Understanding Down Payment and Balloon Payment in Excel

Down Payment

A down payment is something we may be familiar with since we might be asked to put money down on an asset before we purchase. A home or a car would be examples of loans that may require this. If you are making a payment before your loan is cast, then the money should be taken out of the loan present value amount or principle you are borrowing before payments are calculated.

Example:

Vehicle cost $55,000 Down payment 5,000 therefore PV of loan is $55,000-$5,000=$50,000

In Excel you can create a formula in the PV cell of the loan information subtract the DP by typing the value or better is to click on the cell that holds the DP is there is one. =PV-DP

Balloon Payment

Organizations can negotiate to pay a large portion of a loan at the end of the loan term, for instance on the last day of the loan. This is called a balloon payment since the last payment is much larger than the periodic payment. Balloon payments are common if a firm is trying to invest in the launch of a new product, for example. As you may know from the product life cycle, launching a new product (the introductory phase) is very costly. The product may not be profitable for several years while money is invested in development, commercialization, promotion, etc. The revenue is small and must be reinvested to educate the public about the product. It can be difficult to make a very large loan payment in this case. If a creditor supports the business plan and can see forecasted profits later, they will agree to cast the loan with a balloon payment.

For a 5 year loan, assuming that the product launch has been successful it is likely many people are buying and a lot more revenue is being generated which allows the large ending payment to me made on the loan (in a perfect world! Many products fail)

Example:

A business negotiates a 20% balloon payment on a $500,000 Loan. This results in a $100,000 Balloon Payment. The balloon payment is a NEGATIVE future value (FV). This means you owe

$100,000 on the last day. In Excel, the FV cell would be set to -100,000.

You have not paid the loan to 0 (our usual amount in this cell), but instead owe money.