Applied Economics
Basic Data Management in `gretl`

1. Load the file USwages.gdt. It contains information on monthly wages, years of education, age, experience, marital status and race for a sample of male workers in the US.

   (a) How many observations are in the sample? What is the mean wage in the sample? The minimum?

   (b) List the wage of every worker in the sample. What is the monthly wage of the first worker in the sample? What is the monthly wage of the last worker in the sample?

   (c) Wages and earnings are often studied by first taking logarithms. Transform the wage variable by taking its logarithm and report the mean value of the log(wage) variable.

   (d) How many workers have exactly a high-school degree (12 years)? How many workers have exactly a college degree (16 years)? Are there workers who never went to school?

   (e) How many black workers are in the sample? What is the average wage for those workers?

   (f) What is the highest wage in the sample? What is the race, marital status and age of the highest wage worker in the sample?

2. Load the file USmacro.gdt. It contains information on weekly earnings (wkearns), hours (wkhours) and output per hour (outphr) for the US for the period 1947-1987.

   (a) Declare the time-series structure of the data and label the variables.

   (b) Generate the variable *year* using the variable *time*.

   (c) We know that US workers have become more productive over time. Is this fact reflected in this sample? Use a graph to answer the question.

   (d) Compute the average hourly wage for each year. Report the average wage for the first and the last year in the sample.

   (e) Compute the growth rate of the hourly wage and the output per hour. Do these variables present a time trend? Plot both variables in the same graph to answer this question.

   (f) What is the correlation between the hourly wage and the output per worker? Does the correlation change if we use growth rates for both variables? Are the correlations similar for the period 1947 - 1980?

   (g) Save the new database in `gretl` format.