Utah FOUNDATION RESEARCH BRIEF

Flat Income Taxes: Less Progressive But More Stable

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Introduction

Responsiveness in state revenue collections to changes in revenue sources has been increasingly important in recent years. Economic fluctuations have the potential to disrupt state revenue collections and the resulting funding for needed services. Beginning with former Governor Olene Walker's tax reform proposal, attention has been directed to an overhaul of Utah's state personal income tax system. All revenue generated from Utah personal income tax collections is constitutionally designated for education; to add stability to the educational tax structure, a new proposal has been presented that would simplify the state personal income tax by lowering the tax rate and broadening the base by eliminating deductions. The proposal would also decrease taxes for individuals living below the poverty line.

Flat Tax Overview

Under a flat income tax system, all income is taxed at the same rate on a broadly defined base. Flat income taxes usually feature low rates and offer a limited number of deductions and exemptions. With a flat income tax, tax liability increases proportionally as income increases. Many proponents of a flat tax advocate that the flat tax would solve myriad problems ranging from compliance to complexity in state income tax systems. A flat tax is inherently simpler in that individuals do not need to keep track of allowances and deductions. Flat taxes promote equality by applying one tax rate for all individuals (thresholds are usually set to exempt individuals from paying taxes who are in the lowest-income range) and low rates stimulate investment and economic growth, which in turn leads to more revenue for the state.

Opponents, however, claim that by nature the flat tax violates notions of equity and fairness by taxing both the rich and poor at the same rate. They argue that it is necessary to look beyond a simple tax rate and take into consideration the value of money to different income groups. Opponents also argue that more clarification of the term "income" and what counts as "income" is needed to avoid shifting tax burdens off the upper class and onto lower income groups.

Experience With Flat Taxes

In the United States, six states have implemented a flat state income tax: Colorado, Illinois, Indiana, Massachusetts, Michigan and Pennsylvania. Figure 1 shows tax rates, exemptions, deductions and income tax as a percentage of total tax revenue collections for each of the six states. Data for Utah is included in this analysis to offer points of comparison. As can be seen, none of the states imposing a flat income tax allow for standard deductions and they only offer a very limited number of itemized deductions; Colorado has implemented a very simple flat tax and does not allow any additional deductions, exemptions or credits. Colorado's tax, however, is imposed on federal taxable income which implicitly allows for federal standard or itemized deductions and personal exemptions. Most states base the tax on federal adjusted gross income, a broad measure of income, and then provide some exemptions, deductions, and credits from that income. Pennsylvania has the broadest flat tax, with its own definition of gross income and no personal exemptions or standard deductions.

The addition of deductions, exemptions and credits can affect the elasticity of tax revenues in relation to income. Theoretically, a flat rate income tax with no exemptions and credits should have income elasticity equal to one. Allowing taxpayers the opportunity to apply credits or exemptions to their state income tax can skew revenue sensitivities to below or above one.

> "Elasticity:" An economic concept that measures the responsiveness (or sensitivity) of one variable to changes in another variable. For our purposes, we pose the question "how elastic (or sensitive) is revenue based on changes in income?" A number greater than one signals that the revenue is elastic or sensitive to changes in income. Less than one signifies an "inelastic" tax or one that is not as sensitive to income changes

Figure 1: Overview of States with Flat Income Tax Systems

State	2004 Tax Rate Percent	2004 Exemptions: Single	2004 Exemptions: Spouse	2004 Exemptions: Dependent Children
Colorado	4.63% of Federal Taxable Income	Federal*	Federal*	Federal*
Illinois	3% of Federal Ajusted Gross Income (with modifications)	$2,000	$2,000	$2,000
Indiana	3.4% of Federal Ajusted Gross Income (with modifications)	$1,000	$1,000	$1000^
Massachusetts	5.3 or 12%** of Gross Income	$3,300	None (filing jointly $6,600)	$1,000
Michigan	3.95% of Federal Ajusted Gross Income (with modifications)	$3,100	$3,100	$3,700
Pennsylvania	3.07% of Gross Compensation	None	None	None
Utah	2.3%-7% of Taxable Income	$2,325	$2,325	$2,325

State	2004 Standard Deductions	Deductions & Credits Allowed: Property Tax	Deductions & Credits Allowed: Mortgage Interest	Deductions & Credits Allowed: Charitable Contribution	2003 Tax Collections as a Percentage of Total Revenue Collections
Colorado	Federal*	Yes	Yes	Yes	48.8
Illinois	None	Yes	No	No	33.1
Indiana	None	Yes	No	No	32.5
Massachusetts	None	No	No	No	51.4
Michigan	None	Yes	No	Yes++	28.7
Pennsylvania	None	No	No	No+	28.7
Utah	$4,850 single ($9,700 married filing joint)	Yes	Yes	Yes	39.7

*Because Colorado's tax is based on Federal Taxable Income, it implicitly allows the federal exemptions and deductions.

**Massachusetts defines income in the following way: Part A income includes short term capital gains and long term capital gains resulting from the sale of collectibles and pre 1996 installment sales are taxed at 12%; Part B income includes wages, pensions, business income, rents as well as dividends and interest is taxed at 5.3%; Part C income includes long term capital gains (except for collectibles and pre-1996 installment sales) is taxed at 5.3%

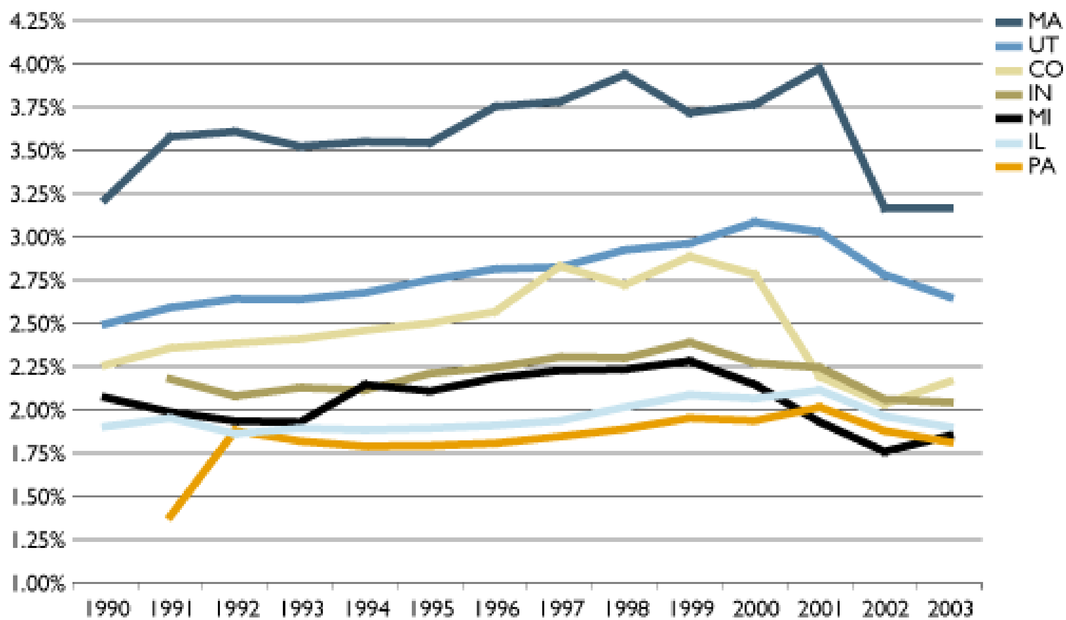
+Pennsylvania repealed its Charitable Contributions Credit in 2002

++Michigan allows 3 different types of credits for charitable contributions: The Community Foundation Credit for contributions to public institutions, the Homeless Shelter and Food Bank Credit and the Community Foundation Credit for contributions to listed certified community organizations.

^Additional exemptions of $1,500 are available for certain dependent children, under age 19

Sources: Individual State Departments of Revenue; Tax Foundation

Figure 2: Income Tax Revenue as a Percentage of Personal Income



Sources: Individual State Departments of Revenue; Bureau of Economic Analysis

Each of the states shown in Figure 2 experienced some fluctuation in revenues due to economic changes. It is clear, however, that three states have a more stable income tax than the others; Indiana, Illinois, and Pennsylvania adhere to the most basic principles of a true, simple flat tax. They only allow very limited deductions and tax a broad definition of income.

Economic fluctuations hit Colorado, Michigan and Massachusetts especially hard, and these states experienced serious budget shortfalls as a result. The main budget problems for these states stemmed from revenue shortfalls caused by the impact of the recession on employment and capital gains income. While Colorado did experience revenue declines due to its reliance on the tech sector, a sharp decline in tourism following the September 11, 2001 terrorist attacks contributed to its shortfall.

Elasticity & Progressivity

Research on tax base elasticities in both the long run and short run conducted by Donald Bruce, William F. Fox and M.H. Tuttle at the University of Tennessee reveals that long run elasticity is higher in states where the highest tax bracket occurs at lower income levels (as in Utah). Their findings suggest that this increase in elasticity occurs as more taxpayers are subject to higher tax rates.[1] In other words, by having a larger base subject to the maximum tax rate, state personal income revenue collections are more sensitive to fluctuations in personal income due to the wider range of incomes. States with more progressive income tax structures also are prone to high long-run income elasticities.

States that adopt a flat income tax give up the opportunity to create a more progressive tax structure. Overall progressivity of their tax system will depend on how other taxes are structured, but even a flat tax can be made more progressive with the introduction of large exemptions for lower income taxpayers. As can be seen from Figure 4, major cities in each state with a flat income tax vary in terms of progressivity. Considering each of the cities in the flat-tax states mentioned above, Salt Lake City is more progressive than any of them, with an index of 0.743.[2]

Figure 3: Personal Income Tax Elasticities

State	Long Run Elasticity	State	Long Run Elasticity
Alabama	1.823	Mississippi	1.910
Arizona	1.140	Missoiuri	2.292
Arkansas	2.012	Montana	1.604
California	1.749	Nebraska	2.491
Colorado	1.256	New Jersey	2.016
Delaware	1.018	New Mexico	3.024
Georgia	1.690	New York	1.295
Hawaii	1.320	North Carolina	1.545
Idaho	1.565	North Dakota	0.809
Illinois	1.565	Ohio	3.983
Indiana	2.435	Oklahoma	2.613
Iowa	2.349	Oregon	1.440
Kentucky	2.600	Pennsylvania	1.431
Kansas	2.260	Rhode Island	1.756
Louisiana	2.272	South Carolina	1.564
Maine	2.873	Utah	1.477
Maryland	1.183	Virginia	1.477
Massachusetts	1.415	Vermont	0.974
Michigan	1.879	West Virginia	2.569
Minnesota	1.320	Wisconsin	1.215

Source: Bruce, Donald, William F. Fox and M. H. Tuttle. 2004. "Tax Base Elasticities: A Multi State Analysis of Long-run and Short-run Dynamics" Table 4: "Personal Income Tax Elasticities."

Figure 4: Index of the Progressivity for the Tax System of the Largest City in Each State

City	State	Progressivity Index	City	State	Progressivity Index
New Orleans	LA	0.448	Kansas City	MO	0.768
Boise	ID	0.471	Burlington	VT	0.772
New York City	NY	0.481	Charleston	WV	0.783
Wichita	KS	0.518	Columbus	OH	0.788
Oklahoma City	OK	0.550	Boston	MA	0.790
Columbia	SC	0.575	Portland	OR	0.815
Minneapolis	MN	0.595	Providence	RI	0.828
Jacksonville	FL	0.596	Louisville	KY	0.836
Washington	DC	0.614	Bridgeport	CT	0.880
Portland	ME	0.629	Virginia Beach	VA	0.886
Baltimore	MD	0.636	Detroit	MI	0.916
Billings	MT	0.666	Philadelphia	PA	0.918
Albuquerque	NM	0.668	Indianapolis	IN	0.932
Jackson	MS	0.693	Fargo	ND	0.937
Charlotte	NC	0.699	Newark	NJ	1.021
Milwaukee	WI	0.703	Chicago	IL	1.024
Atlanta	GA	0.705	Birmingham	AL	1.062
Little Rock	AR	0.706	Houston	TX	1.146
Wilmington	DE	0.725	Anchorage	AK	1.232
Des Moines	IA	0.729	Manchester	NH	1.240
Los Angeles	CA	0.732	Memphis	TN	1.260
Phoenix	AZ	0.737	Cheyenne	WY	1.268
Salt Lake City	UT	0.743	Seattle	WA	1.280
Denver	CO	0.744	Sioux Falls	SD	1.285
Omaha	NE	0.749	Las Vegas	NV	1.345
Honolulu	HI	0.752	US Average		0.821
			MEDIAN		**0.752**

Note: Less than 1 is progressive, greater than 1 is regressive

Source: Government of the District of Columbia. "Tax Rates and Tax Burdens in the District of Columbia: A Nationwide Comparison." 2003, 14.

States with progressive income taxes have more elastic revenues, which has both positive and negative implications. On the one hand, more elastic taxes grow at a faster rate as income grows; on the other hand, less elastic taxes are more stable and do not fall as much when income growth slows. Figure 3 reveals that in the long-run, states with a flat income tax are not necessarily more stable (less elastic) than states with other tax systems. With the exception of Indiana, which is an outlier in the group and is very sensitive with a long-run elasticity measurement of 2.435, it is erroneous to claim that only those states with flat taxes experience lower long-run elasticity.

Several other states with progressive income tax systems have lower long-run income elasticities despite the idea that increased progressivity leads to higher income sensitivity. It is important to note that Utah's tax system is essentially a flat tax system by default due to its low top-income brackets and lack of indexing for inflation. This may explain why it appears more inelastic than other states with progressive tax systems.

Conclusion

When considering policy changes to Utah's tax system, it is helpful to consider the experience of other states that have implemented a flat tax. Broad-based flat income taxes, like those in Pennsylvania, Indiana, and Illinois, do appear to be more stable, providing revenues that do not suffer declines as severe as other states during recessions. The tradeoff that comes with greater stability, however, is slower revenue growth during positive economic cycles. Slower growth may be desirable to those who prefer to limit government growth, but because of the income tax's tie to education funding in Utah, slower growth may be undesirable to those looking for greater increases in education funding during economic expansion years. In addition, a flat income tax carries less opportunity to craft a progressive tax system that eases burdens on low-income taxpayers. Although Utah's income tax seems flat by default, because most full-time workers are paying the highest tax rate, Utah's overall tax system is currently more progressive than any of the flat-tax states.

Endnotes

[1] Bruce, Donald, William F. Fox and M.H. Tuttle. "Tax Base Elasticities: A Multi-State Analysis of Long-run and Short-run Dynamics." University of Tennessee, 2004, 20.

[2] Progressivity is measured by dividing the percentage tax burden at the $25,000 income level and the percentage tax burden at the $150,000 level.

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