

THE WAY WE WERE (AND ARE): CHANGES IN PUBLIC FINANCE AND ITS TEXTBOOKS

HARVEY S. ROSEN*

Abstract - *This paper uses a comparison of a contemporary public finance textbook with one written in the 1940s as a vehicle for assessing the changes in the field since the beginning of the National Tax Journal 50 years ago. The comparison indicates that there have been major changes in the field. From a methodological point of view, the most important change is the embrace of microeconomic theory as the framework for analyzing both positive and normative issues. In addition, the incorporation of econometrics has dramatically affected the field. With respect to topical coverage, research in public finance has changed along with the items on the public policy agenda, and the results of this new research have made their way into contemporary textbooks. But there is continuity as well as change: some topics and their treatments have metamorphosed very little in the last half-century.*

INTRODUCTION

The goal of a textbook is to communicate the received wisdom of its era, or at least the author's interpretation of the received wisdom. As historian of science Thomas Kuhn (1962a, p. 135) put it, textbooks address themselves "to the particular set of paradigms to which the scientific community is committed at the time they are written."¹ Hence, a natural way to assess changes in the field of public finance since the beginning of the *National Tax Journal* 50 years ago is to compare a contemporary public finance textbook with one from the 1940s. That is the purpose of this paper.

The selection of a contemporary textbook was easy for me—my own (*Public Finance*, 1995). It was harder to choose a book from the 1940s. To begin, I accumulated about ten candidates. I then tried to determine which book was most "representative" by writing to the (surviving) publishers and requesting information on sales. This was a futile exercise: the publishers either did not respond or else indicated that the records had been destroyed years ago. Next, I attempted to acquire a few old reading lists to see which

*Department of Economics, Princeton University, Princeton, NJ 08544.

books had been assigned. This wasn't a terribly successful strategy either: few schools (including Princeton and the University of Michigan) have archival material of this sort. However, I was able to obtain a set of Harvard's public finance reading lists from the 1940s. Finally, Mary Ceccanese, Editorial Assistant at the *National Tax Journal*, contacted several emeritus professors of public finance, asked them if they recalled which textbooks were used in the 1940s, and reported her findings to me.

Clearly, there was not a lot for me to go on. However, after reviewing several of the candidates, I concluded that they were fairly similar in substance and tone, so that the particular choice was not too important. Somewhat arbitrarily, then, I selected a text from 1947, *Public Finance* by Harley L. Lutz. Lutz's book was assigned on several of the Harvard syllabi and also appeared in the list compiled by Ms. Ceccanese. Oh yes. Full disclosure requires me to note that Lutz's case was not hurt by the fact that he was "Professor of Public Finance in Princeton University."^{2,3} For the sake of brevity, I will henceforth refer to Lutz's book as PF47 and my own as PF95. My focus will be on two main issues: how the books compare in their methodological approaches (the next section) and in the substantive areas covered (the subsequent section). The last section provides some concluding thoughts.

APPROACH TO THE FIELD

We begin by considering how the definition of the field has changed. PF47 states that,

"Public finance deals with the provision, custody, and disbursement of the resources needed for the conduct of pub-

lic or governmental functions. The subject matter falls, accordingly, into three main divisions. These are: first, public expenditures, which represent the needs of the state; second, public revenues, which are the source of the funds that are expended in the conduct of the public business; and third, financial administration, which deals with the determination of expenditures and income, as well as with the collection, handling and disbursement of public funds" (p. 1).

PF95 offers a more concise definition: "This book is about the taxing and spending activities of government, a subject usually called public finance, but sometimes referred to as public sector economics or simply public economics" (p. 4). The main difference in the definition is the inclusion of "financial administration" in PF47 but not PF95. As shown below, PF47 deals extensively with nitty-gritty details of governmental administration. The current field of public finance, in contrast, deals with administrative issues only at a high level of abstraction (if at all). In this respect, the conception of what public finance encompasses has narrowed.

That said, there is obviously a substantial overlap: both definitions of the field focus on the analysis of government revenues and expenditures. But though the definition of public finance is pretty much the same, the approach to studying it has changed dramatically. The remainder of this section explains how.

Use of Theory

The most important difference becomes evident merely by paging through each text: PF47 hasn't a single diagram, while PF95 has dozens. The figures in PF95—supply and demand models, indifference curve diagrams, Edgeworth Boxes, and so on—are standard tools of micro-

economics. The intensity of their use is emblematic of the fact that economic theory provides the framework for considering both positive and normative issues in contemporary public finance. Indeed, today most economists view public finance as just an area of applied microeconomics. In contrast, 50 years ago public finance appears to have been more of a stand-alone field. The works of Hicks and even Marshall evidently had little impact on the way in which public finance economists approached their work.

Let me provide a few examples. To begin, consider the treatment of tax incidence. In PF95, after a brief discussion of some taxonomic issues (e.g., definitions of “progressive” and “regressive”), the text launches into a graphical analysis of unit and ad valorem taxes in the supply and demand model. After relatively brief discussions of incidence in imperfectly competitive market environments, there is an exposition of general equilibrium models along the lines suggested by Harberger.

The discussion of incidence in PF47 is more taxonomic and less analytical. It begins with a statement of four main theories: (1) the *concentration theory*, “according to which any tax tends to gravitate or to concentrate upon a certain class of taxpayers, regardless of the original point of levy;” (2) the *diffusion theory*, which posits a “general or universal diffusion of taxes throughout the community;” (3) the *price manipulation theory*, which suggests that the extent to which the tax is shifted depends on how prices change in response to the tax; and (4) the *tax capitalization theory*, which states that the “capital value of the tax . . . is deducted from the capital value of the object taxed” (pp. 280–2). The contem-

porary student of public finance will recognize that each outcome is logically possible, depending on the particular type of tax, model of the market, and parameters of that model. But PF47 provides no model to help the reader understand that tax incidence is fundamentally an issue of how prices change when a tax is imposed. To be sure, there are elements of such a model; a section on “Conditions of Tax Shifting” notes that supply conditions are important and points out that, when demand for a commodity is inelastic, the tax is more likely to be shifted to consumers. Further, many of the conclusions are logical even if they are not derived from a formal model; for example, a landlord bears the entire burden of a tax on economic rent. But supply and demand are dropped entirely when it comes to the incidence of taxes on incomes (pp. 296–9). Similarly, the discussion of sales taxes ignores the earlier discussion of shifting, and argues that “direct collection is prima facie, but not necessarily conclusive evidence that the consumer bears the burden of this tax in all cases” (p. 299). In short, PF47 knows and understands the elements of the relevant theories, but doesn’t quite believe that they are useful for explaining how taxes affect the distribution of real income.

The same situation characterizes the discussion of normative issues. Bits of economic theory are present, but they are not brought to bear systematically on the problem. Instead of deriving normative results from models, they are presented as “principles.” For example, in PF95, the choice between debt and tax finance is viewed to a large extent through the prism of Barro’s model, in which the two methods are compared on the basis of the present value of their excess burdens (pp. 470–1). In contrast, PF47 lists a series of “Principles of Public

Credit," including *character* (will the government repay the debt); *capacity* (for what purposes will the government use the credit); and *financial resources* (the government's ability to pay interest and principal) (pp. 534–44). These are sensible criteria to use when thinking about public debt, and it is not at all clear that they are less important than the excess burden considerations stressed in PF95. The PF95 approach reveals the tendency of modern public finance to focus on issues that can be dealt with neatly using microeconomic theory, while the PF47 approach shows a striving to find practical principles for government behavior, without caring very much whether they can be derived from some underlying theoretical framework.

Another example of the contrasting patterns of thought is the discussion of public investment. PF95 builds the discussion around cost-benefit analysis (Chapter 12), which is based on the notion that a project should not be undertaken unless the (properly measured) incremental benefits exceed the incremental costs. The idea that marginal analysis can be used to think about this problem is clearly present in PF47: "The approach of the diminishing utility of more services and the increasing disutility or burden of more taxes to balance should establish a limit to the spending and taxing" (p. 508). But having made this statement, PF47 doesn't do very much with it or pay it serious attention. Rather, PF47 is more comfortable with aphorisms than marginal analysis and ends its discussion with a dictum by H.C. Adams, "A sound financial policy will preserve the patrimony of the State" (p. 516).

A striking example of how economic theory affects both substance and tone is provided by the discussions of the relation between taxation and economic

efficiency. PF47 observes that, "The real reason for moderation in the budget is that, since taxation is disagreeable and burdensome, it produces bad effects upon the taxpayers . . ." (p. 523). This is quite far removed from the current notion that the efficiency cost (excess burden) of a tax is the reduction in welfare in excess of the revenues collected. Of course, without some concept of excess burden, there can be no discussion of optimal taxation as it is understood today. Hence, the discussion of optimal taxation in PF47 is essentially a recitation of a set of first principles (e.g., ". . . taxes must be moderate, they must be laid on gradually, and they must not affect the necessities of life" (p. 509)), while the discussion in PF95 is framed in terms of the trade-off between excess burden and income redistribution (Chapter 15).

Use of Econometrics

A comparison of PF47 and PF95 reveals another important change in the field of public finance in the last 50 years—the incorporation of econometrics. Much of the research in today's public finance is econometrically oriented, and econometric results are cited extensively in PF95. In contrast, PF47 reflects the fact that econometrics was then in its infancy. Although there are some tables with data, there is no discussion of econometric results because there was nothing to discuss. A list of a few examples makes clear just how thoroughly the field has changed in this respect.

- In the discussion of the impact of taxes on labor supply, PF95 summarizes a large literature, which, among other things, provides separate estimates for men and women (pp. 403–4). In PF47, there is a short discussion suggesting that high taxes will reduce labor supply,

but no attempt at all to assess the magnitude or to describe how one might attempt to figure it out (p.134).

- PF47's discussion of intergovernmental grants is entirely prescriptive (p. 116). There is no mention of how grants affect government behavior. No attempt is made to explain the "flypaper effect," because no one knew that it existed.
- PF47's discussion of the charitable deduction does not include anything about its impact on donations (p. 326), and does not even raise the question whether the deduction is an effective way to spur private contributions. PF95 is able to draw upon a large literature on this matter (pp. 375–76).

Interestingly, PF47 strongly implies that the lack of statistical work in public finance is a handicap in understanding the subject. At the beginning of a chapter entitled "Some Effects of Taxation," we read, "This is a difficult subject, the treatment of which cannot readily be supported by statistical or other factual data" (p. 507). This sort of statement suggests that, in the 1940s, there was a substantial pent-up demand for econometric analysis, which was met in subsequent decades.

Taxonomy versus Measurement

PF47 has long and tedious sections on taxonomic issues and very little on measurement and data problems, while PF95 has long and tedious sections on measurement and data problems and very little on taxonomic issues. Let me illustrate. PF47 spends six pages (pp. 245–250) explaining what a "tax" is, covering such issues as whether a contributory (as opposed to compulsory) payment to the government is a true

tax. PF95 does not even provide a definition of "tax;" it is assumed that readers know one when they see one.⁴ Similarly, PF47 devotes an entire chapter to the different ways in which public expenditures can be classified (e.g., by function, by agency spending the money, by object of the expenditure, and by character of the expenditure), while PF95 does not bother to set up any such taxonomy.

Turning to data and measurement issues, let us consider the question of the size of government. PF95 contains a five-page discussion of different ways in which the size of the public sector can be measured (real expenditures, real expenditures per capita, as a proportion of national income, etc.). PF47 is pretty much silent on these issues, implicitly assuming that real expenditures are sufficient. Similarly, PF95 has a long section on deficit and debt measurement, dealing with such issues as the effect of inflation on the real value of debt, the relevance of real assets owned by the government, the importance of implicit promises such as social security, and so on (pp. 460–463). PF47, while providing a substantial discussion on the different types of debt (p. 547), does not even hint that the government statistics might not be economically meaningful.

To a large extent, these differences result from the introduction of economic theory and econometrics into public finance. In contemporary public finance, to the extent that some distinction does not show up in a theoretical model, it is rendered uninteresting. Thus, in either an algebraic or graphical model, a "tax" shows up as a wedge between the before- and after-tax prices of some commodity or input. All taxes that create the same wedge are identical from the standpoint of the model, so

there is no reason to devote any energy to looking for possible distinctions among such taxes. Indeed, PF95 pushes this logic ever farther, arguing that the optimal public sector pricing problem is really just the same as the optimal tax problem, because both involve finding the best wedge between marginal cost and consumer price (pp. 335–39). PF47 draws no such parallel, because it does not view the problems through the lens of economic theory. The more important role of theory has also contributed to the greater stress on measurement issues because it impels researchers to ask whether particular data are reasonable “proxies” for various theoretical constructs. The growth of econometrics has also led to increased interest in measurement issues because the quality of data affects the reliability of econometric estimates. And, of course, the simple fact that more and better data are available now than 50 years ago has had a major impact on economists’ interest in measurement issues.

History and Institutions

The flip side of the fact that public finance has become more theoretical and econometric is that it has become less historical and institutional. The treatment of the history of taxes and expenditures in PF95 is cursory and superficial. A few pages are devoted to long-term budgetary trends (pp. 17–20), but there is no serious attempt to describe the evolution of public finance. In contrast, PF47 devotes 24 pages to the history of federal expenditures, starting in 1792 (Chapter IV). The history of state and local expenditures gets its own 16-page chapter. In the same spirit, PF47 takes the history of thought in public finance quite seriously. It includes a brief survey of fiscal doctrine, starting with ancient Egypt and extending to Ricardo and Mill (pp.

4-9). In contrast, a reader of PF95 would be forgiven for believing that there had never been another way of thinking about public finance problems.⁵ Finally, the discussion of institutional issues is much more extensive in PF47. For example, tax laws and their constitutional basis are discussed at some length (pp. 251–4), while this topic gets barely a page in PF95 (p. 11).

Coverage of Specific Topics

With an understanding of differences in general approaches to the field in hand, I would like to turn to topical coverage. A rough breakdown is provided in Table 1, which shows the percentage of pages devoted to each of several major topics. Several thoughts are suggested by the table. First, the amount of attention devoted to the expenditure side of the budget used to be much less than that devoted to the revenue side, but now there is about parity. I think that this mirrors the changes in professional interests quite accurately. Second, PF95 devotes fully 11 percent of its pages to explaining methodological issues. It contains a chapter on welfare economics, one on drawing inferences from

TABLE 1
DISTRIBUTION OF PAGES BY GENERAL TOPIC^a

Topic	PF47	PF95
Introduction	2%	1%
Methodology	0%	11%
Expenditures	11%	38%
Revenues and taxes	52%	36%
Public credit	10%	3%
Financial administration	13%	0%
Fiscal federalism	0%	8%
History of thought and institutions	12%	3%

^aEach entry in the table shows the percentage of pages in each text devoted to the respective topic.

data, and an appendix reviewing the supply-demand model, indifference curves, and marginal analysis. This reflects the general approach to the subject described in the previous section—theory and econometrics pervade the field to such an extent that one simply cannot approach the subject seriously without having some understanding of them. In contrast, these tools were not used by public finance economists 50 years ago, so there was no need to make sure that students were familiar with them. Third, PF47 devoted 13 percent of its pages to financial administration, which is basically left uncovered in PF95. Detailed hands-on information about how to administer a financial bureaucracy is no longer considered a part of the field. Fourth, the subject of fiscal federalism receives no attention in PF47, but occupies eight percent of the pages in PF95. This is a potentially misleading statistic, because PF47 devotes a substantial number of pages to state and local public finance. However, these pages basically ignore what are today's central federalism issues, such as the optimal division of responsibility across different levels of government, community formation, and intergovernmental grants.

Turning to a more specific discussion of topics and issues covered in each book, one thing is immediately clear: the choice of subjects is heavily influenced by the issues of the day. Having been published only two years after the end of World War II, it is no surprise that PF47 devotes attention to the problems of war finance (e.g., p. 572), a subject entirely missing from PF95. Similarly, with memories of the Great Depression still fresh, PF47 takes seriously the possibility of local governments defaulting on their debts (p. 543). Today, government default is of considerable interest to economists in the fields of

development and international trade, but it receives little attention in discussions of domestic public finance (despite those recent events in Orange County!). Another legacy of the Depression was a concern with the question of whether tax and expenditure policies could help deal with the problem of "oversaving" (p. 694). Fifty years later PF95 discusses whether taxation has contributed to the "capital shortage" (pp. 419–20). Nationalization of industry by the public sector was a big issue in the immediate post-War era; accordingly, it receives coverage in PF47 (pp. 181–82). PF95 also delves into the question of whether certain activities are best undertaken by the public or private sectors, but here it is framed in terms of privatization, which is essentially the reverse of nationalization (pp. 72–73).

To get a better feel for differences in topical coverage, it is useful to divide various subjects into three groups: covered substantially in both books; covered in PF47 but not PF95; and covered in PF95 but not PF47.⁶

Some Topics Covered in Both Books

Many topics are covered in both texts, suggesting that, in important ways, the basic concerns of public finance economists have not changed greatly over the last 50 years. A few examples follow.

- From the perspective of 1995, the size of the public sector in 1947 seems rather modest—government expenditures as a percentage of GDP were about 21 percent in 1947 versus 32 percent in 1995. Nevertheless, even back then there was concern about the sources of public-sector growth. PF47 devotes an entire chapter to "Factors and Conditions Contributing to the Increase of Public Expenditures;"

PF95 has a substantial section on "Explaining Government Growth." The discussions in both texts focus on economic variables such as rates of income growth. They also examine political economy considerations. PF95 discusses rent seeking, logrolling, and how they might affect public spending. The spirit of these ideas is captured in the PF47 discussion of "political pressure groups": "Each one represents only a minority of the electorate, but it is usually well organized, often well financed and always aggressive . . . The characteristic philosophy of such groups may be said to be, 'live and let live.' Each works hard for its particular objective, but it is ordinarily indifferent to the claims of other groups, except as strategy may call for a temporary pooling or opposition of interests in a campaign" (pp. 77–78). PF95 employs the useful jargon of "asymmetric information" to explain the consequences of the fact that citizens may not be well informed about what the government is doing; PF47 simply notes that "the human element is revealed by the difficulty of securing the close attention of citizens to the public business" (p. 77). At some points, the PF47 discussion of political economy issues has a surprisingly modern feel to it. The notion of the time inconsistency of optimal policy (discussed in PF95 on pp. 344–45) seems anticipated by the statement "The capital levy is an emergency device that might possibly be used once and once only, and the prospect of its recurrence would affect adversely the domestic credit of the nation which attempted it" (p. 542).

- The distribution of the tax burden was and is a central topic in public

finance. PF95 devotes an entire chapter to it, and PF47 has two. But, as we have seen, the approaches to this question are rather different. Interestingly, though, in both cases, the bottom line is a warning that tax incidence is a hard problem and the truth hard to come by. PF47 notes that "tax shifting is far more difficult and complicated than is commonly supposed" (p. 290), and PF95 states that "the models in this chapter tell us exactly what information is needed to understand the incidence even of very complex taxes. To the extent that this information is currently unavailable, the models serve as a measure of our ignorance" (p. 301).

- Perceptions of the problems involved in administering an income tax have not changed much at all. PF47 begins its discussion of the federal income tax by quoting the Sixteenth Amendment (which removed constitutional obstacles to income taxation) and complaining that, "There is no definition of income in this language" (p. 333). PF95 also quotes the amendment and similarly complains that "the law provides no definition" (p. 360).⁷ PF95 uses the Haig–Simons criterion for framing the discussion of what "ought" to be in the income-tax base. PF47 does not explicitly invoke any particular rule, but something along Haig–Simons lines clearly lies behind the discussion of what belongs in the tax base. For example, both texts observe that depreciation must be taken into account when computing taxable income and note that measuring depreciation in practice is very hard. As PF47 notes, "the problem is difficult, for it inevitably involves the determination of the

value of capital assets and also a determination of their probable period of usefulness" (p. 326). PF95 uses quite similar language: "In practice, the tax authorities do not know exactly how much a given investment asset depreciates each year, or even what the useful life of the machine is" (p. 431). The problems involved with imputed income receive due consideration in both texts (p. 347 in PF47 and p. 363 in PF95). The question of the appropriate unit of taxation (individual versus family) is also given attention in both (pp. 349–50 in PF47 and pp. 386–88 in PF95). Although PF95 attempts to bring optimal tax logic to the discussion, the essential arbitrariness involved in selecting a taxable unit is a theme that comes through clearly in both texts.

- The issues surrounding other tax instruments have also stayed pretty much the same. Although published 30 years before California's Proposition 13, PF47's section on property taxes includes a discussion of the problems of limitations on tax rates and also stresses that effective and statutory property tax rates may differ because of the vagaries of administration (p. 105). The same points are made in PF95. In their discussions of business taxation, both texts note the problems that come up in allocating net income across jurisdictions when multiple jurisdictions have potential claims to the income (p. 457 in PF47 and p. 448 in PF95). The discussions of the sales tax in both PF47 and PF95 are concerned with regressivity. PF47 accepts the proposition that the relative burden of sales taxes falls with income (p. 473). However, the discussion of the same theme in PF95 brings the permanent income

hypothesis to bear upon the issue and reaches a more agnostic conclusion (p. 479). In both texts, the discussion of inheritance and estate taxes notes the importance of integrating them with the gift tax and the difficulties of doing so. More generally, one gets the sense that, although the tools for analyzing taxation have changed a great deal, the basic problems to be analyzed are very much the same.

An interesting similarity in the texts is the lack of attention to macro policy issues. Currently, most research on unemployment and inflation is considered to be "macroeconomics," and practically all research in public finance abstracts from these issues. PF95 makes this point explicitly in its discussion of the scope of the field: "Nowadays, the macroeconomic functions of government—the use of taxing, spending, and monetary policies to affect the overall level of unemployment and the price level—are usually taught in courses of their own" (p. 4). I conjecture that PF47 and PF95 represent two ends of an inverted-U with respect to their inclusion of macro issues. PF47 came before the Keynesian Revolution swept the profession, and there was not too much to say about the effects of fiscal policy on the economy. On the other hand, by the time that PF95 came along, specialization had gotten to the point where most people who did research in the micro aspects of public finance could not keep up with developments in macro as well. My guess is that, at some intermediate point in time, the textbooks did more to try to cover both macro and micro aspects of public finance. Here, it is important to recognize the influence of Richard Musgrave's 1959 graduate-level treatise, *The Theory of Public Finance*, in which the "stabilization function" of government was

given as much prominence as the “allocation” and “distribution” functions.⁸

Topics Covered in PF47 but not PF95

Some topics have more or less disappeared from the profession’s radar screen during the last 50 years. PF47 has a 30-page chapter on “Public Domain: Lands and Forests,” which analyzes federal land policy; PF95 contains not a word on this topic. PF47 goes into considerable detail on the commercial enterprises of the federal government, including a lengthy section on the post office. Again, PF95 is essentially silent on this topic, although it does spend a bit of time discussing federal lending enterprises. While all levels of government still do manage various enterprises, the treatment in PF95 reflects the fact that these activities have been eclipsed by the government’s tax, transfer, and expenditure functions.

As indicated earlier, PF47 devotes a substantial amount of space to administrative issues. Chapter XIX on “Tax Systems and Tax Administration” provides nuts and bolts advice on running a tax system. We learn, for example, that “The tax roll should be made in duplicate, one copy going to the tax collector and one to the auditor as a means of checking and controlling the collector’s payments to the treasurer” (p. 313). The text contains information on how to arrange the funding of debt in times of an emergency (p. 585), instructions for handling motor vehicle licensing (pp. 473–481), and an admonition to make bureaucracies do their purchasing centrally (p. 97). Such information is absent from PF95.

To the extent that modern public finance economists deal with administrative issues, it is at a much more abstract level. This difference may be

due to the changing role of academic public finance economists. Lutz, like many members of his generation, served on a number of state commissions that dealt with very practical problems. Participation in such groups by academics is less common today, although certainly not unknown, particularly in developing countries.

Topics Covered in PF95 but not PF47

PF95 has entire chapters devoted to externalities, health care, social security, and income maintenance programs. Also, substantial sections of the chapters on income taxation deal with international tax issues. In contrast, PF47 has no mention at all of a government role in maintaining environmental quality. It is silent on imperfections in health care markets and why government intervention in them might be appropriate. Social security gets just a few pages, most of which simply describe the growth in expenditures on the program.⁹ The word “poverty” does not appear in the index, international issues are absent, and redistributive problems receive no systematic attention. These differences in the texts are not mysterious. Over the past 50 years, the items on the public policy agenda have changed enormously. Research in public finance has followed these changes, and the results of this research have made their way into contemporary textbooks. At the same time, as the scope of the public sector has increased, public finance economists have devoted more effort to understanding how the government itself behaves. Thus, PF95 has a chapter devoted to “Public Choice.” As noted above, although PF47 has some important insights regarding political economy issues, it contains no systematic treatment.

PF95 also has new tax-related topics. The theory and measurement of excess burden receive an entire chapter, as does the effect of taxation on various kinds of personal behavior (mainly labor supply and saving). The importance of these topics in PF95 and their absence from PF47 are clearly related to the methodological innovations in the field discussed in the previous section. Differences in topics covered in the two books reflect changes in methodology as well as changes in the policy issues of the day.

Conclusions

A comparison of a contemporary textbook in public finance with a counterpart from the late 1940s indicates that there have been major changes in the field during the last half-century. From a methodological point of view, the most important change is our having traded aphorisms for theorems. Rather than enunciate various principles of public finance, economists attempt to derive their results from underlying objective functions. More generally, the infusion of economic theory into the field has improved the logical consistency of the analyses of many important policy issues. Anyone who doubts the usefulness of microeconomic theory in this context should spend some time trying to fathom a discussion of tax incidence in an old textbook! The other major change in the field has been the introduction of econometric techniques. A current textbook author is able to report to students the results of dozens of studies on how government policies affect individual and business behavior; such a luxury simply was not available 50 years ago. However, as the field has improved its theoretical and statistical underpinnings, it has lost interest in the past. Contemporary public finance textbooks say little about the history of

the field or about the history of fiscal institutions. This mirrors the state of affairs in professional journals such as the *National Tax Journal*.

With respect to topical coverage, in some ways, we seem to be operating in a totally different world from that of scholars from 50 years ago. The government has gone off in some entirely new directions, and public finance researchers have followed. In other cases, however, one experiences distinct feelings of *déjà vu*. The major problems involved in defining the base for an income tax, for example, were recognized and understood at the time of the founding of the *National Tax Journal*. Further, despite the absence of a modern theoretical apparatus, there were anticipations of insights that one considers quite modern. In short, we differ from our intellectual grandparents in many ways, but there is still a strong family resemblance.

ENDNOTES

This paper was written while I was a Visiting Scholar at the Russell Sage Foundation. I am thankful to Robert K. Merton (that's the great sociologist, not his son, the great finance economist) for extensive comments and discussions. I have also received useful suggestions from William Gentry, James Hines, Douglas Holtz-Eakin, Richard Lester, and Joel Slemrod.

¹ Kuhn (1962b, p. 33) goes further in another essay, in which he states that "Textbooks or their equivalent are the unique repository of the finished achievements of modern physical scientists . . . As many autobiographies attest, even the research scientist does not always free himself from the textbook image gained during his first exposures to science." Some of Kuhn's insights regarding textbooks were anticipated by Fleck (1935, 1979), who views the textbook as a vehicle for initiating individuals into the discipline.

² Lutz, who was born in 1882, was president of the National Tax Association in 1927–28 and a member of Princeton's faculty from 1928 to 1947. I never met him—he died in 1975, one year after I arrived at Princeton. According to a personal communication from Emeritus Dean Richard Lester,

who happens to have been a teaching assistant for Lutz during the 1930s, Lutz was rather alienated from the Department of Economics. Apparently, Lutz's son applied and was admitted to the department's graduate program. Two years later, he failed generals and left the program forever. The elder Lutz never forgave the Economics Department.

³ In addition to the facts that our books have the same title and we both taught at Princeton, we received our Ph.D.'s from the same institution, Harvard. Further, our first names differ by only one letter. Spooky, isn't it?

⁴ Issues relating to the definition of a tax have not disappeared completely. For example, PF95 notes that the incremental reduction of welfare benefits when earnings increase is a *de facto* tax on labor. Similarly, there is controversy over whether the omission of certain items from the income tax base ("tax expenditures") should be viewed as an implicit subsidy to these items.

⁵ Interestingly, this appears to be a quite general phenomenon. Kuhn (1962a, pp. 136-7) observes, "Textbooks . . . begin by truncating the scientist's sense of his discipline's history and then proceed to supply a substitute for what they have eliminated. Characteristically, textbooks of science contain just a bit of history, either in an introductory chapter or, more often, in scattered references to the great heroes of an earlier age."

⁶ Of course, I do not attempt to include every topic covered in one category or another. Each book has a subject index that goes on for many pages.

⁷ The British author Philip Guedalla stated that, "History repeats itself. Historians repeat each other." Evidently, so do economists.

⁸ Two decades later, Atkinson and Stiglitz's 1980 graduate text devoted very little space to stabilization issues. It appears that the content of undergraduate textbooks reflects (with a lag) what is covered in graduate courses.

⁹ One part of the discussion observes that, if some output is diverted to help one group in the population, then this will lead to a reduction in income for the working population unless overall production is somehow increased (p. 19). This echoes a theme in the current discussion of the policy issues relating to the impending retirement of the baby boom generation. Another remarkably prescient observation is that "the one thing that the aged can be depended upon as a unit is to exert their voting influence for larger old age grants" (p. 67).

REFERENCES

Atkinson, Anthony B., and Joseph E. Stiglitz. *Lectures on Public Economics*. New York: McGraw-Hill, 1980.

Fleck, Ludwik. *Genesis and Development of a Scientific Fact*. Edited by Thaddeus J. Trenn and Robert K. Merton. Translated by Fred Bradley and Thaddeus J. Trenn. Chicago: University of Chicago Press, [1935], 1979.

Kuhn, Thomas S. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962a.

Kuhn, Thomas S. "The Function of Measurement in Modern Physical Science." In *Quantification—A History of the Meaning of Measurement in the Natural and Social Sciences*, edited by Harry Woolf. Indianapolis: Bobb-Merrill, Inc., 1962b.

Lutz, Harley L. *Public Finance*. 4th ed. New York: D. Appleton-Century Company, Inc., 1947.

Musgrave, Richard A. *The Theory of Public Finance*. New York: McGraw-Hill, 1959.

Rosen, Harvey S. *Public Finance*. 4th ed. Chicago: Richard D. Irwin, Inc., 1995.