

How Progressive Can We Be? Minnesota's Individual Income Tax Rankings and Potential Policy Implications

Executive Summary

MCFE's *Comparison of Individual Income Tax Burdens by State, 2015 Edition* calculates, compares, and ranks income tax burdens for similar households with similar incomes across the country. This edition is the first to capture the effects of the fourth income tax tier Minnesota lawmakers enacted in 2013. This *Issue Brief* reports on the study's Minnesota findings.

Findings on Minnesota Income Tax Burdens

- Across all non-senior filer types, tax burden rankings rise as income rises – often exceptionally, from national lows to national highs – reflecting the significantly greater progressivity of Minnesota's individual income tax system relative to other states.
- The establishment of a 4th tier in the Minnesota individual income tax has had a major influence on the tax burdens – and the associated rankings – of high-income filers relative to other states. For the \$500,000 married filer, the state income tax burden has increased from 18.7% to 40.9% above the national average. For the \$1 million filer the burden has increased from 20.4% to 50.0% above the national average.
- Taxation of senior income in Minnesota remains very high relative to other states. Excluding groups of senior taxpayers where the vast majority of states impose no burden, Minnesota is first in the nation in eight of the remaining eleven examples.
- Of the 38 taxpayer profiles studied, Minnesota treats married filers at \$35,000 of income most favorably relative to other states. The state's earned income tax credit (Working Family Credit, or WFC) creates a "negative" income tax burden for that household of \$944, which is \$1,297 below the national average tax burden for similar households.

Findings on the Structural Progressivity of the Minnesota Income Tax

- The progressivity of Minnesota's income tax system, as measured by the differences in effective tax rates between the same filers at different income levels, ranks among the highest in the nation – primarily due to the Working Family Credit.
- For married filers with \$20,000 of income the WFC is the 5th most generous state earned income credit in the nation (and 3rd when adjusted for purchasing power). For married filers at \$35,000 of income the credit ranks 1st in the nation because it is more accessible and generous than similar credits offered by other states.
- The Working Family Credit is a powerful and under-recognized contributor to state income tax progressivity. The credit accounts for nearly 45% of the total effective tax rate differential between married filers at \$1 million of income and those at \$20,000 of income.
- Minnesota's new fourth tier raised considerable amounts of money but did comparatively little to make the income tax more structurally progressive. For tax year 2013 the total effective income tax rate differential between a \$20,000 married filer and a \$1 million married filer is 15.1%. The new fourth tier created a 1.4% differential. In contrast, a 6.7% differential is attributable to the Working Family Credit.

Findings on Combined State and Federal Tax Burdens and Progressivity

- Federal income taxation has a far greater influence on income tax progressivity than the state's income tax does. When including federal income tax burdens the effective tax rate differential between the married filer at \$1 million of income and at \$20,000 of income is 79.5% – over five times higher than for state taxes alone.

- For the \$35,000 married filer, including federal taxes lowers the effective income tax rate from -2.7% to -14.8% – the result of refundable credits including the federal Earned Income Tax Credit. For the \$500,000 married filer, including federal taxes increases the effective income tax rate more than fourfold from 7.2% to 29.9%.

Implications For Issues of Ongoing Policy Interest in Minnesota

Status of Minnesota’s Working Family Credit

While the Working Family Credit has long been recognized as an efficient and effective means of combating poverty and improving the lives of low-income households, its contributions to the progressivity of the Minnesota income tax system are no less noteworthy. The WFC is a preferable way to improve “tax fairness.” It offers far more progressivity for the dollar than raising rates of high-income earners while avoiding the potential economic dangers and harmful effects created by higher income tax rates.

Policymakers need to understand how proposals designed to improve the economic well being of low-income Minnesotans would interact with the WFC. For example, for married filers who each work 30 hours a week at the minimum wage, the additional income from a \$2.50/hour increase in the minimum wage would be taxed at 61.5% because of higher payroll taxes and reduced credit eligibility. If households also lose access to other income support programs, the effective tax rate would be even higher.

Taxing Senior Income

Unlike many other states, Minnesota does not offer additional tax relief for Social Security income or private pension income beyond what the federal government provides. However, the ability of other states to keep these preferential senior treatments intact is a major question given the fiscal implications this growing demographic has for the future. Moreover, from a tax policy perspective, there is no theory of taxation that provides an argument under which age alone should exempt a person from income taxation. Given all this, additional careful study is warranted before pursuing a push for “senior income tax parity”.

Tax Competitiveness

Considerable research has been done on the relationship between state tax policy and mobility, the location of new plants or firms, and economic and employment growth generally, but findings are often conflicting and contradictory. Nevertheless, two recent studies published by the National Bureau of Economic Research find that individual income taxes affect both high-level scientific talent and pass through employment levels. Such findings suggest Minnesota’s income tax policy has legitimate competitiveness implications worthy of careful consideration.

With Minnesota’s increased outlier status with respect to high income taxation, it is critical that the benefits and value proposition be very clear and tangible to the pass through business entities and highly paid talent paying the higher tax burden. Business activity will be attracted to other locations if equivalent levels and quality of public goods, human capital, and physical infrastructure can be “purchased” at lower tax prices elsewhere.

Addressing Income Inequality Concerns

Rising income inequality has generated considerable attention nationally as well as calls for action here in Minnesota. However, the evidence suggests Minnesota has reached a practical limit in advancing further income equality objectives by raising revenue through the income tax system. For both practical and political reasons, any substantial new spending intended to reduce income inequality will almost certainly need to be supported by new revenue streams from other, more regressive forms of taxation.

Introduction

MCFE's *Comparison of Individual Income Tax Burdens by State, 2015 Edition* calculates and ranks income tax burdens in the 42 states (including D.C.) that impose an individual income tax. It compares state and local individual income tax burdens for similar households with similar incomes across the country by simulating tax returns for 38 "taxpayer profiles" – unique combinations of income levels and filing types. The new release is the seventh edition of this publication and the first capturing the effects of the fourth income tax tier Minnesota lawmakers enacted in 2013. The full report (available on our website, www.fiscalexcellence.org) has complete national rankings and details regarding our methodology.

In this Issue Brief we focus specifically on the Minnesota findings from the study. First, for each taxpayer profile we report the Minnesota tax burdens, how they relate to the national averages, and the accompanying national rankings. We then examine in more detail the structural progressivity of Minnesota's income tax as measured by "tax rate differentials" – the comparison of effective income tax rates between similar households with different incomes. We highlight and discuss the powerful influence the state's earned income tax credit has in making the Minnesota individual income tax one of the most progressive state income tax systems in the nation. We then combine state and federal burdens to examine the influence federal income taxation has on income tax burdens and progressivity. We conclude with commentary and discussion on the implications these findings have on four issues on ongoing policy interest to Minnesota:

- the status of the state's earned income tax credit;
- taxing senior income;
- state competitiveness; and
- future legislative interest in, and pursuit of, efforts to address income inequality.

Minnesota Results for Tax Year 2013

Table 1 presents the results from tax year 2013¹ for all 38 Minnesota taxpayer profiles in the study. Notable findings:

- Across all non-senior filer types tax rankings generally rise as income rises – often exceptionally, from national lows to national highs. This reflects the significantly greater progressivity of Minnesota's individual income tax system relative to other states.
- The establishment of a 4th tier in the Minnesota individual income tax has significantly impacted the tax burdens – and the associated rankings – of high income filers relative to other states. Minnesota married-joint filers with \$500,000 and \$1 million in gross income now rank 2nd and 3rd nationally (respectively), having jumped 10 spots (\$500,000 filer) and 8 spots (\$1 million filer). For the \$500,000 filer, the state income tax burden has increased from 18.7% above the national average (or \$4,942 higher, in dollar terms) in 2010 to 40.9% (\$10,524) higher in 2013. Similarly, for the \$1 million filer the income tax burden increased from 20.4% (\$10,984) above the national average in 2010 to 50.0% (\$27,932) above the average in 2013.
- Taxation of senior income in Minnesota remains very high relative to other states. Of the eleven senior filer types for which national rankings are meaningful², Minnesota ranks first in the nation in eight of them with tax burdens ranging from 37.4% to 132.2% above the national average.

¹ Our study relies on data from the state and federal governments to determine how income at these various levels is derived and the amount of applicable itemized deductions. Because government agencies must collect and verify data from income tax returns, with inaccurate records corrected or eliminated, there is about a two-year lag time before data is available for use. Tax year 2013 is therefore the most recent year we can study.

² Rankings for some lower income senior profiles included in the study are not meaningful because 2/3 or more of states are tied with no tax liability.

Table 1: Minnesota Results, Tax Year 2013

Filing Status	Income	Income Tax	Ranking (of 42)		2013 Tax Above/(Below) National Average	
			2013	Change From 2012	Dollars	Percent
Single	\$10,000	-\$96	40	-2	(\$142)	*
Single	\$20,000	506	19	-1	(\$8)	-1.6%
Single	\$35,000	1,284	22	-1	--	+0.0%
Single	\$50,000	2,278	17	-7	+\$198	+9.5%
Single	\$75,000	3,901	9	+3	+\$590	+17.8%
Single	\$100,000	5,310	9	+1	+\$768	+16.9%
Single	\$150,000	8,489	10	+1	+\$1,451	+20.6%
Single	\$250,000	17,303	3	+8	+\$4,405	+34.1%
Married	\$20,000	-1,343	38	+4	(\$952)	*
Married	\$35,000	-944	42	-1	(\$1,297)	NA
Married	\$50,000	1,257	23	+2	(\$101)	-7.4
Married	\$75,000	2,538	19	--	+\$123	+5.1
Married	\$100,000	4,066	15	-1	+\$373	+10.1
Married	\$150,000	6,934	15	--	+\$717	+11.5
Married	\$250,000	13,676	8	+5	+\$2,115	+18.3
Married	\$500,000	36,243	2	+10	+\$10,524	+40.9
Married	\$1,000,000	83,769	3	+8	+\$27,932	+50.0
HHouse	\$10,000	-771	37	+1	(\$539)	*
HHouse	\$20,000	-854	40	--	(\$859)	*
HHouse	\$35,000	697	28	-4	(\$233)	-25.1
HHouse	\$50,000	1,748	23	+1	(\$38)	-2.1
HHouse	\$75,000	3,397	14	-2	+\$433	+14.6
HHouse	\$100,000	4,712	12	--	+\$618	+15.1
HHouse	\$150,000	7,330	13	--	+\$974	+15.3
HHouse	\$250,000	15,023	8	+3	+\$2,727	+22.2
Sr-Married	\$20,000	0	*	--	+\$20	*
Sr-Married	\$35,000	0	*	--	+\$3	*
Sr-Married	\$50,000	157	12	+1	+\$42	+36.5
Sr-Married	\$75,000	2,316	1	+1	+\$1,318	+132.2
Sr-Married	\$100,000	4,345	1	--	+\$2,302	+112.7
Sr-Married	\$150,000	7,117	1	--	+\$2,802	+64.9
Sr-Married	\$250,000	13,749	1	--	+\$3,742	+37.4
Sr-Single	\$20,000	0	9	-3	(\$8)	*
Sr-Single	\$35,000	328	10	-1	+\$127	+62.7
Sr-Single	\$50,000	1,791	1	+1	+\$984	+122.0
Sr-Single	\$75,000	3,543	1	+1	+\$1,598	+82.1
Sr-Single	\$100,000	4,131	1	+1	+\$1,670	+67.8
Sr-Single	\$150,000	7,478	1	+1	+\$2,298	+44.4

* Not shown if U.S. average taxes are \$50 or less because comparisons to national averages could be misleading.
 NA: Not applicable, tax burden is negative creating distorting comparisons to national averages.

- Minnesota’s income tax system treats the married-joint-\$35,000 taxpayer profile most favorably relative to other states. That household had a negative tax burden (in other words, the household had no tax burden **and** the state awarded cash) of \$944, which is the lowest income tax burden in the nation for this type of filer. This favorable treatment highlights lawmakers’ decision to make Minnesota’s refundable earned income tax credit much more accessible than other states’ credits are. Conversely, the taxpayer profile receiving the least favorable treatment in Minnesota is the married-joint senior-\$75,000 filer with an income tax burden of \$2,316 – first in the nation and 132.2% above the national average.

It is important to recognize that changes in Minnesota rankings since the last study are affected not just by changes Minnesota made to its tax code between 2010 and 2013 but also by tax code changes other states adopted during that same period.

National effective tax rate rankings communicate an important complementary perspective to ranking studies that are based simply on aggregate income tax collections. As Table 2 shows, even though Minnesota is commonly grouped with other high income tax state peers, the income tax systems in these states can treat taxpayers at different incomes very differently.

Table 2: Selected Income Tax Comparison Study Rankings for High Income Tax States

State	Rankings (of 42)			
	State government income tax collections per \$1,000 of income	Married-Joint, \$35,000 Household Income	Single, \$50,000 Household Income	Married-Joint, \$250,000 Household Income
Oregon	1	3	2	1
New York	2	41	16	12
California	3	T29	35	11
Connecticut	4	39	24	18
Minnesota	5	42	17	2
Massachusetts	6	23	20	29
Wisconsin	7	25	10	17
North Carolina	8	11	4	8
Maine	9	T29	9	5
Illinois	10	7	13	30

The Structural Progressivity of the Minnesota Income Tax

Public perception of income tax progressivity is commonly based on the marginal tax rates that apply at various income levels. However, any assessment of an income tax system’s structural progressivity³ should also account for differences in how taxable income is computed as well as the variety and generosity of income tax credits accessible to filers at various income levels. Modeling and comparing income tax burdens for identical filer types at different income levels allows a much better understanding of the true functional progressivity of an income tax system. Comparing effective tax rates of filers with similar characteristics (filing status, number of dependents) across income levels yields a tax rate differential that can be used to evaluate structural progressivity.

Minnesota, as it has for many years, continues to be a national leader in the structural progressivity of its income tax. As Table 3 shows, Minnesota’s structural progressivity ranks among the highest in the nation

³ “Structural progressivity” refers to the progressivity of a tax system based entirely on its structural features. Because taxpayers are not distributed equally across the income spectrum, however, the specific progressivity of any system will differ somewhat from its structural progressivity. Measuring the specific progressivity of the 42 combined state-local income systems is beyond the scope of the report.

whether the comparison is based on “upper middle class” incomes or the top 2%. For the head of household filers we modeled (not shown in the table), Minnesota ranks third in nation for progressivity across all income levels.

Table 3: Most Progressive State Income Tax Systems, Measured by Comparing Effective Tax Rates and Selected Higher Incomes and \$20,000 for Married-Joint Returns

Tax Rate Differentials (TRD), Married Filing Joint Returns							
\$150,000 vs. \$20,000		\$250,000 vs. \$20,000		\$500,000 vs. \$20,000		\$1,000,000 vs. \$20,000	
Most Progressive Income Tax States	TRD	Most Progressive Income Tax States	TRD	Most Progressive Income Tax States	TRD	Most Progressive Income Tax States	TRD
1. New York	16.3%	1. New York	16.8%	1. New York	17.1%	1. New York	17.4%
2. D.C.	14.4%	2. D.C.	15.2%	2. D.C.	15.8%	2. D.C.	16.5%
3. Vermont	12.6%	3. Vermont	13.5%	3. Vermont	15.0%	3. Vermont	15.8%
4. Maryland	12.1%	4. Maryland	13.2%	4. Minnesota	14.0%	4. Minnesota	15.1%
5. Connecticut	11.5%	5. Minnesota	12.2%	5. Maryland	13.6%	5. Maryland	14.2%
6. Minnesota	11.3%	6. Connecticut	11.6%	6. Connecticut	12.2%	6. Connecticut	13.0%

The fact that Minnesota’s income tax system is highly progressive should surprise no one. A prime source of Minnesota’s remarkable income tax progressivity, however, may be surprising. Given the extraordinary focus on the progressivity impact of the new fourth income tax tier, it would be easy to allocate the cause for most or all of the progressivity in the system to the state’s graduated rate structure. However, our findings indicate that Minnesota’s version of the federal Earned Income Tax Credit – the Working Family Credit (WFC) – significantly enhances the progressivity in the state’s income tax system.

As Table 4 demonstrates, the Working Family Credit creates a negative 6.7% effective tax rate for a married-joint filer at \$20,000 of income. That 6.7% amount accounts for nearly 60% of the total tax rate differential between the \$150,000 married-joint filer and the \$20,000 filer. The impact of the Working Family Credit shrinks as incomes rise and the fourth income tax tier comes into effect, but the credit still provides nearly 45% of the total tax rate differential between married-joint filers at \$1 million of income and those at \$20,000 of income. However, it is a considerably larger effect than the impact of the fourth income tax tier, which only affects the two highest taxpayer profiles and creates a 1.0% differential at the \$500,000 level and a 1.4% differential at the \$1 million level.

Table 4: Effective Tax Rate Differentials Between Selected Higher Incomes and \$20,000 for Married-Joint Returns, With and Without Working Family Credit, Minnesota Filers Only

Item	Tax Rate Differential			
	\$150,000 vs. \$20,000	\$250,000 vs. \$20,000	\$500,000 vs. \$20,000	\$1,000,000 vs. \$20,000
Total Tax Rate Differential	11.3%	12.2%	14.0%	15.1%
Attributable to WFC	6.7%	6.7%	6.7%	6.7%
Attributable to Fourth Income Tax Tier	0.0%	0.0%	1.0%	1.4%
Remaining Differential	4.6%	5.5%	6.2%	7.0%

Note: Numbers may not add due to rounding.

What makes Minnesota’s earned income tax credit such a powerful driver of progressivity in the income tax system? For starters, it is one of the most generous in the nation. As Table 4 shows, the \$1,343 benefit the state provides to the \$20,000 married filer via the WFC is tied for the fifth most generous in the nation. When we adjust the credit amounts for the cost of living in each state to determine their purchasing power, Minnesota’s Working Family Credit climbs to third most generous in the nation for filers with these characteristics, leapfrogging New York and Maryland and trailing only the District of Columbia and Vermont.

Table 4: Nominal Benefit and Purchasing Power of State Earned Income Tax Credits, for Married-Joint Filers at \$20,000 of Income

State	Nominal Benefit			Purchasing Power of Benefit		
	Amount	Rank	% Above (Below) MN	Amount	Rank	% Above (Below) MN
District of Columbia	\$2,149	1	60.0%	\$1,555	1	17.6%
Vermont	1,719	2	28.0%	1,462	2	10.6%
Minnesota	1,343	T5	--	1,322	3	--
New York	1,591	3	18.5%	1,207	4	(8.7%)
Maryland	1,373	4	--	1,169	5	(11.6%)
Kansas	913	8	(32.0%)	987	6	(25.3%)
Connecticut	1,343	T5	--	948	7	(28.3%)
New Jersey	1,074	7	(20.0%)	866	8	(34.5%)
Iowa	752	10	(44.0%)	810	9	(38.7%)
Massachusetts	806	9	(40.0%)	649	10	(50.9%)
Wisconsin	591	11	(56.0%)	606	11	(54.2%)
New Mexico	537	T12	(60.0%)	583	12	(55.9%)
Nebraska	537	T12	(60.0%)	582	13	(56.0%)
Illinois	537	T12	(60.0%)	558	14	(57.8%)
Indiana	477	15	(64.5%)	525	15	(60.3%)
Michigan	322	T16	(76.0%)	350	16	(73.5%)
Oklahoma	269	18	(80.0%)	297	17	(77.5%)
Oregon	322	T16	(76.0%)	260	18	(80.3%)
North Carolina	242	19	(82.0%)	249	19	(81.2%)
Louisiana	188	21	(86.0%)	200	20	(84.9%)
Rhode Island	201	20	(85.0%)	164	21	(87.6%)

Note: Delaware, Maine, and Virginia's credits offer \$0 benefit to this taxpayer because their credits are nonrefundable and filers in these circumstances have no tax liability that can be offset.
Purchasing power calculating by adjusting nominal benefits by state cost of living data for the second quarter of 2014, as published by the Missouri Economic Research and Information Center.

The Working Family Credit's comparatively greater accessibility and generosity to filers at higher income levels also enhances the progressivity of Minnesota's income tax system. As Table 5 illustrates, for a married-joint filer at \$35,000 of income – roughly two full-time minimum wage workers – Minnesota's earned income tax credit benefit is the most generous in the nation – exceeding the next closest state by \$150 or over 10% and offering over 3 times what the majority of states with a similar credit provide.

Table 5: State Earned Income Tax Credit Benefits for Married-Joint Filers at \$35,000 of Income

State	Benefit		
	Amount	Rank	% Above (Below) MN
Minnesota	\$1,415	1	--
Maryland	1,264	2	(10.7%)
District of Columbia	1,164	3	(17.7%)
Vermont	931	4	(34.2%)
New York	873	5	(38.3%)
Connecticut	727	6	(48.6%)
New Jersey	582	T7	(58.9%)
Virginia	582	T7	(58.9%)
Delaware	520	9	(63.3%)
Kansas	495	10	(65.0%)
Massachusetts	436	11	(69.2%)
Wisconsin	320	12	(77.4%)
Illinois	291	T13	(79.4%)
New Mexico	291	T13	(79.4%)
Nebraska	291	T13	(79.4%)
Rhode Island	223	16	(84.2%)
Michigan	175	T17	(87.6%)
Oregon	175	T17	(87.6%)
Indiana	161	19	(88.6%)
Oklahoma	145	20	(89.8%)
North Carolina	131	21	(90.7%)
Louisiana	102	22	(92.8%)
Iowa	0	T23	(100.0%)
Maine	0	T23	(100.0%)

A careful comparison with Table 4 finds that Minnesota's Working Family Credit provides a greater benefit for married-joint filers at \$35,000 of income than it does for the same filer at \$20,000. For married filers with two children, the maximum credit in tax year 2013 was \$1,879 for filers with between \$23,200 and \$30,100 of earned income. Even though the credit is phasing out for the married-joint \$35,000 taxpayer, the program still provides a larger credit for this household than for the married-joint household with \$20,000 of income.

Combined State and Federal Burdens

In addition to state income taxes, Minnesotans are also subject to the federal income tax – and with it substantially higher marginal tax rates. Examining filers' total federal and state income tax burdens together offers perspective on both the full extent of the income taxation of Minnesotans and the functional income tax progressivity that results.

Table 6 presents our findings for married-joint filers at all the income levels included in the study. At the lowest income level studied, the \$5,372 benefit from the federal Earned Income Tax Credit (EITC) and a \$1,000 federal refundable tax credit for each child is added to the \$1,343 Minnesota Working Family Credit benefit. The filer owes nothing in federal and state income tax; yielding a total \$8,715 tax refund and a combined negative income tax rate of 43.6%. At the top end (\$1 million of income), the \$83,769 state income tax burden is combined with a federal burden over three times that amount, yielding a combined income tax rate of 35.9%. As the table indicates, when including federal income taxation the effective tax rate differential between the highest married income filer to the lowest married income filer is 79.5% – over five times higher

than for state taxes alone. Such findings demonstrate the far more influential role the federal government has than the state does on income tax progressivity.

Table 6: Combined Minnesota and Federal Income Tax Burdens and Rates, Married-Joint Filers

Married Filing Joint Returns					
Income Level	Minnesota Income Tax	Federal Income Tax	Combined Tax Burden	Combined Effective Tax Rate	Effective Tax Rate Differential (vs \$20,000)
\$20,000	(\$1,343)	(\$7,372)	(\$8,715)	-43.6%	--
\$35,000	(\$944)	(\$4,233)	(\$5,180)	-14.8%	28.8%
\$50,000	\$1,257	\$325	\$1,582	3.2%	46.8%
\$75,000	\$2,538	\$3,548	\$6,087	8.1%	51.7%
\$100,000	\$4,066	\$6,787	\$10,853	10.9%	54.5%
\$150,000	\$6,934	\$17,231	\$24,165	16.1%	59.7%
\$250,000	\$13,676	\$38,768	\$52,443	21.0%	64.6%
\$500,000	\$36,243	\$113,052	\$149,295	29.9%	73.5%
\$1,000,000	\$83,769	\$275,057	\$358,826	35.9%	79.5%

Note: Numbers may not add due to rounding.

Commentary and Discussion: Minnesota Policy Issues

The Status of Minnesota's Working Family Credit

Policy analysts and scholars have long recognized and praised the federal EITC – and its state-level equivalents – as being one of the most efficient and effective means of combating poverty and improving the lives of low-income households. Earned income credits encourage and reward work. Studies have shown earned income credits encourage single parents to leave welfare for work and are more influential in encouraging low-income labor force participation among low-income households than welfare reform or even a strong economy. In the process, it lifts households out of poverty. According to one study, in 2013 the federal EITC lifted about 6.2 million people out of poverty – including about 3.2 million children – and reduced the severity of poverty for another 21.6 million people, including 7.8 million children. State level credits further contribute to this performance. For these reasons, earned income tax credits generally receive considerable broad based and bipartisan political support.

Less recognized, however, are the powerful progressivity effects earned income tax credits have with respect to the fairness of Minnesota's income tax system – or to the tax system as a whole. The strong progressivity influence the state's property tax refund program has on the state-local tax system is relatively easy to find in the state's *Tax Incidence Study* because it is a stand-alone tax component. In contrast, the Working Family Credit's even-more-potent progressivity impacts are largely incorporated into the general findings on the state's individual income tax, with detail on the credit's specific impact available in the chapter on "Additional Results". But as our findings show, the Working Family Credit's influence on the structural progressivity of Minnesota's income tax is much greater than that created by the state's 9.8% fourth income tax tier.

Minnesota's Working Family Credit already ranks as one of the most generous and accessible in the nation. If policymakers desire additional "tax fairness," enhancing the WFC is a preferable way to reduce the inherently regressive nature of other taxes. It offers far more progressivity for the dollar while avoiding the potential economic dangers and harmful effects created by higher income tax rates.

If the goal is further improvement in the economic condition and circumstances of low-income households, it will be important for policymakers to understand how other policies being pursued toward this end will interact with the tax code, and especially the WFC. Of chief interest are the interactive effects between higher minimum wage policies and tax credits. There is considerable interest in some quarters to increase the

minimum wage to \$15 per hour. Table 7 presents the tax-related effect (based on tax year 2013) of increasing the minimum wage from \$9.50 per hour (scheduled to go into effect in Minnesota on August 1, 2016) to both \$12.00 per hour and \$15 per hour, for married-joint filers working 30 hours per week each at the applicable minimum wage.

Table 7: Effect of Increase in Minimum Wage to \$12 and to \$15 on Married Joint Filers, Tax Year 2013

Married-Joint Filer (2 Earners) Each Working 30 Hours/Week						
Minimum Wage	Gross Income	Federal Tax	State Tax	Payroll Tax	Net Income	Tax Rate on Income From Higher Minimum Wage
\$9.50/Hour	\$29,640	(\$5,762)	(\$1,671)	\$4,535	\$32,538	NA
\$12.00/Hour	\$37,440	(\$3,340)	(\$493)	\$5,728	\$35,545	61.5%
\$15.00/Hour	\$46,800	(\$375)	\$971	\$7,160	\$39,044	62.1%

Note: Numbers may not add due to rounding.

As illustrated, an additional \$2.50 hour increases the household's gross income by \$7,800, while an additional \$5.50 an hour yields a \$17,160 increase in gross income. However, this revenue gain is offset by either \$1,193 or \$2,625 in higher payroll (Social Security and Medicare) taxes and an increase in state and federal tax liabilities of either \$3,600 or \$8,779 – mostly driven by reductions in earned income tax credits. The net effect is an effective tax rate of 61.5% or 62.1% on the income resulting from the higher minimum wage – a figure which may be understated if households lose access to income support programs (such as child care or health care subsidies) because their additional income pushes them over eligibility thresholds. Findings like these demonstrate that policymakers need to understand the interactive and possibly unintended effects of policy initiatives designed to improve the economic well being of low-income Minnesotans.

Minnesota Senior Taxation

Minnesota high national rankings in senior income taxation can be traced to two primary policies: 1) the state's decision to offer no additional benefits for Social Security income beyond conformity to federal law;⁴ and 2) no state exemptions or exclusion for private pension income. Most other states offer one or the other and in many cases both.

In Minnesota, the push for senior tax relief has been a part of recent legislative sessions, and demographic trends alone are very likely to increase this political pressure. Moreover, the role of income taxes in aggravating any existing disincentives to retain residency in the state following retirement will fuel further interest in reducing our comparative ranking. On the other hand, from a pure tax policy perspective, neither ability to pay, nor benefit, nor any other theory of taxation provides an argument under which age alone should exempt a person from income taxation.

Perhaps the bigger policy question going forward with respect to state rankings is whether other states will be able to afford to keep their current preferential senior treatments intact. The price tag of such favorable treatment will only grow in years to come as states forgo increasing amounts of income tax revenue. As seniors' demand for public services – especially health care – grows over time with the aging of the nation's population, the fiscal implications of senior tax preferences will magnify over time. For example, a 2015 study found that in Pennsylvania (a state which exempts both Social Security and pension income), taxable income is projected to increase more or less in line with increases in BEA personal income – but state spending on seniors is projected to grow 40% to 50% faster than personal income.⁵

⁴ According to the Department of Revenue's *Tax Expenditure Budget* for FY 2014-17, the Social Security exemption cost the state \$242.6 million in income tax revenue in FY 2014 and \$252.6 million in FY 2015.

⁵ Robert P. Strauss and Yunni Deng, "The Fiscal Implications of Pennsylvania's Aging Population" in *State Tax Notes*, January 19, 2015.

Our cursory review of the literature on states' exemption of Social Security income specifically and retirement income generally uncovered surprisingly little state-specific information or assessments of the net fiscal impacts of such policies. Given the potentially significant fiscal implications, additional careful study is warranted before pursuing an aggressive push for senior income tax parity.

Tax Competitiveness

Minnesota's 2013 income tax changes reinvigorated the debate over state tax competitiveness. Since the fourth tier's enactment, many continue to express concern businesses will forego investments or expansion in the state or move existing activities elsewhere. Others argue that the state is using those new tax revenues on public goods that are critical to our long-term economic success while pointing out our economy is outperforming relative to the rest of the nation and showing no signs of laboring under excessively high taxation.

Minnesota's current debate about taxes and state competitiveness is a microcosm of a debate taking place around the country, and for that matter, one that has gone on for decades. Academics have produced voluminous amounts of studies attempting to measure the effect tax policy has on mobility, the location of new plants or firms, and economic and employment growth generally – each with its own methodological approach, specific questions, and research specifications. While a review of this work is far beyond the scope of this issue brief, it's worth noting that the adjectives commonly found in literature summarizing these investigations and their findings are “contradictory,” “unstable,” “fragile,” and “conflicting.”

While acknowledging that no individual study provides the definitive word on tax impacts, two working papers newly published by the National Bureau of Economic Research are particularly interesting for their potential relevance to the state income tax policy generally and the Minnesota fourth tier specifically. These studies suggest Minnesota's current income tax policy has legitimate competitiveness implications worthy of careful consideration.

The first study⁶ explored the mobility patterns of “star scientists” – the most productive scientists in the country as reflected in patent counts – in response to taxation over a period of 30-plus years. Notably, this study found Minnesota has more star scientists on a per capita basis than any of the state's high performing economic peers. Other studies have found the location of star scientists is responsible for the establishment of research and development facilities and in some cases entire industries. The researchers found “large, stable, and precisely estimated effects” of star scientists' migration patterns leading the researchers to conclude: “state taxes have a significant effect on the geographic location of star scientists and possibly other high skilled workers.”

The second study⁷ examined the reallocation of business activity in response to state tax changes. For the period between 1977 and 2011, researchers examined 27 million individual U.S. business establishments belonging to firms with multiple facilities and having at least 100 total employees with operations in at least two states. The study found no evidence that the business activity of C corporations responds to changes in the individual income tax. However, for pass through businesses (businesses that are taxed using the individual income tax system, not the corporate income tax system) a one percentage point increase in the individual income tax resulted in a 0.2 % decline in pass through business employment. Around half the effects were offset by the reallocation of business activity to other states where the firms also had establishments leading researchers to conclude: “tax competition across states is economically relevant.”

If the history of research on tax policy and economic activity is any indication, future studies on these topics may yield some alternative findings. Nevertheless, one competitiveness implication can probably be stated without much, if any, qualification. With Minnesota's increased outlier status with respect to taxation of higher incomes, it is critical that the benefits and value proposition be very clear and tangible to the pass through business entities and highly paid talent paying the higher tax burden. Business activity will be attracted to other

⁶ Enrico Moretti and Daniel Wilson, *The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientists*, NBER Working Paper 21120, April, 2015.

⁷ Xavier Giroud and Joshua Rauh, *State Taxation and the Reallocation of Business Activity: Evidence from Establishment-Level Data*, NBER Working Paper 21534, September, 2015.

locations if equivalent levels and quality of public goods, human capital, physical infrastructure can be “purchased” at lower tax prices elsewhere. Minnesota must also pursue policies to ensure that the results from taxation rank as high nationally as the tax burden itself.

Addressing Income Inequality Concerns

In recent years rising income inequality has triggered a national policy debate, but the issue is getting considerable attention at the state level as well. Two years ago, one opinion leader identified income inequality as the most urgent policy crisis facing Minnesota describing it as “a clear and present danger to our state.”⁸ The issue has only attracted more interest and attention since then.

Tackling this issue at the state level, however, presents challenges. For starters, it is questionable how large a role any state can assume in addressing this concern through its tax code without triggering economic consequences. Economists generally recognize that since state borders are very open these responsibilities are best addressed by the federal government.

In Minnesota, the challenge of having government address this issue further than it already has is heightened by the fact that, as our income tax findings show, both Minnesota’s income tax system and the tax system overall already demonstrate extraordinary accommodation and sensitivity to this issue:

- Minnesota already features one of the most progressive income tax systems in the nation and taxes its highest income earners at rates 20-50% above the national average.
- Minnesota’s earned income credit is already one of the most generous in the nation yielding negative effective income tax rates and some of the lowest national income tax rankings for low income filer types.
- According to the *Tax Incidence Study*, when looking at the total taxes individuals pay directly to governments in Minnesota, the tax burden is now progressive. In other words, the progressivity of Minnesota’s income tax (combined with the highly progressive property tax refund program, which is also the nation’s most generous) offsets any regressivity found in other forms of individual taxation – including sales taxes, gas taxes, and highly regressive vice taxes. However, taxes on business are regressive and overwhelm the progressivity of the taxes on individuals, resulting in an overall tax system that is regressive.

Compounding the challenge is convincing high-income earners that their tax support is currently insufficient. Because most taxpayers probably do not consciously evaluate their federal and state income tax burdens independently, those subject to the state’s top bracket likely perceive the progressivity and fairness of the overall income tax landscape very differently than others. Policymakers concerned solely with Minnesota taxes may examine Table 6, compare a \$500,000 married filer to a \$50,000 married filer, and see a person with 10 times more income who pays 29 times more in state income tax. A \$500,000 filer views the same data and likely sees someone with 10 times more income paying 94 times more in total income tax.

All this suggests Minnesota has reached a practical limit in advancing further income equality objectives by raising revenue through the income tax system. We have essentially spent all our “fairness ammunition” with respect to taxing individual income, especially if one gives any credence at all to the competitiveness principle of taxation. Short of raising income tax rates or implementing yet another income tax tier, any opportunities for substantial new income tax revenues to spend on these objectives would lie in capping, eliminating, or otherwise limiting access to various federal income tax deductions and credits for higher income households to which the state currently conforms. Besides being intensely controversial, such proposals would create federal conformity issues. Moreover, proposals like capping the deductibility of charitable contributions or making interest on state and local government bonds taxable would likely raise considerable objections even among advocates concerned with income inequality.

⁸ Dane Smith, President of Growth and Justice, interview with *Twin Cities Business*, November 22, 2013.

Ironically, further pursuit of even more progressive taxation in Minnesota may do significant damage to the cause of addressing income inequality. In exploring why cuts in social spending took root in some countries but not others, Monica Prasad of Northwestern University has found⁹ that countries with stronger progressive tax codes and more punitive business taxation triggered much stronger and more aggressive conservative responses against social welfare policies and related spending. The net effect in these countries is that progressive agendas actually lost ground over time. In short: the progressivity of tax codes is negatively correlated with the amount of redistribution they do. The less progressive the tax code, the more overall progressive the fiscal system.

As a result, for both practical and political reasons, any substantial new spending in the future intending to reduce income inequality will almost certainly need to be supported by new revenue streams that are inherently more regressive, such as the expansion of the consumer sales tax base. Such proposals would be a true acid test of Minnesota's commitment to addressing the issues of income inequality and determine whether Minnesota's progressive ideals are based on deep communitarian roots or the shallow but politically popular message of targeting the rich.

⁹ Monica Prasad and Yingying Deng, "Taxation and the Worlds of Welfare" in *Socio-Economic Review*, Vol. 7, Issue 3, (July 2009) pp. 431-457.