

ECON 202
INTERMEDIATE MACROECONOMICS
Dr. Yetkiner

30 April 2007

Homework (5 Net Bonus Points)

Your homework is to compare and contrast the business cycle character of a macroeconomic variable with real GDP. Here are the steps that you have to follow:

1. Select a variable (e.g., inflation rate, money supply, interest rate, etc.) (in addition to Real GDP).
 - Do not forget to register your variable with Research Assistant Onur Ateş. **No** two of you may select the same variable.
 - You should note that the time scale of your variable that you plan to analyze must be identical of real GDP data you are going to use.
2. Go to the Web page: http://www.web-reg.de/hp_addin.html (read the discussion on *Hodrick Prescott filter* for your own understanding). Next, select the *excel add-ins* and download *Hodrick Prescott Filter* add-in (i.e., the file hpfilter.zip). In the zip file, you will find out how you may integrate the add-in to your excel program.
3. After reviewing the example thoroughly, do the following calculations for your own data. I expect you to present me
 - De-trended data via HP filter (your variable and real GDP)
 - The extent that deviations from trend of your variable of choice **co-moves** with the real GDP
 - Whether your variable of choice is leading or lagging to real GDP (+2/-2 are sufficient)
 - The degree of volatility of your variable relative to real GDP
4. Your project must include a ONE-page discussion (not more) plus figures.
5. This homework earns you bonus points. It is not compulsory,