The Role of State & National Institutional Evaluations in Fostering Collective Accountability Across the U.S. States[*]

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Abstract

Theories of collective accountability in American elections center on the ability, and willingness, of voters to hold legislators accountable for the job performance of the president and his party in Congress. While this work finds that presidential and congressional approval finds that legislators pay an electoral penalty for low institutional approval ratings under their party's control, little is none whether this form of collective accountability translates to the state legislative context. We argue that collective accountability in state legislative elections follows a two-tiered approach, with state legislators being held accountable for national and state policymaking institutions. Using new state-level measures of institutional approval for national and state institutions, along with voter-level data from the 2007-2020 Cooperative Election Study, we find that presidential approval is the principal growing motivator of state legislative partisan choice with other policymaking institutions playing a minimal role, at best. These findings suggest that the electoral fortune of state legislative candidates, and state parties, are largely and increasingly determined by national forces outside of the purview of state-level policymaking institutions.

Key words: collective accountability, state politics, presidential approval, gubernatorial approval, nationalized elections

I'm looking at one of these campaigns where I hear Republicans try to tie this guy running for State House to Obama. . . I think that's disingenuous when I hear that, I just think what are you talking about here, apples and oranges totally.

-U.S. Sen. Mark Pryor (D-AR), 9/25/2012[1]

On the heels of another challenging election cycle for Arkansas Democrats, U.S. Senator Mark Pryor (D-AR) lamented that state legislative elections were taking on an increasingly nationalized tone. Following a challenging 2010 election cycle, which saw Arkansas Republicans double their ranks in the State House from 28 to 46 and go from 8 to 15 seats in the State Senate, Arkansas Democrats braced for another challenging election cycle with statewide unpopular Democratic President Barack Obama at the top of the ticket in the 2012 elections. Aside from their state legislative loses, Arkansas Democrats also suffered substantial loses in statewide races for constitutional offices and in the congressional races during the 2010 election cycles. Punctuated by the unseating of Sen. Blanche Lincoln (D-AR) by over twenty percentage points by Rep. John Boozman (R-AR) and victories in three out of four congressional districts, Arkansas Republicans also won three out of seven statewide races for constitutional office with victories in races for Lt. Governor, Secretary of State, and Commissioner of Public Lands.[2] Indeed, the 2010 election cycle saw the election of Arkansas Republicans to the offices of Secretary of State and Commissioner of Public Lands for the first time since Reconstruction. Congruently, the 2010 elections also produced the first Republican majority in the congressional delegation since Reconstruction. As a consequence while popular Democratic Governor Mike Beebe was re-elected by a strong 64-35% margin and Democrats handily won races for State Auditor, Attorney General, and State Treasurer, Arkansas Republicans were successfully able to translate President Obama's chronic unpopularity to historic gains in what was, traditionally, a staunchly Democratic state (Black & Black, 2003).[3]

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[1] Arkansas Business (9/25/2012): Mark Pryor on Arkansas' Shifting Politics, the Danger of Partisanship in the State Legislature.

[2] The 2010 congressional midterm elections saw Arkansas Republicans capture the Democratic open seats in AR-1 and AR-2 while holding AR-3. While Democrats held onto AR-4 with the re-election of Rep. Mike Ross (D-AR), Arkansas Democrats lost a majority in the state congressional delegation for the first time since Reconstruction.

[3] We note that Democratic victories in the constitutional statewide races for State Auditor, Attorney General, and State Treasurer were undeniably aided by the fact that no Republican challenger emerged in these races. With the key exception of Governor Beebe's re-election, Arkansas Republicans won every major party contested statewide

Observing that Arkansas Republicans were nationalizing the 2012 state legislative elections, just like they had in their successful 2010 election cycle, Sen. Pryor noted that Republicans "try to tie this guy running for State House to Obama" and suggesting that an equivalence between the President and Arkansas Democrats running for the state legislature was a proposition akin to "comparing apples and oranges, totally." Ultimately, Arkansas Republicans would leverage the chronic unpopularity of President Obama—who lost Arkansas to Fmr. Gov. Mitt Romney (R-MA) by a 37%-61% margin—in the state to great effect as they gained five seats in the State House and six seats in the State Senate during the 2012 state legislative elections, enough for their first state legislative majorities since Reconstruction.[4] Adding insult to injury, in the same election cycle Arkansas Republicans won the congressional seat left open by retiring Democratic Rep. Mike Ross (AR-4) to control all state congressional districts for the first time since Reconstruction for the upcoming 113th Congress and leaving Sen. Pryor as the last remaining Democrat in the congressional delegation. In the subsequent 2014 election cycle, Arkansas Republicans would complete the partisan realignment that began in 2010 with Sen. Pryor himself losing re-election to freshman Rep. Tom Cotton (R-AR) by a robust 56%-39% and decisive victories in statewide open races for Governor, State Auditor, Attorney General, and State Treasurer.[5]

It is clear through his observation of the forthcoming 2012 state legislative elections that Sen. Pryor both noted, and anticipated, that presidential approval could make its way down the ballot and manifest itself as the significant determinant of state legislative outcomes across Arkansas. While the preceding case study of Arkansas provides an interesting case study into how presidential approval could be a focal point in state legislative elections, a traditionally very local electoral

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race (U.S. Senate, Lt. Governor, Secretary of State, and Commissioner of Public Lands) on the ballot during the 2010 elections.

[4]Another early indicator of President Obama's general unpopularity in Arkansas during the 2012 elections occurred during the 2012 Arkansas Democratic presidential primary, when the President only won the primary by a stunningly low 58%-42% margin over a local perennial candidate.

[5]This remarkable turnaround of electoral fortunes for Arkansas Republicans is further articulated by the fact that Democrats did not face Republican opposition the last time each of these offices were contested, with Republicans declining to challenge Sen. Pryor in the 2008 U.S. Senate race and Democratic incumbents seeking re-election in the 2010 races for State Auditor, Attorney General, and State Treasurer, respectively. Sen. Pryor is the first U.S. Senator since direct-election began in 1914 to be unseated by the opposing party after being uncontested in the prior election cycle.

context, to date there is no model that considers how *all* forms of institutional approval may influence state legislative outcomes. While we qualitatively highlight the dramatic example of Arkansas during the Obama administration, standing models of collective accountability focusing on the role of presidential perceptions at the state legislative level omit the incorporation of other national and state level institutions, such as perceptions of the U.S. Congress, Governor, and state legislature. To that point, the 2010 and 2012 election cycles saw state legislative Arkansas Democrats weighed down by not only an unpopular Democratic President, but also an unpopular Democratic Congress with an approval rating of less than 20% heading into those election cycles (Griffin, 2011; Algara, 2021*b*). Moreover, there is the possibility that while Arkansas Democrats suffered stunning defeats in the State House and State Senate during those two election cycles, their loses could be modestly mitigated by a relatively popular Democratic Governor and Democratic state legislature in power. Taken together, no contemporary model assesses the role of state *and* national institutional job evaluations plays in shaping state legislative outcomes.

In this paper, we specify a model that state legislative outcomes are motivated by state and national institutional evaluations rather than solely on presidential evaluations. While we argue that presidential job approval is the most salient predictor of state legislative elections, we posit that gubernatorial, congressional, and state legislative evaluations also play a role in shaping these inherently local contests for the state legislature. Drawing on new state-level job approval measures of these state and national policymaking institutions (i.e., presidential, gubernatorial, congressional, and state legislative) data on aggregate state legislative turnover, we find strong evidence across differing model specifications that state legislative elections are almost entirely a referendum on presidential job performance irrespective of state legislative chamber. We replicate this finding at the individual-level by finding that while only presidential approval and gubernatorial approval are consistent predictors of state legislative choice by voters, collective accountability is overwhelmingly channeled by presidential job evaluations. Moreover, we find strong evidence that these presidential approval effects on state legislative outcomes are growing over time at both the aggregate and individual-level. Consequently, we argue that the results of our unified

collective accountability model incorporating both state and national institutional evaluations lends additional support that even state legislative candidates running for an inherently local legislative office cannot escape the president-centered nationalization found in congressional politics. As result of this president-centered nationalization at the local level, state legislative candidates cannot rely on potentially more favorable congressional, gubernatorial, and state legislative evaluations to insulate them from potentially unfavorable presidential evaluations.

1 Specifying a Model of State Legislative Collective Accountability

1.1 State & National Executive Origins of Accountability

The Link Between State/National Executive Evaluations and Legislative Elections

The relationship between presidential politics and the behavior of both incumbent and potential officeholders as well as voters in U.S. Congressional elections is well documented. Jacobson (1989) and Lublin (1994) find that challengers to incumbent members of Congress are strategic when making decisions on whether to run for office and account for presidential politics before deciding to challenge an incumbent. Jacobson suggests that congressional candidates consider a sitting president's popularity when making electoral decisions and finds that presidential approval is correlated with the percentage of challengers in U.S. House elections. For example, this means that when an unpopular Democratic president is in office, Republican congressional challengers will be more likely to run for office since the president's low popularity will serve to increase their chance of electoral success. Jacobson further explains that when congressional challengers consider national political conditions when deciding whether to contest a seat, it gives voters additional opportunities to hold members of federal political parties collectively accountable for their performance.

In addition, there is extensive research on the impact of presidential coattails on congressional

elections (Campbell, 1960), as well as on congressional elections serving as a "referendum" on the president (Tufte, 1975). Overall, these studies provide extensive evidence of a connection between the national executive and U.S. Congressional politics.

The impact of executive evaluations on state legislative elections is also well established in the literature. The link between executive evaluations at the state executive level and state legislative electoral outcomes is relatively well-documented. The popularity of the governor can influence potential state legislative challengers' and incumbents' decisions to run for office. Hogan (2005) suggests that potential state legislative challengers may make decisions on whether to run for office while anticipating how the sitting governor's coattails might influence their electoral success. As a result, legislative challengers who are members of the opposite party of the sitting governor should be more likely to run for office when the governor is unpopular. Taking advantage of a sitting governor's unpopularity will therefore serve to increase the probability of electoral success of challengers opposite the governor's party as well as to connect the performance of the governor to the electoral security of incumbent members of the governor's party (Rogers, 2015).

State legislatures are rooted within a federal system where both national and state legislative candidates share party labels. Research has found that in addition to local politics, national politics can influence electoral outcomes at the state level (Carsey & Wright, 1998; Chubb, 1988). In addition to considering a sitting governor's popularity when making electoral decisions, state legislative candidates may also consider presidential approval ratings when deciding whether to run for office. For example, post-Watergate electoral behavior featured both federal and state legislative candidates behaving similarly. President Nixon had an average approval rating of 25% in 1974. As Jacobson's theory would predict, Democrats challenged 164 of the 165 Republican members of the U.S. House of Representatives who ran for reelection. In addition, Democrats contested the seat of every Republican state legislator in over 50 state legislative chambers, over twice the figure for Democrats whose seats were challenged (Tidmarch, Lonergan & Sciortino, 1986). In 1974, Democrats ended up winning over 500 state legislative seats.

One potential explanation for the observed relationship between presidential politics and state

legislative outcomes centers on the importance of political parties as a way for voters to economize on information. Political parties are often inextricably linked to presidential officeholders that were nominated and supported during an election by the party. Presidential politics often takes center stage while candidates for state legislative office are significantly less well known to voters than members of the U.S. Congress. A 2013 Vanderbilt University poll found that less than 20% of voters can successfully identify their state legislator (Rogers, 2015). In addition, the 2008 Cooperative Congressional Election Study found that around 21% of respondents were "not sure" whether they approved of their state legislature. This result is in stark contrast to the 2% of respondents who were "not sure" whether they approved of the president (Rogers, 2015).

Voters pay relatively little attention to the state legislature, which results in a general lack of information on state legislative politics. As a result, voters seeking to form an assessment of candidates for state office may heuristically use their evaluation of the president and the political party link to evaluate state legislative candidates (Tversky & Kahneman, 1974; Kahneman & Frederick, 2012). Due to lack of information on state legislative candidates, voters may use their presidential vote as a guide when casting their vote for candidates to the state legislature (Hinckley, Hofstetter & Kessel, 1974). This approach to voters forming evaluations of state political actors is the result of parties "[imposing] great political simplicity on the most complex governmental system of the world" (Schattschneider, 1942). State legislative electoral contests may therefore become "second-order" elections where voters make decisions "on the basis of factors in the main political arena of the nation" (Reif & Schmitt, 1980).

1.2   State & National Legislative Accountability

The Impact of Executive Evaluations on State Legislative Elections

While the link between executive evaluations and legislative electoral outcomes is well documented, few empirical studies have sought to measure the relative impact of state and national executive evaluations on state legislative electoral outcomes. Research studying voting on the basis of economic performance in gubernatorial elections finds that governors are often not

held responsible by voters for state economic conditions (Partin, 1995). Aggregate-level studies of election outcomes find little evidence that governors are held responsible for the economic performance of their states with the president instead being assigned responsibility (Peltzman, 1987; Chubb, 1988). Stein (1990) explains these finding by suggesting that voters do not hold the governor responsible for state economic performance. Instead, responsibility for the economy is assigned to the president. Stein's analysis of 1982 election exit poll data concluded that only incumbents from the president's party were benefited or hurt by prevailing economic conditions, with voters attributing the economy's performance to the president's political party in general.

A study by Campbell (1986) finds that presidential coattails extend to state legislative candidates as well as to U.S. congressional candidates. Campbell found that all else equal, during presidential election years, a change in a political party's share of state legislative seats is proportional to the share of the vote won in that state by the party's presidential candidate. As a result, during presidential elections, a presidential candidate who performs well in a state will help his party win additional seats in the state legislature. Furthermore, Campbell measured the relative strength of presidential vs. gubernatorial coattails on state legislative elections and found that the two effects are roughly equal.

Additional research finds that both challengers seeking seats and incumbents holding office in the state legislature strategically respond to executive evaluations. A study of challenger entry in state legislative elections by Rogers (2015) found that members of the state legislature that are also members of the governor's party are more likely to be challenged when a state economy is weak. However, members of a president's party are even more likely to be challenged for office when the president is unpopular. In particular, Rogers found that a 10% fall in a president's approval increases the predicted likelihood that a state legislator that is a member of the president's party will be challenged for office by 3.7%.

In another study of potential challengers for office and voter behavior in state legislative elections, Rogers (2016) finds that legislators who are members of the president's party, particularly during unpopular presidencies, are most likely to have their seats contested. Challengers to

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incumbents in the state legislature strategically base their decisions to contest an incumbent on the popularity of the sitting president. This strategy assumes that voters who are unhappy with the president will be more likely to vote against a member of the state legislature who is of the same party as the president during an election. The impact of presidential approval on state legislative member approval is significant. While increasing state legislative approval results in an increase in the predicted likelihood of voting for a candidate, a comparable change in presidential approval has at least three times the impact. Although legislative parties exert more control over state legislatures' performance than the president's party does, shifts in presidential approval matter more than changes in state legislative approval during state legislative elections (Rogers, 2016).

Rogers' findings suggests that an unpopular president harms members of the president's party in state legislative elections in multiple ways. First, a member of the president's party in the state legislature will be more likely to face a challenger during an election. Second, many voters will likely vote for the challenger to the incumbent of the president's party because these voters are unhappy with the president. Finally, the impact of national considerations on state legislative elections effectively makes state legislative elections "second-order elections" where the performance of members of the state legislature has little impact on their electoral outcomes. This suggests that state legislative elections are more accurately characterized as national affairs rather than local politics (Rogers, 2016).

2 Study #1: Aggregate Tests of State Legislative Collective Accountability

2.1 Specifying the Aggregate Model

In the preceding framework, we posit that both national and state level institutional evaluations motivate state legislative elections. To that end, the key expectation of our framework is that

state legislative elections mostly hinge on the job approval standing president rather than a state's chief executive (i.e., the governor) and legislative institutions (i.e., the Congress and state legislature). To test this proposition at the aggregate level, we require both a measure of state legislative outcomes and state-level approval measures of executive, and legislative, institutions. Towards specifying our outcome variable, we collect data on state legislative seat turnover from the *National Council of State Legislatures* (NCSL) and Rogers (2012).[6] We collect data for both the lower and upper legislative chamber for all 49 states with partisan legislatures, excluding the Nebraska unicameral legislature which elects its legislators in nonpartisan elections (Masket & Shor, 2014). To account for the heterogeneity in the number of legislative seats across specific state legislative chambers, we specify our outcome variable as the percentage net change in state legislative seats from election$_t$ to election$_{t+1}$. This allows for comparison across states despite the differing number of legislative seats found across state legislative chambers. For example, calculating the percentage net change from one election to another allows us to compare the smallest lower state legislative chamber, the 90-seat Alaska State House, with the largest upper state legislative chamber, the 424-seat New Hampshire State House. Moreover, this approach can also allow for the pooling of an empirical model that takes into account both lower and upper state legislative chambers by comparing the percentage net change between the smallest state legislative chamber, the 20-seat Alaska State Senate, with the largest state legislative chamber, again the 424-seat New Hampshire State House. As such, we specify two dependent variables that captures the net percentage change in state legislative seats from election$_t$ to election$_{t+1}$ for both the (1) president's party and (2) the governor's party. We specify these two outcome variables for both the lower and upper state legislative chamber for each of the 49 states (i.e., excluding Nebraska) with partisan state legislative elections, providing for a total of four outcome variables measuring the net percentage change of legislative seats for (1) the president's party in the lower chamber, (2) the president's party in the upper chamber, (3) the governor's party in the lower chamber, and (4) the governor's party in the upper chamber. As will become clear in

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[6]Note that Rogers's (2012) data specifically covers the period from 1914 to 2008. To supplement the missing time period from 2009 to 2020, we manually collect data from the NCSL.

the discussion of our explanatory variables of interest, capturing state-level approval ratings of the president, governor, Congress, and state legislature; we will evaluate our framework using two models predicting the net change in state legislative seats held by the president's party and gubernatorial party, respectively.

Figure 1 plots our outcome variables of interest for our main time-frame of interest of 2006 to 2020. Note that we include both standard on-cycle elections that occur in even-numbered years (i.e., midterm and presidential election cycles) and off-cycle elections that occur in odd-numbered years. Thus we capture the percentage change in state legislative seats for all scheduled elections, including state legislative elections that are conducted in odd-numbered years and found in Louisiana, Mississippi, New Jersey, and Virginia.[7] As one can see across all four variants of the outcome variables, the distribution of state legislative seat turnover is mean and median centered around 0, suggesting the relative partisan continuity found in state legislative and congressional elections (Jacobson, 2015; Rogers, 2016; Klarner, 2018). Moreover, as Figure 1 also articulates, the distribution of state legislative seat turnover is similar across all four types of outcome variables with each distribution possessing a standard deviation of about 7% and similar overall ranges.

Turning to the net percentage change in state legislative seats for the president's party, the minimum value for the lower state chambers is -30.75%, reflecting the 2010 loss suffered by New Hampshire Democrats when they lost 123 seats, dropping from 225 (225/400) seats won in 2008 to only 102 (102/400). Indeed, New Hampshire State House Democrats went from controlling 56.25% of seats to 25.6% of seats during the 2010 election cycle. However, the pendulum swung in dramatic fashion in the next cycle, with the maximum value of percentage seat gains for the president party manifesting itself in a value of 29.75% during the 2012 election cycle in which NH State House Democrats gained 119 seats to go from 102 (25.5% of seats) seats to a 221 seat (55.3%) majority. A similar pattern can be found in state legislative upper chambers for the president's

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[7]This includes the: (1) Louisiana House and Senate, which all seats are up every four years and last conducted elections in 2019; (2) Mississippi House and Senate, which all seats are up every four years and last conducted elections in 2019; (3) the New Jersey General Assembly and Senate, which all seats are up every four years and last conducted elections in 2017 (Assembly) and 2019 (Senate); and lastly the (4) Virginia House of Delegates and Senate, which all seats are up every two years in the House and every four years in the Senate, with elections last being conducted in 2019.

Figure 1: Distribution of State Legislative Seat Turnover, 2006-2020
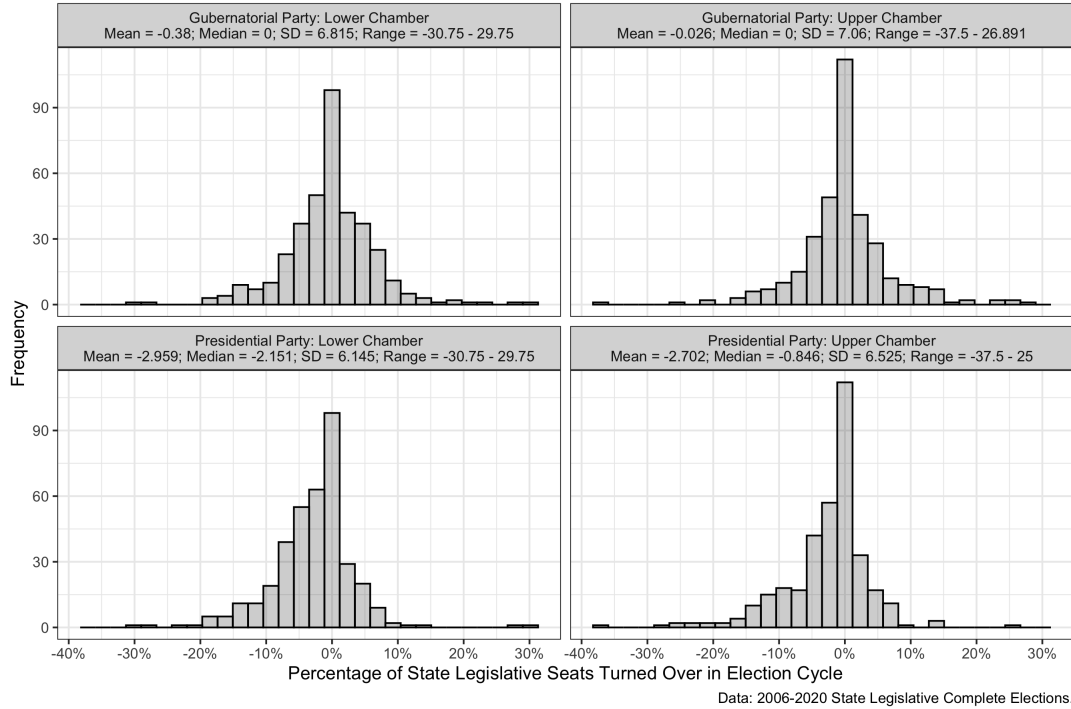
party. The maximum value of 25.00% indicates a net change of going from controlling 5 (20%) to 11 (45%) seats for NH Democrats in the 24 seat State Senate during the 2012 election cycle. By contrast, the minimum value for the president's party in the state upper chambers of -37.50% also reflects the disastrous 2010 cycle for NH Democrats as they went from 14 (58%) seats to 5 (20%) seats. Taken together, our measure allows for the comparison of partisan state legislative seat turnover on a common baseline and irrespective of the number of seats allotted in the legislature across both upper and lower state legislative chambers.

Now that we specified our outcome variable of interest, we turn to estimation of state-level institutional evaluations. Indeed, testing of our preceding theoretical framework requires state-level measures of presidential, gubernatorial, congressional, and state legislative approval ratings to assess how these institutional perceptions predict state legislative election outcomes. To our knowledge, there are no systematic state-level estimates of national and state institutional evaluations that are able to be compared overtime. While there is one potential exception in the

form of the U.S. Officials Job Approval Ratings (JARS) dataset provided by Beyle, Niemi & Sigelman (2002), which provides state approval ratings of presidents and governors from various state-level polling sources, JARS lacks both state-level evaluations of legislative institutions (i.e., Congress and state legislatures) and, most critically, systematic coverage of institutional evaluations over time. Another key consideration is that larger states, such as California, are polled more often than smaller states, further articulating the unsystematic nature of the data coverage provided by the Beyle, Niemi & Sigelman (2002) JARS dataset, which also ends in 2009. To overcome this methodological hurdle required to test our theory in the aggregate, we estimate the latent state-level approval ratings of executive and legislative institutions by leveraging the large N time-series cross-sectional samples provided by the *Cooperative Election Study* (CES), formerly known as the *Cooperative Congressional Election Study*. To derive dynamic approval estimates at these required state-levels over time, we turn to the Bayesian dynamic multi-level regression and post-stratification (MRP) model developed by Caughey & Warshaw (2015). This hierarchical MRP model allows us to dynamically estimate subnational state-level approval ratings as a function of group (i.e., demographic) and contextual (geographic) traits in a Bayesian framework. Together with the large N survey data from the 2006-2020 CES survey cross-sections, providing for a total N of 531,773 state-nested survey respondents over 14 cross-sectional years, we estimate four dynamic MRP models measuring a state's approval of the (1) president, (2) governor, (3) U.S. Congress, and (4) state legislature over time. The large N nature of the CES cross-sectional data provides for a mean (median) of 696 (371) survey respondents per state and cross-sectional year, a considerable amount of data to fit our MRP models estimating state-level approval ratings.[8]

This procedure results in estimates of approval ratings of the president, governor, congress, and state legislature in each state for each time point, with these estimates being able to change over time. These estimates for geographic state units are post-stratified by demographic group considerations to match the "true" census population distribution of a given state (Caughey &

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[8]Indeed, the distribution of state samples provided by the CES ranges from as few as 18 and 19 respondents found in the 2006 DC and 2007 WY samples all the way to the 6,021 respondents found in the 2016 CA samples. The standard deviation of this state sample distribution is about 900 survey respondents, with the first quartile being 155 survey respondents and the third quartile being 920 survey respondents.

Warshaw, 2015). The first step of our MRP estimation procedure models a survey respondent's probability of approving of a given institution (i.e., president, governor, congress, state legislature) as a function of individual-level demographic parameters (i.e., race, gender,education), a series of dummy variables capturing state context (i.e., the state of the respondent), and a series of dummy variables capturing the temporal dynamic (i.e., the survey year of the respondent).[9] For the second step, we post-stratify our state-level approval estimates using U.S. Census data to match the population distribution of demographically relevant groups. As such, we post-stratify the model results to match the demographic characteristics of states with respect to gender, race, and education.[10] The result of this procedure estimates a given state's public attitudes towards the job performance of their state and national institutions, as required by our preceding theoretical framework. Most importantly, this approach allows for data coverage of state-level institutional job evaluations for each state legislative election cycle from 2006 to 2020. [11]

Figure 2 plots the distribution of the state-level job approval ratings of the president, governor, U.S. Congress, and state legislature from 2006-2020. We center our estimated approval ratings by subtracting them from 50%, to capture net approval. As one can see, state-level institutions are generally held in higher regard than national institutions. Indeed, the median net state-level approval for presidents stands at -7.31% as opposed to the median approval of 5.13% enjoyed by

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[9]We follow Caughey & Warshaw (2015) and, given the usage of their dgo package in R, we estimate our Bayesian dynamic MRP models with four "No-U-Turn" sampler chains, a variant of Hamiltonian Monte Carlo, over 1,500 iterations thinned every iteration. We also specify rake our models with survey weights provided by each cross-sectional year of the CES. Given this Bayesian framework, the resulting estimates are the means of the posterior samples generated from the Bayesian estimation, with the 2.5% and 97.5% quantiles also capturing the lower and upper 95% credible (i.e., confidence) intervals. The posterior means and medians of our approval posteriors for each approval rating are correlated at greater than 0.99.

[10]The census data used to post-stratify the model results was obtained using the scraping feature of the acs package in R. The data used in the analysis is taken from the relevant American Community Survey C15002 tables articulating educational attainment by gender and race. We note that post-stratification must match the variable cells included in the first individual-level estimation step and, as a consequence, the most granular census-level cells available are the 24 unique categories provided by gender (2; male, female), race (3; white, Black, other), and educational (4; no high school, high school, some college, college) groupings. In other words, our post-stratification matches to the census proportion of a given state's demographics in 24 unique groups on the basis of gender, race, and education (2 gender groups $\times$ 3 race groups $\times$ 4 educational groups).

[11]We note one minor exception due to the fact that the CES does not ask survey respondents about congressional approval in 2006 and for state legislative approval in 2006, and 2009, respectively. As such we are missing a state-level measure of congressional approval for the 2006 election cycle and state legislative approval for the 2006 and 2009 election cycles. State-level presidential and gubernatorial approval are estimated for each year from 2006 to 2020.

Figure 2: Distribution of National & State Institutional Job Approval, 2006-2020

Data: 2006-2020 State-level MRP Estimates of Latent Approval.
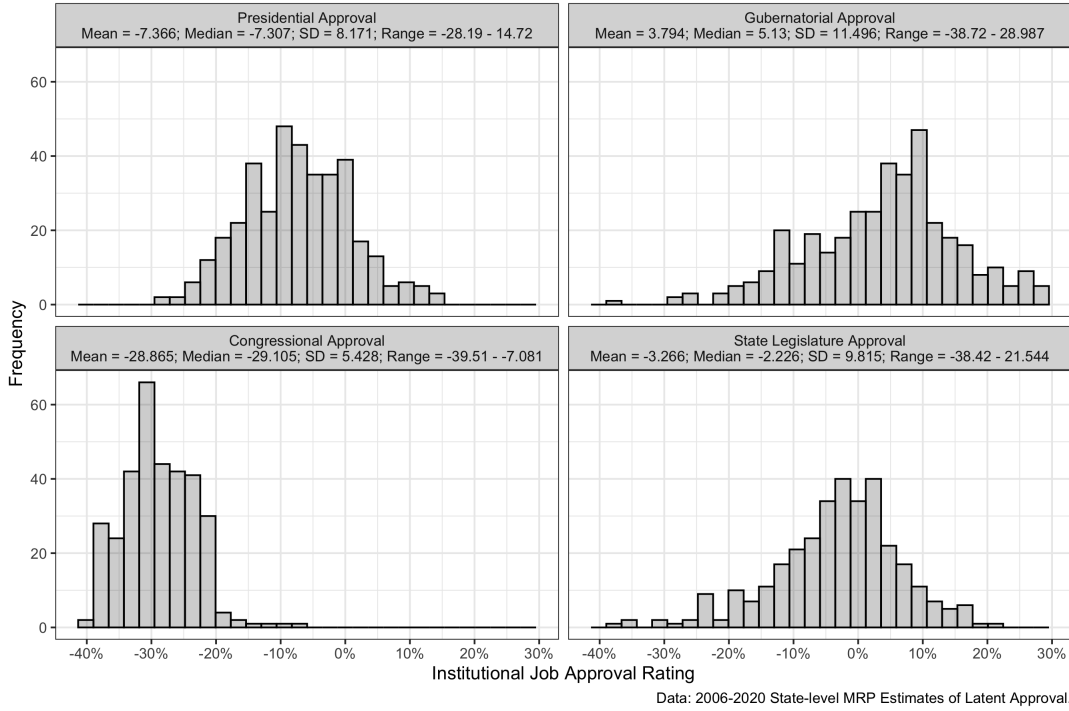
state governors. This is further exasperated when comparing the state-level estimates of legislative institutions. Reflecting the general unpopularity of the contemporary U.S. Congress (i.e., Algara, 2021*a,b*), the median state-level net approval of Congress is -29.11% as opposed to the -2.23% net approval enjoyed by state legislatures. Our estimated findings also replicates the finding at the national level that the presidency receives a higher approval rating than Congress (Algara, 2021*b*), with governors receiving systematically higher approval ratings then the state legislature. Taken together, our results show a considerable amount of variation in state-level approval ratings of both national and state policymaking institutions.[12]

Now that we derive our key outcome and independent variables of interest, we turn to specifying our aggregate model of state legislative collective accountability. To that end, we

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[12]We note that our state-level approval ratings are weakly correlated with one another, providing support that the approval rating for one institution is not merely a proxy for the other. For example, presidential approval is weakly correlated with gubernatorial (-0.18), congressional (0.28), and state legislative approval (-0.14). The only exception is that gubernatorial approval is correlated at 0.78 with state legislative approval, while only being correlated at -0.09 with congressional approval (state legislative approval is also correlated at just -0.07 with congressional approval).

specify the following two full OLS regression models predicting the net percentage change in state legislative seats for (1) the president's party and (2) the governor's party. As will become clear in the forthcoming specification, this approach allows for a robust test of whether state or national institutional evaluations are more predictive of state legislative outcomes.

President's Party Model (1): For the (1) first model predicting the state legislative seat turnover for the president's party, we include the presidential approval rating, gubernatorial approval rating, state legislative approval rating, and the lagged outcome variable (i.e., the seat turnover in the previous election) on the right-hand side of the model. We interact gubernatorial approval with a dummy variable indicating whether the governor is of the same party as the president, with the expectation that higher approval ratings by a co-partisan governor should motivate higher state legislative gains for the president's party. Similarly, we interact congressional and state legislative approval with the same presidential co-partisan variable with the similar expectation. Given our theoretical framework, we fully expect that presidential approval predicts state legislative seat turnover to a greater extent than gubernatorial, congressional, or state legislative approval.

Governor's Party Model (2): For the (2) second model predicting the state legislative seat turnover for the governor's party, we also include all the covariates from the first presidential party model (1) highlighted in the preceding paragraph. However, we interact presidential approval with a dummy variable indicating whether the president is of the same party as the governor, with the expectation that higher (lower) approval ratings by a co-partisan president should motivate higher state legislative gains (losses) for the governor's party. Given our framework, we posit that the estimated presidential approval effects will be of greater salience than the additive gubernatorial approval rating effects. Similarly, we interact congressional and state legislative approval with the same gubernatorial co-partisan variable with the similar expectation. Given our theoretical framework, we fully expect that presidential approval predicts state legislative seat turnover for the governor's party to a greater extent than gubernatorial, congressional, or state legislative approval.
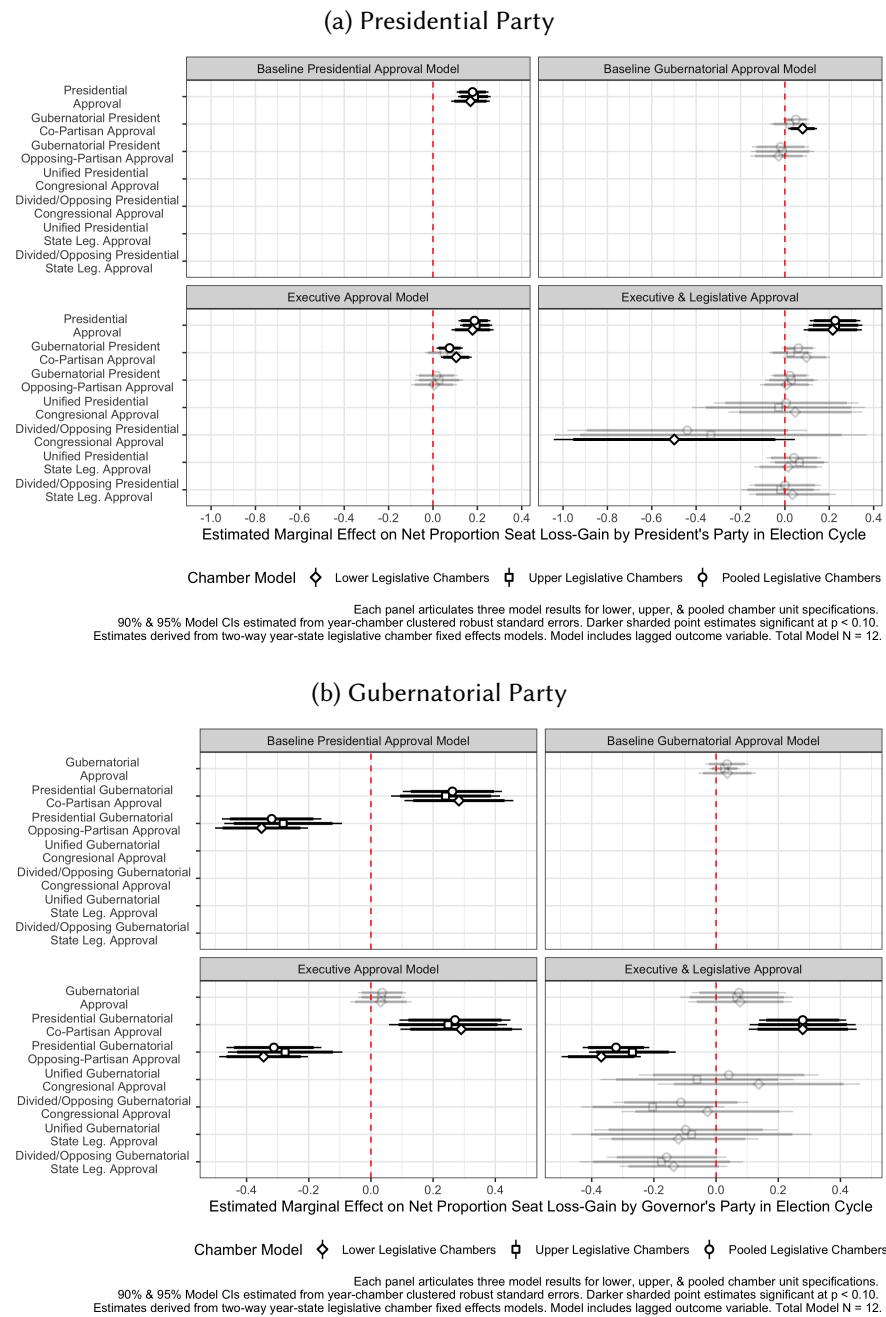
We specify both full models, along with all other aggregate models, with two-way year and

state-chamber fixed-effects, providing for estimation of within-state unit effects. In other words, inclusion of the two-way fixed-effects allows us to estimate how greater institutional approval ratings over time predicts state legislative turnover within each state legislative chamber. We estimate both of our models for the (1) lower state legislative chambers, (2) upper state legislative chambers, and (3) a pooled model pooling both lower and state legislative chambers. Lastly, we estimate our models with two-way robust clustered standard errors by year and state legislative chamber.

2.2   The Persistence of Presidential Approval

Figure 3 plots the results of our full model, which we call the *executive & legislative approval* model, for both the presidential and gubernatorial context of state legislative seat turnover for each legislative chamber and pooled across chambers. We also include three additional models of various specifications as a robustness check, with the first panel only including presidential approval, the second only gubernatorial approval, and the third only executive (i.e., presidential and gubernatorial) approval ratings. Beginning with Figure 3A evaluating our model predicting the net change in the proportion of state legislative seats won by the president's party in the election, we find robust evidence that presidential approval is a significant predictor of state legislative seat turnover in both lower, upper, and pooled state chamber specifications. Turning to the full model in the bottom right panel of Figure 3A articulating the results of executive & legislative approval model, we find that presidential approval is essentially the only consistently predictor of the net percentage change in state legislative seats won by the president's party. For the *executive & legislative approval* model, a one-standard deviation increase in presidential approval within a state is associated with about a 1.76% (8.171×0.216), 1.86% (8.171×0.228), and 1.75% (8.171×0.226) increase in the number of state legislative seats won by the president's party. By contrast, the other institutional approval ratings have no significant relationship to the percentage of seat turnover faced by the president's party, indicating that presidential approval is the only predictor of state legislative outcomes for the presidential party. We also note that across all varying model

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Figure 3: Relationship Between Institutional Evaluations & State Legislative Seat Turnover

(a) Presidential Party

Each panel articulates three model results for lower, upper, & pooled chamber unit specifications.
90% & 95% Model CIs estimated from year-chamber clustered robust standard errors. Darker sharded point estimates significant at p < 0.10.
Estimates derived from two-way year-state legislative chamber fixed effects models. Model includes lagged outcome variable. Total Model N = 12.

(b) Gubernatorial Party

Each panel articulates three model results for lower, upper, & pooled chamber unit specifications.
90% & 95% Model CIs estimated from year-chamber clustered robust standard errors. Darker sharded point estimates significant at p < 0.10.
Estimates derived from two-way year-state legislative chamber fixed effects models. Model includes lagged outcome variable. Total Model N = 12.

specifications, from the simple bivariate relationship to the fully specified model, the coefficient for presidential approval stays relative the same across all chambers, lending additional support for the robustness of the result.
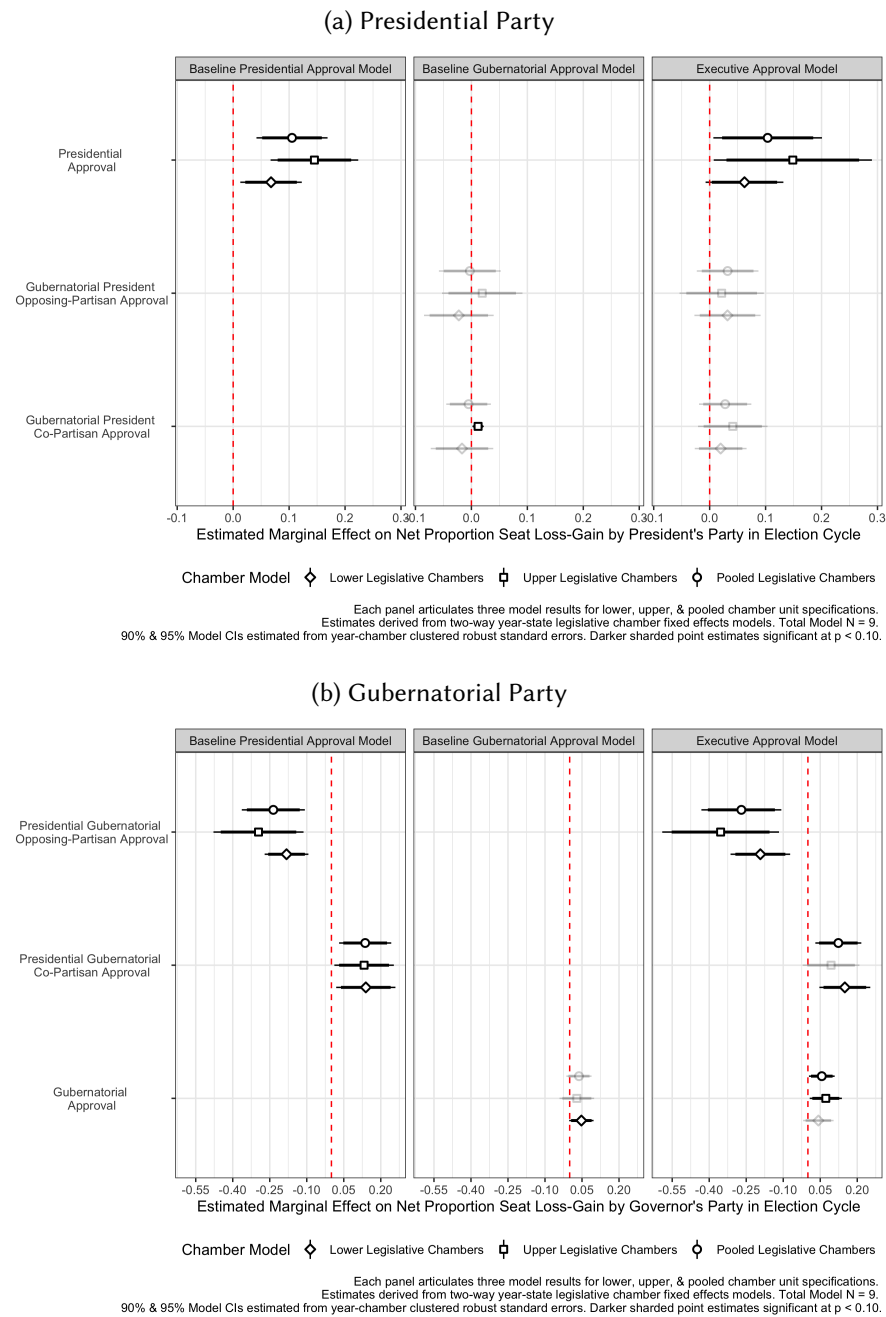
Turning to the governor's party in Figure 3B, we find clear evidence, again, that it is presidential

approval rather than gubernatorial (or any other institution) that motivates state legislative turnover for the governor's party. Congruent with the results of the presidential party seat turnover, within the fully specified model and the simple bivariate context gubernatorial approval is not a significant predictor of state legislative seat turnover by the governor's party. By contrast, presidential approval is a significant predictor of legislative seat turnover by the governor's party. As one can see in the bottom right panel articulating the results of the executive & legislative approval full model, higher approval ratings by a president that is a *co-partisan* of the governor predicts state legislative seat gains for the governor's party while higher approval ratings by an *opposing partisan* of the governor predicts state legislative seat loses for the governor's party. This results hold for models predicting seat turnover at the lower, upper, and pooled state legislative chambers.

Taken together, we find robust aggregate evidence in Figure 3 that it is presidential approval, rather than gubernatorial or other institutional approval, that predicts the turnover of state legislative seats that are observed. However, how robust is this finding and is this finding of heightened salience a mere artifact of the time period selected? To that end, we respecify our models with the JARS data provided by Beyle, Niemi & Sigelman (2002) which measures presidential and gubernatorial approval ratings using a comprehensive search of newspaper sources. The gubernatorial approval rating data begins with the evaluation of Gov. Harold Handley (R-IN) in 1958 and the presidential approval rating data begins with the 1962 evaluation of President Kennedy in Colorado, Illinois, Indiana, and Kentucky. However, as mentioned earlier, the JARS data provides for sparse data coverage as not all states are polled on their attitudes about the president and governor every state legislative election year, in addition to completely omitting congressional and state legislative approval.[13] Indeed, of the 2,184 unique cases of state legislative election cycles held from 1962-2009—the temporal period covered by the JARS data—only 30.54% or 667 state legislative election cycle cases provided both presidential and gubernatorial approval data for that

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[13]We note that the JARS dataset compiled by Beyle, Niemi & Sigelman (2002) also includes data on the approval ratings of U.S. Senators, which is outside the focus of our inquiry.

Figure 4: Job Approval Ratings Database Robustness Check of Institutional Evaluations

(a) Presidential Party

Each panel articulates three model results for lower, upper, & pooled chamber unit specifications.
Estimates derived from two-way year-state legislative chamber fixed effects models. Total Model N = 9.
90% & 95% Model CIs estimated from year-chamber clustered robust standard errors. Darker sharded point estimates significant at p < 0.10.

(b) Gubernatorial Party

Each panel articulates three model results for lower, upper, & pooled chamber unit specifications.
Estimates derived from two-way year-state legislative chamber fixed effects models. Total Model N = 9.
90% & 95% Model CIs estimated from year-chamber clustered robust standard errors. Darker sharded point estimates significant at p < 0.10.

cycle.[14] Nevertheless, this alternative, albeit less systematic measure of approval ratings allows us to confirm the aggregate results we find in the more systematic analysis articulated in Figure 3.

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[14] By a state legislative election cycle case, we mean the specific state legislative chamber up for election. For example, the 2019 Virginia State Senate elections constitutes one unique state legislative election cycle case observation.

To that end, we respecify the same models in the preceding section predicting state legislative seat turnover for both the presidential and gubernatorial party omitting the state legislative institutional ratings.[15] For the rare instances in which multiple polls capture presidential or gubernatorial approval in the JARS data, we take the simple average between the polls as our approval measure. Figure 4 articulates the results of our models leveraging the JARS data for both the presidential and gubernatorial party context. We replicate our previous result in Figure 4A, showing that only presidential approval is a significant predictor of state legislative seat turnover while both presidential opposing-partisan and presidential co-partisan gubernatorial are not salient predictors across all specifications and state legislative chambers. Turning to Figure 4B, we find a similar result. Across all specifications, we find that higher approval ratings by a president that is a *co-partisan* of the governor predicts state legislative seat gains for the governor's party while higher approval ratings by an *opposing partisan* of the governor predicts state legislative seat loses for the governor's party. However, we find largely inconsistent results that gubernatorial approval predicts state legislative seat turnover for the governor's party for the lower, upper, and pooled chamber models. Taken together, we find clear evidence at the aggregate level that presidential approval largely predicts state legislative outcomes at the aggregate level while gubernatorial approval is largely a non-factor in this prediction, providing key support for our theoretical framework that presidential approval largely shapes collective accountability at the state legislative level.

2.3   Growing Salience of Presidential Approval

To further explore our finding that state legislative outcomes largely hinge on state-level assessments of presidential approval, we consider whether this salience is conditioned by temporal period. Scholars note that assessments of presidential approval are further crystallized in the

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[15]Congruent with the previous analysis, each model is estimated with two-way year and state legislative chamber fixed effects. Given the sparse nature of the JARS data and lack of consistency in observations over time, we do not specify our model with the lagged outcome variable. We also specify these models with robust clustered standard errors by year and state legislative chamber.
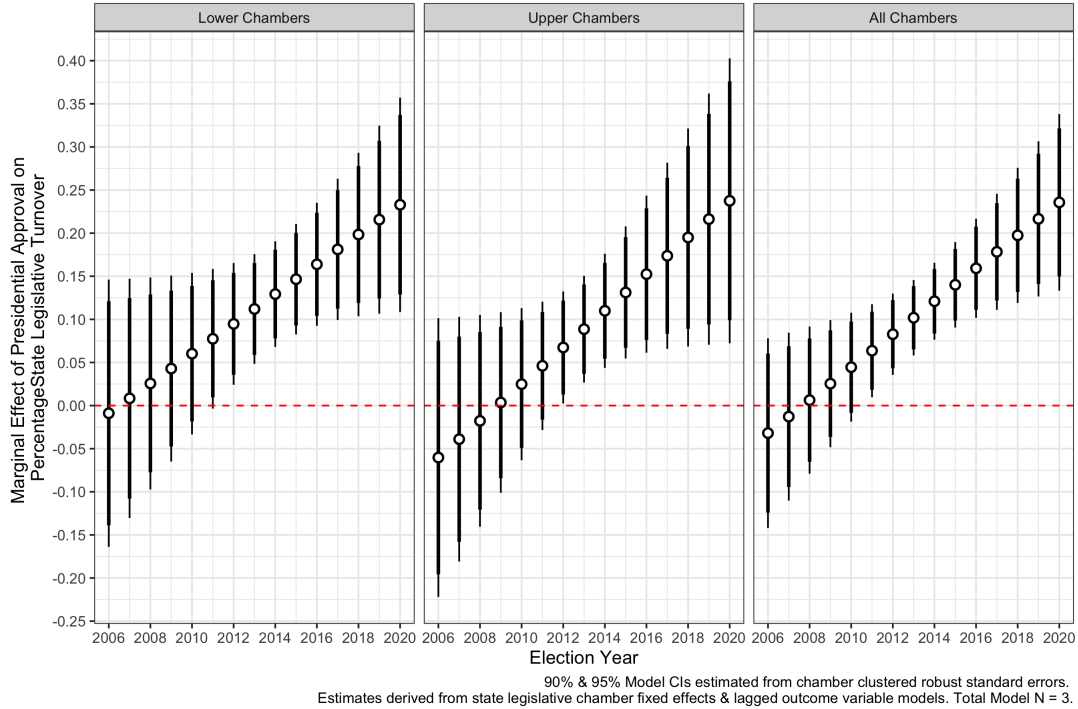
partisan era defined by affective polarization, with co-partisans and opposing-partisans alike largely unmovable in terms of presidential job approval evaluations (Montagnes, Peskowitz & McCrain, 2019). Moreover, against the backdrop of greater partisan polarization and a clarification of partisan policy agendas (McCarty, Poole & Rosenthal, 2006; Jones, 2010), one can expect that presidential approval is becoming an increasingly greater predictor of state legislative seat turnover over time. Coupled with the decreasing salience of the incumbency advantage that traditionally defined the candidate-centered thesis of American elections (Jacobson, 2015; Algara, 2019), state legislative elections can be expected to be increasingly shaped by perceptions of the president (for a similar argument with respect to state partisanship, see Zingher & Richman, 2019). As such, we argue that the salience of presidential approval in shaping state legislative outcomes grows overtime as voters seek to turn these relatively local elections into a referendum on presidential evaluations. This is a similar argument presented by Hopkins (2018), in that nationalized political perceptions plays an increasing role in shaping outcomes initially thought to be moved by state-level considerations, such as gubernatorial elections. We build on these insights and test whether presidential approval is a growing predictor of state legislative outcomes over time.

To that end, we specify a simple regression model predicting state legislative seat turnover for the president's party as a function of multiplicative term estimating presidential approval by election year, lagged seat turnover, and state legislative chamber fixed-effects.[16] The interaction in the multiplicative term allows us to estimate how presidential approval motivates state legislative election seat turnover over time. Congruent with previous tests, we specify the model to predict state legislative seat turnover for the lower chambers, upper chambers, and a model pooling across both state legislative chambers. We fit our data for the 2006-2020 time-period, for which we have systematically estimated presidential approval data for each state legislative election cycle case.

Figure 5 shows the average marginal effect of presidential approval on state legislative seat turnover by the president's party for each election cycle from 2006 to 2020. As one can see, the salience of presidential approval as a determinant of state legislative outcomes increases over

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[16]We specify our models with state-chamber clustered robust standard errors.

Figure 5: Temporal Heterogeneity Relationship Between Presidential Approval & Seat Turnover

90% & 95% Model CIs estimated from chamber clustered robust standard errors.
Estimates derived from state legislative chamber fixed effects & lagged outcome variable models. Total Model N = 3.

time for lower, upper, and pooled legislative chambers. Indeed, across all panels of Figure 5 there is clear evidence of temporal heterogeneity in the marginal effect of presidential approval on state legislative seat turnover, with this effect becoming more salient during the Trump era. In totality, we find robust evidence that presidential approval is the main institutional predictor motivating state legislative election outcomes and that institutional evaluations regarding the job performance of the governor, Congress, and state legislature do not play a role in shaping these outcomes. In the following section, we build on the results of these aggregate models and consider individual-level models to test whether electoral choice by voters is also largely shaped by presidential approval or other institutional approval evaluations.

3   Study #2: Voter-Level Tests of State Legislative Collective Accountability

3.1   Specifying the Voter-Level Model

To construct a voter-level model towards evaluating our theoretical framework, we again turn to the cross-sectional *Cooperative Election Study* data that provides both a large N of state-level samples to estimate our relationships of interest but also comprehensive measures of presidential, gubernatorial, congressional, and state legislative approval. Consistent with the empirical expectations derived from our theoretical framework, we expect presidential approval to not only be the most salient predictor of state legislative electoral choice relative to other forms of institutional evaluations, we also expect presidential approval to increase in salience as a determinant of state legislative choice over time. Given that evaluation of these theoretical considerations requires the specification of a voter-level model, we leverage the CES data and specify two outcome variables measuring electoral choice in the (1) lower and (2) upper state legislative election, respectively. The binary electoral choice measures are coded 1 if a respondent indicated that they voted for the Democratic state legislative candidate and 0 if the respondent indicated a vote for the Republican candidate. Our four covariates of interest measuring presidential, gubernatorial, congressional, and state legislative approval are coded as 1 if a respondent indicates that they either somewhat or strongly approve of the institution or 0 if a respondent indicates that they either somewhat or strongly disapprove of the institution. We also code a series of salient control variables that predict electoral choice, such as partisanship, retrospective economic evaluations, political knowledge, voter gender, voter race, and educational attainment. [17] We estimate our forthcoming models using the 2007, 2008, 2010, 2012, 2014, 2016, 2018, and 2020 CES survey cross-sectionals since these cross-sections are the only ones asking respondents to first state their voting intention in state

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[17]While we articulate the coding scheme of our control variables in the appendix, we note that we code partisanship as a series of two dummy variables indicating Democratic partisanship and Independent partisanship, with the omitted baseline category being Republican partisanship.

legislative elections and secondly state their job approval assessments of the president, congress, governor, and state legislature which is required for evaluation of our theoretical framework.[18]

We specify a pooled baseline two-way year and state-chamber fixed-effects linear probability model assessing how institutional evaluations motivate state legislative electoral choice, in addition to our standard control covariates. Given the partisan direction of our outcome variable measuring state legislative electoral choice, we interact each of our institutional evaluates with partisan indicators of institutional control. For example, we interact presidential approval with a binary variable indicating whether a Republican or Democratic president was in office, since presidential approval should have a positive (negative) relationship with voting Democratic (Republican) in state legislative elections during periods of a Democratic (Republican) president. Congruently, we interact gubernatorial approval with a binary variable indicating whether a respondent's state was steered by a Republican or Democratic governor, since gubernatorial approval should have a positive (negative) relationship with voting Democratic (Republican) in state legislative elections when the state is governed by a Democratic (Republican) Governor. Lastly, we also interact both congressional and state legislative approval with a binary variable indicating partisan control of the chamber, since greater approval of these institutions should have a positive relationship with voting Democratic during periods of Democratic control and a negative relationship with voting Democratic during periods of non-Democratic (i.e., divided and Republican) control.[19] This approach allows us to estimate how institutional approval influences partisan state legislative voting depending on which party controls the institution.

We specify three variants of this pooled baseline two-way year and state-chamber fixed-effects linear probability models to model state legislative choice in: (1) the lower state legislative cham-

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[18]The CES only inquires about state legislative electoral choice during 2006, 2007, 2008, 2010, 2012, 2014, 2016, 2018, 2020. Moreover, the 2006 CES survey does not measure citizen approval of congress and the state legislature, this requiring omitting the cross-sectional year for full model estimation.

[19]Drawing on previous work on collective accountability and legislative approval, we elect to follow this binary indicator of legislative control given that legislative evaluations are largely informed by the lower chamber during periods of divided legislative control. To that point, Algara (2021a) finds evidence that Democrats are just as likely to disapprove of a divided congress in which Republicans control the U.S. House and the Democrats control the U.S. Senate as a congress completely controlled by Republicans. Indeed, during our time period this is precisely the partisan configuration found during divided Congresses. While the results are identical with a trichotomous measure of legislative control (i.e., Democratic, divided, Republican) we elect to use the binary indicator for simplicity.

ber, (2) the upper state legislative chamber, and (3) a "stacked" model pooling both lower and upper chamber electoral choice for a "pooled legislative chamber models." In terms of the latter, respondents residing in states where *both* state legislative chambers are on the ballot appear twice in this model specification given that they cast two state legislative ballots. We specify our pooled baseline models with two-way robust clustered standard errors by year and state legislative chamber. Given our interest in temporal heterogeneity in institutional approval effects, we also estimate our baseline models for each yearly survey cross-sectional year. In this cross-sectional setup we drop the interaction between presidential approval and partisan control, in addition to the interaction between congressional approval and partisan control, given that partisan control of the presidency and congress is constant within a cross-sectional survey year, and simply just need to estimate the additive effect of these national approval assessments with state legislative choice. We also drop the yearly fixed-effects in this cross-sectional specification and cluster our standard errors by state legislative chamber.[20]

3.2   Presidential Approval & Minimal State Institutional Role

Figure 6 articulates the results of our individual-level models predicting electoral choice as a function of state and national level institutional approval assessments at the lower, upper, and pooled legislative chamber level. Each panel of Figure 6 articulates the estimated marginal effect of an institution's approval on the probability of voting Democratic for the pooled baseline and yearly cross-sectional models. Beginning with Figure 6A, the pooled baseline model finds that presidential approval influences state legislative vote choice to a similar degree across the lower legislative chamber model, the upper legislative chamber model, and the pooled legislative chamber model. In the pooled baseline model, we find that presidential approval is associated with an increase in propensity of voting Democratic in the lower (upper) legislative chambers by 13% during Democratic presidential administrations and a decrease in propensity by 15% during Republican administrations. These results replicate in the pooled model context, with presidential

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[20]All individual-level models are estimated with survey sample weights provided by the CES,

approval being associated with an increase in propensity of voting Democratic by 13% and a decrease in propensity of voting Democratic by 15% during Republican administrations. The yearly cross-sectional models also show that this relationship between presidential approval and state legislative electoral choice is growing over time, consistent with the results of the aggregate state legislative seat turnover findings. As one can see, the relationship between presidential approval and state legislative voting reaches its maximum during the 2018 and 2020 election cycles during the Trump administration. During the 2018 and 2020 election cycles, approval of Republican President Donald Trump coincides with a decrease of voting for state legislative Democratic candidates by 15% and 17% across the lower, upper, and pooled state legislative chamber models. This is a pronounced increase from the lower levels of association between presidential approval and state legislative voting found during previous election cycles, indicating a stronger association between attitudes of presidential job performance and state legislative voting choice over time.

Turning to Figure 6B articulating the relationship between gubernatorial approval and state legislative voting, we find that gubernatorial plays a largely minimal role in shaping individual choice in state legislative elections. The pooled baseline model shows that while gubernatorial approval is nominally a significant predictor of state legislative choice, the relationship is far more minimal than the relationship between presidential approval and state legislative choice. This is articulated through the baseline model results presented, with approval of Democratic (Republican) governors only being associated with a 0.06% (0.07%) increase in the propensity of voting Democratic in the upper and pooled legislative chamber models. In the lower state legislative chamber, gubernatorial approval is only a significant predictor of voting Democratic when approving of Republican Governors, with this approval being associated with a 0.07% decline in voting Democratic in lower chamber state legislative elections. While the yearly cross-sectional models point to more consistent significant relationships between gubernatorial approval and state legislative voting, this relationship pales in magnitude to the relationship between presidential approval and state legislative voting. This lends additional support for the notion that presidential evaluations are the driving predictable of state legislative electoral choice, while evaluations of the

state-level executive play a minimal role, at best. This finding suggests that presidential popular co-partisan governors may not be able to provide insulation for their party's state legislative candidates in the face of an unpopular president. Indeed, this dynamic precisely describes the dynamic faced by Arkansas Democrats highlighted in the introduction during the election cycles of the Obama era, as Former Governor Mike Beebe (D-AR) could not insulate his party from the stunning state legislative loses faced as a consequence of the general unpopularity of Democratic President Barack Obama statewide.

Turning to the relationship between congressional approval and state legislative approval, we find inconsistent results from our models. In terms of congressional approval, we find in the pooled baseline model and in the yearly cross-sectional models that congressional approval is an inconsistent predictor of state legislative voting, proving to be a significant predictor in some contexts and not in others. To that point, across the 30 estimated effects capturing the relationship between congressional approval and state legislative choice across the pooled and cross-sectional models, only 20 models registered a significant relationship between this covariate and outcome variable of interest.[21] This lends support for the notion that voters do not rely on their assessments of the job performance of their U.S. Congress to motivate their electoral choice at the state legislative level. This same narrative holds for state legislative voting. The results articulating the relationship between state legislative approval and state legislative voting yield the same substantive result, with state legislative voting being a largely inconsistent predictor of this electoral choice and, when significant, playing a largely minimal role. Indeed, of the 54 estimated effects capturing this relationship shown in Figure 6D, we find evidence of a significant relationship in only 45 estimated effects.[22] Moreover, the significant state legislative effects on state legislative voting that we do find largely oscillate between 1% to 2%, indicating a largely

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[21]We derive this number from the 8 congressional approval effects estimated in the cross-sectional models and the 2 congressional effects estimated in the pooled baseline model, one for periods of Democratic control and one for periods of Divided/Republican control. This constitutes 10 estimated effects for each of the lower, upper and pooled legislative chamber contexts for a total of 30 estimated effects.

[22]We derive 54 estimated effects given that we estimate the effect of state legislative approval under Republican and Democratic legislatures, for a total of 2 effects per model, for each of the 8 cross-sectional models and the 1 pooled baseline model. This provides for 18 estimated state legislative effects for each of the lower, upper and pooled legislative chamber contexts for a total of 54 estimated effects.

minimal, if any, role in shaping voter preferences in state legislative elections.

Figure 6: Relationship Between Executive Evaluations & State Legislative Choice

(a) Presidential Approval

Estimated Marginal Effect on State Legislative Voting (Democratic Party)

□ GOP President   ○ Democratic President

Each panel articulates nine model results for each individual cross-sectional year and a baseline model.
Total Model N = 27. 90% & 95% Model CIs estimated from year-chamber clustered robust standard errors.
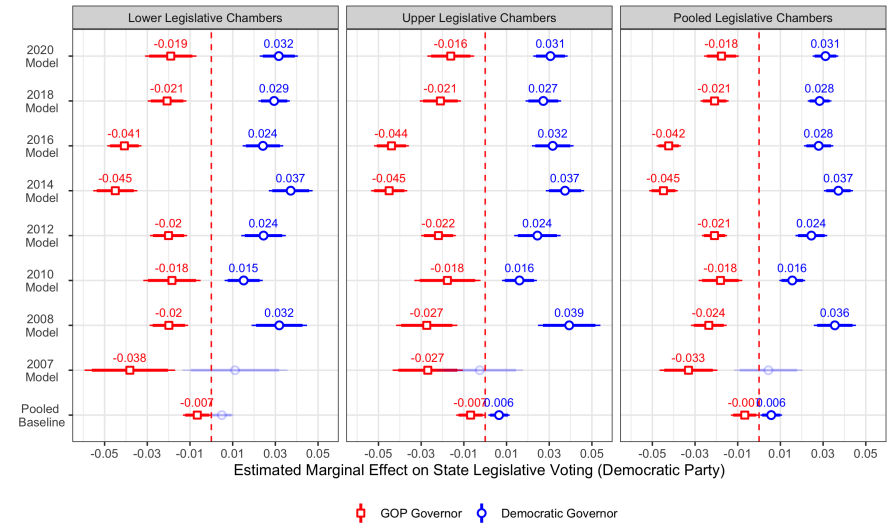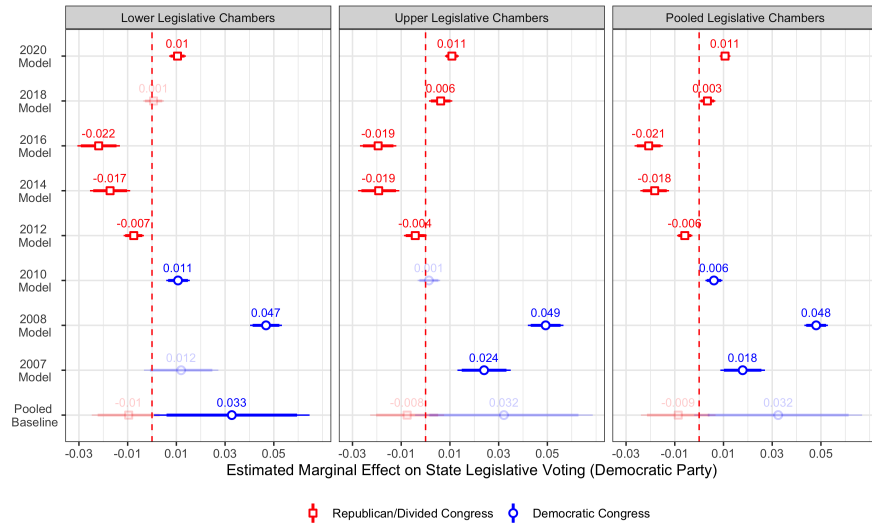Cross-Sectional Estimates derived from one-way state-chamber fixed effects models with vector of voter-level controls.
Baseline estimates derived from two-way year-state legislative chamber fixed effects models with vector of voter-level controls.

(b) Gubernatorial Approval

Estimated Marginal Effect on State Legislative Voting (Democratic Party)

□ GOP Governor   ○ Democratic Governor

Each panel articulates nine model results for each individual cross-sectional year and a baseline model.
Total Model N = 27. 90% & 95% Model CIs estimated from year-chamber clustered robust standard errors.
Cross-Sectional Estimates derived from one-way state-chamber fixed effects models with vector of voter-level controls.
Baseline estimates derived from two-way year-state legislative chamber fixed effects models with vector of voter-level controls.

(c) Congressional Approval

Estimated Marginal Effect on State Legislative Voting (Democratic Party)

□ Republican/Divided Congress   ○ Democratic Congress

Each panel articulates nine model results for each individual cross-sectional year and a baseline model.
Total Model N = 27. 90% & 95% Model CIs estimated from year-chamber clustered robust standard errors.
Cross-Sectional Estimates derived from one-way state-chamber fixed effects models with vector of voter-level controls.
Baseline estimates derived from two-way year-state legislative chamber fixed effects models with vector of voter-level controls.

(d) State Legislative Approval

Estimated Marginal Effect on State Legislative Voting (Democratic Party)

□ Republican Legislature   ○ Democratic Legislature

Each panel articulates nine model results for each individual cross-sectional year and a baseline model.
Total Model N = 27. 90% & 95% Model CIs estimated from year-chamber clustered robust standard errors.
Cross-Sectional Estimates derived from one-way state-chamber fixed effects models with vector of voter-level controls.
Baseline estimates derived from two-way year-state legislative chamber fixed effects models with vector of voter-level controls.

Figure 7: Distribution of Significant Executive Effects on State Legislative Vote

50/54 (93%) gubernatorial effects & 30/30 presidential effects significant.
Absolute Effect Sizes: Median Pres. Approval = 0.13 & Median Gov. Approval = 0.02.
Total Models = 27 Models, 9 for each legislative context (1 pooled baseline model + 8 cross-sectional models).
Two estimated gubernatorial effects per model. One estimated presidential effect per cross-sectional model & two presidential effects per pooled baseline model.

The results of our voter-level models show that while congressional and state legislative approval are largely inconsistent predictors of state legislative choice, both presidential and gubernatorial approval are consistent predictors of this choice. To further situate our findings with respect to our theoretical framework we plot the distribution of the significant presidential and gubernatorial approval effects, in the form of the absolute value, on the probability of state legislative voting across all of three legislative contexts (i.e., lower, upper, and pooled legislative chamber contexts) in Figure 7. We plot the absolute value to directly compare the magnitude of the relationship of the approval effects during periods of varying partisan institutional control on state legislative voting. For example, plotting the absolute values allows us to compare the magnitude of the negative effect of presidential approval of Republican presidents on voting Democratic with the magnitude of the positive effect of presidential approval of Democratic presidents on voting Democratic. As one can see, the average significant effect of presidential approval on voting for Democratic state legislative candidates is far greater than the average significant effect derived

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from gubernatorial approval. On average, presidential approval translates to about a 13% absolute change in the likelihood of voting for a Democratic state legislative candidate. By contrast, the average gubernatorial effect translates to about only a 2% absolute change in the likelihood of voting for a Democratic state legislative candidate. In addition, we find that while presidential approval is significant in all estimated effects, gubernatorial approval is only significant in 50/54 estimated effects, with gubernatorial approval of a Democratic Governor being an insignificant predictor in the 2007 cross-sectional model for each legislative context and in the pooled baseline model for the lower legislative chamber. Taken together, the results of our individual analysis compliment our aggregate analysis in that job performance attitudes of the national executive (i.e., the president) shapes state legislative election outcomes rather than the state executive (i.e., the governor) or legislative institutions. As such, we find that presidential-centered collective accountability permeates throughout all levels of state legislative elections, with state parties doing well during periods of favorable presidential evaluations and paying the electoral cost during periods of unfavorable presidential evaluations. As a consequence, state parties gain in the aggregate and at the voter-level when they are confronted with either a popular co-partisan president or an unpopular opposing partisan president. Our analysis also shows the inverse to hold, given that state parties pay an electoral cost when either an unpopular co-partisan president or popular opposing partisan president while perceptions of the governor, congress, and state legislature are largely a non-factor in shaping state legislative outcomes.

4   Discussion: The Nationalized Story of State Legislative Collective Accountability

We motivated this manuscript highlighting efforts by Arkansas Republicans to leverage an unpopular Democratic President to motivate historic gains in state legislative elections. Despite efforts by Arkansas Democrats to localize state legislative elections, thereby distancing themselves from President Obama, Arkansas Republicans were able to nationalize the state legislative

elections to capture their first state legislative majority since Reconstruction. To that end it appears that, despite the complaints by state Democrats such as Sen. Pryor, Arkansas Republicans successfully rode President Obama's unpopularity towards historic games despite the presence of a popular Democratic Governor. The results of our unified model of collective accountability in state legislative elections suggests that presidential approval serves as an effective focal point towards shaping state legislative outcomes, while state-based considerations regarding the job performance of the governor or state legislature largely play no role. As such, state legislative choice is largely a referendum on the perceptions of governance by the president rather than any state-based institutional considerations.

The results of our model present two clear implications regarding state legislative accountability. First, we add to the multitude of literature positing that electoral politics in the United States increasingly centers on nationalized partisan perceptions rather than locally-based concerns (Abramowitz & Webster, 2016; Hopkins, 2018). Even in elections tasked with selecting state legislators that provide representation in the state capitol, rather than Capitol Hill, candidates and state parties are increasingly held to account for perceptions of presidential job performance. Second, our results suggest that state-based institutions play no role in shaping state legislative elections. Despite the fact that state legislative elections, by design, either provide support or a rebuke of the Governor's agenda, gubernatorial approval plays a very minimal role in shaping these state legislative electoral outcomes. While this stands in contrast with standing studies regarding that gubernatorial approval does motivate state legislative choice (see Rogers, 2016, for a notable exception), we replicate this finding of minimal gubernatorial effects at both the aggregate and individual-level. While we find that gubernatorial approval does not motivate aggregate state legislative seat turnover, we do find that gubernatorial approval does motivate individual-level electoral choice. But these effects are minimal relative to presidential approval perceptions, with state legislative and congressional approval not playing a consistent role in shaping state legislative outcomes. Despite the fact that state legislative elections are inherently integral towards shaping state-level policy (Caughey, Warshaw & Xu, 2017), these elections are

largely a referendum on constituent perceptions of the president rather than state-level considerations.

We posit that the results of our model suggests an increasingly trend in the literature that voters are increasingly relying on are more consistent party cue, provided by increasingly polarized policy differences between the two parties, to formulate their electoral choice at every level of electoral competition (Stone, 2017). Indeed, our study compliments work by Hopkins (2017) on gubernatorial elections by showing that even in the hyper-localized context of state legislative contests, elections hinge on national partisan debates. While it is increasingly easier to link national policy platforms with down-ballot candidates, state-based considerations largely fall to the wayside in explicitly state-based electoral contexts. We suspect that as polarization increases, the salience of presidential approval will also increase as a predictor of state legislative elections while perceptions of gubernatorial or state legislative approval will play essentially no role in shaping these elections. As such, we expect state-level elections to become more nationalized during this hyper polarized period of American politics. Future work should assess this dynamic at the state legislative district level across states, where these electoral contests are ultimately waged between state legislative candidates. Overcoming this would require data on presidential perceptions at the state legislative level, traditionally out of reach in the literature (see Tausanovitch & Warshaw, 2013, for a comprehensive discussion), further research assessing the relationship between national and state level forces at the state legislative district levels will further clarify how collective accountability manifests itself at this hyper local level. Indeed, while scholars note that state legislatures are exhibiting comparable degrees of partisan polarization that plagues the U.S. Congress (Shor, Berry & McCarty, 2010; Birkhead, 2015; Garlick, 2017), an assessment of collective accountability at the state legislative district level can further our assessment of whether Speaker Tip O'Neil's aphorism "all politics is local" is truly a relic to a bygone era of locally-based electoral accountability.

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