

Econ 116
Problem Set 2
Due September 19, 2017

1. Why is saving always equal to actual investment? What happens if saving is greater than planned investment?
2. How is the multiplier affected by the size of the marginal propensity to consume? Explain in words why if government spending increases by 100 output increases by more than 100.
3. Explain carefully the difference between an endogenous variable, an exogenous variable, and a parameter or coefficient. Give an example of each as used in class. If parameters are chosen by the procedure of least squares, what does this mean?
4. Consider the model $C = b(Y - T)$, $T = tY - TR$, $Y = C + I + G$, where C is consumption, I is planned investment (exogenous), G is government spending (exogenous), Y is output, T is net taxes, t is the tax rate (exogenous), and TR is the value of transfer payments (exogenous). b is the marginal propensity to consume. Assume that $b = .75$ and $t = 1/3$. How much does Y increase when G increases by 4? How much does Y increase when TR increases by 4? Explain carefully why these two multipliers are not the same—what is the intuition?
5. In the above question, how much will the government deficit increase if G is increased by 4? How much will it increase if TR is increased by 4? Explain why these two answers are not the same.
6. What was the size of the federal government deficit (at an annual rate) in each of the quarters 2016:3–2017:2? For 2017:2 how large is the deficit as a percent of GDP?