

# **Supplement 2005 Minnesota Tax Incidence Study Comparative Data by Tax, 2002**

April 4, 2005

# Supplement

## 2005 Minnesota Tax Incidence Study

This Supplement contains detailed information on each of the taxes analyzed in the Tax Incidence Study. For each tax the total amount collected in 2002 is given as well as the breakdown of that amount by the sector – Minnesota households, nonresidents, and Minnesota businesses – on which the tax is imposed. Also shown is the amount of the tax borne by Minnesotans after tax shifting takes place, as well as the amount exported outside Minnesota.

For each individual tax the percentage allocation to each of four possible shifting destinations is given: the percentage amount of the tax imposed directly on Minnesota households (direct), the percentage shifted to Minnesota consumers in the form of higher prices (consumers), that shifted the input to production (labor), and the fraction borne by business owners (capital). For a complete discussion of shifting methodology see the Appendix in the 2005 Minnesota Tax Incidence Study.

Effective tax rates by population decile are shown in tabular and graphical form, both for the tax itself and for all taxes as a standard of comparison. Finally, the Suits indices for the individual tax and for the tax system as a whole are given.

Page 2 in this Supplement is a copy of *Table 2-1* in the Tax Incidence Study. This page also serves as a table of contents to enable a reader to locate the particular tax of interest.

A link to the complete report is:

[http://www.taxes.state.mn.us/taxes/legal\\_policy/research\\_reports/content/incidence.shtml](http://www.taxes.state.mn.us/taxes/legal_policy/research_reports/content/incidence.shtml)

A glossary of terms used is appended to this supplement.

**2002**  
**Tax Collection Amounts**  
(\$ Millions)

Page Number	Tax Type	Total	As Imposed			After shifting		Suits Index
			MN	HH's	NR	Business	Minnesota	
	<b>State Taxes</b>							
	<b>Taxes on income and estates</b>							
3	Individual income tax	\$5,408	\$5,229	\$178		\$5,229	\$178	0.199
4	Corporation franchise tax	560			\$560	297	263	-0.116
5	Estate tax	97	97			97		0.281
6	<b>Total income and estate taxes</b>	<b>\$6,064</b>	<b>\$5,326</b>	<b>\$178</b>	<b>\$560</b>	<b>\$5,623</b>	<b>\$441</b>	<b>0.184</b>
	<b>Taxes on consumption</b>							
7	Total sales tax	\$4,438	\$2,357	\$146	\$1,936	\$3,659	\$779	-0.143
8	General sales/use tax	3,829	1,953	146	1,731	3,146	683	-0.143
9	Sales tax on motor vehicles	609	404		205	513	96	-0.145
10	Motor fuels excise taxes	632			632	516	117	-0.240
11	Alcoholic beverage excise taxes	61			61	54	6	-0.170
12	Cigarette and tobacco excise taxes	178			178	173	5	-0.515
13	Insurance premiums taxes	202			202	150	53	-0.131
14	Gambling taxes	57			57	55	2	-0.350
15	MinnesotaCare taxes	191			191	166	25	-0.266
16	<b>Total consumption taxes</b>	<b>\$5,760</b>	<b>\$2,357</b>	<b>\$146</b>	<b>\$3,258</b>	<b>\$4,773</b>	<b>\$987</b>	<b>-0.174</b>
	<b>Taxes on property</b>							
17	Residential recreational property tax	\$28	\$22	\$5		\$22	\$5	-0.179
18	Commercial property tax	\$369	\$0	\$0	\$369	\$194	\$175	-0.105
19	Industrial property tax	\$125	\$0	\$0	\$125	\$14	\$111	0.120
20	Utility property tax	\$64	\$0	\$0	\$64	\$40	\$24	-0.132
21	<b>Total property taxes</b>	<b>\$585</b>	<b>\$22</b>	<b>\$5</b>	<b>\$558</b>	<b>\$270</b>	<b>\$316</b>	<b>(0.10)</b>
	<b>Other taxes</b>							
22	Motor vehicle registration tax	\$483	\$391		\$92	\$440	\$43	-0.107
23	Mortgage and deed taxes	263	168		96	221	42	-0.111
24	Solid waste management taxes	56	22		34	53	4	-0.170
25	<b>Total other taxes</b>	<b>\$803</b>	<b>\$581</b>	<b>\$0</b>	<b>\$221</b>	<b>\$714</b>	<b>\$89</b>	<b>-0.113</b>
	<b>Property Tax Refunds</b>							
26	Homeowners	-\$131	-\$131			-\$131		0.675
27	Renters	-137	-137			-137		0.874
28	<b>Total property tax refunds</b>	<b>-\$268</b>	<b>-\$268</b>			<b>-\$268</b>		<b>0.777</b>
29	<b>Total state taxes</b>	<b>\$12,945</b>	<b>\$8,019</b>	<b>\$329</b>	<b>\$4,597</b>	<b>\$11,112</b>	<b>\$1,833</b>	<b>0.027</b>
	<b>Local Taxes</b>							
30	Property Taxes (Pay 2002)	\$4,071	\$2,004	\$17	\$2,050	\$3,179	\$892	-0.174
31	General Property Tax (gross - credits)	4,009	2,004	17	1,988	3,178	830	-0.175
32	Homeowners (gross of PTR)	1,936	1,936			1,936	0	-0.148
33	Residential recreational property	84	68	17		68	17	-0.179
34	Commercial	882			882	463	419	-0.105
35	Industrial	296			296	32	264	0.120
36	Farm (other than residence)	212			212	208	4	-0.310
37	Rental Housing	416			416	358	59	-0.370
38	Utility	181			181	114	68	-0.132
39	Minerals	0			0	0	0	0.021
40	Mining Production Taxes (taconite)	62			62	1	62	0.149
41	Local Sales Taxes	114	58	4	52	94	20	-0.143
42	Local Gross Earnings Taxes	45			45	28	17	-0.132
43	<b>Total local taxes</b>	<b>\$4,229</b>	<b>\$2,062</b>	<b>\$21</b>	<b>\$2,146</b>	<b>\$3,301</b>	<b>\$929</b>	<b>-0.173</b>
44	<b>Total state and local taxes</b>	<b>\$17,174</b>	<b>\$10,081</b>	<b>\$350</b>	<b>\$6,743</b>	<b>\$14,412</b>	<b>\$2,762</b>	<b>-0.018</b>

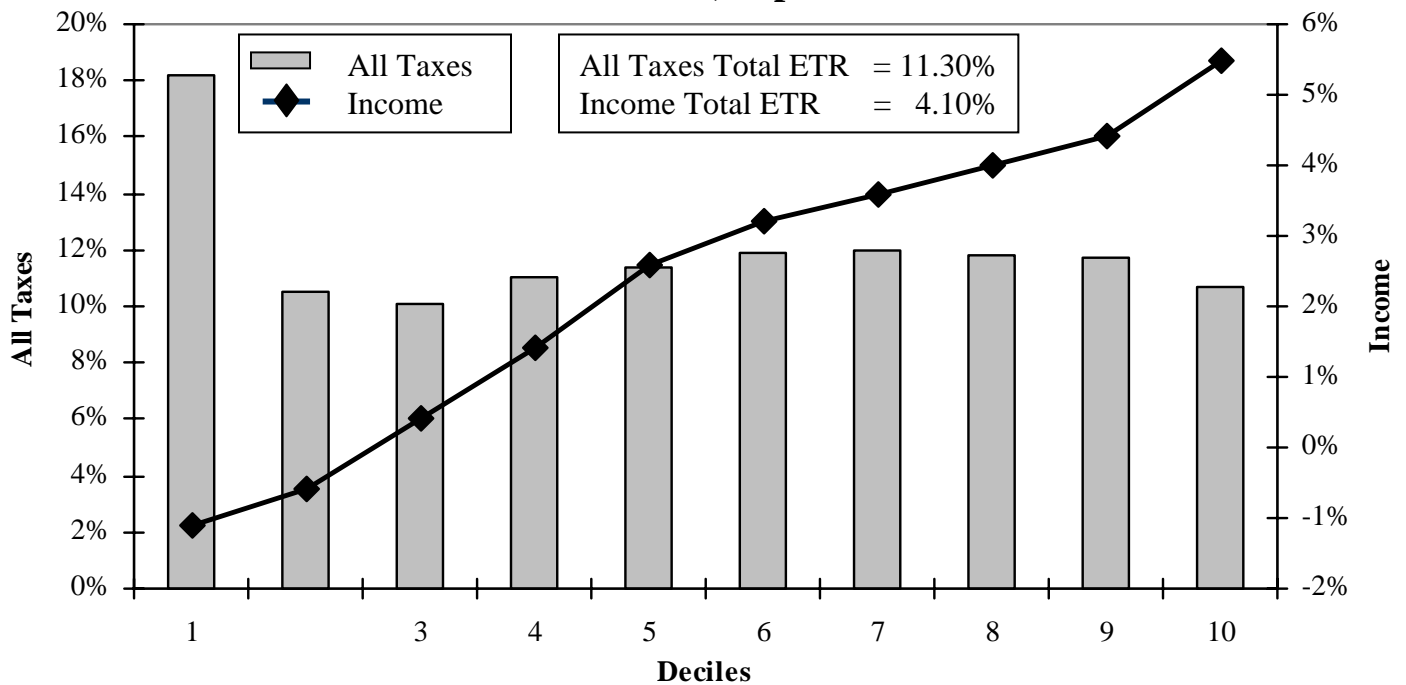
# 2002 Incidence Estimate for Individual Income Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$5,408	\$5,229	\$178	\$0	\$5,229	\$178

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Income	-1.1%	-0.6%	0.4%	1.4%	2.6%	3.2%	3.6%	4.0%	4.4%	5.5%	5.8%	6.3%	0.199

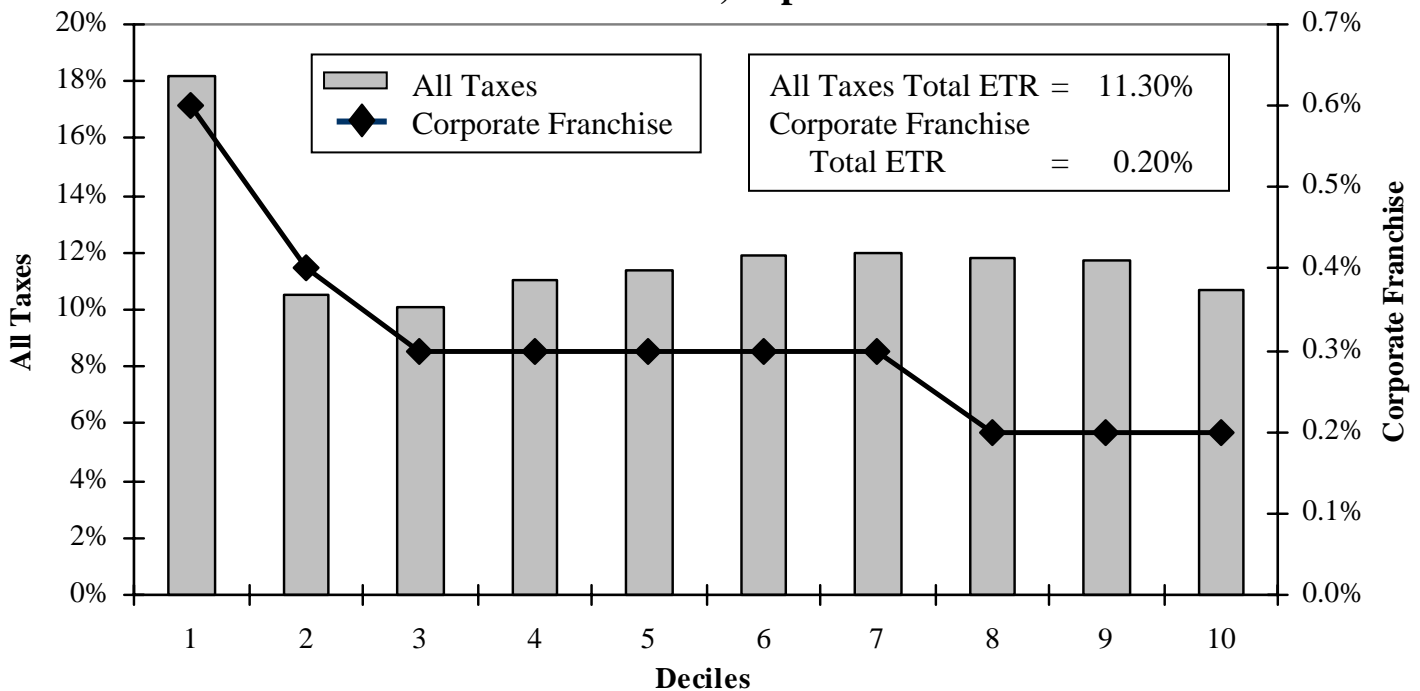
# 2002 Incidence Estimate for Corporation Franchise Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$560	\$0	\$0	\$560	\$297	\$263

\*\*Shifting allocations: Direct = 0%, Consumers = 79%, Labor = 15%, Capital = 6%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Corporate Franchise	0.6%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	-0.116

\*Composed of the corporate franchise tax (\$559M) and the mining occupation tax (\$1M).

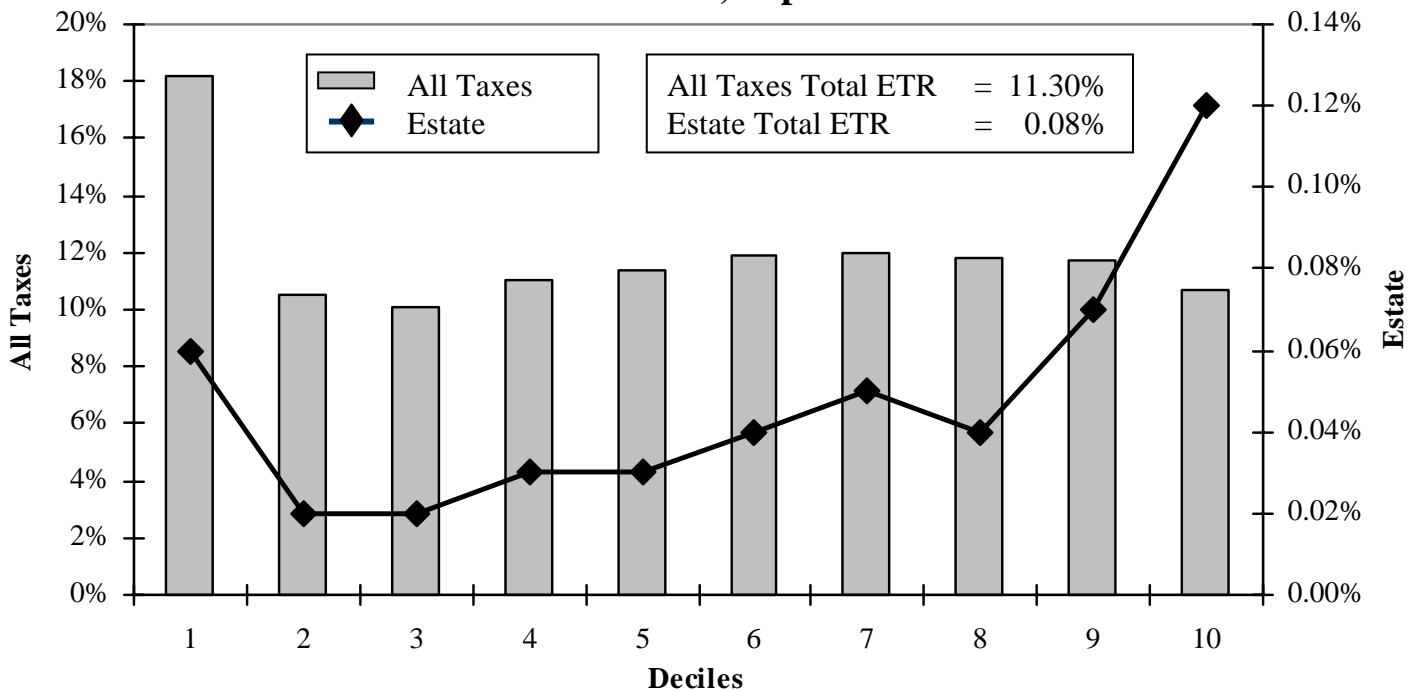
# 2002 Incidence Estimate for Estate Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$97	\$97	\$0	\$0	\$97	\$0

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



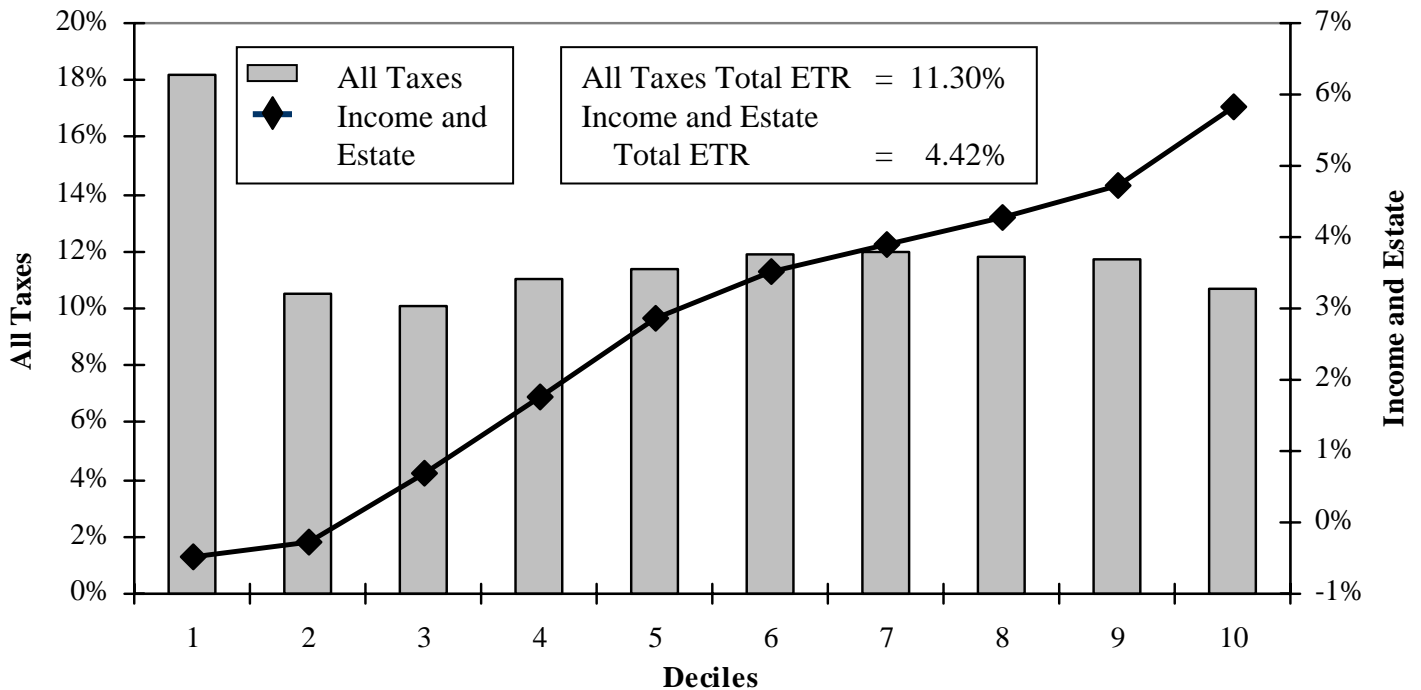
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Estate	0.06%	0.02%	0.02%	0.03%	0.03%	0.04%	0.05%	0.04%	0.07%	0.12%	0.11%	0.05%	0.28

# 2002 Incidence Estimate for Total Income and Estate Taxes

## Tax Collection Amounts 2002 (\$Millions)

	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
<b>Total</b>	\$5,326	\$178	\$560	\$5,623	\$441
	\$6,064				

## Effective Tax Rates, Population Deciles



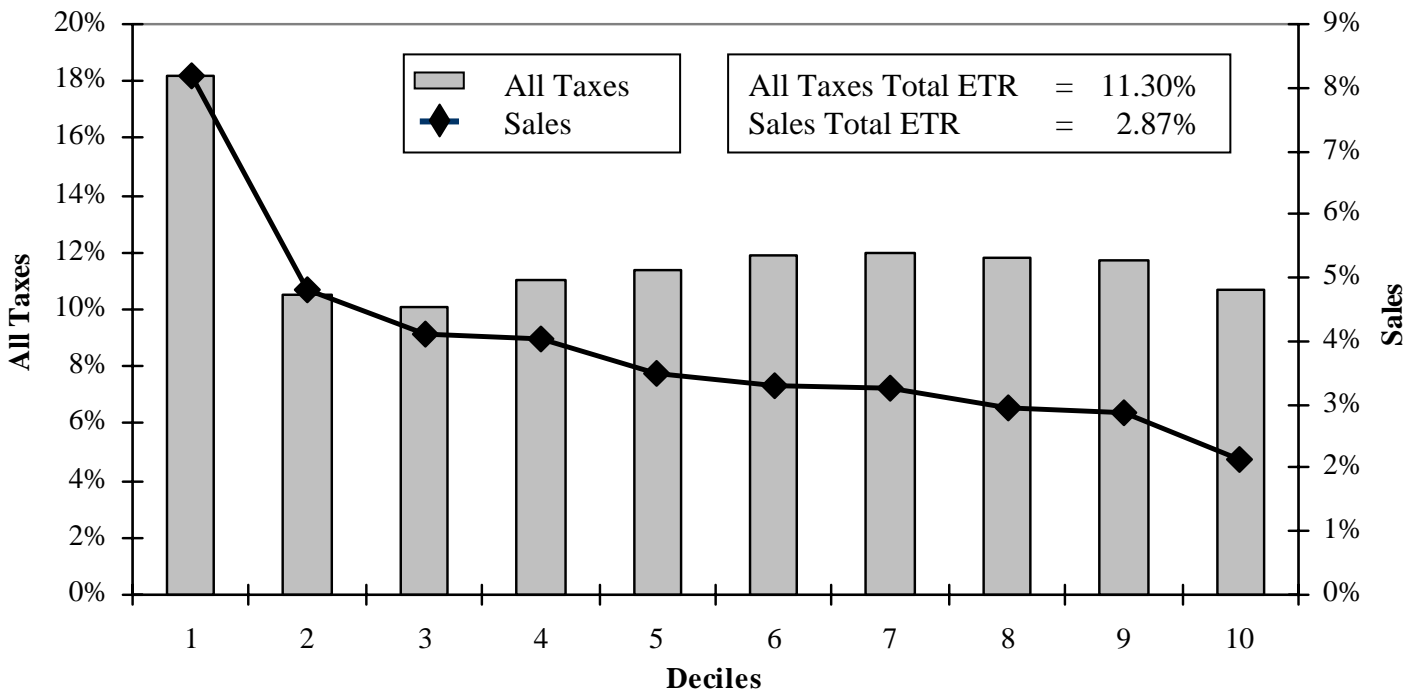
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Income and Estate	-0.47%	-0.28%	0.69%	1.75%	2.86%	3.53%	3.91%	4.29%	4.74%	5.83%	6.05%	6.46%	0.18

# 2002 Incidence Estimate for Total Sales Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$4,438	\$2,357	\$146	\$1,936	\$3,659	\$779

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Sales	8.20%	4.81%	4.13%	4.03%	3.50%	3.29%	3.27%	2.94%	2.86%	2.12%	1.98%	1.05%	-0.14



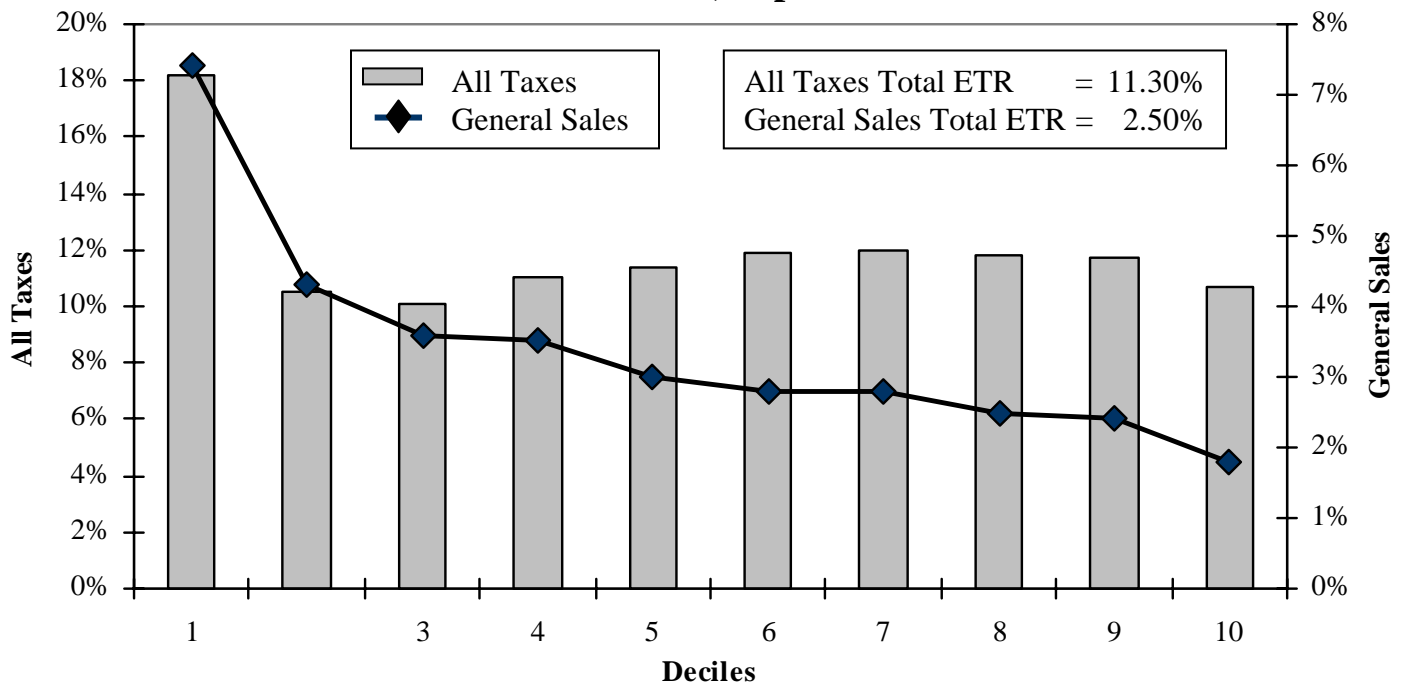
# 2002 Incidence Estimate for General Sales and Use Tax\*

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$3,829	\$1,953	\$146	\$1,731	\$3,146	\$683

\*\*Shifting allocations: Direct = 62%, Consumers = 32%, Labor = 1%, Capital = 5%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
General Sales	7.4%	4.3%	3.6%	3.5%	3.0%	2.8%	2.8%	2.5%	2.4%	1.8%	1.7%	0.9%	-0.143

\*Composed of the general sales tax (\$3,817M) and the motor vehicle rental tax (\$11M).

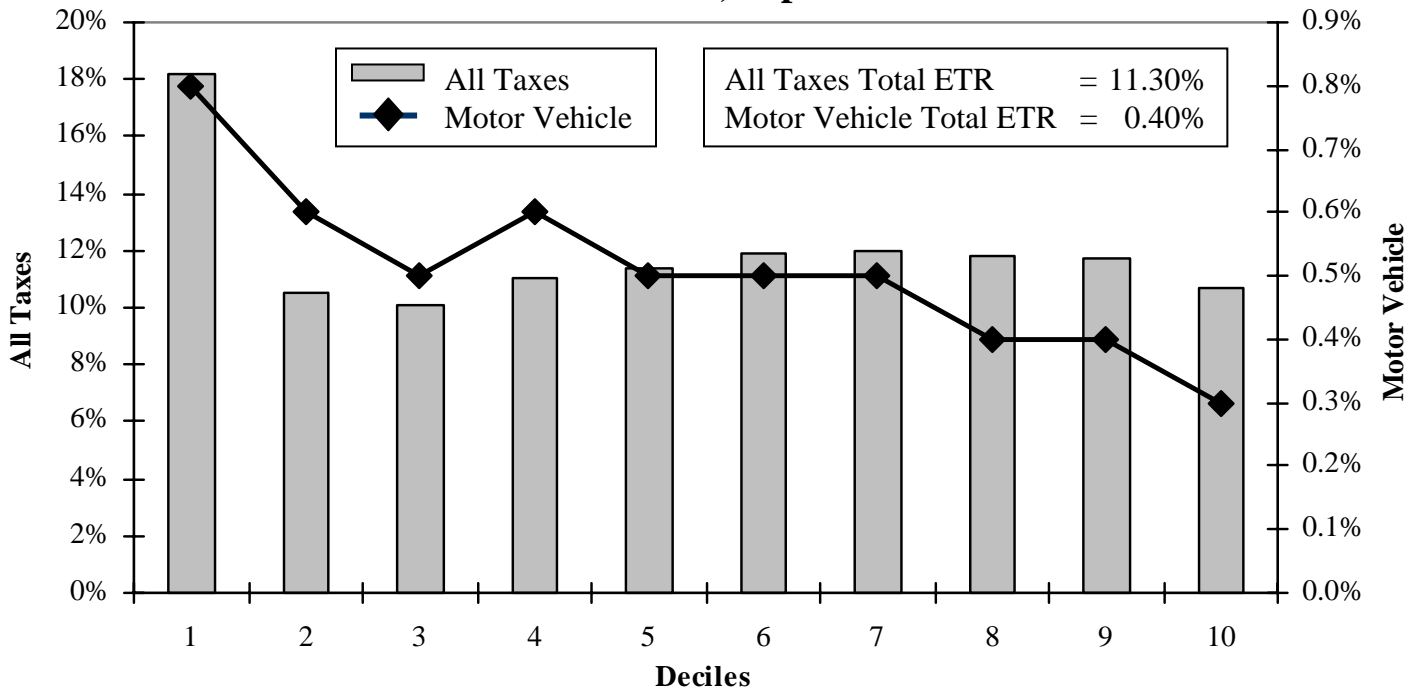
# 2002 Incidence Estimate for Sales Tax on Motor Vehicles

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$609	\$404	\$0	\$205	\$513	\$96

\*Shifting allocations: Direct = 79%, Consumers = 11%, Labor = 7%, Capital = 3%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Motor Vehicle	0.8%	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%	0.1%	-0.145

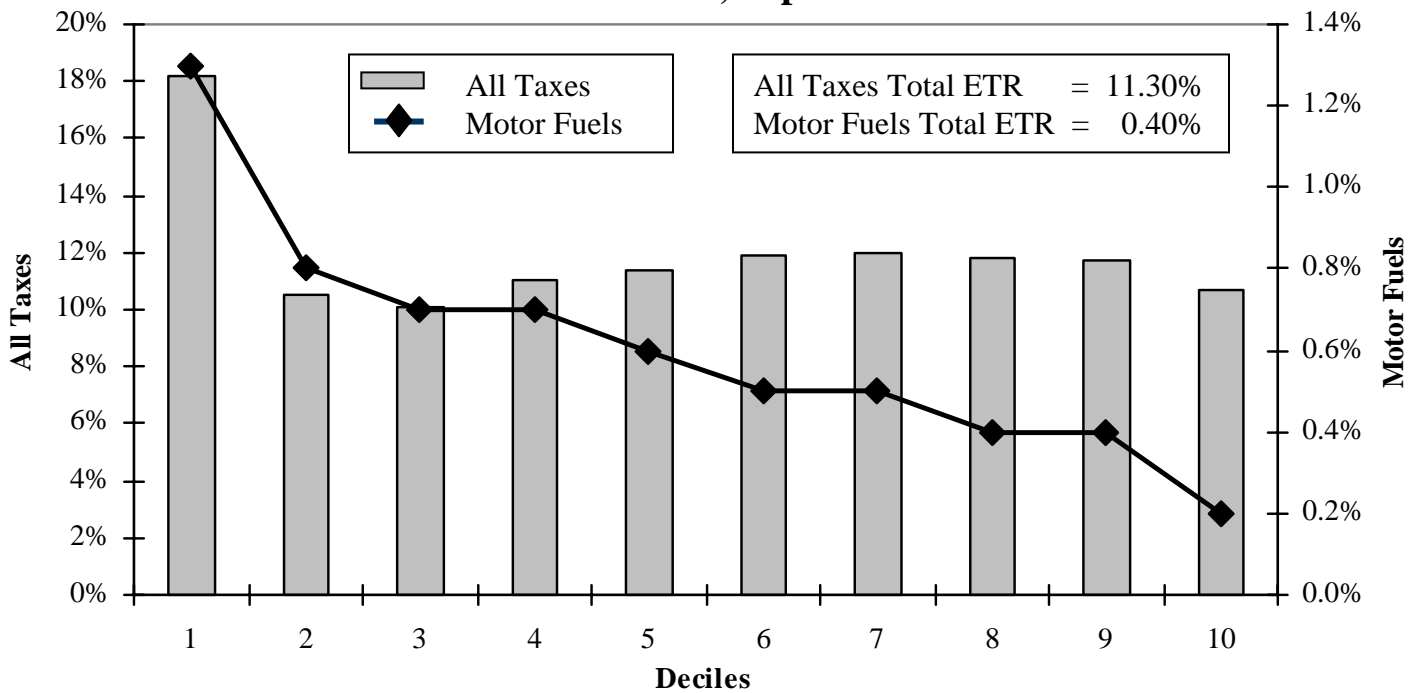
# 2002 Incidence Estimate for Motor Fuels Excise Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$632	\$0	\$0	\$632	\$516	\$117

\*Shifting allocations: Direct = 71%, Consumers = 29%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Motor Fuels	1.3%	0.8%	0.7%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.2%	0.2%	0.1%	-0.24

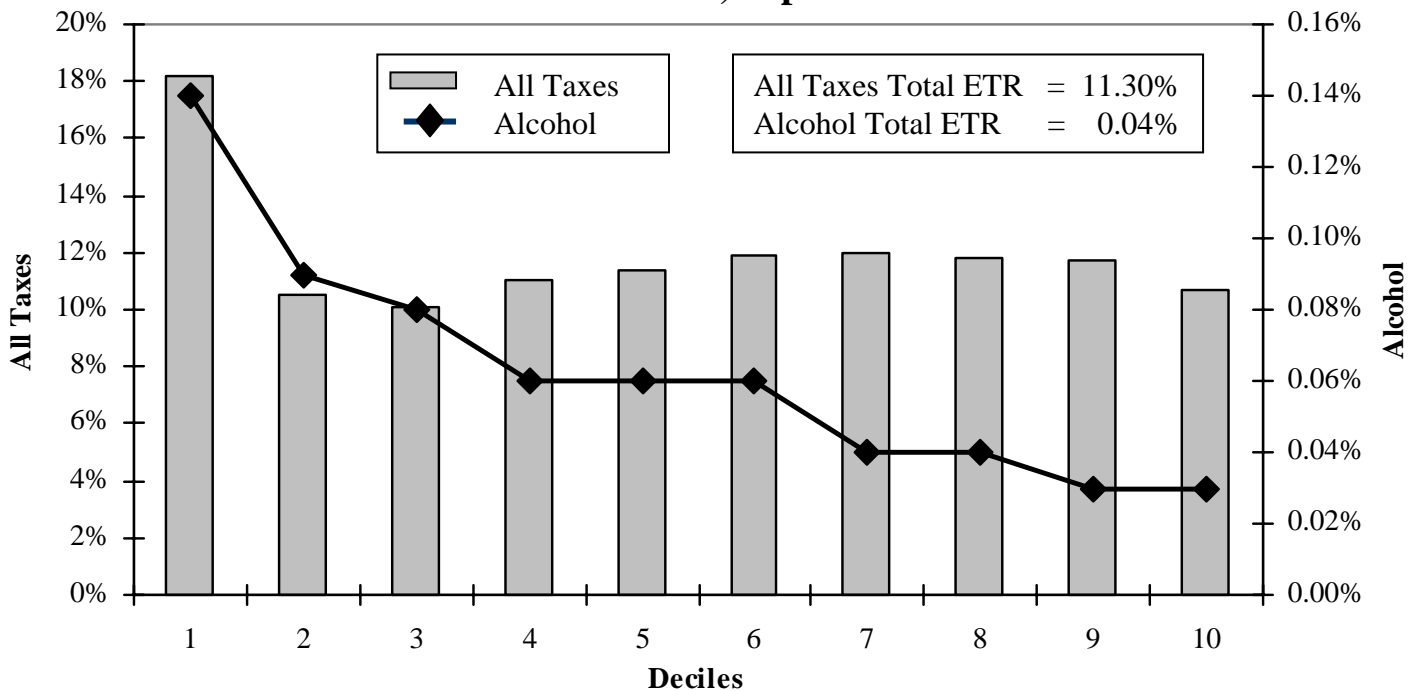
# 2002 Incidence Estimate for Alcoholic Beverage Excise Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$61	\$0	\$0	\$61	\$54	\$6

\*Shifting allocations: Direct = 0%, Consumers = 100%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Alcohol	0.14%	0.09%	0.08%	0.06%	0.06%	0.06%	0.04%	0.04%	0.03%	0.03%	0.03%	0.02%	-0.17

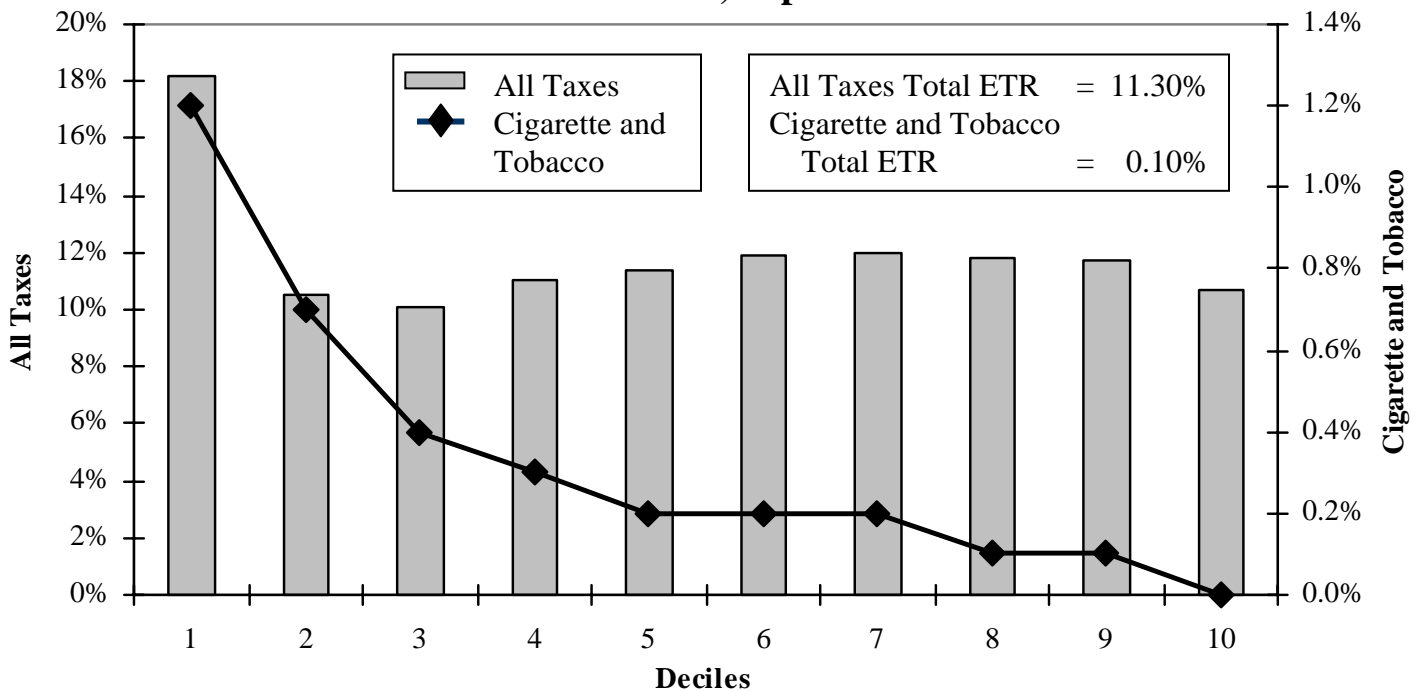
# 2002 Incidence Estimate for Cigarette and Tobacco Excise Taxes\*

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$178	\$0	\$0	\$178	\$173	\$5

\*\*Shifting allocations: Direct = 0%, Consumers = 100%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Cigarette and Tobacco	1.2%	0.7%	0.4%	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.52

\*Composed of the cigarette tax (\$161M) and the tobacco products tax (\$17M).

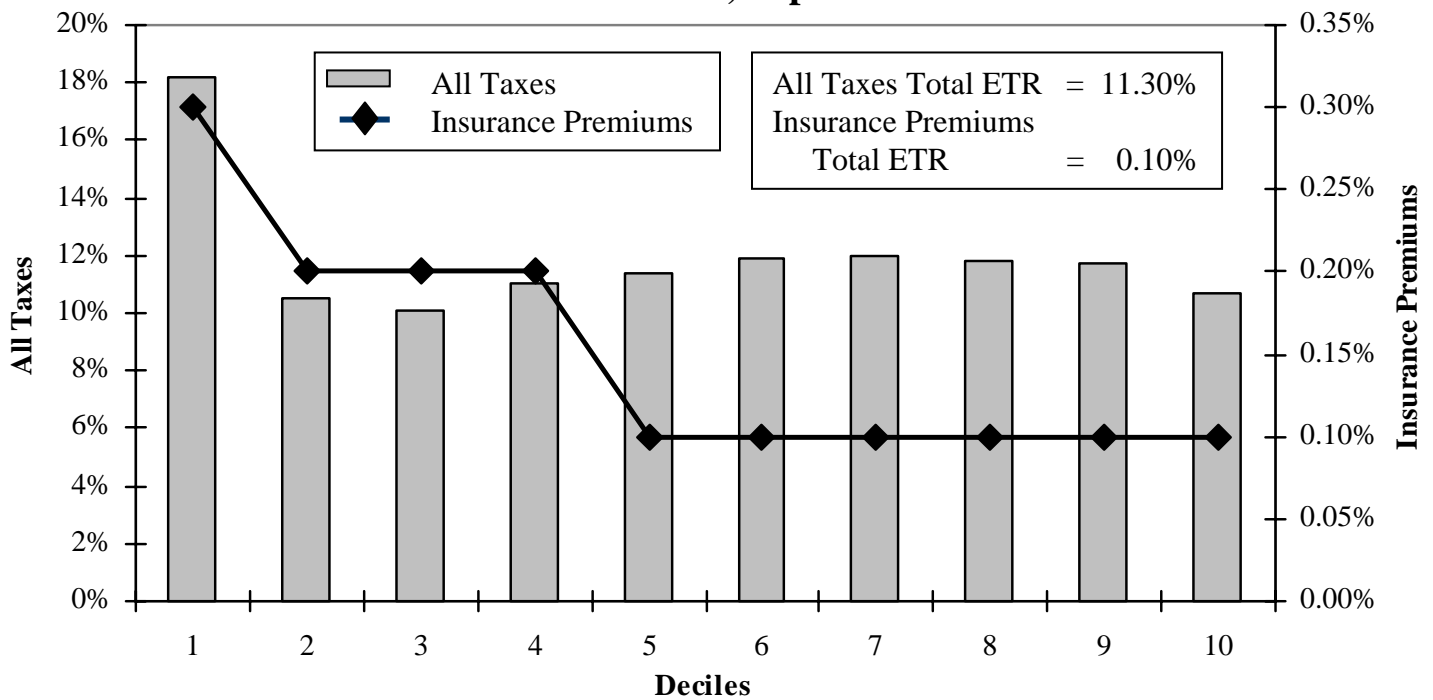
# 2002 Incidence Estimate for Insurance Premiums Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$202	\$0	\$0	\$202	\$150	\$53

\*Shifting allocations: Direct = 79%, Consumers = 13%, Labor = 3%, Capital = 5%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Insurance Premiums	0.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	-0.13

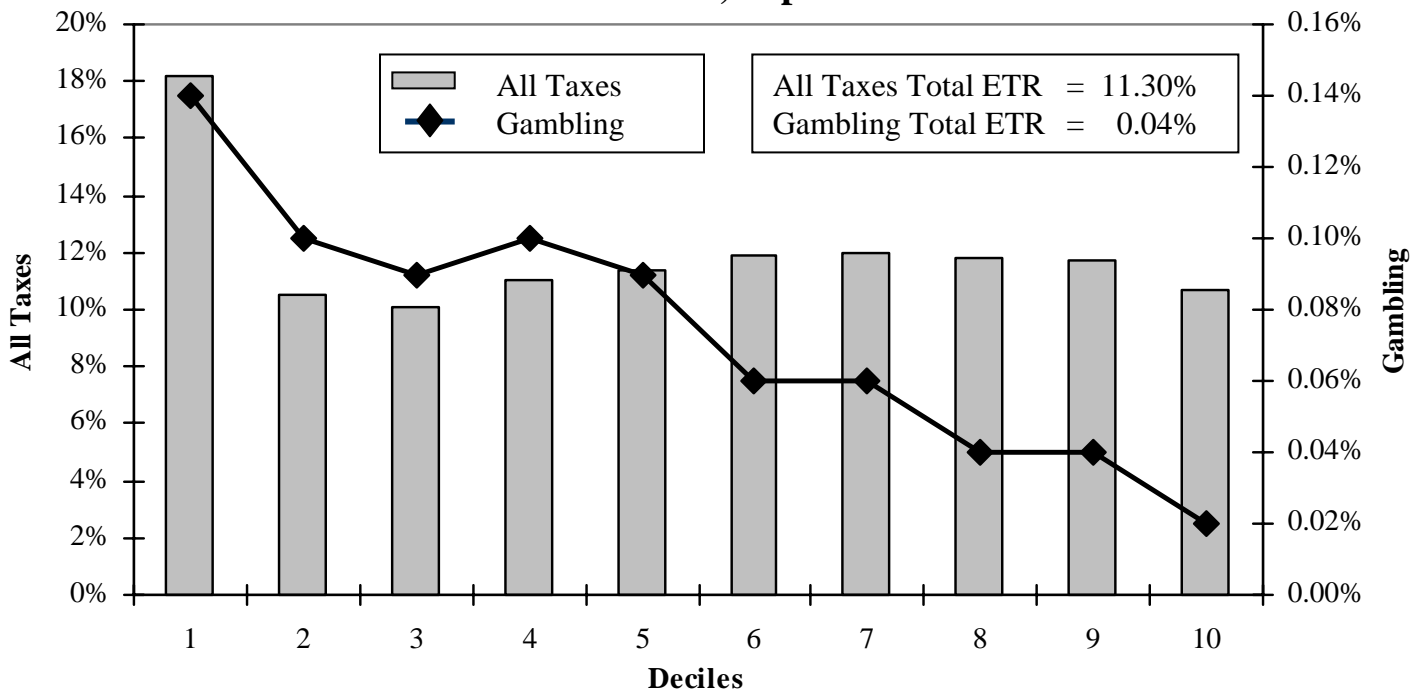
# 2002 Incidence Estimate for Gambling Taxes\*

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$57	\$0	\$0	\$57	\$55	\$2

\*\*Shifting allocations: Direct = 0%, Consumers = 100%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Gambling	0.14%	0.10%	0.09%	0.10%	0.09%	0.06%	0.06%	0.04%	0.04%	0.02%	0.01%	0.01%	-0.35

\*Gambling taxes are composed of Lawful Gambling (\$2M), Pull Tab (\$26M), Combined Receipts (\$28M) and Pari-Mutual (\$1M).

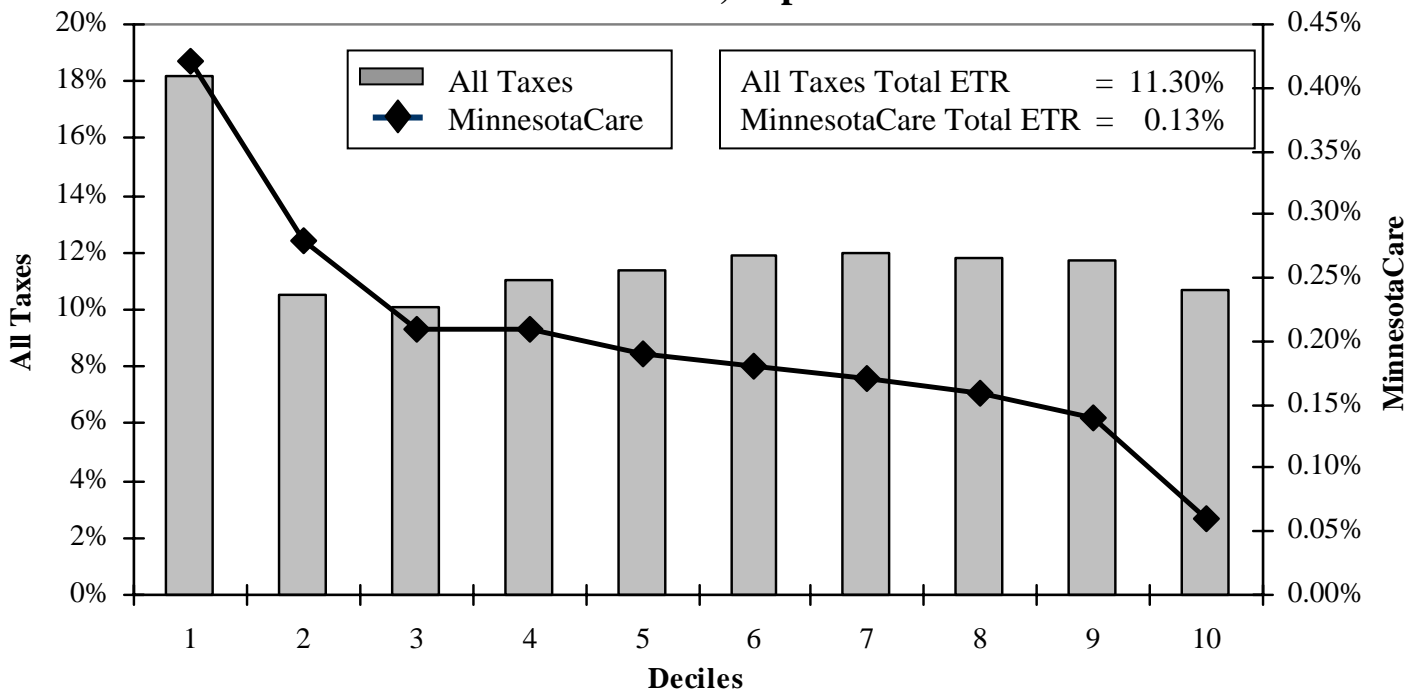
# 2002 Incidence Estimate for MinnesotaCare Taxes\*

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$191	\$0	\$0	\$191	\$166	\$25

\*\*Shifting allocations: Direct = 0%, Consumers = 100%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
MinnesotaCare	0.42%	0.28%	0.21%	0.21%	0.19%	0.18%	0.17%	0.16%	0.14%	0.06%	0.04%	0.02%	-0.27

\*Composed of the providers tax (\$86M), the hospitals tax (\$60M) and the drug distributors tax (\$45M).

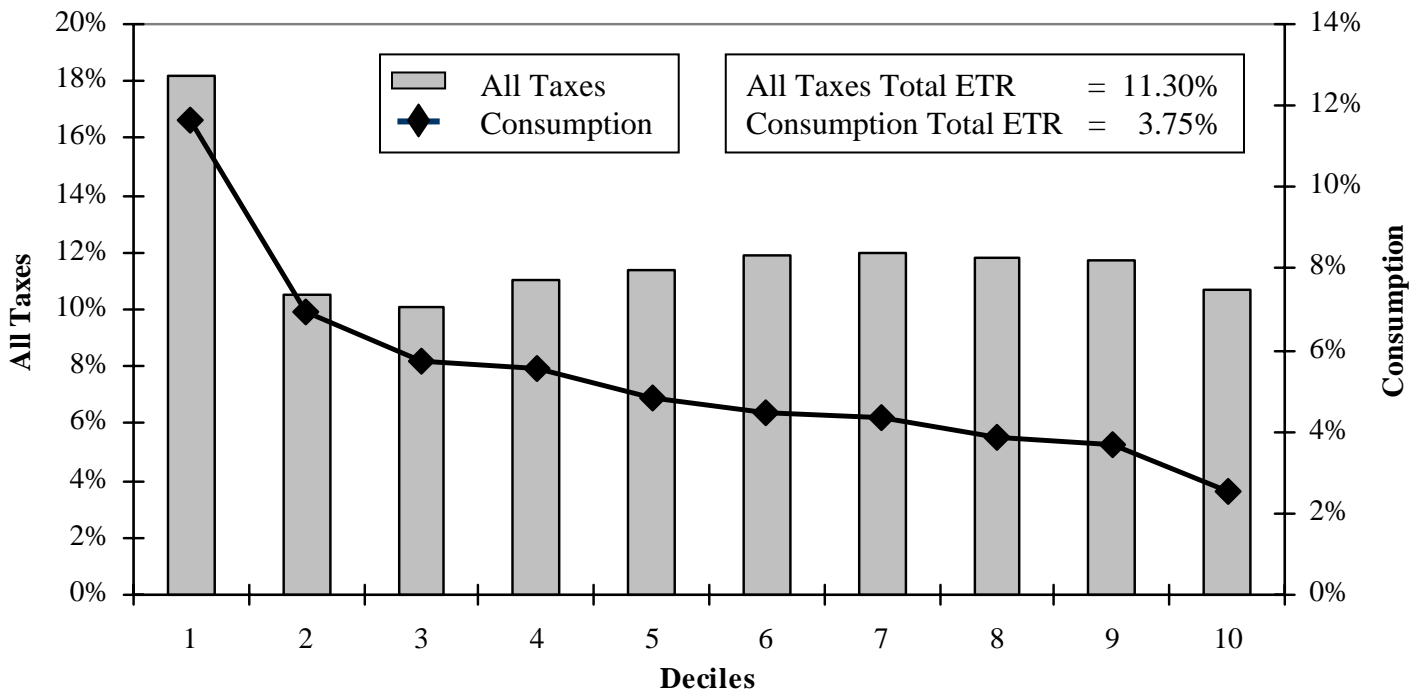


# 2002 Incidence Estimate for Total Consumption Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$5,760	\$2,357	\$146	\$3,258	\$4,773	\$987

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Consumption	11.66%	6.95%	5.76%	5.58%	4.82%	4.45%	4.34%	3.88%	3.67%	2.56%	2.35%	1.23%	-0.17

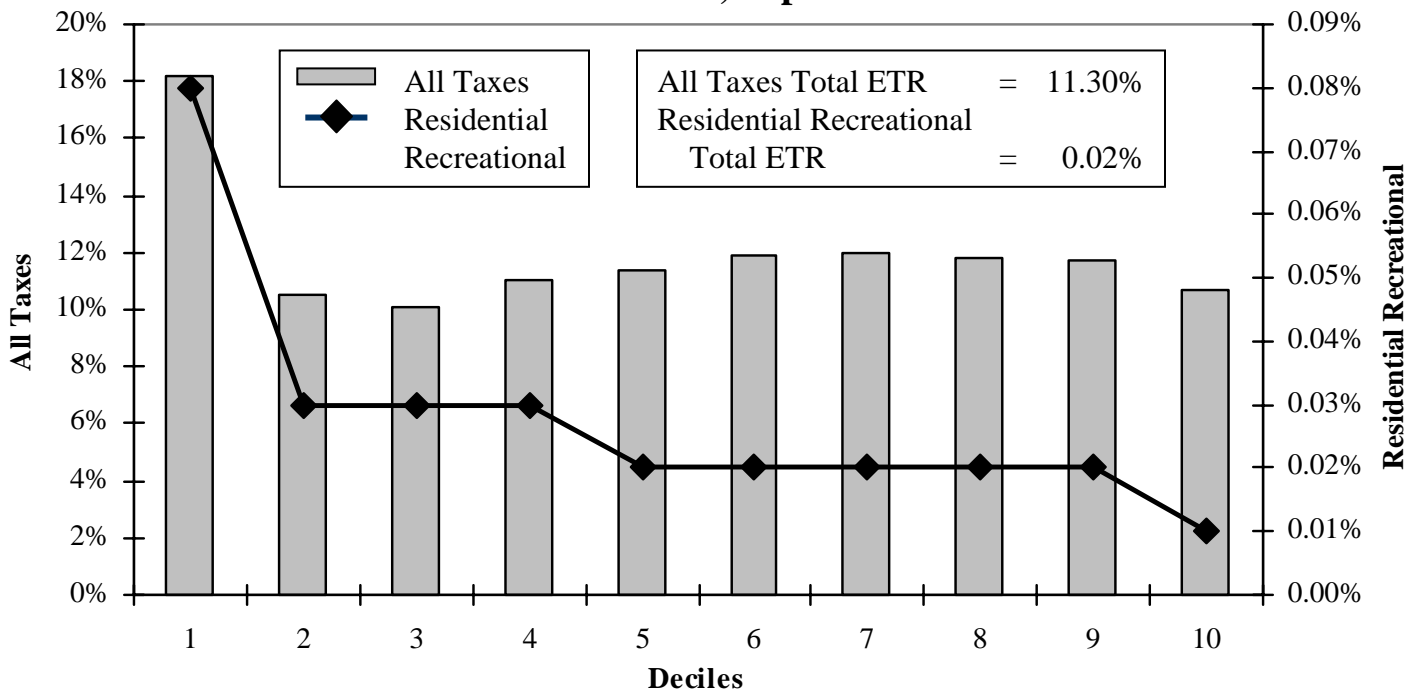
# 2002 Incidence Estimate for Residential Recreational Property Tax, State Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$28	\$22	\$5	\$0	\$22	\$5

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Residential Recreational	0.08%	0.03%	0.03%	0.03%	0.02%	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.01%	-0.18

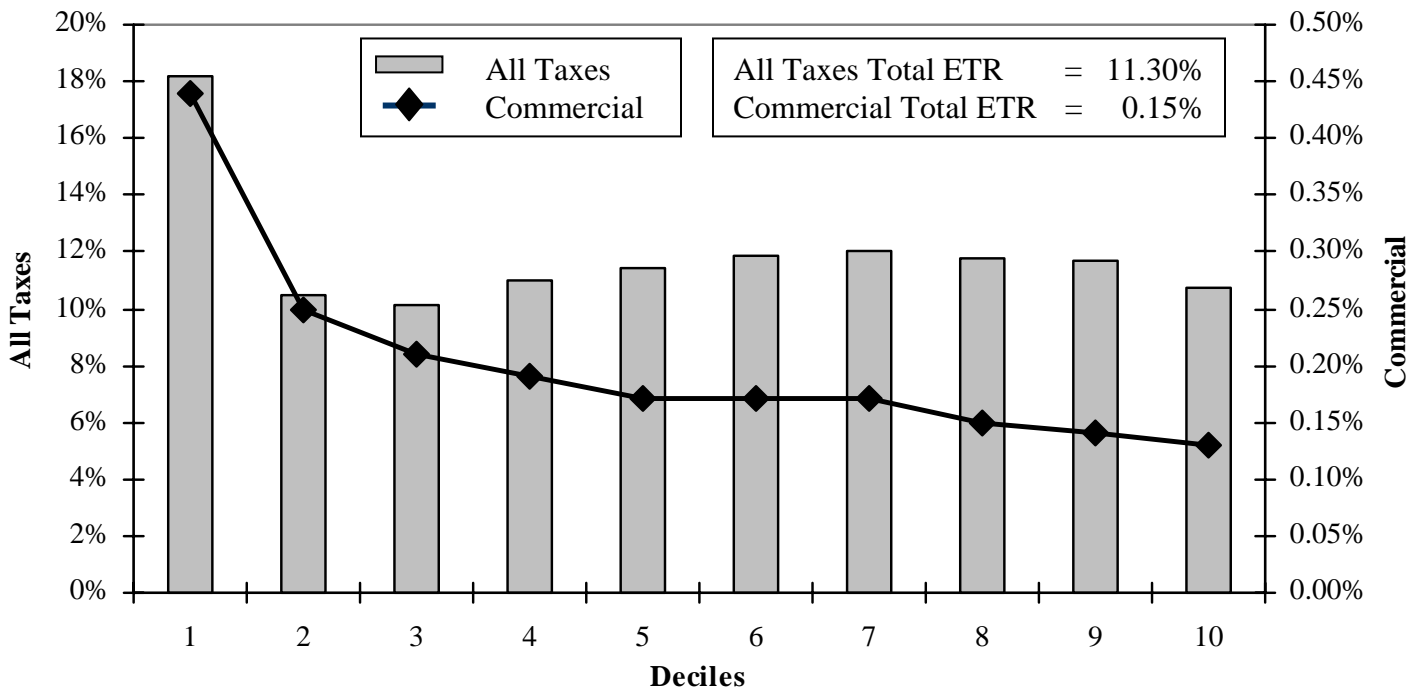
# 2002 Incidence Estimate for Commercial Property Tax, State Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$369	\$0	\$0	\$369	\$194	\$175

\*Shifting allocations: Direct = 0%, Consumers = 62%, Labor = 7%, Capital = 32%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Commercial	0.44%	0.25%	0.21%	0.19%	0.17%	0.17%	0.17%	0.15%	0.14%	0.13%	0.12%	0.09%	-0.11

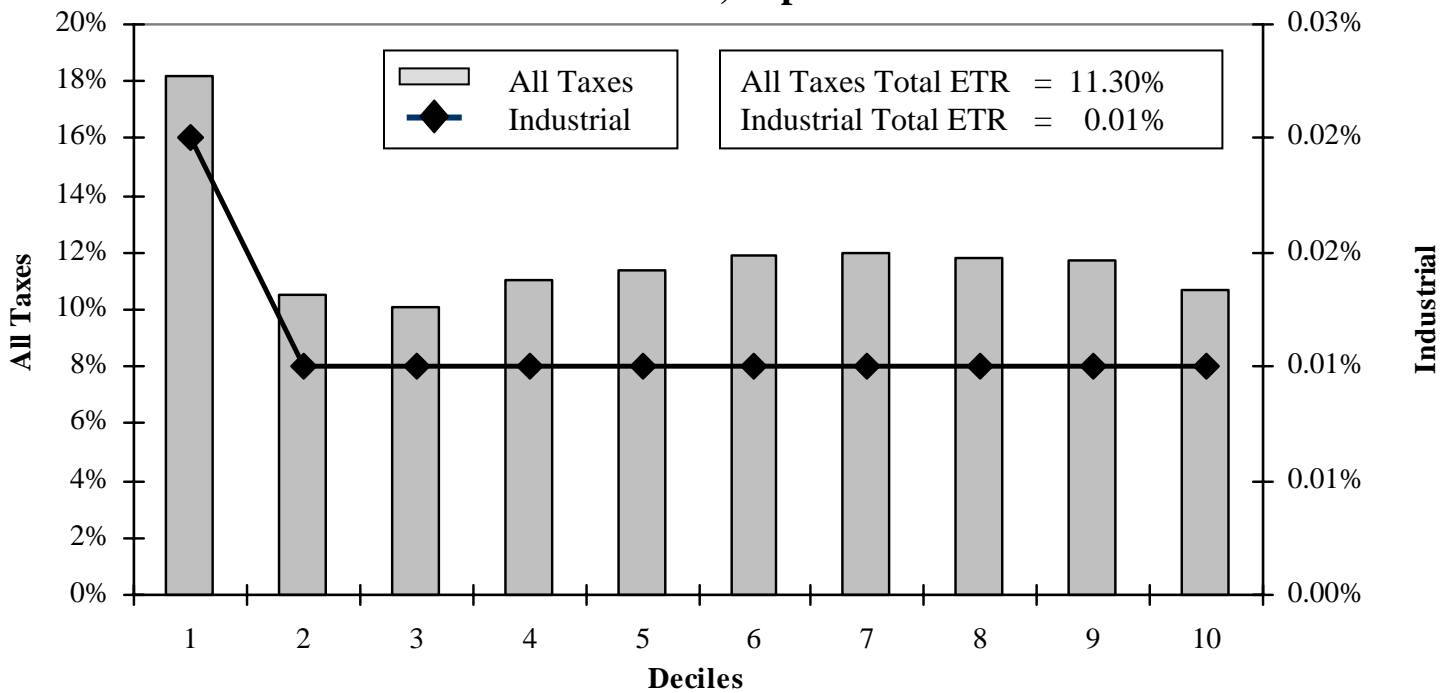
# 2002 Incidence Estimate for Industrial Property Tax, State Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$125	\$0	\$0	\$125	\$14	\$111

\*Shifting allocations: Direct = 0%, Consumers = 3%, Labor = 0%, Capital = 97%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Industrial	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.12

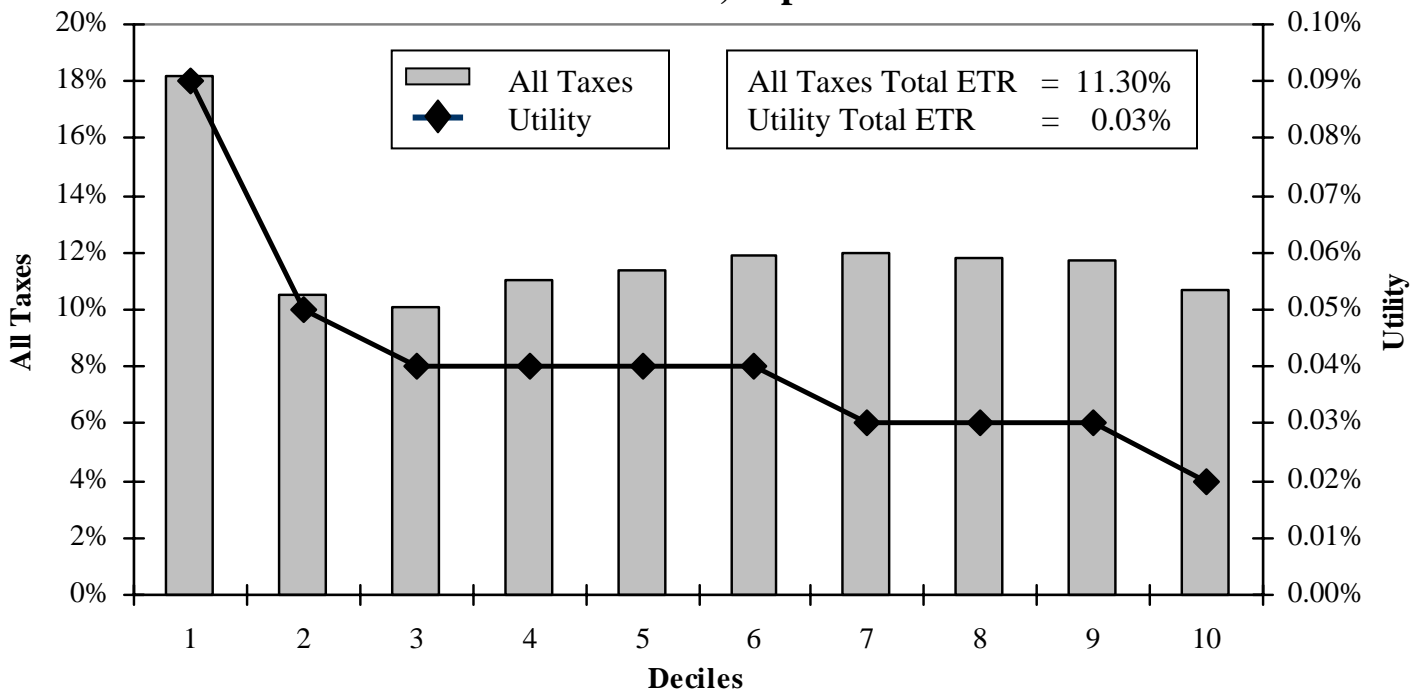
# 2002 Incidence Estimate for Utility Property Tax, State Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$64	\$0	\$0	\$64	\$40	\$24

\*Shifting allocations: Direct = 0%, Consumers = 91%, Labor = 6%, Capital = 4%

## Effective Tax Rates, Population Deciles



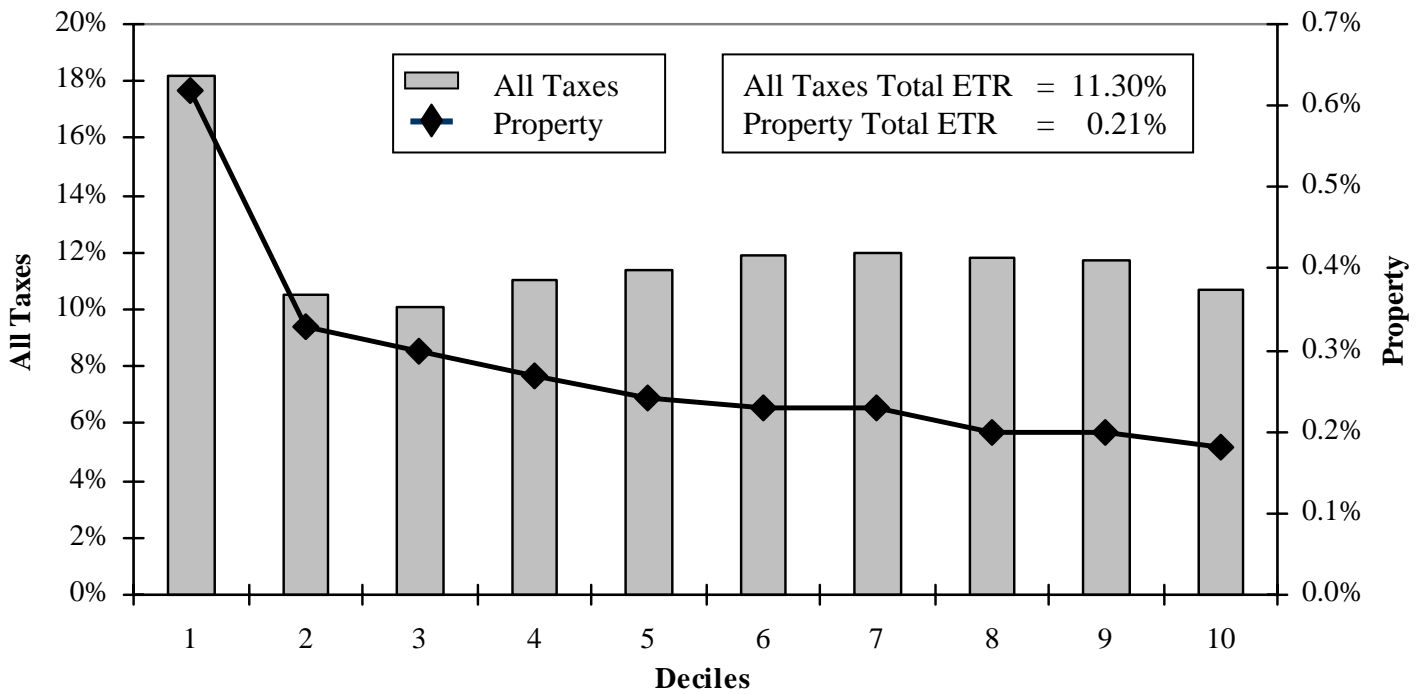
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Utility	0.09%	0.05%	0.04%	0.04%	0.04%	0.04%	0.03%	0.03%	0.03%	0.02%	0.02%	0.01%	-0.13

# 2002 Incidence Estimate for Total Property Taxes, State Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$585	\$22	\$5	\$558	\$270	\$316

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Property	0.62%	0.33%	0.30%	0.27%	0.24%	0.23%	0.23%	0.20%	0.20%	0.18%	0.17%	0.13%	-0.10

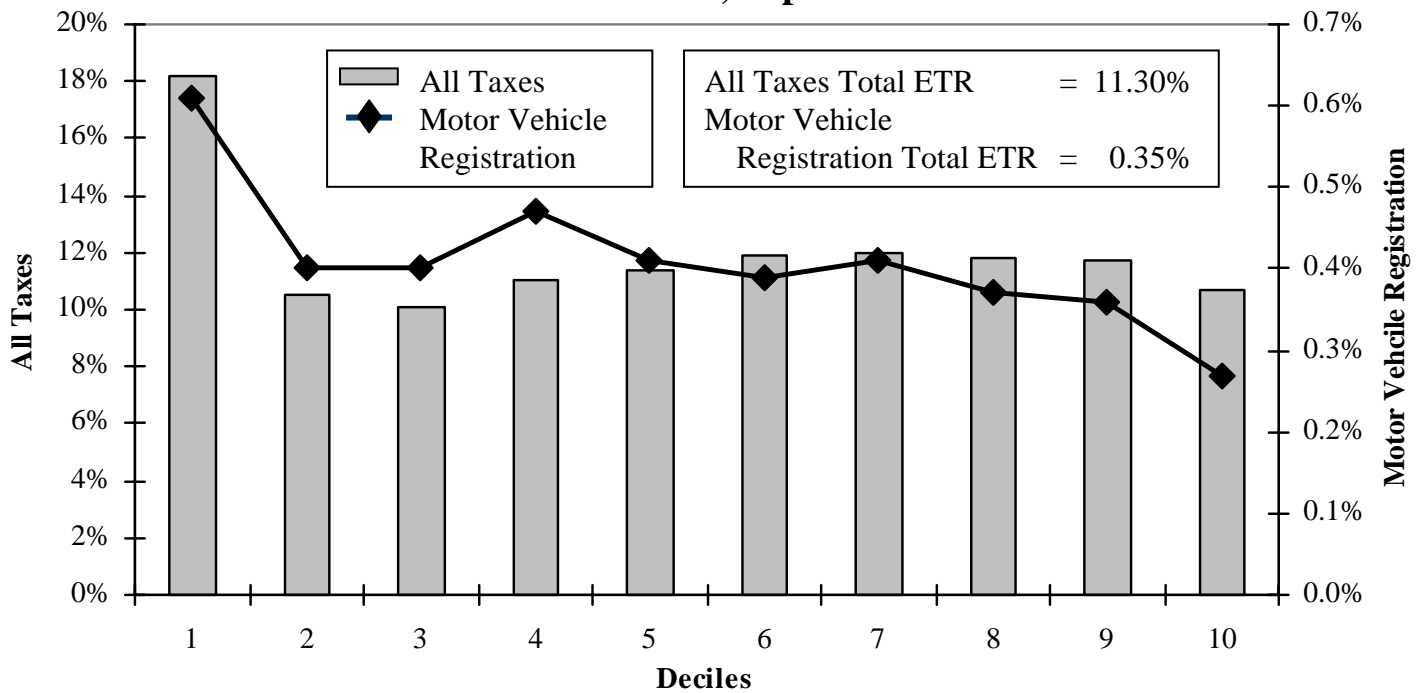
# 2002 Incidence Estimate for Motor Vehicle Registration Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$483	\$391	\$0	\$92	\$440	\$43

\*Shifting allocations: Direct = 79%, Consumers = 11%, Labor = 5%, Capital = 5%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Motor Vehicle Registration	0.61%	0.40%	0.40%	0.47%	0.41%	0.39%	0.41%	0.37%	0.36%	0.27%	0.25%	0.13%	-0.11

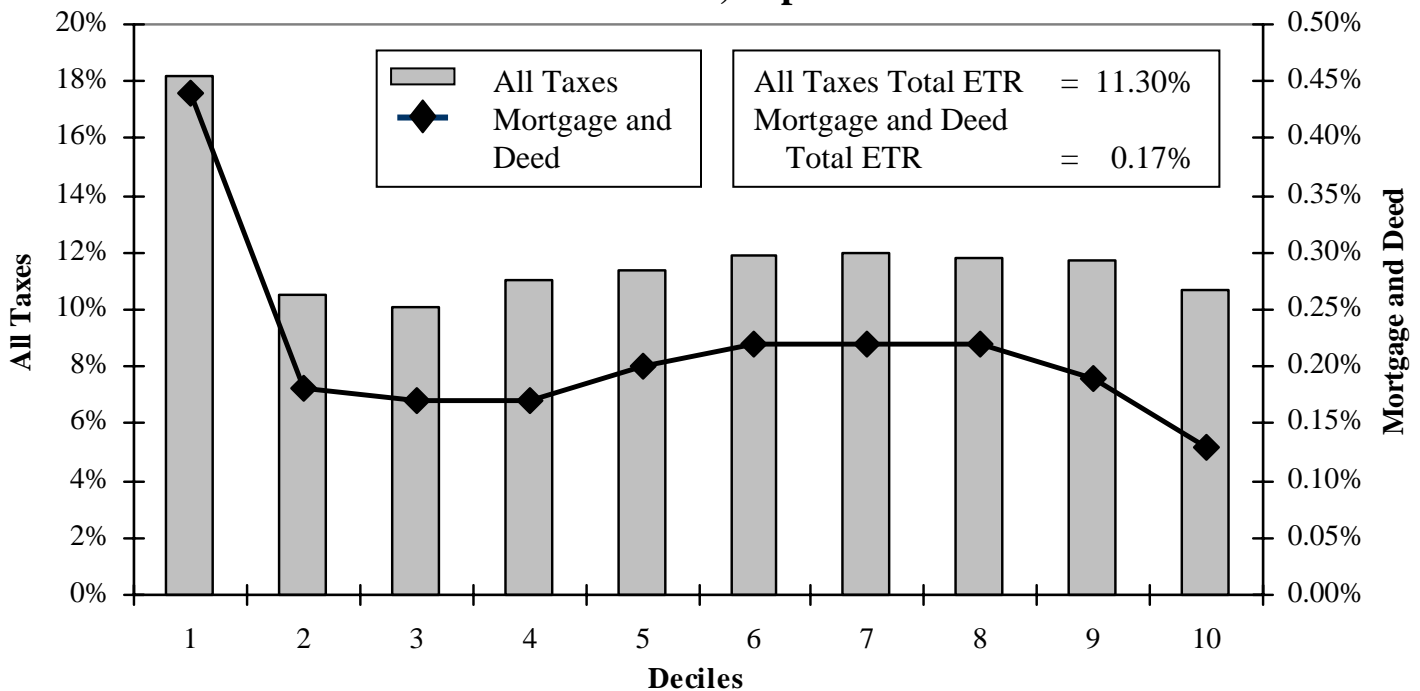
# 2002 Incidence Estimate for Mortgage and Deed Taxes\*

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota**	Exported
\$263	\$168	\$0	\$96	\$221	\$42

\*\*Shifting allocations: Direct = 76%, Consumers = 9%, Labor = 0%, Capital = 16%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Mortgage and Deed	0.44%	0.18%	0.17%	0.17%	0.20%	0.22%	0.22%	0.22%	0.19%	0.13%	0.11%	0.07%	-0.11

\*Composed of the mortgage registration tax (\$173M) and the deed transfer tax (\$90M).



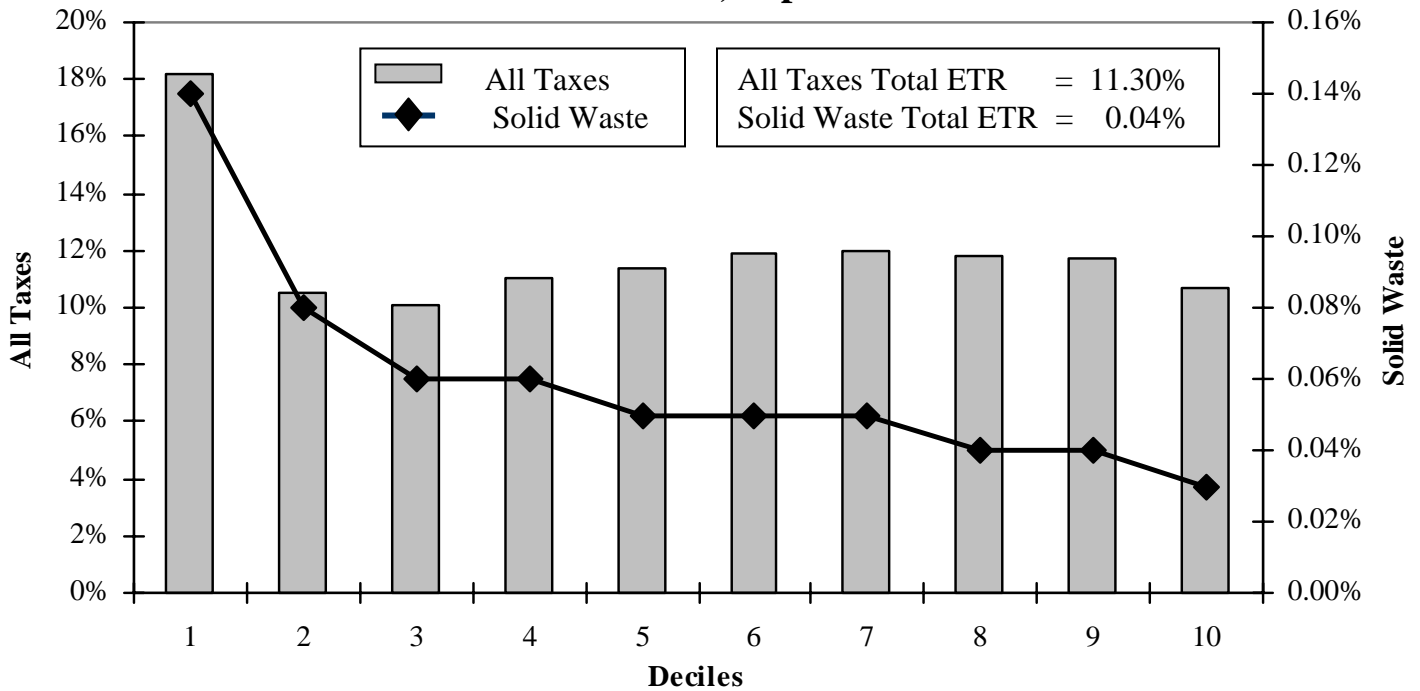
# 2002 Incidence Estimate for Solid Waste Management Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$56	\$22	\$0	\$34	\$53	\$4

\*Shifting allocations: Direct = 43%, Consumers = 55%, Labor = 0%, Capital = 2%

## Effective Tax Rates, Population Deciles



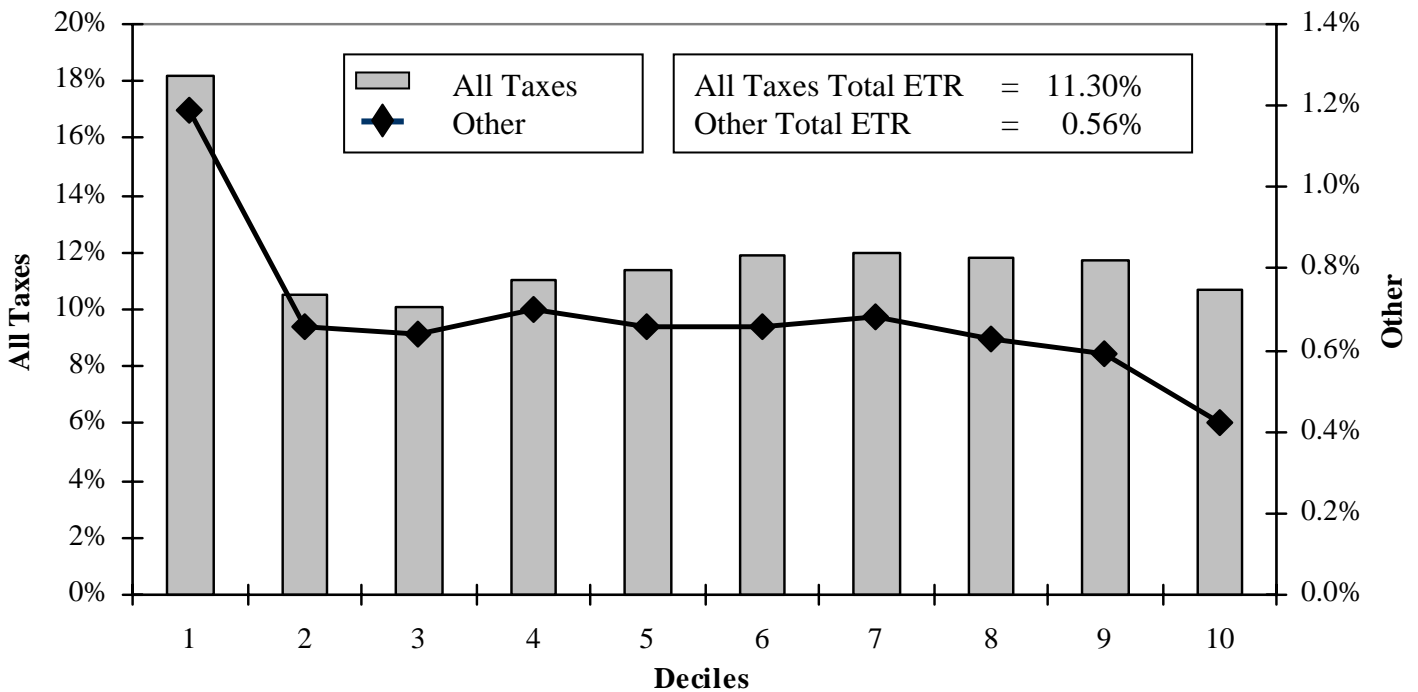
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Solid Waste	0.14%	0.08%	0.06%	0.06%	0.05%	0.05%	0.05%	0.04%	0.04%	0.03%	0.03%	0.01%	-0.17

# 2002 Incidence Estimate for Total Other State Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$803	\$581	\$0	\$221	\$714	\$89

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Other	1.19%	0.66%	0.64%	0.70%	0.66%	0.66%	0.68%	0.63%	0.59%	0.42%	0.38%	0.21%	-0.11

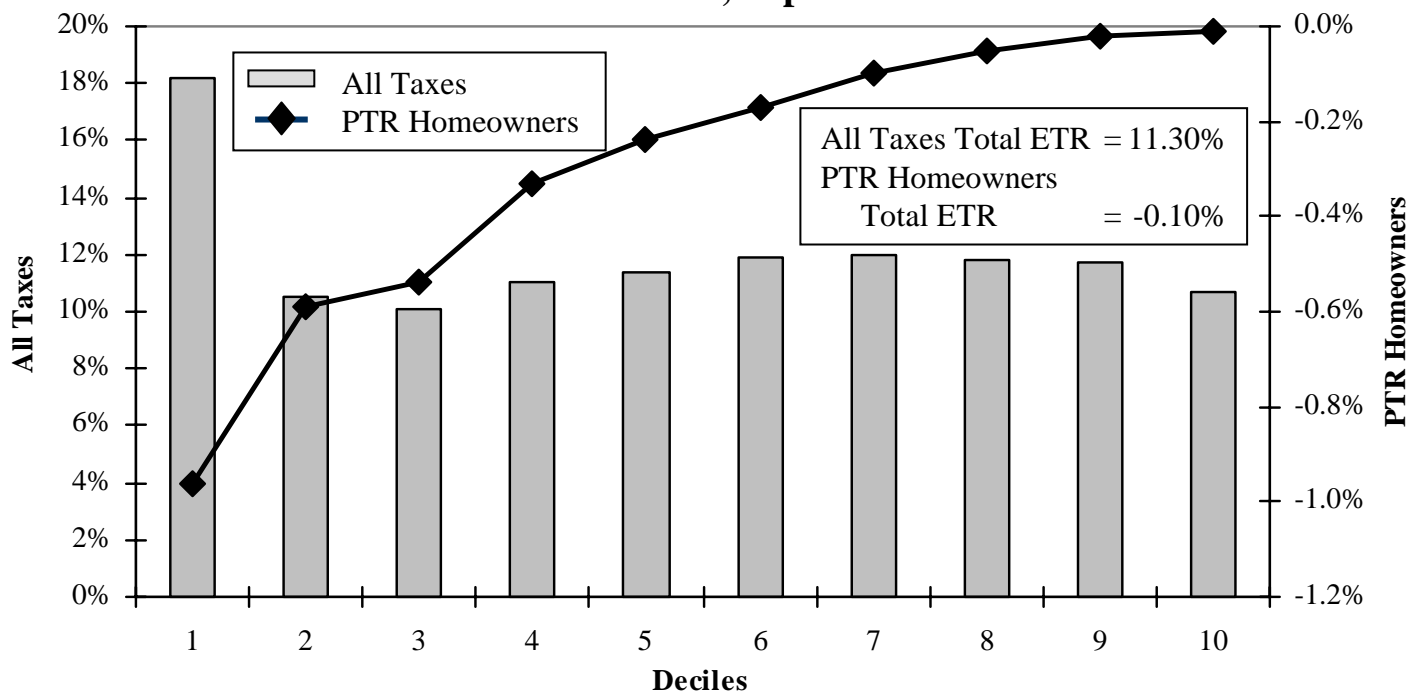
# 2002 Incidence Estimate for Property Tax Refund - Homeowners

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
-\$131	-\$131	\$0	\$0	-\$131	\$0

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
PTR Homeowners	-0.96%	-0.59%	-0.54%	-0.33%	-0.24%	-0.17%	-0.10%	-0.05%	-0.02%	-0.01%	-0.01%	0.00%	0.68

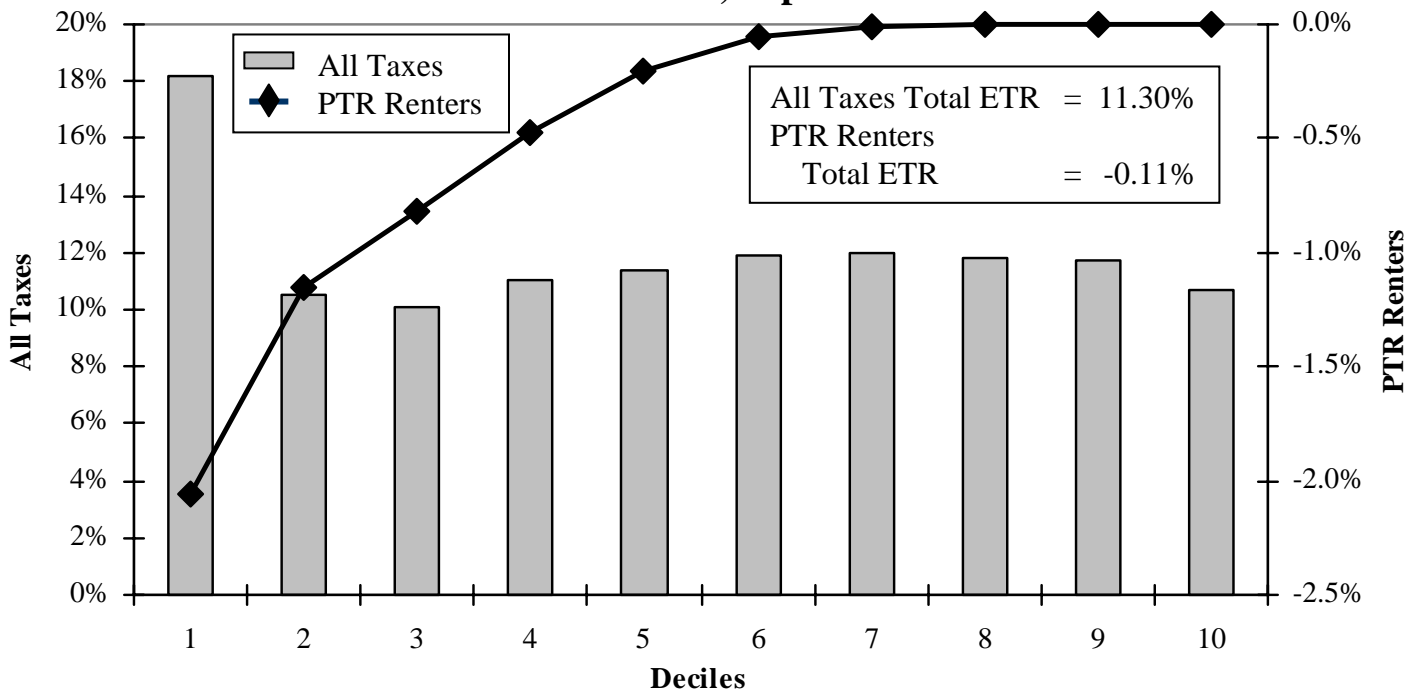
# 2002 Incidence Estimate for Property Tax Refund - Renters

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
-\$137	-\$137	\$0	\$0	-\$137	\$0

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



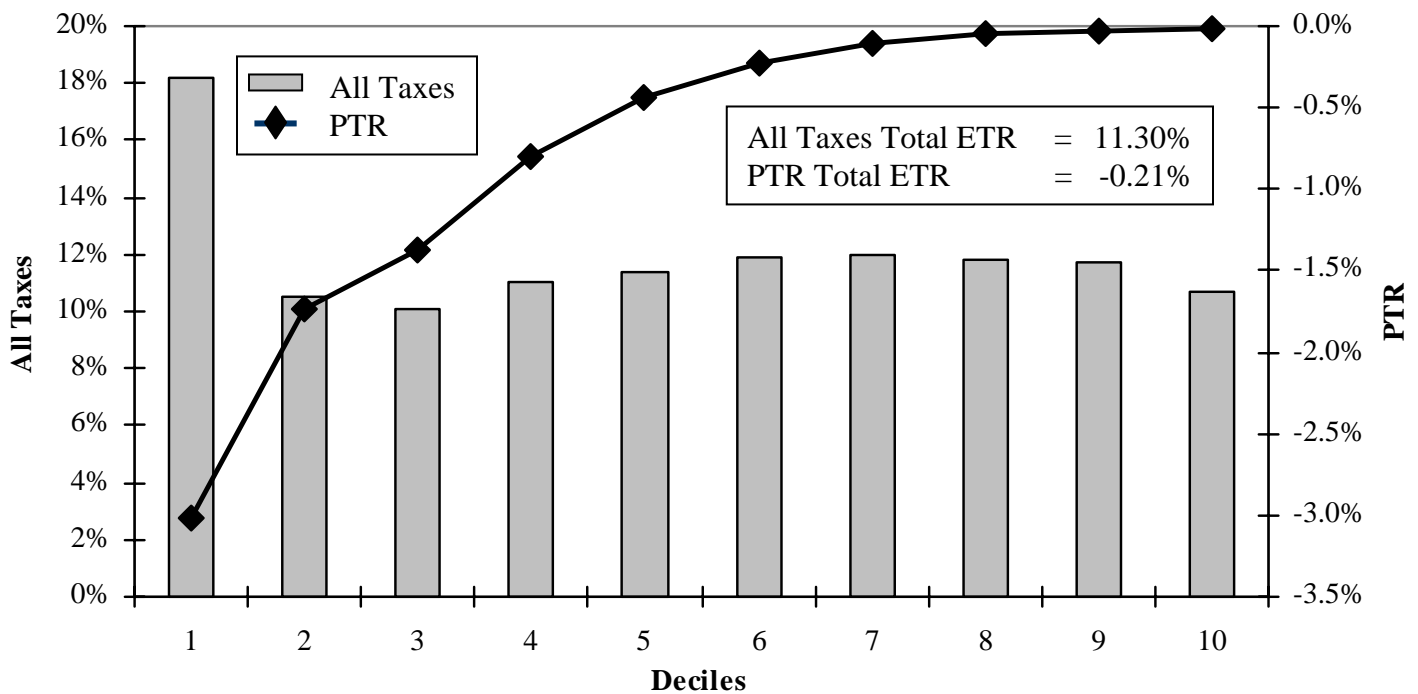
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
PTR Renters	-2.06%	-1.15%	-0.82%	-0.47%	-0.20%	-0.05%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.87

# 2002 Incidence Estimate for Total Property Tax Refund

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
-\$268	-\$268	\$0	\$0	-\$268	\$0

## Effective Tax Rates, Population Deciles



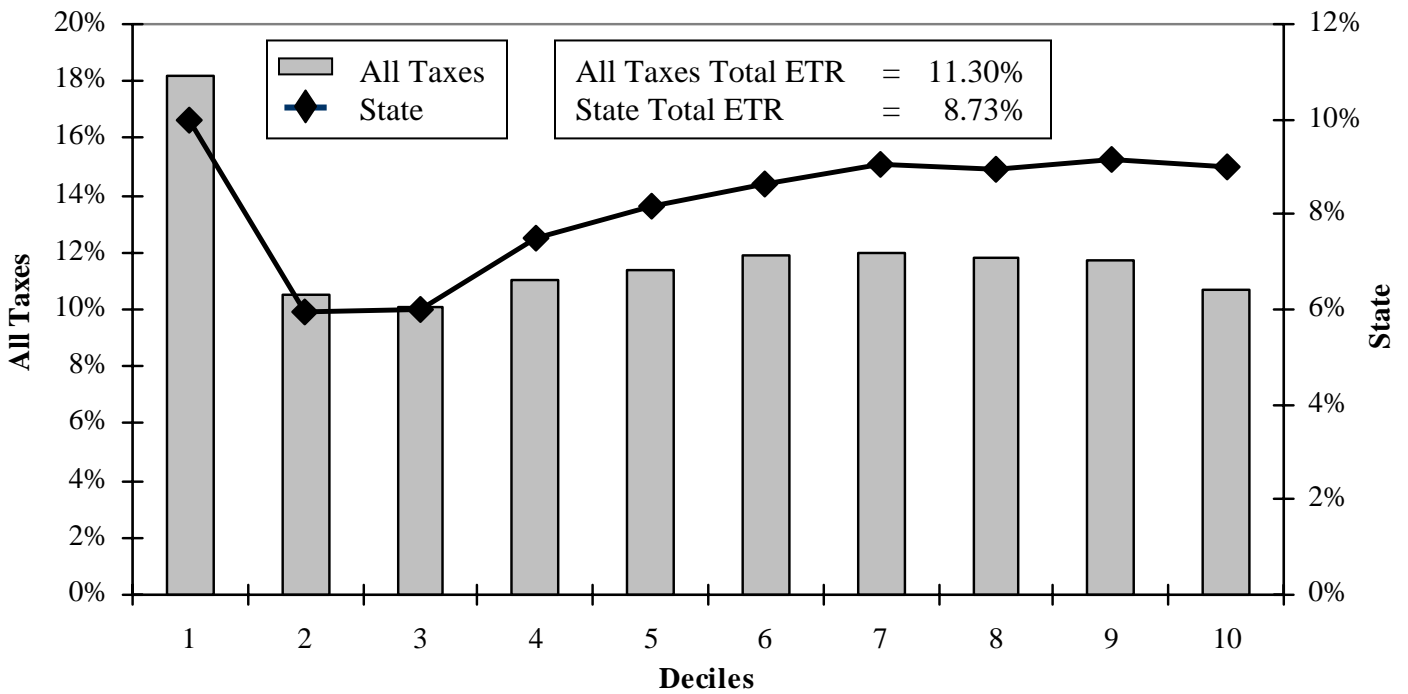
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
PTR	-3.02%	-1.74%	-1.37%	-0.80%	-0.43%	-0.22%	-0.11%	-0.05%	-0.03%	-0.01%	-0.01%	0.00%	0.78

# 2002 Incidence Estimate for Total State Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$12,945	\$8,019	\$329	\$4,597	\$11,112	\$1,833

## Effective Tax Rates, Population Deciles



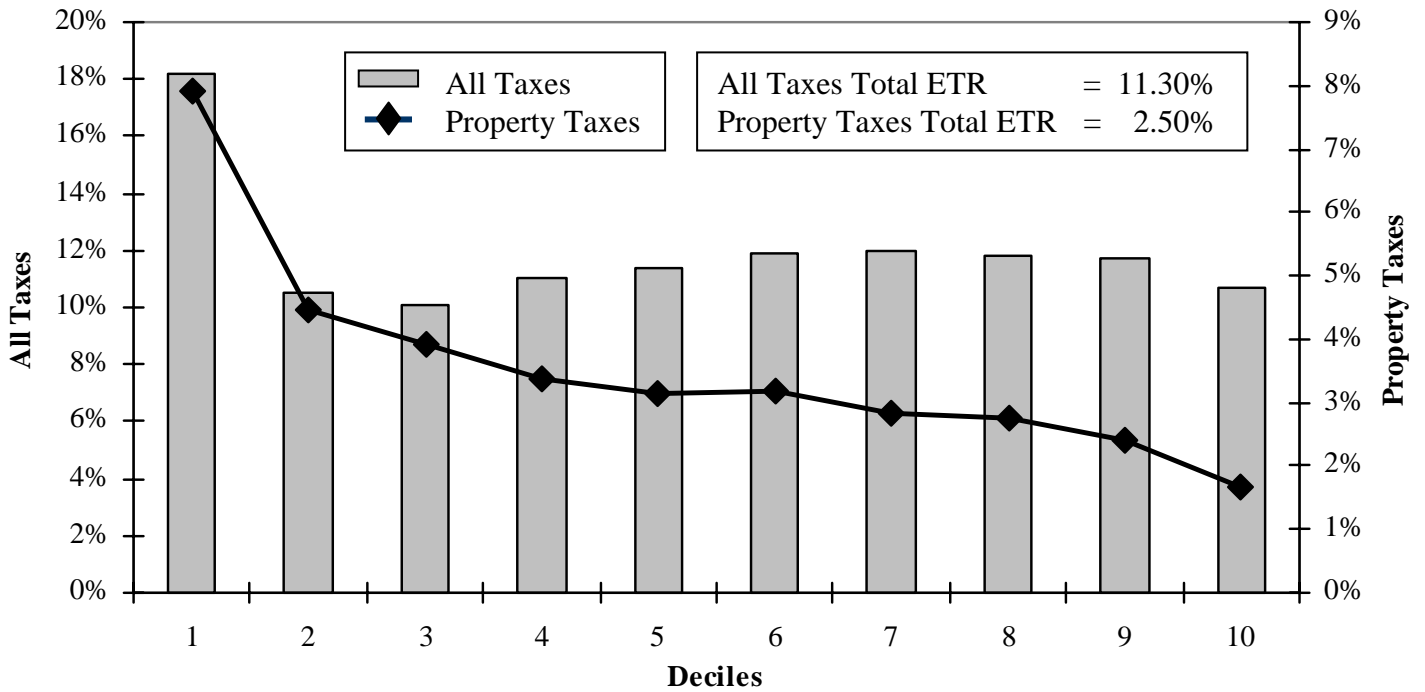
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
State	9.99%	5.93%	6.02%	7.50%	8.15%	8.66%	9.05%	8.96%	9.17%	8.98%	8.94%	8.03%	0.03

# 2002 Incidence Estimate for Local Property Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$4,071	\$2,004	\$17	\$2,050	\$3,179	\$892

## Effective Tax Rates, Population Deciles



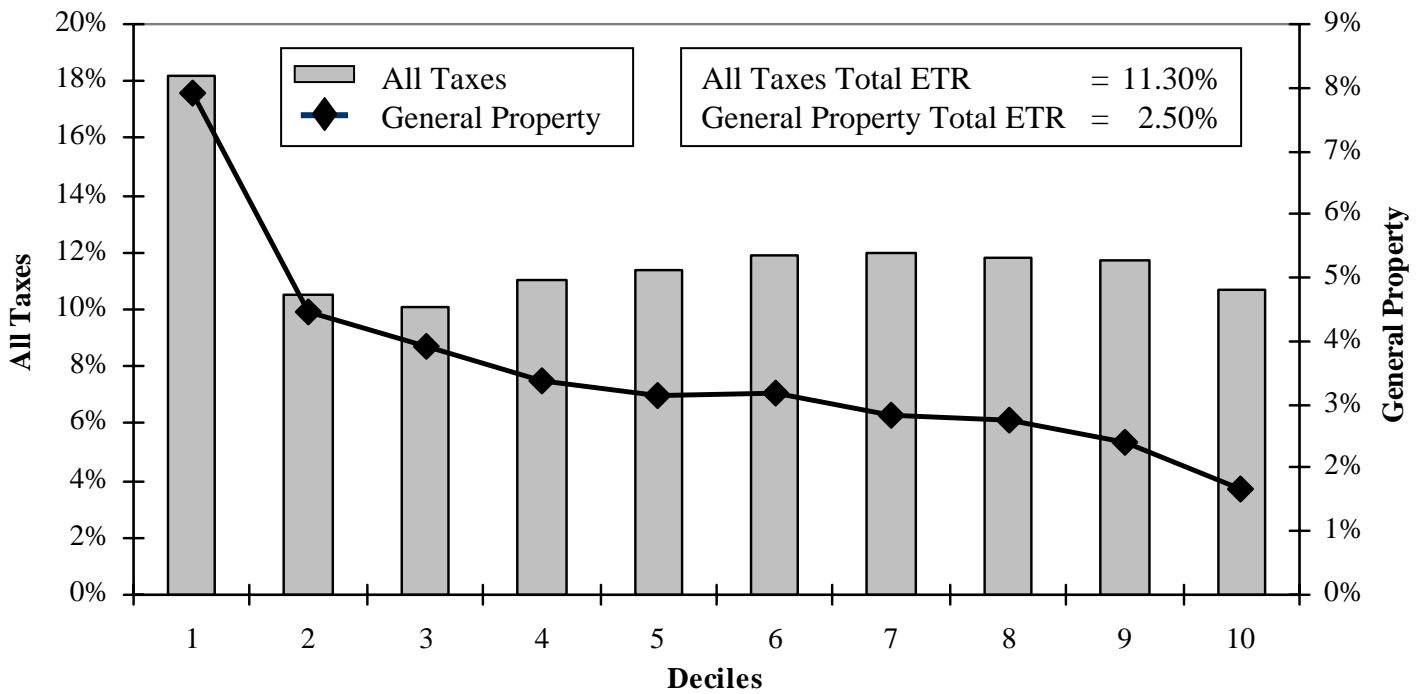
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Property Taxes	7.91%	4.45%	3.91%	3.37%	3.13%	3.18%	2.85%	2.76%	2.41%	1.68%	1.48%	0.97%	-0.17

# 2002 Incidence Estimate for General Local Property Tax (gross-credits)

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$4,009	\$2,004	\$17	\$1,988	\$3,178	\$830

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
General Property	7.91%	4.45%	3.91%	3.37%	3.13%	3.18%	2.85%	2.76%	2.41%	1.68%	1.47%	0.97%	-0.17



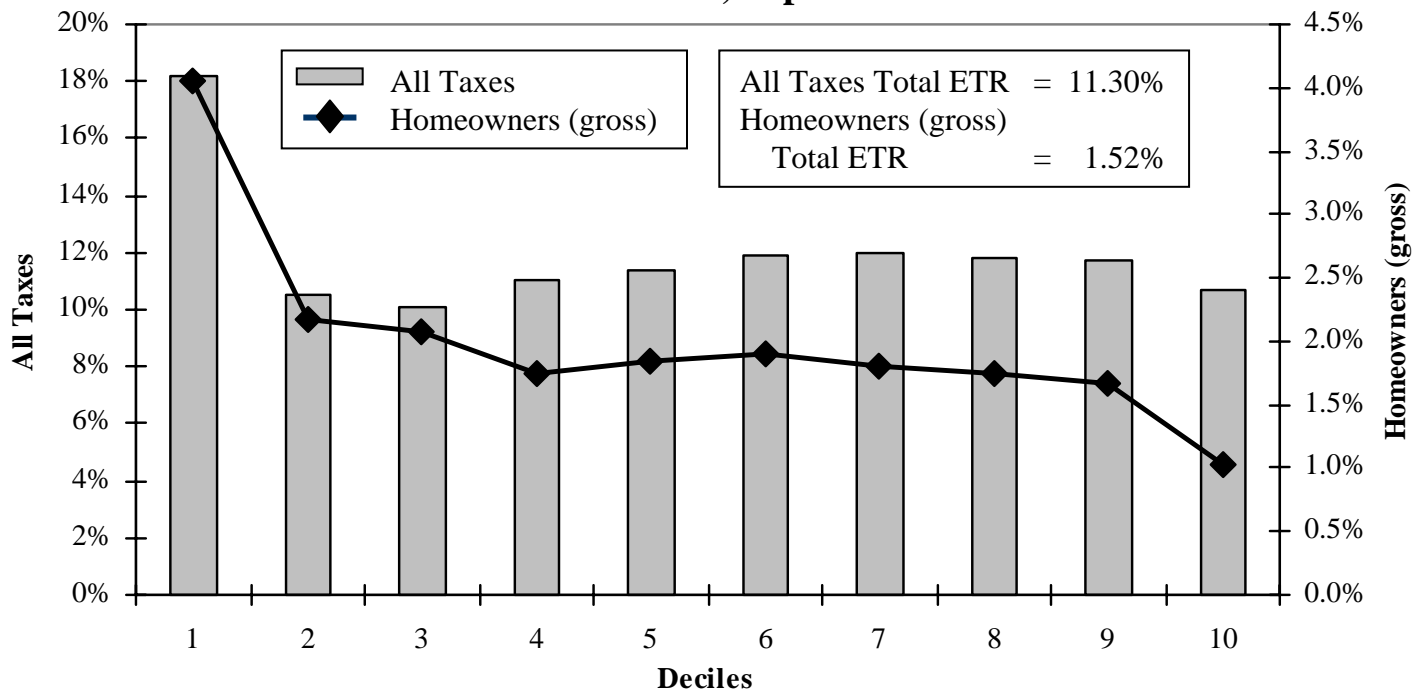
# 2002 Incidence Estimate for General Property Tax - Homeowners (gross of PTR)

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$1,936	\$1,936	\$0	\$0	\$1,936	\$0

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Homeowners (gross)	4.05%	2.18%	2.07%	1.75%	1.84%	1.91%	1.80%	1.75%	1.66%	1.03%	0.85%	0.51%	-0.15

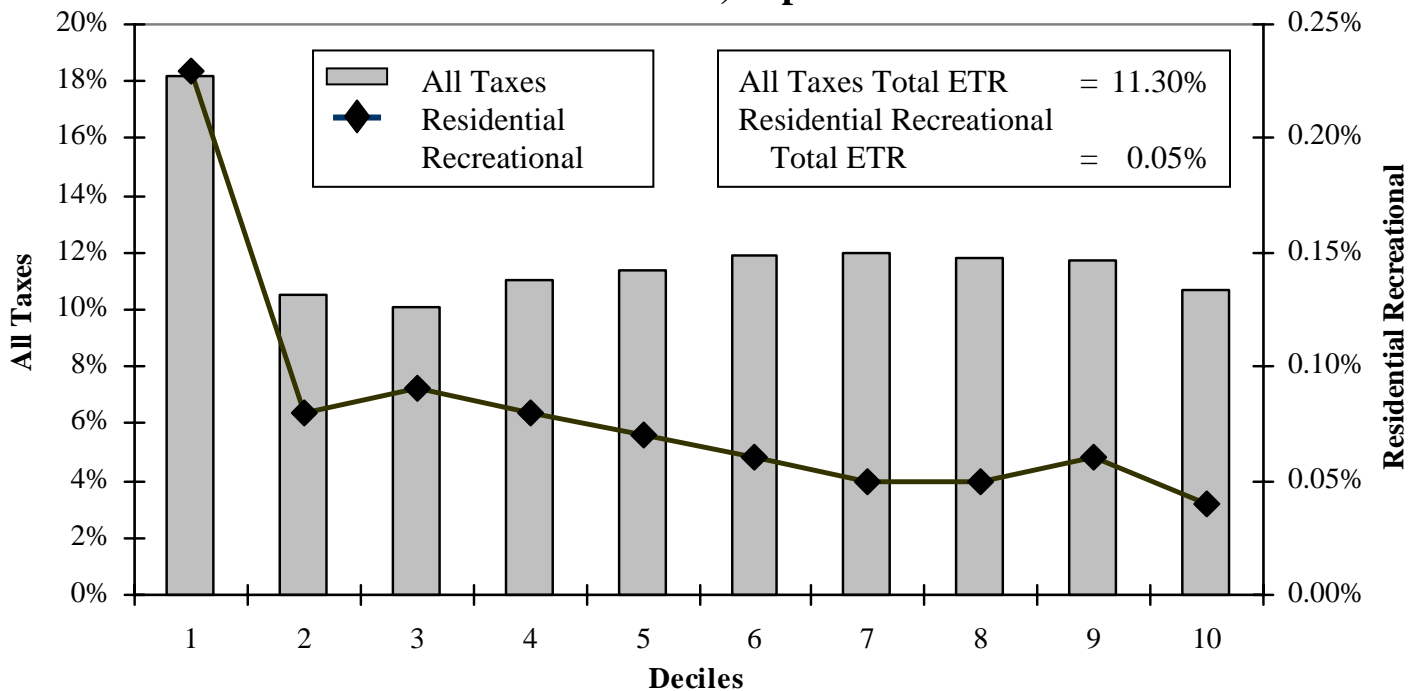
# 2002 Incidence Estimate for Residential Recreational Property Tax, Local Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$84	\$68	\$17	\$0	\$68	\$17

\*Shifting allocations: Direct = 100%, Consumers = 0%, Labor = 0%, Capital = 0%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Residential Recreational	0.23%	0.08%	0.09%	0.08%	0.07%	0.06%	0.05%	0.05%	0.06%	0.04%	0.03%	0.02%	-0.18

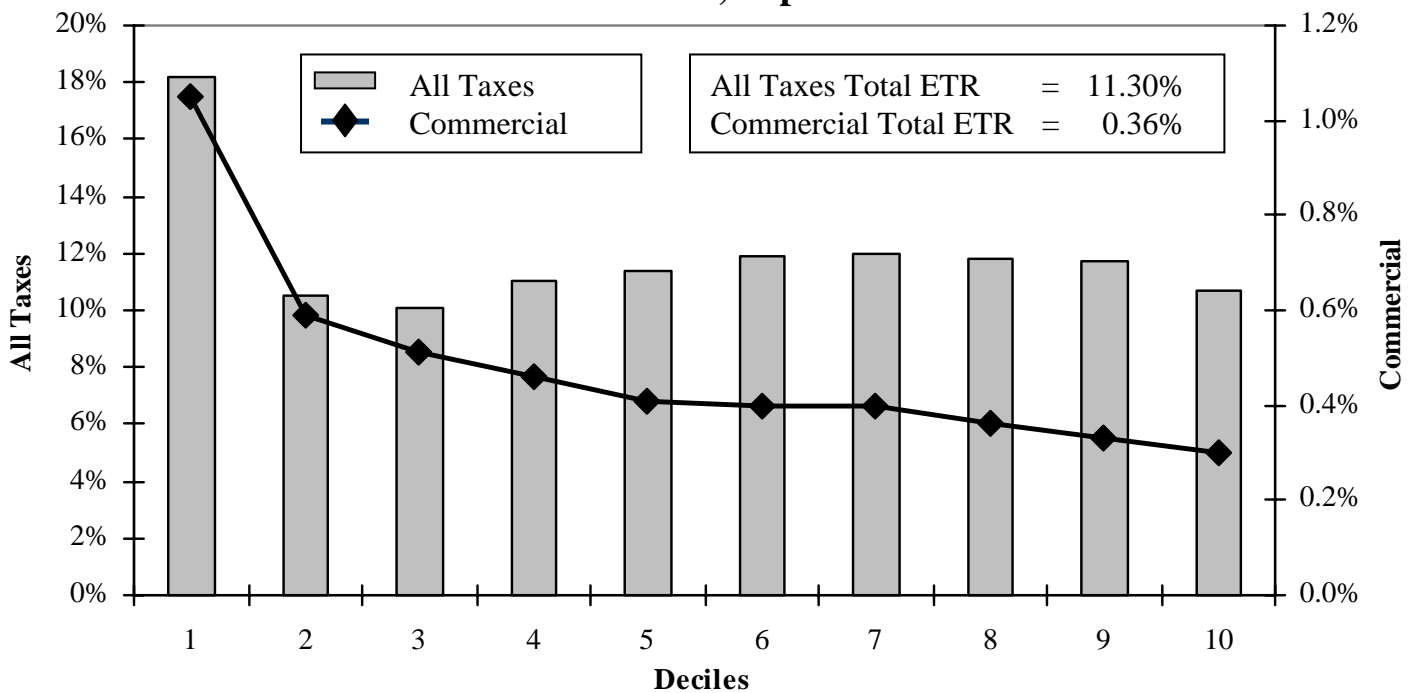
# 2002 Incidence Estimate for Commercial Property Tax, Local Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$882	\$0	\$0	\$882	\$463	\$419

\*Shifting allocations: Direct = 0%, Consumers = 62%, Labor = 7%, Capital = 32%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Commercial	1.05%	0.59%	0.51%	0.46%	0.41%	0.40%	0.40%	0.36%	0.33%	0.30%	0.30%	0.21%	-0.11

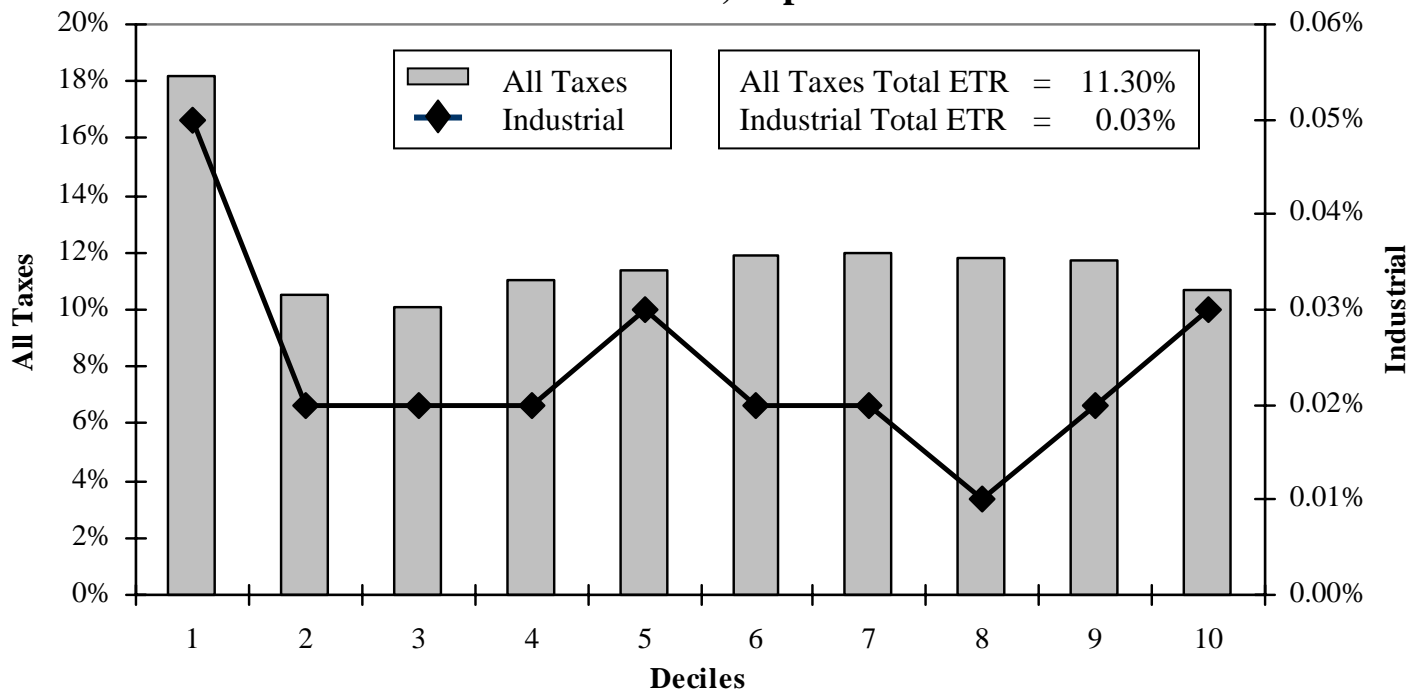
# 2002 Incidence Estimate for Industrial Property Tax, Local Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$296	\$0	\$0	\$296	\$32	\$264

\*Shifting allocations: Direct = 0%, Consumers = 3%, Labor = 0%, Capital = 97%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Industrial	0.05%	0.02%	0.02%	0.02%	0.03%	0.02%	0.02%	0.01%	0.02%	0.03%	0.04%	0.05%	0.12

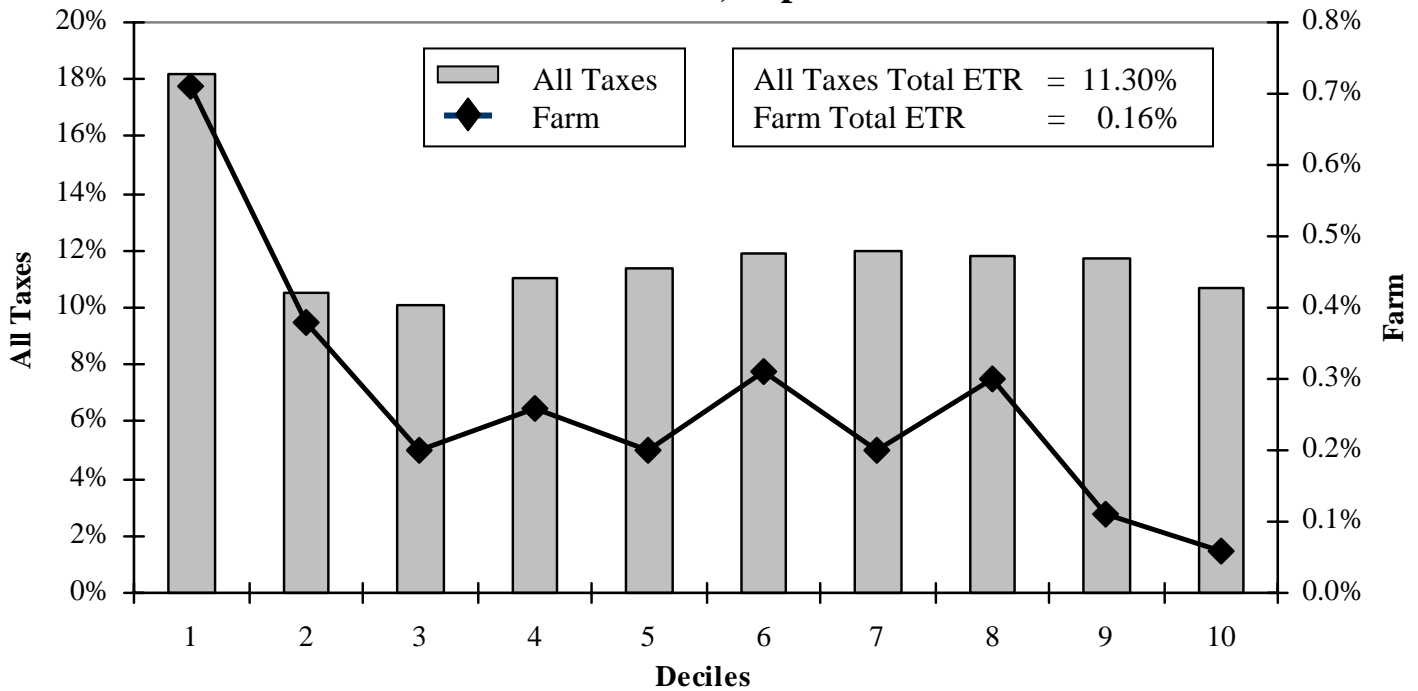
# 2002 Incidence Estimate for Farm Property Tax (other than residence)

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$212	\$0	\$0	\$212	\$208	\$4

\*Shifting allocations: Direct = 0%, Consumers = 0%, Labor = 0%, Capital = 100%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Farm	0.71%	0.38%	0.20%	0.26%	0.20%	0.31%	0.20%	0.30%	0.11%	0.06%	0.05%	0.03%	-0.31

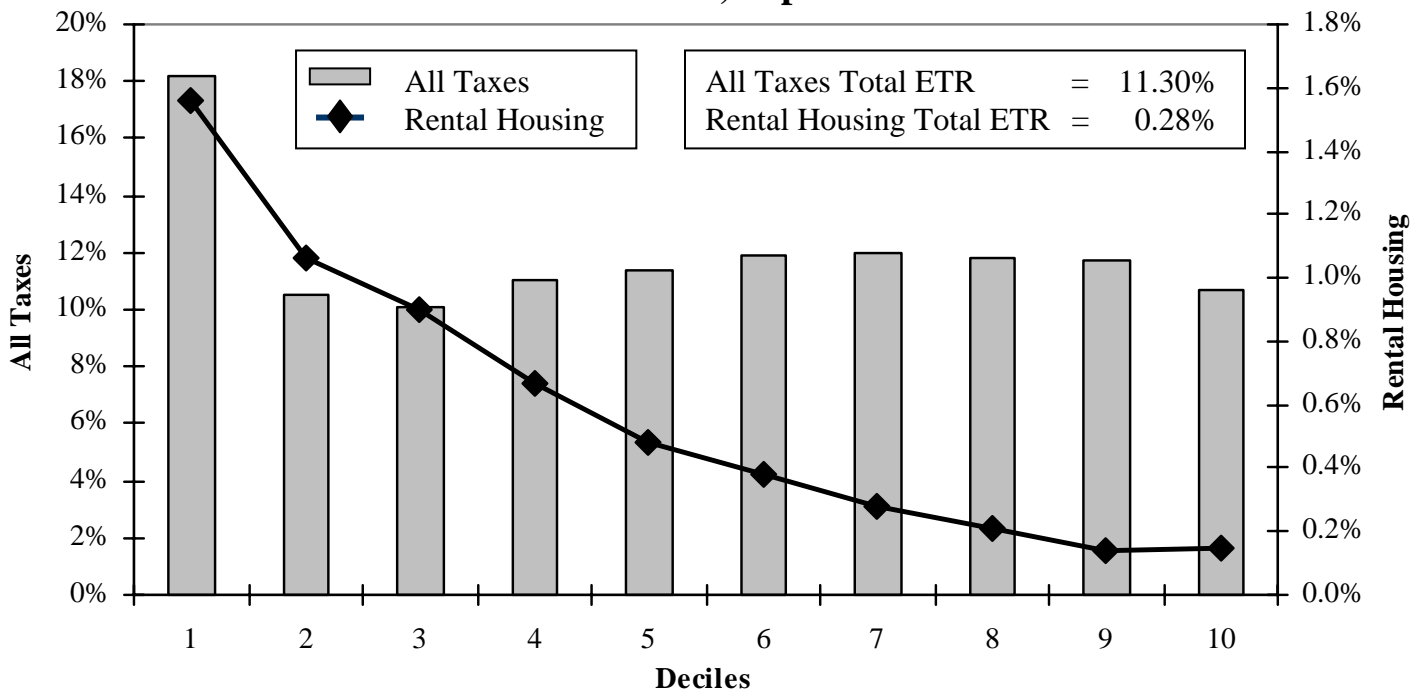
# 2002 Incidence Estimate for Rental Housing Property Tax

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$416	\$0	\$0	\$416	\$358	\$59

\*Shifting allocations: Direct = 0%, Consumers = 49%, Labor = 0%, Capital = 51%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Rental Housing	1.56%	1.06%	0.90%	0.67%	0.48%	0.38%	0.28%	0.21%	0.14%	0.15%	0.15%	0.12%	-0.37

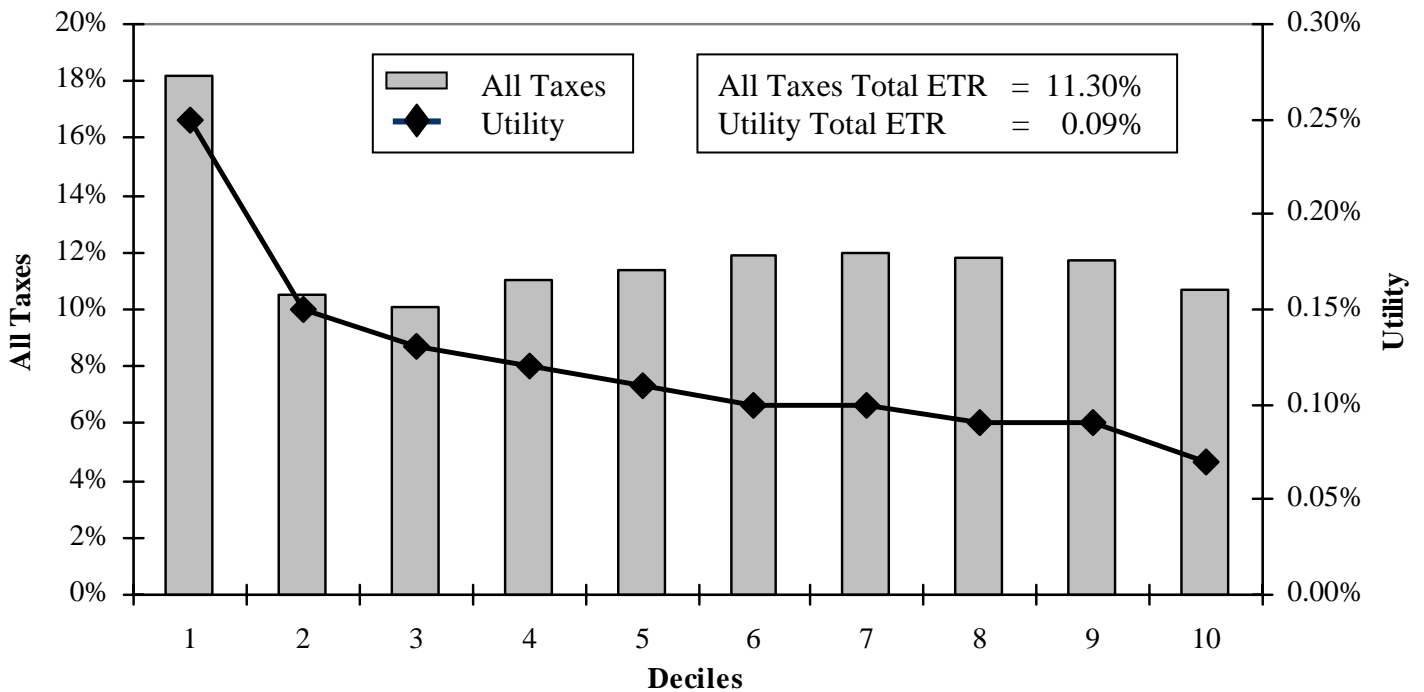
# 2002 Incidence Estimate for Utility Property Tax, Local Portion

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$181	\$0	\$0	\$181	\$114	\$68

\*Shifting allocations: Direct = 0%, Consumers = 91%, Labor = 6%, Capital = 4%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Utility	0.25%	0.15%	0.13%	0.12%	0.11%	0.10%	0.10%	0.09%	0.09%	0.07%	0.06%	0.04%	-0.13

**2002 Incidence Estimate for  
Minerals Property Tax**

**Negligible Amounts**



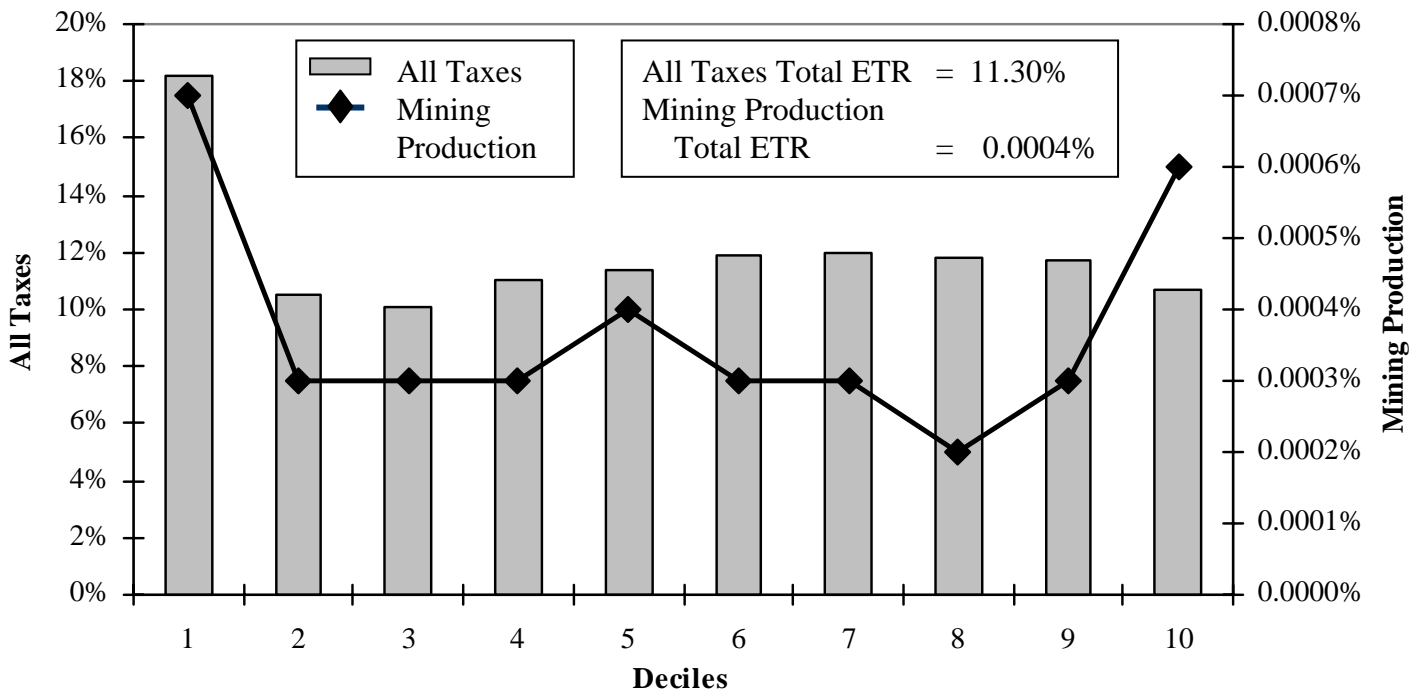
# 2002 Incidence Estimate for Mining Production Taxes (taconite)

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$62	\$0	\$0	\$62	\$1	\$62

\*Shifting allocations: Direct = 0%, Consumers = 0%, Labor = 0%, Capital = 100%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Mining Prod.	0.0007%	0.0003%	0.0003%	0.0003%	0.0004%	0.0003%	0.0003%	0.0002%	0.0003%	0.0006%	0.0006%	0.0008%	0.15

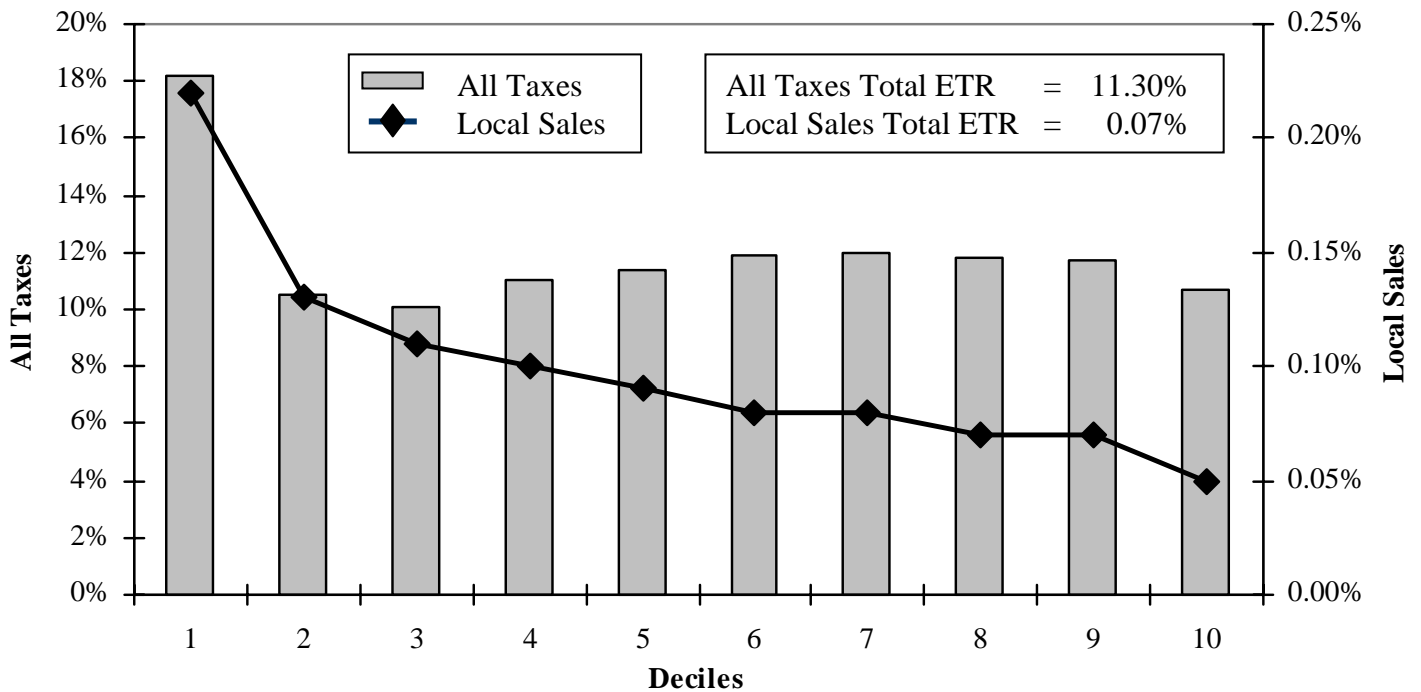
# 2002 Incidence Estimate for Local Sales Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$114	\$58	\$4	\$52	\$94	\$20

\*Shifting allocations: Direct = 62%, Consumers = 32%, Labor = 1%, Capital = 5%

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Local Sales	0.22%	0.13%	0.11%	0.10%	0.09%	0.08%	0.08%	0.07%	0.07%	0.05%	0.05%	0.03%	-0.14

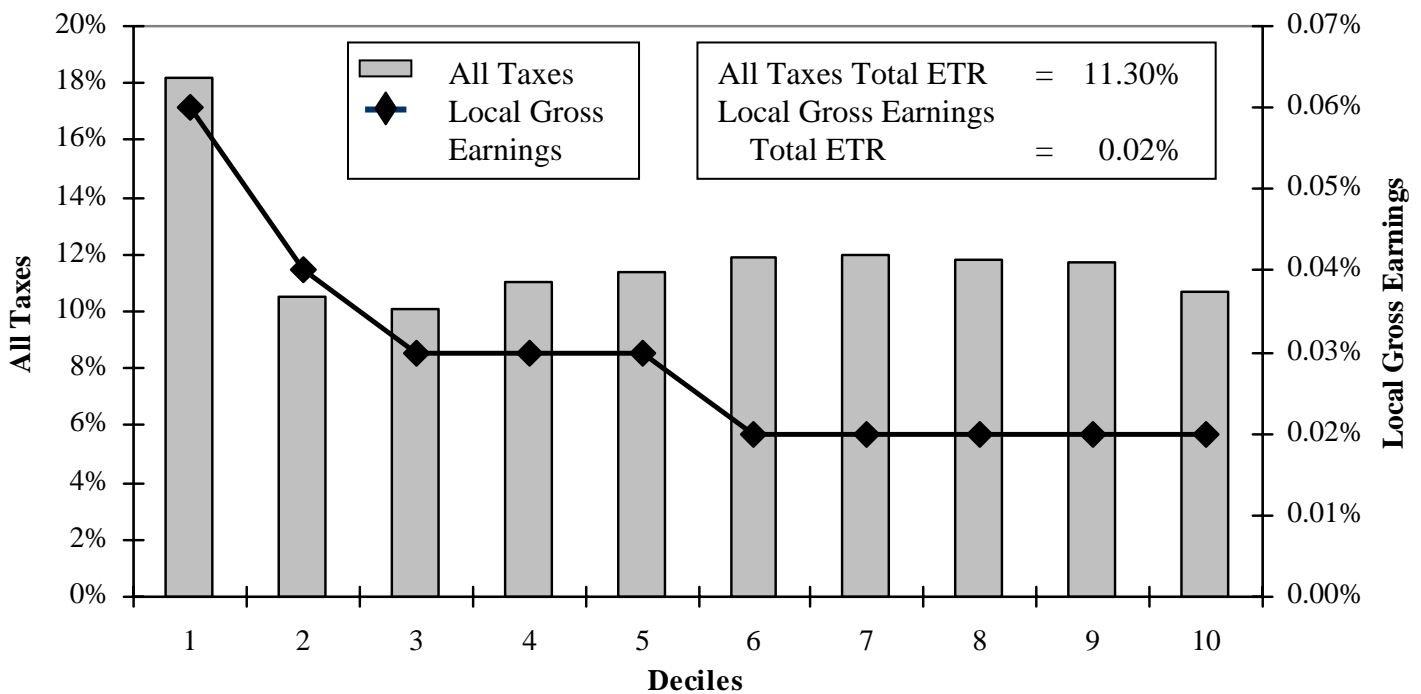
# 2002 Incidence Estimate for Local Gross Earnings Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota*	Exported
\$45	\$0	\$0	\$45	\$28	\$17

\*Shifting allocations: Direct = 0%, Consumers = 91%, Labor = 6%, Capital = 4%

## Effective Tax Rates, Population Deciles



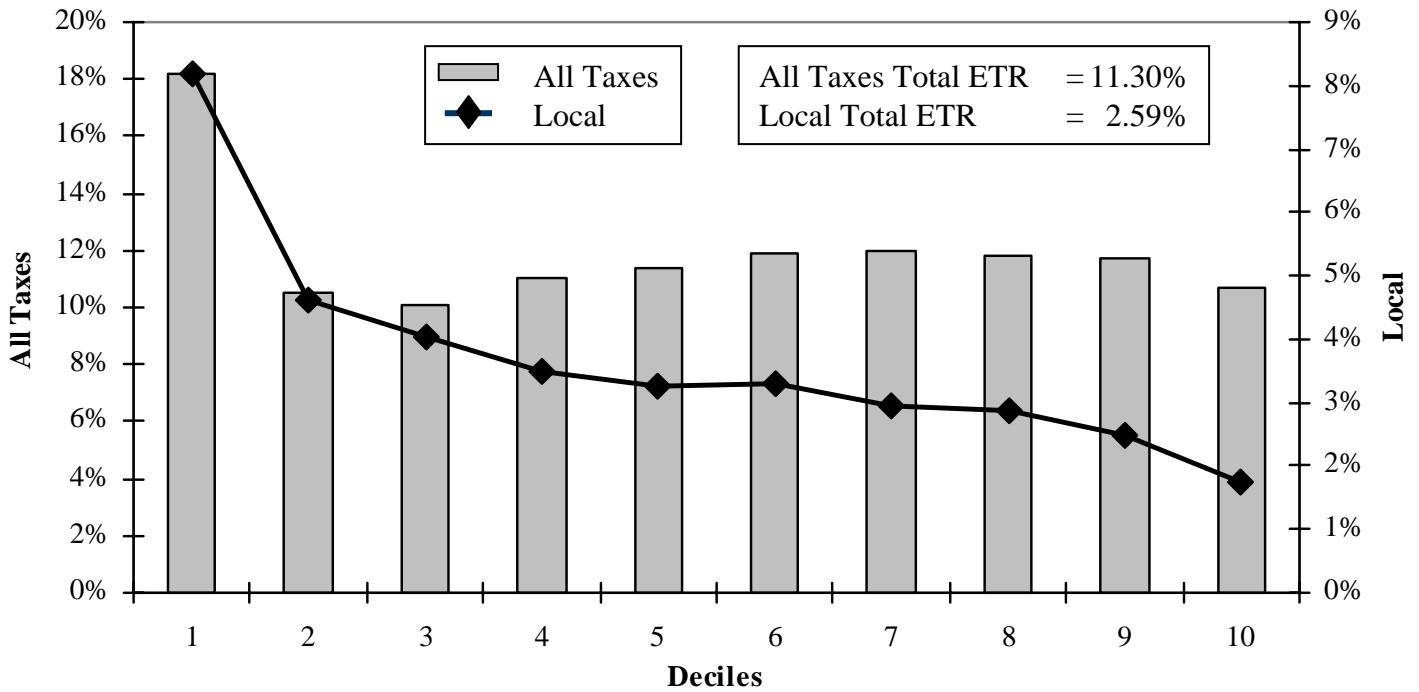
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Local Gross Earnings	0.06%	0.04%	0.03%	0.03%	0.03%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.01%	-0.13

# 2002 Incidence Estimate for Total Local Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$4,229	\$2,062	\$21	\$2,146	\$3,301	\$929

## Effective Tax Rates, Population Deciles



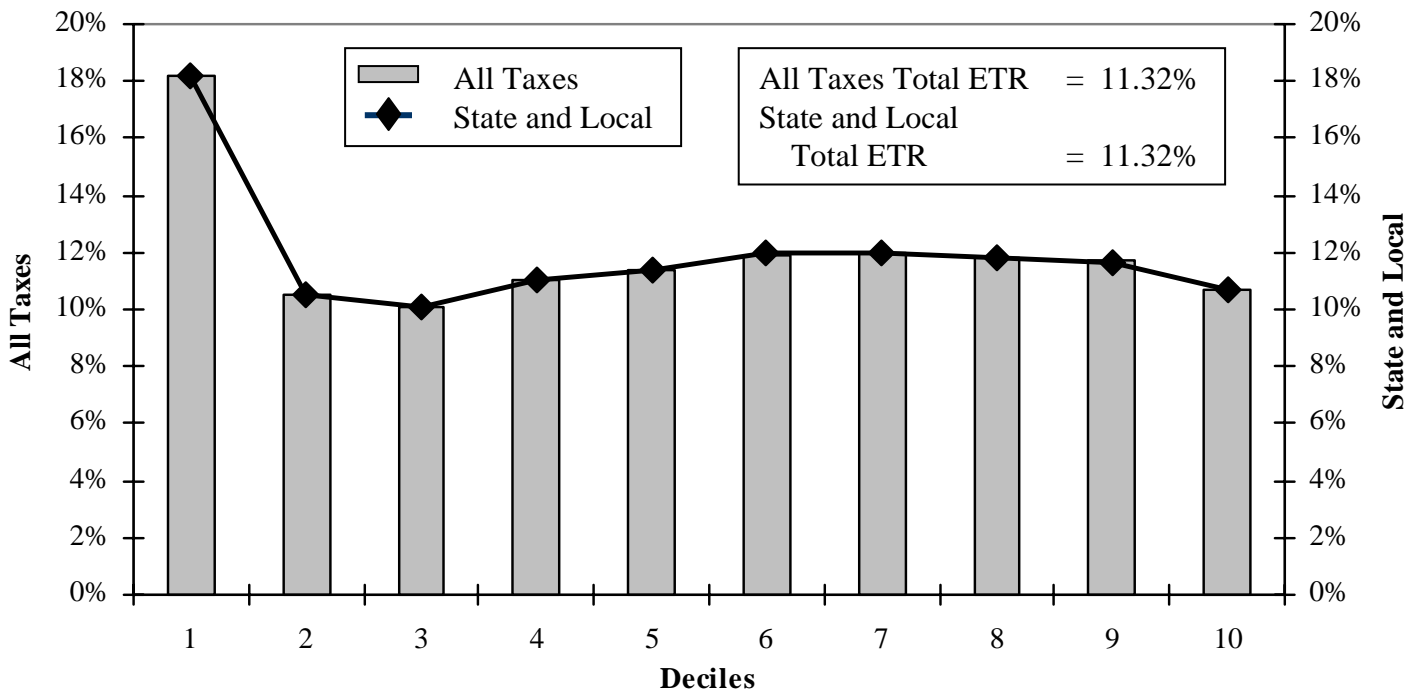
Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.2%	10.5%	10.1%	11.0%	11.4%	11.9%	12.0%	11.8%	11.7%	10.7%	10.5%	9.0%	-0.02
Local	8.19%	4.61%	4.05%	3.50%	3.24%	3.29%	2.96%	2.86%	2.50%	1.76%	1.54%	1.01%	-0.17

# 2002 Incidence Estimate for Total State and Local Taxes

## Tax Collection Amounts 2002 (\$Millions)

Total	As Imposed			After Shifting	
	MN HH	NR	Business	Minnesota	Exported
\$17,174	\$10,081	\$350	\$6,743	\$14,412	\$2,762

## Effective Tax Rates, Population Deciles



Deciles	1	2	3	4	5	6	7	8	9	10	Top 5%	Top 1%	Suits Index
All Taxes	18.18%	10.54%	10.07%	11.00%	11.39%	11.94%	12.01%	11.81%	11.68%	10.73%	10.49%	9.04%	-0.02
State and Local	18.18%	10.54%	10.07%	11.00%	11.39%	11.94%	12.01%	11.81%	11.68%	10.73%	10.49%	9.04%	-0.02

## Glossary of Terms

***Decile*** – one tenth of an ordered list. In this study decile usually means a particular tenth of the total number of households in the state after those households have been ordered or ranked by income; sometimes referred to as a population decile. For example, the first decile means the tenth of the population ranking lowest in income; the tenth decile is the tenth of the population having the highest incomes. An alternative use of the term in this study means a tenth of the total income of the households so ranked; this is referred to as an income decile. For example, the tenth income decile refers to those households receiving the highest tenth of total income.

***Effective tax rate*** – tax paid as a percentage of gross income. Effective tax rates can be calculated for single taxes or groups of taxes. In this study they are also calculated for business taxes by industry sector. Effective tax rates by decile are one of the main methods by which study results are presented. It should be noted that effective tax rates for the first decile are unreliable for several reasons. That decile includes households with temporarily low incomes or who consume based on wealth rather than current income (retirees, for example).

***Household*** – for tax filers, in this study a household is defined as the one or two people entitled to file one income tax return or property tax refund return, plus any dependents. For the nonfilers in this study, a household means those people living at the same address who presumably would be entitled to file one income tax return if they were filers, plus any dependents. This definition differs from that used by the U.S. Census Bureau, which defines a household as any group of people who share living arrangements.

***Impact of tax*** – refers to the initial burden of the tax, experienced by the person or firm legally obligated to pay the tax. The impact is distinguished from the incidence of the tax.

***Incidence of tax*** – refers to the ultimate burden of the tax after the person or business firm legally obligated to pay the tax alters its behavior in response (if it does alter its behavior). In some cases, namely taxes imposed directly on households, both the impact and the incidence are the same. In other cases, such as taxes on businesses, the incidence is shifted from the business to others.

***Progressive tax*** – a tax for which the effective tax rate rises as income rises.

***Proportional tax*** – a tax for which the effective rate does not change with income.

***Regressive tax*** – a tax for which the effective tax rate falls as income rises.

***Suits index*** – a numerical score ranging between  $-1$  and  $+1$  that indicates the extent to which a tax is progressive or regressive. Negative values indicate a regressive tax, positive values a progressive tax, and zero shows a proportional tax. The closer the Suits index is to  $+1$  or  $-1$ , the higher the degree of progressivity or regressivity.

***Tax shifting*** – the process by which the incidence of a tax is translated from the economic entity legally obligated to pay the tax to those bearing the ultimate burden of the tax.