At one time, the complexity and inequity in the tax law were attributed to tax policy. Now the proliferation of tax expenditures, exceptions to exceptions, targeted credits, specialized deductions, cascading definitions, bubbled tax rates, and the swamping of the Code with disguised appropriations provisions suggests that much of the morass that is the tax law is the product of electoral politics.

A. INTRODUCTION

The primary goal of this chapter is an examination of how tax law comes into being. This requires some appreciation of the roles and motivations of at least the following: members of Congress, the President and other executive officials, congressional and executive staffs, affected taxpayers, organizations, lobbyists, media, and voters. The process is not simple—clearly, it is more complex than a generation ago—and it is not particularly pretty. It is important, however.

Subchapter B discusses the factors that cause Congress to act, and which seem destined to generate considerable legislative activity—certainly in the tax arena—for the foreseeable future.

Subchapter C highlights the important role in the budget process played by revenue estimates. Related to this is the attempt of Congress to control its tendencies toward spending without legislating taxes to pay for the spending, and the resulting involvement in tax policy of "spending" congressional committees and executive departments.

In the final subchapter, the Tax Reform Act of 1986 is treated as a case study. The surprising enactment of this sweeping Act is examined, as are explanations for the rapid demise of its vision of a broad tax base with relatively few special provisions.

Notes and Questions

1. An understanding of the tax law process in Washington requires some appreciation of the key role played by congressional staffs. The Joint Committee on Taxation (JCT) was the first joint Congressional Committee

---

Note: The text is a continuation of the discussion from the previous page.
established on a permanent basis with a professional staff. The Joint Congressional Budget Committee was modeled after it.

The JCT staff is not duplicative of the staffs of the House Ways and Means Committee and the Senate Finance Committee. Historically, the JCT staff has provided the advantage of continuity, because it did not change when control of Congress shifted from one party to the other. The JCT staff provides a different sort of continuity by following revenue bills from the House to the Senate. By custom, JCT staff members have been left to develop a level of professionalism and expertise that could not be duplicated in the staff of a House or Senate committee, who are more closely tied to the political fortunes of the chairman and his party.

2. The importance of "bracket creep" and its elimination is discussed elsewhere in this book, from Chapter One to Chapter Sixteen. Prior to 1981, bracket creep allowed Congress the luxury of automatic "real" tax increases caused by inflation; as inflation pushed taxpayers with higher nominal incomes (but unchanged real incomes) into higher tax brackets. This allowed Congress to finance increased Government spending without voting for taxes to pay for it, and also allowed Congress to return a portion of the bracket creep revenues by voting for politically easy tax cuts. All this came to an end in 1981, when Congress indexed many important dollar figures in the Code, including income breakpoints for application of higher tax rates and the dollar amounts of standard deductions and of personal and dependency exemptions.

Ending bracket creep has had profound political consequences. For one, this development has tended to expand the list of tax legislation "players" beyond the tax-writing congressional committees and Treasury. As Kenneth Gideon, former Assistant Secretary of Treasury for Tax Policy, observed:

Treasury and the taxwriting committees have found Congress and other executive departments less willing to cede authority over revenue issues to their expertise. Budgetary constraints drive other congressional committees and executive departments to seek "revenue offsets" for their programs. Deprived of the steadily increasing revenue base provided by bracket creep, the Congressional Budget Committees and the Office of Management and Budget must assert themselves in defining at least the size of revenue requirements to fulfill their budgetary responsibilities.\textsuperscript{b}

It seems likely that the absence of bracket creep and the associated "easy votes" may have increased political partisanship in Congress. Assuming one accepts the over-simple labels of Democrats always wanting to expand government spending and Republicans always wanting to vote tax cuts—actually, the nature of politics is such that members of both parties tend

to always want both—bracket creep made it easier to find common political ground. Without bracket creep, the political stakes in the eternal battle of the budget are somewhat closer to a zero-sum game.

B. INFLUENCES ON CONGRESS

When all is said and done, what causes Congress to act? The most obvious influences, in varying ratios for each member, would seem to be the desire to effect good policy and the desire to be reelected or otherwise to benefit politically.

Obviously, Congress is influenced by citizen input, especially that of constituents, political supporters, and contributors. Americans have a right to be heard by their lawmakers. The right "to petition the Government for a redress of grievances" is explicitly protected by the First Amendment. While many exercise this right individually, an alternative (or additional) route is to hire professionals to lobby on one's behalf, with the result that lobbyists are key players in shaping legislation.

Professor Surrey served as Tax Legislative Counsel during the Truman administration and Assistant Secretary of Treasury for Tax Policy during the Kennedy and Johnson administrations. In these positions, he observed, and influenced, the process first hand. The brief excerpt from his article focuses on the differences in American tax lawmaking as contrasted to that which might be expected under a more controlled parliamentary system of government.

Professor Shaviro's article asserts that traditional analysis of lawmaking is too shallow. "Public interest"—legislating to make society better—is generally dismissed as naive, the pablum we feed our grade-school children. The dominant view is that lawmaking is actually dominated by "public choice"—essentially, selling legislative action to the highest bidder (typically, not in a form as crass as an actual bribe). Shaviro asserts that legislators typically pursue self interest, but not in the shallow, monetary sense that public choice theory posits.

THE CONGRESS AND THE TAX LOBBYIST—
HOW SPECIAL TAX PROVISIONS GET ENACTED

Stanley S. Surrey


History and Politics

Political considerations naturally overhang this whole area, for taxation is a sensitive and volatile matter. Any major congressional action represents the compromises of the legislator as he weighs and balances the strong forces constantly focused on him by the pressure groups of the country. Many special provisions—capital gains, for one—are caught in these swirling pressures. The

* At time of original publication, Professor of Law, Harvard Law School.
response of the legislator to issues raised by these provisions is like his
response to the general level of tax rates or to personal exemptions, a political
response of considerable significance. It is an important part of the fabric of
political responses which determines whether he will remain a congressman
and whether his party will control Congress. * * *

Separation of Executive and
Legislative Branches of Government

But many of the tax provisions we are considering do not lie at this
political level. They are simply a part of the technical tax law. They are not
of major importance in their revenue impact. But they are of major
importance to the group or individual benefited and they are glaring in their
departure from tax fairness. The inquiry, therefore, must here be directed
toward some of the institutional features in the tax-legislation process which
may be responsible for special provisions of this technical variety. Lacking
direct knowledge, I must leave to others the task of describing the types of
pressure from constituents or other groups which may be operative in a
particular case. While these pressures may explain why the congressman who
is directly subject to the pressures may act and vote for a special provision,
they do not explain why other congressmen, not so subject, go along with the
proposal. We must look for reasons beyond these pressures if we are to
understand the adoption of these special tax provisions. A number of these
reasons lie in the institutional aspects of the tax legislative process.

Basic to a consideration of these institutional aspects are the nature of our
governmental system and the relationship between the Congress and the
executive. A different Governmental structure might give the legislator little
or nothing to say about tax provisions. Under a parliamentary government,
the revenue department retains tight control over the statutory development
of tax law. It is responsive only to the broad political issues that require
decisions of a party nature. Beyond these, the governmental tax technicians
mold the structure, so that the tax lobbyist pressing for special legislative
consideration or the legislator seeking to ease a constituent's problem by
special tax relief is not a significant part of the tax scene. Thus, under the
British practice, finance bills are framed by the Treasury and the Board of
Inland Revenue. The bills are debated in the Committee of Ways and
Means—the entire House of Commons sitting under another name and with
different rules of procedure. Here is an opportunity for anyone sufficiently
concerned, who can persuade a Member of Parliament to voice his proposals,
to have these proposals considered in the debates on the bill. Such discussion
may focus attention on weaknesses in the bill or law, and if the proposal is
considered meritorious by the minister in charge of the bill a change will be
made. But if the government does not accept a member's amendment, party
discipline is such that the minister is always supported and the amendment
defeated. In practice, consequently, finance bills generally emerge in about the
same form as introduced.
The United States picture is quite different, for here Congress occupies the role of mediator between the tax views of the executive and the demands of the pressure groups. This is so whether the tax issue involved is a major political matter or a minor technical point. The Congress is zealous in maintaining this position in the tax field. A factor of special importance here is article I, section 7, Of the Constitution, which provides that “All Bills for raising Revenue shall originate in the House of Representatives.” The House Committee on Ways and Means jealously guards this clause against possible inroads by the Senate. It also protects its jurisdiction over revenue legislation from encroachment by other House committees. When senators and other congressmen must toe the line, the executive is not likely to be permitted to occupy a superior position. Further, a legislator regards tax matters as politically very sensitive, and hence as having a significant bearing on elections. It is no accident that the tax committees are generally strong committees, whose membership is carefully controlled by the party leaders.

The Congress, consequently, regards the shaping of a revenue bill as very much its prerogative. It will seek the views of the executive, for there is a respect for the sustained labors of those in the executive departments and also a recognition, varying with the times, of the importance of presidential programs. But control over the legislation itself, both as to broad policies and as to details, rests with the Congress. Hence a congressman, and especially a member of the tax committees, is in a position to make the tax laws bend in favor of a particular individual or group despite strong objection from the executive branch. Under such a governmental system the importance to the tax structure of the institutional factors that influence a congressman’s decision is obvious.

* * *

BEYOND PUBLIC CHOICE AND PUBLIC INTEREST: A STUDY OF THE LEGISLATIVE PROCESS AS ILLUSTRATED BY TAX LEGISLATION IN THE 1980s
Daniel Shaviro
139 University of Pennsylvania Law Review 1.

Introduction

Just as China in the 1960s had perpetual revolution, so the United States in the 1980s had perpetual income tax legislation. Congress passed historic watershed tax bills in 1981 and 1986. Important, though not historic, packages of tax legislation were enacted in 1982, 1984, and 1987. * * *

Even more peculiar than the rapid pace of 1980s tax legislation was the wildly erratic and cyclical nature of tax policy. In this country, tax policy tends to take either of two forms. First, under what I call an “instrumentalist”
approach, tax law ostensibly serves social and economic policy goals (for example, increasing productivity, home ownership, or competitiveness) by providing preferential treatment for selected types of income. This approach is characterized not so much by a fixed agenda as by a willingness to use the tax system to pursue a broad array of goals. Second, the approach that in the last forty years has captured the label "tax reform" aims to tax different types of economic income more equally and to prevent high-income taxpayers from entirely avoiding significant tax liability.

Although tax legislation has shown cyclical tendencies since the early days of the federal income tax, the problem reached a new level in the 1980s. In the entire history of the income tax system, the 1981 Act was the high water mark of tax instrumentalism. It provided tax incentives on a previously unheard of scale, through provisions such as sharply accelerated depreciation for capital equipment, universal individual retirement accounts (IRAs) and other savings incentives for individuals, and a host of benefits for particular industries. By contrast, the 1986 Act was the all-time leading example of tax reform. It eliminated longstanding tax preferences such as the partial exclusion for capital gains (in existence since 1921) and the investment tax credit (in existence for all but two years since 1962). Moreover, it contained an array of provisions that impeded efforts by high-income taxpayers to eliminate entirely their tax liabilities through the use of remaining preferences. Now in 1990, Congress is considering a return to instrumentalism, through restoration of a capital gains preference and savings incentives similar to those eliminated in 1986.

The oscillating congressional approach would be less surprising if it had resulted from changes in the political landscape; for example, if tax instrumentalists had been defeated in the mid-1980s and then restored to power at the end of the decade. Yet, for the most part, this has not been the case. For example, President Reagan and Congressman Rostenkowski (the chairman of the Ways and Means Committee) played critical roles in shaping both the 1981 and the 1986 legislation. Senator Packwood, in 1986 the chairman of the Senate Finance Committee, started out "sort of liking" the highly preferential post-1981 law just "the way it [was]." He then spearheaded the dramatic 1986 changes, but more recently has championed the restoration of tax breaks that, as chairman, he helped eliminate.

How can such erratic behavior by both institutions and individuals be understood and explained? While the tax context may be important, the question also raises fundamental issues about politics and the legislative process. This Article will therefore examine various theories concerning why Congress legislatess, evaluating them both in general and as explanations for the recent course of tax legislation. My goal is to provide both a specific case

study and a broader positive account of the institutional forces that shape legislation, using each to illuminate the other.

To organize the discussion, I will focus on what are currently the two dominant approaches in the legal and economic literature. First, there is public interest theory, under which the government attempts to improve the general welfare, for example, by financing public goods and correcting instances of market failure. Conceived somewhat more broadly, the public interest view emphasizes the importance of ideology and the desire to make good policy, which are seen as motivating legislators to seek to improve society (according to their perhaps controversial notions of what is good). As I will show, public interest theory has been powerfully challenged in its narrow form as lacking a causal mechanism and failing to explain actual government behavior. In its broader form (relating to ideology), the view has received some empirical support, but seems to over-predict the coherence and stability of legislative policy-making.

Second, there is a branch of public choice theory called the economic theory of regulation. This view holds, in brief, that legislation (along with other government action) is a product supplied to well-organized interest groups that are struggling to maximize the incomes of their members, often at the expense of the less well-organized. In effect, legislation is sold to the highest bidder, with bids being paid in the currency of votes, campaign contributions, and personal benefits such as honoraria. As I will show, this view has some explanatory power, but in its strongest form is not only theoretically implausible but has been empirically refuted in an extensive political science literature that public choice writers simply ignore. Public choice theory flattens the motivations and overlooks the independent influence of both politicians and the general voting public. Its explanation of why interest groups often succeed in “rent seeking” (securing transfers from the general public that are negative-sum for society) turns out to be merely one application of a broader principle: that government policy tends to provide visible benefit in exchange for less visible (even if unduly high) cost. Finally, public choice theory fails to explain fully not only the 1986 Act, where special interest groups were generally the big losers, but also the 1981 Act, where such groups were unusually big winners.

The problems with public choice theory have recently begun to attract critical attention. Unfortunately, however, many of the theory’s critics, unable to imagine any third alternative to public interest theory and public choice theory, have seemingly assumed that, to the extent one of the two theories is false, the other must be true. If and when legislation is not just rent seeking by interest groups, it must be altruistic, socially beneficial, or a source of

18. For convenience and following common usage, I will call this “public choice theory” although my comments will not apply to any branch thereof apart from the economic theory of regulation.
immense public satisfaction. As I will show, however, this panglossianism is neither logically nor empirically supportable. The foes of public choice theory, like its friends, fail to understand how self-interested political behavior apart from wealth maximization shapes legislative outcomes.

Public interest and public choice writers, because of their shared failure to consider the implications of self-interest aside from wealth maximization, make an assumption that often turns out to be false. They assume that legislation is primarily directed to some substantive end and intended to have particular real world effects (whether improving society or enriching a particular group). In fact, politicians' claims to intend real world effects are often a pretext, rather than a serious effort. Even if legislation nonetheless has substantial real world effects, from a subjective standpoint these may be incidental.

In many cases, Congress legislates because its members and others who influence it value and benefit from the activity of legislating. The reasons for such behavior can be divided into two categories. First, proposing and enacting legislation is a means of symbolic communication with members of the general public, of causing them to like a politician without the inconvenience (and possible political inconsequence) of actually having to benefit them tangibly.25 Thus, without regard to its actual effects, legislation can promote reelection. Second, succeeding legislatively is a means of exercising and demonstrating one's power. It is inherently gratifying (as when an emperor enjoys seeing statues of himself), and it increases one's prestige and status in political circles. Thus, without regard to its actual effects, legislation can promote self-interested goals apart from reelection.

To the extent that one seeks to legislate for reasons apart from anticipated real world effects, it may be enough that the stated goal of legislation is superficially plausible and relates to areas of public concern. The proponent need not invest much effort in considering whether the legislation actually will do what it promises. Any such assessment is difficult in any case, but even where possible it may be politically unimportant.

The various views of the legislative process that I have outlined are not mutually exclusive. Indeed, all can apply simultaneously, and only a complex multi-factored approach can begin to do justice to the underlying reality. I will argue, however, that the particular factors I emphasize—voters' taste for symbolism and politicians' taste for power and prestige—are extremely important yet have largely been ignored by previous commentators. These factors indeed are dominant as explanations of recent tax legislation, where other causal factors have reduced importance due to the muddiness of

---

25. The classic work concerning this type of political behavior is M. Edelman, The Symbolic Uses of Politics (1964); see also C. Elder & R. Cobb, The Political Uses of Symbols (1983) (describing the role of symbols in political activities).
ideological cleavages in taxation and the severe limits to both the public's and politicians' understanding of tax issues. Under the particular historical circumstances of the 1980s, the principal effect of the symbolic and prestige factors on tax legislation was to create the legislative equivalent of "churning" a portfolio account. Since both of the dominant opposing policies (tax instrumentalism and tax reform) sounded appealing, but only the one less recently tried could be presented as a bold new departure, Congress shuttled back and forth between them. I will suggest, however, that these factors need not always lead to alternating tax reform and tax instrumentalism. They can lead just as easily to one instrumentalist bill after another.\textsuperscript{c} ***

\textbf{The Public Interest Theory of Legislation}

\textbf{The Various Strands of Public Interest Theory}

In contemporary law and economics literature, the public interest theory of legislation is little more than a strawman. Writers describe it as an old-fashioned and now universally rejected school of economic thought, discuss it very briefly, and then move on to the real (public choice-based) discussion. The term is nonetheless useful because it describes a basic attitude, involving optimism about the legislative process, that in sympathetic hands often has specific content. ***

\textbf{Criticisms of Public Interest Theory}

One could not sensibly assert that the public interest view of American politics is wholly false. Surely the government does many things that increase social well-being, such as maintaining public roads, enforcing contracts, and deterring violent crime and foreign invasion. Moreover, the political system reflects and responds to the public's wishes, at least in the extreme sense that no one proposing the policies of a Pol Pot or a Nicolae Ceausescu would have good prospects of sustained electoral success. Disagreements with the public interest view are in part a matter of degree\textsuperscript{**}, as well as of emotional predilection regarding whether to focus on the system's elements of success or failure.

Nonetheless, the public interest view has been criticized on theoretical and empirical grounds for misapprehending both the balance between good and bad and its underlying causation. ***

\textit{(Largely Empirical) Criticisms by Political Scientists}

In recent years many political scientists, like economists, have become skeptical of the pluralist/public interest view of legislation. This skepticism arises principally from empirical studies of who interest groups represent and how interest groups participate in the legislative process. The pluralists'
optimism about the balance and universality of group representation in Washington is contradicted by substantial evidence. **

Schattschneider's *** classic study of interest group lobbying on the Smoot-Hawley Tariff demonstrated that business groups seeking high tariffs were virtually unopposed by those (such as consumers) who would have benefited from low tariffs. Instead of pluralist competition, he found a pattern of pervasive logrolling, whereby business lobbyists agreed to "reciprocal non-interference," or support for each other's high tariff demands. If one group sought a tariff on items that a second group needed to purchase, the second group would settle for a "compensatory duty" on its own products. Thus, the legislative process was a positive sum game for its participants, and probably a highly negative sum game for the country as a whole.

***

The Public Choice Theory of Legislation

Overview of Public Choice Theory

In the law and economics literature, the perennially favored alternative to public interest theory is public choice theory. In its broadest sense, public choice theory is simply the economic study of nonmarket (i.e., political) decision-making. At this level of generality, it requires no stronger assumption than that people act rationally in light of their objectives, whatever these may happen to be. Following common usage, however, I will use the term "public choice theory" to describe what is actually a sub-genre, sometimes called the economic theory of regulation. As we will see, this sub-genre makes considerably stronger and more questionable assumptions.

In the words of Fred McChesney, "the essential insight of the economic model is that, like any other good or service, regulation [i.e., legislation] will be provided to the highest bidder." The sellers are legislators, and they are paid in votes, campaign contributions, and personal benefits such as honoraria and free vacations. The buyers, drawing on the economic theory of groups, are organized interest groups seeking wealth transfers.

McChesney's "essential insight" has a certain rhetorical force. If we assume that everything else in life works a certain way, why should politics be any different? As other public choice writers have put it:

The point is that there is no bifurcation of personality as between our "political" and "private" selves. We do not seek to satisfy the "public interest" when we vote and the "private interest" when we buy groceries. We seek our "self-interests" in both cases. **

Unfortunately, this argument is somewhat misleading. Public choice theory does not automatically follow from accepting the continuity between our

B. INFLUENCES ON CONGRESS

public and private selves. Take the basic analogy to a market where people buy and sell items such as groceries. This market has two important attributes: specific goods to be bought and sold, and the use of money as a uniform medium of exchange. Standard economic analysis, such as the drawing of supply and demand curves, does not require making theoretical assumptions about what goods people want (i.e., what nonmonetary preferences they bring to market). It assumes only that, once in the market, they generally try to do as well as possible in monetary terms. All else being equal, buyers try to pay as little, and sellers to receive as much, as possible. This assumption seems eminently reasonable. Nonmonetary preferences are not being denied; they merely have little effect at this stage of the process. Thus, the economic model of a market does not (to quote a standard criticism of economists) "posit . . . [a] shallow and incomplete . . . caricature" of human nature as concerned only with narrow material gain.

Now consider politics. Here we have a "market" where the goods are unspecified unless we make assumptions about people's preferences. Voters, for example, may care about ideological or symbolic issues that have no direct bearing on their monetary interests. In voting, they are deciding what to buy, not how much to pay, since each voter has but one vote and cash sales of votes are discouraged. Politicians similarly may care about ideological or symbolic issues that have no direct bearing on their monetary or professional interests. Although public choice classifies them as "sellers" of legislation, there is no theoretical reason why they may not want at times to "buy" particular outcomes. Even treating politicians purely as "sellers" who seek to maximize professional self-interest, we encounter a further difference between politics and the standard private market. In politics, despite the importance of money, there is no uniform medium of exchange, unless we simply assume that money is all that politicians want, as opposed to, say, power, prestige, and flattering press coverage (either as ends in themselves or as useful for reelection).

Public choice theory ignores these problems with the analogy to a private market, and treats monetary exchange between interest groups and politicians as all that matters. The public is not only ignorant but irrelevant. Interest groups are all-powerful and concerned purely with monetary wealth. Politicians are not only self-interested but narrowly so; they are literally for sale. By viewing politics so reductively, public choice theory begins to look like the "shallow and incomplete" caricature of human nature expected by critics of economists. Good economic analysis takes people's preferences as a given and asks what consequences will follow from them, assuming only means-ends rationality. Public choice theory instead makes crudely reductive assumptions about the preferences that people actually have. It is as if one predicted that

---

people will buy only healthful and nutritious groceries, or will not pay anything extra for Cadillacs with tail fins.

I should clarify that this is much too harsh for the best public choice writers—who principally teach in economics departments rather than law schools. **

Much public choice writing, however, particularly from law schools, comes considerably closer to the "crude caricature." As we will see, it thereby falsifies not only human nature, but observable facts about the legislative process. **

** What Public Choice Theory Omits

*** [Public Choice Theory] needs to be supplemented, not abandoned. To improve public choice theory, we need a more systematic account of how and why it fails to explain legislative politics. This section will discuss the theory's shortcomings and the principal factors that it omits. Though only a complex and multi-faceted approach can achieve reasonable descriptive accuracy, two factors are particularly important: voters' taste for symbolic legislation and politicians' taste for power and prestige. Under circumstances of high publicity, these factors can easily outweigh interest group politics.

** Voters

Public choice theory treats voters as narrow profit-maximizers who, due to information costs and collective action problems, remain rationally ignorant and thus politically irrelevant to the extent they are not organized into interest groups. The view, however, runs into an immediate logical problem. The rational voter that public choice theory posits would find the act of voting to be irrational, even assuming full knowledge about the candidates and issues. Given the arithmetical unimportance of any one vote, even if the election's outcome is very important, the expected monetary gain from voting in one's interest is almost infinitesimal and the costs of voting (such as the expenditure of time) seem clearly greater. In view of the adverse cost-benefit tradeoff, the fact that millions of people vote is paradoxical to many public choice writers, as is the fact that better-educated voters, whom one would think more likely to be aware that voting is "irrational," vote more than others.

As the best public choice writers have come to recognize, the paradox suggests that voting is based, not on narrow self-interest, but on consumption motives, typically involving symbolic or expressive behavior. Voters "buy" ideological, emotional, or moral satisfaction in the course of satisfying what they may regard as a civic duty, at an individually low cost even if voting conflicts directly against their narrow interests. The satisfaction is derived from the vote itself, as distinct from the electoral outcome, and thus is a strict private good unaffected by its arithmetical unimportance or by collective action problems.

The low value of a single vote provides only one reason for questioning the rational voter model. Consider as well the significance, described by Murray Edelman, of politics' status as a "spectator sport." ** Emotional involvement is facilitated by the fact that, even if one's interest in politics
remains low, much information (both true and false) may come one’s way casually, as when one watches the local news during dinner or glances at newspaper headlines.

***

Given both the arithmetical unimportance of a single vote and voters’ emotional involvement, politics evokes behavior far less centered on narrow wealth maximization than does a private market, even though voters, presumably without schizophrenic personalities, participate in both. Some critics of public choice theory see politics as a realm of greater altruism, where people sacrifice their own interests in order to act properly towards others. This conclusion does not necessarily follow, however, from the lesser importance of monetary self-interest. It depends on what preferences people substitute for wealth maximization.

***

A further aspect of voter behavior apart from altruism arises from the pervasive role of television in bringing prominent national and local politicians into people’s living rooms on a regular basis. The false intimacy created can lead voters to identify with and support a politician on much the same basis as the star of a dramatic television series. *** Gary Orren thinks politics has “more in common with religion than with economics.”357 In an age of weak party allegiances and high focus on personality, with frequent ticket-splitting, numerous independent voters, and an increasingly fickle electorate, a better analogy may be to the entertainment industry.

In summary, the public choice model of voters as narrowly self-interested profit-maximizers seems inaccurate. It confuses low information with no information and ignores important motivations apart from narrow self-interest. To understand more fully the systematic implications of these inaccuracies, it is necessary to examine some of the other descriptive shortcomings of public choice theory.

Politicians

***

If politicians are as exclusively “money-mad” as McChesney posits, one wonders why they have chosen politics as their profession. Elected positions often pay less than the available private sector alternatives, in addition to bringing long hours and relative job instability. The politician who seeks to supplement her income through private arrangements may risk disgrace and even prison, as numerous congressmen and senators have learned in recent years. Moreover, while politics can pave the way to a more lucrative career (such as lobbying), many politicians remain in the business long past the point of maximizing their lifetime earnings potential.

This is not to deny the extreme importance of money in politics, as both a direct goal of politicians and a means of winning reelection. To replace the

public choice account with one that is more realistic, however, we must look more closely at politicians' objectives.

Politicians' Varied Motives

To the extent that one can generalize, what sort of people are politicians? Many contemporary observers agree that politicians approach "each new situation and each other [person] with the simplest question: What can this do for me?"

One senses the voice of envy in some of this. Yet even more sympathetic observers agree that politicians generally are motivated to an unusual degree by what is variously described as a "desire for attention and adulation," "intense and ungratified craving for deference," "ache for applause and recognition," and an "urge for that warm feeling of importance." Thus, self-interest is agreed to be extremely important to politicians, but not primarily the narrow monetary self-interest emphasized by economists. (It is of course likely that some politicians fit the public choice model, and one would expect to find broad variation among individuals' motives.)

These impressionistic accounts of politicians' motives are confirmed by empirical studies of the U.S. Congress. Perhaps the best two such studies, based on extensive confidential interviews, are Richard Fenno's Congressmen in Committees ([1973]) and John Manley's The Politics of Finance: The House Committee on Ways and Means ([1970]). Fenno found that three goals espoused by House members are "the most widely held and the most consequential for committee activity." They are (in no particular order of priority): (1) reelection, (2) "influence" within the House, meaning power and prestige, and (3) good public policy. Manley documented the preeminence of the second of these goals, power and prestige, among members of the Ways and Means Committee.

Of the three goals cited by Fenno, reelection, while obviously a prerequisite to all else, is not a serious problem for everyone. Incumbents win reelection well over 90 percent of the time (at least in the House), and some incumbents, being stronger than others, are particularly safe. While incumbents' success results in part from their doing what they have to do, the high success rate does suggest some freedom to pursue goals other than reelection. Such freedom is particularly great for many senior members in leadership positions. Their seniority is both evidence of electoral strength and a source of strength, while their leadership positions help make influence and policy both more important and more attainable as goals.

Beginning with power and prestige, its implications obviously depend on the context. For a leader, such as the Speaker of the House or a committee chairman, it often depends on winning legislative victories. Wilbur Mills, the

---

B. INFLUENCES ON CONGRESS

Chairman of the Ways and Means Committee from 1958 to 1974, who never lost a tax bill on the House floor, seemingly regarded his "aura of invincibility" as more important than the content of legislation. To this end, he practiced "followership," extensively consulting his colleagues so that he could supply the legislation that they wanted. ***

For members not in leadership positions, the routes to power and prestige are more varied. A member can gain status by introducing ideas that become widely discussed, whether or not the ideas are enacted. Examples include tax reform, which benefitted Senator Bradley and Congressman Gephardt even before enactment became plausible. *** With the increased popularity of TV talk shows such as "Nightline" and "20/20," along with C-SPAN's full-time coverage, one can pursue a career as a television celebrity, although at the risk of gaining an inside reputation as a "show horse" who is all talk and no action.

In the struggle for power and prestige, interest groups can help a member. They can provide the political support that is crucial to winning a legislative contest. *** It seems clear, however, that interest groups are relatively less important in the quest for power and prestige than they are with regard to fund-raising. Ideas, for example, emanate far more from government insiders and academics than from interest groups. The political salience of an idea, as with tax reform, often varies positively with it being hostile to what the media perceives as the "special interests." Thus, interest groups are far less powerful and important in a world where members compete for power and prestige than in a world of McChesneyian money monsters.

Now consider the goal of making good policy or furthering one's ideology. This goal is so important, according to some studies, that ideology is a better predictor of legislative voting behavior than economic interest variables. Moreover, there is anecdotal evidence that members often derive great pleasure from putting ideas into action and having an effect on society. Again, while interest groups can help a member (for example, by exploiting an ideology that serves their purposes, or suggesting workable legislative proposals), their dominance is far less than in fund-raising.

*** In today's Congress, seemingly everyone wants to be an influential policy-maker. As one member put it, "Congress exists to do things. There isn't much mileage in doing nothing."400 Members often want to participate in making policy to a far greater extent than they know what they want to do. Moreover, those who favor activism in a particular area tend to be the ones who seek and get the committee assignments in that area. What results is a bias in favor of action over inaction, a reluctance to consider carefully the merits of legislation (which become subordinate to one's own or one's colleagues' personal investment in it), and a tendency to legislate for legislation's sake. ***

What is true of members of Congress is true as well of a vast array of other "players" in the Washington political community. Like congressmen, congressional staffers, cabinet members and other executive branch political appointees, career bureaucrats, lobbyists, self-styled public interest advocates, journalists, academics, and intellectuals affiliated with think tanks often push for legislation motivated by both desire for influence and concern about policy, as well as sheer enjoyment of the political game.

Politicians' Means of Pursuing Re-election

An important factor in support of the public choice writers' claim that Congress cares only about money is the vital link between campaign financing and re-election. Fund-raising has become increasingly important in recent years.

The inaccuracy of the claim that members literally sell legislation is by no means fatal to a claim of interest group dominance driven by campaign financing. For example, even if members honestly do what they think is right, the political equivalent of natural selection might ensure that only people who agree with interest groups win elections. We also should not underestimate the capacity of a human being to persuade herself that action in her self-interest also happens to be right—especially since members often only hear the interest group's side of the story, and even in good faith may be swayed by feelings of obligation or gratitude towards contributors.

Yet the implications of campaign financing for interest group politics can easily be overstated. Only a small fraction of the money spent on lobbying takes the form of contributions to candidates—suggesting surprising inefficiency or irrationality on the part of interest groups if campaign financing is the unique engine of legislative success. Moreover, PAC contributions (often an important vehicle of interest group influence) are but a part of the campaign financing universe.

Even more significantly, campaign financing is only one factor among many that affects reelection and other factors may dilute or even counter interest groups' influence. Perhaps the most thorough study of how members pursue re-election is David Mayhew's *Congress: The Electoral Connection*. Mayhew finds that members engage principally in three kinds of activities in pursuit of re-election. The first is *advertising*, or "disseminating one's name among constituents in such a fashion as to create a favorable image but in messages having little or no issue content." The second is *position taking*, or "the public enunciation of a judgmental statement on anything likely to be of interest" to one's audience, often without regard to actual legislation. Finally, members engage in *credit claiming*, or "acting so as to generate a belief... that one is personally responsible for causing the government, or some unit thereof, to do something... desirable." A variation of credit claiming is blame

---

415. D. MAYHEW, CONGRESS: THE ELECTORAL CONNECTION 5 (1974) (arguing that congressmen can usefully be viewed as "singleminded seekers of reelection").
avoidance, or deflecting perceived responsibility for unpopular government action.

Each of these activities lends importance to factors apart from interest group influence. * * *

**Organized Interest Groups**

The public choice view of organized interest groups is as narrow and stereotyped as the public choice views of voters and politicians. An interest group ostensibly consists of rational profit-maximizers, cooperating to seek transfers from the rest of society because for each participating individual the expected marginal benefit of cooperating exceeds the expected marginal cost.

**Several empirical studies have revealed** * * * that, like so much else in politics, the groups respond to more than narrow monetary motives. Interest group rank and file members are in some ways like voters. They join for a variety of reasons, including not only narrow self-interest (i.e., expected economic benefit from successful lobbying and demand for goods like trade magazines), but also what James Q. Wilson calls solidary and purposive incentives: the social and status pleasures of belonging to a cohesive group, and emotional attachment to a group's political goals. They do not closely monitor their leaders' activities, and can be kept in line through symbolic behavior such as position-taking. Interest group leaders exploit their own resulting freedom to pursue a combination of goals resembling those held by members of Congress, i.e., institutional survival (the equivalent of reelection), ideological goals that their members may not share, and the desire for power and prestige within the Washington political community. This observation suggests once again that legislation reflects considerably more than the narrowly economic goals emphasized by public choice theory.

**The Media**

* * *

The media is more than a passive purveyor of information, however. Its reporting tends to have various predictable biases, perceptual if not partisan. For example, it focuses on personalities and political “horse races” to a far greater extent than on ideas. The media often portrays politicians as unprincipled power-seekers, and challenges front-runners and incumbents in particular. Perhaps most importantly, in the interest group context, the media has a longstanding populist and muckraking tradition, rooted in reporters' personal beliefs and professional self-images as well as in their sense of what makes a good story. This tradition includes both a love of political scandals and supporting the “little guy” over the establishment.

* * *

Thus, the media is potentially a powerful ally of policy entrepreneurs who take positions against what are deemed special interests. Reformers like Bradley, and (once they adopted reform roles) Rostenkowski and Packwood, can develop a symbiotic relationship with the media: they give it a good story,
and in return it both portrays them favorably and lends powerful support to their side of the struggle. ***

**Ideas and Ideology**

The critical importance of ideas and ideology is one of the most difficult aspects of politics for most public choice writers to appreciate. A mechanical view of wealth maximization has the appeal of a pseudo-science, purporting to unmask underlying realities and ostensibly leading to testable theorems and predictions. Yet the truth, of course, is that people often like ideas, find them interesting, and believe in them, with the result that ideas matter a great deal. ***

**Implications of the Factors Apart From Interest Group Influence**

For the reasons described above, members of Congress in enacting legislation both have considerable leeway and are subject to significant constraints apart from interest group influence. Specifically, members of Congress seek reelection, power, prestige, and ideological goals in a world where ill-informed voters are subject to symbolic responses and where the media can exercise great and often populist influence. Beyond these broad generalizations, the details of legislative behavior are inherently unpredictable. In particular, the incentives for policy entrepreneurship can stimulate any number of responses. An example is taxation, in which one may gain either by being a reformer who opposes interest groups or by championing tax instrumentalism.

The choice of how to seek success as a policy entrepreneur is controlled by the individual legislator. Members of Congress may seek the approbation of their colleagues, the media, the Washington political establishment, or the voters in any number of ways. No abstract model, whether narrowly economic or otherwise, can predict in detail either what proposals will be made at any time or which ones will succeed. Fortuity and the choices made by a small number of idiosyncratic individuals simply play too large a role here. ***

While the content of legislation is difficult to predict, the likelihood that there will be a lot of it seems clear. In particular, the sheer number of different persons and institutions seeking legislative influence, yet bearing little political accountability for the real effects of their actions, promotes a dangerous lack of restraint and discipline. As compared with the opposite extreme of a centralized parliamentary system, the current system may tend to yield more aggregate legislation, rather than less (as one might think from the need for more extended bargaining), because so many different "players" must get to do something. The resulting legislation may be less unified and coherent than under a centralized parliamentary system. ***
B. INFLUENCES ON CONGRESS

Application of the Broader Model to Tax Legislation

By now, we have seen not only what is wrong with public choice theory, but how the 1986 Act won enactment. The public was known to be dissatisfied with the income tax system, largely due to increased real tax burdens (because of bracket creep), growing discontent with government performance, and widely publicized instances of tax avoidance by wealthy individuals and large corporations. The political benefits of responding to this dissatisfaction and the intellectual appeal of tax reform, attracted policy entrepreneurs in Congress and then (more fortuitously) in the Reagan Administration. Once Reagan had made tax reform a cornerstone of his second term, additional forces went to work. Congressional leaders such as Rostenkowski and Packwood found that as leaders in the public spotlight, they had powerful incentives to support tax reform vigorously. The media's populist reporting of the issue pressured committee members to fall in line. *** The incentives of the Democratic and Republican parties first to claim credit for enacting tax reform and then to avoid the blame for killing it contributed to approval by both houses, and also helped ensure the success of an acrimonious House-Senate conference.

Fitting this analysis into the model of congressional behavior that we have developed, we find that the goals of enhancing reelection, prestige, and ideology all played a role.

***

Some Broader Implications of Going Beyond Public Interest Theory and Public Choice Theory

***

Electoral and Other Systemic Reform

***

To bring fundamental, not just marginal, improvement, there really is no substitute for the unlikely prospect of the voting population becoming significantly better educated, better informed, more public-spirited, and more interested in politics. Still, since law generally aims at the margin, it is worth considering a few possibilities.

Campaign Financing and Expenditure Reform

The understanding that legislation is not in a simple sense “for sale,” and that campaign financing is only one of many potentially distorting pressures, does not contradict the need for limiting campaign financing or expenditures.

***

It may well be that public financing of all campaigns for federal office, at a high enough dollar level to dilute incumbents' advantages and induce most candidates to renounce private financing, would improve the legislative process. The analysis in this Article suggests, however, that such a reform might change the process less than many people expect.
Power of Congressional Leadership and Parties

A second direction for reform would *** enhance the power of the congressional leadership, on the theory that such a change will at least marginally improve the legislative process.[1] John Witte has suggested reversing the 1974 congressional reforms, and in particular increasing the chairperson’s power, reducing the size of key committees, reinstating and extending closed rules (barring floor amendments) to the Senate, and restricting open committee sessions (where the public, which usually just means lobbyists, can observe the proceedings) to the early stages of legislation under consideration.518 These proposals are supported by the analysis in this Article, despite the unpredictability of how leaders will exercise power.

A related type of reform would seek to increase the power exercised over members of Congress by their political parties by, for example, directing public financing to the parties or moving towards a parliamentary system. ***

Both increasing the power of the congressional leadership and strengthening the parties would tend to centralize the exercise of legislative authority, and to remove some practical checks and balances that are Madisonian in principle although not constitutionally mandated. The logical endpoint of moving in this direction would be to reject even the constitutionally mandated separation of powers and adopt a parliamentary system of party government. ***

Depoliticizing Particular Decisional Areas

A third direction for reform, also suggested by John Witte, reflects greater despair about the legislative process. Witte proposes that authority over the tax system be insulated from politics through delegation to administrative bodies or executive agencies. He notes that tariff law was similarly depoliticized in the 1930s through legislation empowering the President to negotiate tariff changes that could then be implemented through executive order. This proposal may raise concerns about elitism versus popular government as well as the danger that interest groups will “capture” the new decision-makers. If limited to areas where legislative parochialism seems particularly acute (for example, control over the placement of military bases), and if insulated from direct presidential control, it might, however, be beneficial.

For taxation, this delegation model is already followed interstitially. Congress often grants the Treasury extensive authority to prescribe regulations giving flesh to a vague and conceptual provision. Broader reliance on delegation seems unlikely. ***

518. J. WITTE, THE POLITICS AND DEVELOPMENT OF THE FEDERAL INCOME TAX at 381-82 (1985) (arguing that the 1981 Act “was unique only because it was extreme, not because it established new trends in tax legislation”).
B. INFLUENCES ON CONGRESS

Notes and Questions

3. In many ways Professor Surrey’s 1957 article reads as though it were written last week, but it should be remembered that it was written in a different tax world. The top marginal individual income tax rate exceeded 90 percent at that time; by contrast, since 1986 the top nominal rate has continuously been less than 40 percent. Rate reduction has been the most important consequence of tax legislation during the past 50 years. This change not only reduces the equitable appeal of a taxpayer asking for relief, but it lowers the stakes: a taxpayer presumably is more concerned about petitioning Congress to avoid a tax of 90 percent than a tax of 35 percent.

4. Is the “loophole” label a useful tool for tax policy analysis? Should the term be reserved for unintended glitches in the law, or should it encompass intentionally-enacted special interest provisions? (As Professor Surrey observed in a portion of his article not excerpted, the beneficiaries are likely to view the “loophole” as “relief from special hardship.”)

5. Is it reasonable to assume that tax provisions are unfair if they apply only to specified groups, particularly small groups?

6. Professor Surrey compares the American system for legislating taxes to the British parliamentary system, where the executive branch and the legislative branch are not separate and revenue bills pass through Parliament virtually unscathed. Would we have a better income tax if we had a parliamentary form of government?

Lobbying

7. Most obviously, lobbying means attempting to influence legislation by dealing directly with members of Congress. But lobbying objectives also are accomplished by communicating with congressional staff, Treasury staff, and, occasionally, with Revenue Service personnel. In a broader use of the term, lobbying includes attempts to persuade the public directly—grassroots lobbying.

At least in theory, input from affected taxpayers and their representatives should improve the process. Citizen input informs legislators about political acceptability of proposals in the best sense of the term. Lobbying can also add to the knowledge of decisionmakers. For example, taxpayers who will be affected are likely to be better informed than members of Congress concerning the impact of a complex legislative proposal, and may make legislators and their staff aware of unintended consequences.

8. The expense of most lobbying activity—whether direct or grassroots—would fit within the broad ambit of “ordinary and necessary” business expenses. The deductibility of lobbying expenses has varied over the
years, however. Originally, Congress did not deal explicitly with the issue. Deduction of expenditures to influence legislation was denied by regulation, which the Supreme Court upheld against a challenge that it was inconsistent with the Code provision allowing deduction of ordinary and necessary expenses. In 1962, Congress enacted section 162(e), which allowed deduction of certain lobbying expenses as business expenses. No deduction was allowed for expenditures on grassroots lobbying.

In 1993, section 162(e) was amended to deny deduction of lobbying expenses even when they constitute ordinary and necessary business expenses. (Section 162(e)(5)(A) makes clear that business expenses of conducting the business of lobbying on behalf of others remain deductible.)

9. Is there any justification for treating lobbying expenses differently from other expenses of carrying on a trade or business?

10. Suppose Macbeth, a real estate developer, lobbies the state legislature to repeal a law that blocks his plans to subdivide Burnham Wood into quarter-acre lots for single family dwellings. Suppose McDuff, an individual with no business interest in the matter, is dismayed by Macbeth's proposal because he likes to walk through Burnham Wood to escape the noise of the city. Clearly McDuff cannot deduct any expenses he has in lobbying the state legislature by using ecological arguments on the issue because, for him, the expenses are personal and not business-related. Should Macbeth be able to deduct his lobbying expenses?

11. What of the distinction between grassroots and direct lobbying? If expenses of grassroots lobbying were deductible, could the Service readily distinguish between deductible lobbying expense and nondeductible political contributions? If the expenses of grassroots lobbying were not deductible, could the Service distinguish between deductible advertising expense and nondeductible lobbying?

"Public interest" and "Public choice"

12. What is meant by the "public interest" theory and by the "public choice" theory as explanations of the legislative process?

13. Do you agree that public interest theory gives a less satisfactory explanation of the legislative process than does the dominant public choice theory?

B. INFLUENCES ON CONGRESS

14. The public choice theory—"rent seekers" effectively buying the legislation they want—is dominant, but Professors Edward McCaffery and Linda Cohen suggest that it may work in reverse as well:

The traditional view of politics features the special-interest model, given full academic dress in 1965 by Mancur Olson in his classic work, The Logic of Collective Action. * * * [T]his now-standard view maintains that small groups with high stakes in political action get formed and come to the power centers, relentlessly lobbying legislators to get their way. * * *

Legislators are rational people, and they want and need money. Rational people who want and need money and who have power will use that power to get money. Congress has extremely important powers over taxing, spending, and regulating. Rather than wait for special interests to come to them, we suspected that rational legislators would prospectively solve the Mancur Olson problems, using their agenda-setting abilities and other tools to create and perpetuate issues of high stakes to small groups.

We found a prime example in the saga of estate tax repeal/non-repeal. * * * Here was an issue with small groups, high stakes, two sides, and plausible long-lived action. Sure enough, Congress has strung the issue along, repeatedly voting before resolving anything, and showing that it could kill, or not, the tax. All the while, money has poured into its coffers. Further examples abound. * * * The telltale signs are repeated votes over issues without sensible compromise ever obtaining. It looks like partisan bickering, but it is not. To those who know how to look for it—it can be well hidden—there is money, money everywhere.*

15. Professor Shaviro argues that government will consistently provide benefit that is visible (especially if literally visible, on television) in exchange for greater, but less visible, cost. Do you agree?

Is the post-9/11 response, such as Congress granting unlimited compensation to all those injured or killed, an example of this reaction? (Obviously, the 9/11 victims were blameless and suffered, but could that not be said equally of most victims of crime? Of almost all victims of cancer? Of all victims of birth defect? Was the controlling difference in these cases the degree of suffering, or the degree of national attention to the suffering?)

16. Shaviro makes a strong argument that money cannot account for the actions of members of Congress, because most could make more money, and work less, by leaving office to assume other positions (frequently, as lobbyists).

---

This argues against acceptance of at least the more crass forms of public choice explanation for tax legislation.

17. If we reject the narrow public choice theory, must we accept the view that the process is run by disinterested statesmen acting in the public interest? Shaviro argues not, asserting that much legislative action is motivated not by a desire to achieve any substantive end—either to benefit the public (public interest theory) or to benefit financial supporters (public choice theory)—but simply by a desire to engage in the process of legislating. What benefits might flow to a legislator from simply engaging in this process?

18. Professor Shaviro argues that narrowly self-interested voters, even with much at stake in the outcome of a national election, would act rationally by not bothering to vote. Why not?

19. Do you agree with the characterization of politics as a form of “spectator sport,” in which the media and the voters are more focused on scandal and competition itself (the “horse race”) than on the substance?

20. Shaviro suggests a parallel between politics and the entertainment industry. As evidence, one might point to the 2008 campaign, in which the bulk of the attention was focused on the Democratic Presidential candidate (Obama) and the Republican Vice-Presidential candidate (Palin). As compared to the relatively bland McCain and Biden, these two were younger, more photogenic, more charismatic, had more interesting life stories, and, perhaps most important, were novel in terms of race and sex. It might be argued that these factors would seem more relevant in casting a movie than in filling the White House.

21. Professor Shaviro notes the rapid vacillation between “instrumentalist” tax statutes, of which the Economic Recovery Tax Act of 1981 was the high-water mark, and “reform” measures, of which the Tax Reform Act of 1986 was the apogee. He concludes that “[w]hile the content of legislation is difficult to predict, the likelihood that there will be lots of it seems clear.” Do you agree?

22. Professor Shaviro’s analysis and that of Professor Surrey seem to converge on the point that our disparate set of power bases creates a less cohesive system, and a less stable law, than would be the case under a parliamentary system. In Britain, for example, the government by definition controls majority support in the House of Commons (otherwise the Commons...
would vote "no confidence" in the government, and depose it). When combined with strong party discipline, this means that it is likely that a British government can pass tax measures or other legislation in much "purer" form than can an American government.

Is this an argument for a parliamentary form of government? The contrasting view—that of Madisonian checks and balances—is that we do not want it to be easy for government to act. Perhaps a system that almost requires compromise is better than one that allows a single clear vision to be enacted.

23. The process of writing tax legislation, and the factors that influence it, reflect the legislative process in all areas. For example, the differences between the American system and a parliamentary system are present in all types of legislation.

C. THE ROLE OF BUDGET CONSTRAINTS AND REVENUE ESTIMATES

Budget constraints have always played a significant role in tax law, obviously, but developments in the past 30 years have made them more important. First, the Economic Recovery Tax Act of 1981 directly reduced revenues and, ultimately more important, eliminated future "bracket creep." Subsequently, in an effort to maintain some degree of fiscal discipline in the face of mounting deficits, Congress enacted rules requiring—except on the not-infrequent occasions when Congress decides not to abide by the self-imposed restriction—that revenue-losing tax legislation be accompanied by offsetting estimated revenue increases or expenditure reductions. Revenue estimates have acquired enormous importance.

Revenue estimating is not an exact science. There are two official sources of revenue estimates: the Office of Tax Analysis (OTA) in the Treasury Department, and the Staff of the Joint Committee on Taxation (JCT). Their estimates are based, respectively, on projections for the overall economy by the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO). Even when the OTA and JCT estimates coincide, they are not always correct. When they are at variance with one another, the estimators find themselves involved in tax policy disputes. One of the more celebrated disputes arose in connection with a political fight over capital gains. Almost immediately after the Tax Reform Act of 1986 ended the preferential treatment enjoyed by capital gains for the preceding 65 years, efforts commenced to restore some degree of favorable treatment. In general, Republicans favored such restoration, and Democrats resisted. This was the dominant tax policy issue in the elder President Bush's term. Mr. Bopp's article discusses the important and difficult efforts to estimate whether a rate reduction would increase revenues (due to increased willingness of taxpayers to realize gains), as Republicans claimed, or reduce revenues, as Democrats
claimed. Perhaps unsurprisingly, the Republican administration, through OTA, projected revenue increases, while the Congressional Budget Office, with Democrats in control of both the House and Senate, projected falling revenues. (By the same reasoning, one might not be surprised to read in Mr. Bopp's account that the General Accounting Office (GAO), an arm of Congress, found substantial fault with OTA projections during Republican administrations.)

Professor Graetz, who served as Deputy Assistant Secretary of Treasury under the first President Bush, also discusses revenue estimation in the capital gains context. More broadly, Professor Graetz contends that revenue estimates have taken on a tail-wagging-the-dog quality, as inherently inaccurate revenue estimates are allowed to constrain unduly the policy choices of political actors.

THE ROLES OF REVENUE ESTIMATION AND SCORING IN THE FEDERAL BUDGET PROCESS

Michael D. Bopp

56 Tax Notes 1629, 1645-47 (1992)

Problems With the Existing Revenue Estimation Processes

Though the revenue estimating process is challenged by a number of problems, this section focuses upon two—the inaccuracy and politicization that threaten the efficacy and integrity of revenue estimates. These two "problems" might also be thought of as symptoms of other, underlying difficulties, upon which the following discussion will elaborate. Both the OTA and the JCT, as well as private revenue estimators, are, in varying degrees, faced daily with these problems.

As a starting point for discussion, this section will focus upon the accuracy and politicization considerations raised by the recent controversy over capital gains revenue estimates. The controversy embraced elements of both problems and has helped incite efforts to reform the process.

When two government entities derive significantly different revenue estimates for the same legislative proposal, the controversy threatens an erosion of public confidence. Revenue estimation is the practical application of a social science—economics—to the inner workings of the U.S. tax system. Revenue estimation differs from more theoretical applications of economics in that the former practice demands quantification of behavioral assumptions. But, predicting and quantifying people's behavior is inherently speculative, and revenue estimators possess no particular clairvoyance into the minds of individuals. And when the JCT and the OTA derive different estimates of behavior effects, charges of politicization are inevitably raised.

---

g. Since Mr. Bopp wrote, the GAO has been re-christened the General Accountability Office.

* At time of original publication, associate, Kutak Rock, Washington, D.C.
The JCT and the OTA produced well-publicized, disparate estimates of President Bush’s capital gains proposal in late 1990.\textsuperscript{181} The JCT believed that the proposal would lose $11.4 billion in Treasury receipts over five years, whereas the OTA estimated a $12.5 billion revenue increase. What explains the greatest share of the disparity between these estimates is a divergence in assumptions regarding the effect of the proposal on realizations, or the elasticity of realization response with respect to taxes.  

\textbf{Problems of Inaccuracy}

The different assumptions adopted by the JCT and the OTA might be explained by structural problems that plague government revenue estimation. One could reason that revenue estimation is inherently inaccurate and is unworthy of the imprimatur of science. Ironically, this position is bolstered by the JCT admission that “the choice of an elasticity is ultimately a judgment call,”\textsuperscript{185} and by acknowledgments that both elasticity assumptions are reasonable. The effects of these acknowledgments are ironic, because they attempt to restore confidence in the revenue estimating process, though they ultimately betray the speculative nature of the undertaking.

The accuracy of both the JCT’s and the OTA’s elasticities has been called into question by a recent study. The study, conducted by Congressional Research Service economist Jane Gravelle, indicates that both government revenue estimating bodies adopted elasticities figures that are too high.\textsuperscript{187} Gravelle’s results “imply a revenue loss from a gains cut which is at least twice what the JCT projects, and probably more than five times as great.”\textsuperscript{188}

Gravelle’s study, it might be argued, assumes particular importance in light of the difficulties associated with evaluating the accuracy of revenue estimates. These difficulties stem from an inability to hold constant all revenue influences other than the provision being examined; an inability to isolate a single tax law change. Only aggregate revenue figures are determined with certainty. Thus, when GAO analysts attempted to ascertain, on the basis of Statistics of Income data, the accuracy of prior OTA revenue estimates, they confessed an inability to “claim any added measure of accuracy for our projected baseline of what revenues might have been had tax provisions not been introduced or altered.”\textsuperscript{191} The authors nevertheless did attempt to measure the accuracy of a number of OTA estimates, including an estimate of

\textsuperscript{181} The proposal afforded an exclusion from income for capital assets held for at least one year. The exclusion increased from 10 percent for assets held at least one year, but less than two years, to 30 percent for assets held three years or more.

\textsuperscript{185} Staff of Joint Comm. on Taxation, 101st Cong., 2d Sess., \textit{Explanation of Methodology Used to Estimate Proposals Affecting the Taxation of Income from Capital Gains} (Comm. Print 1990).


the relaxation of IRA requirements in 1981. They found substantial inaccuracies in the OTA estimates, concluding that the OTA's revenue estimate of legislation providing for IRAs was off "by a factor of at least four." The GAO analysts concluded that "[w]hen a change in a provision allows taxpayers a number of alternative responses, economic models are less likely to yield an accurate prediction of how the change will play out in the 'real world.'"

In contrast to this rather gloomy appraisal of government revenue estimation stand a number of arguments made in its defense. * * *

The GAO analysis is similarly subject to a criticism. The analysis is undermined by the argument that ex post facto analyses of revenue estimating accuracy are conjectural endeavors. * * *

Some commentators and estimators have suggested that problems of revenue estimation inaccuracy can be ameliorated with fairly straightforward improvements. The chief explanation for the difference between Gravelle's and the government estimators' elasticity figures centers upon time, one former OTA estimator noted. Government revenue estimators do not possess enough of it to delve into all of the assumptions that they must determine. * * * [M]ost revenue estimates engender complex and time consuming activities including data gathering, economic formulations, and computer modelling.

Another possible, partial solution, is to improve the available data. Revenue estimators could better determine behavioral variables if they had access to different forms of data. This point is no more apparent than in the context of estimating the revenue effects of a change in the tax treatment of capital gains. Efforts to refine and improve revenue estimating data have focused mainly on creating a more complete, though static, picture of U.S. taxpayers. What is lacking is longitudinal data, data that traces the tax status of individuals over a number of years. One analyst, who helps disseminate and package data used by both government and private revenue estimators, has noted the need for longitudinal data in examining taxpayer behavior with respect to capital gains. He argues that:

"The policy implications are quite different if, on the one hand, most people realize gains at only a few points in their lives (e.g., selling a home or a business, or cashing in assets post-retirement) or if, on the other hand, they typically realize gains every single year (e.g., stock market speculators). . . . [N]o amount of data analysis of single-shot, one-year tax returns can shed any light on this matter."

192. Id.
193. Id. at 71.
202. If adding to the staffs of JCT and OTA would not solve the problems of inaccuracy, perhaps a better solution is one suggested by commentator Rob Bennett. He posits that "[i]t might even be a good thing if lawmakers were told they could not obtain an unlimited number of estimates. The fact that JCT estimates are a 'free good' seems to have created an unquenchable thirst for ever more estimates." Bennett, "About Those 'Technical Differences,'" 50 Tax Notes 891, 892 (Feb. 25, 1991).
Thus, whether to analyze existing tax systems or to be ready to analyze future tax systems, it is imperative that we acquire more longitudinal information on taxpayers. But, better data and a heavier staff would not, by themselves, cause the JCT and the OTA to produce the same capital gains revenue estimate. A factor that accounts for $2 billion, or eight percent of the discrepancy between the existing JCT and OTA estimates, is the baseline amount of realizations assumed by each estimating body. The “baseline” figure predicts the amount of realizations that will occur over the next five years under current law. The OTA used OMB figures, which forecast $1,466 billion in realizations between 1990 and 1995. The JCT adopted the CBO baseline figure, which predicted $1,604 billion in realizations, or 9.4 percent more realizations than expected by OMB.

PAINT-BY-NUMBERS TAX LAWMAKING
Michael J. Graetz

Congressional decisionmaking regarding both the revenue and distributional questions reveals a unitary weakness in the current tax legislative process: Congressional decisionmakers routinely suffer from illusions of precision. Congress today seems to want tax policymaking to turn on simple numerical answers, reminiscent of the supercomputer Deep Thought, who in the science fiction classic, The Hitchhiker’s Guide to the Galaxy, revealed that the answer to the “great Question of Life, the Universe and Everything” was “42.” Armed with mathematical answers to both revenue and distributional questions, tax policymakers routinely eschew the difficulties of exercising judgment to strike an appropriate balance among ambiguous and often conflicting normative goals; in the process, they put aside the massive empirical uncertainties they inevitably face. Instead, they constrain themselves to write laws that conform to misleading or wrongheaded mathematical straightjackets.

I do not mean to embrace an easy attack on the theoretical difficulties and limitations of data in order to conclude that nothing of any import can or should be said. That would be palpably false. There is much we know about the likely winners and losers from changes in tax policy. Decisionmakers need such information and are entitled to share in this knowledge. But current illusions of precision should be abandoned.

With regard to revenue estimates, greater attention should be given to long-term and overall revenue consequences of legislation to estimate the


* At time of original publication, Justus S. Hotchkiss Professor of Law, Yale Law School.
current practice of structuring legislation to maximize revenue gains or minimize revenue losses within the budget period. In addition, the reliability—or lack thereof—of these estimates should be identified for policymakers, for example, by providing a range of likely outcomes.

**Revenue Estimates**

**Overview of the Revenue Estimating Process**

My goals in this section are simply to demonstrate congressional willingness—even determination—to be bound by meaningless or, in some cases misleading, numbers, to illuminate the shortcomings of existing revenue estimating practices, and to identify proposed solutions.

In general, an estimate of the revenue consequences of a proposed change in tax law is simply a staff's best estimate of the difference between federal receipts with and without the changes in law for each year of the budget period. The estimate of receipts without the proposed change is the baseline receipts forecast, which is based upon an assumed level of certain macroeconomic variables, including Gross Domestic Product (GDP), the overall price level, interest rates, total employee compensation, total domestic investment, and the total level of state and local taxes.

Revenue estimates hold these macroeconomic variables constant, but take other relevant behavioral changes into account. For example, revenue estimates are based upon estimates of the increase or decrease in tobacco consumption expected to occur in response to changes in tobacco tax rates; they take into account increases or decreases in capital gains realizations expected as a result of changes in capital gains tax rates. Holding macroeconomic variables constant when estimating revenue effects has long been controversial. Holding such estimates constant eliminates a range of disputes over the consequences of proposed legislation, facilitates comparisons of various proposed changes, and makes tax projections consistent with budgetary estimates of spending proposals. The public finance economist, Alan Auerbach, who recently served as Deputy Chief of Staff of Joint Committee on Taxation, which is responsible for revenue estimating for the Congress, has remarked that the opposite course—incorporating estimates of macroeconomic effects of tax legislation—"places the estimator in the very uncomfortable position of having to claim confidence in an estimate in which no sensible person could have much confidence."

Nevertheless, significant tax changes are likely to affect these macroeconomic variables, and if these effects are large, they could change the size of the revenue estimate and in some cases even whether the revenue estimate is predicted to raise or lose revenue.

The most difficult aspect of revenue estimating is anticipating changes in behavior that will be induced by changes in the tax law. During 1989, 1990

---

and 1991, differences between the judgments of JCT and Treasury revenue estimators about the likely behavioral responses of people in realizing capital gains in response to lowered tax rates became a revenue estimating cause célèbre. During the five-year budget period, relatively small differences in the two staffs' behavioral assumptions produced more than a twenty billion dollar swing in projected revenue effects of a proposed exclusion from income of thirty percent of capital gains. For the years 1990-1995, Treasury estimated in 1990 that the proposal would increase revenues by $12.5 billion, while JCT estimated a decrease of nearly $11.5 billion. Virtually all of this gap was due to differences in assumed behavioral responses: first, Treasury assumed a short-run elasticity of 1.2, JCT 1.1; second, Treasury assumed a long-run elasticity of 0.8, JCT 0.66; and finally, Treasury thought it would take three years to reach the long-run, JCT only two years. Most economists would not view the existing empirical evidence as sufficient to choose confidently between these assumptions, but such small differences in assumed behavioral responses can, and did, have large effects on the revenue estimates.

The anticipated revenue loss from the 1981 universalization of eligibility for tax-favored individual retirement accounts ("IRAs") has become a notorious example of a grossly underestimated change, attributed largely to the estimators' failure to anticipate the mass marketing of IRAs by banks and other financial institutions. When revenue estimators aggregate a large number of individual revenue estimates for specific changes to predict the overall revenue effect of a piece of tax legislation, they often claim to rely on their patron saint, "St. Offset," who they hope will assure that their errors are not all in the same direction but will instead tend to offset one another, resulting in an acceptable overall prediction and error rate.

Commentators have long recognized that revenue estimates differ in reliability, depending on both the quality of data available to the revenue estimators and the difficulty of predicting how the change will be perceived and acted upon by taxpayers. No one denies, for example, that a revenue projection for increases or decreases in the personal exemption for the blind is far more reliable than an estimate of the revenue change from enacting or repealing special tax allowances for particular kinds of investments.

***

Asking the Wrong Question

***

Congress has mistakenly elevated the significance of estimates of annual revenue effects of tax legislation for each year of a five- or ten-year budget period by tying potentially serious spending and tax consequences to these numbers. A politician therefore is behaving quite reasonably—given these constraints—when her dominant concern in considering tax legislation is making the revenue numbers "come out right." The diminished capacity of the traditional normative concerns of taxation—fairness, economic efficiency, and simplicity—to influence legislation in this context is not surprising.
Nor should it be surprising that the revenue estimates themselves have taken on increased significance, or that legislators have become experts at playing revenue estimating games in an effort to achieve the legislative outcomes they desire. A few examples of such revenue estimate games should suffice to illustrate the potential aberrations from accounting for revenues on an annual cash-flow basis within a specified budget period. Generally, these games involve accepting long-term pain to achieve short-term gain.

First, cash-flow “budget window” revenue estimates greatly influence the design of tax provisions. For example, the close relationship between investment tax credits, expensing of assets, and accelerated depreciation is well known in the tax policy literature. Reasonably sophisticated analysts, for example, can construct proposals for accelerating depreciation, partial expensing of assets’ costs, or investment tax credits that are equivalent tax reductions in terms of their present value, but that involve quite different timing of the tax reductions and therefore have very different impacts on annual revenue estimates during a budget period. ***

A related phenomenon occurs with respect to the choice between “front-loaded” and “back-loaded” savings incentives. With respect to the former, the taxpayer deducts the cost of the investment when made, accumulates investment income tax-free, and pays taxes when the funds are withdrawn. In the latter case, the taxpayer gets no deduction for putting the funds in the savings account, accumulates investment income tax-free, and pays no tax when the funds are withdrawn. When interest and tax rates are constant over time, the present value of the revenue cost of these two approaches is the same, but the pattern of revenue effects is quite different. Front-loaded savings accounts have large revenue costs in the years of savings; back-loaded accounts cost substantial revenues in the years of withdrawal. During the period 1989-1994, proposals to restore the universal IRA, which had been repealed by the 1986 Tax Reform Act, often took the back-loaded form, principally because the delayed revenue costs did not occur in the budget window, and, therefore, under the Budget rules, neither triggered spending cuts nor required offsetting tax increases. ***

Probably the most venerable technique for taking advantage of cash-flow revenue estimating is the “speed-up.” A speed-up simply moves revenues that would otherwise be collected in a later year to an earlier year. *** Recently, Congress’s favorite speed-up has been accelerating collections of required estimated tax payments from individuals and corporations. Extraordinarily complex individual estimated tax provisions were adopted in 1991 solely to accelerate revenues to “pay for” extensions of unemployment benefits. Here, the temporary revenue gain was used only to pay for a temporary increase in spending, but budget rules permit using such a temporary gain to pay for a permanent revenue loser. ***

Probably the most egregious use of budget scorekeeping rules to finance permanent tax reductions with temporary revenues is the sale of government-
C. BUDGET CONSTRAINTS AND REVENUE ESTIMATES

owned assets to pay for permanent tax changes. It is obvious that the revenue losses from the tax reductions will continue to decrease receipts long after the proceeds from the asset sale have been spent.

As a final example of revenue estimating gamesmanship, consider the creative use of temporary (or expiring) provisions. Budget scorekeeping rules, along with revenue estimating conventions, allow Congress to enact "temporary" tax increase provisions and then to count as revenue gains subsequent extensions of the temporary provision. This occurs because the "baseline" estimate of receipts does not include revenues from the expiring tax increase. * * *

A variety of sensible proposals have been offered to make revenue estimates more meaningful. For example, estimating the effect of proposed changes on the present value of revenues collected from current taxpayers might limit the likelihood that Congress could offer taxpayers an overall tax reduction in exchange for accelerating their tax payments. Jane Gravelle of the Congressional Research Service has recently proposed "annuitizing" the revenue effects of alternative policy proposals to facilitate more appropriate comparisons of alternative proposals.164 This approach would convert any tax proposal, regardless of its effects on the federal government's cash flow, into the equivalent of an annuity, thereby putting proposals with different cash patterns on an equal footing. * * *

To be sure, both of these suggestions offer potential improvements in the process and could be coupled with providing ranges of revenue estimates and classifying estimates according to their likely reliability.165 * * *

But we should not be overconfident about the ability to specify procedures that will make revenue estimates routinely reliable or meaningful. * * *

Whatever the scorekeeping rules, *** opportunistic and creative legislators and their staff will work within and around them, structuring proposals to maximize the likelihood of outcomes they desire.

To be sure, legislators need to be aware generally of the size and direction of revenue effects of proposals under consideration and of enactments. But permitting uncertain and frequently meaningless revenue estimates to serve as a straitjacket on policy outcomes, as they have in the past decade, inhibits thoughtful tax policymaking and undermines public respect for both the laws that result and the lawmakers that enact them.

Conclusion

It seems impossibly difficult to communicate even the simplest facts about tax and fiscal policy to the American public. One cannot be entirely certain whether this is because politicians are engaged in willful distortions, because the politicians themselves simply do not know the facts or are misinformed, or

---

because, as I have demonstrated here, the truth in matters of this sort is at best elusive, and often unknowable. * * *

My concerns expressed here should not be taken to imply that I believe distributional or revenue information to be unimportant or that policymakers should not be informed of the distributional or revenue consequences of their proposed actions. * * *

The current use of revenue estimates is, if anything, even more troubling. Protected by supposed budget scorekeeping safeguards, policy proposals are manipulated to produce revenue results in a five-year budget window when the longer-term revenue consequences are known to be quite different from that within the budget window. The process should be revised to make explicit long-run comparisons of the budgetary effects of proposals in an effort to make legislators accountable for the long-term consequences of their decisions. Moreover, a range of estimated revenue effects should be given to Congress and the Administration. * * *

The current use of both distributional tables and revenue estimates in tax policymaking may prove extremely costly to sensible tax policy. To take only one recent example, the substantial increases in the marriage penalties under the 1993 legislation occurred as a consequence of an effort to make both revenue estimates and distributional tables come out in a certain manner. * * *

Addendum

On March 23, 1995, after this Article went to press, the Wall Street Journal reported that the Treasury Department (OTA) and the Joint Committee on Taxation (JCT) made substantial changes in their methodologies for distributing benefits of tax reductions advanced by the new Republican House of Representatives majority. Both OTA and JCT reversed their positions on distributing changes in taxes versus changes in burdens for proposed capital gains tax rate reductions. OTA distributed the static revenue cost of the change as an estimate of the change in tax burdens (JCT's prior practice) and JCT distributed the actual anticipated change in taxes (OTA's prior practice). JCT also abandoned its prior practice of allocating changes in corporate taxes to owners of capital and instead did not include any of the benefits of corporate tax reductions in its distribution tables. * * * As the Wall Street Journal accurately reported, "The result: The Treasury's changes make the Republican tax-cut bill look extremely generous to the rich. Changes by the congressional Joint Committee on Taxation make the same tax cuts look less generous to the wealthy."180

These methodological changes should shake anyone's remaining confidence that the various staffs' distributional tables discussed in this Article are—-or even can be—driven by economic science rather than by politics. The

C. BUDGET CONSTRAINTS AND REVENUE ESTIMATES

mystery deepens as to why these distributional tables should be used to determine tax legislative outcomes.

I rest my case.

Notes and Questions

24. Would it be better to insulate revenue estimating from both the Treasury and the JCT by creating a separate office of estimators? If so, should it be part of the executive branch, part of the legislative branch, or an “independent” body akin to, or conceivably part of, the Federal Reserve System?

25. Professor Graetz identifies a number of “games” used to finesse the limitations imposed by revenue estimates and their role in the budget process. Some are a transparent decision to juggle the numbers in order to achieve a desired result (which result invariably entails an increased real deficit). Selling government assets, which cannot be sold again, to balance an ongoing expenditure increase or tax cut, represents an obvious decision to follow the budget rules in form but not in substance. Much the same could be said of moving up estimated tax payments by one day, from October 1 to September 30 (or delaying expenditures from September 30 to October 1). Either technique helps the numbers for the fiscal year ending September 30, but is a one-time “fix” that cannot be duplicated in future years.

Of greater interest is the more sophisticated use of tax law to hide real tax cuts (real, in present-value terms) by pushing the revenue loss into the future, ideally out of the relevant budgetary window. For example, the cost to the Government in present-value terms is the same for traditional IRAs and Roth IRAs. (See Chapter Two, Subchapter A.) The traditional IRA costs revenue on the front end, as does a typical qualified retirement plan, because contributions are made on a pre-tax basis; later, however, the Government will fully tax distributions. With a Roth IRA, by contrast, there is no revenue lost at the outset, because contributions are not deductible; many years later, however, the Government will receive substantially reduced revenues when the distributions are received tax-free.

How would Professor Graetz change the revenue estimating process to address this problem?

26. Professor Graetz does not suggest ending revenue estimates, because he recognizes that they have value, even though he thinks they are “driven [not] by economic science but by politics.” Rather than a single number, he recommends that policymakers be given “a range of estimated revenue effects.” Would this improve the process?

27. Is the primary problem the inherent inaccuracy of revenue estimates, the politicization of the revenue estimating process, the failure to provide
present-value revenue estimates, or the weight placed on revenue estimates by the budget process?

28. Professor Graetz's criticisms of the revenue estimating process, and of the weight placed upon "getting the numbers right" in the budget process, are persuasive. At the same time, it must be remembered that these processes were put into place in an attempt to place some limits on the natural tendency of Congress to spend money readily and impose taxes reluctantly.

Would the budgetary deficit be even more difficult to control if the processes were changed as Graetz suggests?

D. THE TAX REFORM ACT OF 1986: A CASE STUDY IN FUNDAMENTAL TAX REFORM (AND WHY IT DID NOT LAST)

The Tax Reform Act of 1986 was the most ambitious attempt in history to fundamentally reform the income tax. Unlike other revenue acts that focused on a few specific segments of the tax system, the 1986 Act attempted to revise the whole system in one massive effort. Even if it failed to do all one might have hoped, and even though some of its changes were reversed in subsequent years, enacting such a sweeping tax revision was an enormous, and surprising, accomplishment.

Professor Witte's article, written just after a dramatic breakthrough in the Senate Finance Committee that ultimately was to lead to passage of the 1986 Act, puts that Act in the context of tax history and tax policy. Mr. Birnbaum, who observed the process from the vantage point of a Wall Street Journal reporter, gives what is probably the best explanation of how the 1986 Act came to pass. Dr. Brannon's article is a critical and cynical analysis of what the 1986 tax revision accomplished.

A LONG VIEW OF TAX REFORM

John F. Witte

39 National Tax Journal 255, 255-59 (1986)

Beyond the simple excitement of tax politics, I also have a modest personal stake in the result, primarily because of a passage, written late in an evening during a particularly depressing period in tax politics following the 1981 tax cut. I committed that passage to print, and made the further error of italicizing it. It occurs at the end of a long, and perhaps tedious, but I think scholarly treatment of the politics, development, and consequences of the federal income tax. The passage follows a description of the then most popular tax reform proposals, Bradley-Gephartd, Kemp-Roth, and Hall-Rabushka. It reads as follows:

* At time of original publication, Professor, University of Wisconsin-Madison.