

2001 Minnesota Tax Incidence Study

(Reflects version as of February 2002)

Who pays Minnesota's household and business taxes?
March 2001

2001 Minnesota Tax Incidence Study

**Who pays Minnesota's household
and business taxes?**

**Minnesota Department of Revenue
Tax Research Division**

March 1, 2001

**The *Tax Incidence Study* is available on the
Department of Revenue's Internet web site at
<http://www.taxes.state.mn.us>**

March 1, 2001

To the Members of the Legislature of the State of Minnesota:

I am pleased to transmit to you the sixth Minnesota Tax Incidence Study undertaken by the Department of Revenue in response to Minnesota Statutes, Section 270.0682 (Laws of 1990, Chapter 604, Article 10, Section 9).

This version of the incidence study report builds on past studies and provides new information regarding tax incidence. Previous studies have estimated how the burden of state and local taxes was distributed across income groups from a historic perspective. This study does that by displaying the burden of state and local taxes across income groups in 1998. It includes 98 percent of Minnesota taxes paid, those paid by business as well as those paid by individuals. The study answers the important question: "Who pays Minnesota's taxes?" It reports detailed information on the household characteristics and tax burdens of Minnesota taxpayers.

Two new features have been added to this study. The first is to estimate the tax incidence across income groups for state and local taxes for 2003. By forecasting incidence into the future, it is possible to give policy makers a view of the state and local tax system that reflects tax law changes enacted into law to date. Prior studies that concentrated on history did not reflect the most recent changes to Minnesota's tax system. In order to provide this information, a forecast of future economic conditions was required. This version of the report contains a forecast that is consistent with the November, 2000 economic outlook from the Department of Finance. As such, we plan on updating this study to reflect significant changes contained in the most current economic outlook.

The second change in the study is to include estimates of effective tax rates for business sectors in Minnesota's economy. This allows the tax system to be compared across industries by the major state and local taxes. The calculations are provided for both 1998 and 2003. Updates for 2003 will follow the same update schedule.

The information presented here can be used to evaluate the fairness of Minnesota's tax system. It should also be valuable in considering any future changes in Minnesota's tax structure.

Minnesota Statutes, Section 3.197, specifies that a report to the Legislature must include the cost of its preparation. The approximate cost of preparing this report was \$75,000.

Sincerely,

Matthew G. Smith
Commissioner

Executive Summary

This report shows the distribution of calendar year 1998 Minnesota state and local taxes in relation to taxpayer income, along with projections to calendar year 2003. It answers the question, “Who pays Minnesota’s taxes?” The major objective is to provide taxpayers and policymakers with important information on the equity or fairness of the overall distribution of Minnesota taxes. This is the sixth biennial tax incidence study prepared in response to the statutory requirement adopted by the 1990 legislature. This edition of the study includes, for the first time, an analysis of taxes initially imposed on businesses by industry sector.

Scope of the Study

Nine categories of state taxes and the local property tax are included in the incidence study:

- ✍ Individual and corporate income taxes
- ✍ Sales and use taxes, including sales tax on motor vehicles
- ✍ Property taxes for homeowners, renters, and businesses
- ✍ Excise taxes on tobacco, alcohol, and gasoline
- ✍ Insurance premiums taxes
- ✍ Motor vehicle registration taxes
- ✍ Gambling taxes
- ✍ MinnesotaCare taxes
- ✍ Mortgage and deed taxes

This report includes taxes with an initial impact on businesses, such as the corporate franchise tax and the sales tax on business purchases, as well as taxes imposed directly on individuals. For 1998, the study includes \$11.7 billion of state taxes, (99 percent of all state taxes) and \$4.4 billion of local taxes (95 percent of all local taxes). Together, the \$16.1 billion of total state and local taxes on individuals and businesses in this study accounts for 98 percent of all Minnesota taxes collected in 1998.

In this report, tax burdens are measured by effective tax rates — the ratio of taxes paid to a taxpayer’s comprehensive money income. Effective tax rates are reported for households at different income levels. All taxpayers are ranked by income level and are then grouped by population deciles; each population decile includes 10 percent of the state’s households. For example, the first decile includes

the 10 percent of Minnesota households with the lowest incomes; the tenth decile includes the 10 percent of households with the highest incomes. The pattern of effective tax rates by income level describes the distribution of the tax burden. If effective tax rates fall as income rises, the burden of a tax is *regressive*; if effective tax rates are constant across income levels, a tax is *proportional*. A tax is *progressive* if effective tax rates rise with income levels.

The comprehensive money income measure used in this study includes both income subject to the Minnesota individual income tax and nontaxable sources of income such as public assistance payments, tax-exempt interest, and nontaxable social security and pension income. Importantly, the study covers the entire population of taxpayers in the state, including low income individuals and families who are not required to file tax returns.

The *incidence* of a tax identifies the final resting place of the tax burden. Incidence can be quite different from the initial impact of a tax, which is usually prescribed by statute in terms of who is legally required to pay the tax. Incidence differs from initial impact when the tax is ultimately shifted to others. For example, landlords may shift a significant part of the local property tax to renters in the form of higher rents, or the corporate franchise tax may be partly absorbed by workers through lower wages.

The results of an incidence study are sensitive to the economic assumptions about who ultimately pays each type of tax. This report describes the incidence assumptions used to estimate how Minnesota taxes with an initial impact on businesses are shifted to major taxpayer groups: Minnesota consumers, Minnesota workers, Minnesota landowners and investors, and nonresident taxpayers. Taxes paid by each Minnesota group are then assigned to individual taxpayers to determine the overall distribution of state and local taxes paid by Minnesota residents.

Distribution of State and Local Taxes

The major findings in this study are summarized in *Tables 1 and 2* and highlighted in *Figures 1* through *2*. The results show that the state and local tax system had some progressivity in the lower to middle deciles and some regressivity in the middle to upper deciles. For 1998, effective tax rates rose from 10.8 percent in the third decile to 13.1 percent in the sixth decile, declined to 12.5 percent in the ninth decile, and then fell to 10.6 percent in the tenth decile. This pattern was generally similar for the projections to 2003, however, the overall rates for 2003 were lower because of tax reductions enacted during the 1999 and 2000 legislative sessions.

Table 1
Minnesota Effective Tax Rates for 1998 and 2003
State and Local Taxes by
Population Decile

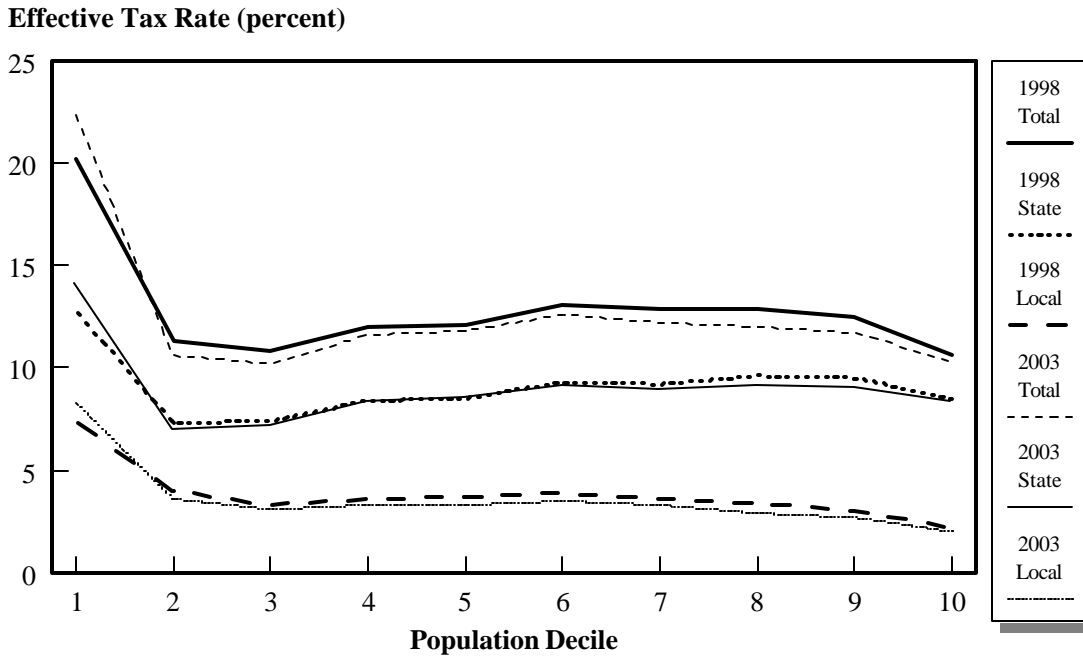
| Decile | 1998 | | | 2003 | | |
|---------|-------|-------|-------|-------|-------|-------|
| | State | Local | Total | State | Local | Total |
| First | 12.8% | 7.4% | 20.2% | 13.7% | 8.3% | 22.0% |
| Second | 7.3 | 4.0 | 11.3 | 6.8 | 3.6 | 10.4 |
| Third | 7.4 | 3.3 | 10.8 | 6.9 | 3.1 | 10.0 |
| Fourth | 8.4 | 3.6 | 12.0 | 8.1 | 3.3 | 11.4 |
| Fifth | 8.5 | 3.7 | 12.1 | 8.3 | 3.3 | 11.7 |
| Sixth | 9.3 | 3.9 | 13.1 | 9.0 | 3.6 | 12.6 |
| Seventh | 9.2 | 3.6 | 12.9 | 8.8 | 3.3 | 12.1 |
| Eighth | 9.6 | 3.4 | 12.9 | 9.0 | 3.0 | 11.9 |
| Ninth | 9.5 | 3.0 | 12.5 | 8.9 | 2.8 | 11.6 |
| Tenth | 8.5 | 2.2 | 10.6 | 8.3 | 2.0 | 10.3 |
| Total | 8.9% | 2.9% | 11.8% | 8.5% | 2.7% | 11.2% |

Table 2
Minnesota Effective Tax Rates for 1998 and 2003
Individual and Business Taxes by Population Decile

| Decile | 1998 | | | 2003 | | |
|---------|------------|----------|-------|------------|----------|-------|
| | Individual | Business | Total | Individual | Business | Total |
| First | 11.4% | 8.8% | 20.2% | 12.6% | 9.4% | 22.0% |
| Second | 6.7 | 4.5 | 11.3 | 6.5 | 3.9 | 10.4 |
| Third | 7.1 | 3.7 | 10.8 | 6.8 | 3.2 | 10.0 |
| Fourth | 8.2 | 3.8 | 12.0 | 8.3 | 3.2 | 11.4 |
| Fifth | 8.8 | 3.3 | 12.1 | 8.8 | 2.8 | 11.7 |
| Sixth | 9.8 | 3.4 | 13.1 | 9.6 | 3.0 | 12.6 |
| Seventh | 9.8 | 3.1 | 12.9 | 9.5 | 2.6 | 12.1 |
| Eighth | 10.0 | 3.0 | 12.9 | 9.5 | 2.4 | 11.9 |
| Ninth | 9.9 | 2.6 | 12.5 | 9.4 | 2.2 | 11.6 |
| Tenth | 8.7 | 2.0 | 10.6 | 8.6 | 1.6 | 10.3 |
| Total | 9.1% | 2.7% | 11.8% | 8.9% | 2.3% | 11.2% |

The Suits Index, a summary measure of the average degree of progressivity or regressivity across all deciles, was -0.04 for 1998. This suggests that the tax system overall was a little regressive, with the progressivity in the lower deciles largely offsetting the regressivity in the upper deciles. However, effective tax rates showed some variation by income level. Aside from the high tax rates in the first decile (discussed below), it is generally a pattern of rising and then falling tax rates that is most noticeable in *Figure 1*.

Figure 1
Effective Tax Rates for 1998 and 2003
State and Local Taxes by Population Decile

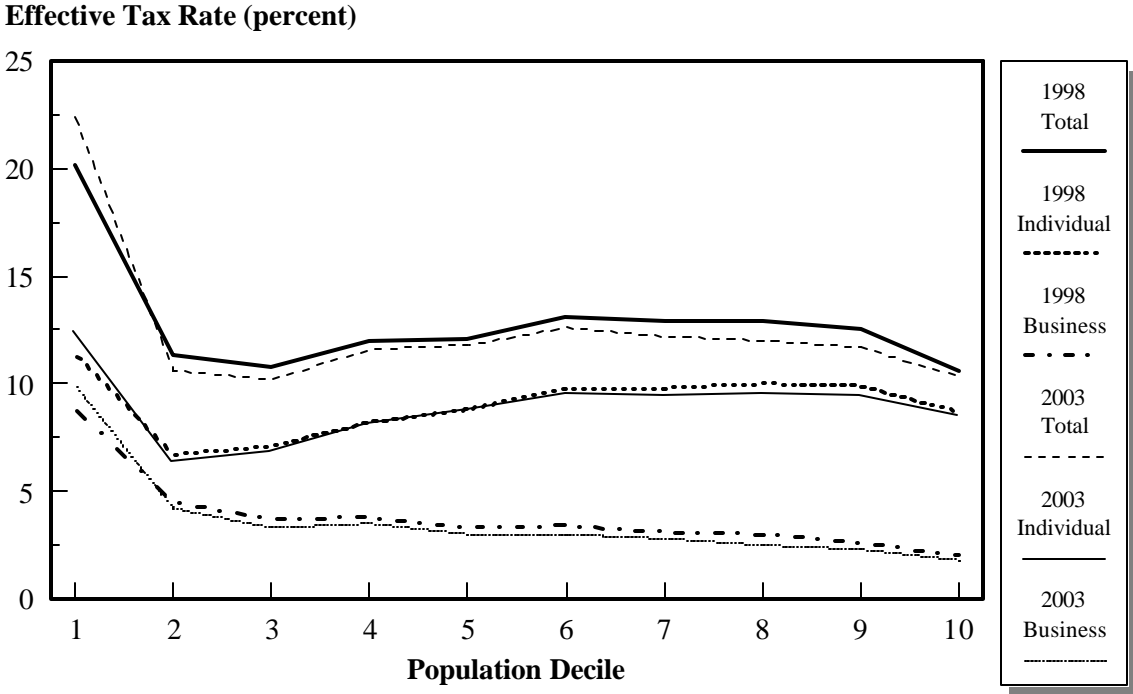


Overall, Minnesota residents paid an estimated 11.8 percent of their 1998 total income in state and local taxes; this declined to 11.2 percent for the 2003 projections. (As discussed later, tax law changes that were adopted reduced state and local taxes after 1998.) For 1998, the effective tax rate was 8.9 percent for state taxes and 2.9 percent for local taxes. Taxpayers in the second through tenth deciles pay 98 percent of the taxes included in the study. Because the information for the first decile includes data anomalies and measurement limitations discussed in the study, effective tax rates for the first decile should be viewed with caution.

As shown in *Figure 1*, state tax burdens and local tax burdens were distributed quite differently. Total state taxes for 1998 (individual and business combined) were slightly regressive overall, with effective tax rates generally rising from 7.3 percent in the second decile to 9.6 percent in the eighth decile before falling to 8.5 percent in the tenth decile. Local property taxes (net of refunds), showed some variation between the second and ninth decile, declined in the tenth decile, and were regressive overall.

As shown in *Figure 2*, the pattern of effective rates for taxes paid by individuals versus businesses were also distributed quite differently. For 1998, effective rates for taxes paid by individuals increased from 6.7 percent in the second decile to 10.0 percent in the eighth decile, and then declined to 8.7 percent in the tenth decile. *Figure 2* indicates that Minnesota state and local taxes on businesses after shifting to Minnesota citizens are regressive, with effective tax rates for 1998 falling from 4.5 to 2.0 percent between the second and tenth deciles. The overall effective rate for taxes on businesses after shifting was 2.7 percent in 1998. For the projections to 2003, the overall effective tax rate on individuals declined to 8.9% and to 2.3% on businesses.

Figure 2
Effective Tax Rates for 1998 and 2003
Individual and Business Taxes by Population Decile



Effective Tax Rates By Industrial Sector

Background

One element of interest to policy makers is the burden a tax system places on business. While the old saying that “businesses don’t pay taxes, people do” is essentially true, the issue of tax burden on business is important in a competitive market place which is increasingly global in scope. In order to examine the issue in Minnesota, the following analysis has been included in the tax incidence report.

One of the first steps in doing the tax incidence study is to estimate how much of the initial tax burden for each revenue source falls on business. The results of allocating revenue sources between business, households and non-residents is contained in *Table C-1*. The 1998 split between business and households is 63% for households and 34% for business, with the remaining amount being paid by non-Minnesota residents. Because the taxes paid by state and local government are contained in the business portion, for purposes of this analysis they have been subtracted. This lowers what is now the private sector business portion of Minnesota levied taxes to 33%. The comparable figure estimated for 2003 is 31%. By taking these private sector amounts and allocating each of the separate taxes analyzed in this study, it is possible to calculate the total tax burden by the major industrial sectors in Minnesota’s economy for the taxes contained in this study (see *Table 1-1* for a listing of taxes contained and omitted in the study).

The next step in calculating the effective tax rates is to select a common measure for a tax base across industry sectors so that a meaningful comparison can be made. This is necessary because of the diverse number of bases that are involved in Minnesota’s tax system. For example, property tax is computed on a value concept while sales tax is tied to a selling price and corporate income tax is computed on a measure of profit. The common base used in this analysis is the total output associated with each sector of the state’s economy. One adjustment to the agricultural standard industrial sector output measures is necessary to allow meaningful analysis of Minnesota’s farm output. Output from the farm sector is combined with non-durable manufacturing in the gross state product measurement framework. Because Minnesota’s tax system contains taxes specifically oriented towards farms, this adjustment is necessary.

The source of the output figures are estimates produced by the U.S. Department of Commerce for 1998 and a forecast for 2003 was made using the REMI (footnote) model for Minnesota. The resulting effective tax rate is most similar to a gross receipts tax and represents all of the taxes levied by Minnesota which fall initially on each business sector. *Tables D-1* and *D-2* contain the results of these calculations

Summary of Effective Tax Rates by Industry

The overall effective tax rate on Minnesota's businesses was 2.01% in 1998 and is estimated to fall to 1.82% by 2003. One reason for this can be traced to business tax reductions that go into effect during the five year period between 1998 and 2003. Changes include a fully phased in capital equipment exemption, a change in apportionment for the corporate income tax and property tax changes aimed at business property. Approximately half of all business tax burden comes from property taxes. Sales and use is second followed by corporate income tax which is a distance third.

Another more fundamental reason for the decline in the overall effective tax rate is the strength of the Minnesota economy. The rapid expansion in economic growth, due in part to productivity increases, has allowed the value of the state's output to exceed expected tax receipts. This has contributed to the estimated decline in the effective tax rate on business.

On a sector basis in 1998 the highest effective tax rate of 3.35% belongs to Transportation Communication and Public Utilities (TCPU). The utility portion of the property tax is one of the reasons for the relatively high effective tax rate. At the opposite end of the spectrum is the Finance Insurance and Real Estate (FIRE) sector which has an effective tax rate of 1.37%. It should be noted that the estimate for the mining industry does not include the Taconite Production Tax because that tax is not a part of the tax incidence study. The effective tax rate for that industry would go from one of the lowest for any sector to the highest.

The following chart contains the ten industrial sectors with their effective tax rates for 1998 and 2003.

Figure 3
Effective Tax Rates by Industry

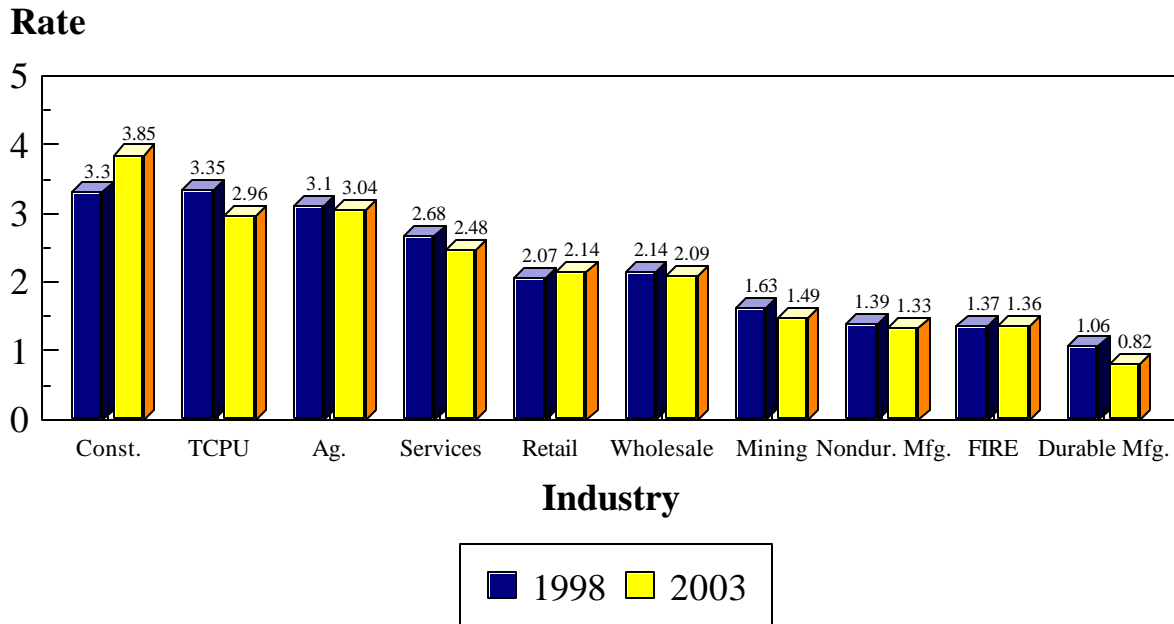


Table D-1 contains the contribution that each tax makes to the overall effective tax rate on Minnesota's industries in 1998.

Table 3
Effective 1998 Rates by Tax

| Tax | Effective Rate |
|---------------------|-----------------------|
| Corporate Franchise | 0.29% |
| General Sales | 0.53 |
| MV Sales | 0.05 |
| Motor Fuels | 0.08 |
| Ins. Premiums | 0.02 |
| Mtg./Deed | 0.02 |
| Property Tax | 1.01 |
| Commercial | 0.42 |
| Industrial | 0.16 |
| Farm | 0.10 |
| Utility | 0.12 |
| Rental | 0.17 |
| MV Reg. | 0.04 |
| Total | 2.0% |

Table of Contents

| | |
|---|----|
| Overview of the Tax Incidence Study | 1 |
| Minnesota State and Local Tax Collections | 1 |
| Tax Law Changes Beyond 1998..... | 5 |
| Measurement of Household Income | 5 |
| The Incidence Study Database..... | 6 |
| Tax Incidence Projections to 2003..... | 6 |
| Summary of Results | 9 |
| The Total Tax Burden..... | 9 |
| Overall Effective Tax Rates | 12 |
| Effective Tax Rates by Type of Tax | 17 |
| Effective Tax Rates in the First Decile | 22 |
| The Suits Index | 23 |
| An Alternative Presentation: Income Deciles | 24 |
| An Alternative Methodology: Adjusting for the Federal Tax Offset..... | 27 |
| Appendix | 31 |
| Tax Incidence Analysis..... | 31 |
| Taxes on Households..... | 33 |
| Taxes on Business..... | 36 |
| Allocation of Business Taxes: An Example | 40 |
| Business Tax Allocators | 47 |
| Estimating the Impact of a Change in Business Taxes | 48 |
| Appendix Tables | 49 |
| Supplement | 77 |
| Incidence Effects of Tax Law Changes Made in the 2001 Legislative Session..... | 77 |
| Supplement Tables | 79 |
| Legislative Mandate | 91 |

List of Tables and Figures

Tables

Overview of the Tax Incidence Study

| | | |
|-----|--|---|
| 1-1 | Minnesota State and Local Tax Collections in 1998..... | 2 |
| 1-2 | 1998 State and Local Tax Collections by Type of Tax and Taxpayer Category..... | 3 |
| 1-3 | 2003 State and Local Tax Collections by Type of Tax and Taxpayer Category..... | 4 |

Summary of Results

| | | |
|-----|--|----|
| 2-1 | 1998 Distribution of Households, Income and Taxes, by Population Decile | 11 |
| 2-2 | 1998 Percent Distribution of Burden by Tax Type within Population Deciles..... | 13 |
| 2-3 | 1998 Effective Tax Rates by Population Decile (All Taxpayers)..... | 14 |
| 2-4 | 2003 Effective Tax Rates by Population Decile (All Taxpayers)..... | 15 |
| 2-5 | Suits Indexes for Minnesota State and Local Taxes | 23 |
| 2-6 | Distribution of Households, Income, and Taxes by Income Decile | 25 |
| 2-7 | 1998 Effective Tax Rates by Income Decile (All Taxpayers)..... | 26 |
| 2-8 | Impact of Federal Tax Offset on Effective State and Local Tax Rates by Population Decile | 29 |

Tables

Appendix A: 1998 State and Local Taxes

A-1 (a) Tax Collection Amounts - Population Deciles 51

A-1 (b) State and Local Tax Burden Amounts by Population Decile 52

A-1 (c) Effective Tax Rates by Population Decile 53

A-2 (a) Tax Collections Amounts - Income Deciles 55

A-2 (b) State and Local Tax Burden Amounts by Income Decile 56

A-2 (c) Effective Tax Rates by Income Decile 57

A-3 CY 1998 Business Taxes Imposed by Sector..... 58

*Appendix B: 2003 State and Local Taxes, Law Prior to 2001
Legislative Session*

B-1 (a) Tax Collections Amounts - Pre-2001 Session - Population Decile..... 59

B-1 (b) State and Local Tax Burden Amounts by Population Decile 60

B-1 (c) Effective Rates by Population Decile..... 61

B-2 (a) Tax Collection Amounts - Pre-2001 Session - Income Decile 63

B-2 (b) State and Local Tax Burden Amounts by Income Decile 64

B-2 (c) Effective Rates by Income Decile 65

B-3 CY 2003 Business Taxes Imposed by Sector..... 67

Tables

Appendix C: State and Local Taxes by Type of Housing, 1998

C-1 (a) State and Local Tax Burden Amounts
by Population Decile for Homeowners..... 68

C-1 (b) Effective Rates by Population Decile for Homeowners..... 69

C-2 (a) State and Local Tax Burden Amounts
By Population Decile for Renters 70

C-2 (b) Effective Rates by Population Decile for Renters 71

C-3 (a) State and Local Tax Burden Amounts
By Population Decile for Others..... 72

C-3 (b) Effective Rates by Population Decile for Others..... 73

Appendix D: Household Characteristics and Taxes by Type of Household, 1998

D-1 Households Characteristics and Average Tax Burden Amounts
by Population Decile - Singles and Married Couples Without
Children (Except Retired) 74

D-2 Households Characteristics and Average Tax Burden Amounts
by Population Decile - Single Parent Families and Married
Couples with Children 75

D-3 Households Characteristics and Average Tax Burden Amounts
by Population Decile - Retired Singles and Married Couples 76

Tables

*Supplement: 2003 State and Local Taxes, Law After 2001
Legislative Session*

S-1(a) Tax Collection Amounts - 2001 Session Final Law
- Population Decile 81

S-1 (b) State and Local Tax Burden amounts by Population Decile 82

S-1 (c) Effective Rates by Population Decile 83

S-2 (a) Tax Collection Amounts - 2001 Session Final Law
- Income Deciles 85

S-2 (b) State and Local Tax Burden Amounts by Income Decile 86

S-2 (c) Effective Rates by Income Decile 87

S-3 CY 2003 Business Taxes Imposed by Sector - New Levels Due
2001 Session Law - February 2001 Forecast..... 88

S-4 Taxes Collection Comparison - Differences Due to
2001 Legislative Session..... 89

S-5 Taxes Imposes by Business Sector - Differences due to
2001 Session Law Changes 90

Figures

Summary of Results

2-1 1998 Distribution of Minnesota State and Local
Tax Burdens by Tax..... 10

2-2 Effective Tax Rates for 1998 and 2003
State and Local Taxes by Population Decile..... 16

2-3 Effective Tax Rates for 1998 and 2003
Individual and Business Taxes by Population Decile 17

2-4 1998 Effective Tax Rates by Tax Type by Population Decile..... 18

2-5 Effective Tax Rates in 1998
With and Without Federal Tax Offset 29

Appendix

3-1 Estimating Tax Incidence..... 32

3-2 Incidence of a Hypothetical \$120 Million Tax on Capital 41

Overview of the Tax Incidence Study

This study provides estimates of the distribution of state and local taxes among Minnesota households in 1998 and includes projections for 2003. These estimates are based on a stratified random sample of almost 49,000 taxpayers representing over 2.2 million households. The sample is “blown up” to represent the total population, and effective tax rates are reported as a percent of total household income for groups of taxpayers. In determining effective tax rates, taxes are calculated as a percentage of a household’s comprehensive money income.

Minnesota State and Local Tax Collections

Minnesota collected \$16.5 billion in state and local taxes in 1998. Over 70% was collected at the state level; local governments collected the remainder, primarily from property taxes. This study estimates how the burden of those taxes was distributed among the residents of Minnesota, with the primary emphasis on the distribution of tax burdens by income level. The study estimates the regressivity (or progressivity) of the total tax system and each separate tax.

The coverage of this study is summarized in *Table 1-1*. It includes taxes on individuals and businesses accounting for 98 percent of total state and local tax collections (99 percent of state collections and 95 percent of local collections).

Table 1-2 shows the distribution of 1998 total tax revenue included in this study by major type of tax. Taxes on income (individual and corporate) accounted for 37.6 percent of total collections. Taxes on consumption (sales tax, excise taxes, insurance premiums tax, gambling taxes, and MinnesotaCare taxes) combined for 30.8 percent of total collections. Taxes on property (including second homes, the motor vehicle registration tax, and mortgage registration and deed transfer taxes) accounted for 31.6 percent of the total.

Included in *Table 1-2* is the estimated distribution of state and local taxes by taxpayer category, either individual households (resident or nonresident) or businesses. This distribution indicates the initial impact of the taxes by taxpayers legally liable to pay the tax (income and property taxes) or by type of purchaser (consumer taxes).

Table 1-3 shows the distribution of total tax revenue projected for calendar year 2003.

Table 1-1
Minnesota State and Local Tax Collections in 1998
(\$ Millions)

| State | | Local | | Total State and Local |
|----------------------------------|-----------------|--|----------------|-----------------------|
| Included | | Included | | Included |
| Individual income tax | \$5,306 | Gross property taxes (after credits) | | |
| Corporate franchise tax | 765 | Homestead property taxes | \$1,920 | |
| General sales and use tax | 3,342 | Property taxes on second homes | 102 | |
| Sales tax on motor vehicles | 466 | Rental property taxes (residential) | 462 | |
| Motor fuels excise taxes | 563 | Other business property taxes (including farming) | <u>2,126</u> | |
| Alcoholic beverage excise taxes | 58 | Subtotal | \$4,610 | |
| Cigarette & tobacco excise taxes | 192 | Property tax refunds | <u>(182)</u> | |
| Insurance premiums tax | 154 | | | |
| Gambling taxes | 62 | | | |
| MinnesotaCare taxes | 133 | | | |
| Mortgage and deed taxes | 136 | | | |
| Motor vehicle registration tax | <u>532</u> | | | |
| Total | \$11,709 | Total | \$4,428 | \$16,137 |
| Omitted | | Omitted | | Omitted |
| Estate and gift taxes | \$60 | Local sales taxes | \$96 | |
| Mining taxes | 2 | Gross earnings taxes | 40 | |
| Waste Taxes | 46 | Mining production tax | 95 | |
| Other taxes | <u>13</u> | Other taxes | <u>6</u> | |
| Total | \$121 | Total | \$237 | \$358 |
| Total Tax Collections | \$11,830 | Total Tax Collections | \$4,665 | \$16,495 |

Table 1-2
1998 State and Local Tax Collections
By Type of Tax and Taxpayer Category
(\$ Millions)

| Tax Category ¹ | Collections | | Percentage by Taxpayer Category | | | |
|-------------------------------------|-----------------|--------------------------------------|---------------------------------|-------------|--------------|---------------|
| | Total | Percentage Distribution ² | Individuals | | Businesses | Total |
| | | | Resident | Nonresident | | |
| Taxes on Income | | | | | | |
| Individual income tax | \$5,306 | 32.9% | 96.1% | 3.9% | 0.0% | 100.0% |
| Corporate franchise tax | <u>765</u> | <u>4.7</u> | 0.0 | 0.0 | 100.0 | 100.0 |
| Total income taxes | \$6,071 | 37.6% | 84.0% | 3.4% | 12.6% | 100.0% |
| Taxes on Consumption | | | | | | |
| Total general sales | \$3,808 | 23.6% | 52.9% | 3.3% | 43.8% | 100.0% |
| General sales/use | 3,342 | 20.7 | 51.0 | 3.8 | 45.2 | 100.0 |
| Sales tax motor vehicles | 466 | 2.9 | 66.3 | 0.0 | 33.7 | 100.0 |
| Motor fuels excise tax | 563 | 3.5 | 43.9 | 16.2 | 40.0 | 100.0 |
| Alcoholic beverage excise taxes | 58 | 0.4 | 89.7 | 10.3 | 0.0 | 100.0 |
| Cigarette and tobacco excise taxes | 192 | 1.2 | 96.9 | 3.1 | 0.0 | 100.0 |
| Insurance premiums tax | 154 | 1.0 | 57.8 | 0.0 | 42.2 | 100.0 |
| Gambling taxes | 62 | 0.4 | 96.8 | 3.2 | 0.0 | 100.0 |
| MinnesotaCare taxes | <u>133</u> | <u>0.8</u> | 97.0 | 3.0 | 0.0 | 100.0 |
| Total consumption taxes | \$4,970 | 30.8% | 55.9% | 4.7% | 39.4% | 100.0% |
| Taxes on Property | | | | | | |
| <i>Local</i> | | | | | | |
| Homeowners (gross) | \$1,920 | 11.9% | 100.0% | 0.0% | 0.0% | 100.0% |
| Residential rental property (gross) | 462 | 2.9 | 0.0 | 0.0 | 100.0 | 100.0 |
| Total Property tax refunds | (182) | (1.1) | 100.0 | 0.0 | 0.0 | 100.0 |
| Homeowners | (80) | (0.5) | 100.0 | 0.0 | 0.0 | 100.0 |
| Renters | (102) | (0.6) | 100.0 | 0.0 | 0.0 | 100.0 |
| Residential recreational (cabins) | 102 | 0.6 | 80.4 | 19.6 | 0.0 | 100.0 |
| Commercial | 1,126 | 7.0 | 0.0 | 0.0 | 100.0 | 100.0 |
| Industrial | 412 | 2.6 | 0.0 | 0.0 | 100.0 | 100.0 |
| Farms (other than residence) | 272 | 1.7 | 0.0 | 0.0 | 100.0 | 100.0 |
| Utility | <u>316</u> | <u>2.0</u> | 0.0 | 0.0 | 100.0 | 100.0 |
| Total Local | \$4,428 | 27.4% | 41.1% | 0.5% | 58.4% | 100.0 |
| <i>State</i> | | | | | | |
| Motor vehicle registration tax | \$532 | 3.3% | 81.0% | 0.0% | 19.0% | 100.0 |
| Mortgage and deed taxes | <u>136</u> | <u>0.8</u> | 67.6 | 0.0 | 32.4 | 100.0 |
| Total State | \$668 | 4.1% | 78.3% | 0.0% | 21.7% | 100.0 |
| Total property taxes | \$5,096 | 31.6% | 46.0% | 0.4% | 53.6% | 100.0% |
| Total Taxes | \$16,137 | 100.0% | 63.3% | 2.9% | 33.8% | 100.0% |

¹For a description of the various taxes, including tax base, rates and other information, please refer to the Minnesota Tax Handbook which can be located at www.taxes.state.mn.us/reports/reports.html.

²Percent of collections included in this study.

Table 1-3
2003² State and Local Tax Collections
By Type of Tax and Taxpayer Category
(\$ Millions)

| Tax Category | Collections | | Percentage by Taxpayer Category | | | |
|-------------------------------------|-----------------|--------------------------------------|---------------------------------|-------------|--------------|---------------|
| | Total | Percentage Distribution ¹ | Individuals | | Businesses | Total |
| | | | Resident | Nonresident | | |
| Taxes on Income | | | | | | |
| Individual income tax | \$7,379 | 35.0% | 96.1% | 3.9% | 0.0% | 100.0% |
| Corporate franchise tax | <u>951</u> | <u>4.5</u> | 0.0 | 0.0 | 100.0 | 100.0 |
| Total income taxes | \$8,330 | 39.6% | 85.1% | 3.5% | 11.4% | 100.0% |
| Taxes on Consumption | | | | | | |
| Total general sales | \$5,191 | 24.7% | 52.8% | 3.4% | 43.8% | 100.0% |
| General sales/use | 4,578 | 21.7 | 51.0 | 3.8 | 45.2 | 100.0 |
| Sales tax motor vehicles | 613 | 2.9 | 66.4 | 0.0 | 33.6 | 100.0 |
| Motor fuels excise tax | 628 | 3.0 | 43.9 | 16.1 | 40.0 | 100.0 |
| Alcoholic beverage excise taxes | 61 | 0.3 | 90.2 | 9.8 | 0.0 | 100.0 |
| Cigarette and tobacco excise taxes | 180 | 0.9 | 97.2 | 2.8 | 0.0 | 100.0 |
| Insurance premiums tax | 203 | 1.0 | 58.1 | 0.0 | 41.9 | 100.0 |
| Gambling taxes | 62 | 0.3 | 96.8 | 3.2 | 0.0 | 100.0 |
| MinnesotaCare taxes | <u>256</u> | <u>1.2</u> | 97.3 | 2.7 | 0.0 | 100.0 |
| Total consumption taxes | \$6,581 | 31.3% | 55.8% | 4.5% | 39.7% | 100.0% |
| Taxes on Property | | | | | | |
| <i>Local</i> | | | | | | |
| Homeowners (gross) | \$2,524 | 12.0% | 100.0% | 0.0% | 0.0% | 100.0% |
| Residential rental property (gross) | 508 | 2.4 | 0.0 | 0.0 | 100.0 | 100.0 |
| Total Property tax refunds | (206) | (1.0) | 100.0 | 0.0 | 0.0 | 100.0 |
| Homeowners | (79) | (0.4) | 100.0 | 0.0 | 0.0 | 100.0 |
| Renters | (127) | (0.6) | 100.0 | 0.0 | 0.0 | 100.0 |
| Residential recreational (cabins) | 122 | 0.6 | 80.3 | 19.7 | 0.0 | 100.0 |
| Commercial | 1,461 | 6.9 | 0.0 | 0.0 | 100.0 | 100.0 |
| Industrial | 490 | 2.3 | 0.0 | 0.0 | 100.0 | 100.0 |
| Farms (other than residence) | 272 | 1.3 | 0.0 | 0.0 | 100.0 | 100.0 |
| Utility | <u>319</u> | <u>1.5</u> | 0.0 | 0.0 | 100.0 | 100.0 |
| Total Local | \$5,490 | 26.1% | 44.0% | 0.4% | 55.6% | 100.0% |
| <i>State</i> | | | | | | |
| Motor vehicle registration tax | \$492 | 2.3% | 81.1% | 0.0% | 18.9% | 100.0% |
| Mortgage and deed taxes | <u>160</u> | <u>0.8</u> | 67.5 | 0.0 | 32.5 | 100.0 |
| Total State | \$652 | 31% | 77.8% | 0.0% | 22.2% | 100.0% |
| Total property taxes | \$6,142 | 29.2% | 47.6% | 0.4 | 52.0% | 100.0% |
| Total Taxes | \$21,053 | 100.0% | 65.0% | 2.9% | 32.1% | 100.0% |

¹Percent of collections included in this study.

²Based on November 2000 forecast.

Tax Law Changes Beyond 1998

Numerous tax law changes have been adopted since 1998 that have impacted state and local tax collections. Major changes include the following:

- ✍ Individual income tax rates were lowered from 6%/8%/8.5% to 5.5%/7.25%/8% starting tax year 1999. A new marriage penalty credit was also adopted at that time.
- ✍ Income tax rates were further reduced to 5.35%/7.05%/7.85% starting tax year 2000.
- ✍ Motor vehicle registration tax levels were lowered over 30% overall beginning July, 2000.
- ✍ MNCare tax rate was reduced from 2% to 1.5% for calendar years 2000 and 2001.
- ✍ Property tax reductions including:
 - ✍ education homestead credit increases
 - ✍ local aid changes
 - ✍ classification rate changes.

Measurement of Household Income

An appropriate measure of income is critical to any study of tax incidence. By definition, a tax incidence study compares taxes paid to some measure of a household's economic well-being or ability to pay. In this study, tax burdens are expressed as ratios of taxes paid to a broad measure of household money income. This comprehensive measure of money income includes not only income taxable on income tax returns but also nontaxable income, such as public assistance payments, tax-exempt interest, and nontaxable social security and pension income.

The definition of household in this study varies from that used by the Census. There are significantly more households than reported by the Census, and median income is considerably lower as a result. Despite the difference in definition, the count of incidence households is consistent with Census data. The definition used here is more appropriate when describing the distribution of the tax burden.

For a further discussion regarding definitions of households and income, please refer to the 1999 Minnesota Tax Incidence Study which can be located at www.taxes.state.mn.us/reports/reports.html.

The Incidence Study Database

The 1998 incidence study database includes detailed information on income and taxes for a stratified random sample of 48,598 Minnesota households. This sample is then “blown up” to represent over 2.2 million Minnesota households. Individual income tax and property tax refund returns filed with the Department of Revenue were the primary sources of information and were supplemented with data on nontaxable income obtained from alternative sources. The additional nontaxable income information provides a more accurate measure of total income, particularly for low-income households who did not meet tax filing requirements.

The use of social security numbers to merge income data from different sources for specific individuals is a unique and important aspect of this study. Income data was matched, for example, with property tax and market value information for individual homeowners. Because of these “hard matches,” the need to impute estimated values of income and tax variables to households in the database was minimized.

The incidence study database was developed in three steps. First, data was taken from state and federal income tax returns. Second, additional data was taken from property tax refund returns. Third, additional income (social security, unemployment compensation, workers’ compensation, and public assistance) was added from other sources. For further explanation regarding creation of this database and related tax calculations, please refer to the 1999 Tax Incidence Study previously cited. A discussion of methodology and assumptions used to determine the final incidence for each of the taxes is included in the Appendix of this report.

Tax Incidence Projections to 2003

To analyze tax incidence for years beyond 1998 various methods were used to project 1998 data into the future. These projections were accomplished in several ways.

Income - The HITS income tax model contains assumptions, derived from the state economic forecast, about expected growth in each of the various categories of income: wages, interest, pensions etc. These expected growth rates were applied to the amount of each type of income that each household received in 1998. Adding up these components provides an estimate of total income in 2003 for the household. Because the various types of income are assumed to grow at different rates, some households in the model will experience faster income growth than will others. As such, the assignment of a given household to a decile ranking may change.

Population - From 1990-1998 Minnesota households grew by 11.2%. Annualizing this figure implies that over the five years between 1998 and 2003 Minnesota households grew by 6.8%. Therefore, we increase the number of households assumed to be represented by each household in the incidence sample by that percentage.

Taxes - All taxes were adjusted for tax law change that had either gone into effect or, under current law, are scheduled to go into effect. Income tax projections were from the HITS income tax model projections. For the remaining taxes in the study, estimates were produced of total collections based on the most current Department of Finance report, and also divided into tax liabilities imposed directly on Minnesota households, amounts imposed on nonresident households and amounts imposed on business. The business estimates were further disaggregated by economic sector. The business taxes were assumed to be shifted in the same manner as were the corresponding 1998 business taxes. Those taxes imposed directly on households were assumed to be allocated to the various households in the sample in the same way as were the 1998 taxes.

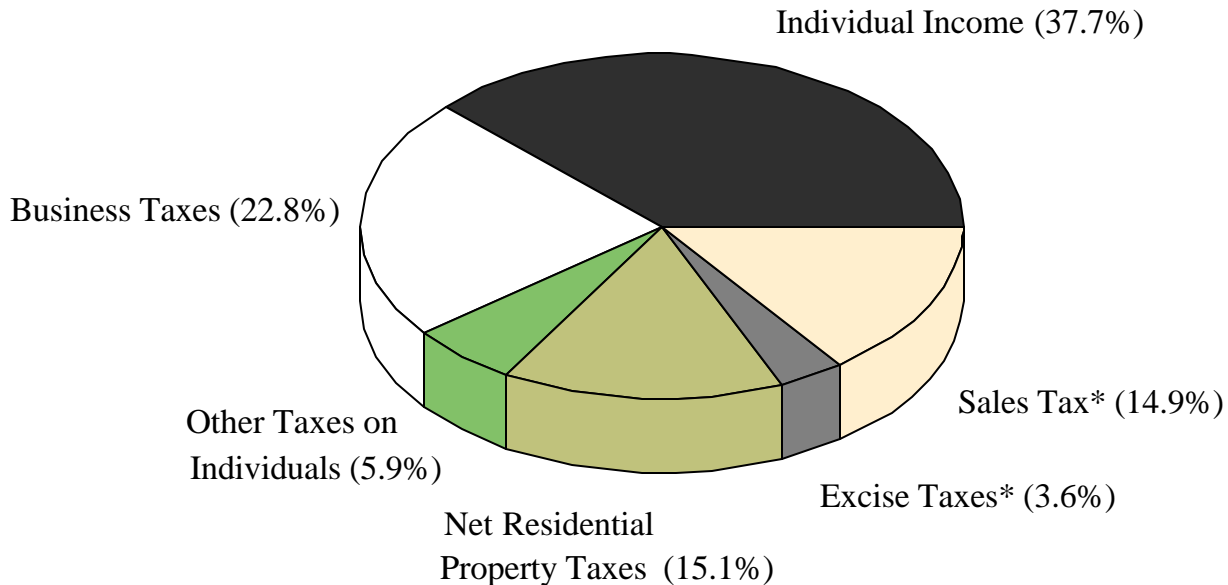
Summary of Results

This section examines the state and local tax burdens imposed on Minnesota taxpayers in 1998, and projections for calendar year 2003. All major taxes are included, those paid by businesses as well as those paid directly by households. The taxes included account for 98 percent of Minnesota state and local tax revenue in 1998. Only Minnesota taxes paid by residents are included in these results; Minnesota taxes paid by nonresidents and taxes paid by Minnesota residents to other states are excluded. For business taxes, the study estimates the extent to which they are shifted forward to Minnesota consumers in higher prices or backward to Minnesota workers in lower wages or to owners of capital in lower returns. The incidence results for the entire system of state and local taxes in Minnesota are reported both in terms of the overall distribution of tax burdens and by tax type.

The Total Tax Burden

For 1998, Minnesota residents paid a total of \$13.52 billion in taxes while earning \$114.6 billion in total money income. Minnesota residents thus paid 11.8 percent of their total income in state and local taxes. As shown in *Figure 2-1*, the individual income tax accounted for over 37% of the total tax burden on Minnesota residents. Residential property taxes and the consumer sales tax (including sales tax on motor vehicles) were 15.1 percent and 14.9 percent of the total, respectively. The three consumer excise taxes (on alcohol, tobacco, and gasoline) accounted for 3.6 percent, while other taxes on individuals (insurance, motor vehicle registration, gambling, MinnesotaCare, and mortgage and deed amounted to 5.9 percent. Business taxes made up for the remaining 22.8 percent of total state and local taxes paid by Minnesota residents.

Figure 2-1
1998 Distribution of Minnesota
State and Local Tax Burdens by Tax



* Consumer portion.

To summarize the distribution of tax burdens by income level, the population of Minnesota households was divided into ten equal-sized groups or *deciles* of households ranked by household income levels. By definition, the first decile includes the 10 percent of households with the lowest income levels and the tenth decile includes the highest-income 10 percent of households. There were approximately 223,000 taxpaying households in each population decile.

Examining the distribution of total tax burden by population decile (ranked by income level), one finds that taxpayers in the top decile (incomes of \$92,346 and over) bore 37.7 percent of the total tax burden while having 41.8 percent of total income. (See *Table 2-1*). By tax type, taxpayers in the top decile paid 53.3 percent of the individual income tax, 26.8 percent of the consumer sales tax, 15.3 percent of the consumer excise taxes, 30.4 percent of the net residential property tax, 26.2 percent of other individual taxes, and 30.4 percent of business taxes.

Table 2-1
1998 Distribution of Households, Income and Taxes, by Population Decile
(\$ Thousands)

| Population Decile | Income Range | Number of Households | Total Household Income | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Taxes ¹ | Other Taxes on Individuals ² | Business Taxes ³ | Total Taxes |
|-------------------|------------------|----------------------|------------------------|-----------------------|--------------------|-----------------------|---|---|-----------------------------|--------------|
| First | \$7,971 & Under | 223,267 | \$1,094,370 | -\$5,507 | \$56,670 | \$24,099 | \$32,950 | \$16,504 | \$96,155 | \$220,872 |
| Second | 7,971 - 13,047 | 223,267 | 2,351,235 | -5,642 | 67,865 | 29,433 | 46,560 | 20,332 | 106,422 | 264,969 |
| Third | 13,047 - 18,550 | 223,267 | 3,540,996 | 16,601 | 95,993 | 39,580 | 66,559 | 31,699 | 130,597 | 381,031 |
| Fourth | 18,550 - 24,885 | 223,267 | 4,813,312 | 88,452 | 123,581 | 43,132 | 94,610 | 45,604 | 180,573 | 575,952 |
| Fifth | 24,885 - 31,890 | 223,267 | 6,317,248 | 176,407 | 140,556 | 43,460 | 143,723 | 53,588 | 209,223 | 766,956 |
| Sixth | 31,890 - 40,645 | 223,267 | 8,060,426 | 284,030 | 187,276 | 49,985 | 189,366 | 76,241 | 272,404 | 1,059,301 |
| Seventh | 40,645 - 51,669 | 223,267 | 10,219,180 | 401,286 | 217,081 | 55,957 | 234,029 | 91,255 | 315,057 | 1,314,666 |
| Eighth | 51,669 - 66,043 | 223,267 | 13,018,657 | 585,782 | 265,911 | 59,304 | 270,365 | 116,061 | 387,195 | 1,684,620 |
| Ninth | 66,043 - 92,346 | 223,267 | 17,300,119 | 842,633 | 318,693 | 65,710 | 344,142 | 140,478 | 446,010 | 2,157,667 |
| Tenth | \$92,346 & Over | 223,267 | 47,895,415 | 2,716,428 | 539,713 | 74,309 | 622,249 | 210,104 | 937,512 | 5,100,315 |
| Total | | 2,232,670 | \$114,610,958 | \$5,100,470 | \$2,013,339 | \$484,969 | \$2,044,553 | \$801,866 | \$3,081,148 | \$13,526,349 |
| Top 5% | \$127,880 & Over | 111,680 | \$36,014,107 | \$2,085,014 | \$351,661 | \$42,360 | \$393,171 | \$130,240 | \$643,676 | \$3,646,122 |
| Top 1% | \$310,014 & Over | 22,358 | 19,774,737 | 1,191,069 | 83,747 | 9,405 | 123,527 | 31,066 | 207,142 | 1,645,956 |

1998 Percentage of Households, Income, and Taxes, by Population Decile

| Population Decile | Income Range | Percent of Households | Percent of Income | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Taxes ¹ | Other Taxes on Individuals ² | Business Taxes ³ | Total Taxes |
|-------------------|------------------|-----------------------|-------------------|-----------------------|--------------------|-----------------------|---|---|-----------------------------|-------------|
| First | \$7,971 & Under | 10.0% | 1.0% | -0.1% | 2.8% | 5.0% | 1.6% | 2.1% | 3.1% | 1.6% |
| Second | 7,971 - 13,047 | 10.0 | 2.1 | -0.1 | 3.4 | 6.1 | 2.3 | 2.5 | 3.5 | 2.0 |
| Third | 13,047 - 18,550 | 10.0 | 3.1 | 0.3 | 4.8 | 8.2 | 3.3 | 4.0 | 4.2 | 2.8 |
| Fourth | 18,550 - 24,885 | 10.0 | 4.2 | 1.7 | 6.1 | 8.9 | 4.6 | 5.7 | 5.9 | 4.3 |
| Fifth | 24,885 - 31,890 | 10.0 | 5.5 | 3.5 | 7.0 | 9.0 | 7.0 | 6.7 | 6.8 | 5.7 |
| Sixth | 31,890 - 40,645 | 10.0 | 7.0 | 5.6 | 9.3 | 10.3 | 9.3 | 9.5 | 8.8 | 7.8 |
| Seventh | 40,645 - 51,669 | 10.0 | 8.9 | 7.9 | 10.8 | 11.5 | 11.4 | 11.4 | 10.2 | 9.7 |
| Eighth | 51,669 - 66,043 | 10.0 | 11.4 | 11.5 | 13.2 | 12.2 | 13.2 | 14.5 | 12.6 | 12.5 |
| Ninth | 66,043 - 92,346 | 10.0 | 15.1 | 16.5 | 15.8 | 13.5 | 16.8 | 17.5 | 14.5 | 16.0 |
| Tenth | \$92,346 & Over | 10.0 | 41.8 | 53.3 | 26.8 | 15.3 | 30.4 | 26.2 | 30.4 | 37.7 |
| Total | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Top 5% | \$127,880 & Over | 5.0% | 31.4% | 40.9% | 17.5% | 8.7% | 19.0% | 16.2% | 20.9% | 27.0% |
| Top 1% | \$310,014 & Over | 1.0% | 17.3 | 23.4 | 4.2 | 1.9 | 6.0 | 3.9 | 6.7 | 12.2 |

NOTES:

¹ Net of renters' property tax refunds. Includes only the renter's share of rental property tax.

² Other taxes include individual motor vehicle registration tax, insurance premiums tax on personal insurance, gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes paid by homeowners.

³ Includes the landlord's share of rental property taxes.

In contrast, taxpayers in the bottom decile (incomes of \$7,971 and below) bore 1.6 percent of the total tax burden and received only 1.0 percent of total income. The bottom decile taxpayers had a negative net individual income tax burden due to the refundable working family credit and the child and dependent care credit. The same households paid 2.8 percent of the consumer sales tax, 5.0 percent of the consumer excise taxes, 1.6 percent of net residential property tax, 2.1 percent of other individual taxes, and 3.1 percent of business taxes.

Table 2-2 summarizes the distribution of the total burden by tax type for each decile. Business taxes, residential property taxes, and the consumer sales tax accounted for the largest percentage of taxes paid in the lowest deciles. Because of the refundable tax credits, the income tax burden in the first decile was negative. In the top deciles, income tax contributed the largest share of taxes paid, with 53.3 percent of the total tax in the tenth decile coming from the income tax. Almost a fifth of the top decile's tax burden came from business taxes.

Overall Effective Tax Rates

To evaluate the fairness or equity in the distribution of tax burdens by income level, tax burdens must be compared to the underlying distribution of income. This section examines this relationship in more detail.

A key measure used to analyze tax equity is the effective tax rate, which is defined as the ratio of taxes to income. Effective tax rates measure the percentage of income paid in taxes and can be compared for different levels of income. The distribution of tax burdens is characterized as progressive if the effective tax rate rises with income, proportional if it is constant for all income levels, or regressive if it falls as income rises.

Effective tax rates by tax type are reported in *Tables 2-3* and *2-4* and in more detail in the Appendices and in the Supplement, pages 51-90. *Figure 2-2* shows overall effective tax rates for Minnesota's state and local tax system and summarizes the most important findings in this study. The effective tax rate is shown on the vertical axis of the figure; population deciles are shown on the horizontal axis (each decile containing 10 percent of total taxpayers).

Table 2-2
1998 Percent Distribution of Burden
by Tax Type within Population Deciles

| Population Decile | Number of Households | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Tax (Net of Refunds) | Other Taxes on Individuals | Business Taxes | Total Taxes |
|--------------------------|-----------------------------|------------------------------|---------------------------|------------------------------|--|-----------------------------------|-----------------------|--------------------|
| First | 223,267 | -2.5% | 25.7% | 10.9% | 14.9% | 7.5% | 43.5% | 100.0% |
| Second | 223,267 | -2.1 | 25.6 | 11.1 | 17.6 | 7.7 | 40.2 | 100.0 |
| Third | 223,267 | 4.4 | 25.2 | 10.4 | 17.5 | 8.3 | 34.3 | 100.0 |
| Fourth | 223,267 | 15.4 | 21.5 | 7.5 | 16.4 | 7.9 | 31.4 | 100.0 |
| Fifth | 223,267 | 23.0 | 18.3 | 5.7 | 18.7 | 7.0 | 27.3 | 100.0 |
| Sixth | 223,267 | 26.8 | 17.7 | 4.7 | 17.9 | 7.2 | 25.7 | 100.0 |
| Seventh | 223,267 | 30.5 | 16.5 | 4.3 | 17.8 | 6.9 | 24.0 | 100.0 |
| Eighth | 223,267 | 34.8 | 15.8 | 3.5 | 16.0 | 6.9 | 23.0 | 100.0 |
| Ninth | 223,267 | 39.1 | 14.8 | 3.0 | 15.9 | 6.5 | 20.7 | 100.0 |
| Tenth | 223,267 | 53.3 | 10.6 | 1.5 | 12.2 | 4.1 | 18.4 | 100.0 |
| Total | 2,232,670 | 37.7% | 14.9% | 3.6% | 15.1% | 5.9% | 22.8% | 100.0% |
| Top 5% | 111,680 | 57.2% | 9.6% | 1.2% | 10.8% | 3.6% | 17.7% | 100.0% |
| Top 1% | 22,358 | 72.4 | 5.1 | 0.6 | 7.5 | 1.9 | 12.6 | 100.0 |

Table 2-3
1998 Effective Tax Rates by Population Decile
(All Taxpayers)

| Population Decile | Number of Households | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Tax¹ | Other Taxes on Individuals² | Total Individual Taxes | Business Taxes³ | Total Taxes |
|--------------------------|-----------------------------|------------------------------|---------------------------|------------------------------|---|---|-------------------------------|-----------------------------------|--------------------|
| First | 223,267 | -0.5% | 5.2% | 2.2% | 3.0% | 1.5% | 11.4% | 8.8% | 20.2% |
| Second | 223,267 | -0.2 | 2.9 | 1.3 | 2.0 | 0.9 | 6.7 | 4.5 | 11.3 |
| Third | 223,267 | 0.5 | 2.7 | 1.1 | 1.9 | 0.9 | 7.1 | 3.7 | 10.8 |
| Fourth | 223,267 | 1.8 | 2.6 | 0.9 | 2.0 | 0.9 | 8.2 | 3.8 | 12.0 |
| Fifth | 223,267 | 2.8 | 2.2 | 0.7 | 2.3 | 0.8 | 8.8 | 3.3 | 12.1 |
| Sixth | 223,267 | 3.5 | 2.3 | 0.6 | 2.3 | 0.9 | 9.8 | 3.4 | 13.1 |
| Seventh | 223,267 | 3.9 | 2.1 | 0.5 | 2.3 | 0.9 | 9.8 | 3.1 | 12.9 |
| Eighth | 223,267 | 4.5 | 2.0 | 0.5 | 2.1 | 0.9 | 10.0 | 3.0 | 12.9 |
| Ninth | 223,267 | 4.9 | 1.8 | 0.4 | 2.0 | 0.8 | 9.9 | 2.6 | 12.5 |
| Tenth | 223,267 | 5.7 | 1.1 | 0.2 | 1.3 | 0.4 | 8.7 | 2.0 | 10.6 |
| Total | 2,232,670 | 4.5% | 1.8% | 0.4% | 1.8% | 0.7% | 9.1% | 2.7% | 11.8% |
| Top 5% | 111,680 | 5.8% | 1.0% | 0.1% | 1.1% | 0.4% | 8.3% | 1.8% | 10.1% |
| Top 1% | 22,358 | 6.0 | 0.4 | 0.0 | 0.6 | 0.2 | 7.3 | 1.0 | 8.3 |

NOTES:

¹ Net of renters' property tax refunds. Includes only the renter's share of rental property taxes.

² Other taxes include individual motor vehicle registration tax, insurance premiums tax on personal insurance, gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes on homes.

³ Includes the landlord's share of rental property taxes.

Table 2-4
2003 Effective Tax Rates by Population Decile
(All Taxpayers)

| Population Decile | Number of Households | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Tax ¹ | Other Taxes on Individuals ² | Total Individual Taxes | Business Taxes ³ | Total Taxes |
|-------------------|----------------------|-----------------------|--------------------|-----------------------|---------------------------------------|---|------------------------|-----------------------------|-------------|
| First | 238,449 | -0.7% | 6.0% | 1.9% | 3.9% | 1.6% | 12.6% | 9.4% | 22.0% |
| Second | 238,449 | -0.3 | 3.0 | 1.0 | 2.1 | 0.8 | 6.5 | 3.9 | 10.4 |
| Third | 238,449 | 0.5 | 2.7 | 0.8 | 2.0 | 0.8 | 6.8 | 3.2 | 10.0 |
| Fourth | 238,449 | 2.2 | 2.5 | 0.7 | 2.1 | 0.8 | 8.3 | 3.2 | 11.4 |
| Fifth | 238,449 | 3.1 | 2.2 | 0.5 | 2.3 | 0.8 | 8.8 | 2.8 | 11.7 |
| Sixth | 238,449 | 3.7 | 2.2 | 0.5 | 2.4 | 0.8 | 9.6 | 3.0 | 12.6 |
| Seventh | 238,449 | 4.0 | 2.0 | 0.4 | 2.3 | 0.8 | 9.5 | 2.6 | 12.1 |
| Eighth | 238,449 | 4.4 | 1.9 | 0.3 | 2.1 | 0.8 | 9.5 | 2.4 | 11.9 |
| Ninth | 238,449 | 4.7 | 1.8 | 0.3 | 2.0 | 0.7 | 9.4 | 2.2 | 11.6 |
| Tenth | 239,667 | 5.7 | 1.1 | 0.1 | 1.4 | 0.4 | 8.6 | 1.6 | 10.3 |
| Total | 2,385,708 | 4.5% | 1.7% | 0.3% | 1.8% | 0.6% | 8.9% | 2.3% | 11.2% |
| Top 5% | 120,514 | 5.5% | 1.0% | 0.1% | 1.2% | 0.3% | 8.1% | 1.5% | 9.6% |
| Top 1% | 25,065 | 5.7 | 0.4 | 0.0 | 0.7 | 0.1 | 7.0 | 0.9 | 7.9 |

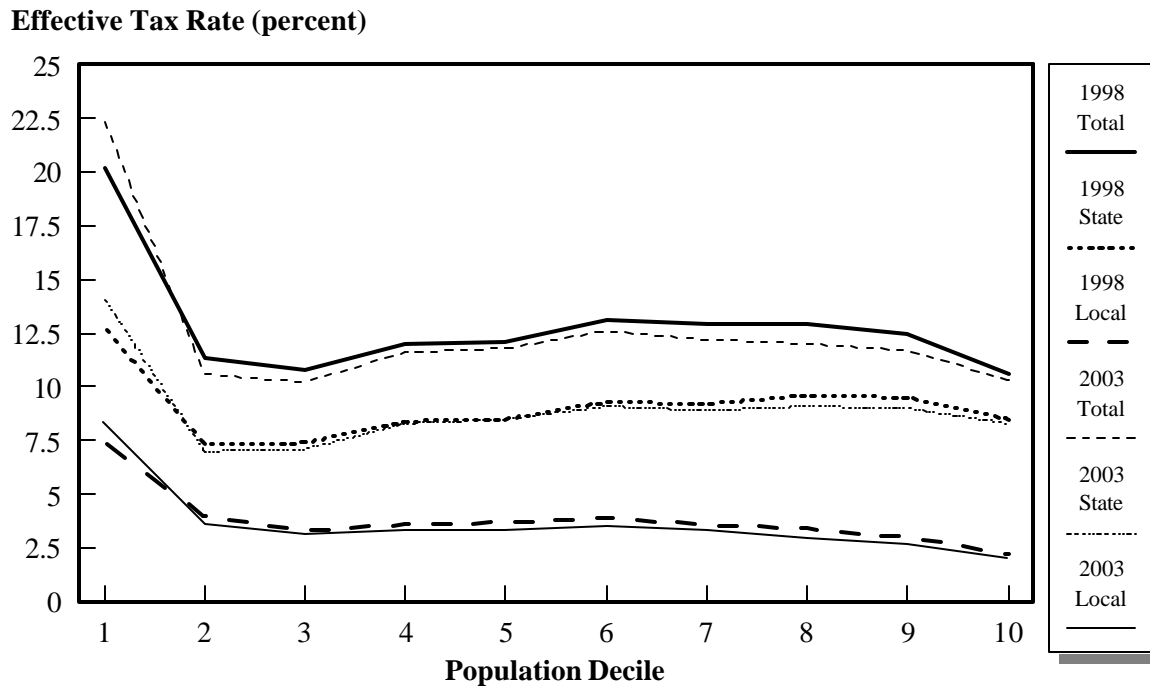
NOTES:

¹ Net of renters' property tax refunds. Includes only the renter's share of rental property taxes.

² Other taxes include individual motor vehicle registration tax, insurance premiums tax on personal insurance, gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes on homes.

³ Includes the landlord's share of rental property taxes.

Figure 2-2
Effective Tax Rates for 1998 and 2003
State and Local Taxes by Population Decile



Overall, Minnesota residents paid an estimated 11.8 percent of their 1998 total income in state and local taxes; this declined to 11.3 percent for the 2003 projections. As discussed earlier, tax law changes that were adopted reduced state and local taxes after 1998. Detailed information by tax on effective rates by decile is included in tables in the Appendices.

As shown in *Figure 2-2*, the state and local tax system had some progressivity in the lower to middle deciles and some regressivity in the middle to upper deciles. For 1998, effective tax rates rose from 10.8 percent in the third decile to 13.1 percent in the sixth decile, declined to 12.5 percent in the ninth decile, and then fell to 10.6 percent in the tenth decile. This pattern was generally similar for the projections to 2003, however, the overall rates for 2003 were lower.

The Suits Index (described later in this chapter) is a measure of the average degree of progressivity or regressivity across all deciles. The Suits Index of -0.04 for 1998 suggests that the tax system overall was a little regressive, with the progressivity in the lower deciles largely offsetting the regressivity in the upper deciles. However, effective tax rates showed some variation by income level. Aside from the high tax rates in the first decile (discussed in more detail later in this chapter), it is generally a pattern of rising and then falling tax rates that is most noticeable in *Figure 2-2*.

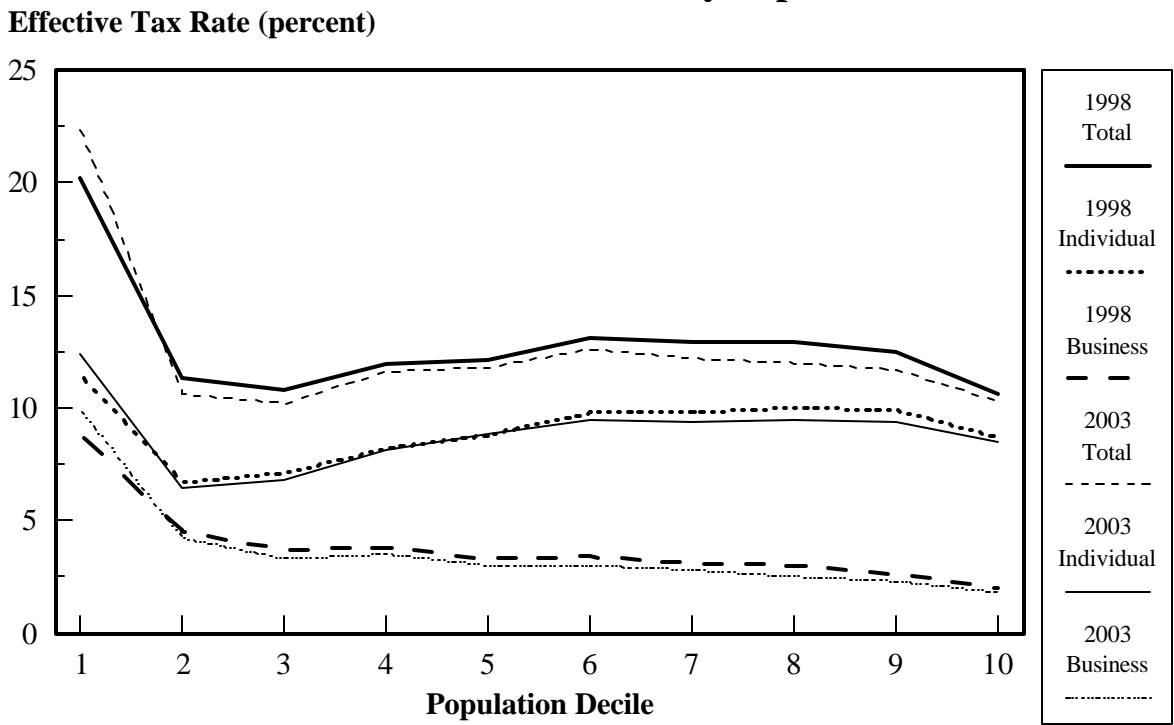
As shown in *Figure 2-2*, state tax burdens and local tax burdens were distributed quite differently. Total state taxes (individual and business combined) were slightly regressive overall, with effective tax rates generally rising from 7.3 percent in the second decile to 9.6 percent in the eighth decile before falling to 8.5 percent in the tenth decile. Local property taxes (net of refunds), showed some variation between the second and ninth deciles, declined in the tenth decile and were regressive overall.

Effective Tax Rates by Type of Tax

As shown in *Tables 2-3 and 2-4*, and *Figure 2-3*, taxes imposed directly on individuals for 1998 had effective tax rates increasing from 6.7 to 10.0 percent from the second to the eighth decile, and then declined to 8.7% in the tenth decile. Business taxes were regressive; effective tax rates declined from 4.5 percent in the second decile to 2.0 percent in the tenth decile.

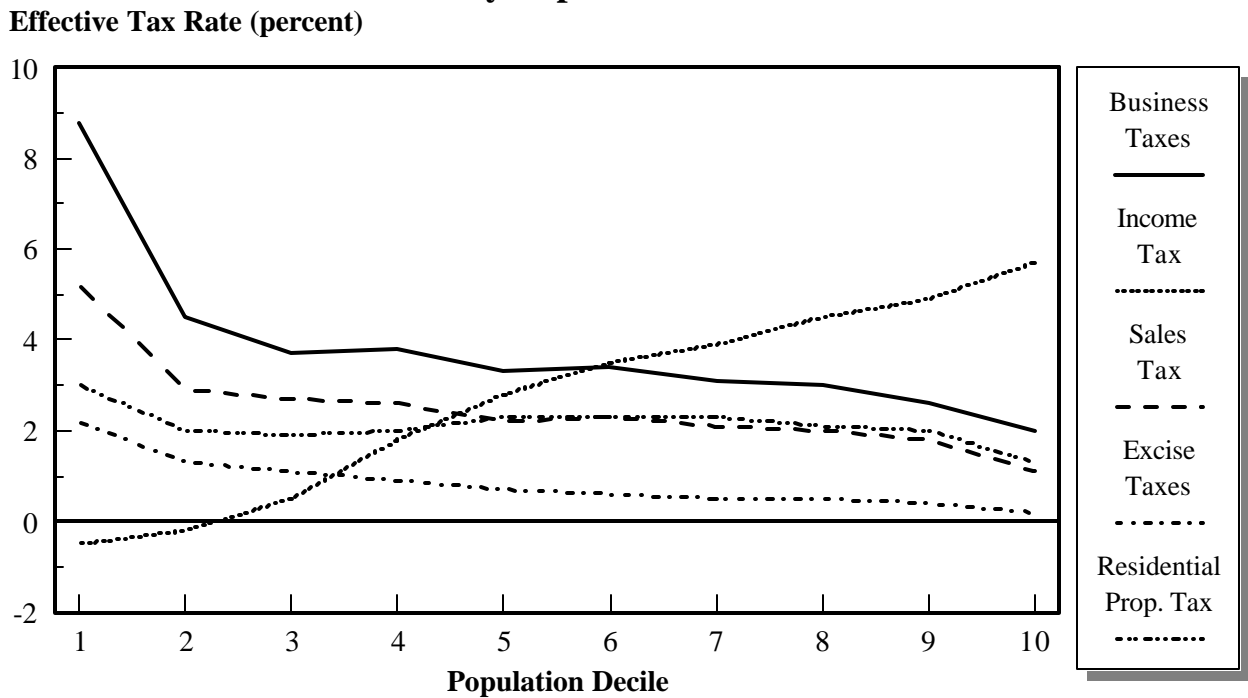
Figure 2-3
Effective Tax Rates for 1998 and 2003

Individual and Business Taxes by Population Decile



Effective tax rates by population deciles for the five major tax types included in this study are presented in *Table 2-3* and are illustrated in *Figure 2-4*. The results show that the individual income tax was very progressive, while the five remaining taxes were generally regressive. Because the progressive individual income tax accounted for over one-third of the total tax burden, it offsets most of the regressivity of the other state and local taxes. Hence, as a whole, the state and local system of taxation in Minnesota was only a little regressive overall.

Figure 2-4
1998 Effective Tax Rates by Tax Type
By Population Decile



The Individual Income Tax

Because of its graduated structure and allowance of personal exemptions and deductions, the individual income tax is, by design, progressive. As seen in *Table 2-3* for 1998, effective tax rates rose significantly with increases in household income. At the low end, the effective tax rate for the income tax was -0.5 percent for the first decile. It rose steadily to 5.7 percent for the tenth decile. First decile households can receive refundable working family credits and refundable child and dependent care credits, which more than offset the positive income tax liabilities.

Sales Tax on Consumer Purchases

In agreement with most incidence studies, this analysis finds the consumer portion of the sales tax to be regressive, especially at low income levels. (The sales tax on business purchases is included with the business tax category.) This is because the share of income represented by taxable consumption tends to be smaller for high income households than for low income ones. Hence, tax burdens as a proportion of income tend to decline as one moves up the income scale.

For 1998, the effective consumer sales tax rate for the bottom decile was 5.2 percent, compared to the rate for the top decile of 1.1 percent (see *Table 2-3*). Effective tax rates for the second through ninth deciles, representing 80 percent of all taxpayers, ranged from 2.9 to 1.8 percent.

Excise Taxes on Consumer Purchases

Three excise taxes were included in this study: gasoline, tobacco, and alcohol taxes. Because each is relatively small individually, the three were combined to arrive at one aggregate measure for this analysis. Like the sales tax, the excise taxes were regressive. This is predictable, since lower income households spend a greater proportion of their income on consumer goods subject to the excise taxes. As a result, effective excise tax rates are higher for low income households than for higher income ones. As shown in *Table 2-3*, the effective tax rate for the bottom decile was 2.2 percent in 1998. It declined from 1.3 percent in the second decile to 0.4 percent in the ninth decile and 0.2 percent for the tenth decile.

Residential Property Taxes

As shown in *Table 2-3*, net effective residential property tax rates, after property tax refunds, showed some variation. Effective property tax rates on residential property were 2 percent in the second decile, 2.3 percent in the sixth decile, and 1.3 percent in the tenth decile for 1998.

Homeowner Property Taxes. The property tax on owned homes, net of property tax refunds, was regressive. (See Appendix *Table B-1 (b)* for homeowner effective tax rates.) For 1998, the net effective property tax rate for homeowners tax was 1.9 percent for the second decile and declined to 1.2 percent in the tenth decile.

Rental Property Taxes. This study's estimates of the property tax burden on renters are consistent with the approach used for business taxes more generally. Taxes on rental property, like taxes on other business property, are partly shifted to renters in higher rents and partly paid by property owners in lower returns. Using the methodology applied to business taxes more generally, this study estimates that a sizable portion of the 1998 rental property tax (41 percent) was borne by the investors who own rental housing; the remaining share (59 percent) was assumed to be shifted to renters in higher rents. The effective tax rate on renters was, therefore, lower than it would have been if all of the tax were passed along in higher rents.

In this study, the entire amount of property tax refunds received by renter households was subtracted from the portion of the tax estimated to be borne by renters. For 1998, the net effective property tax rate for renters (after PTR) was 0.1 percent in the third decile and increased to 0.3 percent in the sixth decile (see Appendix *Table A-1(c)*).

Other Individual Taxes

The "other taxes" category in *Table 2-3* includes the motor vehicle registration tax paid directly by households, the insurance premiums tax paid on personal insurance (homeowner, motor vehicle, life, health, and accident), gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes paid by homeowners. The combined burden for these five taxes showed some variation by income level.

Business Taxes

As shown in *Figure 2-1* above, business taxes were 22.8 percent of the total tax burden on Minnesota residents. Business taxes include the following:

- Business property taxes (including the landlord 's share of rental housing)
- Corporate franchise tax
- Sales tax paid on purchases of capital equipment and other intermediate inputs
- Motor vehicle registration tax paid by business
- Excise taxes paid by business (motor fuels)
- Insurance premiums tax on business insurance
- Mortgage and deed taxes on business property

Although the legal impact of each of these taxes falls on the business entity, each is partially shifted to consumers (in higher prices) and to labor (in lower wages). Only a portion of business taxes are borne by capital owners as a lower rate of return on their investment. Part of the burden of each of these taxes is also shifted to nonresidents. This study estimates the degree to which such shifting occurs and then allocates the estimated burden to Minnesota households based on each household's sources of income and patterns of spending. (An explanation of tax shifting and the method of estimating the incidence of business taxes is included in the Appendix.)

To determine the incidence of each business tax, the study first estimated tax payments made by the different business sectors (manufacturing, mining, retail trade, etc.). Market characteristics of each business sector were used to estimate the degree to which taxes were shifted to consumers, labor, and nonresidents. Finally, taxes paid by each of these taxpayer categories (factors) were distributed to individual households in the sample.

Overall, the burden of Minnesota business taxes on Minnesota households was regressive. The effective tax rate generally fell as income increased. The effective tax rate was 4.5 percent in the second decile; it fell steadily as income rose, reaching 2.0 percent in the tenth decile. (See *Table 2-3*.)

Tables A-1(a) and *B-1(a)* for 1998 and 2003 included in the Appendix show the amount of tax collections by tax type including a breakdown of the initial burden on businesses, Minnesota households and nonresidents. It also includes after shifting amounts either exported or falling on Minnesota resident taxpayers along with the Suits Index for each tax.

Effective Tax Rates in the First Decile

As shown in *Table 2-3*, low income taxpayers in the first decile had significantly higher sales, excise, net property, and business tax burdens than taxpayers with higher incomes. The total effective tax rate of 20.2 percent for taxpayers in the first decile was much higher than the rates in other deciles. This 20.2 percent effective tax rate includes an adjustment to exclude negative incomes.

The effective tax rate for the first decile is overstated for several reasons. First, the lowest decile includes households who have temporarily low incomes or have better overall economic well-being than was indicated by their money income in 1998. A portion of retirees, for example, may be living primarily on savings or other assets but report small amounts of annual money income received. Due to unemployment or business fluctuations, some households who normally have higher incomes are also included in the first decile. A small portion of all first-decile households were in this decile only because they reported business losses or large capital losses for income tax purposes in 1998.

Second, effective tax rates for the first decile are overstated because income is understated. The incidence sample was unable to identify all sources of income. Many first-decile households filed neither an income tax nor a property tax refund return. The incidence study identified some wage and capital income for these nonfilers, but many had other sources of income that were not identified. An underestimate of household income generally causes effective tax rates to be overestimated.

Household income is also underestimated in the *Consumer Expenditure Survey* used to estimate sales and excise tax burdens. To the extent that income was subject to relatively greater underreporting than consumption, particularly for low-income households, the taxable consumption expenditures calculated from CES will be overstated.

While this study does adjust for negative incomes for a small number of households, no attempt has been made to adjust for possible underreported or unidentified sources of income or for other differences between transitory and long-run measures of income. By including only money income, the substantial amounts of food stamps and housing subsidies received by the poor are ignored in this study. Consequently, money income at the low end of the income distribution does not provide an accurate measure of overall economic well-being. For all of these reasons, effective tax rates in the first decile are overstated by an unknown but significant amount.

The Suits Index

The previous sections looked at effective tax rates for each of the six categories of taxes examined in this study. The effective tax rate -- that is, the ratio of taxes paid to income -- can be used to compare tax burdens across income categories. However, it is difficult to summarize the overall distribution of a tax (progressive, proportional, or regressive) from the individual effective tax rates. This section uses the Suits Index as a summary measure of the overall distribution for a specific tax.

The Suits Index measures the relationship between the cumulative percentage of taxes and the cumulative percentage of total income for taxpayers ranked by income. A proportional tax has a Suits Index equal to zero; a progressive tax has a positive index. In the extreme case, when the total tax burden is paid by those in the highest income bracket, the index has a value of +1.00. For a regressive tax, the Suits Index has a negative value between 0 and -1.00, the most regressive value.

Table 2-5 presents Suits indexes for Minnesota state and local taxes in 1998. The only progressive tax was the personal income tax with a positive Suits index of +0.173. Consumption taxes were the most regressive category. Taken as a whole, the system of Minnesota taxes was a little regressive (a Suits index of -0.040). State taxes were slightly regressive (-0.008), and local property taxes were regressive (-0.135).

Table 2-5
Suits Indexes for Minnesota State and Local Taxes

| Tax Category | 1998 Suits Index |
|--------------------------------|-------------------------|
| Personal Income Tax | +0.173 |
| Consumption Taxes | -0.204 |
| Business Taxes | -0.155 |
| Individual Taxes | -0.006 |
| State Taxes | -0.008 |
| Local Property Tax (after PTR) | -0.135 |
| Total Taxes | -0.040 |

An Alternative Presentation: Income Deciles

The results presented earlier in this chapter have been summarized for deciles of households. Each population decile represents ten percent of the population of households in the study. This section provides an alternative way to summarize the distribution of the 1998 tax burden. *Table 2-6* distributes taxes and calculates effective tax rates for all taxpayers organized by income deciles (rather than population deciles). To derive income deciles, households are ranked from lowest to highest income and divided into groups representing equal amounts of total *income*.

The distribution of tax by income deciles in *Table 2-6* can be compared to the distribution by population deciles in *Table 2-1*. In both distributions households are ranked by income level. In the population decile distribution (*Table 2-1*), each decile of 223,000 represents 10 percent of all households; in the income decile distribution (*Table 2-6*), each decile with \$11.4 billion of income represents 10 percent of total income. Because of their relatively low incomes, it took 895,000 households in the first income decile to account for 10 percent of total income; in contrast, there were only 4,637 high income households in the tenth decile, who also received 10 percent of total income.

The bottom half of *Table 2-6* shows the distribution of taxes by income decile. The first decile included 40.1 percent of all households. Their share of total taxes (10.8 percent) was slightly above their share of household income (10 percent). First income decile households (with 10 percent of total income) paid only 1.9 percent of the individual income tax and 11.9 percent of residential property taxes on consumers, but they paid 17.2 percent of the consumer sales tax, 28.2 percent of consumer excise taxes, and 16.8 percent of all business taxes borne by Minnesota residents.

The tenth income decile included only 0.2 percent of all households. Their share of total taxes (6.2 percent) was lower than their share of household income (10 percent). They paid 13.7 percent of the individual income tax, 0.9 percent of the consumer sales tax, 0.4 percent of consumer excise taxes, 1.7 percent of residential property taxes, and 24 percent of business taxes borne by Minnesota residents.

Table 2-7 shows effective tax rates by income decile. The same information for population deciles is shown in *Table 2-3*. A comparison of the effective tax rate for all taxes (the last column in each table) reveals some differences. First,

Table 2-6
Distribution of Households, Income, and Taxes by Income Decile
(\$ Thousands)

| Income Decile | Income Range | Number of Households | Total Household Income | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Taxes ¹ | Other Tax on Individuals ² | Business Taxes ³ | Total Taxes |
|---------------|---------------------|----------------------|------------------------|-----------------------|--------------------|-----------------------|---|---------------------------------------|-----------------------------|--------------|
| First | \$24,957 & Under | 895,648 | \$11,876,186 | \$96,363 | \$346,007 | \$136,740 | \$243,076 | \$114,819 | \$517,277 | \$1,454,282 |
| Second | 24,957 - 37,588 | 369,423 | 11,393,869 | 351,421 | 261,311 | 75,655 | 263,267 | 102,608 | 383,379 | 1,437,642 |
| Third | 37,588 - 49,666 | 263,629 | 11,397,088 | 435,091 | 246,005 | 64,487 | 264,287 | 102,674 | 360,838 | 1,473,382 |
| Fourth | 49,666 - 61,887 | 205,048 | 11,395,920 | 500,277 | 236,236 | 53,709 | 240,820 | 102,365 | 343,140 | 1,476,547 |
| Fifth | 61,887 - 76,959 | 165,350 | 11,391,817 | 540,566 | 224,078 | 47,573 | 231,827 | 98,716 | 318,091 | 1,460,851 |
| Sixth | 76,959 - 96,619 | 133,017 | 11,396,035 | 571,419 | 196,991 | 39,031 | 219,090 | 86,250 | 275,360 | 1,388,140 |
| Seventh | 96,619 - 136,008 | 101,520 | 11,401,442 | 611,841 | 187,240 | 29,976 | 220,465 | 77,620 | 292,813 | 1,419,955 |
| Eighth | 136,008 - 242,719 | 64,970 | 11,390,021 | 628,424 | 196,037 | 24,042 | 195,068 | 72,258 | 317,620 | 1,433,449 |
| Ninth | 242,719 - 840,892 | 29,429 | 11,424,579 | 663,781 | 102,035 | 11,804 | 131,525 | 37,766 | 197,735 | 1,144,646 |
| Tenth | \$840,892 & Over | 4,637 | 11,543,999 | 701,286 | 17,399 | 1,953 | 35,131 | 6,791 | 74,898 | 837,457 |
| Total | | 2,232,671 | \$114,610,956 | \$5,100,469 | \$2,013,339 | \$484,970 | \$2,044,556 | \$801,867 | \$3,081,151 | \$13,526,351 |
| Top 5% | \$3,221,710 & Over | 619 | \$5,842,240 | \$355,788 | \$2,322 | \$985 | \$7,385 | \$996 | \$27,335 | \$394,812 |
| Top 1% | \$38,072,306 & Over | 19 | 1,295,645 | 66,895 | 72 | 105 | 254 | 27 | 3,856 | 71,210 |

Percentage of Households, Income, and Taxes, by Income Decile

| Income Decile | Income Range | Percent Of Households | Percent Of Income | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Taxes ¹ | Other Taxes on Individuals ² | Business Taxes ³ | Total Taxes |
|---------------|---------------------|-----------------------|-------------------|-----------------------|--------------------|-----------------------|---|---|-----------------------------|-------------|
| First | \$24,957 & Under | 40.1% | 10.4% | 1.9% | 17.2% | 28.2% | 11.9% | 14.3% | 16.8% | 10.8% |
| Second | 24,957 - 37,588 | 16.5 | 9.9 | 6.9 | 13.0 | 15.6 | 12.9 | 12.8 | 12.4 | 10.6 |
| Third | 37,588 - 49,666 | 11.8 | 9.9 | 8.5 | 12.2 | 13.3 | 12.9 | 12.8 | 11.7 | 10.9 |
| Fourth | 49,666 - 61,887 | 9.2 | 9.9 | 9.8 | 11.7 | 11.1 | 11.8 | 12.8 | 11.1 | 10.9 |
| Fifth | 61,887 - 76,959 | 7.4 | 9.9 | 10.6 | 11.1 | 9.8 | 11.3 | 12.3 | 10.3 | 10.8 |
| Sixth | 76,959 - 96,619 | 6.0 | 9.9 | 11.2 | 9.8 | 8.0 | 10.7 | 10.8 | 8.9 | 10.3 |
| Seventh | 96,619 - 136,008 | 4.5 | 9.9 | 12.0 | 9.3 | 6.2 | 10.8 | 9.7 | 9.5 | 10.5 |
| Eighth | 136,008 - 242,719 | 2.9 | 9.9 | 12.3 | 9.7 | 5.0 | 9.5 | 9.0 | 10.3 | 10.6 |
| Ninth | 242,719 - 840,892 | 1.3 | 10.0 | 13.0 | 5.1 | 2.4 | 6.4 | 4.7 | 6.4 | 8.5 |
| Tenth | \$840,892 & Over | 0.2 | 10.1 | 13.7 | 0.9 | 0.4 | 1.7 | 0.8 | 2.4 | 6.2 |
| Total | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Top 5% | \$3,221,710 & Over | 0.0% | 5.1% | 7.0% | 0.1% | 0.2% | 0.4% | 0.1% | 0.9% | 2.9% |
| Top 1% | \$38,072,306 & Over | 0.0% | 1.1 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |

NOTES:

¹ Net of renters' property tax refunds. Includes only the renter's share of rental property tax.

² Other taxes include individual motor vehicle registration tax, insurance premiums tax on personal insurance, gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes paid by homeowners.

³ Includes the landlord's share of rental property taxes.

Table 2-7
1998 Effective Tax Rates by Income Decile
(All Taxpayers)

| Income Decile | Income Range | Number Of Households | Individual Income Tax | Consumer Sales Tax | Consumer Excise Taxes | Residential Property Tax¹ | Other Taxes on Individuals² | Total Individual Taxes | Business Taxes³ | Total Taxes |
|----------------------|---------------------|-----------------------------|------------------------------|---------------------------|------------------------------|---|---|-------------------------------|-----------------------------------|--------------------|
| First | \$24,957 & Under | 895,648 | 0.8% | 2.9% | 1.2% | 2.0% | 1.0% | 7.9% | 4.4% | 12.2% |
| Second | 24,957 - 37,588 | 369,423 | 3.1 | 2.3 | 0.7 | 2.3 | 0.9 | 9.3 | 3.4 | 12.6 |
| Third | 37,588 - 49,666 | 263,629 | 3.8 | 2.2 | 0.6 | 2.3 | 0.9 | 9.8 | 3.2 | 12.9 |
| Fourth | 49,666 - 61,887 | 205,048 | 4.4 | 2.1 | 0.5 | 2.1 | 0.9 | 9.9 | 3.0 | 13.0 |
| Fifth | 61,887 - 76,959 | 165,350 | 4.7 | 2.0 | 0.4 | 2.0 | 0.9 | 10.0 | 2.8 | 12.8 |
| Sixth | 76,959 - 96,619 | 133,017 | 5.0 | 1.7 | 0.3 | 1.9 | 0.8 | 9.8 | 2.4 | 12.2 |
| Seventh | 96,619 - 136,008 | 101,520 | 5.4 | 1.6 | 0.3 | 1.9 | 0.7 | 9.9 | 2.6 | 12.5 |
| Eighth | 136,008 - 242,719 | 64,970 | 5.5 | 1.7 | 0.2 | 1.7 | 0.6 | 9.8 | 2.8 | 12.6 |
| Ninth | 242,719 - 840,892 | 29,429 | 5.8 | 0.9 | 0.1 | 1.2 | 0.3 | 8.3 | 1.7 | 10.0 |
| Tenth | \$840,892 & Over | 4,637 | 6.1 | 0.2 | 0.0 | 0.3 | 0.1 | 6.6 | 0.6 | 7.3 |
| Total | | 2,232,671 | 4.5% | 1.8% | 0.4% | 1.8% | 0.7% | 9.1% | 2.7% | 11.8% |
| Top 5% | \$3,221,710 & Over | 619 | 6.1% | 0.0% | 0.0% | 0.1% | 0.0% | 6.3% | 0.5% | 6.8% |
| Top 1% | \$38,072,306 & Over | 19 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 5.2 | 0.3 | 5.5 |

NOTES:

¹ Net of renters' property tax refunds. Includes only the renter's share of rental property tax.

² Other taxes include individual motor vehicle registration tax, insurance premiums tax on personal insurance, gambling taxes, MinnesotaCare taxes, and mortgage and deed taxes paid by homeowners.

³ Includes the landlord's share of rental property taxes.

the effective tax rate for the first income decile (12.2 percent) was much lower than that for the first population decile (20.2 percent). The first income decile included over four times as many households as the first population decile. As a result, the tax rate for the first income decile is an average for households in the first *four* population deciles.

The pattern of effective tax rates also differs for the top deciles. The tenth income decile (with 4,637 households) had an effective tax rate of 7.3 percent. In contrast, the tenth population decile (with 219,397 households) had an effective tax rate of 10.6 percent.

Analyzing the tax burden by income deciles provides additional insights into the distribution of the burden. It provides more detailed information about the burden on higher income households, but less information about the 58 percent of households who are combined in the first two income deciles.

An Alternative Methodology: Adjusting for the Federal Tax Offset

In estimating the incidence of existing Minnesota taxes, this study has made no adjustment for the “federal tax offset” due to the deductibility of Minnesota taxes in calculating the federal income tax. Individuals can generally deduct what they pay in state income tax and homeowner property taxes (and a portion of their motor vehicle registration tax) as itemized deductions. Those who itemize deductions pay less federal income tax as a result. For a taxpayer in the 28 percent federal tax bracket, each additional dollar of itemized deductions lowers federal income tax by 28 cents. As a result, 28 percent of deductible state and local taxes would be borne by the federal government in lower tax revenue. If no adjustment is made for this federal tax offset, the Minnesota tax burden would be overstated. Because itemizing deductions is more common for higher income households (and because they face higher federal tax rates), the federal tax offset will reduce taxes by much more in the upper deciles. A tax system that looks proportional in the absence of such an adjustment might look quite regressive after such an adjustment is made.

This same reasoning applies to business taxes. If an additional dollar in business taxes lowers business income (rather than being passed forward to consumers in higher prices), this reduces the federal income tax paid by the corporation, partnership, or sole proprietor. A portion of the burden on Minnesota business owners would be borne by the federal government in lower tax revenue.

There is a strong argument, however, against making such an adjustment in this study. This study estimates the burden of Minnesota taxes in a multistate context. The incidence of Minnesota taxes depends on the level of taxes in other states. If all states levy deductible taxes, then the federal government presumably makes up for the lost revenue by raising the federal tax rate. It is unlikely that the deductibility of state and local taxes actually lowers the total federal tax burden on Minnesota residents. Minnesota's share of itemized deductions is roughly equal to its share of federal income tax payments. Whether the combination of deductible taxes and higher tax rates reduces a particular decile's tax burden is unknown; it depends on how the federal tax structure has been adjusted to make up for the lost tax revenue.

The results presented in this study include no adjustment for the federal tax offset. The impact of such an adjustment is shown only in this section.

The impact of the federal tax offset is shown in *Table 2-8* and *Figure 2-5*. For all households combined, the federal offset would reduce the effective tax rate from 11.8 percent to 10.4 percent of income. There would be little change in the lowest deciles, which include few who itemize deductions. As expected, the impact of the federal tax offset rises with income. Despite the limitation on itemized deductions for high-income taxpayers, the effective tax rate in the tenth decile would fall from 10.6 percent to 8.4 percent. The adjusted tax burden is noticeably more regressive.

In summary, the federal tax offset (even if limited to individual taxes) would have a significant impact on the distribution of the Minnesota tax burden. Because a strong argument can be made against such an adjustment in a study of this kind, however, no federal tax offset is included in the results presented elsewhere in this study.

Table 2-8
Impact of Federal Tax Offset on Effective
State and Local Tax Rates by Population Decile
(Minnesota Residents, 1998)

| Population Decile | Income Range | Effective Tax Rate | | |
|-------------------|------------------|-----------------------|----------------------------------|---------------------------------|
| | | No Federal Tax Offset | Change Due to Federal Tax Offset | Adjusted for Federal Tax Offset |
| First | \$ 7,971 & Under | 20.2% | 0.1% | 20.1% |
| Second | 7,971 - 13,047 | 11.3 | 0.1 | 11.2 |
| Third | 13,047 - 18,550 | 10.8 | 0.1 | 10.7 |
| Fourth | 18,550 - 24,885 | 12.0 | 0.1 | 11.8 |
| Fifth | 24,885 - 31,890 | 12.1 | 0.2 | 11.9 |
| Sixth | 31,890 - 40,645 | 13.1 | 0.5 | 12.7 |
| Seventh | 40,645 - 51,669 | 12.9 | 0.7 | 12.2 |
| Eighth | 51,669 - 66,043 | 12.9 | 0.9 | 12.0 |
| Ninth | 66,043 - 92,346 | 12.5 | 1.6 | 10.9 |
| Tenth | \$ 92,346 & Over | 10.6 | 2.2 | 8.4 |
| Total | | 11.8% | 1.4% | 10.4% |
| Top 5% | \$127,880 & Over | 10.1% | 2.3% | 7.8% |
| Top 1% | \$310,014 & Over | 8.3% | 2.2% | 6.1% |

Figure 2-5
Effective Tax Rates in 1998
With and Without Federal Tax Offset

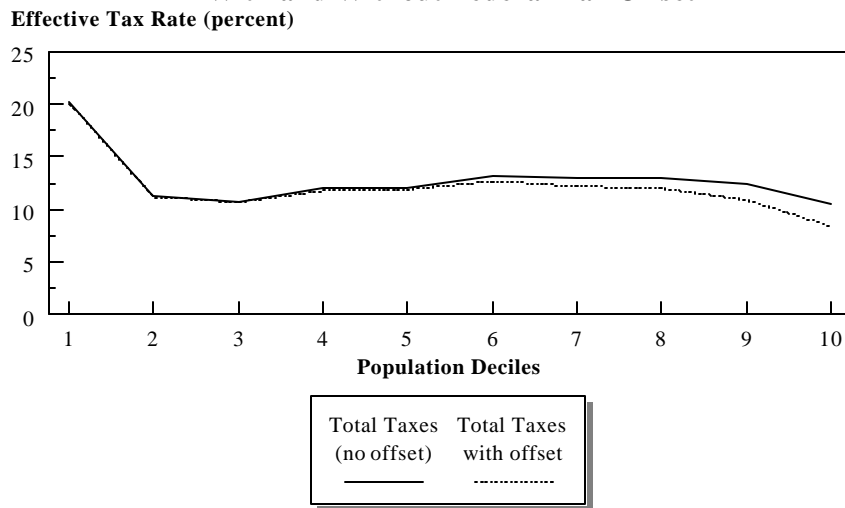


Table 2-9
Suits Index With and Without Federal Tax Offset

| | Without Offset | With Offset |
|------------|----------------|-------------|
| Income Tax | 0.173 | 0.107 |
| All Taxes | -0.040 | -0.087 |

Appendix

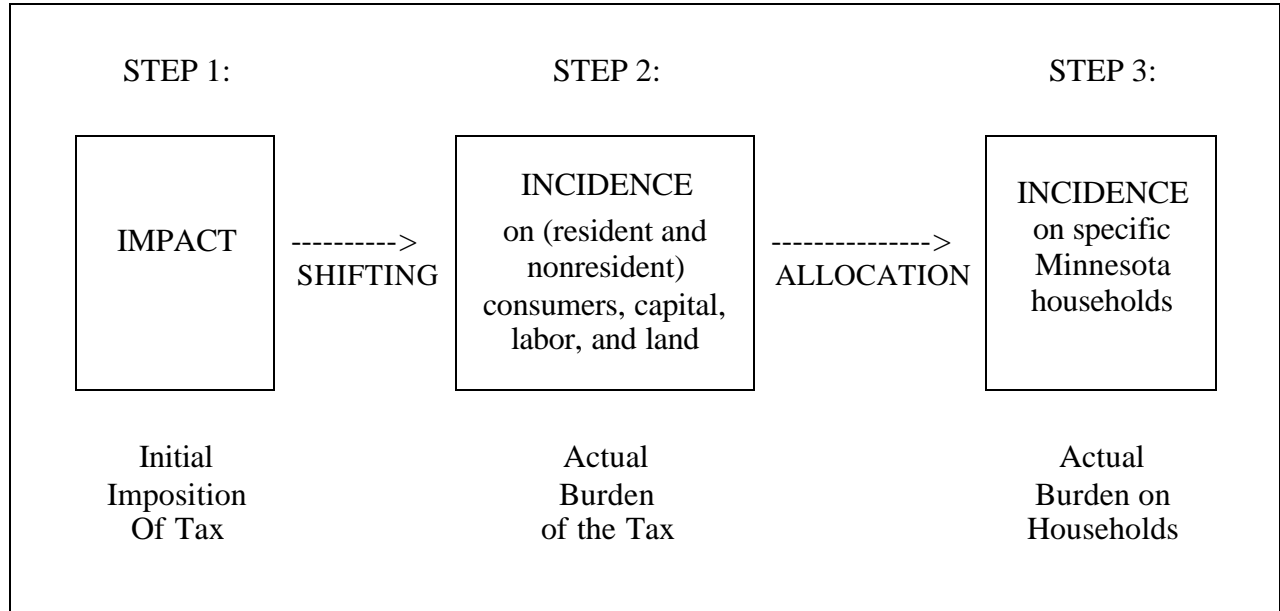
Tax Incidence Analysis

Introduction

Economists commonly distinguish between the initial “impact” of a tax and its “incidence.” The initial impact of a tax is on the taxpayer legally liable to pay the tax, while the incidence of a tax is the final resting place of the tax after any “shifting” has occurred. For example, the initial impact of the insurance premiums tax is on the insurance company, which is legally liable to pay the tax. Consumers may eventually pay some or all of the tax, however, in the form of higher prices for insurance. The incidence of the tax may be on consumers, not the insurance company. Similarly, the impact of the property tax on manufacturing property is on the manufacturer, but the actual incidence may fall partly on consumers (in higher prices) or on workers (in lower wages).

This study measures the distribution of tax burdens among households after any such shifting has occurred. As outlined in *Figure 3-1*, determining the distribution of household tax burdens can be viewed as a three-step process. Step 1 is the collection of data about the initial impact of Minnesota taxes. This step includes compiling information on tax collections by sector, and other estimations, such as the amount of sales tax paid by tourists or on business purchases of capital equipment. Step 2 uses economic theory to estimate how much of the burden of each tax is “shifted” from the initial taxpayer to others. For each tax, Step 2 estimates how much of the tax burden falls on consumers (in higher prices), labor (in lower wages), and capital (in lower rates of return). The portion of the tax burden shifted to nonresidents is also estimated in Step 2. Step 3 combines the incidence assumptions from Step 2 with information on the characteristics of individual households (from the study’s database described in Chapter 4) to estimate the tax burden falling on each of Minnesota’s two million households. Each dollar of tax is “allocated” either to a specific Minnesota household or to nonresidents.

**Figure 3-1
Estimating Tax Incidence**



For example, consider the business property tax. Step 1 obtains data on total tax collections from each business sector (such as manufacturing, farming, apartments, and public utilities). Step 2 uses economic theory and information about the nature of each business sector to estimate how much of each sector’s property tax is borne by Minnesota consumers, Minnesota workers, Minnesota owners of capital, and nonresidents. Step 3 allocates the resident tax burden to specific Minnesota households, based on information about each household’s total income, income sources, household size, and housing status (owner or renter).

The results of any incidence study are significantly determined by the study’s incidence assumptions. This chapter explains both the incidence assumptions used in this study (Step 2) and the method of allocating tax burdens to specific households (Step 3). This study’s incidence assumptions are summarized as follows:

1. Incidence of Taxes on Households

- ✍ The personal income tax is paid by individual taxpayers, and the incidence is the same as the initial impact of the tax.
- ✍ Taxes on purchases by consumers (sales, excise, insurance premiums, gambling, and MinnesotaCare taxes) are borne by consumers of the taxed items.
- ✍ The property tax on homeowners is borne by the homeowner.
- ✍ The motor vehicle registration tax on vehicles owned by households is borne by the owner of the vehicle.
- ✍ Mortgage registration and deed transfer taxes on homes are borne by homeowners.

2. Incidence of Taxes on Business

Taxes on business property, business purchases, and corporate income are partially shifted to consumers and workers. (If fully shifted to consumers, the taxes are classified as taxes on households.) The amount of tax shifting varies by tax and by business sector, depending on the scope of the product market (local or national) and the magnitude of Minnesota's tax rates compared to those in other states.

The rationale for this study's incidence assumptions is discussed in the next two sections. First, taxes on households are discussed. The incidence of business taxes, which is discussed next, is much more complex. Many issues are unsettled, and a wide variety of approaches have been used in previous incidence studies. As a result, this section provides an extended discussion of the methodology underlying this study's approach to business tax incidence.

Taxes on Households

Individual Income Tax

To shift a tax, the individual or business legally liable to pay the tax must alter its economic behavior because of the tax. For example, if a tax on wages reduces after-tax pay, workers may reduce the number of hours worked. This could lead to higher before-tax wages, which would shift a part of the tax to employers or consumers. This study assumes that the burden of the individual income tax is not amenable to shifting through increases in either wages or interest rates. This assumption is correct if both total hours worked and savings rates

are unresponsive to after-tax returns and the package of public spending and taxes in Minnesota (compared to other states) does not cause significant emigration. Given this assumption, the state income tax burden equals each household's tax liability, as listed in the study's database.

Taxes on Consumer Purchases

Sales and Excise Taxes. This study, like most other incidence studies, assumes that businesses legally liable for sales and excise taxes on final products and services will be able to raise product prices by the full amount of the tax, leaving wages and the return to capital unchanged. Therefore, the tax burden is fully shifted to consumers in higher prices. The sales and excise tax burdens were allocated in proportion to each household's consumption of taxed items, as estimated in the study's database.

Insurance Premiums Taxes. The insurance premiums tax equals a flat percentage of the premium paid on selected types of insurance. This tax was assumed to raise insurance premiums by the full amount of the tax, so its burden was distributed in proportion to each household's purchase of insurance subject to the tax. For auto, life, and household insurance, the tax burden allocation was in proportion to expenditures as estimated from the *Consumer Expenditure Survey*.

The premiums tax on insurance provided through employers (most health and workers' compensation) was assumed borne by the employee. By raising the cost of these fringe benefits, the tax either reduced cash wages or other fringe benefits. The tax on health insurance premiums was assigned according to the distribution of total health insurance premiums. In Minnesota, workers' compensation policies are purchased from private insurers. Given the structure of medical and wage replacement benefits, the premium per employee was assumed to increase with wages, subject to a minimum (for workers earning less than half the average state wage) and a maximum (for those earning more than 150 percent of the average state wage).

Gambling Taxes. Gross receipts taxes on pulltabs, tipboards, bingo, raffles, and horse racing were assumed to be borne by the bettor. A recent survey by the Minnesota Lottery (1994) provided substantial information about how gambling varies by income level. The pattern of expenditures on pulltabs (the primary source of revenue) was similar to that for the lottery, so the more detailed distributional information about lottery expenditures was used to distribute these gambling taxes.

MinnesotaCare Taxes. The 2 percent gross receipts tax on most medical bills (including hospital, physician, dental, and laboratory services along with prescription drugs) was assumed to be paid by consumers in higher out-of-pocket medical costs or higher costs for insurance (except for Medicare premiums). The higher costs of employer-provided health insurance were assumed to be borne by households in reduced wages or other fringe benefits. MinnesotaCare taxes were distributed in proportion to the sum of the cost of health insurance plus out-of-pocket costs for medical services and prescription drugs.

Property Taxes on Non-Business Property

Homeowner Property Taxes. The homeowner is both the owner and consumer of housing. As a result, the homeowner bears the full tax burden, regardless of how the burden is split between consumers and owners. The tax burden on the household was assumed to be the total property tax paid on the homestead, as identified in the incidence study database. Similarly, the property tax on cabins was assumed borne by the owners.

Motor Vehicle Registration Tax. The registration tax on motor vehicles owned by households was assumed to be fully borne by the owner. The tax is generally proportional to the market value of the vehicle. Lacking data on the distribution of vehicle stock by income level, this study used the distribution of vehicle purchases (before subtracting trade-in) as an approximation. The tax burden was allocated in proportion to the average gross vehicle expenditures by households of the same size and income level.

Mortgage Registration and Deed Transfer Taxes. The homeowner portion of these taxes was assumed to be borne by the owner of the home. Given a lack of information about the identity of those buying homes or obtaining mortgages in 1998, the burden of the mortgage registration tax was distributed over all mortgage holders (in proportion to mortgage interest paid in 1998); the deed transfer tax burden was distributed over all homeowners (in proportion to the estimated market value of the home).

Adjustment for Burdens on Nonresident Households

The proportion of the total receipts from each of these taxes that was allocated to Minnesota households is shown in *Table 1-2*. For the general sales and use tax and the excise taxes, the Minnesota household share was estimated by the Minnesota Consumption Tax Model. For the other taxes (insurance premiums tax, property tax on cabins, gambling taxes, MinnesotaCare taxes, motor vehicle registration tax, and mortgage and deed taxes), the total burden on Minnesota households was defined as total collections minus the estimated taxes paid by business and nonresident visitors and tourists.

Some incidence studies reduce state and local tax burdens to reflect the “federal tax offset.” State income taxes and homeowner property taxes are both deductible in calculating federal income tax liability, so households paying these Minnesota taxes will pay less in federal income tax (if they itemize deductions). A portion of these deductible taxes is sometimes considered to be shifted to the federal government in lower federal tax revenue. Although no such adjustment is included in this study’s general results, the impact of such an adjustment (and the arguments for and against it) are presented earlier; see *Table 2-8*.

Taxes on Business

Introduction

This study includes over \$5.4 billion in business taxes, as summarized in *Table 3-1*. These business taxes (including rental property taxes) account for 34 percent of Minnesota’s state and local tax revenue. Business taxes include both taxes on capital (structures, capital equipment, and land) and taxes on business purchases of short-lived intermediate inputs (such as gasoline and restaurant meals).

This study estimated the incidence of each of these business taxes. While the initial impact of these taxes is on business, they are partially shifted forward to consumers in higher prices or backward to labor in lower wages. Much of the tax is paid by nonresidents, either as consumers of goods and services produced in Minnesota or as owners of capital and land located in Minnesota. This section summarizes how this study estimated the incidence of business taxes, and how business tax burdens were allocated to Minnesota households.

Table 3-1
1998 Minnesota Taxes on Businesses
(\$ Millions)

| Taxes on Capital and Intermediate Products | |
|---|----------------|
| Rental property taxes | \$ 462 |
| Other business property taxes | 2,126 |
| Corporate franchise tax | 765 |
| Sales tax on capital equipment | 718 |
| Vehicle registration tax | 101 |
| Mortgage and deed taxes | 44 |
| Insurance premiums tax on business | 64 |
| Sales tax on non-capital purchases | |
| Motor fuels excise tax | |
| | 949 |
| | 225 |
| Total Business Taxes | \$5,454 |

The Conceptual Structure

The following six principles define this study's approach to estimating the incidence of Minnesota's existing business taxes.

1. *Capital moves to where it earns the highest return.* If a tax on capital in a single state (or industry) reduces the after-tax rate of return, investors will move their capital to lower-tax locations (or industries). As production falls, prices will rise or costs (including wages) will fall until the after-tax rate of return is again equal to the after-tax rate of return elsewhere. Only the average tax on all forms of capital in all states — a tax which owners of capital cannot avoid — will be fully borne by capital so long as capital is free to move in search of the highest rate of return.

2. *Minnesota's taxes do not occur in isolation.* Every state levies business taxes. The incidence of a tax levied at the same rate in all states differs greatly from the incidence of a tax levied only in Minnesota. For example, a

one percent tax levied on business capital in only Minnesota will be largely shifted to consumers and workers; capital is unlikely to bear much of the final burden due to the ease of capital movement. In contrast, if all states impose the identical one percent tax on the value of all business capital, investors cannot escape the tax. Such a “national” tax on capital is much more likely to be borne by capital, reducing the after-tax rate of return on capital throughout the nation.

This distinction between a single-state tax and a nation-wide tax is crucial to the results of this study. The incidence of a particular Minnesota tax on business depends on how Minnesota’s tax rate compares to those of other states. If, for example, a particular Minnesota business tax rate is 10 percent above the national average, the incidence of this 10 percent “Minnesota differential” will differ greatly from the incidence of the remainder of the tax.

3. *Minnesota’s tax structure evolved over time.* In describing the incidence of existing business taxes, this study assumes that businesses, consumers, and workers have fully adjusted to tax differences across states.
4. *Some businesses, depending on their market, can shift Minnesota business taxes forward to consumers in higher prices.* Given time for full adjustment, the ability to shift taxes forward to consumers depends on the nature of the product being sold. Some producers, such as restaurants, compete only with other Minnesota companies; tax increases would affect all restaurants equally, and prices would rise to cover this higher cost. In contrast, a higher Minnesota tax on manufacturers is much harder to shift to consumers because firms compete in a national market. Therefore, Minnesota manufacturers cannot raise prices to cover higher state taxes. In this study, producers of “local market products” are assumed to pass tax differentials on to consumers but producers of “national market products” cannot.
5. *A tax that reduces the competitiveness of Minnesota businesses will be borne by immobile resources — those either unable or unwilling to leave the state.* If capital is mobile and prices cannot be increased (due to competition), the burden of business taxes will reduce payments to inputs that are geographically tied to the state, including labor and land.

6. *An increase in taxes reflects an increase in state and local government spending.* This study assumes that workers do not move between Minnesota and other states in response to changes in state taxes, because tax changes are offset by expenditure changes, leaving the net benefits to Minnesota taxpayers unchanged. In other words, labor (along with land) is assumed to be immobile. In contrast, changes in taxes on business income are assumed not to be offset by changes in benefits from government expenditures.

In summary, these six concepts have guided this study's approach to estimating the incidence of Minnesota's existing business taxes. The study provides an answer to the question: What is the burden of Minnesota taxes on Minnesota residents, in a multistate context where Minnesota's taxes coexist with those of other states, assuming that producers and consumers have fully adjusted to existing tax rate differences?

Allocation of Business Taxes

The six concepts discussed above are used in this section to determine the allocation of business taxes among the four major taxpayer categories: Minnesota consumers, capital and labor, and nonresidents. The methodology used in this step is discussed in detail before the results are presented.

Several major features of the tax incidence approach used in this study are important to keep in mind. First, this study emphasizes the importance of Minnesota tax rates relative to those in other states. In estimating the incidence of existing business taxes, it is the relative tax rate that matters, not the absolute level of taxes. The incidence of a property tax on manufacturers, for example, depends on how heavily other states tax such property.

Second, this study emphasizes the difference between the incidence of existing business taxes and the incidence of an incremental increase in those taxes. Much of an existing business tax is matched by taxes in other states. The incidence of an increase in such a tax (unmatched by increases in other states) would be quite different. The tax incidence results in this study measure the distribution of existing taxes, not the distribution of increasing Minnesota taxes relative to other states.

Third, this study estimates the burden of business taxes after businesses, consumers, and workers have fully adjusted to them in the long run. For example, relatively high tax rates on capital may reduce wages of Minnesota workers through less capital investment. This long-term perspective is appropriate for estimating the incidence of existing taxes.

Allocation of Business Taxes: An Example

To understand the allocation approach used in this study, suppose that Minnesota levied a \$120 million tax on capital — manufacturing equipment, for example. The owners of that capital are legally liable for the tax, but who would bear the ultimate burden? The first step in answering this question is to determine how shifting spreads the tax to capital owners, consumers and labor.

Allocating the Burden Among Capital, Consumers, and Labor

For each of the business taxes on capital, the tax paid by a particular economic sector is divided into three parts:

- ✍ The portion representing the *national average tax rate on all capital*.
- ✍ The portion representing the *national sector differential*.
- ✍ The portion representing the *Minnesota sector differential*.

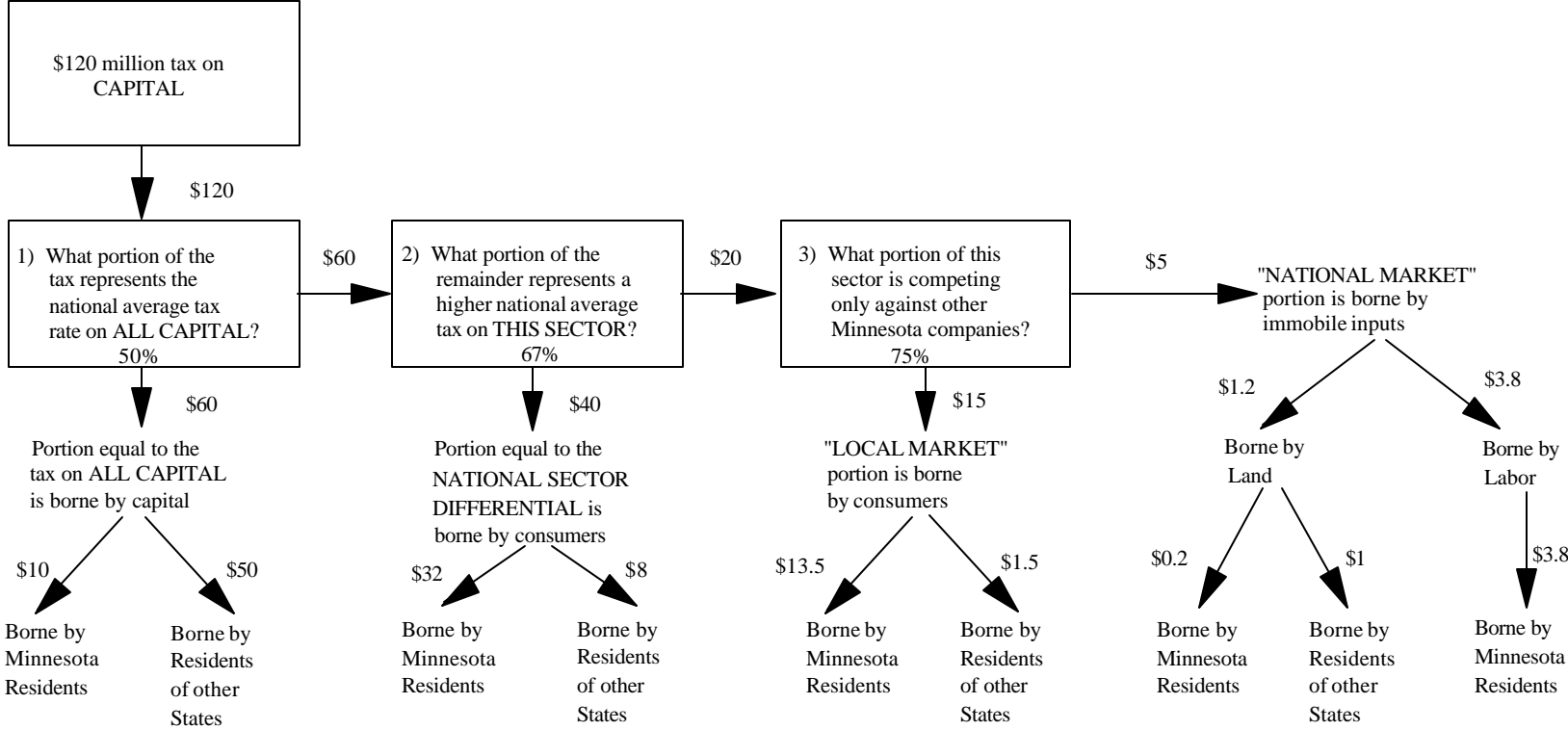
This 3-part division of the tax is based on the answers to three questions. The approach is summarized in *Figure 3-2*, using the example of a \$120 million property tax on capital in the manufacturing sector.

Question 1. What portion of this \$120 million Minnesota tax represents the national average tax on all capital? If all states levied an identical tax on *all* forms of capital, capital would be unable to shift that tax to others and the entire burden would be borne by capital. Given the variation in rates among the states, it is the “average national tax rate on capital” which is borne by capital owners.

The average tax rate on all capital is measured in this study as the average state tax rate on all capital — total tax revenue (in all states) divided by the total national stock of capital. If the Minnesota tax rate on a particular sector is equal to the

Figure 3-2

Incidence of a Hypothetical \$120 Million Tax on Capital



41

| Summary of Tax Incidence (\$ Millions) | | | |
|---|----------------|----------------------------|----------------------------------|
| <u>Taxpayer Category</u> | <u>Total</u> | <u>Minnesota Residents</u> | <u>Residents of Other States</u> |
| Capital* | \$61.2 | \$10.2 | \$51.0 |
| Consumers | 55.0 | 45.5 | 9.5 |
| Labor | 3.8 | 3.8 | 0.0 |
| Total | \$120.0 | \$59.5 | \$60.5 |

*Capital includes land.

national average tax rate on all capital, then the tax will be borne entirely by the owners of capital; if the Minnesota tax rate exceeds the national average tax rate the remainder of the Minnesota tax would be shifted either forward to consumers or backward to labor and other immobile inputs.

For each particular tax on capital, this study estimates the average national tax rate on all capital. If the Minnesota tax rate on a particular form of capital is twice the national average (as is assumed hypothetically in *Figure 3-2*), then the burden of the first half of the tax is assumed to fall on capital. What happens to the remaining half (\$60 million) depends on the answers to the next two questions.

Question 2. What portion of the remaining \$60 million in taxes on capital equipment represents a higher national average tax on this particular sector? Because capital taxes are levied at different rates on different forms of capital, some forms of capital are taxed in all states at a higher rate than all capital. For example, commercial property is taxed at a considerably higher rate than manufacturing property, and both are taxed more heavily than agriculture. In this example, suppose the national tax rate in the manufacturing sector is 1.67 times as high as the national average tax on all capital. This 67 percent higher-than-average tax rate difference for the manufacturing sector is referred to as its “national sector differential.”

Despite these heavier taxes, however, the after-tax rate of return in manufacturing cannot remain lower (with mobile capital) than the rate of return available in other sectors. As firms adjust by reducing output, the portion of a tax on capital equal to this “national sector differential” is borne entirely by consumers in the form of higher prices. For each tax on capital, this study estimates the average national tax rate on capital invested in each sector. The share of the Minnesota tax representing the “national sector differential” is allocated to consumers of products produced in Minnesota. (See *Figure 3-2*.)

The remaining tax (if any) is the “Minnesota sector differential” — the amount by which Minnesota’s tax rate on capital invested in this sector exceeds the national average tax rate in this sector. To determine who bears the burden of this “Minnesota differential,” it is necessary to answer the third question.

Question 3. What portion of this sector’s producers compete only against other Minnesota producers in “local markets”? For products sold in local markets, the Minnesota differential will result in higher prices to consumers.

In contrast, prices for products that compete in national markets (including most manufactured products) are determined nationally. A “Minnesota sector differential” on producers of such national market products cannot usually be shifted to consumers, so that the burden of the tax must fall on immobile resources, land and labor. This study assumes that immobile labor and landowners share the burden of any Minnesota sector differential for national market products in proportion to their relative shares in production.

In summary, to allocate the burden of taxes among capital owners, consumers, and labor, this study divides the tax into three parts (the percentages refer to the example in *Figure 3-2*):

1. The portion representing the “national average tax on all capital” is borne by capital (50 percent).
2. The portion representing the “national sector differential” is borne by consumers (33 percent).
3. The portion representing the “Minnesota sector differential” is borne by:
 - ✍ Consumers for products sold in “local markets” (13 percent);
 - ✍ Labor and landowners for products sold in “national markets” (4 percent).

This approach requires an estimate, for each tax, of the national average tax on all capital. For each tax and each sector, it requires an estimate of the Minnesota differential — the excess of Minnesota taxes over the national average for that sector. The study also needs to estimate, for each sector, the extent to which its products are sold in local as opposed to national markets.

Allocating the Burden between Minnesota Residents and Nonresidents

Exported Tax Burden. A large amount of capital located in Minnesota is owned by nonresidents. For the portion of any tax borne by capital and land, much of the burden will fall on residents of other states. This study assumed that nonresidents own 90 percent of the stock in corporations subject to Minnesota tax, and 20 percent of most noncorporate businesses (but only 5 percent of non-homestead residential property). As such, in sectors which are predominantly corporate, most of the burden falling on capital was exported.

Consumers located in other states will pay some of the “national sector differential” on Minnesota firms that is shifted forward in higher prices. In addition, nonresident visitors bear some of the tax shifted to in-state consumption. For each sector, this study estimated the proportion of sales made to (1) out-of-state consumers and (2) visitors.

The burden on labor (in the form of reduced wages) was assumed to fall entirely on Minnesota residents.

Imported Tax Burden. Both Minnesota consumers and Minnesota owners of capital and land located in other states pay taxes to other states. However, taxes that Minnesota residents pay to other states are ignored here; this study estimates and analyzes the incidence of Minnesota taxes on Minnesota residents.

Federal Tax Offset. In estimating the incidence of existing Minnesota taxes, this study makes no adjustment for the “federal tax offset” due to the deductibility of Minnesota business taxes in calculating federal taxable income. Given the “multistate” approach taken in this study, the federal tax offset is most likely to be quite small. All 50 states levy business taxes. Since approximately one-third of every state’s business taxes are offset by a reduction in federal revenues, the federal government has essentially replaced this lost tax revenue through higher federal tax rates. A state’s “net” federal tax offset would be its “gross” federal tax offset minus the state’s share of those increased federal tax payments. As a result, the net offset for the average state would be zero; with above average business taxes, Minnesota’s would be positive. However, given the offset’s small and uncertain size, this study simply assumes it is zero.

The same argument also applies to the federal tax offset for non-business taxes (the individual income tax, homeowner property tax, and motor vehicle registration tax) deductible in calculating federal individual income tax liability; the net offset for the average state is again zero. Given the multistate perspective of this study, no federal tax offset for household taxes is included. For informational purposes, however, the impact of the federal tax offset for non-business taxes is presented in *Table 2-8*.

Taxes on Intermediate Business Inputs

The incidence of a tax on short-lived intermediate business inputs like gasoline, business meals, lodging, or liquor, is different from the incidence of a tax on capital. While a uniform national tax on all capital would be borne by capital, a uniform national tax on business purchases of gasoline, for example, would not. It would almost certainly be shifted forward to consumers in higher prices. Taxes on short-lived intermediate products raise the cost of production, but they do not raise the cost of capital.

As a result, the approach to the incidence of such taxes skips the first of the three questions asked about capital taxes. The tax on intermediate business purchases is divided into only two parts:

1. The portion representing the “average national tax rate” on this sector is shifted forward to consumers in higher prices.
2. The portion representing the “Minnesota differential” is borne by:
 - a. Consumers for products sold in “local markets;”
 - b. Labor and landowners for products sold in “national markets.”

A summary description of the incidence results for the distribution of each business tax to consumers, capital and labor (both residents and nonresidents) is provided in *Table 3-2*. The business tax allocators used to estimate the business tax burden for specific Minnesota households are discussed below. Further explanation of the incidence estimated for each of the business taxes can be found in the 1999 Tax Incidence Study.

Table 3-2
Distribution of Business Tax Burden
by Taxpayer Category

| | Percent Borne by Minnesota Taxpayers | | | Percent Exported |
|-------------------------------------|--------------------------------------|-------|---------|------------------|
| | Consumers | Labor | Capital | |
| Business Property Taxes | | | | |
| Commercial | 36% | 4% | 15% | 45% |
| Industrial | 2 | 0 | 10 | 88 |
| Farm | 0 | 0 | 100 | 0 |
| Public Utility | 57 | 4 | 2 | 37 |
| Rental Housing | 49 | 0 | 37 | 15 |
| All Sectors | 32% | 2% | 26% | 41% |
| Sales Tax on Business Inputs | | | | |
| Agriculture | 25% | 0% | 28% | 47% |
| Mining | 4 | 7 | 7 | 82 |
| Construction | 80 | 0 | 7 | 12 |
| Durable Manufacturing | 14 | 5 | 3 | 78 |
| Nondurable Manufacturing | 13 | 3 | 3 | 80 |
| TCPU | 52 | 3 | 3 | 42 |
| FIRE | 66 | 3 | 4 | 27 |
| Services | 70 | 0 | 9 | 20 |
| Retail Trade | 53 | 0 | 12 | 35 |
| Wholesale Trade | 54 | 1 | 4 | 41 |
| All Sectors | 59% | 1% | 8% | 32% |
| Corporate Franchise Tax | | | | |
| Commercial | 53% | 8% | 3% | 37% |
| Manufacturing | 12 | 9 | 3 | 76 |
| Public Utility | 49 | 8 | 3 | 40 |
| Mining | 5 | 17 | 3 | 75 |
| All Sectors | 39% | 8% | 3% | 50% |
| Other Business Taxes | | | | |
| Motor Fuels | 64% | 0% | 0% | 36 |
| Motor Vehicle Registration | 29 | 13 | 11 | 46 |
| Mortgage and Deed Taxes | 20 | 0 | 36 | 44 |
| Insurance Premium | 24 | 0 | 13 | 63 |

Business Tax Allocators

After estimating the share of Minnesota business taxes borne by Minnesota owners of capital and land, consumers, and labor, the final step was to allocate those taxes to specific households based on each household's characteristics contained in the database records. In most cases, the study allocated to each household the average tax burden for households with the same characteristics. *Table 3-3* summarizes the allocators used in this final step.

Table 3-3
Business Tax Allocators

| Allocator | Used to Distribute Tax Borne By: |
|--------------------------------|----------------------------------|
| Dividend income | Corporate owners |
| Noncorporate capital ownership | Noncorporate owners |
| Total consumer expenditures | Consumers |
| Labor income | Workers |
| Farm income | Farmers using their own land |
| Farm rents | Farmers leasing their land |

Burden on Consumers. Taxes shifted forward to consumers were allocated to consumers based on their share of total consumer expenditures, as estimated from the *Consumer Expenditure Survey*. Total expenditures for a particular household were estimated based on household income and size.

Burden on Renters. Households filing for property tax refunds report the property tax paid on their housing unit (calculated by their landlord). The renter's burden was assumed to be 59 percent of this reported tax. The property tax on their rental unit was estimated as a percent of their rent, and the renter's burden was again assumed to be 59 percent of the estimated tax. The property tax for the remaining renter households was assumed equal to that of households in the first two groups with similar incomes and household characteristics.

Burden on Corporate Capital. The burden on corporate capital was allocated to households in proportion to taxable dividends received. This allocator was used to estimate the total income received by owners of corporate stock, both as dividends and as capital gains on appreciated stock. Although dividends received may not be a good measure of corporate ownership for particular individuals, the decile-by-decile distribution of dividend income should match the distribution of corporate capital fairly closely.

Burden on Noncorporate Capital. Noncorporate business capital includes capital owned by sole proprietors, partnerships, and S corporations. This study used a variety of information from Schedules C and E to develop a reasonable estimate of each household's ownership of noncorporate capital. The construction of this measure guaranteed that: (1) households with large business losses are assigned some capital ownership (based on either claimed depreciation or the size of claimed losses); and (2) the shares of capital ownership imputed to those with sole proprietor income, rental income, and partnership and S corporation income are roughly proportional to each income source's aggregate share of claimed depreciation.

Burden on Farmers. Rental land accounts for about one third of Minnesota farm land. Approximately half of all farm property taxes were paid on rented land, reflecting higher classification rates on non-homestead farms. Therefore about half of the farm property tax burden was allocated in proportion to farm income (reported on Schedule F), with the rest allocated in proportion to farm rents (reported on Schedule E).

Burden on Labor. The burden on labor (through lower wages) was allocated based on each household's share of earned income, defined as the sum of wages and salaries plus three-quarters of sole proprietor income.

Estimating the Impact of a Change in Business Taxes

This study estimates the burden of existing business taxes at current levels. *The results presented here do not directly apply to changes in the level of business taxes.* As explained in this chapter, the first step in the incidence analysis was to divide existing business taxes into three parts: the national average tax on all capital, the sector differential, and the Minnesota differential. In contrast, a change in business taxes in Minnesota (unmatched by changes elsewhere) would consist of only one part: the Minnesota differential. As a result, distribution of the burden would be different.

Compared to the results presented in this study, the incidence of an increase or decrease in Minnesota business taxes would fall:

- ✍ less on nonresidents,
- ✍ less on Minnesota owners of capital,
- ✍ more on Minnesota consumers, and
- ✍ more on Minnesota labor.

Illustrations of the magnitude of these differences were presented in the 1993 edition of this study (Appendix B).

Appendix Tables

Table A-1 (a)
1998 Tax Collection Amounts
(\$ Millions)

Population
Deciles

| Tax Category | Total | As Imposed | | | After Shifting | | Suits Index |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|---------------|
| | | MN HH's | NR | Business | Minn. | Exported | |
| Taxes on Income | | | | | | | |
| Individual income tax | \$5,306 | \$5,100 | \$206 | | \$5,100 | \$206 | 0.173 |
| Corporate franchise tax | 765 | | | \$765 | 381 | 384 | -0.144 |
| Total income taxes | \$6,071 | \$5,100 | \$206 | \$765 | \$5,482 | \$589 | 0.151 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$3,808 | \$2,013 | \$127 | \$1,667 | \$3,140 | \$668 | -0.178 |
| General sales/use | 3,342 | 1,704 | 127 | 1,510 | 2,725 | 617 | -0.175 |
| Sales tax motor vehicles | 466 | 309 | | 157 | 415 | 51 | -0.197 |
| Motor fuels excise tax | 563 | 247 | 91 | 225 | 392 | 171 | -0.249 |
| Alcoholic beverage excise tax | 58 | 52 | 6 | | 52 | 6 | -0.207 |
| Cigarette and tobacco excise taxes | 192 | 186 | 6 | | 186 | 6 | -0.528 |
| Insurance premiums tax | 154 | 89 | | 64 | 113 | 41 | -0.128 |
| Gambling taxes | 62 | 61 | 2 | | 61 | 2 | -0.399 |
| MinnesotaCare taxes | 133 | 129 | 4 | | 129 | 4 | -0.220 |
| Total consumption taxes | \$4,970 | \$2,777 | \$236 | \$1,956 | \$4,072 | \$898 | -0.204 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$1,920 | \$1,920 | | | \$1,920 | | -0.131 |
| Residential rental property (gross) | 462 | | | \$462 | 395 | \$67 | -0.357 |
| Total property tax refunds | (182) | (182) | | | (182) | | 0.823 |
| Homeowners | (80) | (80) | | | (80) | | 0.747 |
| Renters | (102) | (102) | | | (102) | | 0.882 |
| Residential recreational (cabins) | 102 | 82 | \$20 | | 82 | 20 | -0.202 |
| Commercial | 1,126 | | | 1,126 | 620 | 506 | -0.126 |
| Industrial | 412 | | | 412 | 48 | 364 | 0.103 |
| Farms (other than residence) | 272 | | | 272 | 272 | | -0.323 |
| Utility | 316 | | | 316 | 215 | 101 | -0.164 |
| Total Local | \$4,428 | \$1,820 | \$20 | \$2,588 | \$3,370 | \$1,058 | -0.135 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$532 | \$431 | | \$101 | \$485 | \$47 | -0.130 |
| Mortgage and deed taxes | 136 | 92 | | 44 | 117 | 19 | -0.124 |
| Total State | \$668 | \$523 | | \$145 | \$602 | \$66 | -0.129 |
| Total property taxes | \$5,096 | \$2,343 | \$20 | \$2,733 | \$3,972 | \$1,123 | -0.134 |
| Total Taxes | \$16,137 | \$10,220 | \$462 | \$5,454 | \$13,526 | \$2,611 | -0.040 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table A-1 (b)

2001 Minnesota Tax Incidence Study (1998 Data)
State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 223,267 | \$1,094,370 | -\$5,507 | \$9,660 | \$56,670 | \$32,030 | \$88,700 | \$24,099 | \$4,024 | \$16,504 | \$2,846 | \$91,766 | \$48,561 | \$140,326 |
| Second | \$7,971 - \$13,047 | 223,267 | \$2,351,235 | -\$5,642 | \$11,805 | \$67,865 | \$38,873 | \$106,738 | \$29,433 | \$4,911 | \$20,332 | \$3,175 | \$111,987 | \$58,764 | \$170,751 |
| Third | \$13,047 - \$18,550 | 223,267 | \$3,540,996 | \$16,601 | \$16,759 | \$95,993 | \$52,117 | \$148,110 | \$39,580 | \$6,648 | \$31,699 | \$3,653 | \$183,874 | \$79,176 | \$263,050 |
| Fourth | \$18,550 - \$24,885 | 223,267 | \$4,813,312 | \$88,452 | \$21,727 | \$123,581 | \$67,092 | \$190,673 | \$43,132 | \$8,576 | \$45,604 | \$5,262 | \$300,769 | \$102,657 | \$403,426 |
| Fifth | \$24,885 - \$31,890 | 223,267 | \$6,317,248 | \$176,407 | \$25,739 | \$140,556 | \$78,939 | \$219,496 | \$43,460 | \$10,095 | \$53,588 | \$6,730 | \$414,011 | \$121,503 | \$535,514 |
| Sixth | \$31,890 - \$40,645 | 223,267 | \$8,060,426 | \$284,030 | \$32,821 | \$187,276 | \$97,128 | \$284,405 | \$49,985 | \$12,485 | \$76,241 | \$7,838 | \$597,531 | \$150,273 | \$747,804 |
| Seventh | \$40,645 - \$51,669 | 223,267 | \$10,219,180 | \$401,286 | \$38,558 | \$217,081 | \$115,032 | \$332,113 | \$55,957 | \$14,787 | \$91,255 | \$9,901 | \$765,580 | \$178,277 | \$943,857 |
| Eighth | \$51,669 - \$66,043 | 223,267 | \$13,018,657 | \$585,782 | \$48,380 | \$265,911 | \$141,100 | \$407,011 | \$59,304 | \$18,189 | \$116,061 | \$12,321 | \$1,027,059 | \$219,990 | \$1,247,049 |
| Ninth | \$66,043 - \$92,346 | 223,267 | \$17,300,119 | \$842,633 | \$59,737 | \$318,693 | \$171,377 | \$490,071 | \$65,710 | \$22,172 | \$140,478 | \$14,174 | \$1,367,514 | \$267,460 | \$1,634,974 |
| Tenth | \$92,346 & over | 223,267 | \$47,895,415 | \$2,716,428 | \$115,965 | \$539,713 | \$333,471 | \$873,184 | \$74,309 | \$42,685 | \$210,104 | \$37,048 | \$3,540,554 | \$529,169 | \$4,069,722 |
| TOTALS | | 2,232,670 | \$114,610,957 | \$5,100,469 | \$381,151 | \$2,013,340 | \$1,127,160 | \$3,140,500 | \$484,969 | \$144,572 | \$801,866 | \$102,948 | \$8,400,645 | \$1,755,830 | \$10,156,474 |
| Top 5% | Over \$127,880 | 111,680 | \$36,014,107 | \$2,085,014 | \$78,581 | \$351,661 | \$226,000 | \$577,661 | \$42,360 | \$28,811 | \$130,240 | \$26,728 | \$2,609,275 | \$360,120 | \$2,969,395 |
| Top 1% | Over \$310,014 | 22,358 | \$19,774,737 | \$1,191,069 | \$25,810 | \$83,747 | \$64,556 | \$148,303 | \$9,405 | \$8,248 | \$31,066 | \$11,017 | \$1,315,287 | \$109,632 | \$1,424,919 |

52

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 223,267 | \$1,094,370 | \$31,976 | -\$2,017 | \$4,317 | \$2,300 | \$2,991 | \$37,267 | \$43,278 | \$80,545 | \$220,872 |
| Second | \$7,971 - \$13,047 | 223,267 | \$2,351,235 | \$45,795 | -\$1,847 | \$6,358 | \$4,511 | \$2,612 | \$52,918 | \$41,300 | \$94,218 | \$264,969 |
| Third | \$13,047 - \$18,550 | 223,267 | \$3,540,996 | \$57,620 | \$4,309 | \$5,703 | \$10,012 | \$4,630 | \$72,262 | \$45,718 | \$117,980 | \$381,031 |
| Fourth | \$18,550 - \$24,885 | 223,267 | \$4,813,312 | \$77,537 | \$11,072 | \$8,898 | \$19,970 | \$6,001 | \$103,507 | \$69,019 | \$172,526 | \$575,952 |
| Fifth | \$24,885 - \$31,890 | 223,267 | \$6,317,248 | \$117,943 | \$19,336 | \$12,573 | \$31,909 | \$6,444 | \$156,296 | \$75,146 | \$231,442 | \$766,956 |
| Sixth | \$31,890 - \$40,645 | 223,267 | \$8,060,426 | \$158,216 | \$24,060 | \$10,261 | \$34,321 | \$7,089 | \$199,626 | \$111,870 | \$311,497 | \$1,059,301 |
| Seventh | \$40,645 - \$51,669 | 223,267 | \$10,219,180 | \$207,736 | \$18,435 | \$16,684 | \$35,119 | \$7,858 | \$250,713 | \$120,095 | \$370,809 | \$1,314,666 |
| Eighth | \$51,669 - \$66,043 | 223,267 | \$13,018,657 | \$246,041 | \$15,493 | \$18,417 | \$33,910 | \$8,831 | \$288,782 | \$148,788 | \$437,571 | \$1,684,620 |
| Ninth | \$66,043 - \$92,346 | 223,267 | \$17,300,119 | \$316,552 | \$13,733 | \$20,860 | \$34,593 | \$13,857 | \$365,002 | \$157,690 | \$522,692 | \$2,157,667 |
| Tenth | \$92,346 & over | 223,267 | \$47,895,415 | \$580,283 | \$20,019 | \$65,908 | \$85,926 | \$21,947 | \$688,157 | \$342,436 | \$1,030,593 | \$5,100,315 |
| TOTALS | | 2,232,670 | \$114,610,957 | \$1,839,700 | \$122,594 | \$169,978 | \$292,572 | \$82,260 | \$2,214,531 | \$1,155,342 | \$3,369,873 | \$13,526,348 |
| Top 5% | Over \$127,880 | | \$36,014,107 | \$368,382 | \$11,854 | \$48,631 | \$60,485 | \$12,935 | \$441,803 | \$234,925 | \$676,727 | \$3,646,122 |
| Top 1% | Over \$310,014 | | \$19,774,737 | \$117,291 | \$2,613 | \$16,499 | \$19,112 | \$3,622 | \$140,025 | \$81,012 | \$221,037 | \$1,645,956 |

Table A-1 (c)

2001 Minnesota Tax Incidence Study (1998 Data)
Effective Tax Rates by Population Decile (dollars in thousands)
ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 223,267 | \$1,094,370 | - 0.5% | 0.9% | 5.2% | 2.9% | 8.1% | 2.2% | 0.4% | 1.5% | 0.3% | 8.4% | 4.4% | 12.8% |
| Second | \$7,971 - \$13,047 | 223,267 | \$2,351,235 | - 0.2% | 0.5% | 2.9% | 1.7% | 4.5% | 1.3% | 0.2% | 0.9% | 0.1% | 4.8% | 2.5% | 7.3% |
| Third | \$13,047 - \$18,550 | 223,267 | \$3,540,996 | 0.5% | 0.5% | 2.7% | 1.5% | 4.2% | 1.1% | 0.2% | 0.9% | 0.1% | 5.2% | 2.2% | 7.4% |
| Fourth | \$18,550 - \$24,885 | 223,267 | \$4,813,312 | 1.8% | 0.5% | 2.6% | 1.4% | 4.0% | 0.9% | 0.2% | 0.9% | 0.1% | 6.2% | 2.1% | 8.4% |
| Fifth | \$24,885 - \$31,890 | 223,267 | \$6,317,248 | 2.8% | 0.4% | 2.2% | 1.2% | 3.5% | 0.7% | 0.2% | 0.8% | 0.1% | 6.6% | 1.9% | 8.5% |
| Sixth | \$31,890 - \$40,645 | 223,267 | \$8,060,426 | 3.5% | 0.4% | 2.3% | 1.2% | 3.5% | 0.6% | 0.2% | 0.9% | 0.1% | 7.4% | 1.9% | 9.3% |
| Seventh | \$40,645 - \$51,669 | 223,267 | \$10,219,180 | 3.9% | 0.4% | 2.1% | 1.1% | 3.2% | 0.5% | 0.1% | 0.9% | 0.1% | 7.5% | 1.7% | 9.2% |
| Eighth | \$51,669 - \$66,043 | 223,267 | \$13,018,657 | 4.5% | 0.4% | 2.0% | 1.1% | 3.1% | 0.5% | 0.1% | 0.9% | 0.1% | 7.9% | 1.7% | 9.6% |
| Ninth | \$66,043 - \$92,346 | 223,267 | \$17,300,119 | 4.9% | 0.3% | 1.8% | 1.0% | 2.8% | 0.4% | 0.1% | 0.8% | 0.1% | 7.9% | 1.5% | 9.5% |
| Tenth | \$92,346 & over | 223,267 | \$47,895,415 | 5.7% | 0.2% | 1.1% | 0.7% | 1.8% | 0.2% | 0.1% | 0.4% | 0.1% | 7.4% | 1.1% | 8.5% |
| TOTALS | | 2,232,670 | \$114,610,957 | 4.5% | 0.3% | 1.8% | 1.0% | 2.7% | 0.4% | 0.1% | 0.7% | 0.1% | 7.3% | 1.5% | 8.9% |
| Top 5% | Over \$127,880 | 111,680 | \$36,014,107 | 5.8% | 0.2% | 1.0% | 0.6% | 1.6% | 0.1% | 0.1% | 0.4% | 0.1% | 7.2% | 1.0% | 8.2% |
| Top 1% | Over \$310,014 | 22,358 | \$19,774,737 | 6.0% | 0.1% | 0.4% | 0.3% | 0.7% | 0.0% | 0.0% | 0.2% | 0.1% | 6.7% | 0.6% | 7.2% |

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 223,267 | \$1,094,370 | 2.9% | - 0.2% | 0.4% | 0.2% | 0.3% | 3.4% | 4.0% | 7.4% | 20.2% |
| Second | \$7,971 - \$13,047 | 223,267 | \$2,351,235 | 1.9% | - 0.1% | 0.3% | 0.2% | 0.1% | 2.3% | 1.8% | 4.0% | 11.3% |
| Third | \$13,047 - \$18,550 | 223,267 | \$3,540,996 | 1.6% | 0.1% | 0.2% | 0.3% | 0.1% | 2.0% | 1.3% | 3.3% | 10.8% |
| Fourth | \$18,550 - \$24,885 | 223,267 | \$4,813,312 | 1.6% | 0.2% | 0.2% | 0.4% | 0.1% | 2.2% | 1.4% | 3.6% | 12.0% |
| Fifth | \$24,885 - \$31,890 | 223,267 | \$6,317,248 | 1.9% | 0.3% | 0.2% | 0.5% | 0.1% | 2.5% | 1.2% | 3.7% | 12.1% |
| Sixth | \$31,890 - \$40,645 | 223,267 | \$8,060,426 | 2.0% | 0.3% | 0.1% | 0.4% | 0.1% | 2.5% | 1.4% | 3.9% | 13.1% |
| Seventh | \$40,645 - \$51,669 | 223,267 | \$10,219,180 | 2.0% | 0.2% | 0.2% | 0.3% | 0.1% | 2.5% | 1.2% | 3.6% | 12.9% |
| Eighth | \$51,669 - \$66,043 | 223,267 | \$13,018,657 | 1.9% | 0.1% | 0.1% | 0.3% | 0.1% | 2.2% | 1.1% | 3.4% | 12.9% |
| Ninth | \$66,043 - \$92,346 | 223,267 | \$17,300,119 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.1% | 0.9% | 3.0% | 12.5% |
| Tenth | \$92,346 & over | 223,267 | \$47,895,415 | 1.2% | 0.0% | 0.1% | 0.2% | 0.0% | 1.4% | 0.7% | 2.2% | 10.6% |
| TOTALS | | 2,232,670 | \$114,610,957 | 1.6% | 0.1% | 0.1% | 0.3% | 0.1% | 1.9% | 1.0% | 2.9% | 11.8% |
| Top 5% | Over \$127,880 | 111,680 | \$36,014,107 | 1.0% | 0.0% | 0.1% | 0.2% | 0.0% | 1.2% | 0.7% | 1.9% | 10.1% |
| Top 1% | Over \$310,014 | 22,358 | \$19,774,737 | 0.6% | 0.0% | 0.1% | 0.1% | 0.0% | 0.7% | 0.4% | 1.1% | 8.3% |

Table A-2 (a)
1998 Tax Collection Amounts
(\$ Millions)

Income
Deciles

| Tax Category | Total | As Imposed | | | After Shifting | | Suits Index |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|---------------|
| | | MN HH's | NR | Business | Minn. | Exported | |
| Taxes on Income | | | | | | | |
| Individual income tax | \$5,306 | \$5,100 | \$206 | | \$5,100 | \$206 | 0.178 |
| Corporate franchise tax | 765 | | | \$765 | 381 | 384 | -0.171 |
| Total income taxes | \$6,071 | \$5,100 | \$206 | \$765 | \$5,482 | \$589 | 0.153 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$3,808 | \$2,013 | \$127 | \$1,667 | \$3,140 | \$668 | -0.210 |
| General sales/use | 3,342 | 1,704 | 127 | 1,510 | 2,725 | 617 | -0.207 |
| Sales tax motor vehicles | 466 | 309 | | 157 | 415 | 51 | -0.229 |
| Motor fuels excise tax | 563 | 247 | 91 | 225 | 392 | 171 | -0.277 |
| Alcoholic beverage excise tax | 58 | 52 | 6 | | 52 | 6 | -0.234 |
| Cigarette and tobacco excise taxes | 192 | 186 | 6 | | 186 | 6 | -0.533 |
| Insurance premiums tax | 154 | 89 | | 64 | 113 | 41 | -0.156 |
| Gambling taxes | 62 | 61 | 2 | | 61 | 2 | -0.421 |
| MinnesotaCare taxes | 133 | 129 | 4 | | 129 | 4 | -0.255 |
| Total consumption taxes | \$4,970 | \$2,777 | \$236 | \$1,956 | \$4,072 | \$898 | -0.234 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$1,920 | \$1,920 | | | \$1,920 | | -0.163 |
| Residential rental property (gross) | 462 | | | \$462 | 395 | \$67 | -0.369 |
| Total property tax refunds | (182) | (182) | | | (182) | | 0.804 |
| Homeowners | (80) | (80) | | | (80) | | 0.738 |
| Renters | (102) | (102) | | | (102) | | 0.856 |
| Residential recreational (cabins) | 102 | 82 | \$20 | | 82 | 20 | -0.234 |
| Commercial | 1,126 | | | 1,126 | 620 | 506 | -0.151 |
| Industrial | 412 | | | 412 | 48 | 364 | 0.125 |
| Farms (other than residence) | 272 | | | 272 | 272 | | -0.350 |
| Utility | 316 | | | 316 | 215 | 101 | -0.192 |
| Total Local | \$4,428 | \$1,820 | \$20 | \$2,588 | \$3,370 | \$1,058 | -0.165 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$532 | \$431 | | \$101 | \$485 | \$47 | -0.166 |
| Mortgage and deed taxes | 136 | 92 | | 44 | 117 | 19 | -0.158 |
| Total State | \$668 | \$523 | | \$145 | \$602 | \$66 | -0.164 |
| Total property taxes | \$5,096 | \$2,343 | \$20 | \$2,733 | \$3,972 | \$1,123 | -0.165 |
| Total Taxes | \$16,137 | \$10,220 | \$462 | \$5,454 | \$13,526 | \$2,611 | -0.057 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suites indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table A-2 (b)

2001 Minnesota Tax Incidence Study (1998 Data)
State and Local Tax Burden Amounts by Income Decile (dollars in thousands)
ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|-----------------------|----------------------|--------------------|-----------------------|-------------------------|--------------------------|-------------------------|--------------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|---------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$24,957 & under | 895,648 | 11,876,186 | \$96,363 | \$60,302 | \$346,007 | \$191,070 | \$537,077 | \$136,780 | \$24,284 | \$114,838 | \$15,033 | \$693,987 | \$290,688 | \$984,676 |
| Second | \$24,957 - \$37,588 | 369,423 | 11,393,869 | \$351,421 | \$46,852 | \$261,311 | \$141,081 | \$402,392 | \$75,657 | \$18,087 | \$102,618 | \$11,551 | \$791,007 | \$217,571 | \$1,008,579 |
| Third | \$37,588 - \$49,666 | 263,629 | 11,397,088 | \$435,091 | \$43,574 | \$246,005 | \$130,637 | \$376,642 | \$64,483 | \$16,778 | \$102,678 | \$11,373 | \$848,258 | \$202,362 | \$1,050,620 |
| Fourth | \$49,666 - \$61,887 | 205,048 | 11,395,920 | \$500,277 | \$42,725 | \$236,236 | \$124,930 | \$361,166 | \$53,701 | \$16,102 | \$102,368 | \$10,811 | \$892,582 | \$194,567 | \$1,087,149 |
| Fifth | \$61,887 - \$76,959 | 165,350 | 11,391,817 | \$540,566 | \$41,240 | \$224,078 | \$120,090 | \$344,168 | \$47,565 | \$15,500 | \$98,716 | \$10,047 | \$910,924 | \$186,878 | \$1,097,802 |
| Sixth | \$76,959 - \$96,619 | 133,017 | 11,396,035 | \$571,419 | \$37,678 | \$196,991 | \$106,968 | \$303,959 | \$39,022 | \$13,854 | \$86,248 | \$8,974 | \$893,681 | \$167,474 | \$1,061,155 |
| Seventh | \$96,619 - \$136,008 | 101,520 | 11,401,442 | \$611,841 | \$37,122 | \$187,240 | \$107,290 | \$294,530 | \$29,967 | \$13,824 | \$77,614 | \$10,097 | \$906,662 | \$168,333 | \$1,074,996 |
| Eighth | \$136,008 - \$242,719 | 64,970 | 11,390,021 | \$628,424 | \$38,307 | \$196,038 | \$117,417 | \$313,455 | \$24,039 | \$14,957 | \$72,241 | \$11,305 | \$920,741 | \$181,986 | \$1,102,727 |
| Ninth | \$242,719 - \$840,892 | 29,429 | 11,424,579 | \$663,781 | \$23,696 | \$102,035 | \$68,073 | \$170,108 | \$11,803 | \$8,685 | \$37,755 | \$8,592 | \$815,375 | \$109,047 | \$924,421 |
| Tenth | \$840,892 & over | 4,637 | 11,543,999 | \$701,286 | \$9,655 | \$17,399 | \$19,602 | \$37,001 | \$1,952 | \$2,504 | \$6,789 | \$5,164 | \$727,426 | \$36,925 | \$764,351 |
| TOTALS | | 2,232,670 | 114,610,957 | \$5,100,469 | \$381,151 | \$2,013,340 | \$1,127,159 | \$3,140,499 | \$484,969 | \$144,574 | \$801,865 | \$102,947 | \$8,400,643 | \$1,755,831 | \$10,156,474 |
| Top 5% | Over \$3,221,710 | 619 | 5,842,240 | \$355,788 | \$3,778 | \$2,322 | \$5,914 | \$8,236 | \$985 | \$757 | \$996 | \$2,251 | \$360,091 | \$12,700 | \$372,791 |
| Top 1% | Over \$38,072,306 | 19 | 1,295,645 | \$66,895 | \$622 | \$72 | \$736 | \$808 | \$105 | \$98 | \$27 | \$349 | \$67,100 | \$1,805 | \$68,905 |

56

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|-----------------------|----------------------|----------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|--------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$24,957 & under | 895,648 | \$11,876,186 | \$214,694 | \$11,605 | \$25,271 | \$36,876 | \$16,315 | \$267,886 | \$201,306 | \$469,191 | \$1,453,867 |
| Second | \$24,957 - \$37,588 | 369,423 | \$11,393,869 | \$218,370 | \$34,029 | \$18,114 | \$52,142 | \$10,962 | \$281,474 | \$147,686 | \$429,160 | \$1,437,739 |
| Third | \$37,588 - \$49,666 | 263,629 | \$11,397,088 | \$230,816 | \$24,424 | \$19,463 | \$43,887 | \$9,164 | \$283,867 | \$139,007 | \$422,874 | \$1,473,493 |
| Fourth | \$49,666 - \$61,887 | 205,048 | \$11,395,920 | \$217,379 | \$15,823 | \$16,220 | \$32,043 | \$7,699 | \$257,121 | \$132,346 | \$389,467 | \$1,476,615 |
| Fifth | \$61,887 - \$76,959 | 165,350 | \$11,391,817 | \$214,272 | \$9,465 | \$15,483 | \$24,949 | \$8,133 | \$247,354 | \$115,724 | \$363,078 | \$1,460,880 |
| Sixth | \$76,959 - \$96,619 | 133,017 | \$11,396,035 | \$200,825 | \$8,549 | \$13,032 | \$21,581 | \$9,756 | \$232,162 | \$94,850 | \$327,013 | \$1,388,167 |
| Seventh | \$96,619 - \$136,008 | 101,520 | \$11,401,442 | \$203,528 | \$8,516 | \$16,777 | \$25,293 | \$8,461 | \$237,282 | \$107,703 | \$344,985 | \$1,419,981 |
| Eighth | \$136,008 - \$242,719 | 64,970 | \$11,390,021 | \$182,036 | \$6,389 | \$22,809 | \$29,199 | \$6,672 | \$217,907 | \$112,831 | \$330,738 | \$1,433,465 |
| Ninth | \$242,719 - \$840,892 | 29,429 | \$11,424,579 | \$124,186 | \$2,994 | \$16,941 | \$19,935 | \$4,357 | \$148,479 | \$71,762 | \$220,241 | \$1,144,662 |
| Tenth | \$840,892 & over | 4,637 | \$11,543,999 | \$33,593 | \$800 | \$5,867 | \$6,667 | \$741 | \$41,001 | \$32,125 | \$73,127 | \$837,478 |
| TOTALS | | 2,232,670 | \$114,610,957 | \$1,839,701 | \$122,594 | \$169,978 | \$292,572 | \$82,260 | \$2,214,532 | \$1,155,341 | \$3,369,873 | \$13,526,348 |
| Top 5% | Over \$3,221,710 | 619 | \$5,842,240 | \$7,136 | \$150 | \$1,606 | \$1,756 | \$99 | \$8,991 | \$13,029 | \$22,021 | \$394,812 |
| Top 1% | Over \$38,072,306 | 19 | \$1,295,645 | \$251 | \$1 | \$68 | \$68 | \$3 | \$322 | \$1,984 | \$2,305 | \$71,210 |

Table A-2 (c)

2001 Minnesota Tax Incidence Study (1998 Data)
 Effective Tax Rates by Income Decile (dollars in thousands)
 ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|-----------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$24,957 & under | 895,648 | \$11,876,186 | 0.8% | 0.5% | 2.9% | 1.6% | 4.5% | 1.2% | 0.2% | 1.0% | 0.1% | 5.8% | 2.4% | 8.3% |
| Second | \$24,957 - \$37,588 | 369,423 | \$11,393,869 | 3.1% | 0.4% | 2.3% | 1.2% | 3.5% | 0.7% | 0.2% | 0.9% | 0.1% | 6.9% | 1.9% | 8.9% |
| Third | \$37,588 - \$49,666 | 263,629 | \$11,397,088 | 3.8% | 0.4% | 2.2% | 1.1% | 3.3% | 0.6% | 0.1% | 0.9% | 0.1% | 7.4% | 1.8% | 9.2% |
| Fourth | \$49,666 - \$61,887 | 205,048 | \$11,395,920 | 4.4% | 0.4% | 2.1% | 1.1% | 3.2% | 0.5% | 0.1% | 0.9% | 0.1% | 7.8% | 1.7% | 9.5% |
| Fifth | \$61,887 - \$76,959 | 165,350 | \$11,391,817 | 4.7% | 0.4% | 2.0% | 1.1% | 3.0% | 0.4% | 0.1% | 0.9% | 0.1% | 8.0% | 1.6% | 9.6% |
| Sixth | \$76,959 - \$96,619 | 133,017 | \$11,396,035 | 5.0% | 0.3% | 1.7% | 0.9% | 2.7% | 0.3% | 0.1% | 0.8% | 0.1% | 7.8% | 1.5% | 9.3% |
| Seventh | \$96,619 - \$136,008 | 101,520 | \$11,401,442 | 5.4% | 0.3% | 1.6% | 0.9% | 2.6% | 0.3% | 0.1% | 0.7% | 0.1% | 8.0% | 1.5% | 9.4% |
| Eighth | \$136,008 - \$242,719 | 64,970 | \$11,390,021 | 5.5% | 0.3% | 1.7% | 1.0% | 2.8% | 0.2% | 0.1% | 0.6% | 0.1% | 8.1% | 1.6% | 9.7% |
| Ninth | \$242,719 - \$840,892 | 29,429 | \$11,424,579 | 5.8% | 0.2% | 0.9% | 0.6% | 1.5% | 0.1% | 0.1% | 0.3% | 0.1% | 7.1% | 1.0% | 8.1% |
| Tenth | \$840,892 & over | 4,637 | \$11,543,999 | 6.1% | 0.1% | 0.2% | 0.2% | 0.3% | 0.0% | 0.0% | 0.1% | 0.0% | 6.3% | 0.3% | 6.6% |
| TOTALS | | 2,232,670 | \$114,610,957 | 4.5% | 0.3% | 1.8% | 1.0% | 2.7% | 0.4% | 0.1% | 0.7% | 0.1% | 7.3% | 1.5% | 8.9% |
| Top 5% | Over \$3,221,710 | 619 | \$5,842,240 | 6.1% | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 6.2% | 0.2% | 6.4% |
| Top 1% | Over \$38,072,306 | 19 | \$1,295,645 | 5.2% | 0.0% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 5.2% | 0.1% | 5.3% |

57

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|-----------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$24,957 & under | 895,648 | \$11,876,186 | 1.8% | 0.1% | 0.2% | 0.3% | 0.1% | 2.3% | 1.7% | 4.0% | 12.2% |
| Second | \$24,957 - \$37,588 | 369,423 | \$11,393,869 | 1.9% | 0.3% | 0.2% | 0.5% | 0.1% | 2.5% | 1.3% | 3.8% | 12.6% |
| Third | \$37,588 - \$49,666 | 263,629 | \$11,397,088 | 2.0% | 0.2% | 0.2% | 0.4% | 0.1% | 2.5% | 1.2% | 3.7% | 12.9% |
| Fourth | \$49,666 - \$61,887 | 205,048 | \$11,395,920 | 1.9% | 0.1% | 0.1% | 0.3% | 0.1% | 2.3% | 1.2% | 3.4% | 13.0% |
| Fifth | \$61,887 - \$76,959 | 165,350 | \$11,391,817 | 1.9% | 0.1% | 0.1% | 0.2% | 0.1% | 2.2% | 1.0% | 3.2% | 12.8% |
| Sixth | \$76,959 - \$96,619 | 133,017 | \$11,396,035 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.0% | 0.8% | 2.9% | 12.2% |
| Seventh | \$96,619 - \$136,008 | 101,520 | \$11,401,442 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.1% | 0.9% | 3.0% | 12.5% |
| Eighth | \$136,008 - \$242,719 | 64,970 | \$11,390,021 | 1.6% | 0.1% | 0.2% | 0.3% | 0.1% | 1.9% | 1.0% | 2.9% | 12.6% |
| Ninth | \$242,719 - \$840,892 | 29,429 | \$11,424,579 | 1.1% | 0.0% | 0.1% | 0.2% | 0.0% | 1.3% | 0.6% | 1.9% | 10.0% |
| Tenth | \$840,892 & over | 4,637 | \$11,543,999 | 0.3% | 0.0% | 0.1% | 0.1% | 0.0% | 0.4% | 0.3% | 0.6% | 7.3% |
| TOTALS | | 2,232,670 | \$114,610,957 | 1.6% | 0.1% | 0.1% | 0.3% | 0.1% | 1.9% | 1.0% | 2.9% | 11.8% |
| Top 5% | Over \$3,221,710 | 619 | \$5,842,240 | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 0.4% | 6.8% |
| Top 1% | Over \$38,072,306 | 19 | \$1,295,645 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 5.5% |

Table A-3
CY 1998 Business Taxes Imposed by Sector
Excludes Government

(\$ Thousands)

| Tax Type | Ag. | Mining ¹ | Const. | Durable Mfg. | Nondur. Mfg. | Transportation, Communication, & Public Utility | Finance, Insurance, & Real Estate | Services | Retail Trade | Wholesale Trade | Total Business Taxes | |
|-----------------|------------------|---------------------|------------------|------------------|------------------|---|---|--------------------|------------------|--------------------|----------------------|---------------|
| | | | | | | | | | | | Amount | Distribution |
| Corp. Franchise | \$8,988 | \$2,996 | \$19,588 | \$107,390 | \$143,225 | \$80,773 | \$198,878 | \$56,230 | \$67,061 | \$79,621 | \$764,750 | 14.3% |
| General Sales | 37,552 | 16,617 | 370,096 | 81,572 | 57,403 | 163,145 | 95,168 | 259,823 | 181,272 | 138,975 | 1,401,623 | 26.3% |
| MV Sales | 471 | 942 | 9,107 | 30,618 | 11,148 | 10,520 | 16,330 | 35,799 | 16,016 | 14,759 | 145,710 | 2.7% |
| Motor Fuels | 631 | 1,190 | 12,723 | 49,003 | 30,935 | 18,142 | 33,095 | 42,775 | 19,482 | 17,033 | 225,009 | 4.2% |
| Ins. Premiums | 968 | 288 | 1,491 | 10,347 | 10,348 | 7,587 | 16,064 | 4,644 | 5,429 | 7,169 | 64,335 | 1.2% |
| Mtg./Deed | 124 | 233 | 2,493 | 9,600 | 6,060 | 3,554 | 6,483 | 8,380 | 3,817 | 3,337 | 44,081 | 0.8% |
| Property Tax | 272,340 | 577 | 79,902 | 323,699 | 115,036 | 433,770 | 167,559 | 944,443 | 183,345 | 168,551 | 2,689,222 | 50.4% |
| Commercial | | | 74,000 | | | 111,000 | 157,000 | 452,000 | 173,000 | 159,000 | 1,126,000 | 21.1% |
| Industrial | | | | 304,000 | 108,000 | | | | | | 412,000 | 7.7% |
| Farm | 272,000 | | | | | | | | | | 272,000 | 5.1% |
| Utility | | | | | | 316,000 | | | | | 316,000 | 5.9% |
| Rental | | | | | | | | 462,183 | | | 462,183 | 8.7% |
| MV. Reg. | 340 | 577 | 5,902 | 19,699 | 7,036 | 6,770 | 10,559 | 30,260 | 10,345 | 9,551 | 101,039 | 1.9% |
| Total | \$321,074 | \$22,843 | \$495,400 | \$612,229 | \$374,155 | \$717,491 | \$533,577 | \$1,352,094 | \$476,422 | \$429,445 | \$5,334,730 | 100.0% |

Table B-1 (a)
2003 Tax Collection Amounts - Pre-2001 Session
(\$ Millions)

**Population
Deciles**

| Tax Category | Total | As Imposed | | | After Shifting | | Suits Index |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|---------------|
| | | MN HH's | NR | Business | Minn. | Exported | |
| Taxes on Income | | | | | | | |
| Individual income tax | \$7,230 | \$6,945 | \$285 | | \$6,945 | \$285 | 0.163 |
| Corporate franchise tax | 930 | | | \$930 | 463 | 466 | -0.147 |
| Total income taxes | \$8,160 | \$6,945 | \$285 | \$930 | \$7,408 | \$751 | 0.143 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$4,975 | \$2,657 | \$169 | \$2,148 | \$4,109 | \$866 | -0.182 |
| General sales/use | 4,394 | 2,273 | 169 | 1,951 | 3,593 | 801 | -0.179 |
| Sales tax motor vehicles | 581 | 384 | | 197 | 517 | 64 | -0.200 |
| Motor fuels excise tax | 629 | 276 | 101 | 252 | 438 | 191 | -0.254 |
| Alcoholic beverage excise tax | 61 | 55 | 6 | | 55 | 6 | -0.210 |
| Cigarette and tobacco excise taxes | 176 | 171 | 5 | | 171 | 5 | -0.530 |
| Insurance premiums tax | 195 | 113 | | 82 | 144 | 51 | -0.134 |
| Gambling taxes | 61 | 59 | 2 | | 59 | 2 | -0.401 |
| MinnesotaCare taxes | 257 | 249 | 8 | | 249 | 8 | -0.222 |
| Total consumption taxes | \$6,354 | \$3,580 | \$291 | \$2,482 | \$5,225 | \$1,129 | -0.202 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$2,524 | \$2,524 | | | \$2,524 | | -0.130 |
| Residential rental property (gross) | 517 | | | \$517 | 442 | \$75 | -0.368 |
| Total property tax refunds | (206) | (206) | | | (206) | | 0.835 |
| Homeowners | (79) | (79) | | | (79) | | 0.756 |
| Renters | (127) | (127) | | | (127) | | 0.885 |
| Residential recreational (cabins) | 122 | 98 | \$24 | | 98 | 24 | -0.204 |
| Commercial | 1,461 | | | 1,461 | 804 | 657 | -0.133 |
| Industrial | 490 | | | 490 | 57 | 433 | 0.098 |
| Farms (other than residence) | 279 | | | 279 | 279 | | -0.349 |
| Utility | 319 | | | 319 | 217 | 102 | -0.167 |
| Total Local | \$5,506 | \$2,416 | \$24 | \$3,066 | \$4,215 | \$1,291 | -0.136 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$492 | \$399 | | \$93 | \$449 | \$43 | -0.135 |
| Mortgage and deed taxes | 159 | 108 | | 51 | 136 | 23 | -0.129 |
| Total State | \$651 | \$507 | | \$144 | \$585 | \$66 | -0.134 |
| Total property taxes | \$6,157 | \$2,923 | \$24 | \$3,210 | \$4,800 | \$1,356 | -0.136 |
| Total Taxes | \$20,671 | \$13,448 | \$600 | \$6,622 | \$17,434 | \$3,237 | -0.037 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table B-1 (b)

2001 Minnesota Tax Incidence Study (2003 Data) - Pre-2001 Session Law
 State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
 ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|----------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$9,691 & under | 238,449 | \$1,334,467 | - \$9,638 | \$12,935 | \$80,285 | \$44,667 | \$124,952 | \$24,795 | \$4,908 | \$21,044 | \$3,726 | \$116,486 | \$66,236 | \$182,722 |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | - \$10,533 | \$14,282 | \$90,467 | \$50,263 | \$140,730 | \$29,247 | \$5,546 | \$24,131 | \$3,228 | \$133,312 | \$73,319 | \$206,631 |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | \$24,572 | \$20,088 | \$124,932 | \$66,701 | \$191,633 | \$39,041 | \$7,426 | \$36,143 | \$3,831 | \$224,688 | \$98,046 | \$322,734 |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | \$139,543 | \$26,344 | \$162,871 | \$86,510 | \$249,381 | \$44,295 | \$9,664 | \$52,284 | \$5,603 | \$398,994 | \$128,120 | \$527,114 |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | \$263,077 | \$31,390 | \$189,122 | \$101,944 | \$291,066 | \$45,424 | \$11,409 | \$64,298 | \$6,868 | \$561,920 | \$151,612 | \$713,532 |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | \$413,621 | \$40,093 | \$244,967 | \$126,468 | \$371,435 | \$51,614 | \$14,194 | \$88,226 | \$9,011 | \$798,428 | \$189,765 | \$988,193 |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | \$561,123 | \$46,813 | \$285,312 | \$148,944 | \$434,256 | \$57,726 | \$16,724 | \$107,316 | \$10,686 | \$1,011,477 | \$223,167 | \$1,234,643 |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | \$785,434 | \$58,428 | \$348,202 | \$179,711 | \$527,913 | \$61,684 | \$20,254 | \$135,219 | \$12,335 | \$1,330,539 | \$270,728 | \$1,601,267 |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | \$1,114,868 | \$72,331 | \$417,953 | \$219,618 | \$637,570 | \$68,386 | \$24,826 | \$163,716 | \$14,853 | \$1,764,923 | \$331,628 | \$2,096,551 |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | \$3,662,931 | \$140,557 | \$713,170 | \$427,357 | \$1,140,527 | \$79,411 | \$46,726 | \$236,034 | \$39,263 | \$4,691,545 | \$653,903 | \$5,345,449 |
| TOTALS | | 2,385,708 | \$155,478,757 | \$6,945,000 | \$463,263 | \$2,657,281 | \$1,452,183 | \$4,109,464 | \$501,622 | \$161,675 | \$928,410 | \$109,403 | \$11,032,313 | \$2,186,523 | \$13,218,836 |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | \$2,678,683 | \$96,710 | \$475,944 | \$304,954 | \$780,898 | \$45,260 | \$31,825 | \$143,644 | \$29,118 | \$3,343,531 | \$462,607 | \$3,806,139 |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | \$1,508,124 | \$31,511 | \$113,601 | \$86,188 | \$199,790 | \$10,066 | \$9,016 | \$33,945 | \$11,993 | \$1,665,737 | \$138,708 | \$1,804,445 |

09

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|----------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$9,691 & under | 238,449 | \$1,334,467 | \$46,096 | -\$3,930 | \$5,526 | \$1,596 | \$3,773 | \$51,466 | \$58,944 | \$110,410 | \$293,132 |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | \$59,793 | -\$5,668 | \$7,141 | \$1,473 | \$3,167 | \$64,433 | \$44,998 | \$109,431 | \$316,061 |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | \$80,501 | \$2,026 | \$6,919 | \$8,945 | \$5,367 | \$94,813 | \$51,471 | \$146,284 | \$469,017 |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | \$109,150 | \$10,137 | \$10,534 | \$20,671 | \$7,110 | \$136,931 | \$77,047 | \$213,977 | \$741,091 |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | \$153,002 | \$19,640 | \$13,116 | \$32,756 | \$7,703 | \$193,461 | \$90,909 | \$284,370 | \$997,902 |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | \$214,598 | \$26,672 | \$13,952 | \$40,624 | \$8,291 | \$263,512 | \$137,130 | \$400,642 | \$1,388,835 |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | \$273,318 | \$20,801 | \$20,101 | \$40,902 | \$9,382 | \$323,602 | \$144,544 | \$468,146 | \$1,702,790 |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | \$327,140 | \$17,117 | \$18,852 | \$35,969 | \$10,492 | \$373,600 | \$160,844 | \$534,444 | \$2,135,711 |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | \$414,589 | \$15,711 | \$23,017 | \$38,728 | \$16,323 | \$469,640 | \$189,760 | \$659,400 | \$2,755,951 |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | \$766,253 | \$22,413 | \$71,194 | \$93,607 | \$26,130 | \$885,991 | \$401,922 | \$1,287,913 | \$6,633,361 |
| TOTALS | | 2,385,708 | \$155,478,757 | \$2,444,440 | \$124,919 | \$190,352 | \$315,271 | \$97,738 | \$2,857,449 | \$1,357,567 | \$4,215,016 | \$17,433,852 |
| Top 5% | Over \$165,889 | | \$48,444,502 | \$483,677 | \$12,976 | \$52,075 | \$65,051 | \$15,325 | \$564,052 | \$278,565 | \$842,617 | \$4,648,756 |
| Top 1% | Over \$404,376 | | \$26,347,300 | \$150,718 | \$2,825 | \$16,644 | \$19,469 | \$4,298 | \$174,486 | \$94,436 | \$268,922 | \$2,073,367 |

Table B-1 (c)

2001 Minnesota Tax Incidence Study (2003 Data) - Pre-2001 Session Law
 Effective Tax Rates by Population Decile (dollars in thousands)
 ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|----------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$9,691 & under | 238,449 | \$1,334,467 | - 0.7% | 1.0% | 6.0% | 3.3% | 9.4% | 1.9% | 0.4% | 1.6% | 0.3% | 8.7% | 5.0% | 13.7% |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | - 0.3% | 0.5% | 3.0% | 1.6% | 4.6% | 1.0% | 0.2% | 0.8% | 0.1% | 4.4% | 2.4% | 6.8% |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | 0.5% | 0.4% | 2.7% | 1.4% | 4.1% | 0.8% | 0.2% | 0.8% | 0.1% | 4.8% | 2.1% | 6.9% |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | 2.2% | 0.4% | 2.5% | 1.3% | 3.8% | 0.7% | 0.1% | 0.8% | 0.1% | 6.2% | 2.0% | 8.1% |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | 3.1% | 0.4% | 2.2% | 1.2% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 6.6% | 1.8% | 8.3% |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | 3.7% | 0.4% | 2.2% | 1.1% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 7.2% | 1.7% | 9.0% |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | 4.0% | 0.3% | 2.0% | 1.1% | 3.1% | 0.4% | 0.1% | 0.8% | 0.1% | 7.2% | 1.6% | 8.8% |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | 4.4% | 0.3% | 1.9% | 1.0% | 3.0% | 0.3% | 0.1% | 0.8% | 0.1% | 7.4% | 1.5% | 9.0% |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | 4.7% | 0.3% | 1.8% | 0.9% | 2.7% | 0.3% | 0.1% | 0.7% | 0.1% | 7.5% | 1.4% | 8.9% |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | 5.7% | 0.2% | 1.1% | 0.7% | 1.8% | 0.1% | 0.1% | 0.4% | 0.1% | 7.3% | 1.0% | 8.3% |
| TOTALS | | 2,385,708 | \$155,478,757 | 4.5% | 0.3% | 1.7% | 0.9% | 2.6% | 0.3% | 0.1% | 0.6% | 0.1% | 7.1% | 1.4% | 8.5% |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | 5.5% | 0.2% | 1.0% | 0.6% | 1.6% | 0.1% | 0.1% | 0.3% | 0.1% | 6.9% | 1.0% | 7.9% |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | 5.7% | 0.1% | 0.4% | 0.3% | 0.8% | 0.0% | 0.0% | 0.1% | 0.0% | 6.3% | 0.5% | 6.8% |

61

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|----------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$9,691 & under | 238,449 | \$1,334,467 | 3.5% | - 0.3% | 0.4% | 0.1% | 0.3% | 3.9% | 4.4% | 8.3% | 22.0% |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | 2.0% | - 0.2% | 0.2% | 0.0% | 0.1% | 2.1% | 1.5% | 3.6% | 10.4% |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | 1.7% | 0.0% | 0.1% | 0.2% | 0.1% | 2.0% | 1.1% | 3.1% | 10.0% |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | 1.7% | 0.2% | 0.2% | 0.3% | 0.1% | 2.1% | 1.2% | 3.3% | 11.4% |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | 1.8% | 0.2% | 0.2% | 0.4% | 0.1% | 2.3% | 1.1% | 3.3% | 11.7% |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | 1.9% | 0.2% | 0.1% | 0.4% | 0.1% | 2.4% | 1.2% | 3.6% | 12.6% |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | 1.9% | 0.1% | 0.1% | 0.3% | 0.1% | 2.3% | 1.0% | 3.3% | 12.1% |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.1% | 0.9% | 3.0% | 11.9% |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.0% | 0.8% | 2.8% | 11.6% |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | 1.2% | 0.0% | 0.1% | 0.1% | 0.0% | 1.4% | 0.6% | 2.0% | 10.3% |
| TOTALS | | 2,385,708 | \$155,478,757 | 1.6% | 0.1% | 0.1% | 0.2% | 0.1% | 1.8% | 0.9% | 2.7% | 11.2% |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | 1.0% | 0.0% | 0.1% | 0.1% | 0.0% | 1.2% | 0.6% | 1.7% | 9.6% |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | 0.6% | 0.0% | 0.1% | 0.1% | 0.0% | 0.7% | 0.4% | 1.0% | 7.9% |

Table B-2 (a)
2003 Tax Collection Amounts - Pre-2001 Session
(\$ Millions)

| Tax Category | Total | As Imposed | | | After Shifting | | Income Deciles |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|----------------|
| | | MN HH's | NR | Business | Minn. | Exported | Suits Index |
| Taxes on Income | | | | | | | |
| Individual income tax | \$7,230 | \$6,945 | \$285 | | \$6,945 | \$285 | 0.172 |
| Corporate franchise tax | 930 | | | \$930 | 463 | 467 | -0.172 |
| Total income taxes | \$8,160 | \$6,945 | \$285 | \$930 | \$7,408 | \$752 | 0.150 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$4,975 | \$2,657 | \$169 | \$2,148 | \$4,110 | \$865 | -0.210 |
| General sales/use | 4,394 | 2,273 | 169 | 1,951 | 3,593 | 801 | -0.208 |
| Sales tax motor vehicles | 581 | 384 | | 197 | 517 | 64 | -0.229 |
| Motor fuels excise tax | 629 | 276 | 101 | 252 | 438 | 191 | -0.279 |
| Alcoholic beverage excise tax | 61 | 55 | 6 | | 55 | 6 | -0.234 |
| Cigarette and tobacco excise taxes | 176 | 171 | 5 | | 171 | 5 | -0.535 |
| Insurance premiums tax | 195 | 113 | | 82 | 144 | 51 | -0.159 |
| Gambling taxes | 61 | 59 | 2 | | 59 | 2 | -0.421 |
| MinnesotaCare taxes | 257 | 249 | 8 | | 249 | 8 | -0.256 |
| Total consumption taxes | \$6,354 | \$3,580 | \$291 | \$2,482 | \$5,226 | \$1,129 | -0.230 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$2,524 | \$2,524 | | | \$2,524 | | -0.160 |
| Residential rental property (gross) | 517 | | | \$517 | 442 | \$75 | -0.380 |
| Total property tax refunds | (206) | (206) | | | (206) | | 0.815 |
| Homeowners | (79) | (79) | | | (79) | | 0.742 |
| Renters | (127) | (127) | | | (127) | | 0.861 |
| Residential recreational (cabins) | 122 | 98 | \$24 | | 98 | 24 | -0.234 |
| Commercial | 1,461 | | | 1,461 | 804 | 657 | -0.156 |
| Industrial | 490 | | | 490 | 57 | 433 | 0.120 |
| Farms (other than residence) | 279 | | | 279 | 279 | | -0.368 |
| Utility | 319 | | | 319 | 217 | 102 | -0.193 |
| Total Local | \$5,506 | \$2,416 | \$24 | \$3,066 | \$4,215 | \$1,291 | -0.164 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$492 | \$399 | | \$93 | \$449 | \$43 | -0.167 |
| Mortgage and deed taxes | 159 | 107 | | 51 | 136 | 23 | -0.160 |
| Total State | \$651 | \$507 | | \$144 | \$585 | \$66 | -0.165 |
| Total property taxes | \$6,157 | \$2,922 | \$24 | \$3,210 | \$4,801 | \$1,356 | -0.164 |
| Total Taxes | \$20,671 | \$13,447 | \$600 | \$6,622 | \$17,435 | \$3,237 | -0.050 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table B-2 (b)

2001 Minnesota Tax Incidence Study (2003 Data) - Old Law (Pre-2001 Session)
 State and Local Tax Burden Amounts by Income Decile (dollars in thousands)
 ALL TAXPAYERS

| Income Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|---------------|-------------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$34,679 & under | 953,028 | \$15,540,345 | \$143,858 | \$73,533 | \$457,810 | \$247,805 | \$705,614 | \$137,168 | \$27,503 | \$133,289 | \$16,375 | \$872,124 | \$365,216 | \$1,237,340 |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | \$515,244 | \$57,324 | \$347,247 | \$183,490 | \$530,737 | \$78,896 | \$20,553 | \$120,997 | \$12,591 | \$1,062,384 | \$273,958 | \$1,336,341 |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | \$613,431 | \$52,261 | \$320,016 | \$167,618 | \$487,634 | \$65,835 | \$18,802 | \$119,029 | \$12,333 | \$1,118,312 | \$251,013 | \$1,369,325 |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | \$669,855 | \$51,304 | \$306,888 | \$157,356 | \$464,245 | \$55,626 | \$17,740 | \$118,537 | \$10,800 | \$1,150,907 | \$237,200 | \$1,388,107 |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | \$714,307 | \$49,945 | \$294,298 | \$153,937 | \$448,235 | \$49,589 | \$17,356 | \$115,147 | \$10,156 | \$1,173,341 | \$231,393 | \$1,404,734 |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | \$748,915 | \$45,655 | \$258,722 | \$137,236 | \$395,959 | \$40,904 | \$15,531 | \$100,748 | \$9,601 | \$1,149,289 | \$208,023 | \$1,357,312 |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | \$801,465 | \$44,235 | \$242,445 | \$135,230 | \$377,675 | \$31,742 | \$15,235 | \$88,586 | \$10,314 | \$1,164,238 | \$205,014 | \$1,369,252 |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | \$843,673 | \$46,868 | \$262,207 | \$152,114 | \$414,321 | \$26,130 | \$16,935 | \$80,981 | \$11,915 | \$1,212,991 | \$227,832 | \$1,440,823 |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | \$890,419 | \$29,924 | \$140,613 | \$90,539 | \$231,152 | \$13,250 | \$10,096 | \$43,249 | \$9,586 | \$1,087,531 | \$140,145 | \$1,227,676 |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | \$1,003,832 | \$12,214 | \$27,295 | \$27,016 | \$54,311 | \$2,482 | \$3,022 | \$8,758 | \$5,733 | \$1,042,367 | \$47,985 | \$1,090,352 |
| TOTALS | | 2,385,705 | \$155,478,757 | \$6,945,000 | \$463,263 | \$2,657,540 | \$1,452,342 | \$4,109,882 | \$501,622 | \$162,772 | \$929,321 | \$109,403 | \$11,033,483 | \$2,187,779 | \$13,221,262 |
| Top 5% | Over \$4,476,768 | 863 | \$7,776,869 | \$510,889 | \$5,219 | \$4,288 | \$8,652 | \$12,940 | \$390 | \$957 | \$1,546 | \$2,738 | \$517,113 | \$17,565 | \$534,679 |
| Top 1% | Over \$52,903,860 | 22 | \$1,593,705 | \$108,162 | \$782 | \$107 | \$1,045 | \$1,152 | \$10 | \$113 | \$39 | \$436 | \$108,318 | \$2,376 | \$110,694 |

64

| Income Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|---------------|-------------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$34,679 & under | 953,028 | \$15,540,345 | \$294,384 | \$2,214 | \$30,134 | \$32,348 | \$19,379 | \$346,112 | \$232,238 | \$578,350 | \$1,815,690 |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | \$291,343 | \$36,413 | \$21,509 | \$57,922 | \$13,045 | \$362,311 | \$175,376 | \$537,687 | \$1,874,028 |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | \$303,501 | \$26,885 | \$23,587 | \$50,472 | \$10,771 | \$364,744 | \$176,312 | \$541,056 | \$1,910,381 |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | \$284,971 | \$16,908 | \$15,717 | \$32,625 | \$9,107 | \$326,703 | \$145,063 | \$471,765 | \$1,859,872 |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | \$281,737 | \$11,298 | \$16,832 | \$28,130 | \$9,520 | \$319,387 | \$124,528 | \$443,915 | \$1,848,649 |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | \$263,210 | \$10,008 | \$14,557 | \$24,565 | \$11,503 | \$299,278 | \$121,900 | \$421,178 | \$1,778,490 |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | \$267,606 | \$8,851 | \$18,242 | \$27,093 | \$10,059 | \$304,758 | \$120,512 | \$425,270 | \$1,794,521 |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | \$238,548 | \$7,279 | \$24,834 | \$32,113 | \$7,932 | \$278,593 | \$132,122 | \$410,714 | \$1,851,538 |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | \$169,504 | \$3,720 | \$18,592 | \$22,312 | \$5,374 | \$197,190 | \$90,060 | \$287,250 | \$1,514,927 |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | \$50,196 | \$983 | \$6,437 | \$7,420 | \$1,048 | \$58,664 | \$39,457 | \$98,121 | \$1,188,473 |
| TOTALS | | 2,385,705 | \$155,478,757 | \$2,445,001 | \$124,559 | \$190,441 | \$315,000 | \$97,738 | \$2,857,739 | \$1,357,567 | \$4,215,306 | \$17,436,568 |
| Top 5% | Over \$4,476,768 | 863 | \$7,776,869 | \$13,924 | \$234 | \$2,036 | \$2,270 | \$165 | \$16,359 | \$17,217 | \$33,575 | \$568,254 |
| Top 1% | Over \$52,903,860 | 22 | \$1,593,705 | \$767 | \$0 | \$89 | \$89 | \$4 | \$860 | \$2,682 | \$3,542 | \$114,236 |

Table B-2 (c)

2001 Minnesota Tax Incidence Study (2003 Data) - Old Law (Pre-2001 Session)
 Effective Tax Rates by Income Decile (dollars in thousands)
 ALL TAXPAYERS

| Income Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|---------------|-------------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$34,679 & under | 953,028 | \$15,540,345 | 0.9% | 0.5% | 2.9% | 1.6% | 4.5% | 0.9% | 0.2% | 0.9% | 0.1% | 5.5% | 2.4% | 8.0% |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | 3.3% | 0.4% | 2.2% | 1.2% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 6.8% | 1.8% | 8.6% |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | 3.9% | 0.3% | 2.1% | 1.1% | 3.1% | 0.4% | 0.1% | 0.8% | 0.1% | 7.2% | 1.6% | 8.8% |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | 4.3% | 0.3% | 2.0% | 1.0% | 3.0% | 0.4% | 0.1% | 0.8% | 0.1% | 7.4% | 1.5% | 8.9% |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | 4.6% | 0.3% | 1.9% | 1.0% | 2.9% | 0.3% | 0.1% | 0.7% | 0.1% | 7.5% | 1.5% | 9.0% |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | 4.8% | 0.3% | 1.7% | 0.9% | 2.5% | 0.3% | 0.1% | 0.6% | 0.1% | 7.4% | 1.3% | 8.7% |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | 5.2% | 0.3% | 1.6% | 0.9% | 2.4% | 0.2% | 0.1% | 0.6% | 0.1% | 7.5% | 1.3% | 8.8% |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | 5.4% | 0.3% | 1.7% | 1.0% | 2.7% | 0.2% | 0.1% | 0.5% | 0.1% | 7.8% | 1.5% | 9.3% |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | 5.7% | 0.2% | 0.9% | 0.6% | 1.5% | 0.1% | 0.1% | 0.3% | 0.1% | 7.0% | 0.9% | 7.9% |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | 6.5% | 0.1% | 0.2% | 0.2% | 0.3% | 0.0% | 0.0% | 0.1% | 0.0% | 6.7% | 0.3% | 7.0% |
| TOTALS | | 2,385,705 | \$155,478,757 | 4.5% | 0.3% | 1.7% | 0.9% | 2.6% | 0.3% | 0.1% | 0.6% | 0.1% | 7.1% | 1.4% | 8.5% |
| Top 5% | Over \$4,476,768 | 863 | \$7,776,869 | 6.6% | 0.1% | 0.1% | 0.1% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 6.6% | 0.2% | 6.9% |
| Top 1% | Over \$52,903,860 | 22 | \$1,593,705 | 6.8% | 0.0% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 6.8% | 0.1% | 6.9% |

65

| Income Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes | |
|---------------|-------------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------------------------|----------------------------|-----------------------------|-------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | | | | Residential Total |
| First | \$34,679 & under | 953,028 | \$15,540,345 | 1.9% | 0.0% | 0.2% | 0.2% | 0.1% | 2.2% | 1.5% | 3.7% | 11.7% |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | 1.9% | 0.2% | 0.1% | 0.4% | 0.1% | 2.3% | 1.1% | 3.5% | 12.1% |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | 2.0% | 0.2% | 0.2% | 0.3% | 0.1% | 2.3% | 1.1% | 3.5% | 12.3% |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.1% | 0.9% | 3.0% | 12.0% |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | 1.8% | 0.1% | 0.1% | 0.2% | 0.1% | 2.1% | 0.8% | 2.9% | 11.9% |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | 1.7% | 0.1% | 0.1% | 0.2% | 0.1% | 1.9% | 0.8% | 2.7% | 11.4% |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | 1.7% | 0.1% | 0.1% | 0.2% | 0.1% | 2.0% | 0.8% | 2.7% | 11.5% |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | 1.5% | 0.0% | 0.2% | 0.2% | 0.1% | 1.8% | 0.8% | 2.6% | 11.9% |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | 1.0% | 0.0% | 0.1% | 0.1% | 0.0% | 1.3% | 0.6% | 1.8% | 9.7% |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | 0.3% | 0.0% | 0.0% | 0.1% | 0.0% | 0.4% | 0.3% | 0.6% | 7.6% |
| TOTALS | | 2,385,705 | \$155,478,757 | 1.6% | 0.1% | 0.1% | 0.2% | 0.1% | 1.8% | 0.9% | 2.7% | 11.2% |
| Top 5% | Over \$4,476,768 | 863 | \$7,776,869 | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 0.4% | 7.3% |
| Top 1% | Over \$52,903,860 | 22 | \$1,593,705 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.2% | 0.2% | 7.2% |

Table B-3
CY 2003 Business Taxes Imposed by Sector²
Las as of 1/1/2001 - February 2001 Forecast

(\$ Thousands)

| Tax Type | Ag. | Mining ¹ | Const. | Durable Mfg. | Nondur. Mfg. | Transportation, Communication, & Public Utility | Finance, Insurance, & Real Estate | Services | Retail Trade | Wholesale Trade | Total Business Taxes | |
|-----------------|------------------|---------------------|------------------|------------------|------------------|---|-----------------------------------|--------------------|------------------|------------------|----------------------|---------------|
| | | | | | | | | | | | Amount | Distribution |
| Corp. Franchise | \$10,857 | \$3,690 | \$23,739 | \$130,448 | \$174,120 | \$98,153 | \$242,080 | \$68,306 | \$81,465 | \$96,642 | \$929,500 | 14.4% |
| General Sales | 44,254 | 16,119 | 443,276 | 96,715 | 70,521 | 209,549 | 126,938 | 376,784 | 249,846 | 185,370 | 1,819,372 | 28.1% |
| MV Sales | 585 | 1,112 | 11,316 | 38,046 | 13,657 | 13,072 | 20,291 | 43,509 | 19,901 | 18,340 | 179,829 | 2.8% |
| Motor Fuels | 633 | 1,125 | 11,767 | 64,388 | 31,024 | 20,028 | 35,002 | 48,325 | 20,598 | 18,735 | 251,625 | 3.9% |
| Ins. Premiums | 1,233 | 366 | 1,899 | 13,174 | 13,174 | 9,660 | 20,453 | 5,913 | 6,912 | 9,127 | 81,911 | 1.3% |
| Mtg./Deed | 129 | 229 | 2,396 | 13,113 | 6,318 | 4,079 | 7,128 | 9,841 | 4,195 | 3,815 | 51,243 | 0.8% |
| Property Tax | 279,124 | 534 | 101,140 | 379,338 | 135,111 | 467,174 | 212,445 | 1,139,118 | 231,795 | 213,571 | 3,159,350 | 48.8% |
| Commercial | | | 95,680 | | | 141,977 | 202,677 | 593,628 | 222,225 | 204,735 | 1,460,922 | 22.6% |
| Industrial | | | | 361,115 | 128,602 | | | | | | 489,717 | 7.6% |
| Farm | 278,810 | | | | | | | | | | 278,810 | 4.3% |
| Utility | | | | | | 318,934 | | | | | 318,934 | 4.9% |
| Rental | | | | | | | | 517,496 | | | 517,496 | 8.0% |
| MV. Reg. | 314 | 534 | 5,460 | 18,223 | 6,509 | 6,263 | 9,768 | 27,994 | 9,570 | 8,836 | 93,471 | 1.4% |
| Total | \$336,815 | \$23,175 | \$595,533 | \$735,222 | \$443,925 | \$821,715 | \$664,337 | \$1,691,796 | \$614,712 | \$545,600 | \$6,472,830 | 100.0% |

¹Does not include the taconite production tax.

²Based on February, 2001 economic forecast and REMI 2000.

Table C-1 (a)

2001 Minnesota Tax Incidence Study (1998 Data)
 State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
 Homeowners (excluding farmers)

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 36,432 | \$179,229 | - \$2,241 | \$2,072 | \$12,205 | \$7,244 | \$19,448 | \$4,768 | \$904 | \$4,212 | \$642 | \$18,945 | \$10,862 | \$29,806 |
| Second | \$7,971 - \$13,047 | 52,324 | \$553,101 | - \$2,284 | \$3,441 | \$20,215 | \$11,754 | \$31,969 | \$7,243 | \$1,471 | \$6,626 | \$899 | \$31,801 | \$17,565 | \$49,366 |
| Third | \$13,047 - \$18,550 | 63,864 | \$1,014,386 | - \$2,355 | \$5,223 | \$31,445 | \$17,663 | \$49,108 | \$10,870 | \$2,225 | \$11,625 | \$1,316 | \$51,585 | \$26,427 | \$78,012 |
| Fourth | \$18,550 - \$24,885 | 90,311 | \$1,976,027 | \$24,113 | \$9,549 | \$55,773 | \$31,979 | \$87,752 | \$17,008 | \$4,038 | \$22,130 | \$2,731 | \$119,023 | \$48,297 | \$167,321 |
| Fifth | \$24,885 - \$31,890 | 113,413 | \$3,211,469 | \$74,784 | \$13,847 | \$77,306 | \$44,633 | \$121,939 | \$23,664 | \$5,664 | \$29,891 | \$3,948 | \$205,645 | \$68,091 | \$273,736 |
| Sixth | \$31,890 - \$40,645 | 135,930 | \$4,925,610 | \$158,350 | \$21,263 | \$124,293 | \$63,543 | \$187,837 | \$31,355 | \$8,147 | \$53,061 | \$4,751 | \$367,060 | \$97,705 | \$464,764 |
| Seventh | \$40,645 - \$51,669 | 168,806 | \$7,749,410 | \$291,860 | \$29,545 | \$167,001 | \$89,134 | \$256,135 | \$43,411 | \$11,442 | \$70,008 | \$7,218 | \$572,280 | \$137,339 | \$709,619 |
| Eighth | \$51,669 - \$66,043 | 179,552 | \$10,483,532 | \$470,187 | \$39,602 | \$221,979 | \$116,351 | \$338,329 | \$48,723 | \$15,006 | \$97,954 | \$9,231 | \$838,843 | \$180,190 | \$1,019,033 |
| Ninth | \$66,043 - \$92,346 | 193,994 | \$15,038,588 | \$736,542 | \$53,078 | \$285,215 | \$152,539 | \$437,754 | \$58,612 | \$19,742 | \$127,381 | \$12,094 | \$1,207,750 | \$237,453 | \$1,445,203 |
| Tenth | \$92,346 & over | 198,709 | \$41,450,740 | \$2,428,332 | \$103,083 | \$483,472 | \$297,514 | \$780,986 | \$66,493 | \$38,120 | \$190,055 | \$32,138 | \$3,168,352 | \$470,855 | \$3,639,206 |
| TOTALS | | 1,233,335 | \$86,582,093 | \$4,177,289 | \$280,702 | \$1,478,904 | \$832,353 | \$2,311,257 | \$312,147 | \$106,759 | \$612,944 | \$74,969 | \$6,581,284 | \$1,294,783 | \$7,876,067 |
| Top 5% | Over \$127,880 | 98,644 | \$30,788,541 | \$1,851,190 | \$68,827 | \$310,298 | \$198,810 | \$509,108 | \$37,401 | \$25,377 | \$115,920 | \$22,969 | \$2,314,808 | \$315,982 | \$2,630,791 |
| Top 1% | Over \$310,014 | 19,819 | \$16,407,837 | \$1,053,282 | \$22,170 | \$74,230 | \$55,845 | \$130,074 | \$8,337 | \$7,157 | \$27,768 | \$9,120 | \$1,163,616 | \$94,292 | \$1,257,908 |

89

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 36,432 | \$179,229 | \$27,010 | \$0 | \$1,530 | \$1,530 | \$679 | \$29,220 | \$7,107 | \$36,327 | \$66,134 |
| Second | \$7,971 - \$13,047 | 52,324 | \$553,101 | \$42,240 | \$0 | \$2,012 | \$2,012 | \$664 | \$44,916 | \$9,060 | \$53,976 | \$103,342 |
| Third | \$13,047 - \$18,550 | 63,864 | \$1,014,386 | \$51,145 | \$0 | \$3,177 | \$3,177 | \$1,490 | \$55,812 | \$13,144 | \$68,956 | \$146,968 |
| Fourth | \$18,550 - \$24,885 | 90,311 | \$1,976,027 | \$71,654 | \$0 | \$6,611 | \$6,611 | \$2,720 | \$80,985 | \$32,225 | \$113,209 | \$280,530 |
| Fifth | \$24,885 - \$31,890 | 113,413 | \$3,211,469 | \$107,824 | \$0 | \$8,901 | \$8,901 | \$3,623 | \$120,349 | \$43,130 | \$163,479 | \$437,216 |
| Sixth | \$31,890 - \$40,645 | 135,930 | \$4,925,610 | \$147,756 | \$0 | \$6,382 | \$6,382 | \$4,635 | \$158,773 | \$58,515 | \$217,288 | \$682,052 |
| Seventh | \$40,645 - \$51,669 | 168,806 | \$7,749,410 | \$196,908 | \$0 | \$13,803 | \$13,803 | \$6,119 | \$216,830 | \$70,715 | \$287,545 | \$997,164 |
| Eighth | \$51,669 - \$66,043 | 179,552 | \$10,483,532 | \$231,632 | \$0 | \$15,055 | \$15,055 | \$7,214 | \$253,901 | \$100,781 | \$354,682 | \$1,373,715 |
| Ninth | \$66,043 - \$92,346 | 193,994 | \$15,038,588 | \$306,791 | \$0 | \$18,209 | \$18,209 | \$12,130 | \$337,130 | \$127,917 | \$465,047 | \$1,910,250 |
| Tenth | \$92,346 & over | 198,709 | \$41,450,740 | \$571,555 | \$0 | \$59,382 | \$59,382 | \$19,762 | \$650,700 | \$286,084 | \$936,783 | \$4,575,990 |
| TOTALS | | 1,233,335 | \$86,582,093 | \$1,754,517 | \$0 | \$135,063 | \$135,063 | \$59,036 | \$1,948,616 | \$748,678 | \$2,697,293 | \$10,573,360 |
| Top 5% | Over \$127,880 | 98,644 | \$30,788,541 | \$362,668 | \$0 | \$43,632 | \$43,632 | \$11,599 | \$417,900 | \$194,658 | \$612,558 | \$3,243,349 |
| Top 1% | Over \$310,014 | 19,819 | \$16,407,837 | \$115,608 | \$0 | \$13,999 | \$13,999 | \$3,232 | \$132,839 | \$67,123 | \$199,962 | \$1,457,869 |

Table C-1 (b)

2001 Minnesota Tax Incidence Study (1998 Data)
Effective Tax Rates by Population Decile (dollars in thousands)
Homeowners (excluding farmers)

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 36,432 | \$179,229 | - 1.3% | 1.2% | 6.8% | 4.0% | 10.9% | 2.7% | 0.5% | 2.4% | 0.4% | 10.6% | 6.1% | 16.6% |
| Second | \$7,971 - \$13,047 | 52,324 | \$553,101 | - 0.4% | 0.6% | 3.7% | 2.1% | 5.8% | 1.3% | 0.3% | 1.2% | 0.2% | 5.7% | 3.2% | 8.9% |
| Third | \$13,047 - \$18,550 | 63,864 | \$1,014,386 | - 0.2% | 0.5% | 3.1% | 1.7% | 4.8% | 1.1% | 0.2% | 1.1% | 0.1% | 5.1% | 2.6% | 7.7% |
| Fourth | \$18,550 - \$24,885 | 90,311 | \$1,976,027 | 1.2% | 0.5% | 2.8% | 1.6% | 4.4% | 0.9% | 0.2% | 1.1% | 0.1% | 6.0% | 2.4% | 8.5% |
| Fifth | \$24,885 - \$31,890 | 113,413 | \$3,211,469 | 2.3% | 0.4% | 2.4% | 1.4% | 3.8% | 0.7% | 0.2% | 0.9% | 0.1% | 6.4% | 2.1% | 8.5% |
| Sixth | \$31,890 - \$40,645 | 135,930 | \$4,925,610 | 3.2% | 0.4% | 2.5% | 1.3% | 3.8% | 0.6% | 0.2% | 1.1% | 0.1% | 7.5% | 2.0% | 9.4% |
| Seventh | \$40,645 - \$51,669 | 168,806 | \$7,749,410 | 3.8% | 0.4% | 2.2% | 1.2% | 3.3% | 0.6% | 0.1% | 0.9% | 0.1% | 7.4% | 1.8% | 9.2% |
| Eighth | \$51,669 - \$66,043 | 179,552 | \$10,483,532 | 4.5% | 0.4% | 2.1% | 1.1% | 3.2% | 0.5% | 0.1% | 0.9% | 0.1% | 8.0% | 1.7% | 9.7% |
| Ninth | \$66,043 - \$92,346 | 193,994 | \$15,038,588 | 4.9% | 0.4% | 1.9% | 1.0% | 2.9% | 0.4% | 0.1% | 0.8% | 0.1% | 8.0% | 1.6% | 9.6% |
| Tenth | \$92,346 & over | 198,709 | \$41,450,740 | 5.9% | 0.2% | 1.2% | 0.7% | 1.9% | 0.2% | 0.1% | 0.5% | 0.1% | 7.6% | 1.1% | 8.8% |
| TOTALS | | 1,233,335 | \$86,582,093 | 4.8% | 0.3% | 1.7% | 1.0% | 2.7% | 0.4% | 0.1% | 0.7% | 0.1% | 7.6% | 1.5% | 9.1% |
| Top 5% | Over \$127,880 | 98,644 | \$30,788,541 | 6.0% | 0.2% | 1.0% | 0.6% | 1.7% | 0.1% | 0.1% | 0.4% | 0.1% | 7.5% | 1.0% | 8.5% |
| Top 1% | Over \$310,014 | 19,819 | \$16,407,837 | 6.4% | 0.1% | 0.5% | 0.3% | 0.8% | 0.1% | 0.0% | 0.2% | 0.1% | 7.1% | 0.6% | 7.7% |

69

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 36,432 | \$179,229 | 15.1% | 0.0% | 0.9% | 0.9% | 0.4% | 16.3% | 4.0% | 20.3% | 36.9% |
| Second | \$7,971 - \$13,047 | 52,324 | \$553,101 | 7.6% | 0.0% | 0.4% | 0.4% | 0.1% | 8.1% | 1.6% | 9.8% | 18.7% |
| Third | \$13,047 - \$18,550 | 63,864 | \$1,014,386 | 5.0% | 0.0% | 0.3% | 0.3% | 0.1% | 5.5% | 1.3% | 6.8% | 14.5% |
| Fourth | \$18,550 - \$24,885 | 90,311 | \$1,976,027 | 3.6% | 0.0% | 0.3% | 0.3% | 0.1% | 4.1% | 1.6% | 5.7% | 14.2% |
| Fifth | \$24,885 - \$31,890 | 113,413 | \$3,211,469 | 3.4% | 0.0% | 0.3% | 0.3% | 0.1% | 3.7% | 1.3% | 5.1% | 13.6% |
| Sixth | \$31,890 - \$40,645 | 135,930 | \$4,925,610 | 3.0% | 0.0% | 0.1% | 0.1% | 0.1% | 3.2% | 1.2% | 4.4% | 13.8% |
| Seventh | \$40,645 - \$51,669 | 168,806 | \$7,749,410 | 2.5% | 0.0% | 0.2% | 0.2% | 0.1% | 2.8% | 0.9% | 3.7% | 12.9% |
| Eighth | \$51,669 - \$66,043 | 179,552 | \$10,483,532 | 2.2% | 0.0% | 0.1% | 0.1% | 0.1% | 2.4% | 1.0% | 3.4% | 13.1% |
| Ninth | \$66,043 - \$92,346 | 193,994 | \$15,038,588 | 2.0% | 0.0% | 0.1% | 0.1% | 0.1% | 2.2% | 0.9% | 3.1% | 12.7% |
| Tenth | \$92,346 & over | 198,709 | \$41,450,740 | 1.4% | 0.0% | 0.1% | 0.1% | 0.0% | 1.6% | 0.7% | 2.3% | 11.0% |
| TOTALS | | 1,233,335 | \$86,582,093 | 2.0% | 0.0% | 0.2% | 0.2% | 0.1% | 2.3% | 0.9% | 3.1% | 12.2% |
| Top 5% | Over \$127,880 | 98,644 | \$30,788,541 | 1.2% | 0.0% | 0.1% | 0.1% | 0.0% | 1.4% | 0.6% | 2.0% | 10.5% |
| Top 1% | Over \$310,014 | 19,819 | \$16,407,837 | 0.7% | 0.0% | 0.1% | 0.1% | 0.0% | 0.8% | 0.4% | 1.2% | 8.9% |

Table C-2 (a)

2001 Minnesota Tax Incidence Study (1998 Data)
 State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
 Renters

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 71,413 | \$364,937 | - \$1,644 | \$2,681 | \$16,419 | \$8,708 | \$25,127 | \$7,262 | \$1,101 | \$4,320 | \$429 | \$26,357 | \$12,919 | \$39,276 |
| Second | \$7,971 - \$13,047 | 76,669 | \$811,155 | - \$7,623 | \$3,784 | \$21,687 | \$12,728 | \$34,414 | \$9,742 | \$1,610 | \$5,963 | \$981 | \$29,769 | \$19,102 | \$48,872 |
| Third | \$13,047 - \$18,550 | 74,328 | \$1,176,644 | \$875 | \$5,195 | \$29,396 | \$15,277 | \$44,674 | \$12,874 | \$1,967 | \$8,975 | \$931 | \$52,120 | \$23,371 | \$75,491 |
| Fourth | \$18,550 - \$24,885 | 68,686 | \$1,457,461 | \$31,638 | \$6,204 | \$34,192 | \$17,517 | \$51,709 | \$13,161 | \$2,270 | \$11,747 | \$1,104 | \$90,738 | \$27,095 | \$117,833 |
| Fifth | \$24,885 - \$31,890 | 57,155 | \$1,616,101 | \$51,971 | \$6,011 | \$31,809 | \$16,638 | \$48,446 | \$10,050 | \$2,161 | \$11,933 | \$1,140 | \$105,763 | \$25,950 | \$131,712 |
| Sixth | \$31,890 - \$40,645 | 45,712 | \$1,640,070 | \$69,887 | \$5,915 | \$31,540 | \$16,375 | \$47,915 | \$9,531 | \$2,134 | \$11,415 | \$1,158 | \$122,373 | \$25,582 | \$147,955 |
| Seventh | \$40,645 - \$51,669 | 29,313 | \$1,329,684 | \$63,137 | \$4,829 | \$26,293 | \$13,595 | \$39,887 | \$6,562 | \$1,762 | \$11,326 | \$1,149 | \$107,317 | \$21,335 | \$128,652 |
| Eighth | \$51,669 - \$66,043 | 20,662 | \$1,195,351 | \$60,824 | \$3,942 | \$19,897 | \$10,820 | \$30,717 | \$5,075 | \$1,412 | \$8,031 | \$845 | \$93,827 | \$17,019 | \$110,846 |
| Ninth | \$66,043 - \$92,346 | 15,238 | \$1,176,417 | \$59,747 | \$3,320 | \$15,774 | \$8,970 | \$24,744 | \$3,421 | \$1,167 | \$5,756 | \$857 | \$84,698 | \$14,314 | \$99,012 |
| Tenth | \$92,346 & over | 13,542 | \$2,715,979 | \$162,090 | \$6,572 | \$29,426 | \$18,143 | \$47,570 | \$4,207 | \$2,325 | \$10,497 | \$2,016 | \$206,221 | \$29,057 | \$235,278 |
| TOTALS | | 472,718 | \$13,483,800 | \$490,903 | \$48,453 | \$256,433 | \$138,770 | \$395,203 | \$81,886 | \$17,909 | \$89,962 | \$10,612 | \$919,183 | \$215,744 | \$1,134,927 |
| Top 5% | Over \$127,880 | 6,828 | \$2,010,075 | \$122,831 | \$4,809 | \$21,477 | \$13,433 | \$34,910 | \$2,584 | \$1,710 | \$7,483 | \$1,512 | \$154,375 | \$21,464 | \$175,839 |
| Top 1% | Over \$310,014 | 1,040 | \$1,001,761 | \$71,061 | \$1,320 | \$3,897 | \$3,386 | \$7,283 | \$438 | \$428 | \$1,382 | \$653 | \$76,778 | \$5,786 | \$82,565 |

70

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 71,413 | \$364,937 | \$0 | -\$2,615 | \$403 | -\$2,212 | \$780 | -\$1,432 | \$5,790 | \$4,359 | \$43,634 |
| Second | \$7,971 - \$13,047 | 76,669 | \$811,155 | \$0 | -\$2,390 | \$2,592 | \$202 | \$885 | \$1,086 | \$9,414 | \$10,500 | \$59,372 |
| Third | \$13,047 - \$18,550 | 74,328 | \$1,176,644 | \$0 | \$3,527 | \$534 | \$4,061 | \$1,415 | \$5,475 | \$14,774 | \$20,249 | \$95,740 |
| Fourth | \$18,550 - \$24,885 | 68,686 | \$1,457,461 | \$0 | \$10,439 | \$713 | \$11,152 | \$1,700 | \$12,852 | \$12,383 | \$25,235 | \$143,069 |
| Fifth | \$24,885 - \$31,890 | 57,155 | \$1,616,101 | \$0 | \$18,913 | \$806 | \$19,719 | \$1,394 | \$21,113 | \$12,122 | \$33,234 | \$164,946 |
| Sixth | \$31,890 - \$40,645 | 45,712 | \$1,640,070 | \$0 | \$23,647 | \$1,050 | \$24,697 | \$1,215 | \$25,912 | \$13,693 | \$39,605 | \$187,561 |
| Seventh | \$40,645 - \$51,669 | 29,313 | \$1,329,684 | \$0 | \$18,182 | \$1,330 | \$19,512 | \$880 | \$20,392 | \$15,998 | \$36,390 | \$165,042 |
| Eighth | \$51,669 - \$66,043 | 20,662 | \$1,195,351 | \$0 | \$15,284 | \$1,074 | \$16,359 | \$773 | \$17,131 | \$8,134 | \$25,265 | \$136,111 |
| Ninth | \$66,043 - \$92,346 | 15,238 | \$1,176,417 | \$0 | \$13,620 | \$1,133 | \$14,753 | \$902 | \$15,655 | \$8,203 | \$23,858 | \$122,869 |
| Tenth | \$92,346 & over | 13,542 | \$2,715,979 | \$0 | \$19,785 | \$2,860 | \$22,645 | \$1,162 | \$23,807 | \$17,086 | \$40,893 | \$276,171 |
| TOTALS | | 472,718 | \$13,483,800 | \$0 | \$118,392 | \$12,495 | \$130,887 | \$11,104 | \$141,991 | \$117,596 | \$259,588 | \$1,394,515 |
| Top 5% | Over \$127,880 | 6,828 | \$2,010,075 | \$0 | \$11,669 | \$2,105 | \$13,774 | \$668 | \$14,442 | \$12,557 | \$26,998 | \$202,837 |
| Top 1% | Over \$310,014 | 1,040 | \$1,001,761 | \$0 | \$2,551 | \$1,166 | \$3,718 | \$158 | \$3,876 | \$4,349 | \$8,225 | \$90,789 |

Table C-2 (b)

2001 Minnesota Tax Incidence Study (1998 Data)
Effective Tax Rates by Population Decile (dollars in thousands)
Renters

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 71,413 | \$364,937 | - 0.5% | 0.7% | 4.5% | 2.4% | 6.9% | 2.0% | 0.3% | 1.2% | 0.1% | 7.2% | 3.5% | 10.8% |
| Second | \$7,971 - \$13,047 | 76,669 | \$811,155 | - 0.9% | 0.5% | 2.7% | 1.6% | 4.2% | 1.2% | 0.2% | 0.7% | 0.1% | 3.7% | 2.4% | 6.0% |
| Third | \$13,047 - \$18,550 | 74,328 | \$1,176,644 | 0.1% | 0.4% | 2.5% | 1.3% | 3.8% | 1.1% | 0.2% | 0.8% | 0.1% | 4.4% | 2.0% | 6.4% |
| Fourth | \$18,550 - \$24,885 | 68,686 | \$1,457,461 | 2.2% | 0.4% | 2.3% | 1.2% | 3.5% | 0.9% | 0.2% | 0.8% | 0.1% | 6.2% | 1.9% | 8.1% |
| Fifth | \$24,885 - \$31,890 | 57,155 | \$1,616,101 | 3.2% | 0.4% | 2.0% | 1.0% | 3.0% | 0.6% | 0.1% | 0.7% | 0.1% | 6.5% | 1.6% | 8.1% |
| Sixth | \$31,890 - \$40,645 | 45,712 | \$1,640,070 | 4.3% | 0.4% | 1.9% | 1.0% | 2.9% | 0.6% | 0.1% | 0.7% | 0.1% | 7.5% | 1.6% | 9.0% |
| Seventh | \$40,645 - \$51,669 | 29,313 | \$1,329,684 | 4.7% | 0.4% | 2.0% | 1.0% | 3.0% | 0.5% | 0.1% | 0.9% | 0.1% | 8.1% | 1.6% | 9.7% |
| Eighth | \$51,669 - \$66,043 | 20,662 | \$1,195,351 | 5.1% | 0.3% | 1.7% | 0.9% | 2.6% | 0.4% | 0.1% | 0.7% | 0.1% | 7.8% | 1.4% | 9.3% |
| Ninth | \$66,043 - \$92,346 | 15,238 | \$1,176,417 | 5.1% | 0.3% | 1.3% | 0.8% | 2.1% | 0.3% | 0.1% | 0.5% | 0.1% | 7.2% | 1.2% | 8.4% |
| Tenth | \$92,346 & over | 13,542 | \$2,715,979 | 6.0% | 0.2% | 1.1% | 0.7% | 1.8% | 0.2% | 0.1% | 0.4% | 0.1% | 7.6% | 1.1% | 8.7% |
| TOTALS | | 472,718 | \$13,483,800 | 3.6% | 0.4% | 1.9% | 1.0% | 2.9% | 0.6% | 0.1% | 0.7% | 0.1% | 6.8% | 1.6% | 8.4% |
| Top 5% | Over \$127,880 | 6,828 | \$2,010,075 | 6.1% | 0.2% | 1.1% | 0.7% | 1.7% | 0.1% | 0.1% | 0.4% | 0.1% | 7.7% | 1.1% | 8.7% |
| Top 1% | Over \$310,014 | 1,040 | \$1,001,761 | 7.1% | 0.1% | 0.4% | 0.3% | 0.7% | 0.0% | 0.0% | 0.1% | 0.1% | 7.7% | 0.6% | 8.2% |

71

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 71,413 | \$364,937 | 0.0% | - 0.7% | 0.1% | - 0.6% | 0.2% | - 0.4% | 1.6% | 1.2% | 12.0% |
| Second | \$7,971 - \$13,047 | 76,669 | \$811,155 | 0.0% | - 0.3% | 0.3% | 0.0% | 0.1% | 0.1% | 1.2% | 1.3% | 7.3% |
| Third | \$13,047 - \$18,550 | 74,328 | \$1,176,644 | 0.0% | 0.3% | 0.0% | 0.3% | 0.1% | 0.5% | 1.3% | 1.7% | 8.1% |
| Fourth | \$18,550 - \$24,885 | 68,686 | \$1,457,461 | 0.0% | 0.7% | 0.0% | 0.8% | 0.1% | 0.9% | 0.8% | 1.7% | 9.8% |
| Fifth | \$24,885 - \$31,890 | 57,155 | \$1,616,101 | 0.0% | 1.2% | 0.0% | 1.2% | 0.1% | 1.3% | 0.8% | 2.1% | 10.2% |
| Sixth | \$31,890 - \$40,645 | 45,712 | \$1,640,070 | 0.0% | 1.4% | 0.1% | 1.5% | 0.1% | 1.6% | 0.8% | 2.4% | 11.4% |
| Seventh | \$40,645 - \$51,669 | 29,313 | \$1,329,684 | 0.0% | 1.4% | 0.1% | 1.5% | 0.1% | 1.5% | 1.2% | 2.7% | 12.4% |
| Eighth | \$51,669 - \$66,043 | 20,662 | \$1,195,351 | 0.0% | 1.3% | 0.1% | 1.4% | 0.1% | 1.4% | 0.7% | 2.1% | 11.4% |
| Ninth | \$66,043 - \$92,346 | 15,238 | \$1,176,417 | 0.0% | 1.2% | 0.1% | 1.3% | 0.1% | 1.3% | 0.7% | 2.0% | 10.4% |
| Tenth | \$92,346 & over | 13,542 | \$2,715,979 | 0.0% | 0.7% | 0.1% | 0.8% | 0.0% | 0.9% | 0.6% | 1.5% | 10.2% |
| TOTALS | | 472,718 | \$13,483,800 | 0.0% | 0.9% | 0.1% | 1.0% | 0.1% | 1.1% | 0.9% | 1.9% | 10.3% |
| Top 5% | Over \$127,880 | 6,828 | \$2,010,075 | 0.0% | 0.6% | 0.1% | 0.7% | 0.0% | 0.7% | 0.6% | 1.3% | 10.1% |
| Top 1% | Over \$310,014 | 1,040 | \$1,001,761 | 0.0% | 0.3% | 0.1% | 0.4% | 0.0% | 0.4% | 0.4% | 0.8% | 9.1% |

Table C-3 (a)

2001 Minnesota Tax Incidence Study (1998 Data)
State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
Others (Farmers and those with no residential property tax)

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 115,908 | \$553,852 | - \$1,607 | \$4,929 | \$28,166 | \$16,146 | \$44,311 | \$12,123 | \$2,028 | \$8,004 | \$1,779 | \$46,686 | \$24,882 | \$71,568 |
| Second | \$7,971 - \$13,047 | 94,833 | \$993,659 | \$4,264 | \$4,648 | \$26,366 | \$14,588 | \$40,955 | \$12,592 | \$1,855 | \$7,868 | \$1,313 | \$51,091 | \$22,404 | \$73,495 |
| Third | \$13,047 - \$18,550 | 85,401 | \$1,355,886 | \$18,078 | \$6,370 | \$35,330 | \$19,258 | \$54,589 | \$15,900 | \$2,468 | \$11,162 | \$1,410 | \$80,471 | \$29,507 | \$109,977 |
| Fourth | \$18,550 - \$24,885 | 64,518 | \$1,385,483 | \$32,937 | \$5,996 | \$33,762 | \$17,668 | \$51,430 | \$13,008 | \$2,278 | \$11,784 | \$1,430 | \$91,491 | \$27,372 | \$118,863 |
| Fifth | \$24,885 - \$31,890 | 52,903 | \$1,496,020 | \$49,968 | \$5,900 | \$31,553 | \$17,729 | \$49,282 | \$9,781 | \$2,278 | \$11,805 | \$1,646 | \$103,107 | \$27,553 | \$130,660 |
| Sixth | \$31,890 - \$40,645 | 41,624 | \$1,494,746 | \$55,793 | \$5,643 | \$31,443 | \$17,210 | \$48,653 | \$9,098 | \$2,203 | \$11,765 | \$1,929 | \$108,098 | \$26,985 | \$135,083 |
| Seventh | \$40,645 - \$51,669 | 25,403 | \$1,150,700 | \$46,508 | \$4,228 | \$24,082 | \$12,468 | \$36,551 | \$6,058 | \$1,604 | \$10,049 | \$1,550 | \$86,697 | \$19,850 | \$106,548 |
| Eighth | \$51,669 - \$66,043 | 23,229 | \$1,348,952 | \$55,127 | \$4,875 | \$24,249 | \$14,032 | \$38,280 | \$5,558 | \$1,785 | \$10,175 | \$2,250 | \$95,109 | \$22,941 | \$118,050 |
| Ninth | \$66,043 - \$92,346 | 14,136 | \$1,091,786 | \$46,601 | \$3,360 | \$17,824 | \$9,928 | \$27,752 | \$3,707 | \$1,271 | \$7,396 | \$1,225 | \$75,527 | \$15,785 | \$91,312 |
| Tenth | \$92,346 & over | 11,083 | \$3,734,940 | \$126,349 | \$6,330 | \$26,922 | \$17,870 | \$44,792 | \$3,629 | \$2,248 | \$9,594 | \$2,898 | \$166,493 | \$29,346 | \$195,839 |
| TOTALS | | 529,038 | \$14,606,022 | \$434,018 | \$52,280 | \$279,696 | \$156,898 | \$436,594 | \$91,455 | \$20,018 | \$99,601 | \$17,429 | \$904,771 | \$246,625 | \$1,151,396 |
| Top 5% | Over \$127,880 | 6,208 | \$3,215,491 | \$103,100 | \$4,945 | \$19,886 | \$13,757 | \$33,643 | \$2,374 | \$1,724 | \$6,839 | \$2,248 | \$132,200 | \$22,674 | \$154,873 |
| Top 1% | Over \$310,014 | 1,499 | \$2,365,139 | \$62,217 | \$2,321 | \$5,620 | \$5,326 | \$10,946 | \$631 | \$663 | \$1,915 | \$1,244 | \$70,383 | \$9,554 | \$79,937 |

72

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 115,908 | \$553,852 | \$4,966 | \$601 | \$2,393 | \$2,994 | \$1,537 | \$9,496 | \$30,428 | \$39,925 | \$111,493 |
| Second | \$7,971 - \$13,047 | 94,833 | \$993,659 | \$3,710 | \$544 | \$1,754 | \$2,298 | \$1,080 | \$7,088 | \$23,184 | \$30,272 | \$103,767 |
| Third | \$13,047 - \$18,550 | 85,401 | \$1,355,886 | \$6,476 | \$717 | \$1,992 | \$2,709 | \$1,731 | \$10,916 | \$17,854 | \$28,770 | \$138,748 |
| Fourth | \$18,550 - \$24,885 | 64,518 | \$1,385,483 | \$5,986 | \$634 | \$1,573 | \$2,207 | \$1,585 | \$9,778 | \$24,457 | \$34,235 | \$153,098 |
| Fifth | \$24,885 - \$31,890 | 52,903 | \$1,496,020 | \$10,119 | \$524 | \$2,874 | \$3,398 | \$1,431 | \$14,948 | \$19,937 | \$34,884 | \$165,544 |
| Sixth | \$31,890 - \$40,645 | 41,624 | \$1,494,746 | \$10,460 | \$414 | \$2,829 | \$3,243 | \$1,239 | \$14,942 | \$39,662 | \$54,603 | \$189,687 |
| Seventh | \$40,645 - \$51,669 | 25,403 | \$1,150,700 | \$11,141 | \$252 | \$1,609 | \$1,861 | \$873 | \$13,875 | \$33,513 | \$47,388 | \$153,936 |
| Eighth | \$51,669 - \$66,043 | 23,229 | \$1,348,952 | \$14,617 | \$209 | \$2,287 | \$2,496 | \$849 | \$17,963 | \$39,942 | \$57,905 | \$175,955 |
| Ninth | \$66,043 - \$92,346 | 14,136 | \$1,091,786 | \$9,845 | \$113 | \$1,518 | \$1,631 | \$830 | \$12,305 | \$21,610 | \$33,915 | \$125,227 |
| Tenth | \$92,346 & over | 11,083 | \$3,734,940 | \$8,842 | \$233 | \$3,665 | \$3,898 | \$1,029 | \$13,770 | \$39,376 | \$53,146 | \$248,985 |
| TOTALS | | 529,038 | \$14,606,022 | \$86,162 | \$4,241 | \$22,494 | \$26,735 | \$12,183 | \$125,080 | \$289,965 | \$415,044 | \$1,566,440 |
| Top 5% | Over \$127,880 | 6,208 | \$3,215,491 | \$5,713 | \$185 | \$2,894 | \$3,079 | \$668 | \$9,461 | \$27,710 | \$37,171 | \$192,044 |
| Top 1% | Over \$310,014 | 1,499 | \$2,365,139 | \$1,683 | \$62 | \$1,333 | \$1,395 | \$232 | \$3,310 | \$9,540 | \$12,850 | \$92,787 |

Table C-3 (b)

2001 Minnesota Tax Incidence Study (1998 Data)
Effective Tax Rates by Population Decile (dollars in thousands)
Others (Farmers and those with no residential property tax)

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|---------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$7,971 & under | 115,908 | \$553,852 | - 0.3% | 0.9% | 5.1% | 2.9% | 8.0% | 2.2% | 0.4% | 1.4% | 0.3% | 8.4% | 4.5% | 12.9% |
| Second | \$7,971 - \$13,047 | 94,833 | \$993,659 | 0.4% | 0.5% | 2.7% | 1.5% | 4.1% | 1.3% | 0.2% | 0.8% | 0.1% | 5.1% | 2.3% | 7.4% |
| Third | \$13,047 - \$18,550 | 85,401 | \$1,355,886 | 1.3% | 0.5% | 2.6% | 1.4% | 4.0% | 1.2% | 0.2% | 0.8% | 0.1% | 5.9% | 2.2% | 8.1% |
| Fourth | \$18,550 - \$24,885 | 64,518 | \$1,385,483 | 2.4% | 0.4% | 2.4% | 1.3% | 3.7% | 0.9% | 0.2% | 0.9% | 0.1% | 6.6% | 2.0% | 8.6% |
| Fifth | \$24,885 - \$31,890 | 52,903 | \$1,496,020 | 3.3% | 0.4% | 2.1% | 1.2% | 3.3% | 0.7% | 0.2% | 0.8% | 0.1% | 6.9% | 1.8% | 8.7% |
| Sixth | \$31,890 - \$40,645 | 41,624 | \$1,494,746 | 3.7% | 0.4% | 2.1% | 1.2% | 3.3% | 0.6% | 0.1% | 0.8% | 0.1% | 7.2% | 1.8% | 9.0% |
| Seventh | \$40,645 - \$51,669 | 25,403 | \$1,150,700 | 4.0% | 0.4% | 2.1% | 1.1% | 3.2% | 0.5% | 0.1% | 0.9% | 0.1% | 7.5% | 1.7% | 9.3% |
| Eighth | \$51,669 - \$66,043 | 23,229 | \$1,348,952 | 4.1% | 0.4% | 1.8% | 1.0% | 2.8% | 0.4% | 0.1% | 0.8% | 0.2% | 7.1% | 1.7% | 8.8% |
| Ninth | \$66,043 - \$92,346 | 14,136 | \$1,091,786 | 4.3% | 0.3% | 1.6% | 0.9% | 2.5% | 0.3% | 0.1% | 0.7% | 0.1% | 6.9% | 1.4% | 8.4% |
| Tenth | \$92,346 & over | 11,083 | \$3,734,940 | 3.4% | 0.2% | 0.7% | 0.5% | 1.2% | 0.1% | 0.1% | 0.3% | 0.1% | 4.5% | 0.8% | 5.2% |
| TOTALS | | 529,038 | \$14,606,022 | 3.0% | 0.4% | 1.9% | 1.1% | 3.0% | 0.6% | 0.1% | 0.7% | 0.1% | 6.2% | 1.7% | 7.9% |
| Top 5% | Over \$127,880 | 6,208 | \$3,215,491 | 3.2% | 0.2% | 0.6% | 0.4% | 1.0% | 0.1% | 0.1% | 0.2% | 0.1% | 4.1% | 0.7% | 4.8% |
| Top 1% | Over \$310,014 | 1,499 | \$2,365,139 | 2.6% | 0.1% | 0.2% | 0.2% | 0.5% | 0.0% | 0.0% | 0.1% | 0.1% | 3.0% | 0.4% | 3.4% |

73

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|---------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$7,971 & under | 115,908 | \$553,852 | 0.9% | 0.1% | 0.4% | 0.5% | 0.3% | 1.7% | 5.5% | 7.2% | 20.1% |
| Second | \$7,971 - \$13,047 | 94,833 | \$993,659 | 0.4% | 0.1% | 0.2% | 0.2% | 0.1% | 0.7% | 2.3% | 3.0% | 10.4% |
| Third | \$13,047 - \$18,550 | 85,401 | \$1,355,886 | 0.5% | 0.1% | 0.1% | 0.2% | 0.1% | 0.8% | 1.3% | 2.1% | 10.2% |
| Fourth | \$18,550 - \$24,885 | 64,518 | \$1,385,483 | 0.4% | 0.0% | 0.1% | 0.2% | 0.1% | 0.7% | 1.8% | 2.5% | 11.1% |
| Fifth | \$24,885 - \$31,890 | 52,903 | \$1,496,020 | 0.7% | 0.0% | 0.2% | 0.2% | 0.1% | 1.0% | 1.3% | 2.3% | 11.1% |
| Sixth | \$31,890 - \$40,645 | 41,624 | \$1,494,746 | 0.7% | 0.0% | 0.2% | 0.2% | 0.1% | 1.0% | 2.7% | 3.7% | 12.7% |
| Seventh | \$40,645 - \$51,669 | 25,403 | \$1,150,700 | 1.0% | 0.0% | 0.1% | 0.2% | 0.1% | 1.2% | 2.9% | 4.1% | 13.4% |
| Eighth | \$51,669 - \$66,043 | 23,229 | \$1,348,952 | 1.1% | 0.0% | 0.2% | 0.2% | 0.1% | 1.3% | 3.0% | 4.3% | 13.0% |
| Ninth | \$66,043 - \$92,346 | 14,136 | \$1,091,786 | 0.9% | 0.0% | 0.1% | 0.1% | 0.1% | 1.1% | 2.0% | 3.1% | 11.5% |
| Tenth | \$92,346 & over | 11,083 | \$3,734,940 | 0.2% | 0.0% | 0.1% | 0.1% | 0.0% | 0.4% | 1.1% | 1.4% | 6.7% |
| TOTALS | | 529,038 | \$14,606,022 | 0.6% | 0.0% | 0.2% | 0.2% | 0.1% | 0.9% | 2.0% | 2.8% | 10.7% |
| Top 5% | Over \$127,880 | 6,208 | \$3,215,491 | 0.2% | 0.0% | 0.1% | 0.1% | 0.0% | 0.3% | 0.9% | 1.2% | 6.0% |
| Top 1% | Over \$310,014 | 1,499 | \$2,365,139 | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.1% | 0.4% | 0.5% | 3.9% |

Table D-1

2001 Minnesota Tax Incidence Study (1998 Data)

**Household Characteristics and Average Tax Burden Amounts by Population Decile
Singles and Married Couples Without Children (except retired)**

| <u>HOUSEHOLD CHARACTERISTICS</u> | <u>Population Decile</u> | | | | | | | | | | <u>Total</u> |
|---|--------------------------|------------|--------------|-------------|-------------|------------|--------------|--------------|-------------|------------|--------------|
| | <u>One</u> | <u>Two</u> | <u>Three</u> | <u>Four</u> | <u>Five</u> | <u>Six</u> | <u>Seven</u> | <u>Eight</u> | <u>Nine</u> | <u>Ten</u> | |
| <i>Number of households</i> | 158,705 | 129,774 | 124,630 | 131,639 | 123,384 | 124,009 | 103,343 | 90,291 | 79,331 | 73,798 | 1,138,902 |
| Percent of households in given decile | 74% | 58% | 56% | 59% | 55% | 56% | 46% | 40% | 36% | 33% | 51% |
| Percent that are married | 2% | 3% | 9% | 8% | 13% | 27% | 43% | 63% | 76% | 79% | 26% |
| <i>Average household income</i> | \$4,978 | \$10,482 | \$15,813 | \$21,584 | \$28,185 | \$35,920 | \$45,663 | \$58,177 | \$77,351 | \$238,516 | \$42,676 |
| Percent with earned income | 64% | 73% | 86% | 92% | 94% | 96% | 97% | 97% | 97% | 96% | 87% |
| Average earned income | \$2,544 | \$6,855 | \$12,962 | \$18,495 | \$24,669 | \$30,494 | \$38,423 | \$49,746 | \$63,813 | \$120,066 | \$30,340 |
| <i>Housing Status</i> | | | | | | | | | | | |
| Homeowners | 11% | 18% | 21% | 32% | 41% | 54% | 68% | 76% | 84% | 87% | 44% |
| Renters | 31% | 26% | 30% | 33% | 28% | 25% | 18% | 13% | 10% | 7% | 24% |
| Farmers | 2% | 2% | 3% | 2% | 4% | 4% | 5% | 5% | 4% | 3% | 3% |
| Other | 56% | 53% | 46% | 33% | 27% | 17% | 9% | 6% | 3% | 3% | 29% |
| <u>AVERAGE TAX BURDENS</u> | | | | | | | | | | | |
| <i>Local Property Tax after PTR</i> | 84 | 214 | 272 | 358 | 576 | 779 | 996 | 1192 | 1510 | 2581 | 712 |
| <i>State Income Tax</i> | -\$7 | \$112 | \$373 | \$744 | \$1,155 | \$1,598 | \$2,165 | \$3,022 | \$4,221 | \$13,664 | \$2,053 |
| <i>State Sales Tax</i> | 258 | 293 | 411 | 531 | 600 | 804 | 954 | 1,201 | 1,295 | 2,426 | 757 |
| <i>State Excise Taxes</i> | 117 | 148 | 195 | 205 | 194 | 213 | 236 | 252 | 295 | 329 | 206 |
| <i>Other Taxes</i> | 43 | 57 | 91 | 118 | 146 | 183 | 219 | 281 | 341 | 471 | 168 |
| <i>Business Taxes</i> | 306 | 424 | 533 | 623 | 798 | 1,020 | 1,187 | 1,491 | 1,767 | 3,941 | 1,023 |
| <i>Total State and Local Tax Burden</i> | \$800 | \$1,248 | \$1,873 | \$2,579 | \$3,467 | \$4,596 | \$5,759 | \$7,440 | \$9,430 | \$23,412 | \$4,919 |
| <i>Effective Tax Rate for all taxes</i> | 29.5% | 12.0% | 11.9% | 11.9% | 12.3% | 12.8% | 12.6% | 12.8% | 12.2% | 11.6% | 14.7% |

Table D-2

2001 Minnesota Tax Incidence Study (1998 Data)

**Household Characteristics and Average Tax Burden Amounts by Population Decile
Single Parent Families and Married Couples With Children**

| <i><u>HOUSEHOLD CHARACTERISTICS</u></i> | <i>Population Decile</i> | | | | | | | | | | <i>Total</i> |
|--|--------------------------|------------|--------------|-------------|-------------|------------|--------------|--------------|-------------|------------|--------------|
| | <i>One</i> | <i>Two</i> | <i>Three</i> | <i>Four</i> | <i>Five</i> | <i>Six</i> | <i>Seven</i> | <i>Eight</i> | <i>Nine</i> | <i>Ten</i> | |
| <i>Number of households</i> | 18,888 | 42,341 | 51,005 | 50,201 | 55,085 | 62,986 | 87,913 | 107,912 | 121,045 | 121,986 | 719,361 |
| <i>Percent of households in given decile</i> | 9% | 19% | 23% | 22% | 25% | 28% | 39% | 48% | 54% | 55% | 32% |
| <i>Percent that are married</i> | 21% | 18% | 23% | 49% | 51% | 66% | 83% | 91% | 96% | 97% | 73% |
| <i>Average number of children</i> | 1.46 | 1.63 | 1.79 | 1.84 | 1.86 | 1.84 | 1.93 | 1.92 | 1.99 | 2.02 | 1.90 |
| <i>Average household income</i> | \$5,331 | \$10,655 | \$16,140 | \$21,481 | \$28,403 | \$36,513 | \$45,982 | \$58,448 | \$77,490 | \$191,206 | \$68,633 |
| <i>Percent with earned income</i> | 83% | 96% | 98% | 99% | 100% | 98% | 100% | 100% | 100% | 99% | 99% |
| <i>Average earned income</i> | \$2,483 | \$8,154 | \$13,768 | \$19,789 | \$25,836 | \$33,274 | \$42,496 | \$52,983 | \$68,743 | \$129,671 | \$54,492 |
| <i>Housing Status</i> | | | | | | | | | | | |
| <i>Homeowners</i> | 23% | 19% | 24% | 42% | 59% | 69% | 83% | 84% | 91% | 92% | 71% |
| <i>Renters</i> | 43% | 62% | 46% | 33% | 26% | 17% | 9% | 7% | 4% | 5% | 17% |
| <i>Farmers</i> | 10% | 4% | 4% | 7% | 5% | 8% | 6% | 6% | 4% | 2% | 5% |
| <i>Other</i> | 25% | 15% | 26% | 18% | 9% | 6% | 3% | 3% | 1% | 1% | 7% |
| <i><u>AVERAGE TAX BURDENS</u></i> | | | | | | | | | | | |
| <i>Local Property Tax after PTR</i> | 176 | 143 | 155 | 400 | 552 | 859 | 983 | 1155 | 1482 | 2835 | 1193 |
| <i>State Income Tax</i> | -\$226 | -\$474 | -\$593 | -\$258 | \$387 | \$999 | \$1,568 | \$2,384 | \$3,557 | \$11,286 | \$3,085 |
| <i>State Sales Tax</i> | 372 | 411 | 539 | 667 | 758 | 971 | 1,052 | 1,229 | 1,544 | 2,381 | 1,238 |
| <i>State Excise Taxes</i> | 150 | 166 | 199 | 228 | 246 | 291 | 297 | 297 | 316 | 337 | 279 |
| <i>Other Taxes</i> | 69 | 65 | 100 | 147 | 169 | 214 | 253 | 290 | 365 | 499 | 275 |
| <i>Business Taxes</i> | 1,058 | 650 | 628 | 1,212 | 1,102 | 1,219 | 1,444 | 1,710 | 1,879 | 3,740 | 1,770 |
| <i>Total State and Local Tax Burden</i> | \$1,599 | \$959 | \$1,028 | \$2,395 | \$3,215 | \$4,553 | \$5,597 | \$7,065 | \$9,144 | \$21,078 | \$7,840 |
| <i>Effective Tax Rate for all taxes</i> | 36.9% | 9.0% | 6.4% | 11.0% | 11.3% | 12.5% | 12.2% | 12.1% | 11.8% | 11.9% | 12.0% |

Table D-3

2001 Minnesota Tax Incidence Study (1998 Data)

**Household Characteristics and Average Tax Burden Amounts by Population Decile
Retired Singles and Married Couples**

| <i><u>HOUSEHOLD CHARACTERISTICS</u></i> | <i>Population Decile</i> | | | | | | | | | | <i>Total</i> |
|---|--------------------------|------------|--------------|-------------|-------------|------------|--------------|--------------|-------------|------------|--------------|
| | <i>One</i> | <i>Two</i> | <i>Three</i> | <i>Four</i> | <i>Five</i> | <i>Six</i> | <i>Seven</i> | <i>Eight</i> | <i>Nine</i> | <i>Ten</i> | |
| <i>Number of households</i> | 37,222 | 51,711 | 47,958 | 41,675 | 45,003 | 36,272 | 32,267 | 25,240 | 22,991 | 27,550 | 367,889 |
| Percent of households in given decile | 17% | 23% | 21% | 19% | 20% | 16% | 14% | 11% | 10% | 12% | 17% |
| Percent that are married | 5% | 9% | 18% | 39% | 53% | 60% | 66% | 70% | 70% | 77% | 42% |
| <i>Average household income</i> | \$5,570 | \$10,568 | \$15,701 | \$21,578 | \$28,474 | \$36,012 | \$45,511 | \$58,151 | \$77,886 | \$253,187 | \$45,383 |
| Social Security Income | 5,074 | 8,215 | 10,187 | 11,366 | 12,097 | 12,884 | 13,591 | 14,189 | 14,031 | 15,528 | 11,239 |
| SS income as % of household income | 91% | 78% | 65% | 53% | 42% | 36% | 30% | 24% | 18% | 6% | 25% |
| <i>Housing Status</i> | | | | | | | | | | | |
| Homeowners | 29% | 40% | 52% | 65% | 67% | 72% | 78% | 80% | 78% | 82% | 61% |
| Renters | 31% | 32% | 28% | 20% | 18% | 10% | 10% | 6% | 11% | 10% | 20% |
| Farmers | 9% | 8% | 7% | 7% | 9% | 11% | 9% | 6% | 5% | 6% | 8% |
| Other | 32% | 20% | 12% | 8% | 6% | 7% | 3% | 8% | 6% | 3% | 11% |
| | | | | | | | | | | | |
| <i><u>AVERAGE TAX BURDENS</u></i> | | | | | | | | | | | |
| <i>Local Property Tax after PTR</i> | 177 | 198 | 419 | 517 | 798 | 872 | 1150 | 1168 | 1357 | 2326 | 782 |
| <i>State Income Tax</i> | \$0 | \$0 | \$7 | \$80 | \$273 | \$604 | \$1,188 | \$2,134 | \$3,228 | \$11,666 | \$1,429 |
| <i>State Sales Tax</i> | 184 | 249 | 364 | 489 | 554 | 728 | 813 | 991 | 1,267 | 2,553 | 706 |
| <i>State Excise Taxes</i> | 52 | 64 | 109 | 116 | 134 | 144 | 170 | 178 | 178 | 324 | 135 |
| <i>Other Taxes</i> | 50 | 65 | 104 | 139 | 164 | 187 | 218 | 259 | 316 | 436 | 171 |
| <i>Business Taxes</i> | 262 | 379 | 536 | 703 | 891 | 1,563 | 1,582 | 1,982 | 2,448 | 5,367 | 1,322 |
| <i>Total State and Local Tax Burden</i> | \$725 | \$955 | \$1,540 | \$2,043 | \$2,814 | \$4,098 | \$5,121 | \$6,713 | \$8,794 | \$22,671 | \$4,545 |
| <i>Effective Tax Rate for all taxes</i> | 17.1% | 9.0% | 10.0% | 9.4% | 9.9% | 11.5% | 11.2% | 11.5% | 11.3% | 10.5% | 11.0% |

S-1

Incidence Effects of Tax Law Changes Made in the 2001 Legislative Session

As has been amply noted, property tax changes were the main tax consequence of the 2001 legislative session. While changes did occur in other areas of tax law, the property tax reductions produced by far the largest change in tax revenues. This change had a seemingly paradoxical effect on tax equity. The progressivity¹ of property taxes as measured by the Suits index² declined slightly as a result of the changes. At the same time the progressivity of the overall tax system increased slightly. The explanation for this is that reductions in the property tax resulted in property taxes' becoming a smaller share of the total tax system. Other taxes, notably the progressive income tax, thus became a larger fraction of the total. So even though property taxes became more regressive, this was outweighed by the fact that property taxes became a smaller share of total taxes and all other taxes became relatively larger.

The total reduction in taxes was split about 56% to households and 44% to business. After tax shifting is accounted for Minnesota households received about 84% of the overall reduction while the balance of 16% was exported out of state.

¹ A progressive tax is one in which proportionately more of the tax is paid by higher-income households; that is, the ratio of the tax paid to household income rises as income rises. A regressive tax is the reverse; the ratio of tax paid to household income falls as income rises. The intermediate case of a flat or neutral tax is where the tax paid is just proportional to income.

² The Suits index is a numerical measure of tax progressivity. The value of the index ranges between +1 and -1. Positive values indicate a progressive tax, negative values a regressive tax, while a value of zero indicates a flat tax. The closer the Suits index is to +1 the more progressive is the tax, and similarly the closer the value is to -1 the more regressive the tax is.

Supplemental Tables

Table S-1 (a)
2003 Tax Collection Amounts - 2001 Session Final Law
(\$ Millions)

Population
Deciles

| Tax Category | Total | As Imposed | | | After Shifting | | Suits Index |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|---------------|
| | | MN HH's | NR | Business | Minn. | Exported | |
| Taxes on Income | | | | | | | |
| Individual income tax | \$7,256 | \$6,972 | \$284 | | \$6,972 | \$284 | 0.164 |
| Corporate franchise tax | 900 | | | \$900 | 448 | 451 | -0.147 |
| Total income taxes | \$8,156 | \$6,972 | \$284 | \$900 | \$7,420 | \$736 | 0.145 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$5,015 | \$2,658 | \$169 | \$2,188 | \$4,143 | \$872 | -0.182 |
| General sales/use | 4,435 | 2,274 | 169 | 1,992 | 3,626 | 809 | -0.179 |
| Sales tax motor vehicles | 580 | 384 | | 196 | 517 | 63 | -0.200 |
| Motor fuels excise tax | 629 | 276 | 101 | 252 | 438 | 191 | -0.254 |
| Alcoholic beverage excise tax | 61 | 55 | 6 | | 55 | 6 | -0.210 |
| Cigarette and tobacco excise taxes | 176 | 171 | 5 | | 171 | 5 | -0.530 |
| Insurance premiums tax | 195 | 113 | | 82 | 144 | 51 | -0.134 |
| Gambling taxes | 61 | 59 | 2 | | 59 | 2 | -0.401 |
| MinnesotaCare taxes | 257 | 249 | 8 | | 249 | 8 | -0.222 |
| Total consumption taxes | \$6,394 | \$3,581 | \$291 | \$2,522 | \$5,259 | \$1,136 | -0.202 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$1,961 | \$1,961 | | | \$1,961 | | -0.164 |
| Residential rental property (gross) | 417 | | | \$417 | 356 | \$61 | -0.368 |
| Total property tax refunds | (211) | (211) | | | (211) | | 0.832 |
| Homeowners | (86) | (86) | | | (86) | | 0.755 |
| Renters | (125) | (125) | | | (125) | | 0.885 |
| Residential recreational (cabins) | 114 | 92 | \$22 | | 92 | 22 | -0.204 |
| Commercial | 1,274 | | | 1,274 | 701 | 573 | -0.133 |
| Industrial | 454 | | | 454 | 53 | 401 | 0.098 |
| Farms (other than residence) | 217 | | | 217 | 217 | | -0.349 |
| Utility | 260 | | | 260 | 177 | 83 | -0.167 |
| Total Local | \$4,486 | \$1,842 | \$22 | \$2,622 | \$3,346 | \$1,140 | -0.146 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$492 | \$399 | | \$93 | \$449 | \$43 | -0.135 |
| Mortgage and deed taxes | 159 | 107 | | 51 | 136 | 23 | -0.129 |
| Total State | \$651 | \$506 | | \$144 | \$585 | \$66 | -0.134 |
| Total property taxes | \$5,137 | \$2,348 | \$22 | \$2,766 | \$3,931 | \$1,205 | -0.144 |
| Total Taxes | \$19,686 | \$12,900 | \$597 | \$6,188 | \$16,610 | \$3,077 | -0.033 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table S-1 (b)

2001 Minnesota Tax Incidence Study (2003 Data) - Current Law (Post-2001 Session)
State and Local Tax Burden Amounts by Population Decile (dollars in thousands)
ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|----------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$9,691 & under | 238,449 | \$1,334,467 | -\$9,640 | \$12,511 | \$80,954 | \$45,045 | \$126,000 | \$24,795 | \$4,908 | \$21,044 | \$3,726 | \$117,154 | \$66,190 | \$183,344 |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | -\$10,534 | \$13,814 | \$91,221 | \$50,689 | \$141,910 | \$29,247 | \$5,546 | \$24,131 | \$3,228 | \$134,064 | \$73,276 | \$207,341 |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | \$24,576 | \$19,429 | \$125,955 | \$67,266 | \$193,222 | \$39,041 | \$7,426 | \$36,143 | \$3,831 | \$225,715 | \$97,952 | \$323,667 |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | \$139,565 | \$25,480 | \$164,177 | \$87,243 | \$251,420 | \$44,295 | \$9,664 | \$52,284 | \$5,603 | \$400,321 | \$127,990 | \$528,311 |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | \$263,117 | \$30,361 | \$190,647 | \$102,809 | \$293,455 | \$45,424 | \$11,409 | \$64,298 | \$6,868 | \$563,485 | \$151,447 | \$714,931 |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | \$413,684 | \$38,778 | \$246,869 | \$127,540 | \$374,409 | \$51,614 | \$14,194 | \$88,226 | \$9,011 | \$800,393 | \$189,522 | \$989,915 |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | \$561,208 | \$45,278 | \$287,514 | \$150,206 | \$437,720 | \$57,726 | \$16,724 | \$107,316 | \$10,686 | \$1,013,763 | \$222,894 | \$1,236,657 |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | \$785,553 | \$56,512 | \$350,900 | \$181,234 | \$532,134 | \$61,684 | \$20,254 | \$135,219 | \$12,335 | \$1,333,355 | \$270,335 | \$1,603,690 |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | \$1,119,290 | \$69,959 | \$421,243 | \$221,479 | \$642,722 | \$68,386 | \$24,826 | \$163,716 | \$14,853 | \$1,772,635 | \$331,117 | \$2,103,752 |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | \$3,684,749 | \$135,948 | \$719,014 | \$430,980 | \$1,149,994 | \$79,411 | \$46,726 | \$236,034 | \$39,263 | \$4,719,208 | \$652,916 | \$5,372,124 |
| TOTALS | | 2,385,708 | \$155,478,757 | \$6,971,567 | \$448,070 | \$2,678,494 | \$1,464,491 | \$4,142,985 | \$501,622 | \$161,675 | \$928,410 | \$109,403 | \$11,080,093 | \$2,183,639 | \$13,263,732 |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | \$2,678,683 | \$96,710 | \$475,944 | \$304,954 | \$780,898 | \$45,260 | \$31,825 | \$143,644 | \$29,118 | \$3,343,531 | \$462,607 | \$3,806,139 |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | \$1,508,124 | \$31,511 | \$113,601 | \$86,188 | \$199,790 | \$10,066 | \$9,016 | \$33,945 | \$11,993 | \$1,665,737 | \$138,708 | \$1,804,445 |

82

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|----------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$9,691 & under | 238,449 | \$1,334,467 | \$41,753 | -\$6,645 | \$4,453 | -\$2,193 | \$3,552 | \$43,112 | \$48,550 | \$91,663 | \$275,007 |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | \$53,975 | -\$10,481 | \$5,754 | -\$4,728 | \$2,982 | \$52,229 | \$37,906 | \$90,135 | \$297,476 |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | \$72,780 | -\$4,120 | \$5,575 | \$1,455 | \$5,053 | \$79,288 | \$43,808 | \$123,096 | \$446,763 |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | \$97,610 | \$3,520 | \$8,488 | \$12,008 | \$6,693 | \$116,312 | \$64,919 | \$181,231 | \$709,541 |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | \$138,112 | \$13,506 | \$10,568 | \$24,074 | \$7,252 | \$169,438 | \$76,716 | \$246,154 | \$961,086 |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | \$154,568 | \$20,436 | \$11,242 | \$31,678 | \$7,805 | \$194,051 | \$114,182 | \$308,233 | \$1,298,149 |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | \$200,620 | \$16,543 | \$16,197 | \$32,740 | \$8,832 | \$242,192 | \$121,439 | \$363,631 | \$1,600,288 |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | \$241,194 | \$13,771 | \$15,191 | \$28,961 | \$9,877 | \$280,032 | \$135,944 | \$415,976 | \$2,019,666 |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | \$306,827 | \$12,565 | \$18,546 | \$31,112 | \$15,367 | \$353,305 | \$160,879 | \$514,184 | \$2,617,936 |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | \$567,761 | \$18,055 | \$57,366 | \$75,421 | \$24,599 | \$667,781 | \$343,936 | \$1,011,717 | \$6,383,841 |
| TOTALS | | 2,385,708 | \$155,478,757 | \$1,875,199 | \$77,150 | \$153,379 | \$230,529 | \$92,011 | \$2,197,740 | \$1,148,280 | \$3,346,020 | \$16,609,752 |
| Top 5% | Over \$165,889 | | \$48,444,502 | \$483,677 | \$12,976 | \$52,075 | \$65,051 | \$15,325 | \$564,052 | \$278,565 | \$842,617 | \$4,648,756 |
| Top 1% | Over \$404,376 | | \$26,347,300 | \$150,718 | \$2,825 | \$16,644 | \$19,469 | \$4,298 | \$174,486 | \$94,436 | \$268,922 | \$2,073,367 |

Table S-1 (c)

2001 Minnesota Tax Incidence Study (2003 Data) - Current Law (Post-2001 Session)
 Effective Tax Rates by Population Decile (dollars in thousands)
 ALL TAXPAYERS

| Population Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|-------------------|----------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$9,691 & under | 238,449 | \$1,334,467 | - 0.7% | 0.9% | 6.1% | 3.4% | 9.4% | 1.9% | 0.4% | 1.6% | 0.3% | 8.8% | 5.0% | 13.7% |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | - 0.3% | 0.5% | 3.0% | 1.7% | 4.7% | 1.0% | 0.2% | 0.8% | 0.1% | 4.4% | 2.4% | 6.8% |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | 0.5% | 0.4% | 2.7% | 1.4% | 4.1% | 0.8% | 0.2% | 0.8% | 0.1% | 4.8% | 2.1% | 6.9% |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | 2.2% | 0.4% | 2.5% | 1.3% | 3.9% | 0.7% | 0.1% | 0.8% | 0.1% | 6.2% | 2.0% | 8.2% |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | 3.1% | 0.4% | 2.2% | 1.2% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 6.6% | 1.8% | 8.4% |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | 3.7% | 0.4% | 2.2% | 1.2% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 7.3% | 1.7% | 9.0% |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | 4.0% | 0.3% | 2.0% | 1.1% | 3.1% | 0.4% | 0.1% | 0.8% | 0.1% | 7.2% | 1.6% | 8.8% |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | 4.4% | 0.3% | 2.0% | 1.0% | 3.0% | 0.3% | 0.1% | 0.8% | 0.1% | 7.5% | 1.5% | 9.0% |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | 4.7% | 0.3% | 1.8% | 0.9% | 2.7% | 0.3% | 0.1% | 0.7% | 0.1% | 7.5% | 1.4% | 8.9% |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | 5.7% | 0.2% | 1.1% | 0.7% | 1.8% | 0.1% | 0.1% | 0.4% | 0.1% | 7.3% | 1.0% | 8.3% |
| TOTALS | | 2,385,708 | \$155,478,757 | 4.5% | 0.3% | 1.7% | 0.9% | 2.7% | 0.3% | 0.1% | 0.6% | 0.1% | 7.1% | 1.4% | 8.5% |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | 5.5% | 0.2% | 1.0% | 0.6% | 1.6% | 0.1% | 0.1% | 0.3% | 0.1% | 6.9% | 1.0% | 7.9% |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | 5.7% | 0.1% | 0.4% | 0.3% | 0.8% | 0.0% | 0.0% | 0.1% | 0.0% | 6.3% | 0.5% | 6.8% |

83

| Population Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|-------------------|----------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$9,691 & under | 238,449 | \$1,334,467 | 3.1% | - 0.5% | 0.3% | - 0.2% | 0.3% | 3.2% | 3.6% | 6.9% | 20.6% |
| Second | \$9,691 - \$16,241 | 238,449 | \$3,048,385 | 1.8% | - 0.3% | 0.2% | - 0.2% | 0.1% | 1.7% | 1.2% | 3.0% | 9.8% |
| Third | \$16,241 - \$23,428 | 238,449 | \$4,700,813 | 1.5% | - 0.1% | 0.1% | 0.0% | 0.1% | 1.7% | 0.9% | 2.6% | 9.5% |
| Fourth | \$23,428 - \$31,824 | 238,449 | \$6,480,721 | 1.5% | 0.1% | 0.1% | 0.2% | 0.1% | 1.8% | 1.0% | 2.8% | 10.9% |
| Fifth | \$31,824 - \$41,302 | 238,449 | \$8,561,329 | 1.6% | 0.2% | 0.1% | 0.3% | 0.1% | 2.0% | 0.9% | 2.9% | 11.2% |
| Sixth | \$41,302 - \$53,143 | 238,449 | \$11,034,427 | 1.4% | 0.2% | 0.1% | 0.3% | 0.1% | 1.8% | 1.0% | 2.8% | 11.8% |
| Seventh | \$53,143 - \$67,450 | 238,449 | \$14,091,126 | 1.4% | 0.1% | 0.1% | 0.2% | 0.1% | 1.7% | 0.9% | 2.6% | 11.4% |
| Eighth | \$67,450 - \$86,011 | 238,449 | \$17,879,197 | 1.3% | 0.1% | 0.1% | 0.2% | 0.1% | 1.6% | 0.8% | 2.3% | 11.3% |
| Ninth | \$86,011 - \$120,143 | 238,449 | \$23,665,636 | 1.3% | 0.1% | 0.1% | 0.1% | 0.1% | 1.5% | 0.7% | 2.2% | 11.1% |
| Tenth | \$120,143 & over | 239,667 | \$64,682,655 | 0.9% | 0.0% | 0.1% | 0.1% | 0.0% | 1.0% | 0.5% | 1.6% | 9.9% |
| TOTALS | | 2,385,708 | \$155,478,757 | 1.2% | 0.0% | 0.1% | 0.1% | 0.1% | 1.4% | 0.7% | 2.2% | 10.7% |
| Top 5% | Over \$165,889 | 120,514 | \$48,444,502 | 1.0% | 0.0% | 0.1% | 0.1% | 0.0% | 1.2% | 0.6% | 1.7% | 9.6% |
| Top 1% | Over \$404,376 | 25,065 | \$26,347,300 | 0.6% | 0.0% | 0.1% | 0.1% | 0.0% | 0.7% | 0.4% | 1.0% | 7.9% |

Table S-2 (a)
2003 Tax Collection Amounts - 2001 Session Final Law
(\$ Millions)

**Income
Deciles**

| Tax Category | Total | As Imposed | | | After Shifting | | Suits |
|-------------------------------------|-----------------|-----------------|--------------|----------------|-----------------|----------------|---------------|
| | | MN HH's | NR | Business | Minn. | Exported | Index |
| Taxes on Income | | | | | | | |
| Individual income tax | \$7,256 | \$6,972 | \$284 | | \$6,972 | \$284 | 0.172 |
| Corporate franchise tax | 900 | | | \$900 | 448 | 451 | -0.172 |
| Total income taxes | \$8,156 | \$6,972 | \$284 | \$900 | \$7,420 | \$735 | 0.151 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$5,015 | \$2,658 | \$169 | \$2,188 | \$4,143 | \$872 | -0.210 |
| General sales/use | 4,435 | 2,274 | 169 | 1,992 | 3,626 | 809 | -0.208 |
| Sales tax motor vehicles | 580 | 384 | | 196 | 517 | 63 | -0.229 |
| Motor fuels excise tax | 629 | 276 | 101 | 252 | 438 | 191 | -0.279 |
| Alcoholic beverage excise tax | 61 | 55 | 6 | | 55 | 6 | -0.234 |
| Cigarette and tobacco excise taxes | 176 | 171 | 5 | | 171 | 5 | -0.535 |
| Insurance premiums tax | 195 | 113 | | 82 | 144 | 51 | -0.159 |
| Gambling taxes | 61 | 59 | 2 | | 59 | 2 | -0.421 |
| MinnesotaCare taxes | 257 | 249 | 8 | | 249 | 8 | -0.256 |
| Total consumption taxes | \$6,394 | \$3,581 | \$291 | \$2,522 | \$5,259 | \$1,136 | -0.230 |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | \$1,961 | \$1,961 | | | \$1,961 | | -0.160 |
| Residential rental property (gross) | 417 | | | \$417 | 356 | \$61 | -0.380 |
| Total property tax refunds | (211) | (211) | | | (211) | | 0.813 |
| Homeowners | (86) | (86) | | | (86) | | 0.742 |
| Renters | (125) | (125) | | | (125) | | 0.861 |
| Residential recreational (cabins) | 114 | 92 | \$22 | | 92 | 22 | -0.234 |
| Commercial | 1,274 | | | 1,274 | 701 | 573 | -0.156 |
| Industrial | 454 | | | 454 | 53 | 401 | 0.120 |
| Farms (other than residence) | 217 | | | 217 | 217 | | -0.368 |
| Utility | 260 | | | 260 | 177 | 83 | -0.193 |
| Total Local | \$4,486 | \$1,842 | \$22 | \$2,622 | \$3,346 | \$1,140 | -0.154 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | \$492 | \$399 | | \$93 | \$449 | \$43 | -0.167 |
| Mortgage and deed taxes | 159 | 107 | | 51 | 136 | 23 | -0.160 |
| Total State | \$651 | \$506 | | \$144 | \$585 | \$66 | -0.165 |
| Total property taxes | \$5,137 | \$2,348 | \$22 | \$2,766 | \$3,931 | \$1,205 | -0.156 |
| Total Taxes | \$19,686 | \$12,901 | \$597 | \$6,188 | \$16,610 | \$3,076 | -0.042 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table S-2 (b)

2001 Minnesota Tax Incidence Study (2003 Data) - Current Law (Post-2001 Session)
State and Local Tax Burden Amounts by Income Decile (dollars in thousands)
ALL TAXPAYERS

| Income Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|---------------|-------------------------|----------------------|----------------------|-----------------------|-------------------------|--------------------------|-------------------------|--------------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|---------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$34,679 & under | 953,028 | \$15,540,345 | \$144,417 | \$71,122 | \$461,510 | \$249,878 | \$711,388 | \$137,168 | \$27,503 | \$133,289 | \$16,375 | \$876,384 | \$364,877 | \$1,241,261 |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | \$517,247 | \$55,444 | \$349,968 | \$185,025 | \$534,993 | \$78,896 | \$20,553 | \$120,997 | \$12,591 | \$1,067,109 | \$273,613 | \$1,340,721 |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | \$615,816 | \$50,547 | \$322,458 | \$169,020 | \$491,478 | \$65,835 | \$18,802 | \$119,029 | \$12,333 | \$1,123,139 | \$250,701 | \$1,373,840 |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | \$672,460 | \$49,621 | \$309,231 | \$158,673 | \$467,903 | \$55,626 | \$17,740 | \$118,537 | \$10,800 | \$1,155,853 | \$236,834 | \$1,392,687 |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | \$717,084 | \$48,307 | \$296,575 | \$155,225 | \$451,800 | \$49,589 | \$17,356 | \$115,147 | \$10,156 | \$1,178,394 | \$231,043 | \$1,409,438 |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | \$751,826 | \$44,158 | \$260,742 | \$138,384 | \$399,127 | \$40,904 | \$15,531 | \$100,748 | \$9,601 | \$1,154,220 | \$207,674 | \$1,361,894 |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | \$804,581 | \$42,785 | \$244,379 | \$136,361 | \$380,740 | \$31,742 | \$15,235 | \$88,586 | \$10,314 | \$1,169,288 | \$204,694 | \$1,373,982 |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | \$846,953 | \$45,331 | \$264,344 | \$153,387 | \$417,731 | \$26,130 | \$16,935 | \$80,981 | \$11,915 | \$1,218,408 | \$227,568 | \$1,445,976 |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | \$893,881 | \$28,942 | \$141,767 | \$91,297 | \$233,064 | \$13,250 | \$10,096 | \$43,249 | \$9,586 | \$1,092,147 | \$139,922 | \$1,232,069 |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | \$1,007,735 | \$11,813 | \$27,520 | \$27,242 | \$54,762 | \$2,482 | \$3,022 | \$8,758 | \$5,733 | \$1,046,495 | \$47,810 | \$1,094,305 |
| TOTALS | | 2,385,706 | \$155,478,757 | \$6,972,000 | \$448,070 | \$2,678,494 | \$1,464,491 | \$4,142,985 | \$501,622 | \$162,772 | \$929,321 | \$109,403 | \$11,081,437 | \$2,184,735 | \$13,266,173 |
| Top 5% | Over \$4,476,768 | 863 | 7,776,869 | \$517,431 | \$5,833 | \$3,620 | \$9,146 | \$12,766 | \$329 | \$838 | \$1,290 | \$3,092 | \$522,670 | \$18,910 | \$541,579 |
| Top 1% | Over \$52,903,860 | 22 | 1,593,705 | \$109,562 | \$803 | \$118 | \$923 | \$1,041 | \$11 | \$85 | \$36 | \$377 | \$109,727 | \$2,188 | \$111,915 |

98

| Income Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|---------------|-------------------------|----------------------|----------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|--------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$34,679 & under | 953,028 | \$15,540,345 | \$214,580 | -\$17,727 | \$24,269 | \$6,543 | \$18,244 | \$239,367 | \$194,994 | \$434,361 | \$1,675,622 |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | \$221,297 | \$26,155 | \$17,323 | \$43,478 | \$12,281 | \$277,056 | \$147,279 | \$424,335 | \$1,765,056 |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | \$232,814 | \$21,290 | \$18,997 | \$40,287 | \$10,140 | \$283,242 | \$147,257 | \$430,499 | \$1,804,339 |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | \$219,916 | \$13,611 | \$12,658 | \$26,269 | \$8,573 | \$254,759 | \$122,261 | \$377,021 | \$1,769,708 |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | \$218,270 | \$9,079 | \$13,556 | \$22,635 | \$8,962 | \$249,867 | \$106,135 | \$356,002 | \$1,765,439 |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | \$204,365 | \$7,967 | \$11,724 | \$19,691 | \$10,829 | \$234,886 | \$103,243 | \$338,129 | \$1,700,023 |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | \$207,847 | \$7,127 | \$14,692 | \$21,819 | \$9,470 | \$239,136 | \$102,476 | \$341,611 | \$1,715,593 |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | \$185,307 | \$5,860 | \$20,001 | \$25,861 | \$7,467 | \$218,635 | \$112,812 | \$331,447 | \$1,777,422 |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | \$131,676 | \$2,996 | \$14,974 | \$17,970 | \$5,059 | \$154,705 | \$77,319 | \$232,023 | \$1,464,092 |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | \$38,997 | \$792 | \$5,184 | \$5,976 | \$986 | \$45,959 | \$34,505 | \$80,464 | \$1,174,769 |
| TOTALS | | 2,385,706 | \$155,478,757 | \$1,875,071 | \$77,150 | \$153,379 | \$230,529 | \$92,011 | \$2,197,611 | \$1,148,280 | \$3,345,891 | \$16,612,064 |
| Top 5% | Over \$4,476,768 | 863 | 7,776,869 | \$11,049 | \$202 | \$2,093 | \$2,295 | \$139 | \$13,483 | \$19,230 | \$32,713 | \$574,292 |
| Top 1% | Over \$52,903,860 | 22 | 1,593,705 | \$404 | \$1 | \$94 | \$95 | \$4 | \$503 | \$2,282 | \$2,785 | \$114,699 |

Table S-2 (c)

2001 Minnesota Tax Incidence Study (2003 Data) - Current Law (Post-2001 Session)
 Effective Tax Rates by Income Decile (dollars in thousands)
 ALL TAXPAYERS

| Income Decile | Income Range | Number of Households | Household Income | State Income Taxes | | State Sales Tax | | | State Excise Taxes | | Miscellaneous State Taxes | | Total State Taxes | | |
|---------------|-------------------------|----------------------|------------------|-----------------------|-------------------------|--------------------------|-------------------------|-----------------|--------------------------|-------------------------|---------------------------|---------------------|----------------------|---------------------|-------------------|
| | | | | Individual Income Tax | Corporate Franchise Tax | Purchases by Individuals | Purchases by Businesses | Sales Tax Total | Purchases by Individuals | Purchases by Businesses | Taxes on Individuals | Taxes on Businesses | Total on Individuals | Total on Businesses | State Taxes Total |
| First | \$34,679 & under | 953,028 | \$15,540,345 | 0.9% | 0.5% | 3.0% | 1.6% | 4.6% | 0.9% | 0.2% | 0.9% | 0.1% | 5.6% | 2.3% | 8.0% |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | 3.3% | 0.4% | 2.3% | 1.2% | 3.4% | 0.5% | 0.1% | 0.8% | 0.1% | 6.8% | 1.8% | 8.6% |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | 4.0% | 0.3% | 2.1% | 1.1% | 3.2% | 0.4% | 0.1% | 0.8% | 0.1% | 7.2% | 1.6% | 8.8% |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | 4.3% | 0.3% | 2.0% | 1.0% | 3.0% | 0.4% | 0.1% | 0.8% | 0.1% | 7.4% | 1.5% | 9.0% |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | 4.6% | 0.3% | 1.9% | 1.0% | 2.9% | 0.3% | 0.1% | 0.7% | 0.1% | 7.6% | 1.5% | 9.1% |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | 4.8% | 0.3% | 1.7% | 0.9% | 2.6% | 0.3% | 0.1% | 0.6% | 0.1% | 7.4% | 1.3% | 8.8% |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | 5.2% | 0.3% | 1.6% | 0.9% | 2.4% | 0.2% | 0.1% | 0.6% | 0.1% | 7.5% | 1.3% | 8.8% |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | 5.4% | 0.3% | 1.7% | 1.0% | 2.7% | 0.2% | 0.1% | 0.5% | 0.1% | 7.8% | 1.5% | 9.3% |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | 5.7% | 0.2% | 0.9% | 0.6% | 1.5% | 0.1% | 0.1% | 0.3% | 0.1% | 7.0% | 0.9% | 7.9% |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | 6.5% | 0.1% | 0.2% | 0.2% | 0.4% | 0.0% | 0.0% | 0.1% | 0.0% | 6.7% | 0.3% | 7.0% |
| TOTALS | | 2,385,706 | \$155,478,757 | 4.5% | 0.3% | 1.7% | 0.9% | 2.7% | 0.3% | 0.1% | 0.6% | 0.1% | 7.1% | 1.4% | 8.5% |
| Top 5% | Over \$4,476,768 | 863 | 7,776,869 | 6.7% | 0.1% | 0.0% | 0.1% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 6.7% | 0.2% | 7.0% |
| Top 1% | Over \$52,903,860 | 22 | 1,593,705 | 6.9% | 0.1% | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 6.9% | 0.1% | 7.0% |

87

| Income Decile | Income Range | Number of Households | Household Income | Residential Local Property Taxes | | | | | | Nonresidential Local Property Taxes | Local Property Taxes Total | Total State and Local Taxes |
|---------------|-------------------------|----------------------|------------------|----------------------------------|-------------------|------------------------|-----------------------|-------------------------|-------------------|-------------------------------------|----------------------------|-----------------------------|
| | | | | Homeowners after PTR | Renters after PTR | Owners of Rental Prop. | Total on Rental Prop. | Seasonal / Recreational | Residential Total | | | |
| First | \$34,679 & under | 953,028 | \$15,540,345 | 1.4% | - 0.1% | 0.2% | 0.0% | 0.1% | 1.5% | 1.3% | 2.8% | 10.8% |
| Second | \$34,679 - \$52,231 | 396,451 | \$15,542,253 | 1.4% | 0.2% | 0.1% | 0.3% | 0.1% | 1.8% | 0.9% | 2.7% | 11.4% |
| Third | \$52,231 - \$69,014 | 279,426 | \$15,544,984 | 1.5% | 0.1% | 0.1% | 0.3% | 0.1% | 1.8% | 0.9% | 2.8% | 11.6% |
| Fourth | \$69,014 - \$85,996 | 218,105 | \$15,534,172 | 1.4% | 0.1% | 0.1% | 0.2% | 0.1% | 1.6% | 0.8% | 2.4% | 11.4% |
| Fifth | \$85,996 - \$106,939 | 177,031 | \$15,555,209 | 1.4% | 0.1% | 0.1% | 0.1% | 0.1% | 1.6% | 0.7% | 2.3% | 11.3% |
| Sixth | \$106,939 - \$134,258 | 142,487 | \$15,546,379 | 1.3% | 0.1% | 0.1% | 0.1% | 0.1% | 1.5% | 0.7% | 2.2% | 10.9% |
| Seventh | \$134,258 - \$188,992 | 109,333 | \$15,550,826 | 1.3% | 0.0% | 0.1% | 0.1% | 0.1% | 1.5% | 0.7% | 2.2% | 11.0% |
| Eighth | \$188,992 - \$337,273 | 70,740 | \$15,561,044 | 1.2% | 0.0% | 0.1% | 0.2% | 0.0% | 1.4% | 0.7% | 2.1% | 11.4% |
| Ninth | \$337,273 - \$1,168,472 | 33,233 | \$15,550,718 | 0.8% | 0.0% | 0.1% | 0.1% | 0.0% | 1.0% | 0.5% | 1.5% | 9.4% |
| Tenth | \$1,168,472 & over | 5,871 | \$15,552,828 | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.3% | 0.2% | 0.5% | 7.6% |
| TOTALS | | 2,385,706 | \$155,478,757 | 1.2% | 0.0% | 0.1% | 0.1% | 0.1% | 1.4% | 0.7% | 2.2% | 10.7% |
| Top 5% | Over \$4,476,768 | 863 | 7,776,869 | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 0.4% | 7.4% |
| Top 1% | Over \$52,903,860 | 22 | 1,593,705 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.2% | 7.2% |

Table S-3
CY 2003 Business Taxes Imposed by Sector
New Levels Due to 2001 Session Law - February 2001 Forecast

(\$ Thousands)

| Tax Type | Ag. | Mining | Const. | Durable Mfg. | Nondur. Mfg. | Transportation, Communication, & Public Utility | Finance, Insurance, & Real Estate | Services | Retail Trade | Wholesale Trade | Total Business Taxes | |
|------------------------|-----------|----------|-----------|--------------|--------------|---|-----------------------------------|-------------|--------------|-----------------|----------------------|--------------|
| | | | | | | | | | | | Amount | Distribution |
| Corp. Franchise | \$10,964 | \$3,726 | \$23,972 | \$131,729 | \$175,830 | \$99,117 | \$205,327 | \$68,977 | \$82,265 | \$97,591 | \$899,498 | 14.9% |
| General Sales | 43,671 | 15,956 | 442,359 | 96,704 | 70,514 | 240,267 | 126,924 | 378,525 | 259,388 | 188,531 | 1,862,839 | 30.8% |
| MV Sales | 585 | 1,112 | 11,316 | 38,046 | 13,657 | 12,283 | 20,291 | 43,509 | 19,901 | 18,340 | 179,040 | 3.0% |
| Motor Fuels | 633 | 1,125 | 11,767 | 64,388 | 31,024 | 20,028 | 35,002 | 48,228 | 20,598 | 18,735 | 251,528 | 4.2% |
| Ins. Premiums | 1,233 | 366 | 1,899 | 13,174 | 13,174 | 9,660 | 20,453 | 5,913 | 6,912 | 9,127 | 81,911 | 1.4% |
| Mtg./Deed | 128 | 229 | 2,396 | 13,113 | 6,318 | 4,079 | 7,128 | 9,844 | 4,195 | 3,815 | 51,245 | 0.8% |
| Property Tax | 217,614 | 534 | 89,200 | 352,123 | 126,289 | 389,983 | 186,788 | 961,854 | 203,550 | 186,916 | 2,714,851 | 44.9% |
| Commercial | | | 83,740 | | | 124,020 | 177,020 | 517,280 | 193,980 | 178,080 | 1,274,120 | 21.1% |
| Industrial | | | | 333,900 | 119,780 | | | | | | 453,680 | 7.5% |
| Farm | 217,300 | | | | | | | | | | 217,300 | 3.6% |
| Utility | | | | | | 259,700 | | | | | 259,700 | 4.3% |
| Rental | | | | | | | | 416,580 | | | 416,580 | 6.9% |
| MV. Reg. | 314 | 534 | 5,460 | 18,223 | 6,509 | 6,263 | 9,768 | 27,994 | 9,570 | 8,836 | 93,471 | 1.5% |
| Total | \$274,828 | \$23,048 | \$582,909 | \$709,277 | \$436,806 | \$775,417 | \$601,913 | \$1,516,850 | \$596,809 | \$523,055 | \$6,040,912 | 100.0% |

Table S-4
2003 Tax Collection Comparison
Differences Due to 2001 Legislative Session (Post-session law less pre-session law)
(\$ Millions)

| Tax Category | Total | As Imposed | | | After Shifting | | Suits Index |
|-------------------------------------|------------------|----------------|--------------|----------------|----------------|----------------|----------------|
| | | MN HH's | NR | Business | Minn. | Exported | |
| Taxes on Income | | | | | | | |
| Individual income tax | \$26 | \$27 | (\$1) | | \$27 | (\$1) | 0.0012 |
| Corporate franchise tax | (30) | | | (\$30) | (15) | (15) | |
| Total income taxes | (\$4) | \$27 | (\$1) | (\$30) | \$11 | (\$15) | 0.0018 |
| Taxes on Consumption | | | | | | | |
| Total general sales | \$40 | \$1 | \$0 | \$40 | \$34 | | |
| General sales/use | 41 | 1 | 0 | 41 | 34 | \$7 | |
| Sales tax motor vehicles | (1) | | | (1) | | (1) | |
| Motor fuels excise tax | | | | | | | |
| Alcoholic beverage excise tax | | | | | | | |
| Cigarette and tobacco excise taxes | | | | | | | |
| Insurance premiums tax | | | | | | | |
| Gambling taxes | | | | | | | |
| MinnesotaCare taxes | | | | | | | |
| Total consumption taxes | \$40 | \$1 | \$0 | \$40 | \$34 | \$6 | |
| Taxes on Property | | | | | | | |
| <i>Local</i> | | | | | | | |
| Homeowners (gross) | (\$563) | (\$563) | | | (\$563) | | -0.0337 |
| Residential rental property (gross) | (100) | | | (\$100) | (86) | (\$14) | |
| Total property tax refunds | (5) | (5) | | | (6) | | -0.0033 |
| Homeowners | (7) | (7) | | | (7) | | -0.0014 |
| Renters | 2 | 2 | | | 1 | | |
| Residential recreational (cabins) | (8) | (6) | \$2 | | (6) | (2) | |
| Commercial | (187) | | | (187) | (103) | (84) | |
| Industrial | (36) | | | (36) | (4) | (32) | |
| Farms (other than residence) | (62) | | | (62) | (62) | | |
| Utility | (59) | | | (59) | (40) | (19) | |
| Total Local | (\$1,020) | (\$574) | \$2 | (\$444) | (\$869) | (\$151) | -0.0098 |
| <i>State</i> | | | | | | | |
| Motor vehicle registration tax | | | | | | | |
| Mortgage and deed taxes | | | | | | | |
| Total State | | | | | | | |
| Total property taxes | (\$1,020) | (\$575) | (\$2) | (\$444) | (\$869) | (\$151) | -0.0083 |
| Total Taxes | (\$984) | (\$548) | (\$3) | (\$434) | (\$824) | (\$160) | 0.0038 |

Note: Table is based on the February 2001 forecast, using 2000 legislative session tax laws and the 2001 Tax Incidence Study database (1998 data). The Suits indices in this table are calculated on taxes paid by Minnesota households after tax shifting; that is, after taxes imposed on businesses have been shifted to the ultimate payers.

Table S-5
2003 Taxes Imposed by Business Sector
Differences Due to 2001 Legislative Session
(Post-session law less pre-session law)

(\$ Thousands)

| Tax Type | Ag. | Mining ¹ | Const. | Durable Mfg. | Nondur. Mfg. | Transportation, Communication, & Public Utility | Finance, Insurance, & Real Estate | Services | Retail Trade | Wholesale Trade | Total Business Taxes | |
|-----------------|-------------------|---------------------|-------------------|-------------------|------------------|---|-----------------------------------|--------------------|-------------------|-------------------|----------------------|---------------|
| | | | | | | | | | | | Amount | Distribution |
| Corp. Franchise | \$107 | \$36 | \$233 | \$1,281 | \$1,710 | \$964 | (\$36,753) | \$671 | \$800 | \$949 | (\$30,002) | 6.9% |
| General Sales | (583) | (163) | (917) | (11) | (7) | 30,718 | (14) | 1,741 | 9,542 | 3,161 | 43,467 | -10.1% |
| MV Sales | | | | | | (789) | | | | | (789) | 0.2% |
| Motor Fuels | | | | | | | | (97) | | | (97) | 0.0% |
| Ins. Premiums | | | | | | | | | | | 0 | 0.0% |
| Mtg./Deed | (1) | | | | | | | 3 | | | 2 | 0.0% |
| Property Tax | (61,510) | | (11,940) | (27,215) | (8,822) | (77,191) | (25,657) | (177,264) | (28,245) | (26,655) | (444,499) | 102.9% |
| Commercial | | | (11,940) | | | (17,957) | (25,657) | (76,348) | (28,245) | (26,655) | (186,802) | 43.2% |
| Industrial | | | | (27,215) | (8,822) | | | | | | (36,037) | 8.3% |
| Farm | (61,510) | | | | | | | | | | (61,510) | 14.2% |
| Utility | | | | | | (59,234) | | | | | (59,234) | 13.7% |
| Rental | | | | | | | | (100,916) | | | (100,916) | 23.4% |
| MV. Reg. | | | | | | | | | | | 0 | 0.0% |
| Total | (\$61,987) | (\$127) | (\$12,624) | (\$25,945) | (\$7,119) | (\$46,298) | (\$62,424) | (\$174,946) | (\$17,903) | (\$22,545) | (\$431,918) | 100.0% |

Legislative Mandate

270.0682 Tax Incidence Reports

Subdivision 1. Biennial report. The commissioner of revenue shall report to the legislature by March 1 of each odd-numbered year on the overall incidence of the income tax, sales and excise taxes, and property tax. The report shall present information on the distribution of the tax burden (1) for the overall income distribution, using a systemwide incidence measure such as the Suits index or other appropriate measures of equality and inequality, (2) by income classes, including at a minimum deciles of the income distribution, and (3) by other appropriate taxpayer characteristics.

Subdivision 2. Bill analyses. At the request of the chair of the house tax committee or the senate committee on taxes and tax laws, the commissioner of revenue shall prepare an incidence impact analysis of a bill or a proposal to change the tax system which increases, decreases, or redistributes taxes by more than \$20,000,000. To the extent data is available on the changes in the distribution of the tax burden that are affected by the bill or proposal, the analysis shall report on the incidence effects that would result if the bill were enacted. The report may present information using systemwide measures, such as Suits or other similar indexes, by income classes, taxpayer characteristics, or other relevant categories. The report may include analyses of the effect of the bill or proposal on representative taxpayers. The analysis must include a statement of the incidence assumptions that were used in computing the burdens.

Subdivision 3. Income measure. The incidence analyses shall use the broadest measure of economic income for which reliable data is available.

History: 1990 c 604 art 10 s 9.

