Review for final

Chapter 9 - political economy

1. What is a social preference? What is a social preference rule?

What are the properties of consistent social preferences? Define each property.

A social preference is an ordering of choices for society. A social preference rule is a function from a set of individual preferences (of all members of society) into social preferences.

Consistent social preferences satisfy the following three properties:

a. Dominance - if all members of society prefer one choice, then that choice should be preferred in the social preference.

b. Transitivity - if society prefers a bridge to a park and prefers a park to monument, given their costs, then it prefers a bridge to a monument.

c. Independence of irrelevant alternatives (IIA) - changing some individuals’ preferences over choices C and B while keeping all individuals’ preferences over A and B constant should not change society’s preferences over A and B.

Arrow’s impossibility theorem - If you have a rule that assigns to every possible profile of transitive individual preferences over 3 or more alternatives a social preference that satisfies dominance, transitivity and IIA, then that rule is a dictatorship (one person always gets their preference).

With only 2 alternatives ordinary voting satisfies dominance, transitivity and IIA without being a dictatorship, with no restrictions on individuals’ preferences.

When all individuals’ preferences are restricted to be single-peaked, there are rules that assign to every possible such preference profile a social preference that satisfies dominance, transitivity and IIA.

For a given profile of non-single-peaked preferences there could be a rule that assigns a social preference to that set of profiles that satisfies dominance, transitivity and IIA. But there need not be any such rule.

Illustrate with Exercise 12 on page 255.

What does the median voter theorem for direct voting say? Why might the median voter outcome be inefficient (consider varying intensities of preferences)? On the other hand, why might lobbying lead to an inefficient outcome? Example - farm policy.

The median voter theorem says that when all individual preferences are single-peaked, majority voting will result in the outcome preferred by the median voter. This is the voter such that half the voters have a preferred outcome to one side of the median voter’s outcome and half the voters have a preferred outcome to the other side (voting must be over one dimension).
The efficient outcome is the one which maximizes total surplus. Suppose a little less than half the people in a town would benefit enormously from a public project while the remainder lose only slightly from it. Then put to a majority vote, the public project will lose. However, it would be socially efficient to implement the project.

For representative democracies (people vote for representatives, who choose policies), there is also a median voter theory. When there are only two candidates and a one-dimensional outcome space, candidates care only about maximizing their number of votes and everyone votes for the candidate with the policy closest to their preferred policy, then both candidates will align themselves with the median voter. This assumes that money is not a factor in the political process, that politicians cannot influence voters by their positions, and that there is full information about all the issues for everyone.

**Section 9.4 - government failure**

Government failure occurs when government is unable to act primarily in the interest of its citizens. Government failure can be brought about by bureaucrats’ or politicians’ selfish interests that conflict with the general interests of the population. For example, bureaucrats may care only about the size of their department’s budget, which must increase for them to gain more power and income. This makes them less concerned with providing a service efficiently (providing the maximum amount of service possible with given inputs).

Evidence suggests that private goods are most efficiently provided by private companies. Publicly owned companies usually provide the good at a higher cost, or a larger company is needed to provide the same amount of the good.

On the other hand, social services such as health insurance, cash welfare or public safety may be more efficiently or at least more adequately provided by the public sector. In the health insurance and other types of insurance (unemployment, annuities) market, this is in part due to externalities and asymmetric information or missing markets. A study found that private prisons were more cheaply provided than public prisons, but it was because guards were paid less in the private ones, leading to staffing by lower-quality guards. This allowed more violence in the private prisons and in some cases, riots.

Studies show that paying bureaucrats more makes them less likely to engage in corruption. The more bureaucratic red tape there is in a country, the higher the level of corruption usually is.

**Chapter 10**

**The Tiebout model**

Questions that led to the development of this model:

What public goods are more efficiently provided locally and what public goods are more efficiently provided at the state or federal level?
What is it about private goods that leads to the market providing the efficient amount (with no externalities, complete information, complete markets and competition) that is missing for public goods?

Answer: shopping. Consumers can compare the private good offered by one company to that offered by another, and choose to buy the one that has the best price/quality ratio. This is not easy to do for federally provided public goods. You are basically stuck with what your country offers. But for local public goods, it is easier to shop around different communities. This is a potential benefit of having public goods provided locally.

But in some cases, public goods should be provided at the state or federal level. This is true for public goods that have significant externalities or spillover effects on neighboring communities, and when there are large economies of scale so that it is inefficient for each community to provide its own version of the public good (national defense). Also, public goods that are locally provided should have strong tax-benefit linkages so that people do not move away because they are paying for something they don’t see the benefit of. Thus public goods like cash welfare, which doesn’t have a strong tax-benefit linkage for most people, should be (and is) provided at the state or federal level.

The formal Tiebout model

Assumptions: There are a large number of individuals who differ in their preferences for amounts of public good. There are a large number of communities among which the individuals can move costlessly. For any level of public good provision, the per-capita cost curve (the per-capita cost graphed against number of people in the community) has a unique minimum over population levels.

Under these assumptions each community consists only of people with the same preferences, and produces the amount that its inhabitants prefer, taxing them each the expenditure on the public good divided by the number of inhabitants. In other words, each community charges the per-capita cost \( \frac{G_i}{N_i} \) of providing the public good to each person. Then nobody has an incentive to move away from the community with people of the same preferences as them, and the problem of finding out about people’s preferences for the public good is solved.

Give some evidence from a paper that supports the Tiebout model:

Gramlich and Rubinfeld found that in larger metropolitan areas people had more similar preferences for public goods within communities. In urban and suburban areas people were more satisfied with the level of public good provision in their town than in rural areas.

Capitalization of fiscal differences into house prices. A house should be more valuable if public goods are provided more efficiently in the town the house is in. Evidence on this: Rosen’s (1982) study of the effects of proposition 13, which found that almost all the difference in taxes in Californian towns was capitalized into house prices.
Equalization: Grants - matching, block and conditional block. What are the income and substitution effects of each?

For matching grants substitution effects and income effects go in the same direction. The substitution effect of a higher matching rate is to make the public good cheaper, thus it causes more of the public good to be bought. The income effect of a higher matching rate is that more income is available, so more of the public good can be bought. The total effect on private goods bought is ambiguous.

For unconditional block grants, there is only an income effect on the amount of public good purchased. It is likely that with a block grant, both spending on the public good and spending on the private good will increase. Because there is more choice of what to spend the money on, an unconditional block grant will make a town better off than a matching grant of equal size.

A conditional block grant is a block grant which must be spent on a certain public good. Its effect will be different from that of an unconditional block grant only if the original amount of money spent by the town is less than the amount of the grant.

Taxes

Page 607, exercise 17 ( anvils, books and cardigans).

Chapter 21.

Describe the income effects and substitution effects of an income tax increase on a worker.

Page 633, exercise 6, exercise 9.

6. Making child care costs tax-deductible reduces the tax burden on those who choose to work outside the house. It thus reduces the difference in tax payments made by those who work inside the house and those who work outside the house.

9. Horizontal equity would require that a person who chooses to work inside the home pays the same taxes as an otherwise identical person who chooses to work outside the home. When both parents work outside the home, they both pay taxes on their labor income. When one parent does not work outside the home, they do not pay taxes on what they produce or contribute to the home. The Haig-Simons income definition includes as income the consumption increase to the family that results from working at home. Thus according to this view taxes should be paid on that as well as on income earned outside the home. So reducing the tax exemption for families where one parent works inside the home improves equity.

Maybe exercise 14.

Chapter 22 - taxes on savings

Suppose initially an individual faces a 25% marginal tax rate on savings and an
interest rate of 10%. They save $1000 a year. Then the tax rate rises to a 50% marginal tax rate, with the same interest rate as before. They decrease their savings to $750 a year.

Which type of savings could the individual have been engaging in? What is a type of savings that the individual was definitely not engaging in?

Suppose initially at a tax rate of 25% on returns from saving and a 10% interest rate they saved $1000 a year, then when the tax rate increased to 50% they began to save $1500 a year. What type of saving are they likely to have been engaging in?

Explain how precautionary saving smooths consumption across states. What feature of a person’s utility function causes them to want to smooth consumption across states? Explain the relationship between precautionary saving and insurance. Why might a person engage in precautionary saving rather than buying insurance?

Suppose a person’s savings rate increases dramatically when it becomes possible to have savings for their pension automatically deposited in an account which cannot be accessed until retirement. What model does this person’s behavior support?

What is the difference between a Roth IRA account and a traditional IRA account? Suppose you have $2000 that you want to save either in a traditional IRA account or in a Roth IRA account. What information do you need in order to decide which account to use? Explain.

How does inflation affect the value of after-tax returns to savings?

How is savings in the form of real estate favored among consumers (not businesses) by the tax code? List all the ways. Businesses are allowed to deduct interest payments on borrowed money from their taxable corporate income, so all debt-financed investment is favored for businesses.

Exclusion of capital gains taxation on primary housing up to a value of $500,000.

The interest payments on mortgages are deductible from gross income in calculating taxable income.

Non-payment of the imputed rental value of a home - when you own a house, you are consuming housing each month and essentially paying rent to yourself. An owner of a house who rents out the house to someone else pays income tax on the rent received. But no income tax is owed on the “rent” paid to one’s self. This is an example of a deviation from the Haig-Simons approach to taxation.

Chapter 23 - Capital gains taxation

What are the arguments for lowering the capital gains tax?

Mention the lock-in effect again.

It has been argued that capital gains should be taxed on realization not accrual
because capital gains are taxed too much due to inflation. Why is this argument not valid? What should be done instead to account for inflation?

Give an argument for and an argument against the estate tax. What is a way to avoid paying the estate tax?

page 688, exercises 14 and 15.

14.

Chapter 24 - corporate taxation

How does limited liability protect shareholders?

For an asset that takes a long time to depreciate, would a firm prefer an accelerated depreciation schedule or a depreciation schedule that more accurately reflects the depreciation of the asset? Why?

How is the incidence of the corporate tax divided among consumers, labor and capital? What assumptions about the elasticities of the factors of production lead you to this conclusion? How does corporate taxation affect the non-corporate sector?

Chapter 25- fundamental tax reform

What are three problems with the current tax system that lead some economists to argue for fundamental reform? What are two ideas for fundamental reform?

Arguments for and against a consumption tax. Arguments for and against a flat tax.

Can a consumption tax be made progressive? How (give an example of a progressive consumption tax)? Can a flat tax be made progressive? How?

What are the indirect effects of an increase in the marginal income tax rate? Which of these effects is empirically the most important?

What types of people (rich or poor) can change their taxable income most when there is a tax change? Why is this and how do they tend to change their income?