

Tax Incidence Analysis

Prepared by the Tax Research Division, Minnesota Department of Revenue

June 8, 2011

Governor's Tax Proposals

HF 1231 (Paymar) and SF 925 (Marty)

WITH CHANGES PROPOSED BY GOVERNOR DAYTON ON May 16, 2011

The Governor's revised tax proposals (Supplemental Budget, March 2011) include the following provisions:

- Create new 4th income tax bracket – 10.95% tax rate on Minnesota taxable income over \$250,000 joint, \$150,000 single, and \$200,000 head of household starting in 2011. The new tax bracket is indexed for inflation.
- Increase income subject to corporate tax, primarily by (1) scaling back the foreign royalty subtraction and foreign operating corporation (FOC) provisions, (2) repealing exemption for insurance companies, (3) including Minnesota sales made by *all* members of a unitary group in the Minnesota sales factor, and (4) indexing minimum fees for inflation.
- Increase in the research and development tax credit (primarily corporate tax).
- Enact various sales tax provisions that on net increase the tax base and raise revenue.

Supplemental Budget proposals (March 2011) differed from the current proposal in the following ways:

- (1) It started new 4th bracket at lower income levels -- \$150,000 for joint, \$85,000 for single, and \$130,000 for head of household returns.
- (2) It included a new state tax on homes with market values of \$1 million or more.
- (3) It repealed the foreign royalty and FOC provisions, rather than scaling them back.

These tax law changes would modify the burden of state and local taxes compared to what it would be under current law. The bill's impact can be estimated using the database and underlying models developed for the *Minnesota Tax Incidence Study*. **Because that study projects income and taxes to calendar year 2013, this analysis generally estimates the impact of law changes in that year.**

Law Changes Included in the Analysis

- **New 4th Income Tax Bracket:** The impact is modeled using the House Income Tax Simulation Model for tax year 2013. Minnesota residents would pay \$593 million (89%) of the \$664 million of additional tax.
- **Corporate Tax Changes:** The burden of the estimated \$87 million increase in corporate tax is modeled using the corporate tax incidence model. (The \$87 million total is net of the tax reduction due to the expanded Research and Development Credit.) Roughly half of the net corporate tax change would have its initial impact on manufacturing, the other half on commercial sectors. Some of the burden would be borne in higher prices, some in lower wages, and some in lower returns to business owners. Tax burdens for Minnesota residents would rise by an estimated \$52 million (about 60% of added revenue). The remainder would be borne by nonresidents. These estimates apply to the long-term burden, after businesses have fully adjusted to the change in tax burdens.

- **Sales Tax:** The bill expands the definition of taxable admissions and would increase sales tax remitted by some remote sellers, including some on-line hotel bookings. The tax burden on Minnesota consumers is assumed to rise by \$16 million (85%) of the net \$19 million in tax.

Law Changes Not Included in the Analysis

- Federal conformity provisions are not included in the analysis. Most law changes would affect tax years 2010 through 2012, but not 2013 (the year modeled here). The two income tax provisions that would affect 2013 (other than timing provisions) would largely offset one other.
- Provisions that affect only nonresidents – including a proposed change in the estate tax as well as the tax on “snowbirds” – were excluded.

Results by Population Decile: Minnesota Taxes

- The tax burden on Minnesota taxpayers would rise by \$661 million. Over 90% of the tax increase would fall on the top 5%. Five-sixths would fall on the top 1%.
- The new 4th tier income tax bracket would account for 90% of the added revenue. It would fall on those with highest incomes – 100% on those in the 10th decile, 99.8% on the top 5%, and 91% on the top 1%.
- The proposal includes no cuts in local government aids and no changes in the state property tax, so it would have no impact on property tax burdens relative to current law.
- Tax burdens would rise by an average of 0.33% of income. The increased tax burden is far below that average in the bottom 9 deciles, averaging 0.04% of income for the bottom 9 deciles combined. The increase is more than double that average in the 10th decile (at 0.75% of income). For the top 1% of taxpayers the increased burden would equal 1.77% of income.
- The base expansion for the corporate and sales taxes is regressive, but that impact is overwhelmed by the income tax and property tax changes, as shown in the table below. Under current law, the top 1% of taxpayers has the lowest effective tax rate (at 9.7% of income) and the drop in the effective tax rate between the 9th decile (11.9%) to the tenth decile (10.4%) is significant. Under the proposal, this would not be true. The top 1% of taxpayers would have a higher effective tax rate (at 11.44% of income) than either the 3rd or 10th deciles, and the sharp drop in the effective tax rate between the 9th and 10th decile –projected to be 1.5% of income under current law – would be cut by almost half (to 0.81%).
- The population Suits index would rise from -0.047 to -0.031. Though still regressive, this would be less regressive (or at least no more regressive) than estimated in four of the last six editions of the *Minnesota Tax Incidence Study* (for tax years 1998 through 2008).¹

¹ Because \$5 of every \$6 of increased tax would fall on the top 1% of households, the population-decile Suits index significantly understates the progressivity of the tax change. For the income tax change alone, the more accurate full-sample Suits index for the proposed change is +0.85, while the simpler population Suits index is only +0.59.

- The Suits index for the “total net change in tax burdens” is +0.510 – more progressive than any existing taxes, including the existing income tax (at +0.200).²

2013 Population Decile	Income Range	Percent of All Households	Tax Burden as Percent of Income		
			Current Law	Proposed Law	Change
First	\$ 11,298 & under	10%	30.46%	30.57%	0.11%
Second	\$ 11,299 to \$ 18,732	10%	12.10%	12.16%	0.06%
Third	\$ 18,733 to \$ 26,788	10%	11.02%	11.07%	0.05%
Fourth	\$ 26,789 to \$ 35,561	10%	11.55%	11.60%	0.05%
Fifth	\$ 35,562 to \$ 46,044	10%	12.06%	12.10%	0.04%
Sixth	\$ 46,045 to \$ 59,437	10%	12.10%	12.14%	0.04%
Seventh	\$ 59,438 to \$ 76,276	10%	12.07%	12.10%	0.04%
Eighth	\$ 76,277 to \$ 99,386	10%	12.30%	12.33%	0.04%
Ninth	\$ 99,387 to \$ 142,225	10%	11.89%	11.92%	0.04%
Tenth	\$ 142,226 & over	10%	10.36%	11.11%	0.75%
ALL		100%	11.47%	11.80%	0.33%
Top 5%	\$ 200,907 & over	5%	10.07%	11.08%	1.00%
Top 1%	\$ 472,626 & over	1%	9.68%	11.44%	1.77%

- More details are shown in Tables 1 and 2 below.

Results by Population Decile: Change in Minnesota and Federal Tax Burdens

Because homeowner property taxes and state income taxes can be claimed as itemized deductions on federal income tax returns, a change in these taxes will change federal tax liability. The change in federal tax will offset part of the change in Minnesota income taxes and homeowner property taxes. There is no federal offset for those who do not itemized deductions, nor is there any offset for a taxpayer who is subject to the federal alternative minimum tax (because property and state income taxes are not deductible). For those who itemize (and are not subject to the federal AMT), the portion of the change in Minnesota tax that is offset by the change in federal liability is generally equal to the federal tax rate on the last dollar of the taxpayer’s income. The offset is 15% for a taxpayer in the 15% tax bracket and 35% for a taxpayer in the 35% tax bracket.

- The change in federal tax liability would offset almost 30% (\$176 million) of the \$593 million increase in Minnesota income taxes.
- Although the proposal would increase the burden of *Minnesota* state and local taxes by \$661 million, it would increase the total burden of *federal plus Minnesota* state and local tax burdens by \$485 million.
- When both federal and state taxes are considered, tax burdens would increase by an average of 0.24% of income. The tax burden would rise by 0.53% of income (rather than 0.75%) in the 10th decile and by 1.22% of income (rather than 1.77%) for the top 1% of taxpayers .

² The population-decile Suits index for the homeowner and renter PTR is higher, though, at +0.792.

2013 Population Decile	Income Range	Percent of All Housholds	Net Change in Minnesota Tax Burden as Percent of Income	Net Change in Federal Taxes as Percent of Income:		Net Change in Minnesota and Federal Tax Burden as Percent of Income
				Higher Itemized Deductions for Home Property Taxes	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	10%	0.11%	N/A	0.00%	0.11%
Second	\$ 11,299 to \$ 18,732	10%	0.06%	N/A	0.00%	0.06%
Third	\$ 18,733 to \$ 26,788	10%	0.05%	N/A	0.00%	0.05%
Fourth	\$ 26,789 to \$ 35,561	10%	0.05%	N/A	0.00%	0.05%
Fifth	\$ 35,562 to \$ 46,044	10%	0.04%	N/A	0.00%	0.04%
Sixth	\$ 46,045 to \$ 59,437	10%	0.04%	N/A	0.00%	0.04%
Seventh	\$ 59,438 to \$ 76,276	10%	0.04%	N/A	0.00%	0.04%
Eighth	\$ 76,277 to \$ 99,386	10%	0.04%	N/A	0.00%	0.04%
Ninth	\$ 99,387 to \$142,225	10%	0.04%	N/A	0.00%	0.04%
Tenth	\$142,226 & over	10%	0.75%	N/A	-0.21%	0.53%
ALL MINNESOTA HOUSEHOLDS		100%	0.33%	N/A	-0.09%	0.24%
Top 5%	\$200,907 & over	5%	1.00%	N/A	-0.29%	0.71%
Top 1%	\$472,626 & over	1%	1.77%	N/A	-0.55%	1.22%

N/A = not applicable, because the proposal would have no impact on home property taxes.

- More details are shown in **Tables 3 and 4** below.

Table 1. Dollars of Tax Burden

Tax Incidence Analysis

Governor Dayton's Revised Tax Proposals (May 16, 2011)

(Dollars in \$1000s)

2013 Population Decile	Income Range	Number of Housholds	Current Law Total State and Local Tax	Change in Tax ¹				Proposed Law Total State and Local Tax
				REVISED 4th Tax Bracket at 10.95%	REVISED Corporate Tax Increases	Sales Tax Increases	Total Net Change in Tax	
First	\$ 11,298 & under	263,199	\$ 530,646	-	1,265	605	1,870	\$ 532,516
Second	\$ 11,299 to \$ 18,732	263,199	479,849	-	1,691	754	2,445	482,294
Third	\$ 18,733 to \$ 26,788	263,199	656,857	-	2,203	879	3,082	659,939
Fourth	\$ 26,789 to \$ 35,561	263,199	945,059	-	2,823	1,017	3,840	948,899
Fifth	\$ 35,562 to \$ 46,044	263,199	1,285,863	-	3,394	1,156	4,550	1,290,413
Sixth	\$ 46,045 to \$ 59,437	263,199	1,673,264	-	4,129	1,341	5,470	1,678,734
Seventh	\$ 59,438 to \$ 76,276	263,199	2,146,415	-	5,080	1,602	6,681	2,153,096
Eighth	\$ 76,277 to \$ 99,386	263,199	2,821,394	-	6,506	1,939	8,445	2,829,839
Ninth	\$ 99,387 to \$142,225	263,199	3,672,422	0	8,489	2,347	10,836	3,683,258
Tenth	\$142,226 & over	263,199	8,516,676	593,124	15,929	4,362	613,415	9,130,091
ALL MINNESOTA HOUSEHOLDS		2,631,989	\$ 22,728,445	593,124	51,509	16,000	660,633	\$23,389,078
Top 5%	\$200,907 & over	131,652	\$ 6,076,987	592,101	10,320	2,918	605,338	\$ 6,682,325
Top 1%	\$472,626 & over	26,332	\$ 2,992,407	541,408	3,954	1,306	546,668	\$ 3,539,075

¹ Increases in corporate and sales taxes are net of some tax reductions (such as the R&D credit).

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Table 2. Tax Burden as Percent of Income

Tax Incidence Analysis

Governor Dayton's Revised Tax Proposals (May 16, 2011)

2013 Population Decile	Income Range	Percent of All Houholds	Current Law Tax as Percent of Income	Change in Tax as Percent of Income ¹				Proposed Law Tax as Percent of Income
				REVISED 4th Tax Bracket at 10.95%	REVISED Corporate Tax Increases	Sales Tax Increases	Total Net Change in Tax	
First	\$ 11,298 & under	10%	30.46%	0.00%	0.07%	0.03%	0.11%	30.57%
Second	\$ 11,299 to \$ 18,732	10%	12.10%	0.00%	0.04%	0.02%	0.06%	12.16%
Third	\$ 18,733 to \$ 26,788	10%	11.02%	0.00%	0.04%	0.01%	0.05%	11.07%
Fourth	\$ 26,789 to \$ 35,561	10%	11.55%	0.00%	0.03%	0.01%	0.05%	11.60%
Fifth	\$ 35,562 to \$ 46,044	10%	12.06%	0.00%	0.03%	0.01%	0.04%	12.10%
Sixth	\$ 46,045 to \$ 59,437	10%	12.10%	0.00%	0.03%	0.01%	0.04%	12.14%
Seventh	\$ 59,438 to \$ 76,276	10%	12.07%	0.00%	0.03%	0.01%	0.04%	12.10%
Eighth	\$ 76,277 to \$ 99,386	10%	12.30%	0.00%	0.03%	0.01%	0.04%	12.33%
Ninth	\$ 99,387 to \$142,225	10%	11.89%	0.00%	0.03%	0.01%	0.04%	11.92%
Tenth	\$142,226 & over	10%	10.36%	0.72%	0.02%	0.01%	0.75%	11.11%
ALL MINNESOTA HOUSEHOLDS		100%	11.47%	0.30%	0.03%	0.01%	0.33%	11.80%
Top 5%	\$ 200,907 & over	5%	10.07%	0.98%	0.02%	0.00%	1.00%	11.08%
Top 1%	\$ 472,626 & over	1%	9.68%	1.75%	0.01%	0.00%	1.77%	11.44%

¹ Increases in corporate and sales taxes are net of some tax reductions (such as the R&D credit).

"Population-Decile" Suits Index with Governor's May 16 Proposal:	-0.031
Baseline "Population-Decile" Suits Index (from TIS):	-0.047
<i>"Population-Decile" Suits Index for Proposed Change in Tax:</i>	<i>+0.510</i>

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Table 3. Change in Dollars of Tax Burden: Minnesota and Federal Taxes

Tax Incidence Analysis *Including Change in Federal Tax*
Governor Dayton's Revised Tax Proposals (May 16, 2011)

(Dollars in \$1000s)

2013 Population Decile	Income Range	Number of Housholds	Net Change in Minnesota Tax Burden	Net Change in Federal Taxes Due To:		Net Change in Minnesota and Federal Tax Burden
				Higher Itemized Deductions for Home Property Taxes	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	263,199	\$ 1,870	N/A	-	1,870
Second	\$ 11,299 to \$ 18,732	263,199	2,445	N/A	-	2,445
Third	\$ 18,733 to \$ 26,788	263,199	3,082	N/A	-	3,082
Fourth	\$ 26,789 to \$ 35,561	263,199	3,840	N/A	-	3,840
Fifth	\$ 35,562 to \$ 46,044	263,199	4,550	N/A	-	4,550
Sixth	\$ 46,045 to \$ 59,437	263,199	5,470	N/A	-	5,470
Seventh	\$ 59,438 to \$ 76,276	263,199	6,681	N/A	-	6,681
Eighth	\$ 76,277 to \$ 99,386	263,199	8,445	N/A	-	8,445
Ninth	\$ 99,387 to \$142,225	263,199	10,836	N/A	(0)	10,836
Tenth	\$142,226 & over	263,199	613,415	N/A	(175,638)	437,776
ALL MINNESOTA HOUSEHOLDS		2,631,989	660,633	N/A	(175,638)	484,995
Top 5%	\$ 200,907 & over	131,652	605,338	N/A	(175,398)	429,941
Top 1%	\$ 472,626 & over	26,332	546,668	N/A	(169,718)	376,950

N/A = not applicable, because the proposal would have no impact on home property taxes.

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Table 4. Change in Minnesota and Federal Tax Burden as Percent of Income

Tax Incidence Analysis *Including Change in Federal Tax*
 Governor Dayton's Revised Tax Proposals (May 16, 2011)

2013 Population Decile	Income Range	Percent of All Housholds	Net Change in Minnesota Tax Burden as Percent of Income	Net Change in Federal Taxes as Percent of Income:		Net Change in Minnesota and Federal Tax Burden as Percent of Income
				Higher Itemized Deductions for Home Property Taxes	Lower Itemized Deductions for Minnesota Income Tax	
First	\$ 11,298 & under	10%	0.11%	N/A	0.00%	0.11%
Second	\$ 11,299 to \$ 18,732	10%	0.06%	N/A	0.00%	0.06%
Third	\$ 18,733 to \$ 26,788	10%	0.05%	N/A	0.00%	0.05%
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Fifth	\$ 35,562 to \$ 46,044	10%	0.04%	N/A	0.00%	0.04%
Sixth	\$ 46,045 to \$ 59,437	10%	0.04%	N/A	0.00%	0.04%
Seventh	\$ 59,438 to \$ 76,276	10%	0.04%	N/A	0.00%	0.04%
Eighth	\$ 76,277 to \$ 99,386	10%	0.04%	N/A	0.00%	0.04%
Ninth	\$ 99,387 to \$142,225	10%	0.04%	N/A	0.00%	0.04%
Tenth	\$142,226 & over	10%	0.75%	N/A	-0.21%	0.53%
ALL MINNESOTA HOUSEHOLDS		100%	0.33%	N/A	-0.09%	0.24%
Top 5%	\$ 200,907 & over	5%	1.00%	N/A	-0.29%	0.71%
Top 1%	\$ 472,626 & over	1%	1.77%	N/A	-0.55%	1.22%

N/A = not applicable, because the proposal would have no impact on home property taxes.

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Technical Addendum

A. Assumptions about Changes in Local Property Taxes³

- When general purpose aids to local governments are reduced, a portion of those aid cuts will result in property tax increases. Recent levy reports from local governments indicate that overall levy back reported by cities and counties was 56% in 2010. Levy back declined to 42% in 2011 when deeper aid cuts were imposed.
- For 2012 and future years we assume that non-school local governments will levy back 50% of aid cuts up to a 10% increase in their property tax levy. Any cut beyond that level will be levied back at a 30% rate. In other words, those jurisdictions facing deeper aid cuts that will require a greater percent increase in their levy will be expected to have a lower levy-back rate.

B. Estimating the Incidence of CHANGES in Business Taxes (“Incremental Incidence”)

- As explained on pages 61-62 of the Tax Incidence Study, the incidence of a change in the level of business taxes (“incremental incidence”) will differ from the average incidence of existing business taxes (“average incidence”). Average incidence divides an existing business tax into three parts – the national average tax on all capital, the sector differential, and the Minnesota differential. In contrast, a change in the level of a business tax is all treated as a change in the Minnesota differential.
- If the level of Minnesota business taxes changes, this will generally change the amount of *federal tax* paid by the business – either the federal corporate income tax or the federal individual income tax (for flow-through businesses). For a corporation paying federal tax at the 35% rate, each additional \$1000 in Minnesota tax will reduce the federal tax burden by \$350. So \$350 of the \$1000 of Minnesota tax burden is borne by the federal government in foregone tax revenue. The burden of the remaining \$650 in tax may be shifted to consumers in higher prices or to workers in lower compensation – or it may reduce the after-tax income of the business owner. This analysis assumes an average federal tax rate for business property owners of 30% for corporate tax and 20% for individual income tax.⁴
- The extent to which the tax burden will be shifted to consumers or workers will depend on the nature of the market. Minnesota tax changes are most likely to result in price changes if the market is local and close competitors see the same change in tax. Businesses selling in national or international markets are much less likely to shift the added cost to consumers by raising prices (or reduce their price in response to a tax cut). *As in the incidence study, the incidence results assume the market has time to fully adjust to any tax changes.*
- The incidence of the business tax changes in the bill (as modeled here) is as follows:
 - o Corporate tax increases: 28% shifted to consumers, 31% shifted to workers, 0.2% borne by Minnesota owners, and 41% borne by nonresidents.

³ Not relevant for this bill analysis, but retained for consistency.

⁴ For corporate tax, the analysis assumes a federal tax rate of 35%.