

The Impact of Migration on California Income Tax Revenues

A report prepared by the Franchise Tax Board, Economic and Statistical Research Bureau for

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Executive Summary

Anecdotal and statistical evidence suggest that the migration of individuals and businesses out of California over the last few years has been greater than the migration of individuals and businesses into California. Concerns have been raised that changing migration patterns may limit California's ability to raise revenue via its income tax system.

A number of factors contribute to location decisions made by individuals and businesses. In the California context, individuals may be attracted by the many amenities California has to offer such as climate, employment opportunities, and available recreational activities, but turned off by burdens such as the high cost of housing and taxes. However, the most important factors in California migration patterns for individuals appears to be the high and increasing cost of housing in California and restrictions on international immigration. Overall however, it appears that the reductions in personal income taxes due to out migration seem to be substantially offset by those moving into California.

Business may be attracted to California by the availability of a diverse and talented workforce and a large potential market of consumers, but turned off by the high cost of operating in California. Business migration, however, is more difficult to measure both because data on business relocations is not being tracked systematically and because businesses may relocate part, but not all, of their operations. In addition, California's income tax structure for multistate corporations does not necessarily result in income tax savings to the corporation if they relocate outside of California, suggesting tax rates may not be a primary reason for relocations. Finally, to the extent business relocate, it should be noted that reduced employment opportunities may impact the personal income tax base for California.

The evidence available to date suggests that recent net outmigration from California has reduced, but not reversed, the rate of growth in California income tax revenues.

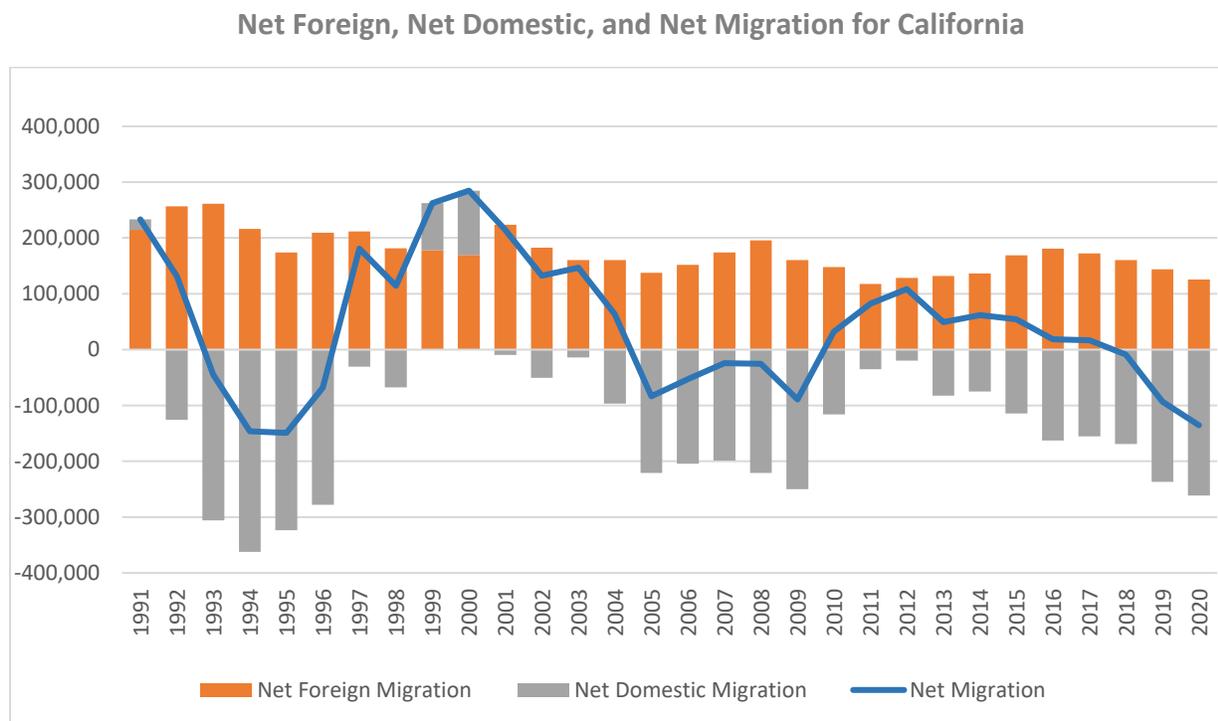
Introduction

After more than a century of rapid growth, California's population has changed little in the last few years. A number of recent reports suggest that changing migration patterns may limit California's ability to raise revenue through its income tax system. This report presents a framework for thinking about the impact of migration patterns on California taxes. The considerations driving location decisions may sometimes be different for individuals than for businesses; this report considers both groups. The report begins with an overview of migration patterns into and out of California and presents a framework for thinking about migration decisions. After that, the report presents some data on California income taxes paid by migrants and reviews evidence on the extent to which behavioral responses to California's income tax structure may be altering California's migration patterns and limiting California's ability to raise additional revenue through its income tax system.

Overview of California Migration Patterns for Individuals

As shown in Figure 1, California has, in recent decades, had net domestic out-migration and net international in-migration for individuals. The balance between these two flows has shifted back and forth over time. Unfortunately, comparable data does not exist for business entities. From 2010 through 2017, the net inflow from abroad was greater than the net outflow to other states. In 2018 there was a reversal with net domestic outflow being greater than net international inflow in the years 2018-2020.

Figure 1:



Source: CA Department of Finance, Demographic Research Unit

A 2018 report by the California Legislative Analyst's Office (LAO) notes that, despite the overall net domestic out-migration, there were some demographic groups in which more people came to California from other states than left California, including those with incomes over \$100,000 and those with graduate degrees.¹ The study also notes that the magnitude of net domestic out-migration from California tends to track increases in the price of California housing relative to the rest of the country. This suggests that perhaps those who can afford California housing are still coming to California, while those with lower income are more likely to be motivated to leave the state in search of lower cost housing.

There has been speculation that perhaps the Covid pandemic is altering the pattern of California migration, perhaps because the increase in remote work is enabling more people to live further from their offices or because border shutdowns are reducing international migration. Preliminary evidence, including studies based on change of address forms filed with the U.S. Post Office or with credit card companies, suggests that there has been an increase in people moving out of San Francisco, but that most of that movement has been to other places in California.² For example, the California Policy Lab reported in March that, net domestic exits from the Bay Area have increased 178 percent since the onset of the pandemic, but that, consistent with pre-pandemic patterns, 80 percent of movers have remained in California. Key findings of the report include that there is "no evidence of a pronounced exodus from the state" and that there is "little evidence that wealthy Californians are leaving en masse."

To the extent that there have been Covid-induced shifts in migration patterns, it is not clear how much of this movement might reverse when the pandemic ends.

A Framework for Thinking about Location Decisions

A wide variety of factors influence location decisions. At the individual level, considerations for each possible location can include:

- employment prospects
- costs of living in that location, such as costs of housing, utilities, taxes, transportation, and food
- available amenities such as climate and available recreational activities
- major life milestones such as marriage, divorce, or retirement
- other considerations such as proximity to family, friends, schools and healthcare

For business, considerations can include:

- availability and cost of qualified workers
- other business costs such as land, utilities, taxes, and regulatory costs
- location of customers and suppliers
- other support services from government or industry organizations
- where the owners or managers would like to live

¹ <https://lao.ca.gov/LAOEconTax/Article/Detail/265>

² <https://www.capolicylab.org/wp-content/uploads/2021/03/CalExodus-Are-People-Leaving-California.pdf>,
<https://www.cbre.us/research-and-reports/COVID-19-Impact-on-Resident-Migration-Patterns>

Both individuals and businesses are likely to move if they believe the net total of all of the advantages and disadvantages of a competing location plus the cost of moving are greater than the net total advantages and disadvantages of their current location.

Since each individual or business is unique in its needs, abilities, and preferences, the relative importance of the different factors listed above in choosing a location will vary across both people and businesses. It is likely that under almost any set of current conditions there are some, but not too many, people/businesses that will move to or from a location if conditions change a little bit.

For California, the evidence presented below suggests that the single biggest factor driving migration decisions is the cost of real estate. The average home price in California is more than double the U.S. average. The high cost of housing in California makes it more difficult for current California renters to strengthen their ties to California by purchasing homes, makes it harder for potential in-migrants to move here, and encourages current homeowners to extract value from their homes by moving to less expensive states. Businesses are adversely affected by both the direct costs of real estate for their operations and by the need to increase wages and salaries to recruit workers willing and able to afford to live in California.

Polling data confirms that real estate prices are the most important factor in California migration decisions. In a March 2021 poll from the Public Policy Institute of California, 33 percent of adults polled said they have seriously considered moving out of CA because of the price of housing.³ In a 2019 Edelman survey, the cost of housing was named the most important problem by four times as many Californians as the second most popular choice (health care).⁴

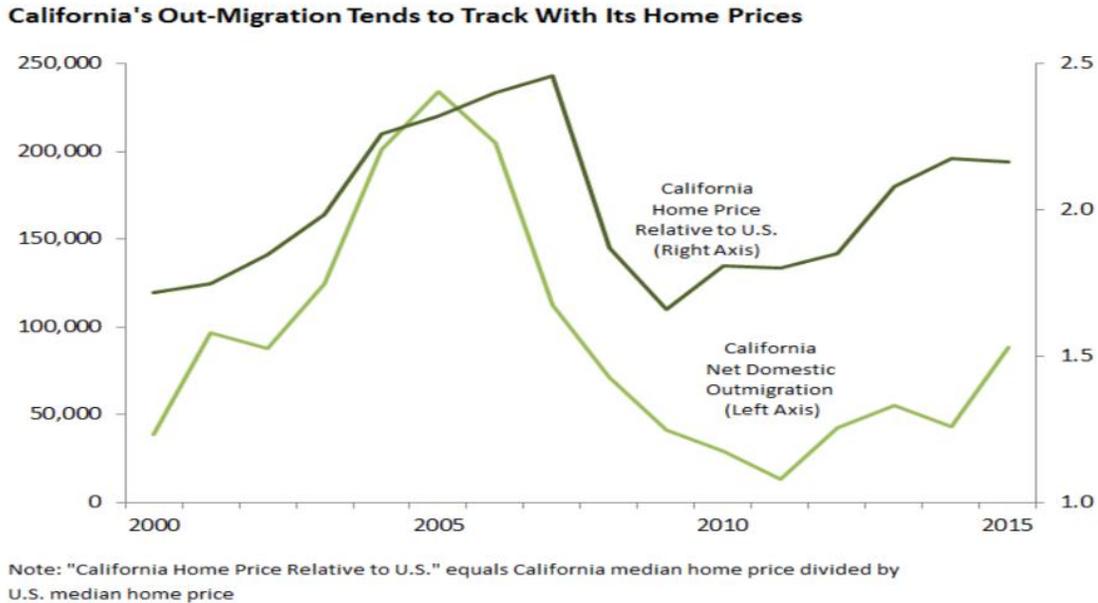
As a result, as documented by the LAO and shown in Figure 2, the flow of net migration in and out of California has followed a pattern similar to that of the cost of housing in California relative to the rest of the country.⁵

³ <https://www.ppic.org/wp-content/uploads/ppic-statewide-survey-californians-and-their-government-march-2021.pdf>

⁴ https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019_Edelman_Trust_Barometer_Special_Report_California_0.pdf

⁵ <https://lao.ca.gov/LAOEconTax/Article/Detail/269>

Figure 2:

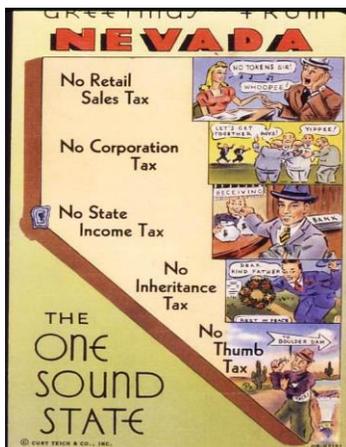


Source: Legislative Analyst's Office

The prominent role of housing prices in migration decisions has interesting implications when considering the interaction of tax policy and migration. First, as long as California housing prices remain high, we know that taxes have not yet induced out-migration large enough to cause a significant reduction in housing prices. Second, if at some point in the future California taxes do start to induce more out-migration, that will reduce the price of housing which, in turn, will reduce the incentive to leave California and partially mitigate the problem.

California Income Taxes

California adopted a corporate income tax in 1929 and a personal income tax (PIT) in 1935. From the beginning, there have been assertions that high tax rates would induce migration and destroy the California economy. As early as 1937, for example, Nevada boosters mailed a brochure to thousands of millionaires across the country recommending that they move to low-tax Nevada.



Despite these fears, California’s economy has grown from about 6 percent of the US economy at the time it adopted income taxes to almost 15 percent in 2020.

Taxes Paid in Recent Years

For the last few years, California income taxes have reflected the strength of the economy. Table 1 shows PIT and Corporate liabilities for the most recent years for which data is available, 2016 – 2019. Both PIT and Corporate tax revenues increased in 2018 and 2019 even though net migration turned negative. It should be noted that a significant amount of corporate revenue was likely shifted from 2017 to 2018 in response to changes in the federal corporate tax rate.

Table 1: California Personal Income Tax (PIT) and Corporation Tax (Corp) Liabilities (\$s in Billions)

Year	PIT	Corp
2016	\$70.5	\$8.7
2017	\$80.0	\$8.7
2018	\$87.0	\$11.6
2019	\$95.5	\$13.2

*2019 Corp estimate from incomplete data

California Income Taxes Paid by Migrants and Nonresidents

Personal Income Tax

It is, of course, not possible to know with certainty how much income tax out-migrants would have paid to California had they not left, but the general magnitude of the impact of migration on revenue can be estimated from tax return data. Under California law, the majority of (but not all) people who are residents of California for only part of a year are required to file a non-resident tax return for the year in which they change residency. Thus, any taxpayer who files a resident return in one year and a nonresident return in an adjacent year can be identified as a migrant. Although this method will miss migrants who are not required to file a California return in the year immediately before or after filing as a California resident, tabulating data for those that file nonresident and resident returns in adjacent years will give a general sense of the effect of migration on taxes. Table 2 presents total personal income tax paid by California residents in the years 2015-2018, as well as the amount paid in each of those years by taxpayers who filed nonresident returns in the prior year or the following year. The difference between the tax paid by taxpayers filing as nonresidents in the following year (out-migrants) and those filing as nonresidents in the prior year (in-migrants) averaged 0.2 percent of personal income tax revenue over those four years. The difference was greater in 2017 and 2018 than in 2015 or 2016. This was due to growth in the number of out-migrants relative to in-migrants in those years.

Table 2: Tax Paid by Residents Filing a Nonresident Return in an Adjacent Year (\$s in Billions)

Year	Total PIT Resident Tax	Tax Paid by Residents Filing a Nonresident Return in the Previous Year	Tax Paid by Residents Filing a Nonresident Return in the Following Year	Difference	Difference as a Percent of Total Resident Tax
2015	\$70.7	\$1.15	\$1.17	\$0.02	0.02 %
2016	\$70.5	\$1.20	\$1.25	\$0.05	0.07 %
2017	\$80.0	\$1.29	\$1.59	\$0.30	0.4 %
2018	\$87.0	\$1.33	\$1.66	\$0.33	0.4 %

Another feature of California tax law that reduces the impact of migration on revenues is source taxation. California taxes all business income earned in California regardless of where the owner lives. So if a taxpayer moves out of California, but continues operating a business here, California will continue to tax the portion of their income earned in California. The total tax paid on nonresident returns (which includes both the tax on part-year residents described above and the tax on nonresidents with California sourced income) is presented in Table 3. The amount of tax paid by nonresidents each year is about four times larger than the amount paid by residents who are transitioning to nonresidents.

Table 3: California Nonresident Returns

Tax Year	Number of Nonresident Returns (In Millions)	Total Tax Liability (In Billions)
2015	1.1	\$4.1
2016	1.1	\$4.3
2017	1.1	\$4.8
2018	1.2	\$5.7
2019	1.3	\$6.0

Businesses Paying California Income Tax

There have been many reports over the years of businesses leaving California. For example, a Southstar Communities report indicates that 13,000 companies left California from 2008 to 2016.⁶ A CNBC report says that 18,000 businesses left between 2008 and 2019.⁷ We are not aware of any popular reports on the number of businesses moving to California, so it is not clear what the net movement of businesses is. It is difficult to measure the movement of businesses in and out of California through tax data. When a business stops filing California returns, we often cannot tell if that is because the business ceased to exist, merged with another business, or moved out of state. Another complication is that some businesses may move parts, but not all, of their business out of California.

⁶ <https://www.southstarcommunities.com/blog/companies-leave-california-bound-for-texas>

⁷ <https://www.cnbc.com/2021/01/23/why-companies-are-fleeing-california.html>

When a business moves only part of their operations out of state it may not change the California tax on their business. This is because California uses single sales apportionment. This means that when businesses operate in multiple states, the portion of their income that is taxable in California is equal to their total income times the percentage of their sales that are in California. If, for example, a company moves some of its back office functions to another state that may not change their pattern of sales or their California income. In fact, if the move lowers their costs, it may increase their total profits which would, in turn, increase their California income and California taxes. That does not guarantee, however, that there is no impact on California revenue. In the example above we may not detect any revenue loss in the Corporation Tax, but the transfer of functions out of state will still reduce the number of employees in California and, in turn, California PIT revenues. While difficult to measure exactly, this effect has not been large enough to offset the recent growth in California PIT revenues (as shown above).

Corporations

Despite the high profile departure of some businesses from California in recent years, the number of corporations paying California taxes has been increasing at a faster rate than the national average. Table 4 shows the growth in the number of corporate returns filed at the state and federal level in 2008 to 2017 (the most recent year for which federal data was available). From 2008 to 2017, the number of federal forms filed by C corporations dropped 13 percent compared to a 2 percent drop in California. During the same period, the number of federal S corporation forms filed increased by 17 percent, compared to a 48 percent increase in California.

Table 4: Change in Number of Corporate Returns Filed at State and Federal Level 2008 to 2017

	Federal	California
C Corporations	- 13%	- 2%
S Corporations	+ 17%	+ 48%

As noted above, there are organizations that maintain lists of businesses that have publicly announced they are leaving California in whole or in part. FTB staff examined the tax returns of more than 100 corporations on one of those lists maintained by the Center for Jobs & the Economy.⁸ Most of the entities on this list announced only a partial move out of California. This is not a scientifically drawn sample of taxpayers, but the data does exhibit some patterns that may be instructive.

More than sixty percent of the corporations in this sample are paying only the minimum franchise tax to California. These companies are either not making enough profit to pay more than the minimum tax or are able to use other features of the tax code, such as the R&D credit, to minimize their liabilities. These companies may be leaving California because the cost of doing business here is too high, but for those paying only minimum tax, taxes are not a major contributor to those costs.

For the entities examined in this exercise that announced some type of relocation prior to 2019, their total amount of California tax in the year after their announcement was about 25 percent greater than their California tax in the year they made their announcement. This is consistent with the observation

⁸ <https://centerforjobs.org/califormers>

above that partial relocations may have little impact on tax because of single sales factor apportionment.

Pass-Through Businesses

Table 5 shows the growth in the number of PIT returns reporting two types of business income from 2008 to 2018 (the most recent year for which federal data was available). The number of returns reporting Schedule C income (sole proprietorships) grew 20 percent at the federal level and 24 percent at the state level during this period. The number of returns reporting partnerships or S corporation income on Schedule E rose about 22 percent at both the federal and state level.

Table 5: Growth in PIT Returns with Business Income, State and Federal, 2008 to 2017

	Federal	California
Returns with Schedule C	+ 20%	+ 24%
Returns with Partnership or S Corporation Income	+ 22%	+ 22%

A portion of the movement of businesses can be tracked by analyzing business income reported by Personal Income Tax payers who file as residents in some years and nonresidents in other years. Of the taxpayers filing a resident return in 2017 and a nonresident return in 2018, about 40,000 reported sole proprietorship income, and almost 13,000 reported either partnership or S-corporation income. Of those who filed resident returns in 2017 after filing nonresident in 2016, about 31,000 reported sole proprietorship income and 9,000 reported either partnership or S-corporation income. Since some taxpayers filed both Schedule C and Schedule E, the total number of out-migrants reporting business income was about 11,500 more than the number of in-migrants. The tax paid in 2017 by residents with business income who would file nonresident returns in 2018 was about \$200 million more than the tax paid by those who had filed as nonresidents in 2016.

About one third of those filing Schedule C in their last year filing a resident return did not file Schedule C the next year when they were a part-year resident, suggesting that their business was closed rather than moved, perhaps in some cases related to retirement. Similarly, 30 percent of those filing as residents for the first time in 2017 and reporting Schedule C income did not file Schedule C the year before, suggesting that they were opening new businesses. For those with partnership or S corporation income, about 20 percent of out-migrants and 26 percent of in-migrants did not file Schedule E in their year of partial residency.

Studies of Behavioral Response to Changes in Tax Rates

Economists have devoted significant effort to modeling and measuring the ways in which people and businesses respond to changes in tax policy. High taxes may reduce work effort by lowering the reward for each hour worked or they could increase work effort so that a worker can maintain a constant after tax income. High taxes may cause out-migration by those who want to reduce their tax bill or in-migration by those attracted by whatever enhanced amenities the higher taxes may fund. This section of this report presents some recent work on the response of Californians to changes in PIT rates, followed by an example of research on the responses of business, and finally an example of what happens when all the pieces are put together into a model of the whole economy.

Responses to Changes in California's Top PIT Rates

In November 2012, California added three new brackets, increasing the tax rate on its highest income taxpayers by 1, 2, or 3 percent. Table 6 shows the number of returns and income reported on returns with income high enough to be subject to these higher tax rates before and after the rate increase. The data is complicated by a 2013 increase in federal tax rates that prompted many taxpayers to recognize capital gains in 2012 before that increase took effect. Despite that anomaly in the data, it can be seen that both the number of high income returns and the amount of income reported on those returns were substantially higher in 2014 than they had been prior to the California rate increase.

Tax Year	Returns (Thousands)	CA AGI (Billions of \$s)
2011	155	209
2012	185	296
2013	176	251
2014	207	315

Two academic working papers - one by Rauh and Shyu and the other by Varner, Young, and Prohofsky - have used FTB data to examine changes in the flow rate of migration of high income Californians in the wake of changes in the top California PIT rates.⁹ In general, net migration rates are low for very high income Californians. Varner et. al. report that for the period 2002-2008, the average annual growth in the number of California returns with income over \$1 million was about 200 times larger in magnitude than net migration for that group. Both of these analyses find that there was some increase in net out-migration of high income Californians after the 2012 tax rate increase. The papers suggest the departure of a few hundred more high income Californians than would have occurred without the tax increase. This would be only one or two-tenths of a percent of the 176,000 Californians subject to the new brackets in 2013. Even though the brackets are indexed for inflation, the number of residents in the top three brackets increased to 270,000 in 2019.

The Varner et. al. paper also examined an earlier California tax increase, the adoption of a 1 percent tax on incomes over \$1,000,000 in 2004 and found no observable increase in net out-migration in response to that policy change. The number of resident returns with taxable income greater than \$1 million increased from 35,000 in 2004 to 43,000 in 2005, the year this tax was implemented, to 90,000 in 2019.

In addition to the question of migration, the Rauh and Shyu paper examined the amount of income report by taxpayers in the top brackets who stayed in California. They estimate the reduction in revenue from high income residents reporting less income was four to five times as large as the reduction from changes in migration. The total tax collected from residents in the new brackets grew around the imposition of the new rates from \$21.5 billion in 2011 to \$25.7 billion in 2013 and \$32.3 billion in 2014. Of this, \$4.4 billion in 2013 and \$5.7 billion in 2014 were additional amounts collected in the new tax brackets, roughly in line with predictions made prior to the adoption of the new rates that

⁹ <https://inequality.stanford.edu/sites/default/files/millionaire-migration-california-impact-top-tax-rates.pdf>,
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3461513

did not consider this type of behavioral response. If Rauh and Shyu are correct, however, the actual revenue increase from the new rates was only about half of those amounts.

Business Establishments

As noted above, businesses may respond to tax policy by moving only part of their operation to a lower tax location rather than the entire business. Giroud and Rauh used state level U.S. Census data on business establishments to estimate the impacts of state income tax changes on business establishments.¹⁰ They find that each 1 percent increase in a state's corporate tax rate reduces the number of establishments owned by corporations in that state by about 0.5 percent, but has no effect on other types of businesses such as sole proprietorships or partnerships. Conversely, each 1 percent increase in personal tax rates reduces the number of establishments owned by pass-through businesses by about 0.4 percent but has no effect on corporations. They find that these effects are much smaller for state that use single sales factor apportionment. This is not surprising because in those states, a business generally will not reduce its taxes by moving employees or assets out of the high tax state. They do note, however, that the effects are larger for single sales factor states that have 'throwback rules' that may base tax liability on the amount of sales to jurisdictions without an income tax on the business in addition to sales made in the state in question. If these estimates are correct, some business activity has left California because of its tax structure, but not enough to fully offset the direct impacts of tax increases.

The California Dynamic Revenue Analysis Model (DRAM)

In the 1990s, California adopted legislation requiring the Department of Finance to prepare dynamic revenue estimates for major tax legislation. The Department of Finance contracted with economists at the University of California, Berkeley to construct a computable general equilibrium (CGE) model of the California economy. A CGE model is a system of equations representing linkages between different actors and sectors of the economy. The model calculates the expected responses of people, businesses, and government spending in response to changes such as an increase in taxes. The California DRAM found that for most tax increase proposals analyzed, the behavioral responses to the proposed tax increases reduced economic activity enough to offset between 3 and 20 percent of the revenue gains that would be anticipated in the absence of behavioral responses. The requirement to use DRAM for dynamic revenue estimates was allowed to sunset after five years. Williams speculates that this was because, "These moderate effects were not a victory for either side of tax policy debates. The results undercut extreme supply-side claims that tax cuts would "pay for themselves." However, they also were inconsistent with claims that tax policies do not matter in terms of economic competitiveness, since the job and income effects associated with an up-to 20 percent feedback effect can be significant."¹¹

¹⁰ Giroud, Xavier and Joshua Rauh, State Taxation and the Reallocation of Business Activity: Evidence from Establishment-Level Data, *Journal of Political Economy*, 2019, vol. 127, no. 3, p 1262-1316.

¹¹ <https://www.taxpolicycenter.org/taxvox/dynamic-scoring-forum-californias-dynamic-revenue-estimating-experience>

Conclusion

In recent years, there has been net outmigration from California, primarily due to California's high cost of housing. It is only natural to wonder if this outmigration will lead to significant revenue losses to the state. Because California uses single sales factor apportionment, many businesses that move portions of their operations out of state see little change in their California taxes. Many of the businesses leaving the state entirely were paying little tax because they were not very profitable. At the individual level, taxes previously paid by out-migrants are almost completely offset by new taxes paid by in-migrants. The data available to date show that people leaving the state pay over \$1 billion in taxes the year before they leave. However, people moving to California also pay over a \$1 billion the year after they arrive. From 2015-2018, the net reduction in tax revenue from those coming and going averaged about 0.2 percent of total California Personal Income Tax revenue. Since the most recent available data is for tax year 2019, it is too early to know if the Covid pandemic has caused a structural shift in the economy that will alter these patterns.