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Explaining Legislative Productivity: Evaluating the Effects of Polarization and Divided Government in a Cross-Sectional Study of State Legislatures

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Abstract

Despite a wealth of literature on the causes of gridlock in Congress, there is a lack of comparative work at the state level exploring whether lawmaking in state legislatures functions similarly. Operating under a theoretical framework assuming polarization and divided government are the primary obstacles to legislative success, and controlling for majority seat share, I test the determinants of legislative productivity with an original dataset consisting of 31 states. I operationalize legislative productivity using a content analysis of editorials from each state during the 2009-2010 legislative sessions to identify pressing political issues, and then determine how many of these issues were addressed in some form of legislation during this period. Utilizing an improved measure of legislative productivity that weights issues by salience, I find that polarization's effects on productivity are conditioned by the presence or absence of divided government; during instances of unified government, polarization increases productivity, while this effect is negated under divided government.

EXPLAINING LEGISLATIVE PRODUCTIVITY: EVALUATING THE EFFECTS OF POLARIZATION AND DIVIDED GOVERNMENT IN A CROSS-SECTIONAL STUDY OF STATE LEGISLATURES

Mike Kistner

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INTRODUCTION

In recent years, much has been written about the failure of the political system to simply get things done. The high profile government shutdown of 2013, budgetary fighting and delays in state legislatures, and an increasingly hostile partisan atmosphere have all contributed to what has been characterized in the media as a political crisis. As a 2013 op-ed in the New York Times puts it, "the legislature has ceased to function" and claims that "what we're losing in the process isn't government -- it's democracy".[112]

While such claims might appear to be dramatized, they do point to a current lack of understanding about when and why government is successfully able to pass laws. What makes some legislatures effective and leaves others mired in gridlock? Political science literature has grappled with this question for almost 130 years, dating back to Woodrow Wilson's critical examination of the nation's primary legislature, *Congressional Government.*

Despite the passage of time, a consensus has failed to emerge on the causes of political gridlock, despite a wealth of recent literature attempting to tackle the topic at the

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[112] Reich 2013, A23

national level.[113] There are numerous potential explanations, which include the effects of increasing polarization, the presence of divided government, and executive success or failure among others. Different authors espouse a belief that one or more such variables is the real cause, only to be rebutted by future research. Interestingly, a comparable literature at the subnational level has failed to develop, and there exists almost no multistate research to determine if state legislatures function (and fail to function) in similar ways to Congress.[114] Currently, there exists no work examining both polarization and divided government – the two most important variables identified at the national level – that encompasses a majority of the states.

This paper attempts to address this absence. By taking my cues from (and improving on) a method of identifying legislative agendas that has been used at the national level, I create two measures of state legislative productivity (one which treats all issues equally, and one which weighs each by salience) and apply these to 31 states during the period from 2009-2010. Then, by utilizing a recently created dataset that quantifies the ideological position of every state legislator, I am able to operationalize polarization as well as divided government, in order to determine their effects. Finally, I examine the impact of divided government and polarization at the state level, controlling for seat share, in an attempt to come to a better understanding of the conditions under which state legislatures succeed and fail at their most basic duty, the passage of laws.

<div align="center">LITERATURE REVIEW</div>

American political scientists have long attempted to isolate what drives legislative productivity, whether by examining Congress or state legislatures. This venture presents a two-fold difficulty. The first part is determining what comprises legislative productivity. Some scholars have tackled the issue as a matter of how much important legislation passed. David Mayhew, in one of the most cited works on the subject, quantified gridlock in this manner.[115] By looking at both contemporary commentary and retrospective judgments of what he termed "landmark" legislation, he was able to assign a raw score to congressional sessions to determine how productive or gridlocked each

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[113] Mayhew 1991; Fiorina 1992; Binder 1999; Jones 2001; Edwards et al. 1997; McCarty et al. 2007; Ilderton 2008
[114] But note Gray and Lowery 1995; Bowling and Ferguson 2001
[115] Mayhew 1991

was. Others have looked at the converse, the amount of important legislation that did not pass.[116] The limiting factor to such approaches is that these measures fail to take into account the differing agendas each session faced. For instance, moments such as the Second World War or the financial crisis of the late 1970s would seemingly provide a greater need (as well as opportunity) to pass legislation. An amount of legislation that would seem prodigious in less eventful times would then be expected. A more useful way to define productivity requires looking at a legislature's responsiveness to the political needs of the time, taking such exigencies into account.

Some have devised measures that attempt to consider the issues faced by each legislature, typically by framing legislative productivity as a fractional score, with the number of relevant issues serving as the denominator, and the number of issues actually addressed as the numerator. One way this has been accomplished is by using the number of bills that made it to a particular stage of the lawmaking process, in order to construct a theoretical legislative agenda.[117] This approach, however, runs the risk of failing to take into account the relative importance of each bill. Hearkening back to the previously mentioned definition, if the goal is to determine how responsive a legislature is to political needs it is certainly not the case that every bill that makes it out of committee necessarily represents a potent issue. In addition, the number of bills introduced or reaching a certain level of visibility is in itself potentially related to how much party conflict is present, making the independent variable subject to endogeneity problems.

Other researchers have come up with ways to take into account both the needs faced by legislatures when lawmaking, as well as determining a level of salience. Binder, in her 1999 work on gridlock in Congress,[118] uses a content analysis of newspaper editorials to provide a legislative agenda of issues considered important enough for a newspaper of record to bring to attention, whether in support of an action or against. Kousser utilizes a similar approach at the single-state level.[119] By setting a threshold of importance as well as determining agenda faced, this type of approach allows more meaningful comparisons to be made across time and location regardless of context.

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[116] Edwards, Barrett, and Peake 1997
[117] Bowling and Ferguson 2001; Ilderton 2008; Jones 2001
[118] See also her book length treatment on the same subject (2003)
[119] Kousser 2010

The second difficulty in investigating legislative productivity is deciding (and disentangling) which variables contribute to successful lawmaking. The primary determinants that researchers have focused on can be broadly categorized as inter-institutional conflict, or intra-institutional conflict.

Inter-institutional conflict refers to the complicating effects that arise when the major players between one branch and another have distinct preferences. At its simplest, this can be viewed as divided control of government. When a president (or governor) is from one of the two major parties and one or both chambers of the legislature are controlled by the other party, does this present an obstacle to the passage of laws? In a Madisonian democracy of checks and balances, it would seem to make sense that when the two branches are controlled by actors with differing goals and interests, the process of lawmaking would be more difficult, requiring compromise, logrolling, and information sharing that isn't an issue if all major players have similar goals.[120] However, Mayhew, in a critical null finding, provided an analysis of 44 years of Congress that found no link between divided government and legislative productivity. Since then, numerous scholars have produced empirical evidence contrary to Mayhew's findings pointing to divided government being an obstacle to legislative efficiency at the national level.[121] Alternatively, others have confirmed Mayhew's results.[122]

While less literature exists at the state level, the debate also seems to extend to the state legislatures. Though they only examine legislative activity in a single state, Kousser and Cummins both conclude that divided government presented a barrier to the passage of bills and budgets in California.[123] Bowling and Ferguson examine all fifty states, measuring gridlock as a simple percentage of how many bills became laws and how many failed to, and find divided government to be a statistically significant factor.[124] On the other hand, in examining legislative activity in 46 of the states, Gray and Lowery found a nonexistent relationship between divided governmental control and law

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[120] Such a process also seems to be more likely to break down completely. For over thirty years, political scientists have observed that vetoes are more common under divided government both at the national (Rohde and Simon 1985) and state (Wiggins 1980) level.
[121] Binder 1999; Ilderton 2008; and Edwards, Barrett and Peake 1997
[122] Fiorina 1992; Jones 2001
[123] Kousser 2010; Cummins 2012
[124] Bowling and Ferguson 2001

passage.[125] Despite widely differing results, all of these authors consider the presence of inter-institutional conflict an important point of analysis.

The second primary lens through which to consider gridlock is intra-branch conflict; specifically, factors within the legislature that prevent it from functioning properly. This discussion has mostly centered on polarization, or the width of the ideological differences between the two parties.[126] Why should polarization affect legislative productivity? For some, polarization's effect is a general one; the more ideologically distant the members making up an institution, the less successful it will be. As Binder puts it, "The broader the distribution of preferences, the greater the likelihood that legislator's goals will be incompatible, or at least the more difficult it will be to reach a suitable compromise."[127] Polarization, therefore, can pose individual level difficulties, but perhaps the greatest threat of polarization is the conflict it encourages in the parties. As the theory of conditional party government suggests, parties in a legislature that are further apart ideologically have more incentive to strengthen party government and oppose the other party more vigorously.[128] Logically, as polarization increases, the minority party will have more incentive to oppose the majority party's actions, complicating the passage of laws.[129]

However, it should be noted that the effects of polarization on the legislative process may differ based on institutional factors. Due to a number of blocking tactics available for the minority party to use in the United States Senate (filibuster, legislative holds, non-germane amendments), researchers have noted that a highly divided Senate may suffer more under polarization than the House does.[130] It has even been suggested that due to the relative ease with which a House majority can pass an agenda, the

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[125] Gray and Lowery 1995

[126] But note Gray and Lowery 1995 as well as Bowling and Ferguson 2001, who suggest that the proliferation of interest groups and the conflict between them is significant too.

[127] Binder 1999, 521

[128] Aldrich 1995; Aldrich and Rohde 1996

[129] Worth noting, however, Dodd and Schraufnagel (2008) suggest that due to increased competitive pressure and intraparty cohesion, polarization might have a curvilinear relationship with legislative productivity, where the ideal amount is moderate polarization, and too far to either extreme results in diminishing returns. In my analysis, I take into account this possibility.

[130] Sinclair 2008; Jones 2001

increased ideological cohesion that comes with polarization may make the House more productive.[131] In fact, others have suggested that polarization can perhaps counter-intuitively have positive effects on the lawmaking process. Dodd and Schraufnagel have suggested that due to intraparty cohesion, increased competitive pressure, and legislator civility, polarization might have a curvilinear relation with legislative productivity, where too little polarization can be as harmful as too much.[132] Likewise, when one takes the conditional party government theory to its logical conclusion, while increased polarization might increase the incentives for parties to draw closer together and oppose each other more vigorously, it also might imply that if polarization is paired with large enough legislative majorities to prevent minority interference, the increased cohesion and incentives for the majority party might lead to greater productivity. Thus, it's important to take majority party seat control into account as a potential explanatory variable as well. While polarization may have both positive and negative effects on legislative productivity, insofar as it is a matter of pitting the majority party against the minority party, the balance of power between the two remains a critical factor.

Notably, few have considered the confluence of polarization and divided government. Polarization's effects may be tampered by whether interparty bargaining is required between a governor and all or part of a legislature. Conversely, if polarization does enhance productivity in some manner, it seems much more likely to occur when the governorship and the legislature are controlled by the same party. McCarty hypothesizes this precise relationship at the national level.[133]

These three variables are not a comprehensive list, as other possible factors in legislative productivity have also been investigated.[134] However, these are the primary potential explanations that scholars have focused on thus far, coming to few undisputed conclusions.

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[131] Ilderton 2008

[132] Dodd and Schraufnagel 2008

[133] McCarty 2007

[134] For instance, legislative professionalism (Gray and Lowery 1995; Clarke 1998), or extra-institutional constraints such as having an initiative process (Cummins 2012; Hicks 2013).

In light of this, a number of things are clear. First, such contradictory results at all levels on the relationship between both inter- and intra-institutional conflict and legislative productivity leave us with a muddled picture on how such factors affect the lawmaking process. Any further research into the phenomenon of gridlock can only help clarify what is now a disputed area. Secondly, while the effects of divided government have been studied at the state level in a comparative context, there is no current equivalent research concerning the effects of polarization on legislative activity in the states. As Layman, Carsey and Horowitz detail at the end of their summary on political polarization, "particularly helpful would be comparative work at both the subnational and cross-national levels, where variations in policy, partisan, institutional, and cultural contexts may shape the beneficial or harmful consequences of party polarization."[135] Considering this, the benefits are numerous of a multi-state examination of legislative productivity taking both inter-institutional and intra-institutional conflict into account; not only will it help illuminate the role of polarization in how legislatures function at the state level, but it also allows an evaluation of how divided government and polarization work as variables across a number of varying institutional and environmental contexts, in a way that looking at Congress or a single state alone does not allow. If inter- and intra-institutional conflict has a universal effect, a study looking at a large cross-section of US states should bring us closer towards properly determining those effects. This paper attempts to address this gap in the literature by systematically looking at the relative influence of these two factors, and presents evidence that at the state level that both have significant (though conditional) effects on legislative productivity.

METHODOLOGY

In order to evaluate these claims, it is necessary to operationalize legislative productivity, polarization, and divided government. The most difficult step is coming up with a valid measure of legislative productivity during 2009-2010, the time period under examination.

Attempts to come up with such a measurement in previous multistate research have primarily utilized a simple measure of total bill passage rate.[136] The problem with

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[135] Layman, Carsey, and Horowitz 2006, 105
[136] Gray and Lowery 1995; Bowling and Ferguson 2001

such an approach is that simply taking the passage rate of all bills mandates the inclusion of a large number of minor legislative actions, as well as failing to capture whether or not a state legislature addressed what were considered the important political issues at the time.

Instead, my measure of legislative productivity draws from Sarah Binder's methodology in "The Dynamics of Legislative Gridlock."[137] Binder measured gridlock by going through the editorial pages of *The New York Times,* coding the policy demands of every editorial mentioning Congress, the House, or the Senate. She then created a measure of gridlock by taking the number of issues that failed to result in the passage of laws, and turning it into a percentage, with the total number of issues discussed in the editorial pages representing the denominator. She decides to only include issues with four or more editorial mentions in her analysis, to provide a floor for salience.[138]

The benefit of such an approach is that it focuses on what political commentators at the time deemed important enough to discuss publicly, rather than merely looking at all bills considered as other researchers have done. This comes closer to the real concern when discussing legislative productivity: determining which legislatures can most effectively respond to the political necessities of the time. For example, an average state might pass 800 new laws per year.[139] On the other hand, my content analysis of newspaper editorials turned up an average of 29 *unique issues* for each state which were considered important enough to discuss in an editorial.

However, while Binder's method recognizes this importance threshold by examining only those issues salient enough to be discussed in the media, it fails to take into account the relative importance of each issue once the threshold has been passed. A better measure would be one that is able to distinguish between issue importance at an interval level (rather than treat all issues past an arbitrary point of salience the same), and incorporate that into a legislative productivity score.

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[137] The use of this method at the state level is not without precedent; in his single state analysis of gridlock in California, Kousser (2010) uses a similar measure as Binder to draw conclusions on the effects of polarization.

[138] In both her 1999 and 2003 works, she does run the tests with different threshold levels, with mostly the same results.

[139] MSNBC 2011

In order to accomplish this, I go through each of the 31 states, and using a newspaper of record for each state (choosing the newspaper with the largest circulation available from two online databases[140]), I analyze every unsigned editorial containing the term "state legislature", or alternatively, the specific name for the state (for example, searching in *The Chicago Tribune* for Illinois using "General Assembly"). I then create a dataset listing all the unique issues, including the number of editorials each issue are mentioned in throughout the two year period.[141] Following this, I utilize websites maintained by the individual state legislatures themselves, contemporary news reports, and Lexis-Nexis to determine which of the issues were addressed in some manner in a bill that passed through both chambers and was signed into law. I make no attempt to judge the quality of the laws, or how closely they came to an ideal version that either the editorial staff at the newspaper or legislators at the statehouse wanted. Rather, it is simply a measure of whether the legislature was able to pass a law that was closely related to the specific problem identified in the editorial pages.

Using this, I derive two measures, depending on whether the unit of analysis is a *unique issue,* or an *issue mention*, counting each mention of an issue in a different editorial separately. Table 1 provides the average number of unique issues and issue mentions per state. While the mean number of mentions each issue received was only 1.8, there was significant variation. At the high end, one issue was mentioned in 22 separate editorials over the two-year period.

Table 1: *Descriptive Statistics for Unique Issues and Issue Mentions Per State.*

	Mean	Low	High	Standard Dev.
Unique Issues	28.5	11	69	31.0
Issue Mentions	52.0	12	118	14.8

N=31

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[140] ProQuest National Newspapers Premiere and Lexis-Nexis
[141] See Appendix A for coding procedure.

The first measure I use is essentially the method used by Binder in her analysis, which I term *Simple Legislative Productivity*. This score considers how effective the legislature was at dealing with all of the issues faced during the time period, without considering their relative importance. It is assumed that if the issue was important enough for an editorial to be written concerning the matter, the issue represented a problem to be faced.

The second measure, which I refer to as *Weighted Legislative Productivity*, weighs each issue differently depending on how many editorials mentioned the issue.[142] This measure takes into account the salience of each issue; perhaps a state that is hampered by divided government or polarization cannot deal with the same number of issues, but it can still address the most pressing problems of the day. By using both measures of productivity, this approach allows such a distinction to be made and penalizes such a legislature less severely than one that addresses problems at random.

This method has the benefit of identifying the most politically salient issues, as well as going beyond a simple count of important legislation in a Mayhew-esque manner, which theoretically would be greater in larger state legislatures as compared to smaller ones. The methodology I utilize attempts to determine how much states had on their agendas during the time period studied, and then how much of that agenda they were able to respond to, a basic definition of legislative success.

Furthermore, because the content and quality of the law is not what is being measured, fears of partisan sympathies on the part of the newspaper under question should not be an issue; as Mayhew described it in his work on divided government, a newspaper need not agree with an issue to deem it important enough to write about.[143] On a theoretical level, editorials represent a sort of communal conversation about the political situations of the time, and just like a political conversation between people, topics will include both issues an editorial board supports and opposes. My coding

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[142] To provide an example, if the issue of same-sex civil unions was mentioned in three editorials, for the first measure I would code simply whether a law was passed concerning same-sex civil unions, and it would represent one success among the total number of issues that had the potential of being addressed in law. For the second measure, I would code that as three successes, among the total number of issues by story mention that potentially could have been addressed in law.

[143] Mayhew 1991, 43

scheme looked only at what editorials were talking about, not what they wanted. I also create a dummy variable utilizing the newspaper slant scores developed by Shapiro and Gentzkow to use in my analysis, coded positively if the newspaper I use is biased towards the party in control of the legislature.[144]

The next step is quantifying the independent variables, polarization, divided government and majority party seat control. To operationalize polarization, I use the data from the ideal space estimation model created by Shor and McCarty.[145] The two are able to map state legislators on a single-dimensional ideological spectrum utilizing roll call voting and survey responses from legislators both at the national and state level, allowing one to compare standardized scores for legislators across time and chambers. By comparing the difference in party ideological medians within each chamber and averaging the two, I come up with a measure of polarization for each state legislature. While my primary unit of analysis will be the state legislatures themselves, the ability to aggregate individual preferences into a total score that is directly comparable with other state legislatures (as well as Congress) provides a more precise measure of polarization than previous attempts at quantifying the concept.[146] I conduct my analysis of state legislatures for the biennium from 2009 to 2010, since that is the most recent period that the majority of states had polarization data available.[147]

I then test whether polarization has the theorized negative effects, conditional on the presence of divided government, coded as a dummy variable (0 if one party controls both the governorship and both chambers of the legislature, 1 if otherwise). My first hypothesis is that polarization should have a negative effect on legislative productivity when combined with divided government, and either no effect or a positive effect during unified government. I also hypothesize that greater majority seat share (coded as the percent of seats in each chamber the largest party in the state controls, averaged across chambers) will likewise allow a majority party to accomplish more of its legislative

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[144] Shapiro and Gentzkow 2010

[145] Shor and McCarty 2011

[146] Erikson, Wright and McIver 1993; Berry et al. 1998

[147] Because the dataset is an ongoing work, for 12 of the 31 states the 2009-2010 data wasn't complete. For these states, I utilize the closest year with complete data before 2009, which was 2008 for all 12 states. Because the ideological medians change gradually over a large number of years, this shouldn't significantly affect the results.

agenda. This should occur regardless of divided government. Under divided government, greater majority size should lead to increased likelihood of a veto override, and even under unified government a larger seat share prevents the minority party from making effective use of blocking mechanisms.

DATA ANALYSIS

In order to evaluate these hypotheses, I measure the legislative productivity of 31 states, and then assess the impact of polarization, divided government, and majority party seat share. My initial list of 31 states is diverse in population, average income, geographical location, and ideology.[148] Particularly, I wanted a mix of divided versus unified control of government. Table 2 provides the relative frequencies of divided government for all state legislatures from 2009-2010,[149] compared to my sample of 31. In addition, 13 of the states in my sample were below the median level of polarization, and 18 were above. Unfortunately, for four out of the eight states that had divided partisan control of the two chambers, no newspaper sources were available in the databases used, preventing me from being fully able to test whether having a unified legislature against the party of the governor had a differential effect on legislative productivity than a divided legislature.

Table 2: *Frequency Distribution of Partisan Control of Government, All States (excl. Nebraska) Compared to Sample*

	All states	31 state sample
Unified Government	26 (53%)	19 (61%)
Divided Branches Only	15 (31%)	8 (26%)
Divided Chambers	8 (16%)	4 (13%)
Total	49 (100%)	27 (100%)

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[148] For a full list of the states examined, as well as further descriptive statistics, see Appendix B.
[149] Excluding Nebraska, a unicameral legislature which for comparability purposes is excluded from consideration in my analysis.

I create legislative productivity scores for each state, both the previously used simple legislative productivity, as well as the weighted productivity score which takes into account the relative salience of each issue and how effectively each legislature was able to deal with these more important issues. Notably, while there is some difference, the two measures track each other very closely; the Pearson's r for the simple and weighted scores is a .903, indicating that the weighted legislative productivity score is a valid alternative measure of productivity. In addition, the agenda size is not correlated with how efficient a legislature was at responding to issues; when either the number of issues or the number of issue mentions are inserted into the main regression, neither variable is significant. As shown in Table 3, the only significant correlations with unique issues and issue mentions were population size and average income, suggesting that the more people (and how relatively affluent they were) were the main determinants behind a larger agenda size. Furthermore, when a variable is created indicating whether the legislature is controlled by the same party that the newspaper is biased towards, neither the simple nor weighted score is significantly correlated with the slant benefit, providing additional confidence in the accuracy of the measure.[150]

Table 3: *Pearson Bivariate Correlations Between Unique Issues/Issue Mentions Per State and Demographic Data*.

	Total Population	Average Annual Income
Number of Unique Issues	.389*	.421*
Number of Issue Mentions	.358*	.435*

*p<.05, ** p<.01   *N=31*

With both of these legislative productivity scores, it is then possible to develop a series of ordinary least squares regression models to estimate the impacts of divided government, polarization, and majority party seat share, as well as the interaction

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[150] Pearson Correlation *p-values* between slant benefit and the two scores are .305 and .314 respectively.

between divided government and polarization. Table 4 reports the coefficients (standard errors in parentheses) and two-tailed significance of the aforementioned variables using both the simple and weighted productivity scores as a dependent variable.

Table 4: OLS Models of Simple and Weighted Legislative Productivity.

	Dependent Variable	
Independent Variables	Simple Legislative Productivity	Weighted Legislative Productivity
Majority Party Seat Share	.440* (.204)	.632* (.240)
Polarization	.156* (.060)	.210** (.071)
Divided Government	.168 (.127)	.219 (.149)
Divided Government and Polarization Interaction	-.203* (.080)	-.248* (.094)
Adjusted R²	.419	.443

*p<.05   *N=31*
**p<.01

The results from the two specifications of the model using the separate measures of legislative productivity are quite similar, not unexpected given the close correlation between the two scores but providing additional confidence in the robustness of the results. In addition a Goldfeld-Quandt test for heteroscedasticity fails to reject the null hypothesis of homoscedasticity,[151] providing assurance that the varying amount of issue mentions in the weighted legislative productivity model isn't affecting the results of the

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[151] 95% confidence level; $F_c=5.0$

regression. While the findings from both specifications of the model are similar, the R^2 of the weighted legislative productivity model is slightly higher, the magnitude of the coefficients is greater for each variable, and polarization registers at a higher level of significance than the simple legislative productivity model, suggesting that taking relative issue salience into account provides a similar but improved picture of legislative productivity.

Turning to the hypotheses, all three variables have statistically significant effects, with the coefficients in the expected direction, although divided government only has an effect through its interaction with polarization. When divided government is not present and coded as zero, the interaction term drops out of the equation and polarization actually has a significant *positive* effect on legislative productivity. Similar to what McCarty suggests is the case at the national level,[152] polarization in the states can under certain circumstance prove beneficial to the legislative process; namely, when both chambers and the governor are controlled by a single party. This effect is bolstered by large majority size, as the positive coefficient in front of majority party seat share demonstrates. However, under divided government, the positive effects of polarization are negated – combining the coefficients for polarization and the interaction term reveals it actually has a small negative effect on legislative productivity. Finally, divided government's lack of a significant effect as an individual variable reveals that divided government, absent polarization, fails to present a substantial obstacle to legislative productivity.

This result could help explain the discrepancy between Mayhew's 1991 null finding on the relation between divided government and gridlock, and later analyses that have demonstrated such a link exists. As many political scientists have noted,[153] elite polarization started rapidly increasing during the 1990s and has continued on to today, where it remains at an apex unreached since the turn of the previous century. Assuming that the findings from this cross-sectional model of legislatures would apply similarly to Congress, the recent increase in polarization would lead directly to less productive

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[152] McCarty 2007
[153] Layman, Carsey and Horowitz 2006; McCarty 2007; Shor and McCarty 2011

instances of divided government compared to unified government, a difference that would not have occurred in times of less polarization.

CONCLUSION

The preceding analysis provides strong support for the idea that it is critical to take into account not just inter-institutional conflict (divided government) and intra-institutional conflict (polarization), but also the ways that the two interact with each other. When polarization is low, the difference for a legislature between negotiating with a governor from the opposite party versus the same party is relatively minor, and thus low levels of inter-institutional conflict mean divided government has little consequence for legislative productivity. However, when elite polarization is high, negotiating across party lines becomes more conflictual. Conflict is not all bad, however; in times of unified government, the higher stakes posed by polarized conditions can lead to increased productivity. This is especially true when the majority party has a larger number of seats under its control in the legislature, as the minority party has fewer options available to block the majority's agenda.

This paper does what others have not - testing polarization's effects broadly across policy areas, taking into account issue salience and weighting accordingly, and looking at a large sample of the state legislatures. Worth noting is that Kousser, who similarly uses a methodology based on Binder's, found in his single-state analysis that polarization alone fails to lead to any decrease in productivity, but that the combined presence of polarization and divided government are when gridlock is most likely to occur.[154] This research provides empirical evidence that a similar effect can be found in a majority of the states.

Another important innovation this paper provides that can be utilized in future research on legislative productivity is the idea that measuring productivity using a graded scale of issue salience allows for a more accurate modeling of real world legislatures. While the difference is small, the model utilizing such a weighted measure does a better job of explaining the variation in legislative productivity than the previously used simple measure does, and is more sensitive to the effects of the explanatory variables. More importantly, on a theoretical basis, it allows for one to make distinctions between the

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[154] Kousser 2010

relatively minor agenda issues that may surface briefly, and the major policy issues that can represent the primary goals of an entire legislative session. Despite this improvement, even the model using weighted legislative productivity is only able to explain approximately half of the variance in productivity; while this might be unsurprising given the state-specific factors that likely exist, it also indicates that significantly more work investigating the determinants of legislative productivity is necessary.

Finally, this research only looks at a relatively short time period of two years, so it is possible that in different time periods inter-institutional and intra-institutional factors have different effects on legislative productivity. While perhaps there were stresses on the legislative system following a recession, or some other idiosyncrasy of this era played a role, a different method enabling the study of state level legislative productivity both over time and across states could help negate these concerns.

Absent more solid evidence to call these findings into doubt, however, this paper provides solid evidence for a more nuanced view of how polarization can operate, both positively and negatively, and the role divided government plays in that determination. By taking into account both inter- and intra-institutional conflict and ways the two concepts work together, it is possible to come to a clearer understanding of the primary obstacles to legislative productivity.

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