

Exam 1

Name: _____

e-mail: _____

Part 1: (15 minutes, 30 points)

1. _____ How big is U.S. Government (as a % of GDP) compared to most **developed** nations? Use Government spending/GDP as your standard of comparison.¹
 - a. Govt spending/GDP is **larger** in the U.S. than in most developed nations.
 - b. Govt spending /GDP in the U.S. is **nearly the average** ($\pm 3\%$) for developed nations.
 - c. Govt spending /GDP is **smaller** in the U.S. than in most developed nations.
 - d. Govt spending /GDP is **measured differently** in the U.S. than in other developed nations.
 - e. Data on govt spending /GDP is **not available** for most developed nations.
2. _____ How big is U.S. Government (as a % of GDP) compared to most **less developed** nations? Use Government spending/GDP as your standard of comparison.²
 - a. Govt spending/GDP is **larger** in the U.S. than in most less developed nations.
 - b. Govt spending /GDP in the U.S. is **nearly the average** ($\pm 3\%$) for less developed nations.
 - c. Govt spending /GDP is **smaller** in the U.S. than in most less developed nations.
 - d. Govt spending /GDP is **measured differently** in the U.S. than in other less developed nations.
 - e. Data on govt spending /GDP is **not available** for most less developed nations.
3. What is the value of **Government Spending (all spending including transfers) as a % of GDP** in the U.S.? _____
4. What is the value of **Government Spending on Goods and services (i.e. not including transfers) as a % of GDP** in the U.S.? _____
5. Fill in the chart below with the top 3 sources of revenue for the **U.S. federal government**.

	Item	% of Federal Revenues
Largest Revenue Source		
2 nd Largest Revenue Source		
3 rd Largest Revenue Source		

6. Fill in the chart below with the top 3 spending items for the **U.S. federal government**.

	Item	% of Federal Spending
Largest Spending Item		
2 nd Largest Spending Item		
3 rd Largest Spending Item		

¹ Here we are talking about all spending, including transfers.

² Here we are talking about all spending, including transfers.

7. Fill in the chart below with the top 2 sources of revenue for the **U.S. state governments**. I am looking for data on all state government, not just Texas.

	Item	% of State Revenues
Largest Revenue Source		
2 nd Largest Revenue Source		

8. Fill in the chart below with the top 2 spending items for the **U.S. state governments**. I am looking for data on all state government, not just Texas.

	Item	% of State Spending
Largest Spending Item		
2 nd Largest Spending Item		

9. Fill in the chart below with the top 2 sources of revenue for the **U.S. local governments**.

	Item	% of Local Revenues
Largest Revenue Source		
2 nd Largest Revenue Source		

10. Fill in the chart below with the top 1 spending items for the **U.S. local governments**.

	Item	% of Local Spending
Largest Spending Item		

11. A principles of economics text lists the following reasons/rationales for government intervention:
- 1) establish & enforce property rights
 - 2) deal with and prevent situations in which markets result in a lack of competition (i.e. conduct anti-trust policy)
 - 3) provide for public goods
 - 4) correct for externalities
 - 5) correct for asymmetric information and other information problems
 - 6) promote macroeconomic stability
 - 7) promote economic growth

Yikes! The authors left one out. What major reason/rationale for government did the authors forget?

Part 2: (9 minutes, 18 points)

Answer 1 of the 2 following questions in your bluebook.

1. • Explain/define the organic and mechanistic views of government. Which is the view of modern Public Finance?
 - Give an example of normative analysis under the organic view of government.
 - Give an example of normative analysis under the mechanistic view of government. .
 - Give an example of positive analysis under the organic view of government.
 - Give an example of positive analysis under the mechanistic view of government.
 - Make sure you clearly explain how/why each of your examples illustrates the viewpoint it is supposed to.

2. Bo and Luke Duke, two economists, are submitting a paper to the prestigious journal *Reflections on Economics, Harleys, And Bars* (REHAB). You are an editor (or referee) for REHAB. In it their article the Dukes argue that increasing political participation lead to higher unemployment. They theorize that political participation results in people using inefficient government to get what they want instead of working to produce it. They estimate (i.e. regress) the following equation using an econometric software package. The voter turnout is the percentage of eligible voters voting in the last election. To hold as much constant as possible, Bo and Luke only examined the top 32 nations in the world in terms of GDP/capita.

$$U_{\text{rate}} = a_0 + a_2 \cdot (\text{Voter turnout in \%}) + e$$

Their results are shown below. Measures of dispersion (i.e. goodness of fit measures such as R^2 , t-stats, etc.) indicate that the data fits the equation really well. i.e. The data strongly indicates that there is some relationship between the unemployment rate and voter turnout.³

$$U_{\text{rate}} = 0.5\% + 0.2 \cdot (\text{Voter turnout in \%}) + e$$

Holy cow! The equation says that increasing voter turnout by, say 10%, increase the unemployment rate ($0.2 \cdot 10\% =$) 2%. Those Duke boys conclude that political participation is bad for economic growth.

- Draw a graph illustrating the equation the Dukes estimated. Include the relevant numbers, etc.
- Critique the Dukes' technique for testing their theory. In particular, point out any flaws they may have made. Would you publish the results? Why or why not?

³ Don't worry about the difference between ε and e in this class. They both mean the unexplained part or the error. One, ε , simply refers to the true value of the error and the other, e , is the value of the error from the estimation results.

Part 3: (26 minutes, 52 points)**Answer 2 of the 3 following questions in your bluebook.**

1. • What is Pareto Efficiency?
 - Construct an Edgeworth Box. Explain what the box is & what any points or lines in the box are.
 - Using your Edgeworth Box, illustrate one or more situations that are not pareto efficient and explain why.
 - Illustrate one or more pareto efficient points and explain why they are pareto efficient. What conditions are necessary for pareto efficiency in an “Edgeworth Box world”.
 - Pick a pareto efficient point in your Edgeworth box. Use it to illustrate why society may want more than just pareto efficiency.
 - What other aspects of the economy does an “Edgeworth Box world” ignore. You may have already answered this when you described the Edgeworth Box.

2. • What are the economy wide efficiency conditions discussed in this course? Explain your terms or definitions.
 - Explain why these conditions are considered efficient. You may wish to describe an inefficient situation and then contrast it with an efficient situation. You may use graphs in your answer. Your answer, should, however, be relatively intuitive. Just cranking through the graphs and/or math is not enough.
 - Will the private sector (i.e. markets) meet these efficiency requirements? If so, why and under what conditions?

3. Ahhh, its almost the weekend! Nothing like kicking back with a cold beer and a good indifference curve! Start your weekend celebration early by doing the following:
 - Analyze school voucher systems mechanically. i.e. Use formulas and/or graphical analysis. Analyze your results. How do vouchers compare to the current system of education provision? What are some difficulties, flaws, or missing details in your mechanical analysis?