

# Vermont Legislative Council

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## MEMORANDUM

To: Ways and Means  
From: Peter Griffin  
Date: January 6, 2017  
Subject: Tax basics

This memorandum is meant to serve as an introduction to some foundational tax terminology and rudimentary relationships between the different components of a tax.

## ANATOMY OF A TAX

**Base** (x) **Rate** = **Liability**

### Tax base modifications:

A tax base is defined by what is included by the statutory language, minus any exemptions and deductions.

An *exemption* is a systemic exclusion from the tax, and is usually limited to a particular group of taxpayers. For example, Vermont has a property tax, but most libraries are statutorily exempt from the paying the tax, even if their property would otherwise be taxable.

An exemption can be a full exemption or a partial exemption. Full exemptions obviously cost more, while partial exemptions require more compliance work by the taxpayer and the Department of Taxes.

A *deduction* is an amount that an individual taxpayer is permitted to subtract from his or her tax base, which typically has the effect of reducing his or her liability. For example, Vermont income taxpayers are taxed on their taxable income, but they are permitted to subtract from their taxable income any interest earned on Vermont bonds.

### Tax base relationship to total revenue:

Certain bases appreciate naturally, such as property taxes which are based on the assessed value of the property, or the sales tax, which is based on the retail price of tangible personal property. The total revenue raised by each of these taxes will roughly keep pace with the appreciation of their tax bases, without any subsequent changes.

Some tax bases vary independent of inflation, such as the bank franchise tax which is based on monthly bank deposits. These taxes are usually linked to regulating a particular behavior, such as bank transactions, insurance transactions, smoking, or drinking.

### **Tax rate modifications:**

Tax rates can be fixed or tiered.

Vermont's sales tax is an example of a fixed rate. It is 6% of the retail price of tangible personal property sold everywhere in the State.

Tiered rates are typically structured as a series of brackets. Most tiered rates are structured to be progressive, which means the liability increases smoothly from bracket to bracket. This is accomplished by having the taxpayer pay only the assigned rate for each dollar within that bracket.

For example, suppose Vermont's income tax had the following brackets:

Taxable income	Rate
0–\$10,000	5%
\$10,001–100,000	10%
\$100,001–\$1,000,000	15%
\$1,000,001+	20%

A person with \$10,000 in taxable income would pay \$500 in taxes because all of his or her income would be in the first bracket, or  $\$10,000 \times 5\% = \$500$ .

If the same person had \$20,000 in income, under a progressive tax structure, he or she would pay \$500 in taxes on the first \$10,000 income, but on the second \$10,000 in income, he or she would pay \$1,000 in taxes, or  $\$10,000 \times 10\%$ . The total tax liability would be \$1,500, or \$500 (from the first bracket) plus \$1,000 (from the second bracket).

For tiered rates, a taxpayer's "*marginal tax rate*" is the tax paid on the last dollar in the base. In the example above, a taxpayer with \$20,000 of income would have a marginal rate of 10%, because he or she would be paying 10% on his or her last earned dollar.

However, a taxpayer's "*effective tax rate*" is the actual rate of tax for the entire liability. In the example above, the taxpayer's effective rate is 7.5%, or  $\$1,500$  (total tax liability) divided by  $\$20,000$  (total base).

### **Tax rate relationship to total revenue:**

Rates are not generally adjusted for inflation. A rate adjusted for inflation lacks transparency and predictability. In addition, picking an appropriate inflationary index can be difficult. Adjusting a rate for inflation requires ongoing administrative and taxpayer compliance efforts, and can lead to complexity.

Vermont's education property tax rate, is an example of a tax with an adjustable rate, and it demonstrates some of these problems. Each year, the property tax rate in each town varies depending on school spending, instead of inflation. The tax was structured this way to link local spending with local tax rates. But as with any adjustable rate, Vermont's property tax system is often criticized as being overly complicated and lacking transparency.

### **Liability modifications:**

A *credit* is an amount that reduces a taxpayer's tax liability. It does not reduce the base or the rate, but lowers the resulting liability.

Credits can be either refundable or nonrefundable. A *refundable credit* means that the taxpayer receives a payment if the credit reduces his or her liability below zero. For example, if a taxpayer has a \$100 tax liability, but a \$150 refundable credit, he or she would receive a cash payment of \$50 from the taxing authority. The first \$100 of credit would go toward eliminating the tax liability, and the remaining \$50 of credit would be refundable.

A *nonrefundable credit* can reduce a liability to zero, but not any further. In the example above, the taxpayer would have his or her liability reduced to zero, but then the remaining \$50 of credit would be unused. Depending on the statutory language, however, the nonrefundable portion of a credit can sometimes be carried forward to subsequent years.

The structure of a credit impacts the cost. A refundable credit is going to cost more money sooner. A nonrefundable credit costs less, and can be spread out by carrying some portion of the credit forward.

### **Tax expenditures**

A *tax expenditure* is "the actual or estimated loss in tax revenue resulting from any exemption, exclusion, deduction, credit, preferential rate, or deferral of liability applicable to the tax." 32 V.S.A. § 312. Every other year, the Tax Department and Joint Fiscal Office publish a tax expenditure report, which provides information related to each individual tax expenditure in the State. 32 V.S.A. § 312. In addition, any tax expenditure must be accompanied by a statement of statutory purpose. *Id.* Cataloging tax expenditures is a way to track State spending through decisions to forego revenue in the tax code.