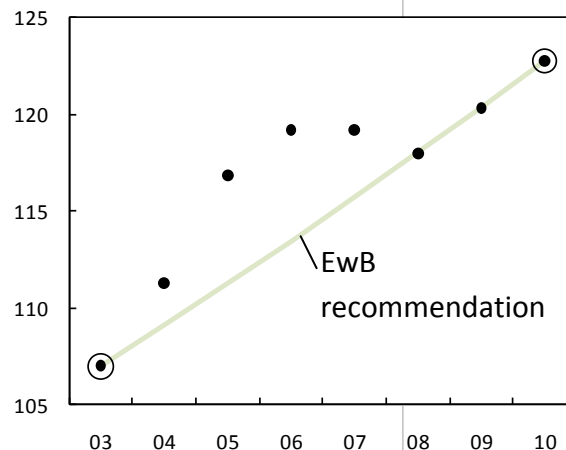


Calculating average % growth

Average percentage growth is not an official accounting or bookkeeping term but it is nonetheless a very useful measure of gain (or loss) over a period of time (of an investment, revenue, profit, etc.). This can help to assess a client's past performance and, perhaps, to predict likely future performance.

There are many ways of calculating this in Excel (eg LOGEST, LINEST, lines of best fit, etc.) but we recommend one of the very simplest: an annual level of growth that would take you from first year's level to the last. It's intuitive and there's no black box; you will understand exactly how and why we get the growth rates we do. Suppose you have a client with net profit figures for 2003-7 as follows:



We use this simple formula:

$$=100*(\text{final value}/\text{initial value})^{(1/\text{number of years' growth})}-100$$

For the data in the example, which spanned seven years' of growth, this formula was used:

$$=100*(C10/C7)^{(1/7)}-100 \text{ (where cells C7 \& C10 contain the first \& last data values)}$$

Giving a result of **2%** annual average growth (technically this is CAGR, Compound Annual Growth Rate, which is explained well here: www.investopedia.com/terms/c/cagr.asp).

Excel with Business

This short lesson is a snippet from Excel with Business's online Excel-training course – see www.excelwithbusiness.com/training.aspx for more details.