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Measure 1: Who Would Pay the Taxes?

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MEASURE 1: WHO WOULD PAY THE TAXES?

Bruce A. Weber and Walter B. Moore

ABSTRACT

Measure 1 is a proposal (1) to impose a retail sales tax in Oregon, (2) use the proceeds to reduce property and personal income taxes and provide low income refunds and renter relief, and (3) place new restrictions on the ability of local governments to raise property taxes and of state government to increase expenditures.

Estimating the final impact of Measure 1 on the distribution of taxes among Oregon income classes is quite complex, involving numerous assumptions about which there is no concensus among economists.

Under a plausible set of assumptions about shifting (that businesses would shift half of business sale taxes and property tax relief under Measure 1 forward to consumers and half back to property owners), Measure 1 would have a relatively minor impact on the distribution of taxes among six broad income classes in the short run. Measure 1 would tend to make the state-local system more proportional overall by slightly lowering the average effective tax rate (taxes as a percentage of income) for the lowest and highest income classes (which now pay the effective highest tax rates) and slightly raising the effective tax rate of the four middle income classes. In so doing, Measure 1 would make the current system slightly less regressive at lower income levels and slightly less progressive at the higher income levels.

These estimates of impact apply to broad income classes. Within any income class there would be those with higher effective tax rates and those with lower effective tax rates.

By focusing on the short run impact of Measure 1, the report ignores the critical dynamic impacts of the Measure on long run growth in income and taxes.

Bruce A. Weber and Walter B. Moore are professor and research assistant in the Department of Agricultural and Resource Economics at Oregon State University. The authors are grateful to Richard Peterson of the Legislative Revenue Office for extensive assistance in both the design of the study and data used in the analysis, and to James Scherzinger of the Legislative Revenue Office, Ronald Oliveira of the Department of Revenue and Russell Youmans and Charles Vars of Oregon State University for perceptive reviews of an earlier draft. Responsibility for the conclusions rests solely with the authors.

MEASURE 1: WHO WOULD PAY THE TAXES?

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On September 17, 1985, Oregonians will vote on Measure 1, a proposal to restructure Oregon's tax system. This measure would impose a sales tax of 5% on many goods sold in Oregon and use the proceeds of the sales tax to reduce income and property taxes.

By restructuring the tax system in this way, the Measure would change the tax burden on various individuals and groups. One concern is how such a change would affect the progressivity of Oregon's state-local tax system (the burden of taxation on different income groups) in the short run. A progressive tax system is one in which the effective tax rate (taxes as a percent of income) increases as income increases. This report is an attempt to shed some light on this very complex issue.

Important issues not dealt with in this report are the long run-effects of Measure 1 on income and job growth in the state, growth in overall tax levels, and the stability of the tax-expenditure system. These long run effects are important in their own right and could alter both the level of taxes paid by Oregonians and the distribution of tax burden among income classes.

A critical distinction in this analysis is that between the initial incidence (the direct burden on individuals or firms who pay the tax initially) and the final incidence of a tax (the direct and indirect burden on individuals after all shifting of taxes and tax relief by firms and individuals has taken place). Ultimately, it is individuals in different income classes who end up paying the taxes initially paid by firms or receiving the relief received by firms. These taxes and tax relief may be shifted to individuals in three ways: as lower or higher profits for business owners, lower or higher wages for employees and/or higher or lower prices for consumers.

The first part of the report summarizes the main features of Oregon's present tax system, discusses the procedure used to analyze the initial incidence of taxes and tax relief among six household income classes, and describes the initial incidence of Oregon's current tax system. The export of personal income and homeowner property taxes to the federal tax system is also discussed.

The report then discusses the shifting and exporting of business taxes to the federal tax system, to out-of-state consumers and property owners, and to Oregon consumers and property owners. The implications of this export and shifting are discussed by describing the final incidence in current state-local system in terms of effective tax rates for each income class.

The second section of the report discusses the major features of Measure 1, the procedures used in this study to allocate the taxes and tax relief under the proposed system, and describes the initial impact of the proposal. The analysis of initial incidence is only partial in that it looks only at the sales tax payments by households and property tax relief to homeowners, renter payments, the low income refund, and the personal income tax reductions. It does not consider how the shift of taxes and tax relief from businesses to households would indirectly affect the overall distribution of tax burden among income classes. The extent to which businesses and owners of residential rental property pass sales tax payments and property tax relief through to consumers and renters affects the ultimate distributional impacts of Measure 1.

The second section of the report concludes with an examination of the final impact of Measure 1 under three alternative assumptions about the shifting of the business sales tax payments and business property tax relief contained in Measure 1.

There is agreement among economists that the general sales tax on final consumption items is shifted forward to the consumer. There is no consensus, however, about the final incidence of business taxes. The economics literature contains little or no discussion of the shifting of sales taxes paid by businesses on goods used in their operation. And for business property taxes and the corporate income tax there is serious professional disagreement among economists about the final incidence. (See Phares (1980) and Pechman (1985) for concise summaries of the shifting and incidence debates.) To reflect the range of professional opinion, we have examined three scenarios (sets of assumptions) about shifting in the analysis of Measure 1 impacts.

The report concludes with a summary of the analysis and attempts to place the report's finding into context.

WHO PAYS THE TAXES IN OREGON'S CURRENT STATE-LOCAL TAX SYSTEM

Oregon state and local governments currently rely primarily on two taxes to support their activities: the state income tax and the local property tax. These two taxes provide about four-fifths of state-local tax revenue.

There are two major property tax relief programs that reduce the property tax burden for individual households: the Property Tax Relief (PTR) Program, and the Homeowners and Renters Refund Program (HARRP). The PTR program pays part of the property taxes of all homeowners and provides a refund payment to all renters who apply. The annual PTR payment in 1985-

86 will be $100 for homeowners and $50 for renters. HARRP provides property tax refunds for homeowners and renters with household incomes of less than $17,500; higher payments are made to those with lower incomes.

Procedures for Estimating Incidence

A first step in analysis of distribution of taxes and tax relief among income classes is to identify different income classes and estimate the income and number of households in each class. Six income classes were selected based on the 1980-81 Consumer Expenditure Survey (published in 1984) adjusted by change in personal income to the 1986 income levels. Thus the "less than $5,000" income class for 1981 became the "less than $6,801" income class for 1986.

Total income for the households in each income class was estimated from the average household income for each class contained in the Consumer Expenditure Survey, adjusted to 1986 by growth in personal income. Note that this is a U.S. income average, not an Oregon income average, and that the average income for the extreme upper and lower income classes might be different for Oregon than for the United States.

This average income for each class was multiplied by the number of households for each class estimated by assigning the 1980 population across the Consumer Expenditure Survey income classes using 1980 Census data. By using the 1980 population distribution, we have assumed that the distribution of population among income categories which existed in 1980 is appropriate for 1986.

The next step is to allocate the taxes and tax relief among the six income classes. The allocation of two major taxes and the two major tax relief programs for homeowners and renters is described below.

Income Tax. The Department of Revenue reports Oregon personal income taxes paid by "adjusted gross income" class. Adjusted gross income (AGI) differs from total income in that it excludes certain transfer payments, a portion of capital gains, moving expenses and other adjustments to income, and personal exemptions. In order to allocate income taxes among the six total household income classes, the AGI income classes had to be made consistent with the total household income classes. Oregon total household income estimated from the Consumer Expenditure Survey is 28 percent higher than Oregon adjusted gross income. Each adjusted gross income class boundary in the Department of Revenue reports was increased by 28 percent to make these income classes consistent with the total household income classes.

Property Tax. The property tax paid by homeowners was allocated among homeowners in proportion to the relative shares of total housing values for each class as reported in the 1980 Census.

PTR: Homeowners. The total available PTR for homeowners was allocated among classes in proportion to the number of homeowners in each class in the West region based on 1981 Annual Housing Survey. The number of homeowners was used because the maximum 1985-86 payment for each homeowner is $100 and almost all households will get the maximum.

PTR: Renter. Similarly, the PTR renter payments were distributed in proportion to the number of renters in each class, since most renters will get the maximum $50 payment. Data from the 1981 Annual Housing Survey were used as the basis for allocation.

HARRP: Homeowner and Renter. The 1983 HARRP returns were used as a basis for allocating the HARRP payments by income class.

Table 1 summarizes the incidence assumptions and allocation procedure used in analyzing incidence in the current tax system.

Export of State-Local Taxes to Federal Government. The federal tax

TABLE 1. INCIDENCE ASSUMPTIONS AND ALLOCATION PROCEDURE: CURRENT OREGON STATE-LOCAL TAX SYSTEM

Tax	Incidence	Allocation
Personal Income Tax	Income Taxpayers	Special series based on 1983 Income Tax Statistics. AGI classes adjusted to total income classes.
Real Property Tax:Homeowners	Homeowners	1979 Home Values
Property Tax Relief PTR:Homeowners	Homeowners	Percent of homeowners in each income class: West region (1981 Annual Housing Survey)
Property Tax Relief PTR:Renters	Renters	Percent of Renters in each class: West region (1981 Annual Housing Survey)
HARRP: Homeowners	Homeowners	1983 HARRP Returns
HARRP: Renters	Renters	1983 HARRP Returns
Real Property Tax:Non-homeowners	B: 1/2 to consumers, 1/2 to owners of capital P: owners of capital R: consumers	Allocation to consumers based on 1980-81 Consumer Expenditure Survey - total consumption expenditures by income class
Corporate Income Tax	B: 1/2 to consumers, 1/2 to owners of capital P: owners of capital R: consumers	Allocation to owners of capital based on distribution of 1981 property income by income class (Current Population Reports)

Key: B: Benchmark; P: Progressive; R: Regressive system allows deduction of state and local taxes as an itemized deduction in computing Federal individual income taxes. Through this deductability provision Oregonians can reduce their federal income tax liability, in effect exporting some of their Oregon state-local taxes to the federal system.

This export of state-local taxes was entered into the analysis by subtracting from each income class' effective tax rate an adjustment designed to capture the deductability feature. This adjustment was computed for each income class in two steps: (1) the effective tax rate of the deductible elements of the state-local tax system (state income taxes plus property taxes net of PTR) of each class was multiplied by the percent of taxpayers in that class that itemize state and local taxes; (2) this product was multiplied by the marginal federal tax rate for the average household in that class.

Initial Incidence in Oregon's Current System

Ignoring possible shifts in taxes to households by the business sector, Oregon's tax system is basically progressive. Except for the lowest income class, the effective tax rate (taxes as a percent of total income) paid by each class increases as income levels increase. The lowest class pays an effective rate that is higher than that of the next higher class. Each of the successive classes, however, pays a slightly higher effective tax rate, with the highest income class paying an effective rate of over 7 percent. Appendix Figure A-1 shows the initial incidence of Oregon's current state-local tax system.

Final Incidence in Oregon's Current System

The foregoing analysis examined the initial incidence among households of taxes and tax relief for the current state-local tax system. The taxes paid by businesses did not enter into the analysis. Businesses, however, pay a substantial amount of taxes through the property tax and corporate income tax. Businesses pass this tax on to individuals: to business owners and stockholders as lower profits, to employees as lower wages and/or to consumers as higher prices. Which income classes these individuals belong to, and where they live, determine the final incidence of the tax.

Export of Taxes

Some of the taxes paid by Oregon firms are exported from the state. There are three mechanisms for the export of taxes: Federal deductability of state and local taxes, sale of Oregon goods and services to out of state purchasers, and reduced property income of non-Oregon stockholders of Oregon businesses. First, the federal corporate income tax allows deduction of state and local taxes paid by firms. Thus, the federal tax system in effect pays some of the state-local taxes. The marginal tax rate for the federal corporate income tax ranges from 15 percent to 46 percent. Although most (83 percent) of corporate income is taxed at the maximum rate, the effective rate is undoubtedly much lower because of tax credits. Therefore, we used 30 percent as the effective tax rate for corporations and assumed that 30 percent of state corporate income and property taxes paid by businesses were exported to the federal system. Although some of these taxes were undoubtedly paid by Oregonians, they were paid as federal rather than state-local taxes.

Secondly, to the extent that the prices of Oregon goods and services reflect the taxes paid by businesses, these taxes are paid by out-of-staters when the goods and services are exported from the state. Input-output model estimates of out-of-state sales for the states of Washington and Mississippi suggest that these states sold 39 and 44 percent of their goods and services outside the state in 1967 and 1972, respectively. We selected 40 percent as a reasonable estimate of 1986 export sales for Oregon in this study. This implies that only 60 percent of the taxes shifted to consumers paid by Oregon firms were shifted to Oregonians.

Finally, to the extent that business taxes are shifted to property owners, some of the property owners live out of state. Mandelbaum (1985) found that one-third of the employees in Oregon manufacturing firms were employed by firms owned by out-of-staters. Because we expect that manufacturing firms are more likely to be out-of-state owned than non-manufacturing firms, we selected 25 percent as a reasonable estimate of how much Oregon property income leaves the state. Only 75 percent of the shift of business taxes to property owners was assigned to Oregonians.

<u>Assumptions about Shifting of Current Taxes</u>

The question of whether the final burden of corporate income and business property taxes rests with owners, workers, or consumers is a matter of some dispute.

A common assumption in incidence studies is to assign half of these taxes to consumers and half to owners of business property (Phares, 1980; Pechman, 1985). We have used this shifting assumption in assigning the corporate income and property taxes paid by businesses under the current tax system among income classes in this study. (See Table 1) Under what we are calling the benchmark assumption, half of non-exported corporate income and business property taxes are allocated among income classes in proportion to the consumption expenditures made by each class (See Table 2). The other half of these taxes is allocated among income classes in proportion to the property income received by each class (See Table 2). Since there is no theoretical basis for assigning corporate income and property taxes to wage earners and since the distribution of wages and salaries among income classes falls between the distributions of consumption expenditures and of property income, no allocation of taxes based on the wages and salary distribution was attempted.

Figure 1 shows the final incidence of Oregon state-local taxes under the current system using the benchmark assumption. Oregon's current state-local system is seen to be regressive at the lower end of the income scale, roughly proportional for the middle income classes and progressive at the highest income ranges. The shape of this distribution is not dissimilar to that of the average U.S. state and local tax system. (Pechman, 1985, p.7)

Alternative shifting assumptions yield quite different results. If one assumes that business taxes are shifted forward to consumers in the form of higher prices (by allocating business taxes to income classes in proportion to consumption expenditures), the state-local tax system looks quite regressive. If one assumes that all business taxes are shifted backward to the owners of business property in the form of lower profits and property incomes (by allocating all business taxes to income classes in proportion to property income), the state-local tax system looks quite progressive. Appendix Figure B-1 shows the variation in the progressivity of the current tax system that results from selecting alternative assumptions about shifting of business taxes.

The benchmark assumption is used in this report as the basis of comparing the current system's final incidence with incidence under Measure 1.

Figure 1 - Current Oregon State-Local Tax System: Final Incidence

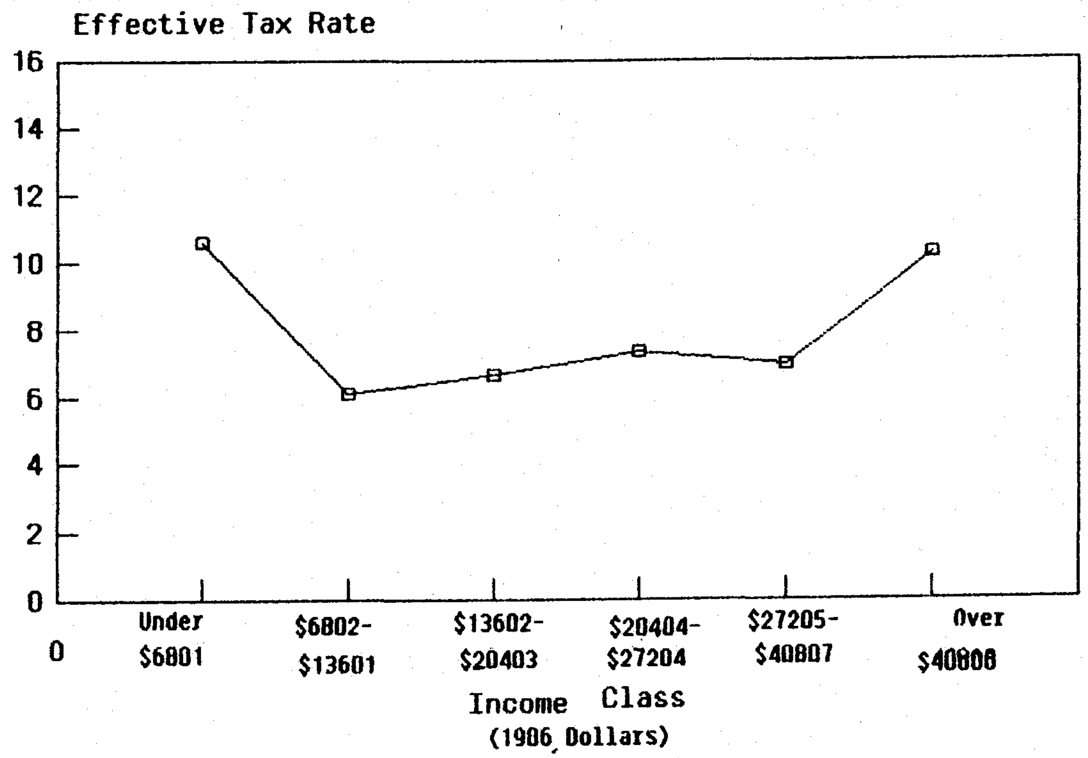

TABLE 2. DISTRIBUTION OF EXPENDITURES, INCOME, AND HOUSEHOLDS BY INCOME CLASS

	% of Households	% of Total Expenditures	% of Total Property Income	% of Total Income
Income under $6801	12.09	7.47	0.25	1.59
$6802 - $13601	16.62	10.41	1.81	6.40
$13602 - $20403	15.60	13.39	5.49	9.98
$20404 - $27204	14.89	16.54	6.79	13.47
$27205 - $40807	22.33	20.93	16.27	28.41
Over $40808	18.47	31.24	69.39	40.16
	100	100	100	100

Sources: Households: U.S. Bureau of the Census, 1980 Census of Population.

Expenditures: U.S. Bureau of Labor Statistics, "Consumer Expenditure Survey" 1984, Table 2

Property Income: U.S. Bureau of the Census, Money Income of Households, Families and Persons in the United States, 1981, Table 20.

Income: See Text.

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THE IMPACT OF MEASURE 1

Measure 1 would impose a retail sales tax of 5 percent on many goods in Oregon and use the proceeds of the sales tax to reduce property and income taxes. It would also provide a low income refund of up to $40 per person to low income taxpayers and would provide a direct payment to renters of residential property equal to 6 percent of their annual rent payment. For a more complete description of this proposal to restructure Oregon's tax system, see How Would Measure 1 Change Taxing and Public Spending in Oregon?, EM 8299, co-published by Oregon State University Extension Service and the Bureau of Governmental Research and Service of the University of Oregon.

Would the imposition of this sales tax, together with the property and income tax reductions and the low income and renter relief payments, make Oregon's tax system more progressive in the short run? Or less progressive? The remainder of this report is an attempt to answer these questions.

The Legislative Revenue Office has estimated that sales tax collections under Measure 1 would be $921.5 million during the first 13 months. During the "steady state" 12-month period for 1986-87 used in this study, $886 million would be collected.

Not all of this would be paid by Oregonians. The Legislative Revenue Office has estimated that 3 percent of the sales taxes revenues would be paid by tourists. These tax revenues would not be paid by Oregonians and hence are not included in the present analysis.

Of the remaining 97 percent of sales taxes, 64 percent would be paid by Oregon households directly and 33 percent would be paid by Oregon businesses. In this section of the report the initial incidence among

Oregon households of the 63 percent of the sales tax and the associated reductions in property and income taxes, low income refund and renter refund will be discussed.

The final incidence of the Measure (how the taxes and tax relief are distributed among Oregon Households after accounting for the shifting of the 33 percent of sales taxes paid by business and the associated business property tax relief) will be discussed in the final part of this section.

Procedures for Estimating Incidence

Analysis of the initial impact of Measure 1 on Oregon households requires an estimate of the distribution of five elements of Measure 1 among the different income classes.

(1) The Sales Tax. The estimated 64 percent of sales tax that would be paid by Oregon households was distributed among the six income classes by using data from the detailed 1972-73 Consumer Expenditure Survey. The 1972 data were integrated into the 1980-81 Consumer Expenditure Survey data to figure the taxable consumption as a percent of income for each of the income classes, given the features and exemptions of Oregon's proposed sales tax. This percentage for each income class was multiplied by the income in each class times the 5 percent estimated sales tax to obtain an estimate of total sales tax revenues for each class. Since respondents in the Consumer Expenditure Survey do not report all consumption, this estimate would underestimate total sales tax revenue obtained from each class. Therefore, each income class' estimated tax revenues were adjusted proportionately upward to yield estimated tax revenues from households.

(2) The Low Income Refund. The proposed measure contains a low income refund of up to $40 per person for the lowest income classes. Using the proposed refund schedule, the Legislative Revenue Office estimated the

refund payments to be made to each of the 3 lower income classes.

(3) Homeowner Property Tax Relief from Sales Tax. The Legislative Revenue Office has estimated that 42 percent of the total property tax is paid by homeowners. The property taxes paid by homeowners are allocated among income classes on the basis of the proportion of total home value in each income class, a figure obtained from the 1980 census.

(4) Renter Relief Under the Sales Tax. The Measure includes a provision to "refund" to renters a figure equal to 6 percent of their annual rent payment. The renter relief under the sales tax was distributed among income classes in proportion to estimated rent payments reported under the HARRP and PTR Program in the 1983 Personal Income Tax report of the Department of Revenue. The reported "adjusted gross income" classes were adjusted to correspond to total income classes of the Consumer Expenditure Survey.

(5) Income Tax Relief. Measure 1 reduces and restructures income tax rates to make the system more progressive. Income tax relief was simulated for each income class by the Legislative Revenue Office (using the typical taxpayer family of four for each income class) by estimating the difference between their tax burdens under the proposed and the actual system. These differences were used to design an allocation of total income tax relief under Measure 1 to each income class.

Table 3 summarizes the allocation procedure for the elements of Measure 1.

Initial Impact of Measure 1

The impact of Measure 1 on the initial incidence of taxes is shown in the appendix Figure A-2. The initial impact of Measure 1 would be to lower the effective tax rate of the lowest income class and raise the effective

TABLE 3. INCIDENCE ASSUMPTIONS AND ALLOCATION PROCEDURES: MEASURE 1

Tax	Incidence	Allocation
Sales Tax: Households	Consumers of Taxed Items	Taxable Consumption (1980-81 Consumer Expenditure Survey)
Low Income Refund	Low Income Households	Special Series derived from Legislative Revenue Office
Renter Relief	Renters	1983 Rent payments
Homeowner Property Tax Relief	Homeowner	1979 Home values
Personal Income Tax Relief	Income Taxpayers	Special Series based on simulation of Measure 1 Income Tax schedules
Sales Tax: Business	B: 1/2 to consumers, 1/2 to owners of capital P: consumers R: owners of capital	Allocation to consumers based on 1980-81 Consumer Expenditure Survey - total consumption expenditures by income class Allocation to owners of capital based on distribution of 1981 property income by income class (Current Population Reports)
Business Property Tax Relief	B: 1/2 to consumers, 1/2 to owners of capital P: consumers R: owners of capital	

Key: B: Benchmark Scenario P: Progressive Scenario R: Regressive Scenario tax rate of the higher income classes, making the overall state-local tax system more progressive.

Final Impact of Measure 1

In addition to the five aspects of Measure 1 that would directly affect the taxes households pay (and thus initial incidence), the Measure would require Oregon businesses to pay an estimated $291 million in sales taxes. Businesses would also receive $392 million in property tax relief. The final impact of Measure 1 depends on how these taxes and tax relief would be shifted to households.

As noted above, economists disagree about how businesses shift taxes. Whether the businesses pass the tax on to consumers in the form of higher prices, employees in the form of lower wages, or property owners in the form of lower profits or dividends or rents depends on market conditions for the products and inputs of the firm, the types and sizes of firms and entrepreneur perceptions about changes in effective tax rates (Due). Which income classes the recipients of the shifted taxes belong to, and where they live, determine the final distributional impact of a change in taxes on Oregon households.

As in the analysis for the exporting of business taxes in the current Oregon system in the first section of this report, we have assumed that: (1) 30 percent of any business taxes/tax relief would be exported to the federal tax system through the state-local tax deductability provisions of the Federal tax code; (2) 40 percent of any business tax/ tax relief shifted to consumers through higher prices would be exported to out of state consumers; (3) 25 percent of any tax/tax relief shifted to property owners would be exported to out of state property owners.

Although the public finance literature has not focused on the shifting of business sales taxes and property tax relief, especially where these are partially offsetting changes, it is consistent with the spirit of some earlier studies to assign non-exported business taxes and tax relief half to property income and half to higher prices for consumers. (Due; Phares; Pechman 1985) It is this assignment that constitutes the benchmark scenario in this report.

In the benchmark scenario, the half of taxes and tax relief that would be shifted to consumers is allocated among the six income classes in proportion to each class' consumption expenditures (Table 2). The half of taxes/tax relief that would be shifted to property owners is allocated in proportion to the property income of each class (Table 2).

Figure 2 and Table 4 show the impact Measure 1 would have on the effective tax rates of the six income classes and on the progressivity of Oregon's state-local tax system. The estimated impact of Measure 1 is the difference between the final incidence of the current system (under the benchmark assumption about the shifting of business taxes) and the final incidence of the Measure 1 system under the benchmark scenario.

Measure 1 would not have a large impact on the overall progressivity of the tax system. It would make the system slightly less regressive at the lower end of the income scale, and very slightly less progressive at the upper end. It would increase the effective tax rates of the middle income groups slightly. In so doing it would basically "even out" the progressivity of the system, raising the tax rates of the classes with the lowest effective tax rates and lowering the tax rates of the two income classes with the highest effective tax rates.

In the earlier section of this report the alternative assumptions about shifting dramatically changed the estimated progressivity of the current system. Alternative assumptions about shifting, however, do not

Figure 2 - Current and Proposed Oregon State-Local Tax System:
Final Incidence

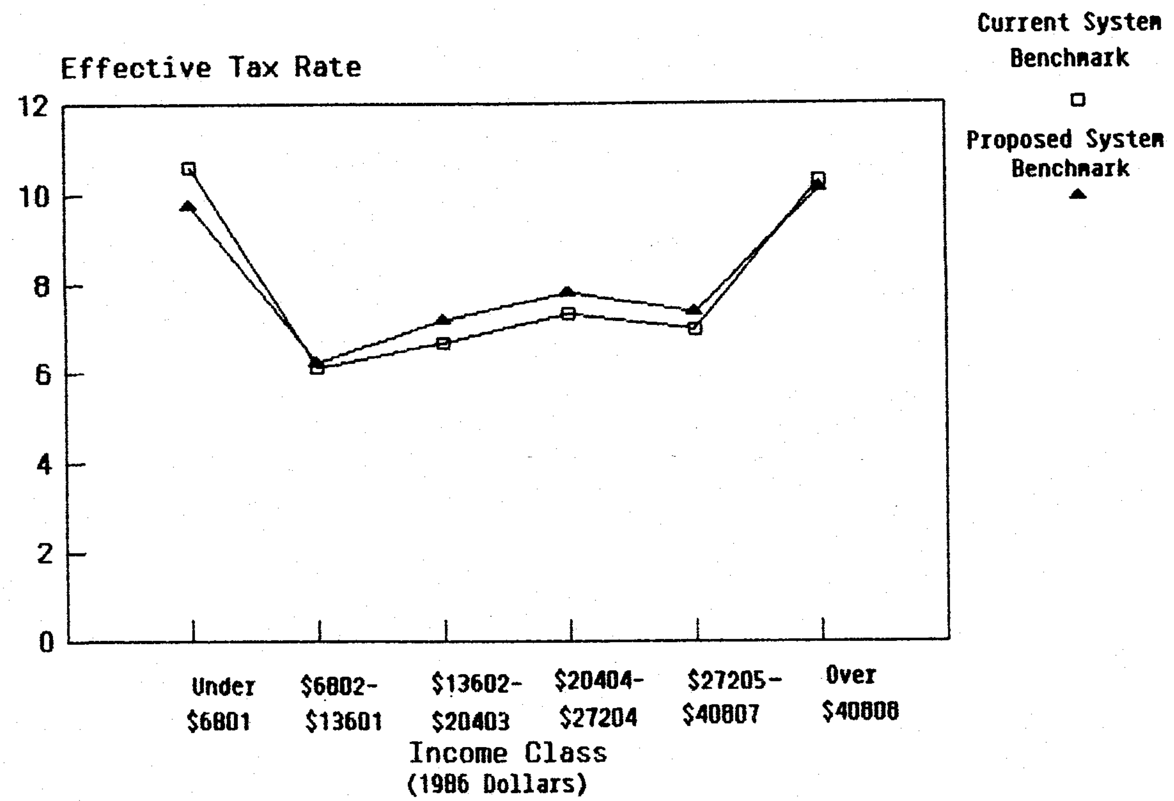


TABLE 4. IMPACT OF MEASURE 1 ON EFFECTIVE OREGON STATE-LOCAL TAX RATES: BENCHMARK SCENARIO

Income Class	Under $6,801	$6,802–$13,601	$13,602–$20,403	$20,404–$27,205	$27,206–$40,807	Over $40,80
Current System System Final Incidence	10.61	6.12	6.68	7.35	7.00	10.27
Measure 1 Initial Impact	−0.46	0.29	0.68	0.63	0.52	0.13
Adjustments in Effective Tax Rates Due to Shifting of Business Taxes and Tax Relief						
Half of Bus. Sales Tax Added to Prices	1.11	0.38	0.32	0.29	0.14	0.15
Half of Bus. Sales Tax Subtracted from Property Income	0.06	0.08	0.17	0.16	0.17	0.51
Half of Bus. Property Tax Relief Subtracted from Prices	−1.50	−0.52	−0.43	−0.39	−0.23	−0.23
Half of Bus. Property Tax Relief Added to Property Income	−0.07	−0.11	−0.22	−0.21	−0.23	−0.69
Measure 1 System Final Incidence	9.75	6.24	+7.20	+7.83	+7.37	10.14
Measure 1 Final Impact	−0.86	+0.12	+0.52	+0.48	+0.37	−0.13

dramatically change the estimated impact of Measure 1. From Figure 3 it is clear that under both a regressive scenario (taxes and tax relief are shifted to property owners) and a progressive scenario (taxes and tax relief are shifted to consumers), the result is basically the same. Measure 1 evens out the distribution of taxes among income classes, making the system less regressive at lower incomes and less progressive at higher incomes. Appendix Figure B-2 and Tables B-1 and B-2 show the small variation in the estimates of Measure 1 final incidence under the alternative assumptions.

SUMMARY

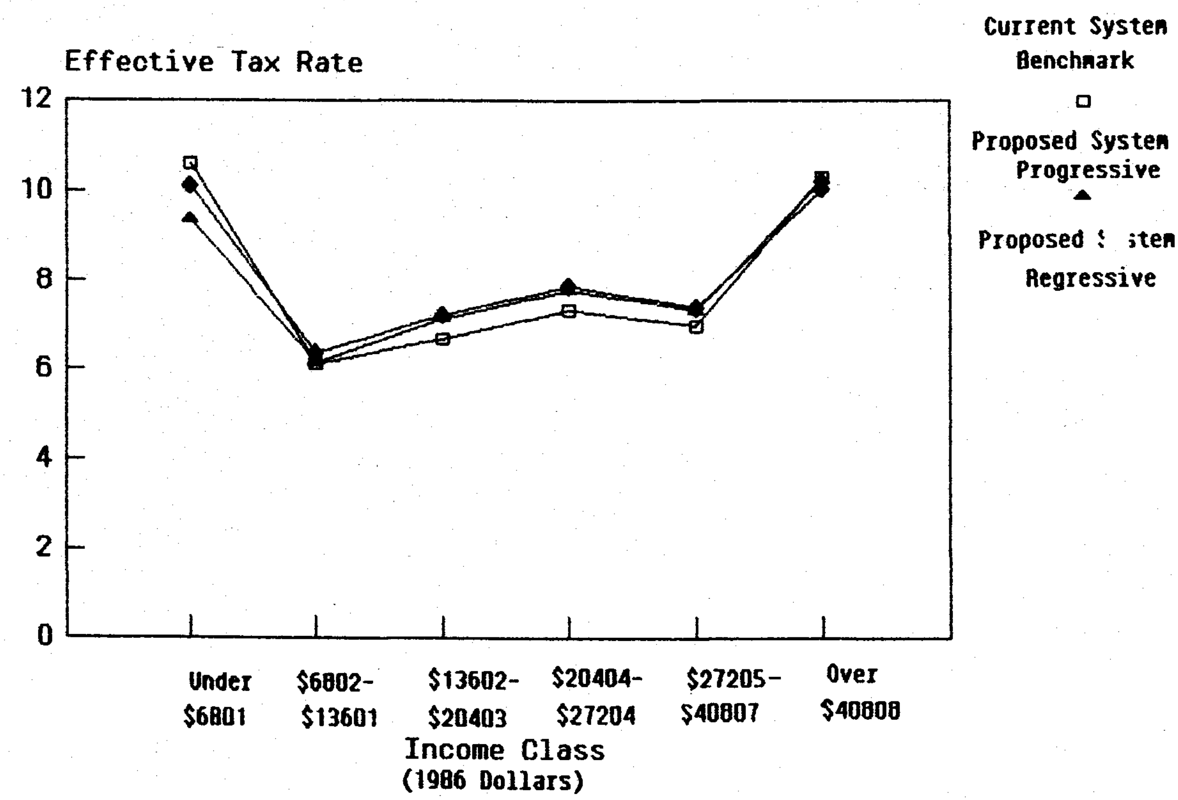
Estimating the distribution of taxes among Oregon income classes and the final impact of Measure 1 is quite complex, not only because of the complexity of the current and proposed tax systems and the limitations of the data, but also because of the lack of consensus among economists about how businesses shift taxes and tax relief to individuals and the limited empirical basis for determining how much Oregon taxes are exported to the Federal tax system and to out of state consumers and property owners.

Considering both direct taxes paid by households and indirect or implicit taxes paid by households because of shifting of business taxes to individuals, and using a plausible set of assumption about shifting, Oregon's current tax system is regressive at low income levels, roughly proportional in the middle income ranges and progressive at upper income levels.

Measure 1 is a proposal to (1) impose a retail sales tax in Oregon, (2) use the proceeds to reduce property and personal income taxes and provide low income refunds and renter relief, and (3) place new

Figure 3 - Current and Proposed Oregon State-Local Tax System:

Final Incidence



restrictions on the ability of local governments to raise property taxes and of state government to increase expenditures.

Under a plausible set of assumptions about shifting (that businesses would shift half of business sales taxes and property tax relief under Measure 1 forward to consumers and half back to property owners), Measure 1 would have a relatively minor impact on the distribution of taxes among six broad income classes in the short run. Measure 1 would tend to make the state-local system more proportional overall by slightly lowering the average effective tax rate (taxes as a percentage of income) for the lowest and highest income classes (which now pay the effective highest tax rates) and slightly raising the effective tax rate of the four middle income classes. In so doing, Measure 1 would make the current system slightly less regressive at lower income levels and slightly less progressive at the higher income levels.

These estimates of impact apply to broad income classes. Within any income class there would be those with higher effective tax rates and those with lower effective tax rates.

Because the report focuses on the short run impact of Measure 1, the critical impacts of the Measure on the dynamics of the system are ignored. To the extent that Measure 1 would affect the stability of the tax system over the business cycle, it could affect fluctuations in the distribution of taxes among income classes. And to the extent that Measure 1 would affect (a) the rate of growth of income by stimulating economic development and (b) the rate of growth of taxes through the tighter limits it imposes on government taxing and spending, the long run impact of Measure 1 on the levels of taxes and on the effective tax rates of various income classes would be different than that outlined in the report.

Figure A-1 - Current Oregon State-Local Tax System: Initial Incidence

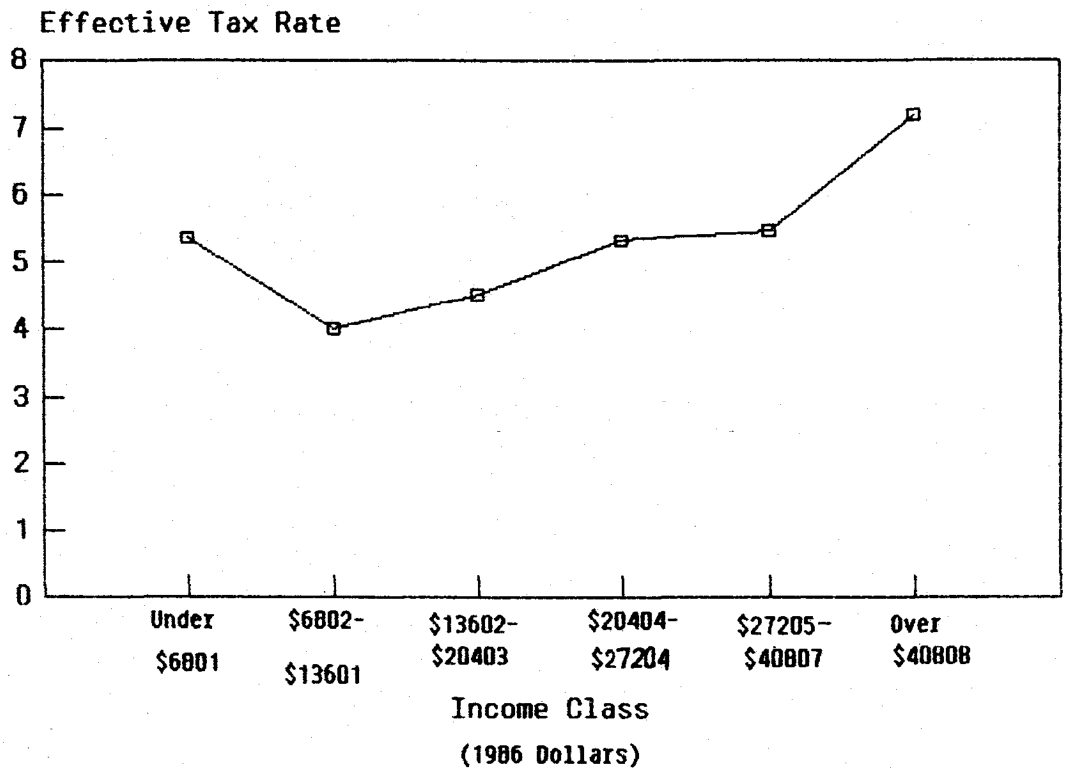


Figure A-2 - Current and Proposed Oregon State-Local Tax System: Initial Incidence

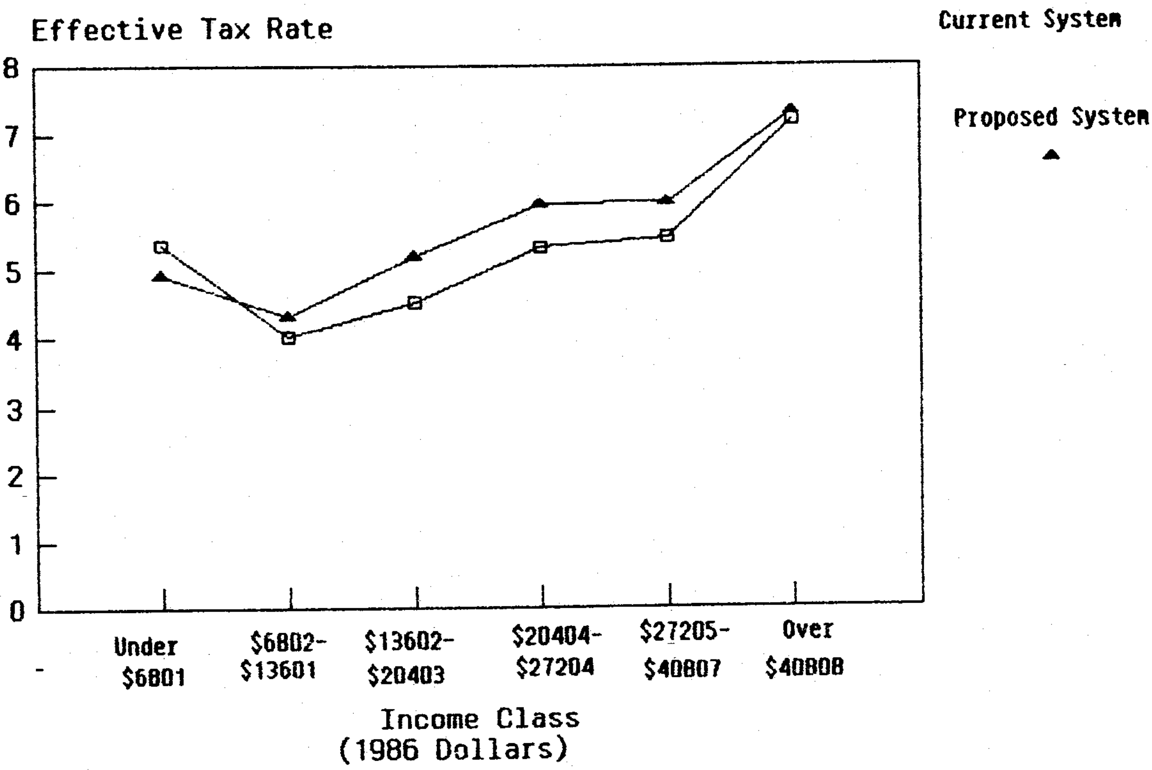


Figure B-1 - Current Oregon State-Local Tax System: Final Incidence

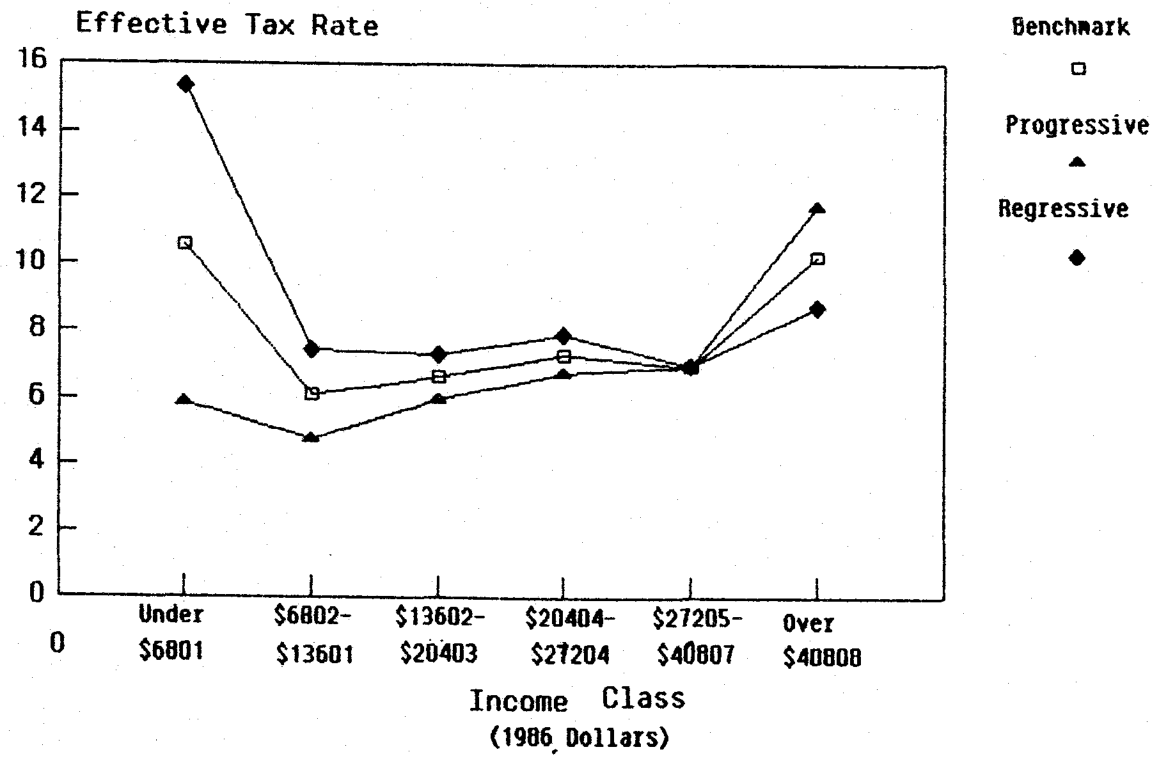


Figure B-2 - Proposed Oregon State-Local Tax System:
Final Incidence

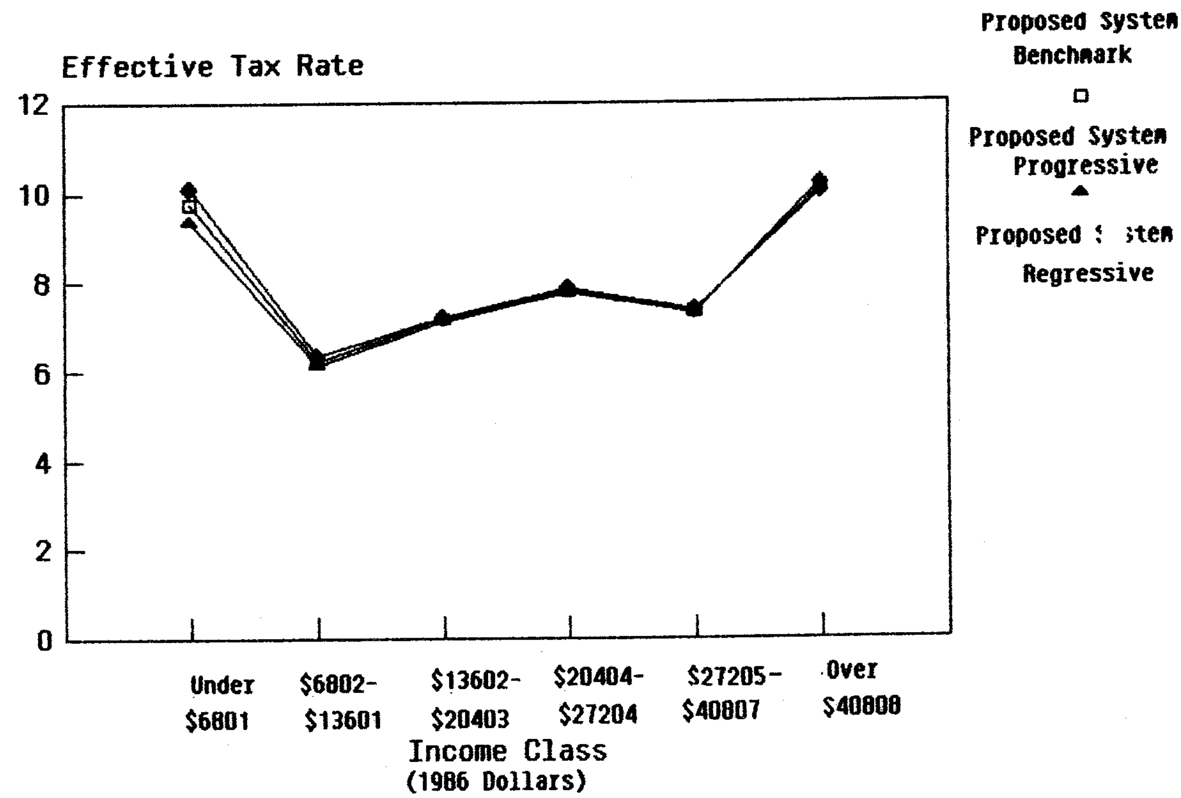


TABLE B-1. IMPACT OF MEASURE 1 ON EFFECTIVE OREGON STATE-LOCAL TAX RATES: PROGRESSIVE SCENARIO

Income Class	Under $6801	$6,802-$13,601	$13,602 $20,403	$20,404-$27,205	$27,206 $46,807	Over $40,808
Current System Final Incidence	+10.61	6.12	6.68	7.35	7.00	10.27
Measure 1 Initial Impact	-0.46	+0.29	0.68	0.63	0.52	+0.13
Adjustments in Effective Tax Rates due to Shifting of Business Taxes and Tax Relief						
Bus. Sales Tax Added to Prices	+2.22	0.78	0.63	0.58	0.29	0.31
Bus. Prop. Tax Relief Subtracted from Prices	-3.00	-1.03	-0.85	-0.78	-0.47	-0.47
Measure 1 System Final Incidence	+9.37	+6.16	+7.14	+7.78	+7.34	+10.24
Measure 1 Final Impact	-1.24	+0.04	+0.46	+0.43	+0.34	- 0.03

TABLE B-2. IMPACT OF MEASURE 1 ON EFFECTIVE OREGON STATE-LOCAL TAX RATES: REGRESSIVE SCENARIO

Income Class	Under $6,801	$6,802-$13,601	$13,602-$20,403	$20,404-$27,205	$27,206-$40,807	Over $40,80
Current System Final Incidence	10.61	6.12	6.68	7.35	7.00	10.27
Measure 1 Initial Impact	-0.46	0.29	0.68	0.63	0.52	0.13
Adjustments in Effective Tax Rates Due to Shifting of Business Taxes and Tax Relief						
Business Sales Tax Subtracted From Property Income	0.11	0.17	0.33	0.32	0.34	1.03
Business Property Tax Relief Added to Property Income	-0.15	-0.22	-0.45	-0.43	-0.46	-1.38
Measure 1 System Final Incidence	10.11	6.36	7.24	7.87	7.40	10.05
Measure 1 Final Impact	-0.50	.24	+0.56	+0.52	+0.40	-0.22

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