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The Adoption of Electoral Reforms and Ideological Change in the California State Legislature



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SIGNIFICANT FINDINGS

Early evidence suggests electoral reforms in California are associated with an ideological shift in the State Legislature, toward the center.

Since the introduction of top-two primaries and independently drawn district lines, the Legislature is becoming more moderate and less polarized.

Since the reforms took effect:

- Senators and Assembly members are more moderate overall, and
- Polarization between the two parties, as demonstrated by an analysis of members' votes, has been reduced by 15 percent in the Assembly and 10 percent in the Senate.

During the same time period, polarization between the parties has increased in the U.S. Congress.

EXECUTIVE SUMMARY

Legislator voting in the California Assembly and the California Senate is examined in two time periods. The first time period is based on legislative roll calls in 2011, before the Citizen's Redistricting Commission (CCRC) issued its district maps and before the top-two primary was used; the second time period is based on legislative roll calls in 2013, after the electoral reforms were used in the 2012 elections.

By comparing legislator voting records before the electoral reforms (pre-August 2011) and after the electoral reforms (2013), we can see whether the Legislature in office following the implementation of the reforms changed relative to the Legislature before the reforms were implemented.

Political polarization in the Assembly

Political polarization has gone down in the Assembly when comparing commonly accepted political science measures of polarization in 2013 to those of 2011, before the CCRC's redistricting maps were released and the top-two primary was first used.

- The median Assembly member is more moderate post-reform than pre-reform.
- The distance between the median legislators of both political parties has shrunk post-reform when compared to the pre-reform 2011 period. Polarization between the two parties in the Legislature has been reduced by 15 percent on the ideological polarization scale.
- While both parties moved away from the extremes in the Assembly, most of the reduction in the ideological polarization gap occurs on the Democratic side.

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Political polarization in the Senate

Political polarization has also gone down in the Senate when comparing the post-reform measures of polarization in 2013 to the pre-reform 2011 measures.

- The median senator is more moderate post-reform than pre-reform.
- The distance between the political parties in the Senate has gone down, post-reform, but not as much as the polarization gap was reduced in the Assembly. Polarization between the two parties in the Senate has been reduced by 10 percent on the polarization scale.
- Democrats in the Senate moderated from 2011 to 2013. However, many of the 12 Republican Senators moved to the right in 2013 relative to the Republicans serving in 2011. Even though Senate Republicans moved rightward, many Democrats moved toward the center enough to offset the Republican rightward shift. Thus, the polarization gap between the parties was reduced.
- This rightward shift among Senate Republicans is explained in part due to the fact that there are so few in 2013. The most heterogeneous and electorally competitive districts are now represented by Democrats, while Senate Republicans almost all hail from districts with strong Republican constituencies.

Contrast with U.S. Congress

Meanwhile, research shows that ideological polarization between the parties has increased in the U.S. Congress during the time period in which we show it has declined in the California State Legislature.

New legislators in 2013 are more moderate than continuing incumbents, and there are more new legislators in 2013 than in the previous years

The post-reform election ushered in a large number of new members. In the first elections in which the top-two primary and CCRC's districts were used, 38 of 80 Assembly members elected were new, and 9 of the 20 Senators in seats up for election were new. In the Assembly, new members are more moderate than returning incumbents.

- Sixteen of the new Assembly members elected in 2012 came from districts where the incumbents were defeated or chose not to run again. Excluding term-limited seats, these new members make up 27.6 percent of the Assembly in 2013. This 27.6 percent exit rate in 2012 is 10 percentage points higher than the rates of incumbent voluntary exits and defeats during the years in which the 2002 legislature-drawn redistricting map was used.
- Three Assembly incumbents lost in 2012. From 2004 to 2010, no Assembly incumbents lost reelection. In 2002, two Assembly incumbents were not reelected. None of the new Senators elected in 2012 defeated incumbents, consistent with high incumbent reelection rates in the Senate between 2002 and 2010. A larger percentage of Senators voluntarily exited the Senate in 2012 than in the 2002 to 2010 period.

2

The top-two reform and same-party general elections

One feature of the top-two primary is that two Democrats may face one another in the general election; or two Republicans may oppose one another in the general election. These same-party general elections occurred in districts with lopsided registration favoring one party. Obviously, pre-reform, the general election contests were always Democrats versus Republicans.

- As predicted by advocates of the top-two system, Assembly general elections featuring two Democrats running against one another tended to elect more moderate legislators than districts with a Democrat-Republican general election contest. However, Republican-against-Republican contests in the Assembly did not, and there were too few instances of same-party general elections in the Senate to analyze.

In general, this analysis of commonly accepted political science measures shows the Legislature was more moderate and less polarized after the implementation of the political reforms than it was before. The reforms are associated with greater changes in the Assembly than the Senate, though both chambers differ between the pre- and post-reform periods.

While promising to reformers seeking to reduce ideological and partisan polarization, the results should be interpreted with caution. It is difficult to determine the causal effect of electoral reforms on California with these data. The redistricting commission and the top-two primary were two reforms introduced at the same time, so it is difficult to distinguish which of these reforms had a greater effect. In addition to these two reforms, other changes have occurred over the same period: the removal of the Legislature's supermajority vote requirement for budget measures, external political factors such as increases in independent expenditures in legislative races, and demographic and partisan changes among the states' voters.

INTRODUCTION: CALIFORNIA'S NEW ELECTORAL REFORMS

The initiative process was created by progressive reformers a century ago. Just a few short years ago, two major political reforms were passed by California voters thanks to the initiative. In 2008 and 2010, California voters passed ballot propositions that changed the electoral laws of the state in dramatic ways. One of these new laws changed the process for legislative redistricting. It gave power to redraw the lines to an independent commission, the California Citizens' Redistricting Commission (CCRC). Redistricting occurs after each decennial census, and the first CCRC redistricting map was drawn for the 2012 elections. Previously, members of the State Senate and Assembly were responsible for redistricting, which meant that state legislators were responsible for redrawing their own district lines.

The second new law changed the system of primary elections. The new law requires that all candidates of all political parties compete against one another in a first-round election, and the top-two vote-getters in the primary move on to face one another in the general election. All voters, regardless of party affiliation, can participate in both the primary and general election votes; and candidates of the same party can advance to the general election.¹ Previously, voters from one party chose one candidate to be the nominee from that party to face the other party's nominee in the general election; and only the general election was open to all voters. This new primary law was first implemented for the 2012 elections.

This pair of political reforms — a citizens' redistricting commission and the top-two primary — had the potential to upend California's politics by making the state's legislative election outcomes more unpredictable than in recent memory. Proponents of redistricting reform favored removing the Legislature and the state's political parties from the redistricting process. The previous redrawing of the lines by the Legislature in 2002 was dubbed the "incumbent protection act" (Nagourney 2012), as few incumbents who ran for reelection lost their seats following the redistricting. The Citizens' Redistricting Commission, in 2012, was by law not to consider incumbency as a consideration in redrawing lines.

Policy advocates of the top-two primary were interested in altering the primary system in order to shake things up as well. Proponents of the top-two primary hoped that the reform would make some legislative races less safe, thereby increasing electoral competition for state legislative elections. In 2012, following the adoption of these reforms, legislative "races were more competitive than in recent years" (McGhee and Krimm 2012). Reform proponents hoped that the electoral changes would also lead to changes in the California Legislature.

This research report assesses whether the California State Legislature has changed ideologically in the period following the implementation of the top-two primary and the redistricting commission. Did California's state legislators moderate following the implementation of the redistricting commission and top-two primary reforms? Is the Legislature less polarized across the two parties since the reforms have been implemented? I examine roll-call voting in the California Assembly and Senate in 2011 (prior to the electoral reform implementation) and in 2013 (post-electoral reform implementation). The findings suggest that the California State Legislature is more moderate in the period after the top-two primary and redistricting commission districts were implemented.² The moderation appears to be greatest in the Assembly and among Democratic legislators. In addition, new members of the Legislature and those elected in same-party general elections were more moderate than returning incumbents and those elected in a general election where candidates of different parties faced one another.

ADVOCACY AND SCHOLARLY PERSPECTIVES: ARE REFORMS ASSOCIATED WITH LEGISLATOR MODERATION?

One of the professed goals of those advocating for both redistricting reform and the top-two primary was to change the ideological profiles of those elected to the California Legislature (Sinclair 2013). Proponents of the top-two primary “argue that if voters could cross over to support candidates from other parties, moderate candidates could build winning coalitions of their own parties’ moderates and crossover supporters.” (McGhee 2010).

Research prior to the implementation of California’s 2012 reforms found mixed results in regards to whether legislators moderate due to similar reforms in other settings. During California’s experiment with the blanket primary, there is some evidence of legislator moderation during the years in which the blanket primary was used (Alvarez and Sinclair 2012; Bullock and Clinton 2011). Others argue that legislator or candidate moderation is more likely to occur in open primary systems than in closed systems, as candidates will have incentives to appeal to all partisan and nonpartisan voters (Cain 2001; Zhang 2012). However, others find that open primaries generally have less of an impact on legislator behavior than expected by reformers, political scientists, and policy scholars (McGhee et al. 2013; Bullock and Clinton 2011).

In regards to California’s top-two primary, some argue that it is likely to result in more moderate legislators. Sinclair (2013, 7) states that “for proponents of primary election reform interested in reducing partisanship, the top-two remains one of the few likely choices.” In some instances, he finds that voters in California Assembly elections in 2012 chose slightly more moderate candidates due to the structure of the primary (Sinclair 2013, Ch. 5). Depending upon the number of candidates running, the candidates’ political positions, and the extent of moderation among voters, the top-two primary could pull a winning candidate toward a relatively more moderate position. The top-two primary presents a structure in which political parties may not always be able to coordinate on one candidate, thus giving an opportunity to a candidate who would not be likely to win in a closed-primary setting (Indridason 2008).

Similarly in regards to redistricting reform, little research has systematically examined the role of independent redistricting commissions on legislator behavior, mostly due to the fact that few large states have used these commissions until recently. Policy advocates of redistricting reform argue that independent commissions will upset the status quo in the Legislature, and in so doing the result may be more moderate legislators less tied to their political parties’ leaders. Some scholars have been less sanguine, arguing that redistricting is likely to play a small, if any, role in legislator ideology (e.g., Masket, Winburn, and Wright 2012; McCarty, Poole, and Rosenthal 2009). Others have found that “neutral” redistricting plans (such as those drawn by commissions) can disrupt the safety of incumbents (Yoshinaka and Murphy 2009; Lindgren and Southwell 2013), in part because many incumbents choose not to run again in unfriendly, redrawn districts (Yoshinaka and Murphy 2011). Others find redistricting generally disrupts electoral security and increases legislator turnover (Ansolabehere and Snyder 2011). If incumbents lose or choose not to run again due to a new redistricting map, then the redistricting commission may indirectly be associated with ideological changes in the Legislature if new legislators are more moderate than departing legislators. McCarty, Poole, and Rosenthal (2009) find that membership replacement of old legislators with new legislators is associated with changes in legislator ideology, though they argue this is not the result of gerrymandering.

The research on the effect of primaries and redistricting on legislator behavior is focused mostly on the U.S. Congress and on time periods prior to the adoption of California's new electoral reforms. No one has examined the association between California's top-two primary, the districts drawn by the California Citizens' Redistricting Commission in 2012, and the behavior of legislators in office. The research that exists on the effect of the top-two primary and/or the redistricting commission in California examines policy positions taken by candidates during the 2012 campaign (Kousser, Phillips, and Shor 2013; Sinclair 2013), and not the roll-call choices made by those in the Legislature. This report is the first to examine legislator roll-call voting to assess the extent of ideological moderation after the implementation of the electoral reforms.

COMPARING LEGISLATOR VOTING AND IDEOLOGY PRE-REFORM AND POST-REFORM

I examine legislator voting in the California Assembly and the California Senate in two time periods. The first time period is based on floor roll calls in 2011 before any political reforms had been implemented, and the second time period is based on floor roll calls in 2013.³ In August 2011, the California Citizens' Redistricting Commission (CCRC) legislative district maps were released. The top-two primary system was used for the first time in 2012. By comparing legislator voting records before these electoral reforms (January through July 2011) and after the electoral reforms (2013), we can see whether the Legislature elected following the implementation of the reforms changed relative to the Legislature before the reforms were implemented. For the 2011-12 Legislature, I do not examine roll calls held after August 2011 or in 2012 as the new districts were announced at this point, and thus legislators were positioning and re-positioning their roll calls given those new lines. Pre-August 2011 and 2013 (after the elections) provide the cleanest comparison.

I examine all roll calls cast during these two periods to construct an individual ideology measure for each legislator in both 2011 and 2013. The legislator ideology measures are estimated using an algorithm called NOMINATE (Poole and Rosenthal 1997). This and similar methods of estimation have been used to scale the ideology of the U.S. Congress, U.S. state legislatures, and legislatures outside of the U.S. (e.g., Bertelli and Grose 2011; Masket, Winburn, and Wright 2012). Writing in the *Washington Post*, Hare, Poole, and Rosenthal (2014) explain that NOMINATE scores "measure legislators' liberal-conservative positions using their roll call voting records." In addition, the NOMINATE algorithm and its estimates of legislator ideologies have been covered in the popular press when assessing the extent of political polarization in the U.S. Congress (e.g., Ellenberg 2001; Haidt and Hetherington 2012). For more information, I suggest the interested reader visit Keith Poole's web site (voteview.com/blog).

We apply the NOMINATE algorithm to all roll calls and legislators in the California Legislature in the two time periods discussed above. Within each legislative chamber, these ideology estimates are comparable over time. A legislator serving in 2011 can be compared to herself in 2013 to see if she moderated or became more extreme following the reforms. This legislator's ideology can also be compared to other legislators, thus allowing for an analysis of overall ideological change toward moderation or extremism over time in the entire legislature.⁴ The ideological scale ranges from -1 to +1 with -1 being the most liberal point on the scale, and +1 being the most conservative. Moderate legislators are located closer to zero than to the extreme values of -1 or +1.

POLITICAL POLARIZATION IN THE CALIFORNIA LEGISLATURE BEFORE AND AFTER THE ELECTORAL REFORMS

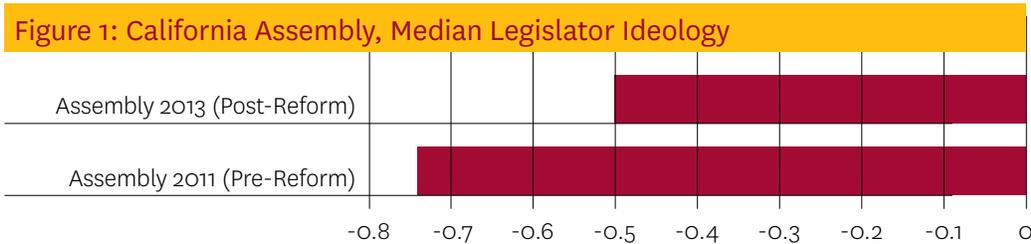
Using these legislator ideology scores, I examine the extent of ideological polarization in the California Legislature before the reforms were implemented (2011) and following the reforms (2013).

Political polarization in the Assembly

Political polarization has been reduced in the Assembly when comparing commonly-accepted political science measures of polarization in 2013, after reform, to 2011, before the CCRC's redistricting maps were released and before the top-two primary was used.

Typically, political scientists examine polarization in a legislature by examining the location of pivotal members of the legislature. One pivotal member of a legislature is the decisive legislator on the chamber floor. In the California Assembly, this would be the 41st of 80 members when all 80 members are ordered by their left-right ideology. This person is pivotal because 41 votes are needed minimally in order for a roll call to pass.⁵ Political scientists refer to the decisive floor member as the floor median.

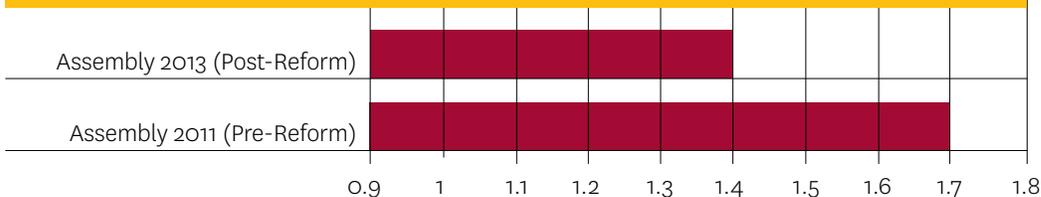
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The x-axis is the legislator ideology score. The full scale ranges from -1 to +1, and scores closer to -1 are more liberal.

Figure 1 shows the location of the median Assembly member in 2011 compared to 2013. Recall that these members' ideologies are estimated based on their roll-call records, and the scale ranges from -1 to +1, with -1 being the most liberal and +1 being the most conservative. In the Assembly, the decisive legislator on close roll calls (the 41st of 80 members) is more moderate post-reform than pre-reform. On all roll calls in 2011 prior to implementation of the reforms, the median Assembly member was located at a fairly liberal position of -0.74. In 2013, once the reforms were implemented, the median Assembly member was located at -0.5. This is still a relatively liberal position, though more moderate than in 2011. Based on this measure, the Assembly has moderated over the space of nearly 25 percent of the left side of the ideological scale (-1 is most liberal, and if 0 is considered most moderate). The Democrats gained seats in the 2012 Assembly elections, but many of these gains came in districts that elected moderate members to the Assembly. The result is that the median legislator is still liberal, but has moved toward the center following the implementation of the redistricting and top-two primary reforms.

Figure 2: California Assembly, Polarization between the Democratic and Republican Parties



The x-axis is the distance between the median Democratic Assembly member and the median Republican Assembly member. Larger values indicate more polarization, and the scale ranges from 0 to 2.

The other measure commonly used by political scientists to measure legislative polarization is the polarization gap between the two major political parties in a legislature. Using the same ideology estimates described above, the distance between the Democratic party median legislator and the Republican party median legislator is used to examine legislative partisan polarization. Figure 2 shows this polarization gap in the Assembly in both the 2011 period and the 2013 period.

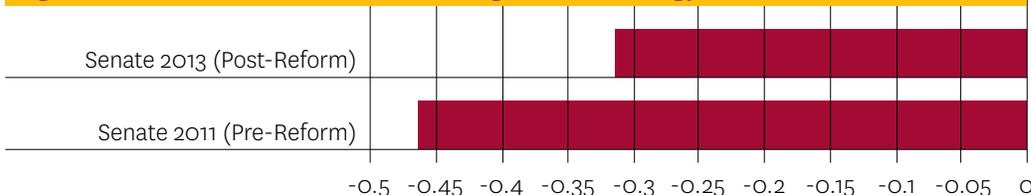
The distance between the pivotal members of both parties has shrunk post-reform when compared to the pre-reform 2011 period. In 2011, the Democratic-Republican polarization gap in the Assembly was 1.7. In 2013, this polarization gap (the distance between Democratic median legislator and the GOP median legislator) was 1.4. The maximum polarization score is 2 (if every Republican voted together on every bill and every Democrat voted together on every bill, the polarization score would be 2), thus showing a meaningful decline in polarization in the Legislature from 2011 to 2013. Polarization between the two parties in the Legislature has been reduced by 15 percent of the ideological polarization scale.

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Political polarization in the Senate

Political polarization has also gone down in the Senate when comparing the post-reform measures of polarization in 2013 to the pre-reform 2011 measures. I estimated Senators' ideologies based on their roll-call records. Like with the Assembly analyses, the scale ranges from -1 to +1, with -1 being the most liberal and +1 being the most conservative.

Figure 3: California Senate, Median Legislator Ideology

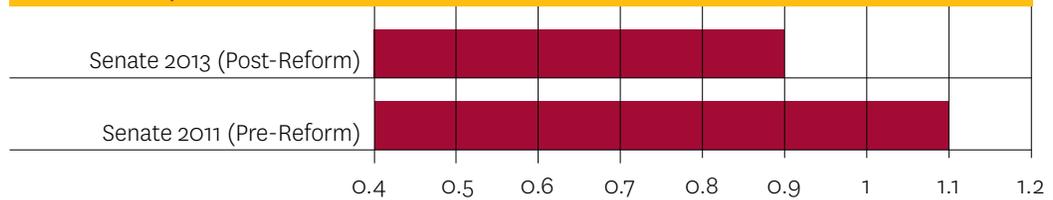


The x-axis is the legislator ideology score. The full scale ranges from -1 to +1, and scores closer to -1 are more liberal.

The California Senate has 40 members, and only 20 seats were up for reelection in 2012 because of the Senate's staggered terms. In the Senate, the floor median – or the decisive legislator on roll calls – is the 21st of 40 members on the left-right ideological scale. As shown in Figure 3, the median legislator is more moderate post-reform than pre-reform. In 2013, the median legislator was at -0.08 on the left-right ideological scale, while in 2011 the median legislator had an ideological score of -0.43. Based on this measure, the Senate has moderated over the space of over 30 percent of the ideological scale.

As with the Assembly, I also examine the distance between the two political parties in the California Senate in 2013 (*see Figure 4*). The distance between the political parties in the Senate has shrunk post-reform when compared to the pre-reform 2011 period, but not nearly as much as the polarization gap was reduced in the Assembly. This is not as surprising as only 20 of the Senate's 40 seats had elections in 2012. The Democratic-Republican polarization gap in 2011 was 1.1, and this gap between the parties shrunk to 0.9 in 2013. The maximum polarization score is 2. Polarization between the two parties in the Senate has been reduced by 10 percent of the polarization scale.

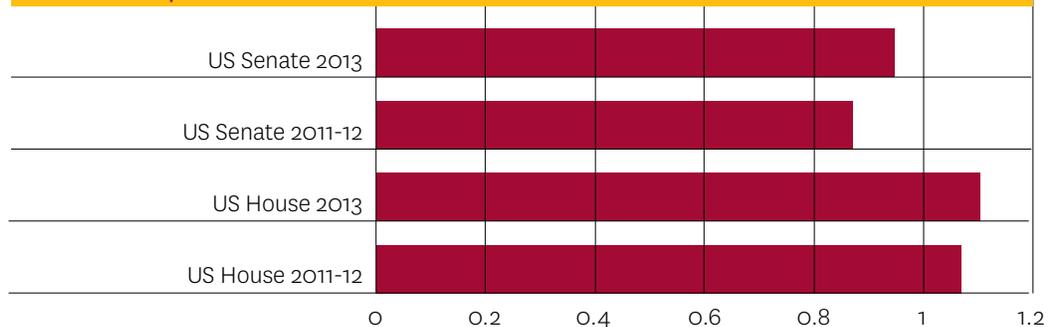
Figure 4: California Senate, Polarization between the Democratic and Republican Parties



The x-axis is the distance between the median Democratic senator and the median Republican senator. Larger values indicate more polarization, and the scale ranges from 0 to 2.

It is clear that polarization has dropped in both the Assembly and the Senate, though the greatest reduction in party polarization has been in the Assembly.

Figure 5: U.S. Congress, Polarization between the Democratic and Republican Parties



The x-axis is the distance between the median Democratic legislator and the median Republican legislator. Larger values indicate more polarization, and the scale ranges from 0 to 2.

Polarization in Congress

To assess whether this reduction in party polarization may be a national trend, I also examined the polarization gaps in the U.S. House and U.S. Senate between the 112th Congress (2011-12) and the first year of the 113th Congress (2013). Using Poole and Rosenthal's ideological estimates of the U.S. Congress (available at voteview.com), we can see that ideological polarization between the two parties in the U.S. Congress has not shrunk during this time.⁶ As Figure 5 shows, the gap between the parties has grown in the U.S. House and in the U.S. Senate during the same time period in which the ideological gap between the parties in California has declined. Elections to the U.S. House are conducted in districts drawn as specified by each state's laws (with many redistricting plans drawn by state legislatures), while the U.S. Senate is of course not redistricted due to the constitutional requirement of two Senators per state. Few states other than California have a primary nomination system similar to California's top-two primary. Given the trends in Congress toward more ideological polarization between the parties, it appears that California is going against the grain with a reduction in polarization in 2013.

THE EXTENT OF MODERATION IN THE CALIFORNIA LEGISLATURE

While the median California legislator is more moderate in 2013 relative to 2011 and party polarization levels have shrunk, what about the rest of the California Assembly and California Senate? If one examines the entire distribution of legislators in the California Assembly and Senate, is there more moderation in legislator ideology? To answer this question, I examine moderation scores for all legislators in both chambers.

A way to measure moderation in the Legislature is to look at the absolute value of the ideology estimates presented above. Recall that the ideology scale ranges from -1 to +1 with -1 being the most liberal and +1 being the most conservative. If we take the absolute value of these scores, extreme scores are closer to 1 and moderate scores are closer to 0. These measures of legislator moderation are also based on all legislators and all roll calls held prior to August 2011 (pre-reform) and in 2013 (post-reform).

Ideological change in the Assembly

The distribution of Assembly members' roll-call voting records were more extreme in 2011 before the citizens' redistricting map was released and before the top-two primary was implemented than the roll-call voting records of Assembly members in 2013.

This ideological moderation measure, which ranges from 0 to 1, is displayed in Figure 6a for all legislators voting in the pre-reform 2011 Assembly. As can be seen in Figure 6a, no legislator has a value lower than 0.4 prior to the reform implementation, and most legislators are quite extreme, with ideology scores near 0.7 to 0.9 on the 0 to 1 scale.

In 2013, following the implementation of the political reforms, the Assembly has more moderate legislators. While there are still legislators at the extreme close to 1, there are now legislators across the entire scale. Some legislators are near 0 and quite moderate. In general, comparing the distribution of legislators' ideologies in Figure 6a and Figure 6b, the entire Assembly has moved to a somewhat more moderate position in 2013 relative to the pre-reform 2011 moderation scores.

Figure 6a: Pre-reform legislator ideological extremity, California Assembly members (2011 roll calls)

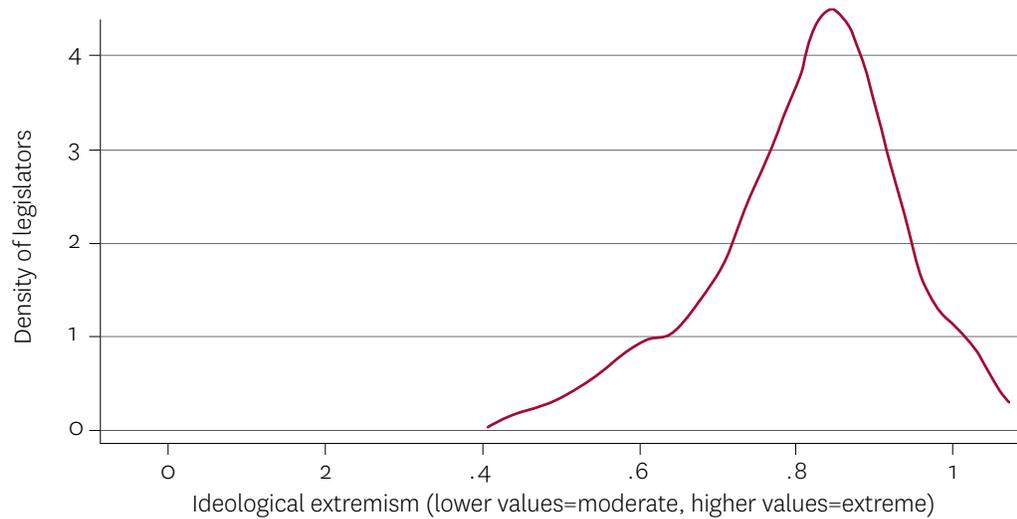
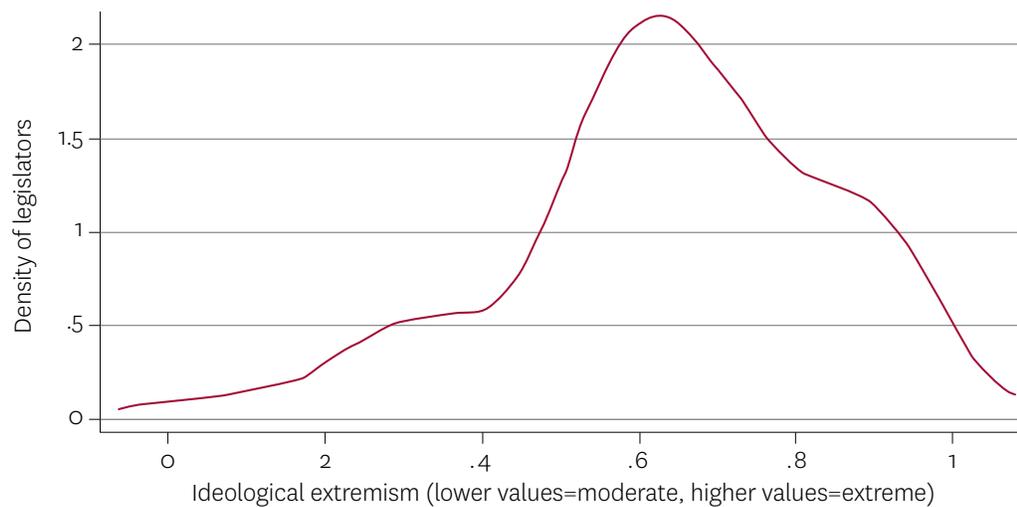


Figure 6b: Post-reform legislator ideological extremity, California Assembly members (2013 roll calls)



Ideological change in the Senate

When examining the entire group of legislators serving in the State Senate in 2011 and 2013, there are more moderate Senators in 2013 than there were moderate Senators serving in pre-reform 2011.

Figure 7a: Pre-reform legislator ideological extremity, California Senators (2011 roll calls)

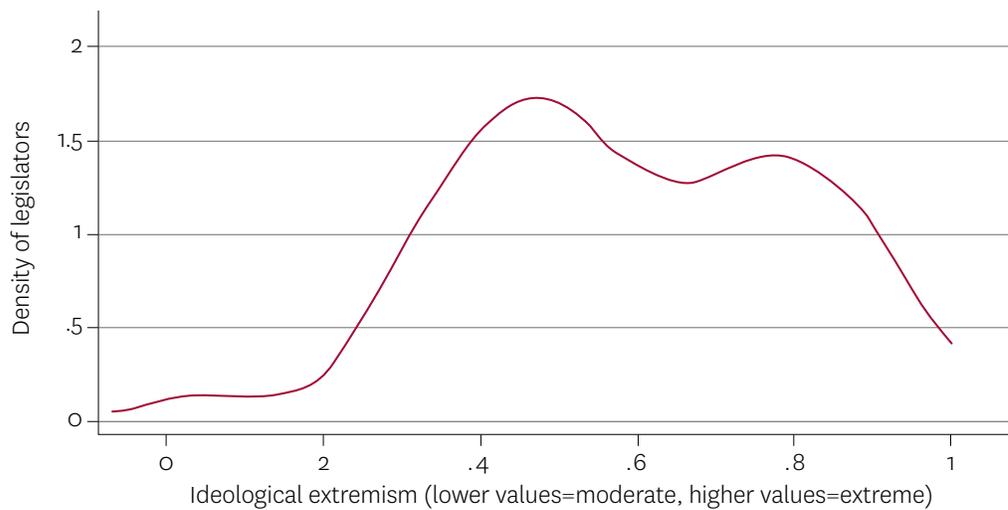
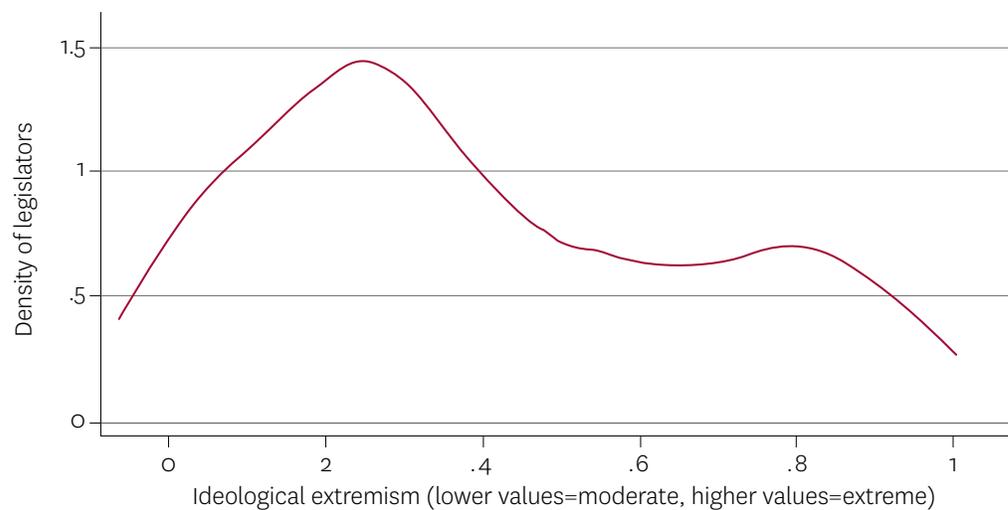


Figure 7b: Post-reform legislator ideological extremity, California Senators (2013 roll calls)



Figures 7a and 7b show the overall moderation of legislators in the California State Senate in pre-reform 2011 and in 2013. In 2011, there were both moderate and more extreme Senators, but the majority of Senators were closer to the extreme end of the scale than the moderate portion of the scale. In 2013, this situation reversed as the California Senate had a larger proportion of Senators that were more moderate than extreme. Following the implementation of the political reforms, there were more moderate State Senators in California than in the previous pre-reform period.

Figure 8a: Pre-reform legislator ideological extremity on Cal Chamber-rated roll calls, Assembly members (2011)

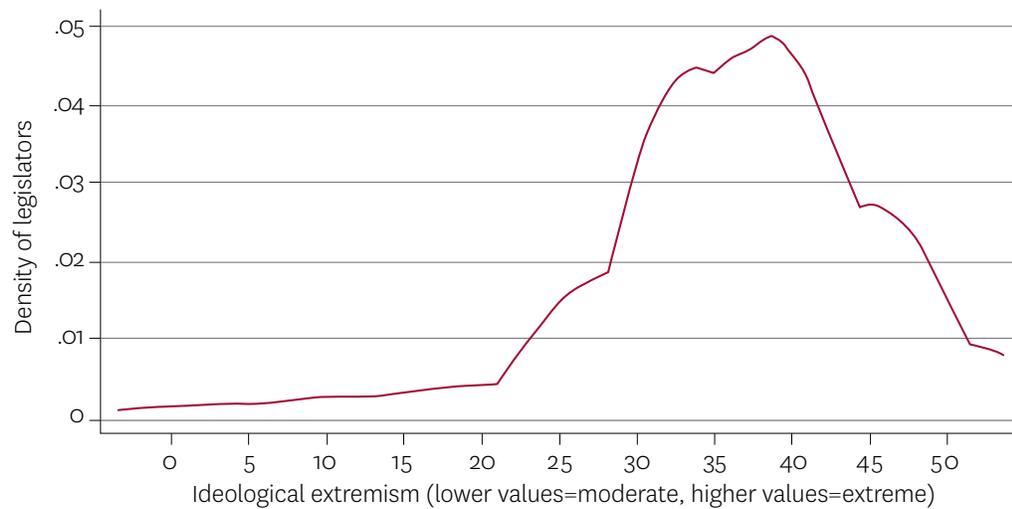
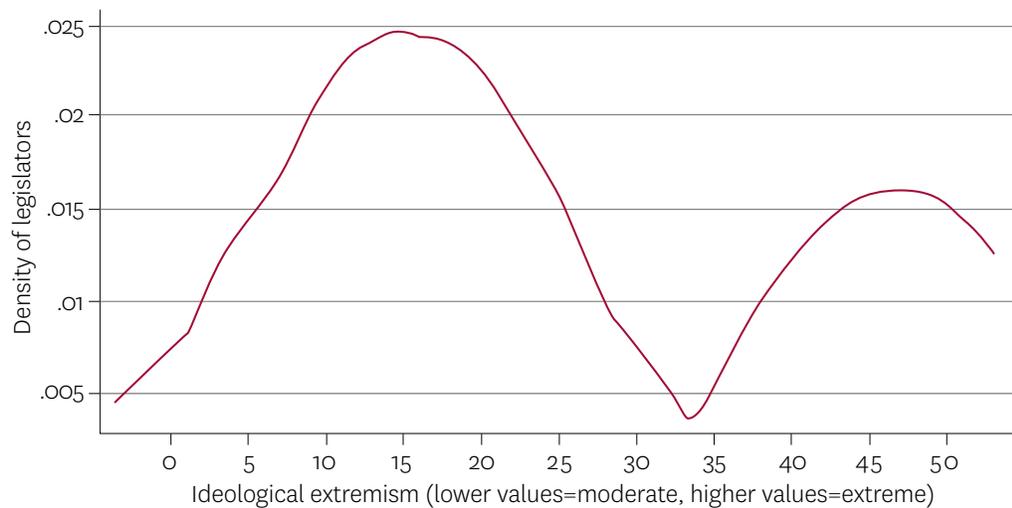


Figure 8b: Post-reform legislator ideological extremity on Cal Chamber-rated roll calls, Assembly members (2013)



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In addition to these measures of moderation on all roll-call votes, I also examined moderation among legislators on the California Chamber of Commerce ratings of individual legislators. The Cal Chamber rates legislators on roll-call votes that it deems pro-business. Like the moderation measure above, I rescaled the Cal Chamber ratings of legislators so that they measure moderation.⁷ The most moderate legislators receive a score of 0 and the most extreme are at 50. The results of both the Assembly and Senate when just looking at levels of moderation on Cal Chamber votes reinforce the findings shown above for general legislator ideology (see Figures 8a, 8b, 8c, 8d).

Figure 8c: Pre-reform legislator ideological extremity on Cal Chamber-rated roll calls, California Senators (2011)

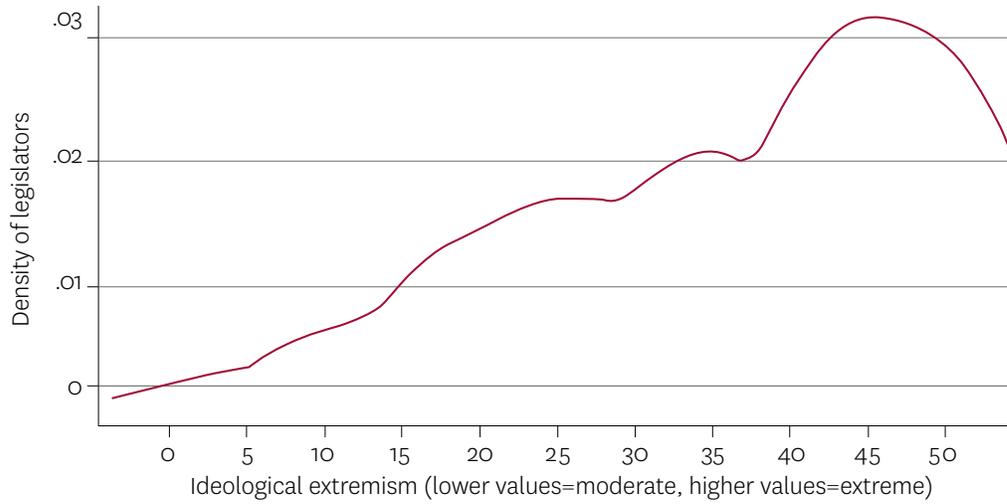
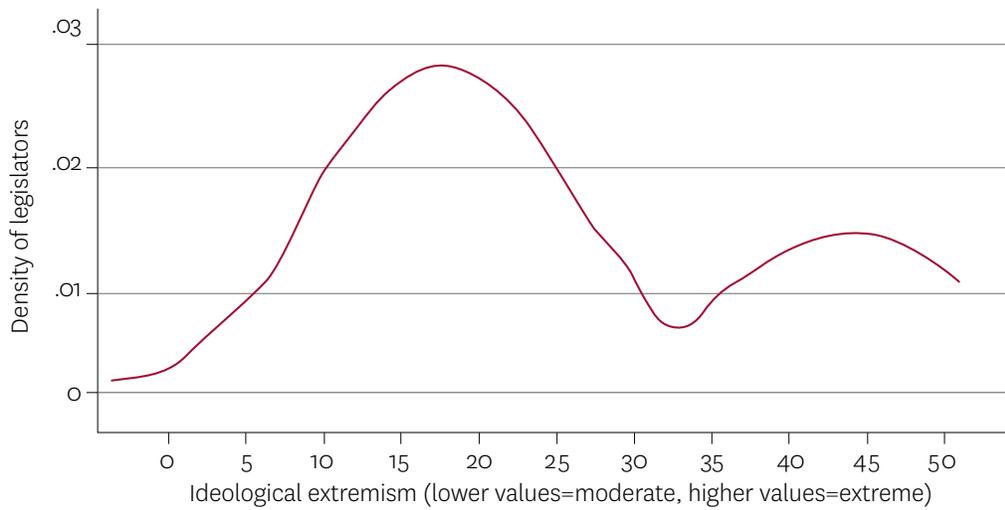


Figure 8d: Post-reform legislator ideological extremity on Cal Chamber-rated roll calls, California Senators (2013)



WHICH LEGISLATORS MODERATED? DIFFERENCES BY POLITICAL PARTY AND CHAMBER

The full legislature moderated in 2013 relative to 2011, but what about within each political party? Democrats gained a supermajority of both legislative chambers in the 2012 elections. Thus, it is possible that most of the moderation comes from the Democratic party because the few remaining Republican legislators represent conservative constituencies, while Democratic legislators are numerically more likely to represent more ideologically heterogeneous constituencies. On the other hand, the moderation observed above may be across both parties.

To assess differences across parties, Table 1 displays the mean ideology ratings for Democratic and Republican Assembly members in the first two columns, and for Democratic and Republican Senators in the last two columns. In the Assembly, both Democrats and Republicans were, on average, more moderate in 2013 than they were in 2011. Democrats most notably shifted toward the center by a fairly large margin, but Republicans only moved very slightly.⁸

Table 1: Average Ideology Score for Democratic and Republican Legislators

Time period	Democratic Assembly Members	Republican Assembly Members	Democratic Senators	Republican Senators
Pre-reform 2011	-0.78	0.82	-0.62	0.55
Post-reform 2013	-0.55	0.80	-0.20	0.76

The ideology scale is from -1 to +1, and liberal ideologies are closest to -1 and conservative ideologies are closest to +1.

In the Senate, Democrats became more moderate in 2013, but Republican Senators did not. Of the 40 Senators, there were only 12 Republicans serving in the Senate in 2013. Contrary to the trends found in the Assembly and with the Democrats in the Senate, most of the 12 Republican Senators moved to the right in 2013.

This result is possibly explained by how well the Democrats fared in the Senate after the 2012 elections. In 2013, Republican Senators almost universally represent districts with very low percentages of Democratic voters – and most Republicans in the Senate in 2013 were not newly elected in 2012. In contrast, Democratic Senators (post-2013) represent a wider range of districts and a significant number were newly elected in 2012. Some of the newly-elected Democratic Senators represent districts in which the Democrats do not have a substantial electoral edge. This means that the mean Democratic Senator ideology may have shifted due to a few key pickups in districts where constituents are not particularly partisan. Thus, Democratic Senators moderated while Republican Senators became more conservative.

NEW MEMBERS AND SAME-PARTY GENERAL ELECTION CONTESTS ARE ASSOCIATED WITH MODERATION

The post-reform election ushered in a large number of new members, particularly in the Assembly. In the first elections in which the top-two and CCRC's districts were used, 38 of 80 Assembly members elected are new and 9 of the 20 Senators in seats up for election are new. McGhee and Krimm (2012) note that "the new districts...altered the electoral landscape, leading many incumbents to pass on reelection...."

To assess whether these post-reform 2012 departures were larger than previous elections, Table 2 shows data on incumbent voluntary exit or involuntary loss from the Assembly from 2002 to 2012. If redistricting in 2012 made reelection more disruptive for Assembly members, some of the legislators may choose to seek other opportunities or would lose reelection; and these rates of exit from the Assembly would be higher than in earlier years (excluding term-limited legislators who have no choice but to leave).

Table 2 suggests that legislator turnover in the Assembly, unrelated to term limits, was higher in 2012 than it has been in the past 10 years, including during the last legislative-drawn redistricting (in 2002). A little more than 27 percent of incumbents in 2012 exited the Assembly by choice or by defeat (16 total Assembly members of the 58 who were not term limited). Three Assembly incumbents lost in 2012 and thirteen Assembly incumbents voluntarily chose not to run for reelection in 2012. The percentage of incumbents who exited for reasons unrelated to term limits was also fairly high in some years (greater than 10 percent in 2002, 2006, and 2010) but low in others (lower than 10 percent in 2004, 2008). In the previous redistricting period in 2002, 18.6 percent of incumbents lost or voluntarily exited the chamber. However, this number is almost 10 percentage points lower than the exit rate in 2012. This suggests that the 2012 commission redistricting map may have been more disruptive to incumbents than the 2002 legislative-led redistricting map, even though both redistricting periods resulted in a reasonably large number of incumbent departures. Similarly, Table 2 shows the percentage of incumbents who lost of those incumbents who ran for reelection. In 2012, this number was 6.7 percent (3 incumbents lost out of 45 incumbents running for re-election). From 2004-2010, no incumbent lost re-election. In 2002, the year the legislative-drawn redistricting map was first used, 4.2 percent (2 of 48) re-election-seeking incumbents failed to win.

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Table 2: Turnover in Assembly, Excluding Term Limited Legislators, 2002 to 2012

	% incumbents who lose or exit but are not term limited	% incumbents who lose of those who ran for reelection
2012	27.6%	6.7%
2010	16.1%	0%
2008	7.1%	0%
2006	13.7%	0%
2004	9.7%	0%
2002	18.6%	4.2%

Table 3 displays the same data for the Senate from 2002 to 2012, showing the percentage of Senators who have left the Senate for reasons other than term limits (loss or voluntary exit) and the percentage of legislators who have only lost re-election to the Senate. In 2012, 21.4 percent of incumbents chose to voluntarily exit the Senate, though none of them lost reelection. Three Senators of 14 who were not term limited chose not to run for reelection.

Table 3 also shows that in 2002, the first election after the legislative-led redistricting, no incumbents exited the Senate if not term limited and no incumbents lost reelection. Between 2004 and 2010, there were some exits from the Senate, but very few incumbents lost. Only one incumbent senator of the 10 who ran for reelection lost in 2008 (10 percent).

Table 3 displays the exits and losses of Senators in percentage terms as this allows for comparability across years in which different numbers of legislators face term limits. However, unlike the Assembly, which has 80 seats up for reelection every two years, the number of seats up for reelection every two years in the Senate is only 20. Thus, large differences in percentages may only be a numerically small difference in terms of the number of Senators and thus caution should be taken when drawing conclusions from Table 3 given the small total number of Senators up for reelection in any given year.

Table 3: Turnover in Senate, Excluding Term Limited Legislators, 2002 to 2012

	% incumbents who lose or exit but are not term limited	% incumbents who lose of those who ran for reelection
2012	21.4%	0%
2010	16.7%	0%
2008	10.0%	10.0%
2006	0%	0%
2004	9.1%	0%
2002	0%	0%

While the Senate data are based on small sample sizes, Table 2 makes clear that a large percentage of Assembly members exited in 2012, the first year in which the redistricting and top-two reforms were implemented. Because of this, I conducted additional analyses comparing the ideology scores of newly-elected legislators with returning incumbents. These additional analyses show that newly-elected Assembly members in 2012 are more moderate than the continuing

incumbents, even after controlling for the underlying partisanship of the district and other factors.⁹ This implies that the top-two and/or redistricting may have played a role in electing more new moderates to the Assembly, inasmuch as these political reforms hastened the exit of some incumbent legislators. In the Senate new members were not more moderate than longer-serving members, though with staggered terms in the Senate there were fewer new members than in the Assembly. This observational relationship between membership replacement and changes to legislator ideology is somewhat consistent with McCarty, Poole, and Rosenthal's (2009) findings in Congress in regards to legislator replacement.¹⁰

In these other analyses, I also examined an outcome unique to the top-two primary reform that can occur in some districts.¹¹ One feature of the top-two primary is that two Democrats may face one another in the general election; and two Republicans may also oppose one another in a general election. These outcomes generally occurred in districts with lopsided registration favoring one party. Obviously, pre-reform, the general election contests were always Democrats versus Republicans. In the Assembly, Democrats who won in 2013 by beating another Democratic candidate in the general election were more moderate than legislators facing the more traditional general election with a different-party opponent. Republican-against-Republican general election contests in the Assembly did not yield a difference compared to different-party general election contests. In the Senate, only 2 of the 20 contests resulted in a same-party general election, and thus there are not enough cases to analyze. Just over 20 percent of all Assembly general-election contests had two candidates of the same party face one another.

Examples of this phenomenon include the 2012 race in the overwhelmingly Democratic 50th Assembly district in coastal L.A. County. The top-two vote getters were incumbent Assembly member Betsy Butler and challenger Richard Bloom. Both were liberal candidates, but Bloom was perceived as just somewhat more moderate than Butler in a survey of the district's voters during the 2012 election (Sinclair 2013). Bloom beat Butler by a small margin, and he benefited from voters who were more moderate than both candidates. According to the ideology scores estimated above, Bloom (in 2013) and Butler (in 2011) were both liberal legislators. However, Bloom's roll-call voting record was somewhat less liberal in 2013 than Butler's voting record was in 2011. Bloom was at -0.597 and Butler was at -0.842 on the -1 to +1 NOMINATE ideological scale. In another Assembly district, the 10th, Michael Allen faced Marc Levine in the general election. Both are Democrats, though incumbent Allen ran as a pro-union Democrat and Levine ran as a more business-friendly Democrat with support from the California Chamber of Commerce.¹² Levine won the election, even though the district is overwhelmingly Democratic (Democratic registrants are a majority of the district and the district gave Obama over 75 percent of the vote in 2008). In 2013, Levine supported the Cal Chamber in 43 percent of votes, which is high for a Democratic legislator. In contrast, Allen supported the Cal Chamber in only 14 percent of votes in 2011. This suggests that even in lopsided one-party districts, the top-two primary may have an impact toward moderation when the two final candidates share the same party affiliation.

CONCLUSION

The California State Legislature was more moderate and less polarized after the implementation of the electoral reforms than it was before the reforms were adopted and used. This increased moderation and reduced polarization was shown in both the California Assembly and Senate. Of course, I caution that it is obviously difficult to determine the causal effect of political reforms on California with these data. The redistricting commission and the top-two primary were two reforms introduced at the same time, so it is difficult to distinguish which of these reforms had the greatest effect on changing legislative politics in California. In addition to these two political reforms, other changes have occurred concurrently: institutional reforms such as the removal of the supermajority vote requirement for budget measures in the Legislature, external political factors such as increases in independent expenditures in legislative races, and demographic and partisan changes among the states' voters.

It is also important to note that while the California Legislature is more moderate in 2013 than it was in 2011 prior to the implementation of the top-two and redistricting reforms, the Legislature is still left-leaning. This is not surprising given the impressive showings the Democratic party garnered in recent elections. The State Legislature in 2013 is more Democratic than it has been in some time, and it is still quite liberal compared to many other states' legislatures. While still a liberal state legislature in 2013, ideological polarization has been reduced between the political parties. In addition, no matter how measured, the Legislature is more moderate in 2013 than in 2011. California's legislators have broken the trend toward increasing political polarization both nationally and in California prior to 2012.

More research should be conducted examining whether these trends toward moderation will continue in California, and exactly what factors are most important in influencing these trends. It is clear that the Legislature is somewhat less polarized and more moderate than it was prior to the adoption of the reforms. However, these data are observational. Future work should attempt to examine causal links between reforms and legislator behavior, voter behavior, interest and advocacy group choices (perhaps using experimental tests that approximate the institutional reform changes in the laboratory, in surveys, or gathered using deliberative focus groups of voters). Did the electoral reforms change behavior at the voter level, thus changing legislator behavior? Did interest groups change their endorsement strategies in favor of more moderate candidates because advocates expected that the reforms would elect these candidates?

A large number of legislators chose not to run for re-election in 2012. Future work should assess what motivations affected individual legislator choices, particularly the role of the newly-redrawn districts and/or the top-two primary. Were those who ran in open seats and won more moderate because they believed moderate candidates had a better chance of winning in the new electoral system? Did the reduction in influence of the political parties in the top-two primary and from the redistricting process give newly-elected legislators more of an opportunity to defect from their party leadership once elected?

In addition, other forms of legislative behavior beyond roll-call voting (Grose 2011) and in states outside of California should also be studied. California only recently changed its electoral laws with the adoption of the top-two primary, and it will be interesting to examine how the new primary rules affect candidate, legislator, and voter behavior in future elections. Any conclusion regarding moderation observed in the Legislature in 2013 must be tempered until we see more data across more years of legislatures (McGhee 2014). In addition, it will be interesting to see how the next round of redistricting via the Citizens' Redistricting Commission plays out, and how that may impact the California Legislature after 2022. The state implemented major reforms to its electoral system during the 2012 elections, and this is just the first examination of how the state's politics may be changing going forward. As always, California is on the cutting edge of political and electoral reform and only time will tell how those changes affect the state's politics and policy-making.

¹ Both voters registered with a political party and those registered as decline-to-state can participate in the primary election, choosing among the same menu of candidates.

² While there is evidence that the Legislature moderated since the implementation of these reforms, some caveats are in order. Because the reforms were implemented at the same time, it is difficult to distinguish which electoral institutional change may play the greatest role. In addition to these two electoral reforms, other confounding political and institutional changes have also occurred at the same time.

³ I thank Seth Masket and Jeff Lewis for directing me to the California legislative roll-call data that Lewis makes available on his web site.

⁴ To make the scales comparable over time, I made identification assumptions, including constraining some ideologically consistent legislators over time. The W-NOMINATE software available on Keith Poole's voteview.com web site was used for estimation. I present the first-dimension ideological estimates in this report. Please contact the author for details if interested.

⁵ In California, the floor median is decisive on those votes not related to tax increases. Those tax roll calls require two-thirds of the Legislature to pass.

⁶ These ideological estimates are from data posted at Keith Poole's web site, voteview.com. These estimates are not on the same scale as the ideological estimates I created for the California Assembly and Senate. Therefore, the scales are not directly comparable, though we can note that Congress's polarization gap is increasing while the California Legislature's polarization gap is narrowing.

⁷ This measure is the absolute value of (50 minus a legislator's Cal Chamber score). Cal Chamber scores range from 0 percent to 100 percent support, so in the rescaled measure 50 would be the most extreme legislator and 0 would be the most moderate legislator. Unlike the NOMINATE ideology measures I generated for the California Legislature, these Cal Chamber moderation scores are not directly comparable across time so caution in interpretation is warranted.

⁸ This difference is statistically insignificant for Republicans.

⁹ These were regression analyses associating multiple predictors with the moderation scores discussed above (the absolute value of NOMINATE ideology scores). The full regression results are available upon request from the author.

¹⁰ McCarty, Poole, and Rosenthal (2009) argue that gerrymandering is not associated with legislator ideology, but find that membership replacement is. Intriguingly, in the case of the California Legislature in 2013, membership replacement in the Legislature was likely hastened by the specific districts drawn by the California Citizens' Redistricting Commission.

¹¹ Details of these analyses are available upon request from the author.

¹² "Top-two Politics." *Calbuzz*. <http://www.calbuzz.com/2013/05/top-two-politics-biz-plots-back-stories-backbiting/>

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