ON THE EFFICACY OF THE EARNED INCOME TAX CREDIT: A PRELIMINARY REPORT FOR THE NASHVILLE WEALTH BUILDING ALLIANCE

A class project by Vanderbilt University Peabody College
HOD2780 Public Finance Class
Spring 2005

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Department of Leadership Policy and Organizations
230 Appleton Place – Peabody Box #514
Payne Hall Room #202C
Nashville, TN 37203-5721

PART II

AN EQUITY ANALYSIS ON THE PRINCIPLES OF TAXATION

Clark Dumas (Team Leader), Shannon Donnelly, John Haury,
Nichole Moscinski, Hunter Sharp

Evaluating the equitable nature of fiscal policy first begins with a broad understanding of the concepts of equity. In its most basic sense, equity aims to grant greater access to equal opportunity for those individuals on the margins of society (Shaffner et al., 245). Fiscal policy is deemed equitable when it recognizes the various social and economic disparities within communities and attempts to resolve such inequalities by redistributing wealth. Taxation, therefore, is a method through which the United States attempts to relieve its citizens suffering the greatest economic distress. The fairness of a tax often is judged through a process called equity analysis. An equity analysis evaluates the fairness of the relationship between those who benefit from the government subsidy and those who bear the tax burden.

The two concepts of equity that may guide these analyses are the benefits principle and the ability to pay principles. If a tax policy reflects either of these two equity concepts, it can be judged equitable. The benefit principle implies that those citizens who benefit the most from government subsidies and services should take on the tax burden (Young, 102). For example, user fees on the toll road follow the benefit principle. Assuming that all revenues from the toll go to the road system, the users pay directly for the service each time they use the road. Those who do not use the road system, however, do not have to pay the usage tax. Therefore, according to the benefits principal, such a policy may be considered equitable.

The second equity concept, the ability to pay principle, suggests that those with more income, more property, or other types of wealth can better afford taxation for government services; and therefore, should pay higher taxes (Young, 102). According to this principle, all citizens do not pay the same amount of taxes, but bear equal burdens in proportion to their current economic situations. While a wealthier person may pay ten times more in taxes than a poorer citizen, it is equitable since both are giving up similar portions of their income. An advocate of the ability to pay principle, John Stewart Mill, believes "equality of taxation…is the equality of sacrifice" (Young, 105). In other words, each individual's sacrifice to pay the tax thus matters more than the sum of money itself. If the financial sacrifice among various socioeconomic groups is relatively proportional – or the income rates progressive – then the tax is considered equitable under the ability to pay principle.

These two concepts of equity can be observed in our present system of taxation. Most progressive, proportional, and regressive taxes reflect at least one of the two principles. Progressive taxes attempt to balance inequalities generated by asymmetric income distribution. By taking a higher percentage of income in taxes at specific levels of wealth, progressive tax adheres to both the ability to pay and the benefit principle (Shaffner et al., 179). More specifically, progressive taxes follow the ability to pay principle since the more money a citizen earns, the greater the proportion that citizen will pay in taxes. Progressive taxes also are considered equitable by the tenets of the benefits principle. For example, those with greater wealth often possess more property; and consequently, receive greater benefits from local services, such as police and fire protection.

A second type of tax, proportional income tax, also follows the ability to pay principle. Proportional taxes require each household to pay a fixed tax rate, regardless of income. Thus, both the high-income taxpayers and the low-income taxpayers will pay the same percentage of their income in taxes. Though ten percent of a wealthy person's income greatly exceeds ten percent of an average person's income, they are making similar sacrifices. Since the financial burden of the proportional tax is, as its name implies, proportional, the tax abides by the ability to pay principle.

Finally, regressive taxes imply that the percentage of income taken in tax declines with higher income levels (Shaffner et al., 179). Such taxes include fixed dollar fees, such as licenses and some user fees. As mentioned earlier, the user fees fall under the benefits principle, since only those who benefit from the governmental service pay the tax.

However, this is the least defensible tax on the basis of the ability to pay principle. Regressive taxes cause poorer individuals to pay a larger share of their income than wealthier individuals. Consequently, they do not adhere to the ability to pay principle since the financial sacrifice among income groups is disproportional.

The equity analysis process highlights some of the strengths and problems of fairness in taxation. Through this procedure, Shaffner et al. believe the majority of the taxes in the United States follow at least one of the equity principles (179). One may assume that the analysis further considers most taxes in this country equitable.

Horizontal Equity

The basic principle of horizontal equity is that equals are to be treated equally. However, this simple definition is insufficient in that there is no explanation of what constitutes as 'equals.' From both a genetic and psychological makeup, we are aware that no two individuals are equal in all senses. Thus, the "definition of the 'equals' requires choosing a set of variables considered as 'relevant' for the definition of the 'equals' itself" (Galbiati & Vertova, 2005). The resulting definition is then those who are in all relevant senses equal should be treated equally. As one can imagine, this normative definition will certainly spark disagreement over the selection of 'relevant' variables. But by defining equals, all individuals possessing the agreed upon qualities must be treated equally if horizontal equity is to be maintained.

The three most common 'relevant' variable choices are income, consumption, and wealth. Each of these three measures has its advantages and disadvantages. "Income measures the amount of purchasing power acquired in a particular period" (Monk, 1990). The advantages of using the amount of purchasing power is that it is a comprehensive measure of economic well-being and that it is time dependent. On top of these features, income is a "pure" measure of ability to pay, because it does not account for individual expenditure once funds are received. However, there are many shortcomings associated with the income measure. Income is difficult to measure on account of it taking several forms. For example, it could be seen as a company car offered to an employee or tips earned by restaurant workers. Next, certain portions of income can be deducted if a catastrophe occurs or a recognized donation is made. Finally, income can vary substantially over time where the typical trend is low earnings upon entry into the work force, peak earnings before retirement, and a return to low earnings as a retiree. Thus, two individuals earning the same income during different time periods would be treated differently if taxes varied during matching earning periods (Monk, 1990).

Consumption, an alternative measure to income, serves as the basis of sales tax. Though providing an incentive to save, consumption is beneficial because of its ease of measurement both in unit or ad valorem terms. It measures mixes of current and prior income providing for a broader appraisal of ability to pay than solely income. However, its one drawback is that it does not distinguish among sources of revenue. The wealth-based measure also lends itself to measurement. This feature is due to the general ease in valuing assets. On the other hand, this method penalizes those who save and has a highly illiquid nature. Thus, someone earning a low income tied up in large, illiquid assets would appear to have a high ability to pay, which would not be the case (Monk, 1990). These are the most frequently used measuring variables, and they have implications for the tax structure of our country.

Each level of government uses a different tax as its primary form of revenue. The federal government gains most of its revenue from personal and corporate income taxes. State governments primarily fund their operations through sales and excise taxes. Lastly, local governments rely on property taxes as their source of revenue. Thus, each level of government uses a different variable (Federal – income, State – consumption, Local – wealth) when considering their specific tax policy's effect on horizontal equity (Monk, 1990). With varying sales tax and property tax rates, horizontal equity often can not be achieved when evaluating a mix of all three taxes levied on an individual.

EITC Implications of Horizontal Equity

As stated previously in the text, the EITC program uses an income-based variable to allocate tax benefits to individuals. However, horizontal equity is not applicable to the EITC because of other factors used to determine the amount of benefit to the individual. For example, a single filer with the same level of income as a married filer would receive a higher tax credit. In addition, higher tax credits are given to those filers with an increasing number of children (capped at two) than those filers with the same level of income and no children. In order for the EITC program to be considered horizontally equitable, each filer with the same level of income regardless of number of children or marital status would receive the same benefit.

Vertical Equity

Vertical equity suggests that people with different levels of welfare should be treated differently (Hyman 405). In other words, individuals who have less income and fewer assets would pay less in taxes, based on the notion of fairness. Vertical equity is also more subjective than horizontal equity. To determine the degree in which a tax system is vertically equitable, judgments must be made about the appropriate way to treat people of different welfare levels.

Vertical equity can also be defined in terms of two principles: the ability-to-pay principle and the benefit principle. The ability-to-pay principle says that taxes should be distributed according to the capacity of taxpayers to pay them. John should pay more than Shirley, but since they earn the same income, this is not the case. The EITC can even out this distribution of the tax burden by giving those with lower amounts of income a tax refund, which is partially based on the number of children they have. The EITC directly addresses the ability to pay principle because it gives rewards to those who need it more. Those with lower incomes should carry less tax burden. Since only those with lower incomes are receiving the refunds, this is vertically equitable. It evens out the tax burden; those with higher incomes are seen as not really needing it.

The EITC is also in line with the benefits principle. The benefit principle suggests that people with differential needs should receive differential benefits. The EITC directly follows this concept. The EITC refund is based on income, but it is also based on the number of children one has, up to two children. This follows the notion that someone with two kids has more burden than someone with no children, and therefore also has less wealth (if they have the same income). Consider Person A, B, and C. They all have the same income, but Person A has no children, Person B has one child, and Person C has two. Under horizontal equity, these three people would all receive the same refund. But, under vertical equity, Person C would receive a bigger refund than Person A and B. For example, in 2001, someone with a household income of $9000 with one child would receive approximately $2428 from the EITC. Someone with that same income with two children would have received $3610. Once again, this shows how highly subjective vertical equity is. Does that difference of $1182 account for one (extra) child? Also, the EITC only accounts for up to two children, not 3, 4, or 5 children.

Also, just because someone has more children does not necessarily mean they will receive a bigger refund. If Person C made more than Person A, even though Person A has no children, she may receive a “better” refund. It is important to recognize once again that the marginal benefit of the dollar changes based on how much wealth one has. Although a person’s refund may monetarily be less than another’s, it may be equal to a greater percentage of that person’s wealth. This makes it have more value. To simplify the numbers, if a person who made $100,000 (the EITC would obviously not apply to this person) earned a $1000 refund, the $1000 might not seem like much. But, if a person who made $10,000 made a $900 refund, it would probably make a big difference in that person’s tax burden. In 2001, someone with one child and an income of $6500 would receive a $2219 refund. That is a much greater percentage of their income than the person who earned $9000 with one child. People with differential needs hence earn differential benefits.

Property taxes are an example of how the benefit principle is carried out through vertical equity. People with property that is worth more pay more in property taxes, and generally those with more property have higher incomes. Owners of more property (people who pay more in property taxes) receive greater benefits from local services. Vertical equity is reflected in progressive taxes. A progressive tax structure is one that takes a higher percentage of income in taxes at each level of income. Federal income tax is an example of progressive tax. The reason why this aligns with vertical equity is fairly obvious. People with different income levels pay different amounts of taxes, based on fairness. Regressive taxes on the other hand shun the idea of vertical equity. With regressive taxes, the tax structure in Tennessee, the *percentage* of income taken for taxes actually declines with higher income levels. Tennessee tax structure will be discussed more thoroughly later, but it is important to recognize that Tennessee’s tax structure is not in line with vertical equity.

Although a progressive tax structure seems vertically equitable, an argument can still be made against it. Income taxes are exactly that – based on a percentage of income, not welfare. It is important to note that a key difference between horizontal and vertical equity is that vertical equity is based on *welfare,* not income. Two people may have the same income, but they may not have the same ability to pay. For example, John Smith might have the same income as Shirley Jones. However, John may have a savings account of $30,000 and a house worth $200,000 that he inherited from his father. John is single with no children to support. Shirley has no savings account, rents her home, and has three children. Even though the two have the same income, John clearly has more wealth. Under horizontal equity, John and Shirley would pay the same in taxes, but under vertical equity, that is not fair.

So how would wealth be measured? Clearly, this is an example of how subjective vertical equity is. The marginal benefit of the dollar varies with the number of dollars a person has (Hyman 406). One dollar may mean a lot to someone with little income or little wealth (like Shirley). To someone who has a lot of wealth, one dollar might be considered just pocket change. Most would agree that John clearly has more ability to pay his taxes than Shirley. Since he has more wealth, he should carry more of the tax burden. How should the burden of taxation be distributed in order to be fair?

EITC Implications of Vertical Equity

This is where the EITC can come into play. The EITC is a perfect example of vertical equity and helps even out the tax burden because of how it follows the ability-to-pay and benefit principles. This differs from horizontal equity that gives the same amount of tax burden to those with equal incomes. The EITC recognizes that there is a difference between wealth and income, and that people with more children may benefit more from a greater refund. It follows the ability-to-pay principle as well as the benefit principle.

Regressivity of Sales, Property, and Excise Tax

As discussed above, a regressive tax is one in which lower income individuals pay a higher portion of their earnings for a tax than higher income individuals. One of the more prevalent regressive tax systems in the United States is the sales tax. An argument against this type of tax is that this tax places a burden on lower income individuals, according to the vertical tax theory. However, this arguement does not take into account spending habits of lower and higher wage earners. Generally the wealthier do spend more on luxury items, but aren't in theory required to spend this money and many do not. In theory, a person has certain amount needs, and a wealthier individual does not have to spend above these needs if they do not wish to. In this basic situation, therefore, tax regressively is inequitable.

To illustrate this, one could take the following basic grocery sales tax example of two wage earners living the same lifestyle but earning different wages. Suppose a wage earner has an annual salary of $35,000.00 a year with no other source of income or wealth for his/her family. This individual spends an average of $333.00 dollars a week on grocery items for his family of four, totaling $17,316.00 annually, or 49% of the person's income. If a state levies a 9% sales tax on all purchased goods, then the tax levied on this individual will total $1558.44 per annum. Therefore the tax totals 4.45% of the individual's annual income.

A wage earner with a much higher salary is paid $100,000.00 annually with no other source of income or wealth. The individual leads a similar lifestyle to the former, and also has a family of four. This individual spends the same $333.00 weekly on grocery items. However, this only totals 17% of this wage earners income. The burden of the same 9% sales tax of $1558.44 per annum is only 1.5 percent of this wage earners income. Therefore the tax can be proven to be inequitable according to the vertical equity theory.

This same principal can be applied flat taxes on purchased or held goods, including property and excise taxes. When a taxation system relies heavily on such programs, it can be deemed highly regressive. This is to say that the entity levying the tax places a tax higher burden on lower income earners than higher earners, using this same vertical equity concept.

Regressivity of Tennessee State Taxation Policies
According to a study performed by the Institute on taxation and Economic Policy, the state of Tennessee has the third most regressive tax system in the nation. Washington and Florida are the only states in the country that were found to be more regressive, and these states are similar in their taxation structure. Other states with similar taxation policy include South Dakota and Texas. All of these states have little or no state levied taxes on annual income and rely heavily on sales, excise, and property taxes.

In Tennessee the same study found that in the average spread of wage earner's state tax burden, the lowest twenty percent of taxpayers pay 11.7% of their income in state taxes. Those in the middle income on average pay around 8.8%, while the highest one percent of income earners pays only 3.4% of their wages to state taxes. Also, the study found that a majority of lower wage earners pay a much higher percentage of their taxes in Sales taxes than property taxes, while the upper percentile of wage earners pay a more equal percentage of their income in property and sales taxes. The complete findings of this study are attached as appendix 1, in which wage earners are split into seven groups and the state taxes they pay are separated into property, sales, and income taxes.

Under the leadership of Governor Phil Bredison, the Tennessee legislature commissioned an independent study of the tax structure of the state of Tennessee " charged with performing a comprehensive study of the entire system of taxation in Tennessee […] to evaluate that system in terms of its soundness, fairness, equity, and deductibility for all Tennessean s, [and] unless we feel through that evaluation process everything is as it should be, […] to recommend changes to the tax structure in order to encourage and enhance soundness, fairness, equity, and adequacy."

The study complemented the ITEP study in finding the Tennessee taxation structure egregiously regressive, and also further noted that it is actually economically damaging the State of Tennessee through anticompetitive effects. This is due to the tax structure as noted by ITEP, which relies heavily on property and sales taxes.

The highest source of income for the state of Tennessee is from state property taxes. This majority was found to be harmful in that it results in double taxation and is also anticompetitive when applied to businesses competing in an interstate trade environment. The second largest source of state income is derived through high sales taxes. This large tax has been found to be highly regressive. It also was found to be anticompetitive in that local customers are looking more and more to e-commerce and other out of state alternatives to purchasing goods in the State of Tennessee in order to avoid the high tax.

Tennessee has no state income tax to counter-balance this regressivity, and therefore the sales tax on average is far higher than most states. This inequity supports the incentive to create a program that would aid lower income earners collect their Federal Earned Income Tax Credit. This program offsets greatly the regressively of lower income earners in that it benefits only those who are fully employed but earning less than a maximum of approximately thirty five thousand dollars annually.

Equity Analyses of Taxation Principles in Nashville
According to the Metro Nashville website (www.nashville.gov), the fiscal year 2004-2005 city budget can be broken down into several categories by spending type and revenue type. The leading source of revenue at forty-six percent is property taxes followed by sales tax at eighteen percent. Grants and contributions makes up an additional nineteen percent with the fund balance providing four percent and other miscellaneous sources providing thirteen percent. The number of most importance in those figures is the sales tax figure of eighteen percent. Nashville relies heavily on sales tax as does the entire state of Tennessee due to the absence of a state income tax. As a result, the effect of the IMPACT program would be very unique and beneficial to the entire city of Nashville.

The IMPACT program would be equitable if no one is left worse off as a result of the program. In essence, the people paying for it in taxes should not lose governmental services or pay more in taxes in the end. Due to the tax structure in Nashville and the nature of the EITC, the monies distributed to recipients would actually end up paying for the IMPACT program if tax revenue increased enough to cover the cost from purchases made with the EITC dollars. Essentially, taxpayers would benefit from the increased economic activity as well as a possible increase in funding for the local and state governments.

The IMPACT program costs roughly $80,000 for the fiscal year. Hence, if tax revenue increased by $80,000 due to additional EITC dollars being spent, the program would be self-sufficient. For equity purposes, costs such as the volunteer hours do not matter. The sales tax rate on purchases in Davidson County is 9.25 percent. This tax rate is broken down into a state rate of 7 percent and a local rate of 2.25 percent. The IMPACT program would be benefiting state revenues as well as local as a result of this tax structure. Additionally, the cost of the EITC dollars has already been paid by the citizens of Nashville when they paid Federal income taxes. Hence, any EITC money brought back into Nashville from the program leaves the city better off than before.

Several estimates of the amount of additional EITC dollars that the IMPACT program could bring in exist and place the total in a range between $15 and 21 million. This amount is based off of the dollars people in Nashville are eligible for versus the amount claimed in the past. As stated above, the tax structure in Tennessee would result in these dollars positively affecting the sales tax revenue amounts. The statewide sales tax of 7 percent would mean $1,050,000 to $1,470,000 more in funding for state programs alone. The local sales tax of 2.25 percent means $337,500 to $472,500 more in funding for local programs. These programs directly benefit those footing the bill for taxes in Nashville and therefore leave those citizens better off than if the IMPACT program did not bring in those additional EITC dollars. Those receiving the EITC dollars are better off than before due to their increase in income.

Conclusions

The increase in tax dollars completely covers the cost of the IMPACT program using the potential numbers we estimated. This means that a burden on the taxpayers of Nashville does not really exist. Essentially, due to the increased funding for State and local programs, everyone, including those not receiving EITC dollars, benefits and no one is left worse off than before. Hence, the IMPACT program funding can be considered equitable. This is not to say that the EITC is an equitable policy. As discussed earlier, it has both inequities in the horizontal and vertical perspectives. However, regardless of this inequity, it is a policy in place that has monies set aside for those who may not be collecting it. By implementing such a program to aid eligible parties collect this unclaimed money, the city of Nashville with be benefiting the entire community, not just the recipients. The most important part in the process continuing from now is to study the amounts of EITC dollars coming to people in Nashville and the amounts of those dollars that are committed to consumer spending or any activity involving taxation which might help pay for the program costs.

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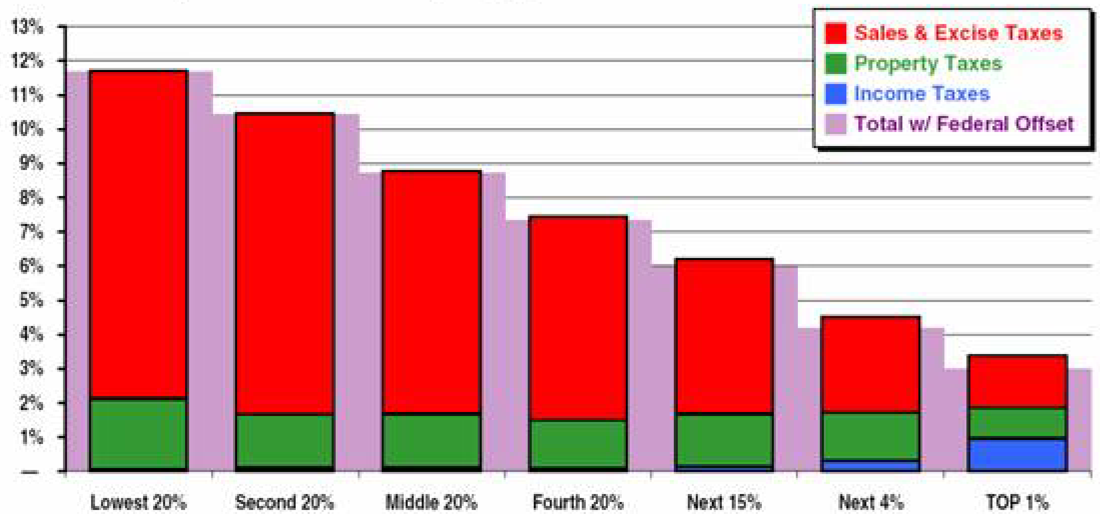
Appendix 1: ITEP-Institute on Taxation and Economic Policy

Exerpt from "Who Pays? A Distributional Analysis of the Tax Systems in All 50 States"

Tennessee

State & Local Taxes in 2002

Shares of family income for non-elderly taxpayers



Income Group	Lowest 20%	Second 20%	Middle 20%	Fourth 20%	Top 20%: Next 15%	Top 20%: Next 4%	Top 20%: TOP 1%
Income Range	Less than $14,000	$14,000 – $24,000	$24,000 – $38,000	$38,000 – $61,000	$61,000 – $119,000	$119,000 – $269,000	$269,000 or more
Average Income in Group	$8,700	$19,000	$30,400	$47,600	$80,200	$167,000	$828,400
Sales & Excise Taxes	**9.6%**	**8.8%**	**7.1%**	**5.9%**	**4.5%**	**2.8%**	**1.5%**
General Sales—Individuals	6.1%	5.9%	4.9%	4.2%	3.2%	1.9%	1.0%
Other Sales & Excise—Ind.	0.9%	0.6%	0.4%	0.3%	0.2%	0.1%	0.0%
Sales & Excise on Business	2.5%	2.3%	1.8%	1.5%	1.1%	0.7%	0.5%
Property Taxes	**2.1%**	**1.6%**	**1.6%**	**1.4%**	**1.5%**	**1.4%**	**0.9%**
Property Taxes on Families	2.0%	1.5%	1.5%	1.4%	1.4%	1.2%	0.5%
Other Property Taxes	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%
Income Taxes	**0.1%**	**0.1%**	**0.1%**	**0.1%**	**0.2%**	**0.3%**	**1.0%**
Personal Income Tax	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.5%
Corporate Income Tax	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.5%
TOTAL TAXES	**11.7%**	**10.5%**	**8.8%**	**7.4%**	**6.2%**	**4.5%**	**3.4%**
Federal Deduction Offset	–0.0%	–0.0%	–0.1%	–0.1%	–0.2%	–0.3%	–0.4%
TOTAL AFTER OFFSET	**11.7%**	**10.4%**	**8.7%**	**7.3%**	**6.0%**	**4.2%**	**3.0%**

Note: Table shows 2002 tax law at 2000 income levels.

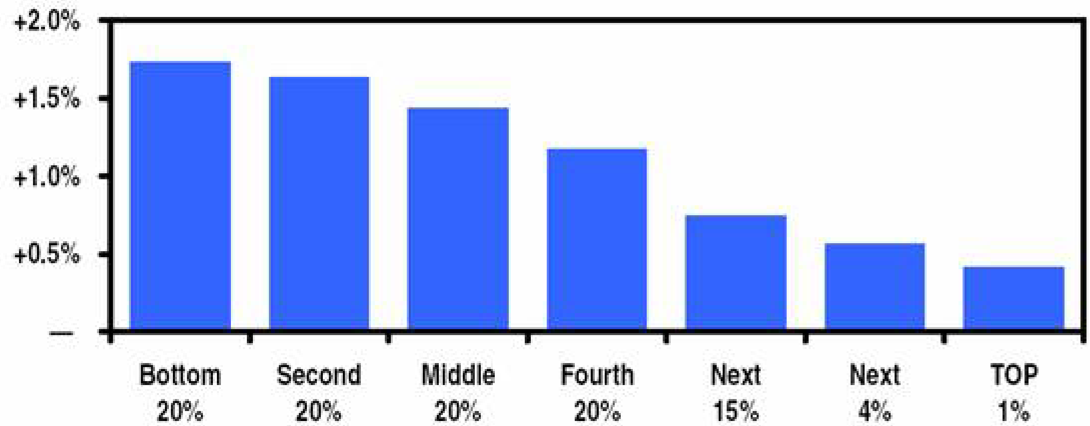
Progressive Features

- ✔ Tax on unearned income

Regressive Features

- ✘ No broad-based income tax
- ✘ Sales tax applies to groceries, though at a slightly lower rate

Changes in Taxes as Shares of Income, 1989 – 2002

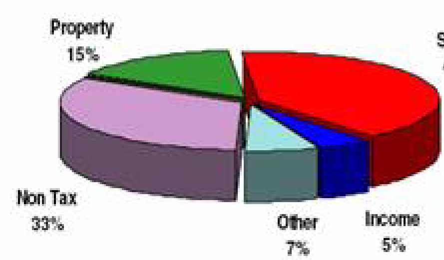


	Bottom 20%	Second 20%	Middle 20%	Fourth 20%	Top 20%: Next 15%	Top 20%: Next 4%	Top 20%: TOP 1%
Sales & Excise	+1.3%	+1.2%	+1.0%	+0.9%	+0.6%	+0.4%	+0.2%
Property	+0.4%	+0.4%	+0.4%	+0.3%	+0.1%	+0.0%	+0.0%
Income	+0.0%	+0.1%	+0.1%	+0.1%	+0.1%	+0.1%	+0.2%
Federal Offset	–0.0%	–0.0%	–0.0%	–0.0%	–0.1%	–0.0%	–0.1%
Overall Change	+1.7%	+1.6%	+1.4%	+1.2%	+0.7%	+0.6%	+0.4%

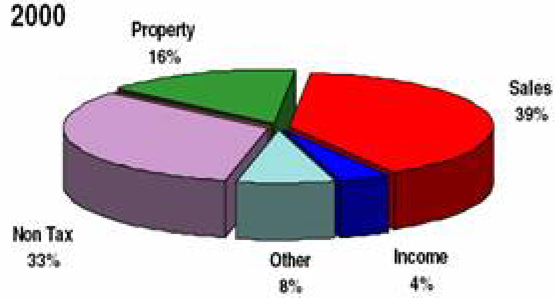
Tennessee increased its state sales tax by 1.5% over the decade. In combination with hikes in alcohol and tobacco excise taxes, these tax hikes made Tennessee's revenue structure even more regressive despite exempting the tax on groceries from the latest increase.

Composition of Revenues

1989



2000



Source: Government Finances, US Department of Census