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Marginal Tax Rates and Individual Income Tax Reforms in Wisconsin

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Abstract

Wisconsin has a progressive individual state income tax system, which features increasing marginal tax rates (the tax rate on the last dollar earned) as income rises. However other aspects of the tax code, such as the earned income tax credit (EITC) and standard deduction, change the effective marginal tax rate that taxpayers face. We consider the case of a married couple with two children, and evaluate the net tax bill and marginal tax rates they face as income rises under current law and two recent tax reform proposals in the state. We show that under current law households earning just below the state median income face the highest marginal tax rates of 9.3-9.8%, while a broad middle range of incomes face effective rates well above their statutory rates due to the unconventional structure of the state standard deduction. We then show that although both of the recent tax reform proposals were aimed at providing middle class tax relief, they have very different implications for marginal tax rates and next tax benefits. Overall, our results illustrate some of the complication caused by credits and deductions in the state tax code, and suggest potential scope for more comprehensive tax reform.

Executive Summary

Wisconsin has a progressive individual state income tax system, which features increasing marginal tax rates (the tax rate on the last dollar earned) as income rises. However other aspects of the tax code, such as the earned income tax credit (EITC) and standard deduction, change the effective marginal tax rate that taxpayers face, as these credits apply and phase out over different income ranges. In this report we consider the case of a married couple with two children, and evaluate the net tax bill and marginal tax rates they face as income rises. We show that under current law households earning \$40,000-\$53,500 face the highest marginal tax rates of 9.3-9.8%, while a broad middle range of incomes in the state face effective rates well above their statutory rates due to the unconventional phase out structure of the state standard deduction.

We also evaluate two different tax reform proposals that were advanced this year, the Republican AB 4 and the Democratic AB 56. Both were aimed at providing middle class tax relief, but they were structured quite differently. We find that AB 4 lowered marginal tax rates for lower incomes and increased rates for a higher income range. However AB 56, which expands the EITC and includes a new credit, has a more complex impact. The plan lowered marginal rates for very low and middle incomes, but increased them slightly for low incomes and sharply for incomes in the \$125,000-\$150,000 range.

Relative to AB 4, AB 56 provided more net tax benefit to very low incomes, less to incomes in the \$36,000-\$80,000 range, and more to households in the \$80,000-\$147,000 range. While AB 4 provided a nearly constant benefit of around \$330 for households earning \$40,000-\$130,000, AB 56 provided a maximum benefit of \$673 for households earning \$125,000, which was 3-4 times as large as the gain for households earning less than \$50,000.

Overall, our results show that the features and complexities of the state individual tax code mean that effective marginal tax rates may differ substantially from statutory tax rates. Since effective rates are what matters for economic behavior, this suggests that there may be substantial gain from simplifying and reforming the state tax code. Tax reform which eliminates many of the credit programs would broaden the tax base and lower marginal tax rates, raising tax revenue while improving efficiency and promoting economic growth.

1. Introduction

In evaluating tax systems, one of the most important components for behavior are marginal tax rates. A marginal tax rate (MTR) is the tax rate incurred on an additional dollar of income. MTR is an important parameter of individual income tax structure because, by reducing the amount of disposal income that an individual could receive from gaining additional income, a higher MTR reduces the incentive to work or invest, and thus could reduce labor supply and overall economic activity. While average tax rates determine a household's overall tax bill and thus the net impact of taxes on their total income, marginal rates matter for decisions on the margin.

In practice, what matters is not the statutory MTR which is specified by law, but rather the effective MTR which captures the net tax impact of an additional dollar earned after all credits and deductions are accounted for. Since many credits and deductions apply over different income ranges, sometimes with a phase-in and phase-out, the effective MTR tends to differ from the statutory MTR. Consequently, changes in deductions and tax credits could affect the effective MTR and, in turn, economic activities even if the statutory rate remains unchanged.

In this report we evaluate the tax liability and effective marginal tax rates for households in Wisconsin. Wisconsin has a progressive individual state income tax system, which features increasing statutory marginal tax rates as income rises. However other aspects of the state tax code affect the effective MTR that taxpayers face. For example, the state earned income tax credit (EITC) lowers marginal rates for low incomes. But the EITC phases out once income passes a threshold, which increases the effective marginal tax rate. In addition, the state standard deduction phases out for higher incomes, increasing the effective MTR over that income range. We focus on the case of a hypothetical married couple with two children, and evaluate the net state tax bill and marginal tax rates they face as income rises. We show that under current law, households earning \$40,000-\$53,500 face the highest marginal tax rates of 9.3-9.8%, driven by increases in statutory rates and the EITC phase-out. The phase-out of the state standard deduction also increases MTRs by over 1 percentage point on a broad range of middle incomes in the state.

We then evaluate the consequences of two recent tax reform proposals: (1) the expansion of the standard deduction introduced in 2019 Assembly Bill 4 (AB 4) by the Assembly Republicans, and (2) the introduction of the Family and Individual Reinvestment (FAIR) credit and the expansion of the Earned Income Tax Credit (EITC) proposed in 2019 Assembly Bill 56 (AB 56) by the Assembly Democrats. Both were aimed at providing middle class tax relief, but they were structured quite differently and had rather different impact on net taxes and marginal rates.

We find that AB 4 slightly lowered marginal tax rates for lower incomes and increased rates for a higher income range, providing a nearly constant net tax benefit for households earning \$40,000-\$130,000. However the expansion of the EITC and the FAIR credit give AB 56 a more complex impact. The plan lowered marginal rates for very low and middle incomes, but increased them slightly for low incomes and sharply for incomes in the \$125,000-\$150,000 range. The phase-out of the FAIR credit leads to high and increasing marginal tax rates over that

range. While AB 4 provided a nearly constant benefit of around \$330 for households earning \$40,000-\$130,000, AB 56 provided a maximum benefit of \$673 for households earning \$125,000, which was 3-4 times as large as the gain for households earning less than \$50,000.

Overall, our results show that the features and complexities of the state individual income tax code mean that effective marginal tax rates may differ substantially from statutory tax rates. Since effective rates are what matters for economic behavior, this suggests that there may be substantial gain from simplifying and reforming the state tax code. Tax reform which eliminates many of the credit programs would broaden the tax base and lower marginal tax rates, raising tax revenue while improving efficiency and promoting economic growth. Such broad based tax reform and its consequences will be the subject of future work.

2. Statutory versus Effective Marginal Tax Rates

Under the state individual income tax, Wisconsin taxable income is multiplied by the applicable tax rates to arrive at the gross tax liability. Currently, the state employs progressive income tax with four tax brackets, with a higher tax rate assigned to each higher 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 separate amounts of 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 first year when both reforms would take effect if the bills were to be passed. The statutory MTR takes one of four values depending on filing status and taxable income.¹

Table 1. Individual Income Tax Rate Schedule

Marginal Tax Rate (%)	Taxable Income Brackets (\$)	
	Single	Married Filing Jointly
4.00	0 – 12,010	0 – 16,010
5.84	12,010 – 24,010	16,010 – 32,020
6.27	24,010 – 264,330	32,020 – 352,440
7.65	264,330+	352,440+

While the statutory MTR is the slope (or the derivative) of the *gross* tax liability with respect to *taxable* income, we define the effective MTR as the derivative or 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

¹ The tax brackets for 2020 are estimated from the corresponding values in 2018 available at <https://www.revenue.wi.gov/Pages/FAQS/pcs-taxrates.aspx#tx1b>

and refundable tax credits from gross tax liability. Consequently, changes in deductions and tax credits could affect the effective MTR even if the statutory MTR remains unchanged.

In the next section, we consider a hypothetical married couple filing jointly with two children as an example to illustrate the calculation of effective MTR under current tax law as their income increases. For reference, the median household income in Wisconsin was \$59,305 in 2017 (the latest available), while the median income for a family of four was \$96,972. (Both of these numbers are gross income not WAGI, so WAGI values would be lower.) We then show how net tax liabilities and effective MTRs would change under the two proposed reforms. Similar analysis could be done for a single child and single filers, which would change the statutory rates and eligibility for different credits, and thus the effective MTRs. However the qualitative results and comparisons are similar across different cases. We assume tax year 2020 for all calculations.

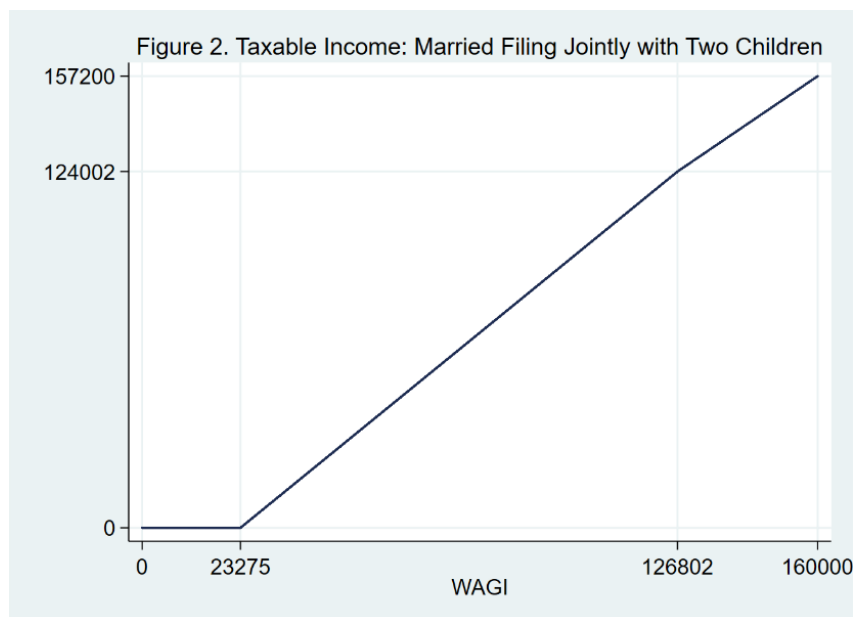
3. Marginal Tax Rates under Current Law

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 \$20,520 if WAGI is below \$23,050, and then declines linearly at a rate of 19.778% before it exhausts when WAGI reaches \$126,802.²

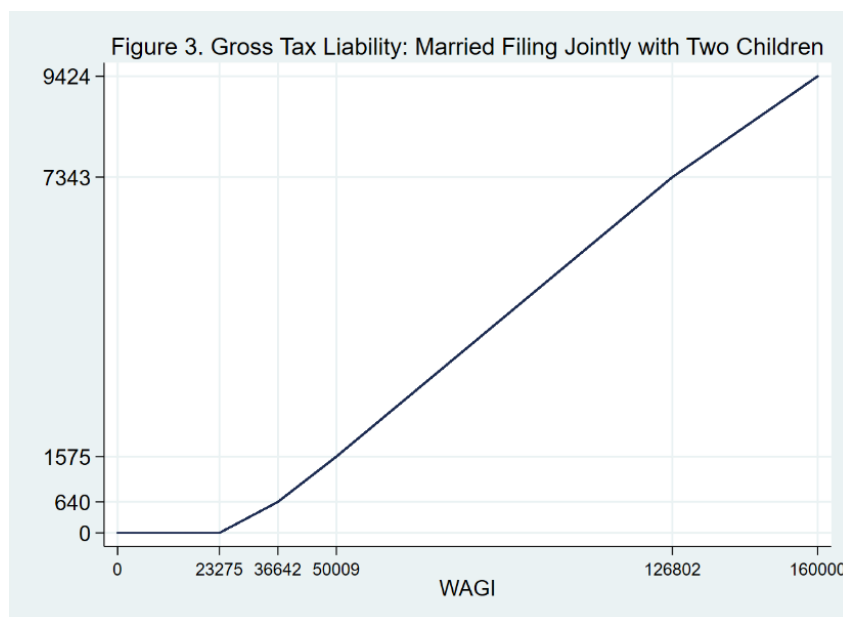


² These numbers, and the corresponding reforms proposed in AB 4 discussed later in this paper, are taken from a report by Wisconsin Legislative Fiscal Bureau available at http://docs.legis.wisconsin.gov/misc/lfb/bill_summaries/2019_21/0004_ab_4_increasing_the_maximum_deducti_on_under_the_individual_income_tax_sliding_scale_standard_deduction_2_7_19.pdf

For married filing jointly with two dependent children, figure 2 plots taxable income as a function of WAGI. Because of personal exemptions and the standard deduction, taxable income is zero for families with WAGI below \$23,275. For WAGI between \$23,275 and \$126,802, 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 \$126,802, 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 3. For WAGI between \$23,275 and \$36,642, taxable income ranges between \$0 and \$16,010, and the gross tax liability increases by about 4.4 cents for each additional dollar of WAGI. The effective MTR (before credits discussed below) is thus 4.4%, which is about 1.2 times the statutory rate of 4% shown in table 1 because of the phase-out of the standard deduction. Similarly, the effective MTR is about 7% (1.2 times the statutory rate of 5.84%) for WAGI between \$36,642 and \$50,009, and it's about 7.5% (1.2 times the statutory rate of 6.27%) for WAGI between \$50,009 and \$126,802. After that, the standard deduction exhausts and the effective MTR is equal to its statutory value of 6.27% for WAGI between \$126,802 and \$160,000. We limit the calculation to WAGI below \$160,000 because neither of the two proposals affect the effective MTR for WAGI above \$160,000.

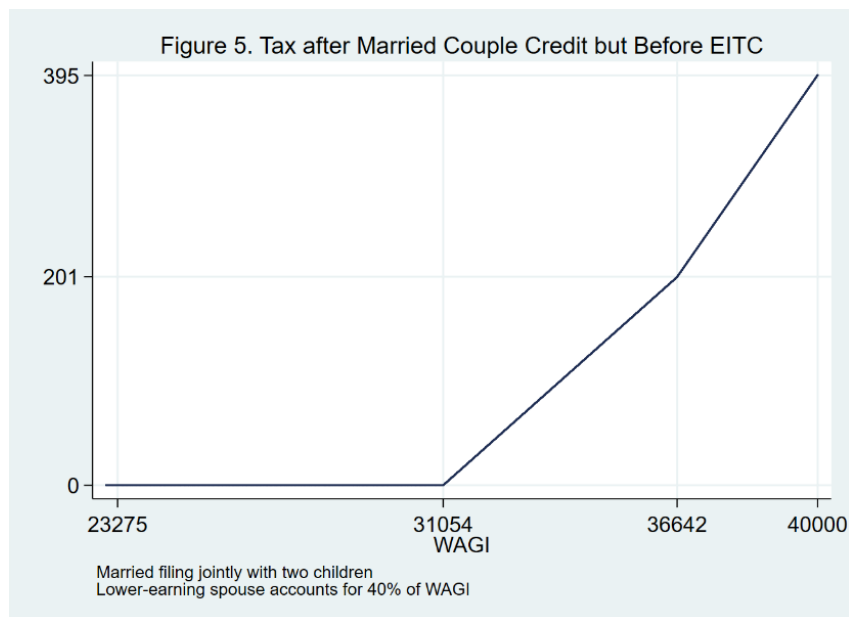


Not all gross taxes have to be paid. Instead, households could use nonrefundable and refundable tax credits to reduce their tax payments. In this paper, we consider one nonrefundable credit, the married couple credit, and one refundable credit, the EITC, as these are broad-based programs of general applicability. The state tax code has many other smaller credit and deduction programs affecting subgroups of taxpayers, which thus affect their net tax liability and effective MTRs.

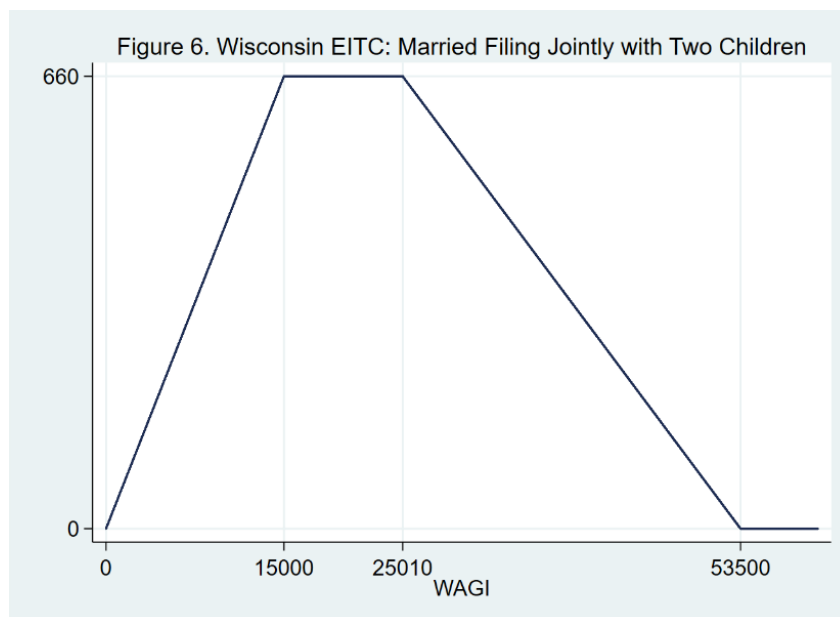
A married couple credit is available to married filing jointly where both spouses are employed. The credit is equal to 3% of the first \$16,000 of the earned income of the lower-earning spouse, with a maximum credit of \$480. We assume that the lower-earning spouse accounts for 40% of household WAGI, and figure 4 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 \$23,275 do not use the credit because they have a zero tax liability even if the credit is available to them. Households with WAGI between \$23,275 and \$31,054 have a positive gross tax liability that is smaller than the married couple credit available and thus do not use all the credit. For these households, the credit reduces their tax liability to zero. Households with WAGI above \$31,054 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.



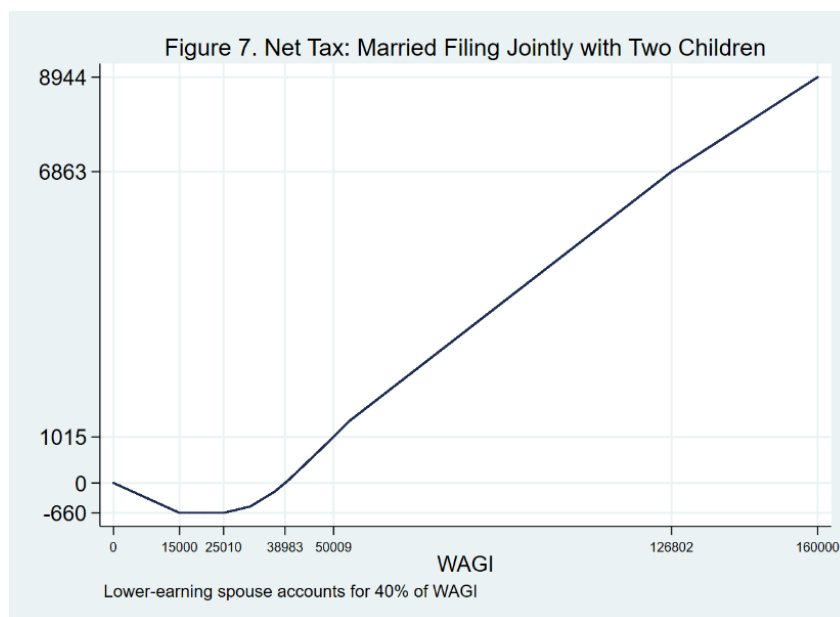
Figure 5 plots the tax liability after adjusting for the married couple credit. The plot is restricted to WAGI between \$23,000 and \$40,000 because this is the range where the credit affects the MTR. As mentioned above, the credit has no effect for WAGI below this range because the gross tax liability is zero. The credit reduces the tax liability and the effective MTR to zero for WAGI between \$23,275 and \$31,054. For WAGI between \$31,054 and \$36,642, the MTR is now about 3.6%, 1.2 percentage points below its level of 4.8% before the credit shown in figure 3. This occurs because the credit increases and thus reduces tax liability by 1.2 cents for each additional dollar of WAGI. Similarly, for WAGI between \$36,642 and \$40,000, the effective MTR is now about 5.8%, 1.2 percentage points below its level of 7% before the credit shown in figure 3. For WAGI above \$40,000, the credit is constant at \$480 and thus affects only the level of tax liability but not how it increases with WAGI.



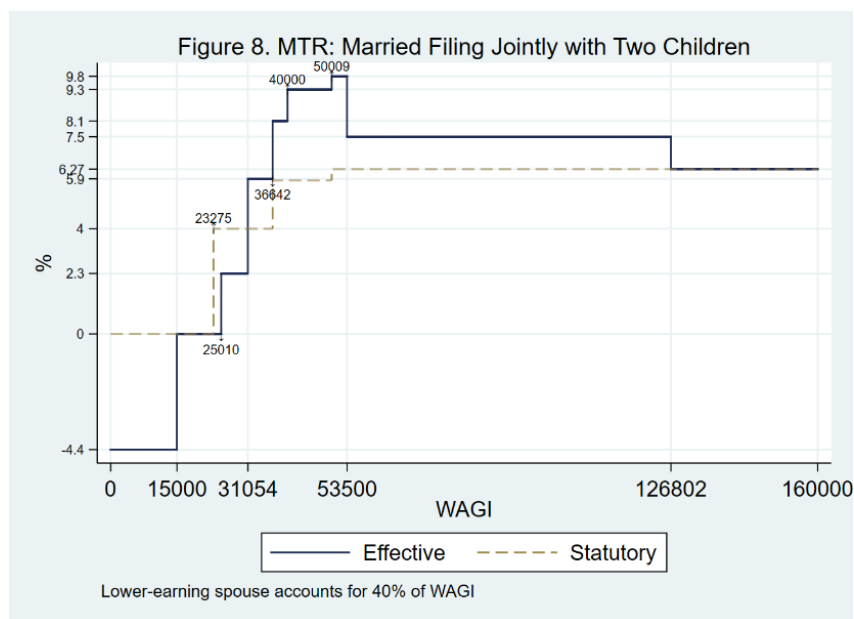
The Wisconsin EITC is equal to a percentage of the federal EITC, based on the number of children in the household. For households with two children, it is 14% of the federal credit. For tax year 2020, the federal credit for joint filers with two children is 40% of household earnings not exceeding \$15,000, and the phase-out range is \$25,010-\$53,500.³ In combination, we obtain the Wisconsin EITC as a function of WAGI shown in figure 6.



After adjusting for state EITC, we obtain the net tax as a function of WAGI shown in figure 7.



³ The earnings cutoffs are adjusted from the corresponding values in 2019 available at <https://www.irs.gov/credits-deductions/individuals/earned-income-tax-credit/eitc-income-limits-maximum-credit-amounts-next-year>



The effective MTR, defined as the slope of the tax curve in figure 7, is shown in figure 8. For comparison, figure 8 also plots the statutory MTR as a function of WAGI. As the figure shows, the effective MTR differs substantially from the statutory MTR due to the deductions and credits.

For WAGI below \$15,000, 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 \$15,000 and \$25,010, the net tax is flat at -\$660 due to the state EITC, and the effective MTR is zero. Although the statutory rate jumps from zero to 4% by the end of this phase, it's not effective yet because the resulting gross tax is less than the married couple credit.

For WAGI between \$25,010 and \$31,054, the effective MTR is 2.3%, the rate at which state EITC phases out. The net tax starts to increase but remains negative. The statutory rate of 4% is still ineffective because of the married couple credit.

For WAGI between \$31,054 and \$36,642, the effective MTR is about 5.9%. The statutory rate of 4% is finally effective. The phase-out of the standard deduction raises the rate to about 4.8%. The phase-in of the married couple credit brings it down to about 3.6%. Finally, the phase-out of state EITC raises it to 5.9%. The net tax is still negative.

For WAGI between \$36,642 and \$40,000, the effective MTR is about 8.1%. Relative to the previous phase, the statutory rate increases from 4% to 5.84%. The phase-out of the standard deduction raises the rate to about 7%. The phase-in of the married couple credit brings it down to about 5.8%. Finally, the phase-out of state EITC raises it to about 8.1%. The net tax turns positive for WAGI above \$38,983.

For WAGI between \$40,000 and \$50,009, the effective MTR is about 9.3%, 1.2 percentage points higher than the last phase because the married couple credit is now flat. Specifically, the statutory rate is still 5.84%. The phase-out of the standard deduction raises the rate to about 7%, and the phase-out of state EITC raises it further to about 9.3%.

For WAGI between \$50,009 and \$53,500, the effective MTR reaches its highest level of about 9.8%. Relative to the last phase, the statutory rate increases to 6.27%. The phase-out of the standard deduction raises the rate to about 7.5%, and the phase-out of state EITC raises it further to about 9.8%.

For WAGI between \$53,500 and \$126,802, the effective MTR is about 7.5%, 2.3 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 7.5%.

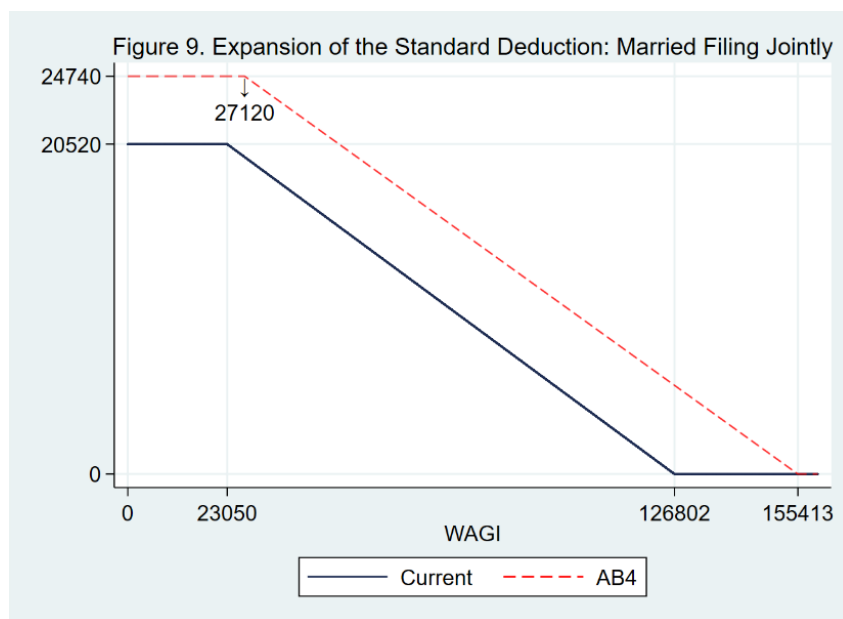
Finally, for WAGI above \$126,802, the standard deduction phases out completely, and the effective MTR is now equal to the statutory rate, which is 6.27% for WAGI below \$160,000.

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 \$31,054, and it is larger for WAGI between \$31,054 and \$126,802, which includes the broad middle class in the state. Moreover, for WAGI between \$40,000 and \$53,500, the statutory rate is about 6% while the effective MTR is 9.3-9.8%, the highest for any income range.

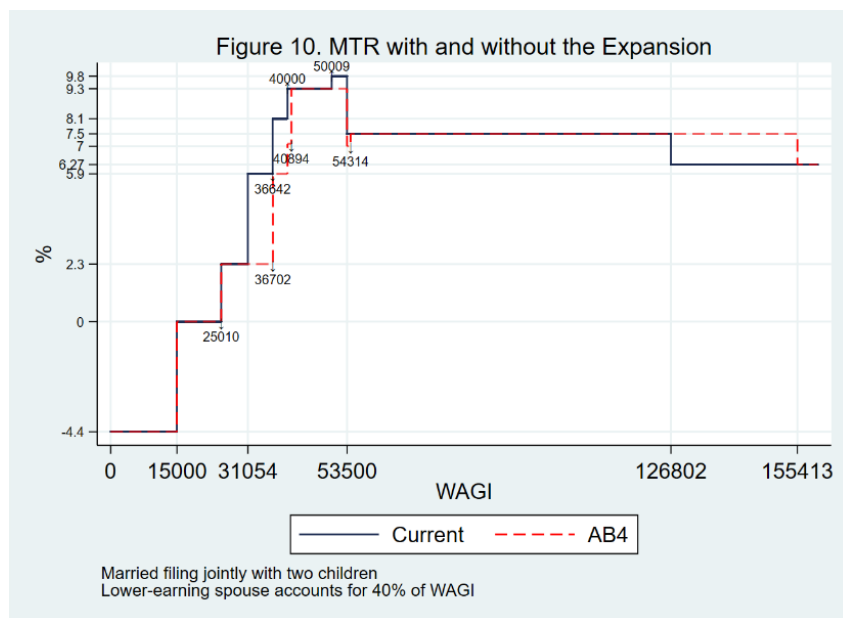
Thus the EITC has two important effects. First it lowers effective MTRs into the negative range for low incomes, and thus providing a subsidy. The positive incentive effects of the federal EITC on labor supply have been well-documented, and the state EITC reinforces those effects. However at moderate income levels, around the Wisconsin median household income, the phase-out of the EITC leads to very high effective MTRs which would tend to discourage work effort. Moreover, unlike most states and the federal tax code, Wisconsin's standard deduction phases out, increasing effective MTRs over the broad middle range of incomes in the state.

4. Marginal Tax Rates under AB 4

AB 4 was a relatively simple tax reform which aimed to provide middle class tax relief by an expansion of the standard deduction. Figure 9 plots the proposed expansion for married couples filing jointly for tax year 2020. The deduction would increase from \$20,520 to \$24,740, and the phase-out range would shift from \$23,050-\$126,802 to \$27,120-\$155,413. The rate at which it phases out would remain unchanged at 19.778%.



This increased deduction with different thresholds for phasing out would thus change effective MTRs relative to current law. For the same hypothetical married couple with two children analyzed above, figure 10 plots the effective MTR with the proposed expansion along with the effective MTR under the current tax code shown in figure 8.



For WAGI below \$31,054, the expansion has no effect on the effective MTR.

For WAGI between \$31,054 and \$36,702, the expansion reduces the effective MTR from about 5.9% to 2.3%. Under the current tax code, married couples with WAGI in this range face a statutory rate of 4%, which is reduced to zero by the proposed expansion of the standard deduction. The 2.3% effective MTR comes solely from the phase-out of state EITC.

For WAGI between \$36,702 and \$40,000, the effective MTR is reduced from about 8.1% to about 5.9%. Similarly, for WAGI between \$40,000 and \$40,894, the effective MTR is reduced from about 7.5% to about 7%. This occurs because married couples with WAGI in the two ranges face a statutory rate of 5.84% under the current tax code, which is reduced to 4% by the proposed expansion of the standard deduction.

For WAGI between \$50,009 and \$53,500, the effective MTR is reduced from about 9.8% to about 9.3%. Similarly, for WAGI between \$53,500 and \$54,314, the effective MTR is reduced from about 9.3% to about 7.1%. This occurs because married couples with WAGI in the two ranges face a statutory rate of 6.27% under the current tax code, which is reduced to 5.84% by the proposed expansion of the standard deduction.

Finally, for WAGI between \$126,802 and \$155,413, the effective MTR increases from the statutory rate of 6.27% to about 7.5%. This occurs because the standard deduction does not exhaust until a higher level of WAGI at \$155,413 under the expansion.

In summary, the expansion of the standard deduction proposed in AB 4 would reduce the effective MTR for households with WAGI between \$31,054 and \$54,314, and increase it for households with WAGI between \$126,802 and \$155,413. The reduction occurs because the expansion pushes households with relative low WAGI into a taxable income bracket with a lower statutory rate, and the increase occurs because the expansion of the phase-out range that affects more households with relative high WAGI.

Relative to current law, the lower MTRs would increase work incentives for households just below the state median income, but effects would likely be modest since the largest changes occur over a narrow income range around \$31,000-\$40,000. In addition, since the plan retains the phase-out structure of the current tax code, which pushes up the range of higher MTRs to higher incomes and thus affect incentives to earn income via work or investment for these households, who may be more responsive to such changes.

5. Marginal Tax Rates under AB 56

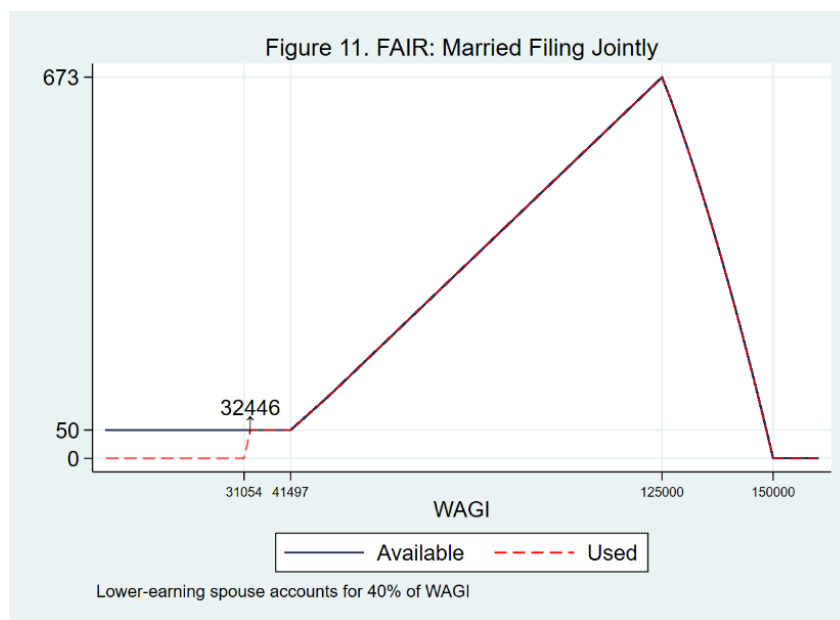
While AB 4 was a relatively simple reform, AB 56 includes two components which have larger impact on effective marginal tax rates. First, AB 56 proposes a new nonrefundable credit termed as Family and Individual Reinvestment (FAIR) credit. A description of how the credit would work is as follows⁴

Set the credit equal to the greater of 10% of the claimant's net tax liability, defined as the claimant's income tax liability prior to the application of the nonrefundable credit for taxes paid to other states, or (a) \$100 if the claimant's filing status is single or head-of-household and the claimant's AGI is less than \$80,000; (b) \$50 if the claimant's filing

⁴ See page 134 of the Summary of Governor's Budget Recommendations at http://docs.legis.wisconsin.gov/misc/lfb/budget/2019_21_biennial_budget/502_summary_of_governor_s_budget_recommendations_march_2019_entire_document.pdf. The document also describes the expansion of state EITC discussed later.

status is married joint and the combined AGI of the claimant and the claimant's spouse is less than \$125,000; and (c) \$25 if the claimant's filing status is married separate and the claimant's AGI is less than \$62,500. If the claimant's AGI, or combined AGI in the case of married joint filers, exceeds the preceding income thresholds but is less than \$100,000 for single or head-of-household filers, \$150,000 for married joint filers, and \$75,000 for married separate filers, set the credit equal to the claimant's net tax liability multiplied by a percentage calculated as follows: (a) subtract the applicable income threshold from the claimant's AGI, or combined AGI in the case of married joint filers; (b) divide the difference by \$20,000 if the claimant's filing status is single or head-of-household, \$25,000 if the claimant's filing status is married joint, or \$12,500 if the claimant's filing status is married separate; (c) subtract that fraction from 1.0; and (d) multiply that fraction by 10%. Under this structure, the 10% credit would phase down between \$80,000 and \$100,000 for single and head-of-household filers, \$125,000 and \$150,000 for married joint filers, and \$62,500 and \$75,000 for married separate filers, and the credit would phase out at the higher income thresholds for each filer type.

As we show, the FAIR credit is rather complex and has dramatic implications for effective tax rates. Assuming it is applied after the married couple credit but before the EITC, figure 11 plots the FAIR credit for married filing jointly. The solid line shows the amount of credits available, and the dashed line shows the amount of credits used. For WAGI below \$41,497, the tax liability after the married couple credit is below \$500, 10% of which is below \$50. According to the proposal, a minimum of \$50 is available. Starting from \$41,497, the FAIR credit increases with WAGI and reaches a maximum of about \$673 when WAGI reaches \$125,000. After that, the credit starts to phase out and vanishes when WAGI reaches \$150,000.

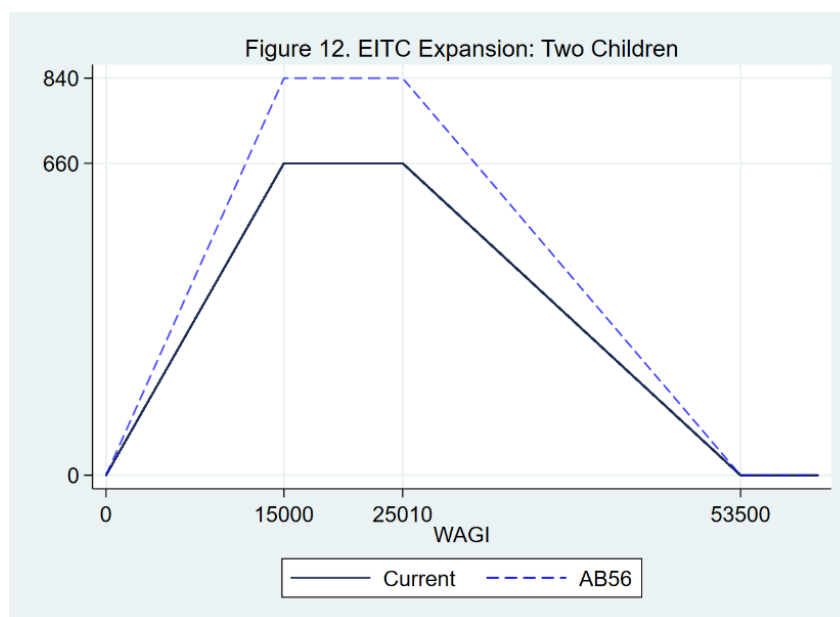


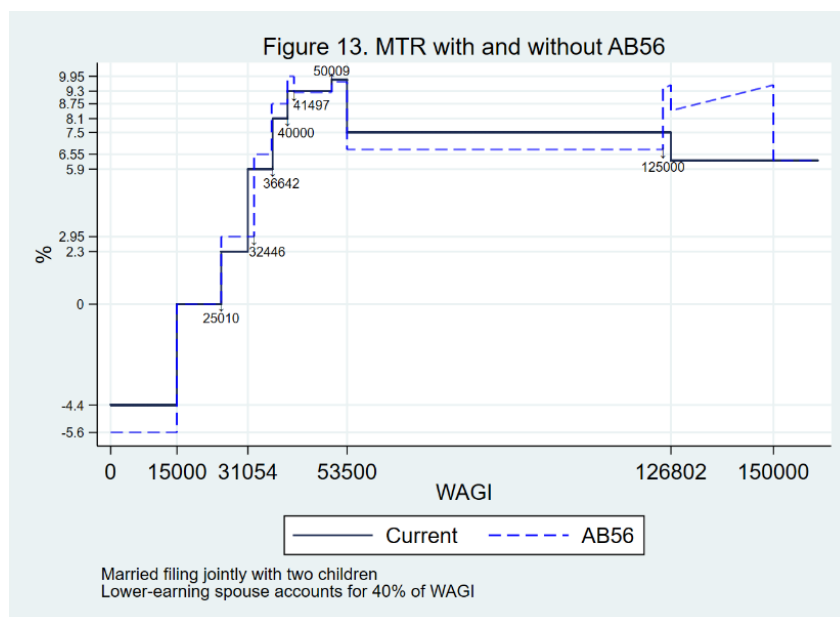
As shown previously, married couples with WAGI below \$31,054 have a zero tax liability after the married couple credit. Consequently, none of the \$50 FAIR credit available will be used. For

WAGI between \$31,054 and \$32,446, the amount of credit used is equal to the amount of tax, which is positive but less than \$50. Starting from \$32,446, all available credits will be used.

An unorthodox feature of the FAIR credit is the phase-out is not linear in WAGI, which implies a range of WAGI where the effective MTR is increasing continuously. Consider WAGI between \$126,802 and \$150,000. The FAIR credit is equal to $FAIR = 10\% \left(1 - \frac{WAGI - 125000}{25000}\right) T$, where $T = a + 0.0627WAGI$ is the net tax under the current tax code, and a is a constant not specified here for simplicity. The effective MTR is obtained by taking the derivative of $(T - FAIR)$ with respect to $WAGI$, which leads to $MTR = b + 2 \times \frac{10\%}{25000} \times 0.0627WAGI$ where b is another constant. Clearly, the effective MTR increases continuously with WAGI which is different from the discrete jumps shown previously.

In addition to the FAIR credit, AB 56 also proposes an expansion of the state EITC. For households with two dependent children, the state EITC would increase from 11% to 14% of federal EITC. As shown in figure 12, the credit would increase from zero to \$840 when WAGI increases from zero to \$15,000 and stays at \$840 until WAGI reaches \$25,010, after which it would phase out gradually and exhaust when WAGI reaches \$53,500.





As above, we now consider the impact on a hypothetical married couple with two children. Figure 13 plots the effective MTR with both the FAIR credit and the proposed EITC expansion along with the effective MTR under the current tax code shown in figure 8. There are some complex interactions between the different pieces of the tax code under AB 56.

For WAGI below \$15,000, the phase-in of the more generous EITC would reduce the effective MTR from -4.4% to -5.6%.

For WAGI between \$15,000 and \$25,010, the effective MTR remains unchanged at 0%.

For WAGI between \$25,010 and \$31,054, the effective MTR would increase from 2.3% to about 2.95%, the rate at which the proposed EITC would phase out.

For WAGI between \$31,054 and \$32,446, the effective MTR would drop from about 5.9% to about 2.95%. This occurs because, as shown in figure 11, the FAIR credit would reduce the positive tax liability under the current tax code to zero.

For WAGI between \$32,446 and \$36,642, the effective MTR would increase from about 5.9% to about 6.55%. Similarly, the effective MTR would increase from about 8.1% to about 8.75% for WAGI between \$36,642 and \$40,000, and it would increase from about 9.3% to about 9.95% for WAGI between \$40,000 and \$41,497. In all three cases, the increase is about 0.65 percentage points and it is due to the increase in the rate at which proposed EITC phases out.

For WAGI between \$41,497 and \$53,500, the effective MTR would experience a minimal decrease that's hard to visualize. It arises from two competing forces that almost cancel each other. On the one hand, as in the previous phase, the increased rate at which state EITC phases out would raise the effective MTR by about 0.65 percentage points. On the other hand, the phase-in of the FAIR credit would reduce the effective MTR by 10%. As the effective MTR under the current tax code is about 7-7.5% for this WAGI range, the reduction would be about

0.7-0.75 percentage points. In combination, the two forces imply a net decrease in effective MTR of about 0.05-0.1 percentage points.

For WAGI between \$53,500 and \$125,000, the phase-in of the FAIR credit would reduce the effective MTR by 10% from about 7.5% to about 6.75%.

For WAGI between \$125,000 and \$126,802, the phase-out of the FAIR credit would raise the effective MTR from about 7.5% to about 9.5%. As explained above, the effective MTR is not constant in this range: it would increase from about 9.42% to about 9.57%.

For WAGI between \$126,802 and \$150,000, the phase-out of the FAIR credit would raise the effective MTR from the statutory value of 6.27% to about 8.45-9.57%.

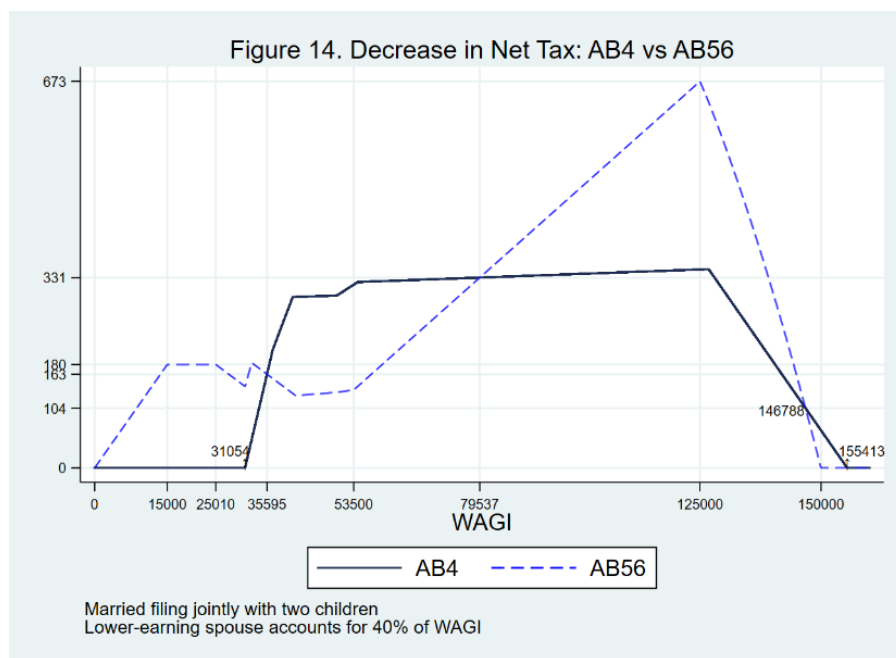
For WAGI above \$150,000, the effective MTR is equal to the statutory value, which is 6.27% for WAGI below \$160,000.

In summary, the phase-in of the increased EITC reduces the effective MTR for households with WAGI below \$15,000, and the phase-out would raise the effective MTR for households with WAGI between \$25,010 and \$53,500. Similarly, the phase-in of FAIR would reduce the effective MTR for households with WAGI between \$31,054 and \$125,000, and the phase-out would raise the effective MTR for households with WAGI between \$125,000 and \$150,000 by over 2 percentage points.

Increasing the EITC would strengthen the same incentive effects that it has under current law. The proposal would increase the positive incentive effects for low income households and cut their effective tax rates by 1.2 percentage points. However the steeper phase-out would increase the already high effective marginal rates for moderate incomes. The FAIR credit provides complications, but it does undo higher marginal rates on the broad middle income range caused by the phase out of the standard deduction under current law. If made transparent, these lower rates would affect work and investment incentives for a large number of households. However the unconventional nonlinear phase out of the FAIR credit provides sharply increasing marginal rates for a higher income range, providing strong disincentive effects for those affected.

6. Net Tax Impact and Conclusion

While the two proposals both raise the effective MTR for some households, it should be noted that no household would experience an increase in net tax under either of the two proposals. Figure 14 plots the decrease in net tax under each of the two proposals. The expansion of the standard deduction proposed in AB 4 would benefit married couples with WAGI between \$40,000 and \$130,000 almost uniformly by about \$330. The benefit of the FAIR credit proposed in AB 56, on the other hand, is concentrated among married couples with WAGI around \$125,000, and the benefit of the EITC expansion is largest for two-child families with WAGI between \$15,000 and \$25,010. As opposed to the near uniform benefit under AB 4, by lowering effective rates AB 56 provides gains that increase with income until the FAIR credit phase-out. The maximum benefit of \$673 for households earning \$125,000 is 3-4 times as large as the gain for households earning less than \$50,000.



Overall, our results show that the features and complexities of the state individual income tax code mean that effective marginal tax rates may differ substantially from statutory tax rates. Since effective rates are what matters for economic behavior, this suggests that there may be substantial gain from simplifying and reforming the state tax code. Neither of the proposals which we evaluated here led to simplifications, but instead retained or even magnified some of the complications and distortions in the current code. For example, as we've discussed, the current tax code increases effective marginal rates on the middle class through the phase-out of the standard deduction. The same effect could be achieved in a more transparent, if not necessarily palatable, way by increasing statutory rates but eliminating the phase-out and making the standard deduction uniform, like most states and the federal government do. Even better, a broader-based tax reform which reduces or eliminates many of the state credit and deduction programs would broaden the tax base and allow for lower marginal tax rates, raising tax revenue while improving efficiency and promoting economic growth.