

Exercises

E13.1 Use the file *Life Expectancy.xls*.

- Regress Life Expectancy on Population, GDP, and Health Expenditure as a pooled cross-section.
- Regress Life Expectancy on Population, GDP, and Health Expenditure as a pooled cross-section controlling for the number of years.
- Now regress Life Expectancy on GDP per Capita and Health Expenditure as a pooled cross-section, controlling for the number of years, and compare your results to what you found in parts (a) and (b). Which specification do you feel is a better fit?

E13.2 Use the file *Life Expectancy.xls*.

- Use first differencing to estimate the regression of Life Expectancy on Population, GDP, and Health Expenditure.
- Now use first-differencing to estimate the regression of Life Expectancy on GDP per Capita and Health Expenditure.
- Compare your results to what you found in problem C13.1.

E13.3 Estimate a fixed-effects model using the NFL data with only using years 2007 and 2009. Comment on the results, and compare your estimates to the first-differenced estimates in Excel Regression Output 13.3.

E13.4 Estimate a random-effects model using the Olympics data. Comment on the results. Do you think that this is the best method to estimate this model? Explain.

E13.5 Use the file *Life Expectancy.xls*.

- Estimate the model Life Expectancy on Population, GDP, and Health Expenditure using the dummy variable method of fixed effects.
- Estimate the model Life Expectancy on Population, GDP, and Health Expenditure using the differencing method of fixed effects. Make sure your results match in parts (a) and (b).
- Estimate the model Life Expectancy on Population, GDP, and Health Expenditure using random effects.
- Comment on the differences.