

An Analysis of the Fiscal Structure of Non-Income Tax States

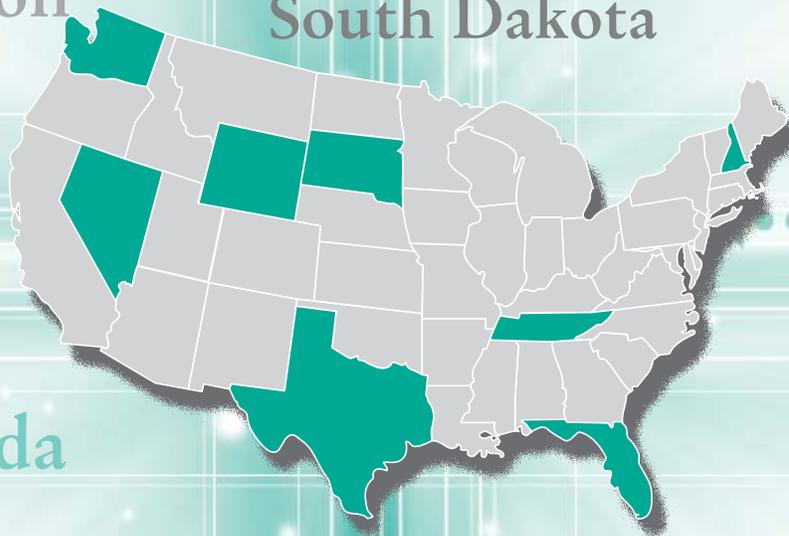


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April 2002



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An Analysis of the Fiscal Structure of Non-Income Tax States

A TACIR Staff Information Report

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Preface

Much has happened since the first draft of this paper was completed. The effect of the national recession that began at the end of the first quarter of 2001 combined with the aftermath of the terrorist attack on September 11th, adversely impacted most state budgets. The non-income tax states were not insulated from these events. In Florida, planned increases in exemptions from the intangibles tax, scheduled to begin in January, were postponed until 2004. This and other measures were needed to deal with an estimated \$1.3 billion hole in the Florida state budget. In Alaska the state is faced with a serious budget problem that has renewed discussions over reinstatement of an income tax that was repealed in 1980. For the first time, Alaska is considering redirecting earnings from the state's Permanent Fund, used to make dividend payments each year to Alaska's residents, to fill the budget gap. In South Dakota, the Governor has recommended offsetting revenue shortfalls by drawing down reserve funds. Even Washington, a state whose economy had performed so strongly thanks to the combined strength of Boeing and abundant software companies, is facing a deficit of \$1.3 billion. Boeing has laid off thousands of workers and the state is suffering a seven percent unemployment rate.



Preface

Non-Income Tax States (NITS)

- **Nine states have state and local revenue systems that exclude a broad-based personal income tax.** (Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming).

Tax Reliance of Non-Income Tax States (NITS)

- **Alaska, Nevada and Wyoming have unique tax sources/situations that allow them to avoid a broad-based personal income tax.**

These unique taxes include:

- ♦ severance taxes and royalty payments on oil and gas in Alaska;
 - ♦ gaming and other visitor/related taxes in Nevada; and
 - ♦ severance taxes and royalty payments on coal in Wyoming.
- **The remaining states without a broad-based income tax rely heavily on sales and property taxes to support state and local governments (property tax only in the case of New Hampshire).**

These six NIT states obtain 46.7 percent of their state and local tax revenue from general and selective sales taxes compared to 35.5 percent for all states. Almost thirty-eight percent of the state and local tax revenue of NIT states is produced by property taxes, versus 29.7 percent for all states. NIT states also collect more revenue per capita from property, general sales, documentary and stock transfer taxes, and from net lottery revenue than the US average.

1997-1998 Per Capita Tax Collections in NIT States

State	Property	General Sales	Documentary & Stock Transfer	Net Lottery	Death & Gift	Corporate Net Income	Public Utility
Florida	\$880	\$901	\$83	\$62	\$39	\$85	\$134
New Hampshire	\$1545	\$0	\$37	\$53	\$36	\$199	\$49
South Dakota	\$777	\$851	\$0	\$142	\$35	\$52	\$3
Tennessee	\$467	\$973	\$20	\$0	\$21	\$112	\$8
Texas	\$877	\$897	\$0	\$58	\$17	\$0	\$55
Washington	\$966	\$1053	\$70	\$31	\$14	\$0	\$93
NITS Average	\$919	\$779	\$35	\$58	\$27	\$75	\$57
US Average	\$852	\$698	\$13	\$52	\$26	\$127	\$62

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates.



Implications of a Non-Income Tax System

- **According to a 1998 study, states without broad-based income taxes are more likely to face structural deficits than states with broad-based income taxes.**

This means that revenue from inelastic taxes used by NIT states fails to keep up with long-run spending requirements. The report predicts that by fiscal year 2005 all nine NIT states will have state and local budget deficits ranging from a .2 percent to 16.1 percent of spending. The only way these states can avoid structural deficits is to benefit from an exceptionally robust state economy or slow or no growth in future program expenditures.

Spending in Income Tax States versus NIT States

- **A regression analysis of K-12 education spending showed no significant impact of a broad-based income tax on spending.**

The results of an analysis on K-12 spending showed that the presence or absence of a broad-based income tax in a state/local tax structure has no discernable effect on spending. Most of the spending variations observed result from differences in teachers' salaries and student/teacher ratios.



Introduction

As of 2001, nine of the fifty states have state and local revenue systems that exclude broad-based personal income taxes. They are Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming.¹ However, since each state must provide a basic menu of services to their residents, they all must raise an adequate level of combined state and local government revenue to finance such expenditures. The evidence reflects that states deal with this fiscal responsibility in significantly different ways.

The purpose of this report is twofold:

- (1) To investigate how other non-income tax states (NITS) deal with their fiscal obligations in the absence of a personal income tax. Investigating other NITS may provide insights and solutions that will help Tennessee deal with its current fiscal crisis. It may also help clarify some issues that were discussed during the fiscal debates that occurred in Tennessee over the last few years. The debates frequently included calls for tax reform that included modifications to Tennessee's tax structure that mirrored those in use in other NITS.
- (2) To analyze spending patterns of NITS and income tax states (ITS) to determine, if possible, whether the presence or absence of a broad-based income tax contributes to structural deficits (long-run fiscal stress) and what effect, if any, the presence or absence of an income tax has on combined state and local spending.

Some Initial Observations

- In Alaska, Nevada, and Wyoming, the key feature in their state and local tax structure is a unique tax source, or sources not generally available or practical in the other NITS.

These unique taxes provide substantial revenues that generally do not entail significant tax burdens on residents nor require offsetting high tax rates in other taxes. As a result of unique circumstances, these states not only raise substantial amounts of revenue without the need for an income tax, but also enjoy the enviable situation of being able to export a large portion of the taxes raised onto nonresidents.²

Table I shows the nature of the unique taxes in each of these states and each state's dependence on these taxes. The data for Nevada understates the importance of gambling because the state also collects disproportionate amounts of both sales and selective sales taxes from those visiting the state.³ While both Florida and Texas enjoy the benefits of either significant severance tax and royalty collections (Texas) or tourism-related taxes (Florida), they are excluded from the short list of states included in Table I. Alaska⁴, Nevada, and Wyoming⁵, because of their unique circumstances, are not considered to have tax structures easily mimicked by other states and therefore not capable of providing useful information in a study of non-income tax revenue structures. They are therefore excluded from the analysis that follows.

¹ Tennessee and New Hampshire impose a limited income tax on dividends and interest. Additionally, Nevada, South Dakota, Texas, Washington, and Wyoming do not impose a corporate income tax.

² Zodrow (1999) lists exportability as one of several desirable features of a state tax system. See Chapter 2.

³ During fiscal 1997-98, Nevada had the third highest level of percapita sales and selective sales taxes (\$1,712). See US Census Bureau, 2001.

⁴ Alaska receives substantial amounts from severance taxes, royalty income and taxes on profits from gas and oil production in the state.

⁵ Wyoming, besides its severance tax revenues, received \$46 million in royalty income during fiscal 1998.



Table 1
Data For States with Unique Tax Sources, Fiscal Year 1997-98

State	Unique Tax Base	Taxes Affected	Receipts (In Millions)	Percent of State Taxes	Percent of State & Local Taxes
Alaska	Oil/Gas	Severance/Royalties	\$1,271.3	107.2%	63.1%
Nevada (1)	Gambling	Gaming Taxes	\$584.0	18.8%	12.2%
Wyoming	Coal	Severance/Royalties	\$313.9	36.7%	22.5%

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates.

Note (1): Gaming tax data for Nevada from Madhusudhan (2000).

- **Of the six remaining NITS, five (Florida, South Dakota, Tennessee, Texas, and Washington) rely heavily on sales and selective sales taxes as their primary source of revenue.**

Table 2
State and Local Taxes by Source (Percentage of Total), Fiscal Year 1997-98

State	Property	General Sales	Selective Sales	Individual Income	Corporate Income	Other	Total	General Sales & Selective Sales
Florida	34.6	35.4	16.5	0.0	3.3	10.0	100	51.9
New Hampshire	64.0	0.0	17.4	2.2	8.3	8.2	100	17.4
South Dakota (1)	36.0	39.5	11.7	0.0	2.4	10.0	100	51.1
Tennessee	22.5	46.8	13.6	1.4	5.4	10.3	100	60.4
Texas (1)	37.4	38.3	12.6	0.0	0.0	12.0	100	50.8
Washington (1)	31.8	34.7	13.2	0.0	0.0	20.0	100	47.8
NITS Average	37.7	32.4	14.2	0.6	3.2	11.8	100	46.6
Total US	29.7	24.4	11.1	22.7	4.4	7.6	100	35.5

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates.

(1) South Dakota, Texas, and Washington Census data adjusted for consistency.

See Mikesell (2000), p. 583.

New Hampshire, while relying somewhat on selective sales taxes, is more dependent on property taxes than any other state in the country.⁶ Table 2 provides data from fiscal year 1997-98 that showcases the combined state and local tax structures in use in these six NIT states. The analysis focuses on combined state and local government finances, not state government finances only. State and local government spending and financing arrangements differ from state to state, yet all states provide a similar menu of public services to their residents. Therefore, an emphasis on combined finances is clearly appropriate when evaluating tax burdens and tax structures among states.

⁶ New Hampshire does not levy a general sales tax.



Preface

All six states raise sufficient revenues to fund basic state and local government services. The purpose of the following state summaries is to identify the unique element(s) in each state's revenue structure that allows them to "make ends meet." Toward this end, only taxes that produce relatively large amounts, relative to a particular state's combined state and local taxes, and at comparatively high per capita levels, as compared to other states, are described in detail. As we progress through the in-depth discussion of the revenue structures of the NITS, it becomes easier to note the common elements of the NITS club.



Florida

Florida had the fourth highest dependence on combined general and selective sales taxes.⁷ Only Nevada, Tennessee and Louisiana had a higher dependence (62.8 percent, 60.4 percent and 54.1 percent respectively).⁸ Florida had a combined state and local sales tax rate that averaged about 6.5 percent, versus over 8.4 percent in Tennessee and even higher in Louisiana. However, Florida generated per capita general sales tax collections equal to 92.6 percent of Tennessee per capita collections (\$901 in Florida versus \$973 in Tennessee) and almost as much in per capita general sales tax collections as Louisiana (\$926).⁹

Sales Tax

Florida's high sales tax productivity is impacted by

- (1) a relatively high level of tourist-related spending,
- (2) inclusion in the tax base of a fairly broad range of services, including cleaning services, detective protection services and pest control services, and
- (3) inclusion in the tax base of commercial leases.

Table 3
Per Capita Sales for Selected Categories of Business

State	Retail Sales (1)	Accommodations Plus Food Service	Gasoline Station Sales	Food & Beverage Stores	Amusement, Gambling, & Recreation	General Sales Tax Collections (3)
Florida	\$9,971	\$1,660	\$731	\$1,642	\$395	\$901
New Hampshire(2)	\$12,490	\$1,234	\$819	\$2,429	\$219	\$0
South Dakota	\$9,351	\$1,215	\$1,041	\$1,343	\$381	\$851
Tennessee	\$9,304	\$1,270	\$923	\$1,347	\$102	\$973
Texas	\$8,876	\$1,716	\$800	\$948	\$118	\$897
Washington	\$8,969	\$1,260	\$676	\$1,697	\$209	\$1,053
NITS Average	\$9,827	\$1,408	\$832	\$1,568	\$237	\$779
United States	\$8,772	\$1,315	\$744	\$1,508	\$195	\$698

Source: Retail trade data from U. S. Bureau of the Census, *1997 Economic Census, Retail Trade, Geographic Area Series*; FY tax data: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates. Figures rounded to the nearest round dollar.

- Notes: (1) Excludes non-store retail sales, primarily electronic and mail order sales.
 (2) New Hampshire's noticeably high per capita amounts in several categories generally viewed as a result of non-resident shopping to avoid sales taxes and container law excise taxes.
 (3) South Dakota, Texas, and Washington Census data adjusted for consistency.

⁷ Tied for fourth place with New Mexico.

⁸ A combined state and local tax dependence during fiscal 1997-98.

⁹ Based on 1997-98 data.



During calendar year 2000, the state general sales tax on commercial leases alone generated over \$860 million, 5.6 percent of total state sales tax collections.¹⁰ Florida is the only state to tax commercial leases under its sales tax.

Florida's ability to leverage tourist-related spending is better appreciated by reference to Table 3. While other states have higher levels of per capita sales in several categories, Florida has relatively high levels for most categories included in Table 3.

In addition to the relatively high per capita revenue generated by Florida's general sales tax (\$901), Florida also generates high relative collections from four other tax sources: the state intangibles tax, documentary and stock tax, state death and gift taxes, and utility taxes.¹¹ The relatively high productivity of three of these taxes (intangibles tax, documentary and stock tax, and death and gift taxes) is related to Florida's relatively large aged population. Table 4 presents comparative tax data for Florida, the other NITS, and the United States for these highly productive Florida taxes.

Table 4
Per Capita Tax Collections, Fiscal Year 1997-98

State	Intangible Taxes	Documentary & Stock Transfer	Public Utility Taxes	Death and Gift
Florida	\$66	\$83	\$134	\$39
New Hampshire	\$52	\$37	\$49	\$36
South Dakota	\$0	\$0	\$3	\$35
Tennessee	\$30	\$20	\$8	\$21
Texas	\$0	\$0	\$55	\$17
Washington	\$0	\$70	\$93	\$14
NITS Average	\$25	\$35	\$57	\$27
United States	NA	\$13	\$62	\$26

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates.

Note: Florida taxes intangibles based on their value while New Hampshire and Tennessee tax the income from intangibles.

Intangibles Tax

Florida annually taxes the value of intangible assets including shares of stock, trusts, bonds, notes, and, until recently, accounts receivable that are not secured by realty.¹² New Hampshire and Tennessee also tax

¹⁰ Based on "Validated Tax Receipts Data For: Calendar Year 2000", Florida Department of Revenue, March 2, 2001.

¹¹ Intangibles taxes and Documentary and stock taxes are explained later in this section. Utility taxes refer to taxes imposed only on public utilities (private- and publicly-owned) and which are applied to gross receipts, or gross earnings, or units of service sold. Tax can be imposed directly on consumers (in billings) or directly on utilities. Utilities include power, light, water, gas, telephone, telegraph, telecommunications, and public and freight transportations.

¹² Note: On a \$1,000 bond that pays 2 percent interest (\$20 a year), a tax of \$1 per \$1,000 of value generates the same tax (\$1) as a 5 percent tax on the income generated by such a bond (5% X \$20 = \$1).



intangible assets, but only the income from such assets.¹³ Only a few states still subject personal holdings of intangible assets to what amounts to a personal property tax.¹⁴ Florida's version of an intangibles tax generated the highest amount of per capita collections during fiscal year 1997-98. However, at its current level of only \$1 per \$1000 of value (versus \$2 per \$1000 during fiscal year 1997-98), the tax in Florida will likely fall below per capita collections in New Hampshire and approximately match the level of per capita collections in Tennessee.

This tax was reduced in 2001 from its previous level of \$2 per \$1,000 and the exemption was increased. It is a controversial tax, considered to negatively impact decisions to locate in Florida by both businesses and individuals, and its repeal has been seriously considered.¹⁵ The recent reduction in the tax rate from \$1.50 to \$1 per \$1000¹⁶ of value was also accompanied by an exemption for accounts receivable (a business tax break) and an increase in the personal exemption from \$20,000 to \$250,000 (\$500,000 for a married couple). The planned increase in personal exemptions has been postponed because of fiscal problems experienced in 2001. In addition to the recurring tax described above, Florida also imposes a nonrecurring (one-time) tax of \$2 per \$1000 valuation on notes, bonds, and other obligations secured by a mortgage, deed of trust or other lien on real property in Florida.

Documentary and Stock Tax

Florida's transfer taxes raised over \$83 per capita in fiscal year 1997-98, the third highest amount in the country. The District of Columbia raised \$184 per capita and Delaware \$88 per capita. Most state and many local governments impose taxes on the transfer of various types of property located within their taxing jurisdiction.¹⁷ Such taxes go under various names: transfer taxes, documentary tax, deed recordation tax, etc. Most of these taxes are imposed on real estate and real estate-related transfers only. They are sometimes imposed on mortgages. Florida's high level of per capita collections is the result of two circumstances:

- (1) the tax base is relatively broad, while the tax rate is only average among the states, and
- (2) Florida has the largest number of vacation homes in the country.¹⁸

Florida's tax rate on deeds and conveyances of realty is \$.70 per \$100 of value. This is less than 1/3 the tax rate imposed in the District of Columbia. Florida's high productivity stems from its imposition of the tax, at a lower rate of \$.35 per \$100, on a wide variety of loan notes (including demand notes, retail installment sale contracts, home equity loans, and refinancing loans), original issues of stock issues, and mortgages. The documentary stamp tax generated over \$1.2 billion for Florida during fiscal year 2000.

¹³ New Hampshire taxes income from intangibles at 5 percent, Tennessee at 6 percent. The New Hampshire tax base is broader than in Tennessee.

¹⁴ Still levied by some counties in Pennsylvania. Kansas authorizes local governments, by option, to levy a tax on the income from intangibles, but the amounts collected are relatively insignificant (about \$5 million in 2000).

¹⁵ It is also a tax subject to easy avoidance by those willing to pay and engage in legal tax avoidance. It should also be noted that other states that in the past imposed a similar tax have since repealed their intangibles taxes, often following successful taxpayer litigation (Kentucky in mid-1990s exempted most households, North Carolina in 1995, Georgia in 1996, Michigan in 1998, and West Virginia where it is being phased-out through 2003).

¹⁶ The tax rate was \$2 per \$1000 during fiscal year 1997-98, the year used for many of the comparative numbers presented in the tables.

¹⁷ Imposed by state, local, or both state and local governments in 36 states and the District of Columbia (1998 data).

¹⁸ The 2000 Census shows Florida with 482,944 seasonal, recreational, or occasional use homes. The next highest number was in California at 236,857 (note that the population of California was over twice that of Florida). The large number of vacation homes, most of which are owned by nonresidents, increases the productivity of the tax when related to Florida's resident population.



Death and Gift Taxes

Florida collected the 7th highest amount of per capita death and gift taxes (\$39) during fiscal year 1997-98. The highest amount was collected in Connecticut, with per capita collections of \$85. Among states that impose only an estate pickup tax, Florida had the third highest amount of per capita collections.¹⁹ The District of Columbia had the highest at \$62. Florida's high level of collections was accomplished in the absence of a separate state inheritance or estate tax. In 2002, thirty-five states imposed only a pick-up tax to absorb the credit allowed under the federal estate tax.²⁰ Florida's relatively high per capita collections partly reflect its relatively large number of senior citizens.²¹ Florida collected almost \$780 million from its estate tax during fiscal year 2000.

Utility Taxes

Florida had the fourth highest level of per capita utility taxes in the country. The level was \$134 for Florida versus \$378 in the District of Columbia,²² \$142 in New Jersey, and \$139 in Illinois). The state tax in Florida is 2.5 percent on gross receipts of most utility businesses (gas, electricity, heat, power, and telecommunications). In addition, local governments are also authorized to levy utility taxes at rates up to 10 percent.

¹⁹ No additional inheritance or estate tax. The estate pickup tax is designed to absorb the maximum state death tax credit allowed under the federal estate tax. The estate pickup tax in Florida and most other states will be effectively repealed with the repeal of the federal estate tax. In Florida, the repeal will threaten a substantial amount of general revenue. The estimated loss in Florida in fiscal year 2003 is \$174.3 million, rising to over \$1 billion by FY 2006 (see Hunt 2001, page 148).

²⁰ All other states also impose a pickup tax, but in conjunction with their own inheritance or estate tax.

²¹ The percent of Florida's population 65 years and over is the highest in the country (17.6 percent in 2000 versus an average of only 12.4 percent in the country). Source: U.S. Census Bureau.

²² Utility taxes in D.C. are levied at a 10 percent rate.



New Hampshire

New Hampshire has the second least centralized state-local government structure in the country.²³ State government taxes accounted for only 46.9 percent of combined state and local own-source revenue. This has changed somewhat in the last few years as a result of the imposition of a new state property tax in 1999.²⁴

Property Tax

New Hampshire's tax structure is funded by an excessive dependence on the property tax and a combination of several other relatively high taxes (See Tables 5 and 6). In 1997-98 New Hampshire had the second highest level of per capita property taxes, in the country, exceeded only by New Jersey, at \$1,744 per capita. With the addition of a state property tax in 1999, New Hampshire may now challenge New Jersey for the number one per capita property tax ranking.

New Hampshire's tax structure is currently in a state of flux as a result of the imposition of a state property tax in late 1999 (\$6.60 per \$1,000 of value). The state property tax was imposed after consideration of many alternatives, including a state income tax as well as a state sales tax. The property tax was passed as a temporary measure to allow time for consideration of a more permanent solution. The unpopularity in some locations of the state property tax is a result of its Robin Hood type impact: while the tax is imposed at a fixed rate on all property across the state, the state funds are distributed through Adequate Education Grants to provide larger relative benefits to property-poor communities. As a result, some wealthy "donor" towns pay the state property tax, which is redistributed to tax-poor locations. This allows tax-poor governments to reduce their local property tax rates.²⁵

New Hampshire remains locked in a debate on how to resolve the educational funding crisis. The 2001 legislative session was raucous and extended almost into the 2001-2002 fiscal year. Despite promises that the original state property tax would be temporary, it remained part of the tax plan finally approved. It was slightly reduced to \$5.80 per \$1,000 of value for fiscal year 2002-2003 with the reduction in needed educational funds made up by increased taxes on businesses (a higher business enterprise tax rate, higher business profits tax rate, and higher telecommunications taxes). Broadening New Hampshire's tax structure through the introduction of a general sales tax or income tax was discussed but ultimately failed to muster sufficient support. Many believe that the current "fix" will be temporary and New Hampshire will have to revisit its tax structure problems again.

²³ 1997-98 data. New York had the lowest level of centralization at 44.5 percent. The District of Columbia is excluded from this comparison since it does not have two separate levels of government.

²⁴ The state property tax was implemented in 1998 as a result of successful litigation by tax-poor local school districts seeking improvement in the method used to finance education. The New Hampshire Supreme Court declared that funding local education almost entirely through local property taxes was unconstitutional.

²⁵ The unsettled and controversial nature of the current New Hampshire fiscal situation was recently dramatized by a threat of secession by two of New Hampshire's donor towns. See *State Tax Notes*, August 13, 2001, page 477.



Table 5
Comparative Per Capita Tax Collections, Fiscal Year 1997-98

State	Property Taxes	Corporate Net Income Tax	Other Selective Sales Taxes (5)	Net Lottery Revenue	Severance/Royalty Revenue
Florida	\$880	\$85	\$54	\$62	\$5
New Hampshire	\$1,545	\$199(1)	\$152	\$53	\$0
South Dakota	\$777	\$52	\$8	\$142(4)	\$6
Tennessee	\$467	\$112(2)	\$45	\$0	\$0
Texas	\$877	\$0(3)	\$25	\$58	\$50
Washington	\$966	\$0	\$68	\$31	\$12
NITS Average	\$919	\$75	\$59	\$58	\$12
United States	\$851	\$127	\$60	\$52	\$21

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates.

Notes: (1) Includes New Hampshire business enterprise tax collections.

(2) If Tennessee's corporate franchise tax collections were included, per capita collections would have been \$169.

(3) If Texas's franchise tax collections were included, per capita collections would have been \$101.

(4) South Dakota reports net revenue from video poker machines as lottery revenue.

(5) Data for South Dakota and Texas adjusted per Mikesell (2000).

Selective Sales, Business Taxes and Lottery Revenue

In addition to New Hampshire's high per capita property taxes, New Hampshire's fiscal data also shows relatively high per capita collections for corporate income taxes, other selective sales taxes, and net lottery revenue. The relatively high per capita collection of other selective sales taxes is somewhat misleading. While New Hampshire does not levy a general sales tax, it does levy selective sales taxes on meals and rentals (room tax). These combined taxes generated more revenue than the state's tax on business profits in fiscal year 2000. In other states, tax collections on meals and room rentals would be reported as part of general sales tax collections.

New Hampshire imposes relatively high taxes on businesses. The business profits tax (net income tax) was recently raised from eight percent to 8.5 percent, making it the sixteenth highest in the country. In addition to the business profits tax, New Hampshire also imposes a separate business tax called the business enterprise tax. This is a hybrid value-added tax imposed on all businesses in the state. In fiscal year 2000, the business enterprise tax, which had been imposed at a rate of .5 percent, generated 64 percent of the amount generated by the business profits tax. New Hampshire recently increased the tax rate to .75 percent, a fifty percent increase. Shortly, the tax is expected to generate almost as much as the business profits tax.²⁶ This combination of taxes will likely make business taxes in New Hampshire among the highest, if not the highest, in the country.

New Hampshire also generates a healthy level of per capita net lottery revenue. However the total amount generated represents a relatively small percent of total state and local taxes. Net lottery revenue represented only 2.2 percent of combined state and local taxes in fiscal 1998.

²⁶ While the business profits tax has also been increased, business profits represent a much less stable tax base than that of the business enterprise tax. The business enterprise tax base includes compensation, dividends, and interest paid.



Table 6.
Selective Per Capita Taxes For NITS, Fiscal Year 1997-98

State	Property Taxes	License & Net Income Taxes	Utility Taxes	Lottery Revenue
Florida	\$880	\$93	\$134	\$62
New Hampshire	\$1,545	\$203(1)	\$49	\$53
South Dakota	\$777	\$55	\$3	\$142(2)
Tennessee	\$467	\$169	\$8	\$0
Texas	\$877	\$101	\$55	\$58
Washington	\$966	\$2	\$93	\$31
NITS Average	\$919	\$104	\$57	\$58
United States	\$851	\$150	\$62	\$52

Source: U.S. Census Bureau, *State and Local Government Finances*, 1997-98 estimates. Figures rounded to nearest whole number.

Notes: (1) Includes New Hampshire business enterprise tax collections. (2) South Dakota reports video poker net revenue as lottery revenue.



South Dakota

South Dakota finances its operations with a heavy dose of state and local sales taxes, state lottery proceeds, and local property taxes. Together these revenue sources accounted for 80 percent of combined state and local taxes in fiscal year 1998.²⁷

Sales Tax

South Dakota's relatively high per capita sales tax collections (\$851 in 1997-1998, see Table 3) at a four percent state rate and various municipal rates (one to three percent) are the result of its broad application to most retail sales, including all food purchases, and most services.²⁸ Notable services excluded from the tax include medical, educational, social, agricultural and construction services. While construction services are exempt, a separate tax of two percent (contractor's excise tax) is imposed on realty improvement construction contracts.²⁹ Only Hawaii and New Mexico, under their general sales or gross receipts tax, tax a broader array of services than South Dakota.

Lottery Revenue

The extremely high level of per capita net lottery revenue (almost \$142, see Table 6) reflects the peculiar inclusion in reported South Dakota net lottery revenue of video poker machine revenues. If video poker net revenues were excluded from reported net lottery revenue, the South Dakota figure would be less than \$10 per capita. South Dakota has over 1,400 licensed video poker establishments and 8,000 machines, or about 1 per every 100 residents.

²⁷ South Dakota does not impose a corporate income tax. They do, however, impose a bank franchise tax. The tax is imposed on all banks and financial corporations, small loan companies and savings and loan companies on their net annual earnings in lieu of local and state personal property taxes. The tax rate declines as income rises. (Rate Base: 6 percent decreasing to 1 percent as income increases or \$200 minimum). Source: South Dakota Department of Revenue website.

²⁸ South Dakota imposes a separate 3 percent excise tax on vehicle sales (in lieu of the sales tax). Collections from this separate tax are included in sales tax data reported for South Dakota in this report.

²⁹ Collections from this tax are also included in reported sales tax figures for South Dakota in tables in this report.



Tennessee

At 46.8 percent of combined state and local taxes, Tennessee's dependence on the general sales tax is the highest in the country (See Table 2). In addition, Tennessee's dependence on combined general and selective sales taxes is also the highest in the country at 60.4 percent of combined state and local taxes. The relative high productivity of the general sales tax (\$973 per capita) reflects Tennessee's very high average tax rate, averaging about 8.4 percent statewide, the inclusion of food, and a slightly above-average band of services in the tax base.

Tennessee relies heavily on corporate license and net income taxes. In fiscal 1997-98, combined corporate license and net income taxes in Tennessee produced per capita taxes of \$169.³⁰ This is somewhat higher than the national average of \$150, and noticeably higher than the respective figures for most southeastern states.³¹

Comparatively, Tennessee's tax structure underutilizes property and public utility taxes. Table 6 illustrates that Tennessee collects much less per capita on public utility taxes and property taxes than both the NITS average and the US average. While Tennessee does not currently have a state lottery, a public referendum on a state lottery will be on the state's November 2002 election ballot.

³⁰ This reflects combined corporate excise and franchise tax collections.

³¹ Tennessee's per capita collections were only slightly higher than the figures for North Carolina and Louisiana (\$163 and \$140 respectively).



Texas

Texas depends heavily on the combination of property and general and selective sales taxes. In fiscal 1997-98, these taxes accounted for 88.3 percent of combined state and local taxes. No other state depended more on this combination of taxes.³² The balance of Texas's revenue needs was met through a combination of fairly standard other state and local tax sources at average tax rates and an above average amount of severance taxes and royalty revenue. Texas oil and gas reserves produced almost \$1 billion in fiscal 1997-98 in severance taxes and royalty income. While equal to only 2.1 percent of combined state and local taxes, the royalty income enables Texas to avoid the need to impose additional relatively high or excessive tax rates elsewhere.

Sales Tax

The Texas general sales tax is fairly productive.³³ While food is exempt, the tax base consists of a relatively broad array of services.³⁴ The Texas sales tax base includes the following services: amusements, credit reporting, data processing, debt collection, information, insurance services, parking and storage of motor vehicles, non-residential real property repair, restoration or remodeling, most personal services, real property services such as pest control, waste collection, and janitorial and custodial services, landscaping and lawn maintenance, surveying, security (armored car services, burglar alarm systems), and telecommunication services including internet access.

³² The next most dependent on this combination of taxes was South Dakota, at 87.2 percent. Not surprisingly, all the NITS being analyzed depended on this combination of taxes for 80 percent or more of their total taxes.

³³ Per capita general sales tax collections in fiscal 1997-98 were \$897. The combined state and local sales tax rate in Texas was approximately the same as in Tennessee (varied somewhat depending on location).

³⁴ In a 1996 survey of service taxation by the Federation of Tax Administrators (1996), Texas had the eight highest number of taxed services (a total of 164 services were included in survey).



Washington

Boeing, Microsoft, and the timber industry heavily impact Washington's economy. These industries showed remarkable strength through the 1990s. This enabled Washington's somewhat unbalanced tax structure to supply sufficient revenues to avoid serious budgetary problems. However, beginning with the recession that started in the first quarter of 2001, Washington has suffered a severe revenue setback. The economic fallout of the September 11 terrorist attacks worsened this setback. Washington is currently facing a \$1.7 billion budget shortfall.

Business and Occupation Gross Receipts Tax

Washington is the only state to levy such a comprehensive gross receipts tax on all businesses. While Washington generates significant amounts from its general sales tax (over \$1,000 per capita), its most important and often misunderstood tax is its Business and Occupation (B&O) tax. The B&O tax is Washington's major business tax.³⁵ The tax is imposed on the gross receipts of all businesses operating in Washington. Rates vary from a low of .138 percent on certain agricultural processing businesses³⁶ to a high of 3.3 percent on businesses engaged in the disposal of low-level radioactive waste. In 1997, 52.7 percent of the B&O tax was raised on retailing, manufacturing and wholesaling, and services.³⁷ The tax generated almost \$1.9 billion for state government in fiscal year 1998 and represented 16.6 percent of all state taxes. In addition to the state tax, local governments also levy gross receipts taxes on businesses, but at much lower rates.

Sales Tax

Per capita general sales tax collections in Washington are among the highest in the country. Washington ranked third in per capita collections in fiscal year 1998.³⁸ This is a result of Washington's high tax rate and its broad tax base. The combined state and local general sales tax rate in Washington varies by location, but is as high as 8.8 percent in several cities. The tax base includes most retail sales, the major exception being food for home consumption, and a broad variety of services. Services subject to the tax include the improvement of real or personal property (all construction services), amusement and recreational businesses, as well as certain other personal services and activities, including lawn maintenance and physical fitness activities. Personal and professional services are generally excluded.³⁹

Property, Utility, and Recordation Taxes

In addition to above average per capita property taxes (see Table 6), Washington also collects above average per capita amounts from its utility taxes and recordation fees/taxes. Both state and local governments impose utility taxes. The state taxes

- sewer, telegraph, and gas distribution businesses at a 3.6 percent rate;
- light and power companies at 3.62 percent;

³⁵ It should be noted that the general sales tax imposes significant tax burdens on businesses in all states in which it is levied.

³⁶ Businesses engaged in agriculture production are exempted from the tax.

³⁷ Travel agents, stevedoring, freight brokers, and international investment management services are taxed at only .275 percent.

³⁸ Hawaii collected \$1,195 per capita and the District of Columbia \$1,065.

³⁹ Washington Department of Revenue (2000), page 2.



- urban transportation and boats (under 65 feet) at .6 percent;
- water distribution at 4.7 percent; and
- motor transportation, railroad, tugboats, and all other public service business at 1.8 percent.

The real estate transfer tax rate in Washington in 1998 was almost 350 percent higher than in Tennessee and ranked third highest in the country, behind only Delaware and Vermont.

The real estate transfer tax rate in Washington in fiscal year 1998 was 1.28 percent of the selling price. This compared to a tax rate in Tennessee of only .37 percent.



Summary of Structure Differences

According to the National Conference of State Legislatures, a good tax system is one that uses a balanced mix of revenues. This is desirable because all taxes have advantages and disadvantages; a good mix helps cancel out the weaknesses. A common model for a balanced tax system is the “three legged stool,” where the legs represent roughly equal use of income, sales, and property taxes.

States not embracing the concept of the three-legged revenue system that utilizes a balance of taxes on property, sales, and income, are forced to rely on one of two strategies:

- (1) find an eccentric or fortuitous revenue source unique to that state (such as in Alaska, Nevada, and Wyoming), or
- (2) rely heavily on one or two of the remaining basic revenue sources, either sales or property (New Hampshire only), and fill the remaining void with a short list of relatively productive minor taxes (fillers).

The detailed description of the tax structures of NITS shows that with the exception of Alaska, Nevada, and Wyoming, **there is no painless way of financing combined state and local government operations.** The review also shows that some of the differences in tax structures are related to unique twists of history, politics, and geography. These reasons would help explain the peculiarly high dependence of New Hampshire on property taxes, the relatively large sales tax base in Florida (geography), the Washington B&O tax (history), and severance taxes in Texas. The following section explains how the tax structure in NIT states contributes to the structural deficits in NIT states.



Structural Deficits and Spending Patterns

The second section of this report address two questions:

- Does the presence of a broad-based income tax affect the likelihood of or the level of a structural deficit (long-run fiscal stress)?
- What effect, if any, does the presence or absence of an income tax have on the level of combined state and local spending?

Structural Deficits

A structural deficit is defined as a long-run tendency for governmental expenditure needs to outstrip revenue flows, assuming existing tax rates and tax bases are fixed.⁴⁰ States with structural deficits may see several years when revenues are sufficient to meet growing expenditures. Such short-run boom years may even result in refunds to taxpayers when revenues greatly exceed fiscal year needs.⁴¹ Expenditures grow as a result of increased workloads (generally the result of population growth), inflation, and new programs, which also affect workloads. While most taxes also grow over time, the critical issue is a focus on differences in the long-run growth of expenditures versus revenues. Some tax sources tend to grow in step with or faster than expenditure needs (most often measured in relation to growth in personal income and characterized as elastic revenue sources). Most revenue streams, however, tend to lag behind the growth in personal income and expenditure needs and are characterized as inelastic, often the primary cause of structural deficits.

Table 7
State and Local Deficit as Percent of Spending (FY 2005)

State	FY 2005 Deficit	Rank
South Dakota	-0.2%	19
Washington	-0.7%	22
Nevada	-3.0%	31
Florida	-4.5%	39
Texas	-4.6%	41
New Hampshire	-4.7%	42
Tennessee	-9.0%	46
Wyoming	-11.2%	49
Alaska	-16.1%	50

Notes: Deficit as Percent of spending.
Ranked from low to high (worst situation).
Source: Hovey (April 1998), p. 6.

- **According to a 1998 study, states without broad-based income taxes face a greater likelihood of structural deficits than do states with broad-based income taxes.**⁴²

That study includes forecasts of state and local government structural deficits or surpluses for all states in fiscal year 2005.⁴³ The study (see Table 7) predicts structural deficits for all nine NITS.⁴⁴ With the exceptions of South Dakota, Washington, and Nevada, the remaining NITS ranked 39th or lower out of 50 in the size of structural deficits predicted, 50 being the worst structural deficit.

⁴⁰ The opposite of a structural deficit is a structural surplus.

⁴¹ Some states have made the mistake of responding to such boom year revenues by lowering tax rates (in lieu of or in addition to refunds). When the boom years end, the lower tax rates will increase the likelihood of a worsened structural deficit in the long run.

⁴² Hovey (1998 & April 1998).

⁴³ Hovey (April 1998), p. 6.



The implication of having predicted structural deficits is clear; none of the NITS have a tax structure that grows in the long run as fast as personal income. This is not surprising since structural deficits are the result of the failure of revenues to keep up with long-run spending requirements. States with relatively inelastic tax structures are saddled with an immediate handicap. Not surprisingly, the nine NITS have the lowest estimated tax elasticities of the 50 states. Hovey (April 1998) estimated an elasticity index for state and local general fund taxes for all 50 states.⁴⁵ The nine NITS had elasticity indices that ranged from .906 (Alaska) to a low of .875 (Nevada). The Tennessee estimate was .885.⁴⁶ The smaller the elasticity figure the less elastic the tax system.

States with inelastic tax structures can avoid structural problems in only two ways: benefit from exceptional long-run revenue growth (usually state economy-related), or relatively low growing expenditure needs. In the decade leading up to 2001, only two of the NITS avoided serious structural deficit situations, South Dakota and Washington.⁴⁷ Washington managed to avoid the pitfalls of its inelastic tax structure by virtue of its healthy economic growth. During the period 1986-99, the average annual growth in Washington State's gross state product was 4.67 percent, the sixth highest in the country. This above average rate of growth, compared to the US figure of 3.37 percent, partially offset the impact of Washington's inelastic tax structure. As long as public expenditures grew at a slower rate than the state economy, Washington was still able to fund its needed expenditures without significant tax increases.

South Dakota's estimated relatively low structural deficit problem resulted from the slow growth in the spending needs of the state. While South Dakota's economy grew at about the same rate as the US economy as a whole (average annual growth during the 1986-99 period of 3.39 percent versus 3.37 percent for the US), it enjoyed some advantages on the spending side of the equation. These advantages included a relatively small state population and a projected percent change in public school enrollment over the 1994-2002 period of zero.⁴⁸

Despite their success in the last decade, both South Dakota and Washington are now facing budget shortfalls as a result of recession and the economic impact of the September 11 terrorist attacks. In South Dakota, the Governor has recommended offsetting revenue shortfalls by drawing down reserve funds. Washington is facing a deficit of \$1.3 billion.⁴⁹

⁴⁴ Structural deficits were predicted for 33 states. The deficits (state and local surplus as percent of spending) ranged from -.1 percent to -16.1 percent).

⁴⁵ Ibid, Table 2.

⁴⁶ The estimated elasticities were for state and local general fund taxes.

⁴⁷ Based on Hovey's estimates.

⁴⁸ Hovey (1998), Table 2.3.

⁴⁹ National Association of State Budget Officers, January 2002.



Does the Absence of an Income Tax Affect Spending?

1—Does an income tax affect the overall level of state and local government spending? *The Statistical Abstract of the United States: 2000*, prepared by the U.S. Census Bureau analyzed state and local government expenditures and outstanding debt per capita for the year 1996. This information provides a snapshot of information to determine if the NIT states spend less or have more or less debt per capita than states with an income tax. Table 8 shows that with Alaska included, NIT states spent more per capita than states with an income tax. With Alaska removed, NIT states spent less than the national average. Therefore, based on this data, it is unclear whether

<p align="center">Table 8 1996 State & Local Government Expenditures and Outstanding Debt Per Capita</p>		
State	State & Local Government Expenditures Per Capita	Outstanding Debt Per Capita
Alaska	\$11,745	\$11,234
Florida	\$4,754	\$4,517
Nevada	\$4,965	\$5,103
New Hampshire	\$4,478	\$5,983
South Dakota	\$4,181	\$3,263
Tennessee	\$4,854	\$4,238
Texas	\$4,387	\$3,992
Washington	\$6,266	\$5,757
Wyoming	\$6,336	\$3,896
NITS average	\$5,774	\$5,331
NITS Average without Alaska	\$5,028	\$5,260
US	\$5,256	\$4,411
<p align="center">Source: U.S. Census Bureau, <i>Statistical Abstract of the United States: 2000</i>, Tables 504 and 505.</p>		

the absence of an income tax affects governmental spending. However, NIT states exhibited more debt per capita than the national average.

2—Does an income tax affect the level of spending on specific programs? Like question one, this question remains extremely difficult to analyze because of difficulties in obtaining appropriate data with which to evaluate such questions. Clearly larger states spend more than smaller states. Proper analysis must utilize data that adjusts for both differences in the relative size (population, students, college-age students, etc) and wealth (personal income) of states and differences, if any, in the cost of providing various state and local government services. To test for “an income tax effect,” the analysis investigates state and local spending on primary and secondary education.⁵⁰

Spending Patterns on Primary and Secondary Education⁵¹

K-12 education is a logical spending program to examine because it absorbs a significant portion of state

⁵⁰ If there “is” an income tax effect, it should be present in the single largest category of combined state and local spending, especially given that many taxes and tax increases are imposed to benefit education.

⁵¹ The section that follows avoids many of the unresolved and controversial issues in school finance. Specifically the section does not deal with the paramount question of whether or not higher levels of spending (resources made available per student) improve student performance (or other economic outcomes such as future income).



and local government revenue.⁵² Every state (combined state and local governments) provides this basic service and there is a relatively large amount of detailed state-by-state data on such spending, including average teacher salaries, pupil/teacher ratios, average teacher experience, etc. Such data provide a promising avenue for analysis.⁵³ In January 2002 *Education Week* released its annual report on K-12 education entitled, *Quality Counts 2002, State of the States*. One of the items examined was the adequacy of state spending per student on K-12 education, adjusted for differences in regional cost of living. In 2001 the NIT states spent \$6,820 per student versus a US average of \$7,079 per student.⁵⁴ NITS spending, state rankings, and overall adequacy grades given in the report are listed below.

Table 9
2001 NIT States Educational Spending National Ranking and Overall Funding Adequacy Scores

State	State Education Spending Per Student Adjusted for Regional Cost Differences	State Ranking of Educational Spending Per Student	Overall Adequacy Score to Stated K-12 Education Spending
Alaska	\$7,129	30	C+
Florida	\$6,251	43	C-
Nevada	\$5,911	42	C-
New Hampshire	\$6,967	33	C
South Dakota	\$7,157	28	C+
Tennessee	\$6,282	45	D+
Texas	\$6,772	34	C
Washington	\$6,256	36	C
Wyoming	\$8,657	1	A
NITS Average	\$6,820	N/A	N/A
US	\$7,079	N/A	N/A

Source: *Education Week* (2002), *Quality Counts 2002, State of the States*, “A Look at the Data, Adequacy Table 1,” page 1. www.edweek.org/sreports. N/A means not applicable.

Table 9 shows that the NIT states on average spent less than the national average per student after spending was adjusted for regional cost differences. However, even after adjusting for regional cost differences, the data is inconclusive relative to the impact on spending, if any, of an income tax. To more thoroughly analyze the causality between an income tax and spending a regression analysis must be used. For the purposes of this investigation a simple regression model is used that contains only three independent variables:

- (1) average annual teacher salary,
- (2) teacher/pupil ratios, and the
- (3) presence or absence of an income tax.

⁵² During fiscal year 1996-97, spending on elementary and secondary education represented 23.5 percent of total general expenditures (combined state and local). Source: U. S. Census Bureau, 2000, Table 34.

⁵³ Instruction expenses accounted for almost 62 percent of total current expenditures (public elementary and secondary education) during 1997-98. See U. S. Department of Education, 2001, Table 164.

⁵⁴ *Education Week* (2002). *Quality Counts 2002, State of the States*, “A Look at the Data, Adequacy Table,” page 1. www.edweek.org/sreports.



It was expected that higher average state teacher salaries and higher average state teacher/pupil ratios would be associated with higher per pupil spending. Whether or not the presence or absence of an income tax affects spending was left to the regression analysis to determine.

Regression Results

The variation in per pupil spending varied significantly from state to state. During fiscal year 1997-98, per pupil spending varied from a high of \$9,643 in New Jersey to a low of \$3,969 in Utah. Moreover, fiscal year 1997-98 average annual salaries varied from a high of \$50,730 in Connecticut to a low of \$27,875 in South Dakota while teacher/pupil ratios varied from a high of .0746 in Vermont (a little more than seven teachers per every 100 students) to a low of .0437 in Utah (about four teachers per every 100 students). This extensive variation in the variables included in the analysis helped produce robust estimates of the regression coefficients for both teacher salaries and the teacher/pupil ratio.

- **The presence of a broad-based personal income tax is insignificant in explaining the level of per student expenditures.**⁵⁵

As expected, both annual teacher salary and the teacher/pupil ratio are significant explanatory variables in determining per pupil spending in a state. The regression results show that variations in teacher salaries and teacher/pupil ratios explained almost 90 percent of the variation in per pupil spending. However, the presence of a broad-based income tax in a state did not have any significant effect on per pupil expenditures. This result may be problematic for NIT states because it demonstrates that a certain level of spending must occur regardless of a state's tax structure. Appendix A provides the details of the regression analysis performed.

⁵⁵ Not only is the coefficient negative, implying that the estimated impact of an income tax on spending is negative, but it is also not significantly different from zero.



Appendix

Regression Model

In the model below, it is expected that both β_1 and β_2 are positive; all things being equal, higher average teacher salaries and higher teacher/pupil ratios will result in higher expenditures per pupil. The model used is a dummy variable regression procedure designed to test whether the dummy variable (a numerical variable designed to represent subgroups) has any real influence on the behavior being analyzed.⁵⁶ If the results of the regression show that β_3 is significant, then the conclusion will be that the presence of a broad-based income tax has an impact on per capita real spending on K-12 education.⁵⁷

$$Z_i = \beta_0 + \beta_1 S_i + \beta_2 R_i + \beta_3 T_i + \varepsilon_i ; \text{ where}$$

Z_i = current spending per pupil in membership in state i ,

S_i = average annual salary of teachers in state i ,

R_i = ratio of teachers to pupils⁵⁸ in state i ,

T_i = 1 in states with a broad-based personal income tax
 0 in states without a broad-based personal income tax,
 (T_i is the dummy variable in this model)

ε_i = error term for the i^{th} state, and β_s are coefficients to be estimated.

Regression Statistics					
Independent Variable	Regression Coefficient	Standard Error	t Statistic	Maximum Value	Minimum Value
Average annual teacher Salary	0.1804	0.0099	18.2	\$50,730	\$27,875
Teacher/Pupil Ratio	74328.0500	8583.6722	8.7	0.0746	0.0437
Broad-Based Income Tax (0 or 1)	-114.2368	156.9756	-0.73**		
Constant	-5097.4418	657.6972	-7.75		

Source: U.S. Department of Education, 2001. All 50 states plus D.C. included in analysis.
 **Not significantly different from zero.

⁵⁶ This technique is in lieu of running separate regressions on each group (NITS versus ITS) and then testing whether there is any significant difference between the values of β_1 and β_2 from each regression.

⁵⁷ There is a difference between the spending of NITS and ITS explained by the presence or absence of a broad-based income tax.

⁵⁸ Calculated as the inverse of the pupil/teacher ratio.



The results of the regression are shown in the adjacent table. Both annual teacher salary and the teacher/pupil ratio are significant explanatory variables. The calculated R^2 (from the regression procedure) is 89.4 percent, meaning that average annual salary and the teacher/pupil ratio explained or accounted for 89.4 percent of the variation in per pupil spending.⁵⁹ It is noteworthy that the presence of a broad-based personal income tax (measured by the dummy variable T_i) is insignificant in explaining the level of per pupil expenditures.⁶⁰

It must be noted that beyond differences in annual average teacher salary and teacher/pupil ratios, variations in K-12 spending per pupil in states could result from other factors not included in this regression analysis. These factors may include: percentage of students identified as special education; educational requirements of teachers; support personnel required; or the limited number of NIT states to provide a broad comparison to states with broad-based personal income taxes. Further study is needed to determine if other factors that may impact K-12 spending are linked to the presence or absence of a broad-based personal income tax in a state.

⁵⁹ R^2 is a measure of how well a regression model explains the data.

⁶⁰ Not only is the coefficient negative, implying that the estimated impact of an income tax on spending is negative, but it is also not significantly different from zero.



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