



# HOW FINANCE CHARGES ARE CALCULATED ON CREDIT CARD ACCOUNTS

**H**ave you ever wondered how the interest on your monthly credit card bill is calculated? If you are like most consumers who carry a balance on their credit cards, you know that there is a finance charge, but you have little or no idea how the creditor arrived at the amount to charge you. Creditors provide the name of the method used to determine your interest charge somewhere on your monthly statement. But, most of the time, consumers are in the dark about what this term means.

The following information should give you a better understanding of how these interest charges are calculated.

## *Average Daily Balance*

This is the most common and one of the most expensive methods used for calculating the interest charge for a consumer bill. There is no "free period" or "grace period." In calculating the interest for your monthly statement, the previous monthly balance, any purchases, any payments, the monthly finance charge (if there is one), and any credits are weighted on a daily basis as they occur. In other words, the interest is calculated daily on the balance for that day.

Other terms for this method are: Straight Average Daily Balance and True Actuarial Average Daily Balance.

Here is how the interest charges are calculated for the average daily balance (DB) method: For example, the closing balance on your account the previous month was \$250.00 and the new billing period began May 22. On May 26 you charge a \$45.00 purchase on your account. On June 2, you charge another purchase of \$63.00 on your account. On June 15, your monthly payment of \$125.00 arrives. Here is how your interest rate is calculated:

May 22 - May 25	(DB of \$250.00 x 4 days)	= \$1,000.00
May 26 - June 1	(DB of \$295.00 x 7 days)	= 2,065.00
June 2 - June 14	(DB of \$358.00 x 13 days)	= 4,654.00
June 15 - June 21	(DB of \$233.00 x 7 days)	= 1,631.00
		Total = \$9,350.00

\$9,350/31 days in the billing period =

\$301.61 average daily balance

\$301.61 x 1.8% monthly interest rate = \$5.43.

Thus the interest rate/finance charge on your bill for the month in the example is \$5.43.

Continuing the example, during the next billing period, you make one purchase on July 6 for \$49.00. Your

monthly payment of \$150.00 arrives on July 20. Here is the interest charge for the second month of this example:

June 22 - July 5	(DB of \$238.43 x 14 days)	= \$3,338.02
July 6 - July 19	(DB of \$287.43 x 14 days)	= 4,024.02
July 20 - July 21	(DB of \$137.43 x 2 days)	= 274.86
		Total = \$7,636.90

\$7,636.90/30 days in the billing period = \$254.56

average daily balance;

\$254.56 x 1.8% monthly interest rate = \$4.58.

## *Two-cycle Average Daily Balance*

This method is similar to the average daily balance method except that the average daily balance is calculated over the previous two billing periods rather than one. It is also a very expensive method for the consumer. Using the information from the average daily balance example, here is how the two-cycle average daily balance is calculated:

May 22 - May 25	(DB of \$250.00 x 4 days)	= \$ 1,000.00
May 26 - June 1	(DB of \$295.00 x 7 days)	= 2,065.00
June 2 - June 14	(DB of \$358.00 x 13 days)	= 4,654.00
June 15 - June 21	(DB of \$233.00 x 7 days)	= 1,631.00
June 22 - July 5	(DB of \$237.85 x 14 days)	= 3,338.02
July 6 - July 19	(DB of \$286.75 x 14 days)	= 4,024.02
July 20 - July 21	(DB of \$136.75 x 2 days)	= 274.86
		Total = \$16,986.90

\$16,986.90/61 days in the billing period = \$278.47

average daily balance.

\$278.47 x 1.8% monthly interest rate = \$5.01

as a finance charge.

The next month the daily balances for May 22 - June 21 are dropped and the average daily balances for July 22 - August 21 are added to calculate the finance charge for the two-cycle average daily balance.

Other methods are sometimes used for calculating interest rate charges on open-ended credit. They are less costly to consumers but are rarely used anymore, especially by bank cards, major store credit cards, and gasoline company credit cards. Below is a brief explanation of these methods.

## *Ending Balance Method*

In this method, any payments and credits to your account are deducted before determining the interest rate. Using the same information in the previous example, here

is how your interest would be calculated using this method:

Previous monthly balance (\$250.00) plus purchases  
(\$45.00 + \$63.00 = \$108.00) less payment (\$125.00)  
equals ending balance (\$233.00).

Ending balance (\$233.00) x monthly interest rate  
(1.8%) = \$4.19.

Thus the interest/finance charge by this method is \$4.19.

### ***Previous Balance Method***

With this method, interest charges are calculated on the previous monthly balance and before purchases and/or payments are placed on the bill. Using the same example as above, here is how it works:

Previous balance (\$250.00) x monthly interest rate  
(1.8%) = \$4.50

The caution with this method is that if your previous balance was zero, you would have no interest charge for this month.

### ***Adjusted Balance Method***

This is the least expensive method for consumers. In this method, any payments or credits during the month are subtracted from the previous month's balance before the interest is calculated. Any purchases are added after the interest is calculated. Here is how it would look with our example:

Previous month's balance (\$250.00) less payments  
(\$125.00) = \$125.00.

\$125.00 x interest rate (1.8%) = \$2.25

## ***Conclusion***

When you are shopping for open-ended credit, it is important to know which method each creditor uses to calculate the finance charges on your account along with the annual percentage rate. As shown in the previous examples, the amount you pay in interest on your account can vary considerably over time. Remember to read any enclosures that come with your monthly bill. Credit terms can change from time to time and you need to be aware of what they are.

There is one way to avoid all credit charges and still use a credit card for purchases. Find a credit card account that does not carry a finance charge if the balance is paid in full each billing period and discipline yourself to be able to pay that balance due each time. If you choose this management style for yourself, you can select a credit card with a high interest rate that does not have a high annual fee.

## ***References:***

- Brown, Kevin W. and Kathleen E. Keest. *Usury and Consumer Credit Regulation*, National Consumer Law Center, Boston, Massachusetts, 1987.
- Garman, T. and R. Forgue. *Personal Finance*, 3rd Edition, Boston: Houghton Mifflin, 1991.