

Doctoral Examination
Policy Process and Analysis
Fall 2022

Part I. Please answer one of the following two questions:

1. The concept of a public good can sometimes be difficult to explain. Roads and military defense represent canonical examples of public goods. Other goods, like vaccinations against SARS-CoV-2, can be more controversial, with people in the real world making arguments that run the spectrum from vaccines are a pure public good to vaccines as a pure private good. Thus, there are questions about the strengths and weaknesses of the concept of public goods and other explanations for public provision. Contrast the public good aspects of the U.S. Interstate Highway System and the development of the initial round of vaccines against SARS-CoV-2 in 2020. Your answer should address the following:

- a) How does the concept of non-excludability explain why government delivers the service? Are these concepts useful in explaining how much government provides, and how it provides it?
- b) How do the concepts of externalities explain why government delivers the service? Are these concepts useful in explaining how much government provides, and how it provides it?
- c) How might you combine aspects of the market failures approach and policy process theories to analyze and explain public provision of vaccine development and deployment?
- d) Based on your discussion in response to c) above, develop a theory as to what would motivate the development and roll-out of the SARS-CoV-2 vaccine, and how the actual distribution of the vaccine across different state jurisdictions deviated from what would be theoretically expected.

2. Privatization of government services through contracting out with private providers has been an alternative for government direct provision for some time in the U.S. One notable area of increasing reliance on private contracting is in criminal justice, where many states now lean heavily on private prisons.

- a) What theoretical and practical advantages and difficulties are there in relying on direct government ownership and management of prisons? What about for relying on private prisons under government contracts?
- b) What are the different objective functions of the government and the private firm providing prison services? (Describe the objective functions qualitatively – do not write down a formal representation of them.) How would you expect those differences to affect outcomes?
- c) Assume you have data on individual prisoners and the institutions in which they are incarcerated. Discuss how an idealized research design could test for differences in performance between publicly owned and privately owned prisons. Include a discussion of potential for sample selection effects to bias the parameters you estimate and what strategies you might deploy to correct for bias.

Part II. Please answer one of the following two questions:

3. Researchers in public policy use a variety of models of the public policy process, including the positive model of regulation (interest group theory), punctuated equilibria, incrementalism, policy streams, policy cycles, systems models, and the advocacy coalition framework. Choose two policy process models (you may include others not listed above). For each model, identify and cite one study reporting an empirical test from the published literature.

- a. Briefly summarize the research questions examined in these empirical studies.
- b. Characterize, assess, and critique (positively and/or negatively) the method(s) employed in these studies. Please be specific.
- c. Does each study help to validate the model it addresses? Or does it raise questions about the model? If each study supports and validates the process model it addresses, to what extent do the empirical studies correctly identify “causal” mechanisms?

4. Under well-known conditions of perfect competition, non-increasing returns, and the absence of externalities, the market allocation of goods and services attains a point on the Pareto frontier (First Welfare Theorem). Therefore, the market, considered as a collective mechanism for making social decisions, maximizes a particular social welfare function. Economists often explicitly or implicitly assume that moves along the Pareto frontier in any direction – moves that transfer wealth from one member of society to another – are of no benefit to society precisely because they represent moves from one maximal point on the social welfare function to another.

- a. Discuss why every point on the Pareto frontier maximizes some social welfare function.
- b. Assume that there is a declining marginal utility of wealth, what does the market social welfare function imply?
- c. If we use the Kaldor-Hicks criteria for cost-benefit analysis, what types of policies will be favored? Why?
- d. Contrast this Pareto-based policy process to one that is driven by a formal theory of justice (perhaps using John Rawls’s “Veil of Ignorance” metaphor). Discuss a policy where you would be opposed to using the “market” social welfare function and would favor a Rawlsian justice frame.

Part III. Please answer one of the following two questions:

5. Two mechanisms for coping with a negative externality are the Coase Theorem and Pigouvian taxes.

- a. Discuss the assumptions built into each approach and under what circumstances each approach could be used in practice. Also, discuss the relative merits and demerits of each approach.
- b. Examine and discuss the distributional consequences of each policy.
- c. How would each of your solutions work in the case of complaints by neighbors about odor and noise associated with a medical marijuana CBD extract production facility in Athens, GA?

6. Assume that society has determined through democratic means that the current disparities in the allocation of resources are unacceptable. (You can think of this as a decision that real incomes for some people start out too low early in the lifecycle and remain persistently disparate irrespective of individuals' market efforts.)

a) Use an Edgeworth Box analysis to graphically show how a two-good / two-consumer economy of free exchange arrives at an equilibrium when it starts with a relatively equal initial distribution of resources. Repeat the analysis starting with a very unequal distribution of both goods and show how free exchange may not yield relative equality in outcomes. (That is, choose your indifference curves such that the core of the economy results in very one-sided allocations.) Explain the basic Edgeworth framework completely.

b) What does this simple analysis say about the potential for free markets to solve all equity or justice problems? Discuss how this illustrates the potential for conflict between Pareto optimal solutions and solutions that are acceptable according to theories of justice.

c) Discuss one practical policy solution to the problem of maldistribution that can be evaluated using the Edgeworth model. Demonstrate how the policy can achieve whatever democratically determined egalitarian goals society has chosen.