

Chapter Summaries

Chapter 17: Taxes, Transfers, and Private Information

Chapter 17 discusses the problems that private information poses for governments in their attempts to collect taxes and provide transfers to the needy. The problem for taxation is that taxpayers can use their private information to hide part of the tax base from the government and thereby escape some of their proper tax liability. The problem for transfer payments is that people can use their private information to conceal some of their income or wealth and thus become eligible for transfers that are not intended for them.

The chapter begins with a discussion of *private information and taxation*.

1. Economists distinguish between tax avoidance and tax evasion. Tax avoidance is reducing tax liability by legally taking advantage of the features of the tax laws, such as by claiming a deduction for interest payments on a mortgage under the federal personal income tax. Tax evasion is reducing tax liability by illegally hiding part of the tax base, such as by not declaring all income that the taxpayer knows to be taxable.
2. The standard model of *tax evasion* borrows from the model of criminal activity, in which prospective criminals consider the benefits and costs of committing a crime. The optimal amount of criminal activity is that which equates the expected marginal benefit of the activity to the expected marginal cost. The marginal benefit and cost are expected values because their calculations involve the probabilities of being caught and not being caught.
3. In terms of an income tax, the criminal activity consists of a prospective tax evader not declaring some taxable income. The expected marginal benefit is the probability of not being audited by the tax authorities times the marginal utility of the additional income because of the taxes not paid. The expected marginal cost is the probability of being audited times marginal utility of the income lost by being caught, which

includes the tax owed on the undeclared income plus a fine. In the model presented in the text, the fine is a constant *penalty rate* imposed on the taxes that are owed on the undeclared income.

4. An alternative way to describe the tax evader's problem of determining how much income to declare is to maximize the expected utility of being caught or not being caught subject to a budget constraint that indicates the income available if caught or not caught for any amount of undeclared income from zero to the taxpayer's total income.
5. The model of tax evasion shows that tax evasion can be reduced either by increasing the penalty rate (the fine) or by *increasing auditing activity*, which increases the probability of being caught. But each has its disadvantages. Increasing the penalty rate is essentially costless to the government, but the penalty may have to be set so high to eliminate tax evasion that it would offend society's sense of the penalty fitting the crime.
Increasing the auditing rate has the disadvantage that it is costly because of the additional resources required to audit more tax returns.
6. In the model presented in the text, *increasing the tax rate* increases both the expected marginal benefit and the expected marginal cost of declaring less income. Therefore, its effect on tax evasion is ambiguous.
7. How much society wants to try to reduce tax evasion through increases in the penalty rate or the auditing rate depends on who counts in the social welfare function: only the honest taxpayers who would never cheat, or all taxpayers.
 - a. If only the honest taxpayers count, then society would definitely want to reduce tax evasion.
 - b. If everyone counts, then allowing tax evasion can increase social welfare if a high enough percentage of people are dishonest or if those who cheat are primarily the poorer taxpayers who have high social marginal utilities of income (e.g. the poor no doubt benefit from the underground economy).
8. The propensity of some people to cheat casts the market system as a potential problem for the government, since the formation of underground markets can make it difficult for the government to collect tax revenues.
9. *Tax amnesties* that allow tax evaders to pay taxes on illegally concealed income without penalty are a mixed blessing. On the plus side, they presumably collect some additional tax revenue and they may have the effect of turning previously dishonest taxpayers into honest taxpayers in the future. On the minus side, they may upset honest taxpayers who see dishonest taxpayers being forgiven, and turn some of the honest taxpayers into future tax evaders.
10. One widely cited study of a tax amnesty in Colorado by Alm and Beck concluded that it had no effect on tax collections.

The chapter then turns to the potential problems that *private information causes for government transfer programs*. The model used to analyze the problems has two individuals, one healthy and one ill. They both gain utility from a composite good, Y, and the ill person also gains utility from a medical good, Z, that reduces the severity of the illness. The government cannot tell who is healthy and who is ill; that information is private to each individual. The total resources in the economy can be converted into Y or Z on a one-for-one basis.

11. The private information that individuals have about their health requires the government to impose two self-selection or incentive compatibility constraints on its policy options, such that each person has an incentive to reveal his/her true health status. They cannot gain by pretending to be the other person.
12. Government provision of Z can preserve some, but not all, of the first-best utility possibilities frontier that would exist without private information.
13. A decentralized solution in which Z is subsidized can preserve only one point of the first-best utility frontier, the point at which both people have equal purchasing power. If the purchasing power were unequal, each person would claim to have the health status of the person receiving the greater purchasing power, and then use the higher purchasing power as they wished.
14. The preference for government provision under private information overturns the public choice recommendation of Chapter 10 for decentralized, subsidized provision of in-kind aid when the motivation for public transfers is that certain people do not have sufficient quantities of some specific good, such as medical care.
15. The model also suggests that private information may prevent the government from implementing the mainstream policy of taxing and transferring resources lump sum to equalize the social marginal utilities of income, even if lump-sum taxes and transfers were feasible. If the government cannot know who has high incomes and who has low incomes, then everyone will claim to have low incomes to receive a transfer and avoid paying a tax.
16. A summary comment notes all the ways discussed in the text to this point in which private information poses difficulties for governments. In addition to tax evasion and the restricted ability to give transfers discussed in Chapter 17, the list includes free riding with externalities, particularly nonexclusive goods, and adverse selection and moral hazard with either private or public insurance.