13.0: Introduction

It would be nice to pay cash for everything that you acquire; however, goods such as housing, automobiles, furniture, and electronics require more money than most Canadians have lying around. If you tried saving up and paying cash for these large purchases, it would take a long time to accumulate enough funds. Take the example of a new home. If you saved $300 per month at 5% compounded annually, it would take approximately 30 years to save up $250,000 in cash, and in the meantime, of course, you would still need to pay for somewhere to live.

So it is not necessarily bad to borrow money at some point. However, to borrow wisely you had better understand where your money is going. Would it shock you to learn that in a typical mortgage arrangement most homeowners pay approximately double for their homes? That is, $250,000 for the home and $250,000 in interest!

Businesses borrow money for many of the same reasons as consumers. Loans and mortgages are commonplace. Certain business activities need to be financed upfront. For example, new products must be researched and developed before a single unit can be sold. This requires investments that will not be reimbursed until the products turn a profit. All company debts must be accurately recorded onto balance sheets to reflect the balances owing. Income statements must appropriately track interest expenses or earnings. Because businesses can deduct their interest expenses against corporate taxable income and lower their taxes, it is important to see what proportion of their loan payments is going to interest.

When you take out a mortgage for yourself or your business, where does your money go? You need a chart of your loan payments showing how much interest the bank charges and how much is applied against your principal.

This chapter takes you through calculating the principal and interest components of any single payment or series of payments for both loans and investment annuities. Recall from Chapter 11 that you estimated the final payment on a loan; you will now see how to calculate that payment precisely. Finally, you will be guided through the largest transactions you personally are likely to make: basic mortgages and renewals.
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