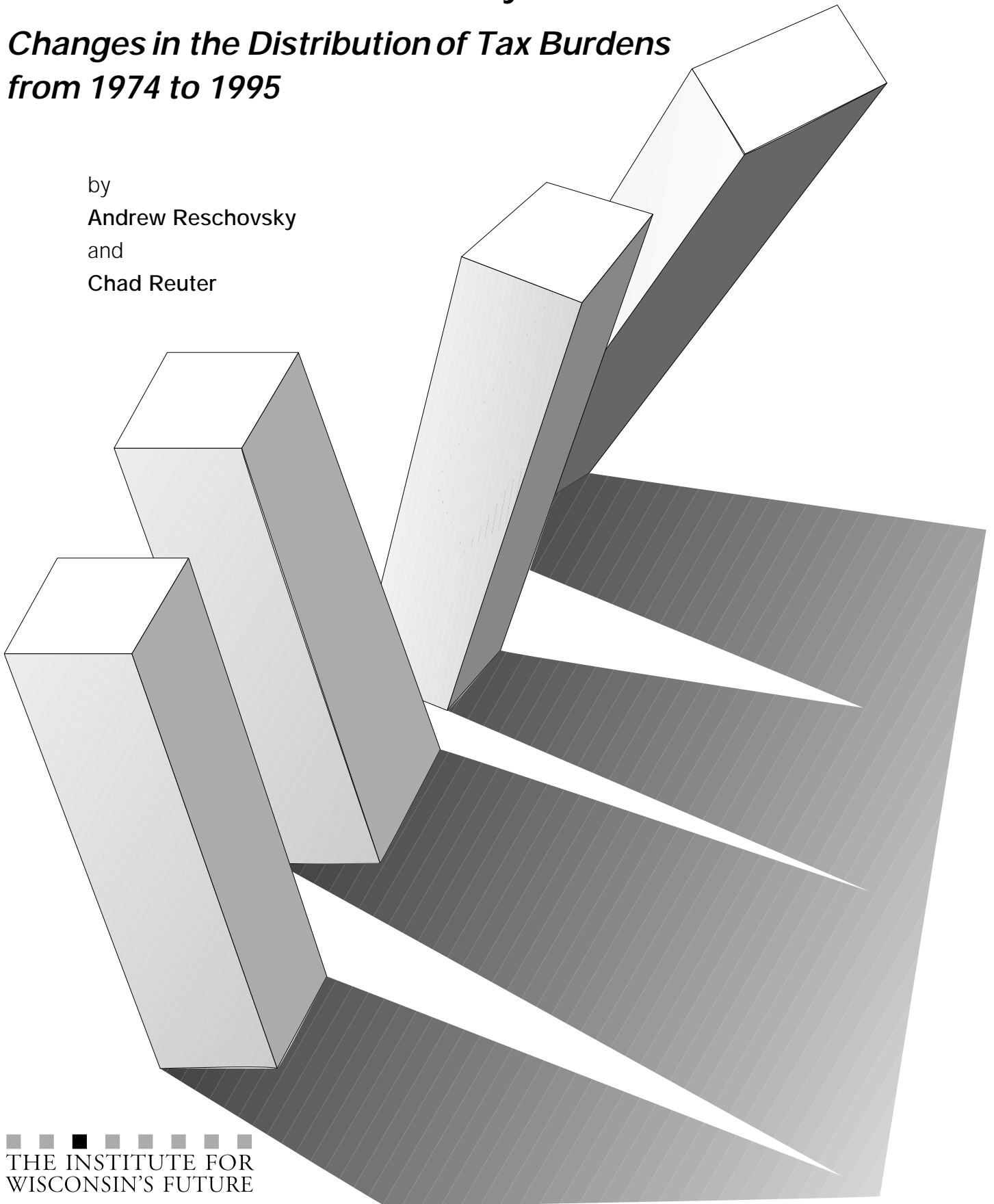


Has Wisconsin's State Tax System Become Less Fair?

*Changes in the Distribution of Tax Burdens
from 1974 to 1995*

by
Andrew Reschovsky
and
Chad Reuter



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This report was prepared for the Institute for Wisconsin's Future, Milwaukee, Wisconsin. Andrew Reschovsky is a professor in the Robert M. La Follette Institute of Public Affairs and the Department of Agricultural and Applied Economics at the University of Wisconsin-Madison. Chad Reuter is a research analyst for the Wisconsin Department of Transportation. He wrote this report while completing his master's degree at the La Follette Institute. The authors would like to acknowledge the advice of Dennis Collier, Robert Haveman, Alice Honeywell, and Paula Voos. The opinions expressed in this report are those of the authors. The La Follette Institute and Department of Agricultural and Applied Economics do not express opinions on issues of public policy.

EXECUTIVE SUMMARY

Wisconsin was the first state to establish an individual income tax. From its beginning in 1911, the tax was *progressive*—people with lower incomes paid a smaller percentage of their income as taxes than persons with higher incomes. Over the past twenty years, Wisconsin policymakers have made substantial changes in the state tax system. These changes have been piecemeal, impacting different constituent groups at different times and in different ways. The authors of this study consider the cumulative impact of these changes and how they have altered the distribution of burdens of the state tax system. They do this by analyzing the changes in the distribution of income, sales and excise taxes across income groups between 1974 and 1995.

Using adjusted 1974 income and tax data from the Wisconsin Department of Revenue's *Wisconsin Tax Burden Study (1979)* and 1995 income and tax data from a study conducted by the Citizens for Tax Justice and the Institute on Taxation and Economic Policy (1996), Professor Andrew Reschovsky and Chad Reuter's study reveals how major elements of our tax system changed over the past couple of decades, and how each change affected the relative tax burden on non-elderly, married couple families.

The key findings from this analysis are:

- 1) Wisconsin's state tax system has become somewhat less progressive over time. In 1974 taxes were progressive over the bottom 95 percent of the income distribution. By 1995, the distribution of burdens was more or less proportional to income over the top 80 percent of the income distribution.
- 2) Many couples with very modest incomes face high state tax burdens—burdens that average more than five percent of their incomes.
- 3) Over the past 20 years, middle and lower-middle income families faced the largest increases in tax burdens.
- 4) Taking into account the ability of upper-income taxpayers to deduct their state income tax payments from their income subject to the federal income tax, the tax burden on the richest 1 percent of the state's taxpayers is about equal to the tax burden on the poorest 20 percent of taxpayers.

Reviewing changes in Wisconsin State Tax Law between 1974 and 1995, Reschovsky and Reuter find that some tax policies have reduced tax burdens on families with modest incomes.

These include:

- Changing itemized deductions to credits.
- Increasing the standard deduction.
- The use of the property tax and rent credit, the married couple credit and the earned income tax credit.

However, the effects of these progressive policies do not outweigh the regressive fiscal impact of other policy changes:

- Income tax rates rose for lower income families while dropping for households with higher income.
- Increases in the proportion of long-term capital gains excluded from taxation bestow the largest benefits on wealthy taxpayers.
- Sales tax rates increases had the largest impact on lower- and middle-income families.

Based on these findings, the authors note a number of ways that the state tax system could be made more progressive:

- Increase the graduation of the income tax schedule to raise rates for those at the upper end of the income scale.
- Tax capital gains at the same rate as other income.
- Increase the standard deduction.
- Include a number of currently exempt goods and services in the sales tax.

Given these changes, the progressivity of the state's tax system would be increased and the burden currently placed on low- and middle-income taxpayers would be reduced. Because the scope of this study was limited to consideration of the income, sales, and excise taxes, the authors recommend that the state undertake a comprehensive study of the distribution of tax burdens, which would consider the effects of all state and local taxes, including the property tax. That way, policymakers could have more information on which to base changes in our tax system.

INTRODUCTION

No comprehensive study analyzing the distribution of tax burdens among Wisconsin residents has been conducted since the Wisconsin Department of Revenue (DOR) published the *Wisconsin Tax Burden Study* in 1979. That study, which relied on 1974 data, provided a comprehensive analysis of the distribution of tax burdens from all major state and local taxes used in Wisconsin. Since that time, the legislature has enacted major changes in a number of Wisconsin's taxes. These changes include a sharp drop in the top marginal income tax rate, an increase in the sales tax rate, and the introduction of a property tax credit. Over the past two decades, there have also been a number of major changes in the state's economy and in the composition of the state population that may well have affected the distribution of tax burdens. Examples of these changes include the growing importance of services and the rapid growth in single-parent families.

Figuring out whether the entire system of state and local taxes in Wisconsin has become more or less progressive over time is not possible without first conducting a full-blown study of state and local tax burdens using current data. Unfortunately, because of the high cost of conducting a new tax burden study, it appears unlikely that the Department of Revenue, or any other group, will undertake such a study in the near future.

In this report, we draw upon results from a nationwide study of state tax systems to reach some conclusions about how the distribution of tax burdens from the individual income tax, the sales tax, and selected excise taxes have changed between 1974 and 1995. Although this report is not a substitute for a comprehensive tax burden study, our results provide valuable information about how major elements of our tax system have changed over the past couple of decades.

In 1996 Citizens for Tax Justice (CTJ), a Washington-based research and advocacy organization, in collaboration with the Institute on Taxation and Economic Policy (ITEP) published *Who Pays?: A Distributional Analysis of the Tax Systems in All 50 States*. The CTJ-ITEP study used federal tax data supplemented with information provided by each state to determine the distribution across income classes of the state and local tax burdens faced by non-elderly married couples in each state. Because of methodological differences between that study and DORs, a direct comparison of the results of the CTJ-ITEP study and the DOR study is

not possible. By adjusting the data in the DOR study, however, we have been able to compare the 1974 distribution of tax burdens for the most important state taxes to the distribution of burdens for the same taxes in 1995.

The purpose of this report is to determine whether the tax system in Wisconsin has become more or less fair over the past two decades. The concept of *fairness* is elusive, and the characterization of any particular distribution of tax burdens as fair is fundamentally a value judgment. In this report we define *tax burdens* as the taxes individuals pay as a percentage of their incomes. Economists characterize a tax system as *progressive* if tax burdens rise as income rises and *regressive* if tax burdens are higher on individuals with low incomes than on individuals with high incomes. In the first part of this report, we use the results of the 1974 and 1995 tax burden studies cited above to determine whether Wisconsin's tax system has become more or less progressive over time. Our own value judgments about what constitutes a fair tax system lead us to interpret any reduction in tax progressivity as a decline in fairness. Readers, however, may have different interpretations. In the second part of the report, we describe the major changes in state tax policy that have occurred over the past 20 years, and assess whether each policy change has contributed to an increase or a decrease in the progressivity of the state tax system. In the final part of the study, we suggest several policy changes that would serve to increase the progressivity of Wisconsin's state tax system.

A Tale of Two Studies

Conducting a study of the distribution of state tax burdens requires that analysts make four major decisions. First, a decision must be made about which taxes to include in the analysis. Both the DOR and the CTJ-ITEP studies are quite comprehensive, including most state and local government taxes. Second, a decision must be made about the population of taxpayers to include in the study. The DOR study is based on the analysis of a sample of all state taxpayers, while the CTJ-ITEP study considers only the tax burdens on non-elderly married couples. Third, analysts must decide how comprehensive a measure of income to use as a foundation for calculating tax burdens. The DOR study is based on an extremely broad income measure referred to as "economic income." The income measure used in the CTJ-ITEP is less comprehensive. The two major types of income that are not included in the CTJ-ITEP analysis are the imputed rent from homeownership and the value of fringe benefits. Fourth, analysts must make assumptions about the *incidence* of each tax. Because taxpayers may be able change their behavior in response to taxes, the taxpayers who bear the actual burden of a tax—its

incidence—may well be different from the taxpayers from whom the tax is collected. For example, businesses may be able to pass on sales taxes on their purchases to consumers in the form of higher prices on the goods or services they produce. The two studies use similar incidence assumptions for the individual income tax, the general sales tax, and excise taxes on cigarettes, alcohol, and gasoline. They use different incidence assumptions for the corporate income tax, for most other business taxes, and for the property tax.¹

Differences between the DOR and the CTJ-ITEP studies in the population of taxpayers, income measures, and incidence assumptions mean that we cannot directly compare the two studies. In order to use the two studies as a basis for determining whether taxes in Wisconsin have become more or less progressive between 1974 and 1995, it is important to manipulate the data from the studies in such a way as to make a comparison valid.

Since it is impossible to expand the CTJ-ITEP study to measure tax burdens on all taxpayers, we had to adjust the data in the DOR study in such a way as to isolate the tax burden on non-elderly married couples. Focusing on the tax burden faced by this group of taxpayers fails to provide a complete picture of the distribution of tax burdens, but this group does pay a large share of all taxes and accounts for a majority of the state's population. The Appendix describes the steps that were taken to calculate the 1974 tax burden on non-elderly married taxpayers using data from the DOR study.

Because the income measure used by the CTJ-ITEP study does not include the value of fringe benefits or imputed rent from homeownership, average tax burdens are higher than they would be if the study had used the broader measure of income used in the DOR study. To help make the two studies comparable, we used data on fringe benefits published as part of the DOR study to subtract fringe benefits from total income. This will have the obvious effect of raising average tax burdens. No data were available to allow us to subtract imputed rent from the income measure used in the DOR study or to add imputed rent to income as measured in the CTJ-ITEP study. Imputed rent, which can be approximated by the return to the equity held in a home, is likely to be relatively small for many non-elderly couples. It is also true that imputed rent may be a somewhat larger share of income for higher-income households. This implies that the CTJ-ITEP study overestimates to a small degree the tax burden faced by high-income couples.

Our goal in this report is to determine whether the distribution of tax burdens across the income distribution has changed over time. It is only possible to make such comparisons if assumptions about tax incidence remain unchanged. Thus we restrict our analysis to the taxes for which both the DOR and the CTJ-ITEP studies use identical incidence assumptions, namely the individual income tax, the general sales tax, and excise taxes on motor fuels, cigarettes, other tobacco products, liquor and wine, and beer. The State of Wisconsin has estimated that in fiscal year 1998, these taxes will account for 88 percent of general fund tax collections (Wisconsin Division of Executive Budget and Finance, 1997).² Our analysis thus provides a quite complete picture of changes in the distribution of burdens from state taxes.

Between 1974 and 1995, incomes in Wisconsin have grown dramatically. Over this 21-year period, personal income per capita has grown by 307 percent in nominal terms and by 32 percent in real terms—after adjusting for inflation (United States Department of Commerce, 1996). The CTP-ITEP study calculates the distribution of tax burdens in terms of relative incomes. In particular, the study ranks all non-elderly married couples in each state by income. The authors then calculate average tax burdens, defined as taxes as a percent of income, for the poorest 20 percent, and for the second, third, and fourth 20 percent. Each 20 percent of the income distribution is referred to as a quintile—thus the first quintile refers to the poorest 20 percent of non-elderly married couples. The CTP-ITEP study divides couples in the top (richest) quintile into three groups—the bottom 15 percentage points (from the 80th to the 95th percentile of the entire income distribution), the next 4 percentage points (from the 95th to the 99th percentile of the income distribution), and the top 1 percent of the income distribution.

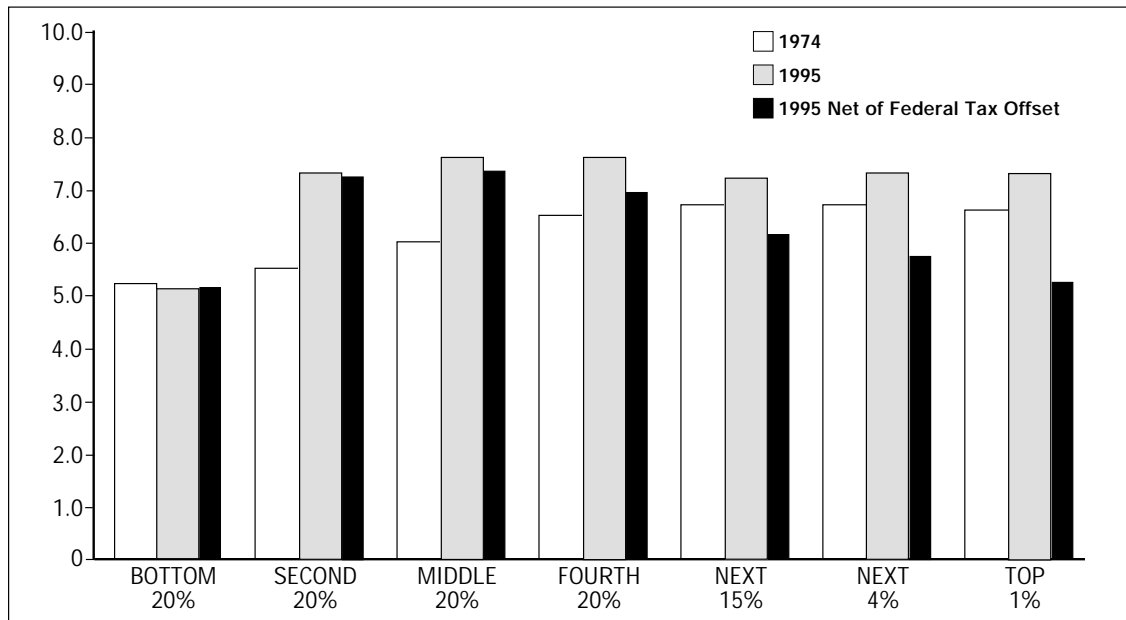
The DOR study presents data on tax burdens for income classes based on 1974 income. To make the DOR study comparable to the CTP-ITEP study, we converted 1974 incomes to 1995 levels, assigned couples to income quintiles, and calculated average tax burdens for each quintile.

Changes in the Progressivity of Wisconsin's Taxes from 1974 to 1995

Figure 1 summarizes the results of our analysis. The figure illustrates the distribution of average tax burdens for the sum of individual income, sales, and selected excise taxes for non-elderly married couples in 1974 and 1995. The data indicate that not only have average tax burdens risen slightly over time, but also that the tax system has become somewhat less progressive over this period. In 1974, this group of taxes was progressive over the bottom 95 percent of the income distribution. By 1995, the progressivity over the middle of the income distribution no longer existed, with the

distribution of burdens being more or less proportional to income over the top 80 percent of the income distribution.

Figure 1
Wisconsin Average State Tax Burdens, 1974 and 1995
For non-elderly married couples by income class



In order to help us understand why the distribution of tax burdens has changed over time, the data in Tables 1 and 2 display average tax burdens by quintile for each tax. The data in Table 1 show clearly that in 1974 the sales tax and excise taxes were regressive, while the individual income tax was progressive. The net pattern was mildly progressive over most of the income distribution. It should be noted, however, that the burden on the poorest 20 percent of non-elderly couples is relatively high. In 1974 this group faced an average tax burden of 5.2 percent, a level that was only 27 percent less than the average burden on the richest one percent of non-elderly couples.

Table 2 presents the Wisconsin results of the CTJ-ITEP study.⁴ These results show that in 1995 the middle class, those in the third and fourth quintiles of the income distribution, face the highest average tax burdens. A comparison of Table 1 to Table 2 also shows that in percentage terms, tax burdens have increased the most for those in the middle quintile. For the poorest 20 percent of couples, average tax burdens have fallen from 5.2 percent in 1974 to 5.1 percent in 1995. The increase in burdens at the top of income distribution is probably slightly overstated because of the use of a somewhat narrower income measure in the 1995 study as compared to the earlier analysis.

Table 1

Income, Sales and Excise Taxes - 1974
As a percentage of family income for non-elderly married couples

Income Class	Bottom 20 percent	Second 20 percent	Middle 20 percent	Fourth 20 percent	Next 15 percent	Next 4 percent	Top 1 percent
Income Range (1995 dollars)	less than 30,844	30,845-40,458	40,459-49,264	49,265-68,310	68,311-114,533	114,534-234,992	234,993 or more
Sales and Excise Taxes	3.4	2.8	2.8	2.6	2.3	2.3	1.8
General Sales	1.9	1.6	1.7	1.7	1.6	1.7	1.3
Excise Taxes	1.5	1.2	1.1	0.9	0.7	0.6	0.5
Individual Income Taxes	1.8	2.7	3.2	3.9	4.4	4.4	4.8
INCOME, SALES and EXCISE TAXES	5.2	5.5	6.0	6.5	6.7	6.7	6.6

Table 2

Income, Sales and Excise Taxes- 1995
As a percentage of family income for non-elderly married couples

Income Class	Bottom 20 percent	Second 20 percent	Middle 20 percent	Fourth 20 percent	Next 15 percent	Next 4 percent	Top 1 percent
Income Range (1995 dollars)	Less than 30,000	30,001-43,000	43,001-56,000	56,001-72,000	72,001-114,000	114,001-262,000	262,001 or more
Sales and Excise Taxes	4.0	3.4	2.9	2.5	1.9	1.4	1.4
General Sales	2.6	2.5	2.2	1.9	1.5	1.1	1.3
Excise Taxes	1.4	0.9	0.7	0.6	0.4	0.3	0.1
Individual Income Taxes	1.1	3.9	4.7	5.1	5.3	5.9	5.9
INCOME, SALES and EXCISE TAXES	5.1	7.3	7.6	7.6	7.2	7.3	7.3
Net of Federal Offset	5.1	7.2	7.3	6.9	6.1	5.7	5.2

Taxpayers who itemize deductions on their federal income tax returns are allowed to take a deduction for state income tax payments. The value of the deduction depends on a taxpayer's state income tax liability and federal marginal tax rate. Thus a taxpayer facing a marginal income tax rate of 28 percent can reduce, or offset, a \$1,000 state income tax liability by \$280 (28 percent of \$1,000). In this example, the taxpayer's state income tax liability net of the federal offset is \$720 (\$1,000 minus \$280). The bottom row of Table 2 and the black bars in Figure 1 presents an estimate of 1995 state tax burdens net of the federal income tax offset. The data indicate that taxpayers in the middle of the income distribution face the highest net burdens, with net burdens declining as income rises over the top half of the income distribution. In fact, the richest one percent of taxpayers face net burdens that are approximately equal to the burdens faced by the poorest 20 percent of state taxpayers.

The data in the next three tables highlight the percentage changes in tax burdens that occurred at various income levels between 1974 and 1995.

Table 3

Wisconsin State Sales and Excise Tax Burdens 1974 and 1995
For non-elderly married couples by income class

Income Class	Average Sales and Excise Tax Burden 1974	Average Sales and Excise Tax Burden 1995	Percentage Change in Average Sales Tax Burden
Bottom 20%	3.4%	4.0%	17.6%
Second 20%	2.8	3.4	21.4
Middle 20%	2.8	2.9	3.6
Fourth 20%	2.6	2.5	-3.8
Next 15%	2.3	1.9	-17.4
Next 4%	2.3	1.4	-39.1
Top 1%	1.8	1.4	-22.2

Table 3 illustrates that the sales and excise tax structure in Wisconsin has become more regressive over the past twenty years. Average sales and excise tax burdens increased for the bottom 60 percent of the income distribution and decreased for households in the top 40 percent of the income distribution between 1974 and 1995. This increased regressivity may be attributable in part to changing patterns of consumption and family organization. For example, as a larger proportion of women work outside the home, the consumption of restaurant meals (mainly fast food) increases. Meals away from home are subject to the sales tax while most food purchased for home consumption is exempt, so taxable consumption has grown over time.

Table 4

Wisconsin State Individual Income Tax Burdens 1974 and 1995
For non-elderly married couples by income class

Income Class	Average Individual Income Tax Burden 1974	Average Individual Income Tax Burden 1995	Percentage Change in Average Individual Income Tax Burden
Bottom 20%	1.8%	1.1%	-38.9%
Second 20%	2.7	3.9	44.4
Middle 20%	3.2	4.7	46.9
Fourth 20%	3.9	5.1	30.8
Next 15%	4.4	5.3	20.5
Next 4%	4.4	5.9	34.1
Top 1%	4.8	5.9	22.9

The data in Table 4 illustrate an increase in the progressivity of the state income tax at relatively low levels of income, but a reduction in progressivity over the rest of the income distribution. For the poorest 20 percent of taxpayers, the average income tax burden has declined by nearly 40 percent since 1974. This reduction in tax burden can be attributed primarily to a series of tax law changes that raised the income threshold below which no tax is due, and the enactment in 1983 of a refundable earned income tax credit. In the middle of the income distribution, however, increases in tax burdens have been greatest for taxpayers with relatively low incomes, thereby reducing the progressivity of the income tax over this range of incomes.

Table 5
Total Wisconsin State Tax Burdens, 1974 and 1995
 For non-elderly married couples by income class

Income Class	Average Total Tax Burden 1974	Average Total Tax Burden 1995	Percentage Change in Average Total Tax Burden
Bottom 20%	5.2%	5.1%	-1.9%
Second 20%	5.5	7.3	32.7
Middle 20%	6.0	7.6	26.7
Fourth 20%	6.5	7.6	16.9
Next 15%	6.7	7.2	7.5
Next 4%	6.7	7.3	8.9
Top 1%	6.6	7.3	10.6

Table 5 shows the percentage changes in the composite average tax burden from the individual income, sales, and excise taxes between 1974 and 1995. In 1974, the Wisconsin tax system was progressive over the bottom 95 percent of the income distribution. In 1995, the tax system was only progressive over the bottom half of the income distribution, with tax burdens proportional for all other taxpayers. Tax burdens in the middle of the income distribution increased by the greatest percentage amount.

The progressivity of Wisconsin's tax system has decreased over the last twenty years for several reasons. Changes in the economy and in the population of the state have resulted in changes in sources of income and in the pattern of spending that in turn influence the distribution of tax burdens. The state legislature has also enacted tax law changes that directly affected the distribution of tax burdens. In the following section, we explore a number of tax law changes that have occurred between 1974 and 1995 and attempt to assess how they have affected the progressivity of Wisconsin's state tax system.

Changes in the State Income Tax between 1974 and 1995

Since 1974, the state legislature has enacted several changes in the state individual income tax. Some of the changes that have decreased the progressivity of the income tax include changes in the structure of income tax rates and bracket and the partial exclusion of long-term capital gains. Other changes have increased the progressivity of the income tax. These include the introduction of a married couple credit, the change in the treatment of itemized deductions, and the change in the treatment of the deduction of property taxes. The net effect of these changes, however, is a reduction of the progressivity of the state income tax, especially at the top of the income distribution.

To calculate their state income tax, Wisconsin taxpayers determine their Wisconsin adjusted gross income by modifying their federal adjusted gross income (FAGI) by adding items such as non-Wisconsin state and municipal bond interest and subtracting items such as 60 percent of long-term capital gains. Gross income tax liabilities are determined by multiplying taxable income by the appropriate tax rates. A taxpayer's net tax liability is then calculated by subtracting any appropriate state income tax credits (such as the married couple, school property tax, or itemized deduction credit) from their gross tax liability.⁵

Changes in the State Income Tax Rates

Changes in the income tax rate and bracket structure have increased marginal tax rates on low-income taxpayers and decreased marginal tax rates on upper-income taxpayers, thus decreasing the progressivity of the state's income tax system.

From the inception of the state income tax in 1911 until 1978, Wisconsin's income tax system had sixteen brackets of taxable income (first \$1,000, second \$2,000 ... over \$15,000).

Table 6 documents the changes in the income tax rate and bracket structure that occurred between 1974 to 1995. To facilitate comparisons over time, all income brackets are presented in 1995 dollars. In 1979, the legislature reduced the number of income brackets from sixteen to eight. This change in the bracket structure increased marginal tax rates for those taxpayers with incomes of less than \$30,000 (in 1995 dollars) and reduced marginal tax rates for upper- and middle-income taxpayers. The largest decrease in marginal tax rates was enjoyed by middle class taxpayers.

From 1979 to 1981, income tax brackets were indexed for inflation. Indexing protects taxpayers from moving into a higher income bracket from one year to the next unless they experience an increase in real (inflation-adjusted) income. For example, a taxpayer with an income of \$30,000 in 1981 would have faced a marginal tax rate of 8.7 percent. If the taxpayer's income increased

by the rate of inflation, in 1982 the taxpayer would have jumped to the next income bracket and would have faced a marginal tax rate 9.1 percent even though the taxpayer's income remained unchanged in constant dollars. Indexing was most beneficial to those in the lowest income brackets, because the relative increase in the marginal tax rates that resulted from moving among the lower-income brackets was larger than the increases that resulted from movement among the upper-income brackets.

For example, a move from the first income bracket to the second income bracket would have resulted in a change in the marginal tax rate from 3.4 to 5.2 percent, a 53 percent increase. A move from the seventh bracket to the top bracket, however, would have resulted in a change in marginal tax rates from 9.5 to 10 percent, a 5.3 percent increase. Indexing was not completely effective in sheltering taxpayers from the effects of inflation because the rate of indexation was set at three percent per year during a period (1979-81) when the average annual inflation rate was 11.9 percent. If the inflation adjustment had been set to reflect the actual inflation rate during those years, the constant dollar income brackets for those years would have remained unchanged. Had indexing not been in effect, the negative impacts of inflation on low-income taxpayers would have been even greater. Despite the advantages to taxpayers of indexing, the need to raise additional tax revenue led to its repeal in 1985 after being used for just four years.

In 1986, Wisconsin established separate marginal tax rates for single and married taxpayers. Because this report focuses on married couples, we will limit our discussion of 1986-87 tax law changes to those that affected those taxpayers.⁶

In 1986, the number of taxable income brackets was reduced from eight to four. This resulted in higher marginal tax rates on married couples with low incomes, because the lowest marginal tax rate increased from 3.4 to 5 percent. Also, the top marginal rate was decreased from 10 to 7.9 percent. While some middle-income families now faced lower marginal tax rates, the largest reductions in marginal tax rates were given to upper-income married couples.

In 1987, in response to the passage by Congress of the Tax Reform Act of 1986, Wisconsin again changed its income tax structure. The number of tax brackets was reduced from four to three, and marginal tax rates were reduced for most taxpayers. Upper- and lower-income taxpayers once again benefited from the largest decreases in their marginal tax rates. For example, married couples who filed a joint return with incomes above \$55,260 received a 12.3 percent reduction in their marginal rate, from 7.9 to 6.93 percent. Married couples with incomes from \$26,831 to \$55,260 received a decrease in their marginal tax rate of 7.6 percent, from 7.5 to 6.93 percent. The basic tax structure has remained unchanged since 1987.

Table 6
State Individual Income Tax Rate and Bracket Structure
1974 to 1995 (income ranges in 1995 dollars)

1974
 (For all taxpayers)

Income Bracket	Tax Rate	Income Bracket	Tax Rate
Less than \$3,091	3.1%	24,730-27,821	8.2%
3,091-6,182	3.4	27,822-30,913	8.8
6,183-9,274	3.6	30,913-34,003	9.3
9,274-12,364	4.8	34,004-37,094	9.9
12,365-15,455	5.4	37,095-40,186	10.5
15,456-18,547	5.9	40,187-43,277	11.1
18,548-21,638	6.5	Over 43,278	11.4
21,639-24,729	7.6		

1979-1985
 (For all taxpayers)

1979	1980	1981	1982	Tax Rate
\$0-\$6,297	\$0-\$6,102	\$0-\$6,036	\$0-\$6,159	3.4%
6,297-12,595	6,103-12,207	6,036-12,071	6,159-12,160	5.2
12,595-18,892	12,207-18,310	12,071-18,275	12,160-18,478	7.0
18,892-25,190	18,310-24,413	18,275-24,310	18,478-24,479	8.2
25,190-31,488	24,413-30,517	24,310-30,178	24,479-30,638	8.7
31,488-41,983	30,517-40,689	30,178-40,405	30,638-40,746	9.1
41,983-83,967	40,689-81,379	40,405-80,811	40,746-81,491	9.5
Over 83,967	Over 81,379	Over 80,811	Over 81,491	10.0

1986
 (By filer type)

Single	Married, Joint	Married, Separate	Tax Rate
\$0-\$10,429	\$0-\$13,905	\$0-\$6,953	5.0%
10,429-20,858	13,905-27,810	6,953-13,905	6.6
20,858-41,715	27,810-55,620	13,905-27,810	7.5
Over 41,715	Over 55,620	Over 27,810	7.9

1987
 (By filer type)

Single	Married, Joint	Married, Separate	Tax Rate
\$0-\$10,061	\$0-\$13,415	\$0-\$6,708	4.90%
10,062-20,123	13,415-26,831	6,708-13,415	6.55
Over 20,123	Over 26,831	Over 13,415	6.93

1995
 (By filer type)

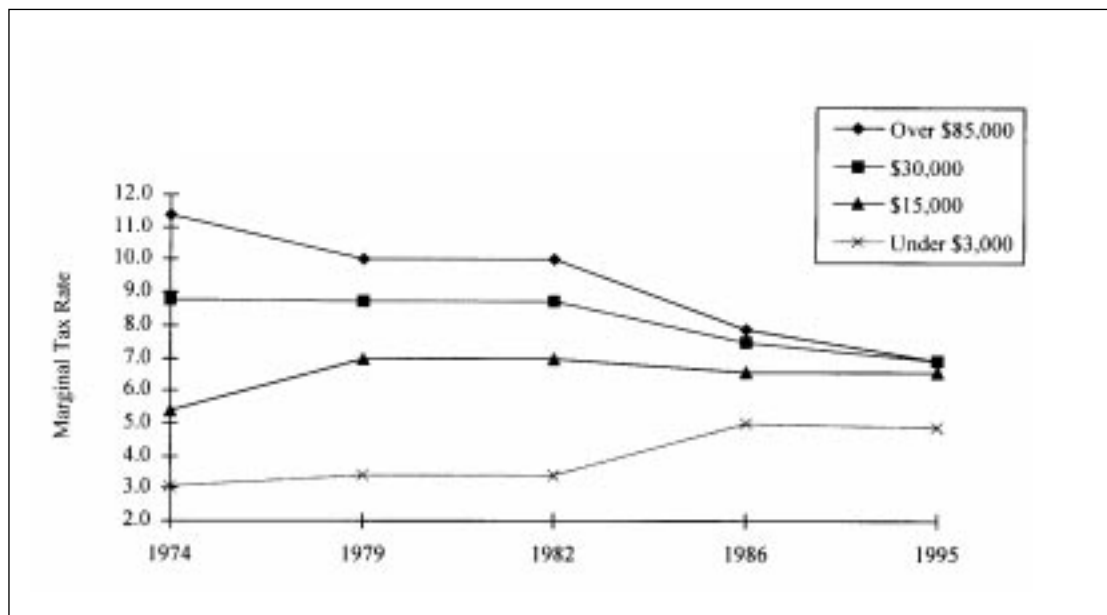
Single	Married, Joint	Married, Separate	Tax Rate
\$0-\$7,500	\$0-\$10,000	\$0-\$5,000	4.90%
7,500-15,000	10,000-20,000	5,000-10,000	6.55
Over 15,000	Over 20,000	Over 10,000	6.93

Source: Legislative Fiscal Bureau 1995c, and authors' calculations.

Figure 2 displays the changes in the marginal tax rates for selected incomes, in constant 1995 dollars, from 1974 to 1995. This graph illustrates the decrease in marginal tax rates for the wealthiest taxpayers and the increase in marginal tax rates for the poorest taxpayers over the last twenty years.⁷

Another consequence of the changes in the state income tax bracket structure from 1974 to 1995 is an increase in the proportion of taxpayers in the top taxable income bracket. This reduces the progressivity of the state income tax system because taxpayers over a wide range of incomes face the same marginal tax rate. In 1995, 79.6 percent of married couples who filed jointly faced the top marginal tax rate of 6.93 percent. If the 1985 income tax bracket structure (in 1985 dollars) had been in place in 1995, only about 40 percent of all married couples would have been in the top taxable income bracket (Legislative Fiscal Bureau, 1995c, and authors' calculations).

Figure 2
Changes in the Marginal Income Tax Rate, 1974-1995
For Selected Incomes (in 1995 dollars)



Changes in Income Tax Deductions and Credits

In this section, we use data from the Wisconsin Department of Revenue's 1995 Individual Income Tax Sample to help us analyze the impact of various deductions, exclusions, and credits on the progressivity of the income tax. As a background for that analysis, Table 7 displays data on the number of tax filers (tax returns), Wisconsin adjusted gross income (WAGI), and net income tax liabilities by income class. The data indicate that of the nearly 2.4 million tax filers, 37 percent have adjusted gross incomes below \$15,000 and 57 percent have incomes between \$15,000 and \$75,000. While only 7 percent of tax filers have income over \$75,000, they have 30 percent of total adjusted gross income and pay 36 percent of total income taxes.

Changes in the Treatment of Itemized Deductions

The change in the treatment of itemized deductions from a deduction to a credit has increased the progressivity of the state income tax.

In 1986, the state legislature eliminated itemized deductions from adjusted gross income. They were replaced by an itemized deduction credit that was set equal to 5 percent of allowable deductions. Allowable deductions include mortgage interest, investment interest up to \$1,200, medical expenses deductible from the federal income tax, and charitable contributions.

Table 7

Distribution of Wisconsin Adjusted Gross Income and Net Tax 1995
For all taxpayers by income class

Income Class (1995 dollars)	Tax Filers (in thousands)	Percentage of Tax Filers	Amount of WAGI (in millions of \$)	Percentage of WAGI	Amount of Net Tax (in millions of \$)	Percentage of Tax Liability
less than \$0	16.1	0.7%	\$(326.8)	0.4	\$0.3	0.0
0-5,000	329.7	14.0	881.2	1.1	3.0	0.1
5,000 -10,000	281.8	12.0	2,083.1	2.7	18.8	0.5
10,000-15,000	247.7	10.5	3,086.2	4.0	60.3	1.6
15,000-20,000	218.2	9.3	3,809.0	4.9	121.9	3.2
20,000-25,000	182.6	7.8	4,089.4	5.3	167.3	4.3
25,000-30,000	151.4	6.4	4,140.8	5.4	187.8	4.9
30,000-40,000	255.2	10.8	8,874.4	11.5	434.0	11.3
40,000-50,000	211.0	9.0	9,429.7	12.3	487.1	12.7
50,000 -75,000	298.4	12.7	18,007.1	23.4	976.1	25.4
75,000 -100,000	92.1	3.9	7,831.8	10.2	445.4	11.6
100,000 -200,000	53.6	2.3	6,970.1	9.1	419.5	10.9
200,000 -300,000	9.0	0.4	2,163.1	2.8	136.7	3.6
Over 300,000	8.6	0.4	5,920.9	7.7	390.7	10.2
TOTAL	362.9	100.0	\$76,690.0	100.0	\$3,848.8	100.0

Source: Wisconsin Department of Revenue, 1997.

Table 8 shows the distribution of benefits from itemized deductions among income classes in 1995. The data in this table (and in Tables 9 through 14) provide data for all taxpayers. It was not possible to isolate the impact of various credits and deductions on non-elderly married couples. Although the average credit increases as income rises, the average credit as a percentage of income declines as income rises. Although over three-quarters of the credits go to taxpayers with incomes over \$50,000, most taxpayers with incomes below \$50,000 take advantage of the standard deduction, which, as will be explained in the next section, is generally not available to higher income taxpayers.

A high percentage of upper-income taxpayers itemize rather than take the standard deduction; therefore they receive most of the total distribution of this credit. Despite the high concentration of benefits among middle- and upper-income taxpayers, wealthy taxpayers actually receive a smaller benefit from the credit than they would have received from an itemized deduction. So even though the itemized deduction credit is not progressive in its own right, the change from a deduction to a credit has increased the progressivity of the state income tax.

Table 8
Distribution of Itemized Deduction Credits — 1995
For all taxpayers that used credit by income class⁸

Income Class (1995 dollars)	Percentage of Income Class that used Credit	Percentage of Taxpayers the used Credit	Average Itemized Deduction Credit	Percentage of Total Itemized Deduction Credits
less than \$0	0.0%	0.0%	\$0	0.0%
0-5,000	1.2	0.6	16	0.0
5,000-10,000	2.6	1.1	70	0.3
10,000-15,000	4.5	1.6	132	0.7
15,000-20,000	5.1	1.6	138	0.7
20,000-25,000	8.4	2.2	121	0.9
25,000-30,000	16.6	3.6	192	2.3
30,000-40,000	31.1	11.5	152	5.8
40,000-50,000	59.1	18.1	192	11.6
50,000-75,000	85.1	36.8	285	35.2
75,000-100,000	94.9	12.7	381	16.2
100,000-200,000	97.9	7.6	553	14.1
200,000-300,000	100.0	1.3	899	3.9
Over 300,000	98.8	1.2	1,994	8.2
TOTAL	29.2%	100.0%	\$299	100.0%

Source: Wisconsin Department of Revenue, 1997.

For example, if itemized deductions were still allowed, a married taxpayer who filed a joint return in 1995 with an income of \$100,000 and itemized deductions of \$7,500 would have had a state income tax liability of \$6,169. With an itemized deduction credit, however, the gross tax liability for that same taxpayer would have been \$6,314. This increase in gross income tax liability occurs because the itemized deduction credit (5.0 percent) is less than the marginal tax rate (6.93 percent) applied to most of the taxpayers' income.

The majority of low-income taxpayers were unaffected by the move from itemized deductions to a deduction credit, because for them the standard deduction exceeded allowable itemized deductions. The net result of the replacement of the deduction with a credit has thus been to increase the progressivity of the state income tax.

Changes in the Standard Deduction

The increase in the standard deduction in the Wisconsin state income tax over the past twenty years has increased the progressivity of the state income tax.

Prior to 1979 taxpayers could either itemize or take the standard deduction. In 1974 the standard deduction consisted of two parts: a low-income allowance of \$1,300 and an additional deduction of \$2,000 or 15 percent of income, whichever was less. From 1977 to 1986 the low-income allowance was set at \$1,300 to \$5,700, depending on taxpayers' ages, marital status, number of dependents, and income level. In 1979, the maximum standard deduction was increased to \$2,300 for single taxpayers and \$3,400 for married taxpayers, and the use of a percentage of income to calculate the maximum standard deduction was eliminated.

In 1986 the structure of the standard deduction was changed in response to federal tax reform. The maximum standard deduction for single taxpayers was increased from \$2,300 to its current level of \$5,200. For married taxpayers filing a joint return, the maximum standard deduction was increased from \$3,400 to \$7,200 in 1986, \$7,560 in 1987, and \$8,900 in 1988. Married couples who filed separately had their maximum standard deduction raised to \$3,420 in 1986, \$3,590 in 1987, and \$4,230 in 1988. The value of the standard deduction is not indexed to reflect increases in prices since 1988. If the current standard deduction for married couples filing jointly had been indexed for inflation, it would be equal to \$12,065 in 1997 instead of \$8,900.

Since 1986 Wisconsin has had a sliding scale standard deduction. For married couples filing a joint return with incomes less than \$10,000, the standard deduction is currently \$8,900. As their Wisconsin adjusted gross income increases, the standard deduction is phased out at a 19.778 percent rate. This means that no married couple filing jointly with an income of greater than \$55,000 can claim the standard deduction. The standard deduction is also not available for single taxpayers with income over \$50,830 and married taxpayers who filed separately with incomes above \$26,140.

Table 9 shows that the standard deduction was used by most eligible taxpayers in 1995. Many low-income taxpayers cannot benefit from all of their standard deduction because their standard deduction is greater than their taxable income prior to applying the deduction. The standard deduction increases the progressivity of the state income tax system because it reduces low- and middle-income taxpayers' gross taxable income, thus reducing their income tax burden. In fact, it allows many low-income taxpayers to have no state income tax liability. Because the sliding scale is not adjusted annually for inflation, however, the positive effects of the standard deduction on the progressivity of the state income tax diminish each year.

Table 9
Distribution of Standard Deductions — 1995
For all taxpayers that used credit by income class

Income Class (1995 dollars)	Percentage of Income Class that used Deductions	Percentage of Taxpayers that Deductions	Average Standard Deductions	Percentage of Total Standard Deductions
less than \$0	0.0%	0.0%	\$0	0.0%
0-5,000	98.7	16.9	2,518	11.2
5,000-10,000	99.1	14.5	5,445	20.7
10,000-15,000	99.3	12.7	5,705	19.1
15,000-20,000	99.5	11.2	5,022	14.9
20,000-25,000	99.1	9.4	4,300	10.6
25,000-30,000	97.4	7.6	3,785	7.6
30,000-40,000	98.2	13.0	3,074	10.5
40,000-50,000	98.4	10.8	1,735	4.9
50,000-75,000	25.6	4.0	471	0.5
75,000-100,000	0.0	0.0	0	0.0
100,000-200,000	0.0	0.0	0	0.0
200,000-300,000	0.0	0.0	0	0.0
Over 300,000	0.0	0.0	0	0.0
TOTAL	81.7%	100.0%	\$3,800	100.0%

Source: Wisconsin Department of Revenue. 1997.

The Introduction of the Property Tax/Rent Credit

The change from the itemized deduction of state and local taxes to the use of a property tax/rent credit has increased the progressivity of the state income tax system.

In 1979 a property tax/rent credit was introduced into the state income tax system to replace the itemized deduction of property taxes. This credit, just like the itemized deduction credit, is subtracted from taxpayers' gross income tax liability. From 1979 to 1983, a deduction of 12 percent was allowed for property taxes or rent paid in each year. In 1983 it was lowered to 10 percent, and it remained at that percentage until the credit was repealed in 1985. The credit returned in 1986, under a new name—the school property tax credit. This credit was set at 6.9 percent for 1986, was raised to 8.5 percent in 1988, and to 10 percent in 1989. Under the current law, the maximum credit is set at \$200, thus limiting the credit to 10 percent of the first \$2,000 of property tax payments. To allow renters to benefit from the property tax credit, the legislature assumed that property taxes make up 20 percent of gross rent if the cost of heat is included in the rent, and 25 percent of gross rent if the tenant pays for the heat independently of the rent. The 10 percent rent credit is also capped at \$200.

Table 10 shows the distribution of property tax credits among all taxpayers who used the credit in 1995. It appears that the change from the deduction of property taxes to the property tax credit in 1979 has increased the progressivity of the state income tax system. A greater percentage of upper- and middle-income taxpayers use the property tax credit, and receive the majority of the benefit from the credit. However, as with the itemized deduction credit, the credits taken by low- and middle-income taxpayers are greater as a percentage of income than those taken by upper-income taxpayers.

Table 10
Distribution of Property Tax Credits —1995
For all taxpayers that used credit by income class

Income Class (1995 dollars)	Percentage of Income Class that used Credit	Percentage of Taxpayers that used Credit	Average Property Tax Credit	Percentage of Total Property Tax Credits
less than \$0	0.0%	0.0%	\$0	0.0%
0-5,000	0.2	0.0	0	0.0
5,000-10,000	13.8	3.7	74	1.8
10,000-15,000	34.2	8.0	112	5.8
15,000-20,000	36.5	7.5	133	6.5
20,000-25,000	40.4	6.9	135	6.1
25,000-30,000	47.1	6.7	137	6.0
30,000-40,000	57.1	13.7	148	13.2
40,000-50,000	76.8	15.3	159	15.8
50,000-75,000	86.2	24.2	177	27.8
75,000-100,000	90.1	7.8	188	9.6
100,000-200,000	90.5	4.6	193	5.7
200,000-300,000	91.1	0.8	196	1.0
Over 300,000	89.5	0.7	197	0.9
TOTAL	44.9%	100.0%	\$154	100.0%

Source: Wisconsin Department of Revenue. 1997.

Some homeowners have benefited from the change from the deduction to a credit, while others have not. Just as with the itemized deduction, taxpayers with marginal tax rates below the property tax credit rate benefit from the change from an itemized deduction of their property taxes to the property tax credit. Since even the highest marginal income tax rate (6.93 percent) is below the property tax credit rate (10 percent), it would stand to reason that all taxpayers who claim this credit would benefit.

The current law, however, places a cap of \$2,000 on the amount of property taxes that can be used to compute the credit, therefore allowing for a maximum credit of \$200. Under the previous law, 100 percent of property tax payments were deductible. Therefore, all homeowners with property tax liabilities of more than \$2,886 (6.93 percent of \$2,886 = \$200) would have received a tax benefit in excess of \$200. All other taxpayers receive a higher benefit from the property tax credit than they would have under the previous law. This includes homeowners who did not itemize. These taxpayers, who most likely have moderate incomes, received no tax benefit from the property tax deduction, but gain from the property tax credit.

From Table 11 we can see that lower- and middle-income taxpayers receive the majority of total rent credits. The percentage of taxpayers who use this credit is quite small, however, as is the

average rent credit. Since rents could not be deducted from state income tax by low-income taxpayers before 1979, the rent credit has nonetheless increased the progressivity of the state income tax.

Table 11
Distribution of Rent Credits—1995
For all taxpayers that used credit by income class

Income Class (1995 dollars)	Percentage of Income Class that used Credit	Percentage of Taxpayers that used Credit	Average Rent Credit	Percentage of Total Rent Credits
less than \$0	0.0%	0.0%	\$0	0.0%
0-5,000	2.4	1.4	12	0.2
5,000-10,000	24.0	11.8	50	6.6
10,000-15,000	38.4	16.7	74	13.8
15,000-20,000	40.8	15.6	84	14.6
20,000-25,000	42.1	13.5	94	14.1
25,000-30,000	42.1	11.2	99	12.3
30,000-40,000	33.7	15.1	108	18.1
40,000-50,000	21.0	7.8	116	10.0
50,000-75,000	10.7	5.6	133	8.3
75,000-100,000	6.2	1.0	139	1.5
100,000-200,000	3.7	0.4	140	0.5
Over 300,000	2.2	0.0	150	0.1
TOTAL	24.1%	100.0%	\$90	100.0%

Source: Wisconsin Department of Revenue, 1997.

Most homeowners have received increased benefit from the change from a property tax deduction to a property tax credit. Those homeowners who did not benefit had high property tax bills—and were most likely upper-income taxpayers. All renters, most of whom have low or moderate incomes, benefited from the imposition of the renter credit. Thus the net effect of the property tax/rent credit is an increase in progressivity of the state income tax system.

The Introduction of the Married Couple Credit

The married couple credit has increased the progressivity of the state's tax system because it is primarily used by low- and middle-income taxpayers.

In 1986, legislation was passed that created separate taxable income brackets for single and married taxpayers. Because of the structure of these brackets, married taxpayers often face higher tax liabilities than single taxpayers with equivalent incomes. The married couple credit was introduced in 1986 to offset the penalty faced by two-earner couples. In addition, two-earner

married couples were at a disadvantage because a single-earner married couple could basically divide the head of the household's earnings by two, thus facing a lower marginal tax rate.⁹

The married couple credit was defined as 2.5 percent of the earnings of the spouse with the lowest earnings, with the credit applied to the first \$18,000 of earnings of that spouse. This resulted in a cap of \$450, or 2.5 percent of \$18,000, on the credit. In 1989 the credit was reduced to 2 percent, and the maximum earnings of the low-earning spouse were reduced to \$15,000. Thus the maximum credit allowed was \$300. Only married couples who file joint returns are allowed to claim this credit.

Table 12 shows the distribution of married couple credits among taxpayers who used the credit in 1995. Middle-income taxpayers, those with incomes between \$30,000 and \$100,000 received most of the benefit from the credit. The credit received by low-income taxpayers, however, represents a higher percentage of their income, on average, than for upper-income taxpayers. The maximum credit of \$300 limits the benefits of this credit that go to high-income taxpayers in the state. We thus conclude that the imposition of the married couple credit has increased the progressivity of the income tax.

Table 12
Distribution of Married Couple Credits — 1995
 For all taxpayers that used credit by income class

Income Class (1995 dollars)	Percentage of Income Class that used Credit	Percentage of Taxpayers that used Credit	Average Married Couple Credit	Percentage of Total Married Couple Credits
less than \$0	0.0%	0.0%	\$0	0.0%
0-5,000	0.4	0.2	14	0.0
5,000-10,000	0.5	0.2	38	0.0
10,000-15,000	4.7	1.7	55	0.4
15,000-20,000	10.5	3.4	86	1.3
20,000-25,000	14.5	3.9	93	1.7
25,000-30,000	20.7	4.6	131	2.8
30,000-40,000	40.2	15.2	186	13.0
40,000-50,000	60.5	8.9	223	19.4
50,000-75,000	77.6	34.2	254	40.1
75,000-100,000	81.4	11.1	270	13.8
100,000-200,000	67.2	5.3	246	6.1
Over 300,000	53.3	0.7	229	0.8
TOTAL	28.6%	100.0%	\$217	100.0%

Source: Wisconsin Department of Revenue, 1997.

Change in the Treatment of Long-Term Net Capital Gains

The exclusion of a portion of long-term net capital gains has reduced the progressivity of the state tax system from 1974 to 1995 because the amount of capital gains in the state is highly concentrated among the wealthiest taxpayers in the state.

Beginning in 1981 Wisconsin has allowed the exclusion from income of a portion of long-term (held for longer than one year) net capital gains. Long-term net capital gains are defined as net gains on assets held for longer than one year minus short-term (assets held for less than a year) capital losses. In 1982, 20 percent of capital gains were excluded from state income taxation. This percentage was increased to 40 percent in 1983, and to 60 percent in 1984 and thereafter. Although the capital gains exclusion was repealed from the federal income tax structure as part of the 1986 Tax Reform Act, Wisconsin kept its capital gains exclusion.

Table 13 shows the distribution of net capital gains among taxpayers with net capital gains in 1995. The effect on the state's treatment of capital gains is a reduction in the progressivity of the state income tax system because of the high concentration of capital gains among upper-income taxpayers. Although a number of low- and middle-income taxpayers realize capital gains, the upper-income taxpayers reap the majority of the benefits from this provision—the wealthiest 1.5 percent of all taxpayers with capital gains have 29.5 percent of the total amount of capital gains reported.¹⁰ Thus, the overall progressivity of the income tax system is clearly reduced by the exclusion of net long-term capital gains.

Table 13
Distribution of Net Capital Gains — 1995
For all taxpayers with net capital gains by income class

Income Class (1995 dollars)	Percentage of Income Class with Net Capital Gains	Percentage of Taxpayers with Net Capital Gains	Average Amount of Net Capital Gains	Percentage of Total Net Capital Gains
less than \$0	21.7%	1.1%	\$154	6.2%
0-5,000	11.7	8.1	7	2.2
5,000-10,000	14.1	8.3	1,158	3.6
10,000-15,000	15.6	8.1	1,011	3.1
15,000-20,000	16.5	7.5	1,110	3.2
20,000-25,000	15.1	5.8	1,921	4.2
25,000-30,000	17.3	5.5	1,452	3.0
30,000-40,000	19.4	10.4	1,489	5.9
40,000-50,000	22.8	10.1	1,272	4.9
50,000-75,000	27.8	17.4	1,617	10.7
75,000-100,000	42.2	8.2	3,017	9.3
100,000-200,000	59.0	6.6	3,755	9.4
Over 300,000	75.6	1.4	8,888	4.8
TOTAL	20.2%	100.0%	\$2,639	100.0%

Source: Wisconsin Department of Revenue, 1997.

The Introduction of the State Earned Income Tax Credit

The introduction of the state Earned Income Tax Credit has increased the progressivity of the state tax system in the last twenty years by lowering the tax burden faced by taxpayers with the lowest incomes.

The federal government has offered an Earned Income Tax Credit (EITC) to eligible families since 1975. This credit is designed to help the working poor by supplementing their wages and reducing their payroll tax burdens. To claim this credit a taxpayer must file a tax return and a separate earned income credit form. This credit is refundable, meaning that if taxpayers' EITCs are greater than their gross tax liability, the difference is refunded. As income increases beyond a given level, the credit is phased out.

The State of Wisconsin offered a non-refundable earned income tax credit from 1983 to 1985. The state EITC was set at 30 percent of the federal EITC. In 1989, Wisconsin reintroduced the credit, again as a percentage of the federal EITC, although varying the percentage depending on family size. In 1994 the state set up its own EITC that no longer "piggybacked" on the federal program. The amount of a taxpayer's EITC depended on the number of children in the family: for a family with three children, the maximum credit was \$1,496; for a two-child family the maximum credit was \$499; and for a one-child family the maximum credit was \$92. For all three types of families, the phase-out of the credit began at \$12,570 and the maximum income allowed for eligibility for an EITC was \$23,470.

In 1995 the state EITC was again computed as a percentage of the federal credit. The state credit was 4 percent of the federal credit for families with one child, 16 percent for families with two children, and 50 percent for families with three children.

Table 14
Distribution of State Earned Income Tax Credits (EITC) — 1995
For all taxpayers that used credit by income class

Income Class (1995 dollars)	Percentage of EITC Recipients	Average EITC Payment	Percentage of Total EITC Received
Under \$4,000	11.4%	\$177	7.0%
4,000-8,000	13.6	347	16.5
8,000-12,000	16.4	462	26.4
12,000-16,000	18.8	367	24.1
16,000-20,000	18.8	254	16.7
Over 20,000	21.0	127	9.3
TOTAL	100.0%	\$287	100.0%

Source: Legislative Fiscal Bureau, 1997a.

Table 14 displays the distribution of EITC payments among different income classes in 1995. Because all of the income classes listed here are within the bottom 20 percent of Wisconsin's income distribution, the state EITC program has reduced low-income taxpayers' tax burdens relative to all of the other income classes. The introduction of the Earned Income Tax Credit has thus increased the progressivity of the state income tax over the past twenty years.

Changes in Wisconsin's State Sales Tax

The increase in the general sales tax rate has resulted in an increase in the regressivity of the state sales tax system over the past twenty years. The average sales tax burden on low-income taxpayers has increased over this period.

In 1981 Wisconsin raised its general sales tax rate from four percent to its current level of five percent.¹¹ An increase in the general sales tax reduces progressivity in the state tax system because low-income families spend a larger share of their income on goods and services subject to the sales tax than wealthier families. This pattern can be explained in part by the fact that low-income taxpayers generally spend all of their income, while wealthier taxpayers save a portion of their income. In addition, the sales tax is regressive because many taxable items make up a larger share of total spending for low-income taxpayers than for higher income taxpayers.

The sales tax base has changed over the past twenty years as well, although the effect of these changes is unclear. According to the State of Wisconsin's *Summary of Tax Exemption Devices*, a substantial number of new exemptions from the sales tax were granted by the Wisconsin legislature between 1983 and 1995. For example, purchases of logging equipment, milkhouse supplies, and raw materials incorporated into printed materials that are used outside the state are now exempt from sales taxation. Goods and services added to the sales tax base during this time period include interstate telephone calls originating in Wisconsin and billed to an in-state subscriber; materials other than advertising materials removed from Wisconsin for out-of-state use; and tangible personal property manufactured in or outside Wisconsin and used in Wisconsin. It is not possible to determine the net effect of these changes in the sales tax base on the progressivity of the sales tax.

Changes in Wisconsin's State Excise Taxes

Over the past 20 years, Wisconsin has increased its excise tax rates on cigarettes and on gasoline, but decreased rates on liquor, wine, and beer. The result of these rate changes is a net increase in the regressivity of these excise taxes.

Several changes have occurred in excise tax rates on items such as cigarettes, alcohol and gasoline over the past twenty years. The cigarette tax increased from 16 to 25 cents a pack in fiscal year 1982, to 30 cents per pack in 1987, to 38 cents per pack in 1991, and to 43 cents per pack in 1995. When inflation is accounted for, however, there has been a 13 percent decrease in the cigarette excise tax rate over the past twenty years.

The excise tax rate on alcohol has been reduced since 1983-84. The rate on beer decreased from \$10.33 to \$9.10 per barrel, while the tax on liquor and wine distributors decreased from \$34.64 per gallon in 1984 to \$30.29 in 1994. This \$4.35 per gallon reduction represents a 39 percent decline in the tax rate when inflation is taken into account.

The motor fuel tax increased from 7 to 23.1 cents per gallon between 1974 and 1995. After adjusting for inflation, this represents a 6.2 percent increase. Under current law, the motor fuel tax is adjusted annually to reflect changes in fuel consumption and inflation.¹²

Table 15
Average Tax Burdens for Selected Excise Taxes — 1995
For non-elderly married couples by income class

Income Class	Average Cigarette Tax Burden	Average Gasoline Tax Burden	Average Beer Tax Burden	Average Selected Excise Taxes Burden
Bottom 20%	0.91%	0.35%	0.01%	1.28%
Second 20%	0.62	0.19	0.01	0.83
Middle 20%	0.51	0.15	0.01	0.67
Fourth 20%	0.40	0.11	0.01	0.52
Next 15%	0.33	0.08	0.01	0.41
Next 4%	0.20	0.04	0.00	0.25
Top 1%	0.09	0.01	0.00	0.10

Source: Citizens for Tax Justice and Institute on Taxation and Economic Policy, 1996.

Table 15 illustrates the distribution of gasoline, cigarettes and beer taxes among non-elderly married couples in 1995. All three of these excise taxes are regressive. According to the data in

Tables 1 and 2, low-income taxpayers are currently facing approximately the same excise tax burdens as they did in 1974. The tax burdens for upper and middle-income taxpayers, however, have decreased over time. This may reflect decreased consumption of cigarettes and alcohol by relatively high-income taxpayers, or the above-average rate of growth in the income of high-income taxpayers over this time period.

Changes in the Federal Income Tax

In this report, we attempt to analyze how changes in Wisconsin's tax laws have affected the progressivity of the state tax system. Because state income taxes are deductible from federal adjusted gross income, those taxpayers who itemize deductions on their federal returns can reduce the net burden of the state income tax. For this reason, changes in federal tax law can have an impact on the progressivity of the state tax structure. The Tax Reform Act of 1986 mandated the reduction of federal marginal income tax rates, the increase in the federal standard deduction, and the elimination of the deduction of state sales taxes. These changes in federal tax law had the net effect of increasing the progressivity of Wisconsin's state tax system.

The federal income tax system allows taxpayers to deduct state and local taxes from their federal adjusted gross income when calculating their federal income tax liability. This allows taxpayers who itemize to reduce their federal income tax liability by an amount equal to the deductible state and local taxes multiplied by their marginal tax rate.

For example, consider a married couple with a 1995 income of \$75,000. Assume that the couple has a Wisconsin state income tax liability of \$3,600 and itemizes deductions on their federal return. This couple would face a federal marginal income tax rate of 28 percent. By including their \$3,600 state income tax liability in their itemized deductions, the couple reduces their federal income tax liability by \$1,008, or 28 percent of \$3,600. This is their federal tax offset. The couple's net state and local tax liability, accounting for the federal tax offset, is \$2,592. The progressivity of Wisconsin's state income tax system has increased over the last twenty years because of three changes that have reduced the effects of the federal offset. These changes are the reduction of the marginal income tax rate faced by the wealthiest taxpayers, the increase in the standard deduction, and the elimination of the deduction of state sales taxes.

The reduction in the federal marginal income tax rate for taxpayers in the top taxable income bracket has been the most instrumental in reducing the effect of the federal offset. The federal

offset is regressive because it gives the largest reductions in state tax burdens to the wealthiest taxpayers with the highest federal marginal income tax rates. Before 1981 the wealthiest taxpayers faced a federal marginal income tax rate of 70 percent. In 1981 the highest marginal tax rate was reduced to 50 percent, and in 1986 to 28 percent. Currently, the highest federal marginal income tax rate is 39.6 percent, which is a 43 percent decrease from the marginal tax rate faced by the wealthiest taxpayers in 1974. This decrease in the federal marginal income tax rate for the wealthiest taxpayers has increased the effective progressivity of the state tax system because the benefits of the federal offset for upper-income taxpayers was reduced.

The increase in the standard deduction enacted in 1986 resulted in a reduction in the number of itemizing taxpayers. Because itemizers tend to be middle- and upper-income taxpayers, this reduced the federal tax offset for those taxpayers and increased the effective progressivity of Wisconsin's state tax system.

The elimination of the deduction of state sales taxes in 1986 reduced the amount of state and local taxes that itemizers could deduct from their federal income tax. Again, this reduced the effect of the federal tax offset for middle- and upper-income taxpayers and increased the effective progressivity of Wisconsin's state tax system.

CONCLUSIONS

In this study, we have compared the distribution of tax burdens from Wisconsin's individual income, sales, and excise taxes for non-elderly married couples for 1974 and 1995. If we define a tax system as progressive when tax burdens rise as income rises, then we can conclude that the state's tax system has become somewhat less progressive over the past couple of decades. In 1974 average tax burdens rose over the bottom 95 percent of the income distribution. In 1995, couples in the middle of the income distribution faced the highest tax burdens. On average, high-income taxpayers in 1995 faced tax burdens that are not much higher than the burdens on the poorest 20 percent of taxpayers, taking into account the ability of upper-income taxpayers to deduct their state income tax payments from their income subject to the federal income tax.

Wisconsin has taken several steps to reduce tax burdens on its low-income residents. These steps have resulted in slightly lower tax burdens on the poorest 20 percent of non-elderly married couples in 1995 as compared to 1974. However, the average tax burden on the middle 60 percent of couples is now considerably higher than it was in 1974. Even before consideration of the deductibility of the state income tax, taxpayers in the second quintile of the income distribution—couples with incomes between \$30,000 and \$43,000—face the same average burden as taxpayers in the top five percent of the income distribution.¹³

The Wisconsin tax system could be changed in ways that would reduce burdens on those with moderate incomes and increase burdens on those with the greatest ability to pay. One possible way to achieve these goals would be to increase the graduation of the income tax schedule. Under current law, married couples filing joint returns face a marginal tax rate of 4.9 percent on taxable income (defined as gross income minus the standard deduction) below \$10,000, a rate of 6.55 percent on taxable income between \$10,000 and \$20,000, and a rate of 6.93 percent on all income above \$20,000. Income tax progressivity could be increased by reducing marginal rates on taxable incomes below \$20,000 and by increasing rates on higher incomes. To guarantee that inflation doesn't erode tax progressivity, the income tax rates, income brackets, and deductions could be indexed to reflect increases in the Consumer Price Index. We have estimated that three additional income brackets and rates; namely, a rate of 7.43 percent on taxable incomes between \$40,000 and \$60,000, a rate of 7.93 percent on incomes between \$60,000 and \$100,000, and a rate of 8.43 percent on incomes above \$100,000 would increase revenues

by \$235 million in fiscal year 1998. This additional revenue could be used to offset the revenue losses created by lowering marginal rates on low-income taxpayers and by implementing indexation.

To target income tax reductions to taxpayers in the bottom half of the income distribution, the standard deduction could be increased. Under the current system, taxpayers whose incomes are above the income threshold for the earned income tax credit face quite high average tax rates. Increasing the standard deduction from its current maximum value of \$8,900 would be an effective way of reducing income tax liabilities for these low-income taxpayers. An increase in the school property tax/rent credit would increase the progressivity of the income tax as well. Increasing the percentage of deductible property taxes or rent paid will benefit primarily low- and middle-income taxpayers. Finally, the exclusion of 60 percent of capital gains primarily benefits high-income taxpayers. Eliminating or substantially reducing the capital gains exclusion would enhance progressivity at the upper end of the income distribution.

Increasing sales and excise tax rates will tend to increase the regressivity of the state tax system. It may be possible, however, to expand the sales tax base in ways that will shield most low-income taxpayers from increased tax burdens. For example, the expansion of the sales tax base to cover a number of currently exempt goods and services is likely to result in an increase in tax progressivity. Possible candidates for sales tax base expansion include legal, accounting, and architectural services purchased by individuals; newspapers and periodicals; health clubs; veterinary services for pets; beauticians and barber services; and dry cleaning.

This study has provided only a partial analysis of changes in the distribution of tax burdens in Wisconsin. Data limitations restricted our analysis to non-elderly married couples and to a subset of all the taxes paid by Wisconsin residents. Although our study includes consideration of the taxes that provide the lion's share of state government revenue, our inability to assess changes in the distribution of property tax burdens forces us to ignore completely the financing of local governments. The 1979 *Wisconsin Tax Burden Study* provided a rigorous and comprehensive analysis of the distribution of tax burdens in Wisconsin. The influence of that study was felt well beyond the borders of the state. The study provided a model for conducting similar analyses in other states. It is now time to conduct a new, comprehensive study of the distribution of tax burdens in Wisconsin. As we have tried to demonstrate, much has happened since 1974. The distribution of tax burdens has clearly changed since then. In order to make good tax policy in Wisconsin, we need to know much more about who pays taxes in Wisconsin.

NOTES

1. For Example, the DOR study assumes that landlords are able to shift 100 percent of the property tax on residential rental units onto tenants in the form of higher rents. The CTJ-ITEP study assumes that landlords are able to shift only 50 percent of the property tax burden onto tenants.
2. Revenue from the motor fuels excise tax is placed in a separate transportation fund. Thus, the taxes included in this study actually account for more than 88 percent of total state tax collections.
3. The 1974 incomes were adjusted to 1995 dollars by using the Consumer Price Index for All Urban Consumers (CPI-U).
4. Some of the numbers included in Table 2 reflect adjustments made by the authors to average burdens that appeared in the CTJ-ITEP study. An analysis by the Wisconsin Department of Revenue's Division of Research and Analysis found that CTJ-ITEP overestimated the burden of the sales tax of taxpayers in the lowest income quintile. In addition, DOR analysts discovered that the CTJ-ITEP study underestimated the sales and income tax burdens of taxpayers in the highest income quintile. A detailed explanation of the adjustments we made is included in the Appendix.
5. The data in this report on income tax burdens does not take account the homestead property tax credit. We followed the approach of the CTJ-ITEP study, which did not include "circuit breakers" like the homestead tax credit in their calculations of state income tax burdens. Their approach was to include the impact of property tax credits in the calculation of property tax burdens.
6. An examination of the 1986 changes in the marginal tax rates for single filers shows that low-income taxpayers faced increases in their marginal tax rates while upper- and middle-income filers benefited from a decrease in their marginal tax rates. Although all taxpayers benefited from a decrease in their marginal tax rates in 1987, lower income single filers received a relatively small decrease in their tax rate as compared to single filers with higher incomes.
7. Because married couples could not file jointly in Wisconsin before 1986, the 1986 and 1987 tax rates shown in Figure 2 are those for married, separate filers. This equals the marginal income tax rate faced by each married taxpayer that files jointly if their earnings are equal to their spouse's.
8. Income classes in Tables 7 through Table 14 is defined as Wisconsin Adjusted Gross Income (WAGI).

9. Over time, as a larger share of all taxpayers face the top marginal tax rate, the impact of the two-earner "penalty" is diminished.
10. Many of the taxpayers with low (or even negative) incomes that report capital gains are owners of businesses whose reported income is low because of business losses in 1995. Averaged over a period of several years, many of these taxpayers have relatively high incomes.
11. County governments in Wisconsin are authorized to levy a 0.5 percent county sales tax. Between 1986 and 1995, 46 of Wisconsin's 72 counties adopted the one-half cent tax.
12. The motor fuel tax is indexed to reflect changing prices and consumption of motor fuel. A constant fuel tax rate, 23.2 cents per gallon, is multiplied by the change in the CPI-U index over the past year and the ratio of the consumption of motor fuels in the past two years. If consumption increased in the past year, the fuel tax rate decreases, and vice versa. An increase in the CPI-U will increase the fuel tax rate, and vice versa.
13. After accounting for the deductibility of the state income tax, the average burden in the high-income group is much lower (5.7 percent) compared to the average burden for those in the second quintile (7.2 percent).

APPENDIX

Methodology Differences and Study Comparison Adjustments

Methodological Differences

The methodologies used by the *Wisconsin Tax Burden Study* (hereafter referred to as the DOR study) and the Citizens for Tax Justice-Institute on Taxation and Economic Policy study (hereafter referred to as the CTJ-ITEP study) to calculate tax burdens differ in a number of important ways.

- In the CTJ-ITEP study, the sample population was comprised only of non-elderly married couples. In the DOR study, non-elderly and married couples were not analyzed separately.
- Graphs were used to report the income, sales, and excise tax burden figures for each income class in the DOR study. No tables giving the actual average tax rate for each income class were provided. Thus the effective tax rates for income, sales, and excise taxes were approximated from the graphs given in the study. These approximations were made taking into account the distribution of taxpayers within the income classes. For example, the effective tax rates for the taxpayers at the upper end of the bottom 20 percent of the income distribution were more heavily weighted than the tax rates for the poorest taxpayers because of the distribution of taxpayers within that income class.
- The CTJ-ITEP study divided its sample population into income quintiles, while the DOR study used nominal dollar income classes, e.g. \$0 to \$2,000, \$2,000-\$5,000.
- The income measure used in the two studies differs as well. The CTJ uses an income measure that "is based on tax-return total plus income sheltered by various tax-breaks." The DOR study uses a broad income measure, called "economic income." This includes all of the sources of income in the CTJ study as well as other sources of income including imputed rents from home ownership and fringe benefits.

Adjustments

Adjustments were made to some of the tax burdens reported in the CTJ-ITEP study. In particular, the sales tax burden reported for the lowest quintile was unreasonably high. It would have implied that nearly two-thirds of all expenditures by low-income Wisconsin residents were for goods and services subject to the sales tax. A study done by the Wisconsin Department of

Revenue estimates that no more than one-half of spending by low-income families is on sales taxable items. We used the information from an unpublished DOR analysis of the CTJ-ITEP study to make appropriate adjustments to the burden reported in the CTJ-ITEP study. Relying on DOR analysis, we also made upwards adjustments to the sales tax burden for the top five percent of the income distribution.

As explained in the text, in order to compare the DOR and the CTJ-ITEP studies, we needed to make a number of adjustments to the data from the DOR study. These adjustments included the following:

- To make the populations in the two studies consistent with each other, we need to calculate 1974 tax burdens for non-elderly married couples. The number of non-elderly married couples in each income class in the 1979 study was calculated by finding the proportion of non-elderly taxpayers and the proportion of married taxpayers within each income class. The number of non-elderly married families in each income class was determined by using Wisconsin household data from the 1970 census.
- Once we had estimated the number of non-elderly married households in each income class, these observations were then divided into quintiles of income to allow comparison with the CTJ-ITEP study. The actual income for each quintile was approximated by multiplying the percentage of families within an income class required to fill an income quintile by the absolute number of dollars within the intervals of each income class. For example, the bottom twenty percent of non-elderly married couples includes all of the observations in the first income class (\$0 and less), but only a percentage of those in the second income class (\$0 to \$2000). This percentage was multiplied by the dollar interval in the second income class, then added to the beginning income in that class. If 50 percent of the second income class observations were needed to fill the lowest income quintile, then the income definition of that quintile would be "up to \$1000", or $(\$2000)(.5)$.
- Because the income definition used in the 1979 study included non-wage compensation, the income brackets and their corresponding tax rates had to be appropriately adjusted to match the methodology in the CTJ-ITEP study. Using data from the DOR study on fringe benefits as a share of income, fringe benefits were subtracted from income as measured in the DOR report. Tax burdens were adjusted to reflect incomes minus fringe benefits.
- The income, sales, and excise tax burdens reported for all taxpayers were multiplied by an adjustment factor to get an approximation of the tax burden for non-elderly married couples. A

separate multiplier was used for each income class, because the proportion of elderly single taxpayers in each income class is different. The adjustment factor was only applied on tax burdens for three income classes: the bottom 20 percent (1.13), second 20 percent (1.02), and the top 1 percent (1.01). The adjustment factor for all other classes was equal to 1.00.

- These adjustments were weighted by the relative shares of single and elderly taxpayers among all taxpayers. For the bottom 20 percent of the income distribution, the ratio of the married taxpayers' average total tax burden over the total tax burden for non-married taxpayers was equal to 1.24. The ratio of the average tax burden for non-elderly taxpayers over the average tax burden for elderly taxpayers was equal to 1.07. The adjustment figure of 1.13 was selected because 38 percent of the families in the bottom 20 percent of the income distribution had more than one member, while 72 percent of the families in that income class had non-elderly heads of household. These ratios were used to compute the weighted adjustment factor in the following way:

$$((1.24) * (\frac{.38}{.38+.72})) + ((1.07) * (\frac{.72}{.38+.72})) = 1.13$$

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