Administrative and Revenue Implications of Alternative Federal Consumption Taxes for the State and Local Sector

A Study for the American Tax Policy Institute

Robert P. Strauss*

*Professor of Economics and Public Policy, H. John Heinz III School of Public Policy and Management, Carnegie-Mellon University, Pittsburgh, Pennsylvania, 15213-3890; Email Address: RS9F@Andrew.CMU.EDU. This is a revised version of a paper presented at a ATPI Roundtable Discussion on January 23, 1997 in Washington, D.C., and published in *The American Journal of Tax Policy*, Vol. 14, No. 2 (Fall, 1997), 361-452. The author benefited from discussions with Edith Brashares, Linda Burke, Harley Duncan, Nick Greenia, Robert Lilja, Mark Mazur, Michael Mazeroff, Ferdinand Schoettle, Daniel Skelly, Edward Symons and James Wetzler, and comments by participants at the Roundtable. Responsibility for the paper rests solely with the author.

Contents

1	Intr	roduction	1
	1.1	Tax Reform and the Current Setting	1
	1.2	Some Assumptions and Limitations	3
	1.3	Organization of Study	5
2	Con	sumption and Income Tax Bases	6
	2.1	Some Aggregate Relationships	6
	2.2	Some Business Level Relationships	6
	2.3	The Flat Tax	8
	2.4	Net Income and VAT bases	8
	2.5	The Saved Income Tax	9
	2.6	Retail Sales Tax	9
	2.7	Value Added Tax Schemes and Administration	10
	2.8	Administrative Techniques for Mitigating Consumption Tax Regressivity and	
		Mitigating Pyramidding or Cascading	10
	2.9	Harmonizing State Consumption Taxes with Federal Consumption Taxes .	11
3	Son	ne Fiscal And Economic Magnitudes in $1992/3$	15
	3.1	The Composition of US Public Finances	15
	3.2	Fiscal Composition of National and Subnational Tax Systems in Other In-	
		dustrialized Countries	17
4	Fisc	cal Concurrency and the IRS	19
	4.1	Activities of the IRS	19
	4.2	Other Statutory Federal Roles of the IRS	19
	4.3	Federal - State Administrative Relationships	21
	4.4	Structural Similarities and Conformities	21
	4.5		24
	4.6	Value of Federal-State Collaborations	26
	4.7	Measures of Federal Information Flows	27
5	Can	ndidate Federal Tax Law Changes for Fundamental Tax Reform	32
	5.1	An Early Precursor, H.R. 10236, 72'nd Congress, 1st Session	32
	5.2	Contemporary Proposals	34
		5.2.1 Major Features of the Flat Tax Proposal, H.R. 2060 104'th Congress,	
		1st Session	35
		5.2.2 Major Features of the Saved Income Tax Proposal, S722 104th Congress,	
		1st Session	36
		5.2.3 Major Features of the Retail Sales Tax Proposal, H.R. 3039 104th	
		Congress, 2nd Session	38

6	Adr	ninistrative Issues for the States	40
	6.1	Some General Observations on the Three Proposals	40
	6.2	Tax Issues Generally Facing the States	43
		6.2.1 Issues for the Continued Taxation of Household Income by the State-	
		Local Sector	45
		6.2.2 Issues for the Continued Taxation of Business Net Income by the	
		State-Local Sector	47
7	Rev	renue Questions at the Federal and State Levels	51
	7.1	Some Aggregate Consumption Tax Arithmetic	51
	7.2	State by State Fiscal Structures and the Risks	55
	7.3	Local Government Implications of Federal Consumption Tax	60
8	Adr	ninistrative Transition and Path Dependencies	64
	8.1	Administrative Impacts on the IRS	64
	8.2	Implications for the States	67
9	Sun	nmary and Conclusions	68
10	Bib	liography	72

List of Tables

1	Composition of 1992 Federal, State and Local Finances (\$ millions)	16
2	Percentage Composition of Federal-State-Local Finance in 1992	17
3	Structure of OECD Tax Revenue, by Level and Type: 1989	18
4	1995 Net Tax Collections (\$ billions) of the Internal Revenue Service	19
5	Incorporation of Internal Revenue Code by State	23
6	State Personal Income Tax Link to Federal AGI in $1993/4$	24
7	Federal-State Exchange Agreements and State Use in 1980	27
8	Composition of 1992 Consumer Expenditures (\$ billions)	52
9	Credit-Invoice VAT Tax Rates Needed to Replace Federal, State and local	
	Income Taxes in 1988	53
10	US Treasury, March, 1995 Preliminary Estimate of Armey Flat Tax	55
11	Differing Revenue Estimates of 5% Federal Consumption Taxes	55
12	Ratio of Capital Income (Interest, Dividends, Rent) to Personal Income be-	
	fore Transfers (BEA Concepts) by State, Selected Years	57
13	States Ranked by Reliance on Personal and Corporate Income Taxes in State	
	Budget, 1992	58
14	States Ranked by Reliance on Sales and Excise Taxes in State Budget, 1992	59
15	States Ranked by Local Reliance on Local Income Taxes in Local Budgets,	
	1992	61
16	States Ranked by Local Reliance on Local Sales and Excise Taxes in Local	
	Budgets, 1992	62

List of Figures

1	Total Number of Federal Tax Return Disclosures (Tape and Non-Tape) by	
	Calendar Year	29
2	Number of Federal Tax Return Disclosures (Tape and Non-Tape) to States	
	and Federal Statistical Uses by Calendar Year	30
3	Share of Federal Tax Return Disclosures (Tape and Non-Tape) to States and	
	Federal Statistical Uses by Calendar Year	31

Countries that do not use the VAT can build up quite unreasonable fears about its introduction.–Alan Tait 1988.

I've always said we're only one President away from a VAT.– Charles McLure, Jr., 1987.

A general sales tax may, unless every precaution is taken, involve so many administrative problems almost impossible of solution that it will fall of its own weight.–Ways and Means Committee 1932.

1 Introduction

1.1 Tax Reform and the Current Setting

The promise to reform taxes at the federal, state, and local levels is now a permanent feature of our political landscape in much the same way that current and prospective government officials promise to eliminate government waste, inefficiency, fraud and abuse. While the most recent national election offered a spectrum of fiscal choices to the electorate, continued divided national government and a narrowed majority in the House of Representatives suggest a lack of political agreement among voters over where national tax policy should go.

Meanwhile, tax policy discussions at the national level continue to argue about fundamental federal tax reform (taken to be some form of federal consumption tax) to improve the economic performance of the economy as well as simplify the tax system. These discussions have generally not indicated the implications of federal tax reform for the state and local sectors. This is unfortunate as the state and local sector taxes and spends on the same order of magnitude as the federal government. While many have commented that wide scale tax policy change at the federal level may have significant implications for the states, there is a paucity of studies which examine these implications, and few if any in the areas of administration and revenues.¹

The purpose of this study, therefore, is to examine in a practical way some of the administrative and revenue implications of the prominent federal consumption tax reform proposals of our national system of taxation for this important sector of the economy.²

¹Recent commentaries on aspects of federal tax reform and the states include: Auten and Toder(1996), Bucks(1995), Duncan and Alt(1993), Duncan and McLure(1996), Gold(1995), Holtz-Eakin(1996), Klein(1984), Mikesell(1996,1997), McLure(1987, 19888), Murray(1997), Joint Committee on Taxation(1995, 1996), Papke(1996), Poddar(1990), Shannon(1995), Sheffrin(1996), Strauss(1995, 1996).

²This is the second study for the American Tax Policy Institute on state-local implications of federal consumption tax. The first, Holtz-Eakin (1996), examined the broad economic implications of federal consumption taxation for the overall state-local sector.

It is my hope that such a practical analysis that includes the perspectives of the state and local sector will not only add to the discussion about national consumption taxation, but elaborate areas in which existing federal consumption tax proposals may require further attention.

A 'practical' view of federal tax reforms entails a realistic understanding of how the objectives of a good tax system interact with each other. Typically, one imagines a good tax system seeks to achieve: (1) minimum distortion of economic choices, (2) revenues adequate to finance agreed-upon budgetary objectives, (3) simplicity and administrative feasibility, (4) aggregate economic stabilization (for some older public finance economists), and (5) the achievement of agreed-upon vertical and horizontal equity goals. However, these objectives do not naturally reinforce each other so that current tax law represents a series of compromises between, say, equity objectives and administrative simplicity. Further, these compromises must be effectively constructed within our existing constitutional framework which circumscribe the fiscal ingenuity and latitude of the state-local sectors, and be consistent with public concerns about the privacy of their financial affairs viz. a viz. the government. Issues of uniformity, due process, equal protection and non-interference with commerce must ultimately be dealt with along with the difficult issue of disclosure.

Tax reform, in my view, involves changing the balance among objectives through the proposal of different tax schemes, the development and enactment of associated tax law and regulation changes, and insuring that administrative application, and finally taxpayer payment and compliance achieve the desired new equilibria among objectives.

Current complaints against the federal individual and corporate *income* taxes involve poor grades with regard to their effects on the economic decision to save and invest compared to the economic decision to consume (objective 1) with adverse effects on the rate of economic growth in the economy, and their growing complexity for tax administrators and taxpayers (objective 3). Movement in part or entirely by the federal government to the taxation of consumption (compared to current law) is thought by advocates to improve the savings behavior in the economy as well as to simplify the administration of federal taxes. Whether the first outcome is likely and to what extent, using reasonable standards of scientific evidence, is beyond the scope of this study. It is the second, especially as relates to the state-local sector as well as whether (or not) the level of revenues can be realistically anticipated that are of interest here.³

'Realism' in the discussion of the effects of tax reform proposals involves, in my view, an understanding of the adversarial relationship between tax minimizing taxpayers and revenue maximizing tax administrators. It also involves, in my view, an appreciation of the world-class capability and ingenuity of the American tax planning industry which to date has been more focused on income than consumption taxes.⁴

³In Berliant and Strauss(1993), the reader can find an extensive discussion and measurement of the vertical and horizontal equity effects of the Tax Reform Act of 1986 on a state by state basis in terms of state personal income taxes and federal personal income taxes. With regard to whether or not a federal consumption tax will raise national savings, I identify the issues in Strauss(1995), and in Nadeau and Strauss(1993) estimate the effects on investment from partial integration of the US corporate income tax.

⁴Anecdotal evidence suggests that the long-term dormancy of senior corporate management's interest in the planning of sales and use and property taxes is coming to an end. Loss of control over product price in many industries is forcing closer scrutiny of even these (tax) costs.

While the US Constitution and the courts accord substantial freedom to the states and their localities in how they finance their public services, the practicalities of tight federal, state and local tax administration budgets have meant greater cooperation among tax administrators. In the past, tax reform through a national consumption tax has not gone unnoticed in state capitols, and Congressional consideration included active testimony from governors and state legislators. What I seek to ascertain below is how the choice of federal consumption tax instrument affects the ability of the states and their localities to finance their public services, and, conversely, how state and local responses to particular forms of federal consumption taxation might strengthen or weaken the odds of achieving national economic and administrative objectives.

1.2 Some Assumptions and Limitations

The evaluation of competing federal tax reform proposals, both from the point of view of the state-local sector as well as the overall economy, can be affected by views on underlying federal budgetary needs and the appropriate size of the federal government. Given the disagreements, discussed below, about what a revenue neutral federal rate of consumption tax might be, an investigation of what the long-run revenue elasticities of such revenue systems could be construed to be theoretical for even those most inclined to abstraction. On the other hand, elected state-local government officials might be quite interested to differentiate among consumption tax proposals to discard those which require more frequent record-vote tax rate increases. Yet others, worried about the growing size of the public sector, would view such votes as healthy, and worry generally that indirect taxes such as a value added tax are hidden "money machines" which will allow further encroachment of the public sector on the private economy. To avoid engaging in such extraneous debates, I simply assume that the observed level of federal revenues is the correct level⁵, and explore the effects on the state-local sector of replacing federal individual and corporate income taxes with various types of consumption taxes.

Since opinions among political leaders, let alone academics and intellectuals interested in fiscal matters, vary widely about whether movement from income taxation to consumption taxation is worthwhile, it may be useful, albeit somewhat unconventional, to disclose some personal, related perspectives. By dint of early professional experience at the US Treasury⁶

Academic attention to consumption tax planning opportunities implied by the USA Tax has begun now in earnest. See Ginsberg(1995), and Feld(1995a, 1995b), Kaplow (1995), Warren(1995), and Wolfman(1995) for critical discussions of the saved income tax.

⁵This assumption, due to space and time limitations, abstracts from issues of the tax gap and what might reasonably be expected to be raised from further compliance efforts by federal tax administrators.

⁶Some historical description of the varying federal commitment to collection state income taxes may be worthwhile. The State and Local Fiscal Assistance Act of 1972, whose development and enactment I was involved in, not only provided for general revenue sharing payments to 39,000 general purpose governments, and put a "cap" on the social services grant program in Title XX of the Social Security Act, but also provided for optional federal collection of qualified state personal income taxes. While George Shultz was ultimately supportive as Treasury Secretary (he had not been as OMB Director) of the first two titles of the law, he was uncomfortable with the third title which purposefully provided free federal tax collection services to interested states. Congressman John Byrnes of Wisconsin, ranking Republican on the Ways and

then the Staff of the Joint Committee on Internal Revenue Taxation, and subsequent study and involvement with state corporate and personal income tax statutes and systems of turnover taxation at the state and local levels, I see merit in achieving national uniformity in the definition of ability to pay that could be embraced throughout our federal system, e.g. the definition of household and business tax bases. However, my enthusiasm over the past quarter century for uniformity in the definition of tax base and freedom of political choice over rates by sub federal units of government, which would thus continue to allow those less interested in public services to "talk with their feet", has been tempered by the growing realization that the federal government, through its personnel and executive and legislative processes may not be the only steady repository of wisdom on what ability to pay should be. Indeed, it seems relatively easy to fashion and sustain the argument that word-processing has superseded air conditioning as the major technological source of fiscal complexity and instability in Washington, D.C.. ⁷

Moreover, despite the intellectual and ethical appeal of achieving societal agreement on the definition of ability to pay (and thus what should be sacrificed in the support of needed public services), I have also come to understand that non-uniformity gives both tax administrators and taxpayers and their staffs at all levels something additionally to do which they evidently value.⁸

With Treasury changing hands due to the election, the commitment to Congressman Byrnes was statutorily honored through a clarifying section in the Tax Reform Act of 1976 which prohibited the federal government from directly or indirectly charging any state for piggyback services. Further, the number of states needed to trigger the system was reduced from three to one, and a qualified piggyback tax was allowed to provide for sales tax credits against piggybacked income taxes.

The more recent history of the federal piggybacking provisions is not, however, particularly encouraging, as the piggyback Code provisions, Sec 6361 and 6362, remained unactivated until they were deemed "deadwood" by Joint Committee legal staff, and eliminated in a 1990 budget act. Subsequent technical corrections bills, albeit not enacted, provided for the re-enactment of the eliminated provisions, and some for significant liberalization.

⁷An evolving corollary may be that the World Wide Web, whose origins are due in good measure to the efforts of my colleagues in adjacent buildings here at Carnegie-Mellon, could create the ultimate nightmare, the capacity of each to fashion and promote the wisdom of one's own personal Internal Revenue Code.

Observers of the revenue estimating process might also note that the advent of personal computers and the growing availability of large quantities of federal economic data on CD-ROMs enable almost anyone to generate attractive fiscal scenarios in conjunction with the aforementioned evolving legal technology. Whether the academic community, which ultimately trains fiscal and legal analysts and often proposes legal and economic theories in support of widely varying definitions of fiscal reform, can agree to standards of conduct and evidence both in training and in substantiating tax policy debates may be an emerging issue worthy to consider.

⁸Non- uniformity serves the interests on both sides of tax optimization problem. The practice in many

Means Committee, made his support of the revenue sharing legislation conditional on the enactment of the piggyback income tax provisions to encourage non-income states to begin to impose their own income taxes with as much enthusiasm as Wisconsin had over the decades.

Treasury's lack of enthusiasm for this new federal role was shared by the Internal Revenue Service and the leadership of the Federation of Tax Administrators at that time. Interested states were reportedly told after enactment by the Treasury (at which time I was back in the classroom) that it would cost them at least \$1/return should they seek to trigger the system. This was, at the time, well above the administrative costs per return of extant state personal income tax systems. Main Treasury also had great difficulty in developing the piggyback regulations, and draft regulations did not reach the Joint Committee on Taxation Staff for review until late 1974, and were not actively reviewed until the summer of 1975.

Where revenue levels from different consumption taxes are discussed below, it will be achieved without my personally tweaking econometric or computable general equilibrium models. Showing the diversity of revenue levels which have been estimated over the years from different consumption tax proposals is intended to direct the attention of the reader to the importance of the revenue issue, rather than find the persuasive estimate from those made by others.

On net, I view my responsibility below to raise some questions, in as transparent a fashion as possible, about the robustness of various claims, and to provide practical answers where possible. Also, I shall alert the reader, when necessary, where there may be more than meets the eye.

1.3 Organization of Study

The study has been written to be relatively self-contained, and to emphasize the diversity of state and local taxation which may be impacted by a federal consumption tax. It is organized as follows:

Section 2 briefly outlines the nature of different tax bases applied to economic flows and stocks to provide a common nomenclature and classification of consumption tax proposals. It also indicates how they may inter-relate in a federal fiscal system, and the major features of taxes that are important to understanding how changes in federal tax policy might impact the state-local sectors.

Section 3 indicates how important fiscally various federal, state, and local tax instruments were in 1992 in relation to each other and in relation to the national economy.

Section 4 discusses the IRS's responsibilities and how it currently interacts with the states, and how state personal and business taxes currently pattern themselves after their federal counterparts.

Section 5 outlines the major features of three candidate federal consumption taxes with attention to practical details that would be important to the state-local sector.

Section 6 examines the three proposals in terms of administrative issues. Such issues ultimately involve constitutional questions about the ability of states to require inter-state reporting of income.

Section 7 examines for both the federal and state-local sectors the level of tax rates necessary to accomplish revenue-neutral fundamental tax reform.

Section 8 discusses transition issues raised by the three tax proposals, both in terms of how they might impact the Internal Revenue Service, as well as the states.

Section 9 summarizes the foregoing analysis and indicates outstanding questions for further consideration.

corporations of compensating senior corporate tax officials for a fraction of what they "save" the corporation in taxes is mirrored by the government practice of finding audit targets which are expected to yield large additional revenues to the fisc. Neither party would do as well were taxation truly transparent.

2 Consumption and Income Tax Bases

2.1 Some Aggregate Relationships

When measuring the economic activity of an entire economy, three aggregates are of interest: the value of what gets produced and sold during the accounting period, the value of what gets paid to those employed by the production and distribution process during the accounting period, and the uses of these payments by those receiving payment during the accounting period.

In a simplified economy whose resources are fully utilized and one without government and without inventory, the value of what gets produced will equal the total payments to the factors of production (labor and capital), and the uses of such payments for consumption and savings will precisely equal the value of production of consumer and investment goods and services:

$$Value \ of \ Output = Wages + Economic \ Profits = Total \ Income \tag{1}$$

 $Total \ Income = Consumption + Investment$ (2)

Since Income - Consumption = Savings, it follows that Investment \equiv Savings in such an equilibrium economy.

If we subtract from Equation 2 the value of Investment, it follows that we have Consumption. A tax on the Value of Output with a deduction for Investment is thus a tax on Consumption.

2.2 Some Business Level Relationships

At the individual business level, we can define various business tax bases by examining the relationship between its revenues and costs. Denote its gross receipts as R, and costs of operation as C. Further, distinguish between its internal costs (payroll, compensation of management, benefits etc.), and its external costs (payments to independent suppliers for materials, utilities etc.).

There are three distinct measures of business activity during an accounting period:

$$Gross \ Turnover = R \tag{3}$$

9

 $^{^{9}}$ The gross turnover tax is probably one of the oldest taxes known. The Spaniards brought it to the Western Hemisphere and imposed gross receipts taxes in Mexico of 3%. See Buehler (1932).

The movement to a value-added form of taxation is a post-World War II phenomenon, and in response to complaints in Western Europe about the cascading and economic harm which the gross turnover form generated.

$$Value \ Added = R - C_{external} \tag{4}$$

$$Net \ Income = R - C_{internal} - C_{external} \tag{5}$$

In turn, we can distinguish among three business tax bases to which a tax rate, t, may be applied:

1. a tax on gross turnover or gross receipts:

$$T_{turnover} = t_{turnover} * R \tag{6}$$

2. a tax on value added:

$$T_{vat} = t_{vat} * (R - C_{external}) \tag{7}$$

3. a tax on net income:

$$T_{income} = t_{income} (R - C_{internal} - C_{external}) \tag{8}$$

Note that adding up the value added of all businesses in Equation 4 is equivalent to Equation 1 earlier. Also, if all after-tax business income is paid out to shareholders as dividends, and the dividend income is taxed at the shareholder level, then corporate source income, as contrasted with sole proprietor's income, will be taxed twice.

If the business is a retailer, then the gross turnover tax is equivalent to an excise tax on the sale of its commodities; by extension to all businesses engaged in retailing, it is equivalent to a retail sales tax. If the business engages in activity prior to the retail stage, say manufacturing, then the gross turnover tax is equivalent to a manufacturer's excise tax. When gross turnover taxes are applied to many stages of economic activity, they cascade and distort economic choices of businesses who purchase from each other (since vertical integration can lead to a tax reduction), and, through price-shifting, distort the economic choices of consumers. Gross turnover taxes are often levied at different rates which vary according to the type of business activity (wholesale, retail, manufacturing, services etc.) Also, they are typically levied on particular economic activities rather than on taxpayers for the privilege in engaging in such activities. Indiana, Hawaii, and Washington continue to employ such state revenue sources.

With regard to a tax on value added, there are three main types of taxes which differ in how the use or acquisition of capital is treated. If neither depreciation nor expensing of capital purchases is allowed, then the tax is said to be a tax on gross value added or gross product. If depreciation deductions are allowed in recognition of the use of capital, then the tax is said to be on net value added. Finally, if expensing of capital purchases is allowed, then the tax is said to be a consumption-based value added tax.

As long as a business has external and internal costs, and its gross receipts exceed such costs, its value added will be greater than its income. It follows that when business has costs in excess of its receipts, i.e. it experiences a net operating loss under financial accounting rules, it still will have positive value added and be liable for a value added tax payment. Operational value added taxes sometimes allow taxpayers in such situations to carry forward negative amounts to be paid in later years when net income is positive. Otherwise they must be financed through historical undistributed profits or through borrowing.

The above development of value added, typical in the economics literature, distinguishes between costs incurred "inside" the business and costs incurred "outside" the business. This distinction is not, however, wholly satisfactory from a legal point of view. I use the convention "external" and "internal" but prefer the concept of "independent" since it implies an arms-length relationship between the business and its suppliers. "Independent" also implies lack of ownership control by the business purchaser, and is consistent with the idea of consolidating an operations statement among owned subsidiaries. Shoup(1969, p. 208) suggests the notion of parties adverse in interest and independent from each other. Sullivan (1965, p.11) reports a German practice devised to avoid cascading which allows "...tax-free transfers among legally independent firms having the same ownership,...and also among separate enterprises deemed to be related through economic, financial, and organizational interdependence."

2.3 The Flat Tax

The basic idea of the flat \tan^{10} most recently elaborated by Hall and Rabushka (1983, 1995, 1996) is to decompose the tax on consumption based value-added:

$$T_{vat} = t_{vat} * (R - C_{external} - I)$$
(9)

into a tax on household wages (W), and a tax on consumption-based value-added with a deduction for wages paid to households:

$$T_{household} = t_{vat} * W \tag{10}$$

$$T_{modified vat} = t_{vat} * (R - C_{external} - I - W)$$
(11)

If one combines Equation 10 and Equation 11, then Equation 9 results. The advantage of taxing separately household wages is to allow for their progressive taxation through the provision of a large standard deduction and personal exemptions. Operational flat-tax proposals are somewhat more complicated, continuously evolving, and are discussed more fully below.

2.4 Net Income and VAT bases

To compare value added taxes to current law, it is useful to write out in abbreviated form a definition of net business income. Let: D denote dividends received (after exclusion), $i_{received}$ denote interest payments received, GR denote gross rents, GRoy denote gross royalties, CapGain denote capital gains. Further, let K denote the capital stock (or tax basis of capital), δ denote a rate of depreciation, i_{paid} denote interest expenses on indebtedness,

¹⁰Shoup(1969), p. 252-3, denotes what is now called the flat tax a "wages type of value-added tax" and traces its lineage to John Stuart Mill and Irving Fisher.

P denote pension contributions and H denote other employee benefit programs including health benefits, Adv denote advertising expenses, Depl denote depletion, and T_{sl} denote state and local income, sales, and property taxes. Recall that costs of goods sold includes employee compensation as well as supplies and services related to operations. Then net business income is:

$$Net Income = ((R - Costs \ of \ Goods \ Sold) + D + i_{received} + GR + GRoy + CapGain - W - Repairs - Bad \ Debts - Rents - T_{sl} - i_{paid} - \delta K - Depl - Adv - P - H)$$
(12)

It is evident that the business portion of the flat tax, Equation 11 is considerably larger than the business net income tax base (especially were investment expensed rather than depreciated for net income tax purposes) represented in Equation 12. From a measurement or accounting perspective it is also clear that while Equation 12 has more elements as to what constitutes an allowable deduction for cost, it does not make a bright line distinction between internal and external costs which is a central feature of the modified value added tax base in Equation 11, or the classical value-added tax base of Equation 4. However, it is also evident that a tax minimizing business will seek, in either case, to minimize R and maximize C. Note that under the net income tax business direct outlays for state and local income and property taxes are deductible as a cost of doing business, and state and local excises on business purchases are indirectly deductible to the extent they are reflected in (deductible) purchase prices.

2.5 The Saved Income Tax

The final approach to consumption taxation which collects taxes at the business level and the household level involves imposing a wage tax at the household level, and a consumption value-added tax at the business level; however, instead of simply taxing wages as in Equation 10, compensation is deduced by subtracting savings from income to arrive at what is described as a saved-income tax:

$$T_{household} = t_{vat} * (Household \ Income - Savings)$$
(13)

2.6 Retail Sales Tax

Finally, one can impose a tax on consumption through a variant of the gross turnover tax by limiting its application to final purchases by consumers:

$$T_{retail} = t_{retail} Gross \ Retail \ Turnover = t_{retail} \ * \ R_{retail} \tag{14}$$

2.7 Value Added Tax Schemes and Administration

Value added taxes on business can be administered in three ways:

- 1. the credit-invoice method (used by the European Community),
- 2. the addition method (used by Michigan and New Hampshire),
- 3. the subtraction method (currently featured in many Congressional consumption tax proposals and recently adopted in Japan).

Under the credit-invoice method, gross value added tax liability is offset by credits shown on purchase invoices from suppliers who state their gross value added tax due in sales to the purchaser. The provision of a tax credit to achieve a net value added tax liability which must be documented through the (auditable) aggregation of invoices (and which match the gross VAT tax liability of each supplier) has been viewed as a self-enforcing feature of this method of value added tax collection.

Under the addition method, taxpayers add to net income (available from income tax or financial reporting records and treated as the return to capital) internal compensation and other internally borne costs of production. Michigan and New Hampshire rely on the records and accounts kept for business net income tax purposes to administer its Single Business Tax.

Under the subtraction method, taxpayers deduct from gross receipts their external costs. While many suggest that a subtraction VAT can be administered with existing business books and records, the distinction between internal and external costs is not necessitated by either current business income tax or financial reporting requirements. The Financial Accounting Standards Board General Pronouncements dealing with revenues, expenses, gains and losses merely states": "Revenues and expenses are commonly displayed as gross inflows and outflows of net assets..."¹¹ Moreover, since neither the addition nor subtraction method typically allows for consideration of other state and local tax costs, taxpayers would then be required to separate out state and local taxes from other deductible external costs. Note that whether excises imposed by other governments are reflected in specific deductions or in T_{sl} under current business net income taxes is currently a matter of indifference to taxpayers since their costs, either way, reduce taxable income. Accordingly, current taxpayer accounting systems do not separately measure them, but would be required to under various VAT schemes with significant impacts on current business accounting systems.

2.8 Administrative Techniques for Mitigating Consumption Tax Regressivity and Mitigating Pyramidding or Cascading

A frequent complaint about consumption taxes is that they fall disproportionately on those less able to pay taxes. Such regressivity, in the sense that the fraction of income

¹¹See FASB(1991) \P 87., p. 808. See also AICPA(1975, p.23) which observed in conjunction with a discussion of how inventory is measured under a VAT that "...VAT theoretically depends on the kinds of expenditures made rather than on how they may be treated for normal accounting purposes."

sacrificed to pay consumption taxes falls as income rises, is argued to be offensive to society's distributional values.

A second complaint against various consumption taxes is that they may pyramid unless care is devoted to taxing final consumption as contrasted with taxing business purchases for business use in the further production or transformation of resources for further, sub-retail sale.

Practical techniques have been devised for each consumption tax variant to deal with both issues; note that in addressing each problem one inherently narrows the taxable base, thereby raising the rate necessary to obtain a target level of revenues, and, by creating a class of non-taxed or less lightly taxed goods and services, one creates incentives for tax management by individuals and businesses.

To avoid pyramidding under a sales tax, all but six states administer a resale exemption certificate system which purchasers, typically registered themselves, are required to show at purchase to avoid paying a sales and use tax. Similar techniques are used separately for purchasers of industrial and farm equipment.¹² Business purchases which are transformed in the manufacturing process are also typically exempt from sales and use taxes under exemptions for manufacturing.

Under the credit-invoice value added tax, pyramidding is avoided by a credit separately stated on supplier invoices which is used to offset gross liability. Under the subtraction method, the deduction of external purchases is intended to achieve the same result.

Certain classes of organizations are usually exempt from consumption taxes as buyers (religious organizations, governments etc.), and their exemption is typically accorded through a registration process which validates their exempt status, and provides certification of that. At time of purchase the organization may then buy at the untaxed price (if policy accords them this offset).

To lessen the regressive impact of consumption taxes, commodities viewed as necessities are usually taxed at a lower rate or not taxed at all. The absence of any tax is called "zerorating" in the value added cases, and "exemption" in the sales tax case.

2.9 Harmonizing State Consumption Taxes with Federal Consumption Taxes

There are several different ways to analyze the relationship between state level consumption taxes and a federal consumption tax, or the extent to which they are harmonized with each other.

First, one can examine whether or not state consumption tax payments are a form of consumption. It is sometimes suggested that household payment of state and local taxes constitute a form of consumption (of state and local public services) and therefore should be included in a federal consumption tax base. A corollary is that they should not be deducted from a national consumption tax bases. On the other hand such payments of state consumption taxes are involuntary whereas most acts of private consumption are voluntary; indeed, the hoped for improvement in the savings rate of individuals and business is predicated on the beneficial exercise of choice.

¹²Due and Mikesell(1994), p.69-71.

On the business side of any consumption tax scheme a question arises over whether state and local taxes constitute inputs (protection and enforcement of private property rights, maintenance of a judicial system etc.), are conceptually worthy of the status of other external business purchases which are deductible at the federal level, and thus reduce national consumption tax liability. If one considers state and local taxes to be used for investments or capital formation rather than consumption their deductibility may become more natural. Certainly the state and local sector is constitutionally responsible for public education, which is widely viewed as investment in human capital, and in partnership with the federal government creates much of the transportation infrastructure of the nation. These considerations suggest that at least a portion of state and local taxes, both for households and businesses, warrant deductible status.

Second, one can examine the relationship of state consumption taxes in determining federal ability to pay. When ability to pay is measured by income, it typically involves recognition in one revenue source of the impact of other revenue sources on the taxpayer's ability to pay, e.g. T_{sl} in Equation 12. Positive recognition through exemption to those receiving certain kinds of receipts (e.g. interest on state and local bonds), deduction or credit clearly encourages or gives precedent to such favored revenue sources. For example, virtually all state corporate income taxes allow the deduction of their own state business wealth or franchise taxes and typically give some recognition to those of other states.¹³

Third, one can view the relationship between state consumption taxes and a federal consumption tax in terms of intergovernmental political risks. When the taxes, which are allowable deductions, are from different levels of government, they can be viewed as reducing the political price or risk associated with their application by elected officials. As I have noted elsewhere¹⁴, the Union Civil War personal income taxes, 1909 corporate income tax, and the 1913 federal individual income tax all deducted state and local taxes in arriving at federal ability to pay. Moreover, in both *de novo* enactments of individual income taxes, the deduction or downward adjustment to income by the amount of state and local taxes paid was universal in arriving at taxable income, and not just limited to itemizers per current practice. ¹⁵

¹³Where property taxes or fees are imposed to reflect benefits from particular services or privileges, their deduction for income taxes, levied under the ability to pay theory, suggest that these costs of public services take precedence in the determination of ability in the same manner as costs of operation.

 $^{^{14}}$ Strauss(1995).

¹⁵The Tax Reform Act of 1986 elimination of the sales tax deduction for households but not for businesses must then be viewed as peculiar viz. a viz. this discussion of fiscal harmonization, and perhaps explains why Professor Musgrave's 1987 overview paper on TRA86 was entitled "Short of Euphoria". The curious bifurcation in the definition of ability to pay between households and businesses has been typically explained as a revenue raising exigency of the moment; however, when coupled with the organizational implications of TRA86's rate flipping between businesses and households which engendered a massive exodus to Subchapter-S and the remarkable development of the Limited Liability Corporation in most states, it might better have been scored a revenue loser for both the federal government and the states rather than a revenue raiser for the federal government. Were state and local sales tax rates much higher, one might expect more to use the business form as a mechanism to take advantage of available sales tax exemptions.

On the other hand, for those who think business may bear at least 1/2 the burden of current state and local sales and use taxes because of their patchy exemptions of business input purchases, TRA86 missed a genuine revenue raising opportunity by denying the deduction for sales taxes paid by businesses on business input purchases, albeit exacerbating existing and objectionable cascading.

The absence of recognition of another tax, imposed by the same level of government, can be designed as a disincentive for certain kinds of behavior. For example, the federal excise on pension reversions is not deductible for federal tax purposes, and was increased in TRA86 to dissuade the use of excess pension plan funding to finance merger and acquisition activity.¹⁶

Harmonization may involve recognition at a "lower" level of government of reductions in ability to pay resulting from taxes imposed by "higher" levels of government. Six states (Alabama, Iowa, Louisiana, Missouri, Oklahoma, and Utah) subtract federal individual income taxes as a mandatory adjustment in arriving at the state definition of ability to pay.¹⁷

Fourth, one can examine from a technical or administrative perspective how state consumption and federal consumption taxes can be defined to eliminate taxpayer confusion and simplify collection. Harmonization in this sense can thus involve utilization of similar or identical definitions of the tax base to ease compliance problems for taxpayers as well as simplifying tax administration. In the proper constitutional setting, it can involve a directive or statutory requirement that tax bases be identically defined for various governments, and can provide for single point collection for multiple governments (piggybacking) or co-administration of the same base with allocated responsibilities. Assigning the costs of piggybacking as well as providing for acceptable roles in the tax dispute resolution process are difficult and important design issues.

As noted by Poddar(1990), subnational value added taxation in the sense of Equation 7 is quite rare in the world; only Brazil's states, and the states of Michigan and (now) New Hampshire¹⁸ impose at the state level classical addition method value-added taxes, although many countries either share national VAT funds with subnational governments, or, as in the case of Germany, allow the states to collect and remit it to the central government for redistribution via revenue sharing payments. On the other hand, as already noted above, retail sales taxation is quite prevalent at the state and local level in the US.

It is worth noting that none of the national flat consumption tax proposals, nor any of the value-added tax proposals, provides for business deductibility or credits against federal VAT liability for state and local income or property taxes, nor do they provide for optional federal collection of piggybacked state consumption taxes of the sort being nationally proposed. This lack of recognition must be considered a disincentive, compared to current income tax law, of the positive incentives for political devolution provided through the deductibility of state and local income, property, and sales taxes, as well as the growing voluntary harmonization through state-local acceptance of the Internal Revenue Code's definitions and administrative practices as well as active administrative cooperation between the IRS and state revenue agencies.¹⁹

¹⁶Analogous situations arise with certain forms of receipts or income; states vary in their exemption for other state' bond interest compared to their own compared to the treatment of their own bond interest.

 $^{^{17}}$ ACIR(1993), Table 21.

¹⁸See, Kenyon(1996) for a description of New Hampshire's VAT.

¹⁹The typical discussion of the proper treatment of subnational governments and non-profits in a classical value-added tax, e.g. Vol. 3 of Treasury (1984), pp. 67-72, addresses whether or not their activities should be treated as taxable 'businesses' or sales to them should be taxed by, say, a federal VAT.

Business tax payments to state and local governments are not small; in 1992 US corporations with net

On the other hand, the proposed national retail sales tax, embodied in H.R. 3039 squarely addresses harmonization issues by offering any states, which agree to conform to the federal model, free federal collection by the federal government. Canada, by contrast, imposes a national credit-invoice VAT while the provinces impose consumption taxes. The Canadian VAT provides that any province may elect into the national system and allow Revenue Canada to collect and turn over consumption tax revenues attributable to that province.

Irrespective of these deductibility and administrative issues, the imposition by the national government of a consumption tax will force subnational governments to decide whether or not their definition of the price of consumption subject to their current consumption taxes includes or excludes, say, a national sales tax. Of course, even if exclusion occurs from an accounting and reporting point of view, from an incidence point of view, it is also likely consumer demand and producers' willingness to sell will be affected which could adversely affect state-local sales tax revenues.

income reported \$206 billion in taxes paid to state and local governments, which was roughly the same order of magnitude as total depreciation deductions for such corporations. (IRS, Statistics of Income Division (1995), Table 7.).

Analogous reasoning can also lead to promoting such deductions for individuals under wage or saved income tax schemes and accordingly narrow the federal consumption tax base. Table 1 below indicates that 1992 state and local personal income taxes amounted to \$115.2 billion. Overall, state and local income taxes (excluding insurance trust taxes) amounted to \$555.6 billion.

3 Some Fiscal And Economic Magnitudes in 1992/3

3.1 The Composition of US Public Finances

In 1992 ²⁰, the value of all goods and services produced in the US was \$6,020.2 billion and was composed of \$4,136.9 billion in personal or household consumption expenditures (68.7% of GDP), \$785.2 billion in gross private investment (13.0% of GDP), and federal-state-local purchases of goods and services of \$1,125.3 billion (18.7% of GDP).²¹ Also of interest is that the public sector spent \$257.8 billion more than it raised (4.3% of GDP), and accordingly lowered private savings by that amount.²²

The modern public sector, however, utilizes far more than 19% of the national economy's production of goods and services since significant funds are raised for redistributive purposes, and significant funds are directed into mandatory retirement and unemployment insurance programs. As measured by the Census Bureau, total federal, state, and local governmental revenues from their own sources were \$2,261 (37.6 % of GDP) in 1992 or about twice the amount of goods and services purchased from the private sector. They were composed of \$1,214.7 billion of taxes, \$430.1 billion of charges, \$554.6 billion of insurance trust fund revenues, and \$62.4 billion of utility and liquor store revenues. Federal income taxes (personal and corporate) totaled \$715.5 billion out of a total of \$1,256.0 federal tax receipts.²³ State and local income taxes (personal and corporate) totaled \$138.7 billion out of a total of \$705.7 billion in taxes.²⁴ Thus, income taxes were 56.9% of federal tax collections, but only 20% of state and local tax collections in 1992. (See Table 3.)

Income taxes from all levels of government constituted about 38% of the total resources which flowed through the public sector in 1992; federal and state personal and corporate income taxes (\$576.8 Billion) were no more than 46% of these total resources. If one views taxes on wages as part of a consumption-value added tax system (see Equation 10 above), then it is evident that the sum of wage taxes and general and selective sales taxes raised by the public sector in 1992 **exceeded** the amount of income taxes employed to finance public services in the economy–compare \$819 billion, composed of federal, state, and local insurance trust wage taxes and general and selective excise taxes to \$715 billion of federal, state, and local household and corporate income taxes. Thus, our current federal-state-local tax system is quite hybrid in terms of its reliance on income as contrasted to consumption

 $^{^{20}}$ Reliable data on most federal and state tax collections and tax laws are available for 1995, and reliable information about federal, state and local tax laws are available for 1996; however, due to reporting lags, 1992 is the most recent year for which systematic local government financial information is available throughout the US. In order to be able to comment on all three levels of government, 1992/3 is the data year discussed below.

²¹Economic Report of the President, 1995, Table B-1, p. 274.

²²Economic Report of the President, 1995, Table B-29, p. 308. This figure has now been roughly halved in dollar and percentage terms.

 $^{^{23}}$ This is the sum of federal tax and federal insurance tax collections.

²⁴This is the sum of state and local tax and insurance tax collections.

or components of consumption taxes.²⁵

These subfederal revenues were raised by 85,006 governmental units in 1992, composed of 50 states and the District of Columbia, 3,043 county governments, 35,935 municipal governments (essentially cities and townships), and 31,556 special purpose districts and 14,422 independent school districts with their own power to tax.²⁶

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Revenue Concept	Total	Federal	State	Local	State+Local
1	Total Revenue	\$2,261,849	\$1,259,383	\$744,232	\$647,872	\$1,392,104
1a	Intergov Revenue		\$3,431	\$169,902	\$216,305	\$386,207
1b	Revenue from Own Sources	\$2,261,849	\$1,255,952	\$574,330	\$431,567	\$1,005,897
	(1b=2a+2b+2c)					
2a	Gen Revenue from Own Sources	\$1,644,789	\$851,390	\$435,980	\$357,419	\$793,399
2b	Utility and Liquor Store Revenues	\$62,431	\$0	\$6,579	\$55,852	\$62,431
2c	Insurance Trust Revenue (wage taxes)	\$554,629	\$404,562	\$131,771	\$18,296	\$150,067
0		A1 A14 B 00	AAF1 AAA	• • • • • • • • •	AAKE (10)	* =00.000
2a	Gen Rev from Own Sources (detail)	\$1,644,789	\$851,390	\$435,980	\$357,419	\$793,399
	2a=2a.1+2a.2	.	A A B A A A	* ****	A	
2a.1	Taxes	\$1,214,651	\$659,041	\$328,370	\$227,240	\$555,610
	Property	\$178,536	\$0	\$6,673	\$171,863	\$178,536
	Individual Income	\$591,636	\$476,465	\$104,609	\$10,562	\$115,171
	Corporate Income	\$123,865	\$100,270	\$21,566	2,029	\$23,595
	Sales and Gross Receipts	\$260,394	\$64,282	\$162,721	\$33,391	\$196,112
	Custom Duties	\$17,480	\$0	\$0	\$0	\$0
	General	\$130,830	\$0	\$107,757	\$23,073	\$130,830
	Selective	\$112,084	\$46,802	\$54,964	\$10,318	\$65,282
	Motor Fuel	\$42,809	\$19,865	\$22,250	\$694	\$22,944
	Alcoholic Beverage	\$11,787	\$7,907	\$3,599	\$281	\$3,880
	Tobacco Products	\$11,500	\$5,190	\$6,119	\$191	\$6,310
	Public Utilities	\$21,338	\$7,851	\$7,762	\$5,725	\$13,487
	Motor Vehicle and Operators	\$12,601	\$0	\$11,771	\$830	\$12,601
	Death and Gift Taxes	\$15,629	\$11,143	\$4,456	\$30	\$4,486
2a.2	Charges	\$430,138	\$192,349	\$107,610	\$130,179	\$237,789

Table 1: Composition of 1992 Federal, State and Local Finances (\$ millions)

Source: Statistical Abstract of US: 1995, Table 475.

 $^{^{25}}$ Since the preponderance (77%) of income taxes are from personal income taxes (\$591 billion out of \$770 billion), whose main taxable base is wages or compensation, one can further argue that our overall tax structure relies more on components of a consumption tax than on capital income taxation.

²⁶U.S. Bureau of the Census, Governments Division(1995), Table 1, 4, 21.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Revenue Concept	Total	Federal	State	Local	State+Local
1'	Total Revenue		100.0%	100.0%	100.0%	100.0%
1a'	Intergov Revenue		0.3%	22.8%	33.4%	27.7%
1b'	Revenue from Own Sources		99.7%	77.2%	66.6%	72.3%
	(1b'=2a'+2b'+2c')					
2a'	Gen Revenue from Own Sources	72.7%	67.8%	75.9%	82.8%	78.9%
2b'	Utility and Liquor Store Revenue	2.8%	0.0%	1.1%	12.9%	6.2%
2c'	Insurance Trust Revenue	24.5%	32.2%	22.9%	4.2%	14.9%
2a.1'	Gen Rev from Own Sources (detail)	100.0%	100.0%	100.0%	100.0%	100.0%
	(2a'=2a.1'+2a.2')					
	Taxes	73.8%	77.4%	75.3%	63.6%	70.0%
	Property	10.9%	0.0%	1.5%	48.1%	22.5%
	Individual Income	36.0%	56.0%	24.0%	3.0%	14.5%
	Corporate Income	7.5%	11.8%	4.9%	0.6%	3.0%
	Sales and Gross Receipts	15.8%	7.6%	37.3%	9.3%	24.7%
	Custom Duties	1.1%	0.0%	0.0%	0.0%	0.0%
	General	8.0%	0.0%	24.7%	6.5%	16.5%
	Selective	6.8%	5.5%	12.6%	2.9%	8.2%
	Motor Fuel	2.6%	2.3%	5.1%	0.2%	2.9%
	Alcoholic Beverage	0.7%	0.9%	0.8%	0.1%	0.5%
	Tobacco Products	0.7%	0.6%	1.4%	0.1%	0.8%
	Public Utilities	1.3%	0.9%	1.8%	1.6%	1.7%
	Motor Vehicle and Operators	0.8%	0.0%	2.7%	0.2%	1.6%
	Death and Gift Taxes	1.0%	1.3%	1.0%	0.0%	0.6%
2a.2'	Charges and Miscellaneous	26.2%	22.6%	24.7%	36.4%	30.0%

Table 2: Percentage Composition of Federal-State-Local Finance in 1992

Derived from Statistical Abstract of US: 1995 Table 475

3.2 Fiscal Composition of National and Subnational Tax Systems in Other Industrialized Countries

Another way to benchmark the current hybrid US tax system is to compare it with those of our trading partners. Table 3 displays for 1989, the most recently available data on consistent basis, the composition of national and subnational finances for federal and unitary systems of government. The US 52.6% reliance on household and business income taxes (see Column (2) and (4) of Table 3), as measured by the OECD, is high, but by no

means extraordinary. In 1989, Australia's national fisc depended for 71% of its financing on household and business income taxes, and Japan relied for 44.2% of its finances on household and business income taxes. Moreover, the composition of regional and local finance in many countries tilts more heavily on business income taxes than in the US; compare 34.7% in Japan to 5.5% in the US.

It is evident (see Column (10) of Table 3), however, that the US relies far less nationally on taxes on goods and services than most other OECD countries. On the other hand, the defacto assignment of consumption taxation to the states and localities is far higher in the US than most other OECD countries. Compare, again, Japan's reliance of only 12.6% of regional and local finance on the taxation of goods and services in contrast to 42% in the US's state and local sector.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Pers Y	Pers Y	Corp Y	Corp Y	Soc Sec	Soc Sec	Property	Property	Gd Serv	Gd Serv
Fed Govts	Fed	StLoc	Fed	StLoc	Fed	StLoc	Fed	StLoc	Fed	StLoc
Australia	55.7%	\mathbf{nt}	15.7%	nt	nt	$_{\rm nt}$	0.4%	42.8%	26.8%	33.7%
Austria	15.6%	36.0%	3.4%	4.9%	41.6%	3.1%	2.0%	5.2%	29.9%	0%
Canada	42.6%	33.1%	10.0%	6.5%	23.5%	\mathbf{nt}	0.0%	19.9%	22.8%	7.9%
Germany	17.4%	57.2%	3.1%	11.0%	53.3%	\mathbf{nt}	0.3%	9.1%	25.9%	.6%
Switzerland	12.2%	67.5%	2.9%	12.4%	53.1%	\mathbf{nt}	4.2%	15.8%	27.6%	.4%
US	42.3%	20.9%	9.8%	5.5%	42.2%	nt	0.8%	31.7%	4.8%	42.0%
	DUNY	DIV	C V	C V	G	G G	D	D	C L C	C L C
TT 11 CL II	Pers Y	Pers Y	Corp Y	Corp Y	Soc Sec	Soc Sec	Property	Property	Gd Serv	Gd Serv
Unitary Govts	Natl	Local	Natl	Local	Natl	Local	Natl	Local	Natl	Local
Belgium	29.6%	60.3%	6.4%	15.1%	36.0%	7.5%	2.9%	nt	24.8%	17.1%
Denmark	35.7% 25.4%	90.5%	5.3%	1.7%	3.4% 16.0%	nt	2.9% 4.9%	7.6% 0.8%	46.9% 51.2%	$0.1\% \\ 0.0\%$
Finland		89.4%	2.3%	9.7%		nt				
Greece	11.6%	14.6%	6.1%	nt	49.3%	nt	2.2%	33.8%	29.1%	13.4%
Iceland	15.8%	55.3%	3.2%	2.1%	3.3%	nt	6.2%	14.4%	66.9%	12.0%
Ireland	33.2%	nt	3.5%	nt	15.1%	nt	2.4%	100.0%	44.4%	nt
Italy	27.2%	13.4%	10.1%	9.0%	34.1%	nt	2.3%	nt	25.9%	55.6%
Japan	23.4%	28.7%	20.8%	34.7%	37.6%	nt	5.7%	23.1%	12.6%	12.6%
Luxembourg	22.3%	32.7%	13.2%	52.4%	29.9%	nt	9.0%	3.4%	25.6%	11.5%
Netherlands	21.9%	nt	8.0%	nt	42.6%	nt	2.2%	73.4%	24.9%	26.6%
New Zealand	49.3%	nt	9.7%	nt	nt	nt	1.7%	93.1%	34.1%	6.9%
Norway	13.1%	80.7%	4.7%	7.5%	34.5%	nt	1.5%	8.2%	45.8%	0.7%
Portugal	14.2%	9.3%	4.0%	1.9%	27.7%	nt	0.3%	24.0%	45.8%	31.6%
Spain	24.0%	15.1%	9.2%	4.6%	39.1%	0.0%	0.8%	27.9%	26.8%	40.4%
Sweden	15.7%	99.6%	5.2%	nt	36.3%	nt	4.6%	nt	33.3%	0.4%
Turkey	2.3%	27.3%	8.2%	9.9%	17.4%	nt	2.1%	2.5%	24.1%	29.2%
U.K.	30.1%	nt	13.9%	nt	19.9%	nt	2.2%	100.0%	33.7%	nt
Source: OECD,	Revenue S	tatistics of	f OECD Me	mber Coun	tries, 1965-	90, p.27. N	ote: nt deno	tes not taxal	ole by govern	iment.

Table 3: Structure of OECD Tax Revenue, by Level and Type: 1989

4 Fiscal Concurrency and the IRS

4.1 Activities of the IRS

In 1995, the Internal Revenue Services collected 1,269.6 billion (net) in various taxes, processed 205.7 million tax returns, about half of which were individual income tax returns (116.3 million), and employed 117,810 individuals (21% were seasonal employees, and 79% full-time or part-time). On a calendar year basis, the IRS spent \$7.5 billion in 1995 to collect \$1,375.7 billion (gross), for a budgetary collection cost of .55%. Over the past 30 years, the budgetary collection cost has been as low as .40% (1969), and as high as .60% (1993).²⁷

(1)	(2)	(3)	(4)
Income Taxes	Corporate	\$156.8	12.7%
	Individual	\$590.5	49.1%
Employment Taxes	Old Age, DI,HI	\$454.5	33.1%
	Unemployment Ins.	\$5.7	.4%
	Railroad Retirement	\$4.3	.3%
Estate and Gift	Estate	\$13.0	1.0%
	Gift	\$1.8	.1%
Excise Taxes		\$43.1	3.3%
Total		\$1,269.6	100.0%

Table 4: 1995 Net Tax Collections (\$ billions) of the Internal Revenue Service

It is not possible to attribute the IRS budget to individual major revenue sources in terms of personnel, supplies, travel, training, computing resources etc.; however, 70.7% of the \$7.5 billion spent by IRS in 1995 represented personnel costs and related benefits, and the remainder other resources and services. The core of the IRS budget is spent in processing tax returns (\$1.541 billion), tax law enforcement (examination and appeals, investigation, collection and taxpayer service (\$4.241 billion), information systems (\$1.494 billion), and administration and management (\$.2 billion).²⁸

4.2 Other Statutory Federal Roles of the IRS

In addition to its primary mission to collect various federal taxes, the IRS is authorized under the disclosure sections of the Code to disclose tax return information to other federal agencies for law enforcement purposes, disclose tax return information to foreign tax

Source: Department of the Treasury, IRS 1995 Data Book, Table 1

 $^{^{27}\}mathrm{IRS}$ Data Book, 1995 Table 28.

 $^{^{28}}$ IRS Data Book, 1995, Table 28.

authorities under Treasury tax treaty agreements, and disclose to the Bureau of the Census and Bureau of Economic Analysis (BEA) tax return information for federal statistical purposes.²⁹

Since 1916, the Congress has obligated the IRS to compile and report annually on the operation of the tax law.³⁰ Not only has the Statistics of Income Division of the IRS routinely reported on various aspects of the tax system, it has assisted other federal statistical agencies to carry out their missions. Federal tax administration records have been used to help characterize the national economy as well as confirm our understanding about distributional aspects of income and wealth and spatial aspects of economic activity. Information about corporate profits and investment in the Bureau of Economic Analysis's GNP accounts are largely based on Statistics of Income Division tabulations of business tax return information.

For decades, information about the level and movement of capital income (interest and dividend payments) has been based primarily on what individual recipients have reported in terms of dividend and interest income to the IRS. The Statistics of Income Division accomplishes these tasks by tabulating the administrative records of the individual and corporate income taxes, the Individual and Business Master Files or IMF and BMF, and analyzing random, stratified samples of tax return information which contains further information abstracted by the Division from paper individual and business tax returns.

In 1972, as a result of the State and Local Fiscal Assistance Act of 1972, the IRS required political jurisdiction of residence information from all individual income tax filers, and this information was utilized by the US Bureau of the Census to develop accurate intercensal estimates of population and income on a continuing basis. Most recently, tax return information has been used to study migration behavior through the comparison of addresses over time.³¹

Tax return information has been routinely used for many years by other federal agencies to confirm their estimation of income and its components for both low and high income individuals and households. For example, the Federal Reserve Board has periodically collected household wealth and income information, and improved their statistical sampling techniques, elicitation methods, and cross-checked income and wealth responses by actively collaborating with the Statistics of Income Division of the IRS. Similar collaborations have occurred over the years with regard to the Current Population Survey and the Census Bureau and the Statistics Division. In the case of non-statistical agencies such as the Federal Reserve Board, collaboration occurs through the IRS analysis and confirmation of Federal Reserve data at the IRS in order to maintain the confidential obligations of IRC 6103.

In the case of the GNP accounts, the Statistics of Income Division collects, tabulates, and provides aggregate income information to the Bureau of Economic Analysis on a reimbursable basis.³²

 $^{^{29}}$ Federal tax return information is also shared to the states to assist child support enforcement activities under 6103 (l) (6).

 $^{^{30}\}mathrm{See}$ Section 6108 of the IRC of 1986 for the statutory requirements.

³¹See Kozielec(1996).

³²See Rosa and Collins(1988), Bureau of Economic Analysis(1985), Sailer(1994).

4.3 Federal - State Administrative Relationships

Federal-state cooperation in the administration of individual income taxes dates back to 1926 when Congress authorized state inspection of federal tax return information under Section 257 (a) of the Revenue Act of 1926, the forerunner to Section 6103 of the Internal Revenue Code. Penniman reports³³ that two states requested access to federal tax return information in 1927. In 1935, Massachusetts paid federal IRS employees overtime to make copies of audit transcript information to be used for state tax administration purposes. The photocopying of federal return information and their provision to state tax administrators became commonplace by close of that decade, and in 1949 the Secretary of the Treasury convened a conference of state and local revenue officials to discuss intergovernmental tax problems and sharing of audit information between the federal government and the states. It is worth noting that this 1949 conference followed a 1942 Conference on Intergovernmental Fiscal Relations and 1947 and 1948 joint meetings of representatives of the Congress, Governor's conference, and other interested parties. These meetings paralleled the development of the Advisory Commission on Intergovernmental Relations in the early 1950's.

With strong leadership from Treasury, various pilot projects were developed to strengthen federal-state tax cooperation. North Carolina and Wisconsin participated in 1950 in a systematic information exchange program with the IRS, and Colorado, Kentucky and Montana followed suit in 1951 and 1952. In 1952 Treasury issued its *Coordination Study* which described the manner in which abstracts of federal adjustments were to be provided to the states.

In 1969, IRS developed a model federal-state exchange and non-disclosure agreement for those states wishing to obtain and provide audit information.

By the 1970's the exchange of audit information had spread to virtually all of the states, and several engaged in cooperative audits with the IRS which generally entailed the states auditing lower income taxpayers for state and federal purposes, and the IRS auditing high income taxpayers.³⁴ Periodically the General Accounting Office has been asked by the Congress to review the extent of federal-state cooperation in tax administration, and concluded this year³⁵, as it did 20 years ago that while important and beneficial to all parties, the systematic exchange of tax return information between the IRS and the states lacked management attention and a long-term strategic vision.

Currently, states without district offices are seeking to locate an IRS employee in their revenue department facility with on-line terminal access to IRS data and transcripts to enable them to speed up the information exchange process for state tax administration purposes.

4.4 Structural Similarities and Conformities

³³Penniman(1980), p. 235.

³⁴Penniman(1980), pp. 234-7. See also Federation of Tax Administrators (1975).

 $^{^{35}}$ GAO(1996).

All but a handful of states begin their definition of taxable income for personal and/or business tax purposes with reference to the Internal Revenue Code, and require that state taxpayers utilize the same accounting period for state purposes as that used for federal tax purposes. As Table 5 indicates, even several states without personal income taxes or corporate income taxes per se (Texas) reference the Internal Revenue Code in conjunction with defining their tax bases. The states vary considerably in terms of whether they automatically accept federal revisions to the Code or require positive acts by the state legislature to accept the Code for a specific year; 26 states automatically accept the IRC while 21 (16 in the case of corporate net income taxes) require acts of the legislature. In some instances states will accept all but certain parts of the Code, or specifically reference Code sections which are to be used (or not) by taxpayers. Some states (e.g. California) replicate verbatim parts of the Internal Revenue Code without cross-reference or attribution, perhaps to avoid undue delegation of state authority.

Most states base their corporate income tax on the IRC; 39 of the 45 states imposing net income taxes incorporate the IRC as the starting point for the state tax on corporate net income.³⁶

While the concept of adjusted gross income (27 states), federal taxable income (8 states) or federal liability (2) is the starting point for 37 of the 45 states with personal income taxes (Table 6), they vary widely in terms of the details of personal and corporate taxes. Tax rates, adjustments to income, exclusions, exemption amounts, and definition of the filing unit vary considerably among the states.

³⁶CCH (1996), Multistate Corporate Income Tax Guide, ¶ 251.

(1)	(2)	(3)
State	IRC Relied Upon?	Adoption Method
Alabama	No	No
Alaska	Yes	As of Current Taxable Year
Arizona	Yes	As of Specific Year
Arkansas	No	No
California	Partial	As of Specific Year
Colorado	Yes	As of Current Taxable Year
Connecticut	Yes	As of Current Taxable Year
Delaware	Yes	As of Current Taxable Year
DC	Yes	As of Specific Year
Florida	Yes	As of Specific Year
Georgia	Yes	As of Specific Year
Hawaii	Yes	As of Specific Year
Idaho	Yes	As of Specific Year
Illinois	Yes	As of Current Taxable Year
Indiana	Yes	As of Specific Year
Iowa	Yes	As of Specific Year
Kansas	Yes	As of Current Taxable Year
Kentucky	Yes	As of Specific Year
Louisiana	Yes	As of Current Taxable Year
Maine	Yes	As of Specific Year
Maryland	Yes	As of Current Taxable Year
Massachusetts	Yes	As of Current Taxable Year
Michigan	Yes	As of Specific Year
Minnesota	Yes	As of Specific Year
Mississippi	Partial	As of Current Taxable Year
Missouri	Yes	As of Current Taxable Year
Montana	Yes	As of Current Taxable Year
Nebraska	Yes	As of Current Taxable Year
Nevada	NA	NA
New Hampshire	Yes	As of Specific Year
New Jersey	Yes	As of Current Taxable Year
New Mexico	Yes	As of Current Taxable Year
New York North Carolina	Yes Yes	As of Current Taxable Year As of Specific Year
North Dakota	Yes	As of Current Taxable Year
Ohio	Yes	As of Current Taxable Year As of Current Taxable Year
Oklahoma	Yes	As of Current Taxable Year As of Current Taxable Year
Oregon	Yes	As of Specific Year
Pennsylvania	Yes	As of Specific Tear As of Current Taxable Year
Rhode Island	Yes	As of Current Taxable Year
South Carolina	Yes	As of Specific Year
South Dakota	Yes	As of Specific Year
Tennessee	Yes	As of Current Taxable Year
Texas	Yes	As of Specific Year
Utah	Yes	As of Current Taxable Year
Vermont	Yes	As of Current Taxable Year
Virginia	Yes	As of Current Taxable Year
Washington	NA	NA
West Virginia	Yes	As of Specific Year
Wisconsin	Yes	As of Specific Year
Wyoming	NA	NA NA

Table 5: Incorporation of Internal Revenue Code by State

Source: Commerce Clearing House, All State Tax Guide

(1)	(2)	(3)	(4)
State	Pers Y Tax ?	Conformity?	1992 Tax Rates (Percent)
Alabama	Yes	None	2.0-5.0
Alaska	No	NA	
Arizona	Yes	AGI	3.8-7.0
Arkansas	Yes	None	1.0-7.0
California	Yes	AGI	1.0-11.0
Colorado	Yes	FTI	5.0
Connecticut	Yes	AGI	4.5
DC	Yes	AGI	6.0-9.5
Delaware	Yes	AGI	3.2-7.7
Florida	No	NA	
Georgia	Yes	AGI	1.0-6.0
Hawaii	Yes	FTI	2.0-10.0
Idaho	Yes	FTI	2.0-8.2
Illinois	Yes	AGI	3.0
Indiana	Yes	AGI	3.4
Iowa	Yes	AGI	.4-9.98
Kansas	Yes	AGI	4.4-7.75
Kentucky	Yes	AGI	2.0-6.0
Louisiana	Yes	AGI	2.0-6.0
Maine	Yes	AGI	2.1-9.89
Maryland	Yes	AGI	2.0-6.0
Massachusetts	Yes	AGI	5.95-12.0
Michigan	Yes	AGI	4.6
Minnesota	Yes	FTI	6.0-8.5
Mississippi	No	None	3.0-5.0
Missouri	Yes	AGI	1.5-6.0
Montana	Yes	AGI	2.0-11.0
Nebraska	Yes	AGI	2.37-6.92
Nevada	No	NA	2.01-0.02
New Hampshire	Yes	(Int and Div Tax)	
New Jersey	Yes	None	2.0-7.0
New Mexico	Yes	AGI	1.8-8.5
New York	Yes	AGI	4.0-7.875
North Carolina	Yes	FTI	6.0-7.75
North Dakota	Yes	AGI	2.67-12.0
Ohio	Yes	AGI	.743-6.9
Oklahoma	Yes	AGI	.5-7.0
Oregon	Yes	FTI	5.0-9.0
Pennsylvania	Yes	None	2.95
Rhode Island	Yes	% of Fed Tax	2.93
South Carolina	Yes	% of Fed Tax FTI	27.5
South Dakota	Yes	I II NA	2.3-7.0
Tennessee	Yes	(Int and Div Tax	
Texas	Yes	(Int and Div Tax NA	
Utah	Yes	FTI	2.55-7.2
0.0000	Yes		
Vermont		% of Fed Tax	28.0-34.0
Virginia	Yes	AGI	2.0-5.75
Washington	Yes	NA	0005
West Virginia	Yes	AGI	3.0-6.5
Wisconsin	Yes	AGI	4.9-6.93
Wyoming Source: ACIR(199	Yes 94), pp. 58-60.	NA	

Table 6: State Personal Income Tax Link to Federal AGI in 1993/4

Source: ACIR(1994), pp. 58-60.

Note: AGI means Adjusted Gross Income Note: FTI means Federal Taxable Income

Note: NA not applicable

4.5 Federal and State Individual Income Tax Withholding and Reporting Systems

Federal withholding of estimated taxes on wages and periodic retirement benefits and required information reporting on other sources of income to the IRS and income recipients have long been an important strength of the federal revenue system. Their development and application has been paralleled in state withholding and information reporting systems which are separate, but increasingly inter-twined with federal structures both for the administrative convenience of state tax administrators and employers who are subject to state laws and regulations governing withholding. Over time, states have increasingly allowed employers to utilize federal withholding and information forms and reports in lieu of state counterparts. Also, a number of states now allow employers to participate in a joint federalstate combined information reporting system through which employers file 1099 information forms at the end of the year, and the IRS then distributes them to the states. The 1099 process has been growing as employee benefits become more complex, and bonuses become a more important component of total compensation for white and blue collar employees who were heretofore either on a salary or hourly compensation basis.³⁷

As might be expected in a federal system, state laws vary sometimes from the federal definition of "employer" but generally obligate an employer to withhold for state income tax purposes if the employer does business in the state, pays wages for services to a minimum (as few as one) number of resident (or non-resident) employees. Employers are required to withhold regardless of their own tax status under state income tax law; thus governmental entities (including the federal government), non-profits, and charities are obligated to withhold estimated tax on wages. As with the federal withholding requirements, several factors are used to determine the relationship between the employee (right to fire the employee etc.), and a limited number of classes of employees (casual laborers, agricultural and migrant workers, domestic employees) are exempt from the withholding process.

Currently, a majority of states follow federal guidelines and rules defining wage and benefit payments subject to withholding, and include in covered wages: salaries, bonuses, commissions, fees, wages, as well as non-cash compensation including stocks, merchandise, food, lodging, and rent-free housing valued at market-value.³⁸

Under most state income tax withholding rules, employees elect the number of exemptions and sign an exemption certificate; several states use Federal Form W-4. Taxes withheld by employers can be computed using either wage bracket tables, percentage computational methods, or a percentage of the federal withholding. Practices with regard to county and municipal income taxes vary. State withholding typically governs resident and non-resident employees, and allocations of non-resident wages are based on the amount of time in-state versus out of state, on a mileage basis, or in proportion to the employee's commissions earned in-state vs. out-of-state.

States require employers to reconcile periodic withholding at the end of the year and inform the state and the employee of prior year's withholding.

State practices with regard to income not subject to income tax withholding but subject to information reporting requirements vary. In some states systems analogous to but separate from the federal 1099 process are utilized while in others employers are allowed to authorize the IRS to provide the 1099s to the state revenue agency. Many states have minimum thresholds of, say \$1,500, in non-recurring or non-wage compensation which must be reported at the close of the year to the payee and to the state revenue agency, either directly, or through the use of a combined report which authorizes the IRS to disclose this information to the state revenue agency. In California, for example, employers are instructed not to file Form 1099 with the Franchise Tax Board, but are required to send a copy of the 1099 to the payees by the close of January; the Franchise Tax Board then obtains its information returns directly from the IRS under the combined filing program. Of interest is that the new Medical Savings Accounts are to be part of this information

³⁷See Wall Street Journal, January 9, 1997, p. B-1.

³⁸BNA(1996), p. 82.

return process under federal law, and it seems likely that the states will avail themselves through regulation or statute of such information as well.

4.6 Value of Federal-State Collaborations

As noted above, state access to federal tax audits immediately enhanced state audit and compliance activities. Computerization of basic tax accounting information for individual and corporate tax purposes based on social security number and employer identification number (EIN) vastly expanded the utility of federal-state information exchanges. Under the federal-state audit information exchange agreements, signatory state revenue authorities obtain revenue agent reports (RARs) which summarize IRS audits of individual and corporate tax returns. Table 7 from Penniman (1980) shows that many of the early information exchange agreements dated back to the 1950's and that a number of non-income tax states have obtained and used federal tax return information to assist in the administration of their non-income taxes.

The Federation of Tax Administrators reported in 1975 that better than \$68 million in state taxes were collected as a result of use of the Individual Master File tapes, and an additional \$50.6 million from federal Revenue Agent Reports.³⁹

In the summer of 1996, FTA surveyed its membership again to ascertain the value to the states of federal-state tax return information exchanges. The state responses indicated that obtaining the Individual Master File and Business Master File along with 1099 forms assisted their own tax administration and analytical support of tax policy in a wide variety of ways. Matching of state and federal databases allows the cross-checking of addresses and the identification of potential non-filers. Comparing income items between federal and state sources materially assists state audit processes. Triggering state assessments as the result of federal audits further enhances state compliance efforts.

New York State alone identified \$275 million/year in additional revenues attributable to the use of various federal tax return information.

California identified \$300.4 million in gross additional tax assessments and \$66.1 million in cancellations and abatements in 1994/5 for personal income taxes as a result of their use of federal audit reports, and an additional \$76.3 million in business tax gross assessments in 1994/5 as a result of their use of federal business tax audit reports.⁴⁰

It should be recalled that the level of individual income tax rates has an immediate bearing on the revenue efficacy of any audit investment. Since the federal personal income tax raises on the order of four times ⁴¹ as much revenue as the aggregate of state and local income taxes, the effective federal marginal tax rates are proportionately higher. This differential explains why one should expect federal individual income tax audit efforts to be qualitatively larger than those of the states, and why state reliance on such federal audits in their own tax administration is significant. In turn, elimination of federal audits would

 $^{^{39}}$ FTA(1975) p. 27 and 36.

⁴⁰Personal correspondence from Karen Beeding, California Franchise Tax Board, to author, December 27, 1996.

⁴¹See Table

reffedstate1, cols (4) and (7) for individual income taxes.

require greater state effort; however, given their lower marginal tax rates, one could not expect them to recoup what was previously achieved by using the federal audits.

(1)	(2)	(3)	(4)	(5)
	Year of			
	Agreement	Audit Adj	IMF Tapes	Specific Return
Alabama	1970	Y	Υb	Y
Alaska	1967	Y	Y	Y
Arizona	1966	Y	Yb	Y
Arkansas	1963	Y	Y	Y
California	1961	Y	Y	Y
Colorado	1952	Y	Yb	
Connecticut	1970	Y		Y
Delaware	1965	Y	Y	Y
Florida	1963		Y	Y
Georgia	1968	Y	Y	Y
Hawaii	1965	Y		Y
Idaho	1964	Y	Y	Y
Illinois	1963	Y	Y	Y
Indiana	1961	Y	Y	Y
Iowa	1962	Y	Y	Y
Kansas	1960	Y	Y	Y
Kentucky	1951	Y	Y	Y
Louisiana	1971	Y	Y	Y
Maine	1964	Y	Y	Y
Maryland	1963	Y	Y	Y
Massachusetts	1963	Y	Y	Y
Michigan	1965	Y	Y	Y
Minnesota	1957	Y	Y b	Y
Mississippi	1966	Y	Y	Y
Missouri	1962	Y	Y	Y
Montana	1951	Y	Y	Y
Nebraska	1963	Y	Y b	Y
New Hampshire	1964	Y	Y	Y
New Jersey	1966	Y	Y	Y
New Mexico	1963	Y	Y	Y
New York	1963	Y	Y	Y
North Carolina	1950	Y		Y
North Dakota	1964	Y	Y	Y
Ohio	1961	Y	Y	Y
Oklahoma	1963	Y	Y	Y
Oregon	1961	Y	Y	Y
Pennsylvania	1965		Y d	Y
Rhode Island	1970	Y	Y	Y
South Carolina	1964	Y	Υ	Y
Tennessee	1963	Y	Υ	Y
Utah	1961	Y	Y	Y
Vermont	1965	Y	Yb	Y
Virginia	1963	Y	Υ	Y
West Virginia	1962	Y		Y
Wisconsin	1950	Y	Υ	Y

Table 7: Federal-State Exchange Agreements and State Use in 1980

a: Note several non income tax states obtained and used IRS data for other taxes.

b: Intermittent or minimal use as of 1980

c: Do not have broad based income taxes

d: Limited to mailing lists

4.7 Measures of Federal Information Flows

As a consequence of amendments to Section 6103 of the IRC in 1976, the Internal Revenue Service is required to make annual reports to the Joint Committee on Taxation about the extent and nature of their disclosures of tax return information. These reports describe the extent of federal tax return information sharing with federal statistical agencies and the states.

Reports for calendar years 1980 through 1994 indicate that federal sharing of federal tax return information to state tax authorities, the Census Bureau, and Bureau of Economic Analysis of the Department of Commerce (BEA) for statistical purposes were far and away the two largest categories of recipients federal income tax information. Total disclosures of federal tax return information grew from about 200 million disclosures in 1980 to about 900 million disclosures in 1994; they have been as high as 1.1 billion disclosures in 1992 and 1993. The rapid growth in disclosures in the late 1980's was due to the elimination of any charge to the states for their obtaining IMF and BMF files and the general growth in use of 1099 information by the states for state tax administration purposes.

The state share of these disclosures has grown from as little as 20+% in 1982 to as high as 85% in 1990. Disclosures of federal tax return information for statistical purposes has averaged about 150 million disclosures until 1994 when it fell to 34 million disclosures. See Figure 1, Figure 2, and Figure 3:⁴²

 $^{^{42} \}mathrm{Data}$ are from the annual disclosure reports prepared by the IRS and provided by the Joint Committee on Taxation.

Figure 1: Total Number of Federal Tax Return Disclosures (Tape and Non-Tape) by Calendar Year

Figure 2: Number of Federal Tax Return Disclosures (Tape and Non-Tape) to States and Federal Statistical Uses by Calendar Year

Figure 3: Share of Federal Tax Return Disclosures (Tape and Non-Tape) to States and Federal Statistical Uses by Calendar Year

5 Candidate Federal Tax Law Changes for Fundamental Tax Reform

5.1 An Early Precursor, H.R. 10236, 72'nd Congress, 1st Session

The idea of imposing a sizable federal consumption tax is not new, and variants were actively considered in the 1930's by the Treasury and Congress to deal with a federal revenue crisis, and in the 1940's within Treasury to deal with war finance. However, neither episode resulted in the imposition of a major federal consumption tax.

On December 7, 1931, the Secretary of the Treasury informed the Congress that public spending for 1932 was projected to exceed total revenues by \$1.241 billion for a shortfall of 55.4%.⁴³ The projected crisis in the federal budget balance was not unexpected, and in hearings before the Ways and Means Committee throughout January, 1932, the public expressed widespread alarm at the deteriorating budgetary position of the federal government and the likely adverse effect it would have on the federal government's credit rating. Remarkably, the National Association of Retailers favored such an emergency measure as did many other business groups in their public testimony before Ways and Means.

To address the projected deficit, \$1.121 billion in additional tax revenues were enacted by the Ways and Means Committee of which \$595 million of new revenues, or about 16% of the projected 1933 federal budget⁴⁴, was to be obtained from a new, broad based manufacturer's excise tax at a rate of 2.25%.⁴⁵ Treasury had proposed a rate of 2.0%; however, the Committee feared that might not be sufficient to meet revenue objectives. The excise tax was reported to the floor (under a closed rule) of the House of Representatives for consideration in mid-March, 1932. However, by early April, 1932, a coalition led by Congressman Fiorello LaGuardia defeated the legislation and Chairman Crisp and the Committee were forced to report another measure which did not include the manufacturers' excise tax and which was agreed to by the House and Senate. The vertical regressivity of the proposed excise tax was probably its greatest point of political vulnerability.

Ten years later, facing the need to finance Lend Lease and quell growing inflation, Treasury considered proposing some form of consumption tax, but the experience of the 1932 legislative debacle forced them to ultimately propose a series of income tax surcharges to find the necessary revenues.

The 1932 manufacturers' excise required the licensing of manufacturers and producers and the registration of dealers and importers with gross sales of over \$20,000 (about \$200,000 in todays dollars), and exempted farmers from licensing. The excise was not imposed on sales of articles between licensed manufacturers; such tax-free transfers were to avoid pyramidding of the tax, and were also available if the transfer from a manufacturer to another was through a registered dealer which took temporary title (an indirect tax-free

⁴³US Congress(1932), p. 2-3.

 $^{^{44}}$ Given total federal spending on the order of \$1.5 trillion, a tax that would finance 16% of todays federal budget would need to raise about \$240 billion.

⁴⁵Canada and Australia had already enacted such taxes, and the Ways and Means Report spoke favorably of it as a mechanism to close the budgetary gap.

transfer). Exports were also exempted from the excise for constitutional reasons, and imports subjected to a 2.25% customs duty for final retail sale, or the equivalent to a compensating state use tax. Several imported items, certain grades of lubricating oil, were subjected to higher rates of customs duties, and imported petroleum, even if subsequently used in the manufacturing process, subjected to a special tax of 1 cent per gallon (or 42 cents per barrel). As gasoline was selling for 12 to 13 cents/gallon,⁴⁶ this special customs duty could easily have raised the price of gasoline at the pump 8% in 1932. Special excise rates were estimated to raise \$80 million of the \$595 million in overall excise revenues.⁴⁷

The 1932 proposed excise exempted farmers and farm products; farm products were broadly defined to include:

...all plant and animal products useful to man except forestry products but not such products when they have been processed by any person other than the original producer or a cooperative association of such producers. (Sec. 602, *passim*).

Exceptions were further made in the case of cleaning and ginning of cotton or cleaning and threshing of grain to forestall the possibility that buyers with greater market power might force the tax back upon the growers. It was intended that livestock and plant products were covered by the exemption, and that these items would be later taxed when sold by licensed (food-stuff) manufacturers for retail consumption.

Section 602 of the legislation also exempted certain items at retail (meat, fish (including shellfish) and poultry if fresh, dried, frozen, chilled, salted or in brine.) Cooked, cured, smoked or canned meats, fish and poultry were not exempt. Smoked or cured bacon, hams, pig shoulders and pig jowls were specifically exempted. Other food exemptions were: butter, oleomargarine, and other butter substitutes, cheese, milk and cream in any form (including fresh, pasteurized,dried, powdered or condensed, but not products of milk such as ice cream and malted milk. Eggs in the shell, bread (but not including biscuits, wafers and crackers), flour and meal made of grain, semolina, sugar, sale, tea, and coffee. The Report notes in passing that the exemptions are "...similar in scope to those provided in Australian law."

Where items were already subject to other federal excise (other than those noted above), they were specifically exempted from the 2.25% levy. Water sold by public service companies was free of excise but not bottled water. Newspapers, magazines, and other periodicals were exempted but the tax on paper, ink and other materials used in manufacture not was expected to compensate for that retail exemption.⁴⁸ Books for the blind, educational textbooks and Bibles were exempted along with certain other items manufactured for the

⁴⁶Statistical Abstract of the US, 1940.

 $^{^{47}}$ US Congress(1932), p. 35.

⁴⁸Obviously if the newspapers were able to demonstrate that they used these items further in manufacturing newspapers, which seems plausible, the sellers of the various items should have been able to avoid the tax, and effectively exempt newspapers and other publications at retail. Today, cable television and various publications are typically exempt from state and local sales and use taxes. Where states have sought to tax advertising, e.g. Florida and Massachusetts, the results have been injurious to the political health of advocates.

West Virginia's historic gross-receipts tax, (The Business and Occupation Tax) was quite aggressive and

exclusive religious and devotional use. Other religious and devotional items which might be suitable for uses other than in the church were not exempt.

Tax avoidance for importers and domestic distributors buying from manufacturers was forestalled, at least on the part of registered dealers, by obligating them to pay the tax which would have been imposed on purchase or importation if it were not exempt. The legislation established a presumption of a positive obligation to pay tax unless exemption was specifically available. Thus, the burden of proof for demonstrating the legitimacy of unforeseen business conditions being the reason for an unwarranted exemption, was constructed to lie on the taxpayer rather than the government, and thereby secure both revenues and standing for later prosecution.⁴⁹ Finally, the Commissioner was authorized under the legislation to develop reporting systems which might be based on, for example, inventory analysis, which might lighten distributors' administrative burdens. The law provided rules governing the sales price to which the excise was to apply, but surprisingly did not require the separate stating of price and excise. Special rules governing the definition of gas and electricity price were provided, and specified that the production price exclusive of distribution costs be the measure. Also, special rules for installment and conditional sales, leases and royalties, and manufacture under contract were provided as well.

5.2 Contemporary Proposals

Three types of consumption tax proposals have been discussed recently at the federal level over the past several years to replace federal individual and corporate income taxes (and in the case of Congressman Armey's proposal and the Retail Sales Tax proposal) also the elimination of federal estate and gift taxes). In addition, Congressman Gibbons has introduced a classical value added tax which would be implemented alongside a simplified federal income tax.

The three most discussed proposals are:

- a flat or wages variant of a consumption value added tax coupled with a modified subtraction method value added tax on business (H.R. 4585 introduced by Congressman Armey in 1994 and revised and reintroduced as H.R. 2060 by Congressman Armey on July 19, 1995);
- an income tax with a deduction for savings coupled with a subtraction method value added tax on business (S. 722 introduced on April 25, 1995 by Senators Domenici, Nunn and Kerrey); and,

unapologetic about its cascading until its repeal in 1985, but took a different route to find the politically correct burden on newspapers by exempting newspapers from other components of the gross receipts tax but imposing a services tax on the distribution of it. The effect was to put the collection burden on the children distributing newspapers to homes. The West Virginia House of Delegates was uncomfortable a decade ago at my reminding them of their own legislative cowardice— requiring children to collect a tax from adults rather than the State Department of Revenue.

⁴⁹The report is silent, however, about whether civil penalties, interest, or criminal penalties were available to the government to encourage compliance.

3. a national retail sales tax (H.R. 3039 introduced on March 6, 1996 by Congressmen Schaefer, Chrysler, Tauzin, Bono, Hefley, Linder and Stump); this form of consumption tax has been favored by Ways and Means Chairman Bill Archer.

5.2.1 Major Features of the Flat Tax Proposal, H.R. 2060 104'th Congress, 1st Session

H.R. 2060, 104th Congress, is composed of several titles. The first title amends the Internal Revenue code to provide for a flat or wages form of consumption value added tax in conjunction with a subtraction value added tax on businesses.

It also materially changes the federal tax treatment of pension plans. It eliminates various prohibitions against discriminatory provision of pension benefits (including limitations or prohibitions of discrimination, top-heavy plans, minimum participation and coverage requirements, deferral percentage in cafeteria plans, limitations on permitted disparity in plan contributions or benefits, and contribution limits. It also eliminates the federal excise on certain plan reversions imposed in the Tax Reform Act of 1986 as long as the plan is fully funded.

The proposal repeals the alternative minimum tax, repeals various income tax credits including the child care credit, foreign tax credit, taxes withheld on wages, the earned income tax credit, credit for taxes withheld at the source on nonresident aliens and foreign corporations, credits for over-payment of taxes, the low-income housing credit, and targeted jobs credit.

It also repeals the estate and gift tax, and provides for an effective date of January 1, 1996. The other major parts of the legislation require a supermajority to make tax changes, impose various spending restraints, and provide various parliamentary budgetary restraints including zero based budgeting and the sunsetting of discretionary spending after ten years.

The base of the household wage tax is composed of cash wages, retirement distributions, and unemployment compensation in excess of the standard deduction and exemption level. It should be noted that the definition of wages is far narrower yet contradictory with current law. Under H.R. 2060, wages are defined as:

... wages (as defined in section 3121(a) without regard to paragraph (1) thereof which are paid in cash and which are received during the taxable year for services performed in the United States,..

Compare this to current Sec. 3121. Definitions:

(a) Wages.–For purposes of this chapter, the term "wages" means all remuneration for employment, including the cash value of all remuneration (including benefits) paid in any medium other than cash;

From a drafting point of view the amendment and underlying Code language are inconsistent since the Code provides expressly for including in wages the cash value of remuneration paid in-kind etc., while the amendment provides for wages measured strictly by cash. An initial question arises about why the amendment even references 3121(a) since it is intentionally far narrower in construction.

Several related points are of interest. First, other income-conditioned transfer payments are excluded (AFDC, Foodstamps, Medicaid). Second, the taxable status of bonuses and other irregular payments, including those which involve providing a capital position to the employee, are unclear.

Upon complete phase-in, the flat tax rate is 17% on wages in excess of the standard deduction and exemptions. The basic standard deduction is \$21,400 for a joint return, \$14,000 for surviving spouse or head of household, and \$10,700 for a single person. Dependents, defined under Section 152 of the Code, are accorded an additional deduction of \$5,000.

The tax on businesses creates two new constructs: (1) business activity, which involves the sale or exchange of real property or services, and (2) the 'person' engaged in such transactions; the 'person' can be an individual, partnership, corporation or otherwise. The proceeds from such activities are called 'gross active income'⁵⁰ and are to be measured at their fair market value plus any money received. Allowable business deductions include:

- 1. the cost of business inputs which are amounts paid for property or services other than employee wages and fringes,
- 2. cash wages as defined above,
- 3. retirement contributions on behalf of employees, and
- 4. federal state and local sales or excises imposed on any input purchases.

At the business level, deductions for payroll, property, and income taxes are no longer available. Payments for financial services, including money and financial instruments, are not deductible.⁵¹

5.2.2 Major Features of the Saved Income Tax Proposal, S722 104th Congress, 1st Session

S722 as introduced in the 104th Congress is composed of five titles. Conceptually, it is a saved income tax at the household or individual level coupled with a subtraction value added tax at the business level with immediate expensing of investment. Gross individual

⁵⁰Neither an activity test nor a definition of 'passive' income is contained in the legislation, so it is difficult to reach any definitive conclusions about the importance of the term 'active.' However, by limiting taxation to the proceeds resulting from the sale or exchange of property or services within the United States, or resulting from exports from the United States overseas, the bill effectively eliminates the receipt of foreign source dividends from the new tax base even though they might represent 'active income' of wholly owned foreign subsidiaries.

⁵¹A variety of commentators have stated that both interest and dividend deductions are prohibited under the business activity tax; they clearly are excluded from inclusion in the household portion of the tax scheme. Since Code sections dealing with corporate distributions are not amended, it may be that current income tax law treatment of shareholder dividends and return of capital would remain in place.

income from all sources is reduced by a deduction for an unlimited savings allowance (hence the acronym USA). Unlike current federal income tax law and many other consumption tax proposals, the rate of tax at the business level (including certain trusts) is significantly lower (11%) than the top marginal tax rate on individuals (40%). ⁵²

Considerable effort is devoted to treating financial institutions or their activities on a separate basis from those of other businesses. Also, unlike many other consumption tax proposals, a substantial amount of the scheme is devoted to easing the transition from an economy subjected to federal income taxes to one subjected to a federal consumption tax, and trying to deal with the problem of "old capital".⁵³

Taxation at the individual level is accomplished by reducing taxable income defined as:

TaxableIncome = AGI + Deferred Income - Alimony Received-Child Support Received - Unlimited Savings Allowance(15)

by deductions for personal and dependent deductions and several other deductions. AGI is comparably inclusive to current law, but excludes a portion of Social Security benefits, health insurance payments if the policy was paid for by the employee, rental value of homes furnished to ministers, combat pay, certain military benefits, moving allowances, foster care payments, gifts, inheritances, government cash and in-kind transfers (AFDC,SSI, foodstamps, rental assistance), interest on state and local bonds, sick-pay, employer provided benefits (meals, parking), medicaid and medicare reimbursements, and taxable receipts of a business entity. The Unlimited Savings Allowance deduction would be for any increase in a net savings account, e.g. the excess of investments over withdrawals in stocks, bonds, securities, certificates of deposits, interests in unincorporated businesses, mutual fund shares, life insurance policies, annuities, retirements accounts, bank and money market accounts, brokerage and other money accounts. Excluded from qualified investments in the USA account are investments in land, collectibles and cash on hand.

The other deductions reducing taxable income are:

- a family living allowance (\$7,400 for joint returns, \$7,400 for surviving spouse, \$4,400 for single returns, and \$5,400 for heads of household) and \$3,700 for married filing separately;
- alimony and child support

⁵²Of related interest is that the USA tax, at Sec. 302, eliminates, effective immediately, Chapter 6 of the Code dealing with consolidated corporate tax return filing requirements and related definitions; however, Subtitle F, relating to Procedure and Administration, is presumed at Sec. 503 of the USA Tax to reflect the amendments of the USA Tax until specifically amended to do so. Joint Committee on Taxation (1995, p. 46) interprets these somewhat contradictory provisions to allow members of an affiliated group to file a consolidated return under the USA tax if they are allowed to under pre-USA tax law. Since all definitions relating to consolidation are eliminated upon first effect of the USA tax law, it is difficult to envision how this could be unambiguously administered.

 $^{^{53}}$ Whether these mechanisms achieve ostensible objectives, and whether there may be opportunities for tax avoidance for the agile as a consequence of these complex rules has occupied the attention of a number of commentators. See Ginsberg(1995) and Warren(1995); Seidman(1996) proposes adjustments to the USA scheme to address these problems.

- personal and dependent exemption deduction (\$2,550)
- Unlimited Savings Allowance deduction and additional deductions for:
 - mortgage interest on mortgage indebtedness under \$1 million,
 - educational expenses of \$2,000 per post-secondary student not to exceed \$8,000/year;
 - gifts to regular charities of up to 50% of AGI (with carry forward of excess gifts)
 - a transition basis deduction available for three years

Three rates on taxable income for individuals are imposed: 8%, 19%, and 40%. Credits to offset tax are provided in stacked order for the foreign tax credit, the employee's payroll tax credit, the earned income tax credit, withholding of taxes during the year, estimated tax payments and over payments of prior-year taxes. Finally, the system for individuals is indexed for inflation.

The business tax is imposed at a rate of 11% on the excess of receipts from the sale of property, use of property, and performance of services over costs. Receipts are measured exclusive of federal, state or local excise taxes. For non-financial institutions, capital income (interest, dividends, proceeds from the sale of stock, annuities, proceeds from life insurance policies, and proceeds from other financial transactions) is excluded from business taxable receipts. Allowable costs include amounts spent in the acquisition of property, the use of property, or services, the purchase of services of independent contractors, purchase of financial intermediation services, purchase of business loss policies (insurance).

State and local excise taxes on deductible business purchases are deductible and need not be separately stated. State and local property and income taxes, payroll taxes and self-employment taxes are specifically excluded and are not deductible.

A number of current law deductions are eliminated: employer provided health benefits, deferred compensation plans,

Credits against gross tax are available for the social security, railroad retirement and hospital insurance taxes paid by the employer.

5.2.3 Major Features of the Retail Sales Tax Proposal, H.R. 3039 104th Congress, 2nd Session

The proposed 15% national retail sales tax repeals federal individual and corporate income taxes, estate and gift taxes, consolidated return provisions, withholding of income taxes at the source, retail excises, manufacturer excises, excises on alcohol, tobacco and certain other taxes, and repeals all of subtitle F except 6103, and certain other administrative provisions kept to implement the new tax. Effective January 1, 1998, it would eliminate appropriations for the Internal Revenue Service and transfer responsibilities for collecting employment taxes to the Social Security Administration. States that elected to conform their sales and use taxes could administer the federal sales and use tax and remit collections to the Secretary of the Treasury. States which conform and administered the sales tax on behalf of the federal government would be permitted to retain 1% of their 15% tax collections to pay for their administrative costs, and retailers could keep .5% of the 15% in recognition of their administrative costs. Thus, the federal government would forego 1.5% of the 15% rate, or 10% of gross collections to defray administrative costs.⁵⁴

Alternatively, the Treasury could administer the national sales and use tax and a conforming state sales and use tax if it were levied at a rate of at least 1%.

The base of the national sales tax is extremely broad and would cover purchases of primary residences, although the buyer could amortize the tax over 30 years at simple interest. The purchases by many organizations (governments, religious, educational and charitable organizations), currently exempt from state sales and use taxes, would become taxable under the proposal. Sales for resale would be exempt, as would purchases to produce taxable property or services. Production explicitly includes research, experimentation, and development and education and training, and purchases by an insurance company on behalf of the insured. Government services would be taxed by the national sales tax. This is accomplished by measuring the value of government services by their wage costs, and imposing and collecting a wage tax from the governments as well.

Tax relief for the poor would be provided through a payment system administered by the Social Security Administration. Payments, through reduced payroll tax remittances, would be equal to 15% of the smaller of the poverty line, given the household's demographics, and wage income.

The tax is to be separately stated. Businesses engaged in a trade or business (not on a casual basis) would register with federal authorities, or (in the case of participating state) the state. Vendors remit collections monthly, and would report gross payment for taxable items, tax collected, and the amount and types of credits claimed.

Credits for the resale of used property are provided, along with deminimus collection amounts to limit registration.

The Secretary of the Treasury is to establish an office to deal with interstate sales issues, resolve conflicts. The tax is based on a sales destination principle.

 $^{^{54}}$ This compares unfavorably with historical IRS budgetary costs of from .4% to .6% of gross collections; see Section 4.1 above.

6 Administrative Issues for the States

6.1 Some General Observations on the Three Proposals

It is generally agreed that the legislative proposals described in Section 5 are in many senses preliminary, and were introduced by their sponsors to begin a national policy debate about where our federal tax system should go. Presumably the sponsors would be surprised to learn that not only was federal tax policy being changed in each instance to achieve taxation of consumption rather than income, but that scores of settled issues of definition and interpretation would be eradicated by the wholesale redefinition of many tax concepts⁵⁵ and the repeal of large sections of the Internal Revenue Code. After all, even the Tax Reform Act of 1986, which some have said ".. is about as close to tax nirvana as we have ever come —low rates on a much broader base."⁵⁶, maintained the definition of a capital gain even though it was not used. I shall assume that much of the enthusiasm for rewriting tax law displayed in each of the bills reviewed above would not preclude the states, if they chose to, to retain the Internal Revenue Code, regulations, and adhere to judicial decisions at every level which dealt with the Code before it was transformed by one of the above bills. Of course, this decoupling of state from new federal tax policy would not constitute the simplification some were hoping for, but could actually promote greater certainty for the states until new federal tax law became settled.

Another approach to devising a national consumption tax would be to use as many constructs in the current Internal Revenue Code to define a broad definition of economic income and savings. These building blocks could then be utilized to define a consumption tax base. The USA tax is perhaps closer to this approach than the other consumption tax proposals.

As noted earlier, the federal income tax system has been integral to the construction of important national economic data through the GNP accounts, national income and wealth distributional information, and economic and distributional information with spatial components e.g., state personal income and wealth data as well as state gross product information. The replacement of the federal income tax by one of several consumption taxes raises questions, then, about what we might be able to continue to know about the economy and ourselves.

With regard to what we know about the nation economy and regions' economic position as a consequence of the use of federal tax return information by federal statistical

⁵⁵In reading each of the draft bills I began to compare basic constructs in the bills with existing Code provisions, but grew weary and decided that such an undertaking would not be productive. Others, perhaps the sponsors, can explain the value of turning "trade or business" into "business" or the real meaning of "business activity" or "business inputs." Given that one bill was self-described by the sponsor's marketing information as obligating cash accounting methods while the bill clearly required accrual accounting, it probably is unnecessarily academic to report on a close textual review of each of the bills.

It seems likely that both the public hearings process and the discipline of capital market scrutiny would iron out much of the unevenness of these draft bills.

 $^{^{56}}$ Nolan(1995).

agencies, it is likely that in the short run there could be a major information loss. Federal administration of a Hall-Rabushka consumption tax and employment taxes would allow the continued measurement of the wage component of national output. Since most variants of the Hall-Rabushka consumption tax provide deductions for personal exemptions, the use of exemption information by tax filing unit could continue to be used by the Census Bureau in estimating population statistics.

With regard to the measurement of business activities, as long as the measurement of the subtraction VAT captured all equipment expensing, then certain kinds of capital outlays could continue to be tracked; however, the non-measurement of the household receipt of various kinds of capital income could create a "hole" in the current flow of funds between households and business. Ironically, states which sought to continue to tax capital income of individuals would know more than the federal government, so it is possible that federal statistical such as the BEA would attempt to collect it from the states; however, as long as major states such as Texas remain immune to income taxation, coverage would be incomplete.

Presumably as focus on the form of the federal consumption tax grows, the manner in which we would be able to measure capital flows from such administrative records would become more important. Foreign experience could prove helpful, although it should be recalled that all industrialized countries with consumption VAT's also have household and business income taxes which in some countries are fairly substantial as noted earlier in Table 3.

Thus, I think the possible adverse effect of federal consumption taxes on our federal statistical system could be quite real, and require, if we wish to know as much about the national economy and ourselves as we have in the past, that far more be spent to enable the statistical agencies (BEA and Census) to produce this sort of information.

Questions also arise about how movement to a national consumption tax might affect other business reporting systems.

As may be appreciated, business record keeping occurs for internal management purposes, federal, state and local tax purposes, financial reporting purposes to shareholders and capital markets, and to comply with federal and state statistical reporting obligations. Finally, business record-keeping is necessary to comply with federal and state environmental and employment laws.⁵⁷ Movement to a subtraction value-added tax of the sorts reviewed above not only raises a question about whether we could continue to generate the aforementioned national economic statistics which historically depended on tax return information, but also raises questions on how financial reporting would continue to be done.⁵⁸ Certainly the entity is often different for the latter since ownership reporting is both world-wide and at a lower (50%), threshold. Also, the frequency with which financial reports must be filed are different.

However, not all business entities need report for SEC purposes; closely-held firms and partnerships generally do not have to publicly report their results.

⁵⁷Given these numerous record keeping needs and requirements, and the fact that to accomplish and maintain them entails outlays for a system, a question arises whether one can isolate just the business record-keeping costs of, say, the federal corporate income tax.

 $^{^{58}}$ See Price-Waterhouse(1993) for example.

It is possible that national laws governing the financial reporting process could be changed to make it meet the needs of our aggregate economic data; this would necessarily be the jurisdiction of non-tax writing committees of the Congress. On the other hand, it is possible that the notion of value added could become more important, though it is hard to imagine that capital markets would prefer to know more about value added than profitability.

Were corporations no longer to file their federal income taxes, but instead subtraction value added taxes, as contrasted with credit-invoice value added taxes with associated self-reinforcing documentation⁵⁹, on a consolidated basis, it is easy to imagine that the federal government would begin to experience what the states have long surmised with purely domestic activities, that the domestic version of the transfer pricing problem can readily have revenue consequences.⁶⁰ As corporate tax accounting has moved closer to financial accounting standards, it has been said that the tension between auditors and tax accountants in large public accounting firms has grown and the notion of independence increasingly strained.⁶¹ It may be that movement away from consolidation on the tax side of the practice while the audit side would remain in a world of consolidation might ease these tensions.

Because it is likely that some of these entity concerns would catch the attention of the tax writing committees of Congress, I will assume that fundamental tax reform at the federal level will not change the federal business filing unit from what it currently is, but merely change what they report and pay to the federal government.

The third general matter to raise involves how to think about the scope of the proposed bills viz. a viz. the state and local sector. Most of the commentary to date about them has centered on the elimination of the income tax; however, several proposals, as noted above, eliminate the gift and estate tax usually without comment or fanfare, and the national sales tax proposal also eliminates most federal excise taxes (recall they are about \$45 billion in 1992 revenues, presumably more in todays revenues).

The proposed elimination of gift and estate taxes has several dimensions to it which deserve some commentary, for their elimination in the consumption tax proposals was not an oversight, it was obviously purposeful. From the point of view of the federal fisc, elimination of the gift and estate taxes will mean substantial revenue reductions in the future because not only will much property change hands as we have aged, it is also likely that much of the wealth of the nation that was initially created at the end of the 19th and early 20th century would otherwise meet the tax collector as the generation-skipping trusts now reach their

⁵⁹Under the credit-invoice method, an audit trail is generated with the seller attesting to two numbers: the price of the sale and the amount of taxes in the invoice which the purchaser has at his disposal. This differs in character from what can be gleaned from the subtraction audit trail. McLure(1988) at Chapter 6 provides a critical appraisal of the subtraction method VAT and the opportunities for aggressive management.

 $^{^{60}}$ Some years ago I did a back of the envelope calculation that indicated that 1/3 of federally defined corporate income had 'disappeared' from the states grasp. Unfortunately, my intention that such information would force both sides (taxpayer and tax administrator) to favor federal corporate piggybacking, whose details I worked out in the paper, was not realized, and I found instead that both sides were angry respectively at me for indicating how successful they were at income tax management, and so poor at grasping it. See Strauss(1992).

⁶¹The growth of various tax policy advising groups inside public accounting firms has probably added to these strains.

last "skip." ⁶² Again, I will simply assume that federal estate and gift taxes are retained.

6.2 Tax Issues Generally Facing the States

The spatial location of the taxpayer or his activities is not important for most federal tax calculations unless the taxpayer and/or activity is outside the United States.⁶³ For the states, however, the geographic location of an individual or business taxpayer's activities is central to their revenue generating process, and they historically have not been adverse to reaching beyond their boundaries to meet revenue requirements.

The type of in-state business activity by an out-of-state business, which enables the state to impose a tax, varies by the type of tax in question. That is, the minimum standard of contact which triggers taxability varies in concept and degree with the tax in question. Business situs and commercial domicile are such thresholds for intangibles and business wealth taxes, while minimum contact and nexus are such thresholds for business net income taxes.

Consumption taxes levied on gross receipts, business and occupation taxes, and sales and use taxes rely on concepts such as the location of the sale or location of final use and the place of business or retailer in triggering the in-state authority to tax inter-state business transactions. These terms indicate the diversity and ingenuity of the states in devising constitutionally acceptable mechanisms to tax out-of-state businesses with in-state business activities.

In the personal income tax area, the states rely on physical location for a period of time or residency test as a constitutionally permissible method of determining state taxation of personal income.

The framers of the Constitution sought to limit or at least order systematically the power of the states to use inter-state commerce as a bountiful if not discriminatory source of revenue to finance internal public services. *Commerce Clearing House* summarized the situation as follows:

Laboring under the dual handicaps of the Due Process and Commerce Clauses of the U.S. Constitution, the states have fought a running battle with the U.S. Supreme Court and the Congress to define the limits of their sovereign taxing powers over corporations by other states. ⁶⁴

The most contentious issue for state household taxation involves judicial limitations placed on their ability to tax importations of goods and services from out-of-state which have grown as transportation and information technology has changed. In the area of state

 $^{^{62}}$ I emphasize the direct revenue implications but must also note the effect of the elimination or limitation of the charitable giving under fundamental tax reform because it will not only reduce charitable giving (e.g. Clotfelder and Schmalbeck(1996)) but also engender former recipients to make stronger claims on state and local budgets for support.

⁶³The federal credit for low income housing and credit for empowerment zones and enterprise communities are exceptions to this generality.

⁶⁴CCH, State Tax Guide (1996), ¶102.

taxation of multistate business income, equally contentious issues involve what portion of the entire multistate business entity may be subject to a state's net income tax, and what geographic attribution rules for apportionment of the resultant entity's net income are judicially tenable.

In both areas, the US Supreme Court has decided cases brought before it, and through *Bella-Hess* and *Quill* in the sales and use tax area, and *Container* and *Barclays* in the business net income area, effectively precluded states from obligating out-of-state mail order sales to collect use tax, and effectively enabled states, if they choose to, to pursue an aggressive policy of taxing international net income of a unitary business. Concomitant with doing its job of adjudicating state tax cases, the Court has routinely made it clear that the Congress has the authority to regulate state taxation of interstate activities, and essentially invited Congress to legislate on these matters.

Direct federal intervention into circumscribing states' power to tax was limited to judicial interpretation until 1959, when nexus standards for the taxation of inter-state net income were enacted under PL 86-272. After a series of Supreme Court decisions in 1959⁶⁵, Congress enacted PL 86-272 which provides a safe haven from state tax on net income for businesses, engaged in the inter-state sales of tangible personal property, which merely solicit orders in that state.

The Congress, while actively besieged by the states on sales and use tax issues, and to a lesser extent by businesses on income tax issues, has not fashioned and passed remedies in either sales and use or business net income area to deal with agitation from the states and business community.⁶⁶

While each state is sovereign with regard to their tax systems, they are not entirely disparate. Interstate competition, state legislative concerns for easing the compliance burden of its citizens viz. a viz. federal taxation, and the actions of nearby states have caused greater homogenization of state tax systems. Slowly, the number of states without personal income taxes has declined.

There are a significant number of multi-state organizations whose purpose it is to foster the understanding of interstate differences in taxation. The establishment of model statutes and regulations has led to their voluntary adoption in many instances: the Uniform Division of Income for Tax Purposes Act which was devised in the late 1950's has either adopted, or been substantially included state statutes and regulations in states with business net income taxes in all states with corporate net income taxes but Minnesota, Mississippi, and West Virginia, and all but Massachusetts, Oregon, and Pennsylvania have ratified the Exchange of Information Agreement proposed by the Federation of Tax Administrators in 1993.⁶⁷

Recent budgetary difficulties at the IRS have drawn state attention, and they have

 $^{^{65}} Portland\ Cement,\ Northwestern-Stockham,\ International\ Shoe.$

⁶⁶While California was victorious in sustaining its application of the unitary principle to the taxation of the world-wide income of Container, business organizations were able to convince the California General Assembly that such tax policy was detrimental to economic development, whereby optional water's edge filing, with a higher initial tax consequence, became law. Also, other states were pressured to limit their participation and support of the Multi-State Tax Commission. More recently, there has been evidence of state and business cooperation to develop workable regulations governing the taxation of highly mobile services such as financial services and the Internet.

⁶⁷CCH, State Tax Guide, p 1058.

expressed concern over how this could adversely impact their own activities.

6.2.1 Issues for the Continued Taxation of Household Income by the State-Local Sector

One way to ascertain the implications of fundamental tax reform for a state is to examine what they would be able to do once the federal government were running the new household tax instead of the current federal individual income tax. Since the states have the constitutional authority to continue to impose and collect their own personal income taxes, their existing administrative mechanisms could continue in place. Their withholding of wages during the year, and taxation of capital income at the end of the year (except for those for whom capital income is sizable) could continue. The primary question the states would face involves the efficacy of their solely administering taxes on capital income received by households to the extent they currently do. In particular questions would arise about the ability of states to require information reporting of capital income from payers or agents of payers.

Under a federal flat wage tax regime with very high standard deductions and exemption levels, a question would arise about the nature of records it would maintain. As long as the tax on federally defined wages for health insurance purposes remain uncapped, the federal government would continue to know what total wage compensation was, and it seems reasonable to assume that the IRS could continue to provide back to the states withholding information for state reconciliation of federal withholding and state withholding. If the federal definition of irregular compensation such as bonuses were to be excluded from the new household wage base, then the current system of employer reporting of 1099's to the IRS that are then shared back to the states need not be continued.

While such payments would likely be deductible on the business side of the modified value added tax, there need not be an employee by employee verification of the items viz. a viz. administration of the business tax. If verification were continued, then the 1099's could be shared back to the states.

Stock options would probably be considered non-wages under the flat tax and the current, federal 1099 system for reporting these would disappear.

With regard to information reporting on capital income (e.g., interest and dividends) paid to individuals by other than his employer, several points should be emphasized. First, current payers and agents of payers would continue to summarize to know who ultimate payees are and where they live, because the payees would ultimately insist on this for their own financial records. Disputes over ownership of capital and whether or not payments of capital income were properly made can only be resolved through sound record-keeping. Federal laws dating back to the Depression govern these matters and would be unaffected by federal tax law change. Second, for payers to payees within the same state, there is no doubt that the state could obligate the payer to engage in information reporting to the state completely analogous to current practice, except that payers or agents of payers would direct their information return to the state revenue agency rather than to the IRS to share back to the state.

The problem the states could have in checking individual declarations of capital income on individual income tax returns would involve the issue of whether or not states could effectively obligate out-of-state payers or agents of payers of capital income to in-state payees to provide information reports. This problem in turn has two dimensions: a constitutional one, and a practical one. From a practical point of view, the states know (as a consequence of receiving 1099's from the IRS) who payers, or agents of payers, recently have been to in-state payees. They thus have an initial point of contact to make continuing information requests to. The question which then arises involves the basis on which a payer or the agent of a payer could refuse to honor an out of state information request, and the steps a state could take to exert pressure. ⁶⁸

I do not believe that the states are powerless. First, resident receipt of capital income from any source is clearly different than, say, solicitation through the Home Shopping Channel. State property laws, for example, protect the payee in terms of his capital as well as periodic payment against thievery instate.

Second, the fact of capital ownership by the payee is prima facie evidence of the payer's exploitation of the state's market for capital purposes. It is an historical fact. Thus privilege (and thus a basis for requiring an information return) has already been extended to both payee and payer.

Third, it is difficult to envision that the mere reporting of capital income payments to a resident by an out of state payer or agent of the payer would constitute an undue burden on interstate commerce given the historical ease with which this has been accomplished and the improved technology and falling cost of that technology for payer and agents of payers. That is, information reporting would seem to be different in nature than the issue of nexus viz. a viz. the out of state payer or agent of the payer. State taxation of personal receipt of the capital is already permissible, so all that is outstanding is the question of whether or not the payee's state can constitutionally obligate the payer to report for information purposes.

Finally, because various state banking and securities laws govern at least in part the marketing of capital instruments in each state, and various financial institutions are anxious to reduce regulatory barriers to marketing, say money market mutual funds or national bank services, it would appear that the states have some leverage in insisting on continued capital income reporting by out of state payers and agents of payers who wish to expand their business activities in-state.

Turning to the household portion of a saved income tax, it seems likely that the states would wind up being better able to administer their state personal income taxes than currently, because there would be a huge increase in federal reporting and reconciliation of capital income flows.⁶⁹

⁶⁸I assume away the possibility that national banking and security laws would be amended to require cooperation between payers and agents of payers and the states as a matter of federal policy, since the basic assumption in fundamental federal tax reform is that the federal government thinks it would be a good thing to tax only consumption and not capital income. Of course, if these national regulatory statutes were amended to obligate payers to report to state revenue agencies, then no further analysis is necessary.

⁶⁹I also expect the administrative burdens of the USA tax on taxpayers, the IRS, and fiduciaries of this simplification to be higher, and thus the compliance costs to be higher than under current law since there would be a need to know what gets put into the IRA-account and what gets taken out to ensure that the

Appraising the effects of the retail sales tax proposal viz. a viz. continued state taxation of personal income involves first deciding on whether or not the elimination of the IRS will take place, and second, determining if the IRS were to disappear, if the above analysis of wage withholding for health insurance purposes could continue from the Social Security Administration. The provision to the states of wage withholding information would probably require an amendment to SSA's confidentiality statutes; however, since relevant statutes would have to be amended anyway to empower the Social Security Administration to do something they currently do not do, this presumably could be accomplished.

Since irregular or miscellaneous income payments would not be taxable under a national sales tax or subject to Social Security taxation, it is likely that federal responsibility for information reporting of this form of compensation would weaken. However, currently employers are obligated to file information returns on such income payments to non-residents (there would be no issue for in-state reporting to the state revenue authority) but often do so under the combined IRS-State program in which the state receives its information return from the IRS. Under this new regime, employers could be obligated to send their information reports directly to the state revenue authorities.

Finally, with respect to information reporting of capital income, the analysis under the national retail sales tax would seem to be the same as under the flat tax. The state would be disadvantaged compared to current law and likely be unable to obligate out-of-state payers or agents for out-of-state payers to send information reports to the state revenue authority.

6.2.2 Issues for the Continued Taxation of Business Net Income by the State-Local Sector

To understand how the candidate federal consumption taxes would affect the current state taxation of business net income, we must explore in some more detail state practices because, unlike state personal income taxes, state business income taxes are more dissimilar than their federal counterparts, especially in terms of the filing unit. If an incorporated business is headquartered in a state, and only does business in that state, then the entity will be same for state and federal except under very unusual circumstances. If the employment and capital are primarily in the state of headquarters, and sales are to other states and some capital and labor are employed in other states, then the headquarters state filing unit can deviate from the federal because the headquarters state may not have jurisdiction to tax the entire entity. State jurisdiction will depend on whether it allows separate filing (suppose a wholly own subsidiary is in another state with no sales into the headquarters state), combined filing, consolidated filing or unitary filing. Once the entity is defined for

extent of the magic claimed by the taxpayer is substantiated by his fiduciaries. Slemrod(1996) reaches a stronger conclusion and finds the USA proposal to be unworkable. On the other hand, Christian(1996) explores the possibility of returnless systems under various consumption tax regimes, and finds them quite feasible, especially under a USA system. Presumably payees will continue to want to know how well their individual investments are doing so that payers and agents of payers will continue to have to inform payees on at least an annual basis what was paid in interest, dividends, etc. and what the unrealized appreciation in value was.

the headquarters state to tax, geographic attribution of the net income on the basis of some sort of formulary apportionment formula will take place to get to a figure which is taxable net income.

Let us turn to how the headquarters state's ability to apply its own corporate net income tax will be affected by the business portion of the flat tax and the USA tax. While compensation for state and federal consumption tax purposes might line up, it is easy to see that the business taxes will not.⁷⁰ First, investment is no longer depreciated but deducted so that federal depreciation schedules can not be relied upon. Second, while the gross receipts concept may not differ, the deductible ("external") costs for the new federal business tax will not be related to that for state business net income tax purposes. Under the flat tax only retirement benefits and compensation are deductible along with investment and external purchases. Other forms of employee compensation, deductible for the state business net income tax will not be available. Under the USA business tax, compensation is not deductible. On the other hand, employee withholding for employment insurance purposes will continue, and can be analyzed by the state business tax division to check on claimed business net income tax deductions.

Implicit in the discussion so far is the notion that the major changes in federal business tax law will adversely affect a state's ability to cross check business income tax returns as filed, and thereby disadvantage the state compared to what they know now, because comparable federal business income information will no longer be available. For small corporations doing business entirely within one state this will be true.

However, the reality of the differences between federal and state filing units for multistate firms is such that one can argue that the states did not know that much before the change.⁷¹ Currently (or before fundamental tax reform takes place), states obligate business taxpayers to attach a copy of their federal corporate tax return to their state return, and typically begin state calculations on the basis of line 28 of federal form 1120. However, because the state filing unit for multistate firms is typically different from their federal filing unit, the data which they put on the 1120 is not what they put on their bonafide 1120 which they file with the IRS. What is attached is what is described as a *pro forma* federal return with the state in question. Such a return contains what their federal return would have been had the filing unit been how they file for state purposes. So the income rules are federal, but the entity is what the taxpayer states is appropriate for that state's tax purposes. Moreover, a corporate officer never signs the *pro forma* federal return, and it would be inappropriate for one to do so. My best guess is that the *pro forma* federal is probably filled out **after** the state return is prepared to conform it with the state, rather than the other way around.

The question that then arises is, what do state business net income auditors currently do absent going to inspect the taxpayer's physical books? To gauge the economic reality of the filed state business tax return, they obviously examine the *pro forma* to see if there is a link between the state and *pro forma* federal return which they typically find. Hopefully,

⁷⁰Some of the remarks about investment and capital assets for incorporated businesses apply to sole proprietorships which have not yet been discussed.

⁷¹Again, recall my back of the envelope calculation that 1/3 of the national business net income disappeared from state business net income. See Strauss(1992).

they will also go to publicly available information from annual reports to check the economic reality of the state return. Also, if permitted by state disclosure statutes, they can check the state unemployment insurance contributions, and wage withholding for personal income tax purposes to see if compensation lines up, and, if ambitious and very patient, can request a copy of the complete *bonafide* federal corporate tax return from the IRS, including the statements of consolidation, to check out the veracity of the state return. It is easy to imagine that if only a portion of a multistate corporation's activities are subject to one state's net income tax, that it can create transactions between that entity and other parts of the corporation not subject to tax in the headquarters state, but (probably) subject to tax in other states, which will globally minimize its multi-state tax bill. Absent prohibitions to the contrary, this is entirely acceptable practice, and will have no effect on the full federal return since over and under pricing of intra-firm transactions will cancel out through consolidation.

It should also be obvious that if, for federal subtraction VAT purposes, a complex consolidated corporation is now allowed to file for federal subtraction VAT purposes on an entity by entity basis, it is imaginable that accounting method and fiscal year manipulations could create the counterpart to Ginsberg's odd numbered year worries on the household side of the consumption tax story.

Loss of access to the *bonafide* federal corporate income tax return is an important information loss to state business net income tax authorities. I am unclear how much use the federal Business Master File is put currently because it contains relatively few items of income and expense. However, the elimination of the 1120 in paper form means that an independent, closely scrutinized measurement of business income will no longer be available to careful state auditors.

Were the new subtraction VAT developed on the basis of existing Code concepts, and the new 1120 extended to include existing net income information, then there would be by definition no information loss to the states. However, unless there was a continuing requirement in the new Internal Revenue Code to continue to collect *income* information on a tax accounting basis in conjunction with the needed value added information, it seems likely that the IRS would develop a tax return which collected only the necessary federal value added tax information. Obviously under a national sales tax, income and balance sheet information would no longer be collected by the federal tax collector, and the states would then be in a lurch. Improved coordination would probably occur viz. a viz. their existing sales and use taxes.

While many have expressed pessimism about what federal movement to a value added tax might mean to the states⁷² in terms of their business taxes, the above suggests that, other than the loss of access to the real 1120's, their audit and compliance processes may be impacted less than meets the eye. For business taxpayers who would like the states to move to subtraction vats themselves, perhaps to avail themselves of some of the planning opportunities which a subtraction vats might engender, a word of caution (and perhaps encouragement to state tax administrators). Do you really believe that 86-272 would provide a safe haven for such a new form of business taxation? My reading of 86-272 is that

⁷²Bucks(1995), Shannon(1995), and Duncan(1996) have expressed serious reservations.

it is limited to net income taxes and would not apply to taxes measured by value added. In turn, then, the nexus bar would come down, or, more likely, would be undefined for state business tax purposes. One can make any sort of guess about what nexus standard might be fashioned by various organizations (the Multistate Tax Commission, Committee on State Taxation etc.), and the sort of discourse which might evolve.

7 Revenue Questions at the Federal and State Levels

It has not been fashionable inside the Beltway to raise questions about what a revenue neutral federal consumption tax rate might be or to point out that serious empirical investigations of the question, when pulled together and put on a common basis, imply a wide range of tax rates. However, given the recent bipartisan progress in deficit reduction, it would be unfortunate if fundamental tax reform led to an unexpected increase in the federal deficit and national debt. I review in this section what rates might be for the federal government, and what sort of revenue risks the states might run if they were no longer able to administer their own income or consumption tax systems.

7.1 Some Aggregate Consumption Tax Arithmetic

Whether or not enactment of a federal consumption tax is a replacement for existing federal income taxes or a revenue enhancement to existing federal income taxes affects the correlative impact on the states. State and local constitutional obligations to balance their annual budgets put more emphasis on the accuracy of revenue projections than might be the case at the federal level. However, whether a replacement federal consumption tax requires a 17% rate or a 35% rate is likely to have subsequent compliance effects and give even the most enthusiastic some pause.

As with any form of taxation, an initial question arises over what is (and what is not) in the taxable base. While an exhaustive analysis of distributional issues raised by consumption taxation are well beyond the scope of this paper, it is worth investigating what some likely exclusions to the taxable consumption base would do to mitigate its regressivity and thereby reduce its overall size. Table 8 displays the composition of total consumption in 1992 as reported by the Bureau of Economic Analysis of the US Department of Commerce. Were food (15.2%), housing (14.5%), transportation(3.8%), and medical care (15.2%) non-taxable, then the 1992 taxable base would be considerably smaller: the sum of these expenditures is 48.7% of total spending.

Replacing \$576.7 billion⁷³ of 1992 federal income taxes could entail either a 13.9% rate (\$576.7 billion / \$4,136.9 billion) or 27.2% rate were the aforementioned items of food, housing, transportation, and medical care excluded from the federal consumption tax base. Replacing state and local income taxes adds from 3.4% to 6.5% to these federal consumption tax rates. These admittedly back-of-the-envelope calculations ignore compliance effects which would raise the combined consumption rates further, and do not take into account existing sales and use tax rates which are in the 4%-7% range across the states.

While all income tax rates would now be zero, the combined federal-state-local consumption and sales and use tax rates would then vary from 21% (13.9% + 3.4% + 4%) to as much as 41%. (27.2% + 6.5% + 7%).

⁷³From Table 1.

(1)	(2)	(3)
Total Durable Goods	\$492.7	11.9%
Motor Vehicles + Parts	\$204.1	4.9%
Furniture + appliances	\$192.5	4.7%
Total Non-durable Goods	\$1,295.5	31.3%
Food	\$626.8	15.2%
Clothing	227.7	5.5%
Gasoline + Oil	\$105.5	2.6%
Fuel Oil + Coal	\$13.0	0.3%
Total Services	\$2,348.7	56.8%
Housing	601.3	14.5%
Total Household Services	\$239.4	5.8%
Electricity + Gas	\$105.7	2.6%
Transportation	\$156.7	3.8%
Medical Care	628.3	15.2%
Total Consumer 1992 Expenditures	\$4,136.9	100.0%

Table 8: Composition of 1992 Consumer Expenditures (\$ billions)

Source: Economic Report of the President, 1995: Table B-15.

What of more complicated calculations by others? A recent Congressional Budget Office $study^{74}$ of value added taxation found that while consumption in the US economy was \$3,774 billion in 1988, a realistic VAT would have a considerably narrower base. CBO examined three alternatives: a "broad" tax base, a tax base which zero-rated certain "merit" goods such as medical care, public and private education, and state and local governments generally, and a "less regressive" tax base which did not tax food and housing. Table 9 takes the basic calculation by CBO of three different tax bases, and divides 1988 federal personal and corporate income tax collections of \$519 billions to get the implied tax rates necessary to achieve fundamental tax reform. The broadest possible base would require a 19.4% tax rate, while one that excluded various merit goods would raise the rate to 23.6%. One that would also exclude housing, private medical care, and about one half of food would drive the rate up to 38.3%. State and local personal and corporate income taxes were \$179 billion in 1988, and the remainder of Table 9 shows that eliminating all income taxes from all levels of government would require credit-invoice VAT rates anywhere from 26% to 51%. If state and local governments, religious and educational institutions to be exempt from paying the vat on their purchases, the CBO middle case, then the total VAT rate would be 31.7%, or about double the standard 15% VAT rate in the European Community.

 74 CBO(1992a)

(1)	(2)	(3)	(4)
Projected 1988	Tax Base 1	Tax Base 2	Tax Base 3
VAT base with 95%		Zero-Rated	"Less
compliance	"Broad"	"Merit Goods"	Regressive"
(billions)	\$2,682	\$2,204	\$1,359
1988 Federal			
Income Tax			
Receipts (1)			
(billions)	\$519		
Implied Federal Replacement			
VAT Tax Rate	10.407	00.00	20.007
	19.4%	23.6%	38.2%
1988 State & Local			
Income Tax			
Receipts 2/			
(billions)	\$179		
(binons)	ψ173		
Implied State Replacement			
VAT Tax Rate			
	6.7%	8.1%	13.2%
	/ 0	/ 0	/ V
Total Implied Replacement			
VAT Tax Rate			
	26.0%	31.7%	51.4%

Table 9: Credit-Invoice VAT Tax Rates Needed to Replace Federal, State and local Income Taxes in 1988

1/ Sum of federal individual and corporate income tax receipts in 1988.
Source: Economic Report of the President, 1991, Table B-80, B-81.
2/ Sum of state and local individual and corporate income tax receipts in 1988.
Source: Economic Report of the President, 1991, Tables B-80, B-81
Congressional Budget Office, Effects of Adopting a Value-Added Tax
February, 1992, p. 22 and author's calculations.

Further indication on the range of revenue neutral federal consumption tax rates needed can be gleaned from 1995 US Treasury and Joint Committee on Taxation analyses. Table 10 displays the March 10, 1995 Treasury published analysis of Congressman Armey's 17% proposal estimated with static revenue-estimating techniques. While most public attention focused on their distributional analysis, which displayed its regressivity compared to current tax law, their revenue analysis of the 17% rate indicated that it would be \$186 billion short of revenue neutrality. Table 10 displays their table.

Annually, the Congressional Budget Office has been obligated under Public Law 93-344 to report to the Congress specific policy options for increasing federal revenues or reducing federal spending. In the February, 1995 *Reducing the Deficit: Spending and Revenue*

Options, it reported Joint Committee on Taxation estimates of the revenues which would result from imposition of a value added tax under two scenarios: a comprehensive or broad base, and one that did not tax food, housing or medical care.⁷⁵

Table 11 takes the various revenue estimates from Table 9, 10, and the 1995 JCT estimates, puts them all at 1995 levels, and displays the resultant rate needed to raise 1995 federal personal and corporate income taxes of \$718 billion. Column (5) of Table 11 indicates that depending on the breadth of the consumption tax base, the revenue neutral federal tax rate would be anywhere from 22.9% to 50.6%! Including state and local income taxes would raise these rates a further 20% to 27% and 60% respectively.

⁷⁵See CBO(1995), p. 393.

(1)	(2)
1. 17% Flat Tax	
Corporate entity tax	\$163
Unincorporated entity tax	\$64
Household entity wage tax	\$305
Total	\$532
2. Current (1995) Federal Tax Law	
Corporate income tax	\$137
Individual Income T	\$581
Total	\$718
3. Difference (flat tax less current law)	(\$186)

Table 10: US Treasury, March, 1995 Preliminary Estimate of Armey Flat Tax

Source: US Treasury Department, Office of Tax Analysis,

A Preliminary Analysis of HR2060,

A Flat Rate Consumption Tax, March 10, 1995

Table 11: Differing Revenue Estimates of 5% Federal Consumption Taxes

(1)	(2)	(3)	(4)	(5)
	Taxable		1995 VAT	Rate
	Consumption	Tax	Revenues	Needed to
Proposal	Concept	Rate	(\$ Billions)	Raise \$718 B.
Flat Tax	Broad	5.0%	$156 \ 1$	22.9%
VAT	Comprehensive	5.0%	$155 \ 2$	23.2%
VAT	Narrow	5.0%	$85 \ 2$	42.5%
VAT	Broad	5.0%	$141 \setminus 3$	25.5%
VAT	Merit Goods	5.0%	$116 \ 3$	31.1%
VAT	Less Regressive	5.0%	$71 \ 3$	50.6%

1 Treasury(1995) and author's calculations.

2 JCT(1995) and author's calculations

3 CBO(1992a) and author's calculations

7.2 State by State Fiscal Structures and the Risks

One way to ascertain how important income and consumption tax bases are to the states and their localities, is to examine, by state the importance of capital income to personal income, and to examine the composition of state and local tax revenues. Some measure of the importance of capital income to state household income tax bases can be obtained by examining, by state, the ratio of interest, dividends, and rent to personal income before transfers.⁷⁶ Table 12 shows these calculations for four years, and sorts the states by the

⁷⁶Data are from the Bureau of Economic Analysis, US Department of Commerce, Regional Economic Information System (CD-ROM), June, 1996. West Virginia is not estimated by BEA due to its small size.

1994 percentage of capital income (highest to lowest). Capital income ranges from about 10 to 24% per state using BEA data, and displays a secular growth for the states in the importance of capital income as a percentage of pre-transfer personal income (1969-94).

Table 12: Ratio of Capital Income (Interest, Dividends, Rent) to Personal Income before Transfers (BEA Concepts) by State, Selected Years

State 1969 1979 1989	
Florida 19.9% 22.0% 27.0	
Wyoming 14.8% 13.5% 20.2	
Montana 14.1% 17.0% 21.6	
Delaware 16.8% 13.6% 18.7	
New Jersey 14.4% 15.3% 19.8	
Vermont 14.6% 15.5% 19.7	
Nebraska 14.9% 16.4% 19.1	
Oregon 14.3% 15.1% 19.2	
Missouri 13.6% 15.1% 20.1	
Connecticut 16.9% 16.7% 19.4	
New Hampshire 14.7% 14.6% 18.8	
Iowa 14.5% 17.1% 19.5	
Arizona 15.6% 15.9% 19.5	
New York 16.7% 16.5% 19.9	
Pennsylvania 13.0% 13.0% 18.5	
Kansas 13.2% 15.0% 19.6	
Illinois 13.9% 14.6% 19.0	
Colorado 15.0% 14.4% 18.3	
Idaho 13.8% 16.4% 19.7	
Michigan 12.1% 12.3% 17.6	
South Dakota 13.0% 15.8% 19.1	
Massachusetts 16.5% 14.9% 18.5	
Rhode Island 14.3% 14.4% 18.7	
Virginia 11.2% 12.7% 17.4	
Washington 13.4% 13.9% 17.4	
Maine 13.9% 13.6% 17.8	
Wisconsin 13.6% 13.7% 17.7	
Nevada 12.8% 13.8% 17.3	
California 14.7% 15.2% 16.9	
Minnesota 13.4% 14.1% 17.2	
Idaho 11.9% 14.2% 16.4%	
Maryland 12.1% 12.9% 16.5	
Ohio 12.6% 12.8% 17.1%	
New Mexico 11.8% 12.4% 17.1	
Oklahoma 12.6% 13.0% 17.5	
District of Columbia 13.4% 12.7% 17.1	
Kentucky 10.3% 11.3% 16.7	
Indiana 11.2% 12.9% 16.5%	
Georgia 10.4% 11.2% 15.5	
Texas 12.6% 12.7% 16.9	
Arkansas 11.3% 12.5% 16.4	
Louisiana 11.1% 11.3% 16.7	
North Carolina 9.7% 10.9% 15.6%	
Hawaii 13.6% 13.8% 14.4	
South Carolina 9.0% 10.0% 12.8	
Alabama 9.6% 10.1% 14.7	
Utah 11.4% 11.2% 14.2%	
Tennessee 10.2% 11.1% 15.1%	
Mississippi 9.1% 9.8% 14.29	
Alaska 7.4% 7.9% 11.2	% 10.9%

Source: US Department of Commerce. REIS, 1969-94

A second way to look at the potential impact on particular states of federal movement to a federal household tax on wages, viz. a viz. the current federal household tax on income, is to look at the composition of state tax revenues. Table 13 displays this for 1992/3 using Census Bureau data on state tax collections. Among state governments, Oregon relies most heavily (70% of state tax revenues) on personal and corporate income taxes, while Massachusetts (61%) relies the second most heavily on state individual and business income taxes. (See Column (3) of Table 13).

Thirty-eight states rely at least 30% or more on their state individual and business income taxes among own-source state tax revenues. Thus, a significant fraction of state tax collections could be involved if the *form* of the federal consumption tax precluded continued state use of their household income taxes.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		State In	St Pers	St Corp	St Sales		ST Other
State Inc	Table 2	Taxes	Inc Tax	Inc Tax	and Excise	St Prop Tax	Taxes
Tax Share		as % All	as % All	as % All	as % All	as % All	as % All
Rank	STATE	ST Taxes	ST Taxes	ST Taxes	ST Taxes	ST Taxes	ST Taxes
1	Oregon	70.8%	65.1%	5.6%	13.1%	0.0%	16.2%
2	Massachusetts	61.0%	51.8%	9.2%	31.8%	0.0%	7.2%
3	New York	57.3%	48.9%	8.4%	36.1%	0.0%	6.5%
4	Michigan	52.3%	38.0%	14.3%	37.6%	2.4%	7.6%
5	Virginia	52.2%	47.3%	4.8%	39.8%	0.2%	7.8%
6	Colorado	50.2%	46.6%	3.6%	41.8%	0.2%	7.8%
7	Indiana	50.1%	40.6%	9.5%	45.5%	0.0%	4.4%
8	Wisconsin	49.5%	43.3%	6.2%	43.2%	0.9%	6.4%
9	North Carolina	48.2%	40.9%	7.3%	43.2%	1.2%	7.4%
10	Georgia	47.4%	41.6%	5.8%	47.3%	0.4%	4.9%
11	Minnesota	47.1%	40.8%	6.3%	43.9%	0.1%	8.9%
12	Delaware	46.8%	38.3%	8.5%	14.8%	0.0%	38.4%
13	Maryland	46.6%	42.9%	3.6%	42.6%	2.9%	8.0%
14	California	45.0%	35.3%	9.7%	44.3%	4.6%	6.1%
15	Connecticut	44.5%	33.8%	10.7%	46.4%	0.0%	9.1%
16	Idaho	44.4%	39.1%	5.4%	45.1%	0.0%	10.5%
17	Ohio	42.2%	36.9%	5.3%	50.1%	0.1%	7.6%
18	Iowa	41.9%	37.6%	4.3%	46.3%	0.0%	11.8%
19	Utah	41.9%	38.1%	3.8%	53.3%	0.0%	4.8%
20	Illinois	40.8%	33.2%	7.6%	50.5%	1.5%	7.2%
21	New Jersey	40.7%	33.4%	7.3%	52.0%	0.1%	7.2%
22	Vermont	40.2%	36.1%	4.1%	47.2%	1.2%	11.4%
23	Missouri	40.1%	36.6%	3.5%	50.5%	0.2%	9.1%
24	Nebraska	39.8%	34.6%	5.2%	52.5%	0.1%	7.6%
25	Rhode Island	39.6%	34.7%	4.9%	53.2%	0.7%	6.5%
26	Alaska	39.2%	0.0%	39.2%	4.5%	3.0%	53.4%
27	Montana	39.1%	31.6%	7.5%	17.7%	20.8%	22.4%
28	Maine	39.1%	34.9%	4.2%	51.7%	2.4%	6.8%
29	South Carolina	39.0%	34.9%	4.1%	51.3%	0.3%	9.4%
30	Kansas	38.1%	31.5%	6.6%	50.5%	1.1%	10.3%
31	Kentucky	37.3%	32.5%	4.8%	44.9%	6.7%	11.1%
32	Pennsylvania	36.8%	28.0%	8.8%	46.8%	1.4%	15.1%
33	Arkansas	36.0%	30.8%	5.2%	56.0%	0.2%	7.8%
34	Hawaii	35.5%	33.6%	1.9%	61.3%	0.0%	3.2%
35	Oklahoma	35.2%	31.7%	3.5%	40.2%	0.0%	24.6%
36	Alabama	32.8%	28.7%	4.1%	54.2%	2.2%	10.8%
37	West Virginia	32.3%	25.1%	7.2%	54.0%	0.1%	13.6%
38	Arizona	30.8%	26.1%	4.6%	56.6%	6.2%	6.4%
39	District Of Col	28.8%	23.2%	5.6%	26.2%	39.8%	5.2%
40	Louisiana	26.9%	21.3%	5.6%	50.9%	0.9%	21.3%
41	Mississippi	25.4%	19.7%	5.7%	65.9%	0.8%	7.9%
42	New Mexico	22.2%	19.0%	3.3%	60.0%	1.0%	16.8%
43	North Dakota	20.5%	14.3%	6.2%	55.9%	0.2%	23.3%
44	New Hampshire	16.3%	3.6%	12.7%	67.8%	0.0%	15.9%
45	Tennessee	$\frac{8.3\%}{4.8\%}$	1.7%	6.6%	79.7%	0.0%	12.0%
46	South Dakota	4.8% 4.6%	$0.0\% \\ 0.0\%$	4.8% 4.6%	79.9% 77.5%	$0.0\% \\ 4.1\%$	15.3% 13.8%
47	Florida Nevada	4.6% 0.0%	0.0%	4.6% 0.0%	77.5% 82.1%	4.1% 2.0%	13.8% 15.9%
48 49	Nevada Texas	0.0%	0.0%	0.0%	82.1% 79.5%	2.0%	
49 50		0.0%	0.0% 0.0%		79.5% 74.6%		20.5%
	Washington	0.0%	0.0% 0.0%	0.0%		16.8%	8.6%
51 Source: Tab	Wyoming ulations of Governm			0.0% Bureau Data	38.0%	12.5%	49.6%

Table 13: States Ranked by Reliance on Personal and Corporate Income Taxes in State Budget, 1992

Source: Tabulations of Governments Division, US Census Bureau Data on WWW;

While a national sales tax may not be as likely in terms of federal adoption at this juncture, we can resort the states in Table 14 by reliance on general sales tax to see which might be most impacted. Here the notion of "impact" means the multiple administration (federal and state) of the same tax base.

Table 14 indicates that, in 1992/3, Nevada derived 82.1% of its state tax revenues from its general sales and use and excise taxes, while South Dakota derived 79.9%. Here, fourtysix states derived at least 30% of their own-source tax revenues from general sales and use and excise taxes. Since the states do not rely on federal administration in the collection of their current general sales and use taxes, they would not be directly impacted by federal adoption of a national sales tax. Whether they would be willing to conform the national retail sales tax model would undoubtedly depend on what level of revenues it would bring in. It seems unlikely that the states with gross receipts taxes (Washington, Hawaii, and Indiana) would switch.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		St Gen Sale	St Inc	St Pers	St Corp	St Prop	St Other
		and Excise	Taxes	Inc Taxe	Inc Taxe	Taxes	Taxes
		as % All	as % All	as % All	as % All	as % All	as % All
Rank	STATE	ST Taxes	ST Taxes	ST Taxes	ST Taxes	ST Taxes	Taxes
1	Nevada	82.1%	0.0%	0.0%	0.0%	2.0%	15.9%
2	South Dakota	79.9%	4.8%	0.0%	4.8%	0.0%	15.3%
3	Tennessee	79.7%	8.3%	1.7%	6.6%	0.0%	12.0%
4	Texas	79.5%	0.0%	0.0%	0.0%	0.0%	20.5%
5	Florida	77.5%	4.6%	0.0%	4.6%	4.1%	13.8%
6	Washington	74.6%	0.0%	0.0%	0.0%	16.8%	8.6%
7	New Hampshire	67.8%	16.3%	3.6%	12.7%	0.0%	15.9%
8	Mississippi	65.9%	25.4%	19.7%	5.7%	0.8%	7.9%
9	Hawaii	61.3%	35.5%	33.6%	1.9%	0.0%	3.2%
10	New Mexico	60.0%	22.2%	19.0%	3.3%	1.0%	16.8%
11	Arizona	56.6%	30.8%	26.1%	4.6%	6.2%	6.4%
12	Arkansas	56.0%	36.0%	30.8%	5.2%	0.2%	7.8%
13	North Dakota	55.9%	20.5%	14.3%	6.2%	0.2%	23.3%
14	Alabama	54.2%	32.8%	28.7%	4.1%	2.2%	10.8%
15	West Virginia	54.0%	32.3%	25.1%	7.2%	0.1%	13.6%
16	Utah	53.3%	41.9%	38.1%	3.8%	0.0%	4.8%
17	Rhode Island	53.2%	39.6%	34.7%	4.9%	0.7%	6.5%
18	Nebraska	52.5%	39.8%	34.6%	5.2%	0.1%	7.6%
19	New Jersey	52.0%	40.7%	33.4%	7.3%	0.1%	7.2%
20	Maine	51.7%	39.1%	34.9%	4.2%	2.4%	6.8%
21	South Carolina	51.3%	39.0%	34.9%	4.1%	0.3%	9.4%
22	Louisiana	50.9%	26.9%	21.3%	5.6%	0.9%	21.3%
23	Illinois	50.5%	40.8%	33.2%	7.6%	1.5%	7.2%
24	Kansas	50.5%	38.1%	31.5%	6.6%	1.1%	10.3%
25	Missouri	50.5%	40.1%	36.6%	3.5%	0.2%	9.1%
26	Ohio	50.1%	42.2%	36.9%	5.3%	0.1%	7.6%
27	Georgia	47.3%	47.4%	41.6%	5.8%	0.4%	4.9%
28	Vermont	47.2%	40.2%	36.1%	4.1%	1.2%	11.4%
29 30	Pennsylvania Connecticut	46.8%	36.8%	28.0%	8.8%	1.4%	15.1%
~ ~		46.4%	44.5%	33.8%	10.7%	0.0%	9.1%
31 32	Iowa Indiana	46.3%	41.9% 50.1%	$37.6\% \\ 40.6\%$	4.3% 9.5%	0.0%	11.8%
32 33	Indiana Idaho	45.5% 45.1%	$\frac{50.1\%}{44.4\%}$	40.6% 39.1%	9.5% 5.4%	$0.0\% \\ 0.0\%$	4.4% 10.5%
33 34	Kentucky	45.1% 44.9%	$\frac{44.4\%}{37.3\%}$	39.1% 32.5%	$\frac{5.4\%}{4.8\%}$	6.7%	10.5% 11.1%
34 35	California	44.3%	45.0%	32.5% 35.3%	4.8% 9.7%	4.6%	6.1%
35 36	Minnesota	44.3% 43.9%	45.0% 47.1%	40.8%	9.7% 6.3%	4.6% 0.1%	8.9%
30	Wisconsin	43.2%	49.5%	43.3%	6.2%	0.9%	6.4%
37	North Carolina	43.2%	49.5% 48.2%	43.3% 40.9%	6.2% 7.3%	1.2%	$\frac{6.4\%}{7.4\%}$
39	Marvland	43.2%	48.2% 46.6%	40.9% 42.9%	3.6%	2.9%	8.0%
39 40	Colorado	42.0%	$\frac{40.0\%}{50.2\%}$	42.9% 46.6%	3.6%	0.2%	7.8%
40	Oklahoma	41.8%	35.2%	31.7%	3.5%	0.0%	24.6%
41 42	Virginia	39.8%	52.2%	47.3%	4.8%	0.2%	7.8%
42 43	Wyoming	38.0%	0.0%	0.0%	0.0%	12.5%	49.6%
43	Michigan	37.6%	52.3%	38.0%	14.3%	2.4%	7.6%
45	New York	36.1%	57.3%	48.9%	8.4%	0.0%	6.5%
46	Massachusetts	31.8%	61.0%	51.8%	9.2%	0.0%	7.2%
40	District Of Col	26.2%	28.8%	23.2%	5.6%	39.8%	5.2%
48	Montana	17.7%	39.1%	31.6%	7.5%	20.8%	22.4%
49	Delaware	14.8%	46.8%	38.3%	8.5%	0.0%	38.4%
50	Oregon	13.1%	70.8%	65.1%	5.6%	0.0%	16.2%
51	Alaska	4.5%	39.2%	0.0%	39.2%	3.0%	53.4%
	Tabulations of Go						

Table 14: States Ranked by Reliance on Sales and Excise Taxes in State Budget, 1992

7.3 Local Government Implications of Federal Consumption Tax

Since local income and sales taxes are the constitutional creatures of state government, the impact of the alternative federal consumption taxes on local governments would depend entirely on how state policy evolved. We can diagnose potential fiscal effects on local governments by looking at their use of local income and sales taxes by state. Table 15 and Table 16 display analogous information for reliance on local income taxes and local sales and use taxes.

Few states' localities would be affected by movement from a federal household income tax to a federal household consumption tax, but a fair number of states' localities would be impacted should the federal government move to a national sales tax. Only localities in five states and the District of Columbia rely on local income taxes for more than 10% of their budgetary needs (see Table 15). The District of Columbia, and Maryland, Kentucky and Ohio's local governments raise 20% or more from local income taxes. This suggests that the impact of the federal government vacating the personal income tax would be far more modest on local governments.

On the other hand, local government reliance on the general sales and use tax is far more significant; local governments in twenty-six states derived more than 10% of their own-source tax revenues from general sales and use and excise taxes in 1992/3. Six states' localities derived more than 30%, and another eight states' localities derived between 20 and 30%. (See Table 16).

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		States R					
		Loc Inc	Loc Pers	Loc Corp	Loc Sales	Loc Prop	Local Other
		Tax as	Inc Tax as	Inc Tax a	and Excise a	Tax as	Taxes as
		% All Loc	% All Loc	% All Loc	% All Loca	% All Loc	% All Loca
Rank	STATE	Taxes	Taxes	Taxes	Taxes	Taxes	Taxes
1	District Of Col	28.8%	23.2%	5.6%	26.2%	39.8%	5.2%
2	Maryland	27.9%	27.9%	0.0%	4.1%	61.4%	6.6%
3	Kentucky	24.4%	24.4%	0.0%	7.7%	51.7%	16.3%
4	Ohio	20.8%	20.8% 18.0%	$0.0\% \\ 0.0\%$	7.2% 2.3%	68.8% 70.6%	3.1% 9.1%
5 6	Pennsylvania New York	18.0% 16.0%	18.0% 10.1%	0.0% 5.9%	2.3% 19.5%	70.6% 61.7%	9.1% 2.8%
7	Indiana	9.4%	9.4%	0.0%	0.9%	88.3%	2.8%
8	Delaware	9.3%	9.3%	0.0%	0.9%	82.7%	7.4%
9	Missouri	9.3% 6.5%	5.5% 6.5%	0.0%	29.9%	57.4%	6.2%
10	Michigan	3.6%	3.6%	0.0%	0.5%	94.1%	1.8%
10	Alabama	3.4%	3.4%	0.0%	47.7%	35.9%	13.1%
12	Iowa	0.7%	0.7%	0.0%	3.0%	94.8%	1.5%
13	New Jersey	0.2%	0.2%	0.0%	0.5%	98.2%	1.2%
14	Louisiana	0.1%	0.1%	0.0%	56.8%	39.8%	3.3%
15	Maine	0.0%	0.0%	0.0%	0.1%	98.6%	1.3%
16	Arkansas	0.0%	0.0%	0.0%	29.6%	68.6%	1.8%
17	Texas	0.0%	0.0%	0.0%	16.0%	81.2%	2.8%
18	South Dakota	0.0%	0.0%	0.0%	16.1%	80.3%	3.6%
19	Vermont	0.0%	0.0%	0.0%	0.4%	99.1%	0.5%
20	North Dakota	0.0%	0.0%	0.0%	6.2%	91.7%	2.1%
21	Illinois	0.0%	0.0%	0.0%	15.3%	81.9%	2.8%
22	Idaho	0.0%	0.0%	0.0%	1.3%	95.9%	2.8%
23	Nevada	0.0%	0.0%	0.0%	17.9%	68.7%	13.5%
24 25	Tennessee	0.0%	0.0%	0.0%	31.8%	62.6%	5.6%
25 26	Florida	$0.0\% \\ 0.0\%$	0.0% 0.0%	$0.0\% \\ 0.0\%$	15.4% 29.0%	81.9% 61.5%	2.8% 9.6%
$\frac{26}{27}$	Washington New Hampshire	0.0%	0.0%	0.0%	29.0%	99.4%	9.6%
27	Mississippi	0.0%	0.0%	0.0%	3.7%	93.9%	2.4%
20	Hawaii	0.0%	0.0%	0.0%	10.6%	82.5%	6.8%
30	New Mexico	0.0%	0.0%	0.0%	43.0%	53.2%	3.8%
31	Arizona	0.0%	0.0%	0.0%	18.9%	78.7%	2.3%
32	West Virginia	0.0%	0.0%	0.0%	3.6%	82.1%	14.3%
33	Utah	0.0%	0.0%	0.0%	22.1%	74.6%	3.3%
34	Rhode Island	0.0%	0.0%	0.0%	0.1%	98.8%	1.1%
35	Nebraska	0.0%	0.0%	0.0%	9.8%	86.8%	3.3%
36	South Carolina	0.0%	0.0%	0.0%	3.8%	90.9%	5.3%
37	Kansas	0.0%	0.0%	0.0%	15.1%	83.0%	1.9%
38	Georgia	0.0%	0.0%	0.0%	25.6%	71.2%	3.3%
39	Connecticut	0.0%	0.0%	0.0%	0.0%	98.9%	1.1%
40	California	0.0%	0.0%	0.0%	21.6%	71.1%	7.3%
41	Minnesota	0.0%	0.0%	0.0%	2.5%	95.4%	2.1%
42	Wisconsin	0.0%	0.0%	0.0%	2.9%	95.4%	1.6%
43 44	North Carolina	0.0%	0.0% 0.0%	$0.0\% \\ 0.0\%$	25.9% 30.6%	71.2% 66.3%	$3.0\% \\ 3.1\%$
44 45	Colorado Oklahoma	$0.0\% \\ 0.0\%$	0.0% 0.0%	0.0% 0.0%	30.6% 41.4%	$\frac{66.3\%}{57.2\%}$	3.1% 1.4%
45 46	Virginia	0.0%	0.0%	0.0%	$\frac{41.4\%}{18.2\%}$	$\frac{57.2\%}{72.3\%}$	1.4% 9.5%
$46 \\ 47$	Wyoming	0.0%	0.0%	0.0%	18.2%	72.3% 80.7%	9.5% 2.9%
47	Massachusetts	0.0%	0.0%	0.0%	0.9%	97.3%	1.8%
48 49	Montana	0.0%	0.0%	0.0%	0.9%	97.3% 95.0%	4.9%
49 50	Oregon	0.0%	0.0%	0.0%	4.0%	86.7%	9.3%
51	Alaska	0.0%	0.0%	0.0%	14.7%	83.5%	1.8%
-	Tabulations of Go					/0	2.370

Table 15: States Ranked by Local Reliance on Local Income Taxes in Local Budgets, 1992

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Loc Sales	Loc Inc	Loc Pers	Loc Corp	Loc Prop	Local Other
		Excise Tax	Taxes as	Inc Tax as	Inc Tax as	Tax as	Taxes as
		% All Loca	% All Loca	% All Loca	% All Loca	% All Local	% All Local
Rank	STATE	Taxes	Taxes	Taxes	Taxes	Taxes	Taxes
1	Louisiana	56.8%	0.1%	0.1%	0.0%	39.8%	3.3%
2	Alabama	47.7%	3.4%	3.4%	0.0%	35.9%	13.1%
3	New Mexico	43.0%	0.0%	0.0%	0.0%	53.2%	3.8%
4	Oklahoma	41.4%	0.0%	0.0%	0.0%	57.2%	1.4%
5	Tennessee	31.8%	0.0%	0.0%	0.0%	62.6%	5.6%
6	Colorado	30.6%	0.0%	0.0%	0.0%	66.3%	3.1%
7	Missouri	29.9%	6.5%	6.5%	0.0%	57.4%	6.2%
8	Arkansas	29.6%	0.0%	0.0%	0.0%	68.6%	1.8%
9	Washington	29.0%	0.0%	0.0%	0.0%	61.5%	9.6%
10	District Of Col	26.2%	28.8%	23.2%	5.6%	39.8%	5.2%
11	North Carolina	25.9%	0.0%	0.0%	0.0%	71.2%	3.0%
12	Georgia	25.6%	0.0%	0.0%	0.0%	71.2%	3.3%
13	Utah	22.1%	0.0%	0.0%	0.0%	74.6%	3.3%
14	California	21.6%	0.0%	0.0%	0.0%	71.1%	7.3%
15	New York	19.5%	16.0%	10.1%	5.9%	61.7%	2.8%
16	Arizona	18.9%	0.0%	0.0%	0.0%	78.7%	2.3%
17	Virginia	18.2%	0.0%	0.0%	0.0%	72.3%	9.5%
18	Nevada	17.9%	0.0%	0.0%	0.0%	68.7%	13.5%
19	Wyoming	16.4%	0.0%	0.0%	0.0%	80.7%	2.9%
20	South Dakota	16.1%	0.0%	0.0%	0.0%	80.3%	3.6%
21	Texas	16.0%	0.0%	0.0%	0.0%	81.2%	2.8%
22	Florida	15.4%	0.0%	0.0%	0.0%	81.9%	2.8%
23	Illinois	15.3%	0.0%	0.0%	0.0%	81.9%	2.8%
24	Kansas	15.1%	0.0%	0.0%	0.0%	83.0%	1.9%
25	Alaska	14.7%	0.0%	0.0%	0.0%	83.5%	1.8%
26	Hawaii	10.6%	0.0%	0.0%	0.0%	82.5%	6.8%
27	Nebraska	9.8%	0.0%	0.0%	0.0%	86.8%	3.3%
28	Kentucky	7.7%	24.4%	24.4%	0.0%	51.7%	16.3%
29	Ohio	7.2%	20.8%	20.8%	0.0%	68.8%	3.1%
30	North Dakota	6.2%	0.0%	0.0%	0.0%	91.7%	2.1%
31	Maryland	4.1%	27.9%	27.9%	0.0%	61.4%	6.6%
32	Oregon	4.0%	0.0%	0.0%	0.0%	86.7%	9.3%
33	South Carolina	3.8%	0.0%	0.0%	0.0%	90.9%	5.3%
34	Mississippi	3.7%	0.0%	0.0%	0.0%	93.9%	2.4%
35	West Virginia	3.6%	0.0%	0.0%	0.0%	82.1%	14.3%
36	Iowa	3.0%	0.7%	0.7%	0.0%	94.8%	1.5%
37	Wisconsin	2.9%	0.0%	0.0%	0.0%	95.4%	1.6%
38	Minnesota	2.5%	0.0%	0.0%	0.0%	95.4%	2.1%
39	Pennsylvania	2.3%	18.0%	18.0%	0.0%	70.6%	9.1%
40	Idaho	1.3%	0.0%	0.0%	0.0%	95.9%	2.8%
41	Massachusetts	0.9%	0.0%	0.0%	0.0%	97.3%	1.8%
42	Indiana	0.9%	9.4%	9.4%	0.0%	88.3%	1.4%
43	Delaware	0.6%	9.3%	9.3%	0.0%	82.7%	7.4%
44	Michigan	0.5%	3.6%	3.6%	0.0%	94.1%	1.8%
45	New Jersey	0.5%	0.2%	0.2%	0.0%	98.2%	1.2%
46	Vermont	0.4%	0.0%	0.0%	0.0%	99.1%	0.5%
47	Maine	0.1%	0.0%	0.0%	0.0%	98.6%	1.3%
48	Montana	0.1%	0.0%	0.0%	0.0%	95.0%	4.9%
49	Rhode Island	0.1%	0.0%	0.0%	0.0%	98.8%	1.1%
50	Connecticut	0.0%	0.0%	0.0%	0.0%	98.9%	1.1%
51 Source:	New Hampshire Tabulations of Gov	0.0%	0.0%	0.0%	0.0%	99.4%	0.6%

Table 16: States Ranked by Local Reliance on Local Sales and Excise Taxes in Local Budgets, 1992

Federal adoption of any of the three consumption taxes analyzed above may also have indirect, but important effects on local governments' revenues, since the local property tax is 75% of total local own source taxes, and residential property tax revenues are driven by the market value of homes. At issue is how existing capital prices would be affected by movement from income taxation to consumption taxation.

Gravelle (1996) estimates that the overall price of housing would fall by 22% under an Armey form of the flat tax, and under the assumption that housing supply is fixed. A third of this fall in housing prices is due to the lost of itemized deductions for mortgage interest and property taxes, while the remainder of the price reductions are due to residential investors making investments in assets other than home equity. These price effects would be moderated if the *rate* of national savings were to increase, as generally expected

by the movement from an income to consumption tax; however, it should be noted the extent of such a savings rate response is not a settled empirical matter among economists. DRI/McGraw-Hill(1995) estimates that housing prices would fall between 15 and 34%, depending on the course of interest rates.

Of course, such implied volatility in property tax revenues would depend ultimately on the timeliness and accuracy of the property assessment process which is known to vary considerably among the states.

8 Administrative Transition and Path Dependencies

In Section 7, a concern was raised that the revenue yield from a federal consumption tax, intended to replace federal household and business income taxes, may be extremely difficult to predict prior to actual implementation. Also, issues have been raised about administrative difficulties which taxpayers as well as the IRS will have in changing their record keeping and reporting systems to meet the information needs of any extant forms of business consumption taxes.

A concern thus arises, strictly in terms of federal tax revenues and matters of taxpayer and tax administration, as the federal tax system moves from one based on income to one based on consumption; this issue of transition is logically separate from equity and efficiency issues which arise and have been discussed by others in terms of how one treats consumption financed out of returns to "old capital" which has been already taxed through the pre-reform income tax.⁷⁷

Because the likely consumption tax enacted and signed will reflect a variety of compromises, its revenue consequences will be very difficult to predict within reasonable or acceptable margins of error and both tax collector and taxpayers will need time to fashion new administrative and compliance mechanisms.

It seems likely a question will arise about how one might fashion a new tax system that generates reliable information about likely revenues and not run the risk of being unacceptably above or below desired revenue levels. One pragmatic approach to this might be to implement the mechanism on a dual basis, but not collect it at all for a period of time until reliable information was collected, or collect it at partial tax rates, e.g. phase the tax in over a period of time.

8.1 Administrative Impacts on the IRS

As is well known, the Treasury and IRS have analyzed various consumption taxes in terms of their administration costs. The purpose of this section is to briefly review them along with identified administrative issues. Given the interdependence between the IRS and state revenue agencies, questions naturally arise about how federal consumption tax administration would be accomplished and in particular its additional budgetary costs and time frame for implementation. Three major federal administrative studies of federal consumption taxes have been performed by the Treasury and IRS:

- 1. the credit-invoice VAT analyzed by Treasury in Chapter 9, Volume 3, of the November, 1984 Tax Reform for Fairness, Simplicity, and Economic Growth;
- 2. the subtraction VAT analyzed by IRS⁷⁸ at the request of Senator William Roth of his May, 1985 proposal for a Business Transfer Tax (BTT) as contained in S. 1102; and,

⁷⁷The USA Tax deals quite extensively with this second issue of transition. See Auerbach(1996) and Perleman(1996) for extensive discussion of economic and legal views on transition problems associated with "old capital."

⁷⁸IRS (1986), Implementation and Administration of the Business Transfer Tax.

3. a "simple" credit-invoice VAT analyzed by IRS staff in May, 1993 for the Commissioner of the Internal Revenue Service.⁷⁹

In addition to these Treasury and IRS studies of federal VAT administration, the Congressional Budget Office⁸⁰ and the General Accounting Office⁸¹ have discussed administrative issues in some detail. There is, of course, an extensive international literature on VAT administration and implementation⁸² based largely on European, Latin American, and African experiences, and likely to be one shortly on the emerging problems of VAT collection in Russia and former Soviet republics.

Threshold administrative issues affecting the business side of a consumption tax discussed typically include:

- 1. the deminimus level of receipts that obligate a business to be registered;
- 2. entity definition and taxpayer identification;
- 3. design of VAT administration for unincorporated businesses (sole proprietorships, partnerships etc.), development;
- 4. invoicing and bookkeeping requirements;
- 5. filing and payment periods;
- 6. collection lags;
- 7. audit issues and coverage rates;
- 8. division of collection responsibility between customs (for VAT collection on imports) and domestic VAT collection;
- 9. training of VAT administrators;
- 10. software development and software integration;
- 11. method of filing (electronic or manual);
- 12. development and execution of external publicity and educational campaigns to familiarize current taxpayers with a new tax system;
- 13. design of the organizational relationship of the new tax administration to existing or phased out tax administrative systems; and
- 14. time frame for implementation;

⁷⁹IRS, Office of the Assistant Commissioner (Panning and Research), A Study of Administrative Issues in Implementing a Federal Value Added Tax, May, 1993.

⁸⁰See CBO(1992a), Chapter 6).

⁸¹See GAO(1993a, 1993b)

 $^{^{82}}$ See, for example, Tait(1988), Gillis, Shoup, and Sicat(1990)

Consumption tax design issues that will first need to be dealt with legislatively and then administratively include the identification of sectoral or differential (multiple) rates or exclusions for such industries as agriculture, food, clothing, housing, financial services, medical services, certain governmental entities and charitable activities, and the tax treatment of foreign travelers.

The May, 1993 IRS⁸³ study anticipated a variety of compliance problems of a simple credit-invoice VAT in the US context which one might wish to in conjunction with the rate levels discussed above in Table 11:

- 1. sales of invoices (by businesses going out of business; early French and Italian VAT experience included the black marketing of phony invoices with phony VAT credits)
- 2. informal vendors;
- 3. bartering;
- 4. carousel schemes (setting up new business to generate VAT credit claims to take advantage of prompt government refunds of taxes);
- 5. under-reporting sales;
- 6. missing trader fraud (....as the sale of services goes through several transactions, one link (the trader) drops out and the VAT revenue is lost so that the input tax is credited but the output tax by the trader is never reported;
- 7. refunds for exporters (false export documents);
- 8. fraud in connection with electronic filing;
- 9. businesses which offer two prices (one with VAT and one without, common problem of cash sales in the services industries);
- 10. misclassification into lower rate category (when multiple rating exists);
- 11. creation of non-existent companies to create the impression that a VAT has been previously paid; and,
- 12. collection but non-remittance of vat.

In 1984, IRS estimated that a credit-invoice VAT would require 20,694 staff years at \$696 million (in 1984 salary levels and dollars, and 20 million taxpayers). A Business Transaction Tax with a single rate of 10% would create 20 million federal taxpayers and cost \$698 million (assumes quarterly Federal Tax Deposits), in 1984 salary levels and dollars. Note that VAT legislation was viewed as a deficit reducing device in the mid-1980's.

In 1993, IRS estimated that, under the assumptions of a simple rate for a credit-invoice VAT with a registration threshold of \$100,000, 13.3 million entities would register and 54 million VAT returns would be filed. This would entail 28,125 staff years to administer the

⁸³See IRS (1993), Appendix 7, pp. 8-10.

simple VAT, considerably more if the rate structure were complex, and considerably more if the standard of administration were higher; four year administrative costs would be \$5.98 billion for the simplest case or roughly a 20 to 25% increase in IRS budget outlays were the old income tax to continue and new VAT systems to be developed in parallel.

GAO estimated costs a basic credit-invoice would cost \$1.83 billion/year, of which \$1.3 billion would be examination costs using an 8% audit rate assumption. (IRS assumed generally lower audit rates on the order of 2% which are well below rates used by European VAT administrators).

If we compare these estimates to historical IRS administrative expenses (e.g. Table 4) initial administrative cost savings do not suggest themselves. Given needed changes in taxpayer accounting systems, it is likely that the combined public and private federal costs of administration could rise significantly for several years. Compliance costs would subsequently go up for businesses and households until replacement of the federal personal and business taxes was complete. Historical income tax record keeping would have to be maintained subject to statute of limitations requirements (presumably 5 years for households, and longer for businesses since dispute adjudication takes so long), and the courts would continue to deal with federal income tax disputes long after they were replaced. If the federal consumption taxes turn out to be a new revenue source, but not a replacement revenue source, then it is imaginable that taxpayer compliance costs would generally rise.

The analysis of administrative expenses have been viewed as incremental, and little comment has been made about the impact of adding something on the order of 20% new personnel to IRS in a relatively short period of time. It is likely that this could have a major effect on management attention and the administration of existing federal taxes, and the level of cooperation and information sharing with the states prior to actual implementation of a federal vat.

The above analysis does not address any effects on households which the USA Tax might entail, and does not address a federal sales tax. It seems reasonable to expect that IRS preparation for the household side of the USA Tax could be quite substantial as well.

8.2 Implications for the States

During this restructuring of the IRS, the states would for purely budgetary purposes have to hold constant their own tax collecting activities. They might well wish to begin their own strategic planning exercises should they wish to rely on the new federal business or household taxes, but it seems unlikely that any would attempt to implement their own customized or closely parallel versions of a federal consumption tax until the federal version had the administrative and legal bugs at least partially worked out. This would mean they would be relying upon a fixed date IRC and regulations.

9 Summary and Conclusions

This review of recently proposed federal consumption taxes and their implications for the state-local sector has focused primarily on administrative and revenue considerations. To understand what may readily change, and that with difficulty, the current reliance on income and consumption taxation in our federal system was reviewed. If one treats various employment taxes as components of a consumption tax, then it is evident that our current federal and state hybrid system taxes consumption more than income. Second, in the aggregate, our overall hybrid system of income and consumption taxation is not fundamentally different from many of our trading partners, although there has been a relatively higher reliance by the state-local sector on consumption taxes and a lower reliance on income taxes, and vice-versa for our national government. Examination on a state by state basis of this conclusion indicates that reliance on both income and sales and excise taxes is high for many states, but local reliance on income taxes is not.

Several of the federal consumption tax proposals use either a subtraction method valueadded tax, or a modified subtraction value-added tax. While advocates of this form of a VAT state that such a form can rely on existing business books and records with the result of substantial tax simplification, a review of financial accounting standards suggests this is quite unlikely. The distinction between internal and external costs, which is at the heart of the value added concept, is simply not part of standard accounting requirements. Accordingly, until techniques for distinguishing on a practical basis between internal and external costs are worked out, one can expect at the federal level significant uncertainty about whether deductions will be allowable. Moreover, unlike the credit-invoice VAT which has a built-in self-auditing mechanism, the subtraction method VAT does not. As a consequence, the opportunity for aggressive tax management would appear qualitatively greater under the subtraction VAT than under the credit-invoice VAT.

An examination of the current administration of state taxes indicates that it is highly intertwined with federal administration, but none the less independent. Withholding and information reporting requirements by the states parallel that of the federal government, and over time collaborative efforts have been undertaken by the IRS and the states to less employer burdens, and utilize the IRS as the information source to the states for employers.

One indirect effect of movement to several forms of a federal consumption tax, which could impact the states, is an initial decline in the quality of several federal statistical sources dealing with the aggregate and state-by-state economy and the distribution of income. National and state GDP estimates have relied for decades on summaries of tax return information, and movement to a flat tax or a national retail sales tax would eliminate this link between the federal tax system and our national statistical sources. Since virtually all states are obligated to balance their budgets based on projections of their state economies, which are based on these federal administrative records, they could be seriously disadvantaged until new mechanisms for the estimation of GDP became available. Similarly, a variety of federal statistical benchmarks for the study of the national and state by state income distributions would disappear as the definition of the federal tax base moved to a flat tax or a national retail sales tax. The states often begin their definition of income and other important constructs by direct reference to the Internal Revenue Code or replicate its language in both personal and corporate income tax areas. Historically, there has be a large and growing amount of information exchange and use of federal tax return data and the results of IRS compliance procedures, so that replacement of federal income taxes by consumption taxes would constitute important revenue losses to the states; New York reports that it gains \$275 million per year from use of federal audit results, and California more than \$300 million per year.

Examination of three different federal consumption tax legislative proposals suggests they are still in the developmental stage. For the purposes of this study, I have assumed that businesses would continue to file on a consolidated basis, and that the IRS as we know it would not be necessarily eliminated. While the USA tax language is the most developed, it is also the most ambitious since it seeks to deal with problems of old capital. It appears to this author, however, that each of the three proposals creates unnecessary difficulties in movement to a new system by creating new terms where existing constructs in the Internal Revenue Code, representing settled law and practice, would do as well. Undoubtedly actual legislative consideration by the tax writing committees of the Congress through public hearings and further external review, even by capital markets, will refine them further. Another aspect of several of these proposals involves their elimination of the federal gift and estate tax, again a tax imposed by most states. Whether or not this would prove realistic, especially in view of its growing and likely federal revenues, remains an open question.

Two questions were posed viz. a viz. the three proposed federal consumption taxes: could the states continue to administer their own hybrid consumption-income tax systems were the federal government to move to any of the three candidates? What sort of tax rates might be implied for different federal consumption taxes?

It appears that much of what the states currently do, because it is independent but inter-twined with federal tax administration through voluntary cooperation activities, could continue. As noted, results of federal income tax compliance activity would cease to be available to the states who, because of their lower marginal tax rates on individual income, have generally not invested in significant audit programs. Much if not all of the states' current withholding and information reporting requirements on wages and wage-related compensation could continue to be met, albeit with greater administrative burdens on employers who would now deal entirely with state revenue and employment insurance agencies rather than with the IRS which currently shares significant amounts of wage-related compensation back to the states for cross-checking.

As long as the IRS continues to withhold federal health insurance taxes for the Social Security administration, most of the administrative efficiencies which have occurred over the years could be maintained even if the federal government went to a national sales tax. Both flat tax and saved income taxes would allow continuation of the federal withholding and information reporting systems.

There are two areas where the states would be particularly disadvantaged compared to current arrangements between themselves, taxpayers, and the IRS:

1. at the household level, the states would no longer obtain information returns on

household receipt of capital income from the IRS because, under two variants of the federal consumption tax (the flat tax and the national retail sales tax), the federal government would no longer collect such information. It is assumed that proper administration of the USA tax would require continued 1099 reporting to the federal government. Since payees would continue to want to know what they have earned, from a technical point of view, payers or agents of payers would be able to supply state revenue authorities such information. The outstanding question is whether or not an out-of-state payer could be constitutionally compelled to do so. A preliminary analysis of this issue suggests several reasons for this to be possible; however, it would benefit from further constitutional analysis.

2. at the business level, the elimination of a completed and audited federal form 1120 (corporate net income tax return) might appear to disadvantage the states viz. a viz. their continued reliance on their state business net income taxes; however, they do not routinely get such information, and the realities of differences between federal and state corporate net income tax filing units are such that there may be less lost than many initially believe.

It is likely that legislative consideration of any national consumption tax would lead to pleas for exemptions or special rates as has happened in state sales tax deliberations and European VAT deliberations and in the 1932 manufacturers excise reported by the Ways and Means Committee. Very high rates could then result, which would have several incentive effects.

With regard to the level of revenue-neutral federal consumption tax rates, a review of national aggregates and federal executive and congressional estimates reveal a wide range of possible rates. Much depends on what winds up in and out of the candidate proposal's tax base, as well as the sort of beneficial economic response from savings which might grow the economy compared to an income tax. Total consumption tax rates vary from 23%, under broad federal consumption tax base assumptions and no state-level movement away from their current income taxes, to as high as 50% under the assumption of a narrow federal consumption tax base, and complete state movement to the new federal consumption tax base. Such high tax rates might create significant compliance problems, especially under a subtraction-method value added tax at the business level; however, the ultimate impact on revenue yield is beyond the scope of this inquiry.

With regard to actual federal implementation and the implications for the states, it seems reasonable to expect:

- 1. a two year planning and training period by the IRS while it continued to administer current income tax law;
- 2. the discovery of problems by the Service which would require legislative remedy and further consideration by the Congress;
- 3. probable continued uneasiness about turning off federal income taxes and turning on the federal consumption tax;

4. a reasonable probability that federal income tax rates would go down as federal consumption tax rates were phased in over a several (additional) year period

At this juncture it is difficult to envision that budget conscious states would adopt the same time frame as the federal government, and would simply wait and plan to continue their income taxes as under current law and begin to make alternative arrangements with employers and payers and agents of payers of capital income. During this two to four year period I envision administrative costs to taxpayers to rise as well as in terms of the budgetary costs of federal implementation. Thus, short term simplification would not seem likely.

Should hoped for revenues prove to be inadequate, and economic growth less than hoped for, it is possible that pressure would build to freeze the federal system in the middle of its transition from personal and corporate income taxes to one with those income taxes at reduced rates and a federal consumption tax at an intermediate rate.

In sum, the difficulties for the states of fundamental federal tax reform loom quite large in my view. Moreover, this review suggests, irrespective of the impact on the state-local sector, that movement from our hybrid income-consumption tax system to one more nearly resembling a pure consumption tax at the federal level is unlikely to result in administrative simplification for taxpayers and the federal tax collectors for a significant numbers of years. Should major industrial states remain wedded to their income taxes, and federal revenue yields turn out to be less than expected⁸⁴, it is possible that complexity for taxpayers and tax administrators, and fiscal uncertainty for federal and state budget officials could substantially increase in our federal system with the end goal of a federal consumption tax never attained. Instead, we might find ourselves with remnants of a federal corporate and individual income tax coupled with a new federal consumption tax, and a patchwork of state systems which also reflect the old and the new.

⁸⁴Consider, for example the unanticipated corporate income tax shortfalls under the Tax Reform Act of 1986. See CBO(1992b). Over the original 5 year projection period, FY87-91, total actual corporate income tax revenues turned out to be 74% of those initially projected. See Strauss(1994), Table 2.

10 Bibliography

- Aaron, Henry J. and William G. Gale (1996). *Economic Effects of Fundamental Tax Reform.* The Brookings Institution.
- Advisory Commission on Intergovernmental Relations (1993). Significan Features of Fiscal Federalism. Volume 1. Budget Processes and Tax Systems. (Washington, D.C.: ACIR, M-185).
- Advisory Commission on Intergovernmental Relations (1994). Significant Features of Fiscal Federalism.
- American Institute of Certified Public Accountants (1975). Value-Added Tax: Statement of Tax Policy. (New York: AICPA).
- American Institute of Certified Public Accountants and Martin Sullivan (1996). Changing America's Tax System: A Guide to the Debate. (New York: John Wiley & Sons, Inc.).
- Auten, Gerald E. and Eric J. Toder (1996), "Federal Consumption Tax Proposals and the States," Paper presented at the Seminar on the Sales Tax in the 21st Century, Institute of Property Taxation and the National Tax Association, February, 1996 (Revised, May, 1996).
- Auerbach, Alan(1996), "Tax Reform, Capital Allocation, Efficiency, and Growth," in Aaron and Gale (editors). *Economic Effects of Fundamental Tax Reform*. (Washington, D.C.: The Brookings Institution).
- Berliant, Marcus C. and Robert P. Strauss (1993) "State and Federal Tax Equity: Estimates Before and After the Tax Reform Act of 1986," *Journal of Policy Analysis and Management*, 12, 1, (Winter, 1993), 9-43.
- Bickley, James M. (1995), *Flat Tax Proposals: An Overview*, CRS Issue Brief, IB95-6-(Congressional Research Service, Library of Congress, updated September 8, 1995).
- Bickley, James M. (1996), "Flat Tax: An Overview of the Hall-Rabushka Proposal," *Tax Notes*, (July 1, 1996), 97-111.
- Bickley, James M. (1997), "Flat Tax Proposals: An Overview," (Congressional Research Service, Library of Congress, updated April 30, 1997).
- Boskin, Michael J. (editor) (1996). Frontiers of Tax Reform. Hoover Institution Press.
- Bucks, Dan (1995). "Federal Tax Restructuring: Perils and Possibilities for the States," Multistate Tax Commission, August, 1995.
- Buehler, Affred G. (1932). General Sales Taxation: its History and Development. (New York: Business Bourse).

- Bureau of Economic Analysis (1985), Corporate Profits, Profits Before Tax, Profits Tax Liability, and Dividends, Methodology Paper Series MP-2, 1985.
- Bureau of Economic Analysis, US Department of Commerce(1996), Regional Economic Information System: 1964-94 (CD-ROM), June, 1996.
- Bureau of National Affairs (1996). Payroll Administration Guide. (Washington, D.C.).
- Christian, Ernest S. (1996), "How Much Simplification is Enough? Is a Returnless Tax Realistic?," Tax Notes 73, 12 (December 23, 1996), 1481-1496.
- Clotfelder, Charles and Richard L. Schmalbeck, "The Impact of Fundamental Tax Reform on Nonprofit Organizations," in Aaron and Gale (editors) *Economic Effects of Fundamental Tax Reform.* The Brookings Institution, 211-246.
- Commerce Clearing House (1996). Multistate Corporate Income Tax Guide. (Chicago, Illinois).
- Commerce Clearing House (1996). State Tax Guide. (Chicago, Illinois).
- Congressional Budget Office (1992a), *Effects of Adopting a Value-Added Tax.* Congress of the United States, CBO, February, 1992.
- Congressional Budget Office (1992b), The Shortfall in Corporate Tax Receipts since the Tax Reform Act of 1986. Congress of the United States, CBO, May, 1992.
- Congressional Budget Office (1995), Reducing the Deficit: Spending and Revenue Options: A Report to the Senate and House Committees on the Budget, February, 1995.
- DRI/McGraw-Hill, Residential Real Estate Impacts of Flat Tax Legislation. Summary Prepared for the National Association of Realtors, May 1995. Principal Investigators: Roger E. Brinner, Dave Wyss, and Mark Lasky.
- Due, John and John Mikesell (1995). Sales Taxation, Second Edition. University Press for the Urban Institute.
- Duncan, Harley and Ronald Alt, "FTA Report: Impact of Federal Tax Changes on State Tax Systems," State Tax Notes, 17, 49 (December 3, 1993), 233-338.
- Duncan, Harley (1996), "Federal Tax Reform: Impact on State Tax Systems," Staff Working Paper, Federation of Tax Administrators, February 1996.
- Duncan, Harley T. and Charles E. McLure, Jr. (1996), "Tax Administration in the United States of American: A Decentralized System," (mimeo, FTA, July, 1996).
- Feld, Alan L. (1995a), "Nunn-Domenici and Nonprofits," Tax Notes, 68, 9 (August 28, 1995), 1119-1120.
- Feld, Alan L. (1995b), "Living with the Flat Tax", National Tax Journal 48, 4 (December, 1995), 603-618.

Federation of Tax Administrators (1975). Personal Income Tax Administration.

- Federation of Tax Administrators (1993), "Tax Return Information Tapes Available from Internal Revenue Services," New Commissioner's Seminar. (Washington, DC), March 11, 1993.
- Financial Accounting Standards Board (1991). Original Pronouncements: Accounting Standards as of June 1, 1991: Volume II. (Homewood, Illinois: Irwin Publishing Company).
- General Accounting Office(1978). Better Management Needed in Exchanging Federal and State Tax Administration. GAO/GGd-78-23.
- General Accounting Office (1993a). Tax Policy: Implications of Replacing the Corporate Income Tax with a Consumption Tax. GAO/GGD-93-55, May, 1993.
- General Accounting Office (1993b). Tax Policy: Valuje-Added Tax: Administrative Costs Vary with Complexity and Number of Businesses. GAO/GGD-93-78, May, 1993.
- General Accounting Office(1996). Tax Administration:FedState Efforts Offer Opportunities but Program Needs Improvement. (October, 31, 1996), GAO/GGD-97-16.
- Gillis, Malcolm Carl S. Shoup and Gerardo P. Sicat (1990). Value Added Taxation in Developing Countries. The World Bank.
- Ginsberg, Martin D. (1995), "Life Under a Personal Consumption Tax: Some Thoughts on Working, Saving and Consuming in Nunn-Domenici's Tax World," National Tax Journal 48, 4 (December, 1995), 585-602.
- Gold, Steven D.(1995), "Impacts of the Revolution in Federal Policies on State and Local Governments," NTA Forum, 22, (Summer, 1995), 1-5.
- Gravelle, Jane G. (1996), "The Flat Tax and Other Proposals: Effects on Housing," (Congressional Research Service, Library of Congress), April 29, 1996, 96-379E.
- Hall, Robert E. and Alvin Rabushka (1983), The Flat Tax, Hoover Institution Press.
- Hall, Robert E. and Alvin Rabushka (1995), *The Flat Tax*, Hoover Institution Press. (Reprinted by permission in *Tax Notes*, Special Supplement, August 4, 1995.)
- Hall, Robert E. and Alvin Rabushka (1996), "The Flat Tax: A Simple, Progressive Consumption Tax," in Michael J. Boskin (editor), Frontiers of Tax Reform, Hoover Institution Press, 27-53.
- Hall, Robert E. (1996), "Comment" in Aaron and Gale (editors), *Economic Effects of Fundamental Tax Reform*. The Brookings Institution, 393-426.
- Holtz-Eakin, Douglas, (1996), "Consumption-Based Tax Reform and the State-Local Sector." National Tax Journal 49, 3 (September, 1996), 475-486.

- Internal Revenue Service (1986). Implementation and Administration of the Business Transfer Tax. February, 1986.
- Internal Revenue Service (1993). A Study of Administrative Issues in Implementing a Federal Value Added Tax. May, 1993.
- Internal Revenue Service (1995) Databook, 1995.
- Internal Revenue Service, Statistics of Income Division (1995), 1992 Statistics of Income: Corporation Income Tax Returns.
- Joint Committee on Taxation (1995). Description and Analysis of Proposals to Replace the Federal Income Tax. (JCS-18-95), June 5, 1995.
- Joint Committee on Taxation (1996), Impact on State and Local Governments and Taxexempt Organizations of Replacing the Federal Income Tax. (JCS 4-96), April 30, 1996.
- Kaplow, Louis (1995), "Recovery of Pre-enactment Basis Under a Consumption Tax: The USA System," Tax Notes, 68, 9 (August 28, 1995), 1109-1118.
- Kenyon, Daphne A. (1996), "A New State VAT? Lessons from New Hampshire," National Tax Journal, 49,3 (September, 1996), 381-400.
- Klein, Robert (1984), "National Consumption Taxes: The View from the States," National Tax Journal, 37, 3 (September, 1984), 313-321.
- Kozielec, John (1996), "The Tax Return: A Unique Data Source for Tracking Migration," in IRS Statistics of Income Division, Turning Administrative Systems Into Information Systems. June, 1996.
- McLure, Charles E. Jr., (1987). The Value Added Tax: Key to Deficit Reduction?. (Washington, D.C.: American Enterprise Institute).
- McLure, Charles E. Jr., (1988), "State and Local Implications of a Federal Value-Added Tax," *Tax Notes*, (March 28, 1988).
- Mikesell, John L. (1996), "A National Retail Sales Tax? Some Thoughts about Taxing Consumption the American Way." *Tax Notes*, July 22, 1996.
- Mikesell, John L. (1997), "The American Retail Sales Tax: Considerations on their Structure, Operations, and Potential as a Foundation for A Federal Sales Tax," National Tax Journal, L, 1 (March, 1997), 149-165.
- Murray, Matthew N. (1997), "Would Tax Evasion and Tax Avoidance Undermine a National Retail Sales Tax?," National Tax Journal, L, 1 (March, 1997), 169-80.
- Musgrave, Richard A (1987), "Short of Euphoria," The Journal of Economic Perspectives, 1, 1(Summer, 1987), 59-72. National Tax Journal, L, 1 (March, 1997), 167-181..

- Nadeau, Serge and Robert P. Strauss (1993), "Taxation, Equity and Growth: Exploring the Trade-off Between Shareholder Dividend Tax Relief and Higher Corporate Income Taxes,", National Tax Journal, XLVI, 2 (June, 1993), 161-75.
- Nazier, Daeng A. (1989). Limiting the Regressivity and Maintaining the Revenues of Consumption-Based Taxes: A Mathematical Programming Approach, unpublished dissertation, School of Urban and Public Affairs, Carnegie-Mellon University, September, 1989.
- New York State Department of Taxation and Finance (1995), "IRS Data Information and Use Report," (Albany, NY, January, 1995).
- Nolan, John S.(1995), "The Merit of an Income Tax versus A Consumption Tax," *The American Journal of Tax Policy*, 12, 2 (Fall, 1995).
- Papke, James A (1996), "Differential Taxation of Capital Income after Federal Tax Restructuring: Impact and Implications for Multilevel Government Finance," State Tax Notes, 11, 13 (September 23, 1996),877-892.
- Penniman, Clara (1980). State Income Taxation. Johns Hopkins University Press.
- Perleman, Ronald A. (1996), "Transition Issues in Moving to a Consumption Tax: A Tax Lawyer's Perspective," in Aaron and Gale (editors), *Economic Effects of Fundamental Tax Reform.* The Brookings Institution, 393-426.
- Poddar, Satya (1990), "Options for a VAT at the State Level", in Gillis, Malcolm Carl S. Shoup and Gerardo P. Sicat (1990). Value Added Taxation in Developing Countries. The World Bank, 104-112.
- Price-Waterhouse (1993). VAT in the Single Market: The Price-Waterhouse Guide Through the Maze
- Rosa, Dan and Dorothy Collins (1988), "Statistics of Income Studies of Business Income and Taxes," *SOI Bulletin*, 8, 2 (Fall, 1988), 81-101.
- Sailer, Peter (1994), "Statistics of Income Studies of Individual Income and Taxes, 1913-92," Statistics of Income Bulletin: 80th Anniversary Issue, 80 Years of SOI Data, (Summer, 1994), 6-13.
- Seidman, Laurence S. (1996), "The USA Tax: A Friendly Critique of its Design," Tax Notes, 69, (November 18, 1996), 833-843.
- Shannon, John (1995) "Can New Federalism Tax Reformers Clear the High Middle Class Political Hurdles.?" State Tax Notes 9, 16 (October 16, 1995), 1141-7.
- Shannon, John (1997), "Middle-Class Votes Bring a New Balance to U.S. Federalism," The Future of the Public Sector, 10 (February, 1997), 1-3.

- Sheffrin, Steven (1996), "Can We Replace Federal Income Taxes with National Sales or Value-Added Taxes?" Paper presented at UCLA Tax Reform Conference, January 31, 1996.
- Shoup, Carl (1969). Public Finance. Aldine Press.
- Slemrod, Joel (1996), "Which is the Simplest Tax System of Them All?," in Aaron and Gale (editors). *Economic Effects of Fundamental Tax Reform*. (Washington, D.C.: The Brookings Institution).
- Strauss, Robert P. (1992) "Federal Collection of State Corporate Income Taxes," in Thomas F. Pogue (editor). State Taxation of Business: Issues and Policy Options, (New York, Praeger Press, 1992), 69-88.
- Strauss, Robert P. (1994), "The Political Economy of Business Tax Return Privacy," National Tax Association, Proceedings of the Eighty-Sixth Annual Conference, Charleston, South Carolina 1994, p. 89-99.
- Strauss Robert P. (1995) "The Effects of a Flat Federal Consumption Tax on the States," *Proceedings* National Tax Association-Tax Institute of America, San Diego, California (October, 1995), 10-23.
- Strauss, Robert P. (1996), "Implications of a Federal Consumption Tax for State and Local Tax Administration," Tax Notes, 73, 5 (November 4, 1996), 605-614.
- Steuerle, Gene (1995), "Consumption and Flat Taxes: A List of Issues," Tax Notes 69, 1 (October 2, 1995), 103-104.
- Sullivan, Clara (1965). The Tax on Value Added. Columbia University Press.
- Tait, Alan A. (1988), Value Added Tax: International Practice and Problems. International Monetary Fund.
- Tax Notes (1987), January 12, 1987, p.93.
- U.S. Bureau of the Census, Governments Division (1995). 1992 Census of Governments: Governmental Organization.
- U.S. Congress, Committee on Ways and Means (1932), Report to Accompany The Revenue Bill of 1932, Union Calendar 123, 72nd Congress, 1st Session, Report No. 708, March 8, 1932.
- U.S. Treasury (1984). Tax Reform For Fairness, Simplicity, and Economic Growth: Volume 3 Value-Added Tax. (US Treasury Department, November, 1984).
- U.S. Treasury Department (1992), Report of the Department of the Treasury on Integration of The Individual and Corporate Tax Systems: Taxing Business Income Once. (Treasury III).

Warren, Alvin C. Jr., "The Proposal for an 'Unlimited Savings Allowance," *Tax Notes* 68, 9 (August 28, 1995), 1103-1108.

Wolfman, Bernard (1995), "Corporate Tax Issues under the Nunn-Domenici Consumption Tax," *Tax Notes*, 68, 9 (August 28, 1995), 1121-1123.

February 1, 2005final3.tex