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GRADUATED INCOME TAX VIEWED FROM A TAX POLICY PERSPECTIVE

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President's Foreword

The effort to amend the Illinois Constitution to allow graduated income tax rates has stalled for this year, but I suspect that it will return. When it does, I hope that the debate will focus on sound tax policy, and this article identifies policy guidelines for advocates and opponents to consider. Of particular interest, and receiving scant attention to date, are: [1] the greater volatility of tax revenues under graduated rates, [2] the question of relative reliance on personal income taxes, [3] the increased costs (for taxpayers and for the government) to administer a more complex graduated rate system, [4] the question of whether single and joint filers should be taxed at different rates, and [5] whether economic distortion would occur under graduated rates. A discussion incorporating these policy issues would be more productive than merely the simplistic arguments that a graduated tax would, or would not, be "fair". – Carol Portman

Introduction

Given recent and likely future conversations about a progressive income tax in Illinois, this article takes a step back from specific proposals and instead summarizes arguments associated with a progressive versus a flat rate income tax structure and closely examines how progressive income taxes are structured in other states.

Progressive versus Flat Rate Taxation

In theory, a flat rate is exactly that - no exemptions, deductions or credits. Everyone pays the statutory rate. A progressive income tax system is more complex, has differing statutory tax rates depending on income levels, and various exemptions, credits and other income modifications that cause deviations between the statutory rate and the effective rate. In theory:

- A progressive or a flat tax can be considered adequate and balanced depending on the rate and resulting revenue mix.
- A progressive tax is more likely to distort economic behavior when compared to a flat tax.
- A flat tax achieves horizontal equity where a progressive income tax achieves vertical equity.
- A flat tax is more likely to meet the principle of simplicity when compared to a progressive tax.
- Receipts from a progressive tax are more volatile than receipts from a flat tax and as such require greater fiscal discipline.
- Everything else being equal, a broad-based tax will have a lower rate and minimize economic distortions.

However, reality differs significantly from theory. States with flat statutory tax rates have income modifications such as exemptions, additions, subtractions, and credits that are in some part designed to make the tax system more progressive. These tax systems often have credits earned by partners and shareholders of businesses that are taken on

Four Economic Principles of Tax Policy

Adequacy: The tax system should generate sufficient revenues to pay for government spending. The adequacy principle does not provide any guidance on what the level or mix of government spending should be.

Economic Neutrality (Efficiency): Taxes should minimize distortions in economic behavior.

Equity (Fairness): Equity has two dimensions – Horizontal equity, where similarly situated individuals pay similar taxes, and vertical equity, where individuals' tax burdens reflect their ability to pay.

Simplicity: Taxes should be designed to minimize taxpayers' cost of complying with the tax and the government's cost of administering it.

TABLE 1. Effective Income Tax Rates in Illinois, Tax Year 2011					
Net Income Range	**Returns**	**Effective Rate Rate (A)**	**Effective Tax Rate Accounting for Taxes Paid in Other States (B)**	**Effective Tax Rate adding Back Retirement Income (C)**	**Effective Rate Adding Back Retirement Income & Accounting for Taxes Paid in Other States (D)**
Equal or Less than Zero	725,350	N/A	N/A	N/A	N/A
$1 - $25,000	2,356,177	4.2%	4.2%	2.8%	2.8%
$25,001 - $50,000	1,142,097	4.6%	4.7%	4.1%	4.1%
$50,001 - $75,000	673,689	4.6%	4.7%	4.3%	4.4%
$75,001 - $100,000	405,073	4.6%	4.7%	4.4%	4.5%
$100,001 - $250,000	562,265	4.6%	4.8%	4.4%	4.6%
$250,001 - $500,000	84,392	4.7%	4.8%	4.5%	4.7%
$500,001 - $1,000,000	27,366	4.6%	4.9%	4.5%	4.7%
$1,000,001 or more	14,667	4.5%	4.9%	4.4%	4.8%

Source: Illinois Department of Revenue, Report TDWR-IITEOY-002.

Note: We assume that Illinois will always provide a credit for taxes paid in other states, rather than legislate double taxation.

their individual income tax return, further impacting the effective rates.

Is Illinois' Income Tax Flat?

In order to assess these two approaches from a tax principles' standpoint, we must first examine the reality of a flat rate to determine how, in practice, it holds up to these principles. To do this, we use Illinois as a case study to determine how its current individual income tax structure measures up to the theoretical ideal of a flat tax system.

Table 1 illustrates several measures of effective individual income tax rates in Illinois:

Column A calculates effective tax rates by dividing taxes due net of all credits by net income (the income that the tax rate is applied to). The data illustrates that, on the surface, the 5 percent tax rate becomes modestly progressive at low net income levels, but the effective rate begins to flatten out at income levels of around $25,000. Taken together, on average credits act to make the current Illinois tax rate more progressive. Schedule 1299-C (business) credits tend to make the tax code regressive, whereas the property tax, education, and earned income tax credits introduce modest progressivity into the tax code.

Column B takes into account income taxed by other states which is not taxed by Illinois. (e.g. a Metro East resident who works in Missouri

pays taxes to Missouri on that income, but is not double taxed by Illinois.) The column reflects the principle in the Illinois tax code that income should not be taxed twice and the data show out-of-state income is heavily earned by higher income taxpayers.

Column C recognizes that retirement income is currently exempt from taxation in Illinois, and as a result is not included in existing net income figures. We add the untaxed retirement income to net income and calculate effective tax rates that include retirement income to give some indication of how the retirement income subtraction impacts the progressivity of taxation in Illinois. The retirement income subtraction increases progressivity until income levels of $700,000 or more.

Column D combines columns B and C. In a sense, this column provides the best perspective as it takes into consideration the impact of tax credits, the exemption of retirement income, and taxes paid to other states. The effective tax rate under this scenario is moderately progressive.

The above analysis illustrates that in spite of Illinois having a flat statutory tax rate, the actual tax code introduces elements of progressivity and regressivity resulting in tax rates that are below the statutory rate and vary by net income levels. Therefore, it is an oversimplification to refer to Illinois as a flat tax state.

By introducing income modifications into the tax code, some sound tax policy principles typically associated with a flat tax are violated. First, offering credits and exemptions favors certain behavior over another, undermining economic neutrality. Second, the ability to claim and use credits reduces horizontal and vertical equity, as does the retirement income subtraction. For example, the property tax credit treats those that own property differently than those that rent. One of the main attributes cited for a flat tax is simplicity in terms of administration and compliance. Introducing income modifications to the tax code increases complexity both in terms of administration and compliance. In other words, Illinois' tax system is something of a hybrid—it looks somewhat like a progressive system not only in its effective rates, but also when viewed through the lens of sound tax policy principles.

There are several "rules of thumb" in tax policy that should also be considered in examining Illinois' individual income tax: a balanced revenue system; broad base and low rates; and predictability or stability **[see the box on page 5]**. In terms of a balanced tax structure, prior to the 2011 income tax rate increase, Illinois was slightly higher than the national average in terms of income tax contributions to total state taxes (43.6 percent in Illinois compared to 39.0 percent nationally).[1] However, the 2011 tax rate increase means that Illinois currently relies much more heavily on these sources. In 2013, income taxes made up 54.2 percent of all state taxes in Illinois,

compared with 41.9 percent nationally. In addition, Illinois' individual income tax base is not as broad as it could be due to the retirement income exemption. Finally, revenue under progressive tax rates fluctuates more widely with the economic cycle.[2] A flat rate will result in a relatively more stable revenue stream. Having said that, it should be noted that certain income modifications (credits that move with the business cycle) may slightly increase volatility.

deliberating the merits of a progressive income tax in Illinois.

Factors to Consider when Structuring a Progressive Income Tax

For purposes of discussion and context, this report looks at individual income tax structures throughout the country and categorizes them based on general characteristics including: whether they have single or multiple tax rate schedules, the number of income bands and tax rates associated with each income band. We calculate single and married schedules based on the fact that most states that have progressive income tax structures have schedules for married filers that are double that for single filers.[3] Summary results are as follows:

Rules of Thumb for Tax Policy

Balanced Revenue System: State and local governments should not rely too heavily on one source of income. In Illinois, currently more than 50 percent of general funds revenue is derived from the individual income tax.

Broad Bases and Low Rates: The general consensus is that taxes should have a low rate and apply that to a broad base. This approach supports the principle of neutrality and allows for more predictability in revenue streams. Broad-based taxes can also produce relatively stable tax revenues from year-to-year. Receipts from a progressive tax rate structure are more volatile than receipts under a flat tax.

Stability/Predictability: Avoid short-term, unanticipated changes to the tax code; when tax laws are in flux, long-range financial planning (for taxpayers and governments alike) is difficult.

As noted above, there are arguments that can be made both for and against amending Illinois' constitution to allow departure from the statutory flat rate. The next section of the report provides a brief overview of income tax systems in surrounding states. The report concludes by outlining various principles and factors stake-holders should consider when

- Thirty-four states have a progressive income tax rate.
- Of the 34 with progressive income tax, 22 have different income schedules that vary with filing status. Should a state have only one income schedule, it means that joint filers are treated in a manner similar to single filers. For example, under a system where a progressive income tax rate of 7 percent kicks in at $100,000, a single person earning 90,000 will not be impacted. On the other hand, a married couple each earning $90,000 will have $80,000 of their income taxed at the 7 percent rate.
- Of the 22 states that have different income schedules, 12 have schedules that treat income bands associated with different rates for married returns at double than that of single returns.
- Of those that have progressive income tax rates, 14 index brackets for inflation.
- The average personal exemption for states with progressive income tax structures and exemptions is $2,788, while the average exemption for dependents is $2,399.

The analysis in **Table 2** on page 7 synthesizes information on characteristics of states that have progressive income tax structures. Our approach is to calculate the average tax rate and income level associated with the lowest and highest average for the selected states. Once this range has been established, average income brackets and tax rates within the range are calculated by dividing the difference between the maximum and minimum income and tax rates by the average number of income brackets for the selected states. On average, progressive income tax states have 6 different income brackets and associated tax rates. The lowest average tax rate is 2.31 percent for taxable income up to $9,447 for single filers, while the highest average tax rate is 7.01 percent for taxable income above $146,895 for single filers. The average personal and dependent exemption for this group was $2,788 and $2,399 respectively. Generally, results were similar when analyzing the 4 surrounding states with progressive income tax structures, and states that have their highest tax rate at income levels of $100,000 or more.

The above discussion illustrates that there are an infinite number of possible progressive income tax scenarios that could be considered. Should an Illinois progressive income tax proposal gain momentum, it seems prudent for legislators and stakeholders to step back and examine how such income bands and associated tax rates should be developed. Issues, many of which have not yet been part of the debate, should include:

- What is the overall goal – how progressive do we want the state tax code to be?
- What should be considered “adequate” revenue from this source?
- Currently Illinois’ Individual Income Tax makes up more than half of Illinois’

TABLE 2. Summary of Progressive Income Tax Characteristics for All States With a Progressive Individual Income Tax

Single - Low End of Range	Single - High End of Range	Married Filing Jointly - Low End of Range	Married Filing Jointly - High End of Range	Rate
$0	$9,447	$0	$18,896	2.31%
$9,448	$43,809	$18,897	$87,619	3.25%
$43,810	$78,171	$87,620	$256,342	4.19%
$78,172	$112,532	$156,343	$225,065	5.13%
$112,533	$146,894	$225,066	$293,789	6.07%
$146,895		$293,790		7.01%

Note: the table assumes only two income schedules-single and married. We calculate the income schedules for married filing jointly at double that of singles, since this is the most common among the states that have more than one schedule.

general funds revenue. Some may consider this a revenue structure that is out-of-balance. The relative revenue contribution of each tax, as well as looking at burden for IIT alone, should be considered.

- What criteria should be used to develop the various income bands? Poverty level, average median income, *etc*. See **Table 3** on page 8 for guidance.
- Are income bands, and associated tax rates, for all returns or should there be different income bands depending on filing status? For example, some states with progressive income taxes have different schedules for single, married filing separately, married filing jointly, head of household, and surviving spouse. Under a single schedule system tax rates are applied per return and do not differentiate between returns with one or more than one taxpayer.
- Should income bands be linked to inflation?
- Should progressivity built into the rates include desired impact of income tax credits? Elimination of tax credits would make the tax return simpler, but eliminates other policy goals associated with the credits.
- How will higher tax rates impact small business shareholders and partners? Will the overall tax rate end up being higher for S-Corporations and Partnerships than for C-Corporations?
- Policy makers should recognize that progressive income tax revenue is more volatile to the business cycle. How should this be addressed in revenue forecasting and budgeting? Should any revenue over a certain baseline be used only for one-time spending rather than on-going operations?
- Do progressive income taxes with significantly higher rates on higher income returns cause individuals to change their behavior and if so in what way? Increases in noncompliance, tax planning and out-migration are all possible responses, but to what degree are they likely to occur? Research on the magnitude of such changes in behavior is mixed.[4] However, any change in behavior resulting from higher rates would violate the tax policy

TABLE 3. Illinois Income Statistics	Annual Amount
Poverty Level for 1 Person	$11,670
EITC Income for 1 Person with no Qualifying Children	$14,590
Wages for 1 Person Earning Illinois Minimum Wage ($8.25)	$16,500
Wages for 1 Person Earning Federal Minimum Wage on Federal Contracts ($10.10)	$20,200
Maximum Unemployment Benefit (annualized)	$21,476
Median Household Income Divided by Average Number of Residents	$21,700
Per Capita Income	$29,519
Median Household Income	$56,853

principles of adequacy, simplicity, and neutrality. Alternatively a progressive income tax with no credits would advance the principles of horizontal and vertical equity.

Conclusions

Of note, our findings include:

- Progressive income taxes are more common than flat taxes.
- Revenue under a progressive tax structure moves more widely with the business cycle compared to revenue under a flat tax.
- The majority of states (65 percent) with a progressive income tax structure have more than one schedule that varies with filing status.
- The most common structure is to have two filing schedules, one for single filers and one for joint filers. Income levels for joint filers are double that for single filers.
- Many states with progressive income tax structures (41 percent) index income brackets for inflation.

Illinois' current individual income tax structure is slightly progressive through net income levels of approximately $1 million. Any conversation about flat versus progressive income tax structures should recognize that both meet some of the principles of sound tax policy but violate others.

ENDNOTES

[1] US Census of Government, http://www.census.gov/govs/statetax/, accessed April 28, 2014.

[2] See The Tax Foundation, The Great Recession and Volatility In Sources of Personal Income, http://taxfoundation.org/article/great-recession-and-volatility-sources-personal-income, accessed February 25, 2014.

[3] Data Sources: Commerce Clearing House, 2013 State Tax Handbook; Federation of Tax Administrators, Individual Income Tax Rates, 2013.

[4] The academic literature on this issue shows mixed results. For example, see: Cristobal Young and Charles Varner, Millionaire Migration and State Taxation of Top incomes: Evidence from a Natural Experiment, National Tax Journal, June 2011, 64 (2, Part 1), 255–284, www.stanford.edu/~cy10/public/Millionaire_Migration.pdf , accessed February 25, 2014, and Roger Cohen, Andrew Lai, and Charles Steindel, Tax Flight Has Tangible Effects On Income Tax Revenue, State Tax Notes, February 20, 2012, 617-622, www.state.nj.us/treasury/economics/documents/taxflight.pdf, accessed February 25, 2014 (article forthcoming in Public Finance Quarterly).

The Case for Looking at Average Tax Rates, Not the Marginal Rates

by Rob Ross

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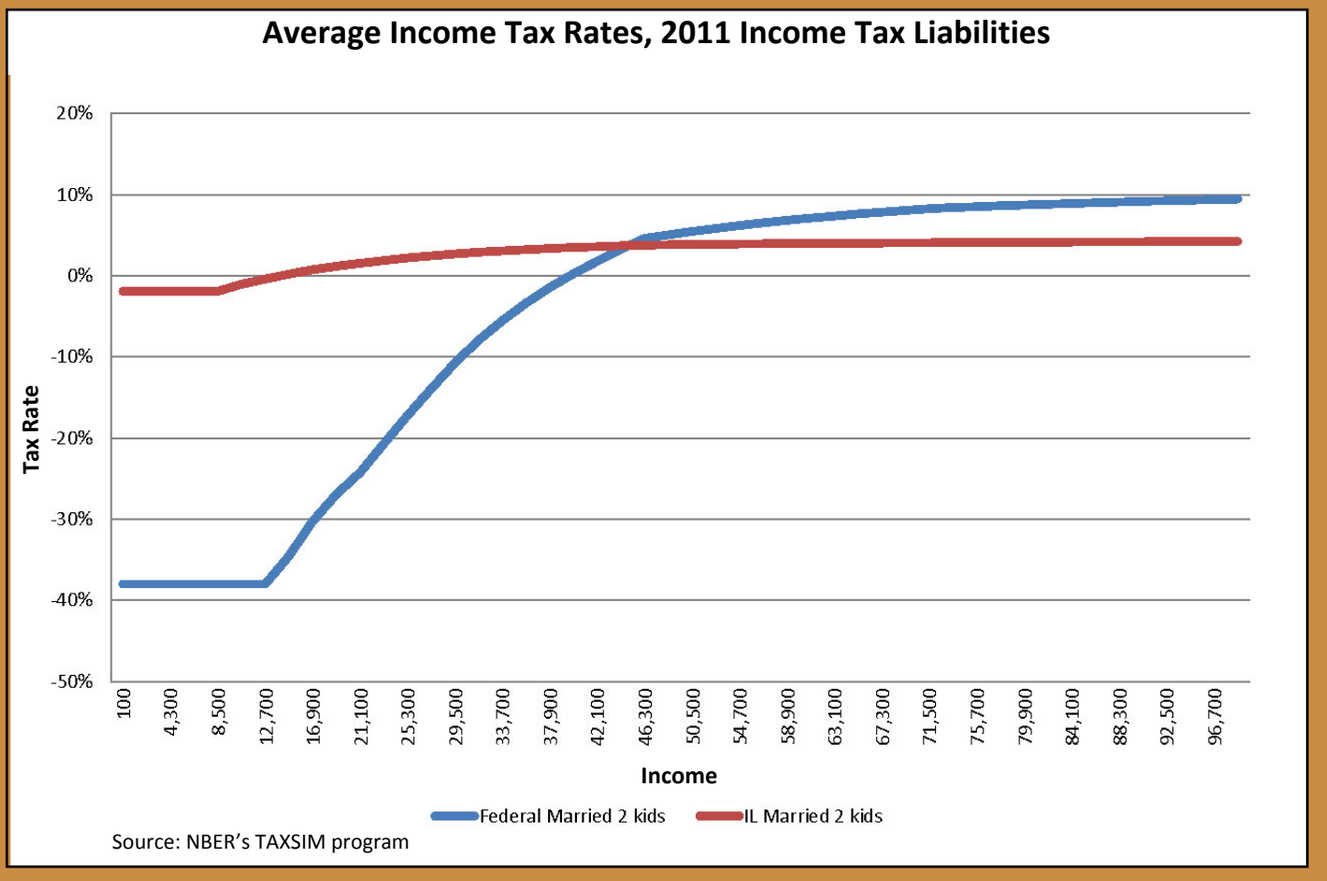
How can we compare different graduated tax rates?

Graduated income tax structures can be confusing because they are presented in terms of marginal tax rates. Taxpayers, on the other hand, tend to think in terms of average tax rates. The marginal tax rate is the amount of taxes the government collects from every *additional dollar earned past a certain amount.* The average tax rate is the total amount of taxes the government collects, divided by total income. This can be calculated at the individual level, or at the population level, depending on the type of question being asked.

To illustrate the difference, consider a hypothetical tax scheme that applies a tax rate of zero on income from $0 to $50, and then a tax rate of 50% on income above $50. In such a scheme, there are two *marginal* rates: 0% and 50%. The average rate is given by dividing total taxes by income, and up to $50 in income, the average rate is 0%. At $51 in income, the taxpayer pays $0.50 in taxes; their marginal rate is



50% and their average tax rate is $0.50/$51 = .01%. At $100 in come the taxpayer pays $25 in taxes; their marginal rate is still 50%, but their average tax rate is $25/$100 = 25%.

For many purposes, the *average* tax rates have more probative value than the marginal rates. By plotting the average tax rate for a sample of taxpayers, we can compare states' entire tax codes, including the many deductions, credits, exemptions etc. that may affect taxpayers' tax liabilities.

Illinois' income taxes are already modestly graduated

Illinois tax code is a complex system of credits, deductions, exemptions, and many other features that make it difficult to judge exactly how "progressive" our tax code actually is. The state's current (as of 1/1/2015) statutory tax rate of 3.75% for all taxpayers is a "flat tax" because it applies equally to all taxpayers regardless of their income. Taking Illinois' *de jur* tax rate at face value, one might conclude that Illinois' income tax structure is not graduated at all. However, this is not true.

Through various features of the tax system, Illinois achieves a measure of progressivity in its income tax. Using the National Bureau of Economic Analysis' TAXSIM program, TFI calculated Illinois and federal tax liabilities for hypothetical filers. We then calculated average tax rates along a range of incomes from $0 to $100,000. The chart on page 10 plots the *average income tax rate* in Illinois against that of the federal tax system.

The chart shows three things. First, it shows that Illinois tax structure was modestly progressive in 2011. Second, it shows that the federal income tax structure is much more progressive than Illinois' tax structure, not just because of its graduated statutory rates but also because of the many refundable credits that push the average tax rate below zero percent for taxpayer making less than about $40,000. In many cases, these refundable credits are a more powerful tool to achieve progressivity in an income tax structure than statutory rates are. Finally, the graph shows that the average tax rate does not actually reach the statutory tax rate of 5% below $100,000 in income for this type of taxpayer.

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[1] State taxes were calculated using the National Bureau of Economics Research's TAXSIM program. TAXSIM will calculate actual taxes due for years prior to 2012. We assumed equal division of income between married partners, 5% of income derived from other property income, mortgage interest payments of 5% of income and property tax payments of 7% of income.