

Name _____

Sign the Pledge:

No Aid, No Violations: _____

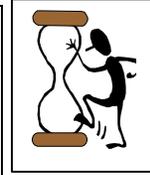
Economics 222, Mike Lovell

May 13, 1998, 2:00-5:00

Final Examination: Public Finance

Please Note:

- The exam will end at 5:10! Budget your time carefully
- Save time to read over your answers and make corrections at the end of the test.
- Help! I will not remain in the classroom during the examination, but I will drop in occasionally to answer any appropriate questions you may have. If you have a serious problem, you may find me in my office, room 308 PAC, x2355 Show your calculations in order that you may receive partial credit even if you make a numerical error.
- If you would like me to mail your exam to your home, leave a stamped addressed envelope in the slot for this course in the Economics/Sociology Alcove. Otherwise, your work will be returned to the alphabetical slots in the Alcove to be picked up at the start of classes in the fall.
- If you want additional feedback on any aspect of your work, please contact me at your convenience for an appointment.



Part I: [40 points – one hour] Taxing Questions – Answer 5 (only five) of the following seven questions.

1. The IRS subsidizes charitable giving, but for some and not for others. Some citizens must sacrifice \$1.00 of their own consumption in order to give \$1.00 to their favorite charity while others may have to give up only 60.4 cents in order to give \$1.00 to charity. Explain what determines a tax payer's marginal cost of giving.
2. You purchase a house in Middletown for \$200,000. The assessment ratio is 80% and the mill rate is 30. How much property tax should you expect to pay each year?
3. Homeowners in Middletown are worried because all property in the town is being reassessed. Assuming that the tax rate is adjusted so as to yield the same total revenue as before the reassessment, will home owners be likely to gain or loose from the reassessment? Explain.
4. What determines the "tax price" that a citizen pays for to finance an extra dollar of local expenditure for education or other public goods? What determines the tax price paid by the "median voter?"
5. Explain the distinction between a tax credit and a tax deduction. Are there circumstances in which a \$600 tax deduction would be worth less to the taxpayer than a \$200 tax credit? Explain.
6. Explain why a taxpayer might be willing to buy Middletown bonds rather than U. S. government bonds even though they pay a lower rate of interest.
7. It is said that one way to escape the capital gains tax is to die! Explain.

Part II: [30 points – one hour] Graphics - Answer TWO (only 2) of the following three questions:

1. Some say that a *cut* in personal income tax rates might provide such a stimulus to work effort that more tax revenue would be collected than when the tax rate was higher. Others assert that a *hike* in the personal income tax might lead to an increase in work effort. Are either (or both) of these assertions compatible with the assumption that individuals maximize utility? Explain, drawing appropriate indifference maps.
2. Show by drawing an appropriate indifference map that the *negative income tax* might conceivably lead to an increase in work effort. Then show that the *welfare step* created when welfare programs provide for a \$1.00 reduction in benefits for each \$1.00 earned can never lead to an increase in work effort.
3. It is often argued that the users of a commodity should pay for its production. When the users are unwilling to pay a price high enough to cover cost, then it is said that the commodity does not pass the “market test” and should not be produced. Nevertheless, we often observe governments subsidizing the production of commodities and services. For example, isolated rural communities may try to attract a physician to practice in their locality by using tax revenue to provide a free clinic and office facilities. And at Wesleyan the student body tax is used to subsidize the publication of the *Argus*, numerous concerts and parties and even guest lecturers. Explain, using an appropriate graph where helpful, the circumstances in which it may be worth while for commodities to be produced that cannot pass the market test.

Part IV: [30 points – one hour] Write an Essay on two (only two) of the following topics:

1. The State Government is running a large budget surplus, thanks primarily to booming economic activity. Two tax reduction measures are under consideration. Proposal #1 would reduce all marginal tax rates by 2%. Proposal #2 would increase the personal exemption by \$200. The Office of Tax Analysis estimates that the total tax reduction would be the same with either measure.
 - a. From an efficiency perspective, which measure would you recommend? Why?
 - b. From an equity perspective, which measure would you recommend? Why?
2. Charles Tiebout (Wesleyan 1950) has argued that the fact that people can migrate, “voting with their feet,” means that there is a natural tendency for public goods to be appropriately allocated. Evaluate the proposition, explaining whether or not the Tiebout effect contributes to an efficient and/or equitable allocation of resources.
3. Tax Reform: The following tax measures have been proposed for Never-Never Land:
 - a. A national sales tax
 - b. A tax on pollution equal to the marginal damage generated by the pollution.
 - c. A tax requiring each citizen to pay \$100 times the last digit of his or her Social Security number.

Please evaluate each of the proposed taxes in terms of its *efficiency costs* (i.e., does the proposed tax generate an excess burden or dead weight loss?)