

An Analysis of Average and Marginal Income Tax Rates in Oregon and Effects on Household Location

June 2009

Overview

The Legislature is considering a proposal that would increase the marginal tax rate to 10.8 percent for households with Adjusted Gross Incomes (“AGI”) above \$125,000. If enacted, Oregon households with incomes between \$125,000 and \$200,000 would pay highest marginal taxes in the United States. Above \$200,000, Oregon’s 10.8 rate would be the second highest—behind only Hawaii.

The proposal has generated a host of questions about the structure of income taxes in Oregon, our relative ranking on income tax payments by upper income households, and the effects on tax policy of household location. This issue paper addresses five research questions related to the proposed changes:

- 1) How do Oregon’s income taxes compare with those of other states for upper income households?
- 2) What would average and marginal tax rates look like after the proposed increase?
- 3) Do state tax data reveal any relationship between the declaration of capital gains and local income tax rates paid by affluent taxpayers?
- 4) Do the tax data show affluent households migrating to Clark County, Washington from the Portland area?
- 5) Was any high-income taxpayer migration evident when Multnomah County had its personal income tax?

Key Findings

Through a review of historic data from US Internal Revenue Service (IRS) and the Oregon Department of Revenue, the analysis finds:

- Oregon taxpayers with incomes above \$200,000 reported paying 7.68 percent of their 2006 AGI as state and local income tax. That placed Oregon as the third highest income tax state—behind New York and California.

This analysis was completed by ECONorthwest Senior Economist Robert Whelan with valuable research assistance from Alex Reed.

- Oregon taxpayers with incomes between \$100,000 and \$199,999 paid 6.62 percent of their 2006 AGI as state and local income tax, which ranked first nationally.
- Capital gains, which are often timed events, account for a larger proportion of AGI in states with no income tax. This supports the hypothesis that some upper income households move to avoid capital gains taxes.
- An analysis of IRS migration data supports the hypothesis that Oregon loses high-income taxpayers to Clark County. During 1992-2006, migrating taxpayers leaving Multnomah, Washington, and Clackamas counties for Clark County earned 37 percent more in the year they relocated than those changing their residences in the opposite direction. Over the course of fifteen years, the net loss in AGI to Oregon exceeded \$1.3 billion—and that counts only the taxable incomes reported in the first year after moving. The income gaps between out- and in-migrants peaked in the late 1990s when the stock market was surging.
- During the three years when Multnomah County levied an income tax, revenue data suggest high-income taxpayers migrated to other parts of Oregon, which further supports the case that tax policy can affect household location.

In short, upper income households take taxes into consideration in their location decisions in varying degrees. For some, our work suggests the historical asymmetry between Oregon and Washington's tax regimes was already sufficiently large to have triggered moves. The proposed increase in rates would tip the balance for some additional households. And, of course, many others would stay put.

The effect of taxes on location depends not only on the rates but on a host of other factors. The duration of

the increase would matter. A temporary increase in rates would likely generate less migration than a permanent one. Households with anticipated capital gains could simply wait out the increase. The location decision could also be affected by how Oregon uses its tax revenues and whether upper income households value the services purchased at the margin.

Impacts on household location are an important consideration for policymakers as they review the proposal. But along with that, they should also consider how the change affects the overall portfolio of state and local taxes and helps or hinders each of the tax systems' key goals: efficiency, equity, stability, and ease of implementation.

Data Used in the Analysis

Tax data pose challenges for the analyst, in large part because definitions of income vary widely. For this analysis, we used Adjusted Gross Income (AGI), which is the income reported on

Table 1: Deduction for State & Local Income Taxes Paid as a Percent of Federal AGI for 2006 Returns with Over \$200,000 in AGI, Ranked by State Residency

Rank	State/Territory	% of AGI	Rank	State/Territory	% of AGI
1	New York	8.58%	27	Virginia	5.02%
2	California	8.36%		United States average	5.01%
3	Oregon	7.68%	28	Georgia	4.87%
4	District Of Columbia	7.52%	29	Utah	4.84%
5	Maryland	6.99%	30	Kentucky	4.74%
6	New Jersey	6.96%	31	Oklahoma	4.52%
7	Ohio	6.82%	32	New Mexico	4.36%
8	Maine	6.69%	33	Arizona	4.34%
9	Minnesota	6.68%	34	Indiana	4.26%
10	North Carolina	6.40%	35	Colorado	4.04%
11	Rhode Island	6.30%	36	Pennsylvania	4.04%
12	West Virginia	5.83%	37	Michigan	3.96%
13	Connecticut	5.78%	38	Mississippi	3.72%
14	Vermont	5.78%	39	North Dakota	3.47%
15	Delaware	5.73%	40	Louisiana	3.46%
16	Kansas	5.66%	41	Alabama	3.19%
17	Hawaii	5.64%	42	Illinois	3.07%
18	Arkansas	5.55%	43	New Hampshire	1.63%
19	Wisconsin	5.48%	44	Wyoming	1.23%
20	Idaho	5.36%	45	Nevada	1.14%
21	Iowa	5.26%	46	Florida	0.96%
22	Massachusetts	5.20%	47	South Dakota	0.74%
23	Nebraska	5.18%	48	Tennessee	0.65%
24	Missouri	5.11%	49	Washington	0.57%
25	Montana	5.10%	50	Texas	0.39%
26	South Carolina	5.06%	51	Alaska	0.32%

Source: Calculated by ECONorthwest using IRS data from <http://www.irs.gov/taxstats>

the Federal 1040 form before subtracting exemptions and deductions, and taking credits.

Taxes paid by individuals are confidential, so we cannot do longitudinal analyses or track the state where affluent households in Oregon file from. We are aware that individuals that have homes in other states underreport Oregon incomes to minimize their taxes. No low cost way of tracking such individuals exists.

Another data problem is that Washington and Nevada have no income taxes. Their lack of tax data prevents tracking the potential migration to avoid Oregon income taxes through state income tax statistics.

That leaves us with relying on IRS data, but here, too, there are issues. The data are reported about two years late. Furthermore, since not everyone fully itemizes all deductions, the reporting of non-federal taxes paid is skewed. This is particularly true for sales taxes. Fortunately, reporting compliance of state income taxes paid is good, so our analysis begins with data from the 2006 federal income tax statistics.

How does Oregon's Rate Compare?

We collected tax return summary data by state for tax year 2006 from the IRS. They divide personal income tax returns into five groups according to their AGI range. The highest we describe as "affluent" taxpayers and they are the ones that reported an AGI of \$200,000 or greater. In 2006, just under 2.5 percent of the federal returns from Oregon showed an AGI of at least \$200,000. In the next lowest tier (\$100,000 to \$199,999) were 8.1 percent of the returns.

We calculated state and local income taxes deducted as a percentage of AGI. All but a small portion of state and local income taxes paid by Oregonians went towards the Oregon personal income tax. The remainder went to other states and local governments outside of Oregon. Note

Table 2: Deduction for State & Local Income Taxes Paid as a Percent of Federal AGI for 2006 Returns with \$100,000 to \$199,999 in AGI, Ranked by State Residency

Rank	State/Territory	% of AGI	Rank	State/Territory	% of AGI
1	Oregon	6.62%	27	Kansas	4.24%
2	District Of Columbia	6.56%	28	Delaware	4.23%
3	Maryland	6.33%	29	Vermont	4.17%
4	New York	5.89%	30	Missouri	4.09%
5	Maine	5.69%	31	Pennsylvania	3.91%
6	North Carolina	5.38%	32	New Jersey	3.90%
7	Ohio	5.34%		United States average	3.73%
8	Wisconsin	5.29%	33	Indiana	3.66%
9	Kentucky	5.27%	34	Colorado	3.34%
10	Minnesota	5.16%	35	Michigan	3.26%
11	California	4.97%	36	New Mexico	3.24%
12	Hawaii	4.88%	37	Alabama	3.14%
13	South Carolina	4.80%	38	Arizona	3.02%
14	Idaho	4.79%	39	Mississippi	2.98%
15	Utah	4.73%	40	Louisiana	2.82%
16	Massachusetts	4.63%	41	Illinois	2.33%
17	Nebraska	4.63%	42	North Dakota	1.72%
18	Rhode Island	4.58%	43	New Hampshire	1.40%
19	Arkansas	4.53%	44	Nevada	0.36%
20	Iowa	4.50%	45	Washington	0.33%
21	Connecticut	4.48%	46	Tennessee	0.29%
22	Georgia	4.47%	47	Florida	0.28%
23	Montana	4.37%	48	South Dakota	0.26%
24	Virginia	4.34%	49	Wyoming	0.24%
25	West Virginia	4.27%	50	Texas	0.17%
26	Oklahoma	4.27%	51	Alaska	0.12%

Source: Calculated by ECONorthwest using IRS data from <http://www.irs.gov/taxstats>

that the Multnomah County income tax had expired in 2005.

There are some limitations to the data. A small fraction of Oregon high-income taxpayers do not report deductions for state and local income taxes. Therefore, the state and local income tax percentage for Oregon probably understates the actual, albeit not by much since 97 percent of the affluent Oregon taxpayers itemized their deductions in 2006 (as did 95 percent of those with an AGI between \$100,000 and \$199,999). You will note that taxpayers in states without income taxes do deduct some state and local income taxes. This is for work done out of state.

Affluent taxpayers in Oregon reported paying 7.68 percent of their 2006 AGI as state and local income tax. That placed Oregon as the third highest income tax state for affluent taxpayers.

Taxpayers in the second highest tier, as defined by the IRS, reported AGI between \$100,000 and \$199,999 in 2006. For this income group, Oregon ranks at the top. These taxpayers paid the

highest proportion of their incomes in state and local income taxes. Compared to affluent households, these taxpayers depend more on retirement income. About 25 percent of the taxable pension, Social Security, and retirement income earned in Oregon goes to filers earning between \$100,000 and \$250,000 in AGI.

As a check against the IRS data, we calculated the state tax to AGI percentages for income groups from Oregon full-year resident tax return data provided by the Oregon Department of Revenue. The percentages are similar and this suggests the data are reliable.

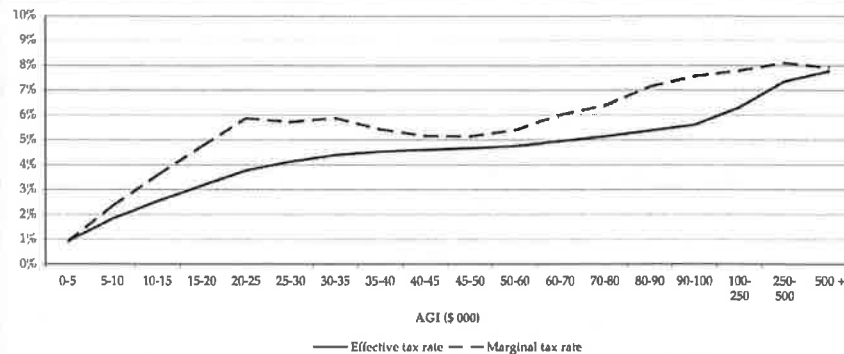
When the percent of AGI paid in Oregon income taxes is plotted against income tiers a pattern emerges. Shown here in Figure 1, the progressivity of the Oregon income tax is clear. The effective tax rate rises with income. However, the marginal tax rate basically stops rising with incomes between \$25,000 and \$60,000. The marginal tax rate is the change in Oregon taxes paid as a percent of the increase in AGI as one goes up the income ladder.

How Would the Proposed Tax Increase Affect Rates?

The proposed 2009–2011 revenue package calls for an increase in tax rates and a phasing out of the federal tax deduction for upper-income filers. It also includes other changes that are less consequential and were not considered in this analysis.¹

The package raises the tax rate on the AGI of single filers by 1.80 percent for amounts between \$125,000 and \$250,000. This would bring the rate up to 10.80 percent. Single filers would pay 11.00 percent for AGI above \$250,000—a two percent

Figure 1: Actual and Marginal Income Tax Rates as a Percent of AGI by Income Tier, Full-Year Residents 2006



Source: Calculated by ECONorthwest using Oregon Department of Revenue data from <http://www.oregon.gov/DOR/STATS/101-406-08-toc.shtml>

increase over the current rate.

Other taxpayers would see their tax rate rise 1.80 percent for amounts between \$250,000 and \$500,000, and two percent for AGI over \$500,000.

To determine how these higher tax rates would change the effective average and marginal tax rates for various income tiers, the analysis used actual data for 2006 and applied the increases. We note that the pattern of taxable income today differs from the last reported tax year (2006) used in this analysis because of the effects of the recession. Of particular importance, capital gains from the sales of real estate and securities are depressed in 2008 and 2009. Nonetheless, the general pattern in effective average and marginal tax rates across income tiers, shown here in Figure 2, fairly represents what one could expect in future years.

The analysis shows that there would be higher tax rates in the upper-income tiers should the revenue package be enacted. The effective marginal tax rate for the top tier is 9.94 percent. This is less than the implied marginal rate of 11.00 percent, as defined in the revenue package, but consistent with the effective rate based on actual data from 2006.

The effective marginal rate is less than 11.00 percent because tax deductions, credits, and exemptions, such as on interest from federal debt, affect how much tax was actually paid by upper

¹ The first \$2,400 in unemployment benefits would be excluded from taxation in 2009 and a general tax amnesty program.

income filers in 2006.

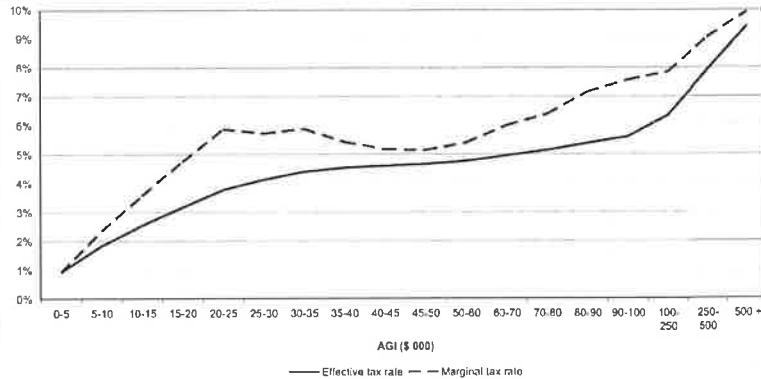
The analysis does not speculate as to the degree to which high-income taxpayers would alter their behavior to lessen their tax burdens. However, filers are apt to respond to the rate increases proposed in the 2009–2011 revenue package. For example, they may use more tax credits, increase charitable deductions, delay the sale of investments carrying large gains, or purchase securities exempt from Oregon income taxes, such as tax-free municipal bonds issued by U.S. territories. The effect of such responses would be to lessen the amount of tax revenue Oregon would otherwise realize.

Are Tax Rates and Capital Gains Declarations Correlated?

We analyzed data for tax year 2006 from federal returns in each of the fifty states and the District of Columbia. We compared state and local income tax deductions as a percent of AGI to the percent of AGI arising from net capital gains for affluent taxpayers. A regression analysis shows a significant, albeit small, negative correlation. That is, affluent residents of states with low income taxes derive a higher proportion of their taxable incomes from capital gains than residents of states with higher income tax rates.

Table 3 shows how states are ranked by how much of affluent taxpayer AGI came from capital gains in 2006. Residents of Wyoming, in 2006, with incomes of at least \$200,000 derived over 40 percent of their AGI from capital gains, making this the highest ranked state. Wyoming has no state income tax. Indeed, five of the ten highest-ranking states had no personal income taxes in 2006.

Figure 2: Actual and Marginal Income Tax Rates as a Percent of AGI by Income Tier with the Proposed Tax Increases Added, Full-Year Residents 2006



Source: Calculated by ECONorthwest using tax increase assumptions and Oregon Department of Revenue data from <http://www.oregon.gov/DOBR/STATS/101-406-08-toc.shtml>

Table 3: 2006 Capital Gains, Percent of AGI for Affluent Taxpayers by State

Rank	State/Territory	% of AGI	Rank	State/Territory	% of AGI
1	Wyoming*	40.08%	26	Georgia	24.33%
2	Nevada*	37.12%	27	Illinois	24.05%
3	Hawaii	34.64%	28	Alabama	23.79%
4	Idaho	34.64%	29	Delaware	23.21%
5	Florida*	33.90%	30	Nebraska	22.55%
6	Vermont	33.36%	31	Wisconsin	22.45%
7	Montana	32.75%	32	North Carolina	22.23%
8	Colorado	30.01%	33	Mississippi	21.93%
9	South Dakota*	29.09%	34	Connecticut	21.84%
10	Washington*	29.07%	35	Pennsylvania	21.51%
11	Arizona	28.59%	36	Virginia	21.44%
12	South Carolina	27.28%	37	Kentucky	21.34%
13	New Hampshire**	27.16%	38	North Dakota	21.20%
14	Utah	27.09%	39	Louisiana	20.96%
15	Maine	27.06%	40	Indiana	20.89%
16	Oregon	26.87%	41	Alaska*	20.13%
17	Oklahoma	25.65%	42	Maryland	19.93%
18	New York	25.56%	43	Arkansas	19.58%
19	Massachusetts	25.53%	44	Missouri	19.49%
20	District Of Columbia	25.43%	45	Ohio	19.32%
21	California	25.15%	46	Kansas	19.17%
22	Texas*	24.95%	47	Minnesota	18.99%
23	Tennessee**	24.83%	48	Iowa	18.45%
24	New Mexico	24.70%	49	Michigan	18.10%
	United States average	24.69%	50	West Virginia	17.03%
25	Rhode Island	24.66%	51	New Jersey	16.14%

* State without a personal income tax.

** State income tax applied only to interest and dividends.

Source: Calculated by ECONorthwest using IRS data from <http://www.irs.gov/taxstats>

Some states with high personal income taxes also rank higher than the national average of affluent incomes from capital gains. Oregon,

New York, and California are notable in this regard, albeit their shares of AGI from capital gains are within 10 percent of the U.S. average for 2006.

To test whether there is a significant relationship, ECONorthwest ran a simple regression. It demonstrated that capital gains as a share of incomes are negatively correlated to effective state and local income tax rates. For every percent increase in local tax rates for affluent taxpayers in 2006, the share of AGI from capital gains was 0.79 percent lower. The result was statistically significant, but only modestly so.

We ran the analysis using 2005 tax-year data to see if there would be a substantially different outcome. Instead, we obtained nearly the same results. The coefficient was -0.75 instead of -0.79. It remained slightly statistically significant. As in 2006, the shares of incomes from capital gains in neighboring Washington and Nevada (no income tax states) were considerably higher than in Oregon.

We recommend further research because of the volatility of capital gains and the ability of one or two taxpayers to distort the data from any one state. IRS tax data for ten or more years should help confirm or reject, as appropriate, the findings for 2005 and 2006.

Is There Evidence of High-Income Taxpayer Migration to Clark County?

Clark County, Washington has no income tax and is part of the Portland metropolitan area. Anecdotal evidence suggests that people do move from the Oregon side to Clark County to avoid or reduce their Oregon tax liability. Even Clark County government highlights this as a reason to relocate to it from Portland.² The question arises of whether there is any hard data to support this belief.

ECONorthwest turned to the IRS, which assembles data on filers that move from one county to another between tax

² See for example, http://www.clarkwa.com/about_clark_county.htm accessed on June 1, 2009.

Table 4: AGI of Taxpayers Moving Between Multnomah, Washington, Clackamas, Oregon to and from Clark County, Washington, 1992 - 2006

Year	Average AGI of Taxpayer		% difference of out migrants	\$ Value of net outflow from Oregon
	Moves to Clark County from PDX area	Moves from Clark County to PDX area		
1992	\$38,336	\$26,726	43%	\$47,889,000
1993	37,177	26,634	40%	50,809,000
1994	38,099	26,304	45%	54,678,000
1995	38,286	29,286	31%	57,801,000
1996	49,021	32,427	51%	89,858,000
1997	45,045	41,383	9%	60,828,000
1998	52,508	35,923	46%	89,351,000
1999	60,553	36,016	68%	127,237,000
2000	70,463	46,470	52%	148,673,000
2001	47,400	46,550	2%	69,043,000
2002	46,385	34,913	33%	95,841,000
2003	50,546	40,326	25%	128,959,000
2004	57,087	41,033	39%	120,020,000
2005	56,930	41,530	37%	89,154,970
2006	54,562	40,148	36%	76,739,000

Source: IRS County-to-County migration data, June 1, 2009.

years. We used this migration data to determine if the incomes of taxpayers that moved to Clark County, Washington from the three principal Oregon counties of Portland metropolitan area (Multnomah, Clackamas, and Washington) were substantially different than those that moved in the other direction.

The analysis limited the scope to Clark and the three Portland area counties to avoid systematic biases that are common when comparing places with substantially different socioeconomic characteristics.

All four counties share a common labor market, are all within commuting distance of one another, and none has large retirement communities. Per capita incomes in Clark County (\$34,426) in 2006 were lower than in the three Portland area counties (\$40,664). Thus, one would expect, absent tax effects, that economic conditions would favor, if anything, lower incomes for those moving to Clark County. The analysis found the opposite.

The average AGI of those moving from the three Oregon counties of Portland to Clark County was higher than those migrating out of Clark County. For example, as shown in Table 4, those that moved out of Clark County, Washington to one of the three Portland area

counties in Oregon reported \$40,148 in AGI on their 2006 federal tax returns. However, those that left the three counties of Oregon and moved into Clark County reported an average AGI 36 percent greater—\$54,562. The net dollar value of the income moving from the three counties to Clark County was \$76,739,000.

On average over time, migrating taxpayers leaving the three Oregon counties for Clark County earned 37 percent more in the year they relocated than those changing their residences in the opposite direction. For each year that the IRS could provide data, the average AGI of taxpayers migrating away from the Portland area was higher. Over the course of fifteen years, the net loss in AGI to Oregon exceeded \$1.3 billion—and that counts only the taxable incomes reported in the first year after moving.

The year-to-year patterns in the AGI differentials strengthen the argument that taxes drive migration. The differences in AGI were high during 1998-2000 when stock prices were surging and very low in 2001 when the market fell.

Did the Multnomah County Income Tax Cause Out Migration?

A natural experiment of how tax rate changes might affect where affluent households live or file taxes from occurred recently. Between 2003 and 2005 Multnomah County levied a temporary 1.25 percent income tax on residents.

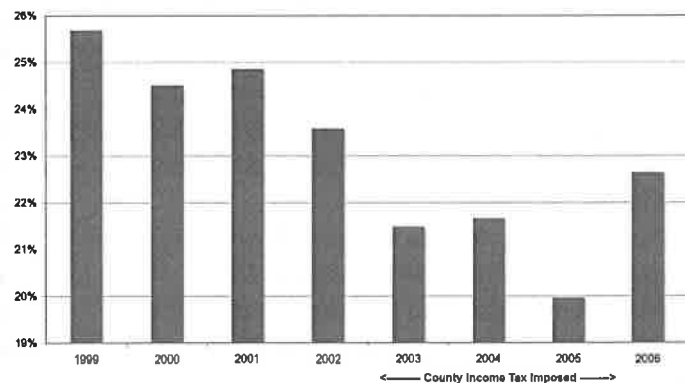
We assembled data from all state tax returns of taxpayers that filed with an AGI of at least \$250,000. Data for all available years where net state taxes and number of filers of affluent taxpayers were gathered (1999 through 2006). The analysis compared returns from those filing from Multnomah County to all tax filers.

The analysis found that both the number of affluent taxpayer returns and the net taxes due the state from Multnomah County were depressed during the three years that the county imposed its temporary income tax. Furthermore,

the impacts, measured by a regression analysis, were statistically significant.

The analysis determined that there were 8.3 percent fewer affluent taxpayers in Multnomah County because of the income tax. More importantly, they tended to be from households

Figure 3: Share of State Income Taxes from Affluent Taxpayers from Multnomah County, 1999 - 2006



Source: Calculated by ECONorthwest using Oregon Department of Revenue data from http://www.oregon.gov/DOR/STATS/101_406_08.toc.shtml.

with unusually high tax burdens, as total taxes from affluent taxpayers were 13.5 percent less than expected.

Figure 3 helps illustrate the effect. It shows the percent of state income taxes that were derived from households declaring Multnomah County as their place of residence. Historically, this ranged from 22.7 to 25.7 percent. However, during the three years Multnomah County levied an income tax on residents, state taxes from affluent households declaring the county as their home residence fell—ranging from 21.7 percent to less than 20.0 percent. It rebounded in 2006 after the tax had expired.

Conclusion

Higher income taxpayers garner a disproportionate share of their earnings from time-controlled tax events such as the sale of bonds, stocks, businesses, and withdrawals from retirement accounts. Furthermore, they are more likely to have homes outside of Oregon. These factors offer them greater flexibility and mobility,

which they are more apt to exercise should the tax rate they would face rise from nine to eleven percent.

An analysis of historical data from the Oregon Department of Revenue and the Internal Revenue Service ("IRS") suggests that some high AGI taxpayers would file or otherwise move out of Oregon if the marginal tax rate imposed by the state increases. This was the experience of Multnomah County when it levied an income tax. It has been the experience with the consistent fifteen-year track record of taxpayers out of the Portland area to Clark County. Indeed, the IRS data show a net outflow of more than \$1.3 billion in AGI lost to Oregon.

There is clear evidence that people with high incomes historically have migrated to Clark County, where there is no income tax, from nearby Multnomah, Clackamas, and Washington counties in Oregon. Furthermore, we conclude

that affluent taxpayers are more able than others to relocate their tax residences because they own housing in more than one tax jurisdiction. They also derive a higher portion of the AGI from income sources that can be delayed by the timing of sales, such as for the sale of real estate, businesses, bonds, and stocks, or by the withdrawal of taxable IRA and other retirement holdings.

This differs markedly from households earning less than \$100,000. They get 76 percent of their AGI from wages, tips, and salaries. Affluent taxpayers get only 32 percent of the AGI from such sources. Instead, the affluent rely more on capital gains.

Affluent households are more mobile. The data are clear. If the state raises the tax rate on affluent households, substantial numbers will move income out of Oregon.