ECON 758 HW 2

a.Why would you expect income to respond to tax rate changes? Give examples of different potential adjustment reactions that would lead to income changes.

A change in the tax on income will change the net income remaining that taxpayers have to dispose of into other consuming or investing activities. A taxpayer’s natural response is to engage in activities that minimize additional tax burden or maximizes a decreasing tax burden.

Taxpayers facing an increase in the marginal tax rate may choose to decrease labor force participation. This reaction may be more pronounced for individuals that are clustered near an end of a step between two income brackets.

Higher income taxpayers are likely to be more sensitive to tax changes and may engage in tax aversion strategies, or shift forms of compensation to compensation schemes less exposed to tax changes.

b.Familiarize yourselves with the data. Provide a table(Table 1)with summary statistics (means and standard deviations) of the variables included in the dataset

Part E)

The magnitude of the estimated tax rate elasticity of income is the coefficient chi which for our regression results using xtreg is .0330515 which means a change in gross income is close to being perfectly inelastic with respect to a change in marginal tax rates.

If however we regress

We obtain a coefficient for mtr of .5206842 which is still inelastic but more in line the authors results. IN either case we are still in the “good” part of the Laffer curve, meaning the government could further increases taxes to increase tax revenue without taxpayers being too sensitive to the tax increase.

We also tried…

And got .2164459 for the coefficient which is still inelastic but more sensible than other regressions

Part F)

Why do you think this OLS estimate could be biased? In which direction do you expect the bias to go, and why? Hint: Germany has a progressive personal income tax schedule. Below you can find the schedule for 2002, 2007and 2012:

We think the initial OLS estimates are biased downward because our proxy for net of tax rate, marginal taxes is endogenous with Germany’s progressive tax system. This tax system over time between panel years has decreased marginal tax rates overall. We expect our X1 (current mtr) is negatively correlated with X2 (decreases in mtr in later panel years). We would expect the coefficient on X2 to be positive since higher income taxpayers face a higher gross income from a lower tax burden in an environment with decrease mtr over time as a lower mtr gives greater incentive to earn more and increase gross income of individual taxpayers.

Questions for Fossen:

For the base model we are running, we get results of a super low elasticity for what we think the model should be (no logs)

“Don’t use log GI”---instruction means lagged GI or the LHS GI ratio? (or both)

Is the weights referring to the income ratio on the LHS of regression? (Implied by 2002 paper pg 15)