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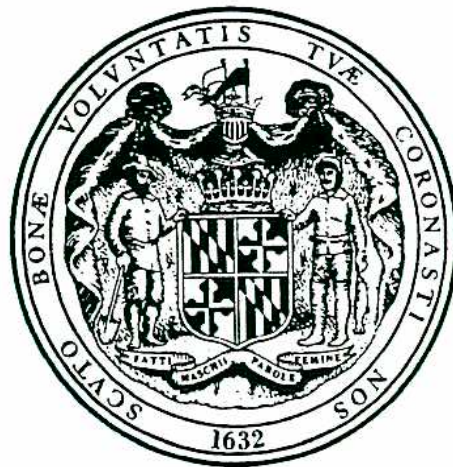
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Tax Incidence In Maryland

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Department of Fiscal Services
September 1994



DEPARTMENT OF FISCAL SERVICES

MARYLAND GENERAL ASSEMBLY
LEGISLATIVE SERVICES BUILDING
90 STATE CIRCLE
ANNAPOLIS, MARYLAND 21401-1991
(410) 841-3761

WILLIAM S. RATCHFORD, II
DIRECTOR

BARBARA A. KLEIN
DEPUTY DIRECTOR

September 23, 1994

The Honorable Thomas V. Mike Miller, Jr., President of the Senate
The Honorable Casper R. Taylor, Jr., Speaker of the House
Members of the General Assembly

Ladies and Gentlemen:

This study of tax incidence measures the tax burden in Maryland and how it is shared among taxpayers of different income levels. It includes all of the major taxes paid by Marylanders --the individual income tax, the sales and use tax, the property tax and the major excise taxes.

The methodology for the study was first developed by Professor Robert Schwab of the University of Maryland in 1989. The Department of Fiscal Services has modified the methodology and assumptions, and has updated it with more recent data.

The study was a combined effort of the members of the Revenue and Tax Policy Group within the Department of Fiscal Services, under the direction of Group Leader, Douglas R. Mann. Contributors to the study include Victoria Crangle, Jonathan Lasley, David Roose, Michael Sanderson, Steven Skinner and a department intern, Mamoud Kamara.

We hope you find this report to be useful in understanding the state's tax structure and how the burden is shared.

Sincerely,

William S. Ratchford, II
Director

Tax Incidence in Maryland

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Executive Summary

I. Introduction

One of the most significant issues surrounding state tax policy is the tax burden and how it is shared by lower, middle and upper income taxpayers. Often, the person or entity who initially pays a tax is not the same one who ultimately bears its final burden. It is this difference that gives rise to the concept of tax incidence.

The purpose of this study is to measure the tax burden in Maryland taking into account the shifting that occurs among taxpayers. The study measures the tax incidence of Maryland's major taxes--individual income taxes, sales taxes, excise taxes and property taxes--based on 1991 data. The study also separately estimates the impact of the 1992 tax increases on tax burdens. Additionally, incidence is calculated both with and without the effect of the federal tax deduction allowed for certain state and local taxes.

The study consists of the following sections.

- * Conceptual Issues - a description of tax incidence in general and conceptual issues involved with measuring it.
- * Methodology - a description of the assumptions, data and methods used to make the incidence calculations.
- * Findings - a summary of the results for each of the major taxes in Maryland.
- * Summary and Conclusion

Appendix I contains a series of exhibits providing detailed results for each of the taxes for all income classes, with and without the federal tax offset and the 1992 tax increases.

II. Key Findings

For purposes of this study, tax burden is measured in terms of "effective tax rates" which are taxes paid as a percent of household income. The amount of taxes paid reflects both direct and indirect payments. A progressive tax is one with effective rates that increase as income goes up. A regressive tax is one with effective rates that decline as income increases. The findings described here reflect the federal tax, offset unless otherwise stated.

On a combined basis, the tax burden of Maryland's four major taxes slightly increases as income increases for most household income classes below \$60,000 and then declines for households with income over \$60,000. For households with income over \$90,000, the highest income class in the study, the percent of income paid in taxes is 7.8%, whereas for households in the \$5,000 - \$10,000 category, its 9.8%. Hence, Maryland's tax burden is slightly progressive across income levels below \$60,000 and is regressive for incomes beginning at \$60,000. These results are shown in the graph on the top of page 3.

slightly, but the upper end regressivity of Maryland's tax system is reduced. This is because middle and upper income taxpayers benefit much more from the federal tax offset since they are more apt to itemize deductions than lower income taxpayers. The effective rate for the highest income group increases to 8.8% while the rate for the lowest income class does not change. Hence, the difference in the effective rates between the lowest and highest income groups is 1.0%, in contrast to 2.0% when the federal tax offset is included. These results are shown in the graph on the bottom of page 3.

The individual income tax burden gradually increases as income increases, across all income levels between \$5,000 and \$60,000. At the \$60,000 level, the tax rate drops and stays constant for higher income classes (including the federal offset).

The sales and excise tax burden declines as income increases, across all income levels from \$5,000 to over \$90,000. The distribution of the property tax burden displays a similar pattern.

The major sales and income tax changes enacted at the First Special Session of 1992 were also simulated with the 1991 data. The findings indicate that the sales tax base broadening measures did not have any material impact on the distribution of the sales tax burden. The temporary 6% income tax bracket increased the effective rate for households with income over \$90,000 by 2/10 of one percent. Hence, it had a negligible impact from a tax burden distribution standpoint.

Comparing the findings from this study to the one done 2 years ago shows that the income tax has become more progressive since 1989. This is due primarily to legislation enacted in 1989 that targeted tax relief to low and middle income taxpayers.

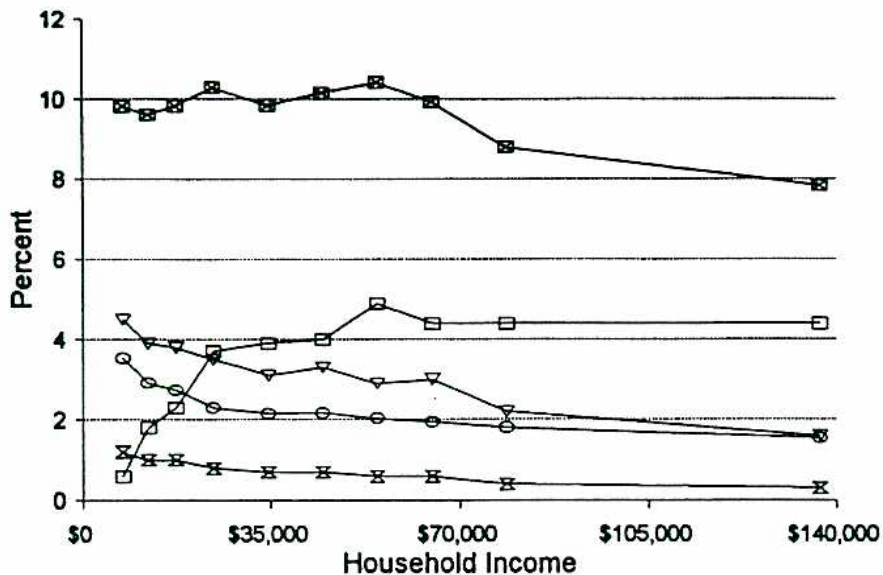
Also, compared to the last study, the property tax burden has increased. The overall effective tax rate has increased from 2.0% to 2.6%, and the tax burden has become more regressive. This is primarily a reflection of rising property values in the late 1980s. Owner-occupied and rental property values increased by 60% and 54%, respectively between fiscal years 1987 and 1991. (The 1989 property tax incidence analysis was based on FY 1987 revenues.) Also, local property tax rates increased slightly for those years. Compared to the 1989 data, the sales tax burden shows little change.

SUMMARY OF TAX INCIDENCE IN MARYLAND

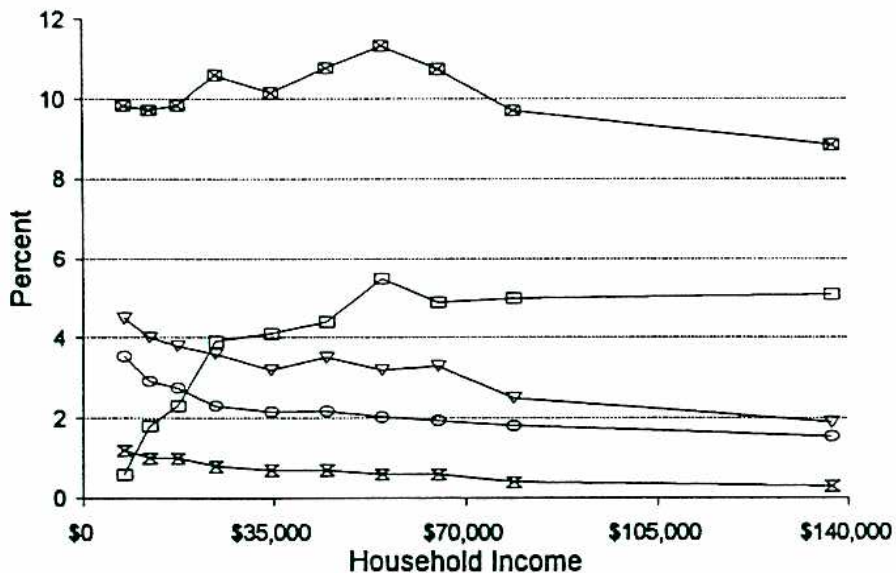
ALL MAJOR TAXES - EFFECTIVE TAX RATES BY HOUSEHOLD INCOME CLASS

TAX YEAR 1991

Including Federal Tax Offset



Not Including Federal Tax Offset



Inc
 Sales
 Prop
 Exc
 Total

Conceptual Issues in Tax Incidence

I. Introduction

The incidence of a tax involves identifying the person who ultimately pays the tax and bears its final burden. A tax incidence study shows the percent of income being paid in taxes by lower, middle and upper income households, taking into account the differences between who makes the initial payment of a tax and who ultimately and permanently gives up income to pay it.

In contrast to tax incidence studies are tax burden studies, which generally examine the distribution of taxes directly paid, exclusive of the tax shifting and exporting that occurs.

II. Factors Causing the Original and Final Payor of Taxes to be Different

The point at which the final burden of a tax is borne is different from the point of original payment for 2 primary reasons: tax shifting and tax exporting.

1. Tax Shifting

Businesses shift their tax burdens on to other businesses and individuals. Businesses pay a significant portion of a state's sales and property taxes. Corporate income or franchise taxes are paid as well. The taxes paid by a business can be shifted in several ways. For example:

- * **To consumers:** it can incorporate the taxes into the prices it charges and recover the cost of the taxes. In this case, consumers ultimately end up paying the taxes.
- * **To workers:** taxes may put downward pressure on wages causing employees to in effect, actually pay a portion of the taxes.
- * **To shareholders:** to the extent taxes are not or cannot be passed to consumers or workers, corporate profits may be lowered. In this case, shareholders end up paying the taxes.
- * **To retirees in pension funds holding the corporation's stock:** to the extent corporate profits declined, retirees receiving pensions from pension funds that invest in corporate equities could receive lower pensions.

The amount of shifting can differ depending on whether a company's products are sold only locally, or if they are sold in national markets. If products are sold locally, it can be assumed that the business will recover the entire cost of taxes in prices. However, if products are sold nationally, businesses may not be able to raise their prices to recover their taxes. In this case, the cost of taxes are more apt to be borne by workers and shareholders.

The taxes paid by property owners are partially passed on to renters in the form of higher rents. One study of property taxes on rental property showed that 56% of property taxes were passed on to renters, with the rest being borne by the property owner.

2. Tax Exporting

Taxes paid by residents of another state are considered to be "exported" by the state imposing the tax. The portion of state tax collections from nonresidents need to be excluded when computing tax incidence.

For example, the sales taxes paid by tourists from other states and countries should be excluded. Business taxes can be exported when the products of a business are sold outside of the state, or when shareholders are residents of other states.

Since property and state and local income taxes are deductible on federal income tax returns, they directly lower federal taxes. The federal taxes saved in effect, result in a reduction in the state taxes actually paid by the individual. The increased federal taxes paid by all other taxpayers to make up for the lost federal revenue resulting from the deductibility, represents the amount of state taxes in aggregate that are exported.

By not taxing that portion of a taxpayer's income used to pay state and local property and income taxes, the federal government is lowering the after-tax cost of the state tax. By doing this, the federal government in effect, enables state governments to keep their taxes lower. Taking into account the federal offset does make state tax systems appear less progressive since the federal tax benefit from deductions grows as income grows.

There are differing views regarding the appropriate treatment of the federal tax offset when computing state tax burdens. The rationale behind including it is based on the view that if the state raised the same revenue through other non-deductible taxes--ie. the sales tax--the after-tax cost to the taxpayer would be higher. The other view is that it should be excluded because it is a reduction in federal taxes and that the appropriate adjustment should be reflected in a study of effective federal tax rates. For purposes of this study, tax burdens were computed both with and without the federal offset.

3. Distribution of Tax Burden Across Income Levels

Depending on how a tax burden is distributed across income levels, it is considered to be either proportional, progressive or regressive.

- * When the same percentage of income is paid in taxes by taxpayers of all incomes, a tax is "proportional".
- * When lower income taxpayers pay a higher percentage of their income in taxes than middle and upper income taxpayers, a tax is "regressive".

- * When the percent of income paid increases for taxpayers with higher income, a tax is "progressive".

Often a tax is regressive across certain income levels and progressive across others. For example, some states have structured their income tax so that they are progressive at the lower end of the income classes. However, these income taxes often become regressive at the middle and upper ranges.

There are different schools of thought as to which type of tax burden distribution is best. Proponents of a progressive system contend that because of "fairness" considerations, those with a greater ability to pay should pay a higher share of their income. Others point out that fairness is very subjective. One school of thought contends that since low income taxpayers receive most of the benefit of government spending (ie. Medicaid, wealth-based school aid, AFDC), it is unfair for middle and upper income taxpayers to bear a greater share of the burden. This school of thought would support a regressive or proportional system.

Others argue that taxes on everyone should be kept low and evenly spread because higher tax rates on middle and upper income taxpayers diminish economic incentives and ultimately cause everyone's taxes to be higher.

Almost all states' tax systems are regressive in whole or in part. (A 1991 study of all state's taxes by Citizens for Tax Justice, a nonprofit tax research and advocacy group, concluded that only Vermont and Delaware have tax systems that are overall progressive.) This is due primarily to three factors.

- * Of the major taxes, only income tax systems can be made progressive. However, the federal government uses the income tax as its major source of revenue, deriving almost 90% of tax receipts from it. Because of this, it is difficult for states to have an especially substantial income tax.
- * Interstate tax competition - because tax rates can influence both corporate and personal location decisions, states are continually under pressure to keep their tax rates low to avoid hampering economic development efforts.
- * Public opinion polls have shown the sales tax to be the least objectionable tax. Hence, states tend to rely on it heavily.

The role of tax incidence also needs to be kept in perspective. It is one of only several factors that need to be considered in shaping state tax policy. For example, a state may want to have a progressive tax system but also needs to keep tax rates low and generate sufficient state revenues. Tradeoffs among these competing goals are necessary.

Methodology

INTRODUCTION

The methodology used in this report was first developed by Professor Robert Schwab of the University of Maryland for the Governor's Commission on State Taxes and Tax Structure in 1989. The original report was based on data for 1987. During the 1991 interim, the Department of Fiscal Services updated that report using 1989 data and also made some revisions to the methodology. This report is based on this methodology as described below, and uses 1991 data.

The study uses the household as the unit of measurement for tax burdens. This is because income and expenses are usually treated on a combined basis within households by the family members.

I. INDIVIDUAL INCOME TAX

The individual income tax incidence study estimates how much income tax was paid by households in each income class. The basic data source is the Statistics of Income (SOI) Report produced by the Comptroller's Office. The SOI reports income tax data grouped according to adjusted gross income (AGI).

The main methodological issue is translating income tax payment information that is readily available by adjusted gross income to household income categories.

1. Amount of Taxes Paid

The amount of state and local income tax to be allocated was obtained from the SOI Report based on federal AGI.

The U.S. Census Bureau gathers household income data as part of its ongoing data collection activities. As part of this work they also ask respondents for their federal adjusted gross income. This data provides the required link between federal adjusted gross income and household income. The Census Bureau has available data on the national level and on a state level. For this incidence study, the Maryland sample was used. The incidence study performed by the Department of Fiscal Services in 1991 used the national data due to concerns about the size and accuracy of the Maryland sample.

This incidence study includes an analysis of the major tax law changes made at the 1992 Special Session. To show the effect of the 1992 changes, the amount of revenue received from the temporary 6% income tax bracket was added to the state and local taxes paid by the appropriate income class. Additionally, since the capital gains subtraction modification was repealed for tax year 1992, the taxes which would have been paid were also added.

2. Taxes Shifted and Exported

For the income tax portion of the incidence study it is assumed that the tax is not passed onto other households. This assumption is not entirely valid since households with business income reported on their personal income tax return (such as sole proprietorships or S corporations) may export or shift some of their taxes. However, the most significant portion of personal income tax does not come from these sources.

Another issue is the federal income tax deduction for state income taxes paid. The amount of the federal offset is estimated based on data obtained from the IRS. This data is used to estimate the marginal tax rate paid by households in the various household income classes and the percentage of households in each class that itemize returns. Each of these points requires a brief explanation.

Under federal law in effect in 1991, there were three marginal tax rates applied to federal taxable income. The IRS publishes data which shows the relationship between marginal tax rate and federal adjusted gross income. Using the data from the Census Bureau, the marginal tax rates by household income were estimated.

Only taxpayers who itemize on their federal return receive a tax benefit for state income tax paid. Therefore, for each household income class, the federal offset is based on the amount of state tax paid by that income class, the percentage of households in that class who itemize their federal return, and the marginal federal tax rate paid by those households.

II. SALES AND EXCISE TAXES

The sales tax incidence study estimates how much sales tax was paid by households in each income class. The basic data source is the Consumer Expenditure Survey compiled by the Bureau of Labor Statistics. The data from this Survey is supplemented to account for the distribution of sales tax initially paid by businesses and tourists.

1. Amount of Taxes Paid

The amount of sales tax to be allocated was obtained from the statement of revenues and expenditures compiled by the Comptroller. Motor vehicle excise tax and boat excise tax revenues are included in addition to the sales and use tax revenues. These excise taxes are included because they have many of the characteristics of the sales tax except they are not distributed to the general fund. Also, most states include motor vehicles and boats in their sales tax base.

Again, this study includes an assessment of tax changes made at the 1992 Special Session. Several sales tax exemptions were repealed, and some services were taxed. The revenues from these changes were added to total sales tax revenues, and thereby distributed among income classes.

2. Taxes Shifted and Exported

For the purposes of the tax incidence study, the sales tax is considered to have been paid initially by one of three groups: Maryland consumers, businesses, or tourists.

The Consumer Expenditure Survey (CES) is the basic data source for computing the amount of tax initially paid by consumers. The Bureau of Labor Statistics compiles extensive national and regional data on expenditure patterns and household income. These steps are required to incorporate the data into the incidence study:

- (i) The most detailed set of national data is used to estimate how much is spent on goods and services that are subject to sales tax in Maryland. For each expenditure category, the percent of purchases subject to sales tax is calculated. This detailed national data is used because the regional data does not show as many expenditure categories and therefore the estimates would not be as accurate.
- (ii) The amount spent by Northeastern region households income levels up to \$50,000 was recorded from the CES data. The Northeastern region data is used because this region was found to be more representative of Maryland than the Southern region data. Unfortunately, the highest income class in the regional data is for "\$50,000 and above". However, we wanted to use as many high income classes as possible. This problem was solved as explained below in Step 3.
- (iii) The highest income class shown for the regional data is "\$50,000 and above", though for the national data the highest class is "\$90,000 and above" with intermediate categories of \$50-\$60,000, \$60-\$70,000 and \$70-\$90,000. The expenditure patterns observed for the higher income classes in the national data were assumed to hold for the high income households in Maryland. Based on this assumption, the observed expenditures for the "\$50,000 and above" households in Maryland were distributed to the same income classes shown in the national data.
- (iv) Each expenditure was multiplied by the percent of expenditures in that category that are taxable and then by the 5% sales tax rate to calculate the amount of sales tax initially paid by consumers.

Data indicates that approximately 59% of sales taxes are paid directly by Maryland consumers, and the remaining amount was initially paid by either businesses or tourists. Based on data obtained from the Department of Economic and Employment development, it was estimated that 7% of the sales tax was initially paid by tourists, and the remaining 34% was paid by businesses.

Taxes initially paid by businesses are either paid by consumers in the form of higher prices or are paid by owners in the form of lower profits. Either way, individuals pay them. It is assumed that 86% of the taxes paid by businesses are incorporated into higher prices on products bought by Maryland citizens. Half of the remainder or 7%, is passed on to consumers or shareholders in other states, and the remaining 7% is paid by shareholders within the state.

Excise Taxes

Alcohol, tobacco and gasoline taxes are of special interest, due both to their individual importance as sources of revenue, and the large increases in the tobacco and gasoline taxes at the 1992 Session. The total tax revenue for each tax was obtained from the Statement of Revenues and Expenditures. This amount was allocated to household income classes based on the expenditures by that class for the commodity as recorded in the CES. Excise taxes are assumed to be paid entirely by Maryland consumers.

To determine the effect of the 1992 changes, revenues from the increase were added to the actual collections. The new totals were distributed among income classes in the same manner.

III. PROPERTY TAXES

The model used to perform this study uses four groups of property tax payers - homeowners, tenants, owners of commercial property and consumers - to determine the property tax burden for each income group. In this way, the different characteristics of the two broad classes of property, residential and commercial, are factored into the data. Through the use of certain assumptions and demographic data, the model assigns to the proper income groups, the amount of property tax borne by the owners of property and the amount paid by their tenants or customers.

1. Amount of Taxes Paid

The starting point for determining the tax burden for any given year is the amount of property tax collected in that year - in this case fiscal year 1991. This amount is then distributed across the several categories used in property assessments: Owner-occupied; Rental; Manufacturing; Agricultural; Commercial; and Other. This is done so that the taxes realized from various activities may be appropriately assigned to payers and income groups.

The model distributes property tax payments among the various assessment classes based on each category's percentage of total assessed value. For example, in 1991, owner-occupied property accounted for roughly 57% of all assessed property value in Maryland. Thus, roughly 57% of total property tax payments were assigned to owner-occupied property. This distribution serves as the basis for the further division of the property tax burden between the two major classes of property and their subdivisions and ultimately among income groups.

2. Taxes Shifted and Exported

Property taxes paid on residential property are divided between two groups of payers: homeowners and tenants. In order to distribute the property tax burden among the various income groups, the incidence model must determine the split between owners and renters in each group. This division is called "Tenure Split." The Tenure Split is derived from U.S. Census Bureau data. Distribution indices across income groups are determined for owners and renters.

Residential Property: The total of taxes paid on owner-occupied property is multiplied by the distribution factor (a percentage) for that income group. This determines the total property tax burden for homeowners in that group. From this total, the model subtracts the state circuit breaker and other credits as well as the federal offset - the amount of property taxes deducted from federal income tax returns.

The property tax burden for tenants is determined in a similar fashion. However, in this instance, both landlords and tenants share the burden. In order to divide taxes paid between landlords and tenants, the model uses an assumption based on the work of Professor Schwab that tenants pay 56% of the taxes levied on rental property. The 44% paid by landlords is included in burden assigned to property owners. After determining the total property taxes paid by tenants, the model calculates a net burden by subtracting out renters' tax credits.

Commercial Property: The taxes derived from property assessed in the Manufacturing, Agricultural, Commercial, Other and Rental (Landlords' share) categories are divided between property owners and consumers. In this case, the incidence model distributes the tax burden among income groups through the use of capital and consumption distributions.

The capital distribution used in allocating among income groups the property tax burdens of owners of rental, manufacturing, commercial and other property stems from capital income data gleaned from income tax returns. The distribution for agricultural property is based on a set of assumptions developed by Professor Schwab. Before these distributions can be applied, the property tax burden must be divided between owners of property and consumers. For rental property this process was discussed above - owners bear 44%. Manufacturing, commercial and other property split their burden 50-50 between owners and consumers. Agricultural property taxes are born 100% by the owner. Again, these assumptions are based on the work of Professor Schwab.

After the model distributes the property owners' tax burden, it subtracts out the federal offset (as it did for homeowners) to arrive at a net property tax burden.

The property tax burden is assigned to consumers in much the same way. In this instance, however, the model uses a consumption distribution derived from sales tax data to assign burdens to each income group. As with tenants, there is no federal offset for consumers because property taxes are passed through to them in the form of price and, therefore, cannot be deducted from income tax.

Findings

I. Overall

On a combined basis, the tax burden of Maryland's four major taxes rises from 9.8% to 10.4% as income increases from \$5,000 to \$60,000, displaying a slightly progressive pattern. For households with income above \$60,000, the effective rate drops to 9.9% and continues to fall to 7.8% for those above \$90,000, resulting in a regressive distribution at these levels. Exhibit I summarizes these results.

If the federal offset is excluded, the progressivity between \$5,000 and \$60,000 is enhanced and the overall burden is higher. The decline in effective tax rates is lessened for higher income groups, as expected. The \$90,000 and over group pays 8.8% while the lowest income group's 9.8% rate does not change. Hence, by excluding the federal offset, the gap between the rates of the lowest and the highest income classes is cut in half, from 2.0% to 1.0%. These results are summarized in Exhibit II.

Despite the nominal progressivity across low and middle income classes, and declining burdens for upper income taxpayers, the amount of state and local taxes in absolute dollar terms rises continuously as income increases. For example, the average taxes paid by the lowest and the highest income groups are \$750 and \$10,683 respectively. See Exhibit VII for a summary of this data.

Also, a computation was done to determine the total state and federal tax burden, on a combined basis. The results show that taken together, federal and state tax burdens increase from 11.3% for the lowest income class to 23.7% for the \$50,000 - \$60,000 class. For incomes between \$60,000 and \$90,000, effective tax rates drop, but then increase to their highest level of 25.7% for the highest income bracket of \$90,000 and over. Exhibit VI summarizes these results.

II. Individual Income Tax

Based on the data, Maryland's state and local income tax is progressive across income levels below \$60,000. The effective tax rates begin at .6% for the \$5 - \$10,000 income category, and gradually increase to 4.9% for the \$50 - \$60,000 income class. The rate drops to 4.4% and stays constant for households over \$60,000. See Exhibit I.

When the effect of the temporary 6% bracket is included, the effective rate for the \$90,000 and over class increase by two-tenths of a percent, respectively. Therefore, from an progressivity standpoint, the impact of the 6% bracket is minor. See Exhibits III and IV.

If the federal offset is excluded, the rates are slightly higher for all income classes over \$20,000 and hence, the tax is more progressive. Except for a rate drop at the \$50 - 60,000 income level, the rates rise continuously across the entire income range. Exhibit II contains this information.

Independent of the rates, the average taxes paid per household does increase steadily across all income classes. The average taxes paid by the lowest and highest income classes are \$45 and \$5,965, respectively. See Exhibit VII.

The findings from this study compared to the 1989 study show that the individual income tax has become more progressive (independent of the 6% bracket). This result is probably due primarily to three factors--an increase in the personal exemption that took effect in 1990, the "poverty-level" deduction that is not fully reflected in 1989 data since that was the first year it took effect, and a federal expansion of the earned income credit that began taking effect in 1991.

III. Sales and Excise Taxes

The study finds that the effective tax rates for sales taxes begin at 3.5% for households in the \$5,000-\$10,000 income class and gradually decline 1.5% for income over \$90,000. Hence, the sales tax distribution is regressive, but not to an extreme degree.

The sales tax is an inherently regressive tax. This is because generally, the percent of income spent on consumer goods falls as income increases. Since sales taxes paid are directly related to consumer purchases, it only follows that effective tax rates fall as income increases.

However, exempting certain items from the sales tax reduces the regressivity. Since purchases of household necessities take up a larger share of the spending of low income families, exempting them from the sales tax can reduce regressivity significantly. Under Maryland law, groceries, medicine and residential utilities are exempt from the sales tax. Without these exemptions, the sales tax would be much more regressive.

During the first special session of 1992, many sales tax exemptions were repealed and several services were made subject to the sales tax. The effects of these changes were simulated on top of the 1991 data. As expected, these changes do cause a slight increase in regressivity. These results are illustrated in Exhibits III and IV.

The distribution of the excise tax burden is very similar to the sales tax. The effective tax rate of 1.2% is highest for the lowest income households, and falls to .3% for the highest income class.

IV. Property Taxes

The results of the study indicate that the property tax burden is also regressive. The effective tax rate declines from 4.5% for the lowest income households to 1.6% for the highest income households.

The average property tax burden has increased from 2.0% to 2.6% between the two studies. The increase is due to a rapid increase in property values during the period FY 87 through FY 91. (The 1989 incidence study was based on FY 87 revenues.) Property values of owner-occupied and rental properties increased by 60% and 54%, respectively over that time period. In addition, local property tax rates increased slightly.

Also, compared to the previous study, the property tax has become more regressive. This is a reflection of rising property values that have a relatively greater impact on low and middle income households, than on upper income households.

The property tax would be much more regressive if not for the homeowners' and renters' circuit breaker credits. Since these credits limit the amount of property taxes that are paid by low income taxpayers, they reduce the inherent regressivity of the property tax.

Although this study did not measure the impact, another significant credit is the Homestead Property tax credit which places a cap on the amount by which a property's assessment can increase in a year. The benefits of this credit go to homeowners experiencing rapid year to year increases in the values of their properties. The properties that qualify for this credit tend to be those in mid to high priced areas. Hence, since the benefits of this credit go disproportionately to higher income homeowners, it makes the property tax burden more regressive.

The property tax distribution becomes modestly less regressive when the federal tax offset is not included.

Summary and Conclusion

The incidence of a state's tax system refers to the distribution of the tax burden--both direct and indirect--among households of different income levels. Information about a state's tax burden and how it is shared by taxpayers of different income levels is important for a policymaking purposes.

This report measured the tax incidence of Maryland's four major taxes--income, sales, excise and property. The report used 1991 data to update incidence analyses that had been done for 1987 and 1989.

Among the significant findings are that for the four taxes combined, the percent of income paid increases slightly as income increases from \$5,000 to \$60,000. Effective tax rates do drop as income exceeds \$60,000; for those over \$90,000 the tax rate is 7.8%, compared to 9.8% for low income households.

The individual income tax is progressive across income levels between \$5,000 and \$60,000 and then declines and remains flat above \$60,000. The sales, excise and property taxes are all regressive across the entire income spectrum. The partial progressivity of income tax offsets to some extent the regressivity of the other taxes.

Maryland, like all states, is limited in the extent to which it can minimize the regressivity of its overall tax structure. This is largely due to federal government's heavy reliance on the income tax which is the only tax that can be raised in a progressive manner, and the pressures faced by all states from interstate tax competition. However, compared to most other states, Maryland's tax structure is less regressive.

This study indicates that Maryland's tax structure does reflect the effective use of policies designed to reduce regressivity. These policies include income tax provisions aimed at eliminating or reducing taxes on low income taxpayers such as the earned income credit and a poverty level deduction. Also, exemptions from the sales tax for certain necessities such as food, medicine and household utilities, and property tax circuit breaker credits that limit the taxes paid by low income property owners and renters have significantly reduced tax regressivity.