

SYRACUSE UNIVERSITY

The Maxwell School of Citizenship and Public Affairs

PA 810: Ph.D. Seminar in Public Finance

Professor Yinger, Spring 2013

Final Exam

This is a closed-book exam. You have two hours to complete it.

The purpose of this exam is to test your skills as a public finance scholar. Focus on presenting the conceptual foundations of and the methodological approaches to the various questions. You should cite key studies in the literature when possible, but it is better to provide a complete conceptual and methodological answer than to worry about remembering every citation.

You may assume that you have any data that you need. Make sure you are clear about any other assumptions you are making, as well.

You must answer any 2 of the following 5 questions.

1. Economies of Scale in Assessment

Explain in detail how you could use the cost-function approach to estimate economies of scale in property tax assessment.

2. Capitalization of Crime-Rate Changes

The City of Hipov (population 1 million) has a serious crime problem, and this crime problem appears to have a severe impact on property values in high-crime neighborhoods. A few years ago, Hipov randomly selected several census tracts in which to implement a new community policing initiative, called Walk In. This initiative appears to have lowered crime rates significantly. You have decided to study the impact of crime on property values in Hipov. You have obtained double sales data for all the houses in the city for a long period of time, including several years both before and after the implementation of Walk In.

Explain the conceptual basis for and specification of your regressions.

Explain how you would use information about Walk In (if at all).

Explain how you would interpret your results.

3. Tax Rates and Economic Development

Local governments in the State of Unreal rely heavily on the property tax and use up-to-date assessment methods. All property must be assessed at 100% of market value and the effective tax rate must be the same for residential and business property. A few years ago the state passed a homestead exemption equal to \$40,000 of the market value for every owner-occupied housing unit. This exemption must be provided by every local government and local governments are NOT compensated by the state for the lost revenue. As a result, local government had to increase their tax rates to make up the lost revenue, and the required rate increases obviously varied across jurisdictions depending on the share of their property tax base that was still taxable. These rate increases apply to all property.

This situation provides a natural experiment to determine the impact of effective property tax rates on local economic development. Design a study to take advantage of this situation. Explain the key conceptual issues. Explain what data you would need. Explain what type of regressions you would estimate. Explain how you would interpret your results.

4. Demand for Fire Services

You have been asked to design a study of the demand for city fire services in the State of Onetype. All cities in Onetype have a professional fire department. Discuss the key conceptual issues, the data requirements, and the methodological challenges.

5. School District Efficiency

Define efficiency in the public sector. Explain at least three different methods for estimating school district efficiency. Explain the strengths and weaknesses of each method. Explain which method you would use (and the steps required to implement it) if you were asked to study school district efficiency.