

Econ 481: Problem Set #1

Due: September 17, 2018

Please choose three of the four problem below.

Problem #1

Focus on data for 2016.

i) Identify the state with the highest level of Government Expenditure in 2016?

ii) Identify the state with the highest level of Tax Revenue in 2016?

iii) Which state had the highest level of Debt to GDP ratio in 2016?

Problem #2

Please provide the following, given the factual expenditure/revenue patterns in the USA at the federal level since 1978.

- i) List the years when the US government ran a budget surplus
- ii) The year when the deficit was the largest as a fraction of the GDP
- iii) The year when the tax revenues were the highest as a fraction of the GDP

Problem #3

Consider two economies. In the first, there are three individuals with incomes, 120, 200, and 380. In the second there are also three individuals with incomes, 150, 250, and 300.

i) In which of the two economies would you prefer to live? Justify your answer.

ii) Would your answer be different if incomes in the second economy were 150, 250, and 400?

Problem #4 - Gruber

The country of Adventureland has two citizens, Bill and Ted. Bill has a private legal business. He earns \$50 per hour. At a tax rate of 0%, Bill works 20 hours. At a 25% tax rate he works only 16 hours, and at a 40% tax rate he works only 8 hours per week. Ted works a manufacturing job. He works 20 hours per week and earns \$6 per hour, regardless of the tax rate. The government is considering imposing an income tax of either 25% or 40% on Bill and using the revenues to make transfer payments to Ted. The accompanying table summarizes the three possible policies. Does either tax policy raise social welfare? Are either of the policies obviously less than optimal? Explain your answers.

	0%	25%	40%
Bill's pre-tax income	\$1000	\$800	\$400
Bill's taxes	\$0	\$200	\$160
Bill's net income	\$1000	\$600	\$240
Ted's pre-tax income	\$120	\$120	\$120
Ted's transfer payment	\$0	\$200	\$160
Ted's net income	\$120	\$320	\$280