Partial exam 1. November 30th, 2016

We want to analyze the sale function of a particular firm.. To that end, the file pex1.wf1 contains information about:

sales: sales of the company

P1t: price index of the product

P2t: average price index of the market

P3t: price index of a similar product in a local market

It: disposable income

The sample covers the period 1991:1-2015:4. With this information, you should reply to the following questions.

1. Test for the unit root null hypothesis for P1t, P2t and it.
2. Test for seasonal unit roots for P3t.
3. Determine the most appropriate ARIMA models for these four variables
4. Predict the future values of these variables for the 2016:1 period
5. Estimate the long-run relationship between the variables. Interpret this model in economic terms
6. Predict the future value of sales for 2016:1 according to the available information
7. Estimate the Error correction mechanism. Interpret this model in economic terms

Once you have finished the exam, send it to [apleconometrics@gmail.com](mailto:apleconometrics@gmail.com) including your name in the text of the mail.