Cheat Sheet for basic budget analysis	
Purpose and formulae for budget analysis tools	**Excel Shortcuts**
Tool 1: **Percentage share of the total (priority)** Percentage share of total (%) = Amount / Total Budget*100	You can pull the formula down if you type a $ sign between the column letter and the row number of the Total Budget, to keep the total budget row constant. You can just pull the formula across without any changes.
Tool 2: **Nominal growth in the budget (progress)** Nominal growth rate (%) = (Y2 - Y1) / Y1*100	You can pull the formula down and across without any alterations (no $ sign needed!)
Tool 3: **Adjusting for inflation (real figures)** Real Amount = Nominal Amount / Deflator	You can pull the formula down if you type a $ sign between the column letter and the row number of the deflator, to keep the deflator row constant. You can also pull the formula across without any changes.
Tool 4: **Real growth in the budget (process in real terms)** Real growth rate (%) = (Y2 - Y1) / Y1*100	You can pull the formula down and across without any alterations (no $ sign needed!)
Tool 5: **Annual average growth (summary)** Average annual growth rate = Sum all growth rates / Number of growth rates summed	You cannot pull this formula across to average growth rates for a number of different years. You can, however, pull the formula down to get the annual average growth rate over the same years, but for different programmes / items.
Tool 6: **Per capita budgets (equity, adequacy and progress)** Per capita budget = Budget / Population	You can pull this formula across, but only if the population and the budget table have the same format!
Tool 7: **Percentage difference from average (equity)** % Difference = (per capita budget for sub-area – per capita budget for total area) / per capita budget for total area	You can pull the formula down if you type a $ sign between the column letter and the row number of the per capita budget for the total area, to keep the total per capita budget row constant. You can also pull the formula across without any changes.

Please turn over

Tool 8: **Real growth in per capita budgets** **(progress after adjusting for inflation and population growth)** Real per capita budget = Nominal per capita / Deflator Real growth rates in per capita budgets = (Y2 - Y1) / Y1*100	See: - Adjusting for inflation (Tool 3) and - Growth (Tool 4)
Tool 9: **Comparing budgets to costs** **(adequacy of budget in relation to costs and performance targets, efficiency & effectiveness)** Required budget = Average cost per unit of service* Number of outputs Number of outputs that are under- or over-funded = (Required budget - Actual budget) / average cost per unit of service	You can generally pull the formula down. However, always check the formats of the source tables and the table to be created or filled in. These must have the same order!!!!
Tool 10: **Comparing budgets to expenditure** **(expenditure as % of the budget – efficiency)** Expenditure as a % of the budget = Expenditure / Budget*100	If expenditure figures are put in a column adjacent to the column with budget figures, you can drag the formula down.

Notes:

1. **A column is vertical (from top to bottom), and is indicated by a letter (A, B, C, etc) in Excel**
2. **A row goes from left to right (horizontal), and is indicated by a number (1, 2, 3, 4 etc.) in Excel.**
3. **ALWAYS check the formats of the tables. In order to be able to drag formulae, the order of the items and years needs to be the same in the reference or source table as in the table to be completed!**
4. **Easy trick: once you have ensured that the format of the table you want to fill in is the same as the source table, you can just copy the original table and replace the original figures with your formulae.**