

February 2017

Income Tax Cuts and Shifting to Sales Tax a Poor Strategy for Growing West Virginia's Economy

Ted Boettner

Overview

Even though faced with a \$600 million budget deficit, some West Virginia lawmakers are proposing reducing or eliminating the state's income tax, and replacing that lost revenue with an increase in the sales tax. This plan is unlikely to produce the economic growth, instead it dramatically shifts tax responsibilities from the wealthy onto low and working class West Virginians. Instead it would dramatically shift tax responsibilities from the wealthy onto low and working class West Virginians and destabilize our state's revenue system.

Other states have eliminated their income taxes with little or nothing to show, other than revenue erosion that brings cuts in support for schools, transportation and other true building blocks of broad prosperity. A better course for West Virginia is to reform the tax system in ways that would close our looming budget gap, tie what people owe more closely to their ability to pay, and help more hardworking men and women provide their families with a secure future.

While there are no details yet about what a West Virginia income tax cut would look like or how part or all of it would be replaced by the sales tax, State Senate leadership and Governor Justice have stated that the goal would be to eliminate the tax altogether. Income tax cuts and proposals in other states have involved significant increases in other taxes — those that affect low-and middle-class households more than the wealthy — and major cuts in essential state services.

The personal income tax is the state's largest revenue source and is approximately 45 percent or \$1.8 billion of the state's estimated FY 2018 General Revenue Fund budget.

Supply-side economist Arthur Laffer touted such an approach in a visit to West Virginia.¹ Laffer has advised the governors of several states, including Kansas, where the decline in revenue has seriously compromised the state's economic recovery and led to its credit rating being downgraded twice. More recently, a new Senate Select Committee on Tax Reform recently created in 2017 and is highly likely to propose a drastic reduction and flattening of the personal income tax rate along with a broader sales tax and rate hike.

Key Findings

- Income tax cuts are not a surefire way to grow the state's economy. Of the five states that have done so recently, only one is experiencing better job and income growth — despite underperforming most of its neighboring states.
- There is no academic consensus that cutting income taxes grows a state's economy. In fact, most academic studies since 2000 find little-to-no impact on economic growth from reducing state personal income taxes. Business investment and location decisions are determined by a myriad of factors, many of which make up a larger share of the cost of doing business.
- State income taxes only have a negligible impact on where people choose to live, according to most academic research. For every 10 people who have moved from West Virginia to Florida — a state that doesn't have an income tax — eight people have moved from Florida to West Virginia. Most people moving out of West Virginia go to states that levy income taxes.
- While proponents of eliminating West Virginia's income tax claim it leads to faster economic growth, over the last ten years states with the highest income tax rates have experienced faster economic growth. The nine states with the highest top income tax rates also have more Fortune 500 companies, higher median incomes, and a smaller share of residents without health insurance.
- Academic and real world experience show that the income tax is a more reliable source of revenue than the sales tax. Since 1990, income tax revenues grew by 249 percent in West Virginia while sales tax revenue only grew by 136 percent.
- The personal income tax is the only state tax based on the ability to pay. States that have a flat income tax tend to rely more heavily on low-and middle-income taxpayers for revenue, and less on the wealthy, than states with graduated income tax rates.
- Replacing West Virginia's personal income tax with a higher sales tax would be a large tax cut for the top one percent of wage earner in West Virginia and a sizable tax increase for most families. If West Virginia eliminated its income tax and replaced with a sales tax that included more professional services, a taxpayer making \$40,000 would see a tax increase of \$728 (annually) while a taxpayer making \$778,000 would see a tax cut of over \$28,000 (on average).
- If West Virginia replaces the income tax with a sales tax increase, it would increase taxes paid by its businesses, resulting in more people buying more products in neighboring states, and possibly lower the purchasing power of its low- and middle-income families.
- A shift from a graduated income tax in West Virginia to a flat income tax rate of five percent would raise taxes on 80 percent of families while giving the top one percent a tax cut of over \$7,000.
- Instead of cutting the income tax, lawmakers should pursue efforts to limit itemized deductions, modernize tax brackets, and create a refundable Earned Income Tax Credit.

Income Tax Cuts Highly Unlikely to Boost Economic Growth

Most of the states that have reduced or eliminated their income tax recently have not experienced stronger growth. Instead they have had trouble finding the resources to meet growing needs. Budget shortfalls have become pronounced. And this means less investment in schools and colleges, transportation, safe communities, and other public goods that provide a foundation for a strong economy. The theory that income tax cuts — especially for the wealthy — lead to stronger economic growth because they promote job creation and contradicted by real-world experience.

Income Tax Cuts Not Delivering Economic Growth for States

A number of states that have recently cut income taxes with the stated aim of boosting economic growth have not seen their performance improve. Since 2012, five states — Ohio, Maine, Kansas, Wisconsin, and North Carolina — have sharply cut their personal income taxes. None of the five saw the economic growth that was claimed, and in North Carolina the modest growth that did occur was concentrated to urban areas of Charlotte and Raleigh leaving the rest of the state behind.

Then there is Kansas, the state that in 2013 enacted the largest personal income tax cuts in recent history, including an income tax exemption for business owners and income tax rate reductions for individuals. The results have been very disappointing to tax-cut advocates. Kansas’s jobs base has grown only by 2.2 percent compared to the national average of 7.6 percent (through December 2016) and personal income growth was 7.0 percent compared to the national average of 12.6 percent since the tax cuts were enacted.

TABLE 1

North Carolina Underperforming Most of its Neighbors in Job Creation, Income, Growth, and Economic Output

	NC	GA	SC	TN	VA
Total Nonfarm Employment Growth	6.50%	8.80%	7.60%	7.20%	5.00%
Total Private Sector Employment Growth	7.70%	10.20%	8.50%	8.30%	6.10%
Nominal Personal Income Growth	14.20%	15.20%	15.70%	13.50%	12.70%
Nominal Per Capita Income Growth	11.20%	11.70%	11.60%	11.10%	10.70%
Nominal GDP Growth	11.80%	14.80%	14.40%	13.00%	9.10%

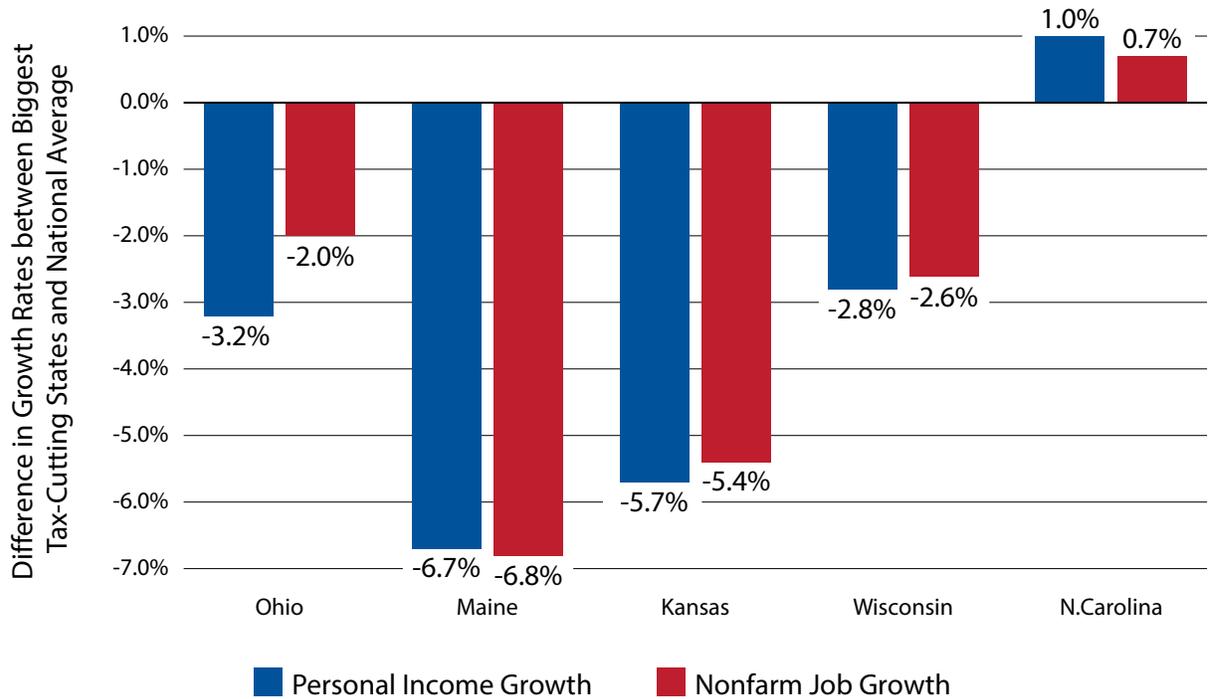
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics (January 2016 seasonally adjusted), and U.S. Bureau of Economic Analysis, 3rd Quarter of 2016.

Note: Employment growth measured from December 2013 to December 2016 and Income/GDP growth from 4th Quarter 2013 to 3rd Quarter 2016. Tax cuts effective January 2014 for North Carolina.

FIGURE 1

Biggest Income-Tax-Cutting States Not Seeing Economic Boom

Total nonfarm and personal income growth since the tax cuts took effect



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics (January 2016 seasonally adjusted) , and U.S. Bureau of Economic Analysis, 3rd Quarter of 2016.

Note: Employment growth measured from December 2013 to December 2016 and Income/GDP growth from 4th Quarter 2013 to 3rd Quarter 2016. Tax cuts effective January 2014 for North Carolina

When Kansas Governor Sam Brownback won passage of these tax cuts he said it “will be like a shot of adrenaline into the heart of the Kansas economy” and create 100,000 jobs by 2019. The opposite has happened, along with a \$700 million budget gap in 2016. Brownback’s plan to eliminate the state income tax has also resulted in nine rounds of budget cuts, two sales tax hikes, increased debt, three credit rating downgrades, and more people leaving Kansas than moved in since the tax plan took effect.² From a political standpoint the results have been equally deflating; in a recent poll only 23 percent of Kansans said they approved of their governor’s job performance.³ Brownback was the least popular governor in the nation in September 2016.

West Virginia has also undergone its own experience in supply-side economics, cutting business taxes over the past eight years in the hope of strong economic growth. The results have been poor. While business taxes as a share of private-sector Gross State Product have fallen to 6.2 percent from 6.8 percent from 2007 to 2015, and the state’s business climate ranking improved to 19th nationally from 37th, according to the conservative Tax Foundation, the state economy did not respond accordingly.⁴ The number of West Virginians employed has shrunk by over 24,000 and private-sector jobs have decreased by about 6,000 since the tax cuts were enacted in 2007.⁵

Income Tax Cuts Won't Boost Small Businesses or Entrepreneurship

Some proponents of cutting or eliminating the personal income tax often argue that it will help small businesses create jobs and boost entrepreneurship. The reality is it may reduce investments in the public goods that are pivotal for small business growth, such as education, workforce development, transportation and other pillars of a strong economy.

In fact, most small businesses are usually not in a position to create a job. According to a recent national study by the U.S. Treasury Department, only 11 percent of taxpayers reporting business income own a small business with employees other than the owner. Altogether, only 2.7 percent of income-tax payers own a small business with an employee other than the owner.¹¹

In West Virginia, 77 percent of tax filers in 2013 who reported business income were sole proprietors (92,700) compared to 23 percent who reported income from other forms of corporations and partnerships (27,600).¹² The average taxable income in 2013 for these businesses was \$21,656. Even if these businesses made enough money to have to pay the state's top income tax rate of 6.5 percent, they would only pay about \$1,400 on average. So eliminating their taxes completely would still produce nowhere near enough money to hire an additional worker.

A 2012 study commissioned by the U.S. Small Business Administration by John Deskins, who is currently the Director of the Bureau of Business and Economic Research at West Virginia University, and Donald Bruce of the University of Tennessee, found "no evidence of an economically significant effect of state tax [policy] portfolios on entrepreneurial activity."¹³ Deskins and Bruce looked at both personal income and corporate income policies in all 50 states from 1989 to 2004 and found that high personal income tax rates did not have a statistically significant impact on the share of taxpayers who were employed in a small business they owned.

A substantial amount of research finds that entrepreneurs are more likely to be attracted to a state because of the quality of the local workforce, amenities, a strong industrial bases similar their own (geographical clusters), and product demand when choosing where to locate or expand.¹⁴ If income tax cuts reduce public investments in schools, public safety, infrastructure, higher education, and other critical building blocks this could result in slower small business growth and development.

When most of the savings from income tax cuts go to the highest-income taxpayers, the impact on state economic growth can be even weaker. This is because higher-income people are able to save more of their money and also to spend or invest it out of state compared to middle-income taxpayers and people struggling to get by. So tax breaks benefitting the rich are a poor way to boost consumer demand in ways that would prompt business owners to step up hiring.⁹

Nor do income tax rates play much of a role in where businesses decide to locate. While it is true that taxes can be a factor this comes into play more if all other considerations are equal and there is perfect market competition. This is rarely the case. Business investment and location decisions usually revolve around such considerations as the availability of skilled workers, quality of life, access to markets, sound infrastructure, and customer demand. Since state and local taxes are generally less than three percent of the cost of doing business, the cost of labor, electricity, property, equipment, raw materials, and transportation are much more substantial for business than taxes and can have a greater impact on profit margins in one state compared to another.¹⁰

State Taxes Have a Negligible Impact on Where People Choose to Live

Some supporters of cutting or eliminating the income tax in West Virginia have argued that doing so could help attract more people — especially wealthier households and entrepreneurs — to move to West Virginia and boost economic growth.¹⁵ In some instances, proponents have claimed that people move from West Virginia to no-income-tax states like Florida to avoid paying West Virginia's income tax. An examination of academic studies, interstate migration data, and real-world experience reveals that state income taxes do not have a significant impact on interstate moves.¹⁶

In a recent review of the 18 major studies on taxes and interstate moves over the last two decades, the Center on Budget and Policy Priorities found that only three of the 15 concluded that high income taxes spur out-migration.¹⁷ Among the seven published studies that were in peer-reviewed economic journals since 2000, "six of the seven concluded that taxes were not a major driver of interstate moves." A 2016 study by Stanford University professors and economists at the U.S. Treasury Department that examined interstate moves of millionaires between 1999 and 2011 found that incomes taxes have only a tiny impact on millionaires' moves and that income taxes have no statistically significant impact on non-millionaires' moves.¹⁸

The fact is relatively few people relocate from state to state, and those who do are mostly likely to cite reasons other than taxes, such as a new job or job transfer, closeness to family, lower housing costs housing or a warmer climate. For wealthier households, extensive research shows there are many factors that work against an interstate move.¹⁹ For instance, high-income earners are more likely to be:

- Married with children and in a situation where both spouses need to obtain a secure job and want to provide a stable environment for their children, especially teenagers.
- Homeowners, which increases the cost of moving.
- Older; those most likely to move are between the ages of 18 and 24 because they have yet to start a family.
- Employed, while those without jobs – which tend to have lower incomes - are four times more likely to move from state to another.
- Highly invested in their community, participating in civic obligations and community leadership and thus less likely to leave.

The high-income households that are relatively mobile tend to be "empty nesters," supported by income from their investments that often own second homes in another state.

Over the last two decades only between 1.5 to 2 percent of households moved from one state to another each year.²⁰ Between 1993 and 2015, approximately 392,313 households moved into West Virginia and 403,821 moved out.²¹ This means 97 percent of households leaving West Virginia were replaced by new households moving into West Virginia. West Virginia ranked near the middle in the net impact of state-to-state moves among all states over this period.

What about Florida? According to Internal Revenue Service (IRS) data, 32,700 households moved from West Virginia to Florida from 1993 to 2015.²² And 27,433 households from Florida moved to West Virginia during this same period. In other words, for every 10 households that moved from West Virginia to Florida, more than eight moved from Florida to West Virginia. Migration patterns in West Virginia are mostly dominated by states that border West Virginia, with more West Virginians moving to and from Ohio, Maryland, Virginia, and

Pennsylvania. From 1993 to 2015, the net migration between West Virginia and North Carolina was the most pronounced, with 37,486 households in West Virginia moving to North Carolina (which has an income tax) while 28,756 moved from North Carolina to West Virginia (77%).

Replacing the Income with a Sales Tax Will Not Significantly Boost West Virginia’s Economy

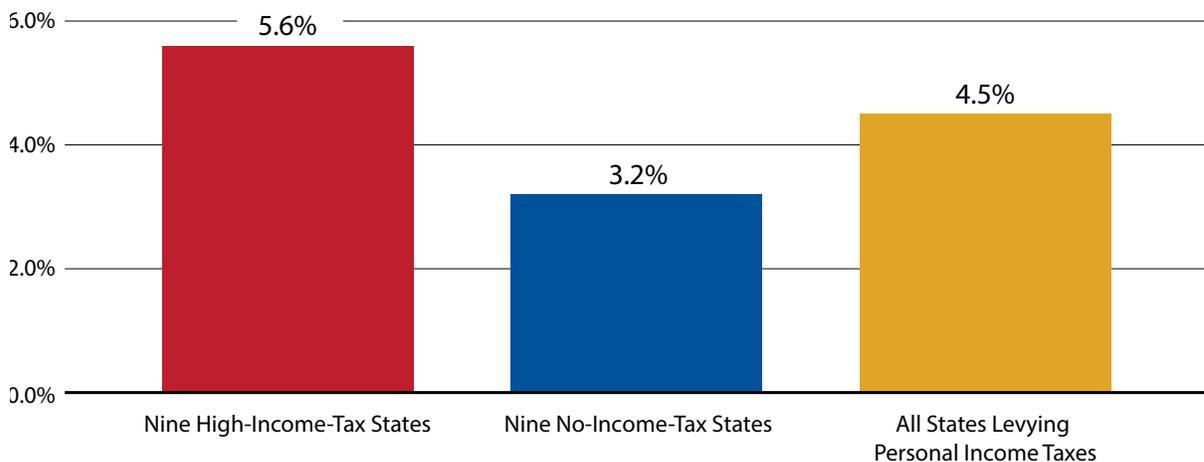
Proponents of shifting away from an income tax and toward sales tax have claimed that it will grow West Virginia’s economy because “evidence shows” it has worked in the states of Tennessee, Texas, and Florida that do not levy a broad-based income tax.²³

Among economists who study taxation and state economic growth, there is no consensus on whether relying less on income taxes and more on sales taxes improves economic growth. In fact, many have found the opposite. A 2005 study co-authored by John Deskins found that a one-percentage-point increase in a state’s top personal income tax rate had a relatively small impact on Gross State Product (GSP) growth, while an equivalent increase in the sales tax rate had a very large effect on GSP growth.²⁵ As the previous section highlighted, states that have recently cut their personal income taxes are not performing better than the nation as a whole.

Additionally for example, over the last ten years the nine states without an income tax have had slower economic growth than states that levy personal income taxes (**Figure 2**). In fact, the nine states with the highest top personal income tax rate outperformed the nine states without an income tax. Moreover, the high-income-tax states were also slightly wealthier.

The nine high-income-tax states also outperformed the nine no-income-tax states on several other measures in 2015, including the average number of Fortune 500 companies (17.6 vs. 10.4), median household income (\$61,784 vs. \$58,423), and the share of residents without health insurance (6.0% vs. 11.4%).²⁶

FIGURE 2
Income-Tax-States Have Higher Economic Growth
Growth in Per Capita Real GSP, 2005-2015 (2009 chained dollars)



Source: U.S. Bureau of Economic Analysis

Note: Does not include the District of Columbia

Income Tax Most Reliable Revenue to Support Public Services

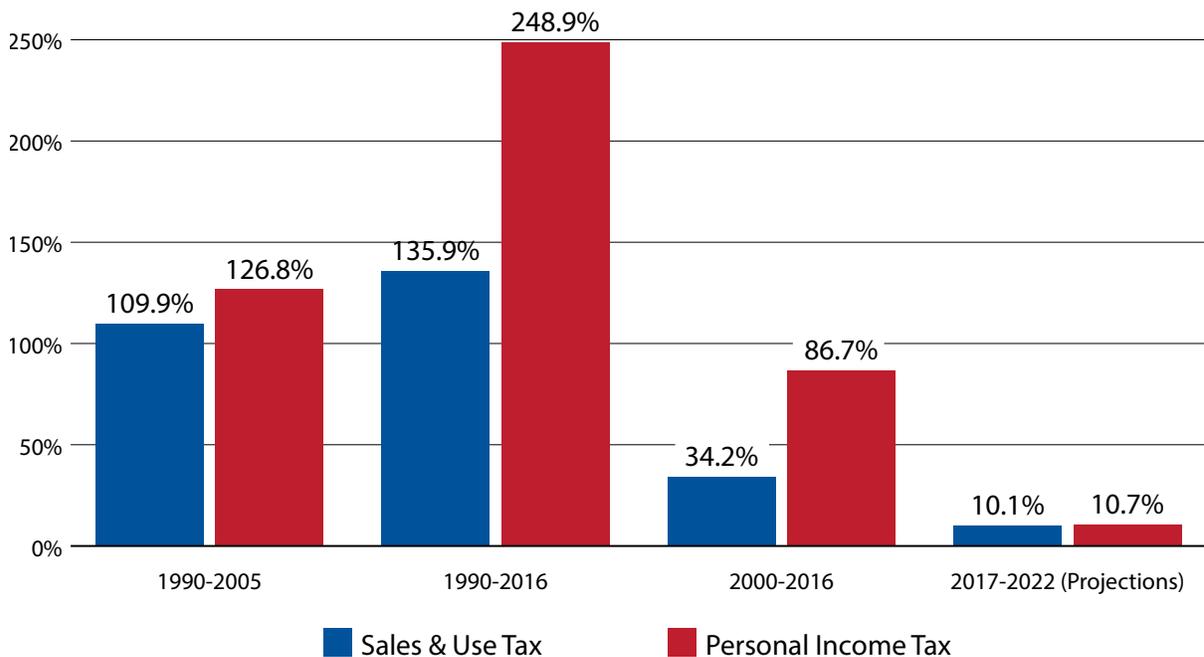
The personal income tax does a good job at keeping pace with the need for important and critical public investments such as education and health care.

Although, no form of taxation is immune from declining in a bad economy. Economy, experts believe the mix of taxes and is the best way to balance. Because personal income tax collections grow faster over time, this helps even out the slower-growing sales and property taxes that often do not keep up with the cost of essential public services. So, any shift from income taxes toward sales taxes in West Virginia would likely lead to slower overall revenue growth, making it much more difficult to maintain critical public services.

The personal income tax is a better and more stable source of revenue than the sales tax in the long run and sometimes in the short-run.²⁷ As Russell Sobel, a former professor of economics at West Virginia University pointed out in his co-authored book *Growth and Variability in the State Tax Revenue*, "personal income taxes are a better source of long-run revenue growth than retail sales taxes."²⁸ Research by academics Donald Bruce, William Fox, and M.H. Tuttle have found that "the average long-run elasticity for incomes taxes is more than double that for sales taxes."²⁹ Bruce et al also found that, even in the short-run, income tax revenue is not more volatile than sales tax revenue.

Standard & Poor's Rating Service finds that states relying on progressive income taxes helps "counteract much of the depressing effect income inequality has on tax revenue growth rates," This is because wealthier Americans, who have seen most of the income gains in recent years, have higher savings rates than low-and middle-income Americans so a lot of their money is not subject to collection.³⁰

FIGURE 3
Personal Income Tax Growth Outpaces Sales and Use Tax



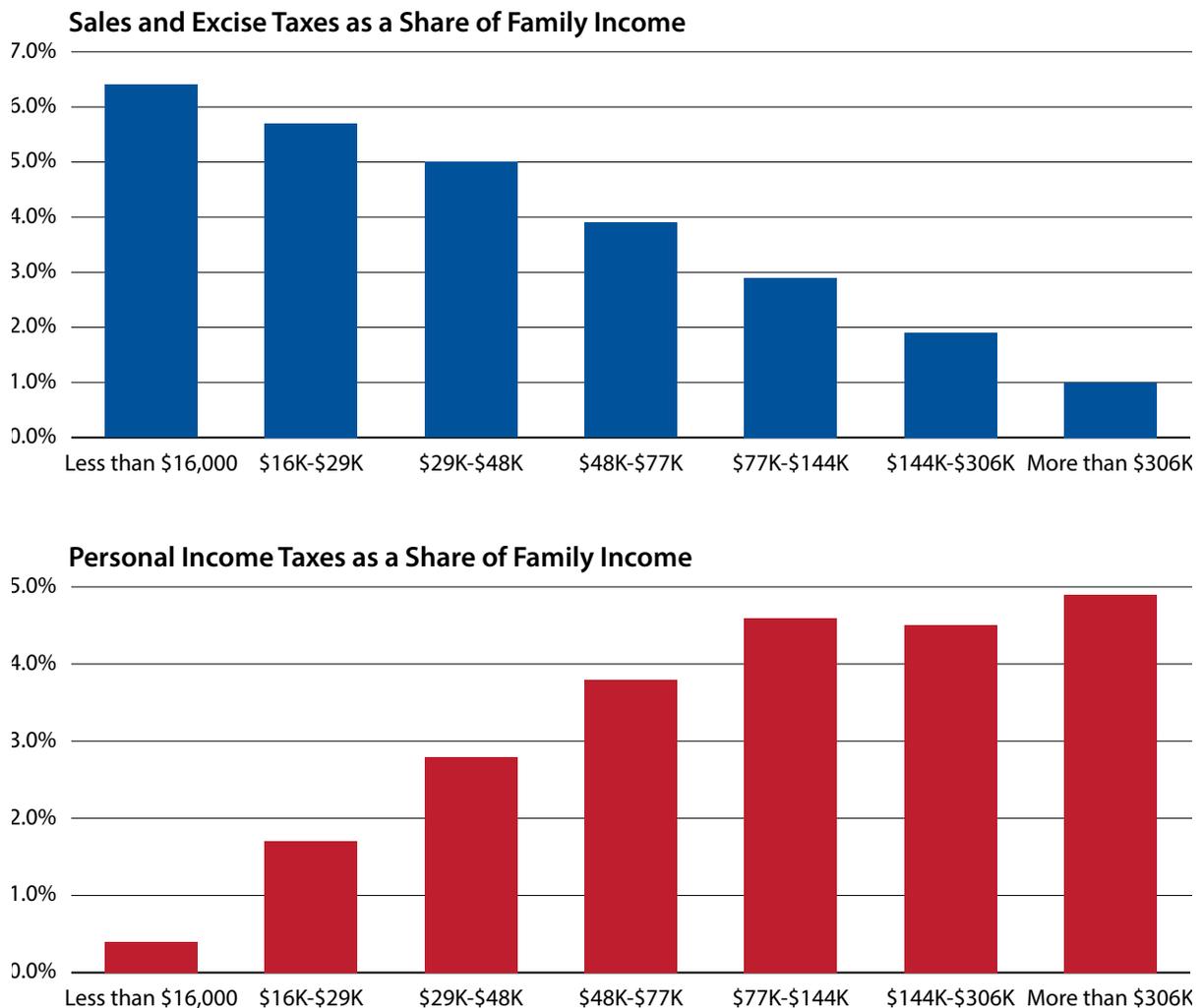
Source: WV State Budget Office

Revenue collections from the state income tax have significantly outpaced growth in receipts from sales and use taxes over the last several decades (**Figure 3**). Over the last 26 years (1990 to 2016), income tax revenues grew by 249 percent while sales and use tax revenue grew by 136 percent. Even before West Virginia’s sales tax on groceries was phased out beginning in 2006, income tax revenue grew at a faster rate than sales and use tax collections. The latest revenue projections are that the income tax will grow slightly faster than the sales and use tax over the next five years.

Income Tax Enhances Equity

In addition to providing a more stable and growing revenue base, the personal income tax also makes the state’s tax system more equitable. It is the only tax West Virginia levies that is based on the ability to pay — meaning that it designed so wealthier taxpayers pays a larger share of what they make in a year than those with lower incomes. (**Figure 4**).

FIGURE 4
West Virginia Sales Taxes Fall Hardest on Low-Income Families
 Personal Income Taxes are based on the Ability to Pay
 (Non-Elderly Family Income)



Source: Institute for Taxation and Economic Policy, “Who Pays? 2015”

West Virginia's personal income tax provides an important counterbalance to sales and excise taxes, which are not based on the ability to pay. For example, a family making \$22,500 a year would pay 8.6 percent of its income in state and local taxes. A family making \$36,900 would pay 9.0 percent, while a household in the top one percent, making an average income of \$675,800 a year, would pay 6.5 percent of its income. The income tax works in the opposite direction; with higher-income families paying a larger share of their income in taxes and lower-income families paying a smaller share .

The states that do not levy graduated income taxes also tend to be those that are least equitable; in other words the wealthiest pay an even smaller share of their income in state and local taxes than in West Virginia, and others pay a higher share. Of the 10 states where this situation is the worst, five have no broad-based income tax and the other five have either an income tax where everyone pays the same rate or a graduated tax with rates that differ little from top to bottom.³¹

In five of the nine states without broad-based personal income taxes, the effective state and local tax rate on low and moderate-income taxpayers (40th percentile and below) is greater than 10 percent. States with flat-rate incomes taxes tend to get more revenue from low-and moderate income earners and less from the wealthy.³²

The recent experience in Kansas illustrates how shifting from the income to heavier reliance on sales and excise taxes can redistribute money upwards. Between 2012 and 2015, Kansas lowered income tax rates, exempted most non-wage business income and income for those making under \$5,600, and decreased itemized deductions, while raising the sales tax and cigarette tax. Altogether, these policies increased taxes on households with incomes averaging \$13,000 by \$197 while the richest one percent — those with income greater than \$439,000 — pay about \$24,000 less a year.³³

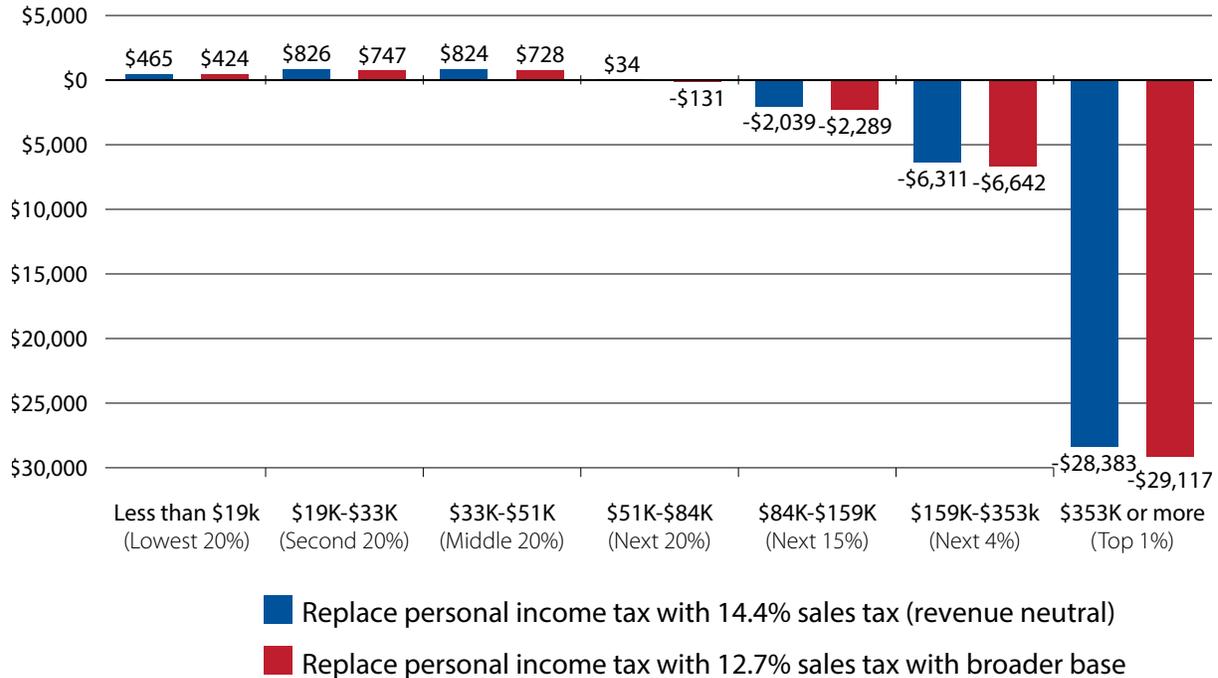
Shift to Sales Tax from Personal Income Tax Boon for Wealthy, Huge Tax Increase on Low-and Moderate-Income Families

While neither state senate leadership nor the governor have put forth specific legislation that would shift or replace the state's personal income tax with sales and use tax, it is clear that this is a long-term goal. Any shift from the income to the sales tax would have major ramifications for the state's taxpayers.

If West Virginia eliminated its personal income tax and replaced it with the state's sales tax, the sales and use tax rate would have to increase to an estimated 14.4 percent from the current rate of six percent to be revenue neutral. This would increase taxes on a majority of West Virginia taxpayers while giving higher-income West Virginia a significant tax break (**Figure 5**). Replacing the income tax with a sales tax would increase taxes on households with income below \$84,000 while giving an average tax cut of \$28,383 to households with income over \$353,000.

FIGURE 5

Replacing Income Tax with Sales Tax is Boon for Wealthy, Tax Increase for Most Families in West Virginia



Source: Institute on Taxation and Economic Policy.

A West Virginia household with an average income of \$40,000 would see an average tax increase of \$824 while a household in the top one-percent with an average income of \$778,000 would receive a tax cut of over \$28,000. Low-income West Virginians would be especially hit hard by this tax shift. A West Virginian making just \$11,000 would see a tax increase of 4.4 percent of his or her family income or \$465, while the top one-percent would see a decrease of 3.7 percent in taxes as a share of their household income.

If state lawmakers broadened the sales tax base to include most professional services³⁴ and eliminated the personal income tax, the sales tax rate would need to be an estimated 12.7 percent to be revenue neutral. This would make West Virginia’s state sales tax rate the highest in the nation, 3.7 percentage points higher than Tennessee at 9 percent.³⁵ While the addition of more professional services into the sales tax base improves the progressivity of the sales tax, these changes would still raise taxes on most West Virginia taxpayers while giving wealthy West Virginia a very large tax cut (**Figure 5**).

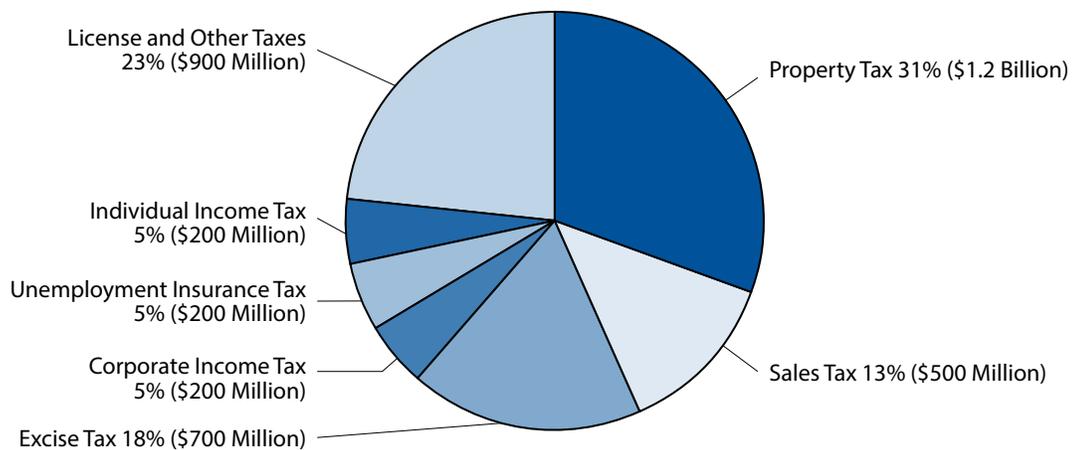
Shifting to a higher sales tax could likely hurt the bottom lines of businesses by shrinking the consumer base in West Virginia. Because the tax changes would raise taxes on most West Virginian families, it would lower their disposable income to spend in local stores or on local products. Businesses located in border counties in West Virginia could also lose customers as they cross state lines or shop online at places that do not impose a sales tax.

Businesses Would See a Tax Increase if Sales Tax Replaces Income Tax

If West Virginia replaces its personal income tax with a sales tax, it would dramatically increase the taxes paid by its businesses. Companies would have to pay higher sales taxes on everyday purchases, such as supplies and office furniture. If West Virginia includes professional services in its sales tax base, such as accounting and legal advice, businesses would have to pay even more.

According to the Council on State Taxation (COST), a Washington, D.C.-based trade association that represents over 600 multistate and multinational corporations, sales taxes account for a larger percentage of total business taxes paid in West Virginia than the income tax. For FY 2015, COST estimates that businesses paid \$500 million in sales taxes compared to just \$200 million in personal income taxes (**Figure 6**). The sales tax accounted for approximately 13 percent of business taxes paid in the state while income taxes accounted for five percent.

FIGURE 6
Shifting from Income to Sales Tax Would Increase Business Taxes in West Virginia



Source: Ernest & Young, FY 2015 COST Report on State and Local Business Taxes

Tax incidence analysis in Texas and Minnesota (the only two states that conduct it), shows that businesses pay an estimated 42 percent of sales and use taxes in Texas and 34 percent in Minnesota. According to COST, businesses in FY 2015 paid 42 percent of state and local sales taxes nationally while households paid 58 percent.³⁶ A 2016 study by the Anderson Economic Group finds that business pay approximately 20 percent of state and local general sales taxes.³⁷

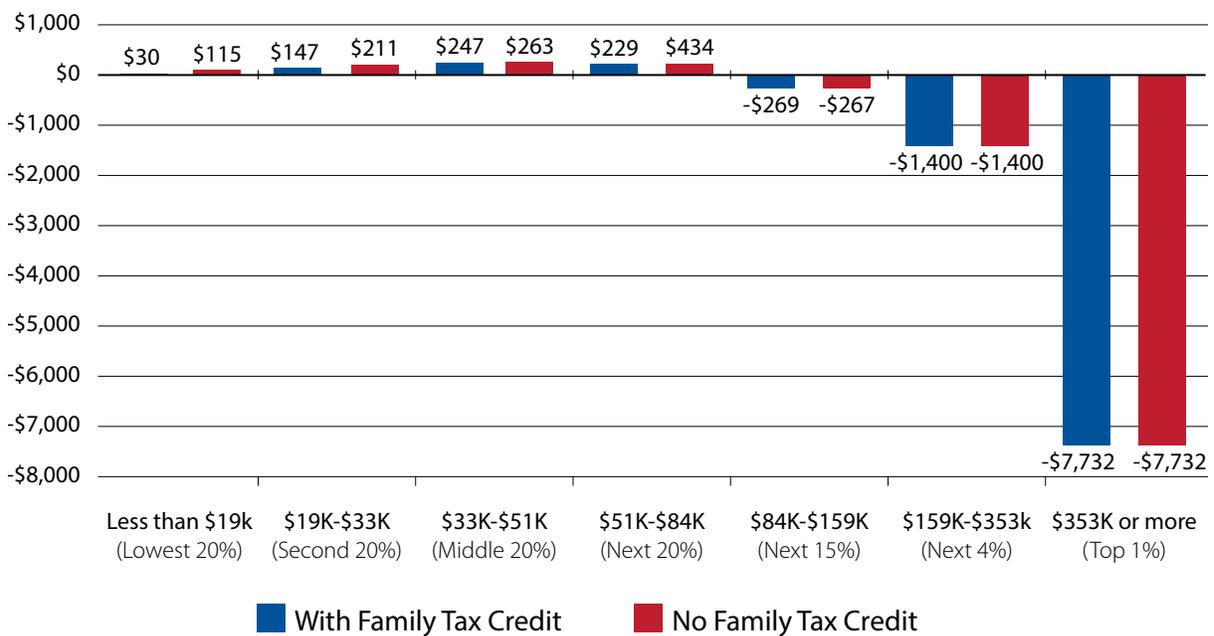
In March of 2013, a scrapped tax plan put forth by former Louisiana Governor Bobby Jindal to replace the income tax with a broader and higher sales tax was estimated to increase business taxes by \$500 million, with about 80 percent of the new sales taxes on services being paid by businesses.³⁸

A Flat Income Tax Raises Taxes on Low-and Moderate-Income West Virginians

Some lawmakers have endorsed a flat income rate for all West Virginians, similar to Pennsylvania and seven other states. In August of 2017, the Joint Select Committee on Tax Reform reviewed several proposals to make changes to the state’s personal income tax schedule, including a flat rate of 5.1 percent. Lawmakers also considered changes to both the state’s Low-Income Earned Income Exclusion (\$10,000 for joint tax filers) and the Family Tax Credit (exempts income taxes for those below the federal poverty line (FPL) and offers a partial credit up to 130% of FPL).

A five percent flat personal income tax rate in West Virginia, with or without the Family Tax Credit, would raise taxes on households in West Virginia with income below \$84,000 while giving a very large tax cut to the top one-percent of \$7,372 (Figure 7).

FIGURE 7
A Flat Income Tax of 5% is a Big Tax Cut for the Wealthy and a Tax Increase on Most Families



Source: Institute on Taxation and Economic Policy.

Conclusion: The Tax Reform West Virginia Needs

Proposals to reduce, flatten, or eliminate West Virginia’s personal income tax is highly unlikely to improve West Virginia’s economy, let alone close a \$600 million budget shortfall. Even if fully replaced by increasing the sales tax (broadening the sales tax base), it would be a massive redistribution of tax responsibilities from the wealthy and upper-middle class to low-and middle-income families.

While growing our economy and promoting shared prosperity requires a reliable source of revenue that can meet the state’s public needs. Rather than reducing or eliminating its state income tax, West Virginia would benefit from several reforms that would make the tax a better, stronger, more equitable source of revenue. They include:

Scale Back Personal Exemptions

West Virginia tax payers receive a \$2,000 exemption for every member of their household. This costs the state an estimated \$136 million per year. Low- and middle-income families would benefit from maintaining this exemption. For the highest-income households it is much less important and, unlike the federal government, West Virginia does not phase out exemptions as income rises.

If the \$2,000 per person exemption were reduced for joint filers between \$150,000 and \$200,000 and eliminated for those over \$200,000, it would increase revenue by an estimated \$9.9 million and improve the equity of taxes in West Virginia. Such a change would have no impact on 96 percent of West Virginians, while the highest earning one percent, those making an average of \$767,000 a year, would pay only 0.1 percent more of their income in taxes.

Modernize Rates & Brackets

West Virginia's personal income tax schedule has not changed since 1987, when the state's top personal income rate was reduced to 6.5 percent from 13 percent. Since then more middle-income households have fallen into higher tax rates.

Adjusting brackets and rates to better reflect modern income levels and the huge disparities in ability to pay between low- and high-income West Virginians would be an important advance. The "bracket creep" people face today means higher tax bills even though their moderately increased income has no more buying power because of inflation. For example, \$130,000 bought no more in 2015 than \$60,000 did in 1987. Reforming brackets could include adopting a new bracket for the highest-income households and possibly reducing rates for low- and middle-income residents without costing the state any money. For example, a new top bracket of 7.4 percent on taxable income above \$150,000 would increase revenue by an estimated \$44.8 million.

Help Low-Paid Workers with a Refundable State Earned Income Tax Credit

At the federal level, the Earned Income Tax Credit (EITC) provides a valuable boost for people who work at such low wages that it is hard to support a family and build a future. In 26 states and the District of Columbia there also is a state EITC. The EITC is a proven tool to fight poverty, increase labor force participation, help low-paid working families make ends meet while improving the health, educational achievement, and future earnings of children of EITC recipients.

Working families with children earning up to \$39,000 to \$53,000 (depending on marital status and the number of children in the family) would qualify for the credit. The largest benefits would go to families with incomes between \$10,000 and \$23,000. If West Virginia adopted a state EITC equal to 15 percent of the federal EITC, which 158,000 West Virginians received in 2013, it would result in a maximum credit of over \$800 for a single mom with two children working full-time at the minimum wage.

The most beneficial form of the EITC provides support for families who make so little they do not owe any state income tax. By providing them with this assistance, the EITC helps to offset the other taxes -- sales, excise, and property taxes, for example -- that take a larger bite out of the incomes of low-paid working people than others. West Virginia today has a Low Income Family Tax Credit that offers a small amount of money to only the state's poorest residents.

These reforms would recognize that West Virginia supports a common-sense income tax that raises the money to build a strong economy and does so equitably. It is a much better path to a bright future for all West Virginians than cutting or eliminating the state income tax and replacing it with a higher sales tax, a move that would benefit the wealthiest the most while potentially costing the state millions of dollars a year that are needed for public services.

Academic Studies since 2000 on Effect of Income Taxes and Economic Growth

Citation	"Do Personal Income Tax Levels Affect Economic Growth?"	Key Quotes
Richard V. Adkisson, Mikidadu Mohammed, "Tax Structure and State Economic Growth During the Great Recession," <i>Social Science Journal</i> , 2014	No	"[I]f one percentage point of [the sales tax's share of total] revenue collections is transferred [i.e., shifted] to personal income tax, the model predicts a 0.02% <i>increase</i> in both one-year and two-year growth rates. . . . The empirical evidence here suggests that marginal differences in tax structure have detectable but very small impacts on growth rates, at least in the context of the Great Recession. Given this evidence, states facing economic downturns should not rush to adjust their tax structures if their goal is to enhance their growth prospects. At least they should not expect large changes if they do." [Emphasis added]
James Alm and Janet Rogers, "Do State Fiscal Policies Affect State Economic Growth?" <i>Public Finance Review</i> , July 2011	No	"Similar results are found for the individual income tax variable. . . . The estimated coefficient is never [statistically] significantly negative . . . but its coefficient is often significantly positive [i.e., indicates that higher state personal income taxes are associated with higher state economic growth]."
Stephen P.A. Brown, Kathy J. Hayes, Lori L. Taylor, "State and Local Policy, Factor Markets, and Regional Growth," <i>Review of Regional Studies</i> , 2003	Yes	"We construct proxies for effective tax rates by dividing state and local government revenues from sales, property, individual income, and corporate income by gross state product. . . . There is no combination of rising taxes and rising public spending that is positively associated with growth in private capital. . . ."
Howard Chernick, "Redistribution at the State and Local Level: Consequences for Economic Growth," <i>Public Finance Review</i> , 2010	No	"The progressivity of a state's tax structure does not have a statistically significant effect on the rate of growth of personal income. . . . Income tax burdens do not have a [statistically] significant effect on growth. . . . The most striking policy implication of this study is that tax cuts for high-income taxpayers cannot be justified in terms of growth in state income. Although such cuts may benefit current taxpayers, there is no evidence of a spillover or trickle-down effect to the overall state economy."

Citation	"Do Personal Income Tax Levels Affect Economic Growth?"	Key Quotes
<p>Brian Goff, Alex Lebedinsky, Stephen Lile, "A Matched Pairs Analysis of State Growth Differences," <i>Contemporary Economic Policy</i>, 2011</p>	<p>Yes and No</p>	<p>"Taken as a unit, our results provide strong support for the idea that lower tax burdens tend to lead to higher levels of economic growth. Among tax variables, individual income taxes matter most. . . . In terms of the matching exercise, this restrictive sample comes the closest to producing a comparison of 'twin' states, such as Kentucky and Tennessee and New Hampshire and Vermont. Policy analysis based on these states would indicate that higher tax burdens and, in particular, higher individual income-tax rates . . . promote higher growth. . . ."</p>
<p>J. William Harden and William H. Hoyt, "Do States Choose Their Mix of Taxes to Minimize Employment Losses?" <i>National Tax Journal</i>, March 2003</p>	<p>No</p>	<p>"We find the corporate income tax has a [statistically] significant negative impact on employment while the sales and individual income taxes do not. . . ."</p>
<p>Randall G. Holcombe and Donald J. Lacombe, "The Effect of State Income Taxation on Per Capita Income Growth," <i>Public Finance Review</i>, May 2004</p>	<p>Yes</p>	<p>"The results show that over the 30-year period from 1960 to 1990, states that raised their income tax rates more than their neighbors had slower income growth and, on average, a 3.4% reduction in per capita income."</p>
<p>Bruce Howard, "Does the Mix of a State's Tax Portfolio Matter? An Empirical Analysis of United States Tax Portfolios and the Relationship to Levels and Growth in Real Per Capita Gross State Product," <i>Journal of Applied Business Research</i>, 2011</p>	<p>No</p>	<p>"A weak but statistically significant positive relationship between the index of annual growth in per capita gross state product and the index for individual income tax share was evidenced in the 1993-99 pooled data [i.e. greater reliance on income taxes was associated with stronger economic growth]. . . . It is hard to place too much confidence in this result because when testing on a year-by-year basis, statistical significance at a confidence level of 90% or greater for the tax index coefficient was achieved for only 1 of the 7 years. Furthermore, there was no statistically significant relationship between the index of per capita level of GSP and the individual income tax index. . . . The empirical results suggest that at the state level . . . taxing individual income is more neutral [in its effects on economic growth] than taxing either property or gross receipts."</p>

Citation	"Do Personal Income Tax Levels Affect Economic Growth?"	Key Quotes
Andrew Leigh, "Do Redistributive State Taxes Reduce Inequality?" <i>National Tax Journal</i> , March 2008	No	<p>"Regarding the efficiency cost of taxation, I find no evidence that states with more redistributive taxes experience slower growth in per capita personal income. (If anything, states with redistributive taxes grow faster.)"</p> <p>[Note: although this quotation refers to "redistributive taxes" in general terms, the specific measure of redistribution used is state personal income taxes.]</p>
Andrew Ojede and Steve Yamarik, "Tax Policy and State Economic Growth: The Long-Run and Short-Run of It," <i>Economics Letters</i> , 2012	No	<p>"This paper used a pooled mean estimator to estimate the short-run and long-run impacts of state and local tax policy on state-level economic growth. . . . The results found that property taxes lowered both short-run and long-run economic growth, sales taxes lowered long-run growth, while income taxes had no short-run or long-run impact." [Emphasis added.]</p>
Barry W. Poulson and Jules Gordon Kaplan, "State Income Taxes and Economic Growth," <i>Cato Journal</i> , Winter 2008	Yes	<p>"The analysis underscores the negative impact of income taxes on economic growth in the states. . . . Jurisdictions that imposed an income tax to generate a given level of revenue experienced lower rates of economic growth relative to jurisdictions that relied on alternative taxes to generate the same revenue."</p>
W. Robert Reed, "The Determinants of U.S. State Economic Growth: A Less Extreme Bounds Analysis," <i>Economic Inquiry</i> , October 2009	No	<p>Note: No direct quotes in the paper summarize findings with respect to the effects of personal income taxes on state economic growth. However, average effective personal income tax rates were <i>not</i> identified in Table 3 of the paper as a statistically "robust" variable in explaining state economic growth in an analysis using the level of and 5-year growth in the explanatory variables. Footnote 25 indicates that higher personal income taxes were actually associated with <i>higher</i> economic growth in the 10-year analysis.</p>
W. Robert Reed and Cynthia L. Rogers, "Tax Cuts and Employment Growth in New Jersey: Lessons from a Regional Analysis," <i>Public Finance Review</i> , May 2004	No	<p>"This study's analysis does not support the hypothesis that [personal income] tax cuts stimulated employment growth in New Jersey."</p>

Citation	"Do Personal Income Tax Levels Affect Economic Growth?"	Key Quotes
Dan S. Rickman, "Should Oklahoma Be More Like Texas? A Taxing Decision," <i>Review of Regional Studies</i> , 2013	No	"[T]here is not compelling evidence that Texas economically out-performs Oklahoma. . . . Controlling for other differences between Oklahoma and Texas using county level data for all neighboring states revealed few growth advantages, in which the only advantage post-2000 occurred during 2007 to 2010. Notably, Texas did not enjoy any advantages during the 2000 to 2007 period, which is prior to when Oklahoma continued to reduce its personal income tax rate. . . . The evidence above suggests that eliminating the [Oklahoma] state income tax at best would have no impact. At worst, if Oklahoma's adjustment to elimination of the state income tax in terms of spending and alternative taxes is worse than that of Texas, the Oklahoma economy could be harmed. Vital investments in education and infrastructure could be harmed, which could more than offset any gains from reducing income taxes."
Marc Tomljanovich, "The Role of State Fiscal Policy in State Economic Growth," <i>Contemporary Economic Policy</i> , July 2004	No	"The coefficients on [personal] income tax rate and property tax rate are statistically insignificant. . . . Subdividing state revenues and expenditures into individual components therefore reinforces the lack of impact of individual [income] tax rates on long-run state economic growth. . . ."

Source: Michael Leachman and Michael Mazerov, "State Personal Income Tax Cuts: Still a Poor Strategy for Economic Growth," Center on Budget and Policy Priorities, Updated May 14, 2015

Other Recent Studies on Income Taxes and Economic Growth

Citation	"Do Personal Income Tax Levels Affect Economic Growth?"	Key Quotes
William G. Gale, Aaron Krupkin, and Kim Rueben, "The Relationship Between Taxes and Growth at the State Level: New Evidence," <i>Tax Policy Center</i> , April 2015.	No	"Using a framework that in prior research generated significant, negative, and robust effects of taxes on growth, we find that neither tax revenues nor top income tax rates bear stable relations to economic growth or employment across states and over time."
Donald Bruce and John Deskins, "Can State Tax Policies Be Used to Promote Entrepreneurial Activity?," <i>Small Business Economics</i> , 2012.	No	"[S]tates with more progressive personal income tax structures and states that have more aggressive corporate income taxes through the imposition of a combined reporting requirement both tend to have slightly higher entrepreneurship rates. The composition of state tax portfolios is not found to be a significant determinant of state entrepreneurship."
Rex J. Pjesky, "What Do We Know About Taxes and State Economic Development? A Replication and Extension of Five Key Studies." <i>Journal of Economics</i> , March 2006.	No	"[T]he conventional wisdom about the impact of taxes on economic growth...rests on a weak foundation."

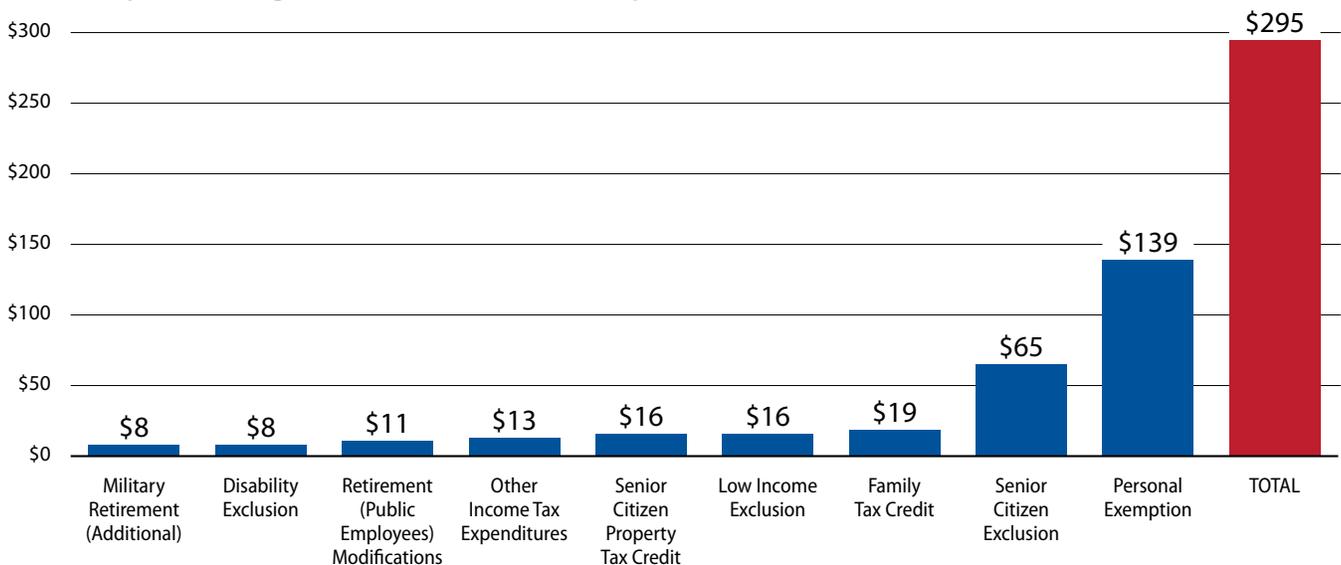
The Personal Income Tax Base in West Virginia

The income tax applies to most types of money income, including wages and salaries, interest, rental income, capital gains, and some business and pension income. West Virginia, similar to 29 other states, links to the federal definition of adjusted gross income (AGI) to define its Personal Income Tax base. However, West Virginia is one of ten states that does not allow any itemized deductions patterned after federal rules.

A small share of personal income tax revenue comes from business income. According to the Council on State Taxation (COST), business income accounted for an estimated 12 percent, or \$200 million, of the \$1.7 billion in personal income taxes collected in fiscal year 2013 in West Virginia. Businesses income subject to the income tax comes from sole proprietorships, partnerships, limited liability companies, and corporations with a small number of stockholders, known as subchapter S-corporations. They are known as “pass through” businesses because the income from the business is passed through to the owner’s personal income tax returns in calculating the businesses’ tax liabilities.

West Virginia, like many states, also has a number of major exclusions, exemptions and credits that lower the income subject to the tax. According to the WV State Tax Department, the estimated value of forgone revenue from personal income tax expenditures was \$295 million in 2017. The largest tax expenditure is the state’s exemption personal allowance of \$2,000 claimed for federal income tax purposes. Many types of pension benefits are also excluded, including state and local police, military (up to \$20,000), some public sector retirees (up to \$2,000), and some surviving spouses, low-income seniors, and disabled residents. Another large modification is the low-income exclusion that allows taxpayers (married, filing jointly), who earn \$10,000 or less, to exclude this income from their taxes. Once the amount of tax liability is determined, West Virginia also offers a number of credits against tax liability. This includes the low-income family tax credit, adoption credit, neighborhood investment credit, and film tax credit to name a few.

FIGURE 8
Major West Virginia Personal Income Tax Expenditures (in millions)



Source: West Virginia Tax Department, 2017 Tax Expenditure Study

How the Personal Income Tax Works

Similar to 33 states, West Virginia has a progressive or graduated rate structure, with marginal income tax rates growing with income. As the table below demonstrates, West Virginia's marginal income tax rate begins at three percent for incomes between \$0 and \$10,000 and ends at 6.5 percent with incomes above \$60,000. This means as income increases, so does the rate at which it is taxed. A tax filer's effective income tax rate is the total tax expense divided by taxable income.

For example, if a family's taxable income is \$65,000 (after any deductions) in West Virginia this does not mean that all of the family's income will be taxed at the top rate of 6.5 percent. As the table below makes clear, the family's first \$10,000 would be taxed at three percent, the next \$15,000 at four percent, and so on. Only the last \$5,000 would be taxed at the top tax rate of 6.5 percent. The family's effective tax rate would be about 4.8 percent (\$3,100/\$65,000).

WV Personal Income Tax Schedule (2014)		Taxable Income of \$65,000	
Income Bracket	Marginal Tax Rate	Amount Taxed	Tax Owed
\$0-\$10,000	3.0%	\$10,000	\$300
\$10,000-\$25,000	4.0%	\$15,000	\$600
\$25,000-\$40,000	4.5%	\$15,000	\$675
\$40,000-\$60,000	6.0%	\$20,000	\$1,200
\$60,000 +	6.5%	\$5,000	\$325
		\$65,000	\$3,100

Source: West Virginia Tax Department, 2017 Tax Expenditure Study

West Virginia's income tax is almost flat for upper-middle income and high-income families. While West Virginia has a low-income exclusion (\$10,000) and a family tax credit for those below and slightly above the federal poverty line, the income brackets and rates have not been adjusted since 1987 (**Table 2**). This means more people are falling into the state's higher-income tax brackets and rates. If they are not adjusted periodically taxes will rise along with inflation in what is popularly known as "bracket creep." For example, \$60,000, in 1987 is the equivalent of over \$130,000 in 2015, after adjusting for inflation.

In 1987, an estimated four percent of families in West Virginia had income above \$60,000 compared to almost 40 percent in 2014. Among the states with an income tax, 25 states fully or partially index their income brackets while 18 states (including West Virginia) do not index at all. West Virginia's marginal tax rate is also much lower today. During the 1970s and early 1980s, West Virginia's top marginal income tax rate was 9.6 percent and, from 1983 to 1986, it reached a high of 13 percent. The lower rates on those with higher incomes have also contributed to a less progressive income tax system in West Virginia.

Serious Research Shows Tax Cuts Do Not Promote Growth

The lackluster economic performance of states that cut their income taxes is no surprise, in light of numerous academic studies showing there is, at most, a small connection between state income tax rates and economic growth.

After reviewing major studies published in academic journals since 2000 that examined the effect of state personal income tax levels on broad measures of state economic growth, the Center on Budget and Policy Priorities concluded that “of the 15, 11 found no significant effects and one of the others produced internally inconsistent results.”⁶ This means for every one academic study that found personal income taxes boosted state economic growth, there were about four that found no significant effects.

A study conducted by the nonpartisan Tax Policy Center further undermines the claim that states can improve their economies by cutting personal income taxes.⁷ It found that personal income taxes have a statistically *insignificant* impact on growth. This study replicated a 2008 study by economist Robert Reed that many tax-cut proponents often cite that found evidence that income tax cuts increase economic growth. TPC research found that simply by extending the time period of Reed’s statistical analysis that the positive results disappeared. In fact, they found that higher personal income taxes are usually associated with higher economic growth.

The TPC study mirrored the findings of a 2006 study by economist Rex Piesky that showed that higher tax states either are associated with stronger growth or have a statically insignificant impact on economic growth.⁸ Piesky concluded that the “conventional wisdom about the impact of taxes on economic growth rests on a weak foundation.”

Endnotes

- 1 David Gutman, "Economist: Cut taxes in W.Va.," *Charleston Gazette-Mail*, September 2, 2015. Retrieved from <http://www.wvgazette.com/article/20150902/GZ01/150909868/1102>
- 2 "A Guide to Comprehensive Tax Reform in Kansas," Kansas Center for Economic Growth, December 2016. Retrieved from http://realprosperityks.com/wp-content/uploads/2013/02/KCEG_booklet_FINAL.pdf
- 3 Tim Carpenter, "New poll ranks Gov. Sam Brownback as nation's least popular governor," *The Topeka Capital-Journal*, September 20, 2016. Retrieved from <http://cjonline.com/news-state-government-local-state/2016-09-20/new-poll-ranks-gov-sam-brownback-nations-least-popular>
- 4 See U.S. Bureau of Labor Force Statistics, Current Employment Statistics and Local Areas Unemployment Statistics (December 2006 to December 2015, seasonally adjusted); and Ted Boettner, "West Virginia Tax Policy & Shared Prosperity: Recommendations to Joint Select Committee on Tax Reform," *WV Center on Budget and Policy*, October 20, 2015. Retrieved from <http://www.wvpolicy.org/wp-content/uploads/2015/10/WVCBP-Recommendations-to-Tax-Reform-Committee2.pdf>
- 5 U.S. Bureau of Labor Statistics, LAUS and CES, seasonally adjusted. Total employment (LAUS) was 769,621 in December 2006 compared to 745,459 in December 2016. Total private-sector employment in December 2006 was 618,200 and 612,300 in December 2016. Retrieved February 6, 2017.
- 6 Michael Leachman and Michael Mazerov, "State Personal Income Tax Cuts: Still a Poor Strategy for Economic Growth," Center on Budget and Policy Priorities, May 14, 2015. Retrieved from <http://www.cbpp.org/research/state-budget-and-tax/state-personal-income-tax-cuts-still-a-poor-strategy-for-economic>
- 7 William G. Gale, Aaron Krupkin, and Kim Rueben, "The Relationship Between Taxes and Growth at the State Level: New Evidence," *Urban-Brookings Tax Policy Center*, April 2005. Retrieved from <http://www.brookings.edu/%7E/media/research/files/papers/2015/04/29-relationship-between-taxes-and-growth-gale/gale--taxes-and-growth-42915.pdf>
- 8 Rex Pjesky, "What Do We Know About Taxes and State Economic Development? A Replication and Extension of Five Key Studies," *The Journal of Economics*, Vol. 32, 2006. Retrieved from http://econpapers.repec.org/article/mvejournl/v_3a32_3ay_3a2006_3ai_3a1_3ap_3a25-40.htm
- 9 Owen M. Zidar, "Tax Cuts for Whom? Heterogeneous Effects of Income Tax Changes on Growth and Employment," *National Bureau of Economic Research*, March 2015. Retrieved from <http://www.nber.org/papers/w21035.pdf>
- 10 Peter Fisher, Gradeingstates.org
- 11 Michael Mazerov, "Cutting State Personal Income Taxes Won't Help Small Businesses Create Jobs and May Harm State Economies," Center on Budget and Policy Priorities, February 19, 2013. Retrieved from http://www.cbpp.org/research/cutting-state-personal-income-taxes-wont-help-small-businesses-create-jobs-and-may-harm#_ftnref23
- 12 IRS Statistics of Income 2013, West Virginia. See lines 29 and 30 for sole proprietors and lines 42 and 43 for S-corporations, partnerships, and LLCs.
- 13 Donald Bruce and John Deskins, "Can State Tax Policies Be Used to Promote Entrepreneurial Activity?," *Small Business Economics*, January 2010. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.169.701&rep=rep1&type=pdf>
- 14 Mazerov, Feb. 19, 2013
- 15 Ross, November 14, 2015
- 16 Michael Mazerov, "State Taxes Have a Negligible Impact on Americans' Interstate Moves," *Center on Budget and Policy Priorities*, May 21, 2014. Retrieved from http://www.cbpp.org/research/state-budget-and-tax/state-taxes-have-a-negligible-impact-on-americans-interstate-moves#_ftnref6
- 17 Ibid
- 18 Michael Mazerov, "Millionaire Tax Flight Myth Debunked – Again," Center on Budget and Policy Priorities, May 26, 2016. Retrieved from <http://www.cbpp.org/blog/millionaire-tax-flight-myth-debunked-again>
- 19 Robert Tannenwald, Job Shure, and Nicholas Johnson, "Tax Flight is a Myth," *Center on Budget and Policy Priorities*, August 5, 2011. Retrieved from http://www.cbpp.org/research/tax-flight-is-a-myth#_ftnref7
- 20 Ibid
- 21 Internal Revenue Service, Statistics of Income Tax Stats: Migration Data. Retrieved from <https://www.irs.gov/uac/soi-tax-stats-migration-data>

- 22 Internal Revenue Service, SOI Tax Stats – Migration Data. Retrieved from <https://www.irs.gov/uac/SOI-Tax-Stats-Migration-Data>
- 23 Eric Eyre, “WV Senate considering shift from income tax to sales tax,” *Charleston Gazette-Mail*, February 3, 2017. Retrieved from <http://www.wvgazettemail.com/news-politics/20170203/wv-senate-considering-shift-from-income-tax-to-sales-tax>
- 24 Chris Dickerson, “Senate Committee to examine taxes, look at eliminating income tax,” *WV Record*, January 23, 2017, Retrieved from <http://wvrecord.com/stories/511076176-senate-committee-to-examine-taxes-look-at-eliminating-income-tax>
- 25 Donald Bruce, John Deskins, and William F. Fox, “ On the Extent, Growth, and Efficiency Consequences of State Business Tax Planning,” in *Taxing Corporate Income in the 21st Century*, June 2005 (See Appendix 1).
- 26 For Fortune 500 Companies by state see Robert Hackett, “States with the most Fortune 500 companies,” *Fortune*, June 15, 2015. Retrieved from <http://fortune.com/2015/06/15/states-most-fortune-500-companies/> ; For median household incomes for 2015 see Kirby G. Posey, “Household Income: 2015, *American Community Survey Briefs*, September 2015. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2016/demo/acsbr15-02.pdf> ; For health insurance coverage see Jessica C. Barnett and Marina S. Vornovitsky, Health Insurance Coverage in the United States: 2015, *Current Population Reports*, September 2016. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-257.pdf>
- 27 As Russell Sobel, a former professor of economics at West Virginia University, pointed out in his co-authored book *Growth and Variability in the State Tax Revenue*, “personal income are a better source of long-run revenue growth than retail sales taxes.” Research by academics Donald Bruce, William Fox, and M.H. Tuttle have found that even in the short-run income tax revenue is not more volatile than sales tax revenue. Bruce et al also found that “the average long-run elasticity for incomes taxes is more than double that for sales tax” See Donald Bruce, Xiaowen Liu, and Matthew N. Murray, “State Tax Policy and Entrepreneurship,” *National Tax Journal*, 2015.
- 28 Ibid
- 29 Donald Bruce, William F. Fox, and M.H. Tuttle, “Tax Base Elasticities: A Multi-State Analysis of Long-Tuna and Short-Run Dynamics,” *Southern Economic Journal*, 2006.
- 30 Gabriel J. Petek, “Income Inequality Weighs On State Tax Revenues,” *Standard & Poors*, September 15, 2014. Retrieved from <https://www.documentcloud.org/documents/1301747-s-amp-p-income-inequality-weighs-on-state-tax.html>
- 31 Carl Davis et al, “Who Pays?: A Distributional Analysis of the Tax Systems in All 50 States,” Institute for Taxation and Economic Policy, January 2015. Retrieved from http://www.itep.org/whopays/full_report.php
- 32 “Fairness Matters: A Chart Book on Who Pays State and Local Taxes,” Institute on Taxation and Economic Policy, January 26, 2017. Retrieved from http://itep.org/itep_reports/2017/01/fairness-matters-a-chart-book-on-who-pays-state-and-local-taxes.php#chart6
- 33 Kelley Davis, “And That s a Wrap... the Failed Experiment in Kansas Continues,” Tax Justice Blog, June 16, 2015. Retrieved from http://www.taxjusticeblog.org/archive/2015/06/and_thats_a_wrapthe_failed_exp.php#.VgGnFc5b2GR
- 34 Scott Drenkard and Nicole Kaeding, “State and Local Sales Tax Rates in 2006,” Tax Foundation, March 9, 2016. Retrieved from <https://taxfoundation.org/state-and-local-sales-tax-rates-2016/>
- 35 See “Tax Exemptions & Tax Incidence,” A Report to the Governor and the 85th Texas Legislature, February 2017, Texas Comptroller of Public Accounts. Retrieved from <https://www.comptroller.texas.gov/transparency/reports/tax-exemptions-and-incidence/2017/96-463.pdf> ; and “2015 Minnesota Tax Incidence Study,” Analysis of Minnesota’s household and business taxes, Minnesota Tax Research Division, March 9, 2015. Retrieved from http://www.revenue.state.mn.us/research_stats/research_reports/2015/2015_tax_incidence_study_links.pdf
- 36 Andrew Phillips, Caroline Sallee, and Charlotte Peak, “Total state and local business taxes: State-by-State estimates for fiscal year 2015,” *Ernest & Young, Council on State Taxation, and State Tax Research Institute*, December 2016. Retrieved from <http://cost.org/WorkArea/DownloadAsset.aspx?id=94697>
- 37 Jason Horwitz and Alex Rosaen, “2016 State Business Tax Burden Rankings,” Anderson Economic Group (7th Edition), May 18, 2016. Retrieved from http://www.andersoneconomicgroup.com/Portals/0/AEG%20Tax%20Burden%20Study_2016_FINAL.pdf
- 38 Jeff Adelson, “Jindal tax plan shifts \$500 million in costs to businesses, administration officials says,” *The Times-Picayune*, March 26, 2013. Retrieved from http://www.nola.com/politics/index.ssf/2013/03/jindal_tax_plan_shifts_500_mil.html