only cases that have non-missing values in the grouping variables will be used in the analysis.

Weight Variable The sampling weight that will be used in the analysis. The IDB Analyzer automatically selects the appropriate weight and replication variables for the analysis.

As an example, we will compute the percentages for boys and girls (ASBG01) and their standard errors within each country (IDCNTRY), using the weighting variable TOTWGT. The data will be read from the data file **Merged_PIRLS_Data.sav** and the standard errors will be computed based on replicate weights.

The steps in the IDB Analyzer are as follows:

- Open the Analysis Module of the IDB Analyzer (Start → All Programs → IEA → IDBAnalyzerV3 → IDBAnalyzer).
- 2. Select the data file named **Merged_PIRLS_Data.sav** that you merged in the previous step.
- 3. As type of the analysis select **PIRLS (Using Student Weights)**. The weight variable is automatically selected by the software. As this is an example for analysis on student level, the weight TOTWGT is selected by default. For the correct weight and variance estimation variables, please refer to the technical documentation specific to the study.
- 4. From the **Statistic Type** dropdown menu, select **Percentages Only**. Leave the other dropdown menus unchanged.
- 5. If you want the IDB Analyzer to create graphs leave the default option "Yes" under the option **Show Graphs**, otherwise change to "No".
- 6. In the next step you will need to define the grouping variables. As **Grouping Variable,** the software always selects variable IDCNTRY by default. You will need to add ASBG01 for this example. To do this, mark the variable from the variable list on the left side of the window and press the right arrow button belonging to the section of the grouping variable or double click on the variable in the list. This will move the variable ASBG01 from the variable list on the left side into the field for the grouping variables on the right.
- 7. Click on the **Define/Modify** button next to **Output Files** and specify the name of the output files. For our example we will use the name "PercentagesOnly". This filename will be used to create an SPSS file with the syntax to perform the analysis, a set of SPSS and Excel files with the statistics from the analysis, and the SPSS output file with summary statistics from the analysis. This name will also be used to create and name a new output window with the results from this analysis.
- 8. Click on the **Start SPSS** button to create the SPSS syntax file and open it in an SPSS syntax window ready for execution. The syntax file must then be executed by opening the **Run** menu of the syntax window and selecting the **All** menu option. Alternatively you can also submit the code for processing with the keystrokes **Ctrl+A** (to select all), followed by **Ctrl+R** (to run the selection). The IDB Analyzer will give a warning if it is about to overwrite an existing file in the specified folder.

Figure 17 shows the IDB Analyzer Setup Screen for this analysis, Figure 18 shows the SPSS Syntax file created by the IDB Analyzer.

SPSS output obtained from SPSS, Excel files and SPSS files with the results from the analysis can be found in the Examples folder.