Lesson 2: Credit Cards

A credit card allows the cardholder to receive cash or to pay for purchases without having the money taken from your account at the time of the transaction. Instead, when a credit card is used, money is being borrowed from the company that issues the credit card.

As a result, credit cards make it extremely easy to purchase items for which we do not presently have the money. This convenience can result in financial difficulties for the cardholder if the credit card charges cannot be paid off. On the other hand, if the credit card charges are paid off in full each month, the credit card can be an extremely beneficial tool.

The Finer Details of a Credit Card

A credit card provides a monthly statement showing all of the transactions that occurred during the month along with the total of these purchases. This statement is mailed out to the customer. As a result, there is a due date in which the payment must be made. The interval between the billing date and the payment due date is often referred to as the grace period.

The statement summarizes all of the purchase made since the previous statement. In addition, the statement indicates a minimum payment amount that must be made by the cardholder if the account is to remain in good standing. The minimum payment amount represents the smallest payment that the credit card company is willing to receive and is based on either a flat fee or a small percentage of the amount owing. Obviously, payments larger than the minimum payment amount can also be made.

If the entire balance is paid, then no interest of any kind is charged. Therefore, it is much like an interest free loan. If the entire balance is not paid, then compound daily interest is charged on the unpaid amount—outstanding balance and is calculated from the date of the purchase until the balance is completely paid off.

The only time interest is charged immediately from the time of the purchase is when the credit card is used for a cash advance (taking money out of a bank machine) and charging the withdrawal to one’s credit card. Interest is charged whether or not the balance is paid in full by the next payment due date.

When a payment is made, it is applied to your account in the following order:

1. interest from previous bills;
2. fees for using the card (usually yearly);
3. cash advances (money taken out of a bank machine);
4. purchases from previous bills for which interest is being charged;
5. new purchases for which interest is not yet being charged (if you are not carrying a balance).
Example

1. Mr. Iboughtit made a $1230 purchase with his credit card on May 12. His credit card company charges 18% per annum in interest. The minimum payment required is 3% of the balance or $10, whichever is greater. The billing date is the 8th of every month and his payment due date is May 21. Interest is compounded daily after the due date from the date of purchase.

   a. What is his minimum payment?

   $3\% \text{ of } 1230 \\
   = 0.03 \times 1230 \\
   = 36.90$

   Since 36.90 is greater than $10, the minimum payment would be.

   b. How much interest would be charged if Mr. Iboughtit paid off the full amount on May 21?

   NONE

   c. If Mr. Iboughtit made a payment of $200 on May 21, and made no further purchases, how much would he owe on the June 21 payment due date?

   \[
   A = P(1+i)^n \\
   = 1030(1.000493)^{40} \\
   = 1050.51 \\
   \]

   \[
   A = 1050.51 + 200 \\
   \]

   Interest = $1250.51 - 1230.00 \\
   = 20.51