POLICY

PIONEER OPPORTUNITY

BRIEF

Tax Flight of the Wealthy: An Academic Literature Review

By Andrew Mikula

In the aftermath of COVID-19, some jurisdictions have considered raising taxes as a means of addressing budget deficits. Conventional economics suggests that raising taxes would lead to an increase in behavioral changes and avoidance efforts, especially among large corporations and the wealthy. The magnitude and significance of these responses to tax increases has proven to be a highly politically contentious issue. However, outside of the political sphere, there has been a steady stream of academic research publications in recent years that have given a clearer picture of the impact of taxation on migration patterns and income, especially of the wealthy. Below, we review some of these publications to better assess the potential implications of the proposed graduated income tax in Massachusetts, which the public will vote on in November 2022.

Early research on the topic of wealth migration had some striking conclusions. A 2004 paper by NBER economists Joel Slemrod and Jon Bakija using data from 1965 to 1998 found that, for every percentage point increase in state personal income tax rates, residents filed 1.5% fewer federal estate tax returns in the state.[1] Slemrod and Bakija go on to discuss a substantial "trade-off between raising revenue in a progressive fashion and the efficiency costs of that approach."[2] Seniors, and especially wealthy seniors, seem to partake frequently in what Slemrod and Bakija call "tax-induced migration."[3] They conclude by declaring that "our evidence is consistent with the idea that some rich individuals flee states that tax them relatively heavily," even before the "Zoom economy" increased the mobility of many white-collar workers during the COVID-19 pandemic.[4]

More recent studies are described in further detail below.

What is the Graduated Income Tax?

For the past several years, Massachusetts has been considering a state constitutional amendment that would levy a four percent surtax on annual personal income over $1 million. The first attempt to do so, filed by initiative petition, failed a Massachusetts Supreme Judicial Court challenge in 2018 before re-emerging as a legislative petition and receiving initial approval at a constitutional convention in 2019. The state legislature granted final approval in June 2021, and the proposal will appear on the statewide ballot in the fall of 2022.

Proponents of the amendment, led by the Massachusetts Teachers Association and the Service Employees International Union, together with advocacy and religious groups, call it the "Fair Share Amendment," a nod to their frequent assertions that the measure would require only the very wealthy to pay what proponents believe is their "fair share" of taxes.

Opponents argue that it would endanger the long-term economic well-being of Massachusetts by prompting high-income residents and businesses to relocate to states that have lower income tax rates and discouraging high-income individuals and businesses from coming to Massachusetts in the first place. They believe that COVID-19 may exacerbate these relocation effects, as the pandemic has made telecommuting much more prevalent, at least in the short term.[5]

PIONEER INSTITUTE
PUBLIC POLICY RESEARCH

Andrew Mikula is an Economic Research Analyst. Mr. Mikula was previously a Lovett & Ruth Peters Economic Opportunity Fellow at Pioneer Institute and studied economics at Bates College.

June 2021

Gorry, Hubbard, and Mathur (2021)

In a 2021 National Tax Journal paper, economists Aspen Gorry, R. Glenn Hubbard, and Aparna Mathur use an empirical model to show that the wealthy often make use of "income shifting" to delay their tax obligations in response to a policy change. Drawing on previous studies that showed how the executive class is more sensitive to increased taxation than other demographic groups, they cite a significant link between tax rates and the share of top earners' incomes that are "deferred" via stock options and the like. They conclude that such "income shifting" activities greatly increase the welfare of wealthy taxpayers in a way that many other studies on the matter have failed to capture.[6]

In a testament to the surprisingly efficient nature of income shifting, the authors claim that "the change in deadweight loss in response to a change in taxes is nearly half as large when income shifting is accounted for."[7] This evidence may deter those who are concerned about the deadweight loss (i.e., economic inefficiencies) involved in taxing the rich. However, Gorry, Hubbard, and Mathur also note that, at the time their data was collected, the federal tax code gave a substantial incentive, under section 162(m), for firms to offer their employees stock options in lieu of a traditional salary. The Tax Cuts and Jobs Act of 2017 has since removed this incentive, potentially exacerbating the deadweight loss from tax hikes in the future.[8]

Moreover, Gorry, Hubbard, and Mathur suggest that, if anything, previous studies have underestimated the magnitude of the behavioral responses (such as physical relocation, reduced working hours, etc.) of the wealthy to tax increases because they fail to take income shifting into account. In their specification, "most of the response [to tax policy changes] is due to income shifting rather than real behavioral changes."[9] The authors point out that the prevalence of income shifting doesn't necessarily mean that behavioral responses will suppress tax revenues in the long run, just shift the timing of when the government gets them. Still, much like income tax revenue as a whole, that timing is decided by the whims of the uber-wealthy, and not by the funding needs of crucial social programs.

Previous studies have underestimated the magnitude of the behavioral responses (such as physical relocation, reduced working hours, etc.) of the wealthy to tax increases because they fail to take income shifting into account.

CEOs with larger roles in the corporate board of directors, as well as those who are better-paid to begin with, are able to pass on more of their tax burden to the company.

Ruf and Schmider (2018)

Many recent studies examining taxes on the wealthy tend to focus on relatively narrow groups of people. In a 2018 study, German researchers Martin Ruf and Julia Schmider examined who bears the cost of raising taxes on CEO pay in particular, finding that "CEOs use their bargaining power to shift their tax load partly to the employer" and that "more powerful CEOs are more successful at doing so."[10] They conclude that "a higher taxation of CEO pay may thus not necessarily be the appropriate measure to reduce the increasing income inequality in the U.S."[11]

Ruf and Schmider draw on data showing that the mean CEO salary in the U.S. is more than 15 times the rate in peer countries such as Australia and Canada. However, the authors also show that taxing CEO pay directly could be inefficient. In fact, they calculate that a 10 percentage point increase in the top marginal tax rate on CEO pay raises gross CEO pay by 12 percent. This implies that, for a CEO who made $10 million before the tax hike, the majority of the cost burden from the higher tax rate would ultimately fall on the company, not the CEO himself or herself.[12]

Ruf and Schmider go on to describe how CEOs with larger roles in the corporate board of directors, as well as those who are better-paid to begin with, are able to pass on more of their tax burden to the company than CEOs that are less influential. While higher tax rates on CEOs tend to be associated with lower average CEO salaries on the national level, taxes on CEO pay tend to be a relatively ineffective channel for "taxing the rich."

Moretti and Wilson (2017)

Like Ruf and Schmider, Enrico Moretti and Daniel Wilson took an applied approach to the issue of wealth migration in their 2017 paper. Moretti and Wilson explored the influence of state taxes on the migration behavior of "star scientists." Defining star scientists as those in the top 5% by number of patents granted, they find that a 1% decrease in the relative effective tax rate leads to a 1.8% increase in the net flow of star scientists arriving in the low-rate state.[13] Moretti and Wilson note the momentous implications of their findings for the geography of job creation, as the presence of high-quality research institutions often yields ecosystems of innovation sector jobs (see Silicon Valley, Kendall Square, etc.). They also discuss whether the findings could possibly be generalizable to other wealthy, highly educated people besides scientists, as supposedly the potential profitability of patent activity is a main reason for the researchers' location decisions.

Moretti and Wilson go on to provide specific examples of how changes in tax rates have impacted the concentration of innovative researchers in certain states in recent years. For example, they estimate that when New York cut the average tax rate for the top 1% of earners from 7.5% to 6.85% in 2006,

it resulted in a net increase of 28 star scientists to the Empire State.[14]

Migrating star scientists also seem to be somewhat responsive to tax credits, although the effect is stronger for investment tax credits, which reimburse corporate capital expenditures, than for R&D tax credits, which reimburse research and development expenditures. While they concede that there are several other factors that influence the migration behavior of star scientists, Moretti and Wilson encourage lawmakers to consider the "cost of higher state tax rates when deciding whom to tax and how much to tax."[15]

Young et al. (2016)

Stanford University researchers Cristobal Young and Charles Varner teamed up with two U.S. Treasury Department officials to examine the scope of tax flight specifically from so-called "millionaire taxes." They discuss competing narratives over the responses the super-wealthy exhibit to income tax rate hikes, invoking an image of both an "embedded elite" who may find it hard to leave high-tax states and a "transitory millionaire" who is more than happy to move to save money. Young and his team conclude that "millionaire tax flight is occurring, but only at the margins of statistical and socioeconomic significance."[16] One implication of their study is that the revenue-maximizing tax rate on incomes over $1 million would be 68 percent.

The implications of changing marginal tax rates go far beyond tax competition between states.

Young and his co-authors use much of the paper to discuss what they bill the "Florida effect" - i.e., the idea that "when Florida is excluded, there is virtually no" correlation between income tax rates and migration patterns in the United States. However, they don't discount the possibility that the Florida effect itself is "driven by tax avoidance or some especially appealing combination of [tax avoidance and geography]."[17] They call for future research to investigate why Florida attracts so many wealthy households fleeing high-tax states.

Young and Varner go on to test the robustness of their findings in other ways, such as by comparing the concentration of millionaires in counties on either side of state borders where one state has significantly higher taxes than the other. They find limited evidence of a correlation, although it's worth noting that their database only includes households that earned over $1 million in the year before the taxpayer moved. This would exclude households that migrate for the purpose of avoiding taxes on the anticipated sale of a valuable asset, such as a home or business, and IRS data has shown that, over a period of 9 years, most "millionaires" only make over $1 million for one of those years.[18]

Interstate migration patterns show persistent preference for both lower state income taxes and lower state and local property taxes.

Carroll & Prante (2012)

Other researchers have considered the economic impact of taxing the wealthy at the federal level, as the implications of changing marginal tax rates go far beyond tax competition between states. Two Ernst & Young economists, Robert Carroll and Gerald Prante, describe a host of macroeconomic consequences to a set of proposed 2013 tax hikes, including rate increases on capital gains, ordinary income, and Medicare taxes, as well as limitations on itemized deductions for high earners.

Carroll and Prante found that enacting these tax changes would cause long-run economic output to fall by some $200 billion. Using the EY General Equilibrium Model, they find that the proposals would collectively "lower output, employment, investment, the capital stock, and real after-tax wages" as well as "reduce work effort and labor force participation."[19] The proposals would have more than doubled average marginal tax rates for dividends and increased the corresponding rate for capital gains by 39 percent, significantly hampering business investment.[20]

Other long-term impacts of such a proposal include losses of 710,000 jobs, a decline in the capital stock of 1.4 percent, a decline in investment of 2.4 percent, and a decline in real after-tax wages of 1.8 percent. Carroll and Prante also find employment and GDP losses in each individual state. The study seems to act as a warning against raising tax rates on dividends and capital gains in particular, as those taxes are reformed most heavily by the proposals the authors analyze.

Cebula and Nair-Reichert (2012)

Drawing on the "Tiebout hypothesis" that people tend to "vote with their feet," Richard Cebula of George Mason University and Usha Nair-Reichert of Georgia Tech used a regression model to find a causal relationship between state-level taxes and the location decisions of individual households. Specifically, they find that interstate migration patterns show persistent preference for both lower state income taxes and lower state and local property taxes, all else being equal.[21]

Further, the authors find that the relationship holds after taking such factors as the cost of living, climate and environmental factors, and the fiscal health of the jurisdiction into account. They then test the robustness of the relationship with multiple types of regression models, for which the relationship also holds.

Cebula and Nair-Reichert also find that migrants have a strong preference for jurisdictions that spend more per capita on education, as reflected in local budgeting data for primary and secondary schools. Their main conclusion, however, is that

lawmakers "should be very cautious in establishing income tax policies...lest they suffer the wrath of consumer-voter flight to more fiscally appealing states."[22]

Saez, Slemrod, & Giertz (2012)

In a critical review that predates many post-Great Recession tax hikes in the U.S., Emmanuel Saez, Joel Slemrod, and Seth Giertz attempted to estimate the magnitude of changes in taxable income that resulted from raising the tax rate. In addition to discussing the cumulative effect of tax avoidance over the course of several years, they concluded that there are notable short-run impacts to hiking taxes as well.[23] Wealthy households tend to be more responsive to tax hikes than poorer households, despite the fact that the wealthy tend to move less often than other income groups.[24]

Saez, Slemrod, and Giertz estimate that, for every 1% increase in the share of taxable income retained after taxes, the total value of taxable income in a jurisdiction increases by between 0.12% and 0.40%. However, the corresponding figure for wealthy households alone may be higher, especially since it is relatively easy for the affluent to buy a new home elsewhere or move financial assets out-of-state. Even if we assume that the 0.12% - 0.40% range applies to the wealthy as well, this would imply that, in decreasing the share of taxable income retained after taxes, Massachusetts' proposed surtax would decrease the amount of taxable income in the state by between $606 million and $2.02 billion.[25] This calculation is based on the fact that, according to the IRS, Massachusetts millionaires earned some $70.7 billion in income in 2018.[26]

This would imply that, in decreasing the share of taxable income retained after taxes, Massachusetts' proposed surtax would decrease the amount of taxable income in the state by between $606 million and $2.02 billion.

The authors are careful to note that their results do not imply that the U.S. as a whole is on the "wrong side" of the Laffer curve, which would suggest that a reduction in tax rates would actually increase government revenue by encouraging some people to earn more taxable income. However, they also emphasize that the effect of tax hikes on the amount of taxable income can't be explained by the direct effect of higher tax rates on employment. The most likely intervening variable is that some people, especially the wealthy, engage in avoidance behaviors.

Lai, Cohen, & Steindel (2011)

New Jersey's 2004 "millionaires' tax," which imposed a 2.6% surcharge on incomes over $500,000 (and $1 million for married couples filing jointly) is one of the more frequently studied examples of the detrimental effects of progressive taxation on individual incomes. In 2011, three researchers at the New Jersey Department of the Treasury — Andrew Lai, Roger Cohen, and Charles Steindel — found that the millionaires' tax drove some 20,000 taxpayers to leave The Garden State by 2009, taking $2.5 billion in taxable income with them.[27]

The millionaires' tax drove some 20,000 taxpayers to leave The Garden State by 2009, taking $2.5 billion in taxable income with them.

The data in Lai, Cohen, and Steindel's report didn't allow them to analyze the effect of tax increases on specific demographic groups, but they did emphasize the cumulative impacts of the tax increase. The authors projected that, while revenues the tax raised exceeded the loss in potential income tax revenue from households leaving, income tax migration could also depress revenue from sales, property, and corporate taxes. Their estimates of taxable income and the number of households leaving also imply an average income of $125,000 among those who moved out of New Jersey because of the millionaires' tax, which was nearly twice the state's median household income at the time of the study.[28]

Lai, Cohen, and Steindel also take the liberty of critiquing other studies on the 2004 New Jersey tax hike that came to different conclusions than theirs did. They said that a 2011 study that found no evidence of millionaire migration from the 2004 New Jersey millionaires' tax was flawed because it "spanned only three years, was restricted to New Jersey, and did not systematically examine the influence of housing costs."[29] Instead, Lai, Cohen, and Steindel use a six-year sample and control for other causes of interstate migration in their analysis. They conclude that, for every percentage point increase in personal income taxes in New Jersey, the state loses about 4,000 taxpayers and $520 million in taxable income to migration.

Coomes and Hoyt (2008)

In 2008, two Kentucky economists, Paul Coomes and William Hoyt, took a unique approach to determining the impact of tax rates on migration patterns. Cognizant of how tax competition between states better allows households to minimize their tax bills, they limited their analysis to metropolitan areas that span multiple states, such as New York, Boston, and Washington, D.C. They find that the most striking impacts of tax hikes occur in states that don't have reciprocity agreements with their neighbors.[30]

Reciprocity agreements exempt employees who live and work in different states from having to file non-resident tax returns in the state where they work. As of November 2020, 16 states and the District of Columbia had such agreements.[31] While reciprocity agreements cover some of the largest multi-state metropolitan areas in the U.S., notably the Capital Region (i.e., Maryland, Virginia, and D.C.), none of the New England states have them. In fact, New Hampshire is the plaintiff in a recent lawsuit that accuses Massachusetts of unconstitutionally taxing

telecommuters whose employers are based in the Bay State.[32]

Coomes and Hoyt conclude that, in states without reciprocity agreements, a 10% increase in marginal tax rates triggers a 4.1% decline in the "relative rate of incoming taxpayers" to that state. Similarly, a tax hike of this magnitude is associated with a 3.3% decline in the inflow rate of taxable income.[33] The authors suggest that the lack of reciprocity agreements may reflect large pre-existing differences in tax rates among neighboring states, which more intuitively explains why they are such a good indicator of the propensity to move to avoid high tax burdens.

In states without reciprocity agreements, a 10% increase in marginal tax rates triggers a 4.1% decline in the "relative rate of incoming taxpayers" to that state.

Conclusion

A review of academic research shows that taxpayers, especially the wealthy, exhibit a significant degree of behavioral responses — from income shifting to location changes — to increases in tax rates in a variety of contexts. These responses are not limited to labor market phenomena, but rather include migration out of high-tax jurisdictions, which, in the long-term, erodes the tax base and potentially damages the most innovative sectors of the economy.

Furthermore, there is reason to believe that the COVID-19 pandemic has catalyzed some of the behavioral responses that disadvantage high-tax jurisdictions, both by eroding the competitive advantage in large metropolises and by making remote work easier.[34] At least in the short-term, tax increases could further solidify these phenomena as the nation and world economy emerge from the pandemic. Multiple of the studies cited above warn policymakers to heed the concern that higher tax rates lead to avoidance behavior and migration of individuals and businesses. This advice is especially important during the COVID-19 recovery period.

Endnotes

1. Jon Bajika & Joel Slemrod, "Do The Rich Flee From High State Taxes? Evidence From Federal Estate Tax Returns," National Bureau of Economic Research, July 2004, **https://www.nber.org/system/files/working_papers/w10645/w10645.pdf**
2. Jon Bajika & Joel Slemrod, "Do The Rich Flee From High State Taxes? Evidence From Federal Estate Tax Returns," National Bureau of Economic Research, July 2004, **https://www.nber.org/system/files/working_papers/w10645/w10645.pdf**
3. Jon Bajika & Joel Slemrod, "Do The Rich Flee From High State Taxes? Evidence From Federal Estate Tax Returns," National Bureau of Economic Research, July 2004, **https://www.nber.org/system/files/working_papers/w10645/w10645.pdf**
4. Jon Bajika & Joel Slemrod, "Do The Rich Flee From High State Taxes? Evidence From Federal Estate Tax Returns," National Bureau of Economic Research, July 2004, **https://www.nber.org/system/files/working_papers/w10645/w10645.pdf**
5. Andrew Mikula, "New Study Finds Pandemic-Spurred Technologies Lowered Barriers to Exit in High-Cost States," Pioneer Institute for Public Policy Research, February 10, 2021, **https://pioneerinstitute.org/covid/covid-economy/new-study-finds-pandemic-spurred-technologies-lowered-barriers-to-exit-in-high-cost-states**
6. Aspen Gorry, R. Glenn Hubbard, & Aparna Mathur, "The Elasticity Of Taxable Income In The Presence Of Intertemporal Income Shifting," National Tax Journal, March 2021, **https://www.journals.uchicago.edu/doi/abs/10.1086/712866**
7. Aspen Gorry, R. Glenn Hubbard, & Aparna Mathur, "The Elasticity Of Taxable Income In The Presence Of Intertemporal Income Shifting," National Tax Journal, March 2021, **https://www.journals.uchicago.edu/doi/abs/10.1086/712866**
8. 8 Aspen Gorry, R. Glenn Hubbard, & Aparna Mathur, "The Elasticity Of Taxable Income In The Presence Of Intertemporal Income Shifting," National Tax Journal, March 2021, **https://www.journals.uchicago.edu/doi/abs/10.1086/712866**
9. Aspen Gorry, R. Glenn Hubbard, & Aparna Mathur, "The Elasticity Of Taxable Income In The Presence Of Intertemporal Income Shifting," National Tax Journal, March 2021, **https://www.journals.uchicago.edu/doi/abs/10.1086/712866**
10. Martin Ruf & Julia Schmider, "Who Bears the Cost of Taxing the Rich? An Empirical Study on CEO Pay," Social Science Research Network, February 28, 2018, **https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3126061**
11. Martin Ruf & Julia Schmider, "Who Bears the Cost of Taxing the Rich? An Empirical Study on CEO Pay," Social Science Research Network, February 28, 2018, **https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3126061**
12. Martin Ruf & Julia Schmider, "Who Bears the Cost of Taxing the Rich? An Empirical Study on CEO Pay," Social Science Research Network, February 28, 2018, **https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3126061**
13. Enrico Moretti & Daniel Wilson, "The Effect of State Taxes on the Geographic Location of Top Earners: Evidence from Star Scientists," University of Pennsylvania, December 2015, **https://eml.berkeley.edu/~moretti/taxes.pdf**
14. Enrico Moretti & Daniel Wilson, "The Effect of State Taxes on the Geographic Location of Top Earners: Evidence from Star Scientists," University of Pennsylvania, December 2015, **https://eml.berkeley.edu/~moretti/taxes.pdf**
15. Enrico Moretti & Daniel Wilson, "The Effect of State Taxes on the Geographic Location of Top Earners: Evidence from Star Scientists," University of Pennsylvania, December 2015, **https://eml.berkeley.edu/~moretti/taxes.pdf**
16. Cristobal Young et al., "Millionaire Migration and Taxation of the Elite: Evidence from Administrative Data," American Sociological Review, 2016, **https://web.stanford.edu/~cy10/public/Jun16ASRFeature.pdf**
17. Cristobal Young et al., "Millionaire Migration and Taxation of the Elite: Evidence from Administrative Data," American Sociological Review, 2016, **https://web.stanford.edu/~cy10/public/Jun16ASRFeature.pdf**
18. Scott A. Hodge, "Who Are America's Millionaires?" Tax Foundation, June 15, 2012, **https://taxfoundation.org/who-are-americas-millionaires/**
19. Robert Carroll & Gerald Prante, "Long-run macroeconomic impact of increasing tax rates on high-income taxpayers in 2013," Ernst & Young Global Limited, July 2012, **https://www.nfib.com/Portals/0/PDF/AllUsers/research/studies/ey-fiscal-cliff-tax-study-increasing-2013-rates.pdf**
20. Robert Carroll & Gerald Prante, "Long-run macroeconomic impact of increasing tax rates on high-income taxpayers in 2013," Ernst & Young Global Limited, July 2012, **https://www.nfib.com/Portals/0/PDF/AllUsers/research/studies/ey-fiscal-cliff-tax-study-increasing-2013-rates.pdf**
21. Richard J. Cebula & Usha Nair-Reichert, "Migration and public policies: A further empirical analysis," Springer Science & Business Media LLC, April 26, 2011, **https://www.researchgate.net/publication/227362059_Migration_and_public_policies_A_further_empirical_analysis**
22. Richard J. Cebula & Usha Nair-Reichert, "Migration and public policies: A further empirical analysis," Springer Science & Business Media LLC, April 26, 2011, **https://www.researchgate.net/publication/227362059_Migration_and_public_policies_A_further_empirical_analysis**
23. Ernst & Young Global Limited & State Tax Research Institute, "Oregon State and Local Tax Burdens," Council On State Taxation, November 2020, **https://cost.org/globalassets/cost/state-tax-resources-pdf-pages/cost-studies-articles-reports/oregon-state-and-local-business-tax-burdens_2020_stri-final-report.pdf**
24. Emmanuel Saez, Joel Slemrod, & Seth Giertz, "The Elasticity of Income with Respect to Marginal Tax Rates: A Critical Review," University of Pennsylvania, August 12, 2010, **https://www.law.upenn.edu/institutes/taxlaw/pastseminars/201011papers/SethGiertz.pdf**
25. Pioneer Institute owes a debt of gratitude to Professor Seth H. Giertz of the University of Texas at Dallas, who was generous enough to share the formula necessary to make these calculations.
26. United States Internal Revenue Service, "SOI Tax Stats - Historic Table 2," United States Department of the Treasury, last updated September 15, 2020, **https://www.irs.gov/statistics/soi-tax-stats-historic-table-2**

27. Andrew Lai, Roger Cohen, & Charles Steindel, "The Effects of Marginal Tax Rates on Interstate Migration in the U.S.," New Jersey Department of the Treasury, October 2011, **https://www.state.nj.us/treasury/news/2011/OCE-Migration%20Study.pdf**

28. Andrew Lai, Roger Cohen, & Charles Steindel, "The Effects of Marginal Tax Rates on Interstate Migration in the U.S.," New Jersey Department of the Treasury, October 2011, **https://www.state.nj.us/treasury/news/2011/OCE-Migration%20Study.pdf**

29. Andrew Lai, Roger Cohen, & Charles Steindel, "The Effects of Marginal Tax Rates on Interstate Migration in the U.S.," New Jersey Department of the Treasury, October 2011, **https://www.state.nj.us/treasury/news/2011/OCE-Migration%20Study.pdf**

30. Paul A. Coomes & William H. Hoyt, "Income taxes and the destination of movers to multistate MSAs," ScienceDirect, May 2008, **https://www.sciencedirect.com/science/article/abs/pii/S0094119007000897#!**

31. Tonya Moreno, "Reciprocity: States That Don't Tax Nonresident Workers," The Balance, last updated November 16, 2020, **https://www.thebalance.com/state-with-reciprocal-agreements-3193329**

32. Mark Hayward, "New Hampshire gains allies in tax fight against Massachusetts," New Hampshire Union Ledger, last updated January 25, 2021, **https://www.unionleader.com/news/courts/new-hampshire-gains-allies-in-tax-fight-against-massachusetts/article_1830797e-dd17-589e-b43c-bb2bc1341216.html**

33. Paul A. Coomes & William H. Hoyt, "Income taxes and the destination of movers to multistate MSAs," ScienceDirect, May 2008, **https://www.sciencedirect.com/science/article/abs/pii/S0094119007000897#!**

34. Andrew Mikula, "New Study Finds Pandemic-Spurred Technologies Lowered Barriers to Exit in High-Cost States," Pioneer Institute for Public Policy Research, February 10, 2021, **https://pioneerinstitute.org/covid/covid-economy/new-study-finds-pandemic-spurred-technologies-lowered-barriers-to-exit-in-high-cost-states/**

PIONEER INSTITUTE
PUBLIC POLICY RESEARCH

185 Devonshire Street, Suite 1101 Boston MA 02110 617.723.2277
www.pioneerinstitute.org Facebook.com/PioneerInstitute Twitter.com/PioneerBoston