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## **Middle Income Tax Reform Options for Wisconsin**

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The state of Wisconsin has a progressive income tax system with statutory marginal tax rates that increase with income. But the tax code has a number of credits and deductions which phase in and out, meaning that the effective rates that taxpayers face may differ quite sharply from the statutory rate. In fact, we show that under current law families in the middle of the income distribution face the highest marginal income tax rate of 9.83%, well above the state's top income tax rate of 7.65% on the highest earners. We evaluate two reforms to simplify the tax structure and lower marginal tax rates on middle income households: ending the phase-out of the standard deduction and eliminating the second tax bracket. We show that these reforms, particularly in combination, sharply lower effective tax rates on middle income filers. After these reforms, middle income families would face a marginal tax rate of 6.27%, the statutory rate in the current third tax bracket. We estimate that the combined reforms would cut taxes by \$1.1 billion per year, and that nearly 70% of all filers would receive a tax cut, which would average \$500. While marginal rates on middle income households would be most affected, higher income households would see larger tax cuts in absolute terms. Households with incomes above the current threshold for the full phase-out of the standard deduction would receive a flat lump sum tax rebate. But as a proportion of income, middle income households in the \$40,000-\$100,000 range would receive the largest benefit from the combined reforms, with increases of 0.9%-1% in after-tax income.

## 1. Introduction and Summary

The state of Wisconsin relies heavily on its personal income tax. The Legislative Fiscal Bureau recently estimated that for fiscal year 2020-2021 the personal income tax would raise \$9.25 billion, or 48% of the \$19.25 billion in total state tax collections. The state income tax structure is progressive, with statutory marginal tax rates that increase with income. But the tax code has a number of credits and deductions which phase in and out, meaning that the effective rates that taxpayers face may differ quite sharply from statutory rates. In fact, as we show below, under current law families of four with incomes around \$50,000 face the highest effective marginal tax rate of 9.83%, more than two percentage points above the 7.65% top rate for the highest earners.

We evaluate two tax reform options to simplify the state tax code and lower marginal tax rates on middle income families: eliminating the phase-out of the state's standard deduction, and getting rid of the second tax bracket. Both of these features of the state tax code are rather unusual. While the federal income tax provides a flat standard deduction against income, in Wisconsin the standard deduction starts phasing out at relatively low income levels (\$23,000 for a married couple), increasing the effective marginal tax rate. In addition, the tax system has four brackets but the bottom two are very narrow, which leads to a sharp increase in marginal rates at low incomes. We examine eliminating the second bracket, which extends the lower marginal rate over a larger range of incomes. We also evaluate the combination of reforms: ending the phase-out of the standard deduction and eliminating the second tax bracket.

We find that these reforms, and especially their combination, would lower marginal tax rates on middle income families. Rather than paying the highest marginal rates as in the current system, marginal rates for middle incomes would top out at 6.27%, the statutory tax rate in the current third tax bracket. Moreover, effective tax rates would more closely follow statutory rates and increase with income, increasing the simplicity and transparency of the tax code.

In addition to illustrating the impact on marginal tax rates, we use a microsimulation of tax returns to evaluate the revenue and distributional implications of these reforms. We estimate that eliminating the phase-out of the standard deduction would cut taxes by \$844 million, while eliminating the second tax bracket would cost \$273 million, and their combination would lead to a \$1.1 billion tax cut. Overall, the combined reform would cut taxes for 2.2 million households in the state, nearly 70% of all filers, providing an average tax cut of \$500. While the reforms would affect marginal tax rates for middle income households, the cumulative nature of the tax structure means that higher income filers would effectively receive a flat, lump-sum tax cut. Thus higher income households would receive larger dollar amounts in tax reductions than lower incomes. For example, filers with income over \$100,000 would get an average \$907 tax cut under the combined reform, more than double the \$450 cut for households in the \$40,000-\$70,000 income range. However as a proportion of income, middle income households in the \$40,000-\$100,000 range would receive the largest benefit from the reforms, with increases of 0.9%-1% in after-tax income.

## 2. Wisconsin State Income Tax: Effective and Statutory Rates

Under the state individual income tax, Wisconsin taxable income is multiplied by the applicable tax rates to arrive at gross tax liability. Currently, the state employs four tax brackets, with a separate tax rate assigned to each bracket. The tax rate structure is cumulative so that each tax rate applies only to income that falls within the corresponding bracket. A taxpayer with income exceeding the threshold for the top bracket would have income subject to each of the four tax rates. The tax brackets vary by filing status and are indexed annually for inflation. Table 1 shows the tax rate schedule for singles and married filing jointly for tax year 2020. The statutory marginal tax rate (MTR) takes one of four values depending on filing status and taxable income.<sup>1</sup>

**Table 1. Individual Income Tax Rate Schedule**

Marginal Tax Rate (%)	Taxable Income Brackets (\$)	
	Single	Married Filing Jointly
3.54	0 – 11,970	0 – 15,960
4.65	11,970 – 23,930	15,960 – 31,910
6.27	23,930 – 263,480	31,910 – 351,310
7.65	263,480+	351,310+

While the statutory MTR is the derivative/slope of *gross* tax liability with respect to *taxable* income, we define the effective MTR as the derivative/slope of *net* tax with respect to Wisconsin adjusted *gross* income (WAGI). As the base for state individual income tax, WAGI is gross income adjusted for income and expenses exempt from state individual income tax. Taxable income is determined by subtracting the standard deduction and personal exemptions from WAGI. As mentioned above, taxable income is multiplied by the applicable tax rates to arrive at gross tax liability. Finally, net tax liability is determined by subtracting nonrefundable and refundable tax credits from gross tax liability. Consequently, changes in deductions and tax credits affect the effective MTR even if the statutory MTR remains unchanged.

We use a married couple filing jointly with two children as an example to illustrate the calculation of the effective MTR and how it would change in response to our proposed reforms of ending the phase-out of the standard deduction, eliminating the second tax bracket, and their combination.

<sup>1</sup> The tax codes are obtained from Informational Paper 2 on Individual Income Tax by Wisconsin Legislative Fiscal Bureau: [https://docs.legis.wisconsin.gov/misc/lfb/informational\\_papers/january\\_2021/0002\\_individual\\_income\\_tax\\_informational\\_paper\\_2.pdf](https://docs.legis.wisconsin.gov/misc/lfb/informational_papers/january_2021/0002_individual_income_tax_informational_paper_2.pdf)

### 3. Effective Tax Rates: Married Couple with Two Children

We now illustrate how tax credits and deductions lead the effective MTR to differ, in some cases quite sharply, from statutory tax rates. We focus on a married couple with two children that file jointly, but the results are similar (with different income cutoffs) for other taxpayers.

To obtain the effective MTR, the first step is to calculate taxable income from WAGI by subtracting personal exemptions and the standard deduction. Wisconsin allows a personal exemption of \$700 for each taxpayer, spouse and dependent. The state also has a sliding scale standard deduction, which means that as WAGI rises, the standard deduction phases out to zero. As shown in figure 1, for married filing jointly, the standard deduction is \$20,470 if WAGI is below \$23,000, and then declines linearly at a rate of 19.778% before it exhausts when WAGI reaches \$126,499.

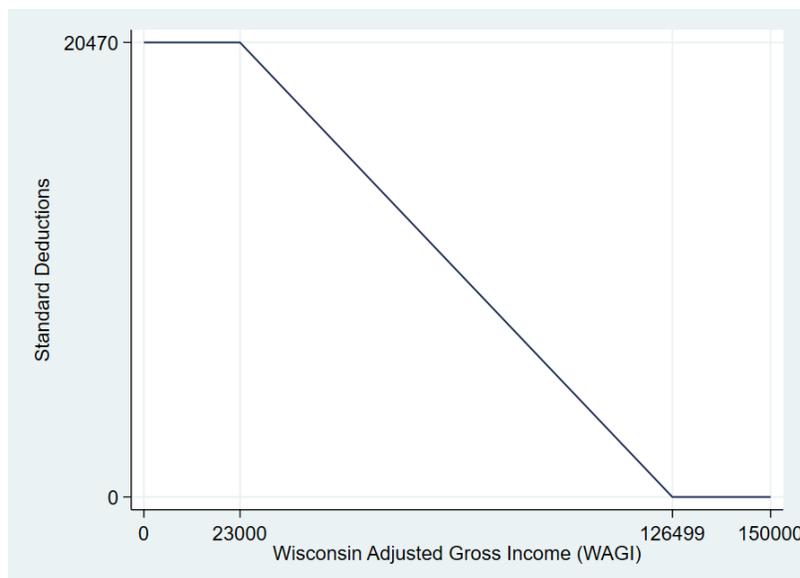


Figure 1: The value of the standard deduction for a married couple filing jointly

Because of personal exemptions and the standard deduction, taxable income is zero for families with WAGI below \$23,226. For WAGI between \$23,226 and \$126,499, taxable income increases by about \$1.2 for each additional dollar of WAGI because the standard deduction declines by about \$0.2 for each additional dollar of WAGI. After the standard deduction exhausts for WAGI above \$126,499, taxable income increases one for one with WAGI. Applying the tax rate schedule in table 1 to taxable income leads to gross tax liability shown in figure 2. For WAGI between \$23,226 and \$36,551, taxable income ranges between \$0 and \$15,960, and the gross tax liability increases by about 4.24 cents for each additional dollar of WAGI. The effective MTR (before credits discussed below) is thus 4.24%, which is about 1.2 times of the statutory rate of 3.54% shown in table 1 because of the phase-out of the standard deduction. Similarly, the effective MTR is about 5.57% (1.2 times the statutory rate of 4.65%) for WAGI between \$36,551 and \$49,867, and it's about 7.51% (1.2 times the statutory rate of 6.27%) for WAGI between \$49,867 and \$126,449. After that, the standard deduction exhausts and the

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effective MTR is equal to its statutory value of 6.27% for WAGI between \$126,449 and \$150,000. We limit the calculation to WAGI below \$150,000 for illustration.

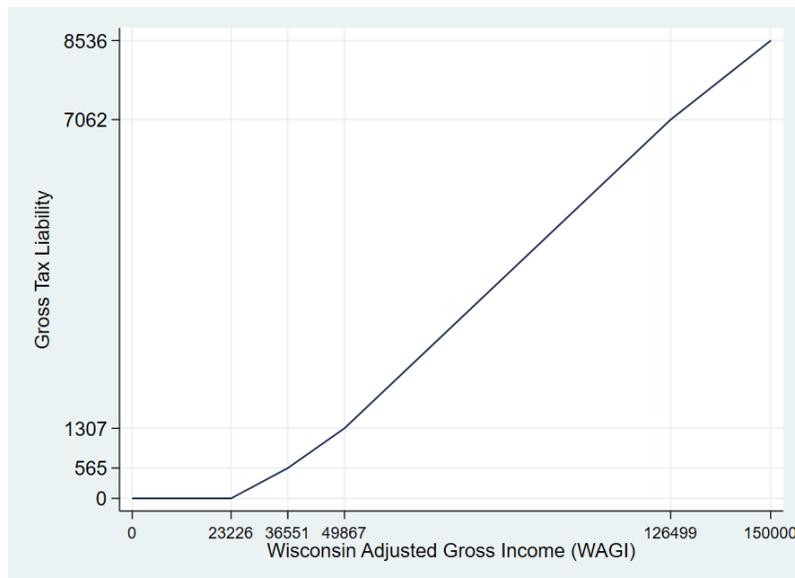


Figure 2: The gross tax liability for a married couple with two children filing jointly

Not all gross taxes have to be paid. Instead, households could use nonrefundable and refundable tax credits to reduce their tax payments. In this paper, we consider one nonrefundable credit, the married couple credit, and one refundable credit, the earned income tax credit (EITC).

A married couple credit is available to married filing jointly where both spouses are employed. The credit is equal to 3% of the first \$16,000 of the earned income of the lower-earning spouse, with a maximum credit of \$480. Assuming the lower-earning spouse accounts for 40% of household WAGI, figure 3 plots the married couple credit as a function of WAGI. The solid line shows the amount of credits available, while the dashed line shows the amount of credits used. They are different because, as a nonrefundable credit, the married couple credit that households can use is limited by their gross tax liability. For example, households with WAGI below \$23,226 do not have to use the credit because they have a zero tax liability even if the credit is available to them. Households with WAGI between \$23,226 and \$32,393 have a positive gross tax liability that is smaller than the married couple credit available and thus do not have to use all of them. For these households, the credit reduces their tax liability to zero. Households with WAGI above \$32,393 have a gross tax liability that is larger than the married couple credit available and thus use all of the credits available, after which they still face a positive tax.

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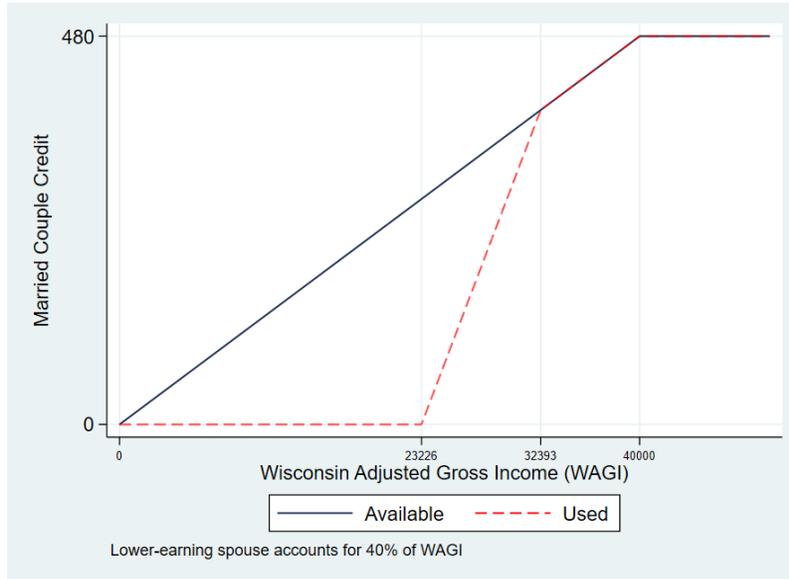


Figure 3: The value of the married couple credit for a married couple filing jointly

The Wisconsin EITC is equal to a percentage of the federal EITC, based on the number of children in the household. For households with two children, it's 11% of the federal credit. For tax year 2020, the federal credit for joint filers with two children is 40% of household earnings not exceeding \$14,800, and the phase-out range is \$25,220-\$53,330. In combination, we obtain the Wisconsin EITC as a function of WAGI shown in figure 4.

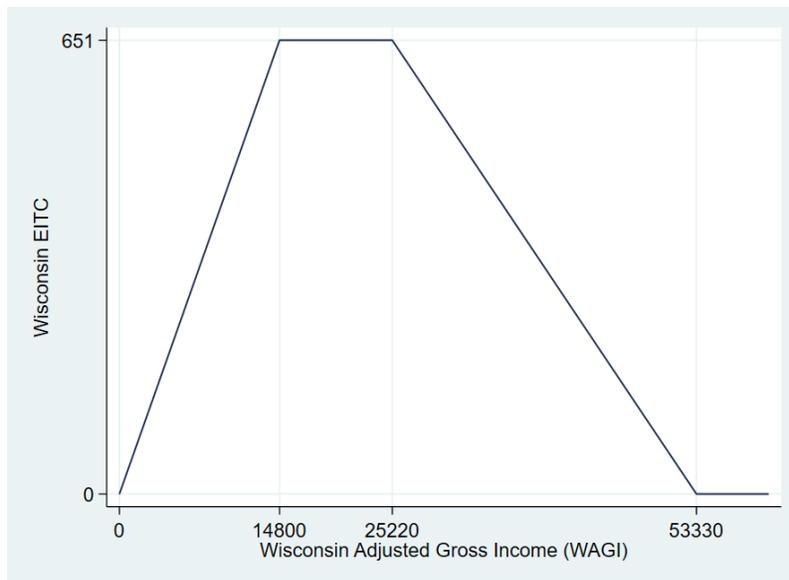


Figure 4: The value of Wisconsin EITC for a married couple filing jointly with two children

After adjusting for the state EITC and the married couple credit, we obtain the net tax as a function of WAGI shown in figure 5. The effective MTR, defined as the slope of the curve in figure 5, is shown in figure 6. For comparison, figure 6 also plots the statutory MTR as a function of WAGI.

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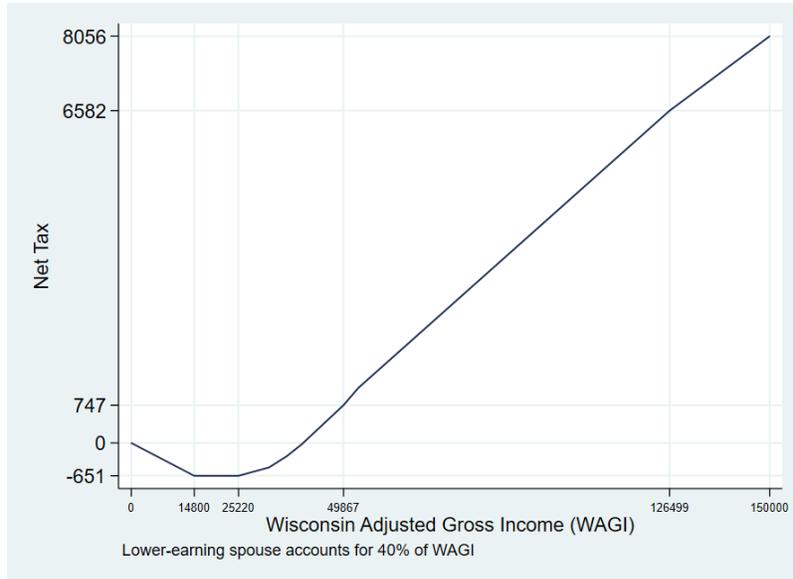


Figure 5: The net tax liability for a married couple with two children filing jointly

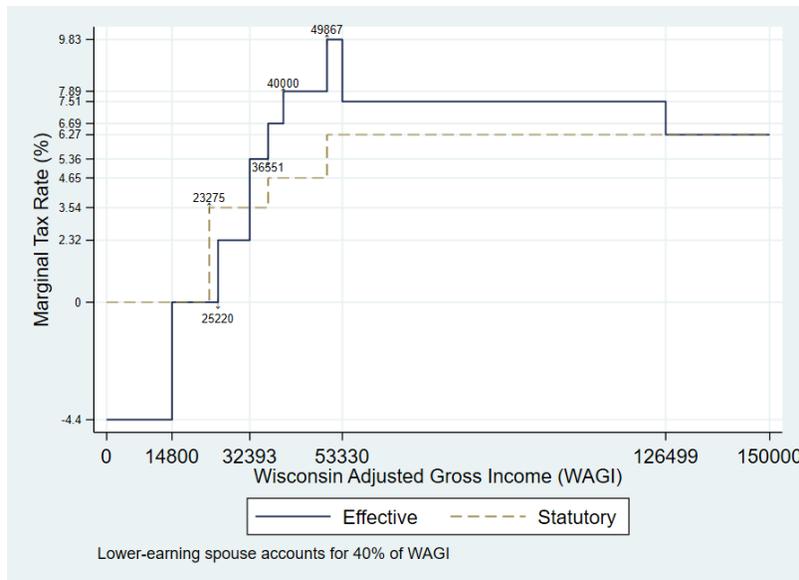


Figure 6: The effective marginal tax rate and statutory tax rate for a married couple with two children filing jointly

As the figure shows, this effective MTR is very complex. For WAGI below \$14,800, the net tax is negative and decreases at a rate of 4.4%, implying an effective MTR of -4.4%. This happens because (1) there is no tax liability due to personal exemptions and the standard deduction, and (2) Each additional dollar of WAGI raises disposable income by \$1.044 with the 4.4 cents coming from the state EITC.

For WAGI between \$14,800 and \$25,220, the net tax is flat at -\$651 because of state EITC, and the effective MTR is zero. Although the statutory rate jumps from zero to 3.54% by the end of

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this phase, it's not effective yet because the resulting gross tax is less than the married couple credit.

For WAGI between \$25,220 and \$32,393, the effective MTR is 2.32%, the rate at which state EITC phases out. The net tax starts to increase but remains negative. The statutory rate of 3.54% is still ineffective because of the married couple credit.

For WAGI between \$32,393 and \$36,551, the effective MTR is about 5.36%. The statutory rate of 3.54% is finally effective. The phase-out of the standard deduction raises the rate to about 4.24%. The phase-in of the married couple credit brings it down to about 3.04%. Finally, the phase-out of state EITC raises it to 5.36%. The net tax is still negative.

For WAGI between \$36,551 and \$40,000, the effective MTR is about 6.69%. Relative to the previous phase, the statutory rate increases from 3.54% to 4.65%. The phase-out of the standard deduction raises the rate to about 5.57%. The phase-in of the married couple credit brings it down to about 4.37%. Finally, the phase-out of state EITC raises it to about 6.69%.

For WAGI between \$40,000 and \$49,867, the effective MTR is about 7.89%, 1.2 percentage points higher than the last phase because the married couple credit is now flat. Specifically, the statutory rate is still 4.65%. The phase-out of the standard deduction raises the rate to about 5.57%, and the phase-out of state EITC raises it further to about 7.89%. The net tax turns positive for WAGI above \$40,402.

For WAGI between \$49,867 and \$53,330, the effective MTR reaches its highest level of about 9.83%. Relative to the last phase, the statutory rate increases to 6.27%. The phase-out of the standard deduction raises the rate to about 7.51%, and the phase-out of state EITC raises it further to about 9.83%.

For WAGI between \$53,330 and \$126,499, the effective MTR is about 7.51%, 2.32 percentage points lower than the previous phase because the state EITC now exhausts. The statutory rate is 6.27%, and the phase-out of the standard deduction raises the effective rate to about 7.51%.

Finally, for WAGI above \$126,499, the standard deduction phases out completely, and the effective MTR is now equal to the statutory rate, which is equal to 6.27% for WAGI below \$150,000.

In summary, the phase-in of tax credits reduces the effective MTR, while the phase-out of both the standard deduction and the tax credits raises the effective MTR. Overall, the effective MTR is smaller than the statutory rate for WAGI below \$32,393, and it is larger for WAGI between \$32,393 and \$126,449. In particular, for WAGI between \$40,000 and \$53,330, the statutory rate is 6.27% or less while the effective MTR is greater than 7.89%. These are highest effective marginal tax rates across the entire income distribution.

#### 4. Reform 1: Eliminating the Standard Deduction Phase-Out

As we have seen, the phase-out of the standard deduction raises effective marginal tax rates across a broad range of incomes. Our first reform option eliminates this phase-out, leaving the standard deduction as a flat deduction dependent only on filing status.

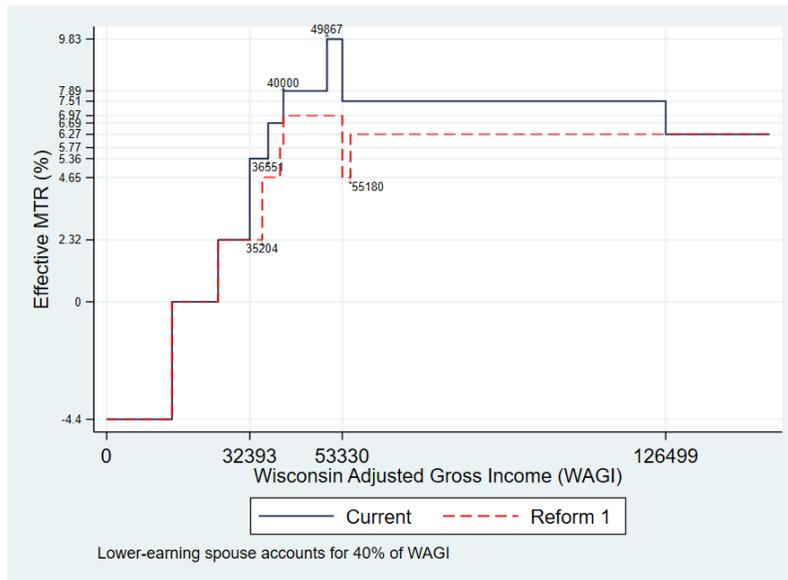


Figure 7: The effective marginal tax rate for a married couple with two children filing jointly under current law and under a reform to remove the phase-out of the standard deduction

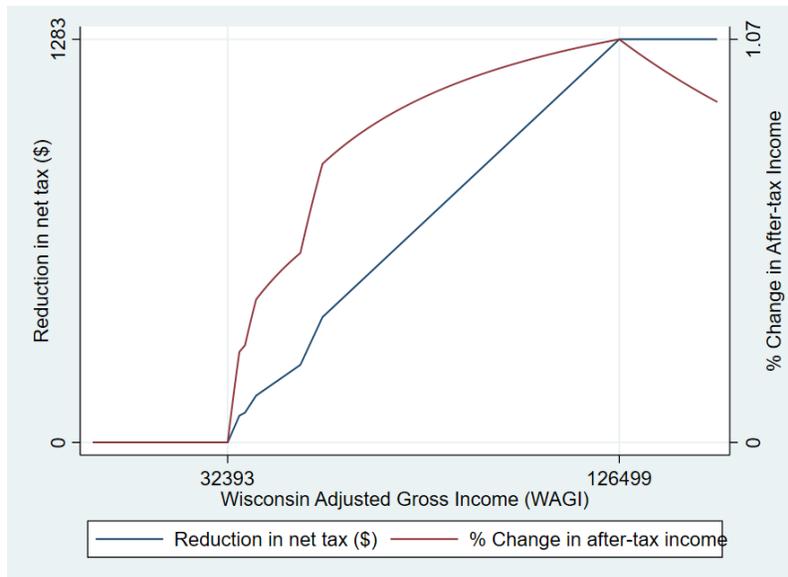


Figure 8: Reduction in net tax (left scale) and increase in after tax income (right scale) for a married couple with two children filing jointly under a reform to remove the phase-out of the standard deduction

The dashed line in Figure 7 shows the effective MTR if the standard deductions never phase out. Relative to the solid line representing the effective MTR under the current tax code, the dashed

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line shows that removing the phase-out would reduce the effective MTR significantly for married joint filers with WAGI between \$32,393 and \$126,499.

Figure 8 shows the impact of the tax reform, both in dollar amounts of the tax reduction (left scale) and in terms of percentage change in after-tax income (right scale). The amount of the tax cut increases monotonically from zero for households with WAGI below \$32,393 to \$1,283 for households with WAGI above \$126,499. These higher income households gain the full, flat amount of the standard deduction, which simply reduces their taxable income by a constant amount and thus leads to a flat, lump sum tax cut. The figure also shows that the percentage increase in after-tax income increases from zero to a maximum of 1.07% at \$126,499. Above this threshold, the flat tax rebate makes up a smaller share of income.

In addition to examining the impact on marginal tax rates, we use a microsimulation of tax returns to evaluate the revenue and distributional implications of these reforms.<sup>2</sup> As described in our previous reports, we use data from the Annual Social and Economic Supplement of the Current Population Survey, which we match to distributional data on tax filing provided by the Wisconsin Department of Revenue. In our previous work, we have shown that our estimates match quite closely those produced by the Department of Revenue and Legislative Fiscal Bureau which use non-public administrative data. Table 2 reports our results.

**Table 2: Impact of Reform 1, Removing the Phase-out of Standard Deductions**

Taxpayers with a Tax Decrease						
WAGI class	Count	Amount of Decrease (\$)	Average Decrease (\$)	Count of All Returns	% of All Returns	% Change in After-tax Income
Less than \$25,000	223,009	-5,091,595	-23	1,171,088	19.0	0.05
\$25,000 - \$40,000	498,117	-54,535,811	-109	528,812	94.2	0.33
\$40,000 - \$70,000	614,848	-193,928,726	-315	616,758	99.7	0.60
\$70,000 - \$100,000	324,720	-193,445,555	-596	324,720	100.0	0.75
Over \$100,000	540,115	-397,416,344	-736	540,115	100.0	0.46
<b>Total</b>	<b>2,200,809</b>	<b>-844,418,031</b>	<b>-384</b>	<b>3,181,493</b>	<b>69.2</b>	<b>0.49</b>

We estimate that the removing the phase-out of the standard deduction would cut taxes by \$844.4 million. It would reduce taxes for 2.2 million households in the state, over 69% of all filers, providing an average tax cut of \$384 and increasing after tax income by roughly half a percentage point. As shown above, in absolute terms the amount of the tax cut would increase with income up to the threshold (dependent on filing status) where the standard deduction fully phased out. As a percentage of income, the largest gains would go to households making \$40,000-\$100,000, who would see average increases of 0.6% to 0.75%.

<sup>2</sup> See our previous report: <https://crowe.wisc.edu/the-impact-of-income-tax-reductions-in-wisconsin/> for more detail on our tax calculations.

## 5. Reform 2 - Removing the Second Bracket

As discussed above, the narrow income tax brackets at the low end of the income distribution contribute to the sharp increase in marginal tax rates for low and middle income households. In this section we examine the impact of eliminating the second tax bracket.

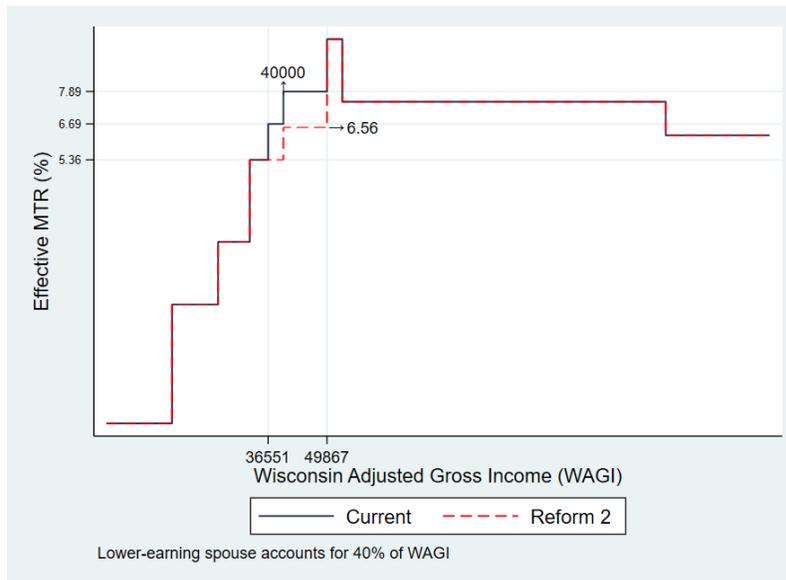


Figure 9: The effective marginal tax rate for a married couple with two children filing jointly under current law and under a reform to eliminate the second tax bracket

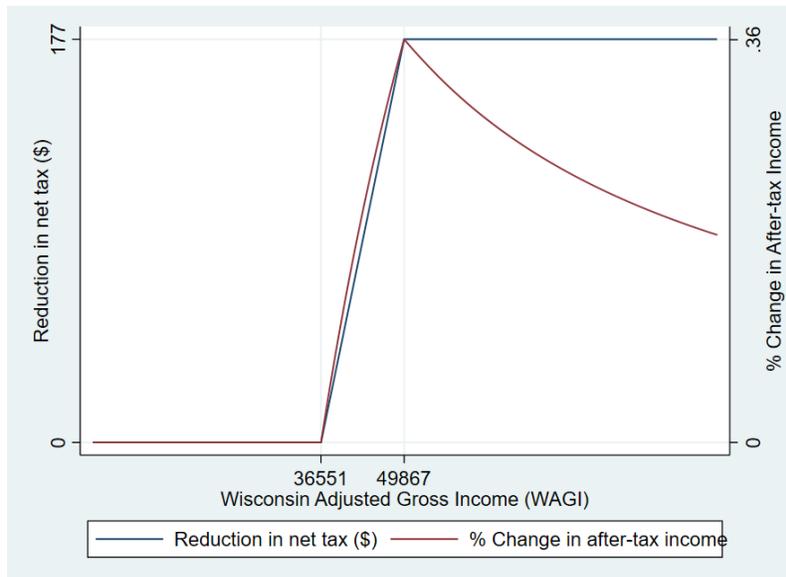


Figure 10: Reduction in net tax (left scale) and increase in after tax income (right scale) for a married couple with two children filing jointly under a reform to eliminate the second tax bracket

The dashed line in Figure 9 shows the effective MTR if the second tax rate bracket is removed. Relative to the solid line representing the effective MTR under the current tax code, the dashed line shows that removing the second bracket would reduce the effective MTR by about 1.33

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percentage points for married joint filers with WAGI between \$36,551 and \$49,867. The reduction in the statutory rate is 1.11, which is raised to 1.33 by the phase-out of the standard deductions. Figure 10 plots the amount of tax reductions, again both in absolute terms and as a percentage of income. The amount of the tax cut increases monotonically from zero for households with WAGI below \$36,551 to \$177 for households with WAGI above \$49,867. That is, all taxpayers above the current second tax bracket pay a lower rate on the income currently covered by that bracket. As a percentage of income, the value of tax cuts increase until they hit 0.36% at the threshold for the current third bracket. After this point, the flat amount of the tax cut becomes a smaller share of income.

**Table 3: Impact of Reform 2, Eliminating the Second Tax Bracket**

Taxpayers with a Tax Decrease						
WAGI class	Count	Amount of Decrease (\$)	Average Decrease (\$)	Count of All Returns	% of All Returns	% Change in After-tax Income
Less than \$25,000	35,444	-440,431	-12	1,171,088	3.0	0.00
\$25,000 - \$40,000	445,312	-41,033,903	-92	528,812	84.2	0.25
\$40,000 - \$70,000	616,758	-87,401,999	-142	616,758	100.0	0.28
\$70,000 - \$100,000	324,720	-52,259,310	-161	324,720	100.0	0.20
Over \$100,000	540,115	-92,235,895	-171	540,115	100.0	0.10
Total	1,962,349	-273,371,539	-139	3,181,493	61.7	0.16

Table 3 presents the revenue and distributional implications of this tax reform. We estimate that the removing the second tax bracket would cut taxes by \$273.4 million. It would reduce taxes for roughly 2 million households in the state, or 61.7% of all filers, providing an average tax cut of \$139. As shown above, in absolute terms the amount of the tax cut would increase with income up to the threshold (dependent on filing status) where the third tax bracket would kick in. As a percentage of income, gains are relatively uniform across a broad range of incomes, leading to after-tax income gains of roughly a quarter of a percentage point for many lower and middle income households.

### 6. Reform 3: Combining Reforms 1 and 2

Finally, we combine both reforms discussed above. That is, we consider the impact of getting rid of the phase-out of the standard deduction while also eliminating the second tax bracket. Because of the interactions of deductions and changes in marginal tax rates, the two reforms are not additive, but they are close. That is, our results here don't simply add the amounts in the previous two sections, but they are relatively close to that combination.

The blue dashed line in Figure 11 shows the effective MTR when we combine reforms 1 and 2. Relative to the red dashed line representing the effective MTR under reform 1, the blue dashed line shows that the combined reform would reduce the effective MTR 1.11 percentage points (which is equal to the reduction in the statutory rate from 4.65 to 3.54) for married joint filers with WAGI between \$39,230 and \$55,180. Relative to current law (the black solid line) we see that the reforms would lower marginal tax rates for a broad range of incomes, and also get rid of

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the perverse impacts where lower and middle income households face higher marginal tax rates than the highest earners. Under our proposed reforms marginal tax rates increase with income, apart from a very small “notch” for a very narrow income range which could be corrected by changing the phase-out of the EITC. Under the reform, marginal tax rates more closely match statutory tax rates, improving the simplicity and transparency of the tax code.

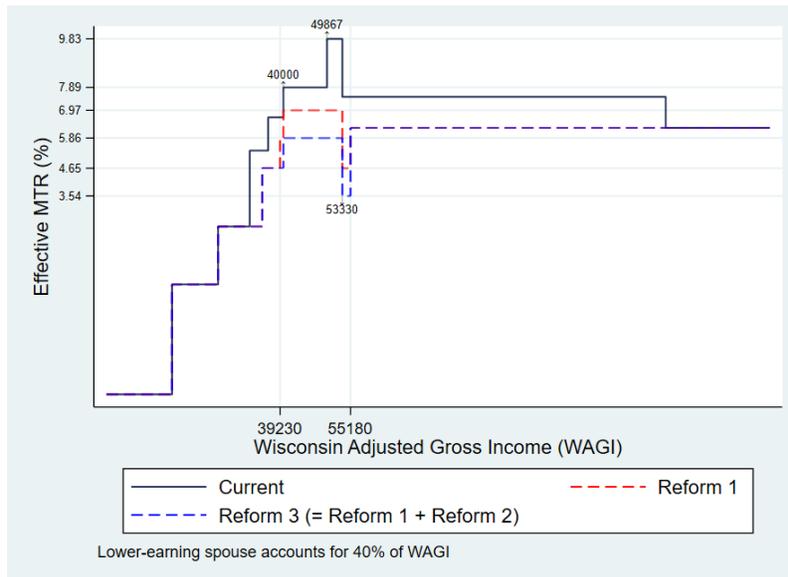


Figure 11: The effective marginal tax rate for a married couple with two children filing jointly under current law and under reforms to eliminate the phase-out of the standard deduction and to remove the second tax bracket

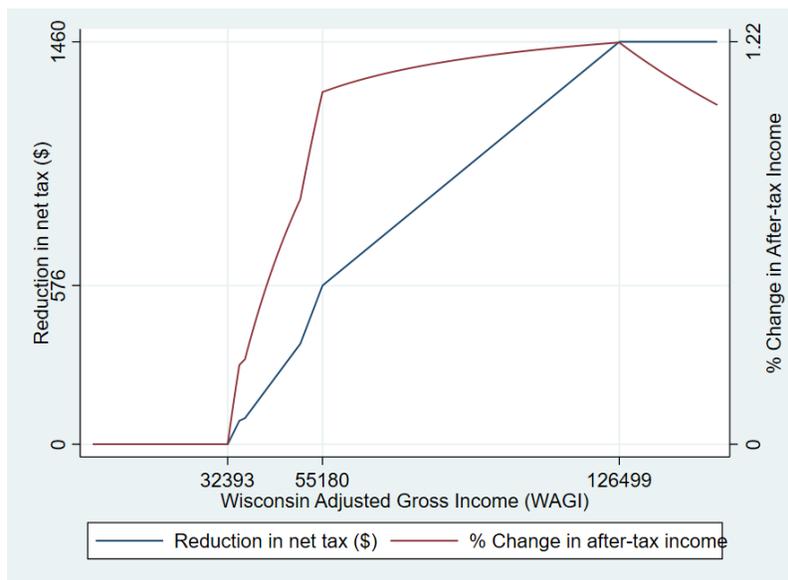


Figure 12: Reduction in net tax (left scale) and increase in after tax income (right scale) for a married couple with two children filing jointly under reforms to eliminate the phase-out of the standard deduction and to remove the second tax bracket

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Figure 12 plots the amount of tax reductions, again both in absolute terms and as a percentage of income. Under the combined reforms, the amount of the tax cut increases monotonically from zero for households with WAGI below \$32,393 to \$1,460 for households with WAGI above \$126,499. Higher income households would receive this flat amount, reflecting the tax rebate on the standard deduction and lower tax on the amount of income currently taxed at the second bracket rate. As a percentage of income, the value of tax cuts increase until they hit 1.22% at the threshold for the full phase-out of the standard deduction. After this point, the flat amount of the tax cut becomes a smaller share of income. However the proportional income gains are relatively flat at around 1% across a broad range of incomes from \$55,180 to \$126,499.

**Table 4: Impact of Reform 3, Eliminating the Stand Deduction Phase-out and the Removing Second Tax Bracket**

Taxpayers with a Tax Decrease						
WAGI class	Count	Amount of Decrease (\$)	Average Decrease (\$)	Count of All Returns	% of All Returns	% Change in After-tax Income
Less than \$25,000	223,009	-5,232,652	-23	1,171,088	19.0	0.05
\$25,000 - \$40,000	507,017	-87,558,880	-173	528,812	95.9	0.53
\$40,000 - \$70,000	616,758	-277,272,500	-450	616,758	100.0	0.86
\$70,000 - \$100,000	324,720	-245,704,859	-757	324,720	100.0	0.95
Over \$100,000	540,115	-489,652,253	-907	540,115	100.0	0.56
<b>Total</b>	<b>2,211,620</b>	<b>-1,105,421,144</b>	<b>-500</b>	<b>3,181,493</b>	<b>69.5</b>	<b>0.64</b>

Table 4 presents the revenue and distributional implications of this tax combined tax reform. We estimate that eliminating the phase-out of the standard deduction and removing the second tax bracket would cut taxes by \$1.105 billion. It would reduce taxes for roughly 2.2 million households in the state, or 69.5% of all filers, providing an average tax cut of \$500 and an average increase in after-tax income of 0.64%. As shown above, in absolute terms the amount of the tax cut would increase with income up to the threshold (dependent on filing status) where the standard deduction fully phased out. As a percentage of income, the largest gains would go to households making \$40,000-\$100,000, who would see average increases of 0.86% to 0.95%.