtained from the investment company. This would be a difference of 1.8 percent per year ($.15 \times 12 = 1.8$).

4. You seek credit in a department store to finance the purchase of a \$160 washing machine. You are told that monthly payments are only \$8.50. Later you find that credit costs for this loan are \$29.00. The cash price of \$160 plus carrying charges of \$29.00 total \$189.00 to be repaid. At \$8.50 per month, 22.25 months will be required to repay the loan. Round this figure to 22 for easy calculations.

Financing Cost	\$ 29.00
Amount Borrowed	160.00

$$\frac{29}{160} = .18$$

In the table, find the .18 column and follow down to the 22 payment column. The rate is 1.57 percent per month or 18.84 percent per year.



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