Spring 2012 **January 27, 2012**

PhD Policy Comprehensive

Second field: Answer any two questions from the three questions below (note that Question II has two parts). You have three hours total.

Question I:

Develop a research design to evaluate the impact of an ongoing public program, policy, or institutional design; to compare the impact of program, policy, or institutional design alternatives; to examine cause (or causes) of policy or institutional choice by legislators, legislatures, bureaucrats or bureaus; or to examine reasons for the differential implementation of policy by bureaucrats or bureaus.

Choose any policy area that you are familiar with. The application MUST be theoretically non-trivial. For example, it should relate to important normative questions of designing institutions that are representative, accountable, and efficient, or to tradeoffs among those values. Or it could relate to theoretically important disputes (for example, about government or market failure, or about cooperation versus self-interest). Discuss the theory or theories that motivate the experimental or statistical model. Briefly describe the program or policy alternatives, or policy decisions, that you are examining, and discuss and justify the outcome measure(s) you will use. Based on theory, what do you expect to find? Why will your findings be theoretically important? Cite relevant literature and previous findings.

Develop a feasible research design to estimate the parameters of your theoretical model. In your design, consider some of the problems you anticipate in making unbiased and efficient estimates, and suggest how you might go about coping with these problems. Include in your discussion the following items, as well as others you believe are pertinent:

*how you propose to collect data;

*problems of measurement;

*how you will analyze the data you collect;

*given your analytical strategy, what are the important threats to internal and statistical validity (that is, threats to getting BLU estimates and steps to minimize these threats)

*issues of external validity;

*how you will interpret the data you collect in light of the theory you are testing.

Question II: Policy Analysis (Answer both 1 and 2a-2e)

1. Economics

In politics and policy analysis, there is considerable debate about gun control. Some argue that new national legislation is necessary to limit gun related violence, particularly that which occurs in schools. One measure that has received support would require gun manufacturers to place "trigger locks" on their firearms, which might prevent children from being able to fire them. Others argue that, rather than write new legislation, the laws already on the books at the local, state and federal level need to be more strictly enforced.

As a policy analyst, evaluate the merits and drawbacks of a national "trigger lock" requirement. What, if any, is (are) the relevant market failure(s)? Can the use of such a regulation be explained as an efficient response to market failure, as government failure, or both? Use diagrams where appropriate.

2. Statistics

An empirical study of the effect of state gun control regulations on the number of gun related deaths reported the results shown in the regression table below. The study was based on data from each of the fifty states in the US in 2000. The dependent variable is the number of gun related deaths. The independent variables are:

REG	Number of independent gun-related regulations in the state
SIZE	Population of the state in thousands
CCH	Crimes committed with handguns over the past 12 months
VC	Number of violent crimes over the past 12 months
HO	Handgun Ownership Rate in the state over the past 12 months

Regression Results

Variable	Coefficient	t-statistic
Constant	27.22	6.1
REG	-0.02	0.33
SIZE	1.76	2.43
CCH	4.22	1.6
VC	3.12	0.99
HO	-.02	.25
ADJ. R-square	0.73	

F-stat (5, 44)	24.33
F-prob	.00

N = 50

a. Interpret the estimated regression equation. Specifically, what does the regression output tell you about the effects of each of the independent variables on the dependent variable? Are they significant? Be specific.

b. What, if any, are the implications of the results for the efficacy of gun control regulations as a means to limit gun related deaths? Explain.

c. Discuss how well or how poorly the model above meets the assumptions necessary for valid parameter estimates and hypothesis tests. How could you improve the model? Be specific.

d. Do you believe the results reported in the above table? Why or why not?

e. What design is implicit in the results reported above? Discuss the weaknesses in that design, and briefly describe a better non-experimental or quasi-experimental design (or a mix of the two) with which to evaluate the impact of gun control regulations on gun related deaths. Also, briefly describe how a randomized field experiment might be used to accomplish this task, and comment on the validity and feasibility of such a design.

Question III: Policy Implementation

Some scholars have argued that large-N studies are the best hope for advancing PI research while others contend large-N studies are simply too narrow to capture the complexities of the implementation process. Incorporating references to the literature from the top-down, bottom-up, and governance paradigms, discuss (1) the strengths and weaknesses of this "third generation" or large-N approach to PI research, (2) compare and illustrate its advantages and disadvantages to research in the first and second generations of research, and (3) offer your opinion of the merits of this debate and any methodological approaches for resolving this issue that may exist.