

Are U.S. State Tax Policies Increasingly Polarized?*

Sarah Robinson Alisa Tazhitdinova

Abstract

We study the extent to which political polarization permeates U.S. state tax policies from 1910 to 2022. We document a dramatic increase in tax policy polarization in recent decades, particularly for personal income, corporate income, and cigarette taxes, but convergence in sales taxes. However, the current levels of polarization are not unique relative to the past. Furthermore, this polarization is only pronounced among states with large political majorities and stable political regimes. Yet state tax policies are not gridlocked: swing states change taxes as frequently as, and with similar magnitude to, deep red and blue states.

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*Sarah Robinson: Department of Economics, Claremont McKenna College (sarah.robinson@claremontmckenna.edu); Alisa Tazhitdinova: Department of Economics, UC Santa Barbara and NBER (tazhitda@ucsb.edu). We thank Youssef Benzarti, John Friedman, Daniel Garrett, Ethan Kaplan, Mateusz Stalinski, Ricardo Perez-Truglia, and seminar participants at Claremont McKenna, LSE, U of Warwick, and 2024 NBER SI Political Economy for insightful suggestions. We thank Ryan Bender and Juan Nicolas Herrera La Rotta for excellent research assistance.

Political polarization in the U.S. has been widely documented: voters increasingly identify as Democrats or Republicans, and express stronger distaste for members of the other party (e.g., [McCarty et al., 2016](#); [Boxell et al., 2022](#)), while politicians increasingly diverge in their choice of words and their roll call votes (e.g., [Shor and McCarty, 2011](#); [Gentzkow et al., 2019](#)). However, less is known about the extent to which this political polarization translates into differences in actual policy. In this paper, we focus on one highly contested policy space: taxation. We study the degree to which political polarization permeates U.S. state tax policies, using novel data on tax rates from 1910 until the present, as well as data on tax revenues and expenditures from 1942 until the present.

Voters consistently rank taxation among the most important issues in political campaigns; and, as a result, over half of candidates discuss taxes in their ads ([Spiliotes and Vavreck, 2002](#)). Several studies have documented increasing polarization in tax-related discussions ([Jensen et al., 2012](#); [Gentzkow et al., 2019](#)). However, implementing a tax change is more difficult than talking about it, and it requires legislators to balance state budgets, agree on policy specifics, and in the case of tax increases, actually make changes that hurt voters' (and their own) financial positions. As a result, studying tax outcomes allows us to evaluate whether politicians and the citizens who elect them put their money where their mouths are, as the saying goes. Tax policies can also be easily compared over long periods of time, enabling us to understand whether current differences by party (if any) are a new phenomenon. Finally, understanding the policymaking process for taxes is of great interest in its own right, given the critical role of taxation in redistribution and the provision of public goods.

Our goal is thus to establish, in a comprehensive and systematic way, whether states with Democrat-controlled governments enact tax policies that are substantially different from those in states with Republican-controlled governments, and how tax policy polarization relates to political polarization. We study six tax policies – personal income, corporate income, sales, cigarette, gasoline, and alcohol taxes – and use a variety of methods for

categorizing state political affiliation. Our tax outcomes include whether or not a state has a given tax type, tax rate levels (unconditional and conditional on being greater than zero), whether the state adopted a progressive or flat personal/corporate income tax, and the degree of income tax progressivity (measured by the ratio of top to minimum tax rates). To provide a broader view of the impact of polarization on state finances, we further examine tax revenues, overall revenues, and expenditures.

We break states into “Republican” and “Democratic” groups using the majority party in state legislatures, as well as the party of the governor, and measures of legislators’ political ideology: DW-NOMINATE scores for U.S. congressmen (Lewis et al., 2023) and ideological scores for state legislators (Shor and McCarty, 2011). Most of the measures we consider yield similar qualitative conclusions about tax policy polarization.

Our analysis generates the following insights. First, consistent with the existing evidence on political polarization, we find a dramatic increase in tax policy polarization in recent decades, particularly for personal and corporate income taxes as well as for cigarette taxes. However, the degree of tax polarization in recent decades is not a historically unique phenomenon. Today, Democratic states have 40% higher top personal income taxes and collect 60% more personal income tax revenue compared to Republican states. But the tax adoptions, tax rates, and tax revenues collected in Republican and Democratic states also diverged substantially at various times in the past. For many decades, Democratic states featured 30% higher adoption rates of personal and corporate income taxes, but with 20-40% lower tax rates conditional on collecting a tax. Only for cigarette taxes is the current level of polarization is unprecedented, with rates more than twice as high in Democratic states compared to Republican states.

Second, we show that the magnitude of polarization and its timing is sensitive to the choice of tax policy measure, and in many cases tax policy polarization *precedes* the political polarization which emerged in the 1970s and increased sharply in 1990s.¹ For example,

¹Unfortunately, measures of political polarization at the state level do not exist prior to 1990s, for this reason we compare state-level tax polarization to political polarization at the federal level.

personal income tax revenue has been diverging since the mid-1970s, while average personal income tax rates, including extensive margin responses, diverged a decade later. On the other hand, if one focuses on whether states collect a given tax at all, then the divergence only began in the late 2000s. Overall, the timing of tax policy polarization does not appear to be driven by political polarization, federal tax policy, or major economic events.

Third, we explore key heterogeneities in political environments: the strength of political control (proxied by the strength of majority in the state house/senate) and stability of political regimes (proxied by the frequency of majority party switches). To the extent that there is polarization in tax policy, it is predominately between states with long-standing, strong majorities on either side. There appears to be a relationship between tax rates and the strength of party majority, or between tax rates and state legislators' ideological scores. However, we observe no notable discontinuity in tax policy around the 50/50 Republican-Democratic split. Our results thus highlight the difficulty of establishing a causal effect of political control on policy outcomes (if such a relationship exists) – plausibly causal analysis exploiting party switches would rely on the swing states which, at least in our setting, show no differences in policy outcomes. Conversely, states that exhibit the largest differences are typically excluded from such causal analysis.

Fourth, we demonstrate that the lack of polarization in states with unstable political environments and slim majorities is not driven by legislative impasse: these states make tax policy changes with equal frequency as, and of similar magnitude to, states with long-standing, strong majorities. Thus, we find no evidence of gridlock at the state level in contrast to previous research linking political polarization to delays in crisis responsiveness (Mian et al., 2014), policy uncertainty (Pastor and Veronesi, 2012; Baker et al., 2016), and legislative gridlock (Binder, 2004) at the federal level. Our results are more consistent with swing states preferring more moderate tax policy.

Our paper contributes to two literatures. For one, to a small literature in public finance that studies the relationship between political control and fiscal policy outcomes (e.g.,

Poterba, 1994; Besley and Case, 1995; Alt and Lowry, 1994, 2000; Caplan, 2001; Reed, 2006; Bjørnskov and Potrafke, 2013, see Potrafke (2018) for a detailed review).² Our analysis reconciles the varying findings of this literature by showing that the differences between Democratic and Republican policies are not stable over time, and (to a lesser extent) depend on the choice of political measure.

In addition, we contribute to the sizable literature that studies polarization in the U.S. A large number of studies document and measure *political* polarization among politicians and individuals in various settings and using various measures.³ In contrast, we contribute to the literature that studies the consequences of political polarization on *policy* outcomes. Our results suggest that tax policy polarization is different from both tax speech polarization (Jensen et al., 2012; Gentzkow et al., 2019) and ideological (economic) polarization (Lewis et al., 2023), and that political polarization does not always translate into actual policy changes, even in the long run.⁴

The closest works, Caughey and Warshaw (2016) and Grumbach (2018), examine the extent of policy polarization across states by studying a wide range of policy outcomes, which include a limited set of tax measures over a shorter time period. In contrast, we focus exclusively on tax policy, and provide a comprehensive account of U.S. state tax policies

²More broadly, a larger political economy/science literature studies the link between political control and policy outcome in general (e.g., Winters, 1976; Blais et al., 1993; Imbeau et al., 2001; Besley and Case, 2003; Caughey et al., 2017).

³See: roll call votes (McCarty et al., 2016; Shor and McCarty, 2011; Bonica et al., 2013), interest group ratings (Grosche et al., 1999), speech patterns (Jensen et al., 2012; Lauderdale and Herzog, 2016; Gentzkow et al., 2019), campaign contributions measures Bonica (2014), individuals' beliefs (Alesina et al., 2020; Stantcheva, 2021; Coibion et al., 2020), individuals' tastes (Fiorina and Abrams, 2008; Bertrand and Kamenica, 2023), self-reported voter preferences towards policies (Abramowitz and Saunders, 2008; Gentzkow, 2016; Caughey et al., 2016; Stantcheva, 2021) and self-reported voter preferences towards voters with opposing views (Glaeser and Ward, 2006; Iyengar et al., 2019; Boxell et al., 2022), top executives and corporations (Fos et al., 2022; Kaplan et al., 2024). A smaller literature studies the causes of polarization: whether these are driven by changes in preferences versus changes of party control (Canen et al., 2020, 2021), the role of spatial sorting (Kaplan et al., 2022b), and whether polarization is exacerbated by factors including economic shocks (Mian et al., 2014; Autor et al., 2020), media bias (DellaVigna and Kaplan, 2007), and exposure to education and peers (Kaplan et al., 2022a; Coriale et al., 2023; Firoozi, 2023; Kaplan et al., 2023).

⁴Beyond taxes, evidence on policy polarization is mixed, both at the federal level (McCarty, 2007; Brady et al., 2008; Lee, 2015; McCarty et al., 2016), and at the state level (Caughey and Warshaw, 2016; Caughey et al., 2017; Grumbach, 2018; DellaVigna and Kim, 2022).

over a 113-year period. The former allows us to establish that the extent of polarization is sensitive to the choice of tax measure used, while the latter provides a complete historical perspective for present-day developments. This wider aperture can be pivotal: for example, by using 1970-2014 data, [Grumbach \(2018\)](#) finds that current levels of tax polarization are unprecedented, but we show that this is not the case over a longer time horizon.

1 Empirical Question, Approach, and Data

1.1 Why Study Polarization of Tax Policies?

Rising political polarization in the U.S. has been detected in a variety of settings: congressional roll call votes and speeches, candidate survey responses, campaign contributions, and more. However, it has not been established whether tax policy – one of the most controversial topics – has followed suit. Previous work hints at such a possibility: [Jensen et al. \(2012\)](#) document polarization of *tax-related phrases* in Google Books, while [Gentzkow et al. \(2019\)](#) document divergence in U.S. senators’ and representatives’ *choice of vocabulary* when discussing taxes. In particular, [Gentzkow et al. \(2019\)](#) show that tax-related speech began to polarize in the early 1990s, and has remained at roughly the same level of polarization since 1995. They further show that while Democrats use such terms as “tax increases,” “raising taxes,” and “tax relief,” Republicans often talk about “tax breaks.” Overall, the results of [Gentzkow et al. \(2019\)](#) suggest that Democrats advocate for higher tax liabilities while Republicans advocate for lower tax liabilities, and voters’ preferences appear to be aligned with such proposals ([Stantcheva, 2021](#)). In this paper, we study whether these differences in verbal discussions and self-reported preferences translate into actual differences in tax policies, and whether these differences have worsened in recent years.

1.2 Defining Political Groups

To assess the degree of polarization in state tax policy, we must sort states into Democratic-leaning and Republican-leaning groups. The optimal method of categorizing states is not obvious in our setting, as voters in each state elect a wide range of officials (governor, state legislators in both chambers, representatives to U.S. Congress in both chambers, presidential electors, etc.), and there are no requirements that these officials be of the same political party.

In the main text, we consider states Republican if both the state house and the state senate have a Republican majority, and Democratic if both the state house and the state senate have a Democratic majority (see Appendix A for details political data sources). States where neither party carries such majorities are included in the “Other” category and thus omitted from the analysis for that year. However, given the distinct identity for state-level Democrats in the South, we consider the following Southern states separately regardless of the party with majority: AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, and WV.

In the Appendix D, we show that our conclusions remain qualitatively unchanged when we (1) retain the Southern states in the Democratic or Republican group, or (2) when requiring that governor also belongs to the majority party, in addition to both chambers of the legislature. The former accounts for the possibility that Southern states, while socially distinct from Northern Democrats, were fiscally similar. The latter accounts for the fact that governors may be the driving force behind policy changes, making such changes unlikely in absence of a trifecta. Finally, we also use measures of legislators’ political ideology: DW-NOMINATE scores along both dimensions for U.S. congressional members (Lewis et al., 2023), as well as ideological scores for state legislators (Shor and McCarty, 2011).

We select state legislative majorities as our preferred measure for two reasons. First, tax policy is ultimately determined by the legislatures: therefore, having a majority in both chambers is highly deterministic of one’s ability to influence tax policy outcomes. While the governor can veto proposed tax legislation, legislatures can override the veto with a super-

majority. But, as already mentioned, our results are robust to accounting for governor’s party affiliation.

Second, our legislative majority measure provides the most stable assignment over time, with the fewest number of party switches among the alternative options we consider. Our party groupings are not stable over time, meaning that a state included in the Republican group in one year may be included in the Democratic group in other years. This flexibility is necessary because during our period of study (1910-2022), no state remained in the same group during the entire period, regardless of the political measure used. However, political measures that shift too rapidly may be capturing idiosyncratic variation (i.e., related to an individual candidate or year) that is unlikely to represent true polarization of views.

In Appendix Figure [A.1](#), we show the number of states that belong to each group by year, how frequently states switch groups, and the party composition of each state. In Appendix [B](#), we examine the extent to which states changing parties from year to year drive our results.

1.3 Tax Policy Outcomes

Tax policies are complex, multi-faceted, and hard to summarize. Our analysis focuses on tax revenues and tax rates. The former account for both tax rates and base rules, while the latter are most salient to voters, subject to extensive media coverage, and are directly changed by policy.

We use tax rate data from [Robinson and Tazhitdinova \(2025\)](#). The data includes information on state and federal tax rates from 1910 to 2022 for the following tax rates: minimum and top personal income, minimum and top corporate income, sales, cigarette per pack, gasoline per gallon, and alcohol spirit per gallon tax rates. We inflation-adjust nominal rates of cigarette, gasoline, and alcohol excise taxes using the BLS CPI series to 2020.

We complement tax rate data with information on state revenues from 1942 to 2022, also from [Robinson and Tazhitdinova \(2025\)](#), and expenditures from the U.S. Census Bu-

reau Annual Survey of State Government Finances. Since revenues and expenditures grow systematically both with population and GDP, when comparing states to each other and across time, we use revenue/expenditure per capita as a percent of U.S. GDP per capita as our outcome variables. This measure accounts for state-specific population trends as well as the overall U.S. GDP growth trend. Alaska tax revenues are exceptionally volatile and reach extreme highs; for consistency, we omit Alaska from all figures showing revenues or expenditures. Finally, since our main focus is on tax policy, we treat each state-year observation as equal and do not weigh by population.

2 Measuring Tax Policy Polarization

2.1 Tax Adoptions and Tax Rates

Figure 1 shows the average top personal income, top corporate income, and sales tax rates in Republican, Democratic, and Southern states over time. Throughout, the time series for Republican states is shown with hollow red markers. For the Democratic (blue) and Southern (yellow) time series, we use a solid marker if the average for that group is statistically different from the Republican average at the 95% confidence level, and a hollow marker otherwise. (Differences are shown in Appendix Figure C.5.) Panel A shows tax rates where all states are included in each group, with a tax rate of zero for states that have not adopted a given tax. Panel B focuses on extensive margin responses, and shows the share of states in each group that have adopted a given tax type. Panel C focuses on the intensive margin, and shows the average tax rate in each group, including only states with non-zero tax rates.⁵ Finally, for each tax type, the vertical gray line marks the year after which no additional states have adopted this tax type. Thus, polarization to the right of the gray line always

⁵Panel D is discussed next in Section 2.2, but included in Figure 1 to aid comparison. To compare the magnitudes of polarization across taxes and measures, in Appendix Figure C.5 we show tax rates and revenues for all six tax types, with each outcome normalized as the difference in Democratic-Republican means divided by the mean across all parties.

excludes extensive margin changes, reflecting only intensive margin changes and changes in the political party of states.

Overall, we see sustained periods of large, statistically significant differences between Republican, Democratic, and Southern states. In particular, there are striking differences in the average top personal income and top corporate income tax rates (Figures 1(a) and (b)), where tax rates in Democratic states have been consistently and substantially higher than Republican states since the 1970s/1980s. For example, since the 1990s, Democratic states have 40% higher top personal income and 20% higher top corporate income tax rates than Republican states. However, at other times, and for other dimensions of tax policy, Republican and Democratic states have been indistinguishable from one another. We can see shared trajectories over time across groups, during periods of relative stability as well as periods of rapid change (such as with the adoption of tax rates pre-1940), suggesting some similarities across states in revenue pressures and changes in redistributive preferences over time.

At first blush, the results in Panel A suggest that income tax policy shifted from low to notable levels of polarization during the 1970s/1980s. However, the absence of income tax differences prior to the 1980s *on average* masks highly heterogeneous patterns for Democratic and Republican states. As we see from Panels B and C, Democratic and Southern states were 30% more likely to have a personal and/or corporate income tax than Republican states. However, the tax rates conditional on adopting a tax were 20-40% lower in Democratic and Southern states than in Republican states for many years. Because the differences in the extensive and intensive margins go in opposite directions, they result in similar tax rates overall.

In addition, the relatively sharp and sustained divergence in tax rates overall in Panel A does not appear in either the extensive (Panel B) or intensive margin (Panel C), but rather is driven by shorter and more gradual changes in both. Emerging differences in conditional tax rates can explain the gap between Republican and Democratic states since the mid-2000s,

but not before. From the mid-1980s to the mid-2000s, only differences along the extensive margin are statistically significant. Furthermore, to the extent that we see polarization in recent decades along either margin, the magnitude is not historically unique.⁶

For sales taxes, the polarization pattern over time is opposite from that of income taxes: we see statistically significant differences in the past, but similar tax rate levels over the most recent 10-15 year period for Democratic and Republican states. Once again, Democratic and Southern states show higher levels of tax adoptions, but lower tax rates than Republican states in earlier years. However, Democratic states dramatically increased sales tax rates in the 1970s, while Southern states followed a tax rate path similar to that of Republicans.

Figure 2 conducts the same analysis for excise taxes. We see differences in cigarette tax rates starting in the late 1980s and increasing dramatically in the 2000s: Democratic states now have tax rates more than 2 times higher than Republican states and 3 times higher than Southern states. However, prior to 1960, we see that Southern states introduced the tax faster than other states and had higher tax rates. This pattern reversed gradually between 1960 and 1980.

In contrast, gasoline tax rates have looked very similar since 1960. However, in the past, Democratic and Southern states had higher tax rates than Republican states, and there were no differences in the speed of adoption. Finally, Democratic states have been more likely to have an alcohol tax in most years after 1950; alcohol tax rates were substantially higher among Southern states until they converged in the 1990s, and have been similar since then.

To summarize, Figures 1 and 2 suggest that polarization indeed permeates state tax policies, but not in a persistent way. We see increasing differences in recent years for some tax rates (personal and corporate income, cigarette taxes). However, the timing of this divergence is highly sensitive to the measure used (e.g., including or excluding tax rates of zero), and the magnitudes of these differences are often not unique from a historical

⁶Similarly, our measures of personal income tax progressivity show gradual changes at varying times, with the likelihood of progressive taxes and the ratio of top to minimum tax rates converging over time, and top income thresholds diverging only as of the 2010s.

perspective. For other tax types (sales, gasoline, alcohol), we see very small or no differences in tax rates. Only the differences in cigarette tax rates in recent decades can be seen as unprecedented from a historical perspective.

Tax Rate Changes versus Compositional Changes. In Appendix B we show that both rate changes and compositional changes within each party drive our results. Specifically, for each year, we show the would-be average tax rates if the composition of the Republican and Democratic groups remained the same. Our decomposition analysis demonstrates that holding groups constant, tax rates trend in the same direction as the overall unrestricted average.

Alternative Definitions of Republican and Democratic States. The results seen in Figures 1-2 are robust to alternative definitions of political party, shown in Appendix D.1. In particular, we observe similar polarization patterns when not separating Southern states, or when requiring the governor to be affiliated with the same party as the house and the senate. While time series are not identical, the patterns of divergence and convergence in tax rates over time are similar. The only definition that generates dramatically different results is the one that breaks states along the second dimension of DW-NOMINATE – the dimension that “picks up differences within the major political parties over slavery, currency, nativism, civil rights, and lifestyle issues” (Lewis et al., 2023). In contrast, a breakdown based on the first DW-NOMINATE dimension, which breaks states into “liberal” vs. “conservative” based on economic issues, yields conceptually identical results.

2.2 Tax Revenues and Expenditures

Since tax policies are complex, states may differ in aspects other than tax rates – e.g., the breadth of the tax base, availability of tax avoidance and tax evasion opportunities, and more. All of these factors will affect the amount of tax revenue a given state generates. For this reason, we explore differences in tax revenues next.

Panel D of Figures 1 and 2 provides time series for state tax revenues. We see that since

1950, Democratic states have derived higher levels of revenue (per-capita) from personal and corporate income taxes compared to Republican states. The sales tax revenues were higher starting in 1940, but have converged to Republican levels since the mid-2000s. For excise taxes, we see higher levels of tobacco tax revenues since the mid-1970s, but small or no differences for motor fuel and alcohol taxes. Interestingly, the timing of tax revenue divergence does not match that of the tax rate – with personal and corporate income tax revenues diverging about 10 years earlier than the average tax rates in Panel A.

2.3 Timing of Polarization

A natural question is whether political polarization drives policy polarization. Our results in Sections 2.1-2.2 show that tax policy polarization often *precedes* rather than follows political polarization at the federal level, which started in 1970s and increased sharply in 1990, making this causal link unlikely.⁷ Appendix C makes this most apparent by directly comparing the timing of tax polarization to polarization in roll call votes and tax-related speech. We also show that the timing of polarization episodes does not map well to federal tax policy changes; to major economic events, such as Great Depression emergency relief programs, expansions of Medicaid, SNAP, etc., or to increased expenditures due to school finance equalization reforms.

3 The Importance of Political Stability & Strength of Majority

Our analysis so far compared tax policies in Democratic, Republican, and Southern states, abstracting away from heterogeneity within each group. In this section, we focus on two additional aspects – the stability of state political regimes and the strength of majority – to shed light on the mechanisms behind tax policy polarization.

⁷Unfortunately, time series of political polarization at the state level are not available prior to 1990s.

If the polarization we observe is driven by increasingly extreme voter preferences, then we expect to see the biggest gaps between states with longstanding, large majorities on either side, and little polarization in swing states with, presumably, more moderate preferences. The opposite may be true if voters in swing states have extreme but unsorted preferences which give legislators wide leeway to change policies (Rogers, 2023). Beyond preferences, party discipline may play a role (Canen et al., 2020, 2021). If this power held by party leadership extends to state legislatures, then even small majorities in unstable political environments hewing close to the party line may be sufficient to shift policy outcomes.

In Figure 3, we first analyze the role of political stability. We break states into two groups: states that switched the majority party in both state legislatures at most twice since 1910 (omitting “Other” episodes) are considered stable, while states that saw five or more switches are considered unstable.⁸ Otherwise, each state is assigned to the Republican/Democratic group following the same rules, i.e., by having a majority in both state legislatures. The time series shown in Figure 3 provide clear evidence: tax rates in stable states diverged in recent years, while tax rates in unstable states or states with different parties controlling the state house/senate remained rather similar. Only for cigarette and alcohol spirit taxes do we see a clear divergence in tax rates between Republican and Democrat states in both stable and unstable states.

When we restrict only to non-zero tax rates, we find similar levels of polarization in recent years but no polarization among the unstable states in the past. On the other hand, when looking at tax adoptions, we find very little polarization among the unstable states, while stable states are highly polarized along this extensive margin. Furthermore, we find that as a whole, unstable states are slower to adopt taxes than stable states. These results are available upon request.

This last finding suggests another factor that could potentially disrupt the translation

⁸See Figure A.1(b) for switches by state. All Southern states are included in the stable category. Other than VA and WV with two switches each, all other Southern states switched from Democratic to Republican majority only once.

of preferences into policy: gridlock. Previous research has documented evidence consistent with gridlock at the federal level (Mian et al., 2014; Binder, 2004). Perhaps legislatures in unstable political environments are simply *unable* to enact tax policy due to legislative impasse. A related possibility is that unstable states lack the resources or incentives that flow to more stable states due to “venue-shopping.” If policy activists are unable to implement their preferred policies at the federal level (e.g., due to gridlock or concerns about quick reversals), they may direct their efforts towards facilitating changes in states where these policies can be implemented faster and with greater permanence.

However, when we compare frequency and magnitude of tax changes in stable and unstable states in Table 1, we do not find evidence of substantial gridlock. In fact, we see that states with unstable political environments change their tax rates slightly *more* frequently, and the average magnitude of the tax change is similar between the groups (though about 30% smaller for personal income taxes). Thus, the lack of a stable majority does not preclude states from making policy changes.

To complement our comparison of stable vs. unstable political environments, we conduct a similar analysis comparing tax rates in states with stronger vs. weaker majorities in state legislatures. Figure 4 bins states into ten groups by Republican/Democratic control in the state house, and then shows the average tax rates in each group (with markers proportional to the sample size in each bin). The figures also report the coefficient and standard error for a linear fit, separately for states with Democratic and Republican majorities. We conduct this analysis for time periods where we observe polarization, as well as for time periods when we did not. Similar evidence is available for the state senate, for excise tax rates, and for adoption rates upon request.

There is frequently a relationship between a party’s majority in the state house/senate and average tax rates. In some years, the pattern moves in the same direction across the political spectrum: for example, in 1940-1970, we see gradually increasing personal income tax rates as the Democratic majority weakens and the Republican majority strengthens; and

we see the mirror image from 2000 onwards, where personal income tax rates are decreasing as the Democratic majority weakens and the Republican majority strengthens. In other years, the relationship is different on either side: for example, in 1940-1970, corporate taxes show an inverse U-shape, with a higher rate for weak majorities and a lower rate for strong majorities, regardless of party.

However, we do not typically see a well-defined *discontinuity* at the 50% majority mark. For states with weak majorities, whether Republican or Democratic, the tax rates appear rather similar. Instead, the pattern in Figure 4 (as in Figure 3) implies that variation in tax rates is primarily driven by states with more extreme preferences in either direction. In particular, moving from 45% to 55% Republican typically corresponds to a smaller change in tax rates than either 35%-45% or 55%-65%. On the other hand, finding a discontinuity would have been suggestive evidence of powerful party leadership that can impose discipline on marginal members.

We also do not find evidence of gridlock among states with slim majorities: moving towards the 50% mark is typically associated with *more* tax changes, rather than fewer. Finally, we note there is a strong correlation between the strength of party majority and the level of ideological conservatism/liberalism in the state, at least for the years 1993 onward when [Shor and McCarty \(2011\)](#) ideological scores are available.

Overall, our results suggest that the polarization we describe in Section 2 is consistent with underlying differences in policy preferences or party discipline. States with long-standing, large majorities (“deep blue” and “deep red” states) have more extreme tax policies. On the other hand, swing states and/or states with smaller majorities look more similar to one another, even though they change taxes as frequently and with the same magnitude as the former group. Our results thus correspond to the findings of [Caughey and Warshaw \(2018\)](#) who show that while policies change in response to shifting preferences, they do so gradually and often without partisan changes.

Our findings highlight the difficulty of establishing a causal relationship between politics

and policy outcomes. We do not claim to estimate causal effects in this paper, and our findings could be consistent with a wide range of potential causal or non-causal relationships. However, if a causal link exists, it is not well-suited for quasi-experimental methods relying on plausibly exogenous party control switches – we find no differences in the swing states that would provide variation, while the largest differences are concentrated among stable states that would not contribute to causal estimates.

4 Conclusion

In this paper, we study the extent of polarization of the U.S. state tax policies. We show that tax policies in Republican and Democratic states frequently differ, but not in a consistent and systematic way; furthermore, these differences do not appear to follow political polarization. We further show that polarization is limited to states with large majorities and stable political regimes, with no notable differences among swing states.

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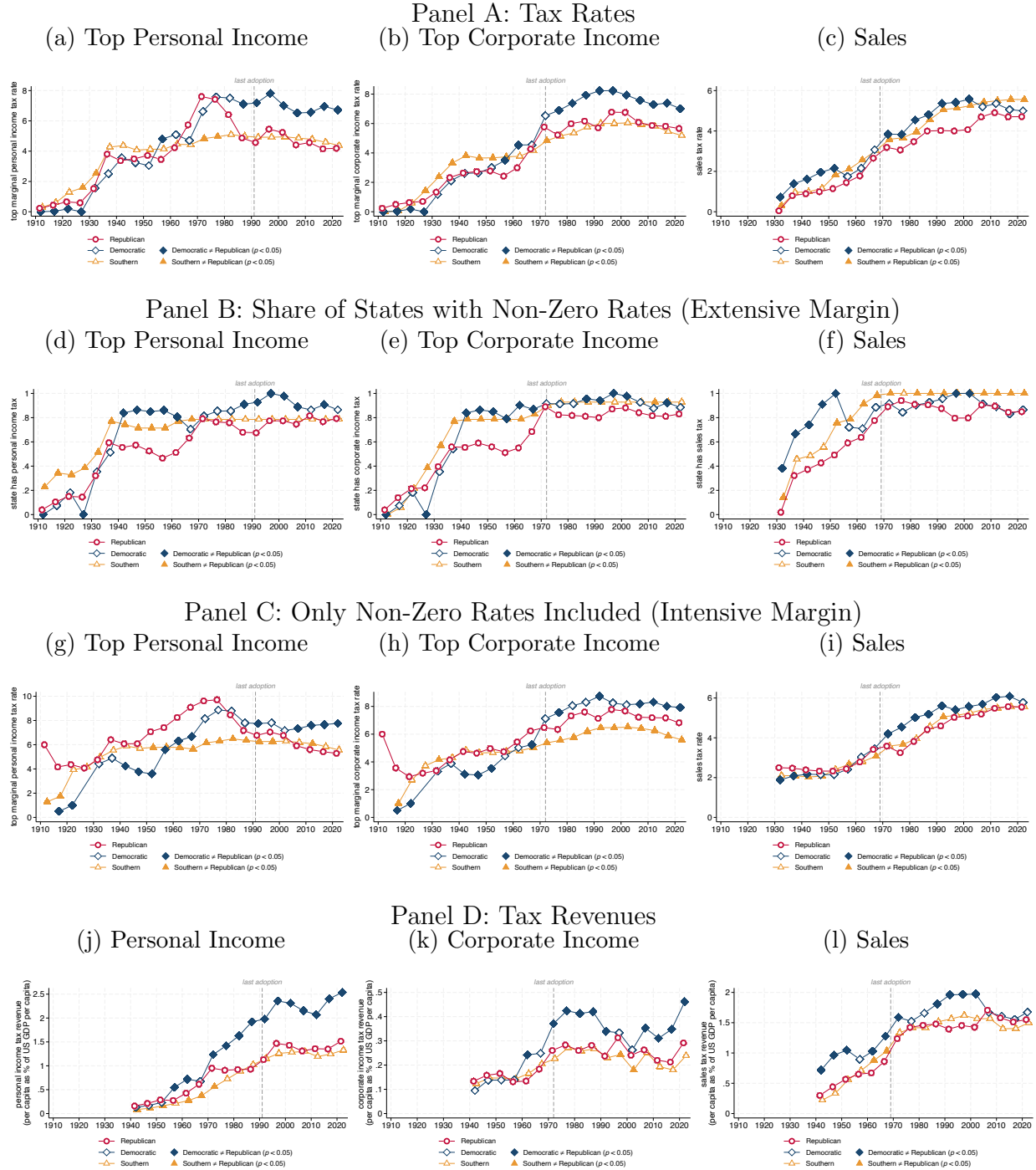
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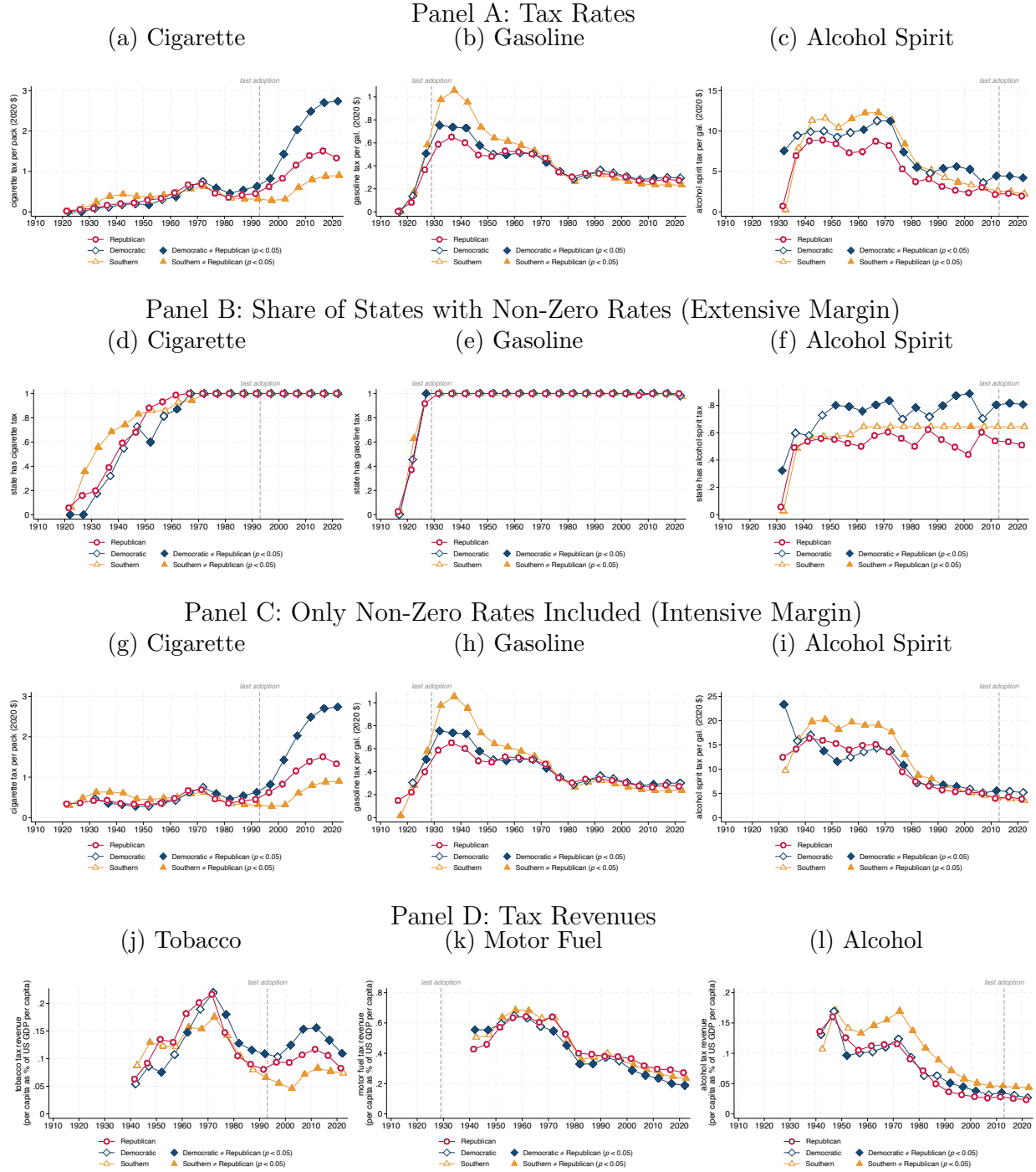
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Figure 1: Income/Sales Taxes in Republican vs. Democratic States



Notes: These figures show average tax rates and tax revenues in 5-year intervals among states that lean Republican (excl. Southern states), lean Democratic (excl. Southern states), and Southern states. For Democratic and Southern states, solid markers identify periods in which the mean is statistically different from the Republican mean at the 95% level. Number of observations in each group shown in Appendix Figure A.1. Tax revenues in Panel D are measured per capita as a percent of GDP per capita. We omit Alaska tax revenues as these are exceptionally volatile. State is considered Democratic- (Republican-) leaning if both state house and state senate have a Democratic (Republican) majority. Southern states are AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV. See Appendix D for alternative definitions of Democratic and Republican states.

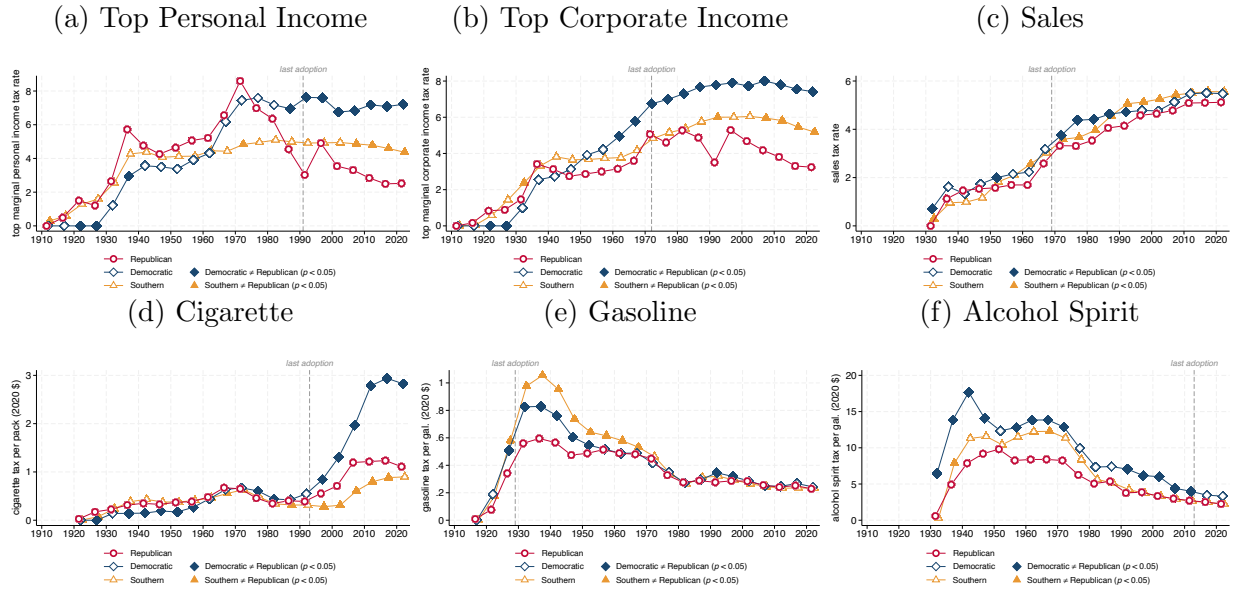
Figure 2: Excise Taxes in Republican vs. Democratic States



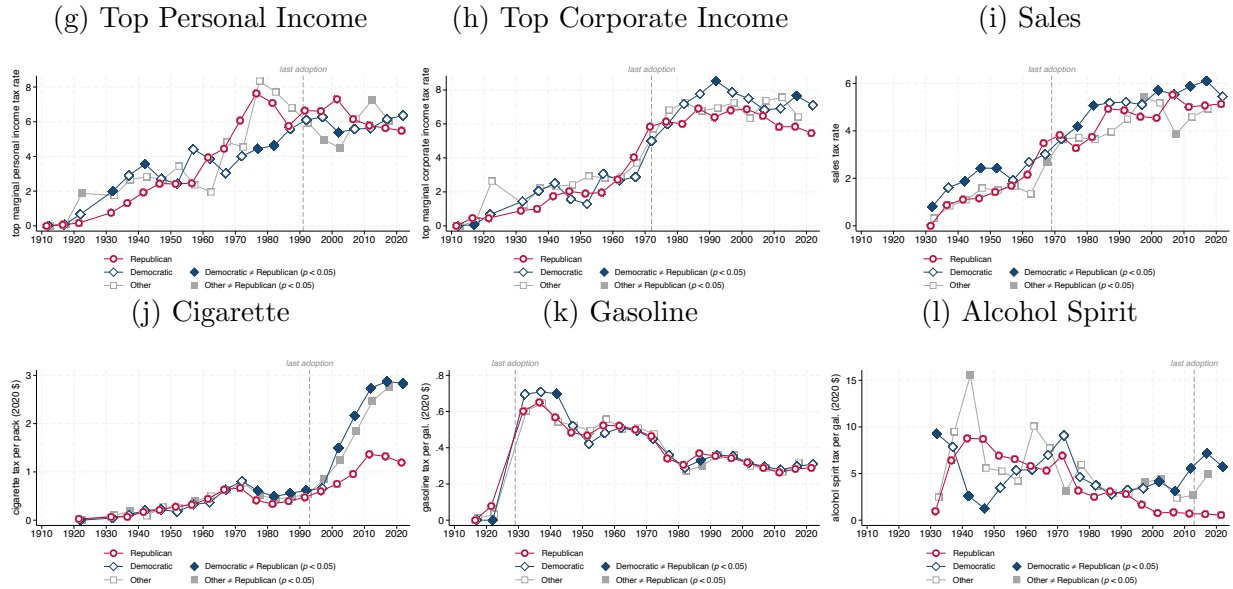
Notes: These figures show average tax rates and tax revenues in 5-year intervals among states that lean Republican (excl. Southern states), lean Democratic (excl. Southern states), and Southern states. For Democratic and Southern states, solid markers identify periods in which the mean is statistically different from the Republican mean at the 95% level. Number of observations in each group shown in Appendix Figure A.1. Tax revenues in Panel D are measured per capita as a percent of GDP per capita. We omit Alaska tax revenues as these are exceptionally volatile. State is considered Democratic- (Republican-) leaning if both state house and state senate have a Democratic (Republican) majority. Southern states are AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV. See Appendix D for alternative definitions of Democratic and Republican states.

Figure 3: Tax Rates in Politically Stable vs. Unstable States

Panel A: Stable States (0-2 Party Switches)



Panel B: Unstable States (5+ Party Switches)



Notes: The sample in Panel A is limited to states that switched majorities at most twice during 1910-2022, while states that switched majorities five or more times during the studied period are included in Panel B (see Figure A.1(b) for switches by state). These figures show average tax rates in 5-year intervals among states that lean Republican (excl. Southern states), states that lean Democratic (excl. Southern states), Southern states (Panel A only: AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV), and Other states (Panel B only). For Democratic, Southern, and Other states, solid markers identify periods in which the mean is statistically different from the Republican mean at the 95% level. State is considered Democratic- (Republican-) leaning if both state house and state senate have a Democratic (Republican) majority, and Other if neither party controls both chambers.

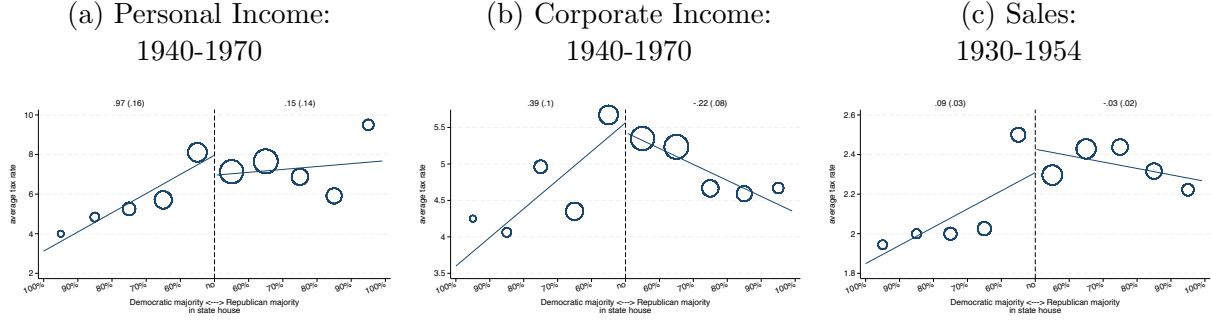
Table 1: Tax Changes in Stable vs. Unstable States
(Including Intensive & Extensive Margin Changes)

	Stable (0-2 Switches)	Neither (3-4 Switches)	Unstable (5+ Switches)	All States
<i>Top personal income tax</i>				
Share changing tax	.0757	.11	.103	.0913
Mean $ \Delta \text{ tax } $	1.85	1.91	1.28	1.67
Mean tax rate	4.16	4.79	3.79	4.18
<i>Top corporate income tax</i>				
Share changing tax	.0734	.0863	.101	.0848
Mean $ \Delta \text{ tax } $	1.29	1.41	1.28	1.31
Mean tax rate	4.06	5.13	3.97	4.26
<i>Sales tax</i>				
Share changing tax	.0535	.0478	.0661	.0561
Mean $ \Delta \text{ tax } $	1.08	.921	.953	1
Mean tax rate	3.98	5.15	4.3	4.24
<i>Cigarette tax (2020 \$)</i>				
Share changing tax	.0926	.124	.111	.105
Mean $ \Delta \text{ tax } $.286	.32	.314	.304
Mean tax rate	.495	.635	.61	.561
<i>Gasoline tax (2020 \$)</i>				
Share changing tax	.129	.182	.155	.148
Mean $ \Delta \text{ tax } $.0969	.0754	.0877	.0883
Mean tax rate	.408	.382	.368	.39
<i>Alcohol spirit tax (2020 \$)</i>				
Share changing tax	.0369	.0461	.026	.0355
Mean $ \Delta \text{ tax } $	6.05	4.8	7.09	5.93
Mean tax rate	5.74	6.04	3.91	5.24

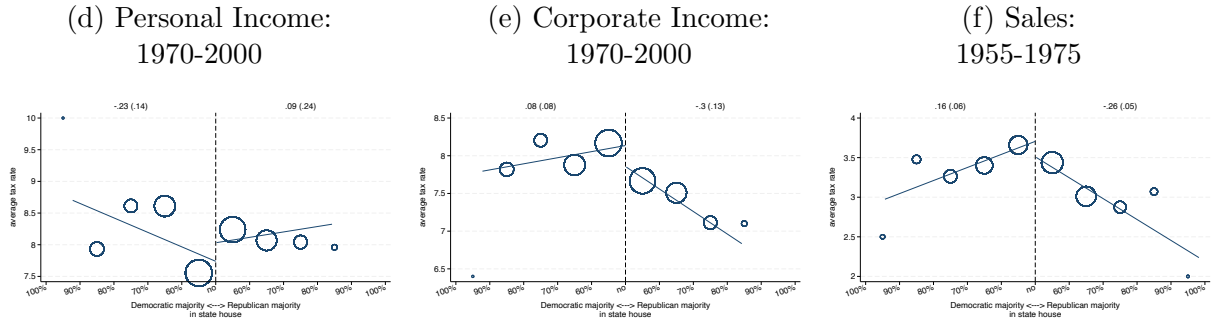
Notes: This table shows the share of states changing a tax in a given year, the average magnitude of tax changes, and average tax rates. These statistics are shown separately for states that switched majorities 0-2 times, 3-4 times, and five or more times during 1910-2022. Tax adoptions and cancellations are included in the tax change statistics.

Figure 4: Tax Rates And Strength of Majority in State House

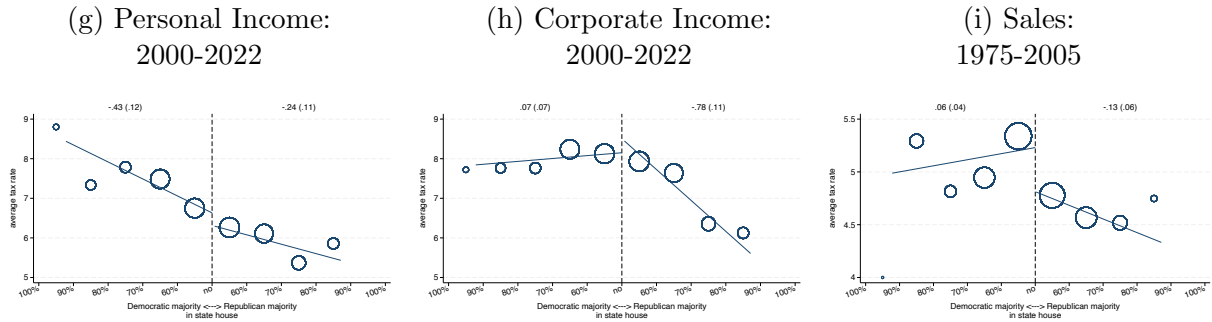
Panel A: Polarization in early years (Democrats feature lower rates than Republicans)



Panel B: No (or weak) polarization



Panel C: Polarization in recent years (Democrats feature higher rates than Republicans)



Notes: These figures show average tax rates (non-zero only) by the strength of the Democratic or Republican majority within the state house. We bin states into ten groups of Republican control, and then plot the average tax rate within each group (where markers are scaled by the number of observations in each bin). We also report the coefficient and standard error for a linear fit, separately for states with Democratic and Republican majorities. Southern states are excluded.

APPENDIX FOR ONLINE PUBLICATION

“Are U.S. State Tax Policies Increasingly Polarized?”

by Sarah Robinson and Alisa Tazhitdinova

A Political Data

We collected information on state legislative majorities and governor’s party affiliation from Wikipedia, between April 22 and May 2, 2024. The entries are occasionally updated; however, the vast majority of updates do not change the party in the majority, only the relative strength of the majority.

For state legislatures that include members of the Republican and Democratic parties, as well as other party affiliations (e.g., “Independent-Democrat” or “Silver Republican”), these other members are counted as “Other” and therefore are not included in the count of Republican/Democratic legislators. With the exception of the two states discussed next, the number of these members is very small and does not affect the calculation of the majority. The exceptions to these rules are Minnesota and Nebraska.

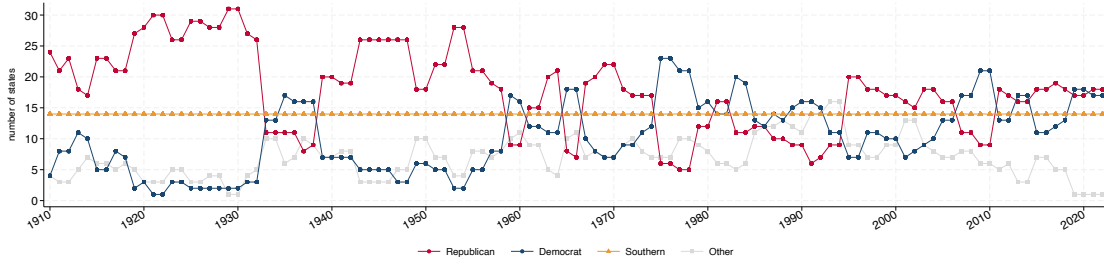
Between 1915 and 1973, the Minnesota Legislature was non-partisan. However, legislators still caucused as “conservatives” or “liberals,” with categories roughly equivalent to Republicans and Democrats. We assign majorities based on these categories. For the years 1915-1950, majorities do not feature exact counts of conservative/liberal legislators. For completeness, in these years the party with the majority was assigned 75% of the seats.

Similarly, the Nebraska legislature has been non-partisan since 1936. Furthermore, the state’s legislature is the only unicameral legislature among U.S. states. Nonetheless, approximate party affiliation can again be determined based on state party endorsements, and once again we use these to assign majorities. For the years 1910-1936, we obtain information on actual counts of conservative/liberal legislators from [Dubin \(2007\)](#). To match other states, we format the data *as if* Nebraska had a senate and a house, by assigning the same majority to each chamber.

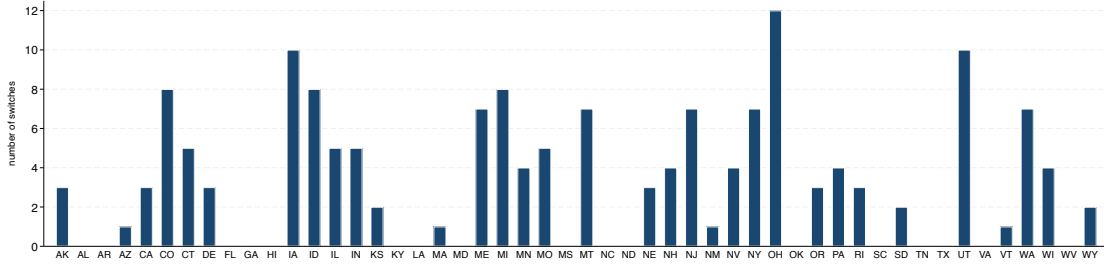
In cases where a governor left before their term was up and was replaced with a governor from the opposite political party, the party is recorded based on the governor who was in office for the majority of that year. Governor vacancies are assigned to the “Other” category.

Figure A.1: States by Political Party

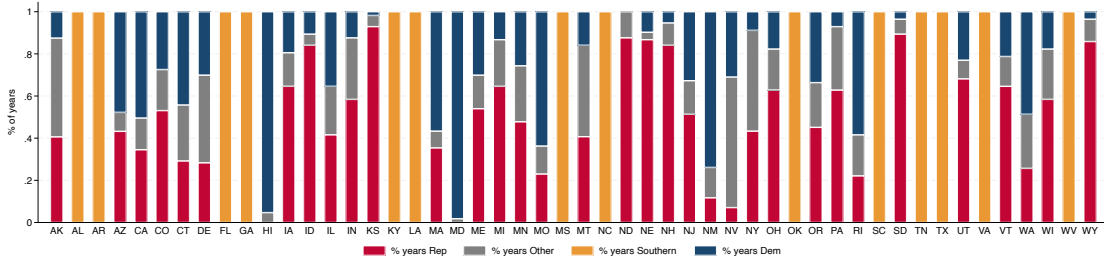
(a) Number of Observations



(b) Number of Republican \leftrightarrow Democrat Switches



(c) Party Composition for Each State



Notes: Figure (a) shows the number of states that are considered Republican, Democrat, or Southern in a given year, using our main definition of political party. A state is considered Republican (Democrat) if both state house and state senate have a Republican (Democratic) majority, and Southern for AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, or WV. Figure (b) shows, for each state, the number of switches from Republican to Democratic majority and vice versa (while at the same time disregarding “Other” episodes). Figure (c) shows, for each state, the proportion of years spent in each group.

B Tax Changes vs. Compositional Changes

In this section, we examine the extent to which polarization in tax outcomes between Republican and Democratic states is driven by changes in tax rates versus changes in the composition of the groups. In our main specification, states are considered Democratic-(Republican-) leaning if both the state house and state senate have a Democratic (Republican) majority. While this measure of political party provides a more stable assignment over time than the alternatives we consider, states can and do move from one group to another. As a result, divergence in tax outcomes between Republican and Democratic states could arise from either of two channels: actual changes in tax rates, or from states differentially sorting into parties without necessarily changing tax rates.

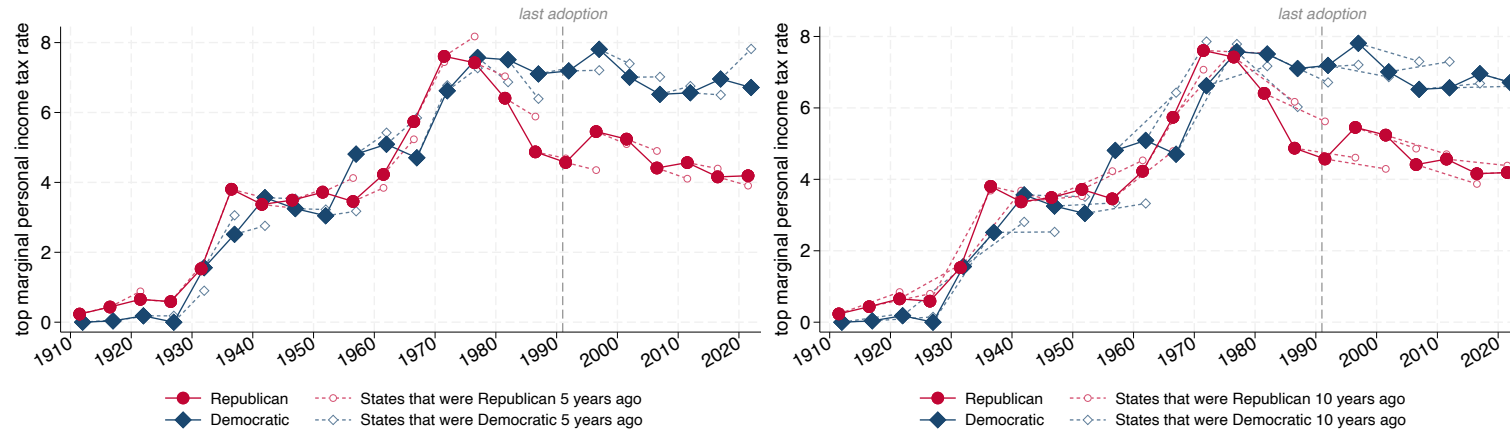
To assess the relative magnitude of each of these channels, we compare tax rates in states that are currently Democratic (or Republican) to tax rates in states that were Democratic (or Republican) 5 years ago, i.e., what the tax rates would be for that group if political party had remained fixed for 5 years. We do a similar analysis holding party fixed for 10 years and for 20 years. We include this analysis for personal income (Figure B.2), corporate income (B.3), and sales taxes (B.4), where the solid markers show the current party averages and the dashed lines and hollow markers show the fixed party counterfactual. If changes within a party over time were driven only by actual tax changes, with no shift in the composition of states, then the current party would be identical to this fixed party counterfactual (the solid and dashed lines will perfectly overlap). On the other hand, if changes were driven only by shifts in the composition of states, with no actual tax changes, then the fixed party counterfactual would be equal to that of the previous period (the dashed lines would be perfectly horizontal).

Figures B.2-B.4 show that both tax changes and compositional changes play an important role. The solid and dashed lines typically move in the same direction, demonstrating that the observed changes would be qualitatively similar even if party had been held fixed. However, we can also observe the sorting of states into parties, as changes in the fixed party counterfactual are often smaller in magnitude than the changes overall.

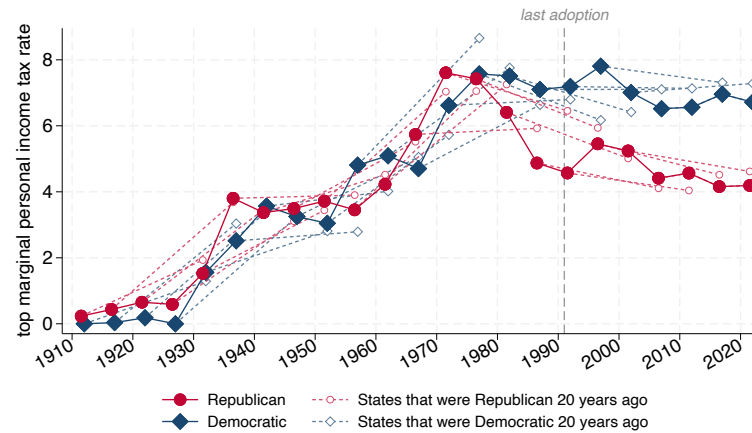
Figure B.2: Personal Income Tax Rate with Fixed Political Party

(a) 5 years

(b) 10 years

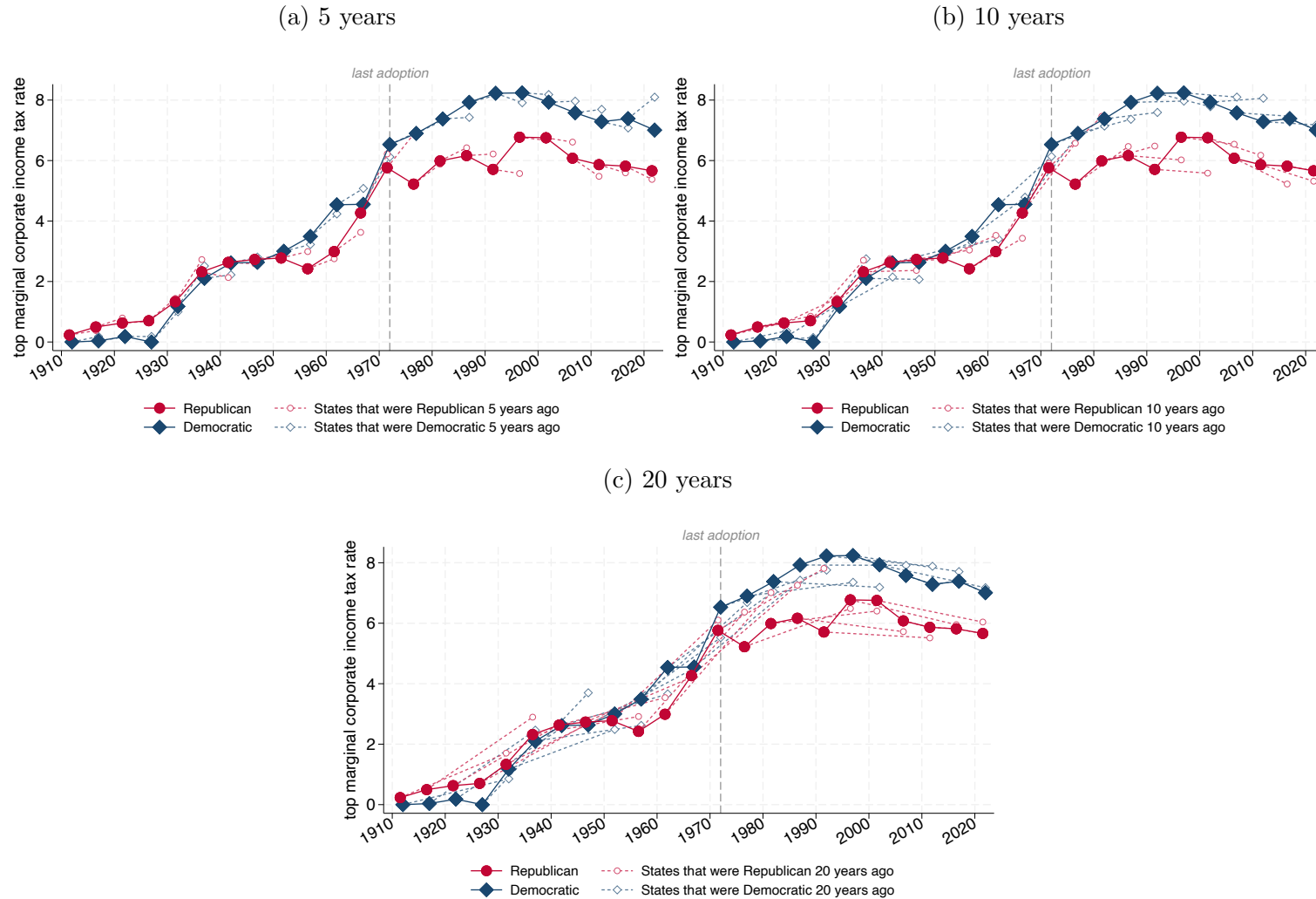


(c) 20 years



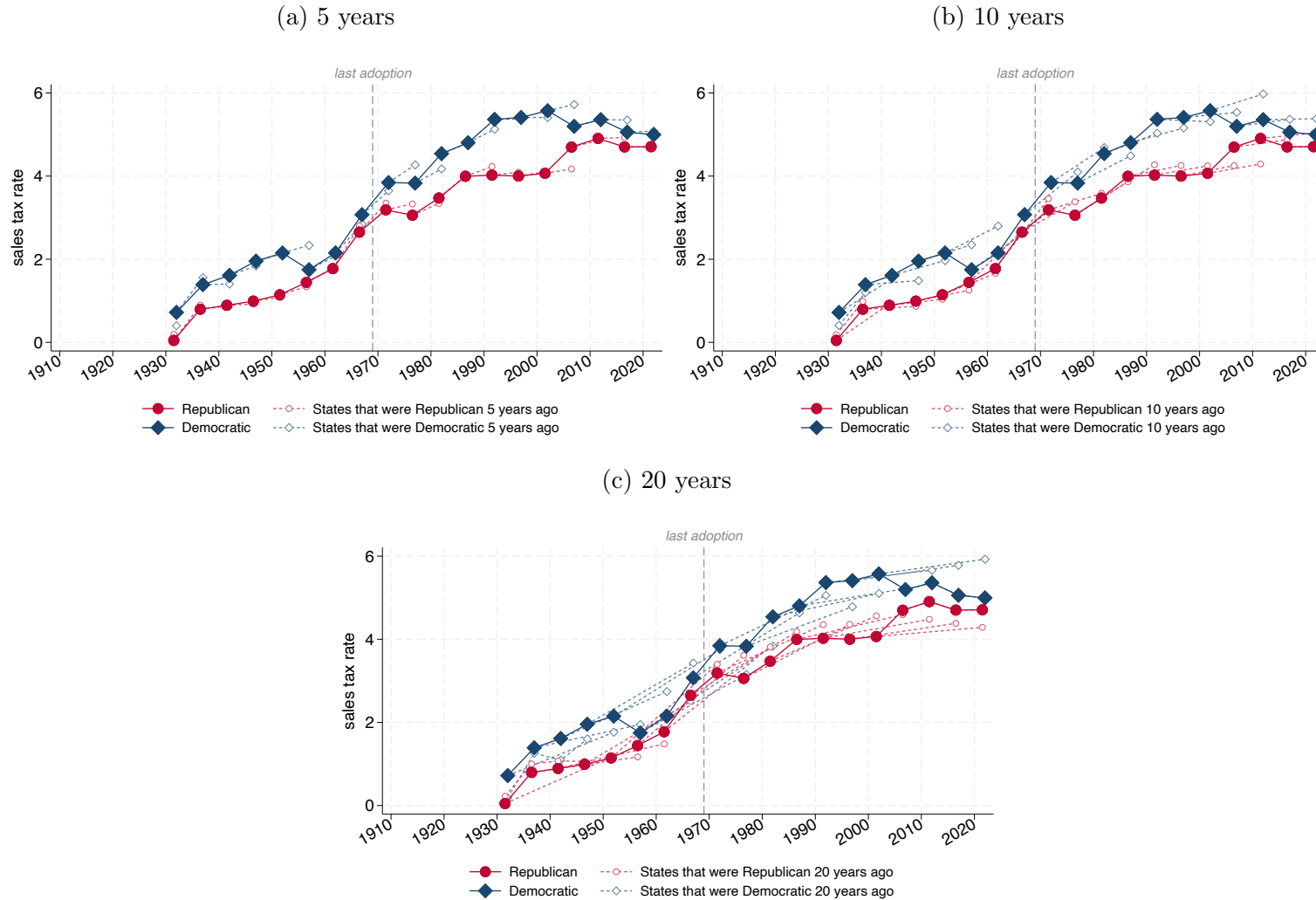
Notes: These figures show average top personal income taxes in states that lean Democratic or lean Republican, where each state is considered Democratic- (Republican-) leaning if both state and state senate have a Democratic (Republican) majority. In each figure, the solid markers show averages by the current year political party, identical to Figure 1(a). The hollow markers show what the average tax rates would be if state political parties remained the same as they were 5, 10, or 20 years ago. The group of Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV) does not change in composition and thus is excluded.

Figure B.3: Corporate Income Tax Rate Decomposition



Notes: These figures show average top corporate income taxes in states that lean Democratic or lean Republican, where each state is considered Democratic- (Republican-) leaning if both state and state senate have a Democratic (Republican) majority. In each figure, the solid markers show averages by the current year political party, identical to Figure 1(b). The hollow markers show what the average tax rates would be if state political parties remained the same as they were 5, 10, or 20 years ago. The group of Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV) does not change in composition and thus is excluded.

Figure B.4: Sales Tax Rate Decomposition



Notes: These figures show average sales taxes in states that lean Democratic or lean Republican, where each state is considered Democratic-(Republican-) leaning if both state and state senate have a Democratic (Republican) majority. In each figure, the solid markers show averages by the current year political party, identical to Figure 1(c). The hollow markers show what the average tax rates would be if state political parties remained the same as they were 5, 10, or 20 years ago. The group of Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV) does not change in composition and thus is excluded.

C Timing of Polarization

In this section we discuss how the timing of tax policy polarization relates to other documented forms of polarization, to federal tax policy, and to some of the political and economic events of the past century.

Political Polarization vs Policy Polarization. How does the timing of tax polarization relate to political polarization and polarization of tax-related speech? To answer this question, Figure C.5 plots the time series of the differences between Republican and Democratic taxes (right axis) against several measures of political polarization (left axis). We measure political polarization using the first dimension of DW-NOMINATE scores (Lewis et al., 2023), plotting the difference between the average in Democrat vs. Republican states. Second, we use the posterior estimates from Gentzkow et al. (2019) for all tax-related speech (i.e., the posterior that a neutral observer expects to assign to a speaker’s true party after hearing a single phrase). Both of these measures are based on state representatives in the U.S. Congress, and therefore do not directly relate to state tax policies. Third, we plot the policy liberalism index from Caughey and Warshaw (2016), derived from 148 distinct state policies.⁹ Finally, our tax outcome variables measure the difference in rates/revenues between Republican and Democrat states divided by the all-state average rate/revenue in that year, times 100%.

Figure C.5 shows that political polarization, measured by roll call votes and speech patterns in U.S. Congress, has increased sharply beginning in 1990. However, despite this ideological gap, state tax policies do not show the same pattern. Intuitively, one would expect political polarization to precede or coincide with tax policy polarization. But to the extent that tax policy has diverged, it appears to mostly precede political polarization – divergence in the average personal income tax rate begins in the 1980s, and divergence in income tax revenues begins even earlier in the 1970s. Somewhat the opposite is observed for

⁹To match the DW-NOMINATE scales, we divide the Democrat-Republican difference of the Policy Liberalism index by 4, while for speech posteriors, we plot the overall average (including Republican and Democrat states) of $(posterior - 0.5) * 10$. Consequently, the absolute value of these indices are meaningless, and the goal of this exercise is to compare the *timing* of changes.

corporate income taxes, which show a recent divergence of revenues but a flat tax rate gap. Overall, the time pattern for income taxes aligns better with the policy liberalization index, rather than roll call votes or speech patterns. This index accounts for a variety of economic and social policies, and shows that after a flat trend between 1935 and 1960, state policies gradually became increasingly liberal. Meanwhile, sales taxes exhibit convergence across a variety of tax measures. Only cigarette taxes show a pattern of divergence that is consistent with roll call vote and speech polarization.

If political polarization cannot explain tax polarization, what other factors may explain the observed patterns? We turn to federal policy next, and then discuss other major political and economic changes that occurred during the last 113 years.

Federal Policies and State Tax Policies. [Robinson and Tazhitdinova \(2025\)](#) show that while federal tax policies generally follow a similar trend as state tax policies, state tax changes do not appear to coincide with federal tax changes of the corresponding type. Nonetheless, it remains possible that states respond differently to federal tax changes depending on whether the state legislature supports or opposes the federal tax changes.

To start, one can compare the top personal income tax time series in [Figure 1](#) to the major federal tax reforms. Top federal rates were changed numerous times, with particularly notable increases in 1917, 1932, 1936, and 1993, and notable decreases in 1922, 1925, 1964, 1982, and 1987. The 1917 and 1993 federal increases did not coincide with major changes at the state level, but the 1932 and 1936 increases coincided with a large number of tax adoptions and generally rising rates at the state level. For tax decreases, the 1922, 1925, and 1964 federal decreases do not coincide with changes at the state level, if anything, the rates grew steadily during the 1960s while federal rates dropped. However, the 1982 and 1987 tax decreases see a corresponding large decrease in top personal rates in Republican states. Overall, such visual analysis suggests that while some federal changes may coincide and thus potentially trigger state tax changes, the relationship between federal changes and state tax changes is not obviously strong.

Appendix Tables C.1 and C.2 investigate this possibility systematically, by regressing the indicator of a state-level tax increase/decrease on indicators of federal rate increases/decreases. For Democratic states, we see a positive relationship between personal income tax decreases and federal income tax decreases in column (5), but no such effect for income tax increases and for corporate income taxes. For Republican states, we see a negative relationship between state increases and federal increases for personal income taxes in column (3) and a negative relationship between state decreases and federal decreases for corporate income taxes in column (7). Table C.1 further shows that for most tax changes, state legislators’ attitude towards the federal tax changes matters, which we proxy by whether the majority in the state legislature matches the party of the president. Democratic legislatures are more likely and Republicans are less likely to pass income/corporate tax increases when they are “upset” about the outcomes of the presidential elections. Response to federal tax increases and decreases is of different signs depending on whether the legislature is happy or upset about the presidential election outcomes. We conclude that the relationship between federal and state tax policies is highly nuanced to provide a compelling explanation for tax policy polarization.

Beyond tax policies, during the studied period, other federal policies had major effects on state tax policies. For example, emergency relief programs such as the Reconstruction Finance Corporation (1930-1932) and the Federal Emergency Relief Administration (1933-1935), as well as expansion of Medicaid, SNAP, AFDC/TANF (1975-1972) and subsequent changes to these programs’ generosity all forced states to search for new revenue sources (Baicker et al., 2012). Similarly, expenditures increased, and consequently revenues increased as a result of the Elementary and Secondary Education and the Higher Education Acts (passed in 1965), as well as the school finance equalization programs (1972-1989) (Hoxby, 2001). The timing of all of these federally-driven revenue shocks coincides with periods of *minimal tax rate polarization*, suggesting that tax policy polarization episodes primarily occurred during periods of relative revenue stability.

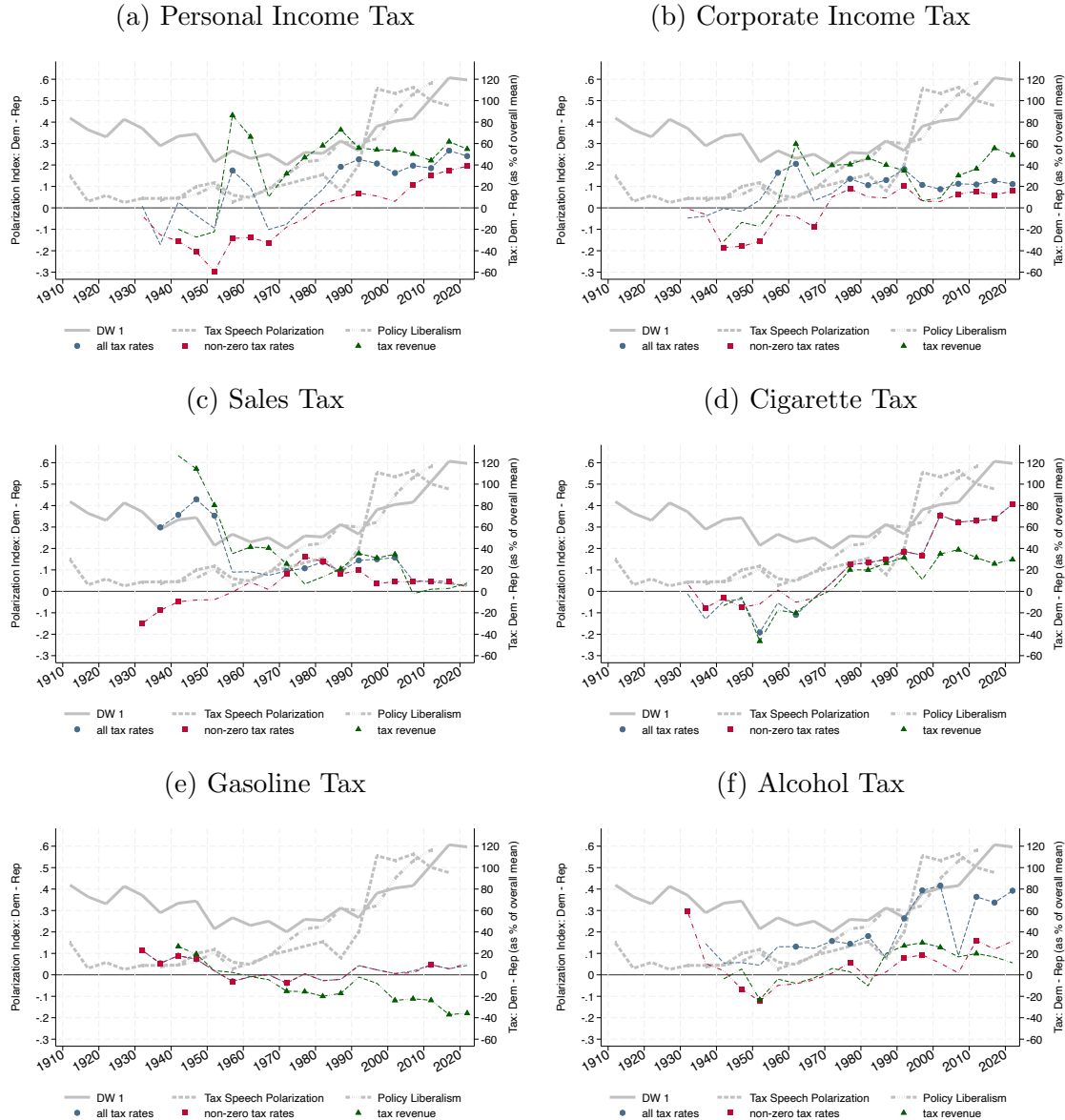
Political, Institutional and Economic Factors. The analysis in this paper is descriptive, consequently, we cannot assign the differences in tax policies documented in Figures 1-2 to state party control. Thus it is possible that the documented differences are driven by economic or institutional conditions, or other economic and political events. While providing a causal analysis is outside the scope of this paper, we briefly discuss some possibilities in this section.

Appendix Figure C.6 plots the time series of economic and institutional conditions in Democratic and Republican states over time, following the same exposition style as in Figures 1-2. Figure C.6 demonstrates that while Democratic states are richer, on average, they experienced similar economic growth as Republican states. Consequently, the differences in tax policies are unlikely to be attributed to dramatically different economic conditions.

Two political events are worth mentioning: the Voting Rights Act of 1965 generated a dramatic increase in black voter registration across the South (Cascio and Washington, 2014; Ang, 2019). Meanwhile, between 1940 and 1970 four million black Americans left the U.S. South and settled in urban areas in the North and West of the United States (Boustan, 2010; Derenoncourt, 2022). Both of these events may have affected the nature of state tax policies implemented during those time periods.

Finally, Canen et al. (2020, 2021) document a changing level of party control in the U.S. Congress over time. They show that the lowest point of party discipline occurred around the second half of the 1960s and early 1970s, while a sharp increase in party discipline happened after the mid-1990s. Unfortunately, it remains unknown whether party discipline at the federal level translates to party discipline at the state level.

Figure C.5: Democratic-Republican Differences in Tax Policy, Ideology, and More



Notes: These figures show differences in average tax rates and tax revenues in 5-year intervals between Democratic and Republican states, alongside differences in measures of political ideology. State is considered Democratic- (Republican-) leaning if both state house and state senate have a Democratic (Republican) majority. The right y-axis, for tax outcomes, measures the difference in means divided by the mean value across all parties. The left y-axis measures the difference in means for the DW-NOMINATE Dimension 1 score for each state's U.S. Senators and Representatives, and for the policy idealism index from [Caughey and Warshaw \(2016\)](#), the latter divided by 4 for comparable scale. In addition, the figure includes the posterior estimates from [Gentzkow et al. \(2019\)](#) for tax-related speech. Here we plot the overall average (for both Republican and Democratic states), after subtracting 0.5 and multiplying by 10, again for comparable scale. These posterior estimates measure how likely a neutral observer expects to guess a speaker's true party after hearing a single phrase. Periods in which the differences in means are statistically different from zero at the 95% level are shown with a solid marker.

Table C.1: Effect of Federal Policy and Elections on State Tax Policy

	State Tax Increases				State Tax Decreases			
	Democratic States		Republican States		Democratic States		Republican States	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Top Personal Income Tax Increases/Decreases								
fed tax increase	0.019 (0.047)	-0.031 (0.035)	-0.061*** (0.022)	0.048 (0.110)	0.017 (0.036)	0.009 (0.043)	0.013 (0.025)	-0.067*** (0.018)
fed tax decrease	-0.011 (0.030)	-0.051*** (0.013)	-0.014 (0.024)	-0.018 (0.033)	0.117** (0.047)	-0.048** (0.018)	0.008 (0.028)	0.038 (0.038)
legislature upset		0.043** (0.021)		-0.044** (0.017)		-0.021 (0.022)		0.019 (0.019)
fed increase x leg upset		0.264** (0.126)		-0.110 (0.105)		0.010 (0.084)		0.084** (0.038)
fed decrease x leg upset		0.029 (0.041)		-0.044 (0.036)		0.198*** (0.052)		-0.111** (0.042)
Adj	0.002	0.019	0.035	0.044	0.035	0.040	0.050	0.051
R-squared	890	890	1000	1000	890	890	1000	1000
Panel B: Top Corporate Income Tax Increases/Decreases								
fed tax increase	-0.006 (0.036)	-0.032 (0.039)	-0.022 (0.024)	-0.017 (0.043)	0.022 (0.029)	0.025 (0.035)	-0.020 (0.021)	-0.034** (0.015)
fed tax decrease	0.012 (0.030)	-0.008 (0.034)	0.040 (0.026)	0.050 (0.035)	0.012 (0.022)	-0.029** (0.013)	-0.041** (0.016)	-0.013 (0.018)
legislature upset		0.043** (0.016)		-0.042* (0.023)		-0.010 (0.013)		0.023 (0.019)
fed increase x leg upset		0.317 (0.209)		0.001 (0.043)		-0.057 (0.043)		0.017 (0.035)
fed decrease x leg upset		0.019 (0.057)		-0.046 (0.052)		0.060* (0.032)		-0.073** (0.029)
Adj	0.008	0.025	0.031	0.038	0.042	0.042	0.053	0.053
R-squared	934	934	1104	1104	934	934	1104	1104

Notes: This table presents the results of regressing the indicator of a tax increase (columns (1)-(4)) or the indicator of a tax decrease (columns (5)-(8)) in Democratic states (columns (1)-(2), (5)-(6)) or in Republican states (columns (3)-(4), (7)-(8)) on indicators of a corresponding federal tax increase, federal tax decrease, an indicator that state legislative majority does not match the party of the president (“legislature upset”), and corresponding interaction terms, and state fixed effects. These OLS regressions are estimated separately for top personal income tax changes (Panel A), and top corporate income tax changes (Panel B). Standard errors are clustered at the state level.

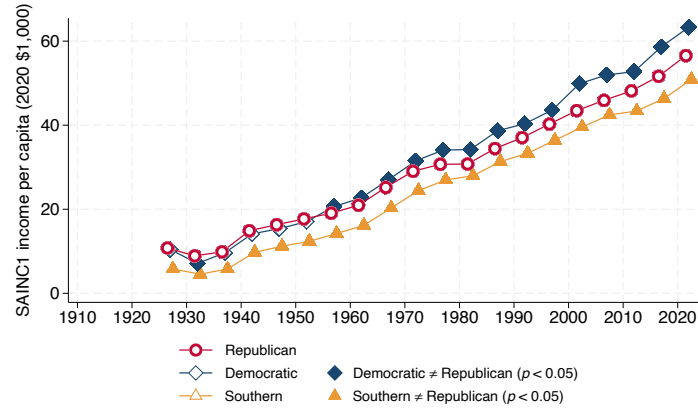
Table C.2: Effect of Federal Policy and Elections on State Tax Policy

	State Tax Increases				State Tax Decreases			
	Democratic States		Republican States		Democratic States		Republican States	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Cigarette Tax Changes								
fed tax increase	0.158*** (0.047)	0.142** (0.058)	0.003 (0.027)	0.201** (0.083)				
legislature upset		0.048** (0.019)		-0.042** (0.018)				
fed increase x leg upset		0.048 (0.090)		-0.271*** (0.090)				
Adj	0.046	0.049	0.005	0.024				
R-squared	923	923	1247	1247				
Panel B: Gasoline Tax Changes								
fed tax increase	0.135*** (0.044)	0.118* (0.059)	0.032 (0.036)	0.032 (0.064)				
legislature upset		0.086*** (0.027)		-0.090*** (0.017)				
fed increase x leg upset		0.010 (0.073)		-0.000 (0.076)				
Adj	0.064	0.075	0.006	0.022				
R-squared	1073	1073	1417	1417				
Panel C: Alcohol Spirit Tax Changes								
fed tax increase	0.019 (0.033)	0.035 (0.044)	-0.070*** (0.024)	-0.071*** (0.019)				
legislature upset		0.005 (0.016)		-0.018 (0.022)				
fed increase x leg upset		-0.035 (0.069)		0.007 (0.038)				
Adj	-0.006	-0.008	0.010	0.008				
R-squared	771	771	750	750				

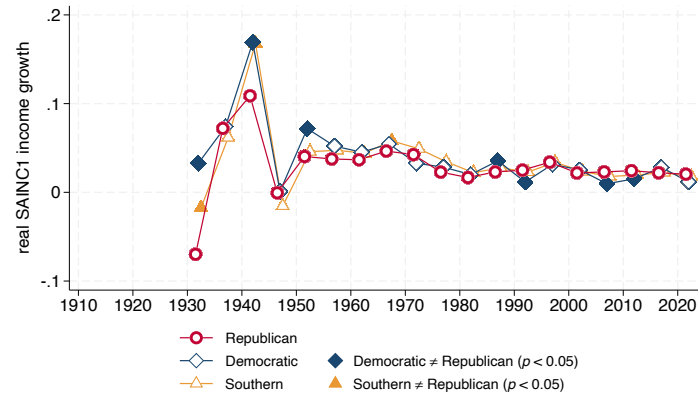
Notes: This table presents the results of regressing the indicator of a tax increase (columns (1)-(4)) in Democratic states (columns (1)-(2)) or in Republican states (columns (3)-(4)) on indicators of a corresponding federal tax increase, federal tax decrease, an indicator that the state legislative majority does not match the party of the president (“legislature upset”), and corresponding interaction terms, and state fixed effects. These OLS regressions are estimated separately for cigarette tax changes (Panel A), gasoline tax changes (Panel B), and alcohol spirit tax changes (Panel C). Tax decreases are omitted as these are very rare for excise taxes. Standard errors are clustered at the state level.

Figure C.6: Economic Conditions

(a) SAINC1 per capita



(b) SAINC1 real growth



Notes: These figures show average real personal income (SAINC1) per capita and real personal income growth in 5-year intervals among states that lean Republican (excl. Southern states), lean Democratic (excl. Southern states), and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic- (Republican-) leaning if both state house and state senate have a Democratic (Republican) majority. For Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown.

D Alternative Definitions of Republican and Democratic States

In this section, we show our main results using alternative methods for dividing states into Democratic- vs. Republican-leaning. We use the following definitions:

- (a) both the state house and the state senate have a Democratic/Republican majority (our preferred measure)
- (b) governor is Democratic/Republican and both the state house and the state senate have a Democratic/Republican majority
- (c) mean Shor-McCarty score among state senate majority and state house majority are $+/- 0$
- (d) mean DW-NOMINATE Dimension 1 scores are $+/- 0$ for both U.S. Senators and Representatives
- (e) mean DW-NOMINATE Dimension 2 scores are $+/- 0$ for both U.S. Senators and Representatives

As in the main analysis, we continue to consider Southern states separately, such that the following states are always excluded from the Republican and Democratic averages: AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV. We remove this restriction in another alternative definition:

- (f) both the state house and the state senate have a Democratic/Republican majority as in (a), but including Southern states

Definitions (c), (d), and (e) incorporate measures of legislators' political ideology. In particular, we use DW-NOMINATE scores for U.S. congressmen ([Lewis et al., 2023](#)) and ideological scores developed by [Shor and McCarty \(2011\)](#) for state congressmen. DW-NOMINATE scores, developed by Keith T. Poole and Howard Rosenthal, use votes in Congress to place the ideology of political actors along two numerical dimensions (where the first tends to

correspond to economic matters and the second to social issues). [Shor and McCarty \(2011\)](#) extend the methodology to state legislators.

D.1 Tax Rates Using Alternative Definitions

Figure D.7: Top Personal Income Tax in Republican vs. Democratic States

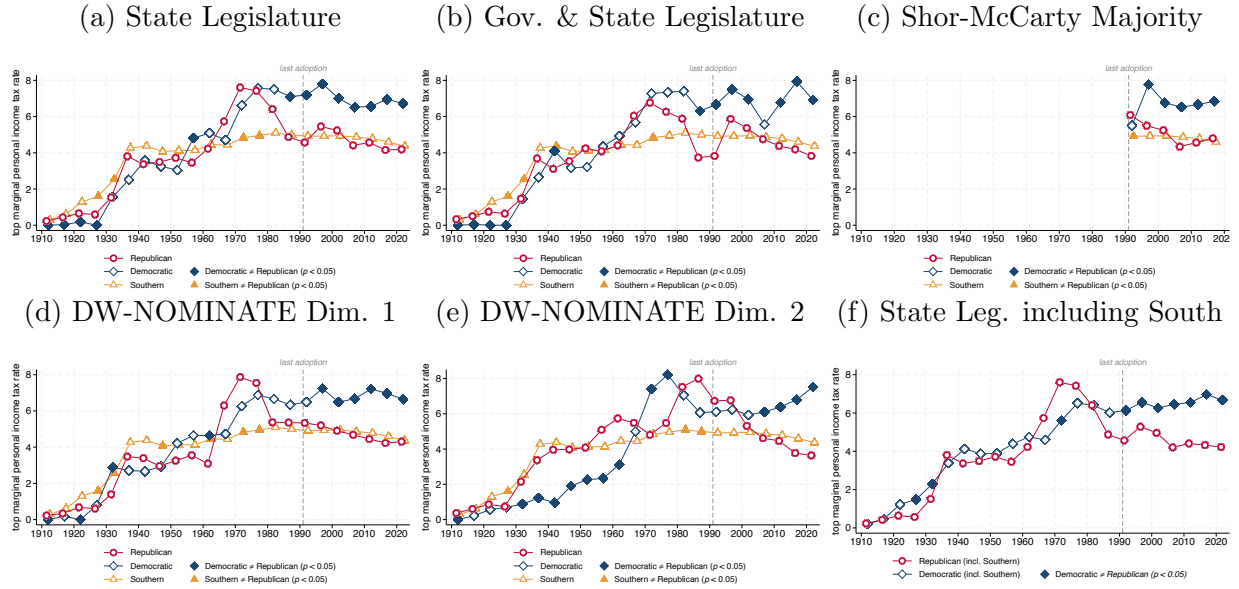
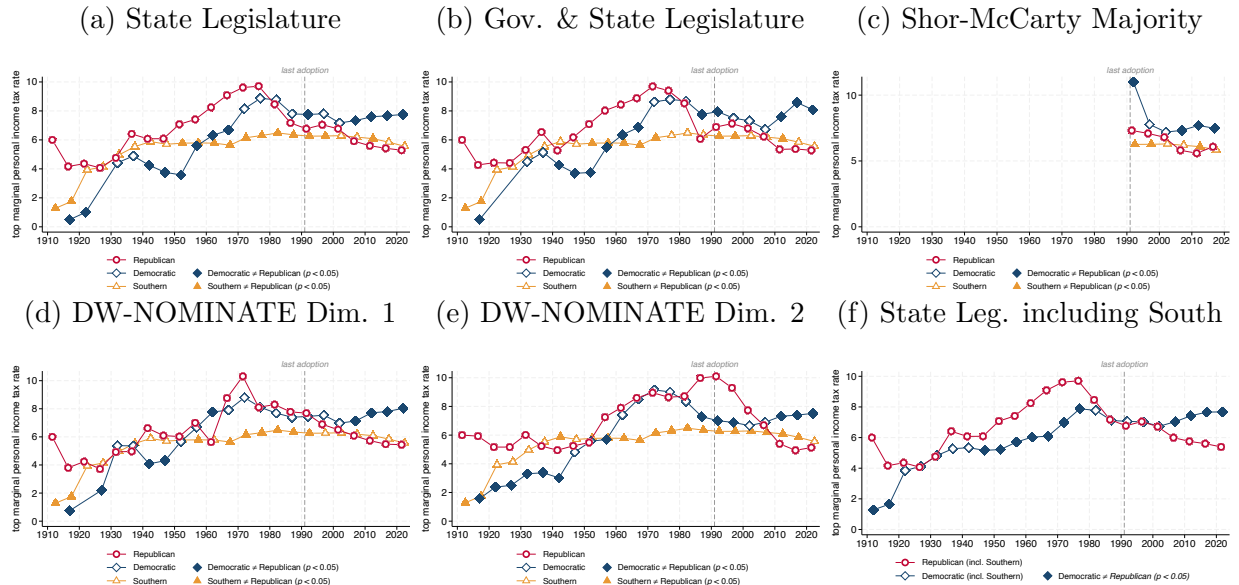


Figure D.8: Top Personal Income Tax (Only Non-Zero Rates Included)



Notes: These figures show average top personal income tax rates (overall in D.7 and non-zero only in D.8) in states that lean Republican, lean Democratic, and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic/Republican-leaning if (a) both state house and state senate have Democratic/Republican majority (our preferred measure), (b) governor is Democratic/Republican and both state house and state senate have Democratic/Republican majority, (c) mean Shor-McCarty score among state senate majority and state house majority are ± 0 , (d) mean DW-NOMINATE Dimension 1 scores or (e) Dimension 2 scores are ± 0 for both U.S. Senators and Representatives. In panel (f), Southern states are included as Democratic/Republican according to our preferred measure (both state house and state senate have Democratic/Republican majority), rather than shown separately. Throughout, for Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown.

Figure D.9: Top Corporate Income Tax in Republican vs. Democratic States

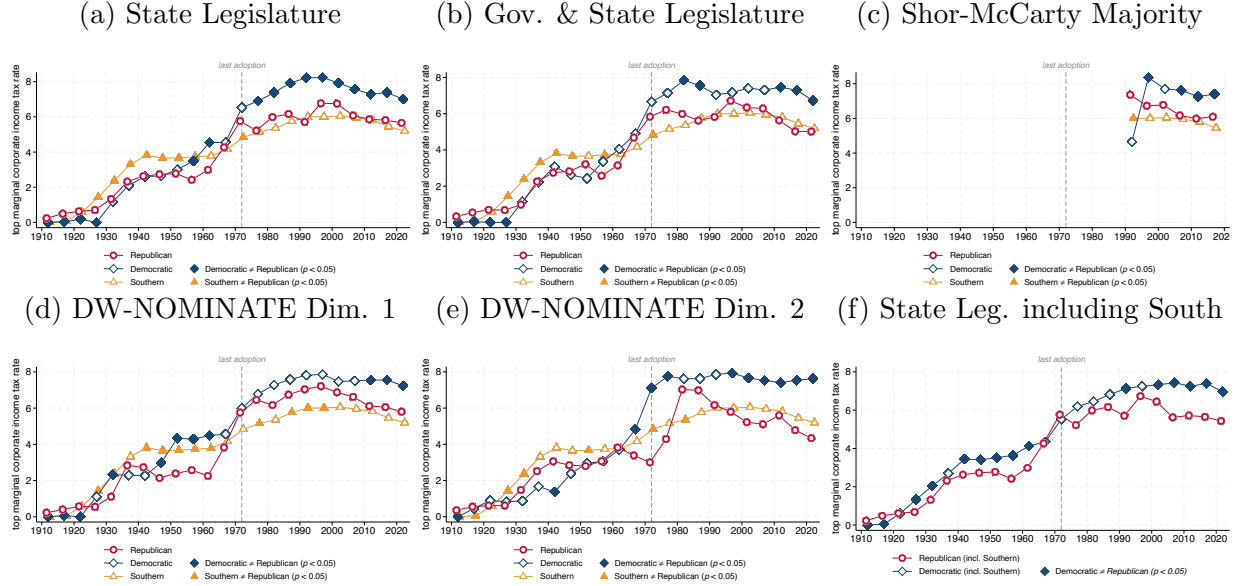
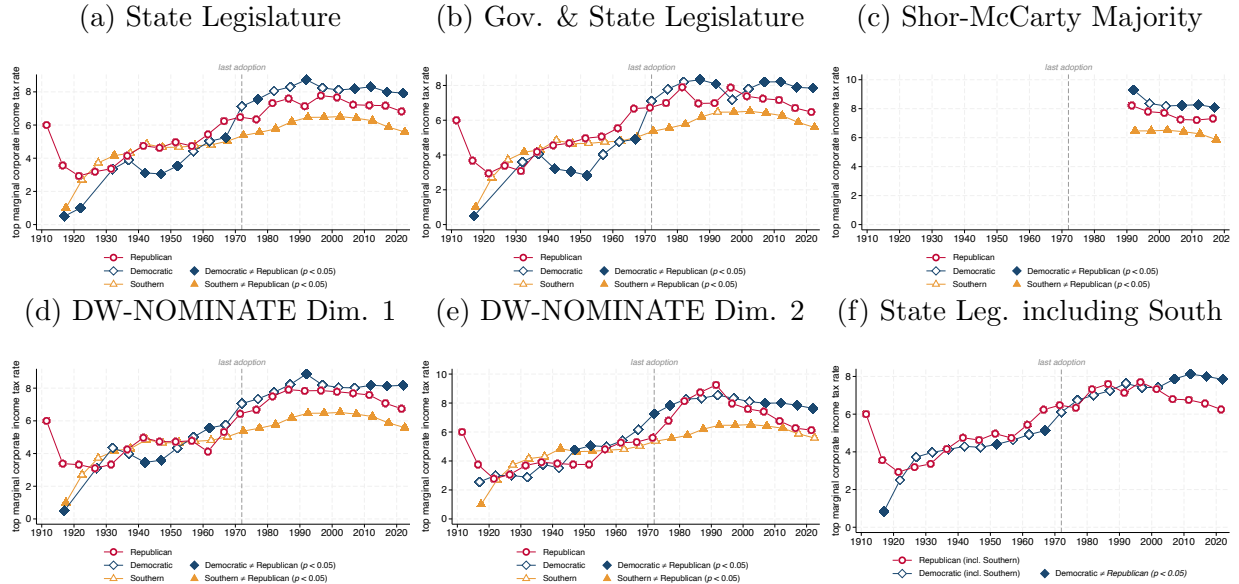


Figure D.10: Top Corporate Income Tax (Only Non-Zero Rates Included)



Notes: These figures show average top corporate income tax rates (overall in D.9 and non-zero only in D.10) in states that lean Republican, lean Democratic, and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic/Republican-leaning if (a) both state house and state senate have Democratic/Republican majority (our preferred measure), (b) governor is Democratic/Republican and both state house and state senate have Democratic/Republican majority, (c) mean Shor-McCarty score among state senate majority and state house majority are ± 0 , (d) mean DW-NOMINATE Dimension 1 scores or (e) Dimension 2 scores are ± 0 for both U.S. Senators and Representatives. In panel (f), Southern states are included as Democratic/Republican according to our preferred measure (both state house and state senate have Democratic/Republican majority), rather than shown separately. Throughout, for Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown.

Figure D.11: Sales Tax in Republican vs. Democratic States

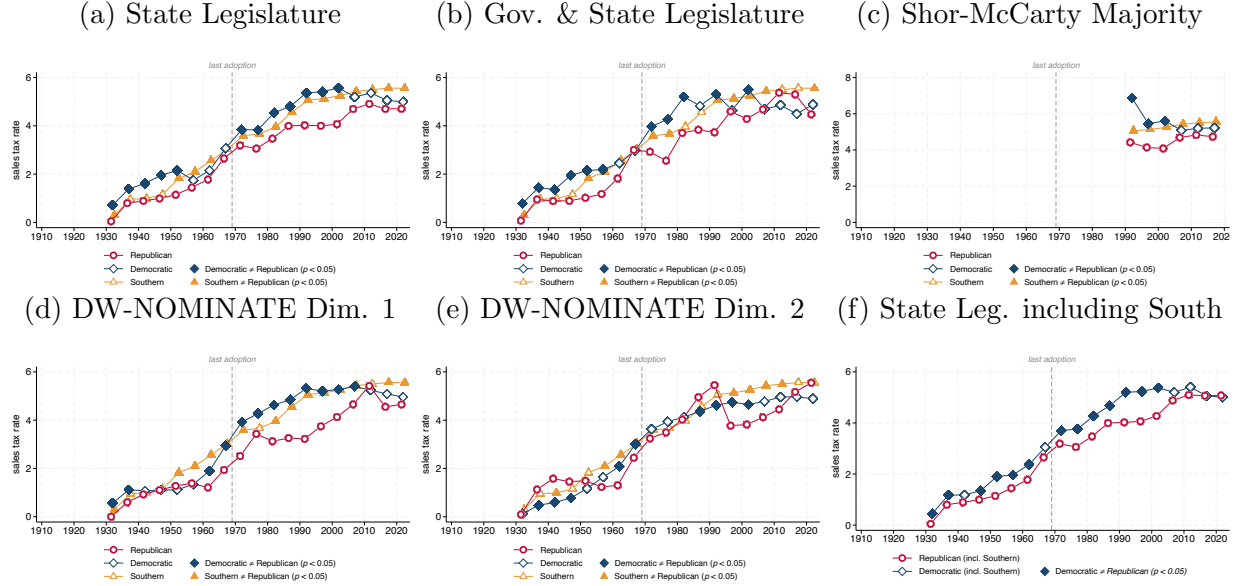
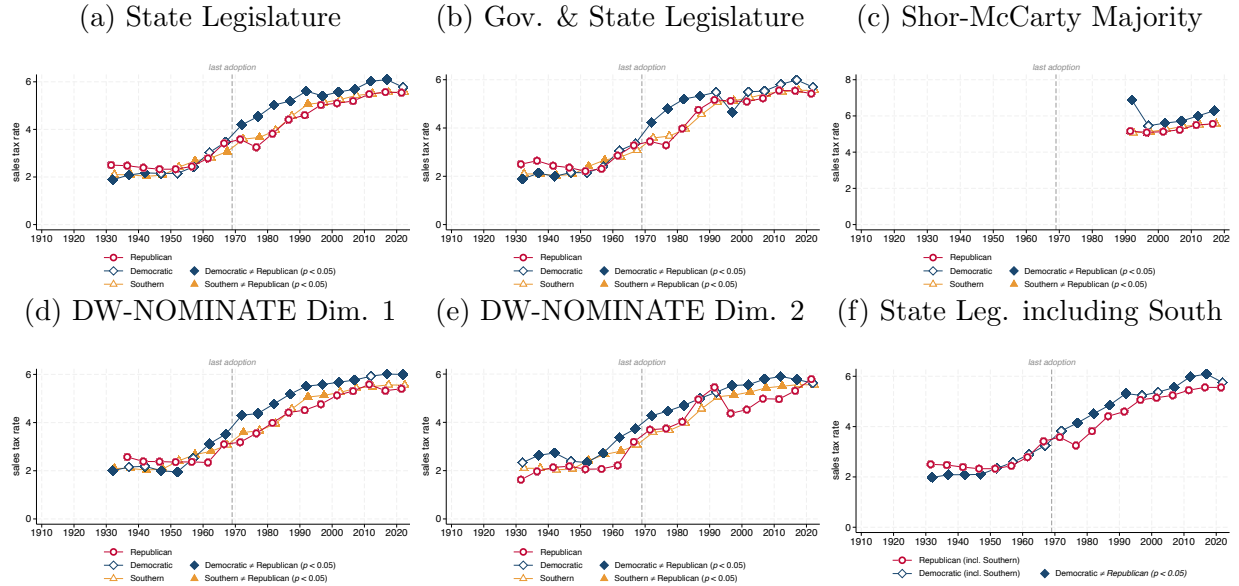


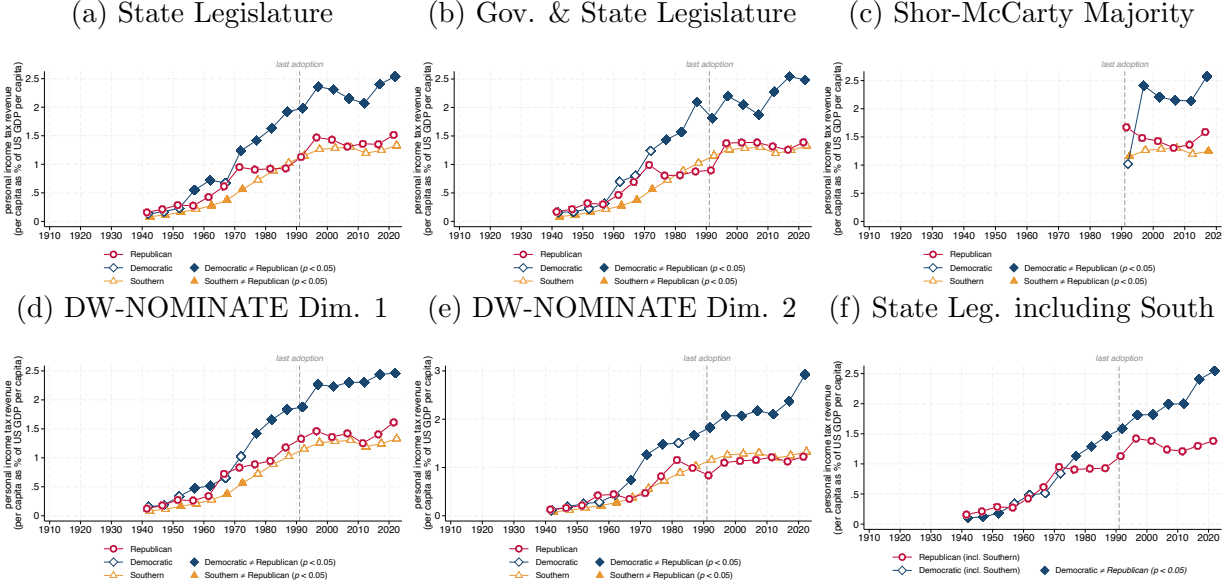
Figure D.12: Sales Tax (Only Non-Zero Rates Included)



Notes: These figures show average sales tax rates (overall in D.11 and non-zero only in D.12) in states that lean Republican, lean Democratic, and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic/Republican-leaning if (a) both state house and state senate have Democratic/Republican majority (our preferred measure), (b) governor is Democratic/Republican and both state house and state senate have Democratic/Republican majority, (c) mean Shor-McCarty score among state senate majority and state house majority are ± 0 , (d) mean DW-NOMINATE Dimension 1 scores or (e) Dimension 2 scores are ± 0 for both U.S. Senators and Representatives. In panel (f), Southern states are included as Democratic/Republican according to our preferred measure (both state house and state senate have Democratic/Republican majority), rather than shown separately. Throughout, for Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown.

D.2 Revenues Using Alternative Definitions

Figure D.13: Personal Income Tax Revenue in Republican vs. Democratic States



Notes: These figures show average personal income tax revenues, measured per capita as a percent of US GDP per capita, in states that lean Republican, lean Democratic, and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic/Republican-leaning if (a) both state house and state senate have Democratic/Republican majority (our preferred measure), (b) governor is Democratic/Republican and both state house and state senate have Democratic/Republican majority, (c) mean Shor-McCarty score among state senate majority and state house majority are ± 0 , (d) mean DW-NOMINATE Dimension 1 scores or (e) Dimension 2 scores are ± 0 for both U.S. Senators and Representatives. In panel (f), Southern states are included as Democratic/Republican according to our preferred measure (both state house and state senate have Democratic/Republican majority), rather than shown separately. Throughout, for Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown. We omit Alaska revenues due to exceptional volatility.

Figure D.14: Corporate Income Tax Revenue in Republican vs. Democratic States

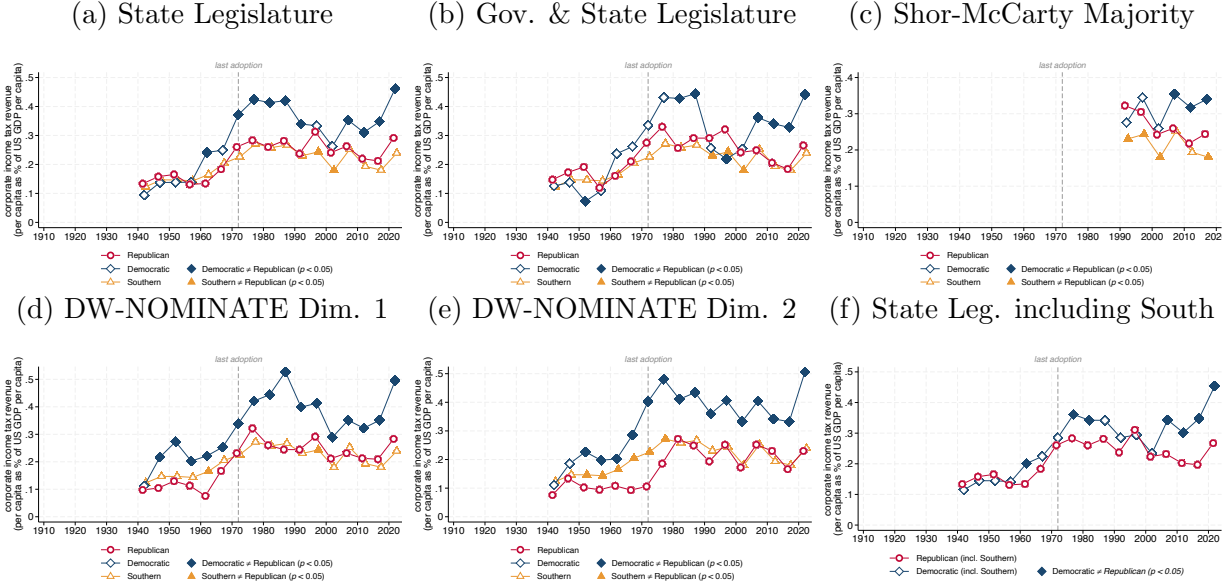
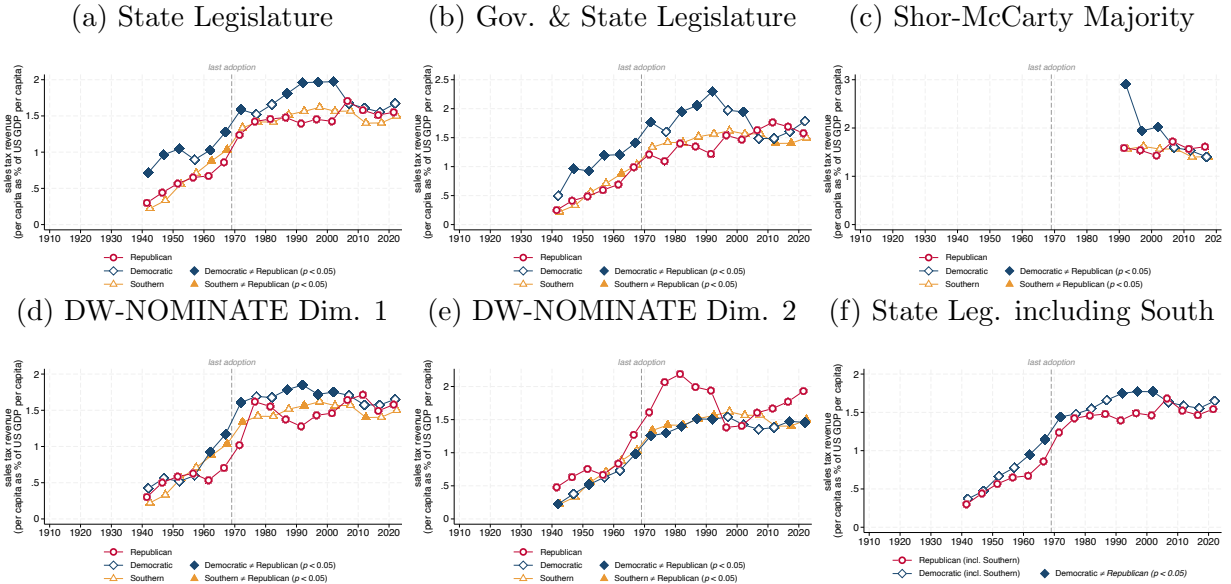


Figure D.15: Sales Tax Revenue in Republican vs. Democratic States



Notes: These figures show average corporate income tax revenues (D.14) and sales tax revenues (D.15), measured per capita as a percent of US GDP per capita, in states that lean Republican, lean Democratic, and Southern states (AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV). State is considered Democratic/Republican-leaning if (a) both state house and state senate have Democratic/Republican majority (our preferred measure), (b) governor is Democratic/Republican and both state house and state senate have Democratic/Republican majority, (c) mean Shor-McCarty score among state senate majority and state house majority are ± 0 , (d) mean DW-NOMINATE Dimension 1 scores or (e) Dimension 2 scores are ± 0 for both U.S. Senators and Representatives. In panel (f), Southern states are included as Democratic/Republican according to our preferred measure (both state house and state senate have Democratic/Republican majority), rather than shown separately. Throughout, for Democratic and Southern states, whether the mean is statistically different from the Republican mean at the 95% level is also shown. We omit Alaska revenues due to exceptional volatility.