***MOOC Econometrics***

By frank: Test-Exercise-6

***Note: (a) is at last***

b)

i)

*Hence: LOGEUR is not Stationary.*

ii)

*Hence: LOGUSA is not Stationary.*

c) AR-Model:

d) The coefficient of monthly inflation in the USA at lag – 6 = -0.0561 with tstat = -1.023 and p-value = 0.3083 > 0.05 means it is not significant different from zero.

ADL- model:

e) interpretation of the outcomes:

|  |  |  |
| --- | --- | --- |
|  | Model of c:  AR-Model | Model of d:  ADL-model |
| RSME | 0.002323 | 0.002111 |
| MAE | 0.001692 | 0.001404 |
| SUM | 0.005055 | 0.000471 |

The second colom shows that adding the leading index , does indeed reducing the out-sample forecast errors for the monthly inflation. So, the in-sample success is also confirmed in the out-of-sample forecasting.

a)

Conclusion: after taken Logs, seems common trend for the CPI\_EUR and CPI\_USA.

(*Please look page-2)*