

Book Reviews

Edited by Robert Herren

Tax Systems. JOEL SLEMROD AND CHRISTIAN GILLITZER. Cambridge, MA: The MIT Press, 2014 Pp. x, 223. \$30.00

Tax systems are consistently on the mind of academics and policymakers. Traditionally, optimal tax theory involves implementing a tax that minimizes the deadweight loss of taxation. The theme of *Tax Systems* is that such an approach is insufficient. A complete theory of optimal taxation would incorporate issues such as tax avoidance and evasion, deterrence, the administrative costs associated with collecting the tax, in addition to the elasticities traditionally considered. Enriching the optimal tax model to include these issues in a full system of taxation is the subject of this book.

Joel Slemrod and Christian Gillitzer break their book into four parts. Parts 1 and 2 provide an overview of the issues that need to be considered in an optimal tax system. This part begins with an overview of the optimal tax model that most economists are familiar with. The authors state that the taxes implied by the model are administratively infeasible because such a system would involve a different tax rate for every different good being taxed. The authors then discuss the practical considerations of a tax system, beginning with a theoretical analysis of tax evasion. The authors use a model of tax evasion developed by Michael G. Allingham and Agnar Sandmo in which taxpayers maximize their expected utility from tax evasion. As might be expected, the amount of evasion depends on the wage rate, the tax rate, and the probability of being caught evading taxes. Extensions of this framework are considered, which include allowing for differences in underreporting income versus underreporting the tax liability and for labor income earned in the informal economy.

Empirical evidence for the degree of evasion is presented, though as the authors point out, it is difficult to find data on how much taxpayers are evading the taxes they owe. According to IRS estimates from random audits, tax evasion costs the U.S. Treasury just under \$400 billion per year. One-third of this sum stems from the underreporting of income that has minimal information reporting, such as sole proprietor income,

royalties, rents, and so forth. Only one percent of underreported income stems from underreported wage and salary income that would be reported on a W2 form. The authors state that in order to minimize evasion, the incentives for the income payer and payee to misreport income information would have to conflict. For instance with W2 wage income, the firm would have an incentive to overstate wage payment to minimize the corporate income tax paid while the worker would have incentive to understate wage income to minimize the personal income tax liability. These two conflicting incentives cancel out, resulting in accurate information being reported. The same is true with a valued-added tax system.

The authors distinguish between tax evasion and tax avoidance, which is the legal means by which taxpayers reduce their tax liability. The authors focus primarily on two forms of tax avoidance: the time shifting of activities to take advantage of changes in the tax code and using financial assets to take advantage of differential tax treatment across different financial assets. The Tax Reform Act of 1986, which lowered the top personal marginal income tax rate below the corporate tax rate, led to many C corporations to be re-characterized to S corporations. Arbitrage can be used to take advantage of differential tax treatment of different types of financial assets, resulting in substantial tax savings.

A discussion of administrative and compliance cost of taxation rounds out Part 1 of the book. Estimates for the administrative costs for the OECD countries are presented. Because administrative costs are largely fixed costs, administrative costs as a percentage of tax revenue are lower for large countries than for small countries. For instance, administrative costs are 0.6 percent of net tax revenue for the United States, compared to 1.1 percent for the Netherlands in 2009.

The cost of complying with the tax system is hidden and difficult to estimate, but important to consider. In the United States, compliance with the personal income tax is estimated to cost 10 cents per dollar of tax revenue raised, while complying with the corporate income tax is estimated to cost 23.4 cents per dollar of tax revenue raised. Administration and compliance costs lead to an interesting discussion regarding how the statutory tax incidence is not independent of the tax liability, in contrast to the standard textbook model. If administrative costs are lower if the tax incidence is placed on the seller versus the buyer, because there are fewer sellers than buyers, then placing the

statutory tax incidence on the sellers will lower the overall cost of the tax system.

In Part 3, the authors reanalyze the optimal tax model with these building blocks in place. Including issues such as evasion and administration costs in the standard model yields novel results. There is a trade-off between the size of the tax base and the amount of administrative costs borne by the taxing authority. A broad tax base minimizes deadweight loss but has substantial administrative costs while a narrow tax base is easy to collect but potentially has large deadweight loss. Including administrative costs in the optimization of the standard tax model allows the policymaker to strike the optimal balance between the breadth of the tax base and size of the administrative costs.

Including administrative costs in the standard tax model also allows policymakers to find the optimal audit rule. In a model without administrative costs, the optimal audit rule is such that revenue to the public treasury is maximized. The authors illustrate that in a model with administrative costs, the optimal audit rule does not result in revenue maximization because that rule would involve spending a dollar on administrative costs in order to raise a dollar of revenue from an avoidant taxpayer.

Part 3 is fairly technical with the authors utilizing multivariate calculus to optimize the tax model that includes administrative costs, compliance costs, taxpayer evasion and avoidance, and so forth. Researchers in optimal tax theory who want to be up-to-date on the state of the field will want to read Part 3 closely. The authors provide enough detail in the mathematical derivations that an interested researcher should be able to recreate the results without too much difficulty. Casual readers can skim through the derivations to obtain the intuition behind the results. The authors do a good job motivating their results and discussing the intuition behind them. Parts 1 and 2 also utilize calculus, but less so than Part 3. Parts 1 and 2 provide more exposition for the models and present the empirical results from researchers who have tried to measure issues such as the administrative and compliance costs of taxation, and the behavioral elasticity in response to taxation. Casual readers and economists not specializing in optimal tax theory will want to focus their attention on these two parts.

The authors wrap-up the book in Part 4 with looking on what tax systems will look like in the future with better information and filing technologies, sales taxes for online versus brick-and-mortar stores, and

multiple tax jurisdictions and tax havens.

This book does not directly address proposed income or corporate tax reforms though optimal tax models certainly have value to add to the discussion of what tax reform should look like. Issues such as an income tax versus a value-added tax, whether deductions such as the mortgage interest deduction are worthwhile, corporate tax reform, and the economics of related issues such as the border adjustment tax are not directly dealt with. However, this book would give the reader a sound foundation on which to further examine taxation issues such as these. Economists who want to be up-to-date on the state of the research on optimal tax theory from the leading researcher in the field should check out *Tax Systems*.

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The Mobility of Students and the Highly Skilled. Ed. MARCEL GERARD AND SILKE UEBELMESSER. Cambridge, MA: The MIT Press. 2014. Pp. vi, 346. \$ 35.00.

This collection of essays is quite timely, given recent political events and policy changes in both the European Union (EU) and the United States. Several papers delve into the “brain gain/brain drain” debate. Other papers discuss how the gain/drain phenomenon might impact a country’s decision to fund higher education. While the essays as a group focus on the EU, there is some mention of labor mobility and immigration issues in regard to the United States, as well as other non-EU countries. Marcel Gerard is at the Catholic University of Louvain, while Silke Uebelmesser is at the University of Jena.

After Chapter 1’s introduction, summarizing some of the book’s results, Chapter 2, written by Gabriel J. Felbermayr and Isabella Reczkowski, employs a gravity-type model to investigate the extent to which the number of international students in a host country determines the number of highly-skilled (university-educated) migrants in the host country. Using a data set based largely on UNESCO numbers, the coauthors find that the elasticity of the “stock of highly educated migrants with respect to the international student body” (p. 45) is about 0.09. However, it is higher for Anglo-Saxon countries, in part because of